Fort Hall Mine Landfill

1500 North Fort Hall Mine Road
Pocatello, Idaho

2020 Offsite Groundwater Monitoring Report

FINAL

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Acronyms and Abbreviations

µg/m^3	microgram per cubic meter
alpha	significance level
alluvium	alluvial sediments
bgs	below ground surface
BHHRA	baseline human health risk assessment
cis-1,2-DCE	cis-1,2-dichloroethene
City	City of Pocatello
COC	chemical of concern
COPCs	chemicals of potential concern
CSIA	compound-specific isotope analysis
CSM	conceptual site model
CTE	central tendency exposure
DEM	USGS Digital Elevation Model
DO	dissolved oxygen
DWSIA	domestic water source inventory area
DQO	data quality objective
EcoSSL	EPA's Ecological Soil Screening Levels
EPA	U.S. Environmental Protection Agency
ft/ft	feet per foot
FHML	Fort Hall Mine Landfill
GPS	global positioning system
HI	hazard index
HQ	hazard quotient
IDGW	Idaho Groundwater Rule
IDEQ	Idaho Department of Environmental Quality
IDW	investigation-derived waste
IDWR	Idaho Department of Water Resources
IRIS	Integrated Risk Information System
IUR	inhalation unit risk
LANL	Los Alamos National Laboratory
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
LDS	Latter-day Saints
LOAEL	Lowest-observed-adverse-effect level
LPRV	Lower Portneuf River Valley
µg/L	micrograms per liter
mg/L	milligrams per liter
MCL	maximum contaminant level
MDL	method detection limit
MS/MSD	matrix spike/matrix spike duplicate
mS/cm	millisiemens per centimeter
MW	monitoring well
n	number of data points
NCEA	National Center for Environmental Assessment
NFG	National Functional Guidelines
NOAEL	no-observed-adverse-effect level

NTU	Nephelometric Turbidity Units
ORP	oxidation-reduction potential
%	percent
p-value	probability value
PA	City of Pocatello monitoring well
PCE	tetrachloroethene
PPRTV	Provisional Peer Reviewed Toxicity Values
PVA	Portneuf Valley Aquifer
QAPP	Quality Assurance Project Plan
RAGS	EPA's Risk Assessment Guidance for Superfund
RfC	reference concentration
RfD	reference dose
RL	reporting limit
RME	reasonable maximum exposure
RPD	relative percent difference
RSL	regional screening levels
RW	domestic well
S	Mann-Kendall summation statistic
SCEM	site conceptual exposure model
S/D	shallow/deep (well)
SF	slope factor
Site, the	Fort Hall Mine Landfill
SLERA	screening-level ecological risk evaluation
SLRA	screening-level risk assessment
SOP	standard operating procedure
TCE	trichloroethene
TOC	total organic carbon
trans-1,2-DCE	trans-1,2-dichloroethene
UF	uncertainty factor
VC	vinyl chloride
VI	vapor intrusion
VISL	vapor intrusion screening level
VOC	volatile organic compound
WOE	weight of evidence

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Section 1
Introduction

Under Task Order No. 2 of the Bannock County Master Services Agreement contract executed on July 24, 2018, CDM Smith was tasked with implementing a groundwater sampling program at select monitoring, remediation, and domestic wells on a downgradient of the Fort Hall Mine Landfill (FHML) (the Site) (**Figure 1-1**). Field activities, laboratory results, data validation, and updated chemical distribution and statistical trends are presented herein.

1.1 Purpose of the Report

The 2020 annual offsite groundwater sampling event was conducted in accordance with the *Final Fort Hall Mine Landfill, Groundwater Monitoring Program Plan Quality Assurance Project Plan (QAPP)*, dated April 25, 2019 (CDM Smith 2019a). The overall purpose of the 2020 offsite monitoring event was to assess the impacts of chemicals of concern (COCs) leaching to groundwater from the FHML to the Portneuf Valley Aquifer (PVA), and to evaluate risks to human health and the environment.

The purpose of this report is to:

- Present the analytical and field data collected during the 2020 offsite groundwater sampling event
- Update the lateral trichloroethene (TCE) groundwater plume extent downgradient plume of the FHML
- Evaluate COC trends in offsite City of Pocatello (City) and domestic wells with sufficient data to conduct statistical analysis
- Update the screening-level risk assessment (SLRA) to evaluate potential human health risks due to the following:
    - use of groundwater as the sole source of household water
    - potential vapor intrusion into residences located above contaminated groundwater
    - use of groundwater as a source of domestic water for irrigation
- Update the screening-level risk ecological risk evaluation (SLERA) to evaluate potential ecological risks due to ingestion of groundwater that may be used to provide drinking water for animals
- Provide recommendations for the 2021 City and domestic well monitoring program

1.2 Site Background

The following sections briefly describe site history and use, COC discharge from the FHML, geology and hydrogeology, fate and transport of COCs, and the offsite FHML monitoring well network.

1.2.1 Site Location and Use

The Site is located on North Fort Hall Mine Road in Bannock County, Idaho, approximately seven miles southeast and hydrologically upgradient of the City of Pocatello, Idaho (**Figure 1-1**). The landfill is alternately known as the Fort Hall Canyon Landfill or Bannock County Landfill (IDEQ 2016a), and has received hazardous and non-hazardous waste since 1943. More information pertaining to site history and use within the FHML property boundary can be found in recent semiannual reports (CDM Smith 2019, 2020a, 2020b).

1.2.2 COC Discharge from the FHML to the PVA

In October 1991, TCE contamination was identified in monitoring wells installed immediately downgradient of FHML Cell 1 (Brown and Caldwell 1992). By 1993, high concentrations of TCE were observed in downgradient domestic wells within the PVA, and two municipal supply wells (#14 and #33, shown on **Figure 1-2**) were subsequently closed due to TCE concentrations (Brown and Caldwell 1994). Within the domestic wells (designated with "RW"), TCE exceeded the groundwater maximum contaminant level (MCL) drinking water standards, with the highest concentrations of 290 micrograms per liter (µg/L) observed in RW-2076F.

Approximately 45 domestic wells have been sampled since 1992. **Figure 1-3** presents the maximum extent of the TCE plume using the highest concentrations observed to date for statistical kriging used to estimate the boundaries of the plume (see CDM Smith 2019a for a more detailed description of the kriging). Although the greatest impacts from COC discharging from the FHML to the PVA were observed in the 1990s, the subsequent extent of the COC plume and concentration trends indicate impacts continue, with municipal supply and domestic wells currently exceeding the MCL for TCE.

1.2.3 Site Geology

In the vicinity of the FHML, Quaternary valley fill deposits of loess and silty gravels are found within the Fort Hall Canyon, which grade into alluvial fan deposits extending northward from the mouth of Fort Hall Canyon. The alluvial deposits consist of stream channel and alluvial fan deposits that are interbedded, discontinuous units of sand, gravel, silt, and clay. Coarse materials are generally subangular to subrounded fragments of red to green metaquartzite and argillite. Interstitial materials are slightly to moderately plastic, light to medium brown silt and clay. The alluvial fan deposits grade into the Lower Portneuf River Valley (LPRV) fill deposits that predate Upper Gravels from the Bonneville Flood event and form the benches along the southwestern edge of the valley. The nature of the lateral and vertical grading between the three sedimentary deposits is unclear at this time. These sedimentary deposits all overlie, and are derived from, the Tertiary Starlight Formation (AEEC 2018).

The base of Fort Hall Canyon intersects the LPRV. Six lithologic groups have been defined in the southern portion of the LPRV (Welhan et al. 1996):

- Bedrock, of variable composition but dominated by pink to white quartzite and varicolored shale or argillite, predominantly of Proterozoic age (Caddy Canyon Formation)
- Middle to late Tertiary basin-filling sediments and volcaniclastics of the Starlight Formation

- Quaternary valley fill and alluvial deposits composed of non-indurated silty gravels and cobbles with lenses of sand, silt, and intercalated clays
- Portneuf basalt deposited along the eastern edge of the LPRV
- Coarse-grained clean gravel and cobbles in the center of the LPRV, known as the Upper Gravels (equivalent to the Michaud Gravels in the northern LPRV), deposited by the Bonneville Flood event and which compromise the most productive portion of the underlying LPRV aquifer
- A silt "mantle" of variable thickness (0 to 43 feet) overlying the Upper Gravels, originating from overbank flood material from periodic Portneuf River flooding.

Seismic refraction geophysical surveys were conducted by Brown and Caldwell as part of the initial site investigations at the mouth of Fort Hall Canyon in 1992 and 1993 (Brown and Caldwell 1992, 1994). The presence of a basin and range-type normal fault that strikes slightly west of north through Fort Hall Canyon was confirmed. This fault was originally identified as a thrust fault by Trimble (1976) and later revised to a normal fault by Rodgers et al. (2006). The fault is estimated to have a dip of 15 to 20 degrees southwest, and it has a surface exposure on the west-facing slope of the canyon. The fault was estimated to be located 100 to 200 feet bgs at the mouth of the canyon and approximately 180 feet wide, with formation offset downward to the west approximately 3.5 miles (Trimble 1976).

Geologic cross sections of the north/south section through the Lower PVA through the TCE plume (**Figure 1-4**) and downgradient of the FHML northwest/southeast cross section through the Lower PVA (**Figure 1-5**) were developed for the *Final 2019 Offsite Groundwater Monitoring Report* (CDM Smith 2020a).

1.2.4 Site Hydrogeology

The aquifer system beneath the FHML consists of loess, alluvium (associated with the Fort Hall Canyon Creek), the alluvial fan extending to the north of the canyon, and the underlying Starlight Formation. The aquifer system is primarily unconfined beneath the FHML, but some areas have evidence of confined conditions, particularly on the east side of Fort Hall Canyon creek near the landfill. The water table is situated within the Starlight Formation in some areas and in the alluvium or loess in other areas. The units in the aquifer system are hydraulically connected and chemicals are expected to migrate between them. Groundwater in the alluvium and the Starlight Formation discharges into the PVA near monitoring well pair MW-103S/D, MW-118, and MW-116S, downgradient of the remediation system.

The alluvium consists of stream channel and alluvial fan deposits that are interbedded, discontinuous units of sand, gravel, silt, and clay. The Starlight Formation is described as "middle to Late Tertiary basin-filling sediments and volcaniclastics" by Welhan et al. (1996). The Starlight Formation is less transmissive than the alluvium, though in some instances, the top 10 feet of the Starlight Formation has been found to be similarly transmissive as the overlying alluvium.

Inflows to the aquifer system underlying the FHML area are direct recharge from precipitation and seepage from Fort Hall Canyon Creek. Average precipitation to the PVA is approximately 13 inches per year over the past 20 years of records. Welhan (1996) estimated average annual precipitation to Fort Hall Canyon to be 20.4 inches per year. The total

estimated water budget for the PVA has previously been estimated at 5.5 billion gallons per day (**Figure 1-6**).

Groundwater flowing through the mouth of Fort Hall Canyon discharges to the Lower PVA. As noted above, the PVA comprises northern, eastern, and southern subaquifers and is the sole source for drinking water for the communities of Pocatello and Chubbuck. In the southern portion of the PVA, wells have high yields because they are completed in coarse, clean upper gravels at depths less than 100 to 150 feet bgs.

The transmissivity of the upper gravels was estimated at approximately 10 square feet per second, with aquifer storage estimated at 0.005, based on constant discharge pumping tests of municipal wells (CH2M Hill 1994).

The Lower PVA aquifer system is defined by the lateral boundaries of the geologic contact between the Quaternary alluvium with less permeable rock formations (i.e. Starlight Formation along the south/southwestern boundary near the FHML) (**Figures 1-4** and **1-5)**. The contact between the Upper Gravels and underlying Tertiary age Starlight Formation is steep on the southwest side becoming more of an undulating surface in the center of the valley (CH2M Hill 1994).

Groundwater flows through the Lower PVA from southeast to northwest, with groundwater discharging to the Lower PVA from tributary basins, including Fort Hall Canyon. Horizontal flow gradients within the Lower PVA vary from zero (stagnation zone) to 0.003 feet per foot (ft/ft) over the 9,330 feet between the confluence of Fort Hall Canyon and the Lower PVA and PA-3. These gradients are considerably smaller than what is regularly observed within Fort Hall Canyon. Vertical head gradients were measured to be negligible at MW-106, PA-4 and PA-9 well clusters within the Lower PVA (CDM Smith 2020b). An upward gradient is measured at upgradient well pair MW-116S/D, where groundwater discharge from Fort Hall Canyon is occurring.

1.2.5 Offsite Monitoring and Domestic Well Network

An extensive monitoring well network has been established throughout the FHML with more limited monitoring offsite in the PVA to evaluate the impacts of the FHML to groundwater (**Figure 1-2**). The offsite city and domestic well monitoring network consists of multiple well groups, as outlined below.

1. **Cell 1 and Offsite Bannock County Monitoring Wells**. The Cell 1 monitoring well group currently consists of 26 Bannock County groundwater monitoring wells located adjacent to and downgradient of Cell 1 on the FHML property. These wells are monitored to assess the extent of contamination immediately north-northeast of the Cell 1 boundary. Additionally, there are eight Bannock County monitoring wells located outside the FHML property boundary (**Figure 1-2**) that comprise the offsite monitoring well group, which are sampled to assess the extent of offsite groundwater contamination. Data presentation and analysis for these wells are presented in spring and fall semiannual monitoring reports and are not discussed herein (CDM Smith 2020b).

2. **City Monitoring Wells.** Twelve groundwater monitoring wells installed by the City have been monitored to evaluate groundwater quality and track the COC plume migrating toward the municipal supply wells. Eleven are currently monitored

annually, as PA-6 was evidently damaged (CDM Smith 2020a). Except for MW-37 and MW-38, city monitoring wells are designated with a "PA."

3. **City Municipal Supply Wells.** Twenty-one municipal supply wells have been installed by the City. The City has used some of these wells to monitor the extent of the plume and the presence of COCs in city drinking water supply. Municipal supply wells #14 and #33 have historically been impacted by FHML-related COCs and are currently sampled annually by CDM Smith.

4. **Domestic Wells.** Approximately 45 residential or domestic groundwater wells (designated with "RW") in the PVA have been monitored at least once between 1991 and 2020 to assess the extent of the offsite groundwater plume and to monitor COC concentrations within and surrounding impacted residential domestic water wells. CDM Smith currently has property access agreements for 42 domestic wells.

1.2.6 COC Fate and Transport

Natural biodegradation of chlorinated solvents is well established in peer-reviewed literature and shown to occur under both aerobic (with oxygen) and anaerobic (without oxygen) conditions. PCE is considered recalcitrant (i.e. it does not degrade biologically) under aerobic conditions and TCE degradation is very slow. This is part of the reason these chemicals persist and tend to form relatively large plumes in aerobic transmissive aquifers.

Under anaerobic conditions, however, PCE and TCE can undergo biotic transformation via anaerobic reductive dechlorination, where bacteria use them as alternate electron acceptors in the absence of oxygen. During anaerobic dechlorination, sequential transformation occurs from PCE to TCE to cis-1,2-DCE (primary) or trans-1,2-DCE to VC to ethene and/or ethane and chloride. The most common dechlorination pathway is conversion of TCE to cis-1,2-DCE to VC to ethene and ethane.

In addition to the anaerobic pathway, other degradation mechanisms for the lower chlorinated ethenes and ethanes, such as cis-1,2-DCE and VC, include anaerobic oxidation (coupled to sulfate or iron reduction) and aerobic oxidation (i.e., used as a carbon and energy source for aerobic microorganisms), which generates carbon dioxide and water. These alternate degradation mechanisms are important when there is significant sulfate or iron available anaerobically or in redox transitions zones where anaerobic groundwater comes into contact with aerobic groundwater in the downgradient/distal plumes or periodic infiltration of aerobic precipitation during rain events. This can occur either down- or cross-gradient from the anaerobic source zone or below the anaerobic treatment zone if there is a vertical gradient resulting in vertical mixing with aerobic groundwater.

In addition to the chlorinated ethenes, reductive daughter products ethene and ethane can be oxidized (i.e., used as carbon and energy sources) by aerobic and/or anaerobic sulfate- or iron-reducing microorganisms. Under conditions in which reductive daughter products are being directly oxidized, a complete mass balance to cis-1,2-DCE, VC, ethene, and/or ethane is not observed.

Geochemical conditions dictate the potential for degradation of chlorinated ethenes. In general, anaerobic conditions facilitate reductive dechlorination of chlorinated ethenes, and aerobic conditions can facilitate both cometabolism of TCE in the presence of methane and cometabolism and direct oxidation of the lower chlorinated ethenes cis-1,2-DCE and VC. In general, reductive dechlorination mechanisms result in a carbon isotope shift during

degradation, allowing degradation via this mechanism to be documented using compound specific isotope analysis (CSIA), which has recently been performed at the Site (CDM Smith 2019b, 2020a). In contrast, oxidative processes, such as direct oxidation reactions, generally do not result in a carbon isotope shift and thus cannot be discerned using carbon CSIA data.

Geochemical conditions within Fort Hall Canyon near the remediation system are aerobic on the east side of Fort Hall Canyon and upgradient of the remediation system and are anaerobic on the west site of Fort Hall Canyon. Generally, anerobic conditions are interpreted based on concentrations of dissolved oxygen (DO) greater than 1 mg/L while anaerobic conditions are defined based on low concentrations of DO (less than 1 mg/L) with methane production observed (CDM Smith 2019d, 2020a, 2020b). Within the PVA, geochemical conditions are aerobic (i.e., oxygen is present, ORP is positive). A summary of geochemical conditions observed in 2020 is provided below (CDM Smith 2020b):

Cell 1 Source and Dissolved Phase Plume

- Monitoring wells that are aerobic with DO greater than 1 milligram per liter (mg/L) include MW-109S/D, MW110S/D, MW-101S, MW-112M/D and MW-119S/D, and RW-10, -17 and -4.
- Monitoring wells that are anaerobic with low DO less than 1 mg/L, low/negative ORP, and high ferrous iron (greater than 0.2 mg/L) include MW-105S, MW-120S/D, MW-118D, MW-111S/D, and MW-113D. All other wells are either aerobic or anoxic.
- Sulfate ranged from approximately 19 to 130 mg/L. The lowest concentration was observed in MW-111D (19 mg/L), while the highest observed concentration was in MW-105S (130 mg/L).
- High levels of methane (approximately 800 µg/L or greater) were detected in MW-111S/D, and MW-113S (**Table 3-4**). Methane was detected at lower levels (approximately 1 to 150 µg/L) in MW-105S, MW-110S/D, and MW-118D. MW-113D (340 µg/L) had an intermediate concentration of methane.

Offsite Wells

- Offsite MW-103S, MW-116S and MW-115S were generally aerobic, with DO ranging from approximately 6.17 to 7.83 mg/L and ORP ranging from approximately 103.1 to 131.8 millivolts.

In the FHML Cell 1 source area(s), on the west side of the Fort Hall Canyon area, attenuation of COCs by biodegradation is occurring primarily via anaerobic processes, while aerobic process likely dominate biodegradation on the east side of Fort Hall Canyon and in the distal PVA plume (CDM Smith 2019b, 2020a). Anaerobic degradation of PCE and TCE is significant immediately downgradient of Cell 1 but was not observed in the CSIA data downgradient of MW-118D (CDM Smith 2019b), indicating decreasing concentrations in this area are likely due to processes that do not cause an isotopic shift, such as physical (i.e., dilution, dispersion) attenuation. Both VC and cis-1,2-DCE degrade within the aerobic and anaerobic plume areas, which is why they do not persist in the Lower PVA.

1.3 Report Organization

This report is organized into the following sections:

1.0 Introduction: This section describes the purpose and organization of the report and summarizes site background information, including the site location, geology, and hydrogeology, the nature and extent of contamination, and COC fate and transport.

2.0 Offsite Field Groundwater Sampling Activities: This section presents a summary of the 2020 offsite sampling activities, including private property owner correspondence, groundwater sampling and analysis, decontamination and handling of investigation-derived waste (IDW), and any deviations from the QAPP (CDM Smith 2019a).

3.0 Groundwater Monitoring Results: This section presents the results of the 2020 offsite sampling activities and presents a summary of the data quality and usability, water level elevations, and groundwater analytical results.

4.0 Data Analysis: This section presents the updated PCE and TCE plume extents and the statistical analysis of PCE and TCE trends in select wells.

5.0 Screening Level Risk Assessment: This section presents an updated SLRA based on new information collected during the 2020 sampling event to evaluate human health risks due to groundwater and vapor intrusion and and updated SLERA to evaluate ecological risks due to ingestion of groundwater by animals.

6.0 Conclusions and Recommendations: This section presents the conclusions of the data analysis and provides recommendations per the decision criteria developed in the QAPP (CDM Smith 2019a) for 2020 offsite groundwater sampling activities at the Site.

7.0 References: This section presents references used to prepare this report.

- **Appendix A** – Table 6-1 from 2019 Annual Offsite Groundwater Monitoring Report
- **Appendix B** – 2020 Annual Offsite Sampling Event Field Documentation
- **Appendix C** – 2020 Annual Offsite Sampling Event Laboratory Analytical Results
- **Appendix D** – 2020 Annual Offsite Sampling Event Data Usability Assessment Report
- **Appendix E** – 2020 Annual Offsite Sampling Event Analytical Laboratory Data Packages
- **Appendix F** – City and Domestic Well Chlorinated Ethene and Geochemistry Time Series Plots

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Section 2
2020 Offsite Field Sampling Activities

During the 2020 annual offsite sampling event (June 22-26, 2020), groundwater samples were collected from domestic wells, municipal supply wells, and one offsite monitoring well. City of Pocatello and Bannock County monitoring wells were sampled during a separate event in early June 2020. All 2020 offsite sample locations are presented in **Table 2-1** and on **Figure 2-1.** All June 2020 offsite well data will be presented and analyzed herein, with the exception of the offsite Bannock County monitoring wells MW-103S, MW-106S, MW-115S, and MW-116S, which are sampled semiannually and discussed under a separate cover (CDM Smith 2020b).

The 2020 offsite sampling activities were performed in accordance with the QAPP (CDM Smith 2019a), except as described in **Section 2.4**.

2.1 Private Property Access

Consent was requested and received from property owners to access properties and collect samples from offsite groundwater monitoring wells and/or domestic water wells sampled.

2.1.1 City Monitoring Well Access

The offsite city monitoring wells include PA-1 through PA-10, MW-37, and MW-38. These wells are located on private land used as a community ballpark and leased out for farming. Sampling consent was arranged between CDM Smith's procurement/legal department and the leasing agency employed by the property landowner, the Latter-Day Saints (LDS) Church. Unlike the domestic well private property consent forms, these consent forms allow access for a one-week period only. Additionally, the nearby residents leasing the land from the LDS Church were notified of sampling via phone or in person during the event. Offsite city monitoring wells were sampled in early June 2020 with the spring semiannual sampling event (CDM Smith 2020b).

2.1.2 Domestic Well Access

Prior to the annual offsite sampling event, each property owner was contacted to confirm their receipt of 2019 sampling data (if their well was sampled), and to schedule a sampling appointment. Consent forms with return request were sent to property owners without a current consent form on file. Several owners who were initially unreachable via phone or e-mail were contacted in person during the 2020 spring semiannual monitoring event, and consent forms were updated in person prior to sampling during the 2020 annual offsite sampling event. If CDM Smith was unable to contact the property owner and had not received a consent form prior to the annual offsite sampling event, the property was visited during the sampling event. If contact was made during this attempt and sampling was permitted, a consent form was filled out during the field event with the field team prior to sampling.

If neither verbal nor written consent was obtained, the domestic well was not sampled. As noted in **Section 2.4**, there was one well for which sampling consent was not obtained.

Access agreements were obtained for all the domestic wells sampled in June 2020, as listed in **Table 2-1** and presented on **Figure 2-1**.

2.2 Groundwater Sampling

The offsite monitoring, domestic, and municipal supply wells sampled during this event are presented on **Figure 2-1**.

Appendix B contains the field documentation for the 2020 annual offsite sampling event, including equipment calibration forms, well purge forms, sample chain-of-custody forms, the field logbook, and sampling event photo log.

2.2.1 Domestic Well Reconnaissance

Prior to the 2019 offsite sampling event, information and historical records for many of the domestic wells in the vicinity of the FHML, including well construction details and property owner contact information, were incomplete or outdated. Therefore, efforts were conducted to confirm the existence, location, and general characteristics of the wells so that this information could be captured and incorporated into the CDM Smith database, as described in the *Final 2019 Annual Offsite Monitoring Report* (CDM Smith 2020a).

In 2020, these efforts continued as new wells were added to the sampling list and as property ownership changed. Updated information obtained from property owners via phone conversation or in person during sampling the well was updated in the CDM Smith database, communication log, and field information spreadsheet. If found, Idaho Department of Water Resources (IDWR) well identification numbers (e.g., metal tag number) were used to match the well to its historical well driller's report in the IDWR database, which supplied the well construction information and subsurface geology. If no match was available, the well depth was typically obtained from the owner. Well construction information was used in the field to identify necessary purge volumes. Most information did not change from 2019.

Field teams verified global positioning system (GPS) coordinates via a cellular phone application for each domestic well not sampled in 2019. Field-verified coordinates and lithology from well logs was incorporated into the FHML CSM and used to update site maps and geologic cross sections. Photographs of domestic wells not previously sampled by CDM Smith are provided in **Appendix B**. Previously sampled wells were not photographed unless there was a change from 2019 (CDM Smith 2020a).

2.2.2 Groundwater Elevation Measurements

Synoptic water levels were collected following procedures outlined in Standard Operating Procedure (SOP) 1-6, "Groundwater Level Measurement" (CDM Smith, 2019a) for City monitoring wells and offsite monitoring wells during the 2020 semiannual spring monitoring event. Water levels from domestic and remediation wells are not collected because of well construction. Domestic wells are closed, and water is only accessible by a spigot at the well head. Manual water level measurements were recorded for the wells at the landmark indicated on the casing (or, in the absence of a mark, the northern edge) using electronic water level meters. Water levels could not be measured at MW-116S/D, PA-1, PA-3, and PA-4 as these locations were inaccessible at the time of the synoptic water level event.

2.2.3 Groundwater Sampling Procedures

Groundwater wells were sampled in accordance with the following standard operating procedures (SOPs) (CDM Smith 2019a):

- SOP 1-2 - Sample Custody

- SOP 1-12 - Low-Stress (Low-Flow) Groundwater Sampling
- SOP 2-1 - Packaging and Shipping Environmental Samples
- SOP 2-2 - Guide to Handling Investigation-Derived Waste
- SOP 4-1 - Field Logbook Content and Control
- SOP 4-2 - Photographic Documentation of Field Activities
- SOP 4-5 - Field Equipment Decontamination at Nonradioactive Sites
- SOP 6-1 - Tap Water Sampling of Residential and Extraction Wells

The following water quality parameters were collected at each location prior to collecting groundwater samples using a Yellow Springs Instruments (YSI) Pro Digital Sampling System (DSS) multiparameter meter:

- DO
- Oxidation-reduction potential (ORP)
- pH
- Turbidity
- Temperature
- Specific conductivity

2.2.3.1 City Monitoring Wells

The city monitoring wells are listed in **Table 2-1.** These wells were sampled according to the procedures outlined in SOP 1-12, "Low-Stress (Low-Flow) Groundwater Sampling," as specified in the QAPP (CDM Smith 2019a). A bladder pump was used, set to approximately the middle of the well screened interval, to pump groundwater at flow rates of 50 to 500 milliliters per minute. Minimal drawdown and/or stabilized drawdown was used to ensure that the water sampled was representative of the formation surrounding the screened interval and not the stagnant water column. Water quality parameters were continuously monitored using a flow-through cell, and when stabilization was achieved, a groundwater sample was collected. Purge forms are provided in the 2020 spring semi-annual report (CDM Smith 2020b).

2.2.3.2 Municipal Supply Wells

Municipal supply wells #14 and #33 (referred to herein as muni-well-14 and muni-well-33) have dedicated, high-flow pumps that produce approximately 1,000 gallons of groundwater per minute. Tap samples were collected according to SOP 6-1, "Tap Water Sampling of Residential and Extraction Wells" via a dedicated sampling port. City of Pocatello Water Department staff assisted in turning on the pump and monitoring the water produced during purging. This water flowed along the street (#33) or into a nearby creek (#14), because these wells have been removed from City supply due to historical contamination.

Field parameters were measured with grab samples every three minutes until field parameters were stable. The grab samples were sealed in a YSI multiparameter meter

sampling cup to reduce the influence of oxygen. Muni-well-14 and muni-well-33 were purged for 5 minutes, producing approximately 5,000 gallons, prior to field parameter collection (**Table 2-2**). Purge forms are provided in **Appendix B**.

2.2.3.3 Domestic Wells

All domestic wells, except RW-2203H, were sampled according to the procedures outlined in SOP 6-1, "Tap Water Sampling of Residential and Extraction Wells" as specified in the QAPP (CDM Smith 2019a). Most domestic wells sampled had a nearby frost-free spigot where groundwater could be collected. Some wells without spigots had alternate access points used per the owner's request.

A minimum of three well volumes or 300 gallons was purged from domestic wells at the maximum flow rate prior to field parameter measurement. For wells with unknown well construction, 300 gallons was purged. For wells with known construction, the minimum purge volume was either three well volumes or 300 gallons, whichever was lower. Volume purged from each well is presented in **Table 2-2**. Purge water was disposed according to the owner's preferences, typically in the lawn or a nearby field, usually diverted with a garden hose.

After purging the minimum volume, water quality parameters were collected every three to five minutes until parameters stabilized. The water source was left continuously running during field parameter collection; however, the flow rate was decreased, if possible, to an appropriate rate for sample collection. Field parameters were measured with grab samples, which were sealed in the water quality meter sample cup without headspace to minimize the impact of oxygen in the ambient air. Field parameter grab samples were collected from the spigot with the hose removed, if possible. After field parameters stabilized, the groundwater sample was collected from the spigot directly, if possible, at a flow rate low enough to prevent aeration of groundwater and bubble entrapment in the sample vials.

For new wells to CDM Smith's sampling program, photographs were taken, GPS coordinates were collected, and access information was documented on purge forms during well purging. GPS coordinates were collected at the well head (if visible) or at the collection point (if the well was not visible).

RW-2203H does not have a working pump; however, the wellhead is accessible. Therefore, it is sampled with low-flow sampling procedures (SOP 1-12). The bladder pump was set to 75 feet below the top of casing, and the flow rate used was 400 milliliters per minute. Drawdown was minimized to ensure that the water sampled was representative of the formation surrounding the screened interval and not the stagnant water column. Water quality parameters were continuously monitored using a flow-through cell, and when stabilization was achieved, a groundwater sample was collected.

Purge forms are provided in **Appendix B**.

Additionally, a new well, RW-7200P, was identified in the vicinity of the FHML. The property owners were contacted in person during the sampling event, and consent was obtained to sample. Because the well had no spigot or pump yet installed, the field team attempted to sample the well with a bladder pump. The IDWR well driller report was consulted to identify the well screen interval. After setting the pump at several depths, the field team was unable to obtain water via the bladder pump, likely due to the lack of an air compressor, which was not present because the well was not originally planned for sampling. Drilling fluid was observed

in the bladder pump when it was drawn up. Once this well is developed, it will be added to future sampling events and sampled via the tap sampling method (SOP 6-1).

2.2.4 Sample Analysis

Samples were analyzed according to the QAPP (CDM Smith 2019a), as summarized in **Table 2-2**. All City and domestic groundwater well samples were analyzed for volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method 8260B. No additional analyses were performed in 2020.

2.3 Decontamination and Investigation-Derived Waste

All non-dedicated sampling equipment (e.g., bladder pump equipment and water level meters) was decontaminated following the procedure outlined in SOP 4-5, "Field Equipment Decontamination at Nonradioactive Sites" (as specified in the QAPP, CDM Smith 2019a). Decontamination procedures for groundwater sampling equipment used a triple wash system. The first wash contained potable water and a laboratory-grade detergent. The second wash contained potable water, and the third wash contained distilled water for rinsing. Before use, re-use, and at the end of the sampling event, all bladder pump equipment was disassembled, scrubbed, and decontaminated using this triple wash system. Decontamination water and purge water from monitoring well sampling was containerized and properly disposed of on-site at the landfill. Personal protective equipment was decontaminated and disposed of on-site at the landfill.

2.4 Deviations

Except where noted below, sampling locations and procedures did not deviate from the sampling plan (**Appendix A**) or QAPP (CDM Smith 2019a).

2.4.1 City of Pocatello Monitoring Wells

The following deviations with respect to City monitoring wells occurred during the 2020 spring semiannual monitoring event:

- The sample for MW-38 was collected while the turbidity reading measured above 50 Nephelometric Turbidity Units (NTU). All other parameters had stabilized at the time of sample collection. The groundwater was consistently black during purging. However, there was no indication of non-aqueous phase liquid.
- As the screened interval at PA-7 is 171.3-176.3 feet bgs, the portable bladder pump should be deployed at a depth of approximately 173 feet bgs. As identified during the 2019 annual sampling event (CDM Smith 2020a), this pump depth requires compressed gas for sampling. Due to the planting of crops at the time of the groundwater monitoring event, PA-7 was inaccessible by vehicle and could not be sampled with compressed gas.
- All screened intervals at PA-4 were sampled, however, the purge form for the deepest screened interval (135-145 feet bgs) was misplaced. Therefore, purge parameters (pH, DO, ORP, temperature, turbidity, and specific conductance) are not available.

2.4.2 City of Pocatello Municipal Supply Wells

There were no deviations from the sampling plan or QAPP for the municipal supply wells.

2.4.3 Domestic Wells

The following deviations with respect to domestic wells occurred during the 2020 annual offsite sampling event:

- RW-2076F was not sampled because the property owner could not be reached during either the semiannual onsite event or the annual offsite sampling event, and there was no CDM Smith access consent form on file. The frost-free spigot for this well on the property where MW-103S/D is located did not produce water. An additional consent form and letter on behalf of Bannock County was deposited in the mailbox for this property owner on June 26, 2020. Permission to sample this well was received by Bannock County in July 2020, and this well will be added to the fall 2020 sampling event.
- RW-2613M was sampled in addition to the domestic wells originally planned for sampling (**Appendix A**), due to recent consent from property owners.
- Sampling procedure for RW-7091R deviated from SOP 6-1 (CDM Smith 2019a) due to the presence of a treatment system. Because the only way to sample the well for untreated groundwater was to use the hand pump, the groundwater could not be pumped at a steady rate during sampling. The system was purged using the property owner's sprinkler system; thereafter, the hand pump was manually operated continuously, and field parameters were collected every three minutes. Oxidation-reduction potential (ORP) was the only parameter that did not stabilize. The groundwater was sampled after 10 minutes of continuous hand pumping.
- RW-8105PN was not sampled because of a malfunctioning pump. The property owner does not use the well, and the pump had not been turned on since the June 2019 sampling event. Because the depths of RW-8105PN and RW-8105PS are comparable and the distance between them is approximately 100 feet, the data from RW-8105PS was considered to be sufficiently representative of PVA groundwater near that property. Thus, additional efforts (i.e., use of a bladder pump) to sample RW-8105PN were not pursued.

2.4.4 Sample Equipment

Both of the multiparameter meters had a malfunctioning turbidity sensor. Daily calibrations were not performed. Turbidity readings of 0 and greater than 100 NTU were collected and are presented in data tables for completion. However, these readings are considered erroneous, as all sampled groundwater was very clear. The other purge parameters were used to determine when parameters had stabilized and samples could be collected, so there was no impact to data quality.

Section 3
Groundwater Monitoring Results

This section presents the groundwater monitoring results of the 2020 annual offsite sampling event. **Figure 2-1** presents the groundwater wells sampled during this event, which include City municipal supply wells and domestic wells. **Figure 2-1** also shows City monitoring wells sampled during the spring semiannual sampling event. All analytical results are presented in **Appendix C**.

3.1 Groundwater Data Usability Assessment

Data validation was performed in accordance with the analytical methods, National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review (EPA 2017a), and NFG for Organic Superfund Methods Data Review (EPA 2017b).

Holding times, sample preparation blanks (method, equipment, source, trip), duplicates (field), surrogate compound recovery, matrix spike/matrix spike duplicates (MS/MSDs), laboratory control sample/laboratory control sample duplicates (LCS/LCSDs), interferences, reporting limits, and compound identification and quantification were included in the review.

CDM Smith validated laboratory analytical data with the EQuIS Data Quality Module (DQM) for the VOC analyses. The validation narrative is provided in **Appendix D**, and the final laboratory data packages for each laboratory sample delivery group are included in **Appendix E**. All data were received in final form, and validation was performed on the final data. All data are suitable for their intended use as stated in the QAPP. Some of the results should be used with caution as noted by the "J/J+/UJ" qualifiers applied during the data validation process.

3.1.1 Precision

Precision was assessed by comparing the relative percent differences (RPDs) or absolute differences for laboratory duplicate samples, field duplicate samples, MS/MSD analyses, and LCS/LCSD analyses. Laboratory in-house limits were used for laboratory duplicate samples LCS/LCSD and MS/MSD duplicate analyses. An RPD field duplicate criteria of 30 percent (%) was used for field duplicates. For field duplicates where results were greater than five times the level of quantification, the RPD was calculated and compared with the 30% precision criteria. Where results were less than five times the reporting limit (RL), the absolute difference was calculated and compared with a precision criterion of less than or equal to the RL. **Table D-2** (**Appendix D**) presents comparisons of results for primary samples and associated field duplicates. All RPDs met their respective control limits.

3.1.2 Accuracy

Accuracy was assessed with percent recoveries in MS/MSD, LCS/LCSD, and surrogate recoveries. All percent recoveries in LCS/LCSDs met the control limit criteria, with the exceptions noted in **Appendix D**; exceptions that required qualification of data (J or UJ) are noted in **Appendix D**. All percent recoveries in MS/MSDs met the control limit criteria, when applicable, with the exceptions noted in **Appendix D**; exceptions that required qualification of data (J or UJ) are noted in **Appendix D**. All surrogate recoveries met the control limit criteria.

3.1.3 Comparability

Comparability from one sampling event to another is achieved by structuring the field sampling program and protocol for sample collection and analyses. CDM Smith's technical SOPs are followed to ensure consistent sampling techniques. In addition, EPA-approved analytical methods and reporting limits are defined and used to ensure comparability of data.

All data included in this report have been validated and are considered acceptable for use; **Appendix D** provides the full validation narrative and results.

3.1.4 Completeness

An analytical completeness goal of 90% for each analytical group was used to determine completeness. Analytical completeness was evaluated for each analytical group through comparison of the number of non-rejected data to the number of requested analyses. All analyses for field samples that were submitted to the laboratory were successfully analyzed, yielding a completeness result of 100%, which met the 90% goal.

3.1.5 Sensitivity

The reporting limits achieved for all samples were adequate to meet the data quality objectives (DQOs).

3.2 Groundwater Elevations

No water level measurements were collected during the 2020 annual offsite sampling event; however, during the spring semiannual sampling event (CDM Smith 2020b), synoptic water levels were collected from 54 monitoring wells according to procedures outlined in SOP 1-6, "Groundwater Level Measurement" (CDM Smith, 2019a). Water levels measured in the PVA are discussed herein.

Groundwater elevation data from the thirteen wells in the PVA event are presented in **Table 3-1**. Groundwater elevations range from 4,462.8 feet at MW-103D to 4,450.6 feet at PA-7. The elevations were calculated by subtracting the measured depth to water from the ground surface elevation estimated from a USGS Digital Elevation Model (DEM) (USGS, 2018) and adding the measured height above ground surface of the well.

One-foot groundwater elevation contours generated from these data are shown on **Figure 3-1.** Contours were generated using the Kriging Gridding Method included in the Golden Software Inc. code Surfer. MW-37 was omitted from the groundwater elevation contours. Groundwater flow is generally to the northwest.

3.2.1 Horizontal Gradient Evaluation

Groundwater flows through the Lower PVA from southeast to northwest, with groundwater discharging to the Lower PVA from tributary basins, including Fort Hall Canyon. From the confluence of Fort Hall Canyon and the Lower PVA at MW-103S/D to the nearest downgradient well MW-106S/D (3,490 feet away), the horizontal flow gradient is approximately 0.0006 ft/ft. Between MW-106S/D and PA-5, which is 3,888 feet away, there is virtually no gradient. A stagnation zone is contoured within this area on **Figure 3-1**, where groundwater velocities are assumed to be negligible. There is not enough data between these two points to determine whether this stagnation zone is occurring because of flows entering the Lower PVA from Mink Creek. It is also unclear whether the appearance of this stagnation zone is ephemeral, a regular occurrence tied to specific hydrologic conditions, or maintained

over long periods of time. Downgradient of the stagnation zone the gradient is 0.005 ft/ft between PA-5 and PA-7 (1,302 feet).

3.2.2 Vertical Gradient Evaluation

Vertical head gradients were measured to be negligible at the MW-106, and MW-115 well pairs. MW-103S had a piezometric head that was 2.7 feet lower than what was measured at MW-103D, inferring an upward gradient of 0.04 ft/ft at this location. These data are included in **Table 3-1**.

3.3 Offsite Monitoring and Domestic Well Groundwater Analytical Results

Analytical results from the 2020 annual offsite sampling event are discussed below.

3.3.1 VOCs

Detections of VOCs in the City monitoring and municipal supply wells and private domestic supply wells are presented in **Tables 3-2** (city wells) and **3-3** (domestic wells) screened against the EPA MCLs and Idaho Groundwater Rule (IDGW) Primary and Secondary Standards for drinking water. Results for PCE, TCE, cis-1,2-DCE, and VC are also shown on **Figures 3-2** through **3-4**. Results for offsite Bannock County monitoring wells are presented and analyzed under a separate cover but are included on figures for completion.

Appendix C presents all 2020 analytical data and all available historical TCE and PCE data. Time series plots in **Appendix F** present all available data for chlorinated ethenes and geochemical parameters by well.

3.3.1.1 City Monitoring and Municipal Supply Wells

Consistent with 2019 results (CDM Smith 2020a), none of the City monitoring or municipal supply well VOC results exceeded the EPA MCL or IDGW primary standard (**Table 3-2**). However, TCE was detected in the following wells:

- MW-37 (2 µg/L)
- PA-1 (1.6 µg/L)
- PA-3 (2 µg/L)
- PA-4 (2.5 µg/L, 2.8 µg/L, and 2.5 µg/L, for the shallow, middle, and deep intervals, respectively)
- PA-5 (0.86 J µg/L)
- PA-8 (0.32 J µg/L, 0.26 J µg/L, and 0.37 J µg/L for the shallow, middle, and deep intervals, respectively)
- Muni-well-14 (1.2 µg/L)
- Muni-well-33 (2.1 µg/L)

PCE was detected in PA-4 (0.63 J µg/L and 0.58 J µg/L, in the middle and deep intervals, respectively), muni-well-14 (0.25 J µg/L), and muni-well-33 (0.37 J µg/L).

Detections of other VOCs include acetone (2.3 J µg/L) and benzene (0.5 J µg/L) in MW-38, cis-1,2-DCE (0.16 J µg/L) in the deep interval at PA-4, and carbon disulfide (0.41 J µg/L) in PA-5.

3.3.1.2 Domestic Wells

TCE exceeded the MCL and IDGW primary standard in the following wells (**Table 3-3**):

- RW-2140H (34 µg/L)
- RW-2151H (5.8 µg/L)
- RW-2172H (28 µg/L)
- RW-2203H (33 µg/L)
- RW-2237H (9.8 µg/L)
- RW-7677P (5.9 µg/L)
- RW-8030P (7.1 µg/L)

These results are consistent with 2019 findings (CDM Smith 2020a). TCE was detected at values less than the MCL in the following domestic wells:

- RW-5898B1 (0.78 J µg/L)
- RW-7070B (3.4 µg/L)
- RW-7091R (1.4 µg/L)
- RW-8000B (4.8 µg/L)
- RW-8048P (4 µg/L)
- RW-8284P (3.9 µg/L)

PCE exceeded the MCL and IDGW primary standard in RW-2140H (6.1 µg/L) and RW-2203H (5.2 µg/L) and was detected in the following domestic wells (**Table 3-3**):

- RW-2172H (4.9 µg/L)
- RW-2237H (1.9 µg/L)
- RW-7070B (0.59 J µg/L)
- RW-7091R (0.24 J µg/L)
- RW-7677P (1.2 µg/L)
- RW-8030P (1.3 µg/L)
- RW-8048P (0.71 J µg/L)
- RW-8284P (0.93 J µg/L)

The reductive daughter product cis-1,2-DCE was detected at values less than the MCL in the following domestic wells:

- RW-2140H (2 µg/L)
- RW-2151H (0.38 J µg/L)
- RW-2172H (1.5 µg/L)
- RW-2203H (2 µg/L)
- RW-7070B (0.19 J µg/L)
- RW-7677P (0.27 J µg/L)
- RW-8030P (0.36 J µg/L)
- RW-8048P (0.16 J µg/L).

The reductive daughter products trans-1,2-DCE and VC were not detected in any domestic wells. Detections of other VOCs include 1,1-dichloroethane (0.23 J µg/L) and chloroform (0.25 J µg/L) in RW-2140H, chloroform (0.2 J µg/L) in RW-2172H, and 1,1-dichloroethane (0.25 J µg/L) and chloroform (0.22 J µg/L) in RW-2203H.

3.3.2 Geochemical Parameters

Geochemical parameters are often used to assess conditions in groundwater affected by the landfill leachate/waste, including redox conditions, pH, and alkalinity, and to evaluate conditions that facilitate COC degradation. Field parameters (conductivity, pH, temperature, turbidity, DO, ORP) are presented in **Tables 3-2** (city wells) and **3-3** (domestic wells). Additional geochemical parameters were not measured in the 2020 annual offsite sampling event.

3.3.2.1 Specific Conductivity

Specific conductivity was measured at all offsite domestic and City of Pocatello monitoring and municipal supply wells. Results are presented in **Tables 3-2** and **3-3**. Relatively high specific conductivity (greater than 1 millisiemens per centimeter [mS/cm]) was observed at wells RW-2140H, RW-2172H, RW-2203H, RW-2879M, RW-8209P, RW-8249, and MW-38. All other locations had specific conductivity less than 1 mS/cm.

The specific conductivity reading at MW-38 was 13.5 mS/cm, which is significantly higher than 1 mS/cm.

3.3.2.2 pH

In City monitoring and municipal supply wells (**Table 3-2**), pH ranged from 7.02 to 7.76 standard units, except in MW-38, which exhibited a pH of 5.51.

pH ranged from 6.19 to 7.76 in domestic supply wells (**Table 3-3**). pH levels outside of the ID GW Secondary drinking water standard (range 6.5 to 8.5 standard units) were observed in RW-8048P (6.4) and RW-8105PS (6.19).

3.3.2.3 Redox Conditions

DO, ORP, sulfate, ferrous iron, and methane are redox parameters used to evaluate the degree to which reducing conditions are established at a location. In addition, redox conditions often control the mobility and subsequent concentration in groundwater of redox-sensitive metals such as iron, manganese, and arsenic. Under reducing conditions, these metals are transformed from their oxidized (and immobile) states to their more soluble, reduced forms. In addition, many metals that are not redox sensitive are sorbed to iron and manganese oxyhydroxides, which may dissolve under reducing conditions, releasing sorbed metals. If site soil/sediments contain redox-sensitive metals, elevated concentrations in groundwater will be observed in areas with reducing conditions.

For the 2020 annual offsite sampling event, only DO and ORP sample data was collected. Except for MW-38, all City monitoring, municipal supply, and domestic supply wells exhibited aerobic conditions, as indicated by DO greater than 1 milligram per liter (mg/L), and a positive ORP (**Tables 3-2** and **3-3**).

DO and ORP readings indicated anaerobic conditions in MW-38, which exhibited low DO (less than 1 mg/L) and negative ORP. These results, coupled with low pH and very high specific conductivity, are consistent with field observations. Groundwater was black, and turbidity did not fall below 50 NTU by the time of sample collection (see **Section 2.4** for an explanation of sampling deviations).

Section 4
Data Analysis

4.1 Plume Extent

Groundwater sampling results obtained from the spring semi-annual and offsite 2020 monitoring events were used to update the current lateral extents of PCE and TCE groundwater plumes through data interpolation with modeling software Leapfrog Works, v.2.2.2. These updated isoconcentration contours are presented in **Figure 4-1** (PCE, 5 µg/L) and **Figure 4-2** (TCE, 5 and 100 µg/L). The data used for interpolation includes fall 2018 through summer 2020 sampling results from Cell 1, Cell 2, Cell 4, offsite monitoring wells, domestic wells, City monitoring wells, and municipal supply wells (#14 and #33). Thus, approximately 100 locations onsite and offsite contribute to the contouring.

A description of the model development is provided in the Final QAPP, FHML (CDM Smith 2019a). The PCE and TCE plume contours were estimated by using a kriging algorithm to create a contour map of the most recent PCE and TCE concentration results for a given location available through 2020. A three-dimensional representation of TCE concentrations in groundwater is shown at the 5 µg/L and 100 µg/L isoconcentration levels. Nondetect results are entered as one-tenth of the reporting detection limit, with some nondetect results ignored due to high reporting limits. Analytical data were log-transformed as part of the interpolation process. The interpolations are accurate at each data point but are estimated between data points. Groundwater interpolations have a dynamic surface resolution of 50 feet and horizontal-to-vertical anisotropy of 10:1. Model settings have been revised according to site conditions, and contours have been further revised manually in reported data figures. For instance, there is not extensive bounding data in the distal portions of the plume (i.e., near northernmost City municipal supply wells #14 and #33); the original interpolations were revised to adjust for this.

As shown in **Figure 4-1**, PCE above 5 µg/L is present predominantly in the groundwater along the eastern boundary of Cell 1, throughout the remediation system area, and along the Fort Hall Mine canyon into the PVA, extending northwest from the base of the landfill. The highest concentrations occur just upgradient of the remediation system, and the distal edge that exceeds groundwater drinking water standards is estimated to be near RW-2203H, which had a result just above the MCL in June 2020.

As shown in **Figure 4-2,** the TCE plume has a similar footprint to PCE, but it extends much farther to the northwest along the Lower PVA towards the City (CDM Smith 2019b). The maximum TCE concentrations are observed at the base of Cell 1 in the vicinity of the remediation system (CDM Smith 2020b). The 5 µg/L isoconcentration contour reaches just northwest of domestic well RW-8030P. As with the PCE plume, there is little bounding data available in the offsite area between the remediation system and RW-2140H (**Figure 4-2**).

TCE impacts have been observed farther downgradient from the FHML within the Lower PVA, with concentrations detected in the most distal well monitoring locations, muni-well-14 and muni-well-33 in 2020. In addition, TCE was detected above the MCL at muni-well-33 in spring 2018. However, between September 2018 and June 2020, the result has been below the MCL and so location is not currently included in the greater than 5 µg/L plume.

For both TCE and PCE, the southern extent of the plume contours on the east side of Cell 1 was manually adjusted because there are no wells south of MW-109S/D that would bound the contour beyond what is shown. Additionally, there are poor bounding data available in the offsite area between the FHML property boundary and domestic well RW-2140H because of lack of access to the private properties located there and the steeply sloped hillside north of Cell 1, so the plume contour was manually adjusted here as well.

Concentrations of PCE and TCE in offsite monitoring and domestic wells in the PVA have frequently exceeded the EPA MCLs (5 µg/L for both PCE and TCE). In the early 1990s, TCE was detected above 100 µg/L in RW-2076F, RW-2151H, RW-2203H, and RW-2172H, and PCE was detected at nearly 200 µg/L in RW-2076F. In the last two decades (2000 to 2020), PCE or TCE have exceeded the MCL in 10 of 45 currently or historically sampled domestic wells: RW-2076F, RW-2140H, RW-2151H, RW-2172H, RW-2203H, RW-2237H, RW-7549P, RW-7677P, RW-7953P, and RW-8030P. Since 2000, maximum concentrations have not exceeded 15 µg/L of PCE or 80 µg/L of TCE (**Appendices C** and **F**). In 2020, PCE or TCE was detected in 13 of the 30 domestic wells sampled (**Table 3-3**), with maximum concentrations of both PCE (6.1 µg/L) and TCE (34 µg/L) observed in RW-2140H (**Table 3-3**).

4.2 Statistical Analysis of PCE and TCE

As discussed in **Section 2.2**, an extensive monitoring well network is used to assess impacts of the FHML Cell 1 source to groundwater within the Fort Hall Canyon and PVA. **Appendix C** presents all available historical and current PCE and TCE data, and chlorinated ethene time series plots are provided in **Appendix F** for the City monitoring wells, municipal supply wells, and domestic wells.

For wells with adequate PCE and TCE data, a statistical analysis was conducted in accordance with EPA and Idaho Department of Environmental Quality (IDEQ) guidance (EPA 2009, IDEQ 2014) to evaluate concentration trends. These data were used to assess the overall plume trends.

4.2.1. Statistical Approach

Groundwater data for PCE and TCE from City monitoring wells, municipal supply wells, and domestic wells were analyzed for statistically significant concentration trends. Trends were evaluated with Mann-Kendall and Theil-Sen statistics to identify datasets with increasing, decreasing, or no trend.

Statistical analysis required datasets to meet the following conditions:

- The dataset contains at least six data points (n).
- The dataset contains less than 50% nondetect (MDL) results.
- The dataset contained a most recent result from September 2017 or later.

The Mann-Kendall test compares each data point to later data points to develop a summation statistic, S. The magnitude of S describes the variance of the dataset, while the sign of S corresponds to trend direction. If the trend is statistically significant, the probability (p-value) is less than alpha, which is 0.05 unless otherwise stated and corresponds to a confidence level of 95%. The Mann-Kendall approach is a common practice in identifying trends of COCs in groundwater wells. It is often accompanied by the Theil-Sen regression line analysis, which

identifies a corresponding slope to the trend of data. The date range for analyzed data was 2002 to 2020 because the remediation system commenced operation in 2002. Additionally, all historical data were evaluated because there were few datasets with enough data for statistical analysis if data prior to 2002 was excluded.

4.2.2 City Monitoring Wells

City monitoring wells were installed by the City as groundwater monitoring (PA wells) or extraction wells (MW-38 and MW-37, respectively) and are located in the Lower PVA downgradient of the FHML beyond the Fort Hall Canyon.

Historical data from City monitoring wells was compiled and reviewed. For wells with multiple screened intervals, data was separated by sample depth, where known, for the time series plots and statistical analysis. Previously, only data from wells with single screens had been evaluated (CDM Smith 2020a). **Appendix C** presents all available historical and current PCE and TCE data for all offsite wells. **Appendix F** presents comprehensive time series plots for chlorinated ethenes and redox parameters.

The statistical summary for City monitoring wells is presented in **Table 4-1**. **Figures 4-3** and **4-4** present the offsite monitoring well trend summary for PCE and TCE, respectively. Data from Bannock County monitoring wells (CDM Smith 2020b) is shown for completeness.

For datasets with at least six data points and fewer than 50% MDL results, groundwater PCE and TCE data from the following City monitoring wells were analyzed for Mann-Kendall trends:

- PA-1
- PA-3
- PA-4, at separate screened intervals 65-75 feet bgs (PA-4-65-75) and 100-110 feet bgs (PA-4-100-110)
- PA-5 (TCE only)
- PA-6 (last sampled 2018, damaged; TCE only)
- PA-7 (TCE only)
- PA-8, at screened interval 37-47 feet bgs (PA-8-37-47) (TCE only)

PCE was statistically decreasing in all city monitoring wells with relatively small p-values, except in PA-4-100-110, where there was no significant trend ($p = 0.060$). TCE was statistically decreasing in all city monitoring well datasets, except in PA-5 and PA-6, where no significant trends appeared ($p = 0.059$ and $p = 0.093$, respectively).

All of the analyzed datasets lacked results between 2002 and either 2017 or 2018. Because of this, there was insufficient data after 2002 to perform analysis on a post-remedy timeframe. Additionally, there was insufficient data to perform analysis for a pre-remedy timeframe. Therefore, all available data for each well starting at 1994 was used in the analysis, and datasets ranged between 6 and 12 data points. Notably, at 0.01 alpha (99% confidence level), most of the trend results would be the same. Datasets for PA-4 contained only six data points and will require additional data points to increase the confidence of the trend results.

4.2.3 Municipal Supply Wells

In addition to city monitoring wells, **Table 4-1** presents the Mann-Kendall analysis for muni-well-14 and muni-well-33, which have historically exceeded the TCE MCL. **Figures 4-3** and **4-4** present the offsite monitoring well trend summary for PCE and TCE, respectively, and **Appendices C** and **F** include historical data and time series plots for these municipal supply wells.

In muni-well-14, PCE was not analyzed because the dataset contained more than 50% MDL results. For the complete dataset, TCE was decreasing in this well ($p = 0.0052$); however, between 2004 and 2020, there was no significant trend ($p = 0.17$). In muni-well-33, PCE ($p = 0.002$) and TCE ($p = 0.0046$) displayed decreasing trends over the entire historical dataset; however, TCE displayed no significant trend since 2002 ($p = 0.94$). These results are consistent with 2019 (CDM Smith 2020a).

Similarly to PA wells, municipal supply wells lack data results for a significant duration of time between remediation system operation onset and recently. However, p-values decreased in 2020 relative to 2019, demonstrating the increasing confidence in statistical results with more data points.

4.2.4 Domestic Wells

Domestic wells are potable supply and irrigation wells located on private properties located downgradient to the FHML. Over the last few decades, some of these domestic wells have been sampled at regular intervals. Historical data from 45 domestic wells was compiled and reviewed. **Appendix C** presents all available historical and current PCE and TCE data for offsite wells. **Appendix F** presents comprehensive time series plots for chlorinated ethenes and redox parameters for domestic wells with six or more PCE or TCE results. The statistical summary is presented in **Table 4-2**. **Figures 4-3** and **4-4** present the offsite monitoring well trend summary for PCE and TCE, respectively.

For datasets with at least six data points, groundwater PCE and TCE data from the following domestic wells were analyzed for Mann-Kendall trends:

- RW-2076F
- RW-2140H
- RW-2151H
- RW-2172H
- RW-2203H
- RW-5898B1
- RW-7505P
- RW-7549P
- RW-7677P
- RW-8000B

- RW-8012P
- RW-8030P

Except for RW-2076F and RW-8030P, significant time gaps existed in the datasets, leaving fewer than six data points between 2002 and 2020. Therefore, the entire date range was included in the analysis for all locations. P-values presented below pertain to the complete dataset, unless otherwise specified. This may introduce a conservative bias to the results, because early data was collected before implementation of a remedy. In addition, RW-2076F, RW-7953P, and RW-8030P datasets were analyzed between 2002 and 2020, and RW-8080P datasets were analyzed for 2010 to 2020.

RW-8030P was the only well to exhibit statistically significant increasing PCE and TCE trends. Results for each analyzed date range are as follow (**Table 4-2**):

- All historical data: increasing PCE ($p = 0.048$), increasing TCE ($p = 0.0042$)
- Date range 2002-2020: increasing PCE ($p = 0.0019$), increasing TCE ($p = 0.000020$)
- Date range 2010-2020: no significant PCE trend ($p = 0.56$), no significant TCE trend ($p = 0.71$)

Consistent with the time series plots shown in **Appendix F**, the trends in RW-8030P vary by date range. The maximum historical TCE concentration in RW-8030P was 30 µg/L in 1992. Thereafter, concentration trend decreased until about 2002, when TCE was at the MCL. Then, TCE concentrations increased to 16 µg/L in 2017, although there is no available data between 2012 and 2017. More recently, the 2019 and 2020 results have decreased again to six and 7.1 µg/L. PCE concentrations have followed a similar pattern, albeit at concentrations below the MCL.

The following domestic wells had a statistically significant decreasing PCE trend (**Figure 4-3**:

- RW-2076F ($p = 0.00046$)
- RW-2151H ($p = 0.0092$)

The following domestic wells had a statistically significant decreasing TCE trend for the complete dataset (**Figure 4-4**):

- RW-2076F ($p = 0.0013$)
- RW-2140H ($p = 0.012$)
- RW-2151H ($p = 0.0054$)
- RW-2172H ($p = 0.048$)
- RW-2203H ($p = 0.036$)
- RW-5898B1 ($p = 0.010$)
- RW-7677P ($p = 0.027$)

The following wells had no significant trend:

- RW-2140H, PCE
- RW-2172H, PCE
- RW-2203H, PCE
- RW-7505P, TCE
- RW-7549P, TCE
- RW-8000B, PCE and TCE
- RW-8012P, TCE

Notably, domestic wells with some of the highest TCE concentrations (RW-2140H, RW-2172H, and RW-2203H) have decreasing TCE trends. However, because there is generally low data density within the last 5 to 10 years, it is important to continue annual monitoring to establish the stability of these trends.

Collectively, the offsite trend data suggest that the extent of the COC plume and many areas within the plume have decreased in concentration since contamination was first discovered in 1992. This is likely the result of reduced COC discharge to the Lower PVA due to the FHML Cell 1 remediation system operation. Areas with decreasing trends are likely more directly downgradient of areas of the plume where containment has been more effective. However, areas where no or increasing trends are observed indicate that containment of the COC plume from FHML has not been achieved and that COC discharge continues to impact the Lower PVA.

Section 5
Screening-Level Risk Assessment

This section presents a SLRA for the following receptors and exposure pathways based upon the analytical results obtained in 2020:

- Human health risks due to use of groundwater as the sole source of household water
- Human health risks due to potential vapor intrusion into residences located above contaminated groundwater
- Human health risks due to use of groundwater as a source of domestic water for irrigation
- Ecological risks due to ingestion of groundwater that may be used to provide drinking water for animals

This SLRA is consistent with one conducted in 2019 as reported in (CDM Smith 2020a). The results of the 2019 SLRA have been retained in the summary tables of this report for ease of comparison with the outcomes of the SLRA based upon the 2020 analytical results.

Sections 5.2 through **5.6** present the screening-level human health risk evaluation. **Section 5.7** presents the screening-level ecological risk evaluation. The purpose of the screening-level evaluations is to frame the analytical results for the samples collected during the 2020 offsite groundwater sampling event. If a baseline human health risk assessment (BHHRA) were to be conducted as more data are available for the Site, potential complete and significant pathways that could require quantitative evaluation may include, but are not limited to:

- Direct ingestion, vapor inhalation (i.e., shower steam), and dermal exposure to impacted groundwater by offsite residents and workers using a domestic well for their sole source of household water (i.e., they are not connected water services from the City Water Department)
- Direct ingestion, vapor inhalation (i.e., fine water mist created by sprayers), and dermal exposure to impacted groundwater by residents using a domestic well for irrigation water
- Ingestion of crops watered by domestic wells used for irrigation
- Direct contact exposure to crops and other plants that have been watered by domestic wells used for irrigation
- Vapor intrusion into residences located above impacted groundwater, with subsequent inhalation of vapors by residents

A quantitative BHHRA must consider seasonal variations in groundwater COC concentrations and incorporate a sufficient number of samples to support statistical analysis. For an individual well, a minimum of 8 to 10 samples would be needed. Collection of time series data for established COC improves the confidence that variability around mean concentration values have been accurately estimated. Following collection of a sufficiently large data set, the

data must be evaluated to assure a minimum level of data quality, compare data to background conditions, and confirm COCs. Based on the validated data, toxicity and exposure assessments will need to be performed to enable risk characterization.

Because sufficient time series data and data for all potentially contaminated media have not yet been collected, a BHHRA is beyond the scope of this report. Instead, a preliminary SLRA is presented, based on comparison of groundwater data collected in June 2020 with EPA regional screening levels (RSLs) for tap water and vapor intrusion screening levels (VISLs) estimated from groundwater concentrations using the EPA VISL Calculator.

Exceedances of RSLs indicate properties that may be at risk due to exposure to impacted groundwater that is the sole source of household water at these residences. Similarly, groundwater samples collected from City of Pocatello monitoring wells have been compared to RSLs. The potential health risks associated with impacted groundwater used for irrigation cannot be assessed at the screening level for human health exposure but has been included for ecological receptors (see **Section 5.7.2**). Screening-level risks have been generated for indoor air that may be subject to vapor intrusion at residences located above contaminated groundwater. Screening-level risks are discussed further in **Sections 5.3** and **5.4**.

The screening-level risk ecological risk evaluation (SLERA) presented in **Section 5.7** is focused on the evaluation of the use of groundwater as a water source for ecological receptors. The SLERA does not evaluate all potentially complete exposure pathways due to lack of data for some media types and lack of data that are representative of the range of environmental conditions.

5.1 Current and Potential Future Uses of Groundwater

Figure 5-1 presents the current Drinking Water Source Inventory Area (DWSIA) and Bannock County parcel boundaries for properties in the Lower PVA.. Most parcels are zoned as residential or commercial properties, except for a few at the southern boundary that are zoned agricultural. The FHML operates under a nonconforming use provision.

The Lower PVA is the sole source of drinking water for the Pocatello and Chubbuck communities, as well as surrounding unincorporated Bannock County land area. Residential wells also supply water for agricultural purposes (gardening/crop irrigation). On **Figure 5-1**, parcels are color-coded based on whether a City of Pocatello water supply connection is available or active. Within the DWSIA, there are approximately 43 properties with domestic supply or irrigation wells. Thirteen of those properties are connected to the City of Pocatello municipal water supply, and 31 properties are not connected to the municipal water supply.

Figure 5-2 presents the property parcel map for domestic wells in the vicinity of the current COC plume, including the property connection status. Of the properties evaluated, three monitoring wells and seven domestic wells are located within the area where COC concentrations exceed the MCL. Of the seven properties with a domestic well, the only property not connected to City water for household use is associated with domestic well RW-8030P. Residents at this property use bottled water for drinking, while groundwater supplied by RW-8030P is used for irrigation and other domestic uses.

5.2 HHRA Approach

The methods used to conduct this SLRA include:

- Data evaluation/hazard identification
- Toxicity assessment
- Exposure assessment
- Risk characterization
- Uncertainty analysis

This approach is consistent with EPA's *Risk Assessment Guidance for Superfund (RAGS)* (EPA 1989), although it has been abbreviated for this screening-level evaluation.

5.2.1 HHRA Data Evaluation/Hazard Identification

Identification of chemicals of potential concern (COPCs) for this SLRA is based on: (1) detection of VOCs at concentrations above the laboratory's reporting limit; and (2) detection of metals above the Federal Primary Drinking Water MCLs. The dataset used for this evaluation consists of the samples collected in 2020 from the offsite Bannock County and City monitoring wells, City municipal supply wells, and residential/domestic wells (44 locations total). TCE and PCE are the primary VOCs that were detected in groundwater within the DWSIA (**Table 5-1**). TCE was detected in 23 wells at concentrations ranging from 0.26 µg/L at PA-8 to 34 µg/L in RW-2140H. PCE was detected in 15 of the residential well samples that contained TCE. TCE and PCE were the only VOCs with exceedances of the groundwater standards (EPA MCL or IDGW primary standards) based on comparison of the MCL with the maximum observed concentration[1]; therefore, only these VOCs were retained as COPCs for further assessment[2].

5.2.2 Toxicity Assessment

5.2.2.1 Overview

The objective of a toxicity assessment is to identify the types of adverse health effects that are caused by a particular chemical, and how the appearance of these adverse effects depends on exposure level. In addition, the toxic effects of a chemical frequently depend on the route of exposure (oral, inhalation, dermal) and the duration of exposure. The toxicity assessment process is usually divided into two parts: the first characterizes and quantifies the non-cancer effects of the chemical, while the second addresses the cancer effects of the chemical. This two-part approach is employed because there are typically major differences in the time-course of action and the shape of the dose-response curve for cancer and non-cancer effects.

5.2.2.2 Non-Cancer Effects

Essentially all chemicals can cause adverse health effects at a sufficient dose. However, when the dose is sufficiently low, typically no adverse effect is observed. Thus, in characterizing the non-cancer effects of a chemical, the key parameter is the threshold dose at which an adverse effect first becomes evident. Doses below the threshold are considered to be safe, while doses above the threshold are likely to cause an effect.

The threshold dose is typically estimated from toxicological data (derived from studies of humans and/or animals) by finding the highest dose that does not produce an observable

[1] The detection limit for 1,2-dibromo-3-chloropropane and 1,2-dibromoethane was greater than the MCL.

[2] Chemicals not detected in any sample collected were not retained as COPCs for further risk quantification.

adverse effect, and the lowest dose that does produce an effect. These are referred to as the no-observed-adverse-effect level (NOAEL) and the lowest-observed-adverse-effect level (LOAEL), respectively. The threshold is presumed to lie in the interval between the NOAEL and the LOAEL. However, in order to be conservative (protective), non-cancer risk evaluations are not based directly on the threshold exposure level but on a value referred to as the reference dose (RfD) for oral exposures (e.g., incidental ingestion of soil, ingestion of drinking water, ingestion of dietary items), with units of mg per kg body weight per day (mg/kg-day), or the reference concentration (RfC), with units of mg/m^3 for inhalation exposures. The RfD and RfC are estimates (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

The RfD and RfC values are derived from the NOAEL, LOAEL, or benchmark dose by dividing by an uncertainty factor (UF) that reflects the limitations of the data used. If the data are from studies in humans, and if the observations are considered to be very reliable, the UF may be as small as 1.0. However, the UF is normally at least 10, and can be much higher if the data are limited. UFs are assigned to account for uncertainty arising from extrapolation of animal data to humans, the use of a LOAEL instead of a NOAEL, the use of less than chronic exposure, and other limitations in the available data (e.g., lack of reproductive data).

The effect of dividing the NOAEL or the LOAEL by a UF is to ensure that the RfD or RfC is not higher than the threshold level for adverse effects. Thus, there is always a "margin of safety" built into a RfD and RfC, and levels equal to or less than the RfD or RfC are nearly certain to be without any risk of adverse effect. Levels higher than the RfD or RfC may carry some risk, but because of the margin of safety, a level above the RfD or RfC does not mean that an effect will necessarily occur. The protectiveness of this margin of safety will vary from chemical to chemical, depending upon the quality of the data and the size of any applied UF. A chemical for which large UF has been applied will generally have a higher margin of safety than a chemical with a smaller UF.

5.2.2.3 Cancer Effects

For cancer effects, the toxicity assessment process has two components. The first is a qualitative evaluation of the weight of evidence (WOE) that the chemical does or does not cause cancer in humans. Previously, this evaluation was performed by EPA using the system summarized below:

WOE Group	Meaning	Description
A	Known human carcinogen	Sufficient evidence of cancer in humans.
B1	Probable human carcinogen	Suggestive evidence of cancer incidence in humans.
B2	Probable human carcinogen	Sufficient evidence of cancer in animals, but lack of data or insufficient data in humans.
C	Possible human carcinogen	Suggestive evidence of carcinogenicity in animals.
D	Cannot be evaluated	No evidence or inadequate evidence of cancer in animals or humans.
E	Not carcinogenic to humans	Strong evidence that it does not cause cancer in humans.

EPA has developed a revised classification system for characterizing the weight of evidence for carcinogens (EPA 2005). However, this system has not yet been implemented for a number of chemicals, so the older classification scheme is retained for use in this assessment.

For chemicals that are classified in Group A, B1, B2, or C using EPA guidelines (EPA 1986), the second part of the toxicity assessment is to describe the carcinogenic potency of the chemical. This is done by quantifying how the number of cancers observed in exposed animals or humans increases as the dose increases. Typically, it is assumed that the dose-response curve for cancer has no threshold, arising from the origin and increasing linearly until high doses are reached. Thus, the most convenient descriptor of cancer potency is the slope of the dose-response curve at low doses (where the slope is still linear). This is referred to as the slope factor (SF), which has dimensions of risk of cancer per unit dose.

Estimating the cancer SF is often complicated by the fact that observable increases in cancer incidence usually occur only at relatively high doses, frequently in the part of the dose-response curve that is no longer linear. Thus, it is necessary to use mathematical models to extrapolate from the observed high dose data to the desired (but unmeasurable) slope at low dose. In order to account for the uncertainty in this extrapolation process, EPA typically chooses to use the 95% upper confidence limit of the slope as the SF. This means there is a 95% probability that the true cancer potency is lower than the value chosen for the SF. This approach ensures that there is a margin of safety in cancer risk estimates.

For inhalation exposures, cancer risk is characterized by an inhalation unit risk (IUR) value. This value represents the upper-bound excess lifetime cancer risk estimated to result from continuous lifetime exposure to a chemical at a concentration of 1 microgram per cubic meter ($\mu g/m^3$) in air.

5.2.3 Toxicity Values

Toxicity values (RfD, RfC, SF, and IUR values) established by EPA are listed in the Integrated Risk Information System (IRIS) (EPA 2020a). Other toxicity values are available as interim recommendations from EPA's Superfund Technical Assistance Center operated by the National Center for Environmental Assessment (NCEA). A toxicity value hierarchy was developed by EPA for use in site-specific risk assessments (EPA 2003). This hierarchy provides an order of preference of toxicity values, with Tier 1 being the preferred source of toxicity information, if available, then Tier 2, followed by Tier 3. The recommended hierarchy of toxicity values is:

- Tier 1 – EPA's IRIS: IRIS assessments have undergone external peer review in accordance with EPA peer review guidance at the time of the assessment. IRIS health assessments contain EPA consensus toxicity values.
- Tier 2 – EPA's Provisional Peer Reviewed Toxicity Values (PPRTVs): The Office of Research and Development/NCEA/Superfund Health Risk Technical Support Center develops PPRTVs on a chemical-specific basis when requested by EPA's Superfund program.
- Tier 3 – Other Toxicity Values: Tier 3 includes additional EPA and non-EPA sources of toxicity information, such as the California Environmental Protection Agency and Agency for Toxic Substances and Disease Registry. Priority should be given to those

sources of information that are the most current, the basis for which is transparent and publicly available, and that have been peer-reviewed.

The EPA RSL tables include a summary of toxicity values derived from these sources using the tiered system described above. These tables are maintained by EPA and periodically updated (EPA 2020b). All toxicity values used in this assessment were taken from the most recent version of the RSL tables (May 2020).

5.2.4 Exposure Assessment

The exposure assessment describes how residents in the DWSIA could come in contact with chemicals in groundwater. The assessment addresses exposures that could result under existing conditions and from reasonably anticipated potential land uses in the future. The exposure assessment contributes to the SLRA by describing the following:

- Populations that might be exposed
- Exposure pathways by which individuals could become exposed
- Magnitude, frequency, and duration of potential exposures

5.2.4.1 Site Conceptual Exposure Model

A human health site conceptual exposure model (SCEM) has been prepared for the FHML. The SCEM consists of the following components:

- A primary contamination source (FHML)
- Contamination release mechanisms (e.g., leaching from former Cell 1)
- Potential secondary contamination sources (e.g., contaminated soil)
- Contaminant transport mechanisms (e.g., infiltration to groundwater, groundwater to soil vapor partitioning, vapor intrusion and accumulation in residential living spaces)
- Contaminated exposure media (e.g., groundwater, soil, soil gas, indoor air)
- Exposure routes (e.g., ingestion, direct dermal contact, and inhalation of COCs during domestic water use; inhalation of COCs from indoor air; ingestion of COCs from contaminated produce)
- Potentially exposed receptors (e.g., residents)

Figure 5-3 presents the SCEM. The SCEM illustrates how the exposure pathways create the potential for human health risk. The exposure pathways define how the contaminant source, impacted media, transport mechanisms, and exposure routes are linked together to make contaminants available for exposure by human receptors. In **Figure 5-3**, each potential exposure pathway is evaluated to determine if it is complete and whether it likely to be an important contributor to total exposures and risks. Boxes lacking a symbol under the "Human Health Receptors" heading in **Figure 5-3** indicate that the exposure pathway from source to receptor is incomplete. Boxes with closed circles indicate that the exposure pathway is potentially complete and may be an important contributor to total exposures. Boxes with an

"X" indicate that the exposure pathway is potentially complete but deemed to be minor relative to the other pathways being evaluated.

Complete groundwater exposure pathways include the following:

- Ingestion – Potential use of groundwater for potable use presents risks of human health exposure to the contaminants through ingestion of drinking water and use in cooking.
- Inhalation – Potential use of groundwater for domestic purposes presents risks of human health exposure to VOCs through inhalation during activities such as bathing.
- Dermal absorption – Potential use of groundwater for domestic purposes presents risks of human health exposure to VOCs through skin contact during activities such as bathing.

Vapor intrusion is also a potential exposure pathway. Vapors from groundwater may enter a residence through preferential pathways (i.e., cracks in the foundation).

Additional exposures that may need to be considered in a BHHRA, but are not considered for quantitative evaluation in the SLRA include:

- Ingestion, inhalation, and dermal exposure to well water during irrigation activities is considered minor compared to exposures resulting from indoor use of water. The contribution of these pathways to total exposures could be evaluated in a BHHRA.
- Ingestion of fruits and vegetables irrigated with well water is considered a minor exposure pathway and has been evaluated qualitatively. Quantitative evaluation could be completed as part of a BHHRA.
- Dermal exposure, inhalation, and incidental ingestion of soils during digging or excavation activities are assumed to be minor because of the depth to groundwater.

5.2.4.2 Exposure Assessment

For every exposure pathway of potential concern, it is expected that there will be differences between different individuals in the level of exposure at a specific location because of differences in intake rates, body weights, exposure frequencies, and exposure durations. Thus, there is normally a wide range of average daily intakes between different members of an exposed population. Because of this, all daily intake calculations must specify what part of the range of doses is being estimated. Typically, attention is focused on intakes that are "average" or are otherwise near the central portion of the range, and on intakes that are near the upper end of the range (e.g., the 95th percentile). These two exposure estimates are referred to as Central Tendency Exposure (CTE) and Reasonable Maximum Exposure (RME), respectively.

Generic screening levels are based on default exposure parameters and factors that represent RME conditions for long-term/chronic exposures. The RME scenario includes but is not limited to the assumptions listed in **Table 5-2** for adult and child residents (EPA 2014a). This combination of conservative assumptions provides some assurance that the estimated risks presented under the RME scenario represent the high end of plausible exposure.

Based on the assumption of random exposure over an exposure area, risk from a chemical within an exposure area is related to the arithmetic mean concentration of that chemical averaged over the entire exposure area. For the SLRA, the exposure point concentration is represented by the 2020 sampling results.

5.3 Risk Characterization for Groundwater

The risk characterization was focused on non-cancer hazards because non-cancer hazards are the more sensitive endpoint compared to cancer risks for the COPCs evaluated (i.e., PCE and TCE). The potential for non-cancer effects from a COPC was evaluated by comparing the results for sampling in 2020 for each well to the residential RSL for tap water. This ratio of site-related exposure to the non-cancer risk level is called the hazard quotient (HQ). This total HQ, across chemicals, is referred to as the hazard index (HI). If the HI value is less than or equal to 1, non-cancer hazards are not expected from any chemical, alone or in combination with others. If the screening level HI exceeds 1, it may be appropriate to perform a follow-on evaluation in which HQ values are added only across chemicals that affect the same target tissue or organ system (e.g., the liver). This is because chemicals that do not cause toxicity in the same tissues are not likely to cause additive effects. Because the COPCs evaluated in this SLRA do not act on the same target organs, HI values were not calculated. The HQ values represent the total exposure, across the ingestion, inhalation, and dermal contact exposure pathways, from the use of tap water. Note, these values do not consider potential vapor intrusion (VI) risk, potential VI risk is evaluated using VISL.

Table 5-3 presents the HQ values for groundwater exposures based on the 2019 and 2020 dataset. In 2020, 10 of the 44 wells have HQ values that exceed the threshold of 1. Seven of these 10 wells also exceeded the HQ threshold of 1 in 2019 to 2 in 2020. Wells with HQ values greater than 1 are shaded grey. In 2020, HQ values ranged from 2 to 12 based on TCE exposures. All PCE HQ values were less than 1, the maximum HQ value was 0.1 in 2020.

5.4 Risk Characterization for Indoor Air

The EPA VISL calculator was used to calculate potential indoor air concentrations due to VI and the associated carcinogenic risk and non-cancer health hazards based on groundwater concentrations for volatile COPCs. The subsurface target concentrations in the VISL calculator are based on the generic conceptual model for VI described in EPA's VI guidance (EPA, 2015). This conceptual model assumes a groundwater or vadose zone source of volatile vapors that diffuse upwards through unsaturated soils towards the surface and into buildings. In this model, the soil in the vadose zone is considered to be relatively homogeneous and isotropic, though horizontal layers of soil types can be accommodated. The receptors are assumed to be occupants in buildings with poured concrete foundations (e.g., basement or slab on grade foundations or crawlspaces with a liner or other vapor barrier).

As described in EPA's VI guidance, VI is a potential human exposure pathway for a specific building or collection of buildings when the following conditions are met:

- A subsurface source of vapor-forming chemicals is present (e.g., in the soil or in groundwater) underneath or near the building(s).
- Vapors form and have a route along which to migrate (be transported) toward the building(s).

- The building(s) is(are) susceptible to soil gas entry, which means openings exist for the vapors to enter the building and driving "forces" exist to draw the vapors from the subsurface through the openings into the building(s).
- One or more vapor-forming chemicals comprising the subsurface vapor source(s) is(are) also present in the indoor environment.
- The building(s) is(are) occupied by one or more individuals when the vapor-forming chemical(s) is(are) present indoors.

If one (or more) of these conditions is currently absent and is reasonably expected to be absent in the future (e.g., vapor migration is significantly and persistently impeded by natural geologic, hydrologic, or biochemical [e.g., biodegradation] processes and conditions), the vapor intrusion pathway is referred to as "incomplete" (EPA 2015).

The underlying assumption for this generic model is that site-specific subsurface characteristics will reduce or attenuate vapor concentrations as vapors migrate upward from the source and that site-specific building characteristics will tend to further dilute the vapors as they mix with the air in the building (EPA 2014b). Depth to groundwater and the soil profile of the vadose zone are expected to reduce the upward migration of volatile organic vapors to potential receptors.

Therefore, calculated indoor air concentrations and associated risks are likely to be conservative. **Table 5-4** summarizes the predicted indoor air concentrations and associated risks calculated using EPA's VISL calculator. Calculations are based on the concentrations of COPCs in groundwater samples from wells in 2020 (with results from 2019 retained for comparative purposes), a revised generic attenuation factor (0.0005), and an average groundwater temperature of 13.5 degrees Celsius. A lower attenuation factor was selected from the default due to the thickness of the vadose zone (approximately 80-90 feet from the water table to ground surface) and geologic logs that indicated significant intervals of low permeability silts and clays. The generic conceptual model for VI assumes a groundwater or vadose zone source of volatile vapors that diffuse upwards through unsaturated soils towards the surface and into buildings (EPA 2014b). Not all of these properties have residential structures currently on them, but zoning allows for residential building in the future. As seen in **Table 5-4,** three of the 44 wells had VI HQ values greater than 1, with HQ values equal to 2. Wells with HQ values greater than one are shaded grey.

5.5 Risk Characterization for Fruits and Vegetables

Ingestion of fruits and vegetables that have been irrigated with impacted domestic well water may increase the risk of exposure to COCs. Risks were not quantitatively evaluated to assess potential risk due to the use of groundwater as an irrigation source for crops because VOCs are volatile and will dissipate and mix with the ambient air when applied to soil. When watering crops, especially through spray irrigation, the amount of VOCs in the water will be significantly lowered as it moves into the air. Therefore, only a small amount of VOCs is expected to be available to garden plants. Any VOCs that are remaining in the water can be taken up by plants; however, the plants will move the VOCs through their leaves into the air. Therefore, it is not anticipated that significant uptake of these chemicals would occur at levels that would be unsafe to those consuming vegetables grown with groundwater.

5.6 Total Human Health Risk

The total risk for a potential receptor was calculated by adding the groundwater HQ value with the VI HQ value to account for all exposure pathways evaluated in this SLRA. **Table 5-5** presents the total HQ values for TCE and PCE; values are displayed to one significant digit. As seen, 12 of the 44 wells assessed in 2020 have HQ values that exceed the threshold of 1, with HQ values ranging from 2 to 10 for TCE. All PCE HQ values were less than 1. While more wells had HQs exceeding 1 in 2020 as compared to 2019 (7 wells), the magnitude of exceedance declined from a maximum HQ of 15 in 2019, compared to a maximum HQ of 12 in 2020.

5.7 Uncertainty Analysis

Quantitative evaluation of the risks to humans from environmental contamination is frequently limited by uncertainty regarding a number of key data items, including concentration levels in the environment, the true level of human contact with contaminated media, and the true dose-response curves for non-cancer and cancer effects in humans. This uncertainty is usually addressed by making assumptions or estimates for uncertain parameters based on whatever limited data are available. Because of these assumptions and estimates, the results of risk calculations are uncertain, and it is important for risk managers and the public to keep this in mind when interpreting the results of a risk assessment.

Based on this preliminary SLRA, it appears TCE and possibly PCE would be retained as primary COPCs in groundwater for a BHHRA due to groundwater ingestion if this pathway is complete for a location. However, groundwater is used as a drinking water source for a limited number of locations (see **Section 5.1**), and it is understood that none of the properties where HQs were reported use groundwater for potable purposes. Similarly, HQ values for TCE and possibly PCE were slightly greater than one with HQ values of two based on VI exposure. The following sections describe the uncertainties associated with the estimated VI HQ values.

5.7.1 Exposure Assessment

Use of site-specific exposure assumptions and factors could result in reduced risks for constituents or their elimination from the list of COPCs. Potential risk associated with exposure to VOCs through VI was calculated using generic conceptual model assumptions and default exposure parameters. EPA cautions that the calculated VISLs may be inappropriate where:

- Contaminant sources originate in landfills, where methane is generated in sufficient quantities to induce advective transport in the vadose zone.
- Vapor-forming chemicals can be released within an enclosed space and the density of the chemicals' vapor may result in significant advective transport of the vapors downward through cracks and openings in floors and into the vadose zone.
- Leaking vapors originate from pressurized gas transmission lines.

In addition, residential building construction and the presence of preferred vapor migration pathways can greatly affect the vapor intrusion process and resulting indoor air quality and must be thoroughly understood. The depth to groundwater and vadose z1 soil characteristics may greatly reduce the actual risks and health hazards associated with VI.

5.7.2 Risk Characterization

It is important to note that no bright-line rule is established at an HQ of 1, and risk management decisions are made on a site-by-site basis. An HQ of 1 1or less for exposure via all chemicals and routes or an HQ of 1 or less in the event that only one COC and/or exposure route is assessed, indicates that the receptor's exposure is equal to or less than an "allowable" exposure level, and adverse health effects are considered unlikely to occur. When the cumulative HQ is less than or equal to 1, a conclusion of "no significant risk of harm to human health" based on noncancer effects is appropriate. Chronic intakes that are greater than the reference concentration (RfC) (i.e., an HQ greater than 1) indicate a possibility for adverse effects, at least in sensitive populations, and therefore may require further evaluation. However, whether such exposure actually produces adverse effects will (depending on the chemical) be a function of many factors, such as the accuracy of uncertainty factors applied to the NOAEL, the appropriateness of animal model used in studies extrapolated to humans, and the potential for the chemical to cause effects in organs or systems (e.g., reproductive and immune systems) that have not been adequately studied. It is generally accepted that the protective assumptions made by EPA in deriving RfCs will, in most cases, mean that exposures slightly in excess of the RfC will be associated with a low risk for adverse effects, with the probability of adverse effects increasing with increasing exposure. For TCE, uncertainty factors for studies included in the derivation of the RfC ranged from 10 to 1,000.

5.7.3 Pathways Not Evaluated Quantitatively

Contact with contaminated soil and ingestion of fruits and vegetables that have been irrigated with impacted domestic well water may increase the risk of exposure to COCs. This pathway was not evaluated in the SLRA due to lack of measured plant tissue data to adequately evaluate this pathway. Literature-based uptake equations may be identified as part of a BHHRA in order to quantitatively evaluate this exposure pathway. Lastly, it is expected that VOCs will volatilize and not be taken up into produce tissue, making this a potentially minor exposure pathway.

5.7.4 Conclusions

Groundwater exposure for select properties is above a level of concern, HQ values are greater than 1, primarily based on ingestion of groundwater. Vapor intrusion exposure for select properties results in a HQ of 2. HQ values of 2 may not necessarily be indicative that exposures are actually unacceptable. This is because the HQ estimates are based on conservative exposure estimates (vapor intrusion modeling assumptions, depth to groundwater, thickness of the vadose zone, etc.) and toxicity values that have an inherent margin of safety included. One method for refining the exposure estimates would be to sample soil gas at a limited number of properties to refine site exposure estimates and address potential uncertainties introduced by estimating indoor air levels from groundwater.

If it is determined that completion of a BHHRA is necessary, collection and inclusion of soil gas data would aid in addressing these uncertainties and refine the estimation of risk for individual properties in the DWSIA.

5.8 Ecological Risk Evaluation

For the SLERA, risks were evaluated for ecological species that may be adversely impacted due to groundwater being used as a drinking water source and application of groundwater to plants. Risks were evaluated for terrestrial receptors only; aquatic and semi-aquatic receptors

were not evaluated, with the rationale being that the habitat is not intentionally supportive of these receptors and exposure pathways for groundwater are not complete. **Figure 5-3** presents the complete exposure pathways for ecological receptors. The sections below present the ecological risk evaluation for complete exposure pathways.

5.8.1 Terrestrial Plant Exposures and Risks

Risks were not evaluated to assess potential risk due to the use of groundwater as an irrigation source for crops because VOCs will dissipate and mix with the ambient air when applied to soil, and toxicity data are lacking to perform a quantitative evaluation. When watering crops, especially through spray irrigation, the amount of TCE and PCE in the water will be significantly lowered as it moves into the air. Therefore, very little TCE and PCE is expected to be available to garden plants. Any TCE and PCE that is remaining in the water can be taken up by plants; however, the plants will move the TCE and PCE through their leaves into the air. This volatilization is the partitioning of contaminants into the air spaces within a plant and subsequent diffusion into the ambient air, under the assumption that ambient air is less contaminated. For VOCs, volatilization from the plant, or phytovolatilization, can represent a major loss mechanism (Limmer and Burken 2016). Therefore, it is not anticipated that significant uptake of these chemicals would occur at levels that would be unsafe to those consuming vegetables grown with groundwater used for irrigation.

5.8.2 Terrestrial Bird/Mammal Exposures and Risks

Because agricultural-specific screening values are not available for the types of receptors that may be present, wildlife receptor-specific screening values have been used as surrogates as provided in Los Alamos National Laboratory (LANL) ECORISK Database (Release 4.1, 2017). The LANL ECORISK Database provides screening levels that are protective of birds and mammals in various functional feeding guilds (carnivores, herbivores, insectivores) for a variety of chemicals, including metals and VOCs. The screening levels are media- and receptor-specific values that may be used to screen environmental data. The LANL screening-level derivation process is similar to the procedures used to develop EPA's Ecological Soil Screening Levels (EcoSSL). The LANL ECORISK Database provides detailed documentation for the type of data collected and used to derive the screening levels, including the selected no-observed-adverse-effect level (NOAEL) and lowest-observed-adverse-effect level toxicity reference values dietary uptake factors, transfer factors, and exposure parameters. For chemicals where an EcoSSL has been derived, the NOAEL-based soil Ecological Screening Levels are set equal to the EcoSSL values.

Table 5-6 presents a COPC selection for ecological receptors, considering data from both the 2019 and 2020 sampling events. The screening values selected for use in the COPC selection are based on the minimum NOAEL value available across all receptor groups provided in the LANL ECORISK Database. As seen, comparison of the maximum concentration to the screening value for each chemical resulted in no COPCs being identified for ecological receptors. Based on these findings, the use of groundwater as a drinking water source is unlikely to pose a risk to agricultural receptors when considering the magnitude of the difference between the most conservative screening values and the maximum concentration.

Section 6
Conclusions and Recommendations

6.1 Results of Offsite and Domestic Well Monitoring

The following conclusions are based on the 2020 offsite monitoring event sampling results (**Tables 3-2** and **3-3**, **Appendix C**), statistical analysis (**Tables 4-1** and **4-2**), and COC time series plots (**Appendix F**):

- ***City Municipal Supply Wells***:
  - Both PCE and TCE were detected in samples collected from muni-well-14 and muni-well-33 below groundwater criteria. These wells have historically exceeded the TCE MCL, most recently in 2018 (muni-well-33).
  - In muni-well-14, PCE was not analyzed because the dataset contained more than 50% MDL results. For the complete dataset, TCE was decreasing in this well ($p = 0.0052$); however, between 2004 and 2020, there was no significant trend ($p = 0.17$).
  - In muni-well-33, PCE ($p = 0.002$) and TCE ($p = 0.0046$) displayed decreasing trends over the entire historical dataset; however, TCE displayed no significant trend since 2002 ($p = 0.94$).
  - As a result of recent detections of TCE above the MCL, the City has not resumed use of either well for municipal supply (these wells were shut down in 1994).
- ***City Monitoring Wells***:
  - None of the samples collected from the City monitoring wells exceeded groundwater criteria.
  - TCE was detected above the laboratory MDL at 10 locations sampled, and PCE was detected in 2 of the 14 locations sampled.
  - In general, trends that could be evaluated using the historical datasets indicated decreasing trends (for PA-1, PA-3, PA-4, PA-7 and PA-8) or no trend (PA-5) for TCE. However, data was not collected between 2002 and 2017, making trend analysis, and specifically impact of the remediation system to the Lower PVA, difficult to determine.
- ***Domestic Supply Wells***:
  - TCE was detected and exceeded the EPA MCL and IDGW primary standard in samples collected from domestic wells RW-2140H, RW-2151H, RW-2172H, RW-2203H, RW-2237H, RW-7677H, and RW-8030P.
  - PCE exceeded the MCL and IDGW primary standard in domestic well in RW-2140H and RW-2203H.

- Thirteen domestic well samples had COC results above laboratory MDLs for TCE and/or PCE.
- The reductive daughter product cis-1,2-DCE was detected in RW-2140H, RW-2151H, RW-2172H, RW-2203H, RW-7070B, RW-7677P, RW-8030P, and RW-8048P.
- 1,2-dichloroethane and chloroform were detected in the samples collected from RW-2140H and RW-2203H.
- Chloroform was detected in the sample collected from RW-2172H.
- Seventeen domestic well samples had no COCs detected above the laboratory MDL.

As reported under a separate cover (CDM Smith 2020b), samples from offsite and boundary Bannock County monitoring wells continue to exceed groundwater criteria. Offsite wells MW-103S and MW-116S exceeded groundwater criteria in June 2020 with statistical significance (i.e., recent results are not outliers). PCE and TCE trends are not statistically significant in MW-116S; however, in MW-103S, both COCs are statistically decreasing. Additionally, PCE and TCE concentrations in FHML Cell 1 boundary wells MW-118D and MW-120S exceeded groundwater criteria, which is consistent with previous findings and the lack of a significant trend for these datasets.

FHML impacts to groundwater in offsite city, domestic, and Bannock County monitoring wells continues, as evidenced by TCE and PCE concentrations above groundwater criteria, and by increasing or stable COC trends. Concentrations of PCE and TCE in offsite monitoring and domestic wells in the PVA have frequently exceeded the EPA MCLs (both at 5 µg/L).

6.2 Screening Level Risk Assessment

A screening level evaluation of human and ecological risks was conducted using data collected in 2020. Human exposures, cancer risks, and non-cancer health hazards associated with groundwater used as domestic tap water as well as VI were evaluated. Risk interpretation was focused on non-cancer endpoints as these are more sensitive than cancer endpoints. Ecological risk was evaluated for groundwater that may be used for drinking water by agricultural receptors and application of groundwater to plants.

For human exposure, residents were evaluated as potential receptors. For groundwater exposure pathways, HQ values exceeded the threshold of 1 for 10 of 44 wells evaluated, with HQ values ranging from 2 to 12 for TCE. All groundwater exposure pathway HQs for PCE were less than 1. For VI, PCE HQ values were less than 1. For TCE, 3 of the 44 wells had VI HQ values greater than 1, with an HQ value of 2. The locations that exceeded the VI human health screening levels for TCE include RW-2140H, RW-2172H, RW-2203H.

The total risk for a potential receptor was calculated by summing the groundwater HQ value with the VI HQ value to account for all exposure pathways evaluated in this SLRA. **Table 5-5** presents the total HQ values for TCE and PCE. As seen, 12 of the 44 wells have HQ values that exceed the threshold of 1, with HQ values ranging from 2 to 12 for TCE. All PCE HQ values were less than 1.

To evaluate ecological risk, screening values were selected for COPCs based on the minimum NOAEL value available across all receptor groups provided in the ECORISK Database. Comparison of the maximum concentration to the screening value for each chemical resulted in no COPCs being identified for ecological receptors. Based on these findings, the use of groundwater as a drinking water source is unlikely to pose a risk to agricultural receptors when considering the magnitude of the difference between the most conservative screening values and the maximum concentration.

6.3 Data Gaps

The following data gaps have been identified:

- There is significant uncertainty in the Starlight Formation to alluvium contact where the COC plume is discharging to the PVA from Starlight Formation wells RW-2140H, RW-2151H and RW-2172H to the PVA (alluvium) to the north.
- There is significant uncertainty in the transport characteristics within the PVA including an apparent stagnation zone between the discharge of Fort Hall Canyon to the PVA and the next closest downgradient well within the PVA, approximately 4,000 feet away. The presence of a stagnation zone implies zero velocity and therefore no groundwater flow or advective solute transport between these two points. It is unclear from this one data set whether the appearance of this stagnation zone is ephemeral, a regular occurrence tied to specific hydrologic conditions, or maintained over long periods of time. Upwards vertical gradients that could result in discharge of the COC plume from the Starlight Formation to the PVA were observed at well pair MW-103S/D, located where groundwater discharges from Fort Hall Canyon to the PVA. Within the PVA, vertical gradients were measured to be negligible.
- Trend analysis for many well locations had relatively high uncertainty due to the gap in data available between approximately 2002 and 2017. In many cases insufficient data were available to conduct trends analysis. In addition, a minimum of eight monitoring events is typically required to support statistical analysis and to determine compliance with groundwater criteria (i.e. EPA MCLs and IDGW rule primary standards), although a threshold of six was used, per EPA guidance (EPA 2009), to conduct the initial trend analysis presented herein. Therefore, additional sampling is needed to evaluate the plume trends and plume stability in the distal area and compliance with groundwater criteria. Recommended locations are included in **Table 6-1**.
- Residences above contaminated groundwater may be at risk of vapor intrusion if groundwater concentrations in future sampling efforts are elevated relative to the groundwater concentrations used in this risk evaluation, given that VI-related risk is low based on 2020 data. In this case, soil gas sampling could be beneficial in evaluating indoor air risks as soil gas data would allow for evaluation of a stronger line of evidence to determine potential VI risk. As noted above, use of groundwater concentrations to predict indoor air concentrations may result in an overestimate of risk given site conditions.

6.4 Recommendations for 2021 City and Domestic Well Monitoring

The results of the 2020 offsite groundwater monitoring activities were used to develop recommendations for additional activities to continue to evaluate the impacts of the VOC plume migrating from the FHML to the PVA and assess risk to human health and the environment.

6.4.1 2021 City and Domestic Well Sampling and Analysis

- Conduct a 2020 offsite groundwater monitoring event as detailed in **Table 6-1**, to include (at a minimum):
  - Sample all City monitoring wells with any TCE or PCE detection within the last five monitoring events or without results from at least six monitoring events.
  - Sample muni-well-14 and muni-well-33.
  - Sample all domestic wells with any detection of TCE or PCE in previous offsite groundwater monitoring events.
  - Sample an additional domestic well, RW-2076F, which IDEQ has requested to be sampled. The property owners could not be reached in 2019, and consent to sample was obtained after the June 2020 sampling event. This well has historically had the highest TCE concentration in a domestic well.
  - Sample a subset of the domestic wells along the boundaries of the VOC plume that have had no detectable VOCs previously to confirm the plume has not expanded.
  - Sample any additional domestic wells identified (e.g. RW-7200P) within the potential area of impact that have not been sampled previously to establish lateral and vertical offsite plume extent and assess any potential risk to human health or the environment.

6.4.2 Evaluate VI Risk

- Assess the risks to human health and the environment based on past, present, and future groundwater COPC concentrations, refining the calculated risks based upon site-specific factors.
- Three properties were identified to be potentially at-risk for VI based on exceeding human health screening levels resulting in a HQ greater than 1 for TCE in 2020 (**Table 5-4**), RW-2140H, RW-2172H, RW-2203H. Therefore, the following is proposed:
  - Continue to collect groundwater samples from these locations.
  - If groundwater concentrations in future sampling efforts are elevated relative to the groundwater concentrations used in this risk evaluation, soil gas sampling could be beneficial in evaluating indoor air risks as soil gas data would allow for evaluation of a stronger line of evidence to determine potential VI risk.

- Determine if a BHHRA is necessary based on results of future groundwater monitoring, and develop a timeline for incorporating all pertinent data collected after completion of additional groundwater monitoring, if it is determined to be required.
- Continue to verify that domestic wells in use for drinking water continue to remain below EPA MCL and IDGW primary drinking water standards.

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Section 7
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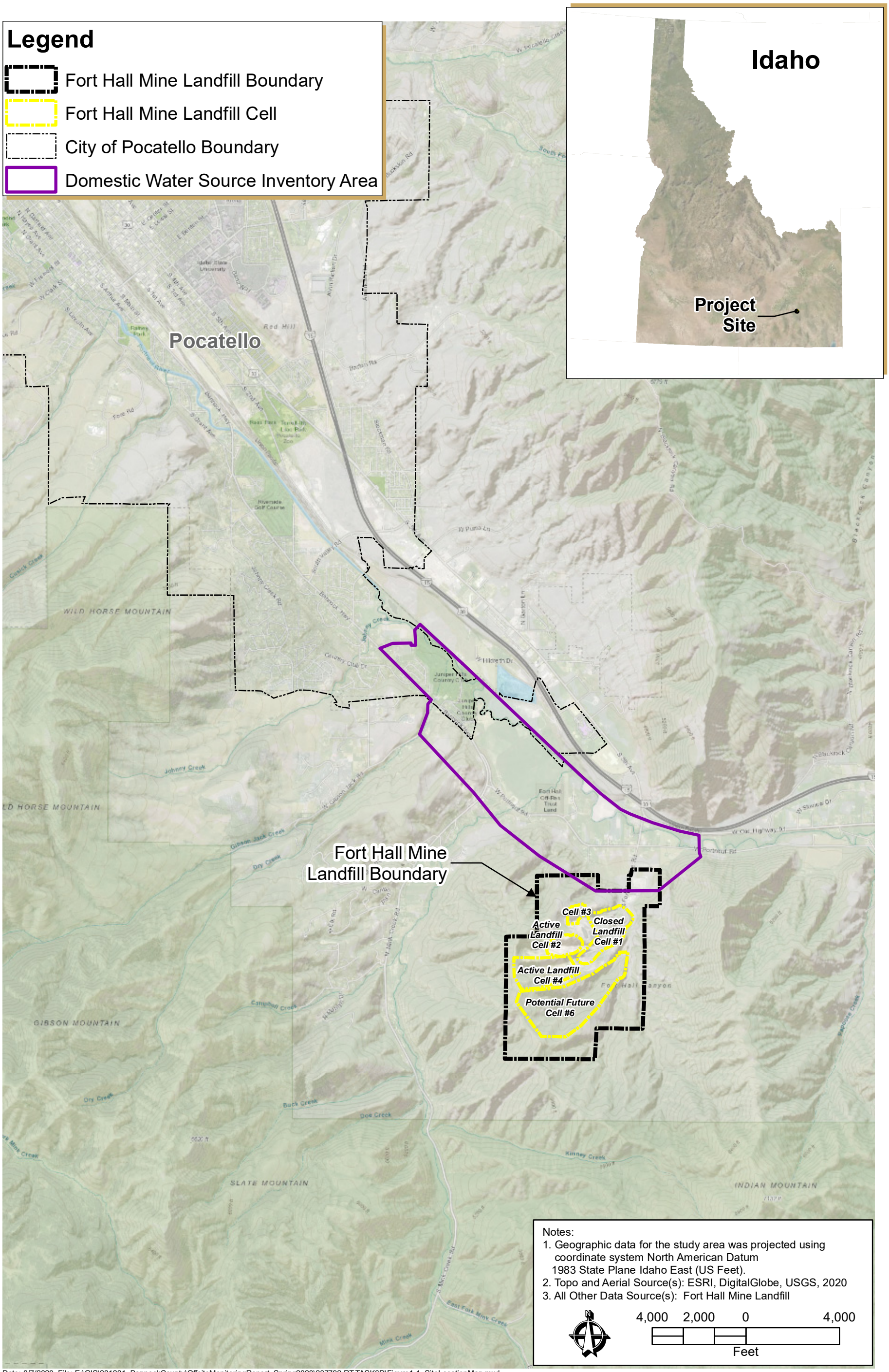
Figures



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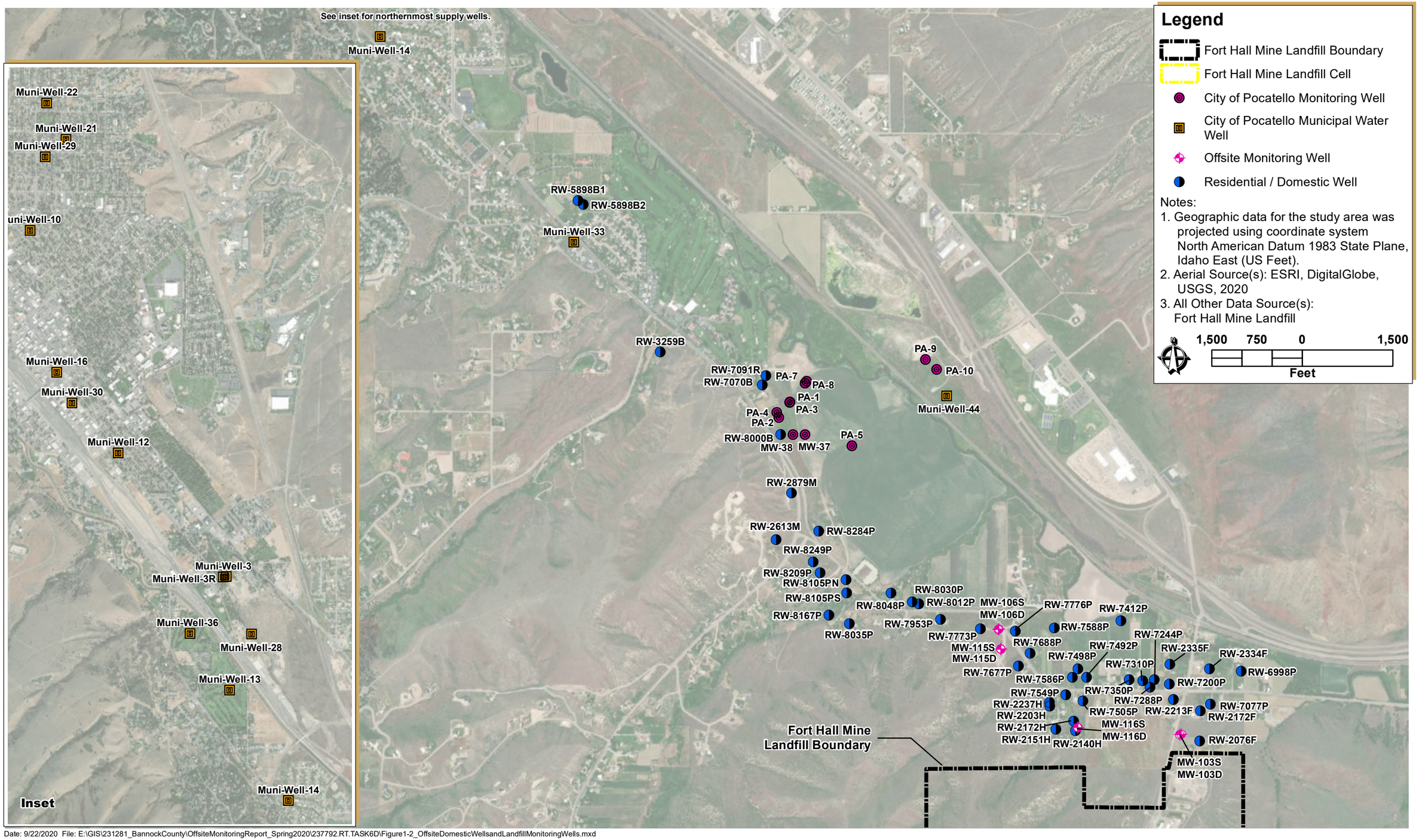

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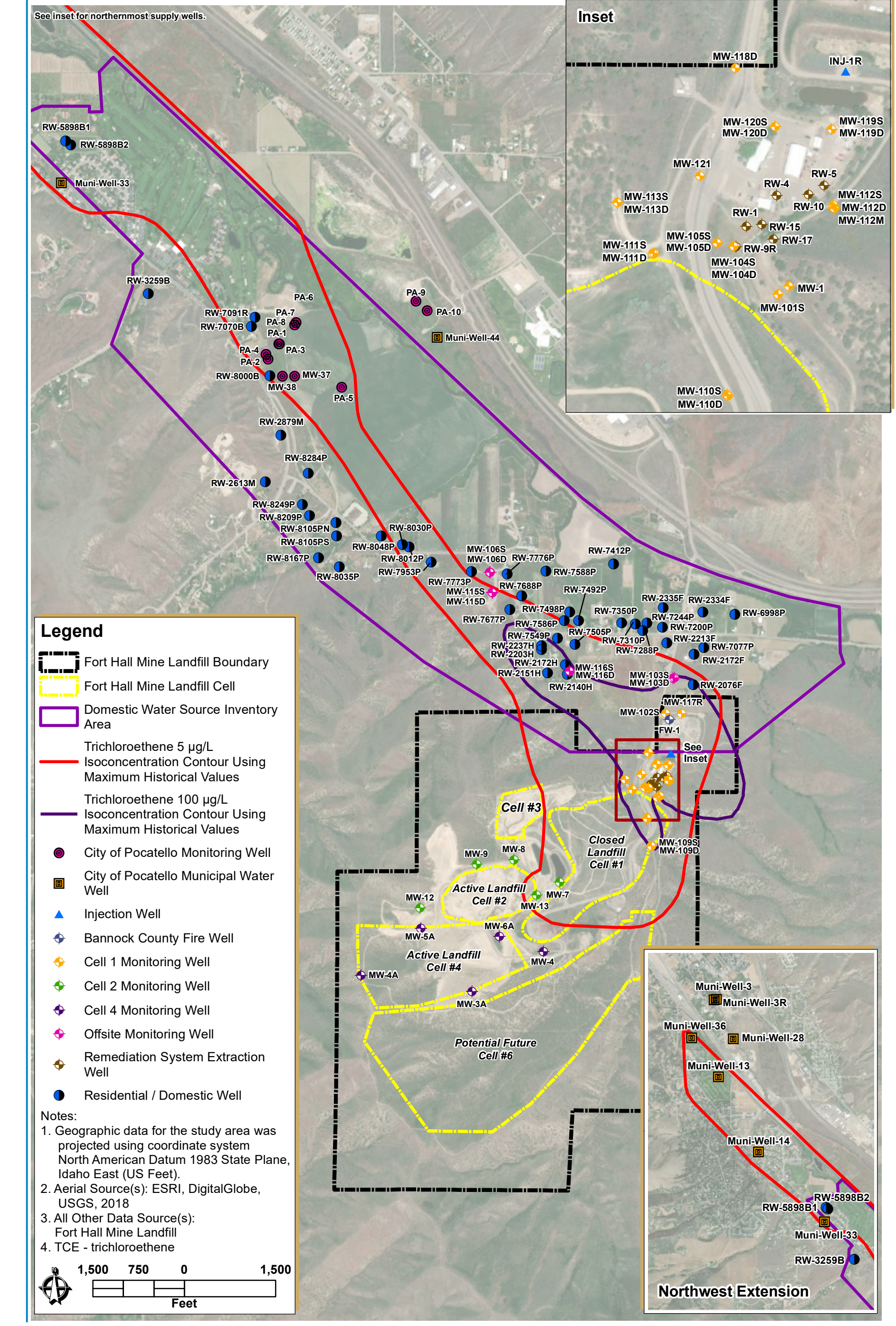
Figure 1-2
Offsite City and Domestic Groundwater Wells



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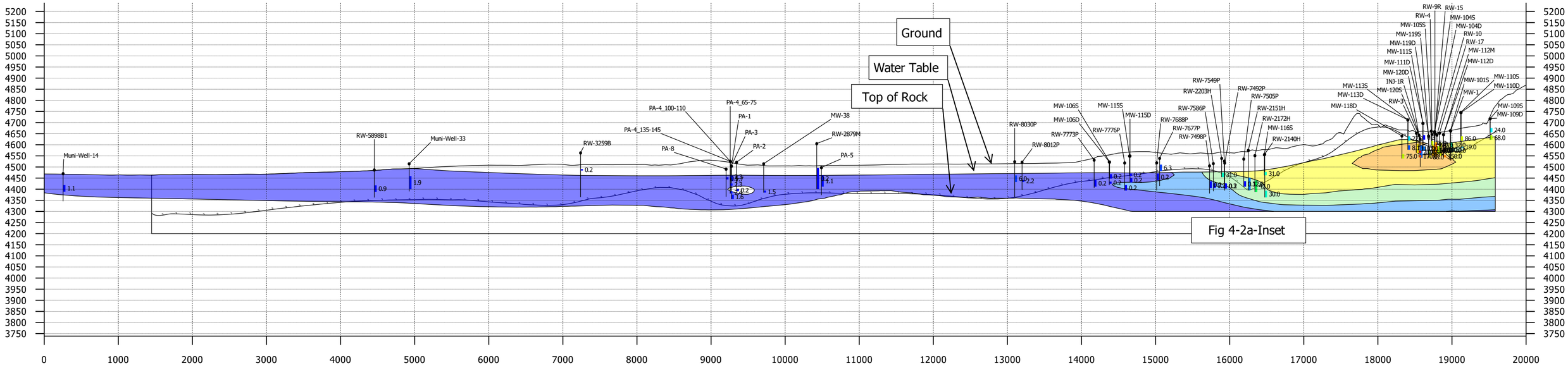
NW

SE



Legend

TCE µg/L

- > 1.0
- > 5.0
- > 10.0
- > 25.0
- > 50.0

Interpolated Top of Rock

Scale: 1:12,000

Vertical exaggeration: 3x

0ft — 4000ft

Lithology

- Overburden: Alluvium, Upper Gravels, & Shallow Silt
- Rock

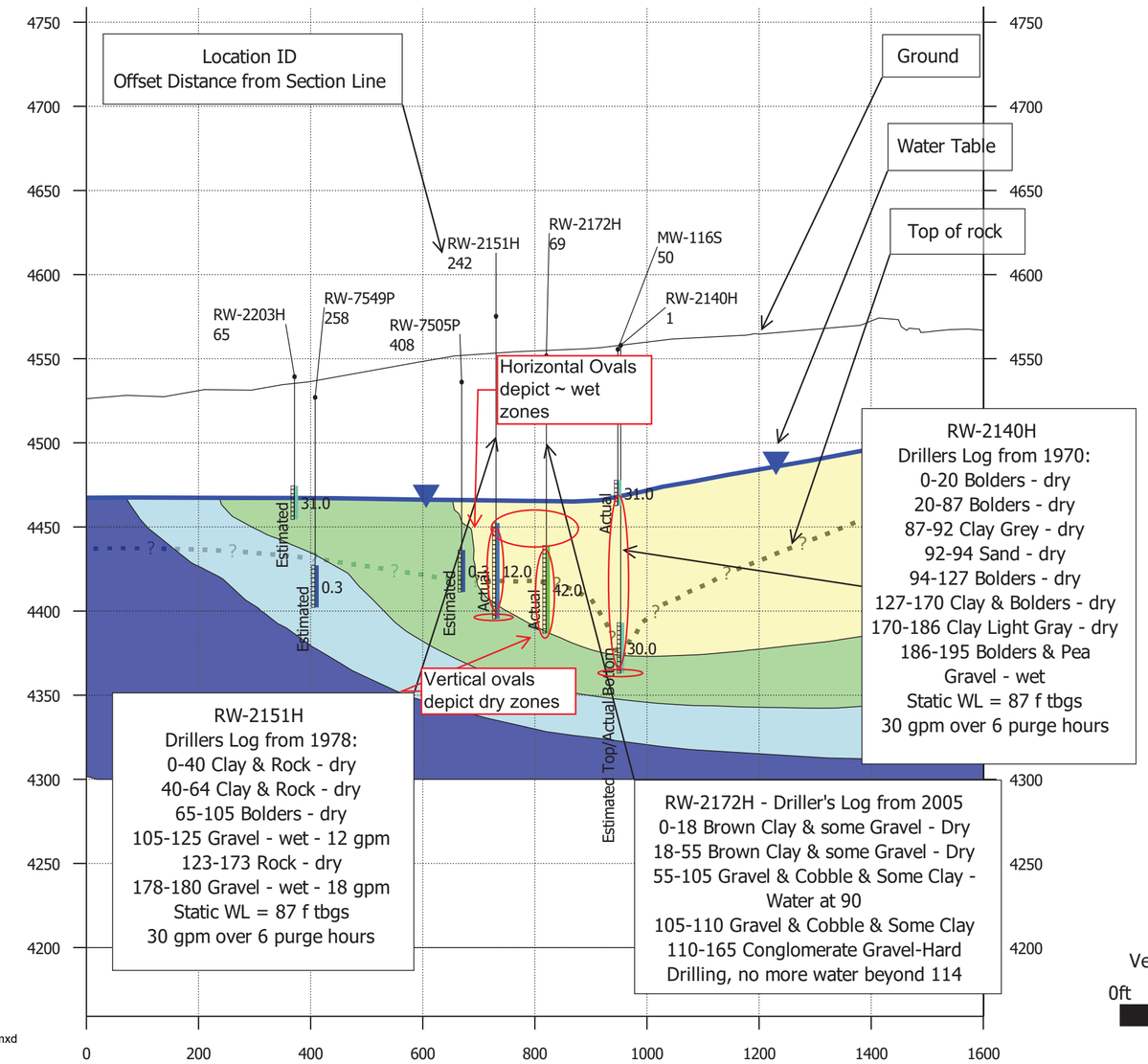
Location

NW: 590408, 422476

SE: 603529, 407382

Inset

Northwest — Southeast



Legend

TCE µg/L

- > 1.0
- > 5.0
- > 10.0
- > 25.0

Lithology

- Overburden: Alluvium, Upper Gravels, & Shallow Silt
- Tertiary Starlight Fm

Location

Northwest: 600753, 410905

Southeast: 601803, 409698

Scale: 1:2,400

Vertical exaggeration: 3x

0ft — 400ft

Date: 8/30/2019 File: D:\GIS\231281_BannockCounty\OffsiteMonitoringReport\237792.RT.TASK6D\Figure4-2a_CrossSectionthroughtheSouthernLowerPVA.mxd

CDM Smith

Figure 1-4
Cross Section through the Southern Lower Portneuf Valley Aquifer

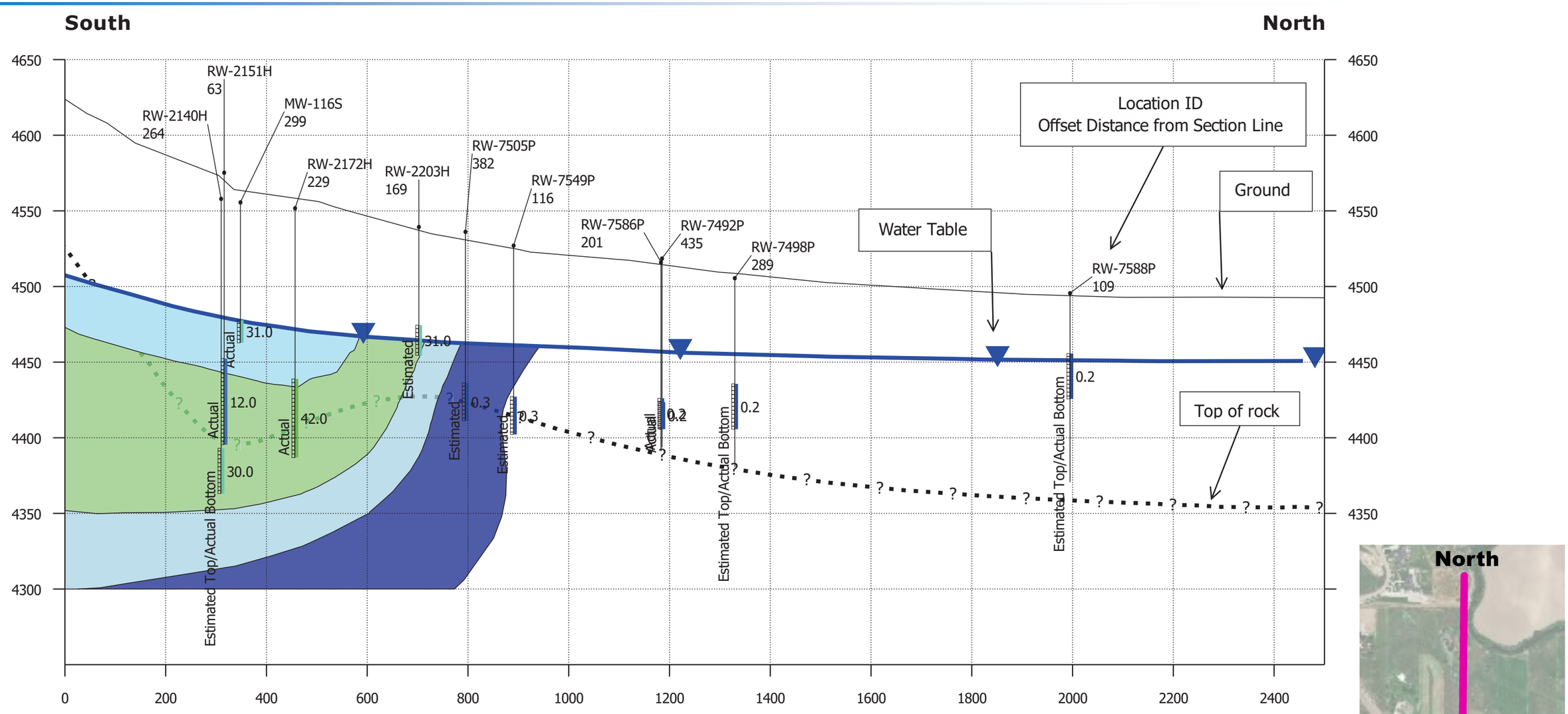


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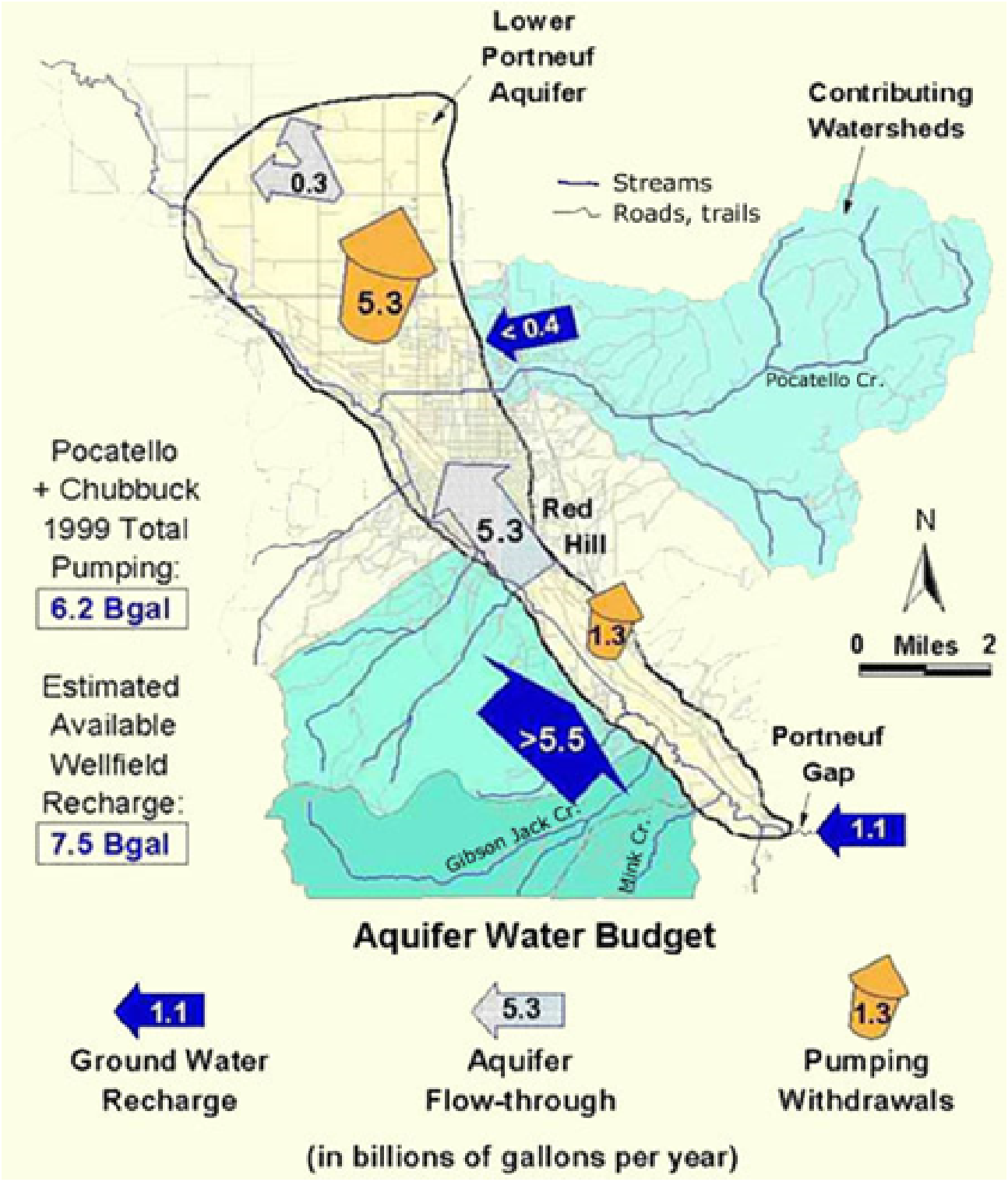
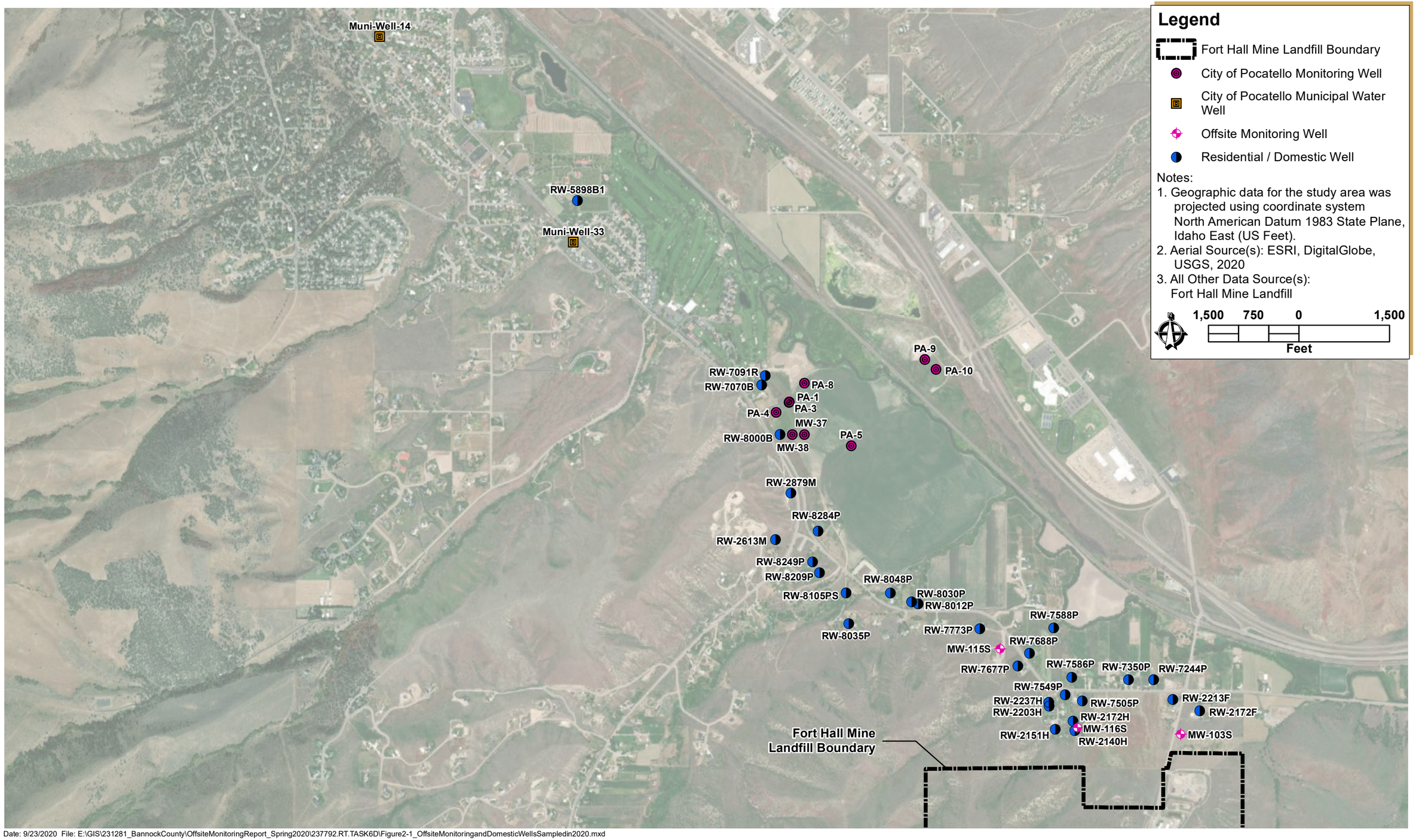
Figure 1-5
Cross Section through TCE Plume in Lower Portneuf Valley Aquifer

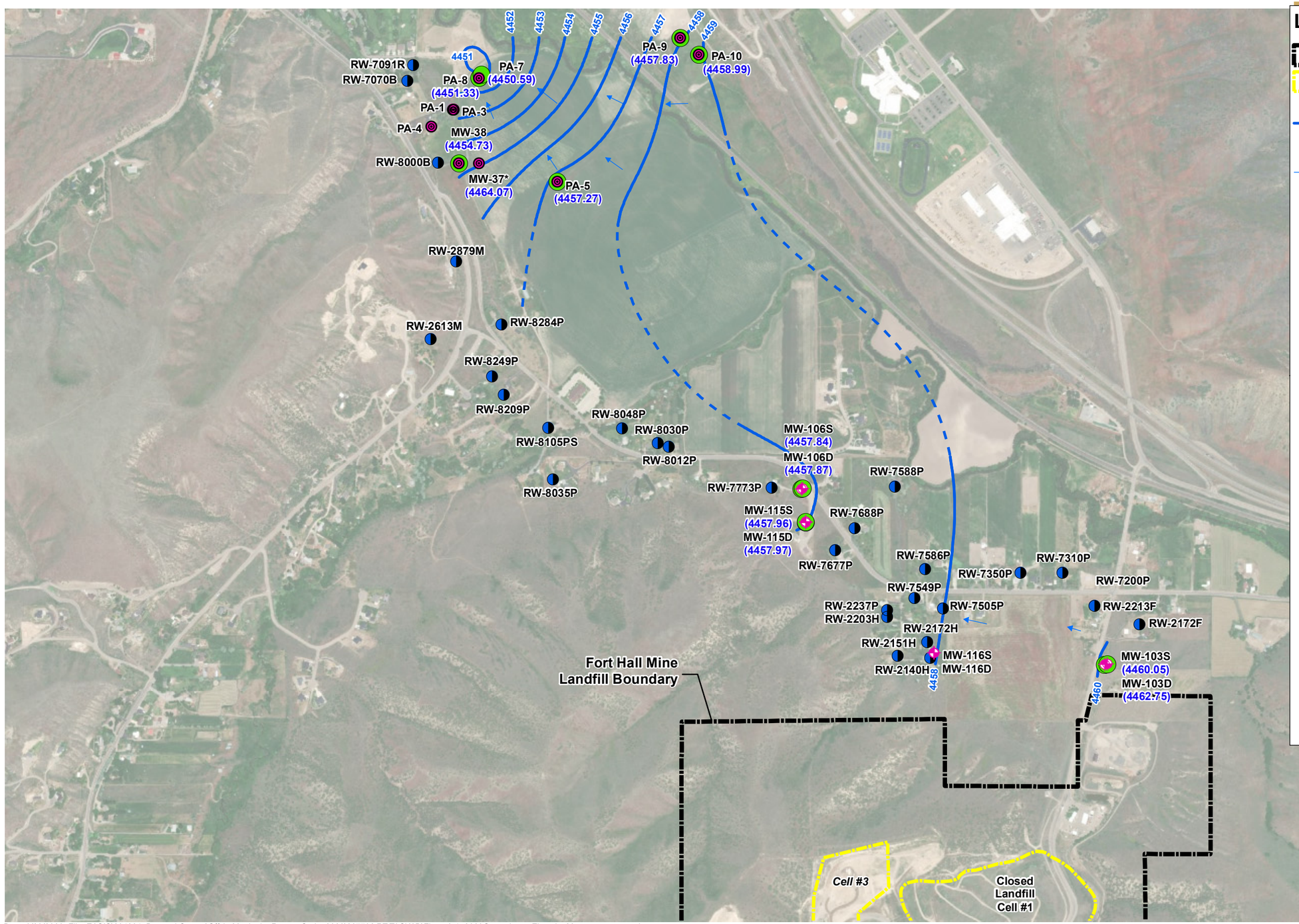


Source: C.W. Meehan. 2005. Geochemistry of the Southern Pocatello Aquifer and its Implications for Aquifer Recharge and Contamination Potential. Master of Science Thesis, Idaho State University.

Date: 11/8//2020 File: D:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure1-6_LowerPortneufValleyAquiferWaterBudget.ai



Date: 9/23/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure2-1_OffsiteMonitoringandDomesticWellsSampledin2020.mxd



Legend

- Fort Hall Mine Landfill Boundary
- Fort Hall Mine Landfill Cell
- Potentiometric Contours within the Fort Hall Canyon (Dashed Where Inferred)
- Approximate Groundwater Flow Direction
- City of Pocatello Monitoring Well
- City of Pocatello Municipal Water Well
- Residential / Domestic Well
- Offsite Monitoring Well
- Location Used for Groundwater Elevation Contouring

Notes:

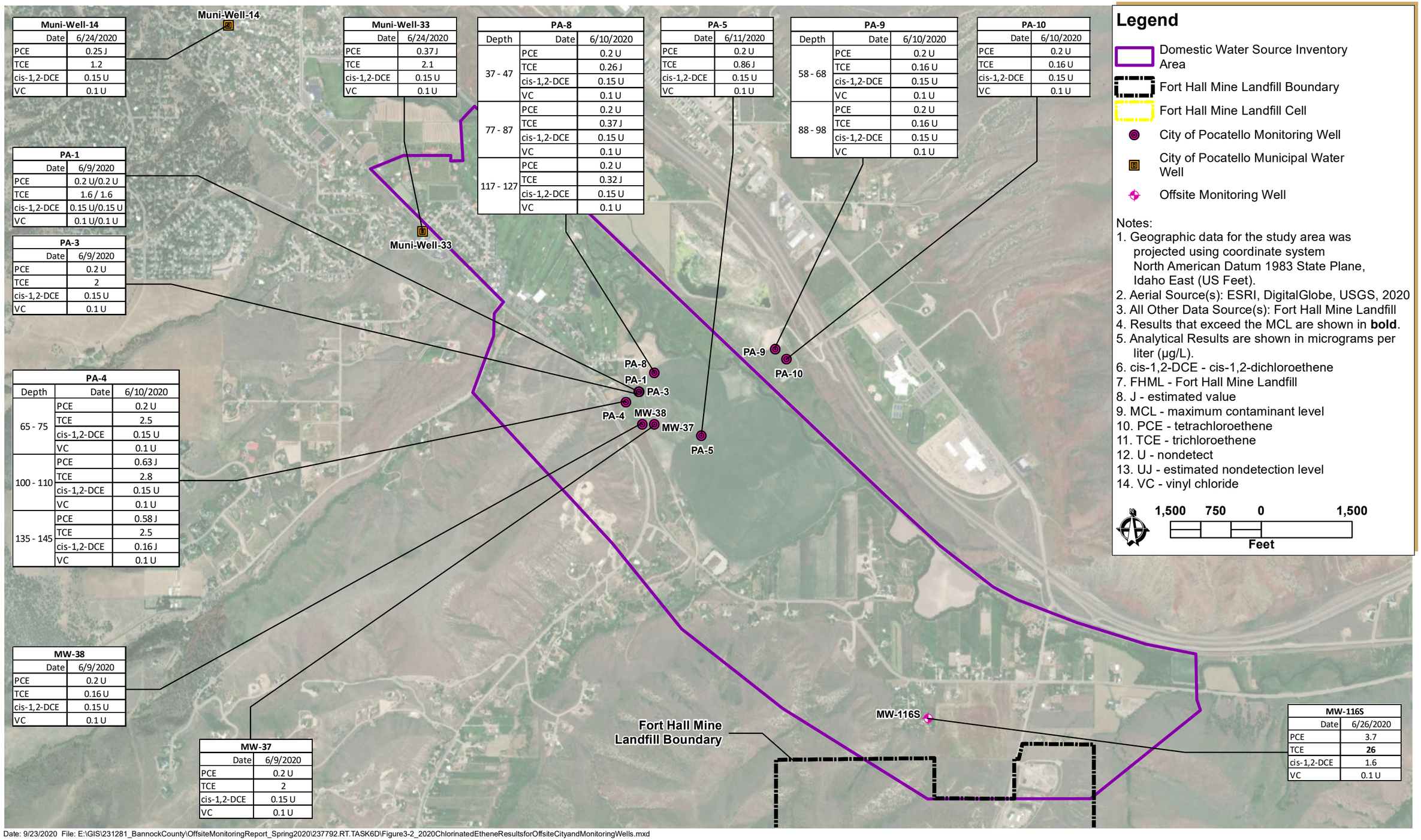
1. Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane, Idaho East (US Feet).
2. Aerial Source(s): ESRI, DigitalGlobe, USGS, 2018
3. All Other Data Source(s): Fort Hall Mine Landfill
4. Groundwater measurements taken in June 2020.
5. The stickup height for these wells was estimated and that these locations will be surveyed in fall 2019.
6. MW-37 was not used in the potentiometric contouring due to its anomalously high value.
7. Only select domestic wells are shown on this figure to give spatial reference for the contours.

MW-106S (4457.84) Well ID Groundwater Measurement

800 400 0 800

Feet

Date: 9/23/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure3-1_2020GroundwaterElevationMeasurements.mxd



Muni-Well-14	
Date	6/24/2020
PCE	0.25 J
TCE	1.2
cis-1,2-DCE	0.15 U
VC	0.1 U

Muni-Well-33	
Date	6/24/2020
PCE	0.37 J
TCE	2.1
cis-1,2-DCE	0.15 U
VC	0.1 U

PA-8		
Depth	Date	6/10/2020
37 - 47	PCE	0.2 U
	TCE	0.26 J
	cis-1,2-DCE	0.15 U
	VC	0.1 U
77 - 87	PCE	0.2 U
	TCE	0.37 J
	cis-1,2-DCE	0.15 U
	VC	0.1 U
117 - 127	PCE	0.2 U
	TCE	0.32 J
	cis-1,2-DCE	0.15 U
	VC	0.1 U

PA-5	
Date	6/11/2020
PCE	0.2 U
TCE	0.86 J
cis-1,2-DCE	0.15 U
VC	0.1 U

PA-9		
Depth	Date	6/10/2020
58 - 68	PCE	0.2 U
	TCE	0.16 U
	cis-1,2-DCE	0.15 U
	VC	0.1 U
88 - 98	PCE	0.2 U
	TCE	0.16 U
	cis-1,2-DCE	0.15 U
	VC	0.1 U

PA-10	
Date	6/10/2020
PCE	0.2 U
TCE	0.16 U
cis-1,2-DCE	0.15 U
VC	0.1 U

PA-1	
Date	6/9/2020
PCE	0.2 U/0.2 U
TCE	1.6 / 1.6
cis-1,2-DCE	0.15 U/0.15 U
VC	0.1 U/0.1 U

PA-3	
Date	6/9/2020
PCE	0.2 U
TCE	2
cis-1,2-DCE	0.15 U
VC	0.1 U

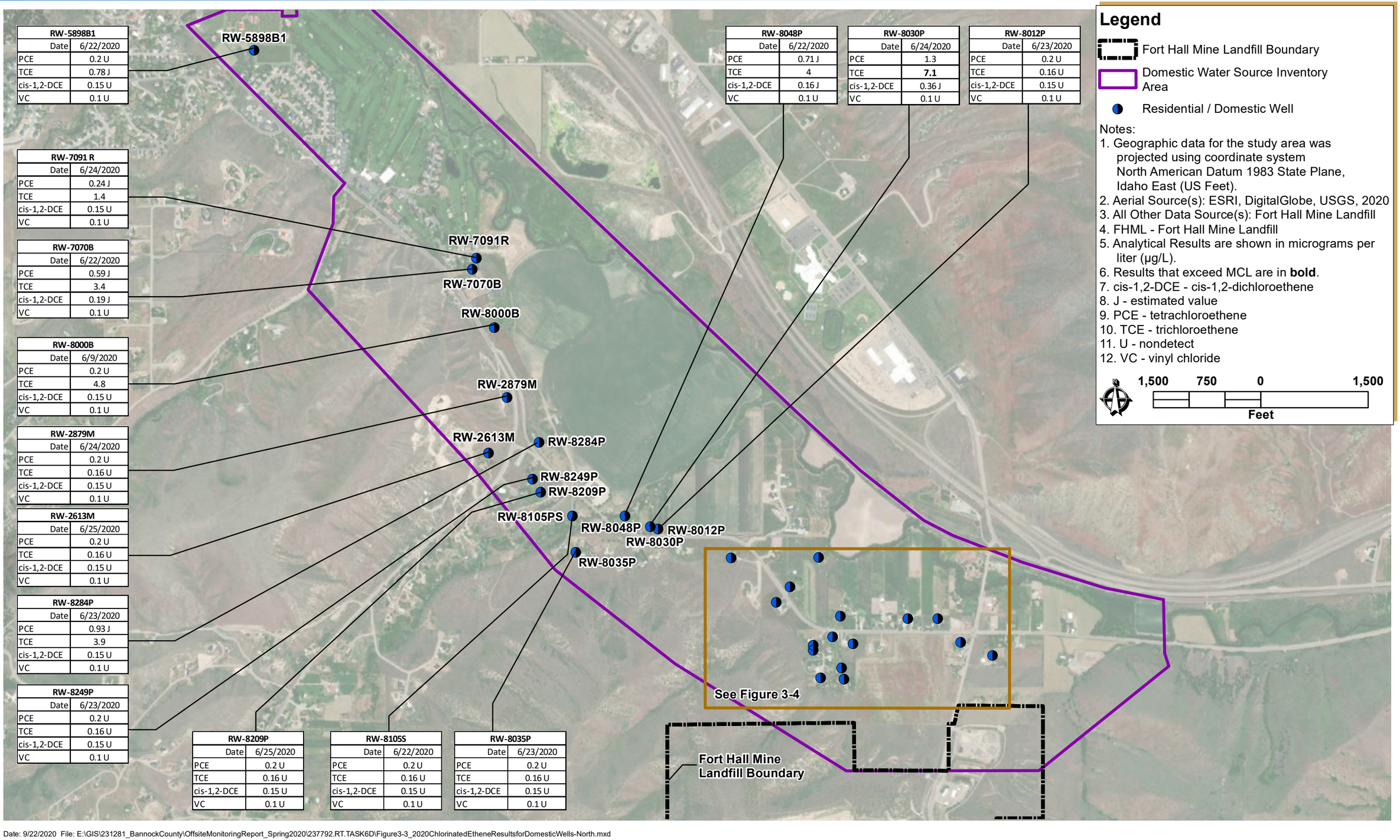
PA-4		
Depth	Date	6/10/2020
65 - 75	PCE	0.2 U
	TCE	2.5
	cis-1,2-DCE	0.15 U
	VC	0.1 U
100 - 110	PCE	0.63 J
	TCE	2.8
	cis-1,2-DCE	0.15 U
	VC	0.1 U
135 - 145	PCE	0.58 J
	TCE	2.5
	cis-1,2-DCE	0.16 J
	VC	0.1 U

MW-38	
Date	6/9/2020
PCE	0.2 U
TCE	0.16 U
cis-1,2-DCE	0.15 U
VC	0.1 U

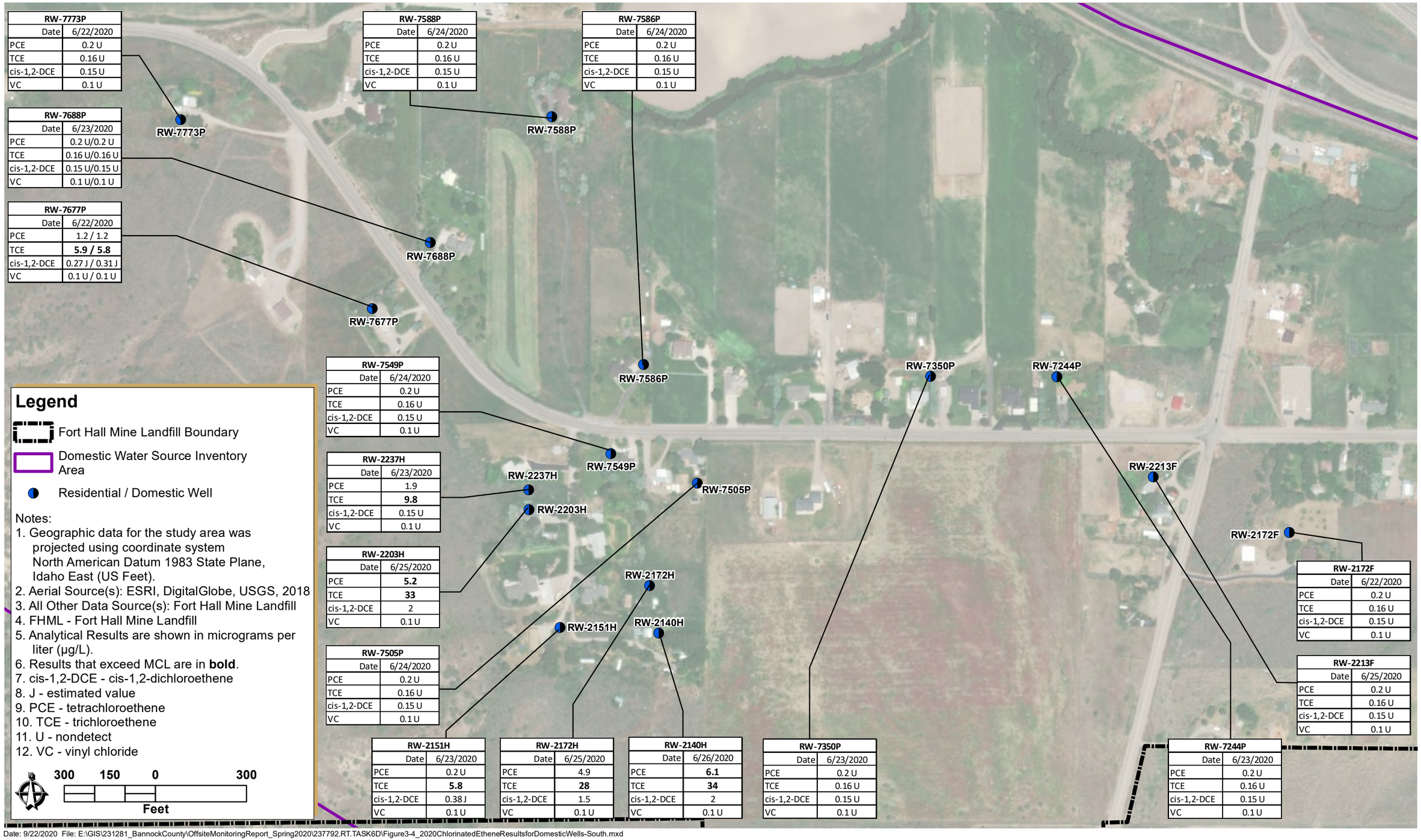
MW-37	
Date	6/9/2020
PCE	0.2 U
TCE	2
cis-1,2-DCE	0.15 U
VC	0.1 U

MW-116S	
Date	6/26/2020
PCE	3.7
TCE	**26**
cis-1,2-DCE	1.6
VC	0.1 U

Date: 9/23/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure3-2_2020ChlorinatedEtheneResultsforOffsiteCityandMonitoringWells.mxd



Date: 9/22/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure3-3_2020ChlorinatedEtheneResultsforDomesticWells-North.mxd



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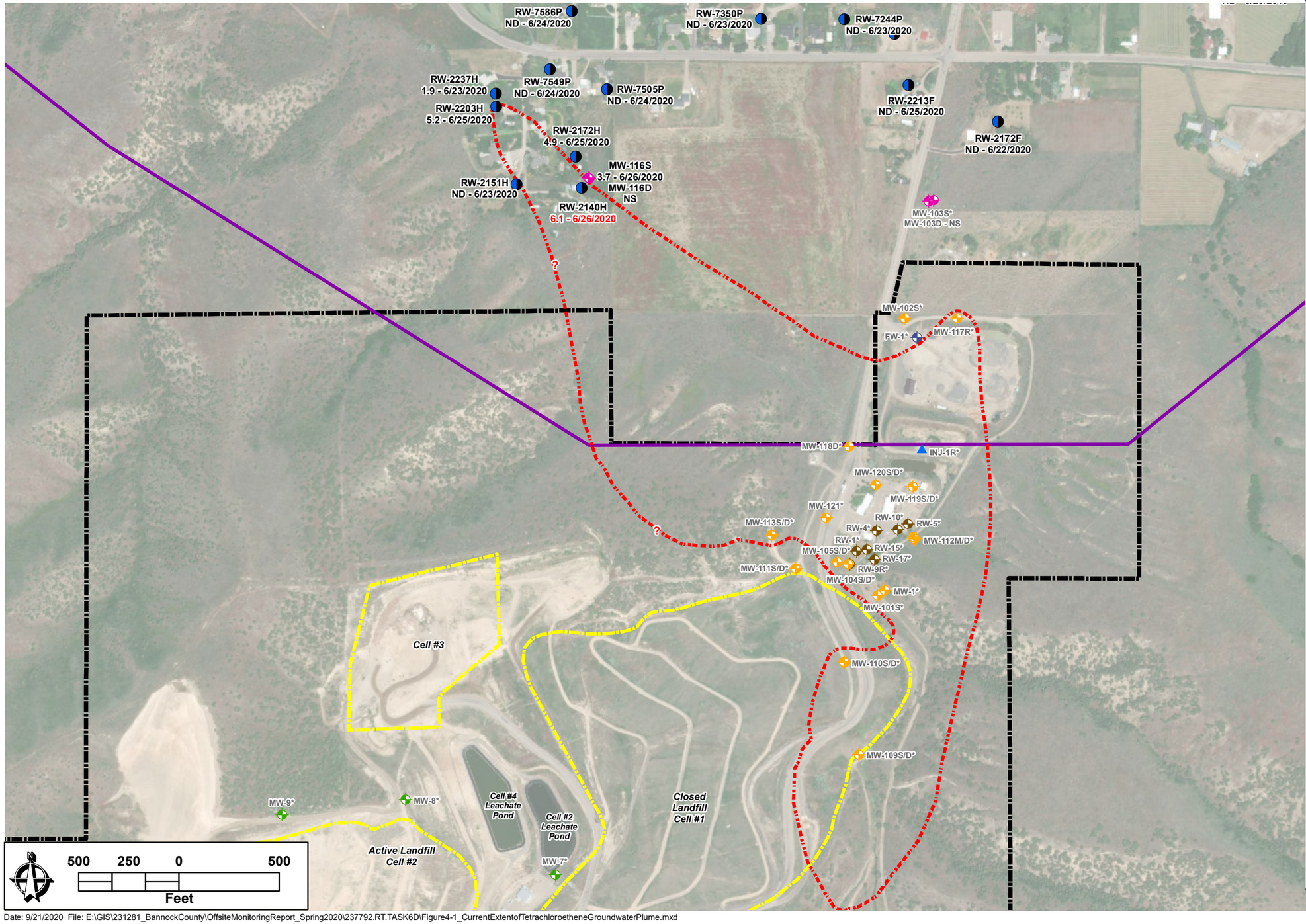


Date: 9/21/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure4-1_CurrentExtentofTetrachloroetheneGroundwaterPlume.mxd

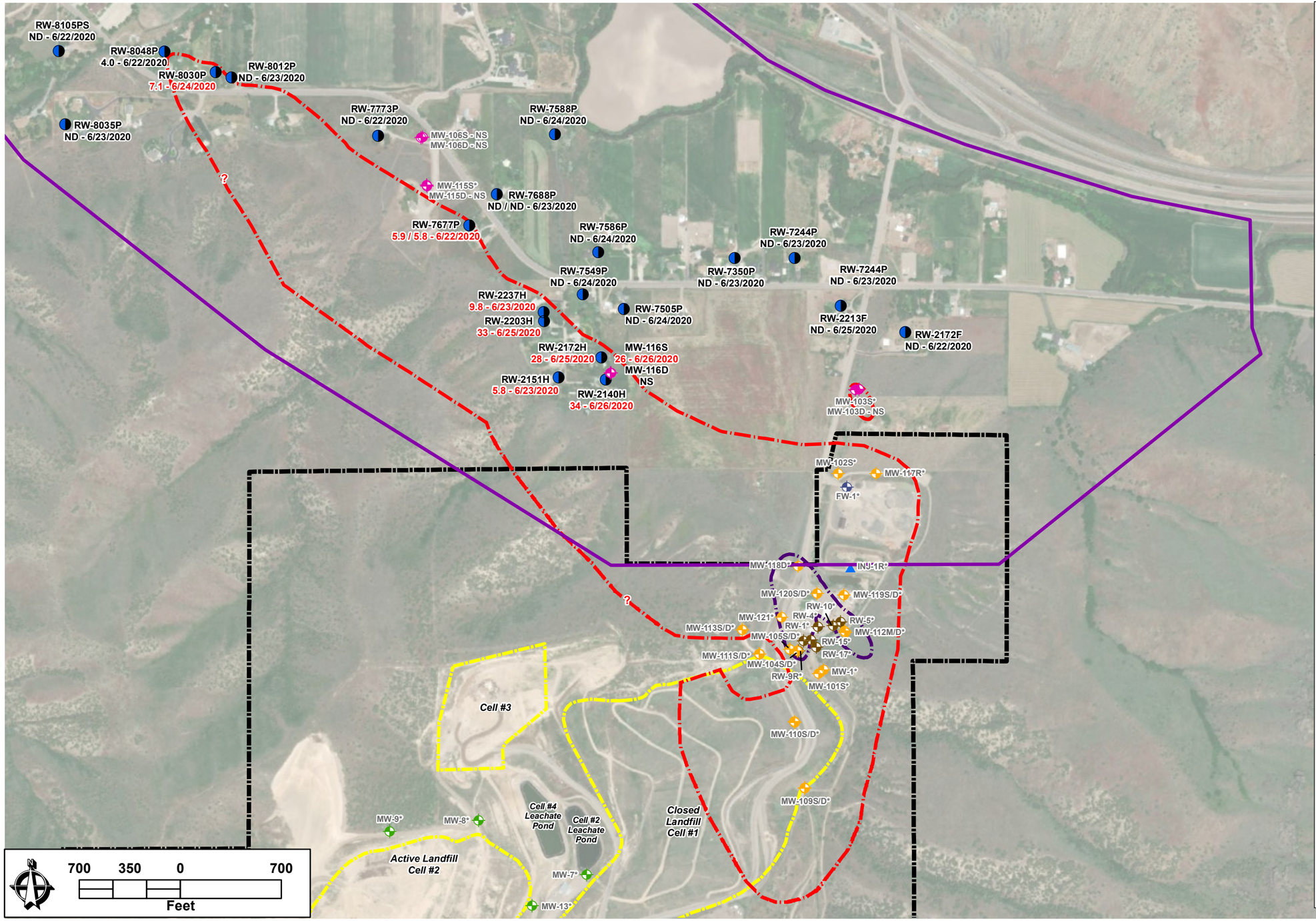
Legend

- Fort Hall Mine Landfill Boundary
- Fort Hall Mine Landfill Cell
- Domestic Water Source Inventory Area
- Tetrachloroethene 5 µg/L Isoconcentration Contour Using Most Recent Values
- City of Pocatello Monitoring Well
- City of Pocatello Municipal Water Well
- Injection Well
- Bannock County Fire Well
- Cell 1 Monitoring Well
- Cell 2 Monitoring Well
- Cell 4 Monitoring Well
- Offsite Monitoring Well
- Remediation System Extraction Well
- Residential / Domestic Well

Notes:

1. Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane, Idaho East (US Feet).
2. Aerial Source(s): ESRI, DigitalGlobe, USGS, 2018
3. All Other Data Source(s): Fort Hall Mine Landfill
4. µg/L - micrograms per liter
5. ND - nondetect (nondetect range 0.16 U - 0.398 U µg/L)
6. NS - not sampled
7. J - estimated value
8. ? - Denotes estimated contour extent in areas with limited bounding data.
9. * Well sampling result presented under a separate cover is shown here to complete the off-site portion of the isoconcentration contour.
10. Highest concentration detected was used to contour at adjacent locations.

Well ID
Tetrachloroethene less than 5 µg/L
Tetrachloroethene greater than 5 µg/L



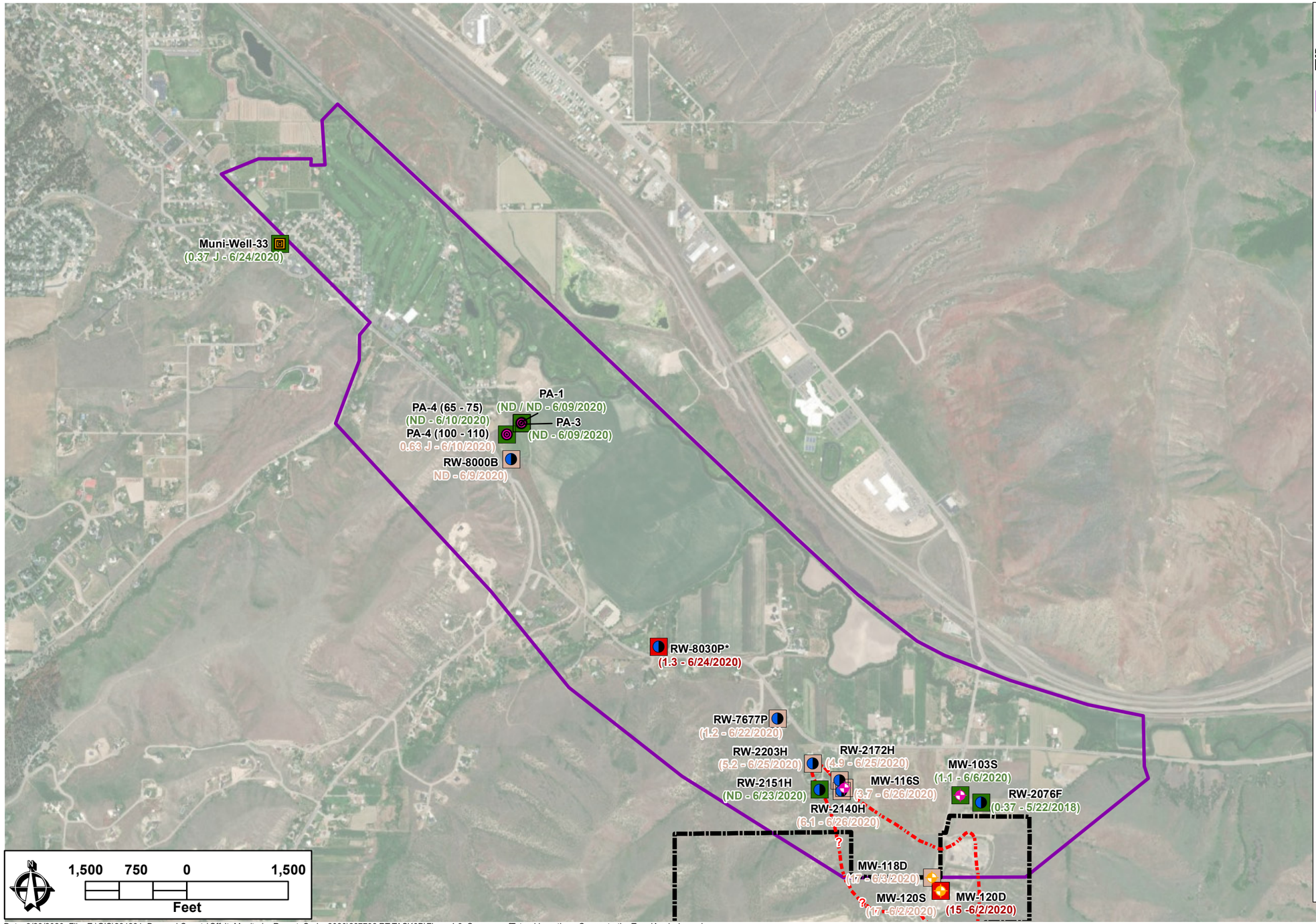
Legend

- Fort Hall Mine Landfill Boundary
- Fort Hall Mine Landfill Cell
- Domestic Water Source Inventory Area
- Trichloroethene 5 µg/L Isoconcentration Contour Using Most Recent Values
- Trichloroethene 100 µg/L Isoconcentration Contour Using Most Recent Values
- City of Pocatello Monitoring Well
- City of Pocatello Municipal Water Well
- Injection Well
- Bannock County Fire Well
- Cell 1 Monitoring Well
- Cell 2 Monitoring Well
- Cell 4 Monitoring Well
- Offsite Monitoring Well
- Remediation System Extraction Well
- Residential / Domestic Well

Notes:
1. Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane, Idaho East (US Feet).
2. Aerial Source(s): ESRI, DigitalGlobe, USGS, 2020
3. All Other Data Source(s): Fort Hall Mine Landfill
4. µg/L - micrograms per liter
5. ND - nondetect (nondetect range 0.16 U - 0.398 U µg/L)
6. NS - not sampled
7. J - estimated value
8. ? - Denotes estimated contour extent in areas with limited bounding data.
9. * Well sampling result presented under a separate cover is shown here to complete the off-site portion of the isoconcentration contour.
10. Highest concentration detected was used to contour at adjacent locations.

Well ID
Trichloroethene less than 5 µg/L
Trichloroethene greater than 5 µg/L

Date: 9/22/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure4-2_CurrentExtentofTrichloroetheneGroundwaterPlume.mxd



Legend

- Fort Hall Mine Landfill Boundary
- Domestic Water Source Inventory Area
- Tetrachloroethene 5 µg/L Isoconcentration Contour Using Most Recent Values
- City of Pocatello Monitoring Well
- City of Pocatello Municipal Water Well
- Cell 1 Monitoring Well
- Offsite Monitoring Well
- Residential / Domestic Well
- Increasing PCE Trend
- Decreasing PCE Trend
- No Significant Trend

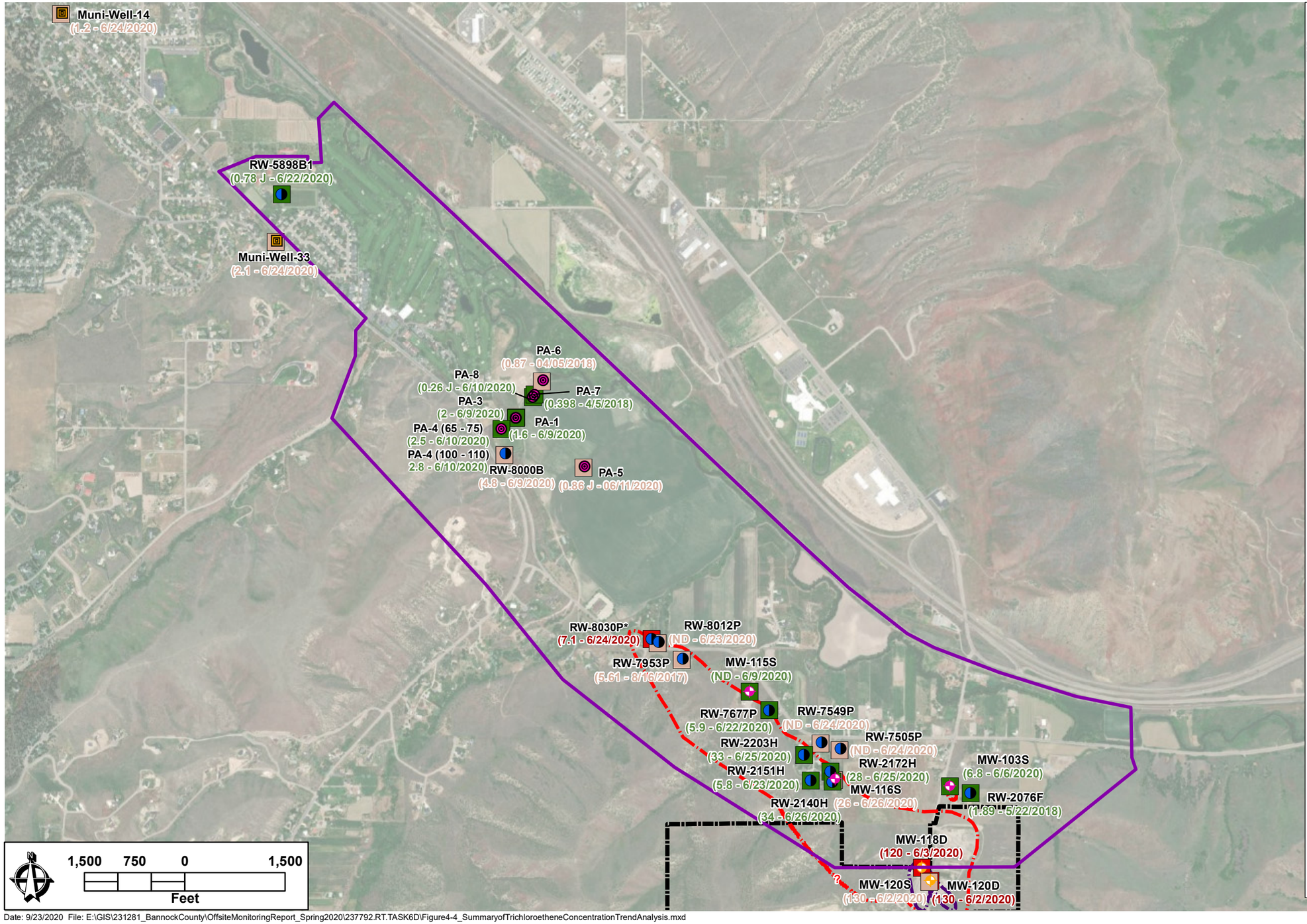
Note:

1. Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane Idaho East (US Feet).
2. Aerial Source(s): ESRI, DigitalGlobe, USGS, 2018
3. All Other Data Source(s): Fort Hall Mine Landfill
4. Only wells with sufficient data to conduct trend analysis are shown on the figure.
5. Highest concentration detected was used to contour at adjacent locations.
6. Results shown include all data through the most current sampling event, with the most recent result shown in the parenthesis.
7. µg/L - micrograms per liter
8. ND - nondetect (nondetect range 0.16 U - 0.398 U µg/L)
9. NS - not sampled
10. PCE - Tetrachloroethene
11. ? - Denotes estimated contour extent in areas with limited bounding data.
12. *When only data since 2010 is evaluated, there is no significant trend for PCE in RW-8030P.

Well ID
Current Result (Increasing Trend)
Current Result (Decreasing Trend)
Current Result (No Trend)

Date: 9/23/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure4-3_SummaryofTetrachloroetheneConcentrationTrendAnalysis.mxd

Figure 4-3
Summary of Tetrachloroethene Concentration Trends Analysis



Legend

- Fort Hall Mine Landfill Boundary
- Domestic Water Source Inventory Area
- Trichloroethene 5 µg/L Isoconcentration Contour Using Most Recent Values
- Trichloroethene 100 µg/L Isoconcentration Contour Using Most Recent Values
- City of Pocatello Monitoring Well
- City of Pocatello Municipal Water Well
- Cell 1 Monitoring Well
- Offsite Monitoring Well
- Residential / Domestic Well
- Increasing TCE
- Decreasing TCE
- No Significant Trend

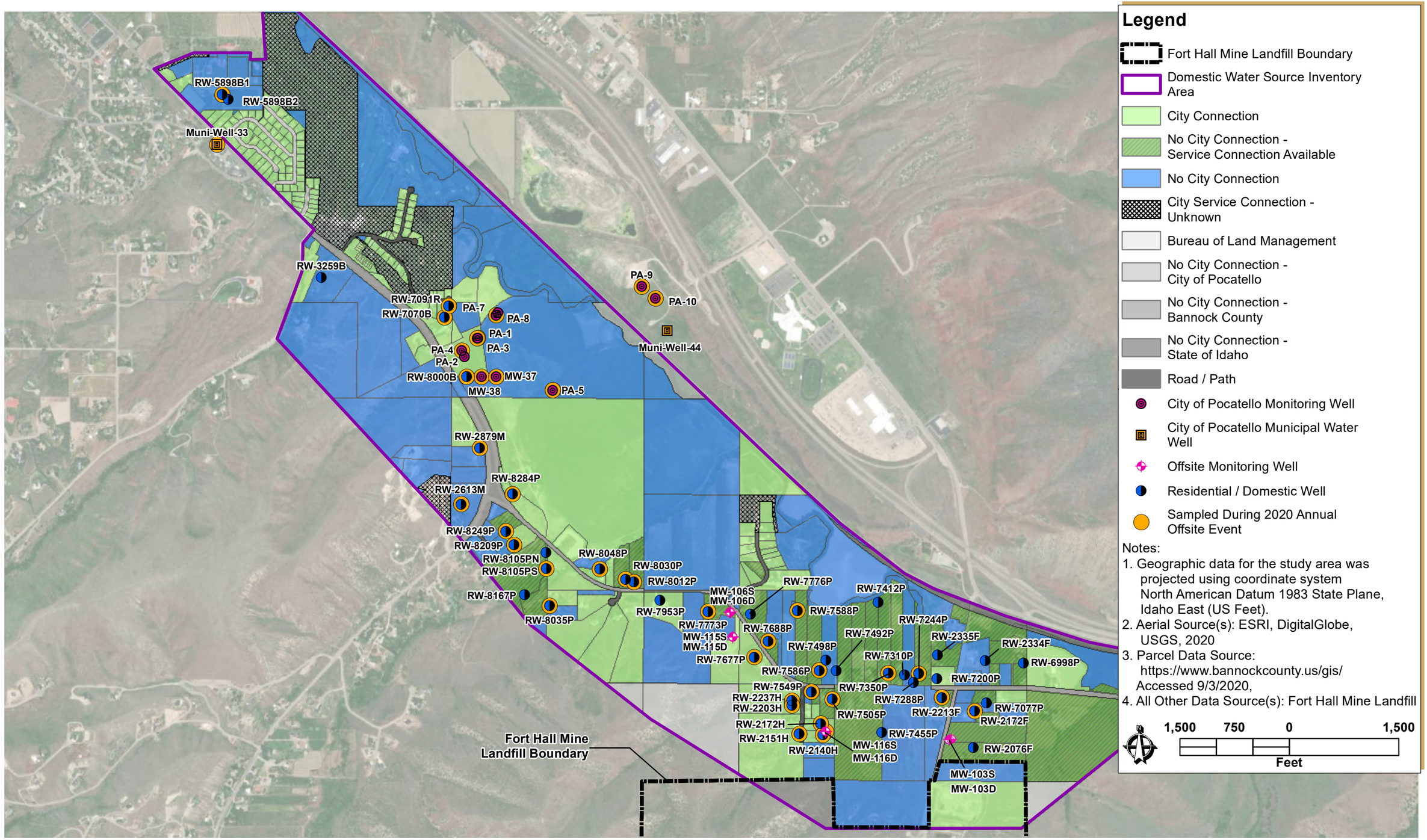
Note:

1. Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane Idaho East (US Feet).
2. Aerial Source(s): ESRI, DigitalGlobe, USGS, 2020
3. All Other Data Source(s): Fort Hall Mine Landfill
4. Only wells with sufficient data to conduct trend analysis are shown on the figure.
5. Highest concentration detected was used to contour at adjacent locations.
6. Results shown include all data through the most current sampling event, with the most recent result shown in the parenthesis.
7. µg/L - micrograms per liter
8. ND - nondetect (nondetect range 0.16 U - 0.398 U µg/L)
9. NS - not sampled
10. PCE - Tetrachloroethene
11. ? - Denotes estimated contour extent in areas with limited bounding data.
12. *When only data since 2010 is evaluated, there is no significant trend for TCE in RW-8030P.

Well ID
Current Result (Increasing Trend)
Current Result (Decreasing Trend)
Current Result (No Trend)

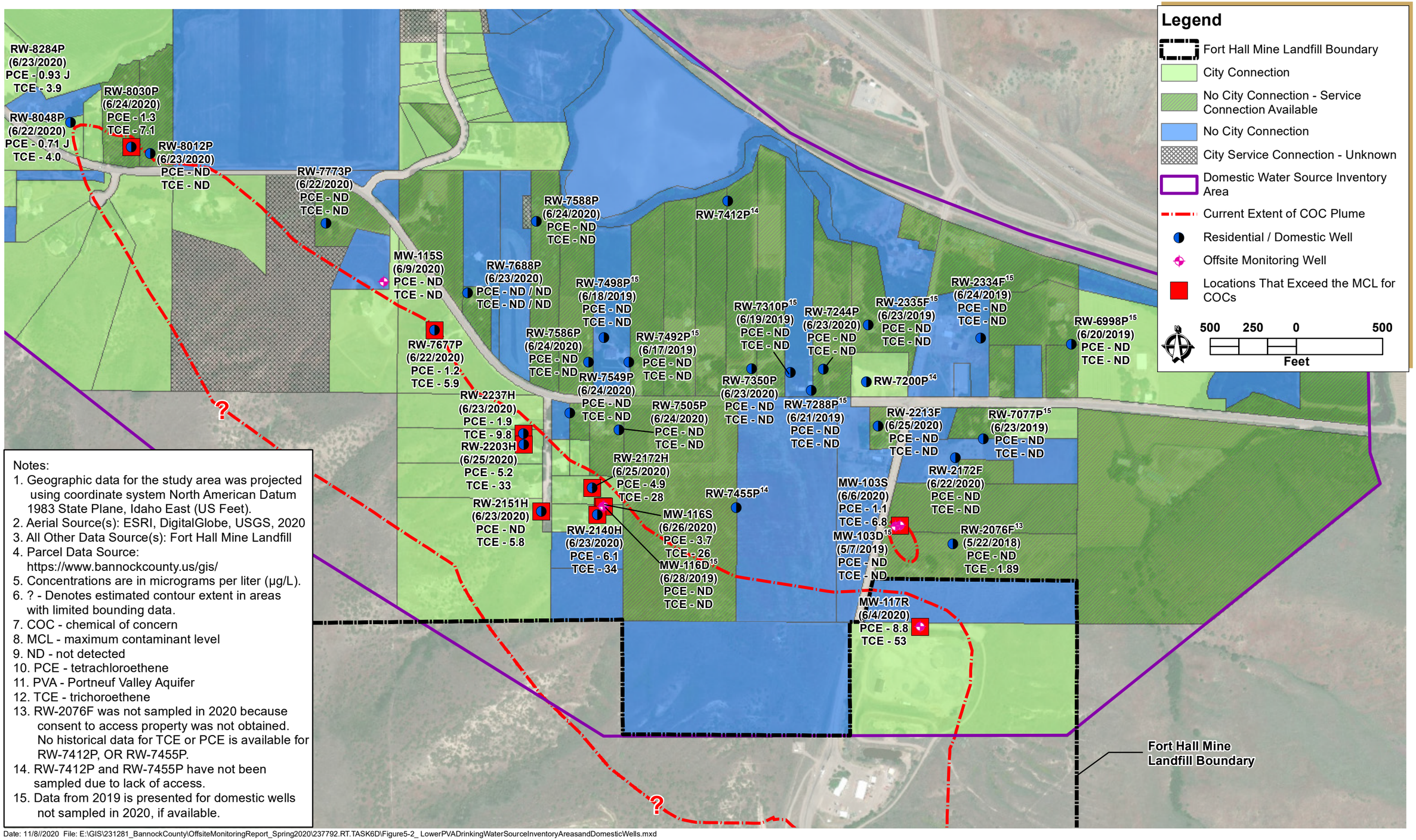
Date: 9/23/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure4-4_SummaryofTrichloroetheneConcentrationTrendAnalysis.mxd

Figure 4-4
Summary of Trichloroethene
Concentration Trends Analysis



Date: 11/8/2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure5-1_DomesticWaterSourceInventoryAreaParcelandWellInformation.mxd

Figure 5-1
Domestic Water Source Inventory Area
Parcel and Well Information



Notes:
1. Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane, Idaho East (US Feet).
2. Aerial Source(s): ESRI, DigitalGlobe, USGS, 2020
3. All Other Data Source(s): Fort Hall Mine Landfill
4. Parcel Data Source: https://www.bannockcounty.us/gis/
5. Concentrations are in micrograms per liter (µg/L).
6. ? - Denotes estimated contour extent in areas with limited bounding data.
7. COC - chemical of concern
8. MCL - maximum contaminant level
9. ND - not detected
10. PCE - tetrachloroethene
11. PVA - Portneuf Valley Aquifer
12. TCE - trichoroethene
13. RW-2076F was not sampled in 2020 because consent to access property was not obtained. No historical data for TCE or PCE is available for RW-7412P, OR RW-7455P.
14. RW-7412P and RW-7455P have not been sampled due to lack of access.
15. Data from 2019 is presented for domestic wells not sampled in 2020, if available.

Date: 11/8//2020 File: E:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure5-2_ LowerPVADrinkingWaterSourceInventoryAreasandDomesticWells.mxd

Figure 5-2
Lower PVA Domestic Wells in the Vicinity of the COC Plume

Sources	Potentially Impacted Media	Transport Mechanisms	Exposure Routes	Human Health Receptors	Ecological Receptors		
				Residents	Plants	Soil Invertebrates	Birds, Mammals
Landfill Cell 1	Air (vapors recovered)	Wind Dispersion	Inhalation (Indoors)				
			Inhalation (Outdoors)				X
	Surface Soil (capped)	Wind Dispersion, Volatilization, Vapor Migration	Inhalation			X	●
			Dermal Absorption		X		
			Incidential Ingestion				
	Subsurface Soil		Inhalation	●			X
		Leaching to Groundwater	Dermal Absorption	●			
			Incidential Ingestion	●			
	Groundwater	Extraction for Domestic Tap Water	Inhalation	●			
			Dermal Absorption	●			
			Incidential Ingestion	●			
		Volatilization/Vapor Intrusion	Inhalation (Indoors)	●			
		Extraction for Irrigation	Water Ingestion, mist inhalation	X	●	●	●
			Ingestion (garden crops/plants)	X	X	X	X
			Dermal Absorption (water, plants)	X	X	X	X

Legend:

●	Pathway complete and significant
X	Pathway is complete, but is judged to be minor compared to other exposure pathways
	Pathway not complete

Date: 11/8//2020 File: D:\GIS\231281_BannockCounty\OffsiteMonitoringReport_Spring2020\237792.RT.TASK6D\Figure5-3_SiteConceptualExposureModelPathway.ai

Tables

Table 2-1
City and Domestic Well Completion Details
Fort Hall Mine Landfill

Well ID	Easting^ (x-coordinate)	Northing^ (y-coordinate)	Elevation (feet msl)	Total Well Depth (feet bgs)	Screen Start~ (feet bgs)	Screen End (feet bgs)	Pump Depth (feet bgs)	Well Diameter (in)
Bannock County Offsite Monitoring Wells*								
MW-116S	601412.65	410222.65	4535.81	73.5	78	93	85	6
City of Pocatello Monitoring Wells								
MW-37	596895.44	415075.61	4503	119	57	107	86	18
MW-38	596694.57	415075.59	4501	135	60	100	N/A	18
MW-38	596694.57	415075.59	4501	135	105	115	N/A	18
MW-38	596694.57	415075.59	4501	135	121	130	125	18
PA-1	596644.63	415607.75	4502.96	149	128.5	148.5	133.5	4
PA-3	596636.44	415606.15	4503.23	68	47.5	67.5	57	4
PA-4	596422.76	415438.08	4518.65	145	64.5	74.5	70	4
PA-4	596422.76	415438.08	4518.65	145	99.5	109.5	105	4
PA-4	596422.76	415438.08	4518.65	145	134.5	145.5	140	4
PA-5	597670.68	414891.60	4498	86.5	36	86.5	60	4
PA-7	596917.81	415954.19	4488	176.5	171	176.5	NS	4
PA-8	596893.98	415920.84	4490	127	37	47	43	4
PA-8	596893.98	415920.84	4490	127	77	87	82	4
PA-8	596893.98	415920.84	4490	127	117	127	122	4
PA-9	598890.52	416316.33	4482	98	57.5	67.5	64	4
PA-9	598890.52	416316.33	4482	98	87.5	98	91	4
PA-10	599076.35	416149.56	4485	62	22	62	44	4
City of Pocatello Municipal Supply Wells								
Muni-Well-14	589854.12	421658.16	4470	82	Unknown	Unknown	Unknown	12
Muni-Well-33	593063.94	418259.59	4510	115	56	115	Unknown	12
Domestic Supply Wells								
RW-2076F	603437.23	410006.10	4568	89	89	89	Unknown	6
RW-2140H	601376.86	410184.78	4557	195	195	195	Unknown	8
RW-2151H	601048.98	410194.52	4571	180	123	180	Unknown	8
RW-2172F	603451.12	410506.72	4545	110	110	110	Unknown	6
RW-2172H	601343.83	410331.91	4552	165	100	113	Unknown	8
RW-2203H	600946.89	410582.10	4542	Unknown	Unknown	Unknown	75	6
RW-2213F	603003.31	410689.99	4533	Unknown	Unknown	Unknown	Unknown	8
RW-2237H	600946.28	410646.63	4532	100	Unknown	Unknown	Unknown	9
RW-2613M	596413.99	413334.09	4648	Unknown	Unknown	Unknown	Unknown	6
RW-2879M	596669.00	414104.78	4604	205	110	110	Unknown	6
RW-5898B1	593134.42	418944.16	4487	100	100	100	Unknown	10
RW-7070B	596184.00	415892.25	4523	Unknown	Unknown	Unknown	Unknown	8
RW-7091R	596242.44	416046.04	4505	100	110	110	Unknown	6
RW-7200P	602934.13	410945.27	4512	140	133	138	Unknown	6
RW-7244P	602684.69	411018.74	4513	80	N/A	N/A	Unknown	6
RW-7350P	602268.67	411019.73	4527	Unknown	Unknown	Unknown	Unknown	Unknown
RW-7505P	601500.56	410668.29	4536	Unknown	Unknown	Unknown	Unknown	Unknown
RW-7549P	601215.93	410767.15	4524	Unknown	Unknown	Unknown	Unknown	8
RW-7586P	601324.00	411058.45	4516	110	90	110	Unknown	6
RW-7588P	601021.80	411873.88	4495	70	Unknown	Unknown	Unknown	8
RW-7677P	600430.68	411242.85	4523	59	Unknown	Unknown	Unknown	6
RW-7688P	600621.78	411461.05	4515	79	Unknown	Unknown	Unknown	6
RW-7773P	599798.81	411863.98	4528	120	Unknown	Unknown	Unknown	6
RW-8000B	596489.98	415079.60	4516	Unknown	Unknown	Unknown	Unknown	Unknown
RW-8012P	598779.95	412267.43	4521	90	80	90	Unknown	8
RW-8030P	598670.00	412304.15	4521	92	Unknown	Unknown	Unknown	8
RW-8035P	597627.73	411942.38	4569	170	Unknown	Unknown	Unknown	8
RW-8048P	598316.55	412447.03	4523	150	130	150	Unknown	6
RW-8105PN	597575.94	412671.40	4539	18	None	None	Unknown	Unknown
RW-8105PS	597583.43	412452.72	4539	Unknown	80	96	Unknown	8
RW-8209P	597141.45	412781.87	4562	Unknown	140 and 185	150 and 195	Unknown	8
RW-8249P	597026.53	412964.39	4575	267	247	267	Unknown	6
RW-8284P	598141.93	412556.97	4524	100	Unknown	Unknown	Unknown	Unknown

Notes:
^Coordinate system is Idaho State Plane East.
~If the screen start and end are the same, the well is expected to be open hole.
*Sampled during the annual offsite event

Abbreviations:
feet bgs = feet below ground surface
feet msl = feet above mean sea level
in = inches

Table 2-2
2020 Offsite Well Sample Collection Information
Fort Hall Mine Landfill

Well ID	Sampling Method	Water Levels	Field parameters*	VOCs (Method 8260B)	2020 Purge Volume~ (gal)
Bannock County Offsite Monitoring Wells					
MW-116S	Low flow	1	1	1	1.5
City of Pocatello Monitoring Wells					
MW-37	Low flow	1	1	1	4.6
MW-38 (deep)	Low flow	1	1	1	5.7
PA-1	Low flow	1	1	1	2.6
PA-3	Low flow	1	1	1	2.8
PA-4 (shallow)	Low flow	1	1	1	2.6
PA-4 (middle)	Low flow	1	1	1	4.0
PA-4 (deep)	Low flow	1	1	1	Unknown+
PA-5	Low flow	1	1	1	2.0
PA-7	Low flow	NS	NS	NS	NS
PA-8 (shallow)	Low flow	1	1	1	3.7
PA-8 (middle)	Low flow	1	1	1	1.5
PA-8 (deep)	Low flow	1	1	1	3.3
PA-9 (shallow)	Low flow	1	1	1	3.4
PA-9 (deep)	Low flow	1	1	1	2.5
PA-10	Low flow	1	1	1	2.4
City of Pocatello Municipal Supply Wells					
Muni-Well-14	Tap		1	1	5,000
Muni-Well-33	Tap		1	1	5,000
Domestic Supply Wells					
RW-2076F	Tap		NS	NS	NS
RW-2140H	Tap		1	1	400
RW-2151H	Tap		1	1	300
RW-2172F	Tap		1	1	100
RW-2172H	Tap		1	1	300
RW-2203H	Low-flow	1	1	1	30
RW-2213F	Tap		1	1	200
RW-2237H	Tap		1	1	300
RW-2613M	Tap		1	1	300
RW-2879M	Tap		1	1	300
RW-5898B1	Tap		1	1	300
RW-7070B	Tap		1	1	100
RW-7091R	Tap		1	1	100
RW-7200P	Low flow	1	NS	NS	NS
RW-7244P	Tap		1	1	100
RW-7350P	Tap		1	1	300
RW-7505P	Tap		1	1	300
RW-7549P	Tap		1	1	300
RW-7586P	Tap		1	1	200
RW-7588P	Tap		1	1	200
RW-7677P	Tap		1	1	100
RW-7688P	Tap		1	1	100
RW-7773P	Tap		1	1	100
RW-8000B	Tap		1	1	Unknown^
RW-8012P	Tap		1	1	200
RW-8030P	Tap		1	1	200
RW-8035P	Tap		1	1	300
RW-8048P	Tap		1	1	300
RW-8105PN	Tap		NS	NS	NS
RW-8105PS	Tap		1	1	200

Table 2-2
2020 Offsite Well Sample Collection Information
Fort Hall Mine Landfill

Well ID	Sampling Method	Water Levels	Field parameters*	VOCs (Method 8260B)	2020 Purge Volume~ (gal)
RW-8209P	Tap		1	1	500
RW-8249P	Tap		1	1	300
RW-8284P	Tap		1	1	300

Notes:

^RW-8000B is an irrigation well for a ballfield; flow rate is not measurable.

*Field parameters include pH, oxidation reduction potential, turbidity, dissolved oxygen, specific conductivity, and temperature

~Purge volume is calculated by multiplying the time between purge start and end by the pumping flow rate for wells sampled with low flow m

[+]Purge form was misplaced.

Abbreviations:

gal = gallons

NS = not sampled

VOCs = volatile organic compounds

Table 3-1

Monitoring Well Water Levels, Screened Intervals, and Vertical Gradients

Well ID	X Coordinate (Idaho State Plane East, feet)	Y Coordinate (Idaho State Plane East, feet)	Surface Elevation (ft msl)	Top of Casing Elevation (ft msl)	Screened Interval (ft bgs)	Depth to Top of Screen (ft msl)	Depth to Bottom of Screen (ft msl)	Remediation System Off			Direction of Gradient^	Gradient^ (ft/ft)
								Measurement Date and Time	Water Level Depth (ft btoc)	Water Level Elevation (ft msl)		
MW-103D	603103.39	410107.66	4557.6	4560.1	173.5-183.5	4384.06	4374.06	6/6/20 8:00 AM	97.4	4462.8	up	-0.04
MW-103S	603129.08	410112.39	4558.4	4560.0	90-110	4468.35	4448.35	6/6/20 8:06 AM	100.0	4460.1		
MW-106D	600093.80	411850.82	4514.2	4516.1	89-99	4425.18	4415.18	6/6/20 10:56 AM	58.3	4457.9	up	0.00
MW-106S	600104.55	411853.60	4514.2	4516.9	55-75	4459.19	4439.19	6/6/20 10:58 AM	59.1	4457.8		
MW-115D	600137.10	411517.23	4537.0	4538.8	100-120	4436.95	4416.95	6/6/20 10:49 AM	80.8	4458.0	up	0.00
MW-115S	600134.12	411522.93	4536.9	4538.7	80-90	4456.86	4446.86	6/6/20 10:47 AM	80.8	4458.0		
MW-37	596895.44	415075.61	4503.0	4505.8	55-107	4448.00	4396.00	6/6/20 11:20 AM	41.8	4464.1	NA	NA
MW-38	596694.57	415075.59	4500.9	4503.9	60-100, 105-115, 121-130	4440.89	4370.89	6/6/20 11:14 AM	49.1	4454.7	NA	NA
PA-5	597670.68	414891.60	4498.2	4499.7	36-86	4462.17	4412.17	6/6/20 11:22 AM	42.4	4457.3	NA	NA
PA-7	596917.81	415954.19	4488.1	4489.7	171.3-176.3	4316.81	4311.81	6/6/20 11:41 AM	39.1	4450.6	NA	NA
PA-8	596893.98	415920.84	4489.9	4491.6	36.8-46.8, 76.8-86.8, 116.8-126.8	4453.07	4363.07	6/6/20 11:34 AM	40.3	4451.3	NA	NA
PA-9	598890.52	416316.33	4482.5	4484.4	57.4-67.4, 87.4-97.4	4425.07	4385.07	6/6/20 10:32 AM	26.6	4457.8	NA	NA
PA-10	599076.35	416149.56	4485.4	4487.3	22-62	4463.37	4423.37	6/6/20 10:30 AM	28.3	4459.0	NA	NA

Notes

ft btoc = feet below top of casing

ft msl = feet meters sea level

ft bgs = feet below ground surface

NA = not applicable

^Direction and magnitude of gradient is calculated between shallow and deep paired wells

Table 3-2

City Monitoring and Municipal Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	MW-37		MW-38		PA-1			
				Sample Name	MW-37-20200609		MW-38-20200609		PA-1-20200609		PA-1Q-20200609	
				Sample Date	6/9/2020		6/9/2020		6/9/2020		6/9/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**6.54**		**0.09**		**6.5**		NS	
Oxidation-Reduction Potential				millivolts	**96.3**		**-91.8**		**40.1**		NS	
pH			6.5 to 8.5	su	**7.07**		**5.51**		**7.33**		NS	
Specific Conductance				mS/cm	**0.765**		**13.501**		**0.765**		NS	
Temperature				°C	**11.4**		**12.1**		**12**		NS	
Turbidity				NTU	**9.11**		**73.1**		**11.3**		NS	
VOCs												
Acetone				µg/L	1.9	U	**2.3**	**J**	1.9	U	1.9	U
Benzene	5	5		µg/L	0.16	U	**0.5**	**J**	0.16	U	0.16	U
Carbon disulfide				µg/L	0.17	U	0.17	U	0.17	U	0.17	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	0.2	U	0.2	U
Trichloroethene	5	5		µg/L	**2**		0.16	U	**1.6**		**1.6**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius

µg/L = microgram per liter

ID = identification

IDGW = Idaho Groundwater

MCL = maximum contaminant level

mg/L = milligram per liter

mS/cm = millisiemens per centimeter

NS = not sampled

NR = not reported

NTU = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Q = qualifier

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

J = Result is estimated

Table 3-2

City Monitoring and Municipal Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	PA-3		PA-4					
				Sample Name	PA-3-20200609		PA-4-65-75-20200610		PA-4-100-110-20200610		PA-4-135-145-20200611	
				Sample Date	6/9/2020		6/10/2020		6/10/2020		6/11/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**7.25**		**6.59**		**6.66**		NR	
Oxidation-Reduction Potential				millivolts	**63.1**		**144.3**		**182.1**		NR	
pH			6.5 to 8.5	su	**7.31**		**7.02**		**7.02**		NR	
Specific Conductance				mS/cm	**0.778**		**0.823**		**0.819**		NR	
Temperature				°C	**11.9**		**24.6**		**19.4**		NR	
Turbidity				NTU	**1.7**		**5.47**		**2.95**		NR	
VOCs												
Acetone				µg/L	1.9	U	1.9	U	1.9	U	1.9	U
Benzene	5	5		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
Carbon disulfide				µg/L	0.17	U	0.17	U	0.17	U	0.17	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	**0.16**	**J**
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	**0.63**	**J**	**0.58**	**J**
Trichloroethene	5	5		µg/L	**2**		**2.5**		**2.8**		**2.5**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius

µg/L = microgram per liter

ID = identification

IDGW = Idaho Groundwater

MCL = maximum contaminant level

mg/L = milligram per liter

mS/cm = millisiemens per centimeter

NS = not sampled

NR = not reported

NTU = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Q = qualifier

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

J = Result is estimated

Table 3-2

City Monitoring and Municipal Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	PA-5		PA-8					
				Sample Name	PA-5-20200611		PA-8-117-127-20200610		PA-8-37-47-20200610		PA-8-77-87-20200610	
				Sample Date	6/11/2020		6/10/2020		6/10/2020		6/10/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**6.72**		**6.68**		**7.39**		**6.5**	
Oxidation-Reduction Potential				millivolts	**165**		**153.9**		**98.9**		**113.3**	
pH			6.5 to 8.5	su	**7.18**		**7.09**		**7.11**		**7.09**	
Specific Conductance				mS/cm	**0.768**		**0.752**		**0.762**		**0.759**	
Temperature				°C	**13.8**		**13.6**		**20.8**		**19.3**	
Turbidity				NTU	**11.31**		**0.56**		**1.41**		**1.98**	
VOCs												
Acetone				µg/L	1.9	U	1.9	U	1.9	U	1.9	U
Benzene	5	5		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
Carbon disulfide				µg/L	0.41	J	0.17	U	0.17	U	0.17	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	0.2	U	0.2	U
Trichloroethene	5	5		µg/L	**0.86**	**J**	**0.32**	**J**	**0.26**	**J**	**0.37**	**J**

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius

µg/L = microgram per liter

ID = identification

IDGW = Idaho Groundwater

MCL = maximum contaminant level

mg/L = milligram per liter

mS/cm = millisiemens per centimeter

NS = not sampled

NR = not reported

NTU = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Q = qualifier

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

J = Result is estimated

Table 3-2

City Monitoring and Municipal Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	PA-9				PA-10		MUNI-WELL-14	
				Sample Name	PA-9-57-67-20200610		PA-9-87-97-20200610		PA-10-20200610		MUNI-WELL-14-20200624	
				Sample Date	6/10/2020		6/10/2020		6/10/2020		6/24/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**9.44**		**7.13**		**7.52**		**7.51**	
Oxidation-Reduction Potential				millivolts	**38.2**		**60.6**		**79.5**		**92.8**	
pH			6.5 to 8.5	su	**7.38**		**7.34**		**7.42**		**7.33**	
Specific Conductance				mS/cm	**0.775**		**0.762**		**0.767**		**0.707**	
Temperature				°C	**20.9**		**12.3**		**11.7**		**12.2**	
Turbidity				NTU	**2.54**		**1**		**6.8**		**0**	
VOCs												
Acetone				µg/L	1.9	U	1.9	U	1.9	U	1.9	U
Benzene	5	5		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
Carbon disulfide				µg/L	0.17	U	0.17	U	0.17	U	0.17	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	0.2	U	**0.25**	**J**
Trichloroethene	5	5		µg/L	0.16	U	0.16	U	0.16	U	**1.2**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius

µg/L = microgram per liter

ID = identification

IDGW = Idaho Groundwater

MCL = maximum contaminant level

mg/L = milligram per liter

mS/cm = millisiemens per centimeter

NS = not sampled

NR = not reported

NTU = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Q = qualifier

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

J = Result is estimated

Table 3-2

City Monitoring and Municipal Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	MUNI-WELL-33	
				Sample Name	MUNI-WELL-33-20200624	
				Sample Date	6/24/2020	
				Unit	Result	Q
Field Parameters						
Dissolved Oxygen				mg/L	**7.74**	
Oxidation-Reduction Potential				millivolts	**41.9**	
pH			6.5 to 8.5	su	**7.37**	
Specific Conductance				mS/cm	**0.712**	
Temperature				°C	**11.9**	
Turbidity				NTU	**0**	
VOCs						
Acetone				µg/L	1.9	U
Benzene	5	5		µg/L	0.16	U
Carbon disulfide				µg/L	0.17	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U
Tetrachloroethene	5	5		µg/L	**0.37**	**J**
Trichloroethene	5	5		µg/L	**2.1**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius

µg/L = microgram per liter

ID = identification

IDGW = Idaho Groundwater

MCL = maximum contaminant level

mg/L = milligram per liter

mS/cm = millisiemens per centimeter

NS = not sampled

NR = not reported

NTU = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Q = qualifier

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

J = Result is estimated

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-2140H		RW-2151H		RW-2172F		RW-2172H	
				Sample Name	RW-2140H-20200626		RW-2151H-20200623		RW-2172F-20200622		RW-2172H-20200625	
				Sample Date	6/26/2020		6/23/2020		6/22/2020		6/25/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**6.81**		**5.7**		**6.55**		**6.93**	
Oxidation-Reduction Potential				millivolts	**142.8**		**-4.2**		**202**		**88.6**	
pH			6.5 to 8.5	su	**6.98**		**7.59**		**7.24**		**7.1**	
Specific Conductance				mS/cm	**1.098**		**0.651**		**0.683**		**1.027**	
Temperature				°C	**12.5**		**12.9**		**12.2**		**12**	
Turbidity				ntu	**25.2**		**74.6**		**0**		**103**	
VOCs												
1,1-Dichloroethane				µg/L	**0.23**	**J**	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	**0.25**	**J**	0.16	U	0.16	U	**0.2**	**J**
cis-1,2-Dichloroethene	70	70		µg/L	**2**		**0.38**	**J**	0.15	U	**1.5**	
Tetrachloroethene	5	5		µg/L	**6.1**		0.2	U	0.2	U	**4.9**	
Trichloroethene	5	5		µg/L	**34**		**5.8**		0.16	U	**28**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
mS/cm = millisiemens per centimeter
NS = not sampled
NR = not reported
NTU = nephelometric turbidity Units
su = standard units
USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-2203H		RW-2213F		RW-2237H		RW-2613M	
				Sample Name	RW-2203H-20200625		RW-2213F-20200625		RW-2237H-20200623		RW-2613M-20200625	
				Sample Date	6/25/2020		6/25/2020		6/23/2020		6/25/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**2.76**		**6.76**		**6.55**		**8.8**	
Oxidation-Reduction Potential				millivolts	**-64.7**		**133**		**133.5**		**67.1**	
pH			6.5 to 8.5	su	**7.23**		**7.44**		**7.19**		**7.59**	
Specific Conductance				mS/cm	**1.114**		**0.653**		**0.795**		**0.588**	
Temperature				°C	**11.8**		**12**		**13.8**		**14.3**	
Turbidity				ntu	**6.31**		**139**		**221**		**161**	
VOCs												
1,1-Dichloroethane				µg/L	**0.25**	**J**	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	**0.22**	**J**	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	**2**		0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	**5.2**		0.2	U	**1.9**		0.2	U
Trichloroethene	5	5		µg/L	**33**		0.16	U	**9.8**		0.16	U

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
mS/cm = millisiemens per centimeter
NS = not sampled
NR = not reported
NTU = nephelometric turbidity Units
su = standard units
USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-2879M		RW-5898B1		RW-7070B		RW-7091R	
				Sample Name	RW-2879M-20200624		RW-5898B1-20200622		RW-7070B-20200622		RW-7091R-20200624	
				Sample Date	6/24/2020		6/22/2020		6/22/2020		6/24/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**6.46**		**5.47**		**7.53**		**5.88**	
Oxidation-Reduction Potential				millivolts	**49.9**		**139.8**		**146.3**		**-4.4**	
pH			6.5 to 8.5	su	**6.85**		**6.67**		**7.21**		**7.39**	
Specific Conductance				mS/cm	**1.511**		**0.541**		**0.773**		**0.649**	
Temperature				°C	**14**		**14.9**		**12.2**		**12**	
Turbidity				ntu	**115**		**226**		**0**		**6.4**	
VOCs												
1,1-Dichloroethane				µg/L	0.22	U	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	**0.19**	**J**	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	**0.59**	**J**	**0.24**	**J**
Trichloroethene	5	5		µg/L	0.16	U	**0.78**	**J**	**3.4**		**1.4**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
mS/cm = millisiemens per centimeter
NS = not sampled
NR = not reported
NTU = nephelometric turbidity Units
su = standard units
USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-7244P		RW-7350P		RW-7505P		RW-7549P	
				Sample Name	RW-7244P-20200623		RW-7350P-20200623		RW-7505P-20200624		RW-7549P-20200624	
				Sample Date	6/23/2020		6/23/2020		6/24/2020		6/24/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**7**		**6.83**		**6.9**		**7.42**	
Oxidation-Reduction Potential				millivolts	**156.1**		**147.8**		**228.1**		**148.8**	
pH			6.5 to 8.5	su	**7.11**		**7.2**		**7.41**		**7.38**	
Specific Conductance				mS/cm	**0.664**		**0.671**		**0.668**		**0.696**	
Temperature				°C	**11.6**		**13.4**		**13.6**		**13.3**	
Turbidity				ntu	**156**		**195**		**0**		**0**	
VOCs												
1,1-Dichloroethane				µg/L	0.22	U	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	0.2	U	0.2	U
Trichloroethene	5	5		µg/L	0.16	U	0.16	U	0.16	U	0.16	U

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

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USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-7586P		RW-7588P		RW-7677P		RW-7677P	
				Sample Name	RW-7586P-20200624		RW-7588P-20200624		RW-7677P-20200622		RW-7677PQ-20200622	
				Sample Date	6/24/2020		6/24/2020		6/22/2020		6/22/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**6.98**		**6.86**		**6.85**		NS	
Oxidation-Reduction Potential				millivolts	**113.9**		**98.3**		**166.9**		NS	
pH			6.5 to 8.5	su	**7.28**		**7.36**		**7.23**		NS	
Specific Conductance				mS/cm	**0.661**		**0.661**		**0.755**		NS	
Temperature				°C	**13.9**		**12.5**		**12.6**		NS	
Turbidity				ntu	**162**		**163**		**0**		NS	
VOCs												
1,1-Dichloroethane				µg/L	0.22	U	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	**0.27**	**J**	**0.31**	**J**
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	**1.2**		**1.2**	
Trichloroethene	5	5		µg/L	0.16	U	0.16	U	**5.9**		**5.8**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
mS/cm = millisiemens per centimeter
NS = not sampled
NR = not reported
NTU = nephelometric turbidity Units
su = standard units
USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-7688P		RW-7688P		RW-7773P		RW-8000B	
				Sample Name	RW-7688P-20200623		RW-7688PQ-20200623		RW-7773P-20200622		RW-8000B-20200609	
				Sample Date	6/23/2020		6/23/2020		6/22/2020		6/9/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**7.11**		NS		**7.45**		**8.07**	
Oxidation-Reduction Potential				millivolts	**116.4**		NS		**65.6**		**65**	
pH			6.5 to 8.5	su	**7.38**		NS		**7.36**		**7.76**	
Specific Conductance				mS/cm	**0.682**		NS		**0.67**		**0.858**	
Temperature				°C	**13.5**		NS		**13**		**11.3**	
Turbidity				ntu	**0**		NS		**0**		**1**	
VOCs												
1,1-Dichloroethane				µg/L	0.22	U	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	0.2	U	0.2	U
Trichloroethene	5	5		µg/L	0.16	U	0.16	U	0.16	U	**4.8**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

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Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
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USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-8012P		RW-8030P		RW-8035P		RW-8048P	
				Sample Name	RW-8012P-20200623		RW-8030P-20200624		RW-8035P-20200623		RW-8048P-20200622	
				Sample Date	6/23/2020		6/24/2020		6/23/2020		6/22/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**8.12**		**7.8**		**8.42**		**6.7**	
Oxidation-Reduction Potential				millivolts	**157.4**		**108.7**		**110.2**		**175.6**	
pH			6.5 to 8.5	su	**7.24**		**7.29**		**7.44**		**6.40**	
Specific Conductance				mS/cm	**0.765**		**0.812**		**0.54**		**0.894**	
Temperature				°C	**14.4**		**12.2**		**13.5**		**14.1**	
Turbidity				ntu	**125**		**133**		**155**		**205**	
VOCs												
1,1-Dichloroethane				µg/L	0.22	U	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	**0.36**	**J**	0.15	U	**0.16**	**J**
Tetrachloroethene	5	5		µg/L	0.2	U	**1.3**		0.2	U	**0.71**	**J**
Trichloroethene	5	5		µg/L	0.16	U	**7.1**		0.16	U	**4**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
mS/cm = millisiemens per centimeter
NS = not sampled
NR = not reported
NTU = nephelometric turbidity Units
su = standard units
USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 3-3
Domestic Supply Wells VOC and Field Parameter Results

Analyte	USEPA MCL	IDGW Primary Standard	IDGW Secondary Standard	Well ID	RW-8105PS		RW-8209P		RW-8249P		RW-8284P	
				Sample Name	RW-8105PS-20200622		RW-8209P-20200625		RW-8249P-20200623		RW-8284P-20200623	
				Sample Date	6/22/2020		6/25/2020		6/23/2020		6/23/2020	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/L	**1.15**		**7.97**		**7.88**		**6.74**	
Oxidation-Reduction Potential				millivolts	**-38.9**		**128.8**		**71.1**		**92.4**	
pH			6.5 to 8.5	su	**6.19**		**7.03**		**7.31**		**7.16**	
Specific Conductance				mS/cm	**0.81**		**3.84**		**1.6**		**0.917**	
Temperature				°C	**10**		**14.6**		**13.7**		**14.4**	
Turbidity				ntu	**225**		**159**		**0**		**0**	
VOCs												
1,1-Dichloroethane				µg/L	0.22	U	0.22	U	0.22	U	0.22	U
Chloroform	80	2		µg/L	0.16	U	0.16	U	0.16	U	0.16	U
cis-1,2-Dichloroethene	70	70		µg/L	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/L	0.2	U	0.2	U	0.2	U	**0.93**	**J**
Trichloroethene	5	5		µg/L	0.16	U	0.16	U	0.16	U	**3.9**	

Notes:

Only detected VOCs are shown. Full analytical results are in Appendix C.

Highlight indicates values greater than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

Acronyms and Abbreviations:

°C = degrees celcius
µg/L = microgram per liter
ID = identification
IDGW = Idaho Groundwater
MCL = maximum contaminant level
mg/L = milligram per liter
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su = standard units
USEPA = United States Environmental Protection Agency
VOC = volatile organic compound
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Table 4-1
Statistical Summary for City Wells
Fort Hall Mine Landfill

General Dataset Information											Trend Analysis						
Well Type	Well ID	Analyte	Latest Result Date	Latest value	Qualifier	Dataset Min	Dataset Max	Dataset n	ND n	Percent ND	Kendall S	Var(S)	Intercept	Theil Sen Slope	p-value	Critical alpha for significant trend	Significant trend?
City Supply	Muni-Well-14	TCE (µg/L)	06/24/20	1.2		03/24/93	06/24/20	14	0	0	-52	332.667	20.73515	-0.00045	0.0052	0.05	Decreasing
City Supply	Muni-Well-14	TCE (µg/L)	06/24/20	1.2		06/23/04	06/24/20	7	0	0.00	-10	43.33	7.96	-0.00015	0.17	0.05	No
City Supply	Muni-Well-33	PCE (µg/L)	06/24/20	0.37	J	03/25/93	06/24/20	18	7	38.89	-80	650.67	1.91	-0.000035	0.002	0.05	Decreasing
City Supply	Muni-Well-33	TCE (µg/L)	06/24/20	2.1		03/25/93	06/24/20	19	0	0.00	-82	816.00	34.30	-0.00076	0.0046	0.05	Decreasing
City Supply	Muni-Well-33	TCE (µg/L)	06/24/20	2.1		06/23/04	06/24/20	11	0	0.00	2	164.00	1.79	0.000018	0.94	0.05	No
City Monitoring	PA-1	PCE (µg/L)	06/09/20	0.2	U	04/25/94	06/09/20	7	1	14.28571	-18	43.3333	5.68693	-0.00012	0.0098	0.05	Decreasing
City Monitoring	PA-1	TCE (µg/L)	06/09/20	1.6		04/25/94	06/09/20	10	0	0.00	-36	124.00	39.91	-0.00088	0.0017	0.05	Decreasing
City Monitoring	PA-3	PCE (µg/L)	06/09/20	0.2	U	04/25/94	06/09/20	7	1	14.29	-19	44.33	3.01	-0.000064	0.0069	0.05	Decreasing
City Monitoring	PA-3	TCE (µg/L)	06/09/20	2		04/25/94	06/09/20	12	0	0.00	-41	211.67	41.17	-0.0009	0.006	0.05	Decreasing
City Monitoring	PA-4-65-75	PCE (µg/L)	06/10/20	0.2	U	04/25/94	06/10/20	6	1	16.67	-15	28.33	8.47	-0.00019	0.0085	0.05	Decreasing
City Monitoring	PA-4-65-75	TCE (µg/L)	06/10/20	2.5		04/25/94	06/10/20	6	0	0.00	-13	28.33	93.89	-0.0021	0.024	0.05	Decreasing
City Monitoring	PA-4-100-110	PCE (µg/L)	06/10/20	0.63	J	04/25/94	06/10/20	6	0	0.00	-11	28.33	6.78	-0.00014	0.06	0.05	No
City Monitoring	PA-4-100-110	TCE (µg/L)	06/10/20	2.8		04/25/94	06/10/20	6	0	0.00	-13	28.33	92.87	-0.0021	0.024	0.05	Decreasing
City Monitoring	PA-5	TCE (µg/L)	06/11/20	0.86	J	04/25/94	06/11/20	9	0	0.00	-19	91.00	21.68	-0.00047	0.059	0.05	No
City Monitoring	PA-6	TCE (µg/L)	04/05/18	0.87		04/25/94	04/05/18	9	0	0.00	-17	91.00	31.39	-0.0008	0.093	0.05	No
City Monitoring	PA-7	TCE (µg/L)	04/04/18	0.398		04/25/94	04/04/18	9	0	0.00	-28	92.00	44.58	-0.0011	0.0049	0.05	Decreasing
City Monitoring	PA-8-37-47	TCE (µg/L)	06/10/20	0.26	J	04/25/94	06/10/20	6	0	0.00	-15	28.33	33.80	-0.00076	0.0085	0.05	Decreasing

Abbreviations and Acronyms
µg/L - micrograms per liter
J - estimated value
n - number of datapoints
ND - nondetect
PCE - tetrachloroethene
S - Mann Kendall test statistic
TCE - trichloroethene
U - analyte was not detected
Var - variance

Dataset Information
Date min - earliest result date in analyzed dataset
Date max - most recent result date in analyzed dataset
Dataset n - number of data points in analyzed dataset
n of ND - number of data points in analyzed dataset that are nondetect values
Percent ND - percent of analyzed dataset composed of nondetect values

Trend Analysis
Kendall S - the Mann-Kendall test statistic, S
Var(S) - variance of S, rounded to two decimal places
Intercept - the y-axis value at which the x-axis is zero, used to plot the trend line, rounded to 2 decimal places
Theil Sen slope - slope of the regression line representing the data trend, rounded to 2 significant figures
p-value - probability that S would occur in a dataset without a significant trend, compared to alpha, rounded to 2 significant figures
Critical alpha for significant trend - the level against which the p-value is compared to determine significant trend at the corresponding confidence level
Significant trend? - trend analysis result

Table 4-2
Mann Kendall Statistical Summary for Domestic Wells
Fort Hall Mine Landfill

General Dataset Information										Trend Analysis						
Well ID	Analyte	Latest Result Date	Latest value	Qualifier	Dataset Min	Dataset Max	Dataset n	ND n	Percent ND	Kendall S	Var(S)	Intercept	Theil Sen Slope	p-value	Critical alpha for significant trend	Significant trend?
RW-2076F	PCE (µg/L)	05/22/18	0.372	U	08/26/92	05/22/18	43	2	4.65	-335	9082.45	70.46	-0.0016	0.00046	0.05	Decreasing
RW-2076F	PCE (µg/L)	05/22/18	0.372	U	01/08/02	05/22/18	15	2	13.33	-45	393.00	59.91	-0.0014	0.026	0.05	Decreasing
RW-2076F	TCE (µg/L)	05/22/18	1.89		08/26/92	05/22/18	43	0	0.00	-308	9118.01	692.13	-0.017	0.0013	0.05	Decreasing
RW-2076F	TCE (µg/L)	05/22/18	1.89		01/08/02	05/22/18	15	0	0.00	-45	403.67	350.50	-0.0081	0.029	0.05	Decreasing
RW-2140H	PCE (µg/L)	06/26/20	6.1		09/28/92	06/26/20	12	0	0.00	-8	210.67	7.59	-0.000053	0.63	0.05	No
RW-2140H	TCE (µg/L)	06/26/20	34		09/28/92	06/26/20	13	0	0.00	-42	266.67	185.40	-0.0036	0.012	0.05	Decreasing
RW-2151H	PCE (µg/L)	06/23/20	0.2	U	09/28/92	06/23/20	10	1	10.00	-30	124.00	68.08	-0.0015	0.0092	0.05	Decreasing
RW-2151H	TCE (µg/L)	06/23/20	5.8		09/28/92	06/23/20	10	0	0.00	-32	124.00	746.30	-0.017	0.0054	0.05	Decreasing
RW-2172H	PCE (µg/L)	06/25/20	4.9		09/28/92	06/25/20	7	0	0.00	-12	43.33	43.95	-0.00087	0.095	0.05	No
RW-2172H	TCE (µg/L)	06/25/20	28		09/28/92	06/25/20	7	0	0.00	-14	43.33	514.46	-0.011	0.048	0.05	Decreasing
RW-2203H	PCE (µg/L)	06/25/20	5.2		09/28/92	06/25/20	9	0	0.00	-16	90.00	47.25	-0.00098	0.11	0.05	No
RW-2203H	TCE (µg/L)	06/25/20	33		09/28/92	06/25/20	9	0	0.00	-21	91.00	505.02	-0.011	0.036	0.05	Decreasing
RW-5898B1	TCE (µg/L)	06/22/20	0.78	J	07/30/93	06/22/20	11	0	0.00	-34	164.00	23.20	-0.00052	0.01	0.05	Decreasing
RW-7505P	TCE (µg/L)	06/24/20	0.16	U	09/28/92	06/24/20	8	2	25.00	-8	65.33	1.25	-0.000023	0.39	0.05	No
RW-7549P	TCE (µg/L)	06/24/20	0.16	U	09/28/92	06/24/20	15	2	13.33	-40	402.67	2.78	-0.000055	0.052	0.05	No
RW-7677P	PCE (µg/L)	06/22/20	1.2		03/22/94	06/22/20	7	0	0.00	-2	39.81	2.17	-0.000022	0.87	0.05	No
RW-7677P	TCE (µg/L)	06/22/20	5.9		10/23/92	06/22/20	11	0	0.00	-29	160.39	59.22	-0.0012	0.027	0.05	Decreasing
RW-8000B	PCE (µg/L)	06/09/20	0.2	U	08/21/91	06/09/20	8	1	12.50	-14	65.33	4.53	-0.000091	0.11	0.05	No
RW-8000B	TCE (µg/L)	06/09/20	4.8		08/21/91	06/09/20	8	0	0.00	-12	65.33	59.06	-0.0013	0.17	0.05	No
RW-8012P	TCE (µg/L)	06/23/20	0.16	U	06/13/95	06/23/20	8	1	12.50	-4	65.33	4.61	-0.000067	0.71	0.05	No
RW-8030P	PCE (µg/L)	06/24/20	1.3		08/20/92	06/24/20	34	0	0.00	133	4470.33	-2.70	0.00011	0.048	0.05	Increasing
RW-8030P	PCE (µg/L)	06/24/20	1.3		01/09/02	06/24/20	27	0	0.00	148	2243.33	-7.81	0.00023	0.0019	0.05	Increasing
RW-8030P	PCE (µg/L)	06/24/20	1.3		09/29/10	06/24/20	13	0	0.00	-10	239.33	2.10	NC	0.56	0.05	No
RW-8030P	TCE (µg/L)	06/24/20	7.1		08/20/92	06/24/20	46	0	0.00	302	11080.00	-30.21	0.00099	0.0042	0.05	Increasing
RW-8030P	TCE (µg/L)	06/24/20	7.1		01/09/02	06/24/20	34	0	0.00	287	4507.67	-53.86	0.0016	0.00002	0.05	Increasing
RW-8030P	TCE (µg/L)	06/24/20	7.1		09/29/10	06/24/20	13	0	0.00	-7	263.00	42.90	-0.00076	0.71	0.05	No

Abbreviations and Acronyms

µg/L - micrograms per liter
J - estimated value
n - number of datapoints
ND - nondetect
PCE - tetrachloroethene
S - Mann Kendall test statistic
TCE - trichloroethene
U - analyte was not detected
Var - variance

Dataset Information

Date min - earliest result date in analyzed dataset
Date max - most recent result date in analyzed dataset
Dataset n - number of data points in analyzed dataset
n of ND - number of data points in analyzed dataset that are nondetect values
Percent ND - percent of analyzed dataset composed of nondetect values

Trend Analysis

Kendall S - the Mann-Kendall test statistic, S
Var(S) - variance of S, rounded to two decimal places
Intercept - the y-axis value at which the x-axis is zero, used to plot the trend line, rounded to 2 decimal places
Theil Sen slope - slope of the regression line representing the data trend, rounded to 2 significant figures
p-value - probability that S would occur in a dataset without a significant trend, compared to alpha, rounded to 2 significant figures
Critical alpha for significant trend - the level against which the p-value is compared to determine significant trend at the corresponding confidence level
Significant trend? - trend analysis result

TABLE 5-1
HUMAN HEALTH CHEMICALS OF POTENTIAL CONCERN SELECTION
Fort Hall Mine Landfill, Bannock County, Idaho

	2019								2020							
Chemical	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	MCL (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	MCL (µg/L)	COPC?
1,1,1,2-Tetrachloroethane	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
1,1,1-Trichloroethane	60	2	3%	0.16	0.16	0.27	200	N	51	NA	0%	0.16	0.16	0.16	200	N
1,1,2,2-Tetrachloroethane	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
1,1,2-Trichloroethane	60	NA	0%	0.27	0.27	0.27	5	N	51	NA	0%	0.27	0.27	0.27	5	N
1,1-Dichloroethane	60	2	3%	0.22	0.22	0.26	NA	N	51	2	4%	0.22	0.22	0.25	NA	N
1,1-Dichloroethene	60	NA	0%	0.23	0.23	0.23	7	N	51	NA	0%	0.23	0.23	0.23	7	N
1,1-Dichloropropene	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N
1,2,3-Trichloropropane	60	NA	0%	0.33	0.33	0.33	NA	N	51	NA	0%	0.33	0.33	0.33	NA	N
1,2,4-Trichlorobenzene	60	NA	0%	0.21	0.21	0.21	70	N	51	NA	0%	0.21	0.21	0.21	70	N
1,2-Dibromo-3-Chloropropane	60	NA	0%	0.47	0.47	0.47	0.2	N	51	NA	0%	0.47	0.47	0.47	0.2	N
1,2-Dibromoethane	60	NA	0%	0.18	0.18	0.18	0.05	N	51	NA	0%	0.18	0.18	0.18	0.05	N
1,2-Dichlorobenzene	60	NA	0%	0.15	0.15	0.15	600	N	51	NA	0%	0.15	0.15	0.15	600	N
1,2-Dichloroethane	60	3	5%	0.13	0.21	2	5	N	51	NA	0%	0.13	0.13	0.13	5	N
1,2-Dichloropropane	60	1	2%	0.18	0.18	0.29	5	N	51	NA	0%	0.18	0.18	0.18	5	N
1,3-Dichlorobenzene	60	NA	0%	0.13	0.13	0.13	NA	N	51	NA	0%	0.13	0.13	0.13	NA	N
1,3-Dichloropropane	60	NA	0%	0.09	0.09	0.09	NA	N	51	NA	0%	0.09	0.09	0.09	NA	N
1,4-Dichlorobenzene	60	NA	0%	0.16	0.16	0.16	75	N	51	NA	0%	0.16	0.16	0.16	75	N
2,2-Dichloropropane	60	NA	0%	0.38	0.38	0.38	NA	N	51	NA	0%	0.38	0.38	0.38	NA	N
2-Butanone (MEK)	60	NA	0%	2	2	2	NA	N	51	NA	0%	2	2	2	NA	N
2-Hexanone	60	NA	0%	1.7	1.7	1.7	NA	N	51	NA	0%	1.7	1.7	1.7	NA	N
4-Methyl-2-pentanone (MIBK)	60	NA	0%	0.98	0.98	0.98	NA	N	51	NA	0%	0.98	0.98	0.98	NA	N
Acetone	60	1	2%	1.9	2.12	10	NA	N	51	1	2%	1.9	1.9	2.3	NA	N
Acetonitrile; methyl cyanide	60	NA	0%	9.6	9.6	9.6	NA	N	51	NA	0%	9.6	9.6	9.6	NA	N
Acetylene	14	NA	0%	0.73	0.84	2.2	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Acrolein	60	NA	0%	2.8	2.8	2.8	NA	N	51	NA	0%	2.8	2.8	2.8	NA	N
Acrylonitrile	60	NA	0%	1.4	1.4	1.4	NA	N	51	NA	0%	1.4	1.4	1.4	NA	N
Allyl chloride	60	1	2%	0.17	0.18	0.75	NA	N	51	NA	0%	0.17	0.17	0.17	NA	N
Antimony	14	NA	0%	0.4	0.4	0.4	6	N	NA	NA	0%	NA	NA	NA	6	N
Arsenic	14	10	71%	0.33	1.73	8.1	10	N	NA	NA	0%	NA	NA	NA	10	N
Barium	14	14	100%	130	168	310	2000	N	NA	NA	0%	NA	NA	NA	2000	N
Benzene	60	NA	0%	0.16	0.16	0.16	5	N	51	1	2%	0.16	0.17	0.5	5	N
Beryllium	14	1	7%	0.08	0.08	0.11	4	N	NA	NA	0%	NA	NA	NA	4	N
Bromochloromethane	60	NA	0%	0.1	0.1	0.1	NA	N	51	NA	0%	0.1	0.1	0.1	NA	N
Bromodichloromethane	60	1	2%	0.17	0.1905	1.4	80	N	51	NA	0%	0.17	0.17	0.17	80	N
Bromoform	60	1	2%	0.46	0.50	3	80	N	51	NA	0%	0.46	0.46	0.46	80	N
Bromomethane	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
Cadmium	14	NA	0%	0.27	0.27	0.27	5	N	NA	NA	0%	NA	NA	NA	5	N
Carbon disulfide	60	1	2%	0.17	0.17	0.22	NA	N	51	1	2%	0.17	0.17	0.41	NA	N
Carbon tetrachloride	60	NA	0%	0.19	0.19	0.19	5	N	51	NA	0%	0.19	0.19	0.19	5	N
Chlorobenzene	60	NA	0%	0.17	0.17	0.17	100	N	51	NA	0%	0.17	0.17	0.17	100	N
Chlorodibromomethane	60	1	2%	0.17	0.22	3	80	N	51	NA	0%	0.17	0.17	0.17	80	N
Chloroethane	60	NA	0%	0.41	0.41	0.41	NA	N	51	NA	0%	0.41	0.41	0.41	NA	N
Chloroform	60	6	10%	0.16	0.176	0.62	80	N	51	4	8%	0.16	0.16	0.25	80	N
Chloromethane	60	NA	0%	0.3	0.3	0.3	NA	N	51	NA	0%	0.3	0.3	0.3	NA	N
Chloroprene	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
Chromium	14	8	57%	0.5	0.66	1.7	100	N	NA	NA	0%	NA	NA	NA	100	N
cis-1,2-Dichloroethene	60	9	15%	0.15	0.34	2.5	70	N	51	11	22%	0.15	0.29	2	70	N
cis-1,3-Dichloropropene	60	NA	0%	0.16	0.16	0.16	NA	N	51	NA	0%	0.16	0.16	0.16	NA	N
Cobalt	14	7	50%	0.054	0.13	0.48	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Copper	14	10	71%	0.56	2.9	14	1300	N	NA	NA	0%	NA	NA	NA	1300	N
Dibromomethane	60	1	2%	0.17	0.17	0.32	NA	N	51	NA	0%	0.17	0.17	0.17	NA	N
Dichlorodifluoromethane	60	NA	0%	0.31	0.31	0.31	NA	N	51	NA	0%	0.31	0.31	0.31	NA	N
Ethane	14	NA	0%	0.57	0.65	1.7	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Ethene	14	NA	0%	0.4	0.46	1.2	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Ethyl methacrylate	60	NA	0%	0.86	0.86	0.86	NA	N	51	NA	0%	0.86	0.86	0.86	NA	N
Ethylbenzene	60	NA	0%	0.16	0.17	1	700	N	51	NA	0%	0.16	0.16	0.16	700	N
Iodomethane	60	NA	0%	0.23	0.23	0.23	NA	N	51	NA	0%	0.23	0.23	0.23	NA	N
Iron	14	10	71%	22	437	1800	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Isobutanol; Isobutyl alcohol	60	NA	0%	37	37	37	NA	N	51	NA	0%	37	37	37	NA	N
Lead	14	8	57%	0.18	1.0	9.1	15	N	NA	NA	0%	NA	NA	NA	15	N
m,p-Xylene	60	1	2%	0.15	0.305	2	NA	N	51	NA	0%	0.15	0.15	0.15	NA	N
Manganese	14	9	64%	0.31	66	480	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Methacrylonitrile	60	NA	0%	1.6	1.6	1.6	NA	N	51	NA	0%	1.6	1.6	1.6	NA	N
Methane	14	1	7%	0.63	94	1300	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Methyl methacrylate	60	NA	0%	1.1	1.1	1.1	NA	N	51	NA	0%	1.1	1.1	1.1	NA	N
Methylene Chloride	60	NA	0%	0.94	0.94	0.94	5	N	51	NA	0%	0.94	0.94	0.94	5	N
Nickel	14	8	57%	0.3	0.76	1.5	NA	N	NA	NA	0%	NA	NA	NA	NA	N
o-xylene (1,2-dimethylbenzene)	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N
Propane	14	NA	0%	0.56	0.64	1.7	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Propionitrile; ethyl cyanide	60	NA	0%	3.7	3.7	3.7	NA	N	51	NA	0%	3.7	3.7	3.7	NA	N
Selenium	14	8	57%	0.37	0.66	3	50	N	NA	NA	0%	NA	NA	NA	50	N
Silver	14	2	14%	0.033	0.03	0.036	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Styrene	60	NA	0%	0.36	0.36	0.36	100	N	51	NA	0%	0.36	0.36	0.36	100	N
Tetrachloroethene	60	20	33%	0.2	0.72	7	5	Y	51	17	33%	0.2	0.74	6.1	5	Y
Thallium	14	1	7%	0.089	0.09	0.12	2	N	NA	NA	0%	NA	NA	NA	2	N
Tin	14	1	7%	0.77	0.95	3.3	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Toluene	60	1	2%	0.17	0.17	0.19	1000	N	51	NA	0%	0.17	0.17	0.17	1000	N
trans-1,2-Dichloroethene	60	NA	0%	0.15	0.15	0.15	100	N	51	NA	0%	0.15	0.15	0.15	100	N
trans-1,3-Dichloropropene	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N

TABLE 5-1
HUMAN HEALTH CHEMICALS OF POTENTIAL CONCERN SELECTION
Fort Hall Mine Landfill, Bannock County, Idaho

	2019								2020							
Chemical	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	MCL (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	MCL (µg/L)	COPC?
trans-1,4-Dichloro-2-butene	60	NA	0%	0.8	0.8	0.8	NA	N	51	NA	0%	0.8	0.8	0.8	NA	N
Trichloroethene	60	27	45%	0.16	4.0	42	5	Y	51	28	55%	0.16	4.0	34	5	Y
Trichlorofluoromethane	60	NA	0%	0.29	0.29	0.29	NA	N	51	NA	0%	0.29	0.29	0.29	NA	N
Vanadium	14	NA	0%	1.2	1.2	1.2	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Vinyl acetate	60	1	2%	0.94	0.94	1	NA	N	51	NA	0%	0.94	0.94	0.94	NA	N
Vinyl chloride	60	NA	0%	0.1	0.1	0.1	2	N	51	NA	0%	0.1	0.1	0.1	2	N
Xylene (Total)	60	1	2%	0.19	0.34	2	10000	N	51	NA	0%	0.19	0.19	0.19	10000	N
Zinc	14	10	71%	2	99	790	NA	N	NA	NA	0%	NA	NA	NA	NA	N

Nondetects were evaluated at the method detection limit for summary statistic computation.
µg/L - micrograms per liter
COPC - chemical of potential concern
MCL - maximum contaminant level
N - no
NA - not applicable
Y - yes

TABLE 5-2
HUMAN HEALTH REASONABLE MAXIMUM EXPOSURE PARAMETERS
Fort Hall Mine Landfill, Bannock County, Idaho

Parameter	Units	Adult	Child
Exposure Duration	years	20	6
Exposure Frequency	days	350	350
Air Exposure Time	hours/day	24	24
Drinking Water Ingestion Rate	L/day	2.5	0.78
Water Exposure Time	hours/event	0.71	0.54
Water Exposure Events		1	1
Body Weight	kilograms	80	15
Skin Surface Area	mg/cm^2	19,652	6,365
Averaging Time	days/year	365	365

mg - milligrams
cm^2 - squared centimeter

TABLE 5-3
HUMAN HEALTH GROUNDWATER NON-CANCER HAZARD EVALUATION
Fort Hall Mine Landfill, Bannock County, Idaho

Well ID	Groundwater Concentration (µg/L)				Groundwater HQ			
	TCE		PCE		TCE		PCE	
	2019	2020	2019	2020	2019	2020	2019	2020
MUNI-WELL-14	1.1	1.2	0.2	0.25	0.4	0.4	0.005	0.006
MUNI-WELL-33	1.9	2.1	0.31	0.37	0.7	0.8	0.008	0.009
MW-103S	NA	6.8	NA	1.1	NA	2	NA	0.03
MW-106D	0.16	NA	0.2	NA	0.1	NA	0.005	NA
MW-106S	0.16	NA	0.2	NA	0.1	NA	0.005	NA
MW-115S	NA	0.16	NA	0.2	NA	0.1	NA	0.005
MW-116D	0.16	NA	0.2	NA	0.1	NA	0.005	NA
MW-116S	31	26	3	3.7	11	9	0.07	0.09
MW-37	2.6	2	0.39	0.2	0.9	0.7	0.01	0.005
MW-38	1.5	0.16	0.23	0.2	0.5	0.1	0.006	0.005
PA-1	1.6	1.6	0.2	0.2	0.6	0.6	0.005	0.005
PA-10	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
PA-2	0.16	NA	0.2	NA	0.06	NA	0.005	NA
PA-3	1.7	2	0.24	0.2	0.6	0.7	0.006	0.005
PA-4	2.3	2.8	0.25	0.63	0.8	1.0	0.006	0.02
PA-5	1.1	0.86	0.2	0.2	0.4	0.3	0.005	0.005
PA-8	0.45	0.32	0.2	0.2	0.2	0.1	0.005	0.005
PA-9	0.16	0.16	0.2	0.2	0.1	0.1	0.005	0.005
RW-2140H	30	34	4.6	6.1	11	12	0.1	0.1
RW-2151H	12	5.8	1.8	0.2	4	2	0.04	0.005
RW-2172F	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-2172H	42	28	7	4.9	15	10	0.2	0.1
RW-2203H	31	33	4.6	5.2	11	12	0.1	0.1
RW-2213F	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-2237H	NA	9.8	NA	1.9	NA	4	NA	0.05
RW-2334F	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-2335F	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-2613M	NA	0.16	NA	0.2	NA	0.1	NA	0.005
RW-2879M	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-3259B	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-5898B1	0.88	0.78	0.2	0.2	0.3	0.3	0.005	0.005
RW-6998P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-7070B	2.9	3.4	0.9	0.59	1	1.2	0.022	0.01
RW-7077P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-7091R	NA	1.4	NA	0.24	NA	0.5	NA	0.006
RW-7244P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-7288P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-7310P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-7350P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-7492P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-7498P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-7505P	0.29	0.16	0.2	0.2	0.1	0.1	0.005	0.005
RW-7549P	0.26	0.16	0.2	0.2	0.09	0.1	0.005	0.005
RW-7586P	0.16	0.16	0.2	0.2	0.1	0.1	0.005	0.005
RW-7588P	0.16	0.16	0.2	0.2	0.1	0.1	0.005	0.005
RW-7677P	6.3	5.9	1.2	1.2	2	2	0.029	0.03
RW-7688P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-7773P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-7776P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-8000B	3.5	4.8	1	0.2	1	2	0.02	0.005
RW-8012P	2.2	0.16	0.79	0.2	0.8	0.1	0.02	0.005
RW-8030P	6	7.1	0.94	1.3	2	3	0.02	0.03
RW-8035P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-8048P	NA	4	NA	0.71	NA	1	NA	0.02
RW-8105PN	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-8105PS	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-8167P	0.16	NA	0.2	NA	0.06	NA	0.005	NA
RW-8209P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-8249P	0.16	0.16	0.2	0.2	0.06	0.1	0.005	0.005
RW-8284P	3.4	3.9	0.89	0.93	1	1	0.02	0.02

EPA - Environmental Protection Agency
HI - hazard index
HQ - hazard quotient
ID - indentifier
PCE - tetrachloroethene
RSL - Regional Screening Level
TCE - trichloroethene
VI - vapor intrusion
µg/L - micrograms per liter

[1] VI HQ values are presented in detail in Table 5-4.
Shading indicates HQ values greater than 1.

TABLE 5-4
HUMAN HEALTH VAPOR INTRUSION NON-CANCER HAZARD EVALUATION
Fort Hall Mine Landfill, Bannock County, Idaho

		2019				2020			
Well ID	Chemical	Groundwater Concentration (µg/L)	Calculated Indoor Air Concentration (µg/m^3)	VI Carcinogenic Risk	VI HQ	Groundwater Concentration (µg/L)	Calculated Indoor Air Concentration (µg/m^3)	VI Carcinogenic Risk	VI HQ
MUNI-WELL-14	PCE	0.2	0.04	4E-09	0.0009	0.3	0.05	4E-09	0.001
	TCE	1.1	0.12	3E-07	0.1	1.2	0.14	3E-07	0.1
MUNI-WELL-33	PCE	0.3	0.06	5E-09	0.001	0.4	0.07	7E-09	0.002
	TCE	1.9	0.21	4E-07	0.1	2.1	0.24	5E-07	0.1
MW-103S	PCE	NA	NA	NA	NA	1.1	0.21	2E-08	0.005
	TCE	NA	NA	NA	NA	6.8	0.77	2E-06	0.4
MW-106D	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
MW-106S	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
MW-116D	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
MW-115S	PCE	NA	NA	NA	NA	0.2	0.04	4E-09	0.001
	TCE	NA	NA	NA	NA	0.2	0.02	4E-08	0.009
MW-116S	PCE	3.0	0.57	5E-08	0.01	3.7	0.70	7E-08	0.02
	TCE	31	3.51	7E-06	**2**	26.0	2.94	6E-06	1
MW-37	PCE	0.4	0.07	7E-09	0.002	0.2	0.04	4E-09	0.001
	TCE	2.6	0.29	6E-07	0.1	2.0	0.23	5E-07	0.1
MW-38	PCE	0.2	0.04	4E-09	0.001	0.2	0.04	4E-09	0.001
	TCE	1.5	0.17	4E-07	0.1	0.2	0.02	4E-08	0.01
PA-1	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	1.6	0.18	4E-07	0.1	1.6	0.18	4E-07	0.1
PA-10	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
PA-2	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
PA-3	PCE	0.2	0.05	4E-09	0.001	0.2	0.04	4E-09	0.001
	TCE	1.7	0.19	4E-07	0.1	2.0	0.23	5E-07	0.1
PA-4	PCE	0.3	0.05	4E-09	0.001	0.6	0.12	1E-08	0.003
	TCE	2.3	0.26	5E-07	0.1	2.8	0.32	7E-07	0.2
PA-5	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	1.1	0.12	3E-07	0.1	0.9	0.10	2E-07	0.05
PA-8	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.45	0.05	1E-07	0.02	0.3	0.04	8E-08	0.02
PA-9	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-2140H	PCE	4.6	0.87	8E-08	0.02	6.1	1.16	1E-07	0.03
	TCE	30	3.39	7E-06	**2**	34.0	3.84	8E-06	**2**
RW-2151H	PCE	1.8	0.34	3E-08	0.01	0.2	0.04	4E-09	0.001
	TCE	12	1.36	3E-06	0.7	5.8	0.66	1E-06	0.3
RW-2172F	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-2172H	PCE	7.0	1.33	1E-07	0.03	4.9	0.93	9E-08	0.02
	TCE	42	4.75	1E-05	**2**	28.0	3.17	7E-06	**2**
RW-2203H	PCE	4.6	0.87	8E-08	0.02	5.2	0.99	9E-08	0.02
	TCE	31	3.51	7E-06	**2**	33.0	3.73	8E-06	**2**
RW-2213F	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-2237H	PCE	NA	NA	NA	NA	1.9	0.36	3E-08	0.009
	TCE	NA	NA	NA	NA	9.8	1.11	2E-06	0.5
RW-2334F	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-2335F	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-2613M	PCE	NA	NA	NA	NA	0.2	0.04	4E-09	0.0009
	TCE	NA	NA	NA	NA	0.2	0.02	4E-08	0.009
RW-2879M	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-3259B	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-5898B1	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.88	0.10	2E-07	0.0	0.8	0.09	2E-07	0.04

TABLE 5-4
HUMAN HEALTH VAPOR INTRUSION NON-CANCER HAZARD EVALUATION
Fort Hall Mine Landfill, Bannock County, Idaho

		2019				2020			
Well ID	Chemical	Groundwater Concentration (µg/L)	Calculated Indoor Air Concentration (µg/m^3)	VI Carcinogenic Risk	VI HQ	Groundwater Concentration (µg/L)	Calculated Indoor Air Concentration (µg/m^3)	VI Carcinogenic Risk	VI HQ
RW-6998P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-7070B	PCE	0.9	0.17	2E-08	0.00	0.6	0.11	1E-08	0.003
	TCE	2.9	0.33	7E-07	0.2	3.4	0.38	8E-07	0.2
RW-7077P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-7091R	PCE	NA	NA	NA	NA	0.2	0.05	4E-09	0.001
	TCE	NA	NA	NA	NA	1.4	0.16	3E-07	0.08
RW-7244P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-7288P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-7310P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-7350P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-7492P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-7498P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-7505P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.29	0.03	7E-08	0.02	0.2	0.02	4E-08	0.009
RW-7549P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.26	0.03	6E-08	0.01	0.2	0.02	4E-08	0.009
RW-7586P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-7588P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-7677P	PCE	1.2	0.23	2E-08	0.01	1.2	0.23	2E-08	0.01
	TCE	6.3	0.71	1E-06	0.3	5.9	0.67	1E-06	0.3
RW-7688P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-7773P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-7776P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-8000B	PCE	1.0	0.19	2E-08	0.00	0.2	0.04	4E-09	0.001
	TCE	3.5	0.40	8E-07	0.2	4.8	0.54	1E-06	0.3
RW-8012P	PCE	0.8	0.15	1E-08	0.00	0.2	0.04	4E-09	0.0009
	TCE	2.2	0.25	5E-07	0.1	0.2	0.02	4E-08	0.009
RW-8030P	PCE	0.9	0.18	2E-08	0.00	1.3	0.25	2E-08	0.01
	TCE	6	0.68	1E-06	0.3	7.1	0.80	2E-06	0.4
RW-8035P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-8048P	PCE	NA	NA	NA	NA	0.7	0.13	1E-08	0.003
	TCE	NA	NA	NA	NA	4.0	0.45	9E-07	0.2
RW-8105PN	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-8105PS	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-8167P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA
RW-8209P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-8249P	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009
RW-8284P	PCE	0.9	0.17	2E-08	0.004	0.9	0.18	2E-08	0.004
	TCE	3.4	0.38	8E-07	0.2	3.9	0.44	9E-07	0.2

Groundwater temperture was set to 13.5 (^{o}C) in the VISL calculator.
Shading indicates locations with HQs greater than 1.
Bolding indicates HQs greater than 1.

HQ - hazard quotient
µg/L - micrograms per liter
µg/m^3 - micrograms per cubic meter
ID - indentifier
VI - vapor intrusion
VISL - vapor intrusion screening level

TABLE 5-5
HUMAN HEALTH TOTAL NON-CANCER HAZARD QUOTIENTS
Fort Hall Mine Landfill, Bannock County, Idaho

Well ID	2019								2020							
	Groundwater Concentration (µg/L)		Groundwater HQ		VI HQ[1]		Total HQ		Groundwater Concentration (µg/L)		Groundwater HQ		VI HQ[1]		Total HQ	
	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE
MUNI-WELL-14	1.1	0.2	0.4	0.005	0.06	0.0009	0.5	0.006	1.2	0.25	0.4	0.006	0.07	0.001	0.5	0.007
MUNI-WELL-33	1.9	0.31	0.7	0.008	0.1	0.001	0.8	0.009	2.1	0.37	0.8	0.009	0.1	0.002	0.9	0.01
MW-103S	NA	NA	NA	NA	NA	NA	NA	NA	6.8	1.1	2	0.03	0.4	0.005	**3**	0.03
MW-106D	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
MW-106S	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
MW-115S	NA	NA	NA	NA	NA	NA	NA	NA	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
MW-116D	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
MW-116S	31	3	10	0.07	2	0.01	**13**	0.09	26	3.7	9	0.09	1	0.02	**11**	0.1
MW-37	2.6	0.39	0.9	0.01	0.1	0.002	1	0.01	2	0.2	0.7	0.005	0.1	0.0009	0.8	0.006
MW-38	1.5	0.23	0.5	0.006	0.08	0.001	0.6	0.007	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
PA-1	1.6	0.2	0.6	0.005	0.09	0.0009	0.7	0.006	1.6	0.2	0.6	0.005	0.09	0.0009	0.7	0.006
PA-10	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
PA-2	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
PA-3	1.7	0.24	0.6	0.006	0.09	0.001	0.7	0.007	2	0.2	0.7	0.005	0.1	0.0009	0.8	0.006
PA-4	2.3	0.25	0.8	0.006	0.1	0.001	0.9	0.007	2.8	0.63	1	0.02	0.2	0.003	1	0.02
PA-5	1.1	0.2	0.4	0.005	0.06	0.0009	0.5	0.006	0.86	0.2	0.3	0.005	0.05	0.0009	0.4	0.006
PA-8	0.45	0.2	0.2	0.005	0.02	0.0009	0.2	0.006	0.32	0.2	0.1	0.005	0.02	0.0009	0.1	0.006
PA-9	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-2140H	30	4.6	10	0.1	2	0.02	**12**	0.1	34	6.1	10	0.1	2	0.03	**14**	0.2
RW-2151H	12	1.8	4	0.04	0.7	0.008	**5**	0.05	5.8	0.2	2	0.005	0.3	0.0009	**2**	0.006
RW-2172F	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-2172H	42	7	20	0.2	2	0.03	**17**	0.2	28	4.9	10	0.1	2	0.02	**12**	0.1
RW-2203H	31	4.6	10	0.1	2	0.02	**13**	0.1	33	5.2	10	0.1	2	0.02	**14**	0.2
RW-2213F	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-2237H	NA	NA	NA	NA	NA	NA	NA	NA	9.8	1.9	4	0.05	0.5	0.009	**4**	0.05
RW-2334F	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-2335F	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-2613M	NA	NA	NA	NA	NA	NA	NA	NA	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-2879M	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-3259B	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-5898B1	0.88	0.2	0.3	0.005	0.05	0.0009	0.4	0.006	0.78	0.2	0.3	0.005	0.04	0.0009	0.3	0.006
RW-6998P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-7070B	2.9	0.9	1	0.02	0.2	0.004	1	0.03	3.4	0.59	1	0.01	0.2	0.003	1	0.02
RW-7077P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-7091R	NA	NA	NA	NA	NA	NA	NA	NA	1.4	0.24	0.5	0.006	0.08	0.001	0.6	0.007
RW-7244P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7288P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-7310P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-7350P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7492P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-7498P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-7505P	0.29	0.2	0.1	0.005	0.02	0.0009	0.1	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7549P	0.26	0.2	0.09	0.005	0.01	0.0009	0.1	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006

TABLE 5-5
HUMAN HEALTH TOTAL NON-CANCER HAZARD QUOTIENTS
Fort Hall Mine Landfill, Bannock County, Idaho

Well ID	2019								2020							
	Groundwater Concentration (µg/L)		Groundwater HQ		VI HQ[1]		Total HQ		Groundwater Concentration (µg/L)		Groundwater HQ		VI HQ[1]		Total HQ	
	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE
RW-7586P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7588P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7677P	6.3	1.2	2	0.03	0.3	0.005	**3**	0.03	5.9	1.2	2	0.03	0.3	0.005	**2**	0.03
RW-7688P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7773P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-7776P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-8000B	3.5	1	1	0.02	0.2	0.005	1	0.03	4.8	0.2	2	0.005	0.3	0.0009	**2**	0.006
RW-8012P	2.2	0.79	0.8	0.02	0.1	0.004	0.9	0.02	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-8030P	6	0.94	2	0.02	0.3	0.004	**2**	0.03	7.1	1.3	3	0.03	0.4	0.006	**3**	0.04
RW-8035P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-8048P	NA	NA	NA	NA	NA	NA	NA	NA	4	0.71	1	0.02	0.2	0.003	**2**	0.02
RW-8105PN	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-8105PS	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-8167P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	NA	NA	NA	NA	NA	NA	NA	NA
RW-8209P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-8249P	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006	0.16	0.2	0.06	0.005	0.009	0.0009	0.07	0.006
RW-8284P	3.4	0.89	1	0.02	0.2	0.004	1	0.03	3.9	0.93	1	0.02	0.2	0.004	**2**	0.03

EPA - Environmental Protection Agency
HI - hazard index
HQ - hazard quotient
ID - indentifier
PCE - tetrachloroethene
RSL - Regional Screening Level
TCE - trichloroethene
VI - vapor intrusion
µg/L - micrograms per liter

[1] VI HQ values are presented in detail in Table 5-4.
Shading indicates HQ values greater than 1.

TABLE 5-6
ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN SELECTION
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	2019								2020							
	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	Screening Value (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	Screening Value (µg/L)	COPC?
1,1,1,2-Tetrachloroethane	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
1,1,1-Trichloroethane	60	2	3%	0.16	0.16	0.27	4400000	N	51	NA	0%	0.16	0.16	0.16	4400000	N
1,1,2,2-Tetrachloroethane	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
1,1,2-Trichloroethane	60	NA	0%	0.27	0.27	0.27	NA	N	51	NA	0%	0.27	0.27	0.27	NA	N
1,1-Dichloroethane	60	2	3%	0.22	0.22	0.26	1700000	N	51	2	4%	0.22	0.22	0.25	1700000	N
1,1-Dichloroethene	60	NA	0%	0.23	0.23	0.23	130000	N	51	NA	0%	0.23	0.23	0.23	130000	N
1,1-Dichloropropene	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N
1,2,3-Trichloropropane	60	NA	0%	0.33	0.33	0.33	NA	N	51	NA	0%	0.33	0.33	0.33	NA	N
1,2,4-Trichlorobenzene	60	NA	0%	0.21	0.21	0.21	6600	N	51	NA	0%	0.21	0.21	0.21	6600	N
1,2-Dibromo-3-Chloropropane	60	NA	0%	0.47	0.47	0.47	NA	N	51	NA	0%	0.47	0.47	0.47	NA	N
1,2-Dibromoethane	60	NA	0%	0.18	0.18	0.18	NA	N	51	NA	0%	0.18	0.18	0.18	NA	N
1,2-Dichlorobenzene	60	NA	0%	0.15	0.15	0.15	NA	N	51	NA	0%	0.15	0.15	0.15	NA	N
1,2-Dichloroethane	60	3	5%	0.13	0.21	2	19000	N	51	NA	0%	0.13	0.13	0.13	19000	N
1,2-Dichloropropane	60	1	2%	0.18	0.18	0.29	NA	N	51	NA	0%	0.18	0.18	0.18	NA	N
1,3-Dichlorobenzene	60	NA	0%	0.13	0.13	0.13	NA	N	51	NA	0%	0.13	0.13	0.13	NA	N
1,3-Dichloropropane	60	NA	0%	0.09	0.09	0.09	NA	N	51	NA	0%	0.09	0.09	0.09	NA	N
1,4-Dichlorobenzene	60	NA	0%	0.16	0.16	0.16	11000	N	51	NA	0%	0.16	0.16	0.16	11000	N
2,2-Dichloropropane	60	NA	0%	0.38	0.38	0.38	NA	N	51	NA	0%	0.38	0.38	0.38	NA	N
2-Butanone (MEK)	60	NA	0%	2	2	2	7900000	N	51	NA	0%	2	2	2	7900000	N
2-Hexanone	60	NA	0%	1.7	1.7	1.7	NA	N	51	NA	0%	1.7	1.7	1.7	NA	N
4-Methyl-2-pentanone (MIBK)	60	NA	0%	0.98	0.98	0.98	NA	N	51	NA	0%	0.98	0.98	0.98	NA	N
Acetone	60	1	2%	1.9	2.1	10	44000	N	51	1	2%	1.9	1.9	2.3	44000	N
Acetonitrile; methyl cyanide	60	NA	0%	9.6	9.6	9.6	NA	N	51	NA	0%	9.6	9.6	9.6	NA	N
Acetylene	14	NA	0%	0.73	0.84	2.2	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Acrolein	60	NA	0%	2.8	2.8	2.8	NA	N	51	NA	0%	2.8	2.8	2.8	NA	N
Acrylonitrile	60	NA	0%	1.4	1.4	1.4	NA	N	51	NA	0%	1.4	1.4	1.4	NA	N
Allyl chloride	60	1	2%	0.17	0.18	0.75	NA	N	51	NA	0%	0.17	0.17	0.17	NA	N
Antimony	14	NA	0%	0.4	0.4	0.4	690	N	NA	NA	0%	NA	NA	NA	690	N
Arsenic	14	10	71%	0.33	1.73	8.1	560	N	NA	NA	0%	NA	NA	NA	560	N
Barium	14	14	100%	130	168	310	6100	N	NA	NA	0%	NA	NA	NA	6100	N
Benzene	60	NA	0%	0.16	0.16	0.16	110000	N	51	1	2%	0.16	0.17	0.5	110000	N
Beryllium	14	1	7%	0.08	0.08	0.11	2900	N	NA	NA	0%	NA	NA	NA	2900	N
Bromochloromethane	60	NA	0%	0.1	0.1	0.1	NA	N	51	NA	0%	0.1	0.1	0.1	NA	N
Bromodichloromethane	60	1	2%	0.17	0.1905	1.4	NA	N	51	NA	0%	0.17	0.17	0.17	NA	N
Bromoform	60	1	2%	0.46	0.50	3	NA	N	51	NA	0%	0.46	0.46	0.46	NA	N
Bromomethane	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
Cadmium	14	NA	0%	0.27	0.27	0.27	4800	N	NA	NA	0%	NA	NA	NA	4800	N
Carbon disulfide	60	1	2%	0.17	0.17	0.22	NA	N	51	1	2%	0.17	0.17	0.41	NA	N
Carbon tetrachloride	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N
Chlorobenzene	60	NA	0%	0.17	0.17	0.17	260000	N	51	NA	0%	0.17	0.17	0.17	260000	N
Chlorodibromomethane	60	1	2%	0.17	0.22	3	NA	N	51	NA	0%	0.17	0.17	0.17	NA	N
Chloroethane	60	NA	0%	0.41	0.41	0.41	NA	N	51	NA	0%	0.41	0.41	0.41	NA	N
Chloroform	60	6	10%	0.16	0.18	0.62	67000	N	51	4	8%	0.16	0.16	0.25	67000	N
Chloromethane	60	NA	0%	0.3	0.3	0.3	NA	N	51	NA	0%	0.3	0.3	0.3	NA	N

TABLE 5-6
ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN SELECTION
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	2019								2020							
	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	Screening Value (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	Screening Value (µg/L)	COPC?
Chloroprene	60	NA	0%	0.21	0.21	0.21	NA	N	51	NA	0%	0.21	0.21	0.21	NA	N
Chromium	14	8	57%	0.5	0.66	1.7	7100	N	NA	NA	0%	NA	NA	NA	7100	N
cis-1,2-Dichloroethene	60	9	15%	0.15	0.34	2.5	NA	N	51	11	22%	0.15	0.29	2	NA	N
cis-1,3-Dichloropropene	60	NA	0%	0.16	0.16	0.16	NA	N	51	NA	0%	0.16	0.16	0.16	NA	N
Cobalt	14	7	50%	0.054	0.13	0.48	82	N	NA	NA	0%	NA	NA	NA	82	N
Copper	14	10	71%	0.56	2.9	14	12000	N	NA	NA	0%	NA	NA	NA	12000	N
Dibromomethane	60	1	2%	0.17	0.17	0.32	NA	N	51	NA	0%	0.17	0.17	0.17	NA	N
Dichlorodifluoromethane	60	NA	0%	0.31	0.31	0.31	NA	N	51	NA	0%	0.31	0.31	0.31	NA	N
Ethane	14	NA	0%	0.57	0.65	1.7	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Ethene	14	NA	0%	0.4	0.46	1.2	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Ethyl methacrylate	60	NA	0%	0.86	0.86	0.86	NA	N	51	NA	0%	0.86	0.86	0.86	NA	N
Ethylbenzene	60	NA	0%	0.16	0.17	1	NA	N	51	NA	0%	0.16	0.16	0.16	NA	N
Iodomethane	60	NA	0%	0.23	0.23	0.23	NA	N	51	NA	0%	0.23	0.23	0.23	NA	N
Iron	14	10	71%	22	437	1800	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Isobutanol; Isobutyl alcohol	60	NA	0%	37	37	37	NA	N	51	NA	0%	37	37	37	NA	N
Lead	14	8	57%	0.18	1.0	9.1	4300	N	NA	NA	0%	NA	NA	NA	4300	N
m,p-Xylene	60	1	2%	0.15	0.305	2	NA	N	51	NA	0%	0.15	0.15	0.15	NA	N
Manganese	14	9	64%	0.31	66	480	190000	N	NA	NA	0%	NA	NA	NA	190000	N
Methacrylonitrile	60	NA	0%	1.6	1.6	1.6	NA	N	51	NA	0%	1.6	1.6	1.6	NA	N
Methane	14	1	7%	0.63	94	1300	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Methyl methacrylate	60	NA	0%	1.1	1.1	1.1	NA	N	51	NA	0%	1.1	1.1	1.1	NA	N
Methylene Chloride	60	NA	0%	0.94	0.94	0.94	26000	N	51	NA	0%	0.94	0.94	0.94	26000	N
Nickel	14	8	57%	0.3	0.76	1.5	300	N	NA	NA	0%	NA	NA	NA	300	N
o-xylene (1,2-dimethylbenzene)	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N
Propane	14	NA	0%	0.56	0.64	1.7	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Propionitrile; ethyl cyanide	60	NA	0%	3.7	3.7	3.7	NA	N	51	NA	0%	3.7	3.7	3.7	NA	N
Selenium	14	8	57%	0.37	0.66	3	890	N	NA	NA	0%	NA	NA	NA	890	N
Silver	14	2	14%	0.033	0.03	0.036	22000	N	NA	NA	0%	NA	NA	NA	22000	N
Styrene	60	NA	0%	0.36	0.36	0.36	NA	N	51	NA	0%	0.36	0.36	0.36	NA	N
Tetrachloroethene	60	20	33%	0.2	0.72	7	8900	N	51	17	33%	0.2	0.74	6.1	8900	N
Thallium	14	1	7%	0.089	0.09	0.12	31	N	NA	NA	0%	NA	NA	NA	31	N
Tin	14	1	7%	0.77	0.95	3.3	NA	N	NA	NA	0%	NA	NA	NA	NA	N
Toluene	60	1	2%	0.17	0.17	0.19	110000	N	51	NA	0%	0.17	0.17	0.17	110000	N
trans-1,2-Dichloroethene	60	NA	0%	0.15	0.15	0.15	NA	N	51	NA	0%	0.15	0.15	0.15	NA	N
trans-1,3-Dichloropropene	60	NA	0%	0.19	0.19	0.19	NA	N	51	NA	0%	0.19	0.19	0.19	NA	N
trans-1,4-Dichloro-2-butene	60	NA	0%	0.8	0.8	0.8	NA	N	51	NA	0%	0.8	0.8	0.8	NA	N
Trichloroethene	60	27	45%	0.16	4.0	42	440000	N	51	28	55%	0.16	4.0	34	440000	N
Trichlorofluoromethane	60	NA	0%	0.29	0.29	0.29	NA	N	51	NA	0%	0.29	0.29	0.29	NA	N
Vanadium	14	NA	0%	1.2	1.2	1.2	4500	N	NA	NA	0%	NA	NA	NA	4500	N
Vinyl acetate	60	1	2%	0.94	0.94	1	NA	N	51	NA	0%	0.94	0.94	0.94	NA	N
Vinyl chloride	60	NA	0%	0.1	0.1	0.1	NA	N	51	NA	0%	0.1	0.1	0.1	NA	N

TABLE 5-6
ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN SELECTION
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	2019								2020							
	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	Screening Value (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Minimum (µg/L)	Average (µg/L)	Maximum (µg/L)	Screening Value (µg/L)	COPC?
Xylene (Total)	60	1	2%	0.19	0.34	2	9400	N	51	NA	0%	0.19	0.19	0.19	9400	N
Zinc	14	10	71%	2	99	790	490000	N	NA	NA	0%	NA	NA	NA	490000	N

Nondetects were evaluated at the method detection limit for summary statistic computation.

µg/L - micrograms per liter
COPC - chemical of potential concern
MCL - maximum contaminant level
N - no
NA - not applicable
Y - yes

Table 6-1
2021 Annual Offsite Sampling Plan
Fort Hall Mine Landfill

Well ID	Water Levels	Field parameters*	VOCs (8260B)	Easting^ (x-coordinate)	Northing^ (y-coordinate)	Elevation (feet msl)	Screen Start (feet bgs)	Screen End (feet bgs)	Minimum Purge Volume (gallons)	Sampling Rationale
City of Pocatello Monitoring Wells										
MW-37	1	1	1	596895.44	415075.61	4503	57	107	3.8	VOCs detected
MW-38	1	1	1	596694.57	415075.59	4501	60	100	2.7	VOCs detected
	1	1	1	596694.57	415075.59	4501	105	115	3.2	VOCs detected
	1	1	1	596694.57	415075.59	4501	121	130	3.5	VOCs detected
PA-1	1	1	1	596644.63	415607.75	4503	129	149	2.4	VOCs detected
PA-3	1	1	1	596636.44	415606.15	4503.23	48	68	1.1	VOCs detected
PA-4	1	1	1	596422.76	415438.08	4518.65	65	75	2.5	VOCs detected
	1	1	1	596422.76	415438.08	4518.65	100	110	2.5	VOCs detected
	1	1	1	596422.76	415438.08	4518.65	135	145	2.5	VOCs detected
PA-5	1	1	1	597670.68	414891.60	4498.17	36	87	1.1	VOCs detected
PA-7	1	1	1	596917.81	415954.19	4488.11	171	177	3.1	VOCs detected
PA-8	1	1	1	596893.98	415920.84	4489.87	37	47	2.2	VOCs detected
	1	1	1	596893.98	415920.84	4489.87	77	87	2.2	VOCs detected
PA-8	1	1	1	596893.98	415920.84	4489.87	117	127	2.2	VOCs detected
PA-9	1	1	1	598890.52	416316.33	4482.47	58	68	1.7	Plume boundary
	1	1	1	598890.52	416316.33	4482.47	88	98	1.7	Plume boundary
PA-10	1	1	1	599076.35	416149.56	4485.37	22	62	0.8	VOCs detected
City of Pocatello Municipal Supply Wells										
Muni-Well-14		1	1	589854.12	421658.16	4470	Unknown	Unknown	5000	VOCs detected
Muni-Well-33		1	1	593063.94	418259.59	4510	56	115	5000	VOCs detected
Domestic Supply Wells										
RW-2076F		1	1	603437.23	410006.10	4568	N/A	N/A	NS	VOCs detected
RW-2140H		1	1	601376.86	410184.78	4557	N/A	N/A	400	VOCs detected
RW-2151H		1	1	601048.98	410194.52	4571	123	180	300	VOCs detected
RW-2172F		1	1	603451.12	410506.72	4545	N/A	N/A	100	Plume boundary
RW-2172H		1	1	601343.83	410331.91	4552	100	113	300	VOCs detected
RW-2203H		1	1	600946.89	410582.10	4542	Unknown	Unknown	30	VOCs detected
RW-2213F		1	1	603003.31	410689.99	4533	Unknown	Unknown	200	Plume boundary
RW-2237H		1	1	600946.28	410646.63	4532	Unknown	Unknown	300	VOCs detected
RW-2879M		1	1	596669.00	414104.78	4604	110	110	300	Plume boundary
RW-5898B1		1	1	593134.42	418944.16	4487	N/A	N/A	300	VOCs detected
RW-7070B		1	1	596184.00	415892.25	4523	Unknown	Unknown	100	VOCs detected
RW-7091R		1	1	596242.44	416046.04	4505	N/A	N/A	100	VOCs detected
RW-7200P		1	1	602934.13	410945.27	4512	133	138	NS	Not previously sampled
RW-7244P		1	1	602684.69	411018.74	4513	N/A	N/A	100	Plume boundary
RW-7350P		1	1	602268.67	411019.73	4527	Unknown	Unknown	300	Plume boundary
RW-7505P		1	1	601500.56	410668.29	4536	Unknown	Unknown	300	VOCs detected
RW-7549P		1	1	601215.93	410767.15	4524	Unknown	Unknown	300	Plume boundary
RW-7586P		1	1	601324.00	411058.45	4516	90	110	200	Plume boundary
RW-7588P		1	1	601021.80	411873.88	4495	Unknown	Unknown	200	Plume boundary
RW-7677P		1	1	600430.68	411242.85	4523	Unknown	Unknown	100	VOCs detected
RW-7688P		1	1	600621.78	411461.05	4515	Unknown	Unknown	100	Plume boundary
RW-7773P		1	1	599798.81	411863.98	4528	Unknown	Unknown	100	VOCs detected
RW-8000B		1	1	596489.98	415079.60	4516	Unknown	Unknown	Unknown	VOCs detected
RW-8012P		1	1	598779.95	412267.43	4521	80	90	200	VOCs detected
RW-8030P		1	1	598670.00	412304.15	4521	Unknown	Unknown	200	VOCs detected
RW-8035P		1	1	597627.73	411942.38	4569	Unknown	Unknown	300	Plume boundary
RW-8048P		1	1	598316.55	412447.03	4523	130	150	300	VOCs detected
RW-8105PS		1	1	597583.43	412452.72	4539	80	96	200	Plume boundary
RW-8209P		1	1	597141.45	412781.87	4562	140 and 185	150 and 195	500	Plume boundary
RW-8249P		1	1	597026.53	412964.39	4575	247	267	300	Plume boundary
RW-8284P		1	1	598141.93	412556.97	4524	Unknown	Unknown	300	VOCs detected

Notes:
Domestic well sampling is contingent upon continued consent to access.
*Field parameters include pH, oxidation reduction potential, turbidity, dissolved oxygen, specific conductivity, and temperature
^Coordinate system is Idaho State Plane East

Abbreviations:
VOCs = volatile organic compounds
msl = mean sea level
bgs = below ground surface

Appendix A

Table 6-1 from the 2019 Offsite Groundwater Monitoring Report - Recommendations for 2020 Annual Offsite Sampling

Table 6-1
2021 Annual Offsite Sampling Plan
Fort Hall Mine Landfill

Well ID	Water Levels	Field parameters*	VOCs (8260B)	Easting^ (x-coordinate)	Northing^ (y-coordinate)	Elevation (feet msl)	Screen Start (feet bgs)	Screen End (feet bgs)	Minimum Purge Volume (gallons)	Sampling Rationale
City of Pocatello Monitoring Wells										
MW-37	1	1	1	596895.44	415075.61	4503	57	107	3.8	VOCs detected
MW-38	1	1	1	596694.57	415075.59	4501	60	100	2.7	VOCs detected
	1	1	1	596694.57	415075.59	4501	105	115	3.2	VOCs detected
	1	1	1	596694.57	415075.59	4501	121	130	3.5	VOCs detected
PA-1	1	1	1	596644.63	415607.75	4503	129	149	2.4	VOCs detected
PA-3	1	1	1	596636.44	415606.15	4503.23	48	68	1.1	VOCs detected
PA-4	1	1	1	596422.76	415438.08	4518.65	65	75	2.5	VOCs detected
	1	1	1	596422.76	415438.08	4518.65	100	110	2.5	VOCs detected
	1	1	1	596422.76	415438.08	4518.65	135	145	2.5	VOCs detected
PA-5	1	1	1	597670.68	414891.60	4498.17	36	87	1.1	VOCs detected
PA-7	1	1	1	596917.81	415954.19	4488.11	171	177	3.1	VOCs detected
PA-8	1	1	1	596893.98	415920.84	4489.87	37	47	2.2	VOCs detected
	1	1	1	596893.98	415920.84	4489.87	77	87	2.2	VOCs detected
PA-8	1	1	1	596893.98	415920.84	4489.87	117	127	2.2	VOCs detected
PA-9	1	1	1	598890.52	416316.33	4482.47	58	68	1.7	Plume boundary
	1	1	1	598890.52	416316.33	4482.47	88	98	1.7	Plume boundary
PA-10	1	1	1	599076.35	416149.56	4485.37	22	62	0.8	VOCs detected
City of Pocatello Municipal Supply Wells										
Muni-Well-14		1	1	589854.12	421658.16	4470	Unknown	Unknown	5000	VOCs detected
Muni-Well-33		1	1	593063.94	418259.59	4510	56	115	5000	VOCs detected
Domestic Supply Wells										
RW-2076F		1	1	603437.23	410006.10	4568	N/A	N/A	NS	VOCs detected
RW-2140H		1	1	601376.86	410184.78	4557	N/A	N/A	400	VOCs detected
RW-2151H		1	1	601048.98	410194.52	4571	123	180	300	VOCs detected
RW-2172F		1	1	603451.12	410506.72	4545	N/A	N/A	100	Plume boundary
RW-2172H		1	1	601343.83	410331.91	4552	100	113	300	VOCs detected
RW-2203H		1	1	600946.89	410582.10	4542	Unknown	Unknown	30	VOCs detected
RW-2213F		1	1	603003.31	410689.99	4533	Unknown	Unknown	200	Plume boundary
RW-2237H		1	1	600946.28	410646.63	4532	Unknown	Unknown	300	VOCs detected
RW-2879M		1	1	596669.00	414104.78	4604	110	110	300	Plume boundary
RW-5898B1		1	1	593134.42	418944.16	4487	N/A	N/A	300	VOCs detected
RW-7070B		1	1	596184.00	415892.25	4523	Unknown	Unknown	100	VOCs detected
RW-7091R		1	1	596242.44	416046.04	4505	N/A	N/A	100	VOCs detected
RW-7200P		1	1	602934.13	410945.27	4512	133	138	NS	Not previously sampled
RW-7244P		1	1	602684.69	411018.74	4513	N/A	N/A	100	Plume boundary
RW-7350P		1	1	602268.67	411019.73	4527	Unknown	Unknown	300	Plume boundary
RW-7505P		1	1	601500.56	410668.29	4536	Unknown	Unknown	300	VOCs detected
RW-7549P		1	1	601215.93	410767.15	4524	Unknown	Unknown	300	Plume boundary
RW-7586P		1	1	601324.00	411058.45	4516	90	110	200	Plume boundary
RW-7588P		1	1	601021.80	411873.88	4495	Unknown	Unknown	200	Plume boundary
RW-7677P		1	1	600430.68	411242.85	4523	Unknown	Unknown	100	VOCs detected
RW-7688P		1	1	600621.78	411461.05	4515	Unknown	Unknown	100	Plume boundary
RW-7773P		1	1	599798.81	411863.98	4528	Unknown	Unknown	100	VOCs detected
RW-8000B		1	1	596489.98	415079.60	4516	Unknown	Unknown	Unknown	VOCs detected
RW-8012P		1	1	598779.95	412267.43	4521	80	90	200	VOCs detected
RW-8030P		1	1	598670.00	412304.15	4521	Unknown	Unknown	200	VOCs detected
RW-8035P		1	1	597627.73	411942.38	4569	Unknown	Unknown	300	Plume boundary
RW-8048P		1	1	598316.55	412447.03	4523	130	150	300	VOCs detected
RW-8105PS		1	1	597583.43	412452.72	4539	80	96	200	Plume boundary
RW-8209P		1	1	597141.45	412781.87	4562	140 and 185	150 and 195	500	Plume boundary
RW-8249P		1	1	597026.53	412964.39	4575	247	267	300	Plume boundary
RW-8284P		1	1	598141.93	412556.97	4524	Unknown	Unknown	300	VOCs detected

Notes:
Domestic well sampling is contingent upon continued consent to access.
*Field parameters include pH, oxidation reduction potential, turbidity, dissolved oxygen, specific conductivity, and temperature
^Coordinate system is Idaho State Plane East

Abbreviations:
VOCs = volatile organic compounds
msl = mean sea level
bgs = below ground surface

Appendix B

Field Documentation and Photo Log

	Date: 6/22/2020 **Location:** RW-2076F **Description:** Accessed from MW-103S/D property gate, RW-2076F is located in the field to the north of the property it serves. This well has not been sampled by CDM Smith. .
	Date: 6/22/2020 **Location:** RW-2076F **Description:** Located approximately 30 feet west of RW-2076F on the MW-103S/D property, this spigot does not produce water but may have been the sampling source for RW-2076F in the past .

	Date: 6/22/2020 **Location: P**roperty associated with RW-2076F **Description:** This hydrant is located on the east side of North Fort Hall Mine Road, just north of the driveway to the property associated with RW-2076F. It is likely associated with City of Pocatello water and not RW-2076F.
	Date: 6/25/2020 **Location:** RW-2213F **Description:** RW-2213F and turn valve (disconnected) and what appear to be well drains, which overflowed during purging. The wells is close to a basement window well on the west side of the house.

Date: 6/23/2020

Location: RW-2237H

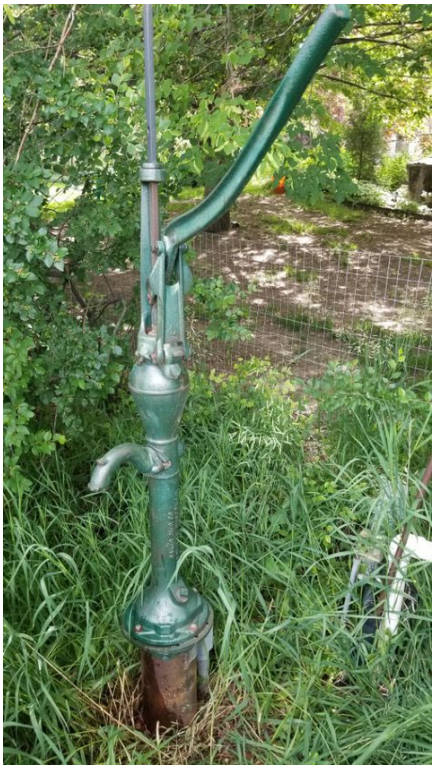
Description: Sampling setup at RW-2237H, first sampling by CDM Smith.

Date: 6/25/2020

Location: RW-2613M

Description: RW-2613M well positioned in field on side of hill to the right of house. PVC piping is permanently connected to spigot outlet into the ground. There is a horizontal PVC pipe where sampling can occur if lifted off the ground.

	Date: 6/22/2020 **Location:** RW-5898B2 **Description:** RW-5898B2 (also known as the irrigation well) is the second well on the property and is not sampled by CDM Smith. Pictured is the well (beneath the whiskey barrel) and its associated filtration treatment system..
	Date: 06/24/2020 **Location:** RW-7091R **Description:** Well water is directed through filtering system before feeding through house and sprinkler systems. No spigot available on system before water is filtered.

	**Date:** 6/24/2020 **Location:** RW-7091R **Description:** The hand pump atop RW-7091R, used to sample the well to collect untreated groundwater.
	Date: 06/25/2020 **Location:** RW-7200P **Description:** Well head located on east side of house next to dog kennel. The well has not been developed and does not have a dedicated pump.

		Date: 06/25/2020 **Location:** RW-7200P **Description:** Black sheen (drilling fluid) in groundwater and sampling equipment after attempted sampling at RW-7200P.
		Date: 06/22/2020 **Location:** RW-8048P **Description:** Well head behind bushes on left side of driveway. Sampled via a hose about 30 feet from well (no spigot).

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: Muni-Well-14	Date: 06/24/20	Samplers: T. VIRTUE / D. CHEES
Tap Location:		

Well Diameter (inches):		1" - 0.041 Gal/ft.		Minimum purge volume (gallons)
Total Depth of Well (feet):	(-)	2" - 0.16 Gal/ft.		
Depth to Water (feet):		4" - 0.65 Gal/ft.	= ~23,000	
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.		
		8" - 2.60 Gal/ft.		

Purge Rate (gallon/minute):		Begin Purge (time):	1022
Required Purge Time (minute):	5 min	End Purge (time):	1038

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1032	13.0	7.41	7.52	710	0.00	86.6	minimum purge volume ~
1035	12.4	7.34	7.55	705	0.00	91.2	
1038	12.2	7.33	7.51	707	0.00	92.8	
1041	Sample time						

Sample ID: Muni-Well-14-20200624	Sample Time: ~~Jun~~ 24 2020 1041
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: Muni-Well-33	Date: 06/24/20	Samplers: T. VANTAR, M. GAMES
Tap Location:		

Well Diameter (inches): _____
Total Depth of Well (feet): _____ (-)
Depth to Water (feet): _____
Water Column Height (feet): _____ (x)

1" - 0.041 Gal/ft.
2" - 0.16 Gal/ft.
4" - 0.65 Gal/ft.
6" - 1.47 Gal/ft.
8" - 2.60 Gal/ft.

Minimum purge volume (gallons) = ~10,000

Purge Rate (gallon/minute): _____
Required Purge Time (minute): 5min

Begin Purge (time): 0955
End Purge (time): ~~1018~~ 1018

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1000	12.7	7.39	7.57	721	1.49	117.9	minimum purge volume not
1003	12.2	7.39	7.72	712	0.0	75.2	
1006	11.9	7.37	7.73	710	0.0	60.6	
1009	11.8	7.37	7.84	712	0.0	54.4	
1012	11.9	7.37	7.74	711	0.0	45.4	
1015	12.0	7.37	7.74	712	0.0	38.7	
1018	11.9	7.37	7.74	712	0.0	41.9	
1220	samples taken						

Sample ID: Muni-Well-33-20200624 Sample Time: 1220

QC Samples Collected: None

Analytical Parameters: VOCs

CDM Smith

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: FHML Date: 6/26/20 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.6 (Vented to) _____

Well ID: MW-116S Purging/Sampling Device: Portable pump Pump depth (ft btoc): 85

Initial Static Water Level (feet btoc): 77.7 (w/o pump) 77.27 (w/ pump) Analytical Parameters: VOCs (8260)

Final Water Level (feet btoc): 77.26 QC Samples Collected: None

Purge Start Time: 12:55 Ferrous Iron (mg/L): NM Allowable Drawdown (ft): 0.1

Sample Time: 13:30 Controller Settings: Recharge: 14 secs Discharge: 6 secs Pressure: 60 psi

Samplers' Signatures: _____ Cycles Per Minute: 3

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
13:05	77.27	15.5	7.07	1031	6.57	97.2	76.00	250	~0.75 gal; water is clear
13:15	77.26	15.6	7.08	1028	6.71	109.8	189.72	250	~1.4 gal; water is clear
13:20	77.26	15.1	7.09	1030	6.84	113.8	194.58	250	~1.6 gal; water clear; purge volume met
13:25	77.26	15.0	7.08	1025	6.78	115.6	123.88	250	~1.7 gal; water clear
13:26	77.26	15.6	7.09	1028	6.79	117	191.34	250	
13:30	SAMPLE								

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47

Previous controller settings: Recharge: 14 secs Discharge: 6 secs
Pressure: 60 psi Cycles Per Minute: 3 Flow Rate: 200-325 mL/min

Screened Interval: 78-93 ft bgs Minimum purge volume: 1.5 gallons

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1° C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10mV
Conductivity	± 10 %	Water Level	± 0.1 foot
		Turbidity	< 50 NTU

* Turbidity sensor malfunctioning

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2140H	Date: 06/20/2020	Samplers: HH/EE
Tap Location: Garden Hose		

Well Diameter (inches):	8		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	195	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 400
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	4.5	Begin Purge (time):	1130
Required Purge Time (minute):	89	End Purge (time):	1259

owner purged through garden hose

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1310	12.7	6.89	6.84	1108	179.21	143.2	
1315	12.5	6.94	6.89	1103	7.99	~~143~~ 143.6	
1320	12.5	6.96	6.84	1101	12.70	142.2	
1325	12.5	6.98	6.81	1098	25.17	142.8	
1335	Sample						

Sample ID:	Sample Time: 1335
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID Readings: 22.0 % OXY
0 % LEL
0 ppm CO, H_2S, ~~VOC~~ ##
0.2 ppm VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2151H	Date: 06/23/10	Samplers: T. METTAE / M. GATES
Tap Location:		

Well Diameter (inches):	8	1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	180 (-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):		4" - 0.65 Gal/ft. =	300
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.	
		8" - 2.60 Gal/ft.	

PID = 0.4 ppm

Purge Rate (gallon/minute):	20	Begin Purge (time):	1200
Required Purge Time (minute):	15	End Purge (time):	1255

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1225	15.6	7.65	6.92	554	31.50	20.1	minimum purge volume met
1230	14.5	7.67	9.91	540	34.96	17.2	
1235	14.8	7.85	5.96	473.7	72.74	29.7	water turned orange
1236	13.3	7.70	5.58	542	70.81	17.0	water cleared up, readings every 3mins
1239	13.0	7.66	5.72	585	69.78	-4.7	
1242	13.2	7.65	5.32	587	112.33	-6.6	
1251	13.4	7.68	5.10	582	71.75	14.5	
1252	12.8	7.61	5.61	639	71.65	5.0	
1254	12.9	7.59	5.70	651	74.59	-4.2	checked w/ FTL, sampling during next clear phase
1303	Sample time						

Sample ID: RW-2151H-20100623	Sample Time: 1303
QC Samples Collected: FD and MS/MSD	
Analytical Parameters: VOCs	

CDM Smith

Note: Do not move the electrical box on top of the well, it may spark when moved.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2172F	Date: 06/22/20	Samplers: T. VETLAK/ M. GATES
Tap Location: Near the pine tree, NW of the house		

Well Diameter (inches):	6		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	110	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 100
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	3.33	Begin Purge (time):	1105
Required Purge Time (minute):	30 min	End Purge (time):	~~H20~~ ~~H35~~ TV alle 1150

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
11:35	14.0	7.17	6.22	684	6.45	200.0	Minimum purge volume met
11:40	12.8	7.23	6.35	683	0.00	204.9	
11:45	12.4	7.22	6.38	681	0.00	204.6	
11:50	12.2	7.24	6.55	683	0.00	202.0	
11:54	Sample time						

Sample ID: RW-2172F-20200622	Sample Time: 1154
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2172H	Date: 6/25/20	Samplers: EE, HH
Tap Location:		

Well Diameter (inches):	8		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	165	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 300
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	10 (5.4 hose + 2 sprinklers)	Begin Purge (time):	11:42
Required Purge Time (minute):	30	End Purge (time):	12:12

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1215	12.5	7.04	4.81	1031	HH 6/25/20 7.17	135.5	
1220	12.6	7.05	6.86	1026	13.04	115.4	
1225	11.9	7.09	6.90	1027	17.76	97.1	
1230	11.9	7.09	6.90	1027	40.52	89.7	
1235	12.0	7.10	6.93	1027	103.35	88.6	Water is clear
1240	Sample						

Sample ID:	RW-2172H-20200625	Sample Time:	1240
QC Samples Collected:	None		
Analytical Parameters:	VOCs		

CDM Smith

PID Readings: 20.9% OXY
0% LEL
0 ppm CO, H2S, VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2213F	Date: 06/25/2020	Samplers: HH/EE
Tap Location: spigot off house in back; must turn on water breaker in basement		

Well Diameter (inches):	8		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	140	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 200
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	~~13~~ 5.8	Begin Purge (time):	1629
Required Purge Time (minute):	35	End Purge (time):	1704

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
17:07	13.1	7.43	6.75	658	212.02	133.9	
17:10	11.9	7.45	6.76	654	184.74	134.1	water is flooding window wells
17:13	12.0	7.44	6.76	653	138.75	133.0	
17:15	SAMPLE						

Sample ID:	Sample Time:
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID Readings: 20.9% oxy
0 % LEL
0 ppm CO, H_2S, VOC

* Only took 3 readings because well drain flooded the window wells.

* Basement has 1 main breaker box, 1 water/pump control box, 1 water control switch, all separate. Have to turn on control switch prior to purging.

GROUNDWATER MONITORING WELL
LOW-FLOW SAMPLING DATA SHEET

Site Name: FHML Date: 6/25/20 OVM: FID ☐ PID ■ In Casing (ppm): (Initial) 0.0 (Vented to) 0.0

Well ID: RW-2203H Purging/Sampling Device: Portable bladder pump

Initial Static Water Level (feet btoc): 68.37 (no pump); 68.35 (after pump install) Analytical Parameters: VOCs

Final Water Level (feet btoc): 68.35 QC Samples Collected: None

Purge Start Time: 0850 Sample Number: RW-2203H-20200625

Sample Time: 1415 Controller Settings: Recharge: 5 secs Discharge: 5 secs Pressure: 80 psi

Samplers' Signatures: T. Vernon / M. Gates Cycles Per Minute: 6

Time	Water Level (ft btoc)	Temperature (Degrees C)	pH	Specific Cond. (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (mL/min)	Comments
0950	68.40	11.4	7.61	861	4.8	-151.1	113.30	400	
1032	68.41	11.4	7.46	1038	5.1	124.2	78.49	375	
1400	68.41	11.7	7.23	1115	2.64	-66.4	6.42	400	
1405	68.41	11.7	7.23	1115	2.70	-65.4	6.20	400	minimum purge volume met
1410	68.41	11.8	7.23	1114	2.76	-64.7	6.31	400	
1415	Sample time								

Casing Volume Calculations:
Water Col. X Casing Factor = Gallons per Casing Volume
Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47

Previously used
Controller Settings: Recharge: 5 secs Discharge: 5 secs Pressure: 50 psi
Cycles Per Minute: 6

Depth of pump (ft btoc): 75

PARAMETERS FOR WATER QUALITY STABILIZATION			
Temperature	± 1° C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10mV
Conductivity	± 10 %	Water Level	± 0.1 foot
		Turbidity	< 50 NTU

Minimum purge volume (gallon): 28

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2237H	Date: 06/23/2020	Samplers: HH | EE
Tap Location: North side of driveway beside well		

Well Diameter (inches): 9 (owner) ~~100 (owner)~~
Total Depth of Well (feet): 100 (owner) (-)
Depth to Water (feet): 65 (estimate)
Water Column Height (feet): 35 (x)

1" - 0.041 Gal/ft.
2" - 0.16 Gal/ft.
4" - 0.65 Gal/ft.
6" - 1.47 Gal/ft.
8" - 2.60 Gal/ft.

Minimum purge volume (gallons) = 115 (X) 3 = 345
using 300 as max.

Purge Rate (gallon/minute): 7.2
Required Purge Time (minute): 42
Begin Purge (time): 1401
End Purge (time): 1443

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %	
pH	± 0.1 pH unit	~~ORP~~	± 10 mV	sensor issues
Conductivity	± 10 %	Turbidity	< 50 NTU	

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1448	14.1	7.35	6.56	801	183.11	126.6	water is clear
1453	13.6	7.24	6.51	796	223.93	127.1	"
1458	13.7	7.20	6.54	794	210.3	132.4	"
1503	13.8	7.19	6.55	795	220.67	133.5	"
1506	SAMPLE						

Sample ID: RW-2237H-20200623
Sample Time: 1506
QC Samples Collected: None
Analytical Parameters: VOCs

CDM Smith

PID readings:
20.9% oxy
0 % LEL
0 ppm CO H_2S
0.2 ppm VOC

Purged using owner's hose.
Detach hose with wrench.

Well located in tall grass on right side of house

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2613M	Date: 6/25/2020	Samplers: HH/EE

Tap Location: Beside wellhead infield/hillside to N of house. Spigot connected to PVC pipe horizontal along ground.

Well Diameter (inches):	~6	1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):		4" - 0.65 Gal/ft.	= 300
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.	
		8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	~10	Begin Purge (time):	1402
Required Purge Time (minute):	30	End Purge (time):	1432

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1433	15.1	7.75	9.02	700	194.12	119.0	water is clear
1438	14.3	7.62	9.08	715	166.33	94.8	"
1443	14.8	7.60	8.58	587	153.88	74.0	"
1448	14.3	7.60	8.94	580	156.60	70.7	"
1453	14.3	7.59	8.80	588	161.01	67.1	"
1500	Sample						

Sample ID: RW-2613M-20200625	Sample Time: 1500
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

GPS Lat 42.86070
Long -112.38936

PID readings: 20.9 % OXY
0 % LEL
0 ppm CO, H_2S, ~~VOC~~
0.1 ppm VOC

*No way to measure flow rate with PVC fittings on the spigot. Lift the horizontal pipe to decrease contact with ground.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-2879M	Date: 06/24/2020	Samplers: HH / EE
Tap Location: North side of driveway beside wellhead		

Well Diameter (inches):	6		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	205	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 300
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	11.1	Begin Purge (time):	0908
Required Purge Time (minute):	27	End Purge (time):	0935

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU - sensor

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
0940	15.6	7.06	6.63	1524	148.01	139.0	water is clear
0945	15.1	6.95	6.68	1513	153.06	96.2	"
0950	14.6	6.68	6.94	1513	194.39	62.0	"
0955	14.1	6.91	6.56	1514	140.69	53.3	"
1000	14.2	6.87	6.37	1517	180.89	52.6	"
1005	14.0	6.85	6.46	1511	114.82	49.9	
1010	SAMPLE						

Sample ID: RW-2879M-20200624	Sample Time: 1010
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% OXY
0% LEL
0 ppm H_2S, CO, VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-5898B1	Date: 6/22/2020	Samplers: EE / HH

Tap Location: Spigot on outside of barn. Go inside barn to open valve. *Post-filtration.*

Well Diameter (inches):	10 (visual)			Minimum purge volume (gallons)
Total Depth of Well (feet):	_____	(-)	1" - 0.041 Gal/ft.	
Depth to Water (feet):	_____		2" - 0.16 Gal/ft.	
Water Column Height (feet):	_____	(x)	4" - 0.65 Gal/ft.	= 300
			6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	5.58	Begin Purge (time):	13:59
Required Purge Time (minute):	54	End Purge (time):	14:53

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature ✓	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

issues w/ sensor

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1458	15.6	6.52	5.40	550	81.2	154.4	
1503	15.1	6.62	5.30	543	164.82	148.5	clear water
1508	14.6	6.65	5.44	547	128.75	143.7	clear water
1513	14.9	6.67	5.47	541	225.75	139.8	clear water
1515	SAMPLE						

Sample ID: RW-5898B1-20200622	Sample Time: 1515
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

One of 2 wells on property. 2nd well is beneath whiskey barrel outside barn. Both have filtration systems.

PID readings: 20.9% oxy; 0% LEL; CO, H_2S = 0 ppm; VOC = 0.1 ppm

Barn smells like chemicals (formaldehyde?) (VOC = 0.2 ppm in barn)

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7070B	Date: 06122020	Samplers: T. VRTIAK / M. GATES

Tap Location:

Well Diameter (inches):	8			Minimum purge volume (gallons)
Total Depth of Well (feet):	100 (-)	1" - 0.041 Gal/ft.		
Depth to Water (feet):		2" - 0.16 Gal/ft.		
Water Column Height (feet):	(x)	4" - 0.65 Gal/ft.	= 100	
		6" - 1.47 Gal/ft.		
		8" - 2.60 Gal/ft.		

Purge Rate (gallon/minute):	5.6	Begin Purge (time):	16:10
Required Purge Time (minute):	18	End Purge (time):	1645

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
16:30	13.4	7.21	7.45	782	0.00	143.0	minimum purge volume met
16:35	12.8	7.20	7.46	776	0.00	150.0	
16:40	12.4	7.22	7.55	774	0.00	148.7	
16:45	12.2	7.21	7.53	773	0.00	146.3	
16:48	sample time						

Sample ID: RW-7070B-20200622	Sample Time: 16:48
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7091R	Date: 06/24/20	Samplers: T. VETTER / M. GIBBS

Tap Location: NORTHEAST FROM THE ENTRANCE) BELOW BURNING OF THE FENCE ON THE SE UNIT 42.808150°N 112.389820°W

Well Diameter (inches):	6	1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	100 (-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):		4" - 0.65 Gal/ft.	= 100
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.	
		8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	20	Begin Purge (time):	1457
Required Purge Time (minute):		End Purge (time):	1517

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
15:20	14.2	7.95	1.63	490.2	15.79	-192.5	
15:23	12.6	7.46	4.70	654	6.39	-57.3	
15:26	12.1	7.44	4.96	623	7.04	-37.0	
15:29	11.8	7.43	5.64	641	7.53	-19.0	
15:31	12.0	7.39	5.88	649	6.46	-4.4	FR decided due to sample depth despite SAP due to specific sampling procedure
15:33	sample time						

TV 08/05: Correct Sample ID is RW-7091R-20200624.

Sample ID: RW-7091R-20200624	Sample Time: 1533
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7208	Date: 06/25/20	Samplers: T. VERNAE / M. GATES
Tap Location: EAST OF THE HOUSE, IN FRONT OF DOG KENNEL		42.7942 °N. 112.36474 °W

Well Diameter (inches):	6	1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	133-138 (-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):	60.58	4" - 0.65 Gal/ft.	= 91.76 (X) 3 = 275
Water Column Height (feet):	62.42 (x)	6" - 1.47 Gal/ft.	
60.61	123-60.58	8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	N/A	Begin Purge (time):	
Required Purge Time (minute):	N/A	End Purge (time):	

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments

Sample ID: Not sampled	Sample Time: Not sampled
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7244P	Date: 06-~~22~~ 23-2020	Samplers: HH, EE
Tap Location:		

Well Diameter (inches):	6		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	80	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 100
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	12.5	Begin Purge (time):	0832
Required Purge Time (minute):	8	End Purge (time):	0840

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU → sensor issues

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
0840	11.7	6.95	6.96	663	179.00	161.8	water looks clear
0845	11.6	7.01	7.00	664	129.33	160.1	"
0850	11.6	7.07	6.95	664	112.43	156.0	"
0855	11.6	7.11	7.00	664	156.1	156.1	"
0900	SAMPLE						

Sample ID: RW-7244-20200623	Sample Time: 0900
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% oxy
0 % LEL
Ø CO, H_2S, VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7350P	Date: 06-23-20	Samplers: EE, HH
Tap Location: NW side of property behind shed.		

Well Diameter (inches):		1" - 0.041 Gal/ft.		Minimum purge volume (gallons)
Total Depth of Well (feet):	(-)	2" - 0.16 Gal/ft.		
Depth to Water (feet):		4" - 0.65 Gal/ft.	= 300	
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.		
		8" - 2.60 Gal/ft.		

Purge Rate (gallon/minute):	12.5	Begin Purge (time):	09:43
Required Purge Time (minute):	24	End Purge (time):	10:07

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	~~Turbidity~~	~~< 50 NTU~~ — sensor issues

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
10:10	13.1	7.17	7.08	675	205.37	148.6	water is clear
10:15	13.4	7.19	6.98	671	129.4	147.4	"
10:20	13.4	7.20	6.83	671	195.22	147.8	
10:25	SAMPLE						

Sample ID: RW-7350P-20200623	Sample Time: 10:25
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

Note: no well information. assume 300 gallons is adequate.

PID Readings: 20.9% oxy
0 % LEL
0 ppm VOC, H_2S, CO

*Sampled from hose - Field team error.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7505P	Date: 06/24/2020	Samplers: Tea V. Maddie G.
Tap Location:		

Well Diameter (inches):		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)	
Total Depth of Well (feet):	(-)	2" - 0.16 Gal/ft.		
Depth to Water (feet):		4" - 0.65 Gal/ft.	= 300	
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.		
		8" - 2.60 Gal/ft.		

Purge Rate (gallon/minute):	MG 06/24 ~~13.0~~ 13	Begin Purge (time):	08:03
Required Purge Time (minute):	23	End Purge (time):	08:45

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C ✓	DO	± 10 % ✓
pH	± 0.1 pH unit ✓	ORP	± 10 mV ✓
Conductivity	± 10 % ✓	Turbidity	< 50 NTU ✓

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
08:30	14.3	7.31	6.68	675	1.0	230.9	minimum purge volume met
0835	13.0	7.38	7.08	668	0.0	228.7	
0840	12.8	7.40	7.13	668	0.0	229.5	
0845	13.6	7.41	6.90	668	0.0	228.1	
0850	SAMPLE TIME						

Sample ID: RW-7505P-20200624	Sample Time: 0850
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

Note: no well information. assume 300 gallons is adequate.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7549P	Date: 06/24/2020	Samplers: T. Vetlar M. Gates

Tap Location:

Well Diameter (inches): ___ ___
Total Depth of Well (feet): _____ (-)
Depth to Water (feet): _____
Water Column Height (feet): _____ (x)

1" - 0.041 Gal/ft.
2" - 0.16 Gal/ft.
4" - 0.65 Gal/ft.
6" - 1.47 Gal/ft.
8" - 2.60 Gal/ft.

Minimum purge volume (gallons) = 300

Purge Rate (gallon/minute): 4.3
Required Purge Time (minute): 69

Begin Purge (time): 11:20
End Purge (time): 13:03

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
12:43	14.5	7.37	7.28	706	0.07	125.5	minimum purge met
12:48	13.2	7.38	7.42	697	0.00	135.2	
12:53	12.8	7.39	7.68	693	0.00	142.1	
12.58	13.2	7.36	7.33	696	0.00	147.1	
13:03	13.3	7.38	7.42	696	0.00	148.8	
13:04	sample	time					

Sample ID: RW-7549P20200624
Sample Time: 13:04

QC Samples Collected: None

Analytical Parameters: VOCs

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7586P	Date: 04/24/2026	Samplers: HH / EE
Tap Location:		

Well Diameter (inches):	8		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	120	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 200
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	8.8	Begin Purge (time):	10:33
Required Purge Time (minute):	23	End Purge (time):	10:56

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
10:58	17.1	7.49	6.83	668	202.29	65.3	water is clear
11:03	14.2	7.37	7.03	665	194.79	77.5	
11:08	13.8	7.30	7.03	661	207.77	85.0	
11:13	14.0	7.25	6.86	662	179.60	91.4	
11:18	14.1	7.27	7.03	661	200.55	95.5	
11:23	14.5	7.31	7.04	663	155.50	113.6	
11:28	14.4	7.33	7.00	663	149.70	111.3	
11:33	13.9	7.28	XRH 7, 6.98	661	162.34	113.9	
11:35	Sample						

Sample ID: RW-7586P-20200624	Sample Time: 11:35
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% oxy
Ø % LEL
Ø ppm H_2S, CO, VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7588P	Date: 06/24/2020	Samplers: HH/EE
Tap Location:		

Well Diameter (inches):	8		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	70	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 200
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	9.1	Begin Purge (time):	1420
Required Purge Time (minute):	22	End Purge (time):	1442

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1445	12.3	7.46	6.79	6061	194.79	89.4	Water is clear
1450	12.3	7.41	6.89	6062	141.19	91.5	"
1455	12.5	7.36	6.86	6061	163.23	98.3	"
1500	sample						

Sample ID: RW-7588P-20200624	Sample Time: 1500
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% OXY
0% LEL
0 ppm CO, H_2S, VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7677P	Date: 06/22/20	Samplers: Tea V. / Maddie G.

Tap Location:

Well Diameter (inches):	6			Minimum purge volume (gallons)
Total Depth of Well (feet):	60 (-)	1" - 0.041 Gal/ft.		
Depth to Water (feet):		2" - 0.16 Gal/ft.		
Water Column Height (feet):	(x)	4" - 0.65 Gal/ft.	= 100	
		6" - 1.47 Gal/ft.		
		8" - 2.60 Gal/ft.		

Purge Rate (gallon/minute):	13.3	Begin Purge (time):	1435
Required Purge Time (minute):	7.5	End Purge (time):	

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
14:45	14.3	7.18	6.47	756	0.55	167.8	minimum purge volume met
14:50	12.9	7.24	6.99	757	0.00	168.0	
14:55	12.9	7.22	6.75	751	0.00	167.1	
15:00	12.6	7.23	6.85	755	0.00	166.9	
15:04	sample	time					

Sample ID: RW-7677P-20200622	Sample Time: 15:04 & 1509 (FD)
QC Samples Collected: FD and MS/MSD	
Analytical Parameters: VOCs	

FD ID: RW-7677P2-20200622

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7688P	Date: 06/23/2020	Samplers: Tea V., Maddie G.
Tap Location:		

Well Diameter (inches):	6		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	79	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 100
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	4.5	Begin Purge (time):	13:44
Required Purge Time (minute):	22	End Purge (time):	1420

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
14:10	14.0	7.39	7.13	688	0.00	106.7	Minimum purge volume met
14:15	13.1	7.39	7.20	683	0.00	111.6	
14:20	13.5	7.38	7.11	682	0.00	116.4	
14:21	Sample time						
14:26	FD Sample time						

Sample ID: RW-7688P-20200623 AND*	Sample Time: 1421 & 1420 (FD)
QC Samples Collected: ~~None~~ MS/MSD	RW-7688P MS/MSD and RW-7688PQ
Analytical Parameters: VOCs	

CDM Smith

* Sample ID (FD): RW-7688PQ-20200623

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-7773P	Date: 06/22/20	Samplers: T. VERNAE/M. GATES
Tap Location: Near the old house		

Well Diameter (inches):	6		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	120	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 100
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	10	Begin Purge (time):	1302
Required Purge Time (minute):	10	End Purge (time):	~~1312~~ TV 06/22 1340

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1315	15.4	7.28	7.00	671	4.94	117.4	minimum purge volume met
1320	12.8	7.30	6.60	670	4.39	94.1	
1325	12.5	7.30	6.99	667	9.06	75.0	
1330	12.9	7.34	7.11	671	0.0	72.1	
1335	13.0	7.36 ~~7.44~~ TV 06/22 1339	7.45	670	0.0	65.6	
1342	→ sample taken						

Sample ID: RW-7773P-20200622	Sample Time: 1342
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8012P	Date: 06-23-2020	Samplers: EE, HH

Tap Location: Tap spigot on side of house ~80 feet east of well * (different from 2019)

Well Diameter (inches):	8			Minimum purge volume (gallons)
Total Depth of Well (feet):	90	(-)	1" - 0.041 Gal/ft.	
Depth to Water (feet):			2" - 0.16 Gal/ft.	
Water Column Height (feet):		(x)	4" - 0.65 Gal/ft.	= 200
			6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	6.25	Begin Purge (time):	~1450 (per owner)
Required Purge Time (minute):	48	End Purge (time):	1550

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1553	17.1	7.34	7.47	783	122.29	149.4	in sun? water is clear
1558	15.0	7.28	7.97	775	128.10	150.9	water is clear
1603	14.8	7.25	8.00	772	129.63	156.6	"
1608	14.4	7.24	8.12	765	124.65	157.4	"
1610	SAMPLE						

Sample ID: RW-8012P-20200623	Sample Time: 1610
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% oxy
Ø % oxy
Ø ppm CO, H_2S
0.1 ppm VOC

* Spigot near well did not yield water. Homeowner & daughter not sure why. Used for irrigation but not turned on this season. Pump supplies the house, so it's working. No treatment.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8030P	Date: 6/24/2020	Samplers: HH, EE
Tap Location: Spigot nearest to well along eastern manifold		

Well Diameter (inches):	8		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	92	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):			4" - 0.65 Gal/ft.	= 200
Water Column Height (feet):		(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	20 (homeowner estimate)	Begin Purge (time):	1308
Required Purge Time (minute):	10 min	End Purge (time):	

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1320	14.7	7.48	7.57	817	186.58	105.1	Water is clear
1325	12.6	7.36	8.13	817	171.35	109.7	"
1330	12.2	7.34	8.25	815	182.31	108.0	"
1335	12.2	7.29	7.80	812	132.93	108.7	"
1340	sample						

Sample ID:	Sample Time:
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% Oxy
0% LEL
0 ppm H_2S, CO, VOC

*Did not measure flow in field. Homeowner turned on irrigation line (5 GPM, 5 heads) to purge.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8035P	Date: 6/23/2020		Samplers: EE / HH
Tap Location:			
Well Diameter (inches):	8	1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	170 (-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):		4" - 0.65 Gal/ft.	= 300
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.	
		8" - 2.60 Gal/ft.	
Purge Rate (gallon/minute):	2.9	Begin Purge (time):	10:48
Required Purge Time (minute):	103	End Purge (time):	12:31

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU — sensor issues

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
12:40	14.2	7.46	8.39	545	101.76	113.0	water is clear
12:45	13.6	7.45	8.47	541	131.82	108.5	"
12:50	13.5	7.44	8.42	540	155.35	110.2	"
12:55	SAMPLE						

Sample ID: RW-8035P-2020 06 23	Sample Time: 12:55
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID readings: 20.9% oxy
Ø % LEL
Ø ppm H_2S, CO, +
0.1 ppm VOC

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8048P	Date: 6/22/2020	Samplers: EE, HH

Tap Location: front yard ~30 feet from well between 2 large pines - owner's hose (no spigot)

Well Diameter (inches):	5		1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	owner verified → 150	(-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):	↳ ~65		4" - 0.65 Gal/ft.	= 300
Water Column Height (feet):	85	(x)	6" - 1.47 Gal/ft.	
			8" - 2.60 Gal/ft.	

Purge Rate (gallon/minute):	23	Begin Purge (time):	1627
Required Purge Time (minute):	13	End Purge (time):	1640

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

turbidity sensor issues

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1645	14.1	6.46	6.74	903	142.21	161.8	water is clear
1650	13.7	6.39	6.79	894	180.11	169.3	water is clear
1655	14.1	6.40	6.76	894	205.36	175.0	water is clear
1658	SAMPLE						

Sample ID:	RW-8048P-20200622	Sample Time:	1658
QC Samples Collected:	None		
Analytical Parameters:	VOCs		

CDM Smith

PID Readings: 20.9% OXY
0% LEL
0 ppm CO, H_2S
0.1 ppm

Sampled via owner hose because no spigot. Closest access point to well.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8105PS	Date: 6/22/2020	Samplers: EE, HH
Tap Location: Behind the house next to gate that opens to 8167 Portneuf driveway		

Well Diameter (inches): _____
Total Depth of Well (feet): _____ (-)
Depth to Water (feet): _____
Water Column Height (feet): _____ (x)

1" - 0.041 Gal/ft.
2" - 0.16 Gal/ft.
4" - 0.65 Gal/ft.
6" - 1.47 Gal/ft.
8" - 2.60 Gal/ft.

Minimum purge volume (gallons) = 200

Homeowner says well measures 18 feet deep. Submersible pump ~17 feet.

Purge Rate (gallon/minute):	13.5	Begin Purge (time):	11:08
Required Purge Time (minute):	15 mins	End Purge (time):	11:23

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
11:25	10.7	5.63	2.80	846	0.65	63	
11:30	10.5	5.84	1.98	833	5.24	39.5	
11:35	10.4	5.95	1.65	831	9.82	-16.5	
11:40	10.2	6.07	1.74	829	183.24	-20.1	water looks clear
11:45	10.2	6.07	2.08	828	225.65	-22.8	water looks clear
11:50	10.4	6.20	2.03	836	221.20	-34.2	water looks clear
11:55	10.1	6.14	1.62	827	203.81	-33.0	water looks clear
12:00	10.1	6.14	1.40	827	191.78	-32.5	
12:05	10.0	6.17	0.99	812	209.14	-34.6	
12:10	10.0	6.19	1.10	809	251.60	-39.3	
12:15	10.0	6.19	1.15	810	225.81	-38.9	
12:20	SAMPLE						

Sample ID: RW-8105PS-20200622	Sample Time: 12:20
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

PID: 20.9% Oxygen
0% LEL
CO, H_2S, VOC: 0 ppm

Homeowner says this well is used daily, pumped ~2hr.

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8209P	Date: 6/25/2020	Samplers: HH/EE
Tap Location: Basement room, tap along the pipe with black		

Well Diameter (inches): _____
Total Depth of Well (feet): _____ (-)
Depth to Water (feet): _____
Water Column Height (feet): _____ (x)

1" - 0.041 Gal/ft.
2" - 0.16 Gal/ft.
4" - 0.65 Gal/ft.
6" - 1.47 Gal/ft.
8" - 2.60 Gal/ft.

Minimum purge volume (gallons) = 500

Purge Rate (gallon/minute): ~20 sprinkler system (10 heads)
Required Purge Time (minute): ~25
Begin Purge (time): 1345
End Purge (time): ~~1440~~ 1520

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1520	15.3	7.19	7.59	3840	148.88	127.8	water is clear
1525	14.8	7.05	7.90	3840	173.01	123.3	"
1530	14.7	7.02	7.96	3840	157.22	127.2	"
1535	14.6	7.03	7.97	3840	158.81	128.8	"
1540	SAMPLE						

Sample ID: RW-8209P-20200625
Sample Time: 1540
QC Samples Collected: None
Analytical Parameters: VOCs

CDM Smith

PID readings: 20.9 % oxy
0 % LEL
0 ppm CO, H2S, ~~VOC~~
0.1-0.2 VOC (basement room)

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8249P	Date: 06/23/20		Samplers: T. VALTAIR / M. GATES
Tap Location:			
Well Diameter (inches):	6	1" - 0.041 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	267 (-)	2" - 0.16 Gal/ft.	
Depth to Water (feet):		4" - 0.65 Gal/ft. =	300
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.	
		8" - 2.60 Gal/ft.	
Purge Rate (gallon/minute):	8.57	Begin Purge (time):	0843
Required Purge Time (minute):	35	End Purge (time):	1020

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
0920	15.8	7.20	7.14	1781	1.84	217.8	minimum purge volume met
09:25	14.4	7.24	7.58	1758	0.87	216.3	
09:30	13.9	7.22	7.81	2119	1.29	205.1	increased (to 15 mpm) surge of flow, high conductivity associated with this reading
09:35	14.2	7.26	7.69	1747	0.11	191.8	
09:40	14.4	7.26	7.53	1696	1.72	183.6	
09:45	14.8	7.23	7.63	1963	1.92	144.0	fluctuations in flow
09:50	14.0	7.31	7.56	1392	0.0	128.5	
0955	13.9	7.26	7.64	1676	0.46	~~10.1~~ TV 6/23 12.1	resident turned of wastey reading
1000	14.0	7.27	7.68	1658	0.37	97.9	parameters getting more stable
1005	13.7	7.29	7.77	1522	0.0	75.3	
1010	13.9	7.26	7.64	1658	0.47	75.3	
1015	13.8	7.29	7.73	1647	0.58	75.7	stable parameters
1020	13.7	7.31	7.88	1600	0.0	71.1	
1022	SAMPLES ONE	~~225~~ TV 06/23				TV 6/23 5	have obtained reading from sonde after sample collection, photo taken, parameters, reading flow rate, sonde (lic. cord) firmly

Sample ID: RW-8249P-~~20200623~~ TV 6/23 20200623 Sample Time: 1022

QC Samples Collected: None

Analytical Parameters: VOCs

CDM Smith

RESIDENTIAL WELL PURGING AND SAMPLING FORM
FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCATELLO, ID

Well No.: RW-8284P	Date: 06/23/2020	Samplers: Tea V. Maddire G.
Tap Location: GPS location: 42.798590°N 112.382870°W, past the church, to the left (last home)		

Well Diameter (inches):		1" - 0.041 Gal/ft.		Minimum purge volume (gallons)
Total Depth of Well (feet):	100 (-)	2" - 0.16 Gal/ft.		
Depth to Water (feet):		4" - 0.65 Gal/ft.	= 300	
Water Column Height (feet):	(x)	6" - 1.47 Gal/ft.		
		8" - 2.60 Gal/ft.		

Purge Rate (gallon/minute):	20	Begin Purge (time):	15:30
Required Purge Time (minute):	15	End Purge (time):	16:10

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %
pH	± 0.1 pH unit	ORP	± 10 mV
Conductivity	± 10 %	Turbidity	< 50 NTU

Begin Parameter Collection for Stabilization (time):

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
15:50	15.2	7.15	6.68	933	0.00	116.1	
15:55	14.1	7.17	6.69	923	0.00	105.2	
16:00	13.9	7.14	6.82	915	0.00	97.7	
16:05	14.1	7.16	6.84	913	0.00	92.9	
16:10	14.4	7.16	6.74	917	0.00	92.4	
16:12	Sample time						

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Sample ID: RW-8284P-20200623	Sample Time: 16:12
QC Samples Collected: None	
Analytical Parameters: VOCs	

CDM Smith

EQUIPMENT CALIBRATION LOG

SITE NAME: FMHL OFFSITE SAMPLING EVENT

Instrument (Name/Model No./Serial No.): MULTIRAE U66034X

Manufacturer: MULTIRAE

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/22/20	20.6	Fresh air	—	None	20.9	PASS	TV
06/22/20	N/A	4-gas	Lot: 19-6944 EXP. 08/01/2021	None	H_2S=10 ppm CH_4=2.5% CO=50ppm O_2=18%	PASS	TV
06/22/20	N/A	Isobutylene	LOT: 18-7061 EXP: 09/30/2024	None	100 ppm	PASS	TV
06/23/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/23/20	N/A	4-gas	Same as above (AAA)	None	10 ppm 2.5% 50ppm 18%	PASS	TV
06/23/20	N/A	Isobutylene	SAA	None	100 ppm	PASS	TV
06/24/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/24/20	N/A	4-gas	SAA	None	10ppm 2.5% 50ppm 18%	PASS	TV
06/24/20	N/A	Isobutylene	SAA	None	100 ppm	PASS	TV
06/25/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/25/20	N/A	4-gas	SAA	None	10ppm 2.5% 50ppm 18%	PASS	TV
06/25/20	N/A	Isobutylene	SAA	None	100 ppm	PASS	TV
06/26/20	N/A	4-gas	SAA	None	pass	pass	EE
06/26/20	N/A	fresh air	—	None	20.9% oxy	pass	EE
6/26/20	N/A	4-gas	SAA	None	10 ppm 2.5% 50 ppm 18%	pass	EE
6/26/20	N/A	isobutylene	SAA	None	100 ppm	pass	EE

EQUIPMENT CALIBRATION LOG

SITE NAME: FTML OFFSITE SAMPLING EVENT

Instrument (Name/Model No./Serial No.): MULTIRAE UG8878X

Manufacturer: Multirae

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/22/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/22/20	N/A	4-gas	Lot: 19-6944 EXP: 08/01/2021	None	H_2S=10 ppm CH_4=2.5% CO=50 ppm O_2=18%	PASS	TV
06/22/20	N/A	Isobutylene	Lot: 19-7061 EXP: 01/31/2024	None	100 ppm	PASS	TV
06/23/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/23/20	N/A	4-gas	Same as above (yyy)	None	10 ppm 2.5% 50 ppm 18%	PASS	TV
06/23/20	N/A	Isobutylene	SAA	None	100 ppm	PASS	TV
06/24/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/24/20	N/A	4-gas	SAA	None	10 ppm 2.5% 50 ppm 18%	PASS	TV
06/24/20	N/A	Isobutylene	SAA	None	100 ppm	PASS	TV
06/25/20	20.9	Fresh air	—	None	20.9	PASS	TV
06/25/20	N/A	4-gas	SAA	None	10 ppm 2.5% 50 ppm 18%	PASS	TV
06/25/20	N/A	Isobutylene	SAA	None	100 ppm	PASS	TV

MG 06/22

EQUIPMENT CALIBRATION LOG

SITE NAME: ~~FHML~~ FHML

Instrument (Name/Model No./Serial No.): YSI Pro DSS 19H10222

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/22/20	7.13	pH 7.0	J008-03 1/22/20	no	7.00	pass	MG
06/22/20	4.23	pH 4.0	K017-04 1/21/20	no	4.00	pass	MG
06/22/20	9.99	pH 10.0	J293-03 10/29/20	no	10.00	pass	MG
06/22/20	1493	1490 ms/cm	7906263 6/1/22	no	1409	pass	MG
06/22/20	213.7	240 mV	0GD520 Jan/21	no	240.0	pass	MG
06/23/20	7.03	pH 7.0	J008-03 1/22/20	no	7.00	pass	MG
06/23/20	3.87	pH 4.0	K017-04 1-21-22	no	4.00	pass	ELE
06/23/20	9.97	pH 10.0	J295-03 10-27-20	no	10.00	pass	ELE
06/23/20	1395	1409 ms/cm	7906263 6-1-21	no	1409	pass	ELE
06/23/20	248.1	240 mV	0GD520	no	240	pass	ELE
06/24/20	7.06	pH 7.0	J008-03 1/22/20	no	7.00	pass	MG
06/24/20	4.00	pH 4.0	K01704 1/21/20	no	4.00	pass	MG
06/24/20	9.98	pH 10.0	J293-03 10/29/20	no	10.00	pass	MG
06/24/20	1416	1409 ms/cm	7906263 6/1/22	no	1409	pass	MG
06/24/20	237.4	240 mV	0GD520 Jan/21	no	240.0	pass	MG

EQUIPMENT CALIBRATION LOG

SITE NAME: FHML OFFSITE SAMPLING EVENT

Instrument (Name/Model No./Serial No.): YSI DSS Pro 19H10222I

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/25/2020	7.13	pH 7.0	J008-03 1/21/21	no	7.00	pass	MG
06/25/2020	4.11	pH 4.0	K017-04 1/21/22	no	4.00	pass	MG
06/25/2020	10.01	pH 10.0	J295-03 10/29/20	no	10.00	pass	MG
06/25/2020	1417	1409 µS/cm	7906263 6/1/21	no	1409	pass	MG
06/25/2020	293.8	240 mV	OGD520 Jan/21	no	240.0	pass	MG
06/26/2020	4.04	pH 4.0	K017-04 1/21/22	no	4.00	pass	HKH
06/26/2020	7.12	pH 7.0	J008-03 1/22/21	no	7.00	pass	HKH
06/26/2020	9.95	pH 10.0	J295-03 10/29/20	no	10.00	pass	HKH
06/26/2020	1412	1409 µS/cm	7906263 6/1/21	no	1409	pass	HKH
06/26/2020	240.8	240 mV	OGD520 Jan/21	no	240.0	pass	HKH

EQUIPMENT CALIBRATION LOG

SITE NAME: FHML

Instrument (Name/Model No./Serial No.): YSI ProDSS 19K101426

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/22/20	7.13	pH 7.0	J008-03 1/22/21	no	7.00	pass	MG
06/22/20	4.13	pH 4.0	K017-04 1/21/22	no	4.00	pass	MG
06/22/20	9.99	pH 10.0	J295-03 10/20/20	no	10.00	pass	MG
06/22/20	1493	1409 µs/cm	7906263 6/1/22	no	1409	pass	MG
06/22/20	249	240 mV	0GD520 Jan/21	no	240.0	pass	MG
06/23/20	~~7.03~~ 6.53	pH 7.0	J008-03 1/22/21	no	7.00	pass	MG
06/23/20	2.20	pH 4.0	K017-04 1/22/22	no	4.00	pass	MG
06/23/20	10.38	pH 10.0	J295-03 10/20/20	no	10.0	pass	MG
06/23/20	1390	1409 µs/cm	7906263 6/1/22	no	1409	pass	MG
06/23/20	244.7	240 mV	0GD520 Jan/21	no	240.0	pass	MG
06/24/20	7.03	pH 7.0	J008-03 1/22/21	no	7.00	pass	HKH
06/24/20	3.93	pH 4.0	K017-04 1/21/22	no	4.00	pass	HKH
06/24/20	9.85	pH 10.0	J295-03 10/20/20	no	10.00	pass	HKH
06/24/20	1427	1409 µs/cm	7906263 6/1/22	no	1409	pass	HKH
06/24/20	240.7	240 mV	0GD520 Jan/21	no	240	pass	HKH

EQUIPMENT CALIBRATION LOG

SITE NAME: FHML OFFSITE SAMPLING EVENT

Instrument (Name/Model No./Serial No.): YSI / DSS PRO / 19K101420

Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/25/2020	3.87	pH 4.0	K017-04 01/21/22	no	4.0	Pass	HKH
06/25/2020	6.92	pH 7.0	J008-03 01/22/21	no	7.0	Pass	HKH
06/25/2020	9.82	pH 10.0	J295-03 10/29/20	no	10.0	Pass	HKH
06/25/2020	1419	1409 MS/cm	7906263 6/1/21	no	1409	Pass	HKH
06/25/2020	234	240 mV	060520 Jan/21	no	240	Pass	HKH
06/26/2020	HH 6/25/20 ~~4.05~~ 4.04	pH 4.0	K017-04 01/21/22	no	4.0	Pass	HKH
06/26/2020	7.12	pH 7.0	J008-03 01/22/21	no	7.0	Pass	HKH
06/26/2020	10.02	pH 10.0	J295-03 10/29/20	no	10.0	Pass	HKH
06/26/2020	1409	1409 MS/cm	7906263 6/1/21	no	1409	Pass	HKH
06/26/2020	239.0	240 mV	060520 Jan/21	no	240.0	Pass	HKH

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Emma Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 1 of 3
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N		
~~RW-8105B~~ ll6/24 RW-8105PS-20200622	6/22/20	12:20	G	W	N	N	X																	3	
RW-5898BI-20200622	6/22/20	15:15	G	W	N	N	X																	3	
RW-8048P-20200622	6/22/20	16:58	G	W	N	N	X																	3	
RW-7244P-20200623	6/23/20	09:00	G	W	N	N	X																	3	
RW-7350P-20200623	6/23/20	10:25	G	W	N	N	X																	3	
RW-8035P-20200623	6/23/20	12:55	G	W	N	N	X																	3	
RW-2237H-20200623	6/23/20	15:06	G	W	N	N	X																	3	
RW-8012P-20200623	6/23/20	16:10	G	W	N	N	X																	3	
RW-2879M-20200624	6/24/20	10:10	G	W	N	N	X																	3	
RW-7586P-20200624	6/24/20	11:35	G	W	N	N	X																	3	
RW-8030P-20200624	6/24/20	13:40	G	W	N	N	X																	3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ☐ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 6/24/2020 11:00	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Emma Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 2 of 3
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N	X	
~~RW-7588P-20200624~~	~~6/24/20~~	~~14:20~~	G	W	N	N	X																		
RW-2172F-20200622	6/22/20	11:54	G	W	N	N	X																	3	
RW-7773P-20200622	6/22/20	13:42	G	W	N	N	X																	3	
RW-7677P-20200622	6/22/20	15:04	G	W	N	Y	X																	3	
RW-7677PQ-20200622	6/22/20	15:09	G	W	N	N	X																	9	
RW-7070B-20200622	6/22/20	16:48	G	W	N	N	X																	3	
RW-8249P-20200623	6/23/20	10:22	G	W	N	N	X																	3	
RW-2151H-20200623	6/23/20	13:03	G	W	N	N	X																	3	
RW-7688P-20200623	6/23/20	14:21	G	W	N	Y	X																	3	
RW-7688PQ-20200623	6/23/20	14:26	G	W	N	N	X																	9	
RW-8284P-20200623	6/23/20	16:12	G	W	N	N	X																	3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

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:

Empty Kit Relinquished by:		Date: 6/25/2020	Time:	Method of Shipment:	
Relinquished by:	Date/Time: 6/25/20 11:00	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

#280

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Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

eurofins | Environment Testing TestAmerica

Chain of Custody Record

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Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 3 of 3
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N	X	
RW-758 Muni-Well-33-20200624	6/24/20	10:20	G	W	N	N	X																	3	
Muni-Well-14-20200624	6/24/20	10:41	G	W	N	N	X																	3	
RW-7549P-20200624	6/24/20	13:04	G	W	N	N	X																	3	
RW-7091R-20200624	6/24/20	15:33	G	W	N	N	X																	3	
RW-7505P-20200624	6/24/20	8:50	G	W	N	N	X																	3	
RW-7588P-20200624	6/24/20	15:00	G	W	N	N	X																	3	
TB-01-20200625	6/25/20	10:30	G	W	N	N	X																	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

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:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 6/25/20 11:00	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Denver #280

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Arvada, CO 80002
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Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Emma Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 1 of 2
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N		
Muni-Well-14-20200624	06242020	1041	G	W	N	N	X																	3	
Muni-Well-33-20200624	06242020	1020	G	W	N	N	X																	3	
RW-2172H-20200625	06252020	1240	G	W	N	N	X																	3	
RW-2203H-20200625	06252020	1415	G	W	N	N	X																	3	
RW-2213F-20200625	06252020	1715	G	W	N	N	X																	3	
RW-2613M-20200625	06252020	1500	G	W	N	N	X																	3	
RW-7691R-20200624	06242020	1533	G	W	N	N	X																	3	
RW-7505P-20200624	06242020	0850	G	W	N	N	X																	3	
RW-7549P-20200624	06242020	1304	G	W	N	N	X																	3	
RW-7588P-20200624	06242020	1500	G	W	N	N	X																	3	
RW-8209P-20200625	06252020	1540	G	W	N	N	X																	3	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

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:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 6/26/20	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Denver
#280

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4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: EMMA Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 2 of 2
Company: CDM Smith, Inc.				Job #:

Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:
City: Bellvue	TAT Requested (days): 15 business days
State, Zip: WA, 98007	
Phone: 425-519-8300	PO #: 85985
Email: FoxML@cdmsmith.com	WO #:
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772
Site: FHML	SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N			
EB-00-20200625	06252020	1500	G	W	N	N	X																	3	
EB-01-20200625	06252020	1505	G	W	N	N	X																	3	
TB-02-20200626	06252020	10:00	G	W	N	N	X																	2	
RW-2140H-20200626	06/26/2020	13:35	G	W	N	N	X																	3	
MW-1165-20200626	06/26/2020	13:30	G	W	N	N	X																	3	
EB-02-20200626	6/26/2020	15:10	G	W	N	N	X																	3	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 6/26/20	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

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PAGE	REFERENCE	DATE
1	FHML Offsite Groundwater Sampling D1	6-22-20
7	FHML Offsite Groundwater Sampling D2	6-23-20
14	FHML Offsite Groundwater Sampling D3	6-24-20
19	FHML Offsite Groundwater Sampling D4	6-25-20
27	FHML Offsite Groundwater Sampling D5	6-26-20

Date: 6-~~24~~ 22 ~~6/22~~ -2020

Weather: Sunny, ~65° PPE: Level D

Personnel: Madison Gates, Haley Hutchins, Tea Vrtar, Emma Ehret (CDM Smith)

Project: Fort Hall Mine Landfill (FHML)

Event: Offsite Domestic Well Groundwater Sampling

Plan for the day: Receive bottleware, prep coolers, get equipment from FedEx, safety briefing, pack vehicles, Sample wells: RW-2172F, RW-7773P, RW-7677P (QC), RW-8105PN/S, RW-58981, RW-2076F (inspect)

Author: Emma Ehret Weaber: 70°F ~~Sunny~~ Sunny

0700 CDM Smith personnel arrives onsite. Inspect deliveries to landfill office. Check supplies in field trailer. Prep bottle kits in coolers.

0820 Health & safety briefing Topics: slip, trip, fall; bugs, snakes, dogs; homeowners, gunfire; driving; COVID PPE; water (drinking)

0830 Depart field trailer to investigate RW-2076F. Recon revealed one hydrant near

Rite in the Rain

6/22/2020

side of ~~road~~ road, near gate to 2076 Fort Hall Mine Rd residence. Per maps, RW-2076F is farther off road to the east of MW-1035/D. Team entered County gate north of 2076 Fort Hall Mine Rd, walked past MW-1035/D, identified a well & spigot that are likely RW-2076F. Took photos & coordinates. Well & Spigot are ~ 50 feet apart (East west) Lat: 42.791840°N/Long: 112.363890°W

0915 Emma E, Haley H pick up supplies at FedEx. Tea V., Madison G get ice.

0940 CDM Smith personnel at the field trailer. Check in equipment
Calibrate PIDs, YSI

1055 EE, HH Arrive at 8105 West Portneuf. Homeowner attempted to start pump at RW-8105N. The pump has not run since June 2019 sampling and is rusted over. EE called Karla Leslie to confirm OK not to sample with CDM Smith bladder pump at this well.
TV, MG arrive at RW-2172F.

Start Purge Time		Sample Time
RW-2172F	11:05	11:54
RW-8105S	11:08	12:20

Difficulties with stabilization of field parameters at RW-8105S. Last year, easy to stabilize. High turbidity reading with visibly clear water. DO & pH slowly going down & up, resp. Parameters eventually stabilized. Turbidity sensor likely not calibrated (no cal standard is provided with rental - verified with Tamzen during planning meeting that we did not need to order turbidity standard).

12:40 CDM Smith personnel convene at trailer. Lunch for TV, MG.

12:50 Buchanan onsite to sanitize RW-15. They request access to storage shed. TV, MG leave to sample RW-7773P. CDM Smith Adam Neisess (sp?) onsite. Print consent forms (blank extras) off zip drive with Debbie (Bannock County).

1300 Lunch for EE, HH.

1330 EE, HH leave site to sample RW-5898B.

1350 Talked with Donna Akers about wells. She didn't know which is which.

Rite in the Rain

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We called her daughter, Angela. The irrigation well is beneath a whiskey barrel outside the barn. The house well is inside the barn (the one we sampled last year). The manual switch in the barn is for the irrigation well. Briefly switched on & irrigation well gushed water from filtration system.

Well	Start Purge Time	Sample Time
RW-7773P	1302	1342
RW-5898B1	1359	1515
RW-7677P	1445	1504 (1509 QC sample)

1525 EE, HH leave 5898 Bannock.

1530 EE, HH stop at new house at 7200 Portneuf; meet homeowner Mike Drake, inquire after his well, ask if he is interested in sampling. He had his well installed in the last year, moved in Oct 2019. House is on city water; well is for irrigation. He was friendly & interested. His well is registered with IDWR (Idaho Dept of Natural Resources). Asked

about the direction/flow of contamination; EE says it comes down from landfill & up PV (Portneuf Valley). Owner was aware of sampling effort; when asked if there have been MCL exceedances along the north side of road, EE ~~is~~ said yes. (EE is in the process of fact-checking this.) Left owner consent form & business card. Owner is interested in future sampling. EE said we may be able to sample before next June during a different field event. Well is ~130 feet deep, per owner.

1620 HH, EE arrive at RW-8048P. TV, MB go to RW-7070B.

Well	Purge Start	Sample Time
RW-8048P	1627	1658
RW-7070B	1610	1648

1655 EE consults Karla Leslie re: current facts for 7200 Portneuf homeowner. Will be in touch and follow up with

Rite in the Rain

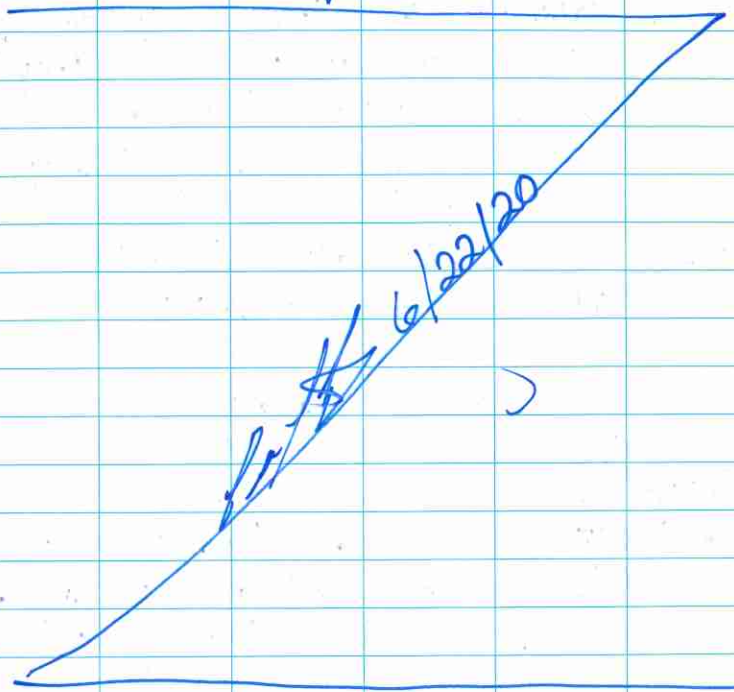
6/22/2020

a document we can drop off.

1700 HH, EE investigate the County area near MW-103 S/D again to look for additional wells, spigots. Horses & vehicles seen at 2076 Fort Hall Mine Landfill. No additional info. Spigot does not produce water.

1715 CDM Smith personnel at field trailer. End of day paperwork, check in

1745 CDM Smith personnel offsite.



Date: 6/23/20

Project: FHML (Bannock County) PPE: Level D

Event: offsite Domestic Well Sampling

Personnel: Emma Ehret (EE), Tea Virtlar (TV), Haley Hutchins (HH), Madison Gates (MG) (CDM Smith) (samplers)

Plan for the day: Calibrate PIDs, water quality parameters; Sample wells: RW-8249, RW-2151H, RW-7688P, RW-8284P, RW-724H, RW-7350P, RW-8035P, RW-8012P

Author: Emma Ehret Weather: 70°F, sunny

0700 CDM Smith personnel onsite (EE@ 7:10) Nick with Buchanan also onsite*

Equipment calibration, measure tubing

0800 Safety briefing: Hydration, sunscreen, driving, keeping alert as things go well

Adam Neisess arrives onsite (AN)

0825 CDM Smith sampling team leaves field trailer.

Well ID	Start Purge	Sample Time
RW-724H	0832	0900
RW-8249P	0843	1022

0915 HH, EE stop briefly at landfill office

*TV taught Nick how to calibrate PID.

Rite in the Rain

6/23/2020

0930 HH, EE stop at 2076 Fort Hall Mine Rd, knock on door. As we were halfway back up the drive, the door opened, we walked back & introduced ourselves. Woman was a little stand off-ish, said the owner would be back Wednesday (tomorrow, unless she meant the next). I confirmed the owner is Kari Lynn Steed. She asked if we could leave something for Kari. We left a blank consent form, said we had an old one from the previous consultant, but we started on the project in 2018. HH, EE went to RW-7350P.

Well ID	Start Purge	Sample Time
RW-7350P	09:43	1025

1000 EE calls Jason Knapp (PM). Air sensor calibration for Buchanan was for health & safety, likely addressed this morning when TV taught Nick from Buchanan how to calibrate their PID. Discussed status of sampling event.

1030 HH, EE depart RW-7350P, called ahead to RW-8035P owner to let them know ahead of schedule. Karla L. requests field team measure TOC for MW-37, 38, PA wells, FW1. She will check w/ Jason re: ~~assess~~ access to LDS property. EE 6/23

HH, EE head to RW-8035P.

Well ID	Purge Start	Sample Time
RW-8035P	10:48	1255
RW-2151H	12:00	1303

1130 Discussed difficulties sampling at RW-8249P with TV. Pump evidently cycling. Difficult to achieve field parameter stabilization. Conductivity shot up during high flow cycles, reached max of ~2100 µS/cm. This is similar behavior to RW-2151H last year. Part way thru field parameter collection, owner turned off indoor water use (appliance). Eventually reached stabilized field parameters. Discussed with Karla L; pump is likely on a cycle (field team could feel/hear it), & pump may be corroding.

Rite in the Rain

6/23/2020

11:45 Also discussed specific procedure for tap sampling. Karla L, TV, EE agreed on the following for consistency with SOP, relevant methods:

* ① Purge the well using a hose to direct flow. Purge at maximum flow rate possible to displace well volume(s).
② When purge volume is purged, lower flow rate, ideally to a flow that is low enough for VOC sampling.
③ Remove hose from spigot, turning off the water briefly if necessary (low flow rates should be OK to keep on).
④ Collect field parameters from spigot, collecting water between readings in a 5-gallon bucket. Use additional bucket if volume to reach stabilization exceeds 5 gallons.
* ⑤ Sample from the spigot. May further reduce flow if needed for VOC sampling, to prevent aeration & bubbles.

* Most critical elements per Karla L.

cont'd: Also discussed sampling approach for wells with cycling pumps: Try to identify cycling timeframe, then try to obtain 3 consecutive field parameter readings within stabilized ranges. < 5min intervals of field parameter measurement is OK if required to fit within a consistent flow interval, but try 5 min intervals to start.

12:55 TV calls to explain difficulties at RW-2151H. Field parameters are not stabilizing during low flow pump cycle (~10 min). They have 9 readings. EE told them to sample next time water clears. (During higher flow intervals, water gets brown & turbid). TV suggested moving QC samples from this well to another. EE concurs.

1300 HH, EE depart RW-8035P for field trailer.

1315 Personnel at field trailer. Tamzen Macbeth onsite with Buchanan (TWM). MG, TV depart for next well EE reschedules RW-2237.

Rite in the Rain

6/23/2020

14 89 6/23/20

1350 HH, EE arrive at RW-2237H.

Well ID	Purge Start	Sample Time
RW-2237H	1401	~~1420~~ 1506
RW-7688P *	1344	1421
RW-7688PQ	"	1426

* MS/MSD samples collected

1520 HH, EE arrive at RW-8012P. Spigot near well does not yield water. TV confirms it worked last year. Homeowner says it has not been used all season but is used for irrigation. Homeowner's daughter came by & does not know what is wrong. She calls a brother. The front lawn sprinkler was turned off to decrease demand. No water came out of spigot, but sounds of air could be heard. The well supplies the whole house, so the pump is functional. The water is not treated, so EE & HH decide to sample at house spigot. Because homeowner has been watering front lawn

for about an hour, 48 minute purge time (100 gallons at 6.25 GPM) is already met. Commence collecting water quality parameters.

Well ID	Start Purge	Sample Time
RW-8012P	1450 (Gamma)	1610
RW-8284P	1530	1612

1630 HH, EE investigate FW-1. It is beside a ditch, so TOC measurement will be estimate.

1640 CDM Smith sampling personnel at field trailer. Plug in PIDs. Final paperwork

1740 CDM Smith sampling crew leaves site.

6/23/2020

Rite in the Rain

Date: 6/24/2020

Project: FHML (Bannock County)

Event: Offsite Domestic Well Sampling

Personnel: Emma Ehret (EE), Tea Virtdar (TV), Haley Hutchins (HH), Madison Coates (MG) (CDM Smith samplers)

Plan for the day: sample RW-2879M, RW-7505P, Muni Well 14, Muni Well 33, RW-7586P, RW-8030P, RW-7549P, RW-2213F; ship one cooler; measure stickup height at FW-1.

Author: Emma Ehret

Weather: 65°, sunny (0700)

0700 CDM Smith sampling personnel onsite. Equipment calibration.

0750 Safety meeting. Topics: heat/hydration, road safety for muni well sampling, tiredness.

0755 TV, MG depart site for 8 am appt. EE, HH organize shed.

0900 EE, HH depart site.

Well ID	Purge Start	Sample Time
RW-7505P	0803	0850
RW-2879M	0908	1010

1000 Weather: 76°, sunny Level D PPE TV, MG arrive at Muni-Well-33.

Well ID	Purge Start	Sample Time
RW-7586P	10:33	11:35
Muni-Well-33	09:55	10:20
Muni-Well-14	10:27	10:41
RW-7549P	11:20	13:04

Notes: Cooler packing: padding @ bottom, double contractor bag outside loose ice, VOA baggies, bubble bag. Typical of this project, not our federal SOP, not a lab requirement. Labs suggest more loose ice method, also uses less plastic, if allowed. (Notes from call w/ Karla L.)

11:45 EE, HH return to trailer. Lunch.

12:15 EE gets ice; gives RW-2213F paperwork, COC, ice to TV, MG. (at RW-7549P)

13:00 EE, HH arrive at RW-8030P

Well ID	Start Purge	Sample Time
RW-8030P	1308	1340
~~RW-2213F~~	// 6/29/20	

1350 HH, EE, TV, MG at landfill office. Teams leave to RW-2213F, -7588P.

Rite in the Rain

6/24/2020

Well ID	Purge Start	Sample Time
RW-7588P	1420	1500

1336 EE leaves voicemail w/ Taylor Leavitt.*

1430 Homeowner of RW-7588P came home as we set up. Did not know we were coming this week. Did not get our voicemails scheduling for tomorrow or asking to come early today. Asked if there is anything different we're looking for, asked if she has an option to opt out of sampling. We assured her she does & confirmed we have to correct info. She was fine with us sampling. Did not want a card. Told her about public meeting.
Also, RW-2213F unable to be sampled because property caretaker (cousin of homeowner, previously brother of homeowner) did not know how to turn well on. There is a manifold & T-bar. No one lives there now. We want to ask Tamzen about local well expert we can recommend & whether it would be feasible to sample with bladder pump. Earlier this year, the pump worked. TV rescheduled RW-7091R for today.

* Re: access to LDS property

6/24/2020

1345 TV, MG en route to RW-7091R.

1400 RW-7091R has a hand pump. There is a line treated that goes to the yard for purging. Hand pump is only untreated source.

1430 HH, EE leave RW-7091R for RW-7200P (schedule sampling).

1440 RW-7091R field ~~parms~~ parameters were measured every 3 minutes from hand pump after well was purged into lawn. Pump was hand-pumped throughout the duration. ORP parameters did not stabilize, but other field parameters did. May have something to do with pump not being in regular use. EE approved sampling after 10 minutes ~~of~~ of continuous hand pumping.

Rite in the Rain

6/24/2020

Well ID	Purge Start	Sample Time
RW-7091R	1457	1533

~~HH~~ 9:12 6/24/20

1540 EE, HH go to RW-7200P to schedule well for sampling tomorrow. Return to landfill.

Clarification Notes: RW-7091R

Purge volume for RW-7091R was purged into lawn via piping that goes through water treatment. After purge volume was poured, hand pumping commenced for 10 minutes; during, field parameters were collected every 3 minutes. Sampled without stabilization of ORP due to feasibility of hand pumping & complete purge volume met.

1555 TV, MG return to RW-2213F because caretaker said the breaker was off previously.

1605 EE consults Karla about shipping schedule. Will ship coolers tomorrow.

1625 RW-2213F still not working. CDM Smith personnel return to landfill.

1648 CDM Smith personnel offsite.

6/25/2020

Project: FHML/Bannock County

Event: Offsite Domestic Well Sampling

Personnel: Emma Ehret (EE), Ted Vrtlar (TV), Haley Hutchins (HH), Madison Gates (MG). (CDM Smith samplers)

Plan for the day: Sample RW-2203H, RW-2172H, RW-8209P, RW-2613M, RW-7200P (New well); send a cooler to lab; connect with owner of RW-2076F; obtain permission & measure stickup heights for select MWs; chemical disposal

Weather: 60°, cloudy, cool

PPE: Level D

Author: Emma Ehret

0700 CDM Smith sampling personnel onsite. Materials organized between teams, samples checked, equipment calibrated, supplies checked.

0815 EE, HH, TV, MG depart for RW-2203H. Set up bladder pump & flow thru cell! Fitting too large for water line; adjusted with different sizes of tubing.

0930 HH, EE depart RW-2203H.

Rite in the Rain

6/25/2020

1000 EE, HH pack cooler, ~~go to FedEx.~~ ℄ 6/25
10:30 TB-01 (2 VOAs)
1130 EE, HH at RW-2172H.

Well ID	Purge Start	Sample Time
RW-2203H	08:50	14:15
RW-2172H	11:42	12:40

1300 EE, HH drop off cooler at FedEx.
1330 Jared (Buchanan) available to check on RW-2213F. Left voicemail with property caretaker.
Jason Knapp emailed that we can let the LDS property farmer know & take the measurements (stick up heights).

Equipment Blanks
1500 EB-00-20200625 (DDI water only)
1505 EB-01-20200625 (rinsed over equip)
TV, MG head to 7200 Portneuf (new well).

Well ID	~~Sam~~ Purge Start	Sample Time
RW-8209P	1345	1540
RW-7200P*	N/A	N/A

1545 HH, EE meet Jared at RW-2213F. Confirmed no power to the pump. Turn valve is not connected (can

*confirm address on consent form.

pull it out). Spigot from house does not produce water. Louis' wife en route to house. Louis says pump was serviced ~~recently~~ locally, not sure when, by plumber.
1610 New well at 7200 Portneuf has metal tag ID: DØØ75881. Karla L. searches IDWR, confirms ~~open hole.~~ ℄ 6/25 Screen is 133 to 138 feet bgs. TV is trying to place the pump at 123 feet bgs because of depth concern: screen may be too deep to get compressed air down to sufficiently displacing water.
1620 Inside. Water breaker was turned off. Water switch needs to be turned on from basement. Control box for water is on opposite side of room from water breaker. Water breaker is not with the main electrical breaker box but is in the same room in basement. We will purge from outdoor spigot. Initially a connection beneath stairs was

Rite in the Rain

6/25/20

loose & water leaked in the house. HH is communicating leak to resident. Jared ~~sa~~ tightened valves to prevent ~~fut~~ further leaking & suggests switching water off after sampling. HH, EE sample.

1650 Louis Chandler requests via text message to HH that we leave the water control switch on when we are finished. HH suggests he check the house tonight/tomorrow for additional indoor ~~house~~. EE 6/25 leaks.

Karla L. recommends minimum purge volume for well at 7200 Portneuf be pump depth to bottom volume. Prior to sampling, field parameters must stabilize. There may be a need to purge additional volume if parameters don't stabilize.

TV is working on a stable flow rate.

Well ID	Purge Start	Sample Time
~~RW-2213F~~	~~1345~~	~~1540~~

EE 6/25/20

Well ID	Purge Start	Sample Time
RW-2213F	1629	1715
RW-2613M*	1402	1500

1745 After ~~a~~ purging, well drain appeared to flood the soil near window wells, which accumulated water & leaked into the basement of 2213 Fort Hall Mine Rd. Samples were collected after 2 stable parameter readings to prevent further flooding. Water control switch was turned off immediately after sampling. Water in window wells was removed via 5 gal buckets during & after parameter & sample collection. Louis Chandler (owner's cousin, property caretaker) was informed immediately, sent pictures from HH.

HH consulted Jared: It is possible that during winterization, the green valve (in green casing next to well) was closed. So the drain is not working (assumption - not sure). So then the water

* Should have listed on pg. 20.

Rite in the Rain

is coming up / out the only way it can.
Laura says the flooding explains water damage in the basement. Per his request, Jared's contact info forwarded.
Photographs of well, thern valve, control boxes, flooding included in the photo log.

1745 Karla L, TV, EE discuss status of 7200 well. After about 3 ~~years~~ hours, shutting down attempts to purge.

Details: DWR well Tag No: DØØ 75881
yielded driller log: Screen 133-138 feet bgs, total depth 140 feet bgs.
Visual stickup estimate: 2 feet.
Initial pump setting: 123'. WL = 60.58
(minimum purge volume from pump to bottom = $\pi r^2 \times (138 - ~~60.58~~ 123)$
$= 2.94 ft^3 = 22$ gal; max volume from WL to bottom = $\pi r^2 \times (138 - 60.58)$
$= 15.2 ft^3 = 114$ gal)
At 17:04 TV lifted pump to 113' to attempt to get water.
At 17:18 TV lifted pump to 103'

after no water at 113'.
17:32 TV lifts pump to 93' [sequence: 1 CDM 50, 10; then try tweaking] max pressure, bubbles in water line. The proper air size connection was not sent with pumps. Using tubing as a makeshift converter worked at RW-2203H, but may be a factor here).
17:53 TV sends photo of bladder. Fine, chalky, light grey/white, clayish material saturated throughout.
18:15 All CDM Smith sampling personnel at trailer.
Cleaned bladder pump, organized/packed field team equipment. Decide Tea/Maddie will leave for home in the morning. Packed some equipment.
Send Tamzen photo of RW-7500P bladder. She says the well needs to be developed; the liquid is drilling fluid.
Plan for the morning & weekend field shipments.
1915 HH leaves site. TV, MG begin dumping

Rite in the Rain

6/25/2020

old VOAs into buckets for dilution & disposal. EE checks in with Karla.

0800 EE offsite. Requested TV complete her binder paperwork for tomorrow morning. Told TV, MG to prioritize paperwork over VOA disposal, & to not stay until 9pm.

0830 MG, TV offsite

6/26/20

Project: FHML/Bannock County
Event: Offsite Domestic Well Sampling
Personnel: Emma Ehret (EE), Haley Hutchins (HH) (CDMSmith samplers)
Weather: 70-80°, sunny
PPE: Level D
Author: Emma Ehret

Plan for the Day: Attempt final contact with resident at 2076 Fort Hall Mine Rd; measure stickup heights for casing at PA-3, PA-5, PA-7, -8, -9, -10; package/prepare cooler & sampling equipment; sample RW-2140H & MW-1165; ship final cooler of samples; if time allows, additional organization of shed, chemical disposal; dispose of diluted HCl bucket; take trash; transfer keys.

0800 HH, EE run errands: Lowe's, Walmart. Return to Hotel for safety vest.

0915 Notice 2076 Fort Hall gates are closed, not locked. They were open on Tuesday. Consult Tamzen & decide to leave another consent

Rite in the Rain

form with business card & return address later today if gate is not opened before field team leaves. EE, HH arrive at field trailer. EE coordinates over phone with Kiel Burmester to get an envelope and/or letter with County letterhead & return info.

0935 Jody Bunker calls EE to say we can sample earlier. Appt re-scheduled to 11am.

HH, EE fill out COC & prep cooler.

1100 Get letter packet from Kiel, head to 2140 Hillside.

Adjust PID calibration.

11:20 Arrive at RW-2140H, MW-1165. Friendly interaction with homeowner. He locks goats outside of pasture. Set up bladder pump sampling system at MW-1165. RW-2140H turned on by homeowner.

MW-1166

initial static WL (no pump): 77.7 ft btoc

initial static WL (w/ pump): 77.27

Troubleshooting controller w/ Karla.

Well ID	Purge Start	Sample Time
RW-2140H	11:30	13:35
MW-1165	12:55	13:30

Bladder pump settings: 60psi, 3 cpm, Discharge 6 sec, Recharge 14 sec

1400 EE gets ice

1430 Lunch

1445 Pack cooler, QC COC,

1500 Pack field equipment

1600 Drop letter off at 2076 Fort Hall Mine Rd.

1630 Cooler, equipment dropped off at FedEx.

Stickup Height	Inner	Outer	
1705 PA-9:	1' 11"	2' 1"	
PA-90	1' 11"	2'	
MW-38:	3' 2"	(N/A)	
MW-37:	2' 10"	(N/A)	
PA-3:	1' 10"	1' 11"	
PA-~~7 or 8~~:	19"	1' 8"	(Northeast)
PA-~~7 or 8~~:	20.75"	22.75"	(South/west)

*Lock won't close.

PA-5: 18" 18.5"

FW-1: 28" same

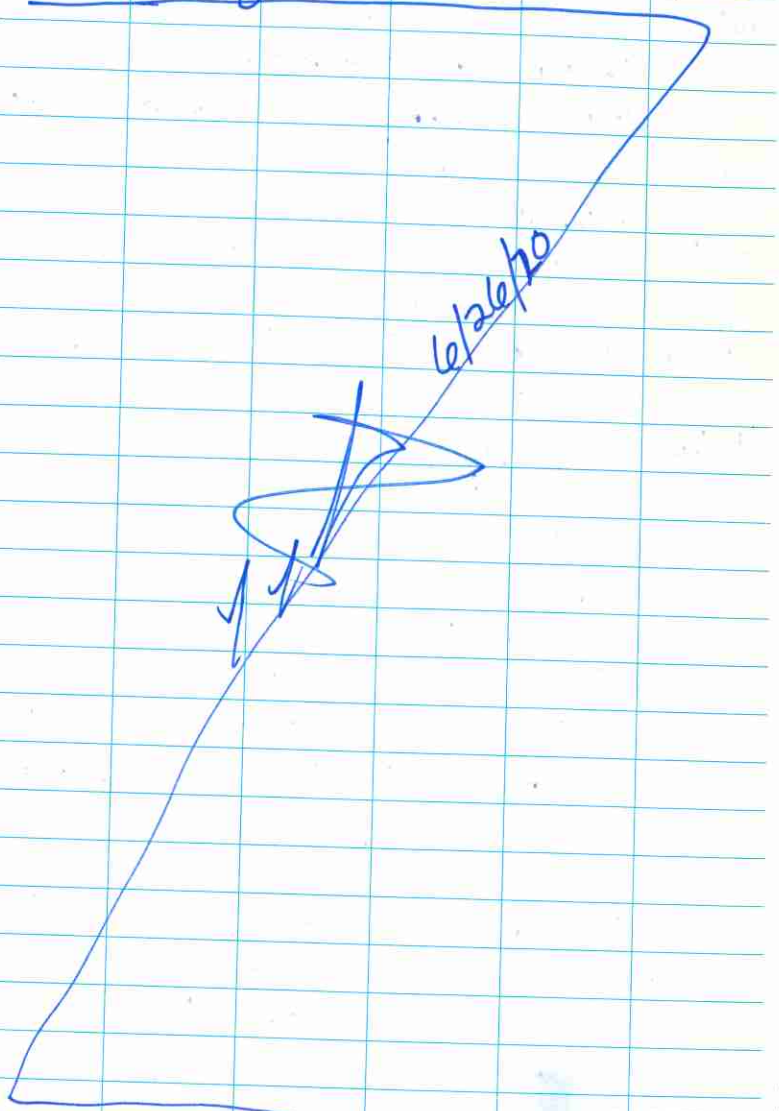
18:15 HH, EE return to field trailer. Take trash to landfill & HCl bucket to leachate pond.

18:30 HH, EE left site.

Rite in the Rain

6/26/20

Keys will be given to Tamzen this evening. Field trailer & shed are locked



Rite in the Rain.

Appendix C

2020 Results and All Historical PCE and TCE Data

Analyte	USEPA MCL	IDGW PRIMARY	Area	Pocatello City Monitoring Well																	
			Well ID	MW-37		MW-38		PA-1		PA-1		PA-10		PA-3		PA-4		PA-4		PA-4	
			Sample Name	MW-37-20200609		MW-38-20200609		PA-1-20200609		PA-1Q-20200609		PA-10-20200610		PA-3-20200609		PA-4-100-110-20200610		PA-4-135-145-20200611		PA-4-65-75-20200610	
			Sample Date	6/9/2020		6/9/2020		6/9/2020		6/9/2020		6/10/2020		6/9/2020		6/10/2020		6/11/2020		6/10/2020	
			Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																					
Dissolved Oxygen			mg/l	**6.54**		**0.09**		**6.5**				**7.52**		**7.25**		**6.66**				**6.59**	
Oxidation-Reduction Potential			millivolts	**96.3**		**-91.8**		**40.1**				**79.5**		**63.1**		**182.1**				**144.3**	
pH			su	**7.07**		**5.51**		**7.33**				**7.42**		**7.31**		**7.02**				**7.02**	
Specific Conductance			ms/cm	**0.765**		**13.501**		**0.765**				**0.767**		**0.778**		**0.819**				**0.823**	
Temperature			Celsius	**11.4**		**12.1**		**12**				**11.7**		**11.9**		**19.4**				**24.6**	
Turbidity			ntu	**9.11**		**73.14**		**11.3**				**6.8**		**1.7**		**2.95**				**5.47**	
VOCs																					
1,1,1,2-Tetrachloroethane			µg/L	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
1,1,1-Trichloroethane	200	200	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-Tetrachloroethane			µg/L	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
1,1,2-Trichloroethane	5	5	µg/L	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-Dichloroethane			µg/L	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-Dichloroethene	7	7	µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-Trichloropropane			µg/L	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
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-Dichlorobenzene	600	600	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-Dichloroethane	5	5	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-Dichloropropane	5	5	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-Dichlorobenzene		600	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-Dichloropropane			µg/L	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-Dichlorobenzene	75	75	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-Dichloropropane			µg/L	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
2-Butanone (MEK)			µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Hexanone			µg/L	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Acetone			µg/L	1.9	U	**2.3**	**J**	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Acetonitrile; methyl cyanide			µg/L	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
Acrolein			µg/L	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Acrylonitrile			µg/L	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Allyl chloride			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Benzene	5	5	µg/L	0.16	U	**0.5**	**J**	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Bromochloromethane			µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Bromodichloromethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Bromoform	80	100	µg/L	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
Bromomethane			µg/L	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
Carbon disulfide			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Carbon tetrachloride	5	5	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Chlorobenzene	100	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chlorodibromomethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chloroethane			µg/L	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
Chloroform	80	2	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Chloromethane			µg/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Chloroprene			µg/L	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
cis-1,2-Dichloroethene	70	70	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	**0.16**	**J**	0.15	U
cis-1,3-Dichloropropene			µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Dibromomethane			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Dichlorodifluoromethane			µg/L	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Ethyl methacrylate			µg/L	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
Ethylbenzene	700	700	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Iodomethane			µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
Isobutanol; Isobutyl alcohol			µg/L	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000		µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Methacrylonitrile			µg/L	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Methyl methacrylate			µg/L	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Methylene Chloride	5	5	µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Propionitrile; ethyl cyanide			µg/L	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Styrene	100	100	µg/L	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
Tetrachloroethene	5	5	µg/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	**0.63**	**J**	**0.58**	**J**	0.2	U
Toluene	1000	1000	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
trans-1,3-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
trans-1,4-Dichloro-2-butene			µg/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5	µg/L	**2**		0.16	U	**1.6**		**1.6**		0.16	U	**2**		**2.8**		**2.5**		**2.5**	
Trichlorofluoromethane			µg/L	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
Vinyl acetate			µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
Vinyl chloride	2	2	µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylene (Total)	10000	10000	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

Notes:

Highlight indicates values great than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

USEPA = United States Environmental Protection Agency

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

NS = not sampled

µg/L = microgram per liter

Q = qualifier

J = Result is estimated

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

Analyte	USEPA MCL	IDGW PRIMARY	Area		
			Well ID	PA-5	
			Sample Name	PA-5-20200611	
			Sample Date	6/11/2020	
			Unit	Result	Q
Field Parameters					
Dissolved Oxygen			mg/l	**6.72**	
Oxidation-Reduction Potential			millivolts	**165**	
pH			su	**7.18**	
Specific Conductance			ms/cm	**0.768**	
Temperature			Celsius	**13.8**	
Turbidity			ntu	**11.31**	
VOCs					
1,1,1,2-Tetrachloroethane			µg/L	0.21	U
1,1,1-Trichloroethane	200	200	µg/L	0.16	U
1,1,2,2-Tetrachloroethane			µg/L	0.21	U
1,1,2-Trichloroethane	5	5	µg/L	0.27	U
1,1-Dichloroethane			µg/L	0.22	U
1,1-Dichloroethene	7	7	µg/L	0.23	U
1,1-Dichloropropene			µg/L	0.19	U
1,2,3-Trichloropropane			µg/L	0.33	U
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U
1,2-Dichlorobenzene	600	600	µg/L	0.15	U
1,2-Dichloroethane	5	5	µg/L	0.13	U
1,2-Dichloropropane	5	5	µg/L	0.18	U
1,3-Dichlorobenzene		600	µg/L	0.13	U
1,3-Dichloropropane			µg/L	0.09	U
1,4-Dichlorobenzene	75	75	µg/L	0.16	U
2,2-Dichloropropane			µg/L	0.38	U
2-Butanone (MEK)			µg/L	2	U
2-Hexanone			µg/L	1.7	U
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U
Acetone			µg/L	1.9	U
Acetonitrile; methyl cyanide			µg/L	9.6	U
Acrolein			µg/L	2.8	U
Acrylonitrile			µg/L	1.4	U
Allyl chloride			µg/L	0.17	U
Benzene	5	5	µg/L	0.16	U
Bromochloromethane			µg/L	0.1	U
Bromodichloromethane	80	100	µg/L	0.17	U
Bromoform	80	100	µg/L	0.46	U
Bromomethane			µg/L	0.21	U
Carbon disulfide			µg/L	**0.41**	**J**
Carbon tetrachloride	5	5	µg/L	0.19	U
Chlorobenzene	100	100	µg/L	0.17	U
Chlorodibromomethane	80	100	µg/L	0.17	U
Chloroethane			µg/L	0.41	U
Chloroform	80	2	µg/L	0.16	U
Chloromethane			µg/L	0.3	U
Chloroprene			µg/L	0.21	U
cis-1,2-Dichloroethene	70	70	µg/L	0.15	U
cis-1,3-Dichloropropene			µg/L	0.16	U
Dibromomethane			µg/L	0.17	U
Dichlorodifluoromethane			µg/L	0.31	U
Ethyl methacrylate			µg/L	0.86	U
Ethylbenzene	700	700	µg/L	0.16	U
Iodomethane			µg/L	0.23	U
Isobutanol; Isobutyl alcohol			µg/L	37	U
m,p-Xylene	10000		µg/L	0.15	U
Methacrylonitrile			µg/L	1.6	U
Methyl methacrylate			µg/L	1.1	U
Methylene Chloride	5	5	µg/L	0.94	U
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U
Propionitrile; ethyl cyanide			µg/L	3.7	U
Styrene	100	100	µg/L	0.36	U
Tetrachloroethene	5	5	µg/L	0.2	U
Toluene	1000	1000	µg/L	0.17	U
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U
trans-1,3-Dichloropropene			µg/L	0.19	U
trans-1,4-Dichloro-2-butene			µg/L	0.8	U
Trichloroethene	5	5	µg/L	**0.86**	**J**
Trichlorofluoromethane			µg/L	0.29	U
Vinyl acetate			µg/L	0.94	U
Vinyl chloride	2	2	µg/L	0.1	U
Xylene (Total)	10000	10000	µg/L	0.19	U

Notes:
Highlight indicates values great than the MCL
Underline indicates values greater than IDGW Standard
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USEPA = United States Environmental Protection Agency
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µg/L = microgram per liter
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Analyte	USEPA MCL	IDGW PRIMARY	Area	Pocatello City Monitoring Well										Pocatello City Municipal Supply Well			
			Well ID	PA-8		PA-8		PA-8		PA-9		PA-9		MUNI-WELL-14		MUNI-WELL-33	
			Sample Name	PA-8-117-127-20200610		PA-8-37-47-20200610		PA-8-77-87-20200610		PA-9-57-67-20200610		PA-9-87-97-20200610		MUNI-WELL-14-20200624		MUNI-WELL-33-20200624	
			Sample Date	6/10/2020		6/10/2020		6/10/2020		6/10/2020		6/10/2020		6/24/2020		6/24/2020	
			Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																	
Dissolved Oxygen			mg/l	**6.68**		**7.39**		**6.5**		**9.44**		**7.13**		**7.51**		**7.74**	
Oxidation-Reduction Potential			millivolts	**153.9**		**98.9**		**113.3**		**38.2**		**60.6**		**92.8**		**41.9**	
pH			su	**7.09**		**7.11**		**7.09**		**7.38**		**7.34**		**7.33**		**7.37**	
Specific Conductance			ms/cm	**0.752**		**0.762**		**0.759**		**0.775**		**0.762**		**0.707**		**0.712**	
Temperature			Celsius	**13.6**		**20.8**		**19.3**		**20.9**		**12.3**		**12.2**		**11.9**	
Turbidity			ntu	**0.56**		**1.41**		**1.98**		**2.54**		**1**		**0**		**0**	
VOCs																	
1,1,1,2-Tetrachloroethane			µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,1-Trichloroethane	200	200	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-Tetrachloroethane			µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,2-Trichloroethane	5	5	µg/L	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-Dichloroethane			µg/L	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-Dichloroethene	7	7	µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-Trichloropropane			µg/L	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-Dichlorobenzene	600	600	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-Dichloroethane	5	5	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-Dichloropropane	5	5	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-Dichlorobenzene		600	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-Dichloropropane			µg/L	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-Dichlorobenzene	75	75	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-Dichloropropane			µg/L	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U
2-Butanone (MEK)			µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Hexanone			µg/L	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Acetone			µg/L	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Acetonitrile; methyl cyanide			µg/L	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
Acrolein			µg/L	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Acrylonitrile			µg/L	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Allyl chloride			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Benzene	5	5	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Bromochloromethane			µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Bromodichloromethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Bromoform	80	100	µg/L	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U
Bromomethane			µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Carbon disulfide			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Carbon tetrachloride	5	5	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Chlorobenzene	100	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chlorodibromomethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chloroethane			µg/L	0.41	U	0.41	U	0.41	U	0.41	U	0.41	U	0.41	U	0.41	U
Chloroform	80	2	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Chloromethane			µg/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Chloroprene			µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
cis-1,2-Dichloroethene	70	70	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
cis-1,3-Dichloropropene			µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Dibromomethane			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Dichlorodifluoromethane			µg/L	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Ethyl methacrylate			µg/L	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
Ethylbenzene	700	700	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Iodomethane			µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
Isobutanol; Isobutyl alcohol			µg/L	37	U	37	U	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000		µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Methacrylonitrile			µg/L	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Methyl methacrylate			µg/L	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Methylene Chloride	5	5	µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Propionitrile; ethyl cyanide			µg/L	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Styrene	100	100	µg/L	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U
Tetrachloroethene	5	5	µg/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	**0.25**	**J**	**0.37**	**J**
Toluene	1000	1000	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
trans-1,3-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
trans-1,4-Dichloro-2-butene			µg/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5	µg/L	**0.32**	**J**	**0.26**	**J**	**0.37**	**J**	0.16	U	0.16	U	**1.2**		**2.1**	
Trichlorofluoromethane			µg/L	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
Vinyl acetate			µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
Vinyl chloride	2	2	µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylene (Total)	10000	10000	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

Notes:

Highlight indicates values great than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

USEPA = United States Environmental Protection Agency

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

NS = not sampled

µg/L = microgram per liter

Q = qualifier

J = Result is estimated

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

Analyte	USEPA MCL	IDGW PRIMARY	Area	Domestic Wells																			
			Well ID	RW-2140H		RW-2151H		RW-2172F		RW-2172H		RW-2203H		RW-2213F		RW-2237H		RW-2613M		RW-2879M			
			Sample Name	RW-2140H-20200626		RW-2151H-20200623		RW-2172F-20200622		RW-2172H-20200625		RW-2203H-20200625		RW-2213F-20200625		RW-2237H-20200623		RW-2613M-20200625		RW-2879M-20200624			
			Sample Date	6/26/2020		6/23/2020		6/22/2020		6/25/2020		6/25/2020		6/25/2020		6/23/2020		6/25/2020		6/24/2020			
			Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
Field Parameters																							
Dissolved Oxygen			mg/l	**6.81**		**5.7**		**6.55**		**6.93**		**2.76**		**6.76**		**6.55**		**8.8**		**6.46**			
Oxidation-Reduction Potential			millivolts	**142.8**		**-4.2**		**202**		**88.6**		**-64.7**		**133**		**133.5**		**67.1**		**49.9**			
pH			su	**6.98**		**7.59**		**7.24**		**7.1**		**7.23**		**7.44**		**7.19**		**7.59**		**6.85**			
Specific Conductance			ms/cm	**1.098**		**0.651**		**0.683**		**1.027**		**1.114**		**0.653**		**0.795**		**0.588**		**1.511**			
Temperature			Celsius	**12.5**		**12.9**		**12.2**		**12**		**11.8**		**12**		**13.8**		**14.3**		**14**			
Turbidity			ntu	**25.17**		**74.59**		**0**		**103.35**		**6.31**		**138.75**		**220.67**		**161.01**		**114.82**			
VOCs																							
1,1,1,2-Tetrachloroethane			µg/L	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		
1,1,1-Trichloroethane	200	200	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U		
1,1,2,2-Tetrachloroethane			µg/L	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		
1,1,2-Trichloroethane	5	5	µg/L	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U		
1,1-Dichloroethane			µg/L	**0.23**	J	0.22	U	0.22	U	0.22	U	**0.25**	J	0.22	U	0.22	U	0.22	U	0.22	U		
1,1-Dichloroethene	7	7	µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U		
1,1-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U		
1,2,3-Trichloropropane			µg/L	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		
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U		
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U		
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U		
1,2-Dichlorobenzene	600	600	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U		
1,2-Dichloroethane	5	5	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U		
1,2-Dichloropropane	5	5	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U		
1,3-Dichlorobenzene		600	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U		
1,3-Dichloropropane			µg/L	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U		
1,4-Dichlorobenzene	75	75	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U		
2,2-Dichloropropane			µg/L	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		
2-Butanone (MEK)			µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U		
2-Hexanone			µg/L	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U		
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U		
Acetone			µg/L	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U		
Acetonitrile; methyl cyanide			µg/L	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U		
Acrolein			µg/L	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U		
Acrylonitrile			µg/L	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U		
Allyl chloride			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
Benzene	5	5	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U		
Bromochloromethane			µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Bromodichloromethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
Bromoform	80	100	µg/L	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		
Bromomethane			µg/L	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		
Carbon disulfide			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
Carbon tetrachloride	5	5	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U		
Chlorobenzene	100	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
Chlorodibromomethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
Chloroethane			µg/L	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		
Chloroform	80	2	µg/L	**0.25**	J	0.16	U	0.16	U	**0.2**	J	**0.22**	J	0.16	U	0.16	U	0.16	U	0.16	U		
Chloromethane			µg/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U		
Chloroprene			µg/L	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		
cis-1,2-Dichloroethene	70	70	µg/L	**2**		**0.38**	J	0.15	U	**1.5**		**2**		0.15	U	0.15	U	0.15	U	0.15	U		
cis-1,3-Dichloropropene			µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U		
Dibromomethane			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
Dichlorodifluoromethane			µg/L	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U		
Ethyl methacrylate			µg/L	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U		
Ethylbenzene	700	700	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U		
Iodomethane			µg/L	0.23	U	0.23	U	0.23	UJ	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U		
Isobutanol; Isobutyl alcohol			µg/L	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U		
m,p-Xylene	10000		µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U		
Methacrylonitrile			µg/L	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U		
Methyl methacrylate			µg/L	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U		
Methylene Chloride	5	5	µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U		
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U		
Propionitrile; ethyl cyanide			µg/L	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U		
Styrene	100	100	µg/L	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		
Tetrachloroethene	5	5	µg/L	**6.1**		0.2	U	0.2	U	**4.9**		**5.2**		0.2	U	**1.9**		0.2	U	0.2	U		
Toluene	1000	1000	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U		
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U		
trans-1,3-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U		
trans-1,4-Dichloro-2-butene			µg/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U		
Trichloroethene	5	5	µg/L	**34**		**5.8**		0.16	U	**28**		**33**		0.16	U	**9.8**		0.16	U	0.16	U		
Trichlorofluoromethane			µg/L	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U		
Vinyl acetate			µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U		
Vinyl chloride	2	2	µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Xylene (Total)	10000	10000	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U		

Notes:

Highlight indicates values great than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

USEPA = United States Environmental Protection Agency

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

NS = not sampled

µg/L = microgram per liter

Q = qualifier

J = Result is estimated

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

Analyte	USEPA MCL	IDGW PRIMARY	Area	Domestic Wells																	
			Well ID	RW-5898B1		RW-7070B		RW-7091R		RW-7244P		RW-7350P		RW-7505P		RW-7549P		RW-7586P		RW-7588P	
			Sample Name	RW-5898B1-20200622		RW-7070B-20200622		RW-7091R-20200624		RW-7244P-20200623		RW-7350P-20200623		RW-7505P-20200624		RW-7549P-20200624		RW-7586P-20200624		RW-7588P-20200624	
			Sample Date	6/22/2020		6/22/2020		6/24/2020		6/23/2020		6/23/2020		6/24/2020		6/24/2020		6/24/2020		6/24/2020	
			Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																					
Dissolved Oxygen			mg/l	**5.47**		**7.53**		**5.88**		**7**		**6.83**		**6.9**		**7.42**		**6.98**		**6.86**	
Oxidation-Reduction Potential			millivolts	**139.8**		**146.3**		**-4.4**		**156.1**		**147.8**		**228.1**		**148.8**		**113.9**		**98.3**	
pH			su	**6.67**		**7.21**		**7.39**		**7.11**		**7.2**		**7.41**		**7.38**		**7.28**		**7.36**	
Specific Conductance			ms/cm	**0.541**		**0.773**		**0.649**		**0.664**		**0.671**		**0.668**		**0.696**		**0.661**		**0.661**	
Temperature			Celsius	**14.9**		**12.2**		**12**		**11.6**		**13.4**		**13.6**		**13.3**		**13.9**		**12.5**	
Turbidity			ntu	**225.75**		**0**		**6.4**		**156.1**		**195.22**		**0**		**0**		**162.34**		**163.23**	
VOCs																					
1,1,1,2-Tetrachloroethane			µg/L	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
1,1,1-Trichloroethane	200	200	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-Tetrachloroethane			µg/L	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
1,1,2-Trichloroethane	5	5	µg/L	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-Dichloroethane			µg/L	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-Dichloroethene	7	7	µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-Trichloropropane			µg/L	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
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-Dichlorobenzene	600	600	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-Dichloroethane	5	5	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-Dichloropropane	5	5	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-Dichlorobenzene		600	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-Dichloropropane			µg/L	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-Dichlorobenzene	75	75	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-Dichloropropane			µg/L	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
2-Butanone (MEK)			µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Hexanone			µg/L	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Acetone			µg/L	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Acetonitrile; methyl cyanide			µg/L	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
Acrolein			µg/L	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Acrylonitrile			µg/L	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Allyl chloride			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Benzene	5	5	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Bromochloromethane			µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Bromodichloromethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Bromoform	80	100	µg/L	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
Bromomethane			µg/L	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
Carbon disulfide			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Carbon tetrachloride	5	5	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Chlorobenzene	100	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chlorodibromomethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chloroethane			µg/L	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
Chloroform	80	2	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Chloromethane			µg/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Chloroprene			µg/L	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
cis-1,2-Dichloroethene	70	70	µg/L	0.15	U	**0.19**	J	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
cis-1,3-Dichloropropene			µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Dibromomethane			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Dichlorodifluoromethane			µg/L	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Ethyl methacrylate			µg/L	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
Ethylbenzene	700	700	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Iodomethane			µg/L	0.23	UJ	0.23	UJ	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
Isobutanol; Isobutyl alcohol			µg/L	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000		µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Methacrylonitrile			µg/L	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Methyl methacrylate			µg/L	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Methylene Chloride	5	5	µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Propionitrile; ethyl cyanide			µg/L	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Styrene	100	100	µg/L	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
Tetrachloroethene	5	5	µg/L	0.2	U	**0.59**	J	**0.24**	J	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Toluene	1000	1000	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
trans-1,3-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
trans-1,4-Dichloro-2-butene			µg/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5	µg/L	**0.78**	J	**3.4**		**1.4**		0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Trichlorofluoromethane			µg/L	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
Vinyl acetate			µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
Vinyl chloride	2	2	µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylene (Total)	10000	10000	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

Notes:

Highlight indicates values great than the MCL

Underline indicates values greater than IDGW Standard

Bold indicates detected values

USEPA = United States Environmental Protection Agency

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

NS = not sampled

µg/L = microgram per liter

Q = qualifier

J = Result is estimated

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

Analyte	USEPA MCL	IDGW PRIMARY	Area	Domestic Wells																	
			Well ID	RW-7677P		RW-7677P		RW-7688P		RW-7688P		RW-7773P		RW-8000B		RW-8012P		RW-8030P		RW-8035P	
			Sample Name	RW-7677P-20200622		RW-7677PQ-20200622		RW-7688P-20200623		RW-7688PQ-20200623		RW-7773P-20200622		RW-8000B-20200609		RW-8012P-20200623		RW-8030P-20200624		RW-8035P-20200623	
			Sample Date	6/22/2020		6/22/2020		6/23/2020		6/23/2020		6/22/2020		6/9/2020		6/23/2020		6/24/2020		6/23/2020	
			Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																					
Dissolved Oxygen			mg/l	**6.85**				**7.11**				**7.45**		**8.07**		**8.12**		**7.8**		**8.42**	
Oxidation-Reduction Potential			millivolts	**166.9**				**116.4**				**65.6**		**65**		**157.4**		**108.7**		**110.2**	
pH			su	**7.23**				**7.38**				**7.36**		**7.76**		**7.24**		**7.29**		**7.44**	
Specific Conductance			ms/cm	**0.755**				**0.682**				**0.67**		**0.858**		**0.765**		**0.812**		**0.54**	
Temperature			Celsius	**12.6**				**13.5**				**13**		**11.3**		**14.4**		**12.2**		**13.5**	
Turbidity			ntu	**0**				**0**				**0**		**1**		**124.65**		**132.93**		**155.35**	
VOCs																					
1,1,1,2-Tetrachloroethane			µg/L	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
1,1,1-Trichloroethane	200	200	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-Tetrachloroethane			µg/L	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
1,1,2-Trichloroethane	5	5	µg/L	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-Dichloroethane			µg/L	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-Dichloroethene	7	7	µg/L	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-Trichloropropane			µg/L	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
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-Dichlorobenzene	600	600	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-Dichloroethane	5	5	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-Dichloropropane	5	5	µg/L	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-Dichlorobenzene		600	µg/L	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-Dichloropropane			µg/L	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-Dichlorobenzene	75	75	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-Dichloropropane			µg/L	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
2-Butanone (MEK)			µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Hexanone			µg/L	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
Acetone			µg/L	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Acetonitrile; methyl cyanide			µg/L	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
Acrolein			µg/L	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
Acrylonitrile			µg/L	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Allyl chloride			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Benzene	5	5	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Bromochloromethane			µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Bromodichloromethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Bromoform	80	100	µg/L	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
Bromomethane			µg/L	0.21	UJ	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Carbon disulfide			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Carbon tetrachloride	5	5	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Chlorobenzene	100	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chlorodibromomethane	80	100	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Chloroethane			µg/L	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
Chloroform	80	2	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Chloromethane			µg/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Chloroprene			µg/L	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
cis-1,2-Dichloroethene	70	70	µg/L	**0.27**	J	**0.31**	J	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	**0.36**	J	0.15	U
cis-1,3-Dichloropropene			µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Dibromomethane			µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Dichlorodifluoromethane			µg/L	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Ethyl methacrylate			µg/L	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
Ethylbenzene	700	700	µg/L	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Iodomethane			µg/L	0.23	UJ	0.23	UJ	0.23	U	0.23	U	0.23	UJ	0.23	U	0.23	U	0.23	U	0.23	U
Isobutanol; Isobutyl alcohol			µg/L	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000		µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Methacrylonitrile			µg/L	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Methyl methacrylate			µg/L	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
Methylene Chloride	5	5	µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Propionitrile; ethyl cyanide			µg/L	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Styrene	100	100	µg/L	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
Tetrachloroethene	5	5	µg/L	**1.2**		**1.2**		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	**1.3**		0.2	U
Toluene	1000	1000	µg/L	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
trans-1,3-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
trans-1,4-Dichloro-2-butene			µg/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5	µg/L	**5.9**		**5.8**		0.16	U	0.16	U	0.16	U	**4.8**		0.16	U	**7.1**		0.16	U
Trichlorofluoromethane			µg/L	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
Vinyl acetate			µg/L	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
Vinyl chloride	2	2	µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylene (Total)	10000	10000	µg/L	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

Notes:

Highlight indicates values great than the MCL

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Bold indicates detected values

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MCL = maximum contaminant level

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µg/L = microgram per liter

Q = qualifier

J = Result is estimated

U = Analyte was not detected at the associated value

UJ =The non-detection at the associated value is an estimate

Analyte	USEPA MCL	IDGW PRIMARY	Area								Domestic Wells			
			Well ID	RW-8048P		RW-8105PS		RW-8209P			RW-8249P		RW-8284P	
			Sample Name	RW-8048P-20200622		RW-8105PS-20200622		RW-8209P-20200625			RW-8249P-20200623		RW-8284P-20200623	
			Sample Date	6/22/2020		6/22/2020		6/25/2020			6/23/2020		6/23/2020	
			Unit	Result	Q	Result	Q	Result	Q		Result	Q	Result	Q
Field Parameters														
Dissolved Oxygen			mg/l	**6.7**		**1.15**		**7.97**			**7.88**		**6.74**	
Oxidation-Reduction Potential			millivolts	**175.6**		**-38.9**		**128.8**			**71.1**		**92.4**	
pH			su	**6.4**		**6.19**		7.03			7.31		7.16	
Specific Conductance			ms/cm	**0.894**		**0.81**		**3.84**			**1.6**		**0.917**	
Temperature			Celsius	**14.1**		**10**		**14.6**			**13.7**		**14.4**	
Turbidity			ntu	**205.36**		**225.31**		**158.81**			**0**		**0**	
VOCs														
1,1,1,2-Tetrachloroethane			µg/L	0.21	U	0.21	U	0.21	U		0.21	U	0.21	U
1,1,1-Trichloroethane	200	200	µg/L	0.16	U	0.16	U	0.16	U		0.16	U	0.16	U
1,1,2,2-Tetrachloroethane			µg/L	0.21	U	0.21	U	0.21	U		0.21	U	0.21	U
1,1,2-Trichloroethane	5	5	µg/L	0.27	U	0.27	U	0.27	U		0.27	U	0.27	U
1,1-Dichloroethane			µg/L	0.22	U	0.22	U	0.22	U		0.22	U	0.22	U
1,1-Dichloroethene	7	7	µg/L	0.23	U	0.23	U	0.23	U		0.23	U	0.23	U
1,1-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U		0.19	U	0.19	U
1,2,3-Trichloropropane			µg/L	0.33	U	0.33	U	0.33	U		0.33	U	0.33	U
1,2,4-Trichlorobenzene	70	70	µg/L	0.21	U	0.21	U	0.21	U		0.21	U	0.21	U
1,2-Dibromo-3-Chloropropane	0.2	0.2	µg/L	0.47	U	0.47	U	0.47	U		0.47	U	0.47	U
1,2-Dibromoethane	0.05	0.05	µg/L	0.18	U	0.18	U	0.18	U		0.18	U	0.18	U
1,2-Dichlorobenzene	600	600	µg/L	0.15	U	0.15	U	0.15	U		0.15	U	0.15	U
1,2-Dichloroethane	5	5	µg/L	0.13	U	0.13	U	0.13	U		0.13	U	0.13	U
1,2-Dichloropropane	5	5	µg/L	0.18	U	0.18	U	0.18	U		0.18	U	0.18	U
1,3-Dichlorobenzene		600	µg/L	0.13	U	0.13	U	0.13	U		0.13	U	0.13	U
1,3-Dichloropropane			µg/L	0.09	U	0.09	U	0.09	U		0.09	U	0.09	U
1,4-Dichlorobenzene	75	75	µg/L	0.16	U	0.16	U	0.16	U		0.16	U	0.16	U
2,2-Dichloropropane			µg/L	0.38	U	0.38	U	0.38	U		0.38	U	0.38	U
2-Butanone (MEK)			µg/L	2	U	2	U	2	U		2	U	2	U
2-Hexanone			µg/L	1.7	U	1.7	U	1.7	U		1.7	U	1.7	U
4-Methyl-2-pentanone (MIBK)			µg/L	0.98	U	0.98	U	0.98	U		0.98	U	0.98	U
Acetone			µg/L	1.9	U	1.9	U	1.9	U		1.9	U	1.9	U
Acetonitrile; methyl cyanide			µg/L	9.6	U	9.6	U	9.6	U		9.6	U	9.6	U
Acrolein			µg/L	2.8	U	2.8	U	2.8	U		2.8	U	2.8	U
Acrylonitrile			µg/L	1.4	U	1.4	U	1.4	U		1.4	U	1.4	U
Allyl chloride			µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
Benzene	5	5	µg/L	0.16	U	0.16	U	0.16	U		0.16	U	0.16	U
Bromochloromethane			µg/L	0.1	U	0.1	U	0.1	U		0.1	U	0.1	U
Bromodichloromethane	80	100	µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
Bromoform	80	100	µg/L	0.46	U	0.46	U	0.46	U		0.46	U	0.46	U
Bromomethane			µg/L	0.21	U	0.21	U	0.21	U		0.21	U	0.21	U
Carbon disulfide			µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
Carbon tetrachloride	5	5	µg/L	0.19	U	0.19	U	0.19	U		0.19	U	0.19	U
Chlorobenzene	100	100	µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
Chlorodibromomethane	80	100	µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
Chloroethane			µg/L	0.41	U	0.41	U	0.41	U		0.41	U	0.41	U
Chloroform	80	2	µg/L	0.16	U	0.16	U	0.16	U		0.16	U	0.16	U
Chloromethane			µg/L	0.3	U	0.3	U	0.3	U		0.3	U	0.3	U
Chloroprene			µg/L	0.21	U	0.21	U	0.21	U		0.21	U	0.21	U
cis-1,2-Dichloroethene	70	70	µg/L	**0.16**	**J**	0.15	U	0.15	U		0.15	U	0.15	U
cis-1,3-Dichloropropene			µg/L	0.16	U	0.16	U	0.16	U		0.16	U	0.16	U
Dibromomethane			µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
Dichlorodifluoromethane			µg/L	0.31	U	0.31	U	0.31	U		0.31	U	0.31	U
Ethyl methacrylate			µg/L	0.86	U	0.86	U	0.86	U		0.86	U	0.86	U
Ethylbenzene	700	700	µg/L	0.16	U	0.16	U	0.16	U		0.16	U	0.16	U
Iodomethane			µg/L	0.23	UJ	0.23	UJ	0.23	U		0.23	U	0.23	U
Isobutanol; Isobutyl alcohol			µg/L	37	U	37	U	37	U		37	U	37	U
m,p-Xylene	10000		µg/L	0.15	U	0.15	U	0.15	U		0.15	U	0.15	U
Methacrylonitrile			µg/L	1.6	U	1.6	U	1.6	U		1.6	U	1.6	U
Methyl methacrylate			µg/L	1.1	U	1.1	U	1.1	U		1.1	U	1.1	U
Methylene Chloride	5	5	µg/L	0.94	U	0.94	U	0.94	U		0.94	U	0.94	U
o-xylene (1,2-dimethylbenzene)	10000		µg/L	0.19	U	0.19	U	0.19	U		0.19	U	0.19	U
Propionitrile; ethyl cyanide			µg/L	3.7	U	3.7	U	3.7	U		3.7	U	3.7	U
Styrene	100	100	µg/L	0.36	U	0.36	U	0.36	U		0.36	U	0.36	U
Tetrachloroethene	5	5	µg/L	**0.71**	**J**	0.2	U	0.2	U		0.2	U	**0.93**	**J**
Toluene	1000	1000	µg/L	0.17	U	0.17	U	0.17	U		0.17	U	0.17	U
trans-1,2-Dichloroethene	100	100	µg/L	0.15	U	0.15	U	0.15	U		0.15	U	0.15	U
trans-1,3-Dichloropropene			µg/L	0.19	U	0.19	U	0.19	U		0.19	U	0.19	U
trans-1,4-Dichloro-2-butene			µg/L	0.8	U	0.8	U	0.8	U		0.8	U	0.8	U
Trichloroethene	5	5	µg/L	**4**		0.16	U	0.16	U		0.16	U	**3.9**	
Trichlorofluoromethane			µg/L	0.29	U	0.29	U	0.29	U		0.29	U	0.29	U
Vinyl acetate			µg/L	0.94	U	0.94	U	0.94	U		0.94	U	0.94	U
Vinyl chloride	2	2	µg/L	0.1	U	0.1	U	0.1	U		0.1	U	0.1	U
Xylene (Total)	10000	10000	µg/L	0.19	U	0.19	U	0.19	U		0.19	U	0.19	U

Notes:
Highlight indicates values great than the MCL
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USEPA = United States Environmental Protection Agency
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NS = not sampled
µg/L = microgram per liter
Q = qualifier
J = Result is estimated
U = Analyte was not detected at the associated value
UJ =The non-detection at the associated value is an estimate

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-10	7/18/1997	0.6	1.3	Historical Data - Previous Consultant
	12/21/1999	ND U	1	Historical Data - Previous Consultant
	9/26/2000	ND U	0.5	Historical Data - Previous Consultant
	9/18/2001	ND U	0.7	Historical Data - Previous Consultant
	10/8/2001	ND U	0.6	Historical Data - Previous Consultant
	9/4/2002	ND U	0.6	Historical Data - Previous Consultant
	9/16/2003	ND U	2	Historical Data - Previous Consultant
	9/8/2004	0.5 U	0.5 U	Historical Data - Previous Consultant
	10/26/2005	ND U	0.5	Historical Data - Previous Consultant
	10/26/2005	0.5 U	0.5	Historical Data - Previous Consultant
	9/20/2006	0.5	0.5	Historical Data - Previous Consultant
	12/5/2007	0.5	0.5	Historical Data - Previous Consultant
	10/24/2008	0.5	0.5	Historical Data - Previous Consultant
	11/30/2009	0.5	0.5	Historical Data - Previous Consultant
	9/14/2010	ND U	0.54	Historical Data - Previous Consultant
	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
	9/13/2011	0.5	0.5	Historical Data - Previous Consultant
	10/2/2012	0.5	0.5	Historical Data - Previous Consultant
	9/18/2013	0.5	0.5	Historical Data - Previous Consultant
	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-12	3/25/1993	ND U	1.3	Historical Data - Previous Consultant
	7/20/1993	ND U	1.6	Historical Data - Previous Consultant
	10/18/1993	ND U	1.8	Historical Data - Previous Consultant
	3/17/1994	ND U	3	Historical Data - Previous Consultant
	8/23/1994	ND U	2.1	Historical Data - Previous Consultant
	12/13/1994	ND U	2.5	Historical Data - Previous Consultant
	3/22/1995	ND U	3.3	Historical Data - Previous Consultant
	6/24/1997	ND U	2.4	Historical Data - Previous Consultant
	10/19/1998	ND U	3.8	Historical Data - Previous Consultant
	12/21/1999	ND U	4.5	Historical Data - Previous Consultant
	9/26/2000	ND U	1.3	Historical Data - Previous Consultant
	7/3/2001	ND U	0.9	Historical Data - Previous Consultant
	9/18/2001	ND U	1.7	Historical Data - Previous Consultant
	10/8/2001	ND U	1.6	Historical Data - Previous Consultant
	6/17/2002	ND U	1.3	Historical Data - Previous Consultant
	9/4/2002	ND U	1.2	Historical Data - Previous Consultant
	9/16/2003	ND U	2.6	Historical Data - Previous Consultant
	6/23/2004	0.5	0.7	Historical Data - Previous Consultant
	9/8/2004	ND U	0.7	Historical Data - Previous Consultant
	9/8/2004	0.5	0.7	Historical Data - Previous Consultant
	10/26/2005	ND U	0.7	Historical Data - Previous Consultant
	10/26/2005	0.5	0.7	Historical Data - Previous Consultant
	9/20/2006	ND U	0.6	Historical Data - Previous Consultant
	9/20/2006	0.5	0.6	Historical Data - Previous Consultant
	12/5/2007	ND U	0.76	Historical Data - Previous Consultant
	12/5/2007	0.5	0.76	Historical Data - Previous Consultant
	10/24/2008	0.5	0.5	Historical Data - Previous Consultant
	11/30/2009	ND U	0.68	Historical Data - Previous Consultant
	11/30/2009	0.5	0.68	Historical Data - Previous Consultant
	9/14/2010	ND U	0.58	Historical Data - Previous Consultant
	9/14/2010	0.5	0.5	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-12	9/13/2011	ND U	0.58	Historical Data - Previous Consultant
	9/13/2011	0.5	0.58	Historical Data - Previous Consultant
	10/11/2012	ND U	0.75	Historical Data - Previous Consultant
	10/11/2012	0.5	0.75	Historical Data - Previous Consultant
	9/18/2013	ND U	0.54	Historical Data - Previous Consultant
	9/18/2013	0.5	0.54	Historical Data - Previous Consultant
	9/9/2014	ND U	0.54	Historical Data - Previous Consultant
	9/9/2014	0.5	0.54	Historical Data - Previous Consultant
	9/10/2015	0.5	0.5	Historical Data - Previous Consultant
	10/18/2016	0.5	0.5	Historical Data - Previous Consultant
	10/5/2017	0.5	0.53	Historical Data - Previous Consultant
	9/26/2018	0.5	1	Historical Data - Previous Consultant
Muni-Well-13	6/29/1993	ND U	2	Historical Data - Previous Consultant
	7/20/1993	ND U	2.5	Historical Data - Previous Consultant
	10/18/1993	ND U	2.7	Historical Data - Previous Consultant
	3/17/1994	ND U	3.8	Historical Data - Previous Consultant
	5/26/1994	ND U	3.2	Historical Data - Previous Consultant
	6/2/1994	ND U	3.2	Historical Data - Previous Consultant
	8/23/1994	ND U	3.1	Historical Data - Previous Consultant
	11/28/1994	0.6	6.2	Historical Data - Previous Consultant
	12/12/1994	0.5	5.7	Historical Data - Previous Consultant
	7/10/1997	ND U	4.5	Historical Data - Previous Consultant
	10/19/1998	ND U	3.5	Historical Data - Previous Consultant
	2/2/1999	ND U	3	Historical Data - Previous Consultant
	12/21/1999	ND U	3.6	Historical Data - Previous Consultant
	9/26/2000	ND U	0.5	Historical Data - Previous Consultant
	2/27/2001	ND U	1.1	Historical Data - Previous Consultant
	6/26/2001	ND U	0.9	Historical Data - Previous Consultant
	9/18/2001	ND U	1.1	Historical Data - Previous Consultant
	10/8/2001	ND U	1.1	Historical Data - Previous Consultant
	1/31/2002	ND U	2	Historical Data - Previous Consultant
	6/17/2002	ND U	1.1	Historical Data - Previous Consultant
	9/4/2002	ND U	1.1	Historical Data - Previous Consultant
	9/16/2003	ND U	2.2	Historical Data - Previous Consultant
	6/23/2004	0.5	0.6	Historical Data - Previous Consultant
	9/8/2004	0.5	0.5	Historical Data - Previous Consultant
	10/26/2005	ND U	0.8	Historical Data - Previous Consultant
	10/26/2005	0.5	0.8	Historical Data - Previous Consultant
	9/20/2006	ND U	0.7	Historical Data - Previous Consultant
	9/20/2006	0.5	0.7	Historical Data - Previous Consultant
	12/5/2007	ND U	0.82	Historical Data - Previous Consultant
	12/5/2007	0.5	0.82	Historical Data - Previous Consultant
	10/24/2008	0.5	0.5	Historical Data - Previous Consultant
	11/30/2009	ND U	0.81	Historical Data - Previous Consultant
	11/30/2009	0.5	0.81	Historical Data - Previous Consultant
	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
	9/13/2011	ND U	0.77	Historical Data - Previous Consultant
	9/13/2011	0.5	0.77	Historical Data - Previous Consultant
	10/2/2012	ND U	0.67	Historical Data - Previous Consultant
	10/2/2012	0.5	0.67	Historical Data - Previous Consultant
	9/18/2013	0.5	0.5	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-13	9/9/2014	0.5	0.5	Historical Data - Previous Consultant
	9/10/2015	0.5	0.5	Historical Data - Previous Consultant
	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
	10/5/2017	0.5	0.75	Historical Data - Previous Consultant
	9/26/2018	0.5	1.17	Historical Data - Previous Consultant
Muni-Well-14	3/24/1993	ND U	3.8	Historical Data - Previous Consultant
	6/29/1993	ND U	4.6	Historical Data - Previous Consultant
	7/20/1993	ND U	6.3	Historical Data - Previous Consultant
	10/18/1993	0.6	5.2	Historical Data - Previous Consultant
	11/28/1994	0.8	9.4	Historical Data - Previous Consultant
	10/19/1998	ND U	6.1	Historical Data - Previous Consultant
	2/1/1999	ND U	4.7	Historical Data - Previous Consultant
	6/23/2004	0.5 U	2.2	Historical Data - Previous Consultant
	9/8/2004	0.5 U	1.9	Historical Data - Previous Consultant
	6/8/2005	0.5 U	1.2	Historical Data - Previous Consultant
	6/13/2018	0.5 U	2.46	Historical Data - Previous Consultant
	9/26/2018	0.5 U	1.4	Historical Data - Previous Consultant
	6/19/2019	0.2 U	1.1	2019 June Offsite Residential
	6/24/2020	0.25 J	1.2	2020 Spring Off-Site Sampling
Muni-Well-16	3/24/1993	ND U	1.1	Historical Data - Previous Consultant
	6/7/1993	ND U	1.2	Historical Data - Previous Consultant
	7/20/1993	ND U	1.2	Historical Data - Previous Consultant
	10/18/1993	ND U	1.2	Historical Data - Previous Consultant
	3/16/1994	ND U	2.2	Historical Data - Previous Consultant
	5/26/1994	ND U	2	Historical Data - Previous Consultant
	8/23/1994	ND U	1.9	Historical Data - Previous Consultant
	12/21/1994	ND U	1.4	Historical Data - Previous Consultant
	3/21/1995	ND U	1.8	Historical Data - Previous Consultant
	5/12/1997	ND U	2.1	Historical Data - Previous Consultant
	10/19/1998	ND U	2.6	Historical Data - Previous Consultant
	2/1/1999	ND U	3.4	Historical Data - Previous Consultant
	12/21/1999	ND U	2.6	Historical Data - Previous Consultant
	9/26/2000	ND U	0.9	Historical Data - Previous Consultant
	2/27/2001	ND U	1.3	Historical Data - Previous Consultant
	9/18/2001	ND U	1	Historical Data - Previous Consultant
	1/31/2002	ND U	1	Historical Data - Previous Consultant
	9/4/2002	ND U	0.8	Historical Data - Previous Consultant
	9/16/2003	ND U	2.2	Historical Data - Previous Consultant
	10/26/2005	0.5	0.5	Historical Data - Previous Consultant
	12/5/2007	0.5	0.5	Historical Data - Previous Consultant
	2/23/2009	0.5	0.5	Historical Data - Previous Consultant
	4/22/2009	0.5	0.5	Historical Data - Previous Consultant
	6/8/2009	0.5	0.5	Historical Data - Previous Consultant
	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-29	10/10/2002	ND U	0.6	Historical Data - Previous Consultant
	10/26/2005	0.5	0.5	Historical Data - Previous Consultant
	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
	10/17/2016	0.5	0.5	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-30	7/20/1993	ND U	0.8	Historical Data - Previous Consultant
	10/18/1993	ND U	1.2	Historical Data - Previous Consultant
	3/16/1994	ND U	1.9	Historical Data - Previous Consultant
	5/26/1994	ND U	2	Historical Data - Previous Consultant
	8/23/1994	ND U	1.4	Historical Data - Previous Consultant
	11/28/1994	ND U	1.1	Historical Data - Previous Consultant
	6/27/1996	ND U	0.6	Historical Data - Previous Consultant
	5/12/1997	ND U	1	Historical Data - Previous Consultant
	10/19/1998	ND U	1.5	Historical Data - Previous Consultant
	2/1/1999	ND U	1.6	Historical Data - Previous Consultant
	12/21/1999	ND U	0.9	Historical Data - Previous Consultant
	9/26/2000	ND U	0.5	Historical Data - Previous Consultant
	2/27/2001	ND U	0.8	Historical Data - Previous Consultant
	9/18/2001	ND U	0.9	Historical Data - Previous Consultant
	10/8/2001	ND U	0.6	Historical Data - Previous Consultant
	9/16/2003	ND U	2.1	Historical Data - Previous Consultant
	6/23/2004	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-33	3/25/1993	0.74	8.4	Historical Data - Previous Consultant
	6/29/1993	0.7	7	Historical Data - Previous Consultant
	10/18/1993	0.7	7.1	Historical Data - Previous Consultant
	6/2/1994	1.2	15	Historical Data - Previous Consultant
	11/28/1994	1.2	13.2	Historical Data - Previous Consultant
	10/19/1998	1.6	14.4	Historical Data - Previous Consultant
	2/1/1999	0.6	9.6	Historical Data - Previous Consultant
	9/26/2000	ND U	3.9	Historical Data - Previous Consultant
	6/23/2004	0.5 U	2.8	Historical Data - Previous Consultant
	9/8/2004	0.5 U	2.1	Historical Data - Previous Consultant
	6/8/2005	0.5 U	2	Historical Data - Previous Consultant
	1/23/2006	0.5 U	2.5	Historical Data - Previous Consultant
	6/8/2009	ND U	2.27	Historical Data - Previous Consultant
	6/8/2009	0.5 U	2.27	Historical Data - Previous Consultant
	9/29/2009	0.5 U	2.67	Historical Data - Previous Consultant
	5/2/2018	0.55	5.16	Historical Data - Previous Consultant
	6/18/2018	0.5 U	4.41	Historical Data - Previous Consultant
	9/26/2018	0.51	3.24	Historical Data - Previous Consultant
	6/19/2019	0.31 J	1.9	2019 June Offsite Residential
	6/24/2020	0.37 J	2.1	2020 Spring Off-Site Sampling
Muni-Well-36	10/14/1993	ND U	1.2	Historical Data - Previous Consultant
	3/16/1994	0.5	4	Historical Data - Previous Consultant
	5/26/1994	ND U	3.1	Historical Data - Previous Consultant
	8/23/1994	ND U	4	Historical Data - Previous Consultant
	11/28/1994	ND U	5.2	Historical Data - Previous Consultant
	12/12/1994	0.5	6	Historical Data - Previous Consultant
	6/7/1995	ND U	4.7	Historical Data - Previous Consultant
	9/18/1995	ND U	4.9	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-36	12/15/1995	ND U	3.9	Historical Data - Previous Consultant
	3/29/1996	ND U	3	Historical Data - Previous Consultant
	6/27/1996	0.7	4.9	Historical Data - Previous Consultant
	7/10/1997	ND U	4.3	Historical Data - Previous Consultant
	8/21/1997	ND U	5.2	Historical Data - Previous Consultant
	8/28/1997	0.6	6.2	Historical Data - Previous Consultant
	9/22/1997	ND U	4.8	Historical Data - Previous Consultant
	9/30/1997	0.5	5.3	Historical Data - Previous Consultant
	6/8/1998	0.71	10.9	Historical Data - Previous Consultant
	10/19/1998	ND U	3.5	Historical Data - Previous Consultant
	2/1/1999	ND U	3.4	Historical Data - Previous Consultant
	10/11/1999	ND U	4.2	Historical Data - Previous Consultant
	12/21/1999	ND U	4.2	Historical Data - Previous Consultant
	9/26/2000	ND U	0.9	Historical Data - Previous Consultant
	2/27/2001	ND U	1	Historical Data - Previous Consultant
	6/26/2001	ND U	0.9	Historical Data - Previous Consultant
	9/18/2001	ND U	1.4	Historical Data - Previous Consultant
	6/17/2002	ND U	1.5	Historical Data - Previous Consultant
	10/10/2002	ND U	1.1	Historical Data - Previous Consultant
	9/16/2003	ND U	2.2	Historical Data - Previous Consultant
	6/23/2004	0.5	1.38	Historical Data - Previous Consultant
	9/8/2004	ND U	0.6	Historical Data - Previous Consultant
	10/26/2005	ND U	0.7	Historical Data - Previous Consultant
	10/26/2005	0.5	0.7	Historical Data - Previous Consultant
	9/20/2006	ND U	0.7	Historical Data - Previous Consultant
	12/5/2007	ND U	0.88	Historical Data - Previous Consultant
	12/5/2007	0.5	0.7	Historical Data - Previous Consultant
	10/24/2008	0.5	0.88	Historical Data - Previous Consultant
	11/30/2009	ND U	0.81	Historical Data - Previous Consultant
	11/30/2009	0.5	0.81	Historical Data - Previous Consultant
	9/14/2010	ND U	0.61	Historical Data - Previous Consultant
	9/13/2011	ND U	0.85	Historical Data - Previous Consultant
	9/13/2011	0.5	0.5	Historical Data - Previous Consultant
	10/2/2012	ND U	0.9	Historical Data - Previous Consultant
	10/2/2012	0.9	0.85	Historical Data - Previous Consultant
	9/9/2014	ND U	0.59	Historical Data - Previous Consultant
	9/9/2014	0.5	0.59	Historical Data - Previous Consultant
	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
	10/5/2017	0.5	0.71	Historical Data - Previous Consultant
Muni-Well-39	12/19/2005	0.5 U	0.5 U	Historical Data - Previous Consultant
	11/15/2007	0.5 U	0.5 U	Historical Data - Previous Consultant
	6/1/2011	0.5 U	0.5 U	Historical Data - Previous Consultant
	12/6/2016	0.5 U	0.5 U	Historical Data - Previous Consultant
Muni-Well-44	12/5/2007	0.5	0.5	Historical Data - Previous Consultant
	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
	10/17/2016	0.5	0.5	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
MW-37	4/4/2018	0.372 U	2.65	2018 Spring Groundwater
	6/27/2019	0.39 J	2.6	2019 June Offsite Residential
	6/9/2020	0.2 U	2	2020 Spring On-Site Sampling
MW-38	8/10/2017	0.381 J	2.94	Historical Data - Previous Consultant
	4/5/2018	0.598 J	4.19	2018 Spring Groundwater
	6/26/2019	0.23 J	1.5	2019 June Offsite Residential
	6/9/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
PA-1	4/25/1994	1.5	19.9	Historical Data - Previous Consultant
	8/8/1994	1.1	14.2	Historical Data - Previous Consultant
	11/12/1997	0.5	6.3	Historical Data - Previous Consultant
	6/26/2000	ND U	6.8	Historical Data - Previous Consultant
	2/27/2001	ND U	7.4	Historical Data - Previous Consultant
	1/31/2002	ND U	4.7	Historical Data - Previous Consultant
	8/10/2017	0.372 U	2.12	Historical Data - Previous Consultant
	4/6/2018	0.409 J	2.94	2018 Spring Groundwater
	6/27/2019	0.2 U	1.6	2019 June Offsite Residential
	6/9/2020	0.2 U	1.6	2020 Spring On-Site Sampling
	6/9/2020	0.2 U	1.6	2020 Spring On-Site Sampling
PA-2	11/12/1997	ND U	0.7	Historical Data - Previous Consultant
	4/9/2018	0.372 U	0.398 U	2018 Spring Groundwater
	6/27/2019	0.2 U	0.16 U	2019 June Offsite Residential
PA-3	4/25/1994	0.9	11.6	Historical Data - Previous Consultant
	8/8/1994	0.8	10.5	Historical Data - Previous Consultant
	11/12/1997	0.7	9.9	Historical Data - Previous Consultant
	3/20/2000	ND U	3.8	Historical Data - Previous Consultant
	6/26/2000	ND U	3.8	Historical Data - Previous Consultant
	9/26/2000	ND U	4.1	Historical Data - Previous Consultant
	2/27/2001	ND U	8.3	Historical Data - Previous Consultant
	1/31/2002	ND U	4.2	Historical Data - Previous Consultant
	8/10/2017	0.372 U	1.66	Historical Data - Previous Consultant
	4/9/2018	0.409 J	3.04	2018 Spring Groundwater
	6/27/2019	0.24 J	1.7	2019 June Offsite Residential
	6/9/2020	0.2 U	2	2020 Spring On-Site Sampling
PA-4	4/25/1994	2.1	26.5	Historical Data - Previous Consultant
	8/8/1994	1.8	22.5	Historical Data - Previous Consultant
	11/12/1997	1.2	15.5	Historical Data - Previous Consultant
	6/26/2000	ND U	9.1	Historical Data - Previous Consultant
	2/27/2001	0.6	5.7	Historical Data - Previous Consultant
	1/31/2002	0.6	6.1	Historical Data - Previous Consultant
	9/16/2003	0.6	5.4	Historical Data - Previous Consultant
	8/10/2017	0.372 U	2.18	Historical Data - Previous Consultant
	4/9/2018	0.675 J	3.88	2018 Spring Groundwater
	4/9/2018	0.604 J	3.81	2018 Spring Groundwater
	4/9/2018	0.453 J	3.94	2018 Spring Groundwater
	6/27/2019	0.25 J	2.3	2019 June Offsite Residential
	6/27/2019	0.29 J	2.3	2019 June Offsite Residential
	6/27/2019	0.35 J	2.4	2019 June Offsite Residential
	6/10/2020	0.2 U	2.5	2020 Spring On-Site Sampling
	6/10/2020	0.63 J	2.8	2020 Spring On-Site Sampling
	6/11/2020	0.58 J	2.5	2020 Spring On-Site Sampling

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
PA-5	4/25/1994	2.1	8.2	Historical Data - Previous Consultant
	8/8/1994	ND U	4.8	Historical Data - Previous Consultant
	11/12/1997	0.4	4.8	Historical Data - Previous Consultant
	3/21/2000	ND U	0.5	Historical Data - Previous Consultant
	2/27/2001	ND U	1.8	Historical Data - Previous Consultant
	1/31/2002	ND U	1.9	Historical Data - Previous Consultant
	4/5/2018	0.372 U	1.76	2018 Spring Groundwater
	4/5/2018	0.372 U	1.96	2018 Spring Groundwater
	6/26/2019	0.2 UJ	1.1 J	2019 June Offsite Residential
	6/11/2020	0.2 U	0.86 J	2020 Spring On-Site Sampling
PA-6	4/25/1994	0.6	7.6	Historical Data - Previous Consultant
	8/8/1994	ND U	3.6	Historical Data - Previous Consultant
	11/17/1997	0.2	3.1	Historical Data - Previous Consultant
	3/20/2000	ND U	1.3	Historical Data - Previous Consultant
	6/26/2000	ND U	1.5	Historical Data - Previous Consultant
	9/26/2000	ND U	1	Historical Data - Previous Consultant
	2/27/2001	ND U	1.5	Historical Data - Previous Consultant
	1/31/2002	ND U	1.6	Historical Data - Previous Consultant
	4/5/2018	0.372 U	0.87 J	2018 Spring Groundwater
	4/5/2018	0.372 U	1.36	2018 Spring Groundwater
PA-7	4/25/1994	0.8	7.9	Historical Data - Previous Consultant
	8/8/1994	0.6	7.3	Historical Data - Previous Consultant
	11/12/1997	0.3	3.6	Historical Data - Previous Consultant
	3/20/2000	ND U	2.1	Historical Data - Previous Consultant
	6/26/2000	ND U	2.9	Historical Data - Previous Consultant
	9/26/2000	ND U	2	Historical Data - Previous Consultant
	2/27/2001	ND U	1.9	Historical Data - Previous Consultant
	1/31/2002	ND U	2.5	Historical Data - Previous Consultant
	4/4/2018	0.372 U	0.398 U	2018 Spring Groundwater
PA-8	4/25/1994	0.9	8.7	Historical Data - Previous Consultant
	8/8/1994	ND U	6.5	Historical Data - Previous Consultant
	11/12/1997	0.3	3.4	Historical Data - Previous Consultant
	3/20/2000	ND U	1.2	Historical Data - Previous Consultant
	6/26/2000	ND U	2.3	Historical Data - Previous Consultant
	2/27/2001	ND U	2.3	Historical Data - Previous Consultant
	1/31/2002	ND U	1.9	Historical Data - Previous Consultant
	4/4/2018	0.372 U	0.879 J	2018 Spring Groundwater
	4/4/2018	0.372 U	0.674 J	2018 Spring Groundwater
	4/4/2018	0.372 U	0.869 J	2018 Spring Groundwater
	6/28/2019	0.2 U	0.45 J	2019 June Offsite Residential
	6/10/2020	0.2 U	0.26 J	2020 Spring On-Site Sampling
	6/10/2020	0.2 U	0.37 J	2020 Spring On-Site Sampling
	6/10/2020	0.2 U	0.32 J	2020 Spring On-Site Sampling

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
PA-9	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/10/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
	6/10/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
PA-10	11/12/1997	ND U	0.4	Historical Data - Previous Consultant
	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/10/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
RW-2076F	8/26/1992	15	210	Historical Data - Previous Consultant
	9/28/1992	12	150	Historical Data - Previous Consultant
	10/22/1992	15	ND U	Historical Data - Previous Consultant
	12/1/1992	6.4	90	Historical Data - Previous Consultant
	12/3/1992	6.4	90	Historical Data - Previous Consultant
	1/20/1993	15	130	Historical Data - Previous Consultant
	2/25/1993	190	ND U	Historical Data - Previous Consultant
	3/30/1993	190	260	Historical Data - Previous Consultant
	5/5/1993	290	290	Historical Data - Previous Consultant
	6/16/1993	0.88	6.9	Historical Data - Previous Consultant
	6/17/1993	0.66	6.9	Historical Data - Previous Consultant
	9/23/1993	0.24	2.31	Historical Data - Previous Consultant
	12/15/1993	ND U	1.3	Historical Data - Previous Consultant
	3/24/1994	24	230	Historical Data - Previous Consultant
	6/20/1994	14	160	Historical Data - Previous Consultant
	12/14/1994	12	160	Historical Data - Previous Consultant
	7/18/1995	13	160	Historical Data - Previous Consultant
	12/20/1996	ND U	0.67	Historical Data - Previous Consultant
	6/1/1998	13	ND U	Historical Data - Previous Consultant
	11/9/1998	ND U	7	Historical Data - Previous Consultant
	6/2/1999	ND U	8	Historical Data - Previous Consultant
	7/6/1999	ND U	6	Historical Data - Previous Consultant
	1/7/2000	8	59	Historical Data - Previous Consultant
	4/12/2000	10	77	Historical Data - Previous Consultant
	7/11/2000	10	68	Historical Data - Previous Consultant
	10/4/2000	9	68	Historical Data - Previous Consultant
	1/8/2001	11	63	Historical Data - Previous Consultant
	4/9/2001	12	70	Historical Data - Previous Consultant
	7/10/2001	9	49	Historical Data - Previous Consultant
	10/1/2001	6	34	Historical Data - Previous Consultant
	1/8/2002	9	54 J	Historical Data - Previous Consultant
	4/2/2002	14	80	Historical Data - Previous Consultant
	7/9/2002	8	48	Historical Data - Previous Consultant
	10/7/2002	6	32 J	Historical Data - Previous Consultant
	1/13/2003	7	37	Historical Data - Previous Consultant
	4/3/2003	9	46	Historical Data - Previous Consultant
	7/7/2003	7	37	Historical Data - Previous Consultant
	9/29/2003	6	31	Historical Data - Previous Consultant
	1/15/2004	7	37	Historical Data - Previous Consultant
	4/5/2004	11	60	Historical Data - Previous Consultant
	6/30/2004	8	45	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-2076F	10/4/2004	6	32	Historical Data - Previous Consultant
	1/5/2005	7	38	Historical Data - Previous Consultant
	8/2/2017	0.372 U	0.588 J	Historical Data - Previous Consultant
	5/22/2018	0.372 U	1.89	2018 Spring Groundwater
RW-2140H	9/28/1992	4.2	55	Historical Data - Previous Consultant
	3/23/1994	7.9	78	Historical Data - Previous Consultant
	3/24/1994	7.9	78	Historical Data - Previous Consultant
	6/3/1999	4	47	Historical Data - Previous Consultant
	7/7/1999	7	71	Historical Data - Previous Consultant
	10/15/1999	5	46	Historical Data - Previous Consultant
	4/13/2000	5	50	Historical Data - Previous Consultant
	7/11/2000	6	6	Historical Data - Previous Consultant
	7/11/2001	ND U	5	Historical Data - Previous Consultant
	8/11/2017	5.68	33.9	Historical Data - Previous Consultant
	10/19/2018	4.9	34	2018 Fall Groundwater
	6/28/2019	4.6	30	2019 June Offsite Residential
	6/26/2020	6.1	34	2020 Spring Off-Site Sampling
RW-2151H	9/28/1992	8.4	110	Historical Data - Previous Consultant
	3/23/1994	23	250	Historical Data - Previous Consultant
	3/24/1994	23	250	Historical Data - Previous Consultant
	3/20/1997	7.7	86.7	Historical Data - Previous Consultant
	11/13/1998	12	137	Historical Data - Previous Consultant
	6/3/1999	2	23	Historical Data - Previous Consultant
	7/12/2000	4	40	Historical Data - Previous Consultant
	11/16/2017	4.66	34.4	Historical Data - Previous Consultant
	6/21/2019	1.8	12	2019 June Offsite Residential
	6/21/2019	1.9	12	2019 June Offsite Residential
	6/23/2020	0.2 U	5.8	2020 Spring Off-Site Sampling
RW-2172F	12/15/1993	0.34	ND U	Historical Data - Previous Consultant
	8/2/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/22/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-2172H	9/28/1992	12	140	Historical Data - Previous Consultant
	3/24/1994	15	140	Historical Data - Previous Consultant
	3/19/1997	21.5	207.1	Historical Data - Previous Consultant
	6/4/1999	7	72	Historical Data - Previous Consultant
	8/8/2017	6.69	37.7	Historical Data - Previous Consultant
	6/24/2019	7	42	2019 June Offsite Residential
	6/25/2020	4.9	28	2020 Spring Off-Site Sampling
RW-2203H	9/28/1992	18	140	Historical Data - Previous Consultant
	3/23/1994	28	250	Historical Data - Previous Consultant
	3/24/1994	28	250	Historical Data - Previous Consultant
	6/4/1999	4	49	Historical Data - Previous Consultant
	7/13/1999	7	72	Historical Data - Previous Consultant
	10/14/1999	7	68	Historical Data - Previous Consultant
	8/9/2017	2.5	27.5	Historical Data - Previous Consultant
	6/22/2019	4.6	31	2019 June Offsite Residential
	6/22/2019	4.7	31	2019 June Offsite Residential
	6/25/2020	5.2	33	2020 Spring Off-Site Sampling

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-2213F	8/2/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	5/22/2018	0.372 U	0.398 U	2018 Spring Groundwater
	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/25/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-2237H	9/28/1992	6.2	33	Historical Data - Previous Consultant
	3/24/1994	1.5	14	Historical Data - Previous Consultant
	6/24/1994	1.5	14	Historical Data - Previous Consultant
	8/3/2017	7.84	44.3	Historical Data - Previous Consultant
	6/23/2020	1.9	9.8	2020 Spring Off-Site Sampling
RW-2334F	6/24/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-2335F	6/23/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-2613M	6/25/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-2879M	8/11/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-3259B	8/16/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/21/2019	0.2 UJ	0.16 UJ	2019 June Offsite Residential
RW-5898B1	7/30/1993	ND U	4.5	Historical Data - Previous Consultant
	6/18/1996	ND U	5.03	Historical Data - Previous Consultant
	6/17/1997	ND U	5.65	Historical Data - Previous Consultant
	7/29/1998	ND U	5.87	Historical Data - Previous Consultant
	8/23/1999	0.54	6.69	Historical Data - Previous Consultant
	6/18/2000	ND U	4.04	Historical Data - Previous Consultant
	8/24/2001	ND U	2.98	Historical Data - Previous Consultant
	8/31/2004	ND U	2.04	Historical Data - Previous Consultant
	9/3/2008	ND U	2.04	Historical Data - Previous Consultant
	6/20/2019	0.2 U	0.88 J	2019 June Offsite Residential
	6/22/2020	0.2 U	0.78 J	2020 Spring Off-Site Sampling
RW-6998P	1/6/2011	0.15 U	0.14 U	Historical Data - Previous Consultant
	4/20/2011	0.26 U	0.2 U	Historical Data - Previous Consultant
	7/13/2011	0.26 U	0.2 U	Historical Data - Previous Consultant
	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7070B	6/18/2019	0.9 J	2.9	2019 June Offsite Residential
	6/22/2020	0.59 J	3.4	2020 Spring Off-Site Sampling
RW-7077P	8/2/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/23/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7091R	6/24/2020	0.24 J	1.4	2020 Spring Off-Site Sampling
RW-7244P	8/8/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/21/2019	0.2 UJ	0.16 UJ	2019 June Offsite Residential
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7288P	7/14/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7310P	7/13/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/19/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7350P	8/3/2017	0.372 UJ	0.398 U	Historical Data - Previous Consultant
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7492P	7/12/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7498P	7/12/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-7505P	9/28/1992	ND U	0.6	Historical Data - Previous Consultant
	2/25/1993	ND U	0.2	Historical Data - Previous Consultant
	12/15/1993	0.37	2.5	Historical Data - Previous Consultant
	6/21/1994	ND U	0.28	Historical Data - Previous Consultant
	7/18/1995	ND U	0.38	Historical Data - Previous Consultant
	7/13/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/21/2019	0.2 U	0.29 J	2019 June Offsite Residential
	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7549P	9/28/1992	ND U	1.1	Historical Data - Previous Consultant
	2/25/1993	ND U	1.1	Historical Data - Previous Consultant
	3/30/1993	ND U	0.71	Historical Data - Previous Consultant
	5/5/1993	ND U	0.7	Historical Data - Previous Consultant
	6/16/1993	ND U	0.89	Historical Data - Previous Consultant
	6/17/1993	ND U	0.89	Historical Data - Previous Consultant
	9/23/1993	0.24	2.83	Historical Data - Previous Consultant
	3/22/1994	ND U	0.7	Historical Data - Previous Consultant
	6/20/1994	ND U	0.31	Historical Data - Previous Consultant
	12/14/1994	ND U	0.7	Historical Data - Previous Consultant
	1/8/2002	ND U	1	Historical Data - Previous Consultant
	7/14/2017	0.822 J	5.5	Historical Data - Previous Consultant
	5/23/2018	0.372 U	0.398 U	2018 Spring Groundwater
	6/18/2019	0.2 U	0.26 J	2019 June Offsite Residential
	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7586P	7/13/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7588P	7/14/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/19/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7677P	10/23/1992	ND U	32	Historical Data - Previous Consultant
	3/22/1994	3.1	32	Historical Data - Previous Consultant
	6/21/1994	1	11	Historical Data - Previous Consultant
	10/1/1995	ND U	32	Historical Data - Previous Consultant
	6/8/1999	ND U	10	Historical Data - Previous Consultant
	7/10/2000	ND U	6	Historical Data - Previous Consultant
	8/9/2017	5.45	33.8	Historical Data - Previous Consultant
	5/22/2018	0.614 J	2.95	2018 Spring Groundwater
	6/17/2019	1.2	6.3	2019 June Offsite Residential
	6/22/2020	1.2	5.9	2020 Spring Off-Site Sampling
	6/22/2020	1.2	5.8	2020 Spring Off-Site Sampling
RW-7688P	8/8/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7773P	8/15/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	10/7/2018	0.2 U	0.16 U	2018 Fall Groundwater
	6/19/2019	0.2 UJ	0.16 UJ	2019 June Offsite Residential
	6/22/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7776P	8/8/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-7953P	1/6/2000	ND U	3	Historical Data - Previous Consultant
	1/14/2001	ND U	2	Historical Data - Previous Consultant
	4/10/2001	ND U	1	Historical Data - Previous Consultant
	1/9/2002	ND U	3	Historical Data - Previous Consultant
	4/3/2002	ND U	2	Historical Data - Previous Consultant
	9/29/2003	ND U	1	Historical Data - Previous Consultant
	1/5/2005	ND U	2	Historical Data - Previous Consultant
	10/15/2007	ND U	1.9	Historical Data - Previous Consultant
	3/26/2009	0.5 U	1.1	Historical Data - Previous Consultant
RW-7953P	10/19/2009	ND U	0.53 J	Historical Data - Previous Consultant
	10/20/2009	0.5 U	0.53 J	Historical Data - Previous Consultant
	1/11/2010	0.5 U	0.5 U	Historical Data - Previous Consultant
	4/15/2010	0.5 U	0.5 U	Historical Data - Previous Consultant
	6/29/2010	0.15 U	0.14 U	Historical Data - Previous Consultant
	9/29/2010	0.38 J	0.97 J	Historical Data - Previous Consultant
	9/30/2010	0.38 J	0.97 J	Historical Data - Previous Consultant
	1/5/2011	0.15 U	0.57 J	Historical Data - Previous Consultant
	4/19/2011	ND U	1	Historical Data - Previous Consultant
	4/20/2011	0.26 U	1	Historical Data - Previous Consultant
	7/13/2011	0.26 U	1.3	Historical Data - Previous Consultant
	10/18/2011	0.42 J	1.7	Historical Data - Previous Consultant
	1/10/2012	0.91 J	6.4	Historical Data - Previous Consultant
	4/19/2012	0.67 J	4.2	Historical Data - Previous Consultant
	4/21/2012	0.67 J	4.2	Historical Data - Previous Consultant
	8/16/2017	0.764 J	5.61	Historical Data - Previous Consultant
RW-8000B	8/21/1991	1.33	15.5	Historical Data - Previous Consultant
	7/8/1995	1.57	17.7	Historical Data - Previous Consultant
	8/23/1999	1.38	15.3	Historical Data - Previous Consultant
	8/31/2004	0.67	3.66	Historical Data - Previous Consultant
	5/28/2015	0.54	3.7	Historical Data - Previous Consultant
	8/3/2017	0.786 J	4.65	Historical Data - Previous Consultant
	6/18/2019	1	3.5	2019 June Offsite Residential
	6/9/2020	0.2 U	4.8	2020 Spring On-Site Sampling
RW-8012P	6/13/1995	ND U	1.8	Historical Data - Previous Consultant
	6/17/1997	1.43	18.6	Historical Data - Previous Consultant
	8/24/2001	ND U	0.62	Historical Data - Previous Consultant
	6/30/2006	ND U	1.65	Historical Data - Previous Consultant
	5/27/2015	0.33	2.3	Historical Data - Previous Consultant
	8/3/2017	0.381 J	2.08	Historical Data - Previous Consultant
	6/18/2019	0.79 J	2.2	2019 June Offsite Residential
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8030P	8/20/1992	2.3	30	Historical Data - Previous Consultant
	6/13/1995	1.5	12.3	Historical Data - Previous Consultant
	6/18/1996	2.21	24.6	Historical Data - Previous Consultant
	6/8/1999	1	16	Historical Data - Previous Consultant
	6/19/2000	0.97	8.3	Historical Data - Previous Consultant
	7/10/2000	3	ND U	Historical Data - Previous Consultant
	7/11/2000	ND U	3	Historical Data - Previous Consultant
	1/4/2001	ND U	3	Historical Data - Previous Consultant
	1/14/2001	ND U	3	Historical Data - Previous Consultant
	4/11/2001	1	8	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-8030P	7/10/2001	ND U	7	Historical Data - Previous Consultant
	7/11/2001	ND U	7	Historical Data - Previous Consultant
	10/1/2001	ND U	4	Historical Data - Previous Consultant
	1/9/2002	1	8	Historical Data - Previous Consultant
	4/3/2002	1	7	Historical Data - Previous Consultant
	7/10/2002	ND U	5	Historical Data - Previous Consultant
	10/7/2002	ND U	5	Historical Data - Previous Consultant
	7/7/2003	ND U	5	Historical Data - Previous Consultant
	9/29/2003	1	7	Historical Data - Previous Consultant
	4/5/2004	1	7	Historical Data - Previous Consultant
	6/30/2004	ND U	6	Historical Data - Previous Consultant
	10/4/2004	ND U	7	Historical Data - Previous Consultant
	10/14/2004	ND U	7	Historical Data - Previous Consultant
	1/5/2005	ND U	5	Historical Data - Previous Consultant
	10/15/2007	1.4	10	Historical Data - Previous Consultant
	3/26/2009	1.9	11.4	Historical Data - Previous Consultant
	10/19/2009	1.5	8.8	Historical Data - Previous Consultant
	10/20/2009	1.5	8.8	Historical Data - Previous Consultant
	1/9/2010	1.3	7.8	Historical Data - Previous Consultant
	1/11/2010	1.3	7.8	Historical Data - Previous Consultant
	4/14/2010	1.3	8.1	Historical Data - Previous Consultant
	4/15/2010	1.3	8.1	Historical Data - Previous Consultant
	6/28/2010	1.6	10.8	Historical Data - Previous Consultant
	6/29/2010	1.6	10.8	Historical Data - Previous Consultant
	9/29/2010	2.1	12	Historical Data - Previous Consultant
	9/30/2010	2.1	12	Historical Data - Previous Consultant
	1/5/2011	2.1	12	Historical Data - Previous Consultant
	4/19/2011	1.7	10.8	Historical Data - Previous Consultant
	4/20/2011	1.7	10.8	Historical Data - Previous Consultant
	7/13/2011	1.4	8.9	Historical Data - Previous Consultant
	10/18/2011	1.8	10.2	Historical Data - Previous Consultant
	1/10/2012	2.1	15	Historical Data - Previous Consultant
	4/19/2012	2.1	14	Historical Data - Previous Consultant
	4/21/2012	2.1	14	Historical Data - Previous Consultant
	8/1/2017	2.67	16.4	Historical Data - Previous Consultant
	6/20/2019	0.94 J	6	2019 June Offsite Residential
	6/24/2020	1.3	7.1	2020 Spring Off-Site Sampling
RW-8035P	8/1/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	5/23/2018	0.372 U	0.398 U	2018 Spring Groundwater
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8048P	6/22/2020	0.71 J	4	2020 Spring Off-Site Sampling
RW-8105PN	8/11/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-8105PS	8/11/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/22/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8167P	6/23/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-8209P	8/2/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/25/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-8249P	8/16/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8284P	6/23/2019	0.89 J	3.4	2019 June Offsite Residential
	6/23/2020	0.93 J	3.9	2020 Spring Off-Site Sampling

Appendix D

Data Validation

Appendix D Data Validation

This appendix presents the data validation results for the sampling event/samples collected during the offsite residential well sampling event June 2020.

The analytical data for the samples listed **Table D-1** were validated according to requirements in the analytical methods; National Functional Guidelines (NFGs) for Superfund Organic Methods Data Review (United States Environmental Protection Agency [EPA] 2017) and NFGs for Inorganic Superfund Methods Data Review (EPA 2017), as applicable.

TestAmerica Denver (TA-Denver) performed the volatile organic compounds (VOCs) by SW-846 method 8260B.

The samples were analyzed according to the following method:

- *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods (SW-846). Third Edition, Final Update III*
    - 8260B - VOCs by Gas Chromatography/Mass Spectrometry (GC/MS)

Level 2 and 4 data packages were provided as well as electronic data deliverables (EDDs). All data generated by TestAmerica laboratories were validated manually to the Stage 2A level.

Cross references of laboratory sample delivery groups (SDGs), data validation reports, and sample identifications (IDs) are provided in **Tables D-1**. The complete laboratory data packages for each SDG are provided in **Appendix E.** All samples submitted were analyzed as requested. No data were rejected. All data generated is acceptable, with some qualification as noted in the discussion below.

Sampling Deviations

No sampling deviations occurred.

1.1 Offsite Residential Well Sampling June 2020

From June 22 to June 26, 2020, 32 primary samples, 2 field duplicates, 3 rinsate blanks, and 2 trip blanks were collected for analysis of VOCs. Data were qualified as estimated (J, J+, UJ) or not detected (U) based on results for laboratory control sample/laboratory control sample duplicate (LCS/LCSD) percent (%) recoveries criteria.

Results reported above the method detection limit (MDL) but below the reporting limit (RL) were qualified as estimated (J) by the laboratory.

1.1.1 Holding Times

Holding times for all analyses were met.

1.1.2 Blank Results

Trip, equipment and laboratory method blanks were analyzed. Trip blanks were included with the VOC sample shipments and equipment blanks were submitted for equipment that was used at multiple locations and decontaminated between locations.

When an analyte was detected in a blank below the RL and that analyte was detected in a sample at a concentration less than the RL the result was qualified as not detected at the RL (U). When the sample concentration was above the RL, but less than five times the RL, the analyte result was qualified as estimated with a potential high bias (J+). When associated sample detections were greater than 5 times the RL, the data were not qualified.

2-Butanone was detected the EB-00-20200625 equipment blank. 2-Butanone was not detected in any samples associated with this equipment blank and no data were qualified.

1.1.3 Laboratory Reporting Limits

The reporting levels (method detection limits [MDLs]) achieved by the laboratories either met the project goals or were appropriate for the concentrations and/or matrices of the samples.

1.1.4 Field Duplicate Results

Two field duplicates were collected for the offsite and residential well groundwater sampling, which meets the planned frequency. Relative percent differences (RPDs) were calculated when analytes were detected in both the primary sample and its duplicate. The project specific and groundwater RPD control limits for field duplicates is 30% when an analyte is reported in both the primary sample and its field duplicate at concentrations equal to or greater than five times the RL. When either the sample or duplicate concentration is less than five times the RL, the absolute difference between the two concentrations should be less than the RL. The results of the field duplicate RPDs are included in **Table D-2** of this Appendix. All RPDs or absolute differences for the three field duplicates met the control limits.

1.1.5 Laboratory Control Sample Results

All LCS/LCSD % recoveries and RPDs for the groundwater samples met the quality control (QC) limits with the following exceptions:

- Percent recovery of iodomethane in the LCS associated with VOC analyses of samples in SDG 280-138090-1 was below the control limits. The compounds were not detected in the samples and all sample iodomethane results were qualified estimated (UJ).
- Percent recoveries of dichlorodifluoromethane in an LCS associated with VOC analyses of samples in SDGs 280-138090-1 and 280-13898-1 was above the control limits. Dichlorodifluoromethane was not detected in the associated samples and no data were qualified for the high recovery.

1.1.6 Matrix Spike Results

All MS/MSD % recoveries and RPDs met the QC limits except for the following samples/analytes:

- Sample RW-7677P-20200622: percent recoveries of bromomethane and iodomethane were below the control limits. The bromomethane and iodomethane results for the parent sample were not detected and were qualified estimated (UJ).

1.1.7 Surrogate Recovery Results

All surrogate recoveries for the VOC analyses met the control limits for all groundwater analyses.

1.1.8 Completeness

Completeness was evaluated by comparing the number of completed analyses yielding valid data to requested analyses with a criterion of 90%. All analyses requested were successfully performed, yielding a completeness value of 100%.

1.1.9 Assessment of Data Usability

All the groundwater data are suitable for their intended use. No data were rejected. Some of the results should be used with caution as noted by the "J/ U" qualifiers applied during the data validation process.

2.1 References

United States Environmental Protection Agency, Office of Solid Waste and Emergency Response. 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. January 13.

United States Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. 2017. *National Functional Guidelines for Superfund Inorganics Methods Data Review*. January.

United States Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. 2017. *National Functional Guidelines for Superfund Organics Methods Data Review*. January.

TABLE D-1

TABLE D-2

Attachment A

Data Validation Reports

Table D-1
Sample ID, Laboratory SDG, and Data Validation Report References

Analytical Method	SW8260B
Sample ID	**LAB SDG**
MUNI-WELL-14-20200624	280-138098-1
MUNI-WELL-33-20200624	280-138098-1
MW-116S-20200626	280-138098-1
RW-2140H-20200626	280-138098-1
RW-2151H-20200623	280-138090-1
RW-2172F-20200622	280-138090-1
RW-2172H-20200625	280-138098-1
RW-2203H-20200625	280-138098-1
RW-2213F-20200625	280-138098-1
RW-2237H-20200623	280-138090-1
RW-2613M-20200625	280-138098-1
RW-2879M-20200624	280-138090-1
RW-5898B1-20200622	280-138090-1
RW-7070B-20200622	280-138090-1
RW-7091R-20200624	280-138098-1
RW-7244P-20200623	280-138090-1
RW-7350P-20200623	280-138090-1
RW-7505P-20200624	280-138098-1
RW-7549P-20200624	280-138098-1
RW-7586P-20200624	280-138090-1
RW-7588P-20200624	280-138098-1
RW-7677P-20200622	280-138090-1
RW-7677PQ-20200622	280-138090-1
RW-7688P-20200623	280-138090-1
RW-7688PQ-20200623	280-138090-1
RW-7773P-20200622	280-138090-1
RW-8012P-20200623	280-138090-1
RW-8030P-20200624	280-138090-1
RW-8035P-20200623	280-138090-1
RW-8048P-20200622	280-138090-1
RW-8105PS-20200622	280-138090-1
RW-8209P-20200625	280-138098-1
RW-8249P-20200623	280-138090-1
RW-8284P-20200623	280-138090-1
EB-00-20200625	280-138098-1
EB-01-20200625	280-138098-1
EB-02-20200626	280-138098-1
TB_062520 10:30	280-138090-1
TB_062620 10:00	280-138098-1

Notes:
ID = identification
SDG = sample delivery group

Table D-2
Groundwater Field Duplicates Comparisons

		Well1D	RW-7677P		RW-7677P					RW-7688P		RW-7688P				
		Sample Type	N		FD				RPD or Absolute	N		FD				RPD or Absolute
		Sample Date	6/22/2020		6/22/2020					6/23/2020		6/23/2020				
Method	Analyte	Unit	Result	Q	Result	Q	RDL	5x RDL	Difference	Result	Q	Result	Q	RDL	5x RDL	Difference
SW8260B	1,1,1,2-Tetrachloroethane	ug/l	0.21	U	0.21	U	1	5	NC	0.21	U	0.21	U	1	5	NC
	1,1,1-Trichloroethane	ug/l	0.16	U	0.16	U	1	5	NC	0.16	U	0.16	U	1	5	NC
	1,1,2,2-Tetrachloroethane	ug/l	0.21	U	0.21	U	1	5	NC	0.21	U	0.21	U	1	5	NC
	1,1,2-Trichloroethane	ug/l	0.27	U	0.27	U	1	5	NC	0.27	U	0.27	U	1	5	NC
	1,1-Dichloroethane	ug/l	0.22	U	0.22	U	1	5	NC	0.22	U	0.22	U	1	5	NC
	1,1-Dichloroethene	ug/l	0.23	U	0.23	U	1	5	NC	0.23	U	0.23	U	1	5	NC
	1,1-Dichloropropene	ug/l	0.19	U	0.19	U	1	5	NC	0.19	U	0.19	U	1	5	NC
	1,2,3-Trichloropropane	ug/l	0.33	U	0.33	U	2.5	13	NC	0.33	U	0.33	U	2.5	13	NC
	1,2,4-Trichlorobenzene	ug/l	0.21	U	0.21	U	1	5	NC	0.21	U	0.21	U	1	5	NC
	1,2-Dibromo-3-Chloropropane	ug/l	0.47	U	0.47	U	5	25	NC	0.47	U	0.47	U	5	25	NC
	1,2-Dibromoethane (Ethylene Dibromide)	ug/l	0.18	U	0.18	U	1	5	NC	0.18	U	0.18	U	1	5	NC
	1,2-Dichlorobenzene	ug/l	0.15	U	0.15	U	1	5	NC	0.15	U	0.15	U	1	5	NC
	1,2-Dichloroethane	ug/l	0.13	U	0.13	U	1	5	NC	0.13	U	0.13	U	1	5	NC
	1,2-Dichloropropane	ug/l	0.18	U	0.18	U	1	5	NC	0.18	U	0.18	U	1	5	NC
	1,3-Dichlorobenzene	ug/l	0.13	U	0.13	U	1	5	NC	0.13	U	0.13	U	1	5	NC
	1,3-Dichloropropane	ug/l	0.09	U	0.09	U	1	5	NC	0.09	U	0.09	U	1	5	NC
	1,4-Dichlorobenzene	ug/l	0.16	U	0.16	U	1	5	NC	0.16	U	0.16	U	1	5	NC
	2,2-Dichloropropane	ug/l	0.38	U	0.38	U	1	5	NC	0.38	U	0.38	U	1	5	NC
	2-Chloro-1,3-Butadiene	ug/l	0.21	U	0.21	U	1	5	NC	0.21	U	0.21	U	1	5	NC
	2-Hexanone	ug/l	1.7	U	1.7	U	5	25	NC	1.7	U	1.7	U	5	25	NC
	Acetone	ug/l	1.9	U	1.9	U	10	50	NC	1.9	U	1.9	U	10	50	NC
	Acetonitrile; methyl cyanide	ug/l	9.6	U	9.6	U	30	150	NC	9.6	U	9.6	U	30	150	NC
	Acrolein	ug/l	2.8	U	2.8	U	20	100	NC	2.8	U	2.8	U	20	100	NC
	Acrylonitrile	ug/l	1.4	U	1.4	U	20	100	NC	1.4	U	1.4	U	20	100	NC
	Allyl chloride	ug/l	0.17	U	0.17	U	2	10	NC	0.17	U	0.17	U	2	10	NC
	Benzene	ug/l	0.16	U	0.16	U	1	5	NC	0.16	U	0.16	U	1	5	NC
	Bromochloromethane	ug/l	0.1	U	0.1	U	1	5	NC	0.1	U	0.1	U	1	5	NC
	Bromodichloromethane	ug/l	0.17	U	0.17	U	1	5	NC	0.17	U	0.17	U	1	5	NC
	Bromoform	ug/l	0.46	U	0.46	U	1	5	NC	0.46	U	0.46	U	1	5	NC
	Bromomethane	ug/l	0.21	UJ	0.21	U	2	10	NC	0.21	U	0.21	U	2	10	NC
	Carbon disulfide	ug/l	0.17	U	0.17	U	2	10	NC	0.17	U	0.17	U	2	10	NC
	Carbon tetrachloride	ug/l	0.19	U	0.19	U	1	5	NC	0.19	U	0.19	U	1	5	NC
	Chlorobenzene	ug/l	0.17	U	0.17	U	1	5	NC	0.17	U	0.17	U	1	5	NC
	Chloroethane	ug/l	0.41	U	0.41	U	2	10	NC	0.41	U	0.41	U	2	10	NC

Chloroform	ug/l	0.16	U	0.16	U	1	5	NC	0.16	U	0.16	U	1	5	NC
Chloromethane	ug/l	0.3	U	0.3	U	2	10	NC	0.3	U	0.3	U	2	10	NC
cis-1,2-Dichloroethene	ug/l	0.27	J	0.31	J	1	5	0.04	0.15	U	0.15	U	1	5	NC
cis-1,3-Dichloropropene	ug/l	0.16	U	0.16	U	1	5	NC	0.16	U	0.16	U	1	5	NC
Dibromocmethane	ug/l	0.17	U	0.17	U	1	5	NC	0.17	U	0.17	U	1	5	NC
Dibromomethane	ug/l	0.17	U	0.17	U	1	5	NC	0.17	U	0.17	U	1	5	NC
Dichlorodifluoromethane	ug/l	0.31	U	0.31	U	2	10	NC	0.31	U	0.31	U	2	10	NC
Ethyl methacrylate	ug/l	0.86	U	0.86	U	3	15	NC	0.86	U	0.86	U	3	15	NC
Ethylbenzene	ug/l	0.16	U	0.16	U	1	5	NC	0.16	U	0.16	U	1	5	NC
Iodomethane	ug/l	0.23	UJ	0.23	UJ	1	5	NC	0.23	U	0.23	U	1	5	NC
Isobutanol; Isobutyl alcohol	ug/l	37	U	37	U	110	550	NC	37	U	37	U	110	550	NC
m,p-Xylene	ug/l	0.15	U	0.15	U	2	10	NC	0.15	U	0.15	U	2	10	NC
Methyl Ethyl Ketone(2-Butanone)	ug/l	2	U	2	U	6	30	NC	2	U	2	U	6	30	NC
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone	ug/l	0.98	U	0.98	U	5	25	NC	0.98	U	0.98	U	5	25	NC
Methyl Methacrylate	ug/l	1.1	U	1.1	U	4	20	NC	1.1	U	1.1	U	4	20	NC
Methylacrylonitrile	ug/l	1.6	U	1.6	U	10	50	NC	1.6	U	1.6	U	10	50	NC
Methylene Chloride	ug/l	0.94	U	0.94	U	2	10	NC	0.94	U	0.94	U	2	10	NC
O-Xylene (1,2-Dimethylbenzene)	ug/l	0.19	U	0.19	U	1	5	NC	0.19	U	0.19	U	1	5	NC
Propane Nitile (Propionitrile)	ug/l	3.7	U	3.7	U	20	100	NC	3.7	U	3.7	U	20	100	NC
Styrene	ug/l	0.36	U	0.36	U	1	5	NC	0.36	U	0.36	U	1	5	NC
Tetrachloroethene	ug/l	1.2		1.2		1	5	0	0.2	U	0.2	U	1	5	NC
Toluene	ug/l	0.17	U	0.17	U	1	5	NC	0.17	U	0.17	U	1	5	NC
trans-1,2-Dichloroethene	ug/l	0.15	U	0.15	U	1	5	NC	0.15	U	0.15	U	1	5	NC
trans-1,3-Dichloropropene	ug/l	0.19	U	0.19	U	3	15	NC	0.19	U	0.19	U	3	15	NC
trans-1,4-Dichloro-2-butene	ug/l	0.8	U	0.8	U	3	15	NC	0.8	U	0.8	U	3	15	NC
Trichloroethene	ug/l	5.9		5.8		1	5	2	0.16	U	0.16	U	1	5	NC
Trichlorofluoromethane	ug/l	0.29	U	0.29	U	2	10	NC	0.29	U	0.29	U	2	10	NC
Vinyl acetate	ug/l	0.94	U	0.94	U	3	15	NC	0.94	U	0.94	U	3	15	NC
Vinyl chloride	ug/l	0.1	U	0.1	U	1	5	NC	0.1	U	0.1	U	1	5	NC
Xylenes	ug/l	0.19	U	0.19	U	2	10	NC	0.19	U	0.19	U	2	10	NC

Notes:

FD = field duplicate

N = normal field sample

NC = not calculated

Appendix E

Data Packages

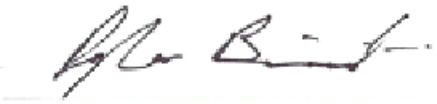
ANALYTICAL REPORT

Job Number: 280-138090-1

Job Description: Bannock Ft. Hall Mine LF, Idaho

For:
CDM Smith, Inc.
14432 S.E. Eastgate Way
Suite 100
Bellevue, WA 98007-6493

Attention: Mary Lou Fox



Approved for release.
Dylan T Bieniulis
Project Manager I
7/8/2020 8:57 AM

Dylan T Bieniulis, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
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07/08/2020

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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.

Eurofins TestAmerica, Denver
4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

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Definitions/Glossary

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: CDM Smith, Inc.

Project: Bannock Ft. Hall Mine LF, Idaho

Report Number: 280-138090-1

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.

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.

RECEIPT

The samples were received on 06/26/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.5 C.

The chain of custody lists sample ID "Muni-Well-33-20200624"; however, the laboratory did not receive any sample volume labeled with this sample ID. The sample was not logged. The client was notified on 6/29/2020.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples RW-8105PS-20200622 (280-138090-1), RW-5898B1-20200622 (280-138090-2), RW-8048P-20200622 (280-138090-3), RW-7244P-20200623 (280-138090-4), RW-7350P-20200623 (280-138090-5), RW-8035P-20200623 (280-138090-6), RW-2237H-20200623 (280-138090-7), RW-8012P-20200623 (280-138090-8), RW-2879M-20200624 (280-138090-9), RW-7586P-20200624 (280-138090-10), RW-8030P-20200624 (280-138090-11), RW-2172F-20200622 (280-138090-12), RW-7773P-20200622 (280-138090-13), RW-7677P-20200622 (280-138090-14), RW-7677PQ-20200622 (280-138090-15), RW-7070B-20200622 (280-138090-16), RW-8249P-20200623 (280-138090-17), RW-2151H-20200623 (280-138090-18), RW-7688P-20200623 (280-138090-19), RW-7688PQ-20200623 (280-138090-20), RW-8284P-20200623 (280-138090-21) and TB-01-20200625 (280-138090-22) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/30/2020, 07/02/2020 and 07/06/2020.

1,2-Dichloroethane and Trichloroethene were detected in method blank MB 280-500580/9 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Iodomethane failed the recovery criteria low for LCS 280-500579/4. This is not indicative of a systematic control problem as it falls within criteria and control limits of a random marginal exceedance. Qualified results have been reported. Refer to the QC report for details.

Dichlorodifluoromethane failed the recovery criteria high for LCS 280-500875/4. Dichlorodifluoromethane failed the recovery criteria high for LCSD 280-500875/5. The analyte was biased high in the LCS and LCSD and was not detected in the associated samples; therefore, the data have been reported. Refer to the QC report for details.

Bromomethane and Iodomethane failed the recovery criteria low for the MS of sample RW-7677P-20200622 (280-138090-14) in batch 280-500579. Iodomethane failed the recovery criteria low for the MSD of sample RW-7677P-20200622 (280-138090-14) in batch 280-500579. Iodomethane exceeded the RPD limit. Refer to the QC report for details.

The continuing calibration verification (CCV) associated with batch 280-500580 recovered above the upper control limit for iodomethane (35%D) at 54%D. The samples associated with this CCV were non-detects for the analyte; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 280-501117 recovered above the upper control limit for Iodomethane (35%D) at 36%D. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-138090-1

Client Sample ID: RW-8105PS-20200622 — Lab Sample ID: 280-138090-1

No Detections.

Client Sample ID: RW-5898B1-20200622 — Lab Sample ID: 280-138090-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.78	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8048P-20200622 — Lab Sample ID: 280-138090-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.16	J	1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.71	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	4.0		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7244P-20200623 — Lab Sample ID: 280-138090-4

No Detections.

Client Sample ID: RW-7350P-20200623 — Lab Sample ID: 280-138090-5

No Detections.

Client Sample ID: RW-8035P-20200623 — Lab Sample ID: 280-138090-6

No Detections.

Client Sample ID: RW-2237H-20200623 — Lab Sample ID: 280-138090-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.9		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	9.8	B	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8012P-20200623 — Lab Sample ID: 280-138090-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.9	B	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2879M-20200624 — Lab Sample ID: 280-138090-9

No Detections.

Client Sample ID: RW-7586P-20200624 — Lab Sample ID: 280-138090-10

No Detections.

Client Sample ID: RW-8030P-20200624 — Lab Sample ID: 280-138090-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.36	J	1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.3		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	7.1		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2172F-20200622 — Lab Sample ID: 280-138090-12

No Detections.

Client Sample ID: RW-7773P-20200622 — Lab Sample ID: 280-138090-13

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Client Sample ID: RW-7677P-20200622 Lab Sample ID: 280-138090-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.27	J	1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.2		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	5.9		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7677PQ-20200622 Lab Sample ID: 280-138090-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.31	J	1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.2		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	5.8		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7070B-20200622 Lab Sample ID: 280-138090-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.19	J	1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.59	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	3.4		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8249P-20200623 Lab Sample ID: 280-138090-17

No Detections.

Client Sample ID: RW-2151H-20200623 Lab Sample ID: 280-138090-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.38	J	1.0	0.15	ug/L	1		8260B	Total/NA
Trichloroethene	5.8	B	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7688P-20200623 Lab Sample ID: 280-138090-19

No Detections.

Client Sample ID: RW-7688PQ-20200623 Lab Sample ID: 280-138090-20

No Detections.

Client Sample ID: RW-8284P-20200623 Lab Sample ID: 280-138090-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.93	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	3.9	B	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TB-01-20200625 Lab Sample ID: 280-138090-22

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-8105PS-20200622 Lab Sample ID: 280-138090-1

Date Collected: 06/22/20 12:20 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 03:23	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 03:23	1
Acrolein	ND		20	2.8	ug/L			06/30/20 03:23	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 03:23	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 03:23	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 03:23	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 03:23	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 03:23	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 03:23	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 03:23	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 03:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 03:23	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 03:23	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 03:23	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 03:23	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 03:23	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 03:23	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 03:23	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 03:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 03:23	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 03:23	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 03:23	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 03:23	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 03:23	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 03:23	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 03:23	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 03:23	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 03:23	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 03:23	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 03:23	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 03:23	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 03:23	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 03:23	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 03:23	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 03:23	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 03:23	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 03:23	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 03:23	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 03:23	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 03:23	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 03:23	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 03:23	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 03:23	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 03:23	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 03:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 03:23	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 03:23	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 03:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 03:23	1

Client Sample ID: RW-8105PS-20200622 Lab Sample ID: 280-138090-1

Date Collected: 06/22/20 12:20 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 03:23	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 03:23	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 03:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 03:23	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 03:23	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 03:23	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 03:23	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 03:23	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 03:23	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 03:23	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 03:23	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 03:23	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 03:23	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 03:23	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*06/30/20 03:23*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 03:23*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*06/30/20 03:23*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*06/30/20 03:23*	*1*

Client Sample ID: RW-5898B1-20200622 Lab Sample ID: 280-138090-2

Date Collected: 06/22/20 15:15 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 03:44	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 03:44	1
Acrolein	ND		20	2.8	ug/L			06/30/20 03:44	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 03:44	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 03:44	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 03:44	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 03:44	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 03:44	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 03:44	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 03:44	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 03:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 03:44	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 03:44	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 03:44	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 03:44	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 03:44	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 03:44	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 03:44	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 03:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 03:44	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 03:44	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 03:44	1

Client Sample ID: RW-5898B1-20200622 Lab Sample ID: 280-138090-2

Date Collected: 06/22/20 15:15 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 03:44	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 03:44	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 03:44	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 03:44	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 03:44	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 03:44	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 03:44	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 03:44	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 03:44	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 03:44	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 03:44	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 03:44	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 03:44	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 03:44	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 03:44	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 03:44	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 03:44	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 03:44	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 03:44	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 03:44	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 03:44	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 03:44	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 03:44	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 03:44	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 03:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 03:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 03:44	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 03:44	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 03:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 03:44	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 03:44	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 03:44	1
Trichloroethene	**0.78**	**J**	1.0	0.16	ug/L			06/30/20 03:44	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 03:44	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 03:44	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 03:44	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 03:44	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 03:44	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 03:44	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 03:44	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*06/30/20 03:44*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 03:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*06/30/20 03:44*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*06/30/20 03:44*	*1*

Client Sample ID: RW-8048P-20200622 Lab Sample ID: 280-138090-3

Date Collected: 06/22/20 16:58 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 04:06	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 04:06	1
Acrolein	ND		20	2.8	ug/L			06/30/20 04:06	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 04:06	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 04:06	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 04:06	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 04:06	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 04:06	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 04:06	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 04:06	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 04:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 04:06	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 04:06	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 04:06	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:06	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 04:06	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 04:06	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 04:06	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 04:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 04:06	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:06	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 04:06	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 04:06	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 04:06	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 04:06	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 04:06	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 04:06	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 04:06	1
cis-1,2-Dichloroethene	**0.16**	**J**	1.0	0.15	ug/L			06/30/20 04:06	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:06	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 04:06	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 04:06	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 04:06	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 04:06	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 04:06	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 04:06	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 04:06	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 04:06	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 04:06	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 04:06	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 04:06	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 04:06	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 04:06	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 04:06	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 04:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 04:06	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 04:06	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 04:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:06	1

Client Sample ID: RW-8048P-20200622 Lab Sample ID: 280-138090-3

Date Collected: 06/22/20 16:58 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:06	1
Tetrachloroethene	**0.71**	**J**	1.0	0.20	ug/L			06/30/20 04:06	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 04:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 04:06	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 04:06	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 04:06	1
Trichloroethene	**4.0**		1.0	0.16	ug/L			06/30/20 04:06	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 04:06	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 04:06	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 04:06	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 04:06	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 04:06	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 04:06	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 04:06	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*06/30/20 04:06*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 04:06*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*06/30/20 04:06*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*06/30/20 04:06*	*1*

Client Sample ID: RW-7244P-20200623 Lab Sample ID: 280-138090-4

Date Collected: 06/23/20 09:00 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 04:07	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 04:07	1
Acrolein	ND		20	2.8	ug/L			06/30/20 04:07	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 04:07	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 04:07	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 04:07	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 04:07	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 04:07	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 04:07	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 04:07	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 04:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 04:07	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 04:07	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 04:07	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:07	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 04:07	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 04:07	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 04:07	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 04:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 04:07	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:07	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 04:07	1

Client Sample ID: RW-7244P-20200623 Lab Sample ID: 280-138090-4

Date Collected: 06/23/20 09:00 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 04:07	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 04:07	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 04:07	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 04:07	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 04:07	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 04:07	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:07	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:07	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 04:07	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 04:07	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 04:07	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 04:07	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 04:07	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 04:07	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 04:07	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 04:07	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 04:07	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 04:07	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 04:07	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 04:07	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 04:07	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 04:07	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 04:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 04:07	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 04:07	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 04:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:07	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 04:07	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 04:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 04:07	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 04:07	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 04:07	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 04:07	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 04:07	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 04:07	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 04:07	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 04:07	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 04:07	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 04:07	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 04:07	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*06/30/20 04:07*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*06/30/20 04:07*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*06/30/20 04:07*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*06/30/20 04:07*	*1*

Client Sample ID: RW-7350P-20200623 Lab Sample ID: 280-138090-5

Date Collected: 06/23/20 10:25 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 04:29	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 04:29	1
Acrolein	ND		20	2.8	ug/L			06/30/20 04:29	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 04:29	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 04:29	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 04:29	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 04:29	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 04:29	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 04:29	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 04:29	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 04:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 04:29	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 04:29	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 04:29	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:29	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 04:29	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 04:29	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 04:29	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 04:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 04:29	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:29	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 04:29	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 04:29	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 04:29	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 04:29	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 04:29	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 04:29	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 04:29	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:29	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:29	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 04:29	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 04:29	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 04:29	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 04:29	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 04:29	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 04:29	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 04:29	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 04:29	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 04:29	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 04:29	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 04:29	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 04:29	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 04:29	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 04:29	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 04:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 04:29	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 04:29	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 04:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:29	1

Client Sample ID: RW-7350P-20200623 Lab Sample ID: 280-138090-5

Date Collected: 06/23/20 10:25 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:29	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 04:29	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 04:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 04:29	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 04:29	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 04:29	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 04:29	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 04:29	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 04:29	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 04:29	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 04:29	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 04:29	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 04:29	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 04:29	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*06/30/20 04:29*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*06/30/20 04:29*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*06/30/20 04:29*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*06/30/20 04:29*	*1*

Client Sample ID: RW-8035P-20200623 Lab Sample ID: 280-138090-6

Date Collected: 06/23/20 12:55 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 04:50	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 04:50	1
Acrolein	ND		20	2.8	ug/L			06/30/20 04:50	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 04:50	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 04:50	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 04:50	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 04:50	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 04:50	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 04:50	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 04:50	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 04:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 04:50	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 04:50	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 04:50	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:50	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 04:50	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 04:50	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 04:50	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 04:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 04:50	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:50	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 04:50	1

Client Sample ID: RW-8035P-20200623 Lab Sample ID: 280-138090-6

Date Collected: 06/23/20 12:55 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 04:50	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 04:50	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 04:50	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 04:50	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 04:50	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 04:50	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:50	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:50	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 04:50	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 04:50	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 04:50	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 04:50	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 04:50	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 04:50	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 04:50	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 04:50	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 04:50	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 04:50	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 04:50	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 04:50	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 04:50	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 04:50	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 04:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 04:50	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 04:50	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 04:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:50	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 04:50	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 04:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 04:50	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 04:50	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 04:50	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 04:50	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 04:50	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 04:50	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 04:50	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 04:50	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 04:50	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 04:50	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 04:50	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*06/30/20 04:50*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*06/30/20 04:50*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*06/30/20 04:50*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*06/30/20 04:50*	*1*

Client Sample ID: RW-2237H-20200623 Lab Sample ID: 280-138090-7

Date Collected: 06/23/20 15:06 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 05:11	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 05:11	1
Acrolein	ND		20	2.8	ug/L			06/30/20 05:11	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 05:11	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 05:11	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 05:11	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 05:11	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 05:11	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 05:11	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 05:11	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 05:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 05:11	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 05:11	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 05:11	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:11	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 05:11	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 05:11	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 05:11	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 05:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 05:11	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:11	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 05:11	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 05:11	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 05:11	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 05:11	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 05:11	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 05:11	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 05:11	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:11	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:11	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 05:11	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 05:11	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 05:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 05:11	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 05:11	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 05:11	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 05:11	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 05:11	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 05:11	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 05:11	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 05:11	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 05:11	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 05:11	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 05:11	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 05:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 05:11	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 05:11	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 05:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:11	1

Client Sample ID: RW-2237H-20200623 — Lab Sample ID: 280-138090-7

Date Collected: 06/23/20 15:06 — **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:11	1
Tetrachloroethene	**1.9**		1.0	0.20	ug/L			06/30/20 05:11	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 05:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 05:11	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 05:11	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 05:11	1
Trichloroethene	**9.8**	**B**	1.0	0.16	ug/L			06/30/20 05:11	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 05:11	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 05:11	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 05:11	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 05:11	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 05:11	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 05:11	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 05:11	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*06/30/20 05:11*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 05:11*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*06/30/20 05:11*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*06/30/20 05:11*	*1*

Client Sample ID: RW-8012P-20200623 — Lab Sample ID: 280-138090-8

Date Collected: 06/23/20 16:10 — **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 05:33	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 05:33	1
Acrolein	ND		20	2.8	ug/L			06/30/20 05:33	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 05:33	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 05:33	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 05:33	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 05:33	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 05:33	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 05:33	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 05:33	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 05:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 05:33	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 05:33	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 05:33	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:33	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 05:33	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 05:33	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 05:33	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 05:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 05:33	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:33	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 05:33	1

Client Sample ID: RW-8012P-20200623 Lab Sample ID: 280-138090-8

Date Collected: 06/23/20 16:10 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 05:33	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 05:33	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 05:33	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 05:33	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 05:33	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 05:33	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:33	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:33	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 05:33	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 05:33	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 05:33	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 05:33	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 05:33	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 05:33	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 05:33	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 05:33	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 05:33	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 05:33	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 05:33	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 05:33	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 05:33	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 05:33	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 05:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 05:33	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 05:33	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 05:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:33	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 05:33	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 05:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 05:33	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 05:33	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 05:33	1
Trichloroethene	**1.9**	**B**	1.0	0.16	ug/L			06/30/20 05:33	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 05:33	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 05:33	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 05:33	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 05:33	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 05:33	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 05:33	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 05:33	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*06/30/20 05:33*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*06/30/20 05:33*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*06/30/20 05:33*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*06/30/20 05:33*	*1*

Client Sample ID: RW-2879M-20200624 Lab Sample ID: 280-138090-9

Date Collected: 06/24/20 10:10 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 01:26	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 01:26	1
Acrolein	ND		20	2.8	ug/L			07/02/20 01:26	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 01:26	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 01:26	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 01:26	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 01:26	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 01:26	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 01:26	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 01:26	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 01:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 01:26	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 01:26	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 01:26	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:26	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 01:26	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 01:26	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 01:26	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 01:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 01:26	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:26	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 01:26	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 01:26	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 01:26	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 01:26	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 01:26	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 01:26	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 01:26	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:26	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:26	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 01:26	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 01:26	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 01:26	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 01:26	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 01:26	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 01:26	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 01:26	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 01:26	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 01:26	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 01:26	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 01:26	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 01:26	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 01:26	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 01:26	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 01:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 01:26	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 01:26	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 01:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:26	1

Client Sample ID: RW-2879M-20200624 — Lab Sample ID: 280-138090-9

Date Collected: 06/24/20 10:10 — **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:26	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 01:26	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 01:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 01:26	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 01:26	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 01:26	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 01:26	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 01:26	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 01:26	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 01:26	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 01:26	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 01:26	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 01:26	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 01:26	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*07/02/20 01:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 01:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*07/02/20 01:26*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 01:26*	*1*

Client Sample ID: RW-7586P-20200624 — Lab Sample ID: 280-138090-10

Date Collected: 06/24/20 11:35 — **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 01:47	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 01:47	1
Acrolein	ND		20	2.8	ug/L			07/02/20 01:47	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 01:47	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 01:47	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 01:47	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 01:47	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 01:47	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 01:47	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 01:47	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 01:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 01:47	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 01:47	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 01:47	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:47	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 01:47	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 01:47	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 01:47	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 01:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 01:47	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:47	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 01:47	1

Client Sample ID: RW-7586P-20200624 Lab Sample ID: 280-138090-10

Date Collected: 06/24/20 11:35 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 01:47	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 01:47	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 01:47	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 01:47	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 01:47	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 01:47	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:47	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:47	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 01:47	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 01:47	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 01:47	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 01:47	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 01:47	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 01:47	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 01:47	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 01:47	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 01:47	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 01:47	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 01:47	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 01:47	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 01:47	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 01:47	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 01:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 01:47	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 01:47	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 01:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:47	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 01:47	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 01:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 01:47	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 01:47	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 01:47	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 01:47	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 01:47	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 01:47	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 01:47	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 01:47	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 01:47	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 01:47	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 01:47	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 01:47*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*07/02/20 01:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*07/02/20 01:47*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 01:47*	*1*

Client Sample ID: RW-8030P-20200624 Lab Sample ID: 280-138090-11

Date Collected: 06/24/20 13:40 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 02:09	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 02:09	1
Acrolein	ND		20	2.8	ug/L			07/02/20 02:09	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 02:09	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 02:09	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 02:09	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 02:09	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 02:09	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 02:09	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 02:09	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 02:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 02:09	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 02:09	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 02:09	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 02:09	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 02:09	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 02:09	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 02:09	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 02:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 02:09	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 02:09	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 02:09	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 02:09	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 02:09	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 02:09	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 02:09	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 02:09	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 02:09	1
cis-1,2-Dichloroethene	**0.36**	**J**	1.0	0.15	ug/L			07/02/20 02:09	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 02:09	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 02:09	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 02:09	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 02:09	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 02:09	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 02:09	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 02:09	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 02:09	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 02:09	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 02:09	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 02:09	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 02:09	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 02:09	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 02:09	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 02:09	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 02:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 02:09	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 02:09	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 02:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 02:09	1

Client Sample ID: RW-8030P-20200624 Lab Sample ID: 280-138090-11

Date Collected: 06/24/20 13:40 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 02:09	1
Tetrachloroethene	**1.3**		1.0	0.20	ug/L			07/02/20 02:09	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 02:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 02:09	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 02:09	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 02:09	1
Trichloroethene	**7.1**		1.0	0.16	ug/L			07/02/20 02:09	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 02:09	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 02:09	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 02:09	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 02:09	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 02:09	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 02:09	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 02:09	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 02:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/02/20 02:09*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 02:09*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 02:09*	*1*

Client Sample ID: RW-2172F-20200622 Lab Sample ID: 280-138090-12

Date Collected: 06/22/20 11:54 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 04:27	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 04:27	1
Acrolein	ND		20	2.8	ug/L			06/30/20 04:27	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 04:27	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 04:27	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 04:27	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 04:27	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 04:27	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 04:27	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 04:27	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 04:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 04:27	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 04:27	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 04:27	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:27	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 04:27	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 04:27	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 04:27	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 04:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 04:27	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:27	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 04:27	1

Client Sample ID: RW-2172F-20200622 Lab Sample ID: 280-138090-12

Date Collected: 06/22/20 11:54 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 04:27	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 04:27	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 04:27	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 04:27	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 04:27	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 04:27	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:27	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:27	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 04:27	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 04:27	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 04:27	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 04:27	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 04:27	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 04:27	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 04:27	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 04:27	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 04:27	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 04:27	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 04:27	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 04:27	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 04:27	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 04:27	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 04:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 04:27	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 04:27	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 04:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:27	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 04:27	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 04:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 04:27	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 04:27	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 04:27	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 04:27	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 04:27	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 04:27	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 04:27	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 04:27	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 04:27	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 04:27	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 04:27	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*06/30/20 04:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 04:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*06/30/20 04:27*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*06/30/20 04:27*	*1*

Client Sample ID: RW-7773P-20200622 Lab Sample ID: 280-138090-13

Date Collected: 06/22/20 13:42 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 04:48	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 04:48	1
Acrolein	ND		20	2.8	ug/L			06/30/20 04:48	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 04:48	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 04:48	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 04:48	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 04:48	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 04:48	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 04:48	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 04:48	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 04:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 04:48	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 04:48	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 04:48	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:48	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 04:48	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 04:48	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 04:48	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 04:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 04:48	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 04:48	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 04:48	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 04:48	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 04:48	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 04:48	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 04:48	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 04:48	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 04:48	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:48	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 04:48	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 04:48	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 04:48	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 04:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 04:48	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 04:48	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 04:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 04:48	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 04:48	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 04:48	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 04:48	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 04:48	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 04:48	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 04:48	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 04:48	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 04:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 04:48	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 04:48	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 04:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:48	1

Client Sample ID: RW-7773P-20200622 Lab Sample ID: 280-138090-13

Date Collected: 06/22/20 13:42 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 04:48	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 04:48	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 04:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 04:48	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 04:48	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 04:48	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 04:48	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 04:48	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 04:48	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 04:48	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 04:48	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 04:48	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 04:48	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 04:48	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*06/30/20 04:48*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 04:48*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*06/30/20 04:48*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*06/30/20 04:48*	*1*

Client Sample ID: RW-7677P-20200622 Lab Sample ID: 280-138090-14

Date Collected: 06/22/20 15:04 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 05:09	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 05:09	1
Acrolein	ND		20	2.8	ug/L			06/30/20 05:09	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 05:09	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 05:09	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 05:09	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 05:09	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 05:09	1
Bromomethane	ND	F1	2.0	0.21	ug/L			06/30/20 05:09	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 05:09	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 05:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 05:09	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 05:09	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 05:09	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:09	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 05:09	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 05:09	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 05:09	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 05:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 05:09	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:09	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 05:09	1

Client Sample ID: RW-7677P-20200622 Lab Sample ID: 280-138090-14

Date Collected: 06/22/20 15:04 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 05:09	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 05:09	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 05:09	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 05:09	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 05:09	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 05:09	1
cis-1,2-Dichloroethene	**0.27**	**J**	1.0	0.15	ug/L			06/30/20 05:09	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:09	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 05:09	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 05:09	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 05:09	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 05:09	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 05:09	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 05:09	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 05:09	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 05:09	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 05:09	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 05:09	1
Iodomethane	ND	* F1 F2	1.0	0.23	ug/L			06/30/20 05:09	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 05:09	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 05:09	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 05:09	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 05:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 05:09	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 05:09	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 05:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:09	1
Tetrachloroethene	**1.2**		1.0	0.20	ug/L			06/30/20 05:09	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 05:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 05:09	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 05:09	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 05:09	1
Trichloroethene	**5.9**		1.0	0.16	ug/L			06/30/20 05:09	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 05:09	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 05:09	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 05:09	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 05:09	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 05:09	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 05:09	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 05:09	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*06/30/20 05:09*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 05:09*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*06/30/20 05:09*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*06/30/20 05:09*	*1*

Client Sample ID: RW-7677PQ-20200622 Lab Sample ID: 280-138090-15

Date Collected: 06/22/20 15:09 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 06:13	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 06:13	1
Acrolein	ND		20	2.8	ug/L			06/30/20 06:13	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 06:13	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 06:13	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 06:13	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 06:13	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 06:13	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 06:13	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 06:13	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 06:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 06:13	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 06:13	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 06:13	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:13	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 06:13	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 06:13	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 06:13	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 06:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 06:13	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:13	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 06:13	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 06:13	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 06:13	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 06:13	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 06:13	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 06:13	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 06:13	1
cis-1,2-Dichloroethene	**0.31**	**J**	1.0	0.15	ug/L			06/30/20 06:13	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 06:13	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 06:13	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 06:13	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 06:13	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 06:13	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 06:13	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 06:13	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 06:13	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 06:13	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 06:13	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 06:13	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 06:13	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 06:13	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 06:13	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 06:13	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 06:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 06:13	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 06:13	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 06:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:13	1

Client Sample ID: RW-7677PQ-20200622 Lab Sample ID: 280-138090-15

Date Collected: 06/22/20 15:09 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:13	1
Tetrachloroethene	**1.2**		1.0	0.20	ug/L			06/30/20 06:13	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 06:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 06:13	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 06:13	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 06:13	1
Trichloroethene	**5.8**		1.0	0.16	ug/L			06/30/20 06:13	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 06:13	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 06:13	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 06:13	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 06:13	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 06:13	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 06:13	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 06:13	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*06/30/20 06:13*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*06/30/20 06:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*06/30/20 06:13*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*06/30/20 06:13*	*1*

Client Sample ID: RW-7070B-20200622 Lab Sample ID: 280-138090-16

Date Collected: 06/22/20 16:48 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 06:34	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 06:34	1
Acrolein	ND		20	2.8	ug/L			06/30/20 06:34	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 06:34	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 06:34	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 06:34	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 06:34	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 06:34	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 06:34	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 06:34	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 06:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 06:34	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 06:34	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 06:34	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:34	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 06:34	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 06:34	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 06:34	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 06:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 06:34	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:34	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 06:34	1

Client Sample ID: RW-7070B-20200622 Lab Sample ID: 280-138090-16

Date Collected: 06/22/20 16:48 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 06:34	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 06:34	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 06:34	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 06:34	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 06:34	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 06:34	1
cis-1,2-Dichloroethene	**0.19**	**J**	1.0	0.15	ug/L			06/30/20 06:34	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 06:34	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 06:34	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 06:34	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 06:34	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 06:34	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 06:34	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 06:34	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 06:34	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 06:34	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 06:34	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 06:34	1
Iodomethane	ND	*	1.0	0.23	ug/L			06/30/20 06:34	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 06:34	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 06:34	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 06:34	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 06:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 06:34	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 06:34	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 06:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:34	1
Tetrachloroethene	**0.59**	**J**	1.0	0.20	ug/L			06/30/20 06:34	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 06:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 06:34	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 06:34	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 06:34	1
Trichloroethene	**3.4**		1.0	0.16	ug/L			06/30/20 06:34	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 06:34	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 06:34	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 06:34	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 06:34	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 06:34	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 06:34	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 06:34	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 06:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*06/30/20 06:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/30/20 06:34*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*06/30/20 06:34*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*06/30/20 06:34*	*1*

Client Sample ID: RW-8249P-20200623 Lab Sample ID: 280-138090-17

Date Collected: 06/23/20 10:22 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 05:54	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 05:54	1
Acrolein	ND		20	2.8	ug/L			06/30/20 05:54	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 05:54	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 05:54	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 05:54	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 05:54	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 05:54	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 05:54	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 05:54	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 05:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 05:54	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 05:54	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 05:54	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:54	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 05:54	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 05:54	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 05:54	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 05:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 05:54	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 05:54	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 05:54	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 05:54	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 05:54	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 05:54	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 05:54	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 05:54	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 05:54	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:54	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 05:54	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 05:54	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 05:54	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 05:54	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 05:54	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 05:54	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 05:54	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 05:54	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 05:54	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 05:54	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 05:54	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 05:54	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 05:54	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 05:54	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 05:54	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 05:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 05:54	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 05:54	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 05:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:54	1

Client Sample ID: RW-8249P-20200623 Lab Sample ID: 280-138090-17

Date Collected: 06/23/20 10:22 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 05:54	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 05:54	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 05:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 05:54	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 05:54	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 05:54	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 05:54	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 05:54	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 05:54	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 05:54	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 05:54	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 05:54	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 05:54	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 05:54	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*06/30/20 05:54*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*06/30/20 05:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*06/30/20 05:54*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*06/30/20 05:54*	*1*

Client Sample ID: RW-2151H-20200623 Lab Sample ID: 280-138090-18

Date Collected: 06/23/20 13:03 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 06:15	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 06:15	1
Acrolein	ND		20	2.8	ug/L			06/30/20 06:15	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 06:15	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 06:15	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 06:15	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 06:15	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 06:15	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 06:15	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 06:15	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 06:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 06:15	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 06:15	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 06:15	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:15	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 06:15	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 06:15	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 06:15	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 06:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 06:15	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:15	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 06:15	1

Client Sample ID: RW-2151H-20200623 Lab Sample ID: 280-138090-18

Date Collected: 06/23/20 13:03 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 06:15	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 06:15	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 06:15	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 06:15	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 06:15	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 06:15	1
cis-1,2-Dichloroethene	**0.38**	**J**	1.0	0.15	ug/L			06/30/20 06:15	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 06:15	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 06:15	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 06:15	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 06:15	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 06:15	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 06:15	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 06:15	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 06:15	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 06:15	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 06:15	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 06:15	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 06:15	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 06:15	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 06:15	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 06:15	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 06:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 06:15	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 06:15	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 06:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:15	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 06:15	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 06:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 06:15	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 06:15	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 06:15	1
Trichloroethene	**5.8**	**B**	1.0	0.16	ug/L			06/30/20 06:15	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 06:15	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 06:15	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 06:15	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 06:15	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 06:15	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 06:15	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 06:15	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*06/30/20 06:15*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*06/30/20 06:15*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*06/30/20 06:15*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*06/30/20 06:15*	*1*

Client Sample ID: RW-7688P-20200623 Lab Sample ID: 280-138090-19

Date Collected: 06/23/20 14:21 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 06:36	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 06:36	1
Acrolein	ND		20	2.8	ug/L			06/30/20 06:36	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 06:36	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 06:36	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 06:36	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 06:36	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 06:36	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 06:36	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 06:36	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 06:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 06:36	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 06:36	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 06:36	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:36	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 06:36	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 06:36	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 06:36	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 06:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 06:36	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 06:36	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 06:36	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 06:36	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 06:36	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 06:36	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 06:36	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 06:36	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 06:36	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 06:36	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 06:36	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 06:36	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 06:36	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 06:36	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 06:36	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 06:36	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 06:36	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 06:36	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 06:36	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 06:36	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 06:36	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 06:36	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 06:36	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 06:36	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 06:36	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 06:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 06:36	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 06:36	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 06:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:36	1

Client Sample ID: RW-7688P-20200623 Lab Sample ID: 280-138090-19

Date Collected: 06/23/20 14:21 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 06:36	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 06:36	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 06:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 06:36	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 06:36	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 06:36	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 06:36	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 06:36	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 06:36	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 06:36	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 06:36	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 06:36	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 06:36	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 06:36	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*06/30/20 06:36*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*06/30/20 06:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*06/30/20 06:36*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*06/30/20 06:36*	*1*

Client Sample ID: RW-7688PQ-20200623 Lab Sample ID: 280-138090-20

Date Collected: 06/23/20 14:26 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 07:40	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 07:40	1
Acrolein	ND		20	2.8	ug/L			06/30/20 07:40	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 07:40	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 07:40	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 07:40	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 07:40	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 07:40	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 07:40	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 07:40	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 07:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 07:40	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 07:40	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 07:40	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 07:40	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 07:40	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 07:40	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 07:40	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 07:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 07:40	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 07:40	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 07:40	1

Client Sample ID: RW-7688PQ-20200623 Lab Sample ID: 280-138090-20

Date Collected: 06/23/20 14:26 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 07:40	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 07:40	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 07:40	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 07:40	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 07:40	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 07:40	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 07:40	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 07:40	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 07:40	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 07:40	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 07:40	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 07:40	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 07:40	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 07:40	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 07:40	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 07:40	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 07:40	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 07:40	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 07:40	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 07:40	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 07:40	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 07:40	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 07:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 07:40	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 07:40	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 07:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 07:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 07:40	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 07:40	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 07:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 07:40	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 07:40	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 07:40	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 07:40	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 07:40	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 07:40	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 07:40	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 07:40	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 07:40	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 07:40	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 07:40	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 07:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*06/30/20 07:40*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*06/30/20 07:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*06/30/20 07:40*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*06/30/20 07:40*	*1*

Client Sample ID: RW-8284P-20200623 Lab Sample ID: 280-138090-21

Date Collected: 06/23/20 16:12 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 08:02	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 08:02	1
Acrolein	ND		20	2.8	ug/L			06/30/20 08:02	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 08:02	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 08:02	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 08:02	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 08:02	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 08:02	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 08:02	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 08:02	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 08:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 08:02	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 08:02	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 08:02	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 08:02	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 08:02	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 08:02	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 08:02	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 08:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 08:02	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 08:02	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 08:02	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 08:02	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 08:02	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 08:02	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 08:02	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 08:02	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 08:02	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 08:02	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 08:02	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 08:02	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 08:02	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 08:02	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 08:02	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 08:02	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 08:02	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 08:02	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 08:02	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 08:02	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 08:02	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 08:02	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 08:02	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 08:02	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 08:02	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 08:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 08:02	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 08:02	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 08:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 08:02	1

Client Sample ID: RW-8284P-20200623 Lab Sample ID: 280-138090-21

Date Collected: 06/23/20 16:12 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 08:02	1
Tetrachloroethene	**0.93**	**J**	1.0	0.20	ug/L			06/30/20 08:02	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 08:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 08:02	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 08:02	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 08:02	1
Trichloroethene	**3.9**	**B**	1.0	0.16	ug/L			06/30/20 08:02	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 08:02	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 08:02	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 08:02	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 08:02	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 08:02	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 08:02	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 08:02	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 08:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*06/30/20 08:02*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*06/30/20 08:02*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*06/30/20 08:02*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*06/30/20 08:02*	*1*

Client Sample ID: TB-01-20200625 Lab Sample ID: 280-138090-22

Date Collected: 06/25/20 10:30 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/06/20 12:56	1
Acetonitrile	ND		30	9.6	ug/L			07/06/20 12:56	1
Acrolein	ND		20	2.8	ug/L			07/06/20 12:56	1
Acrylonitrile	ND		20	1.4	ug/L			07/06/20 12:56	1
Benzene	ND		1.0	0.16	ug/L			07/06/20 12:56	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/06/20 12:56	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/06/20 12:56	1
Bromoform	ND		1.0	0.46	ug/L			07/06/20 12:56	1
Bromomethane	ND		2.0	0.21	ug/L			07/06/20 12:56	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/06/20 12:56	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/06/20 12:56	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/06/20 12:56	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/06/20 12:56	1
Chloroprene	ND		1.0	0.21	ug/L			07/06/20 12:56	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/06/20 12:56	1
Chloroethane	ND		2.0	0.41	ug/L			07/06/20 12:56	1
Chloroform	ND		1.0	0.16	ug/L			07/06/20 12:56	1
Chloromethane	ND		2.0	0.30	ug/L			07/06/20 12:56	1
Allyl chloride	ND		2.0	0.17	ug/L			07/06/20 12:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/06/20 12:56	1
Dibromomethane	ND		1.0	0.17	ug/L			07/06/20 12:56	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/06/20 12:56	1

Client Sample ID: TB-01-20200625 Lab Sample ID: 280-138090-22

Date Collected: 06/25/20 10:30 **Matrix: Water**
Date Received: 06/26/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/06/20 12:56	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/06/20 12:56	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/06/20 12:56	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/06/20 12:56	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/06/20 12:56	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/06/20 12:56	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/06/20 12:56	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/06/20 12:56	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/06/20 12:56	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/06/20 12:56	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/06/20 12:56	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/06/20 12:56	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/06/20 12:56	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/06/20 12:56	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/06/20 12:56	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/06/20 12:56	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/06/20 12:56	1
2-Hexanone	ND		5.0	1.7	ug/L			07/06/20 12:56	1
Iodomethane	ND		1.0	0.23	ug/L			07/06/20 12:56	1
Isobutyl alcohol	ND		110	37	ug/L			07/06/20 12:56	1
Methacrylonitrile	ND		10	1.6	ug/L			07/06/20 12:56	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/06/20 12:56	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/06/20 12:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/06/20 12:56	1
Propionitrile	ND		20	3.7	ug/L			07/06/20 12:56	1
Styrene	ND		1.0	0.36	ug/L			07/06/20 12:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/20 12:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/20 12:56	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/06/20 12:56	1
Toluene	ND		1.0	0.17	ug/L			07/06/20 12:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/06/20 12:56	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/06/20 12:56	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/06/20 12:56	1
Trichloroethene	ND		1.0	0.16	ug/L			07/06/20 12:56	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/06/20 12:56	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/06/20 12:56	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/06/20 12:56	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/06/20 12:56	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/06/20 12:56	1
o-Xylene	ND		1.0	0.19	ug/L			07/06/20 12:56	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/06/20 12:56	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/06/20 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*07/06/20 12:56*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/06/20 12:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*07/06/20 12:56*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*07/06/20 12:56*	*1*

Default Detection Limits

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	1.0	0.21	ug/L
1,1,1-Trichloroethane	1.0	0.16	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.21	ug/L
1,1,2-Trichloroethane	1.0	0.27	ug/L
1,1-Dichloroethane	1.0	0.22	ug/L
1,1-Dichloroethene	1.0	0.23	ug/L
1,1-Dichloropropene	1.0	0.19	ug/L
1,2,3-Trichloropropane	2.5	0.33	ug/L
1,2,4-Trichlorobenzene	1.0	0.21	ug/L
1,2-Dibromo-3-Chloropropane	5.0	0.47	ug/L
1,2-Dibromoethane	1.0	0.18	ug/L
1,2-Dichlorobenzene	1.0	0.15	ug/L
1,2-Dichloroethane	1.0	0.13	ug/L
1,2-Dichloropropane	1.0	0.18	ug/L
1,3-Dichlorobenzene	1.0	0.13	ug/L
1,3-Dichloropropane	1.0	0.090	ug/L
1,4-Dichlorobenzene	1.0	0.16	ug/L
2,2-Dichloropropane	1.0	0.38	ug/L
2-Butanone (MEK)	6.0	2.0	ug/L
2-Hexanone	5.0	1.7	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	0.98	ug/L
Acetone	10	1.9	ug/L
Acetonitrile	30	9.6	ug/L
Acrolein	20	2.8	ug/L
Acrylonitrile	20	1.4	ug/L
Allyl chloride	2.0	0.17	ug/L
Benzene	1.0	0.16	ug/L
Bromoform	1.0	0.46	ug/L
Bromomethane	2.0	0.21	ug/L
Carbon disulfide	2.0	0.17	ug/L
Carbon tetrachloride	1.0	0.19	ug/L
Chlorobenzene	1.0	0.17	ug/L
Chlorobromomethane	1.0	0.10	ug/L
Chlorodibromomethane	1.0	0.17	ug/L
Chloroethane	2.0	0.41	ug/L
Chloroform	1.0	0.16	ug/L
Chloromethane	2.0	0.30	ug/L
Chloroprene	1.0	0.21	ug/L
cis-1,2-Dichloroethene	1.0	0.15	ug/L
cis-1,3-Dichloropropene	1.0	0.16	ug/L
Dibromomethane	1.0	0.17	ug/L
Dichlorobromomethane	1.0	0.17	ug/L
Dichlorodifluoromethane	2.0	0.31	ug/L
Ethyl methacrylate	3.0	0.86	ug/L
Ethylbenzene	1.0	0.16	ug/L
Iodomethane	1.0	0.23	ug/L
Isobutyl alcohol	110	37	ug/L
Methacrylonitrile	10	1.6	ug/L
Methyl methacrylate	4.0	1.1	ug/L
Methylene Chloride	2.0	0.94	ug/L
m-Xylene & p-Xylene	2.0	0.15	ug/L
o-Xylene	1.0	0.19	ug/L
Propionitrile	20	3.7	ug/L

Default Detection Limits

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	RL	MDL	Units
Styrene	1.0	0.36	ug/L
Tetrachloroethene	1.0	0.20	ug/L
Toluene	1.0	0.17	ug/L
trans-1,2-Dichloroethene	1.0	0.15	ug/L
trans-1,3-Dichloropropene	3.0	0.19	ug/L
trans-1,4-Dichloro-2-butene	3.0	0.80	ug/L
Trichloroethene	1.0	0.16	ug/L
Trichlorofluoromethane	2.0	0.29	ug/L
Vinyl acetate	3.0	0.94	ug/L
Vinyl chloride	1.0	0.10	ug/L
Xylenes, Total	2.0	0.19	ug/L

Surrogate Summary

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(70-127)	(80-125)	(78-120)	(77-120)
280-138090-1	RW-8105PS-20200622	94	100	100	98
280-138090-2	RW-5898B1-20200622	95	100	99	99
280-138090-3	RW-8048P-20200622	95	100	100	99
280-138090-4	RW-7244P-20200623	102	98	95	103
280-138090-5	RW-7350P-20200623	102	99	94	101
280-138090-6	RW-8035P-20200623	99	98	98	100
280-138090-7	RW-2237H-20200623	102	100	96	102
280-138090-8	RW-8012P-20200623	99	97	99	101
280-138090-9	RW-2879M-20200624	94	99	100	101
280-138090-10	RW-7586P-20200624	95	100	96	100
280-138090-11	RW-8030P-20200624	95	97	97	100
280-138090-12	RW-2172F-20200622	96	100	98	99
280-138090-13	RW-7773P-20200622	95	100	100	99
280-138090-14	RW-7677P-20200622	95	100	99	98
280-138090-14 MS	RW-7677P-20200622	94	102	100	98
280-138090-14 MSD	RW-7677P-20200622	95	100	99	99
280-138090-15	RW-7677PQ-20200622	93	99	101	97
280-138090-16	RW-7070B-20200622	96	100	99	98
280-138090-17	RW-8249P-20200623	100	97	97	102
280-138090-18	RW-2151H-20200623	101	99	97	102
280-138090-19	RW-7688P-20200623	102	98	96	102
280-138090-19 MS	RW-7688P-20200623	99	100	97	101
280-138090-19 MSD	RW-7688P-20200623	98	100	97	101
280-138090-20	RW-7688PQ-20200623	100	99	96	102
280-138090-21	RW-8284P-20200623	101	98	96	101
280-138090-22	TB-01-20200625	91	97	95	102
LCS 280-500579/4	Lab Control Sample	96	99	100	98
LCS 280-500579/6	Lab Control Sample	95	99	101	98
LCS 280-500580/4	Lab Control Sample	98	97	96	101
LCS 280-500580/6	Lab Control Sample	100	96	98	101
LCS 280-500875/4	Lab Control Sample	93	97	97	100
LCS 280-500875/6	Lab Control Sample	94	96	97	100
LCS 280-501117/4	Lab Control Sample	89	97	92	100
LCS 280-501117/6	Lab Control Sample	89	97	97	100
LCSD 280-500579/5	Lab Control Sample Dup	95	100	100	99
LCSD 280-500579/7	Lab Control Sample Dup	96	99	99	98
LCSD 280-500580/5	Lab Control Sample Dup	100	99	96	101
LCSD 280-500580/7	Lab Control Sample Dup	102	97	97	103
LCSD 280-500875/5	Lab Control Sample Dup	94	97	97	100
LCSD 280-500875/7	Lab Control Sample Dup	96	97	96	101
LCSD 280-501117/5	Lab Control Sample Dup	89	97	93	100
LCSD 280-501117/7	Lab Control Sample Dup	89	97	96	101
MB 280-500579/9	Method Blank	95	101	99	98
MB 280-500580/9	Method Blank	104	96	96	103
MB 280-500875/9	Method Blank	95	98	98	100
MB 280-501117/9	Method Blank	90	97	95	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: CDM Smith, Inc.
Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-500579/9
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 00:11	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 00:11	1
Acrolein	ND		20	2.8	ug/L			06/30/20 00:11	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 00:11	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 00:11	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 00:11	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 00:11	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 00:11	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 00:11	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 00:11	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 00:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 00:11	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 00:11	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 00:11	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 00:11	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 00:11	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 00:11	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 00:11	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 00:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 00:11	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 00:11	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 00:11	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 00:11	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 00:11	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 00:11	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 00:11	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 00:11	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/20 00:11	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 00:11	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 00:11	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 00:11	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 00:11	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 00:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 00:11	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 00:11	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 00:11	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 00:11	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 00:11	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 00:11	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 00:11	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 00:11	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 00:11	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 00:11	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 00:11	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 00:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 00:11	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 00:11	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 00:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-500579/9
Matrix: Water
Analysis Batch: 500579

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	ND		1.0	0.21	ug/L			06/30/20 00:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 00:11	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 00:11	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 00:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 00:11	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 00:11	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 00:11	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/20 00:11	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 00:11	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 00:11	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 00:11	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 00:11	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 00:11	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 00:11	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 00:11	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 00:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*06/30/20 00:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*06/30/20 00:11*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*06/30/20 00:11*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*06/30/20 00:11*	*1*

Lab Sample ID: LCS 280-500579/4
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	101		ug/L		101	39 - 156
Acrolein	247	141		ug/L		57	36 - 147
Acrylonitrile	250	260		ug/L		104	56 - 135
Benzene	25.0	22.2		ug/L		89	65 - 135
Chlorobromomethane	25.0	22.3		ug/L		89	65 - 135
Dichlorobromomethane	25.0	23.9		ug/L		96	65 - 135
Bromoform	25.0	24.2		ug/L		97	62 - 135
Bromomethane	25.0	21.5		ug/L		86	45 - 135
2-Butanone (MEK)	100	105		ug/L		105	44 - 177
Carbon disulfide	25.0	15.2		ug/L		61	55 - 143
Carbon tetrachloride	25.0	21.1		ug/L		84	65 - 135
Chlorobenzene	25.0	22.6		ug/L		91	65 - 135
Chlorodibromomethane	25.0	24.5		ug/L		98	65 - 135
Chloroethane	25.0	21.6		ug/L		86	46 - 136
Chloroform	25.0	22.1		ug/L		89	65 - 135
Chloromethane	25.0	19.0		ug/L		76	34 - 145
Allyl chloride	25.0	21.7		ug/L		87	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	26.4		ug/L		106	57 - 135
Dibromomethane	25.0	23.5		ug/L		94	65 - 135
1,2-Dichlorobenzene	25.0	22.6		ug/L		90	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500579/4
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	23.8		ug/L		95	65 - 135
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	65 - 135
trans-1,4-Dichloro-2-butene	25.0	24.8		ug/L		99	53 - 135
Dichlorodifluoromethane	25.0	16.3		ug/L		65	43 - 142
1,1-Dichloroethane	25.0	22.2		ug/L		89	65 - 135
1,2-Dichloroethane	25.0	23.1		ug/L		92	65 - 135
cis-1,2-Dichloroethene	25.0	22.4		ug/L		90	65 - 135
trans-1,2-Dichloroethene	25.0	20.1		ug/L		80	65 - 135
1,1-Dichloroethene	25.0	17.7		ug/L		71	65 - 136
1,2-Dichloropropane	25.0	24.5		ug/L		98	64 - 135
1,3-Dichloropropane	25.0	23.6		ug/L		94	64 - 135
2,2-Dichloropropane	25.0	23.0		ug/L		92	65 - 135
cis-1,3-Dichloropropene	25.0	24.8		ug/L		99	65 - 135
trans-1,3-Dichloropropene	25.0	23.6		ug/L		95	65 - 135
1,1-Dichloropropene	25.0	21.1		ug/L		84	65 - 135
Ethylbenzene	25.0	22.8		ug/L		91	65 - 135
Ethyl methacrylate	25.0	26.0		ug/L		104	50 - 135
2-Hexanone	100	111		ug/L		111	57 - 139
Iodomethane	25.0	13.7	*	ug/L		55	65 - 142
Isobutyl alcohol	625	704		ug/L		113	55 - 135
Methylene Chloride	25.0	22.6		ug/L		91	54 - 141
4-Methyl-2-pentanone (MIBK)	100	111		ug/L		111	60 - 150
Styrene	25.0	24.0		ug/L		96	65 - 135
1,1,1,2-Tetrachloroethane	25.0	23.3		ug/L		93	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	58 - 135
Tetrachloroethene	25.0	22.2		ug/L		89	65 - 135
Toluene	25.0	22.7		ug/L		91	65 - 135
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	58 - 135
1,1,1-Trichloroethane	25.0	21.4		ug/L		86	65 - 135
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	64 - 135
Trichloroethene	25.0	21.7		ug/L		87	65 - 135
Trichlorofluoromethane	25.0	20.0		ug/L		80	53 - 137
1,2,3-Trichloropropane	25.0	23.9		ug/L		96	65 - 135
Vinyl acetate	50.0	54.9		ug/L		110	11 - 187
Vinyl chloride	25.0	20.3		ug/L		81	40 - 137
m-Xylene & p-Xylene	25.0	23.3		ug/L		93	65 - 135
o-Xylene	25.0	23.5		ug/L		94	65 - 135
Xylenes, Total	50.0	46.8		ug/L		94	65 - 135
1,2-Dibromoethane	25.0	23.6		ug/L		94	65 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
Toluene-d8 (Surr)	*99*		*80 - 125*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500579/6
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetonitrile			250	233		ug/L		93	50 - 150		
Chloroprene			25.0	23.4		ug/L		94	50 - 150		
Methacrylonitrile			250	238		ug/L		95	50 - 150		
Methyl methacrylate			50.0	51.1		ug/L		102	50 - 150		
Propionitrile			250	246		ug/L		99	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
Toluene-d8 (Surr)	*99*		*80 - 125*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*

Lab Sample ID: LCSD 280-500579/5
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	96.1		ug/L		96	39 - 156	5	23
Acrolein			247	133		ug/L		54	36 - 147	6	30
Acrylonitrile			250	248		ug/L		99	56 - 135	5	30
Benzene			25.0	22.4		ug/L		90	65 - 135	1	20
Chlorobromomethane			25.0	22.5		ug/L		90	65 - 135	1	29
Dichlorobromomethane			25.0	23.7		ug/L		95	65 - 135	1	20
Bromoform			25.0	24.7		ug/L		99	62 - 135	2	27
Bromomethane			25.0	20.4		ug/L		82	45 - 135	5	33
2-Butanone (MEK)			100	101		ug/L		101	44 - 177	4	32
Carbon disulfide			25.0	15.5		ug/L		62	55 - 143	2	20
Carbon tetrachloride			25.0	21.5		ug/L		86	65 - 135	2	21
Chlorobenzene			25.0	23.4		ug/L		94	65 - 135	3	20
Chlorodibromomethane			25.0	24.8		ug/L		99	65 - 135	1	20
Chloroethane			25.0	22.0		ug/L		88	46 - 136	2	25
Chloroform			25.0	22.5		ug/L		90	65 - 135	1	20
Chloromethane			25.0	19.0		ug/L		76	34 - 145	0	24
Allyl chloride			25.0	21.9		ug/L		87	50 - 135	1	30
1,2-Dibromo-3-Chloropropane			25.0	24.8		ug/L		99	57 - 135	6	22
Dibromomethane			25.0	23.6		ug/L		94	65 - 135	0	26
1,2-Dichlorobenzene			25.0	23.2		ug/L		93	65 - 135	3	20
1,3-Dichlorobenzene			25.0	24.3		ug/L		97	65 - 135	2	20
1,4-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	1	23
trans-1,4-Dichloro-2-butene			25.0	24.2		ug/L		97	53 - 135	2	25
Dichlorodifluoromethane			25.0	16.6		ug/L		66	43 - 142	2	30
1,1-Dichloroethane			25.0	22.3		ug/L		89	65 - 135	1	21
1,2-Dichloroethane			25.0	22.9		ug/L		92	65 - 135	0	20
cis-1,2-Dichloroethene			25.0	22.4		ug/L		90	65 - 135	0	20
trans-1,2-Dichloroethene			25.0	20.3		ug/L		81	65 - 135	1	24
1,1-Dichloroethene			25.0	17.7		ug/L		71	65 - 136	0	20
1,2-Dichloropropane			25.0	24.4		ug/L		97	64 - 135	1	20
1,3-Dichloropropane			25.0	23.8		ug/L		95	64 - 135	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500579/5
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane			25.0	23.3		ug/L		93	65 - 135	1	20
cis-1,3-Dichloropropene			25.0	25.5		ug/L		102	65 - 135	3	26
trans-1,3-Dichloropropene			25.0	23.4		ug/L		93	65 - 135	1	26
1,1-Dichloropropene			25.0	21.1		ug/L		85	65 - 135	0	21
Ethylbenzene			25.0	23.4		ug/L		94	65 - 135	3	20
Ethyl methacrylate			25.0	26.1		ug/L		104	50 - 135	0	30
2-Hexanone			100	109		ug/L		109	57 - 139	1	25
Iodomethane			25.0	16.6		ug/L		66	65 - 142	19	25
Isobutyl alcohol			625	679		ug/L		109	55 - 135	4	30
Methylene Chloride			25.0	22.7		ug/L		91	54 - 141	0	26
4-Methyl-2-pentanone (MIBK)			100	107		ug/L		107	60 - 150	4	22
Styrene			25.0	24.8		ug/L		99	65 - 135	3	26
1,1,1,2-Tetrachloroethane			25.0	23.8		ug/L		95	65 - 135	2	20
1,1,2,2-Tetrachloroethane			25.0	25.3		ug/L		101	58 - 135	1	20
Tetrachloroethene			25.0	22.8		ug/L		91	65 - 135	2	20
Toluene			25.0	23.1		ug/L		92	65 - 135	2	20
1,2,4-Trichlorobenzene			25.0	23.5		ug/L		94	58 - 135	2	25
1,1,1-Trichloroethane			25.0	21.9		ug/L		87	65 - 135	2	20
1,1,2-Trichloroethane			25.0	24.4		ug/L		98	64 - 135	2	27
Trichloroethene			25.0	21.6		ug/L		86	65 - 135	0	20
Trichlorofluoromethane			25.0	20.5		ug/L		82	53 - 137	2	27
1,2,3-Trichloropropane			25.0	23.6		ug/L		94	65 - 135	1	23
Vinyl acetate			50.0	52.7		ug/L		105	11 - 187	4	24
Vinyl chloride			25.0	20.5		ug/L		82	40 - 137	1	24
m-Xylene & p-Xylene			25.0	23.9		ug/L		96	65 - 135	3	20
o-Xylene			25.0	24.3		ug/L		97	65 - 135	4	20
Xylenes, Total			50.0	48.2		ug/L		96	65 - 135	3	20
1,2-Dibromoethane			25.0	23.9		ug/L		96	65 - 135	1	27

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
Toluene-d8 (Surr)	*100*		*80 - 125*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*

Lab Sample ID: LCSD 280-500579/7
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile			250	238		ug/L		95	50 - 150	NaN	30
Chloroprene			25.0	23.5		ug/L		94	50 - 150	NaN	30
Methacrylonitrile			250	241		ug/L		97	50 - 150	NaN	30
Methyl methacrylate			50.0	51.2		ug/L		102	50 - 150	NaN	30
Propionitrile			250	251		ug/L		100	50 - 150	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500579/7
Matrix: Water
Analysis Batch: 500579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 125*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*

Lab Sample ID: 280-138090-14 MS
Matrix: Water
Analysis Batch: 500579

Client Sample ID: RW-7677P-20200622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	94.0		ug/L		94	39 - 156
Acrolein	ND		247	203		ug/L		82	36 - 147
Acrylonitrile	ND		250	245		ug/L		98	56 - 135
Benzene	ND		25.0	23.5		ug/L		94	65 - 135
Chlorobromomethane	ND		25.0	23.2		ug/L		93	65 - 135
Dichlorobromomethane	ND		25.0	24.8		ug/L		99	65 - 135
Bromoform	ND		25.0	25.3		ug/L		101	62 - 135
Bromomethane	ND	F1	25.0	10.1	F1	ug/L		40	45 - 135
2-Butanone (MEK)	ND		100	97.8		ug/L		98	44 - 177
Carbon disulfide	ND		25.0	16.7		ug/L		67	55 - 143
Carbon tetrachloride	ND		25.0	22.9		ug/L		92	65 - 135
Chlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135
Chlorodibromomethane	ND		25.0	26.0		ug/L		104	65 - 135
Chloroethane	ND		25.0	22.2		ug/L		89	46 - 136
Chloroform	ND		25.0	23.2		ug/L		93	65 - 135
Chloromethane	ND		25.0	17.8		ug/L		71	34 - 145
Allyl chloride	ND		25.0	22.8		ug/L		91	50 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	25.5		ug/L		102	57 - 135
Dibromomethane	ND		25.0	24.7		ug/L		99	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.5		ug/L		94	65 - 135
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135
1,4-Dichlorobenzene	ND		25.0	24.1		ug/L		97	65 - 135
trans-1,4-Dichloro-2-butene	ND		25.0	21.2		ug/L		85	53 - 135
Dichlorodifluoromethane	ND		25.0	16.7		ug/L		67	43 - 142
1,1-Dichloroethane	ND		25.0	23.4		ug/L		94	65 - 135
1,2-Dichloroethane	ND		25.0	23.4		ug/L		94	65 - 135
cis-1,2-Dichloroethene	0.27	J	25.0	24.0		ug/L		95	65 - 135
trans-1,2-Dichloroethene	ND		25.0	21.5		ug/L		86	65 - 135
1,1-Dichloroethene	ND		25.0	18.9		ug/L		76	65 - 136
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	64 - 135
1,3-Dichloropropane	ND		25.0	24.5		ug/L		98	64 - 135
2,2-Dichloropropane	ND		25.0	22.9		ug/L		91	65 - 135
cis-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	65 - 135
trans-1,3-Dichloropropene	ND		25.0	23.6		ug/L		94	65 - 135
1,1-Dichloropropene	ND		25.0	22.6		ug/L		90	65 - 135
Ethylbenzene	ND		25.0	25.1		ug/L		101	65 - 135
Ethyl methacrylate	ND		25.0	26.8		ug/L		107	50 - 135
2-Hexanone	ND		100	106		ug/L		106	57 - 139
Iodomethane	ND	* F1 F2	25.0	9.30	F1	ug/L		37	65 - 142

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-138090-14 MS **Client Sample ID: RW-7677P-20200622**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500579

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isobutyl alcohol	ND		625	643		ug/L		103	55 - 135
Methylene Chloride	ND		25.0	23.5		ug/L		94	54 - 141
4-Methyl-2-pentanone (MIBK)	ND		100	104		ug/L		104	60 - 150
Styrene	ND		25.0	25.9		ug/L		103	65 - 135
1,1,1,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	58 - 135
Tetrachloroethene	1.2		25.0	25.1		ug/L		96	65 - 135
Toluene	ND		25.0	24.1		ug/L		96	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	23.5		ug/L		94	58 - 135
1,1,1-Trichloroethane	ND		25.0	23.0		ug/L		92	65 - 135
1,1,2-Trichloroethane	ND		25.0	24.9		ug/L		99	64 - 135
Trichloroethene	5.9		25.0	28.5		ug/L		90	65 - 135
Trichlorofluoromethane	ND		25.0	20.7		ug/L		83	53 - 137
1,2,3-Trichloropropane	ND		25.0	24.0		ug/L		96	65 - 135
Vinyl acetate	ND		50.0	52.1		ug/L		104	11 - 187
Vinyl chloride	ND		25.0	21.2		ug/L		85	40 - 137
m-Xylene & p-Xylene	ND		25.0	25.2		ug/L		101	65 - 135
o-Xylene	ND		25.0	25.7		ug/L		103	65 - 135
Xylenes, Total	ND		50.0	50.9		ug/L		102	65 - 135
1,2-Dibromoethane	ND		25.0	24.1		ug/L		96	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*
Toluene-d8 (Surr)	*102*		*80 - 125*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*

Lab Sample ID: 280-138090-14 MSD **Client Sample ID: RW-7677P-20200622**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500579

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	89.8		ug/L		90	39 - 156	4	23
Acrolein	ND		247	200		ug/L		81	36 - 147	1	30
Acrylonitrile	ND		250	235		ug/L		94	56 - 135	4	30
Benzene	ND		25.0	22.4		ug/L		90	65 - 135	5	20
Chlorobromomethane	ND		25.0	22.3		ug/L		89	65 - 135	4	29
Dichlorobromomethane	ND		25.0	23.6		ug/L		95	65 - 135	5	20
Bromoform	ND		25.0	24.0		ug/L		96	62 - 135	5	27
Bromomethane	ND	F1	25.0	11.7		ug/L		47	45 - 135	15	33
2-Butanone (MEK)	ND		100	94.0		ug/L		94	44 - 177	4	32
Carbon disulfide	ND		25.0	15.7		ug/L		63	55 - 143	6	20
Carbon tetrachloride	ND		25.0	21.6		ug/L		86	65 - 135	6	21
Chlorobenzene	ND		25.0	22.9		ug/L		91	65 - 135	8	20
Chlorodibromomethane	ND		25.0	24.5		ug/L		98	65 - 135	6	20
Chloroethane	ND		25.0	22.2		ug/L		89	46 - 136	0	25
Chloroform	ND		25.0	22.1		ug/L		88	65 - 135	5	20
Chloromethane	ND		25.0	18.2		ug/L		73	34 - 145	2	24

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-138090-14 MSD **Client Sample ID: RW-7677P-20200622**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500579

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Allyl chloride	ND		25.0	21.3		ug/L		85	50 - 135	7	30
1,2-Dibromo-3-Chloropropane	ND		25.0	25.1		ug/L		100	57 - 135	2	22
Dibromomethane	ND		25.0	23.0		ug/L		92	65 - 135	7	26
1,2-Dichlorobenzene	ND		25.0	22.4		ug/L		90	65 - 135	5	20
1,3-Dichlorobenzene	ND		25.0	23.4		ug/L		94	65 - 135	5	20
1,4-Dichlorobenzene	ND		25.0	23.3		ug/L		93	65 - 135	4	23
trans-1,4-Dichloro-2-butene	ND		25.0	20.4		ug/L		82	53 - 135	4	25
Dichlorodifluoromethane	ND		25.0	16.6		ug/L		66	43 - 142	0	30
1,1-Dichloroethane	ND		25.0	22.2		ug/L		89	65 - 135	5	21
1,2-Dichloroethane	ND		25.0	22.1		ug/L		88	65 - 135	6	20
cis-1,2-Dichloroethene	0.27	J	25.0	22.9		ug/L		91	65 - 135	5	20
trans-1,2-Dichloroethene	ND		25.0	20.6		ug/L		83	65 - 135	4	24
1,1-Dichloroethene	ND		25.0	17.8		ug/L		71	65 - 136	6	20
1,2-Dichloropropane	ND		25.0	24.1		ug/L		96	64 - 135	5	20
1,3-Dichloropropane	ND		25.0	23.2		ug/L		93	64 - 135	5	20
2,2-Dichloropropane	ND		25.0	21.5		ug/L		86	65 - 135	6	20
cis-1,3-Dichloropropene	ND		25.0	24.5		ug/L		98	65 - 135	5	26
trans-1,3-Dichloropropene	ND		25.0	22.3		ug/L		89	65 - 135	6	26
1,1-Dichloropropene	ND		25.0	20.9		ug/L		84	65 - 135	8	21
Ethylbenzene	ND		25.0	23.3		ug/L		93	65 - 135	8	20
Ethyl methacrylate	ND		25.0	24.8		ug/L		99	50 - 135	8	30
2-Hexanone	ND		100	100		ug/L		100	57 - 139	5	25
Iodomethane	ND	* F1 F2	25.0	12.4	F1 F2	ug/L		50	65 - 142	29	25
Isobutyl alcohol	ND		625	613		ug/L		98	55 - 135	5	30
Methylene Chloride	ND		25.0	22.5		ug/L		90	54 - 141	5	26
4-Methyl-2-pentanone (MIBK)	ND		100	100		ug/L		100	60 - 150	4	22
Styrene	ND		25.0	23.9		ug/L		95	65 - 135	8	26
1,1,1,2-Tetrachloroethane	ND		25.0	23.5		ug/L		94	65 - 135	7	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.0		ug/L		96	58 - 135	6	20
Tetrachloroethene	1.2		25.0	23.4		ug/L		89	65 - 135	7	20
Toluene	ND		25.0	22.9		ug/L		92	65 - 135	5	20
1,2,4-Trichlorobenzene	ND		25.0	22.1		ug/L		88	58 - 135	6	25
1,1,1-Trichloroethane	ND		25.0	21.8		ug/L		87	65 - 135	5	20
1,1,2-Trichloroethane	ND		25.0	23.8		ug/L		95	64 - 135	4	27
Trichloroethene	5.9		25.0	26.9		ug/L		84	65 - 135	6	20
Trichlorofluoromethane	ND		25.0	20.5		ug/L		82	53 - 137	1	27
1,2,3-Trichloropropane	ND		25.0	22.9		ug/L		92	65 - 135	5	23
Vinyl acetate	ND		50.0	49.4		ug/L		99	11 - 187	5	24
Vinyl chloride	ND		25.0	20.9		ug/L		84	40 - 137	1	24
m-Xylene & p-Xylene	ND		25.0	23.6		ug/L		94	65 - 135	7	20
o-Xylene	ND		25.0	23.6		ug/L		94	65 - 135	8	20
Xylenes, Total	ND		50.0	47.2		ug/L		94	65 - 135	8	20
1,2-Dibromoethane	ND		25.0	22.8		ug/L		91	65 - 135	6	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
Toluene-d8 (Surr)	*100*		*80 - 125*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-138090-14 MSD
Matrix: Water
Analysis Batch: 500579

Client Sample ID: RW-7677P-20200622
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	99		77 - 120

Lab Sample ID: MB 280-500580/9
Matrix: Water
Analysis Batch: 500580

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			06/30/20 00:53	1
Acetonitrile	ND		30	9.6	ug/L			06/30/20 00:53	1
Acrolein	ND		20	2.8	ug/L			06/30/20 00:53	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/20 00:53	1
Benzene	ND		1.0	0.16	ug/L			06/30/20 00:53	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/20 00:53	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/20 00:53	1
Bromoform	ND		1.0	0.46	ug/L			06/30/20 00:53	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/20 00:53	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/20 00:53	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/20 00:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/20 00:53	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/20 00:53	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/20 00:53	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/20 00:53	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/20 00:53	1
Chloroform	ND		1.0	0.16	ug/L			06/30/20 00:53	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/20 00:53	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/20 00:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/20 00:53	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/20 00:53	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/20 00:53	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/20 00:53	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/20 00:53	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/20 00:53	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/20 00:53	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/20 00:53	1
1,2-Dichloroethane	0.208	J	1.0	0.13	ug/L			06/30/20 00:53	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 00:53	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/20 00:53	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/20 00:53	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/20 00:53	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/20 00:53	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/20 00:53	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/20 00:53	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/20 00:53	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/20 00:53	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/20 00:53	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/20 00:53	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/20 00:53	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/20 00:53	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-500580/9
Matrix: Water
Analysis Batch: 500580

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isobutyl alcohol	ND		110	37	ug/L			06/30/20 00:53	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/20 00:53	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/20 00:53	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/20 00:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/20 00:53	1
Propionitrile	ND		20	3.7	ug/L			06/30/20 00:53	1
Styrene	ND		1.0	0.36	ug/L			06/30/20 00:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 00:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/20 00:53	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/20 00:53	1
Toluene	ND		1.0	0.17	ug/L			06/30/20 00:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/20 00:53	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/20 00:53	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/20 00:53	1
Trichloroethene	0.383	J	1.0	0.16	ug/L			06/30/20 00:53	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/20 00:53	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/20 00:53	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/20 00:53	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/20 00:53	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/20 00:53	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/20 00:53	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/20 00:53	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/20 00:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*06/30/20 00:53*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*06/30/20 00:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*06/30/20 00:53*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*06/30/20 00:53*	*1*

Lab Sample ID: LCS 280-500580/4
Matrix: Water
Analysis Batch: 500580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	78.8		ug/L		79	39 - 156
Acrolein	247	127		ug/L		51	36 - 147
Acrylonitrile	250	240		ug/L		96	56 - 135
Benzene	25.0	24.4		ug/L		98	65 - 135
Chlorobromomethane	25.0	25.8		ug/L		103	65 - 135
Dichlorobromomethane	25.0	26.8		ug/L		107	65 - 135
Bromoform	25.0	22.3		ug/L		89	62 - 135
Bromomethane	25.0	25.2		ug/L		101	45 - 135
2-Butanone (MEK)	100	88.0		ug/L		88	44 - 177
Carbon disulfide	25.0	19.2		ug/L		77	55 - 143
Carbon tetrachloride	25.0	25.8		ug/L		103	65 - 135
Chlorobenzene	25.0	25.3		ug/L		101	65 - 135
Chlorodibromomethane	25.0	22.8		ug/L		91	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500580/4
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 500580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	25.1		ug/L		101	46 - 136
Chloroform	25.0	25.5		ug/L		102	65 - 135
Chloromethane	25.0	20.0		ug/L		80	34 - 145
Allyl chloride	25.0	23.8		ug/L		95	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	21.2		ug/L		85	57 - 135
Dibromomethane	25.0	27.0		ug/L		108	65 - 135
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	65 - 135
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	65 - 135
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135
trans-1,4-Dichloro-2-butene	25.0	21.5		ug/L		86	53 - 135
Dichlorodifluoromethane	25.0	14.5		ug/L		58	43 - 142
1,1-Dichloroethane	25.0	24.7		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	25.9		ug/L		104	65 - 135
cis-1,2-Dichloroethene	25.0	26.8		ug/L		107	65 - 135
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	65 - 135
1,1-Dichloroethene	25.0	22.8		ug/L		91	65 - 136
1,2-Dichloropropane	25.0	23.5		ug/L		94	64 - 135
1,3-Dichloropropane	25.0	23.3		ug/L		93	64 - 135
2,2-Dichloropropane	25.0	25.4		ug/L		101	65 - 135
cis-1,3-Dichloropropene	25.0	23.3		ug/L		93	65 - 135
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	65 - 135
1,1-Dichloropropene	25.0	24.7		ug/L		99	65 - 135
Ethylbenzene	25.0	27.6		ug/L		110	65 - 135
Ethyl methacrylate	25.0	21.8		ug/L		87	50 - 135
2-Hexanone	100	84.2		ug/L		84	57 - 139
Iodomethane	25.0	28.9		ug/L		116	65 - 142
Isobutyl alcohol	625	511		ug/L		82	55 - 135
Methylene Chloride	25.0	24.4		ug/L		98	54 - 141
4-Methyl-2-pentanone (MIBK)	100	82.1		ug/L		82	60 - 150
Styrene	25.0	26.8		ug/L		107	65 - 135
1,1,1,2-Tetrachloroethane	25.0	23.9		ug/L		95	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.6		ug/L		90	58 - 135
Tetrachloroethene	25.0	23.6		ug/L		94	65 - 135
Toluene	25.0	25.6		ug/L		102	65 - 135
1,2,4-Trichlorobenzene	25.0	23.9		ug/L		96	58 - 135
1,1,1-Trichloroethane	25.0	23.9		ug/L		95	65 - 135
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	64 - 135
Trichloroethene	25.0	28.1		ug/L		112	65 - 135
Trichlorofluoromethane	25.0	26.8		ug/L		107	53 - 137
1,2,3-Trichloropropane	25.0	22.8		ug/L		91	65 - 135
Vinyl acetate	50.0	44.9		ug/L		90	11 - 187
Vinyl chloride	25.0	23.1		ug/L		93	40 - 137
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	65 - 135
o-Xylene	25.0	24.5		ug/L		98	65 - 135
Xylenes, Total	50.0	49.2		ug/L		98	65 - 135
1,2-Dibromoethane	25.0	23.2		ug/L		93	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500580/4 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

Lab Sample ID: LCS 280-500580/6 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetonitrile			250	232		ug/L		93	50 - 150		
Chloroprene			25.0	24.8		ug/L		99	50 - 150		
Methacrylonitrile			250	252		ug/L		101	50 - 150		
Methyl methacrylate			50.0	50.5		ug/L		101	50 - 150		
Propionitrile			250	248		ug/L		99	50 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
Toluene-d8 (Surr)	*96*		*80 - 125*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

Lab Sample ID: LCSD 280-500580/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	93.2		ug/L		93	39 - 156	17	23
Acrolein			247	148		ug/L		60	36 - 147	15	30
Acrylonitrile			250	272		ug/L		109	56 - 135	13	30
Benzene			25.0	25.7		ug/L		103	65 - 135	5	20
Chlorobromomethane			25.0	26.6		ug/L		107	65 - 135	3	29
Dichlorobromomethane			25.0	27.9		ug/L		112	65 - 135	4	20
Bromoform			25.0	24.4		ug/L		97	62 - 135	9	27
Bromomethane			25.0	23.6		ug/L		94	45 - 135	7	33
2-Butanone (MEK)			100	102		ug/L		102	44 - 177	15	32
Carbon disulfide			25.0	19.7		ug/L		79	55 - 143	2	20
Carbon tetrachloride			25.0	26.5		ug/L		106	65 - 135	2	21
Chlorobenzene			25.0	26.8		ug/L		107	65 - 135	6	20
Chlorodibromomethane			25.0	24.1		ug/L		96	65 - 135	6	20
Chloroethane			25.0	25.5		ug/L		102	46 - 136	1	25
Chloroform			25.0	26.3		ug/L		105	65 - 135	3	20
Chloromethane			25.0	20.0		ug/L		80	34 - 145	0	24
Allyl chloride			25.0	24.5		ug/L		98	50 - 135	3	30
1,2-Dibromo-3-Chloropropane			25.0	22.8		ug/L		91	57 - 135	8	22
Dibromomethane			25.0	27.4		ug/L		110	65 - 135	1	26
1,2-Dichlorobenzene			25.0	27.2		ug/L		109	65 - 135	5	20
1,3-Dichlorobenzene			25.0	26.8		ug/L		107	65 - 135	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500580/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			25.0	26.6		ug/L		106	65 - 135	2	23
trans-1,4-Dichloro-2-butene			25.0	23.5		ug/L		94	53 - 135	9	25
Dichlorodifluoromethane			25.0	13.8		ug/L		55	43 - 142	5	30
1,1-Dichloroethane			25.0	25.5		ug/L		102	65 - 135	3	21
1,2-Dichloroethane			25.0	26.3		ug/L		105	65 - 135	2	20
cis-1,2-Dichloroethene			25.0	28.0		ug/L		112	65 - 135	4	20
trans-1,2-Dichloroethene			25.0	25.8		ug/L		103	65 - 135	0	24
1,1-Dichloroethene			25.0	23.8		ug/L		95	65 - 136	4	20
1,2-Dichloropropane			25.0	25.5		ug/L		102	64 - 135	8	20
1,3-Dichloropropane			25.0	24.9		ug/L		100	64 - 135	7	20
2,2-Dichloropropane			25.0	26.7		ug/L		107	65 - 135	5	20
cis-1,3-Dichloropropene			25.0	24.6		ug/L		98	65 - 135	5	26
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	65 - 135	2	26
1,1-Dichloropropene			25.0	25.4		ug/L		102	65 - 135	3	21
Ethylbenzene			25.0	28.3		ug/L		113	65 - 135	3	20
Ethyl methacrylate			25.0	23.8		ug/L		95	50 - 135	9	30
2-Hexanone			100	97.9		ug/L		98	57 - 139	15	25
Iodomethane			25.0	30.4		ug/L		121	65 - 142	5	25
Isobutyl alcohol			625	594		ug/L		95	55 - 135	15	30
Methylene Chloride			25.0	25.1		ug/L		100	54 - 141	3	26
4-Methyl-2-pentanone (MIBK)			100	95.8		ug/L		96	60 - 150	15	22
Styrene			25.0	28.1		ug/L		113	65 - 135	5	26
1,1,1,2-Tetrachloroethane			25.0	24.8		ug/L		99	65 - 135	4	20
1,1,2,2-Tetrachloroethane			25.0	24.1		ug/L		96	58 - 135	6	20
Tetrachloroethene			25.0	25.6		ug/L		102	65 - 135	8	20
Toluene			25.0	26.4		ug/L		106	65 - 135	3	20
1,2,4-Trichlorobenzene			25.0	24.3		ug/L		97	58 - 135	2	25
1,1,1-Trichloroethane			25.0	24.8		ug/L		99	65 - 135	4	20
1,1,2-Trichloroethane			25.0	27.3		ug/L		109	64 - 135	5	27
Trichloroethene			25.0	27.7		ug/L		111	65 - 135	1	20
Trichlorofluoromethane			25.0	26.4		ug/L		105	53 - 137	2	27
1,2,3-Trichloropropane			25.0	25.0		ug/L		100	65 - 135	9	23
Vinyl acetate			50.0	48.9		ug/L		98	11 - 187	9	24
Vinyl chloride			25.0	22.2		ug/L		89	40 - 137	4	24
m-Xylene & p-Xylene			25.0	24.8		ug/L		99	65 - 135	0	20
o-Xylene			25.0	25.3		ug/L		101	65 - 135	3	20
Xylenes, Total			50.0	50.1		ug/L		100	65 - 135	2	20
1,2-Dibromoethane			25.0	25.2		ug/L		101	65 - 135	9	27

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
Toluene-d8 (Surr)	*99*		*80 - 125*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500580/7
Matrix: Water
Analysis Batch: 500580

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile			250	259		ug/L		104	50 - 150	NaN	30
Chloroprene			25.0	24.8		ug/L		99	50 - 150	NaN	30
Methacrylonitrile			250	257		ug/L		103	50 - 150	NaN	30
Methyl methacrylate			50.0	54.2		ug/L		108	50 - 150	NaN	30
Propionitrile			250	270		ug/L		108	50 - 150	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*

Lab Sample ID: 280-138090-19 MS
Matrix: Water
Analysis Batch: 500580

Client Sample ID: RW-7688P-20200623
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone	ND		100	85.1		ug/L		85	39 - 156		
Acrolein	ND		247	247		ug/L		100	36 - 147		
Acrylonitrile	ND		250	243		ug/L		97	56 - 135		
Benzene	ND		25.0	25.2		ug/L		101	65 - 135		
Chlorobromomethane	ND		25.0	25.4		ug/L		101	65 - 135		
Dichlorobromomethane	ND		25.0	27.1		ug/L		108	65 - 135		
Bromoform	ND		25.0	23.0		ug/L		92	62 - 135		
Bromomethane	ND		25.0	21.1		ug/L		84	45 - 135		
2-Butanone (MEK)	ND		100	90.6		ug/L		91	44 - 177		
Carbon disulfide	ND		25.0	19.6		ug/L		78	55 - 143		
Carbon tetrachloride	ND		25.0	26.8		ug/L		107	65 - 135		
Chlorobenzene	ND		25.0	26.7		ug/L		107	65 - 135		
Chlorodibromomethane	ND		25.0	23.5		ug/L		94	65 - 135		
Chloroethane	ND		25.0	23.7		ug/L		95	46 - 136		
Chloroform	ND		25.0	26.3		ug/L		105	65 - 135		
Chloromethane	ND		25.0	19.3		ug/L		77	34 - 145		
Allyl chloride	ND		25.0	23.3		ug/L		93	50 - 135		
1,2-Dibromo-3-Chloropropane	ND		25.0	22.4		ug/L		89	57 - 135		
Dibromomethane	ND		25.0	27.0		ug/L		108	65 - 135		
1,2-Dichlorobenzene	ND		25.0	25.8		ug/L		103	65 - 135		
1,3-Dichlorobenzene	ND		25.0	26.7		ug/L		107	65 - 135		
1,4-Dichlorobenzene	ND		25.0	27.0		ug/L		108	65 - 135		
trans-1,4-Dichloro-2-butene	ND		25.0	21.3		ug/L		85	53 - 135		
Dichlorodifluoromethane	ND		25.0	13.8		ug/L		55	43 - 142		
1,1-Dichloroethane	ND		25.0	25.4		ug/L		101	65 - 135		
1,2-Dichloroethane	ND		25.0	26.9		ug/L		108	65 - 135		
cis-1,2-Dichloroethene	ND		25.0	26.4		ug/L		106	65 - 135		
trans-1,2-Dichloroethene	ND		25.0	26.6		ug/L		106	65 - 135		
1,1-Dichloroethene	ND		25.0	22.8		ug/L		91	65 - 136		
1,2-Dichloropropane	ND		25.0	24.2		ug/L		97	64 - 135		
1,3-Dichloropropane	ND		25.0	24.1		ug/L		97	64 - 135		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-138090-19 MS **Client Sample ID: RW-7688P-20200623**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	ND		25.0	23.6		ug/L		94	65 - 135
cis-1,3-Dichloropropene	ND		25.0	23.3		ug/L		93	65 - 135
trans-1,3-Dichloropropene	ND		25.0	20.5		ug/L		82	65 - 135
1,1-Dichloropropene	ND		25.0	25.9		ug/L		103	65 - 135
Ethylbenzene	ND		25.0	27.8		ug/L		111	65 - 135
Ethyl methacrylate	ND		25.0	22.3		ug/L		89	50 - 135
2-Hexanone	ND		100	88.6		ug/L		89	57 - 139
Iodomethane	ND		25.0	27.0		ug/L		108	65 - 142
Isobutyl alcohol	ND		625	538		ug/L		86	55 - 135
Methylene Chloride	ND		25.0	24.0		ug/L		96	54 - 141
4-Methyl-2-pentanone (MIBK)	ND		100	85.7		ug/L		86	60 - 150
Styrene	ND		25.0	28.1		ug/L		112	65 - 135
1,1,1,2-Tetrachloroethane	ND		25.0	25.0		ug/L		100	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	23.5		ug/L		94	58 - 135
Tetrachloroethene	ND		25.0	25.1		ug/L		100	65 - 135
Toluene	ND		25.0	26.2		ug/L		105	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	23.6		ug/L		94	58 - 135
1,1,1-Trichloroethane	ND		25.0	24.8		ug/L		99	65 - 135
1,1,2-Trichloroethane	ND		25.0	26.8		ug/L		107	64 - 135
Trichloroethene	ND		25.0	25.9		ug/L		104	65 - 135
Trichlorofluoromethane	ND		25.0	26.5		ug/L		106	53 - 137
1,2,3-Trichloropropane	ND		25.0	23.4		ug/L		94	65 - 135
Vinyl acetate	ND		50.0	41.6		ug/L		83	11 - 187
Vinyl chloride	ND		25.0	21.7		ug/L		87	40 - 137
m-Xylene & p-Xylene	ND		25.0	25.3		ug/L		101	65 - 135
o-Xylene	ND		25.0	25.5		ug/L		102	65 - 135
Xylenes, Total	ND		50.0	50.8		ug/L		102	65 - 135
1,2-Dibromoethane	ND		25.0	23.3		ug/L		93	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
Toluene-d8 (Surr)	*100*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

Lab Sample ID: 280-138090-19 MSD **Client Sample ID: RW-7688P-20200623**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	83.2		ug/L		83	39 - 156	2	23
Acrolein	ND		247	230		ug/L		93	36 - 147	7	30
Acrylonitrile	ND		250	238		ug/L		95	56 - 135	2	30
Benzene	ND		25.0	23.7		ug/L		95	65 - 135	6	20
Chlorobromomethane	ND		25.0	24.6		ug/L		98	65 - 135	3	29
Dichlorobromomethane	ND		25.0	25.5		ug/L		102	65 - 135	6	20
Bromoform	ND		25.0	22.9		ug/L		92	62 - 135	1	27
Bromomethane	ND		25.0	21.8		ug/L		87	45 - 135	3	33

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-138090-19 MSD **Client Sample ID: RW-7688P-20200623**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	ND		100	90.7		ug/L		91	44 - 177	0	32
Carbon disulfide	ND		25.0	18.2		ug/L		73	55 - 143	7	20
Carbon tetrachloride	ND		25.0	24.6		ug/L		98	65 - 135	8	21
Chlorobenzene	ND		25.0	25.3		ug/L		101	65 - 135	6	20
Chlorodibromomethane	ND		25.0	22.7		ug/L		91	65 - 135	4	20
Chloroethane	ND		25.0	23.1		ug/L		92	46 - 136	3	25
Chloroform	ND		25.0	24.6		ug/L		98	65 - 135	7	20
Chloromethane	ND		25.0	18.3		ug/L		73	34 - 145	5	24
Allyl chloride	ND		25.0	21.8		ug/L		87	50 - 135	7	30
1,2-Dibromo-3-Chloropropane	ND		25.0	21.9		ug/L		88	57 - 135	2	22
Dibromomethane	ND		25.0	25.4		ug/L		102	65 - 135	6	26
1,2-Dichlorobenzene	ND		25.0	26.0		ug/L		104	65 - 135	0	20
1,3-Dichlorobenzene	ND		25.0	25.4		ug/L		102	65 - 135	5	20
1,4-Dichlorobenzene	ND		25.0	26.0		ug/L		104	65 - 135	4	23
trans-1,4-Dichloro-2-butene	ND		25.0	20.6		ug/L		82	53 - 135	3	25
Dichlorodifluoromethane	ND		25.0	13.1		ug/L		52	43 - 142	5	30
1,1-Dichloroethane	ND		25.0	23.5		ug/L		94	65 - 135	8	21
1,2-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 135	6	20
cis-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	65 - 135	2	20
trans-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	65 - 135	7	24
1,1-Dichloroethene	ND		25.0	21.2		ug/L		85	65 - 136	7	20
1,2-Dichloropropane	ND		25.0	22.8		ug/L		91	64 - 135	6	20
1,3-Dichloropropane	ND		25.0	23.8		ug/L		95	64 - 135	1	20
2,2-Dichloropropane	ND		25.0	22.1		ug/L		88	65 - 135	7	20
cis-1,3-Dichloropropene	ND		25.0	22.8		ug/L		91	65 - 135	2	26
trans-1,3-Dichloropropene	ND		25.0	20.1		ug/L		80	65 - 135	2	26
1,1-Dichloropropene	ND		25.0	24.0		ug/L		96	65 - 135	8	21
Ethylbenzene	ND		25.0	27.5		ug/L		110	65 - 135	1	20
Ethyl methacrylate	ND		25.0	21.9		ug/L		88	50 - 135	2	30
2-Hexanone	ND		100	90.7		ug/L		91	57 - 139	2	25
Iodomethane	ND		25.0	25.7		ug/L		103	65 - 142	5	25
Isobutyl alcohol	ND		625	565		ug/L		90	55 - 135	5	30
Methylene Chloride	ND		25.0	23.1		ug/L		93	54 - 141	4	26
4-Methyl-2-pentanone (MIBK)	ND		100	84.2		ug/L		84	60 - 150	2	22
Styrene	ND		25.0	26.6		ug/L		106	65 - 135	6	26
1,1,1,2-Tetrachloroethane	ND		25.0	23.5		ug/L		94	65 - 135	6	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.7		ug/L		91	58 - 135	4	20
Tetrachloroethene	ND		25.0	24.2		ug/L		97	65 - 135	4	20
Toluene	ND		25.0	25.1		ug/L		100	65 - 135	4	20
1,2,4-Trichlorobenzene	ND		25.0	22.8		ug/L		91	58 - 135	3	25
1,1,1-Trichloroethane	ND		25.0	23.4		ug/L		94	65 - 135	6	20
1,1,2-Trichloroethane	ND		25.0	24.9		ug/L		99	64 - 135	7	27
Trichloroethene	ND		25.0	25.1		ug/L		100	65 - 135	3	20
Trichlorofluoromethane	ND		25.0	24.8		ug/L		99	53 - 137	7	27
1,2,3-Trichloropropane	ND		25.0	23.5		ug/L		94	65 - 135	0	23
Vinyl acetate	ND		50.0	41.5		ug/L		83	11 - 187	0	24
Vinyl chloride	ND		25.0	21.1		ug/L		85	40 - 137	3	24
m-Xylene & p-Xylene	ND		25.0	24.0		ug/L		96	65 - 135	5	20
o-Xylene	ND		25.0	23.9		ug/L		96	65 - 135	6	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-138090-19 MSD **Client Sample ID: RW-7688P-20200623**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	ND		50.0	47.9		ug/L		96	65 - 135	6	20
1,2-Dibromoethane	ND		25.0	23.4		ug/L		94	65 - 135	1	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
Toluene-d8 (Surr)	*100*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

Lab Sample ID: MB 280-500875/9 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 01:05	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 01:05	1
Acrolein	ND		20	2.8	ug/L			07/02/20 01:05	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 01:05	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 01:05	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 01:05	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 01:05	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 01:05	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 01:05	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 01:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 01:05	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 01:05	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 01:05	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:05	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 01:05	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 01:05	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 01:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 01:05	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:05	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 01:05	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 01:05	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 01:05	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/02/20 01:05	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 01:05	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 01:05	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:05	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:05	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 01:05	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 01:05	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 01:05	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 01:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-500875/9
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 01:05	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 01:05	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 01:05	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 01:05	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 01:05	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 01:05	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 01:05	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 01:05	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 01:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 01:05	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 01:05	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 01:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:05	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 01:05	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 01:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 01:05	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 01:05	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 01:05	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 01:05	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 01:05	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 01:05	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 01:05	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 01:05	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 01:05	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 01:05	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 01:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 01:05*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 01:05*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 01:05*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 01:05*	*1*

Lab Sample ID: LCS 280-500875/4
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	96.5		ug/L		97	39 - 156
Acrolein	247	236		ug/L		96	36 - 147
Acrylonitrile	250	246		ug/L		98	56 - 135
Benzene	25.0	24.3		ug/L		97	65 - 135
Chlorobromomethane	25.0	24.9		ug/L		100	65 - 135
Dichlorobromomethane	25.0	24.9		ug/L		100	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500875/4
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	25.0	26.8		ug/L		107	62 - 135
Bromomethane	25.0	30.9		ug/L		124	45 - 135
2-Butanone (MEK)	100	99.1		ug/L		99	44 - 177
Carbon disulfide	25.0	27.9		ug/L		112	55 - 143
Carbon tetrachloride	25.0	25.8		ug/L		103	65 - 135
Chlorobenzene	25.0	24.2		ug/L		97	65 - 135
Chlorodibromomethane	25.0	26.1		ug/L		104	65 - 135
Chloroethane	25.0	28.5		ug/L		114	46 - 136
Chloroform	25.0	23.9		ug/L		95	65 - 135
Chloromethane	25.0	29.2		ug/L		117	34 - 145
Allyl chloride	25.0	25.6		ug/L		102	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L		108	57 - 135
Dibromomethane	25.0	24.4		ug/L		98	65 - 135
1,2-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	65 - 135
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135
trans-1,4-Dichloro-2-butene	25.0	24.0		ug/L		96	53 - 135
Dichlorodifluoromethane	25.0	36.9	*	ug/L		148	43 - 142
1,1-Dichloroethane	25.0	24.7		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	23.8		ug/L		95	65 - 135
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	65 - 135
trans-1,2-Dichloroethene	25.0	24.9		ug/L		100	65 - 135
1,1-Dichloroethene	25.0	26.9		ug/L		108	65 - 136
1,2-Dichloropropane	25.0	24.9		ug/L		99	64 - 135
1,3-Dichloropropane	25.0	23.6		ug/L		95	64 - 135
2,2-Dichloropropane	25.0	27.0		ug/L		108	65 - 135
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	65 - 135
trans-1,3-Dichloropropene	25.0	24.1		ug/L		97	65 - 135
1,1-Dichloropropene	25.0	24.6		ug/L		98	65 - 135
Ethylbenzene	25.0	24.5		ug/L		98	65 - 135
Ethyl methacrylate	25.0	25.7		ug/L		103	50 - 135
2-Hexanone	100	105		ug/L		105	57 - 139
Iodomethane	25.0	20.5		ug/L		82	65 - 142
Isobutyl alcohol	625	656		ug/L		105	55 - 135
Methylene Chloride	25.0	26.1		ug/L		104	54 - 141
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	60 - 150
Styrene	25.0	25.4		ug/L		102	65 - 135
1,1,1,2-Tetrachloroethane	25.0	25.4		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	58 - 135
Tetrachloroethene	25.0	25.5		ug/L		102	65 - 135
Toluene	25.0	24.3		ug/L		97	65 - 135
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	58 - 135
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	65 - 135
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	64 - 135
Trichloroethene	25.0	23.7		ug/L		95	65 - 135
Trichlorofluoromethane	25.0	25.8		ug/L		103	53 - 137
1,2,3-Trichloropropane	25.0	24.1		ug/L		96	65 - 135
Vinyl acetate	50.0	52.0		ug/L		104	11 - 187
Vinyl chloride	25.0	29.3		ug/L		117	40 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500875/4
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	25.0	24.3		ug/L		97	65 - 135
o-Xylene	25.0	24.8		ug/L		99	65 - 135
Xylenes, Total	50.0	49.1		ug/L		98	65 - 135
1,2-Dibromoethane	25.0	24.4		ug/L		98	65 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCS 280-500875/6
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	250	206		ug/L		82	50 - 150
Chloroprene	25.0	22.1		ug/L		88	50 - 150
Methacrylonitrile	250	210		ug/L		84	50 - 150
Methyl methacrylate	50.0	49.6		ug/L		99	50 - 150
Propionitrile	250	225		ug/L		90	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*
Toluene-d8 (Surr)	*96*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCSD 280-500875/5
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	94.6		ug/L		95	39 - 156	2	23
Acrolein	247	236		ug/L		96	36 - 147	0	30
Acrylonitrile	250	247		ug/L		99	56 - 135	1	30
Benzene	25.0	23.8		ug/L		95	65 - 135	2	20
Chlorobromomethane	25.0	25.2		ug/L		101	65 - 135	1	29
Dichlorobromomethane	25.0	24.8		ug/L		99	65 - 135	0	20
Bromoform	25.0	26.2		ug/L		105	62 - 135	2	27
Bromomethane	25.0	28.2		ug/L		113	45 - 135	9	33
2-Butanone (MEK)	100	99.0		ug/L		99	44 - 177	0	32
Carbon disulfide	25.0	27.4		ug/L		110	55 - 143	2	20
Carbon tetrachloride	25.0	25.4		ug/L		102	65 - 135	2	21
Chlorobenzene	25.0	23.6		ug/L		94	65 - 135	2	20
Chlorodibromomethane	25.0	25.5		ug/L		102	65 - 135	2	20
Chloroethane	25.0	27.5		ug/L		110	46 - 136	4	25
Chloroform	25.0	23.6		ug/L		94	65 - 135	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500875/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 500875

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane			25.0	27.6		ug/L		111	34 - 145	5	24
Allyl chloride			25.0	25.5		ug/L		102	50 - 135	0	30
1,2-Dibromo-3-Chloropropane			25.0	27.1		ug/L		109	57 - 135	0	22
Dibromomethane			25.0	24.7		ug/L		99	65 - 135	1	26
1,2-Dichlorobenzene			25.0	23.5		ug/L		94	65 - 135	0	20
1,3-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	3	20
1,4-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	3	23
trans-1,4-Dichloro-2-butene			25.0	23.8		ug/L		95	53 - 135	1	25
Dichlorodifluoromethane			25.0	35.7	*	ug/L		143	43 - 142	3	30
1,1-Dichloroethane			25.0	24.4		ug/L		97	65 - 135	1	21
1,2-Dichloroethane			25.0	24.1		ug/L		96	65 - 135	1	20
cis-1,2-Dichloroethene			25.0	24.7		ug/L		99	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	24.7		ug/L		99	65 - 135	1	24
1,1-Dichloroethene			25.0	26.6		ug/L		107	65 - 136	1	20
1,2-Dichloropropane			25.0	24.6		ug/L		99	64 - 135	1	20
1,3-Dichloropropane			25.0	23.6		ug/L		95	64 - 135	0	20
2,2-Dichloropropane			25.0	26.4		ug/L		106	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	25.1		ug/L		100	65 - 135	2	26
trans-1,3-Dichloropropene			25.0	24.2		ug/L		97	65 - 135	0	26
1,1-Dichloropropene			25.0	23.9		ug/L		95	65 - 135	3	21
Ethylbenzene			25.0	23.7		ug/L		95	65 - 135	3	20
Ethyl methacrylate			25.0	25.5		ug/L		102	50 - 135	0	30
2-Hexanone			100	103		ug/L		103	57 - 139	2	25
Iodomethane			25.0	22.2		ug/L		89	65 - 142	8	25
Isobutyl alcohol			625	646		ug/L		103	55 - 135	1	30
Methylene Chloride			25.0	25.5		ug/L		102	54 - 141	2	26
4-Methyl-2-pentanone (MIBK)			100	102		ug/L		102	60 - 150	1	22
Styrene			25.0	24.6		ug/L		98	65 - 135	3	26
1,1,1,2-Tetrachloroethane			25.0	24.0		ug/L		96	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	24.8		ug/L		99	58 - 135	1	20
Tetrachloroethene			25.0	24.2		ug/L		97	65 - 135	5	20
Toluene			25.0	24.1		ug/L		96	65 - 135	1	20
1,2,4-Trichlorobenzene			25.0	24.0		ug/L		96	58 - 135	2	25
1,1,1-Trichloroethane			25.0	24.8		ug/L		99	65 - 135	2	20
1,1,2-Trichloroethane			25.0	25.3		ug/L		101	64 - 135	1	27
Trichloroethene			25.0	23.9		ug/L		96	65 - 135	1	20
Trichlorofluoromethane			25.0	26.5		ug/L		106	53 - 137	2	27
1,2,3-Trichloropropane			25.0	24.3		ug/L		97	65 - 135	1	23
Vinyl acetate			50.0	51.2		ug/L		102	11 - 187	1	24
Vinyl chloride			25.0	28.2		ug/L		113	40 - 137	4	24
m-Xylene & p-Xylene			25.0	23.8		ug/L		95	65 - 135	2	20
o-Xylene			25.0	24.1		ug/L		96	65 - 135	3	20
Xylenes, Total			50.0	47.9		ug/L		96	65 - 135	2	20
1,2-Dibromoethane			25.0	24.1		ug/L		96	65 - 135	1	27

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500875/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500875

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCSD 280-500875/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500875

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile			250	230		ug/L		92	50 - 150	11	30
Chloroprene			25.0	22.6		ug/L		90	50 - 150	2	30
Methacrylonitrile			250	221		ug/L		88	50 - 150	5	30
Methyl methacrylate			50.0	48.2		ug/L		96	50 - 150	3	30
Propionitrile			250	243		ug/L		97	50 - 150	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

Lab Sample ID: MB 280-501117/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501117

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/06/20 11:30	1
Acetonitrile	ND		30	9.6	ug/L			07/06/20 11:30	1
Acrolein	ND		20	2.8	ug/L			07/06/20 11:30	1
Acrylonitrile	ND		20	1.4	ug/L			07/06/20 11:30	1
Benzene	ND		1.0	0.16	ug/L			07/06/20 11:30	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/06/20 11:30	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/06/20 11:30	1
Bromoform	ND		1.0	0.46	ug/L			07/06/20 11:30	1
Bromomethane	ND		2.0	0.21	ug/L			07/06/20 11:30	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/06/20 11:30	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/06/20 11:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/06/20 11:30	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/06/20 11:30	1
Chloroprene	ND		1.0	0.21	ug/L			07/06/20 11:30	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/06/20 11:30	1
Chloroethane	ND		2.0	0.41	ug/L			07/06/20 11:30	1
Chloroform	ND		1.0	0.16	ug/L			07/06/20 11:30	1
Chloromethane	ND		2.0	0.30	ug/L			07/06/20 11:30	1
Allyl chloride	ND		2.0	0.17	ug/L			07/06/20 11:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/06/20 11:30	1
Dibromomethane	ND		1.0	0.17	ug/L			07/06/20 11:30	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/06/20 11:30	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/06/20 11:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-501117/9
Matrix: Water
Analysis Batch: 501117

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/06/20 11:30	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/06/20 11:30	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/06/20 11:30	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/06/20 11:30	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/06/20 11:30	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/06/20 11:30	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/06/20 11:30	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/06/20 11:30	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/06/20 11:30	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/06/20 11:30	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/06/20 11:30	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/06/20 11:30	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/06/20 11:30	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/06/20 11:30	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/06/20 11:30	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/06/20 11:30	1
2-Hexanone	ND		5.0	1.7	ug/L			07/06/20 11:30	1
Iodomethane	ND		1.0	0.23	ug/L			07/06/20 11:30	1
Isobutyl alcohol	ND		110	37	ug/L			07/06/20 11:30	1
Methacrylonitrile	ND		10	1.6	ug/L			07/06/20 11:30	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/06/20 11:30	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/06/20 11:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/06/20 11:30	1
Propionitrile	ND		20	3.7	ug/L			07/06/20 11:30	1
Styrene	ND		1.0	0.36	ug/L			07/06/20 11:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/20 11:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/20 11:30	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/06/20 11:30	1
Toluene	ND		1.0	0.17	ug/L			07/06/20 11:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/06/20 11:30	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/06/20 11:30	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/06/20 11:30	1
Trichloroethene	ND		1.0	0.16	ug/L			07/06/20 11:30	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/06/20 11:30	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/06/20 11:30	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/06/20 11:30	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/06/20 11:30	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/06/20 11:30	1
o-Xylene	ND		1.0	0.19	ug/L			07/06/20 11:30	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/06/20 11:30	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/06/20 11:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 127*		*07/06/20 11:30*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/06/20 11:30*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*07/06/20 11:30*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*07/06/20 11:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-501117/4
Matrix: Water
Analysis Batch: 501117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	74.4		ug/L		74	39 - 156
Acrolein	247	216		ug/L		88	36 - 147
Acrylonitrile	250	228		ug/L		91	56 - 135
Benzene	25.0	20.8		ug/L		83	65 - 135
Chlorobromomethane	25.0	22.5		ug/L		90	65 - 135
Dichlorobromomethane	25.0	22.4		ug/L		89	65 - 135
Bromoform	25.0	20.0		ug/L		80	62 - 135
Bromomethane	25.0	26.5		ug/L		106	45 - 135
2-Butanone (MEK)	100	79.8		ug/L		80	44 - 177
Carbon disulfide	25.0	23.1		ug/L		92	55 - 143
Carbon tetrachloride	25.0	19.2		ug/L		77	65 - 135
Chlorobenzene	25.0	21.1		ug/L		84	65 - 135
Chlorodibromomethane	25.0	18.9		ug/L		76	65 - 135
Chloroethane	25.0	21.5		ug/L		86	46 - 136
Chloroform	25.0	21.0		ug/L		84	65 - 135
Chloromethane	25.0	16.8		ug/L		67	34 - 145
Allyl chloride	25.0	22.3		ug/L		89	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	18.9		ug/L		75	57 - 135
Dibromomethane	25.0	22.1		ug/L		89	65 - 135
1,2-Dichlorobenzene	25.0	20.9		ug/L		84	65 - 135
1,3-Dichlorobenzene	25.0	21.3		ug/L		85	65 - 135
1,4-Dichlorobenzene	25.0	21.0		ug/L		84	65 - 135
trans-1,4-Dichloro-2-butene	25.0	18.6		ug/L		74	53 - 135
Dichlorodifluoromethane	25.0	11.2		ug/L		45	43 - 142
1,1-Dichloroethane	25.0	20.7		ug/L		83	65 - 135
1,2-Dichloroethane	25.0	20.7		ug/L		83	65 - 135
cis-1,2-Dichloroethene	25.0	22.4		ug/L		89	65 - 135
trans-1,2-Dichloroethene	25.0	22.6		ug/L		91	65 - 135
1,1-Dichloroethene	25.0	22.0		ug/L		88	65 - 136
1,2-Dichloropropane	25.0	20.6		ug/L		82	64 - 135
1,3-Dichloropropane	25.0	19.7		ug/L		79	64 - 135
2,2-Dichloropropane	25.0	20.0		ug/L		80	65 - 135
cis-1,3-Dichloropropene	25.0	19.8		ug/L		79	65 - 135
trans-1,3-Dichloropropene	25.0	17.8		ug/L		71	65 - 135
1,1-Dichloropropene	25.0	19.4		ug/L		78	65 - 135
Ethylbenzene	25.0	22.0		ug/L		88	65 - 135
Ethyl methacrylate	25.0	18.8		ug/L		75	50 - 135
2-Hexanone	100	78.5		ug/L		78	57 - 139
Iodomethane	25.0	26.3		ug/L		105	65 - 142
Isobutyl alcohol	625	456		ug/L		73	55 - 135
Methylene Chloride	25.0	21.8		ug/L		87	54 - 141
4-Methyl-2-pentanone (MIBK)	100	73.3		ug/L		73	60 - 150
Styrene	25.0	22.1		ug/L		88	65 - 135
1,1,1,2-Tetrachloroethane	25.0	19.8		ug/L		79	65 - 135
1,1,2,2-Tetrachloroethane	25.0	19.1		ug/L		77	58 - 135
Tetrachloroethene	25.0	18.8		ug/L		75	65 - 135
Toluene	25.0	20.8		ug/L		83	65 - 135
1,2,4-Trichlorobenzene	25.0	19.7		ug/L		79	58 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-501117/4
Matrix: Water
Analysis Batch: 501117

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-Trichloroethane	25.0	18.2		ug/L		73	65 - 135
1,1,2-Trichloroethane	25.0	22.0		ug/L		88	64 - 135
Trichloroethene	25.0	20.3		ug/L		81	65 - 135
Trichlorofluoromethane	25.0	21.5		ug/L		86	53 - 137
1,2,3-Trichloropropane	25.0	19.1		ug/L		76	65 - 135
Vinyl acetate	50.0	39.1		ug/L		78	11 - 187
Vinyl chloride	25.0	19.1		ug/L		77	40 - 137
m-Xylene & p-Xylene	25.0	19.5		ug/L		78	65 - 135
o-Xylene	25.0	20.0		ug/L		80	65 - 135
Xylenes, Total	50.0	39.5		ug/L		79	65 - 135
1,2-Dibromoethane	25.0	20.5		ug/L		82	65 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCS 280-501117/6
Matrix: Water
Analysis Batch: 501117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	250	239		ug/L		96	50 - 150
Chloroprene	25.0	22.7		ug/L		91	50 - 150
Methacrylonitrile	250	233		ug/L		93	50 - 150
Methyl methacrylate	50.0	50.6		ug/L		101	50 - 150
Propionitrile	250	251		ug/L		100	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCSD 280-501117/5
Matrix: Water
Analysis Batch: 501117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	79.5		ug/L		79	39 - 156	7	23
Acrolein	247	215		ug/L		87	36 - 147	1	30
Acrylonitrile	250	235		ug/L		94	56 - 135	3	30
Benzene	25.0	19.6		ug/L		78	65 - 135	6	20
Chlorobromomethane	25.0	20.6		ug/L		82	65 - 135	9	29
Dichlorobromomethane	25.0	20.7		ug/L		83	65 - 135	8	20
Bromoform	25.0	18.9		ug/L		76	62 - 135	6	27
Bromomethane	25.0	20.9		ug/L		84	45 - 135	23	33

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-501117/5
Matrix: Water
Analysis Batch: 501117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	100	90.3		ug/L		90	44 - 177	12	32
Carbon disulfide	25.0	21.3		ug/L		85	55 - 143	8	20
Carbon tetrachloride	25.0	17.4		ug/L		69	65 - 135	10	21
Chlorobenzene	25.0	19.3		ug/L		77	65 - 135	9	20
Chlorodibromomethane	25.0	18.2		ug/L		73	65 - 135	4	20
Chloroethane	25.0	22.0		ug/L		88	46 - 136	2	25
Chloroform	25.0	19.9		ug/L		80	65 - 135	5	20
Chloromethane	25.0	16.2		ug/L		65	34 - 145	4	24
Allyl chloride	25.0	20.3		ug/L		81	50 - 135	9	30
1,2-Dibromo-3-Chloropropane	25.0	20.1		ug/L		80	57 - 135	6	22
Dibromomethane	25.0	21.5		ug/L		86	65 - 135	3	26
1,2-Dichlorobenzene	25.0	20.6		ug/L		82	65 - 135	2	20
1,3-Dichlorobenzene	25.0	20.6		ug/L		82	65 - 135	4	20
1,4-Dichlorobenzene	25.0	20.5		ug/L		82	65 - 135	2	23
trans-1,4-Dichloro-2-butene	25.0	19.3		ug/L		77	53 - 135	4	25
Dichlorodifluoromethane	25.0	10.8		ug/L		43	43 - 142	4	30
1,1-Dichloroethane	25.0	19.5		ug/L		78	65 - 135	6	21
1,2-Dichloroethane	25.0	20.4		ug/L		82	65 - 135	1	20
cis-1,2-Dichloroethene	25.0	21.3		ug/L		85	65 - 135	5	20
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	65 - 135	9	24
1,1-Dichloroethene	25.0	21.2		ug/L		85	65 - 136	3	20
1,2-Dichloropropane	25.0	19.0		ug/L		76	64 - 135	8	20
1,3-Dichloropropane	25.0	19.2		ug/L		77	64 - 135	2	20
2,2-Dichloropropane	25.0	17.9		ug/L		71	65 - 135	11	20
cis-1,3-Dichloropropene	25.0	18.4		ug/L		73	65 - 135	7	26
trans-1,3-Dichloropropene	25.0	17.2		ug/L		69	65 - 135	3	26
1,1-Dichloropropene	25.0	18.3		ug/L		73	65 - 135	6	21
Ethylbenzene	25.0	20.2		ug/L		81	65 - 135	9	20
Ethyl methacrylate	25.0	18.8		ug/L		75	50 - 135	0	30
2-Hexanone	100	83.6		ug/L		84	57 - 139	6	25
Iodomethane	25.0	24.2		ug/L		97	65 - 142	8	25
Isobutyl alcohol	625	535		ug/L		86	55 - 135	16	30
Methylene Chloride	25.0	20.9		ug/L		84	54 - 141	4	26
4-Methyl-2-pentanone (MIBK)	100	80.9		ug/L		81	60 - 150	10	22
Styrene	25.0	20.5		ug/L		82	65 - 135	7	26
1,1,1,2-Tetrachloroethane	25.0	18.5		ug/L		74	65 - 135	7	20
1,1,2,2-Tetrachloroethane	25.0	20.1		ug/L		80	58 - 135	5	20
Tetrachloroethene	25.0	17.4		ug/L		70	65 - 135	8	20
Toluene	25.0	19.4		ug/L		78	65 - 135	7	20
1,2,4-Trichlorobenzene	25.0	19.1		ug/L		76	58 - 135	4	25
1,1,1-Trichloroethane	25.0	17.0		ug/L		68	65 - 135	7	20
1,1,2-Trichloroethane	25.0	21.8		ug/L		87	64 - 135	1	27
Trichloroethene	25.0	18.9		ug/L		76	65 - 135	7	20
Trichlorofluoromethane	25.0	20.6		ug/L		83	53 - 137	4	27
1,2,3-Trichloropropane	25.0	20.0		ug/L		80	65 - 135	4	23
Vinyl acetate	50.0	38.2		ug/L		76	11 - 187	2	24
Vinyl chloride	25.0	18.2		ug/L		73	40 - 137	5	24
m-Xylene & p-Xylene	25.0	18.0		ug/L		72	65 - 135	8	20
o-Xylene	25.0	18.2		ug/L		73	65 - 135	9	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-501117/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 501117

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total			50.0	36.2		ug/L		72	65 - 135	9	20
1,2-Dibromoethane			25.0	19.7		ug/L		79	65 - 135	4	27

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCSD 280-501117/7 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 501117

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile			250	222		ug/L		89	50 - 150	8	30
Chloroprene			25.0	22.8		ug/L		91	50 - 150	0	30
Methacrylonitrile			250	231		ug/L		92	50 - 150	1	30
Methyl methacrylate			50.0	49.4		ug/L		99	50 - 150	2	30
Propionitrile			250	242		ug/L		97	50 - 150	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*

GC/MS VOA

Analysis Batch: 500579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-138090-1	RW-8105PS-20200622	Total/NA	Water	8260B	
280-138090-2	RW-5898B1-20200622	Total/NA	Water	8260B	
280-138090-3	RW-8048P-20200622	Total/NA	Water	8260B	
280-138090-12	RW-2172F-20200622	Total/NA	Water	8260B	
280-138090-13	RW-7773P-20200622	Total/NA	Water	8260B	
280-138090-14	RW-7677P-20200622	Total/NA	Water	8260B	
280-138090-15	RW-7677PQ-20200622	Total/NA	Water	8260B	
280-138090-16	RW-7070B-20200622	Total/NA	Water	8260B	
MB 280-500579/9	Method Blank	Total/NA	Water	8260B	
LCS 280-500579/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-500579/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-500579/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-500579/7	Lab Control Sample Dup	Total/NA	Water	8260B	
280-138090-14 MS	RW-7677P-20200622	Total/NA	Water	8260B	
280-138090-14 MSD	RW-7677P-20200622	Total/NA	Water	8260B	

Analysis Batch: 500580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-138090-4	RW-7244P-20200623	Total/NA	Water	8260B	
280-138090-5	RW-7350P-20200623	Total/NA	Water	8260B	
280-138090-6	RW-8035P-20200623	Total/NA	Water	8260B	
280-138090-7	RW-2237H-20200623	Total/NA	Water	8260B	
280-138090-8	RW-8012P-20200623	Total/NA	Water	8260B	
280-138090-17	RW-8249P-20200623	Total/NA	Water	8260B	
280-138090-18	RW-2151H-20200623	Total/NA	Water	8260B	
280-138090-19	RW-7688P-20200623	Total/NA	Water	8260B	
280-138090-20	RW-7688PQ-20200623	Total/NA	Water	8260B	
280-138090-21	RW-8284P-20200623	Total/NA	Water	8260B	
MB 280-500580/9	Method Blank	Total/NA	Water	8260B	
LCS 280-500580/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-500580/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-500580/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-500580/7	Lab Control Sample Dup	Total/NA	Water	8260B	
280-138090-19 MS	RW-7688P-20200623	Total/NA	Water	8260B	
280-138090-19 MSD	RW-7688P-20200623	Total/NA	Water	8260B	

Analysis Batch: 500875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-138090-9	RW-2879M-20200624	Total/NA	Water	8260B	
280-138090-10	RW-7586P-20200624	Total/NA	Water	8260B	
280-138090-11	RW-8030P-20200624	Total/NA	Water	8260B	
MB 280-500875/9	Method Blank	Total/NA	Water	8260B	
LCS 280-500875/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-500875/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-500875/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-500875/7	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 501117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-138090-22	TB-01-20200625	Total/NA	Water	8260B	
MB 280-501117/9	Method Blank	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 501117 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-501117/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-501117/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-501117/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-501117/7	Lab Control Sample Dup	Total/NA	Water	8260B	

Client Sample ID: RW-8105PS-20200622 — Lab Sample ID: 280-138090-1

Date Collected: 06/22/20 12:20 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 03:23	PP	TAL DEN

Client Sample ID: RW-5898B1-20200622 — Lab Sample ID: 280-138090-2

Date Collected: 06/22/20 15:15 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 03:44	PP	TAL DEN

Client Sample ID: RW-8048P-20200622 — Lab Sample ID: 280-138090-3

Date Collected: 06/22/20 16:58 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 04:06	PP	TAL DEN

Client Sample ID: RW-7244P-20200623 — Lab Sample ID: 280-138090-4

Date Collected: 06/23/20 09:00 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 04:07	PP	TAL DEN

Client Sample ID: RW-7350P-20200623 — Lab Sample ID: 280-138090-5

Date Collected: 06/23/20 10:25 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 04:29	PP	TAL DEN

Client Sample ID: RW-8035P-20200623 — Lab Sample ID: 280-138090-6

Date Collected: 06/23/20 12:55 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 04:50	PP	TAL DEN

Client Sample ID: RW-2237H-20200623 — Lab Sample ID: 280-138090-7

Date Collected: 06/23/20 15:06 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 05:11	PP	TAL DEN

Client Sample ID: RW-8012P-20200623 — Lab Sample ID: 280-138090-8

Date Collected: 06/23/20 16:10 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 05:33	PP	TAL DEN

Client Sample ID: RW-2879M-20200624 — Lab Sample ID: 280-138090-9

Date Collected: 06/24/20 10:10 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 01:26	PP	TAL DEN

Client Sample ID: RW-7586P-20200624 — Lab Sample ID: 280-138090-10

Date Collected: 06/24/20 11:35 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 01:47	PP	TAL DEN

Client Sample ID: RW-8030P-20200624 — Lab Sample ID: 280-138090-11

Date Collected: 06/24/20 13:40 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 02:09	PP	TAL DEN

Client Sample ID: RW-2172F-20200622 — Lab Sample ID: 280-138090-12

Date Collected: 06/22/20 11:54 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 04:27	PP	TAL DEN

Client Sample ID: RW-7773P-20200622 — Lab Sample ID: 280-138090-13

Date Collected: 06/22/20 13:42 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 04:48	PP	TAL DEN

Client Sample ID: RW-7677P-20200622 — Lab Sample ID: 280-138090-14

Date Collected: 06/22/20 15:04 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 05:09	PP	TAL DEN

Client Sample ID: RW-7677PQ-20200622 — Lab Sample ID: 280-138090-15

Date Collected: 06/22/20 15:09 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 06:13	PP	TAL DEN

Client Sample ID: RW-7070B-20200622 — Lab Sample ID: 280-138090-16

Date Collected: 06/22/20 16:48 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500579	06/30/20 06:34	PP	TAL DEN

Client Sample ID: RW-8249P-20200623 — Lab Sample ID: 280-138090-17

Date Collected: 06/23/20 10:22 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 05:54	PP	TAL DEN

Client Sample ID: RW-2151H-20200623 — Lab Sample ID: 280-138090-18

Date Collected: 06/23/20 13:03 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 06:15	PP	TAL DEN

Client Sample ID: RW-7688P-20200623 — Lab Sample ID: 280-138090-19

Date Collected: 06/23/20 14:21 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 06:36	PP	TAL DEN

Client Sample ID: RW-7688PQ-20200623 — Lab Sample ID: 280-138090-20

Date Collected: 06/23/20 14:26 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 07:40	PP	TAL DEN

Client Sample ID: RW-8284P-20200623 — Lab Sample ID: 280-138090-21

Date Collected: 06/23/20 16:12 — **Matrix: Water**
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500580	06/30/20 08:02	PP	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Client Sample ID: TB-01-20200625
Lab Sample ID: 280-138090-22

Date Collected: 06/25/20 10:30
Matrix: Water
Date Received: 06/26/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501117	07/06/20 12:56	AJP	TAL DEN

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Laboratory: Eurofins TestAmerica, Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025-011	01-08-21

Method Summary

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: CDM Smith, Inc. Job ID: 280-138090-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-138090-1	RW-8105PS-20200622	Water	06/22/20 12:20	06/26/20 09:25	
280-138090-2	RW-5898B1-20200622	Water	06/22/20 15:15	06/26/20 09:25	
280-138090-3	RW-8048P-20200622	Water	06/22/20 16:58	06/26/20 09:25	
280-138090-4	RW-7244P-20200623	Water	06/23/20 09:00	06/26/20 09:25	
280-138090-5	RW-7350P-20200623	Water	06/23/20 10:25	06/26/20 09:25	
280-138090-6	RW-8035P-20200623	Water	06/23/20 12:55	06/26/20 09:25	
280-138090-7	RW-2237H-20200623	Water	06/23/20 15:06	06/26/20 09:25	
280-138090-8	RW-8012P-20200623	Water	06/23/20 16:10	06/26/20 09:25	
280-138090-9	RW-2879M-20200624	Water	06/24/20 10:10	06/26/20 09:25	
280-138090-10	RW-7586P-20200624	Water	06/24/20 11:35	06/26/20 09:25	
280-138090-11	RW-8030P-20200624	Water	06/24/20 13:40	06/26/20 09:25	
280-138090-12	RW-2172F-20200622	Water	06/22/20 11:54	06/26/20 09:25	
280-138090-13	RW-7773P-20200622	Water	06/22/20 13:42	06/26/20 09:25	
280-138090-14	RW-7677P-20200622	Water	06/22/20 15:04	06/26/20 09:25	
280-138090-15	RW-7677PQ-20200622	Water	06/22/20 15:09	06/26/20 09:25	
280-138090-16	RW-7070B-20200622	Water	06/22/20 16:48	06/26/20 09:25	
280-138090-17	RW-8249P-20200623	Water	06/23/20 10:22	06/26/20 09:25	
280-138090-18	RW-2151H-20200623	Water	06/23/20 13:03	06/26/20 09:25	
280-138090-19	RW-7688P-20200623	Water	06/23/20 14:21	06/26/20 09:25	
280-138090-20	RW-7688PQ-20200623	Water	06/23/20 14:26	06/26/20 09:25	
280-138090-21	RW-8284P-20200623	Water	06/23/20 16:12	06/26/20 09:25	
280-138090-22	TB-01-20200625	Water	06/25/20 10:30	06/26/20 09:25	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 485097

Lab Sample ID: STD005 280-485097/21 IC Client Sample ID:

Date Analyzed: 02/06/20 14:40 Lab File ID: P7815.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Propanol	3.13	Peak assignment corrected	zhangji	02/06/20 21:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 496958

Lab Sample ID: STD005 280-496958/12 IC Client Sample ID:

Date Analyzed: 06/01/20 16:26 Lab File ID: P1658.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.67	Assign Peak	seifertj	06/02/20 08:03
Chloromethane	1.84	Assign Peak	seifertj	06/02/20 08:03
Bromomethane	2.24	Assign Peak	seifertj	06/02/20 08:03
Acetone	2.96	Assign Peak	seifertj	06/02/20 08:04
Iodomethane	3.08	Assign Peak	seifertj	06/02/20 08:04
Carbon disulfide	3.13	Assign Peak	seifertj	06/02/20 08:04
Methylene Chloride	3.31	Assign Peak	seifertj	06/02/20 08:04
trans-1,2-Dichloroethene	3.52	Invalid Compound ID	ornelasg	06/01/20 21:43
Chlorobromomethane	4.43	Invalid Compound ID	ornelasg	06/01/20 21:43
1,2-Dichloroethane	4.92	Invalid Compound ID	ornelasg	06/01/20 21:53
Trichloroethene	5.39	Invalid Compound ID	ornelasg	06/01/20 21:43
Methylcyclohexane	5.59	Invalid Compound ID	ornelasg	06/01/20 21:43
Dibromomethane	5.67	Invalid Compound ID	ornelasg	06/01/20 21:43
1,2-Dibromoethane	7.24	Invalid Compound ID	ornelasg	06/01/20 21:43
1-Chlorohexane	7.63	Invalid Compound ID	ornelasg	06/01/20 21:54
Chlorobenzene	7.68	Invalid Compound ID	ornelasg	06/01/20 21:43
Ethylbenzene	7.75	Invalid Compound ID	ornelasg	06/01/20 21:43
Bromobenzene	8.89	Invalid Compound ID	ornelasg	06/01/20 21:44
4-Chlorotoluene	9.19	Invalid Compound ID	ornelasg	06/01/20 21:44
1,3-Dichlorobenzene	9.80	Invalid Compound ID	ornelasg	06/01/20 21:44
1,4-Dichlorobenzene	9.90	Invalid Compound ID	ornelasg	06/01/20 21:44
1,2,4-Trichlorobenzene	11.87	Invalid Compound ID	ornelasg	06/01/20 21:44
Hexachlorobutadiene	12.00	Invalid Compound ID	ornelasg	06/01/20 21:44
1,2,3-Trichlorobenzene	12.35	Invalid Compound ID	ornelasg	06/01/20 21:44

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 496958

Lab Sample ID: STD010 280-496958/13 IC Client Sample ID:

Date Analyzed: 06/01/20 16:47 Lab File ID: P1659.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.84	Invalid Compound ID	ornelasg	06/01/20 21:04
Acetone	2.96	Invalid Compound ID	ornelasg	06/01/20 21:52

Lab Sample ID: STD020 280-496958/14 IC Client Sample ID:

Date Analyzed: 06/01/20 17:09 Lab File ID: P1660.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Iodomethane	3.07	Peak Tail	seifertj	06/02/20 09:06

Lab Sample ID: STD100 280-496958/19 IC Client Sample ID:

Date Analyzed: 06/01/20 18:55 Lab File ID: P1665.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.22	Invalid Compound ID	ornelasg	06/01/20 21:04

Lab Sample ID: STD200 280-496958/20 IC Client Sample ID:

Date Analyzed: 06/01/20 19:16 Lab File ID: P1666.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.21	Invalid Compound ID	ornelasg	06/01/20 21:04

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 500579

Lab Sample ID: 280-138090-14 MS Client Sample ID: RW-7677P-20200622 MS

Date Analyzed: 06/30/20 05:31 Lab File ID: P2873.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propionitrile		Invalid Compound ID	petuninp	06/30/20 20:44

Lab Sample ID: 280-138090-14 MSD Client Sample ID: RW-7677P-20200622 MSD

Date Analyzed: 06/30/20 05:52 Lab File ID: P2874.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)	4.22	Peak assignment corrected	petuninp	06/30/20 20:57
Propionitrile		Invalid Compound ID	petuninp	06/30/20 20:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 497166

Lab Sample ID: STD020 280-497166/46 IC Client Sample ID:

Date Analyzed: 06/03/20 15:14 Lab File ID: R5919.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trichlorobenzene	11.12	Assign Peak	peppinga	06/04/20 14:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 497370

Lab Sample ID: STD005 280-497370/14 IC Client Sample ID:

Date Analyzed: 06/04/20 12:50 Lab File ID: R5934.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.83	Assign Peak	peppinga	06/05/20 07:45
Iodomethane	3.00	Assign Peak	peppinga	06/05/20 08:32
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Assign Peak	peppinga	06/05/20 08:39
1,1-Dichloroethane	3.75	Assign Peak	peppinga	06/05/20 08:43
2,2-Dichloropropane	4.17	Assign Peak	peppinga	06/05/20 11:15
cis-1,3-Dichloropropene	6.03	Assign Peak	peppinga	06/05/20 12:11
Hexachlorobutadiene	11.87	Assign Peak	peppinga	06/08/20 13:46

Lab Sample ID: STD010 280-497370/15 IC Client Sample ID:

Date Analyzed: 06/04/20 13:12 Lab File ID: R5935.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.20	Invalid Compound ID	peppinga	06/05/20 08:26
Iodomethane	3.01	Split Peak	peppinga	06/05/20 08:35
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichrastr	06/04/20 17:24
2,2-Dichloropropane	4.17	Peak assignment corrected	sumichrastr	06/04/20 20:41
sec-Butyl Alcohol	4.25	Assign Peak	peppinga	06/05/20 08:44
Methylcyclohexane	5.46	Assign Peak	peppinga	06/05/20 08:53
cis-1,3-Dichloropropene	6.03	Assign Peak	peppinga	06/05/20 12:11
Hexachlorobutadiene	11.87	Peak assignment corrected	peppinga	06/08/20 13:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 497370

Lab Sample ID: STD020 280-497370/16 IC Client Sample ID:

Date Analyzed: 06/04/20 13:33 Lab File ID: R5936.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroethane	2.30	Split Peak	peppinga	06/05/20 07:49
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichrastr	06/04/20 17:24

Lab Sample ID: STD050 280-497370/17 IC Client Sample ID:

Date Analyzed: 06/04/20 13:54 Lab File ID: R5937.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichrastr	06/04/20 17:23

Lab Sample ID: STD10 280-497370/18 IC Client Sample ID:

Date Analyzed: 06/04/20 14:15 Lab File ID: R5938.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichrastr	06/04/20 17:23
2,2-Dichloropropane	4.17	Assign Peak	peppinga	06/05/20 11:31

Lab Sample ID: ICIS 280-497370/19 Client Sample ID:

Date Analyzed: 06/04/20 14:37 Lab File ID: R5939.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichrastr	06/04/20 17:22

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 497370

Lab Sample ID: STD75 280-497370/20 IC Client Sample ID:

Date Analyzed: 06/04/20 14:58 Lab File ID: R5940.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichras tr	06/04/20 17:22

Lab Sample ID: STD100 280-497370/21 IC Client Sample ID:

Date Analyzed: 06/04/20 15:20 Lab File ID: R5941.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichras tr	06/04/20 17:21

Lab Sample ID: STD200 280-497370/22 IC Client Sample ID:

Date Analyzed: 06/04/20 15:41 Lab File ID: R5942.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichras tr	06/04/20 17:20

Lab Sample ID: ICV 280-497370/23 Client Sample ID:

Date Analyzed: 06/04/20 16:02 Lab File ID: R5943.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tert-butyl alcohol (2-methyl-2-propanol)	3.29	Peak assignment corrected	sumichras tr	06/04/20 17:25

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 500580

Lab Sample ID: 280-138090-4 Client Sample ID: RW-7244P-20200623

Date Analyzed: 06/30/20 04:07 Lab File ID: R6987.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	petuninp	06/30/20 20:24

Lab Sample ID: 280-138090-7 Client Sample ID: RW-2237H-20200623

Date Analyzed: 06/30/20 05:11 Lab File ID: R6990.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	petuninp	06/30/20 20:25
cis-1,2-Dichloroethene		Invalid Compound ID	petuninp	06/30/20 20:25

Lab Sample ID: 280-138090-17 Client Sample ID: RW-8249P-20200623

Date Analyzed: 06/30/20 05:54 Lab File ID: R6992.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	petuninp	06/30/20 20:25

Lab Sample ID: 280-138090-18 Client Sample ID: RW-2151H-20200623

Date Analyzed: 06/30/20 06:15 Lab File ID: R6993.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	petuninp	06/30/20 20:25

Lab Sample ID: 280-138090-19 Client Sample ID: RW-7688P-20200623

Date Analyzed: 06/30/20 06:36 Lab File ID: R6994.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	petuninp	06/30/20 20:26

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 500580

Lab Sample ID: 280-138090-19 MSD Client Sample ID: RW-7688P-20200623 MSD

Date Analyzed: 06/30/20 07:19 Lab File ID: R6996.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propionitrile		Invalid Compound ID	petuninp	06/30/20 20:28

Lab Sample ID: 280-138090-20 Client Sample ID: RW-7688PQ-20200623

Date Analyzed: 06/30/20 07:40 Lab File ID: R6997.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone		Invalid Compound ID	petuninp	06/30/20 20:28
Carbon disulfide		Invalid Compound ID	petuninp	06/30/20 20:29

Lab Sample ID: 280-138090-21 Client Sample ID: RW-8284P-20200623

Date Analyzed: 06/30/20 08:02 Lab File ID: R6998.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	petuninp	06/30/20 20:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Analysis Batch Number: 501117

Lab Sample ID: MB 280-501117/9 Client Sample ID:

Date Analyzed: 07/06/20 11:30 Lab File ID: R7179.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	peppinga	07/06/20 12:08
Carbon disulfide		Invalid Compound ID	peppinga	07/06/20 12:08

Lab Sample ID: 280-138090-22 Client Sample ID: TB-01-20200625

Date Analyzed: 07/06/20 12:56 Lab File ID: R7183.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	peppinga	07/06/20 14:01
Carbon disulfide		Invalid Compound ID	peppinga	07/06/20 14:01

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
mv-Cent BFB_00001							1,2-Dichloroethene, Total	
							1,2-Dichloroethene, Total (URS)	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
							Xylenes, Total (URS)	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		BFB	250 ug/mL
mv-Cent BFB_00002							1,2-Dichloroethene, Total	
							1,2-Dichloroethene, Total (URS)	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
							Xylenes, Total (URS)	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		BFB	250 ug/mL
mv-Cent IS_00006	07/31/23	02/24/20	P&T Methanol, Lot 1996628	5 mL	MV-568718-D_00016	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.MV-568718-D_00016	07/31/23		RESTEK, Lot A0139459		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
MV-Gas A_00057	06/05/20	05/19/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00005	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00010	11/30/21		RESTEK, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00005	10/31/21		RESTEK, Lot A0142584		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00058	06/12/20	05/26/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00005	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00010	11/30/21		RESTEK, Lot A0143158		(Purchased Reagent)		Bromomethane	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
.MV-569723_00005	10/31/21		RESTEK, Lot A0142584		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00060	07/03/20	06/20/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00012	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722_00012	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
MV-Gas A_00061	07/10/20	07/04/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00012	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722_00012	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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MV-Gas B_00060	06/05/20	05/18/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(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
MV-Gas B_00064	07/10/20	06/25/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(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
mv-IS_00001	06/13/20	12/15/19	P&T Methanol, Lot 198123	50 mL	mv-30241_00008	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
mv-IS_SS_00001	06/13/20	12/13/19	P&T Methanol, Lot 198123	50 mL	mv-30241_00008	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
					MV-567650_00028	1000 uL	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
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.MV-567650_00028	11/30/22		Restek, Lot A0132615		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene-d8 (Surr)	2500 ug/mL
mv-IS_SS_00006	11/07/20	05/07/20	P&T Methanol, Lot 198123	100 mL	mv-30241_00008	2000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
mv-IS_SS_00006	11/07/20	05/07/20	P&T Methanol, Lot 198123	100 mL	MV-567650_00028	2000 uL	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
.MV-567650_00028	11/30/22		Restek, Lot A0132615		(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
MV-MegaMain B_00031	10/24/20	04/24/20	P&T Methanol, Lot 181124	25 mL	MV-568720.sec_00031	1250 uL	Acrolein	987.5 ug/mL
					MV-569721.sec_00006	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724.sec_00027	1000 uL	Vinyl acetate	200 ug/mL
					MV-571992.sec_00005	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,2-Dichloropropane	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Allyl chloride	100 ug/mL
							Benzene	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chlorodibromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Dibromomethane	100 ug/mL
							Dichlorobromomethane	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	100 ug/mL
							o-Xylene	100 ug/mL
							Styrene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
							Xylenes, Total	200 ug/mL
.MV-568720.sec_00031	04/30/21		RESTEK, Lot A0154553		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721.sec_00006	08/31/21		RESTEK, Lot A0140519		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724.sec_00027	09/30/21		RESTEK, Lot A0158728		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-571992.sec_00005	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-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	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
							Acrylonitrile	25000 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Allyl chloride	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	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
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
MV-MegaMainA_00034	10/31/20	04/28/20	P&T Methanol, Lot 181124	25 mL	MV-568720_00033	1250 uL	Acrolein	987.5 ug/mL
					MV-569721_00008	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724_00025	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00010	4000 uL	Cyclohexanone	4000 ug/mL
					MV-571992_00004	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Allyl chloride	100 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chlorodibromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromomethane	100 ug/mL
							Dichlorobromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					MV-CUS17739_00005	2500 uL	1-Chlorohexane	100 ug/mL
							2-Pentanone	400 ug/mL
							sec-Butyl Alcohol	3000 ug/mL
.MV-568720_00033	04/30/21		RESTEK, Lot A0154578		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721_00008	10/31/21		RESTEK, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00025	07/31/21		RESTEK, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00010	03/31/22		RESTEK, Lot A0146650		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00004	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-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	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
							2-Methyl-2-propanol	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Allyl chloride	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	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
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	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
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 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
.MV-CUS17739_00005	12/31/21		Agilent, Lot 6503344		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00034	10/31/20	04/28/20	P&T Methanol, Lot 181124	25 mL	MV-571992_00004	1000 uL	Xylenes, Total	200 ug/mL
.MV-571992_00004	06/30/21		RESTEK, Lot A0143774		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
MV-Supp A_00041	05/31/20	12/28/19	P&T Methanol, Lot 199628	20 mL	mv-570808_00006	400 uL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Chloroprene	50 ug/mL
							Isopropyl alcohol	500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					mv-570809_00006	400 uL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					mv-571993_00004	400 uL	Acetonitrile	500 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					mv-571994_00003	600 uL	Ethanol	3000 ug/mL
					mv-VO-TAOH-5_00009	2000 uL	cis-1,4-Dichloro-2-butene	100 ug/mL
							Propene oxide	5000 ug/mL
							Tetrahydrothiophene	100 ug/mL
.mv-570808_00006	07/31/20		Restek, Lot A0145375		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Chloroprene	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00006	05/31/20		Restek, Lot A0143198		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
.mv-571993_00004	01/31/21		RESTEK, Lot A0144915		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-571994_00003	11/30/21		RESTEK, Lot A0143139		(Purchased Reagent)		Ethanol	100000 ug/mL
.mv-VO-TAOH-5_00009	06/15/20		SPEX, Lot EN191217018		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
							Propene oxide	50000 ug/mL
							Tetrahydrothiophene	1000 ug/mL
MV-Supp A_00044	11/01/20	05/27/20	P&T Methanol, Lot 199628	20 mL	mv-570808_00007	400 uL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Chloroprene	50 ug/mL
							Isopropyl alcohol	500 ug/mL
							Methacrylonitrile	500 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	1250 ug/mL
					mv-570809_00007	400 uL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					mv-571993_00004	400 uL	Acetonitrile	500 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					mv-571994_00004	600 uL	Ethanol	3000 ug/mL
					mv-VO-TAOH-5_00010	2000 uL	cis-1,4-Dichloro-2-butene	100 ug/mL
							Ethylene oxide	5000 ug/mL
							Propene oxide	5000 ug/mL
							Tetrahydrothiophene	100 ug/mL
.mv-570808_00007	05/31/21		Restek, Lot A0154734		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Chloroprene	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00007	05/31/21		Restek, Lot A0156071		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
.mv-571993_00004	01/31/21		RESTEK, Lot A0144915		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-571994_00004	12/31/22		RESTEK, Lot A0156082		(Purchased Reagent)		Ethanol	100000 ug/mL
.mv-VO-TAOH-5_00010	11/01/20		SPEX, Lot CP200505005		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
							Ethylene oxide	50000 ug/mL
							Propene oxide	50000 ug/mL
							Tetrahydrothiophene	1000 ug/mL
MV-Supp B_00026	05/07/20	11/07/19	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00004	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00004	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00003	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808.sec_00004	05/31/20		Restek, Lot A0143097		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809.sec_00004	04/30/20		Restek, Lot A0142413		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993.sec_00003	06/30/20		RESTEK, Lot A0139245		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL
MV-Supp B_00027	08/07/20	02/07/20	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00004	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00004	400 uL	Methyl methacrylate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					mv-571993.sec_00003	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808.sec_00004	05/31/20		Restek, Lot A0143097		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809.sec_00004	04/30/20		Restek, Lot A0142413		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993.sec_00003	06/30/20		RESTEK, Lot A0139245		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL

Reagent

mv-30241_00008

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Reference Material Producer
Certificate #3222.01

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. : 30241 **Lot No.:** A0131578

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 : October 31, 2022 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene	2,522.1 µg/mL	+/- 14.6637 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBK8171V)		+/- 141.4116 µg/mL	Unstressed
	Purity 99%		+/- 144.7205 µg/mL	Stressed
2	Chlorobenzene-d5	2,518.6 µg/mL	+/- 14.6434 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 141.2154 µg/mL	Unstressed
	Purity 99%		+/- 144.5197 µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,520.5 µg/mL	+/- 14.6544 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 141.3219 µg/mL	Unstressed
	Purity 99%		+/- 144.6287 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

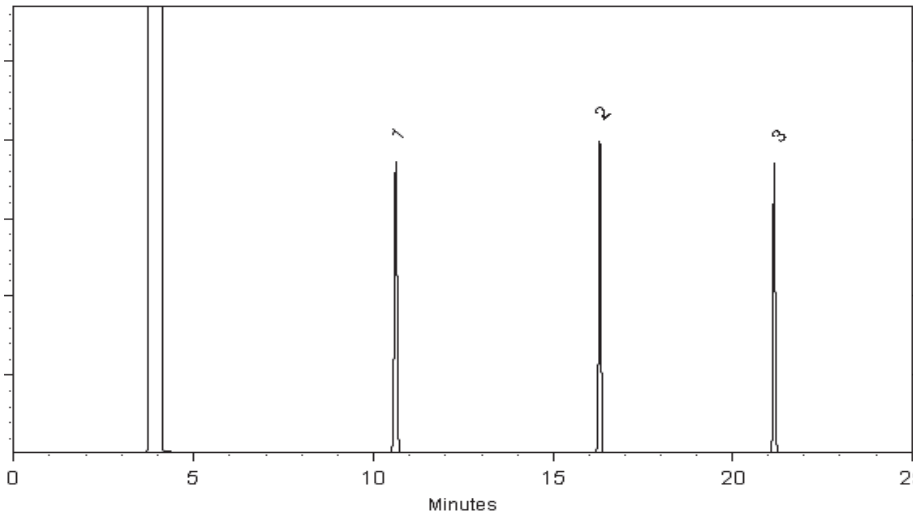
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 11-Oct-2017 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-567650_00028

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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. : 567650 **Lot No.:** A0132615

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

Rec'd 11/1/19

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 140.1837 µg/mL		Unstressed
	Purity 99.8%			+/- 143.4639 µg/mL		Stressed
2	1,2-Dichloroethane-d4		2,500.2 µg/mL	+/- 14.5361 µg/mL		Gravimetric
	CAS # 17060-07-0	(Lot PR-26748)		+/- 140.1809 µg/mL		Unstressed
	Purity 99%			+/- 143.4610 µg/mL		Stressed
3	Toluene-d8		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 2037-26-5	(Lot PR-26623)		+/- 140.1837 µg/mL		Unstressed
	Purity 99%			+/- 143.4639 µg/mL		Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,500.3 µg/mL	+/- 14.5370 µg/mL		Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 140.1893 µg/mL		Unstressed
	Purity 99%			+/- 143.4696 µg/mL		Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

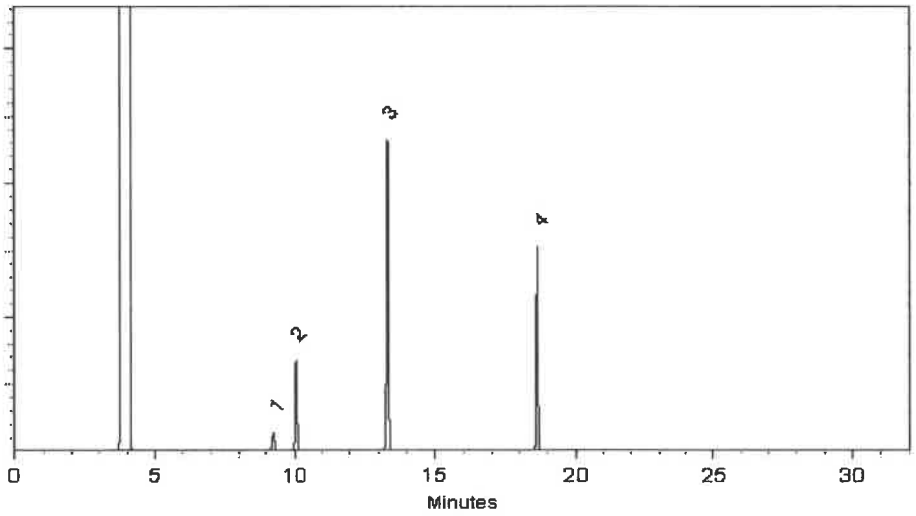
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Michael J Maye

Date Mixed: 21-Nov-2017 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 22-Nov-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

MV-568718-D_00016

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Reference Material Producer
Certificate #3222.01

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. : 568718 **Lot No.:** A0139459

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,018.0 µg/mL	+/- 29.1735 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.4354 µg/mL	Unstressed
	Purity 98%			+/- 110.5588 µg/mL	Stressed
2	2-Butanone-d5		1,253.8 µg/mL	+/- 7.2897 µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.8440 µg/mL	Unstressed
	Purity 99%			+/- 27.6244 µg/mL	Stressed
3	Fluorobenzene		250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%			+/- 5.5112 µg/mL	Stressed
4	1,4-Dioxane-d8		5,004.8 µg/mL	+/- 29.0965 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.1519 µg/mL	Unstressed
	Purity 99%			+/- 110.2670 µg/mL	Stressed
5	Chlorobenzene-d5		250.4 µg/mL	+/- 1.4589 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3609 µg/mL	Unstressed
	Purity 99%			+/- 5.5167 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.6 µg/mL	+/- 1.4604 µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.3663 µg/mL	Unstressed
	Purity 99%			+/- 5.5222 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

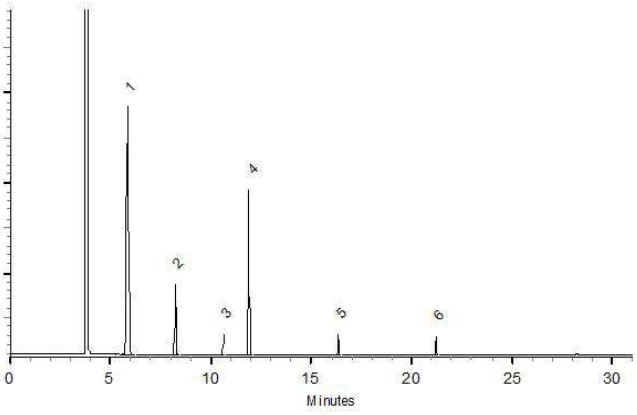
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 09-Jul-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 10-Aug-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-568720.sec_00031

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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. : 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.

Rec'd 4/24/20 GM

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%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

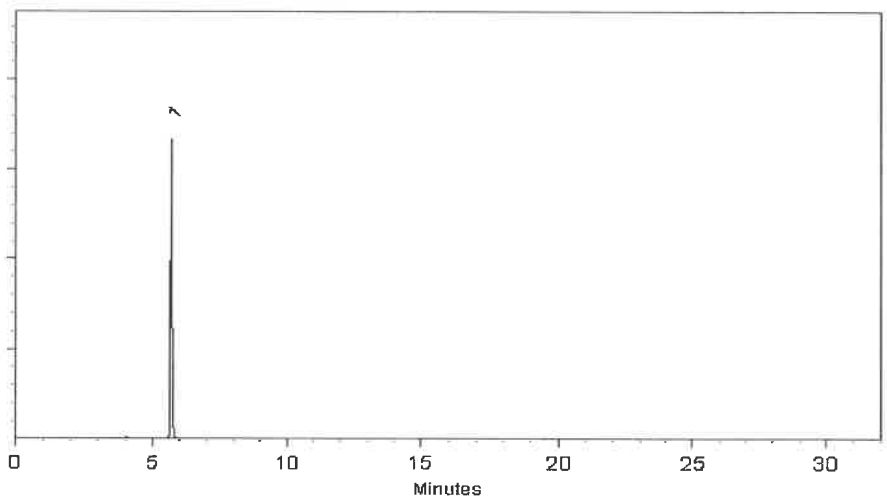
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 30-Oct-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-568720_00033

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ilac-MRA

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.

Rec'd 4/28/20

GM

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%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

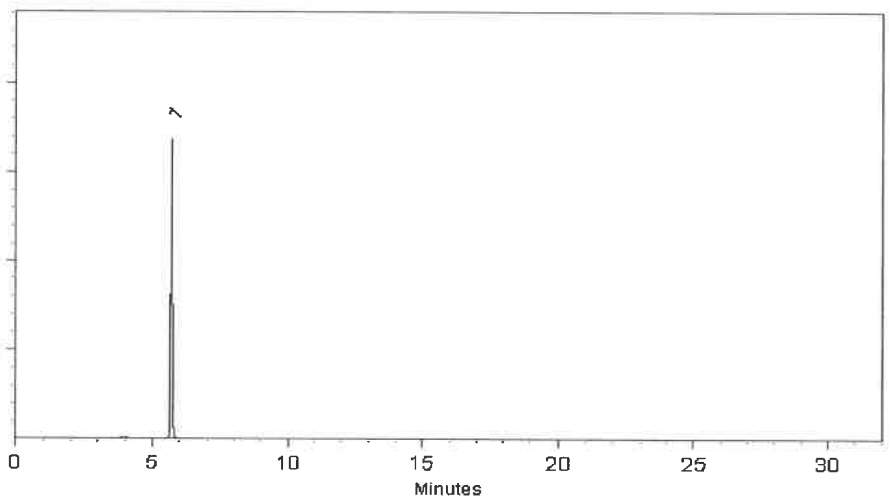
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 31-Oct-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-569721.sec_00006

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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. : 569721.SEC **Lot No.:** A0140519

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 : August 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,509.0 µg/mL	+/- 73.2429 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot U13B039)		+/- 754.7732 µg/mL	Unstressed
	Purity 99%		+/- 756.5649 µg/mL	Stressed
2	2-Butanone (MEK)	12,558.0 µg/mL	+/- 73.5299 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 757.7297 µg/mL	Unstressed
	Purity 99%		+/- 759.5285 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,547.0 µg/mL	+/- 73.4654 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 757.0660 µg/mL	Unstressed
	Purity 99%		+/- 758.8632 µg/mL	Stressed
4	2-Hexanone	12,561.0 µg/mL	+/- 73.5474 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 757.9108 µg/mL	Unstressed
	Purity 99%		+/- 759.7099 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

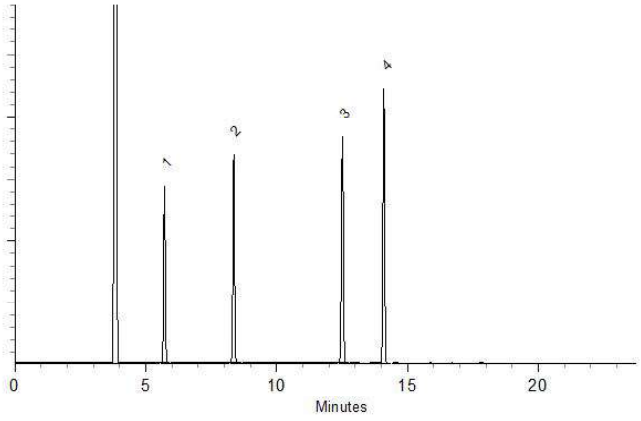
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 09-Aug-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Aug-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-569721_00008

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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. : 569721 **Lot No.:** A0143988

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, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone		12,500.5 µg/mL	+/- 72.6790 µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBJ7699)		+/- 754.2106 µg/mL	Unstressed
	Purity 99%			+/- 756.0012 µg/mL	Stressed
2	2-Butanone (MEK)		12,501.0 µg/mL	+/- 72.6819 µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 754.2407 µg/mL	Unstressed
	Purity 99%			+/- 756.0314 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,501.5 µg/mL	+/- 72.6848 µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBH8930)		+/- 754.2709 µg/mL	Unstressed
	Purity 99%			+/- 756.0617 µg/mL	Stressed
4	2-Hexanone		12,501.8 µg/mL	+/- 72.6863 µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKCD9048)		+/- 754.2860 µg/mL	Unstressed
	Purity 99%			+/- 756.0768 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

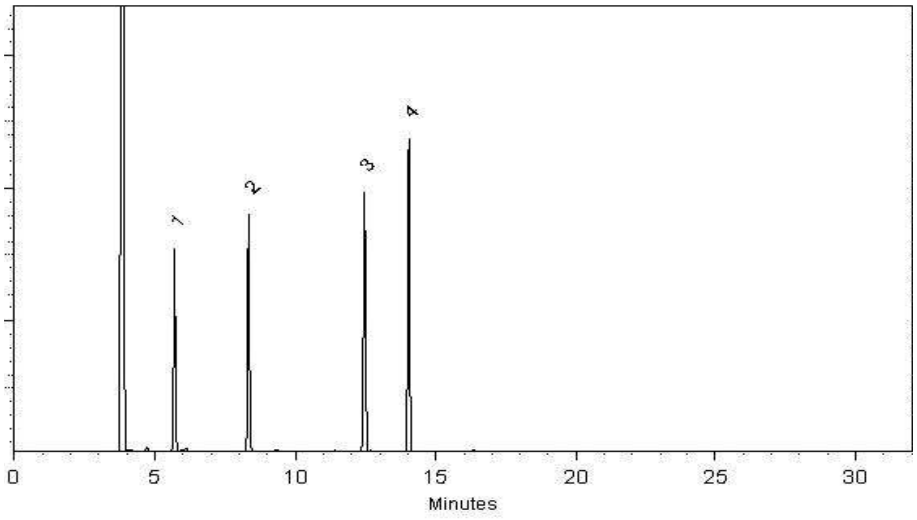
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 11-Dec-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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.SEC **Lot No.:** A0142594

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)	2,499.3 µg/mL	+/- 25.7724 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24847)		+/- 141.7384 µg/mL	Unstressed
	Purity 99%		+/- 144.9810 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,506.0 µg/mL	+/- 21.8612 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.4482 µg/mL	Unstressed
	Purity 99%		+/- 144.7145 µg/mL	Stressed
3	Vinyl chloride	2,505.4 µg/mL	+/- 25.4396 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 142.0168 µg/mL	Unstressed
	Purity 99%		+/- 145.2689 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 22.0034 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 22331)		+/- 141.1491 µg/mL	Unstressed
	Purity 99%		+/- 144.4071 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,511.9 µg/mL	+/- 23.0453 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 141.9646 µg/mL	Unstressed
	Purity 99%		+/- 145.2346 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,498.5 µg/mL	+/- 23.5866 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 141.3133 µg/mL	Unstressed
	Purity 99%		+/- 144.5633 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,450.0 µg/mL	+/- 14.3780 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7766400)		+/- 137.3830 µg/mL	Unstressed
	Purity 97%		+/- 140.5969 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,502.5	µg/mL	+/-	22.2947	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)			+/-	141.3276	µg/mL	Unstressed
	Purity 99%				+/-	144.5877	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)

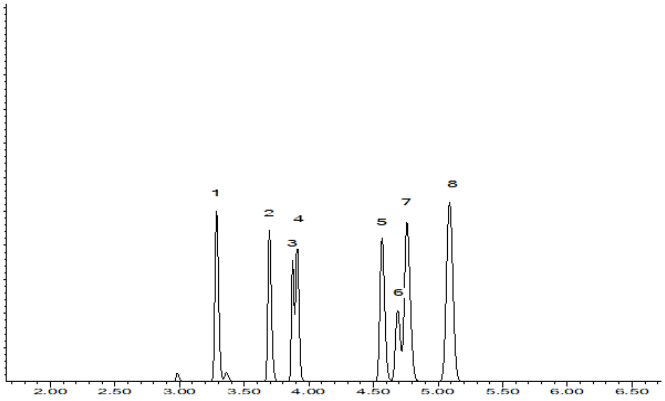
Carrier Gas:
helium-constant pressure 30 psi

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.

Brandon Reish - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 05-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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. : 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)	2,500.9 µg/mL	+/- 17.2023 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5234 µg/mL	Unstressed
	Purity 99%		+/- 143.7976 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.4 µg/mL	+/- 17.0791 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBJ6334)		+/- 140.4796 µg/mL	Unstressed
	Purity 99%		+/- 143.7534 µg/mL	Stressed
3	Vinyl chloride	2,500.4 µg/mL	+/- 16.5693 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00012557)		+/- 140.4224 µg/mL	Unstressed
	Purity 99%		+/- 143.6977 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 17.0785 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.4623 µg/mL	Unstressed
	Purity 99%		+/- 143.7357 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.9 µg/mL	+/- 16.5511 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4457 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,502.0 µg/mL	+/- 16.0409 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.4480 µg/mL	Unstressed
	Purity 99%		+/- 143.7268 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 7766400)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	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)

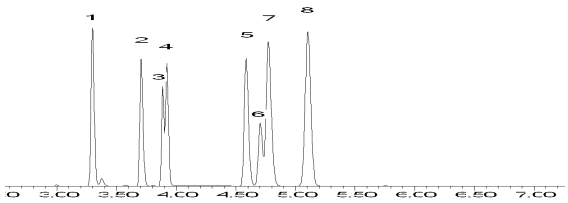
Carrier Gas:
helium-constant pressure 30 psi

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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

Rec'd 6/2/20 Gm

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 µg/mL +/- 140.5076 µg/mL +/- 143.7858 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 µg/mL +/- 140.4038 µg/mL +/- 143.6799 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 µg/mL +/- 140.4890 µg/mL +/- 143.7623 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 µg/mL +/- 140.5681 µg/mL +/- 143.8406 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 µg/mL +/- 140.4450 µg/mL +/- 143.7217 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 µg/mL +/- 140.5555 µg/mL +/- 143.8274 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **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)		2,501.4	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)

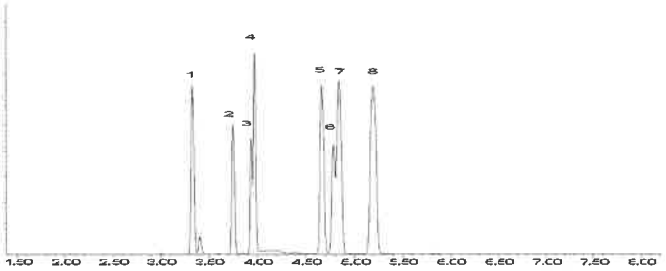
Carrier Gas:
helium-constant pressure 30 psi

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

MV-569723_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. : 569723 **Lot No.:** A0142584

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 : October 31, 2021 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,506.0 µg/mL	+/- 14.7066 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.6910 µg/mL	Unstressed
	Purity 99%		+/- 55.2497 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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

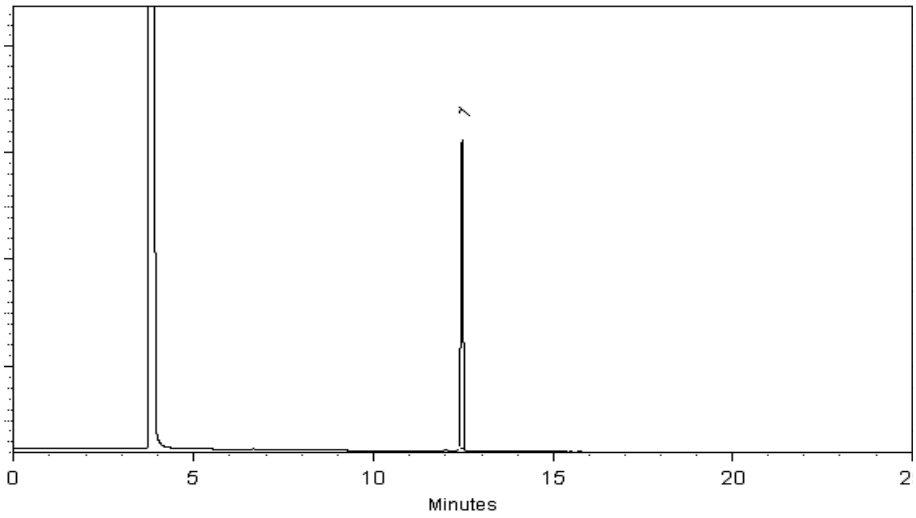
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 24-Oct-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Oct-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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.

Rec'd 4/24/20

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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

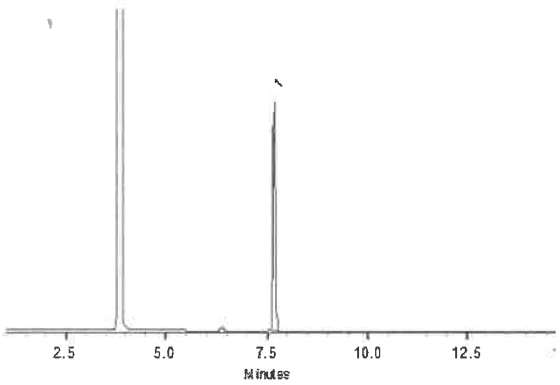
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Lane Kibe - Mix Technician

Date Mixed: 11-Mar-2020 **Balance:** 1128342314

Feng-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015 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.

Rec'd 4/24/20

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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

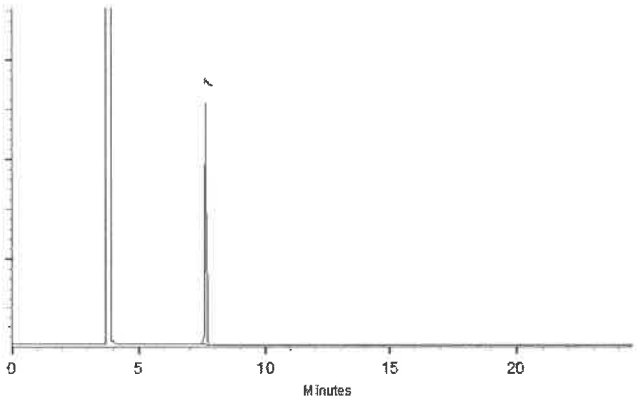
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 10-Jan-2020 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Jan-2020

Manufactured under Restek's ISO 9001:2015 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. : 569727 **Lot No.:** A0146650

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Rec'd 4/28/20

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2022 **Storage:** 10°C or colder

GM

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 MKCD4357)		+/- 1,508.8223 µg/mL	Unstressed
	Purity 99%		+/- 1,512.4040 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

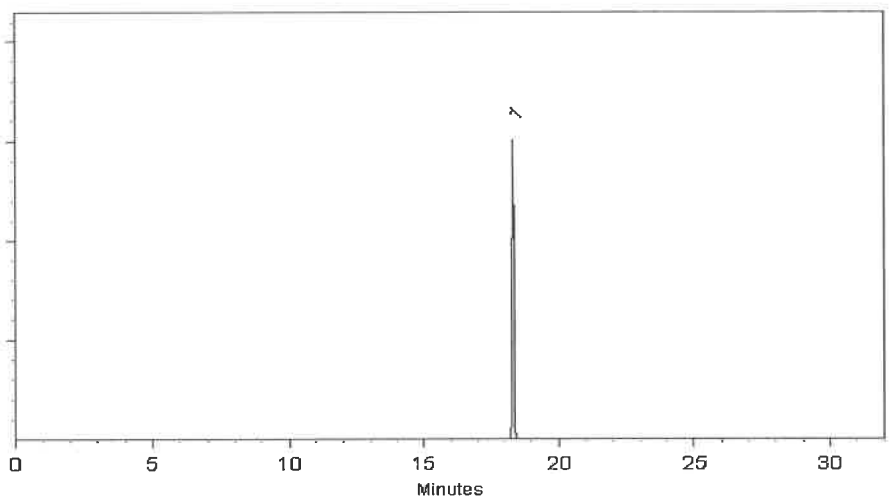
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 05-Mar-2019 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 07-Mar-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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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. : 570808.SEC **Lot No.:** A0143097

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, 2020 **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)	25,047.5 µg/mL	+/- 146.6586 µg/mL	Gravimetric
	CAS # 67-63-0.SEC (Lot NWVYK)		+/- 1,239.1674 µg/mL	Unstressed
	Purity 99%		+/- 1,269.9744 µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene)	2,509.0 µg/mL	+/- 14.7242 µg/mL	Gravimetric
	CAS # 126-99-8 * (Lot 180921JLM)		+/- 124.1310 µg/mL	Unstressed
	Purity 99%		+/- 127.2168 µg/mL	Stressed
3	Methacrylonitrile	25,031.0 µg/mL	+/- 146.5620 µg/mL	Gravimetric
	CAS # 126-98-7 * (Lot 1012014)		+/- 1,238.3511 µg/mL	Unstressed
	Purity 99%		+/- 1,269.1379 µg/mL	Stressed
4	2,2,4-Trimethylpentane (Isooctane)	2,513.5 µg/mL	+/- 14.7506 µg/mL	Gravimetric
	CAS # 540-84-1.SEC (Lot 4597900)		+/- 124.3536 µg/mL	Unstressed
	Purity 99%		+/- 127.4450 µg/mL	Stressed
5	1-Butanol	62,799.0 µg/mL	+/- 367.6830 µg/mL	Gravimetric
	CAS # 71-36-3.SEC (Lot TOY3I)		+/- 3,106.8338 µg/mL	Unstressed
	Purity 99%		+/- 3,184.0731 µg/mL	Stressed
6	2-Nitropropane	5,003.9 µg/mL	+/- 29.2988 µg/mL	Gravimetric
	CAS # 79-46-9.SEC (Lot 6M3NJ)		+/- 247.5555 µg/mL	Unstressed
	Purity 98%		+/- 253.7099 µg/mL	Stressed
7	1-Chlorohexane	2,501.9 µg/mL	+/- 14.6828 µg/mL	Gravimetric
	CAS # 544-10-5.SEC (Lot 3890000)		+/- 123.7817 µg/mL	Unstressed
	Purity 98%		+/- 126.8588 µg/mL	Stressed

8	1,2,3-Trimethylbenzene		2,512.3	µg/mL	+/-	14.7436	µg/mL	Gravimetric
	CAS # 526-73-8.SEC	(Lot 7754800)			+/-	124.2942	µg/mL	Unstressed
	Purity 97%				+/-	127.3841	µg/mL	Stressed
9	Benzyl chloride		2,501.0	µg/mL	+/-	14.6773	µg/mL	Gravimetric
	CAS # 100-44-7.SEC	(Lot H29N03)			+/-	123.7352	µg/mL	Unstressed
	Purity 99%				+/-	126.8112	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,506.5	µg/mL	+/-	14.7095	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	124.0073	µg/mL	Unstressed
	Purity 99%				+/-	127.0900	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.**

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

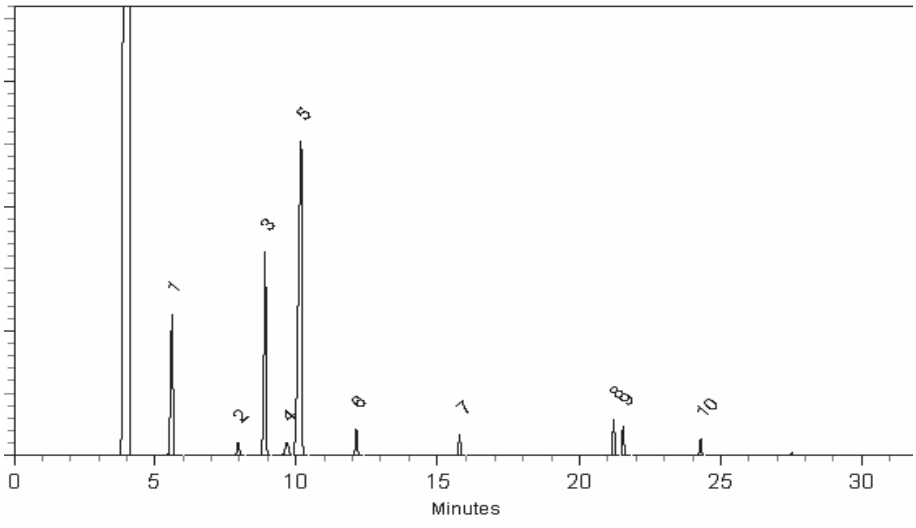
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 08-Nov-2018 **Balance:** 1128342314

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 13-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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. : 570808 **Lot No.:** A0145375

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 : 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	2-Propanol (isopropanol)	25,151.3 µg/mL	+/- 147.2666 µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBH7211)		+/- 1,244.3044 µg/mL	Unstressed
	Purity 99%		+/- 1,275.2391 µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene)	2,508.0 µg/mL	+/- 14.7183 µg/mL	Gravimetric
	CAS # 126-99-8 (Lot 180921JLM)		+/- 124.0815 µg/mL	Unstressed
	Purity 99%		+/- 127.1661 µg/mL	Stressed
3	Methacrylonitrile	25,161.0 µg/mL	+/- 147.3232 µg/mL	Gravimetric
	CAS # 126-98-7 (Lot 1012014)		+/- 1,244.7826 µg/mL	Unstressed
	Purity 99%		+/- 1,275.7292 µg/mL	Stressed
4	2,2,4-Trimethylpentane (isooctane)	2,510.3 µg/mL	+/- 14.7320 µg/mL	Gravimetric
	CAS # 540-84-1 (Lot SHBF8066V)		+/- 124.1969 µg/mL	Unstressed
	Purity 99%		+/- 127.2844 µg/mL	Stressed
5	1-Butanol	62,638.0 µg/mL	+/- 366.7403 µg/mL	Gravimetric
	CAS # 71-36-3 (Lot SHBK1866)		+/- 3,098.8687 µg/mL	Unstressed
	Purity 99%		+/- 3,175.9100 µg/mL	Stressed
6	2-Nitropropane	5,032.0 µg/mL	+/- 29.4633 µg/mL	Gravimetric
	CAS # 79-46-9 (Lot BCBL0537V)		+/- 248.9453 µg/mL	Unstressed
	Purity 98%		+/- 255.1343 µg/mL	Stressed
7	1-Chlorohexane	2,510.4 µg/mL	+/- 14.7326 µg/mL	Gravimetric
	CAS # 544-10-5 (Lot 05107LK)		+/- 124.2019 µg/mL	Unstressed
	Purity 98%		+/- 127.2895 µg/mL	Stressed

8	1,2,3-Trimethylbenzene		2,514.7	µg/mL	+/-	14.7576	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-12)			+/-	124.4120	µg/mL	Unstressed
	Purity 98%				+/-	127.5048	µg/mL	Stressed
9	Benzyl chloride		2,516.7	µg/mL	+/-	14.7692	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBB7346V)			+/-	124.5103	µg/mL	Unstressed
	Purity 99%				+/-	127.6055	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,513.3	µg/mL	+/-	14.7496	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	124.3454	µg/mL	Unstressed
	Purity 99%				+/-	127.4365	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

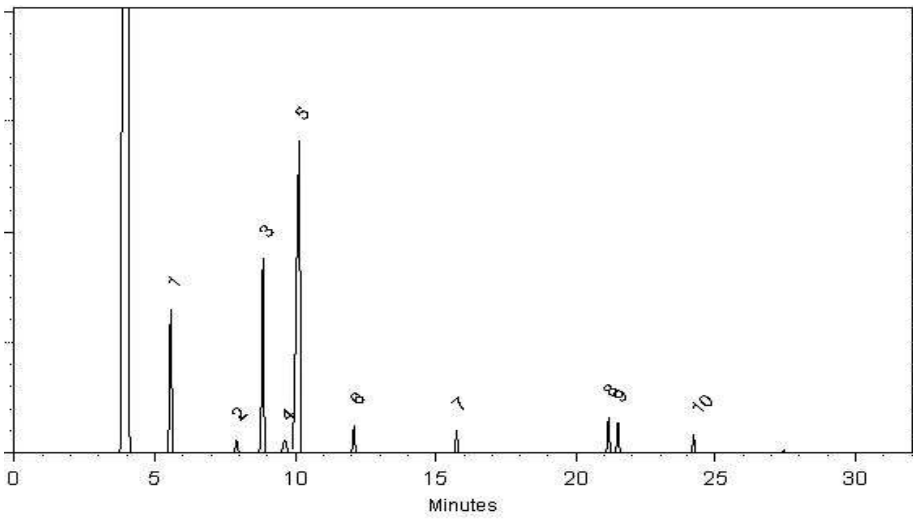
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Cheryl Graham - Mix Technician

Date Mixed: 27-Jan-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 29-Jan-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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

Rec'd 4/23/20

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		2,510.3	µg/mL	+/-	14.7317	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-12)			+/-	124.1938	µg/mL	Unstressed
	Purity 98%				+/-	127.2812	µg/mL	Stressed
9	Benzyl chloride		2,516.0	µg/mL	+/-	14.7653	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBH2102V)			+/-	124.4773	µg/mL	Unstressed
	Purity 99%				+/-	127.5717	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,523.0	µg/mL	+/-	14.8064	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	124.8236	µg/mL	Unstressed
	Purity 99%				+/-	127.9267	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

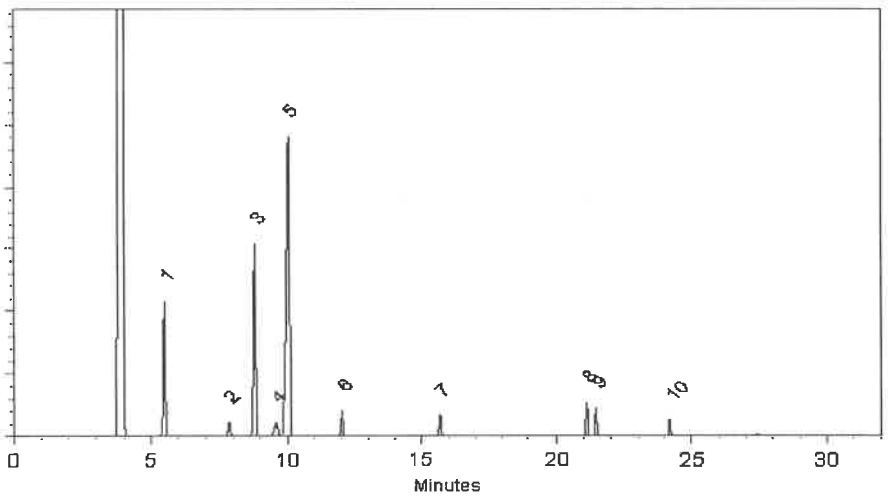
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 Lo - QC Analyst

Date Passed: 07-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

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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. : 570809.SEC **Lot No.:** A0142413

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, 2020 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethyl acetate	5,017.5 µg/mL	+/- 29.3786 µg/mL	Gravimetric
	CAS # 141-78-6.SEC (Lot C386A-GG)		+/- 302.7480 µg/mL	Unstressed
	Purity 99%		+/- 303.4666 µg/mL	Stressed
2	Ethyl acrylate	2,501.5 µg/mL	+/- 14.6802 µg/mL	Gravimetric
	CAS # 140-88-5.SEC (Lot YIFAM-TG)		+/- 150.9398 µg/mL	Unstressed
	Purity 99%		+/- 151.2981 µg/mL	Stressed
3	Methyl methacrylate	5,014.5 µg/mL	+/- 29.3610 µg/mL	Gravimetric
	CAS # 80-62-6.SEC (Lot G01X021)		+/- 302.5670 µg/mL	Unstressed
	Purity 99%		+/- 303.2852 µg/mL	Stressed
4	Butyl acetate	2,502.5 µg/mL	+/- 14.6861 µg/mL	Gravimetric
	CAS # 123-86-4.SEC (Lot V2L2G-GT)		+/- 151.0001 µg/mL	Unstressed
	Purity 99%		+/- 151.3585 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

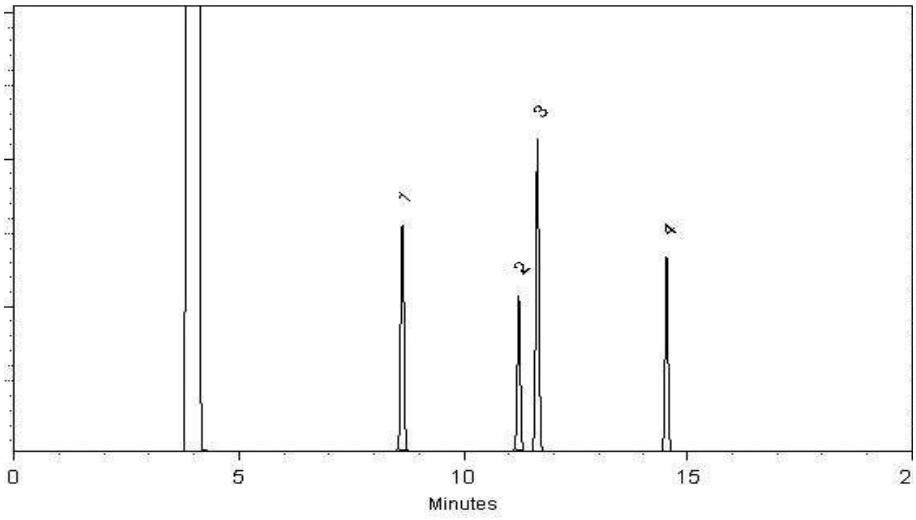
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 17-Oct-2018 **Balance:** 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Oct-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

mv-570809_00006

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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. : 570809 **Lot No.:** A0143198

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 : May 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethyl acetate		5,022.5 µg/mL	+/- 29.4078 µg/mL	Gravimetric
	CAS # 141-78-6	(Lot SHBJ7347)		+/- 303.0497 µg/mL	Unstressed
	Purity 99%			+/- 303.7691 µg/mL	Stressed
2	Ethyl acrylate		2,514.0 µg/mL	+/- 14.7536 µg/mL	Gravimetric
	CAS # 140-88-5	(Lot 10129902)		+/- 151.6940 µg/mL	Unstressed
	Purity 99%			+/- 152.0541 µg/mL	Stressed
3	Methyl methacrylate		5,019.5 µg/mL	+/- 29.3903 µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKBH4379V)		+/- 302.8686 µg/mL	Unstressed
	Purity 99%			+/- 303.5876 µg/mL	Stressed
4	Butyl acetate		2,507.0 µg/mL	+/- 14.7125 µg/mL	Gravimetric
	CAS # 123-86-4	(Lot SHBJ2076)		+/- 151.2716 µg/mL	Unstressed
	Purity 99%			+/- 151.6307 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

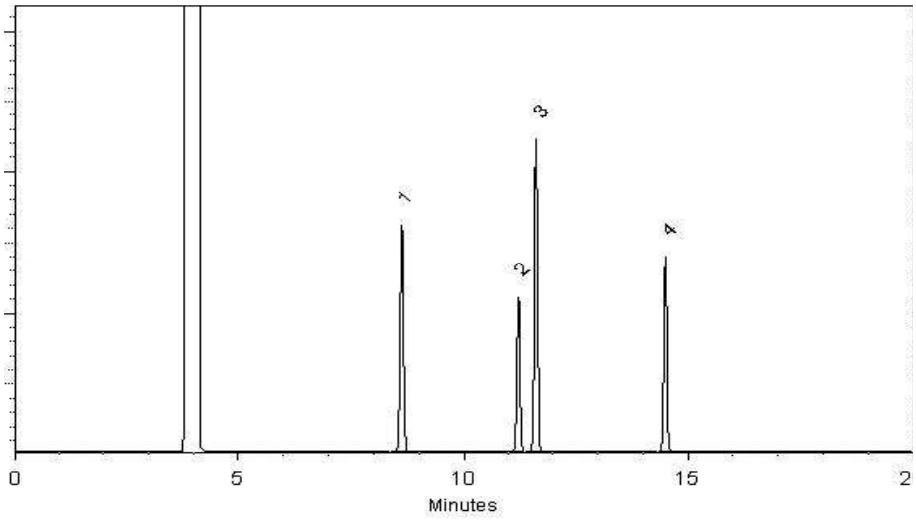
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Rebecca Sawyer

Tyler Brown - Operations Tech-ARM QC

Date Mixed: 13-Nov-2018 **Balance:** B707717271

Date Passed: 15-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

mv-570809_00007

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO 17034 Accredited
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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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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.

Rec'd 4/23/20

GM

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%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

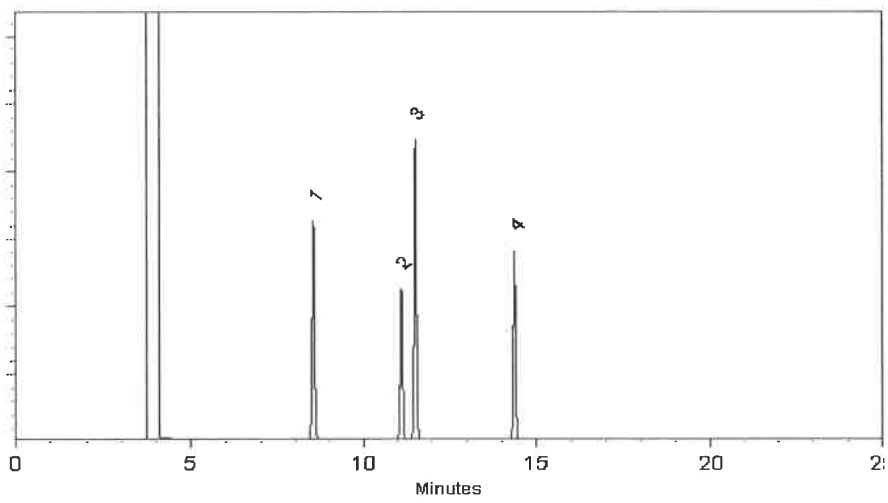
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 22-Dec-2019 **Balance:** B442140311

Tyler Brown - Operations Tech-ARM QC

Date Passed: 26-Dec-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-571992.sec_00005

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

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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.:** 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

Rec'd 4/24/20

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

GM

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)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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)

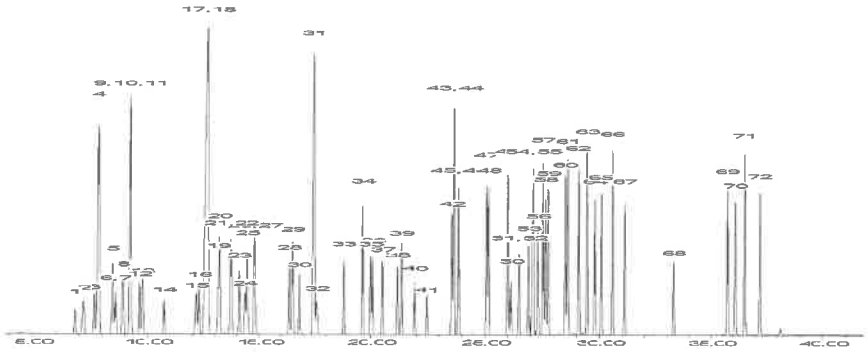
Carrier Gas:
helium-constant pressure 30 psi

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

MV-571992_00004

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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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 **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

RECEIVED 8/30/19 GM

4x/mL

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBJ5713)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.6 µg/mL	+/- 14.5447 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/- 150.9341 µg/mL	Unstressed
	Purity 99%		+/- 151.2925 µg/mL	Stressed
3	1,1-dichloroethene	2,501.9 µg/mL	+/- 14.5461 µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/- 150.9492 µg/mL	Unstressed
	Purity 99%		+/- 151.3076 µg/mL	Stressed
4	tert-Butanol (TBA)	25,008.1 µg/mL	+/- 145.3918 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBJ9404)		+/- 1,508.8503 µg/mL	Unstressed
	Purity 99%		+/- 1,512.4325 µg/mL	Stressed
5	Methyl acetate	5,000.8 µg/mL	+/- 29.0748 µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/- 301.7174 µg/mL	Unstressed
	Purity 99%		+/- 302.4337 µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBH4362V)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,502.0 µg/mL	+/- 14.5468 µg/mL	Gravimetric
	CAS # 107-05-1 (Lot WXBB7852V)		+/- 150.9567 µg/mL	Unstressed
	Purity 99%		+/- 151.3151 µg/mL	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		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,499.9	µg/mL	+/-	14.5348	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBH5027V)			+/-	150.8320	µg/mL	Unstressed
	Purity 97%				+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBV3556V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	151.0095	µg/mL	Unstressed
	Purity 99%				+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
71	Naphthalene		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	151.0020	µg/mL	Unstressed
	Purity 99%				+/-	151.3605	µg/mL	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)

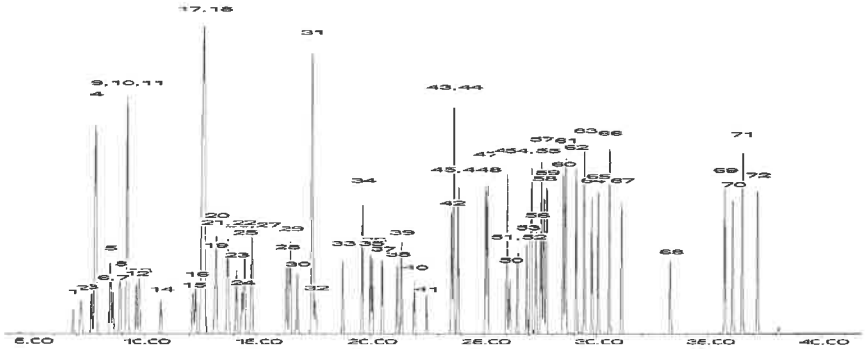
Carrier Gas:
helium-constant pressure 30 psi

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

mv-571993.sec_00003

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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.:** A0139245

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 : June 30, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile	25,059.0 µg/mL	+/- 146.7260 µg/mL	Gravimetric
	CAS # 75-05-8.SEC (Lot 7KGDA)		+/- 1,239.7364 µg/mL	Unstressed
	Purity 99%		+/- 1,270.5575 µg/mL	Stressed
2	Diisopropyl ether (DIPE)	2,518.6 µg/mL	+/- 14.7806 µg/mL	Gravimetric
	CAS # 108-20-3.SEC (Lot LL7TN-SH)		+/- 124.6059 µg/mL	Unstressed
	Purity 98%		+/- 127.7036 µg/mL	Stressed
3	Ethyl-tert-butyl ether (ETBE)	2,508.0 µg/mL	+/- 14.7183 µg/mL	Gravimetric
	CAS # 637-92-3.SEC (Lot MHBJG-QK)		+/- 124.0815 µg/mL	Unstressed
	Purity 99%		+/- 127.1661 µg/mL	Stressed
4	Propionitrile	25,069.0 µg/mL	+/- 146.7845 µg/mL	Gravimetric
	CAS # 107-12-0.SEC (Lot SASVN)		+/- 1,240.2311 µg/mL	Unstressed
	Purity 99%		+/- 1,271.0646 µg/mL	Stressed
5	tert-Amyl alcohol	25,008.0 µg/mL	+/- 146.4273 µg/mL	Gravimetric
	CAS # 75-85-4.SEC (Lot MMGO1)		+/- 1,237.2133 µg/mL	Unstressed
	Purity 99%		+/- 1,267.9717 µg/mL	Stressed
6	tert-Amyl methyl ether (TAME)	2,501.0 µg/mL	+/- 14.6770 µg/mL	Gravimetric
	CAS # 994-05-8.SEC (Lot 7375800)		+/- 123.7332 µg/mL	Unstressed
	Purity 98%		+/- 126.8091 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

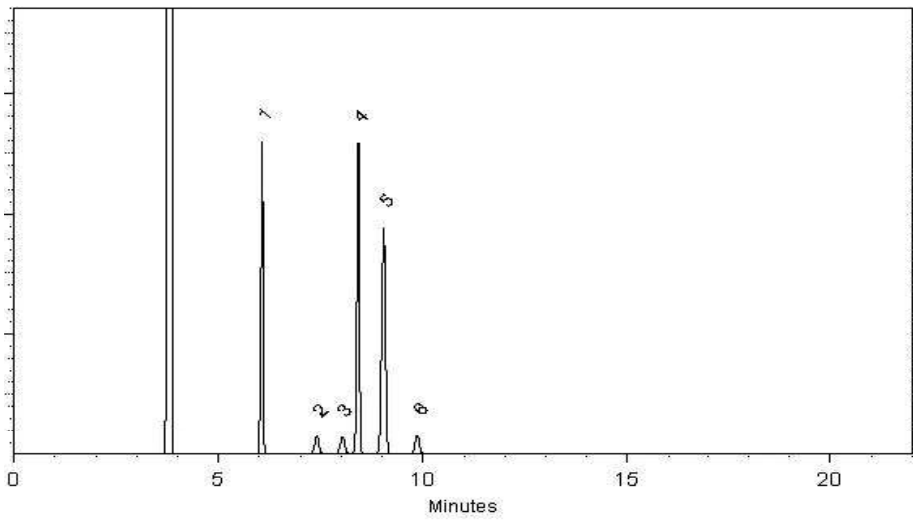
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 26-Jun-2018 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 29-Jun-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Reference Material Producer
Certificate #3222.01

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. : 571993 **Lot No.:** A0144915

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 : January 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile	25,249.0 µg/mL	+/- 147.8384 µg/mL	Gravimetric
	CAS # 75-05-8 (Lot SHBH6233)		+/- 1,249.1362 µg/mL	Unstressed
	Purity 99%		+/- 1,280.1910 µg/mL	Stressed
2	Diisopropyl ether (DIPE)	2,524.3 µg/mL	+/- 14.8142 µg/mL	Gravimetric
	CAS # 108-20-3 (Lot SHBH1927V)		+/- 124.8896 µg/mL	Unstressed
	Purity 99%		+/- 127.9943 µg/mL	Stressed
3	Ethyl-tert-butyl ether (ETBE)	2,524.3 µg/mL	+/- 14.8142 µg/mL	Gravimetric
	CAS # 637-92-3 (Lot MKCC2702)		+/- 124.8896 µg/mL	Unstressed
	Purity 99%		+/- 127.9943 µg/mL	Stressed
4	Propionitrile	25,249.7 µg/mL	+/- 147.8424 µg/mL	Gravimetric
	CAS # 107-12-0 (Lot BCBV8545)		+/- 1,249.1692 µg/mL	Unstressed
	Purity 99%		+/- 1,280.2248 µg/mL	Stressed
5	tert-Amyl alcohol	25,249.0 µg/mL	+/- 147.8384 µg/mL	Gravimetric
	CAS # 75-85-4 (Lot STBG1140V)		+/- 1,249.1362 µg/mL	Unstressed
	Purity 99%		+/- 1,280.1910 µg/mL	Stressed
6	tert-Amyl methyl ether (TAME)	2,523.7 µg/mL	+/- 14.8103 µg/mL	Gravimetric
	CAS # 994-05-8 (Lot HMBF8365V)		+/- 124.8566 µg/mL	Unstressed
	Purity 99%		+/- 127.9605 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

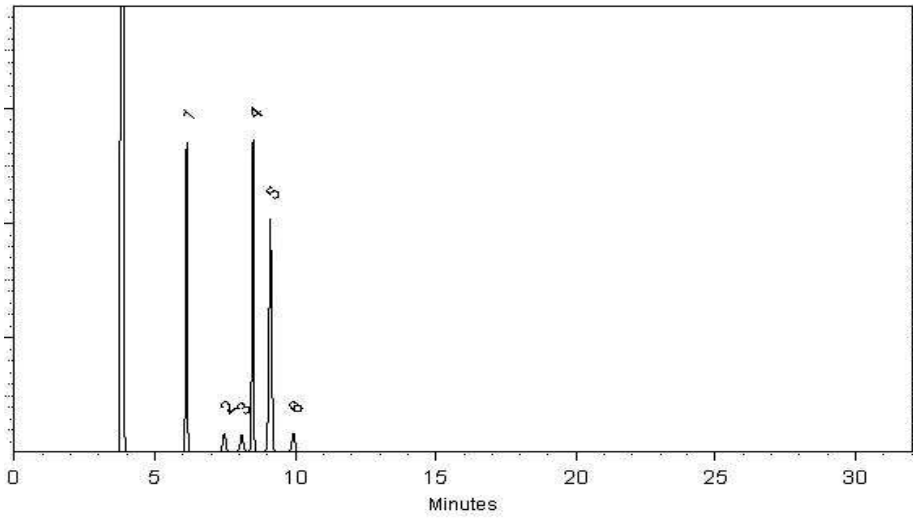
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 14-Jan-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jan-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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. : 571994 **Lot No.:** A0143139

Description : 8260 Ethanol Standard

8260 Ethanol Standard 100,000µg/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	Ethanol	100,011.5 µg/mL	+/- 585.5591 µg/mL	Gravimetric
	CAS # 64-17-5 (Lot SHBJ0994)		+/- 2,142.3707 µg/mL	Unstressed
	Purity 99%		+/- 2,204.5894 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

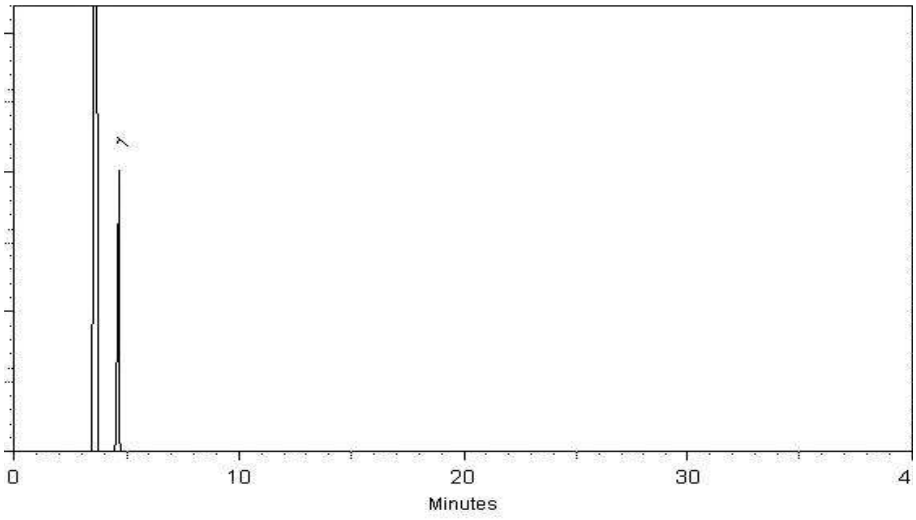
Carrier Gas:
hydrogen-constant pressure 11 psi.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/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.

F. Joseph Fallon - Mix Technician

Date Mixed: 12-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

mv-571994_00004

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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.

Rec'd 4/23/20

Catalog No. : 571994 **Lot No.:** A0156082

Description : 8260 Ethanol Standard

8260 Ethanol Standard 100,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2022 **Storage:** 0°C or colder

GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethanol	100,295.5 µg/mL	+/- 587.2219	µg/mL	Gravimetric
	CAS # 64-17-5 (Lot SHBK6489)		+/- 2,148.4543	µg/mL	Unstressed
	Purity 99%		+/- 2,210.8497	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

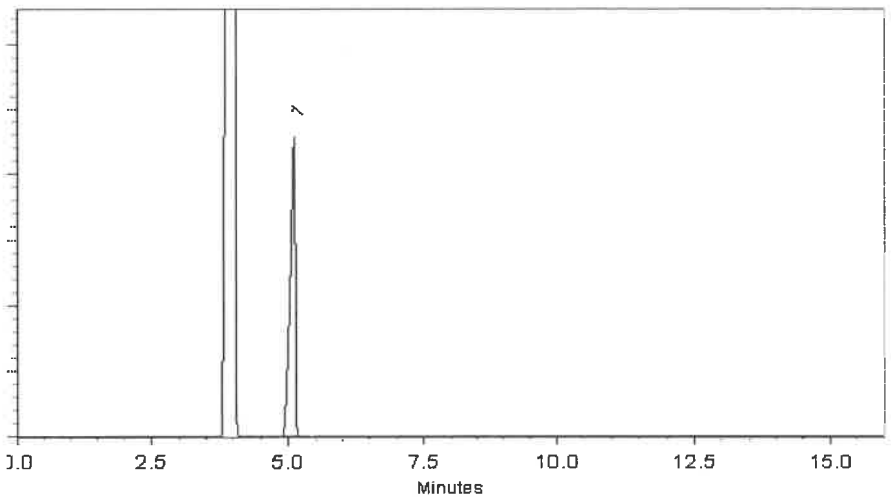
Carrier Gas:
hydrogen-constant pressure 11 psi.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/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.

Cathleen Soltis - Mix Technician

Date Mixed: 23-Dec-2019 **Balance:** B251644995

Tyler Brown - Operations Tech-ARM QC

Date Passed: 26-Dec-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-CUS17739_00005

Agilent

Certificate of Analysis
ISO 17034

Custom Standard

Product Number: CUS-17739 **Page:** 1 of 1

Lot Number: 0006503344 **Lot Issue Date:** 12-Nov-2019 **Expiration Date:** 31-Dec-2021

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-chlorohexane	000544-10-5	RM12893	1001 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30126 ± 151 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

12/11/19

RECEIVED

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Reagent

mv-IS/SS Tune_00001

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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. : 570812 **Lot No.:** A0143593

Description : 8260 IS/Surrogate Mix (2016)

8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,000.1 µg/mL	+/- 29.0694 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0521 µg/mL	Unstressed
	Purity 98%			+/- 110.1643 µg/mL	Stressed
2	Dibromofluoromethane		250.2 µg/mL	+/- 1.4580 µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 5.3577 µg/mL	Unstressed
	Purity 99%			+/- 5.5134 µg/mL	Stressed
3	1,2-Dichloroethane-d4		250.3 µg/mL	+/- 1.4584 µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot PR-29377)		+/- 5.3592 µg/mL	Unstressed
	Purity 99%			+/- 5.5149 µg/mL	Stressed
4	1,4-Dioxane-d8		5,000.5 µg/mL	+/- 29.0716 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.0602 µg/mL	Unstressed
	Purity 99%			+/- 110.1726 µg/mL	Stressed
5	Fluorobenzene		250.1 µg/mL	+/- 1.4573 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3549 µg/mL	Unstressed
	Purity 99%			+/- 5.5105 µg/mL	Stressed
6	Toluene-d8		250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-27311)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%			+/- 5.5112 µg/mL	Stressed
7	Chlorobenzene-d5		250.5 µg/mL	+/- 1.4600 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3649 µg/mL	Unstressed
	Purity 99%			+/- 5.5208 µg/mL	Stressed

8	1-Bromo-4-fluorobenzene (BFB)		250.1	µg/mL	+/-	1.4575	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)			+/-	5.3556	µg/mL	Unstressed
	Purity 99%				+/-	5.5112	µg/mL	Stressed
9	1,4-Dichlorobenzene-d4		250.2	µg/mL	+/-	1.4580	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/-	5.3577	µg/mL	Unstressed
	Purity 99%				+/-	5.5134	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

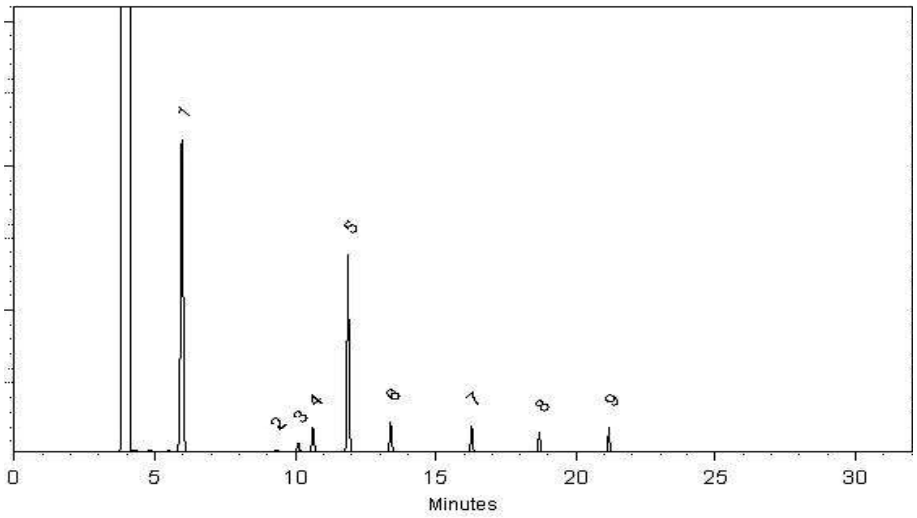
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 29-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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mv-VO-TAOH-5_00009

Reference Materials Producer
Cert #2495.01

SPEXertificate®
Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: VO-TAOH-5 **Lot No.** EN191217018

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 12-18-2019
Expiration Date: 6-15-2020

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	49973 µg/mL	± 1799 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	1013 µg/mL	± 36 µg/mL
Propylene oxide	75-56-9	50000 µg/mL	99%	49937 µg/mL	± 1798 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	990 µg/mL	± 36 µg/mL

Rec'd 1/15/20

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 12-18-2019

Certifying Officer: Shannon Mace
Shannon Macieira, Operations Manager

© 2019 SPEX CertiPrep, LLC

Report of Certification

Catalog Number: VO-TAOH-5 **Lot No.** EN191217018

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 12-18-2019

Expiration Date: 6-15-2020

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS) and ISO 17025 (accredited by A2LA), and ISO 17034 (accredited by A2LA) quality system consistent with the following standards:

- ISO 9001: Quality management systems - Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials - Selected terms and definitions
- ISO Guide 31: Reference Materials - Contents of certificates and lables
- ISO Guide 35: Refernece Materials - General and Statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement - Third Edition
- NIST Technical Note 1297

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a freezer (-35°C to -10°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is stored under the laboratory specified conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking. prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Phone: 1-732-549-7144 • Fax 1-732-603-9647

Reagent

mv-VO-TAOH-5_00010

Reference Materials Producer
Cert #2495.01

SPEXertificate®
Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: VO-TAOH-5 **Lot No.** CP200505005

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: May ~~5, 2020~~

Expiration Date: November 1, 2020

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It ~~can be employed in~~ USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	49996 µg/mL	± 1800 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	992 µg/mL	± 36 µg/mL
Propylene oxide	75-56-9	50000 µg/mL	99%	49860 µg/mL	± 1795 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	990 µg/mL	± 36 µg/mL

REC'D
5/26/20
GM

* - Isomer ratios (when applicable) are an uncertified parameter.

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: May 5, 2020

Certifying Officer: Shannon Mace

Shannon Macieira, Operations Manager

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Report of Certification

Catalog Number: VO-TAOH-5 **Lot No.** CP200505005

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: May 5, 2020

Expiration Date: November 1, 2020

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS) and ISO 17025 (accredited by A2LA), and ISO 17034 (accredited by A2LA) quality system consistent with the following standards:

- ISO 9001: Quality management systems - Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials - Selected terms and definitions
- ISO Guide 31: Reference Materials - Contents of certificates and lables
- ISO Guide 35: Refernece Materials - General and Statistical principals for certification
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- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement - Third Edition
- NIST Technical Note 1297

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a freezer (-35°C to -10°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and applicable only if the product is stored under the laboratory specified conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bo ttle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-732-549-7144 • Fax 1-732-603-9647

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
RW-8105PS-20200622	280-138090-1	98	94	100	100
RW-5898B1-20200622	280-138090-2	99	95	100	99
RW-8048P-20200622	280-138090-3	99	95	100	100
RW-7244P-20200623	280-138090-4	103	102	98	95
RW-7350P-20200623	280-138090-5	101	102	99	94
RW-8035P-20200623	280-138090-6	100	99	98	98
RW-2237H-20200623	280-138090-7	102	102	100	96
RW-8012P-20200623	280-138090-8	101	99	97	99
RW-2879M-20200624	280-138090-9	101	94	99	100
RW-7586P-20200624	280-138090-10	100	95	100	96
RW-8030P-20200624	280-138090-11	100	95	97	97
RW-2172F-20200622	280-138090-12	99	96	100	98
RW-7773P-20200622	280-138090-13	99	95	100	100
RW-7677P-20200622	280-138090-14	98	95	100	99
RW-7677PQ-20200622	280-138090-15	97	93	99	101
RW-7070B-20200622	280-138090-16	98	96	100	99
RW-8249P-20200623	280-138090-17	102	100	97	97
RW-2151H-20200623	280-138090-18	102	101	99	97
RW-7688P-20200623	280-138090-19	102	102	98	96
RW-7688PQ-20200623	280-138090-20	102	100	99	96
RW-8284P-20200623	280-138090-21	101	101	98	96
TB-01-20200625	280-138090-22	102	91	97	95
	MB 280-500579/9	98	95	101	99
	MB 280-500580/9	103	104	96	96
	MB 280-500875/9	100	95	98	98
	MB 280-501117/9	99	90	97	95
	LCS 280-500579/4	98	96	99	100
	LCS 280-500579/6	98	95	99	101
	LCS 280-500580/4	101	98	97	96
	LCS 280-500580/6	101	100	96	98
	LCS 280-500875/4	100	93	97	97
	LCS 280-500875/6	100	94	96	97
	LCS 280-501117/4	100	89	97	92
	LCS 280-501117/6	100	89	97	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	LCSD 280-500579/5	99	95	100	100
	LCSD 280-500579/7	98	96	99	99
	LCSD 280-500580/5	101	100	99	96
	LCSD 280-500580/7	103	102	97	97
	LCSD 280-500875/5	100	94	97	97
	LCSD 280-500875/7	101	96	97	96
	LCSD 280-501117/5	100	89	97	93
	LCSD 280-501117/7	101	89	97	96
RW-7677P-20200622 MS	280-138090-14 MS	98	94	102	100
RW-7688P-20200623 MS	280-138090-19 MS	101	99	100	97
RW-7677P-20200622 MSD	280-138090-14 MSD	99	95	100	99
RW-7688P-20200623 MSD	280-138090-19 MSD	101	98	100	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2853.D

Lab ID: LCS 280-500579/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	101	101	39-156	
Acrolein	247	141	57	36-147	
Acrylonitrile	250	260	104	56-135	
Benzene	25.0	22.2	89	65-135	
Chlorobromomethane	25.0	22.3	89	65-135	
Dichlorobromomethane	25.0	23.9	96	65-135	
Bromoform	25.0	24.2	97	62-135	
Bromomethane	25.0	21.5	86	45-135	
2-Butanone (MEK)	100	105	105	44-177	
Carbon disulfide	25.0	15.2	61	55-143	
Carbon tetrachloride	25.0	21.1	84	65-135	
Chlorobenzene	25.0	22.6	91	65-135	
Chlorodibromomethane	25.0	24.5	98	65-135	
Chloroethane	25.0	21.6	86	46-136	
Chloroform	25.0	22.1	89	65-135	
Chloromethane	25.0	19.0	76	34-145	
Allyl chloride	25.0	21.7	87	50-135	
1,2-Dibromo-3-Chloropropane	25.0	26.4	106	57-135	
Dibromomethane	25.0	23.5	94	65-135	
1,2-Dichlorobenzene	25.0	22.6	90	65-135	
1,3-Dichlorobenzene	25.0	23.8	95	65-135	
1,4-Dichlorobenzene	25.0	23.8	95	65-135	
trans-1,4-Dichloro-2-butene	25.0	24.8	99	53-135	
Dichlorodifluoromethane	25.0	16.3	65	43-142	
1,1-Dichloroethane	25.0	22.2	89	65-135	
1,2-Dichloroethane	25.0	23.1	92	65-135	
cis-1,2-Dichloroethene	25.0	22.4	90	65-135	
trans-1,2-Dichloroethene	25.0	20.1	80	65-135	
1,1-Dichloroethene	25.0	17.7	71	65-136	
1,2-Dichloropropane	25.0	24.5	98	64-135	
1,3-Dichloropropane	25.0	23.6	94	64-135	
2,2-Dichloropropane	25.0	23.0	92	65-135	
cis-1,3-Dichloropropene	25.0	24.8	99	65-135	
trans-1,3-Dichloropropene	25.0	23.6	95	65-135	
1,1-Dichloropropene	25.0	21.1	84	65-135	
Ethylbenzene	25.0	22.8	91	65-135	
Ethyl methacrylate	25.0	26.0	104	50-135	
2-Hexanone	100	111	111	57-139	
Iodomethane	25.0	13.7	55	65-142	*
Isobutyl alcohol	625	704	113	55-135	
Methylene Chloride	25.0	22.6	91	54-141	
4-Methyl-2-pentanone (MIBK)	100	111	111	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2853.D

Lab ID: LCS 280-500579/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	24.0	96	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.3	93	65-135	
1,1,2,2-Tetrachloroethane	25.0	25.7	103	58-135	
Tetrachloroethene	25.0	22.2	89	65-135	
Toluene	25.0	22.7	91	65-135	
1,2,4-Trichlorobenzene	25.0	23.2	93	58-135	
1,1,1-Trichloroethane	25.0	21.4	86	65-135	
1,1,2-Trichloroethane	25.0	25.0	100	64-135	
Trichloroethene	25.0	21.7	87	65-135	
Trichlorofluoromethane	25.0	20.0	80	53-137	
1,2,3-Trichloropropane	25.0	23.9	96	65-135	
Vinyl acetate	50.0	54.9	110	11-187	
Vinyl chloride	25.0	20.3	81	40-137	
m-Xylene & p-Xylene	25.0	23.3	93	65-135	
o-Xylene	25.0	23.5	94	65-135	
Xylenes, Total	50.0	46.8	94	65-135	
1,2-Dibromoethane	25.0	23.6	94	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2855.D

Lab ID: LCS 280-500579/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	233	93	50-150	
Chloroprene	25.0	23.4	94	50-150	
Methacrylonitrile	250	238	95	50-150	
Methyl methacrylate	50.0	51.1	102	50-150	
Propionitrile	250	246	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6973.D

Lab ID: LCS 280-500580/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	78.8	79	39-156	
Acrolein	247	127	51	36-147	
Acrylonitrile	250	240	96	56-135	
Benzene	25.0	24.4	98	65-135	
Chlorobromomethane	25.0	25.8	103	65-135	
Dichlorobromomethane	25.0	26.8	107	65-135	
Bromoform	25.0	22.3	89	62-135	
Bromomethane	25.0	25.2	101	45-135	
2-Butanone (MEK)	100	88.0	88	44-177	
Carbon disulfide	25.0	19.2	77	55-143	
Carbon tetrachloride	25.0	25.8	103	65-135	
Chlorobenzene	25.0	25.3	101	65-135	
Chlorodibromomethane	25.0	22.8	91	65-135	
Chloroethane	25.0	25.1	101	46-136	
Chloroform	25.0	25.5	102	65-135	
Chloromethane	25.0	20.0	80	34-145	
Allyl chloride	25.0	23.8	95	50-135	
1,2-Dibromo-3-Chloropropane	25.0	21.2	85	57-135	
Dibromomethane	25.0	27.0	108	65-135	
1,2-Dichlorobenzene	25.0	25.7	103	65-135	
1,3-Dichlorobenzene	25.0	25.8	103	65-135	
1,4-Dichlorobenzene	25.0	26.0	104	65-135	
trans-1,4-Dichloro-2-butene	25.0	21.5	86	53-135	
Dichlorodifluoromethane	25.0	14.5	58	43-142	
1,1-Dichloroethane	25.0	24.7	99	65-135	
1,2-Dichloroethane	25.0	25.9	104	65-135	
cis-1,2-Dichloroethene	25.0	26.8	107	65-135	
trans-1,2-Dichloroethene	25.0	25.8	103	65-135	
1,1-Dichloroethene	25.0	22.8	91	65-136	
1,2-Dichloropropane	25.0	23.5	94	64-135	
1,3-Dichloropropane	25.0	23.3	93	64-135	
2,2-Dichloropropane	25.0	25.4	101	65-135	
cis-1,3-Dichloropropene	25.0	23.3	93	65-135	
trans-1,3-Dichloropropene	25.0	21.7	87	65-135	
1,1-Dichloropropene	25.0	24.7	99	65-135	
Ethylbenzene	25.0	27.6	110	65-135	
Ethyl methacrylate	25.0	21.8	87	50-135	
2-Hexanone	100	84.2	84	57-139	
Iodomethane	25.0	28.9	116	65-142	
Isobutyl alcohol	625	511	82	55-135	
Methylene Chloride	25.0	24.4	98	54-141	
4-Methyl-2-pentanone (MIBK)	100	82.1	82	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6973.D

Lab ID: LCS 280-500580/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	26.8	107	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.9	95	65-135	
1,1,2,2-Tetrachloroethane	25.0	22.6	90	58-135	
Tetrachloroethene	25.0	23.6	94	65-135	
Toluene	25.0	25.6	102	65-135	
1,2,4-Trichlorobenzene	25.0	23.9	96	58-135	
1,1,1-Trichloroethane	25.0	23.9	95	65-135	
1,1,2-Trichloroethane	25.0	26.0	104	64-135	
Trichloroethene	25.0	28.1	112	65-135	
Trichlorofluoromethane	25.0	26.8	107	53-137	
1,2,3-Trichloropropane	25.0	22.8	91	65-135	
Vinyl acetate	50.0	44.9	90	11-187	
Vinyl chloride	25.0	23.1	93	40-137	
m-Xylene & p-Xylene	25.0	24.7	99	65-135	
o-Xylene	25.0	24.5	98	65-135	
Xylenes, Total	50.0	49.2	98	65-135	
1,2-Dibromoethane	25.0	23.2	93	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6975.D

Lab ID: LCS 280-500580/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	232	93	50-150	
Chloroprene	25.0	24.8	99	50-150	
Methacrylonitrile	250	252	101	50-150	
Methyl methacrylate	50.0	50.5	101	50-150	
Propionitrile	250	248	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2973.D

Lab ID: LCS 280-500875/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	96.5	97	39-156	
Acrolein	247	236	96	36-147	
Acrylonitrile	250	246	98	56-135	
Benzene	25.0	24.3	97	65-135	
Chlorobromomethane	25.0	24.9	100	65-135	
Dichlorobromomethane	25.0	24.9	100	65-135	
Bromoform	25.0	26.8	107	62-135	
Bromomethane	25.0	30.9	124	45-135	
2-Butanone (MEK)	100	99.1	99	44-177	
Carbon disulfide	25.0	27.9	112	55-143	
Carbon tetrachloride	25.0	25.8	103	65-135	
Chlorobenzene	25.0	24.2	97	65-135	
Chlorodibromomethane	25.0	26.1	104	65-135	
Chloroethane	25.0	28.5	114	46-136	
Chloroform	25.0	23.9	95	65-135	
Chloromethane	25.0	29.2	117	34-145	
Allyl chloride	25.0	25.6	102	50-135	
1,2-Dibromo-3-Chloropropane	25.0	27.1	108	57-135	
Dibromomethane	25.0	24.4	98	65-135	
1,2-Dichlorobenzene	25.0	23.6	94	65-135	
1,3-Dichlorobenzene	25.0	24.9	99	65-135	
1,4-Dichlorobenzene	25.0	24.8	99	65-135	
trans-1,4-Dichloro-2-butene	25.0	24.0	96	53-135	
Dichlorodifluoromethane	25.0	36.9	148	43-142	*
1,1-Dichloroethane	25.0	24.7	99	65-135	
1,2-Dichloroethane	25.0	23.8	95	65-135	
cis-1,2-Dichloroethene	25.0	25.0	100	65-135	
trans-1,2-Dichloroethene	25.0	24.9	100	65-135	
1,1-Dichloroethene	25.0	26.9	108	65-136	
1,2-Dichloropropane	25.0	24.9	99	64-135	
1,3-Dichloropropane	25.0	23.6	95	64-135	
2,2-Dichloropropane	25.0	27.0	108	65-135	
cis-1,3-Dichloropropene	25.0	25.5	102	65-135	
trans-1,3-Dichloropropene	25.0	24.1	97	65-135	
1,1-Dichloropropene	25.0	24.6	98	65-135	
Ethylbenzene	25.0	24.5	98	65-135	
Ethyl methacrylate	25.0	25.7	103	50-135	
2-Hexanone	100	105	105	57-139	
Iodomethane	25.0	20.5	82	65-142	
Isobutyl alcohol	625	656	105	55-135	
Methylene Chloride	25.0	26.1	104	54-141	
4-Methyl-2-pentanone (MIBK)	100	103	103	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2973.D

Lab ID: LCS 280-500875/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	25.4	102	65-135	
1,1,1,2-Tetrachloroethane	25.0	25.4	101	65-135	
1,1,2,2-Tetrachloroethane	25.0	25.0	100	58-135	
Tetrachloroethene	25.0	25.5	102	65-135	
Toluene	25.0	24.3	97	65-135	
1,2,4-Trichlorobenzene	25.0	24.5	98	58-135	
1,1,1-Trichloroethane	25.0	25.4	102	65-135	
1,1,2-Trichloroethane	25.0	25.1	100	64-135	
Trichloroethene	25.0	23.7	95	65-135	
Trichlorofluoromethane	25.0	25.8	103	53-137	
1,2,3-Trichloropropane	25.0	24.1	96	65-135	
Vinyl acetate	50.0	52.0	104	11-187	
Vinyl chloride	25.0	29.3	117	40-137	
m-Xylene & p-Xylene	25.0	24.3	97	65-135	
o-Xylene	25.0	24.8	99	65-135	
Xylenes, Total	50.0	49.1	98	65-135	
1,2-Dibromoethane	25.0	24.4	98	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2975.D

Lab ID: LCS 280-500875/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	206	82	50-150	
Chloroprene	25.0	22.1	88	50-150	
Methacrylonitrile	250	210	84	50-150	
Methyl methacrylate	50.0	49.6	99	50-150	
Propionitrile	250	225	90	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R7177.D

Lab ID: LCS 280-501117/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	74.4	74	39-156	
Acrolein	247	216	88	36-147	
Acrylonitrile	250	228	91	56-135	
Benzene	25.0	20.8	83	65-135	
Chlorobromomethane	25.0	22.5	90	65-135	
Dichlorobromomethane	25.0	22.4	89	65-135	
Bromoform	25.0	20.0	80	62-135	
Bromomethane	25.0	26.5	106	45-135	
2-Butanone (MEK)	100	79.8	80	44-177	
Carbon disulfide	25.0	23.1	92	55-143	
Carbon tetrachloride	25.0	19.2	77	65-135	
Chlorobenzene	25.0	21.1	84	65-135	
Chlorodibromomethane	25.0	18.9	76	65-135	
Chloroethane	25.0	21.5	86	46-136	
Chloroform	25.0	21.0	84	65-135	
Chloromethane	25.0	16.8	67	34-145	
Allyl chloride	25.0	22.3	89	50-135	
1,2-Dibromo-3-Chloropropane	25.0	18.9	75	57-135	
Dibromomethane	25.0	22.1	89	65-135	
1,2-Dichlorobenzene	25.0	20.9	84	65-135	
1,3-Dichlorobenzene	25.0	21.3	85	65-135	
1,4-Dichlorobenzene	25.0	21.0	84	65-135	
trans-1,4-Dichloro-2-butene	25.0	18.6	74	53-135	
Dichlorodifluoromethane	25.0	11.2	45	43-142	
1,1-Dichloroethane	25.0	20.7	83	65-135	
1,2-Dichloroethane	25.0	20.7	83	65-135	
cis-1,2-Dichloroethene	25.0	22.4	89	65-135	
trans-1,2-Dichloroethene	25.0	22.6	91	65-135	
1,1-Dichloroethene	25.0	22.0	88	65-136	
1,2-Dichloropropane	25.0	20.6	82	64-135	
1,3-Dichloropropane	25.0	19.7	79	64-135	
2,2-Dichloropropane	25.0	20.0	80	65-135	
cis-1,3-Dichloropropene	25.0	19.8	79	65-135	
trans-1,3-Dichloropropene	25.0	17.8	71	65-135	
1,1-Dichloropropene	25.0	19.4	78	65-135	
Ethylbenzene	25.0	22.0	88	65-135	
Ethyl methacrylate	25.0	18.8	75	50-135	
2-Hexanone	100	78.5	78	57-139	
Iodomethane	25.0	26.3	105	65-142	
Isobutyl alcohol	625	456	73	55-135	
Methylene Chloride	25.0	21.8	87	54-141	
4-Methyl-2-pentanone (MIBK)	100	73.3	73	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R7177.D

Lab ID: LCS 280-501117/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	22.1	88	65-135	
1,1,1,2-Tetrachloroethane	25.0	19.8	79	65-135	
1,1,2,2-Tetrachloroethane	25.0	19.1	77	58-135	
Tetrachloroethene	25.0	18.8	75	65-135	
Toluene	25.0	20.8	83	65-135	
1,2,4-Trichlorobenzene	25.0	19.7	79	58-135	
1,1,1-Trichloroethane	25.0	18.2	73	65-135	
1,1,2-Trichloroethane	25.0	22.0	88	64-135	
Trichloroethene	25.0	20.3	81	65-135	
Trichlorofluoromethane	25.0	21.5	86	53-137	
1,2,3-Trichloropropane	25.0	19.1	76	65-135	
Vinyl acetate	50.0	39.1	78	11-187	
Vinyl chloride	25.0	19.1	77	40-137	
m-Xylene & p-Xylene	25.0	19.5	78	65-135	
o-Xylene	25.0	20.0	80	65-135	
Xylenes, Total	50.0	39.5	79	65-135	
1,2-Dibromoethane	25.0	20.5	82	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R7181.D

Lab ID: LCS 280-501117/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	239	96	50-150	
Chloroprene	25.0	22.7	91	50-150	
Methacrylonitrile	250	233	93	50-150	
Methyl methacrylate	50.0	50.6	101	50-150	
Propionitrile	250	251	100	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2854.D

Lab ID: LCSD 280-500579/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	96.1	96	5	23	39-156	
Acrolein	247	133	54	6	30	36-147	
Acrylonitrile	250	248	99	5	30	56-135	
Benzene	25.0	22.4	90	1	20	65-135	
Chlorobromomethane	25.0	22.5	90	1	29	65-135	
Dichlorobromomethane	25.0	23.7	95	1	20	65-135	
Bromoform	25.0	24.7	99	2	27	62-135	
Bromomethane	25.0	20.4	82	5	33	45-135	
2-Butanone (MEK)	100	101	101	4	32	44-177	
Carbon disulfide	25.0	15.5	62	2	20	55-143	
Carbon tetrachloride	25.0	21.5	86	2	21	65-135	
Chlorobenzene	25.0	23.4	94	3	20	65-135	
Chlorodibromomethane	25.0	24.8	99	1	20	65-135	
Chloroethane	25.0	22.0	88	2	25	46-136	
Chloroform	25.0	22.5	90	1	20	65-135	
Chloromethane	25.0	19.0	76	0	24	34-145	
Allyl chloride	25.0	21.9	87	1	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99	6	22	57-135	
Dibromomethane	25.0	23.6	94	0	26	65-135	
1,2-Dichlorobenzene	25.0	23.2	93	3	20	65-135	
1,3-Dichlorobenzene	25.0	24.3	97	2	20	65-135	
1,4-Dichlorobenzene	25.0	24.0	96	1	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	24.2	97	2	25	53-135	
Dichlorodifluoromethane	25.0	16.6	66	2	30	43-142	
1,1-Dichloroethane	25.0	22.3	89	1	21	65-135	
1,2-Dichloroethane	25.0	22.9	92	0	20	65-135	
cis-1,2-Dichloroethene	25.0	22.4	90	0	20	65-135	
trans-1,2-Dichloroethene	25.0	20.3	81	1	24	65-135	
1,1-Dichloroethene	25.0	17.7	71	0	20	65-136	
1,2-Dichloropropane	25.0	24.4	97	1	20	64-135	
1,3-Dichloropropane	25.0	23.8	95	1	20	64-135	
2,2-Dichloropropane	25.0	23.3	93	1	20	65-135	
cis-1,3-Dichloropropene	25.0	25.5	102	3	26	65-135	
trans-1,3-Dichloropropene	25.0	23.4	93	1	26	65-135	
1,1-Dichloropropene	25.0	21.1	85	0	21	65-135	
Ethylbenzene	25.0	23.4	94	3	20	65-135	
Ethyl methacrylate	25.0	26.1	104	0	30	50-135	
2-Hexanone	100	109	109	1	25	57-139	
Iodomethane	25.0	16.6	66	19	25	65-142	
Isobutyl alcohol	625	679	109	4	30	55-135	
Methylene Chloride	25.0	22.7	91	0	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	107	107	4	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2854.D

Lab ID: LCSD 280-500579/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	24.8	99	3	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.8	95	2	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	25.3	101	1	20	58-135	
Tetrachloroethene	25.0	22.8	91	2	20	65-135	
Toluene	25.0	23.1	92	2	20	65-135	
1,2,4-Trichlorobenzene	25.0	23.5	94	2	25	58-135	
1,1,1-Trichloroethane	25.0	21.9	87	2	20	65-135	
1,1,2-Trichloroethane	25.0	24.4	98	2	27	64-135	
Trichloroethene	25.0	21.6	86	0	20	65-135	
Trichlorofluoromethane	25.0	20.5	82	2	27	53-137	
1,2,3-Trichloropropane	25.0	23.6	94	1	23	65-135	
Vinyl acetate	50.0	52.7	105	4	24	11-187	
Vinyl chloride	25.0	20.5	82	1	24	40-137	
m-Xylene & p-Xylene	25.0	23.9	96	3	20	65-135	
o-Xylene	25.0	24.3	97	4	20	65-135	
Xylenes, Total	50.0	48.2	96	3	20	65-135	
1,2-Dibromoethane	25.0	23.9	96	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2856.D

Lab ID: LCSD 280-500579/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetonitrile	250	238	95	NaN	30	50-150	
Chloroprene	25.0	23.5	94	NaN	30	50-150	
Methacrylonitrile	250	241	97	NaN	30	50-150	
Methyl methacrylate	50.0	51.2	102	NaN	30	50-150	
Propionitrile	250	251	100	NaN	30	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6974.D

Lab ID: LCSD 280-500580/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	93.2	93	17	23	39-156	
Acrolein	247	148	60	15	30	36-147	
Acrylonitrile	250	272	109	13	30	56-135	
Benzene	25.0	25.7	103	5	20	65-135	
Chlorobromomethane	25.0	26.6	107	3	29	65-135	
Dichlorobromomethane	25.0	27.9	112	4	20	65-135	
Bromoform	25.0	24.4	97	9	27	62-135	
Bromomethane	25.0	23.6	94	7	33	45-135	
2-Butanone (MEK)	100	102	102	15	32	44-177	
Carbon disulfide	25.0	19.7	79	2	20	55-143	
Carbon tetrachloride	25.0	26.5	106	2	21	65-135	
Chlorobenzene	25.0	26.8	107	6	20	65-135	
Chlorodibromomethane	25.0	24.1	96	6	20	65-135	
Chloroethane	25.0	25.5	102	1	25	46-136	
Chloroform	25.0	26.3	105	3	20	65-135	
Chloromethane	25.0	20.0	80	0	24	34-145	
Allyl chloride	25.0	24.5	98	3	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	22.8	91	8	22	57-135	
Dibromomethane	25.0	27.4	110	1	26	65-135	
1,2-Dichlorobenzene	25.0	27.2	109	5	20	65-135	
1,3-Dichlorobenzene	25.0	26.8	107	4	20	65-135	
1,4-Dichlorobenzene	25.0	26.6	106	2	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	23.5	94	9	25	53-135	
Dichlorodifluoromethane	25.0	13.8	55	5	30	43-142	
1,1-Dichloroethane	25.0	25.5	102	3	21	65-135	
1,2-Dichloroethane	25.0	26.3	105	2	20	65-135	
cis-1,2-Dichloroethene	25.0	28.0	112	4	20	65-135	
trans-1,2-Dichloroethene	25.0	25.8	103	0	24	65-135	
1,1-Dichloroethene	25.0	23.8	95	4	20	65-136	
1,2-Dichloropropane	25.0	25.5	102	8	20	64-135	
1,3-Dichloropropane	25.0	24.9	100	7	20	64-135	
2,2-Dichloropropane	25.0	26.7	107	5	20	65-135	
cis-1,3-Dichloropropene	25.0	24.6	98	5	26	65-135	
trans-1,3-Dichloropropene	25.0	22.2	89	2	26	65-135	
1,1-Dichloropropene	25.0	25.4	102	3	21	65-135	
Ethylbenzene	25.0	28.3	113	3	20	65-135	
Ethyl methacrylate	25.0	23.8	95	9	30	50-135	
2-Hexanone	100	97.9	98	15	25	57-139	
Iodomethane	25.0	30.4	121	5	25	65-142	
Isobutyl alcohol	625	594	95	15	30	55-135	
Methylene Chloride	25.0	25.1	100	3	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	95.8	96	15	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6974.D

Lab ID: LCSD 280-500580/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	28.1	113	5	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	24.8	99	4	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	24.1	96	6	20	58-135	
Tetrachloroethene	25.0	25.6	102	8	20	65-135	
Toluene	25.0	26.4	106	3	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.3	97	2	25	58-135	
1,1,1-Trichloroethane	25.0	24.8	99	4	20	65-135	
1,1,2-Trichloroethane	25.0	27.3	109	5	27	64-135	
Trichloroethene	25.0	27.7	111	1	20	65-135	
Trichlorofluoromethane	25.0	26.4	105	2	27	53-137	
1,2,3-Trichloropropane	25.0	25.0	100	9	23	65-135	
Vinyl acetate	50.0	48.9	98	9	24	11-187	
Vinyl chloride	25.0	22.2	89	4	24	40-137	
m-Xylene & p-Xylene	25.0	24.8	99	0	20	65-135	
o-Xylene	25.0	25.3	101	3	20	65-135	
Xylenes, Total	50.0	50.1	100	2	20	65-135	
1,2-Dibromoethane	25.0	25.2	101	9	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6976.D

Lab ID: LCSD 280-500580/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetonitrile	250	259	104	NaN	30	50-150	
Chloroprene	25.0	24.8	99	NaN	30	50-150	
Methacrylonitrile	250	257	103	NaN	30	50-150	
Methyl methacrylate	50.0	54.2	108	NaN	30	50-150	
Propionitrile	250	270	108	NaN	30	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2974.D

Lab ID: LCSD 280-500875/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	94.6	95	2	23	39-156	
Acrolein	247	236	96	0	30	36-147	
Acrylonitrile	250	247	99	1	30	56-135	
Benzene	25.0	23.8	95	2	20	65-135	
Chlorobromomethane	25.0	25.2	101	1	29	65-135	
Dichlorobromomethane	25.0	24.8	99	0	20	65-135	
Bromoform	25.0	26.2	105	2	27	62-135	
Bromomethane	25.0	28.2	113	9	33	45-135	
2-Butanone (MEK)	100	99.0	99	0	32	44-177	
Carbon disulfide	25.0	27.4	110	2	20	55-143	
Carbon tetrachloride	25.0	25.4	102	2	21	65-135	
Chlorobenzene	25.0	23.6	94	2	20	65-135	
Chlorodibromomethane	25.0	25.5	102	2	20	65-135	
Chloroethane	25.0	27.5	110	4	25	46-136	
Chloroform	25.0	23.6	94	1	20	65-135	
Chloromethane	25.0	27.6	111	5	24	34-145	
Allyl chloride	25.0	25.5	102	0	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	27.1	109	0	22	57-135	
Dibromomethane	25.0	24.7	99	1	26	65-135	
1,2-Dichlorobenzene	25.0	23.5	94	0	20	65-135	
1,3-Dichlorobenzene	25.0	24.0	96	3	20	65-135	
1,4-Dichlorobenzene	25.0	24.0	96	3	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	23.8	95	1	25	53-135	
Dichlorodifluoromethane	25.0	35.7	143	3	30	43-142	*
1,1-Dichloroethane	25.0	24.4	97	1	21	65-135	
1,2-Dichloroethane	25.0	24.1	96	1	20	65-135	
cis-1,2-Dichloroethene	25.0	24.7	99	1	20	65-135	
trans-1,2-Dichloroethene	25.0	24.7	99	1	24	65-135	
1,1-Dichloroethene	25.0	26.6	107	1	20	65-136	
1,2-Dichloropropane	25.0	24.6	99	1	20	64-135	
1,3-Dichloropropane	25.0	23.6	95	0	20	64-135	
2,2-Dichloropropane	25.0	26.4	106	2	20	65-135	
cis-1,3-Dichloropropene	25.0	25.1	100	2	26	65-135	
trans-1,3-Dichloropropene	25.0	24.2	97	0	26	65-135	
1,1-Dichloropropene	25.0	23.9	95	3	21	65-135	
Ethylbenzene	25.0	23.7	95	3	20	65-135	
Ethyl methacrylate	25.0	25.5	102	0	30	50-135	
2-Hexanone	100	103	103	2	25	57-139	
Iodomethane	25.0	22.2	89	8	25	65-142	
Isobutyl alcohol	625	646	103	1	30	55-135	
Methylene Chloride	25.0	25.5	102	2	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	102	102	1	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2974.D

Lab ID: LCSD 280-500875/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	24.6	98	3	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	24.0	96	5	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	24.8	99	1	20	58-135	
Tetrachloroethene	25.0	24.2	97	5	20	65-135	
Toluene	25.0	24.1	96	1	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.0	96	2	25	58-135	
1,1,1-Trichloroethane	25.0	24.8	99	2	20	65-135	
1,1,2-Trichloroethane	25.0	25.3	101	1	27	64-135	
Trichloroethene	25.0	23.9	96	1	20	65-135	
Trichlorofluoromethane	25.0	26.5	106	2	27	53-137	
1,2,3-Trichloropropane	25.0	24.3	97	1	23	65-135	
Vinyl acetate	50.0	51.2	102	1	24	11-187	
Vinyl chloride	25.0	28.2	113	4	24	40-137	
m-Xylene & p-Xylene	25.0	23.8	95	2	20	65-135	
o-Xylene	25.0	24.1	96	3	20	65-135	
Xylenes, Total	50.0	47.9	96	2	20	65-135	
1,2-Dibromoethane	25.0	24.1	96	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2976.D

Lab ID: LCSD 280-500875/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetonitrile	250	230	92	11	30	50-150	
Chloroprene	25.0	22.6	90	2	30	50-150	
Methacrylonitrile	250	221	88	5	30	50-150	
Methyl methacrylate	50.0	48.2	96	3	30	50-150	
Propionitrile	250	243	97	8	30	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R7180.D

Lab ID: LCSD 280-501117/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	79.5	79	7	23	39-156	
Acrolein	247	215	87	1	30	36-147	
Acrylonitrile	250	235	94	3	30	56-135	
Benzene	25.0	19.6	78	6	20	65-135	
Chlorobromomethane	25.0	20.6	82	9	29	65-135	
Dichlorobromomethane	25.0	20.7	83	8	20	65-135	
Bromoform	25.0	18.9	76	6	27	62-135	
Bromomethane	25.0	20.9	84	23	33	45-135	
2-Butanone (MEK)	100	90.3	90	12	32	44-177	
Carbon disulfide	25.0	21.3	85	8	20	55-143	
Carbon tetrachloride	25.0	17.4	69	10	21	65-135	
Chlorobenzene	25.0	19.3	77	9	20	65-135	
Chlorodibromomethane	25.0	18.2	73	4	20	65-135	
Chloroethane	25.0	22.0	88	2	25	46-136	
Chloroform	25.0	19.9	80	5	20	65-135	
Chloromethane	25.0	16.2	65	4	24	34-145	
Allyl chloride	25.0	20.3	81	9	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	20.1	80	6	22	57-135	
Dibromomethane	25.0	21.5	86	3	26	65-135	
1,2-Dichlorobenzene	25.0	20.6	82	2	20	65-135	
1,3-Dichlorobenzene	25.0	20.6	82	4	20	65-135	
1,4-Dichlorobenzene	25.0	20.5	82	2	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	19.3	77	4	25	53-135	
Dichlorodifluoromethane	25.0	10.8	43	4	30	43-142	
1,1-Dichloroethane	25.0	19.5	78	6	21	65-135	
1,2-Dichloroethane	25.0	20.4	82	1	20	65-135	
cis-1,2-Dichloroethene	25.0	21.3	85	5	20	65-135	
trans-1,2-Dichloroethene	25.0	20.7	83	9	24	65-135	
1,1-Dichloroethene	25.0	21.2	85	3	20	65-136	
1,2-Dichloropropane	25.0	19.0	76	8	20	64-135	
1,3-Dichloropropane	25.0	19.2	77	2	20	64-135	
2,2-Dichloropropane	25.0	17.9	71	11	20	65-135	
cis-1,3-Dichloropropene	25.0	18.4	73	7	26	65-135	
trans-1,3-Dichloropropene	25.0	17.2	69	3	26	65-135	
1,1-Dichloropropene	25.0	18.3	73	6	21	65-135	
Ethylbenzene	25.0	20.2	81	9	20	65-135	
Ethyl methacrylate	25.0	18.8	75	0	30	50-135	
2-Hexanone	100	83.6	84	6	25	57-139	
Iodomethane	25.0	24.2	97	8	25	65-142	
Isobutyl alcohol	625	535	86	16	30	55-135	
Methylene Chloride	25.0	20.9	84	4	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	80.9	81	10	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R7180.D

Lab ID: LCSD 280-501117/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	20.5	82	7	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	18.5	74	7	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	20.1	80	5	20	58-135	
Tetrachloroethene	25.0	17.4	70	8	20	65-135	
Toluene	25.0	19.4	78	7	20	65-135	
1,2,4-Trichlorobenzene	25.0	19.1	76	4	25	58-135	
1,1,1-Trichloroethane	25.0	17.0	68	7	20	65-135	
1,1,2-Trichloroethane	25.0	21.8	87	1	27	64-135	
Trichloroethene	25.0	18.9	76	7	20	65-135	
Trichlorofluoromethane	25.0	20.6	83	4	27	53-137	
1,2,3-Trichloropropane	25.0	20.0	80	4	23	65-135	
Vinyl acetate	50.0	38.2	76	2	24	11-187	
Vinyl chloride	25.0	18.2	73	5	24	40-137	
m-Xylene & p-Xylene	25.0	18.0	72	8	20	65-135	
o-Xylene	25.0	18.2	73	9	20	65-135	
Xylenes, Total	50.0	36.2	72	9	20	65-135	
1,2-Dibromoethane	25.0	19.7	79	4	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R7182.D

Lab ID: LCSD 280-501117/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetonitrile	250	222	89	8	30	50-150	
Chloroprene	25.0	22.8	91	0	30	50-150	
Methacrylonitrile	250	231	92	1	30	50-150	
Methyl methacrylate	50.0	49.4	99	2	30	50-150	
Propionitrile	250	242	97	4	30	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2873.D

Lab ID: 280-138090-14 MS Client ID: RW-7677P-20200622 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	100	ND	94.0	94	39-156	
Acrolein	247	ND	203	82	36-147	
Acrylonitrile	250	ND	245	98	56-135	
Benzene	25.0	ND	23.5	94	65-135	
Chlorobromomethane	25.0	ND	23.2	93	65-135	
Dichlorobromomethane	25.0	ND	24.8	99	65-135	
Bromoform	25.0	ND	25.3	101	62-135	
Bromomethane	25.0	ND	10.1	40	45-135	F1
2-Butanone (MEK)	100	ND	97.8	98	44-177	
Carbon disulfide	25.0	ND	16.7	67	55-143	
Carbon tetrachloride	25.0	ND	22.9	92	65-135	
Chlorobenzene	25.0	ND	24.7	99	65-135	
Chlorodibromomethane	25.0	ND	26.0	104	65-135	
Chloroethane	25.0	ND	22.2	89	46-136	
Chloroform	25.0	ND	23.2	93	65-135	
Chloromethane	25.0	ND	17.8	71	34-145	
Allyl chloride	25.0	ND	22.8	91	50-135	
1,2-Dibromo-3-Chloropropane	25.0	ND	25.5	102	57-135	
Dibromomethane	25.0	ND	24.7	99	65-135	
1,2-Dichlorobenzene	25.0	ND	23.5	94	65-135	
1,3-Dichlorobenzene	25.0	ND	24.7	99	65-135	
1,4-Dichlorobenzene	25.0	ND	24.1	97	65-135	
trans-1,4-Dichloro-2-butene	25.0	ND	21.2	85	53-135	
Dichlorodifluoromethane	25.0	ND	16.7	67	43-142	
1,1-Dichloroethane	25.0	ND	23.4	94	65-135	
1,2-Dichloroethane	25.0	ND	23.4	94	65-135	
cis-1,2-Dichloroethene	25.0	0.27 J	24.0	95	65-135	
trans-1,2-Dichloroethene	25.0	ND	21.5	86	65-135	
1,1-Dichloroethene	25.0	ND	18.9	76	65-136	
1,2-Dichloropropane	25.0	ND	25.4	102	64-135	
1,3-Dichloropropane	25.0	ND	24.5	98	64-135	
2,2-Dichloropropane	25.0	ND	22.9	91	65-135	
cis-1,3-Dichloropropene	25.0	ND	25.7	103	65-135	
trans-1,3-Dichloropropene	25.0	ND	23.6	94	65-135	
1,1-Dichloropropene	25.0	ND	22.6	90	65-135	
Ethylbenzene	25.0	ND	25.1	101	65-135	
Ethyl methacrylate	25.0	ND	26.8	107	50-135	
2-Hexanone	100	ND	106	106	57-139	
Iodomethane	25.0	ND	9.30	37	65-142	F1
Isobutyl alcohol	625	ND	643	103	55-135	
Methylene Chloride	25.0	ND	23.5	94	54-141	
4-Methyl-2-pentanone (MIBK)	100	ND	104	104	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2873.D

Lab ID: 280-138090-14 MS Client ID: RW-7677P-20200622 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Styrene	25.0	ND	25.9	103	65-135	
1,1,1,2-Tetrachloroethane	25.0	ND	25.2	101	65-135	
1,1,2,2-Tetrachloroethane	25.0	ND	25.4	102	58-135	
Tetrachloroethene	25.0	1.2	25.1	96	65-135	
Toluene	25.0	ND	24.1	96	65-135	
1,2,4-Trichlorobenzene	25.0	ND	23.5	94	58-135	
1,1,1-Trichloroethane	25.0	ND	23.0	92	65-135	
1,1,2-Trichloroethane	25.0	ND	24.9	99	64-135	
Trichloroethene	25.0	5.9	28.5	90	65-135	
Trichlorofluoromethane	25.0	ND	20.7	83	53-137	
1,2,3-Trichloropropane	25.0	ND	24.0	96	65-135	
Vinyl acetate	50.0	ND	52.1	104	11-187	
Vinyl chloride	25.0	ND	21.2	85	40-137	
m-Xylene & p-Xylene	25.0	ND	25.2	101	65-135	
o-Xylene	25.0	ND	25.7	103	65-135	
Xylenes, Total	50.0	ND	50.9	102	65-135	
1,2-Dibromoethane	25.0	ND	24.1	96	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6995.D

Lab ID: 280-138090-19 MS Client ID: RW-7688P-20200623 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	100	ND	85.1	85	39-156	
Acrolein	247	ND	247	100	36-147	
Acrylonitrile	250	ND	243	97	56-135	
Benzene	25.0	ND	25.2	101	65-135	
Chlorobromomethane	25.0	ND	25.4	101	65-135	
Dichlorobromomethane	25.0	ND	27.1	108	65-135	
Bromoform	25.0	ND	23.0	92	62-135	
Bromomethane	25.0	ND	21.1	84	45-135	
2-Butanone (MEK)	100	ND	90.6	91	44-177	
Carbon disulfide	25.0	ND	19.6	78	55-143	
Carbon tetrachloride	25.0	ND	26.8	107	65-135	
Chlorobenzene	25.0	ND	26.7	107	65-135	
Chlorodibromomethane	25.0	ND	23.5	94	65-135	
Chloroethane	25.0	ND	23.7	95	46-136	
Chloroform	25.0	ND	26.3	105	65-135	
Chloromethane	25.0	ND	19.3	77	34-145	
Allyl chloride	25.0	ND	23.3	93	50-135	
1,2-Dibromo-3-Chloropropane	25.0	ND	22.4	89	57-135	
Dibromomethane	25.0	ND	27.0	108	65-135	
1,2-Dichlorobenzene	25.0	ND	25.8	103	65-135	
1,3-Dichlorobenzene	25.0	ND	26.7	107	65-135	
1,4-Dichlorobenzene	25.0	ND	27.0	108	65-135	
trans-1,4-Dichloro-2-butene	25.0	ND	21.3	85	53-135	
Dichlorodifluoromethane	25.0	ND	13.8	55	43-142	
1,1-Dichloroethane	25.0	ND	25.4	101	65-135	
1,2-Dichloroethane	25.0	ND	26.9	108	65-135	
cis-1,2-Dichloroethene	25.0	ND	26.4	106	65-135	
trans-1,2-Dichloroethene	25.0	ND	26.6	106	65-135	
1,1-Dichloroethene	25.0	ND	22.8	91	65-136	
1,2-Dichloropropane	25.0	ND	24.2	97	64-135	
1,3-Dichloropropane	25.0	ND	24.1	97	64-135	
2,2-Dichloropropane	25.0	ND	23.6	94	65-135	
cis-1,3-Dichloropropene	25.0	ND	23.3	93	65-135	
trans-1,3-Dichloropropene	25.0	ND	20.5	82	65-135	
1,1-Dichloropropene	25.0	ND	25.9	103	65-135	
Ethylbenzene	25.0	ND	27.8	111	65-135	
Ethyl methacrylate	25.0	ND	22.3	89	50-135	
2-Hexanone	100	ND	88.6	89	57-139	
Iodomethane	25.0	ND	27.0	108	65-142	
Isobutyl alcohol	625	ND	538	86	55-135	
Methylene Chloride	25.0	ND	24.0	96	54-141	
4-Methyl-2-pentanone (MIBK)	100	ND	85.7	86	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6995.D

Lab ID: 280-138090-19 MS Client ID: RW-7688P-20200623 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Styrene	25.0	ND	28.1	112	65-135	
1,1,1,2-Tetrachloroethane	25.0	ND	25.0	100	65-135	
1,1,2,2-Tetrachloroethane	25.0	ND	23.5	94	58-135	
Tetrachloroethene	25.0	ND	25.1	100	65-135	
Toluene	25.0	ND	26.2	105	65-135	
1,2,4-Trichlorobenzene	25.0	ND	23.6	94	58-135	
1,1,1-Trichloroethane	25.0	ND	24.8	99	65-135	
1,1,2-Trichloroethane	25.0	ND	26.8	107	64-135	
Trichloroethene	25.0	ND	25.9	104	65-135	
Trichlorofluoromethane	25.0	ND	26.5	106	53-137	
1,2,3-Trichloropropane	25.0	ND	23.4	94	65-135	
Vinyl acetate	50.0	ND	41.6	83	11-187	
Vinyl chloride	25.0	ND	21.7	87	40-137	
m-Xylene & p-Xylene	25.0	ND	25.3	101	65-135	
o-Xylene	25.0	ND	25.5	102	65-135	
Xylenes, Total	50.0	ND	50.8	102	65-135	
1,2-Dibromoethane	25.0	ND	23.3	93	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2874.D

Lab ID: 280-138090-14 MSD Client ID: RW-7677P-20200622 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	89.8	90	4	23	39-156	
Acrolein	247	200	81	1	30	36-147	
Acrylonitrile	250	235	94	4	30	56-135	
Benzene	25.0	22.4	90	5	20	65-135	
Chlorobromomethane	25.0	22.3	89	4	29	65-135	
Dichlorobromomethane	25.0	23.6	95	5	20	65-135	
Bromoform	25.0	24.0	96	5	27	62-135	
Bromomethane	25.0	11.7	47	15	33	45-135	
2-Butanone (MEK)	100	94.0	94	4	32	44-177	
Carbon disulfide	25.0	15.7	63	6	20	55-143	
Carbon tetrachloride	25.0	21.6	86	6	21	65-135	
Chlorobenzene	25.0	22.9	91	8	20	65-135	
Chlorodibromomethane	25.0	24.5	98	6	20	65-135	
Chloroethane	25.0	22.2	89	0	25	46-136	
Chloroform	25.0	22.1	88	5	20	65-135	
Chloromethane	25.0	18.2	73	2	24	34-145	
Allyl chloride	25.0	21.3	85	7	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	25.1	100	2	22	57-135	
Dibromomethane	25.0	23.0	92	7	26	65-135	
1,2-Dichlorobenzene	25.0	22.4	90	5	20	65-135	
1,3-Dichlorobenzene	25.0	23.4	94	5	20	65-135	
1,4-Dichlorobenzene	25.0	23.3	93	4	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	20.4	82	4	25	53-135	
Dichlorodifluoromethane	25.0	16.6	66	0	30	43-142	
1,1-Dichloroethane	25.0	22.2	89	5	21	65-135	
1,2-Dichloroethane	25.0	22.1	88	6	20	65-135	
cis-1,2-Dichloroethene	25.0	22.9	91	5	20	65-135	
trans-1,2-Dichloroethene	25.0	20.6	83	4	24	65-135	
1,1-Dichloroethene	25.0	17.8	71	6	20	65-136	
1,2-Dichloropropane	25.0	24.1	96	5	20	64-135	
1,3-Dichloropropane	25.0	23.2	93	5	20	64-135	
2,2-Dichloropropane	25.0	21.5	86	6	20	65-135	
cis-1,3-Dichloropropene	25.0	24.5	98	5	26	65-135	
trans-1,3-Dichloropropene	25.0	22.3	89	6	26	65-135	
1,1-Dichloropropene	25.0	20.9	84	8	21	65-135	
Ethylbenzene	25.0	23.3	93	8	20	65-135	
Ethyl methacrylate	25.0	24.8	99	8	30	50-135	
2-Hexanone	100	100	100	5	25	57-139	
Iodomethane	25.0	12.4	50	29	25	65-142	F1 F2
Isobutyl alcohol	625	613	98	5	30	55-135	
Methylene Chloride	25.0	22.5	90	5	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	100	100	4	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2874.D

Lab ID: 280-138090-14 MSD Client ID: RW-7677P-20200622 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	23.9	95	8	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.5	94	7	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	24.0	96	6	20	58-135	
Tetrachloroethene	25.0	23.4	89	7	20	65-135	
Toluene	25.0	22.9	92	5	20	65-135	
1,2,4-Trichlorobenzene	25.0	22.1	88	6	25	58-135	
1,1,1-Trichloroethane	25.0	21.8	87	5	20	65-135	
1,1,2-Trichloroethane	25.0	23.8	95	4	27	64-135	
Trichloroethene	25.0	26.9	84	6	20	65-135	
Trichlorofluoromethane	25.0	20.5	82	1	27	53-137	
1,2,3-Trichloropropane	25.0	22.9	92	5	23	65-135	
Vinyl acetate	50.0	49.4	99	5	24	11-187	
Vinyl chloride	25.0	20.9	84	1	24	40-137	
m-Xylene & p-Xylene	25.0	23.6	94	7	20	65-135	
o-Xylene	25.0	23.6	94	8	20	65-135	
Xylenes, Total	50.0	47.2	94	8	20	65-135	
1,2-Dibromoethane	25.0	22.8	91	6	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6996.D

Lab ID: 280-138090-19 MSD Client ID: RW-7688P-20200623 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	83.2	83	2	23	39-156	
Acrolein	247	230	93	7	30	36-147	
Acrylonitrile	250	238	95	2	30	56-135	
Benzene	25.0	23.7	95	6	20	65-135	
Chlorobromomethane	25.0	24.6	98	3	29	65-135	
Dichlorobromomethane	25.0	25.5	102	6	20	65-135	
Bromoform	25.0	22.9	92	1	27	62-135	
Bromomethane	25.0	21.8	87	3	33	45-135	
2-Butanone (MEK)	100	90.7	91	0	32	44-177	
Carbon disulfide	25.0	18.2	73	7	20	55-143	
Carbon tetrachloride	25.0	24.6	98	8	21	65-135	
Chlorobenzene	25.0	25.3	101	6	20	65-135	
Chlorodibromomethane	25.0	22.7	91	4	20	65-135	
Chloroethane	25.0	23.1	92	3	25	46-136	
Chloroform	25.0	24.6	98	7	20	65-135	
Chloromethane	25.0	18.3	73	5	24	34-145	
Allyl chloride	25.0	21.8	87	7	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	21.9	88	2	22	57-135	
Dibromomethane	25.0	25.4	102	6	26	65-135	
1,2-Dichlorobenzene	25.0	26.0	104	0	20	65-135	
1,3-Dichlorobenzene	25.0	25.4	102	5	20	65-135	
1,4-Dichlorobenzene	25.0	26.0	104	4	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	20.6	82	3	25	53-135	
Dichlorodifluoromethane	25.0	13.1	52	5	30	43-142	
1,1-Dichloroethane	25.0	23.5	94	8	21	65-135	
1,2-Dichloroethane	25.0	25.5	102	6	20	65-135	
cis-1,2-Dichloroethene	25.0	25.8	103	2	20	65-135	
trans-1,2-Dichloroethene	25.0	24.7	99	7	24	65-135	
1,1-Dichloroethene	25.0	21.2	85	7	20	65-136	
1,2-Dichloropropane	25.0	22.8	91	6	20	64-135	
1,3-Dichloropropane	25.0	23.8	95	1	20	64-135	
2,2-Dichloropropane	25.0	22.1	88	7	20	65-135	
cis-1,3-Dichloropropene	25.0	22.8	91	2	26	65-135	
trans-1,3-Dichloropropene	25.0	20.1	80	2	26	65-135	
1,1-Dichloropropene	25.0	24.0	96	8	21	65-135	
Ethylbenzene	25.0	27.5	110	1	20	65-135	
Ethyl methacrylate	25.0	21.9	88	2	30	50-135	
2-Hexanone	100	90.7	91	2	25	57-139	
Iodomethane	25.0	25.7	103	5	25	65-142	
Isobutyl alcohol	625	565	90	5	30	55-135	
Methylene Chloride	25.0	23.1	93	4	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	84.2	84	2	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Matrix: Water Level: Low Lab File ID: R6996.D

Lab ID: 280-138090-19 MSD Client ID: RW-7688P-20200623 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	26.6	106	6	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.5	94	6	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	22.7	91	4	20	58-135	
Tetrachloroethene	25.0	24.2	97	4	20	65-135	
Toluene	25.0	25.1	100	4	20	65-135	
1,2,4-Trichlorobenzene	25.0	22.8	91	3	25	58-135	
1,1,1-Trichloroethane	25.0	23.4	94	6	20	65-135	
1,1,2-Trichloroethane	25.0	24.9	99	7	27	64-135	
Trichloroethene	25.0	25.1	100	3	20	65-135	
Trichlorofluoromethane	25.0	24.8	99	7	27	53-137	
1,2,3-Trichloropropane	25.0	23.5	94	0	23	65-135	
Vinyl acetate	50.0	41.5	83	0	24	11-187	
Vinyl chloride	25.0	21.1	85	3	24	40-137	
m-Xylene & p-Xylene	25.0	24.0	96	5	20	65-135	
o-Xylene	25.0	23.9	96	6	20	65-135	
Xylenes, Total	50.0	47.9	96	6	20	65-135	
1,2-Dibromoethane	25.0	23.4	94	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: P2858.D Lab Sample ID: MB 280-500579/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_P Date Analyzed: 06/30/2020 00:11

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-500579/4	P2853.D	06/29/2020 22:24
	LCSD 280-500579/5	P2854.D	06/29/2020 22:45
	LCS 280-500579/6	P2855.D	06/29/2020 23:07
	LCSD 280-500579/7	P2856.D	06/29/2020 23:28
RW-8105PS-20200622	280-138090-1	P2867.D	06/30/2020 03:23
RW-5898B1-20200622	280-138090-2	P2868.D	06/30/2020 03:44
RW-8048P-20200622	280-138090-3	P2869.D	06/30/2020 04:06
RW-2172F-20200622	280-138090-12	P2870.D	06/30/2020 04:27
RW-7773P-20200622	280-138090-13	P2871.D	06/30/2020 04:48
RW-7677P-20200622	280-138090-14	P2872.D	06/30/2020 05:09
RW-7677P-20200622 MS	280-138090-14 MS	P2873.D	06/30/2020 05:31
RW-7677P-20200622 MSD	280-138090-14 MSD	P2874.D	06/30/2020 05:52
RW-7677PQ-20200622	280-138090-15	P2875.D	06/30/2020 06:13
RW-7070B-20200622	280-138090-16	P2876.D	06/30/2020 06:34

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: R6978.D Lab Sample ID: MB 280-500580/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_R1 Date Analyzed: 06/30/2020 00:53

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-500580/4	R6973.D	06/29/2020 23:06
	LCSD 280-500580/5	R6974.D	06/29/2020 23:28
	LCS 280-500580/6	R6975.D	06/29/2020 23:49
	LCSD 280-500580/7	R6976.D	06/30/2020 00:10
RW-7244P-20200623	280-138090-4	R6987.D	06/30/2020 04:07
RW-7350P-20200623	280-138090-5	R6988.D	06/30/2020 04:29
RW-8035P-20200623	280-138090-6	R6989.D	06/30/2020 04:50
RW-2237H-20200623	280-138090-7	R6990.D	06/30/2020 05:11
RW-8012P-20200623	280-138090-8	R6991.D	06/30/2020 05:33
RW-8249P-20200623	280-138090-17	R6992.D	06/30/2020 05:54
RW-2151H-20200623	280-138090-18	R6993.D	06/30/2020 06:15
RW-7688P-20200623	280-138090-19	R6994.D	06/30/2020 06:36
RW-7688P-20200623 MS	280-138090-19 MS	R6995.D	06/30/2020 06:58
RW-7688P-20200623 MSD	280-138090-19 MSD	R6996.D	06/30/2020 07:19
RW-7688PQ-20200623	280-138090-20	R6997.D	06/30/2020 07:40
RW-8284P-20200623	280-138090-21	R6998.D	06/30/2020 08:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: P2978.D Lab Sample ID: MB 280-500875/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_P Date Analyzed: 07/02/2020 01:05

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-500875/4	P2973.D	07/01/2020 23:18
	LCSD 280-500875/5	P2974.D	07/01/2020 23:40
	LCS 280-500875/6	P2975.D	07/02/2020 00:01
	LCSD 280-500875/7	P2976.D	07/02/2020 00:22
RW-2879M-20200624	280-138090-9	P2979.D	07/02/2020 01:26
RW-7586P-20200624	280-138090-10	P2980.D	07/02/2020 01:47
RW-8030P-20200624	280-138090-11	P2981.D	07/02/2020 02:09

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: R7179.D Lab Sample ID: MB 280-501117/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_R1 Date Analyzed: 07/06/2020 11:30

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-501117/4	R7177.D	07/06/2020 10:47
	LCSD 280-501117/5	R7180.D	07/06/2020 11:51
	LCS 280-501117/6	R7181.D	07/06/2020 12:13
	LCSD 280-501117/7	R7182.D	07/06/2020 12:34
TB-01-20200625	280-138090-22	R7183.D	07/06/2020 12:56

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: P7804.D BFB Injection Date: 02/06/2020

Instrument ID: VMS_P BFB Injection Time: 10:25

Analysis Batch No.: 485097

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	71.2	
175	5.0 - 9.0 % of mass 174	5.8	(8.2) 1
176	95.0 - 101.0 % of mass 174	70.1	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.7	(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
	STD005 280-485097/21	P7815.D	02/06/2020	14:40
	STD010 280-485097/22	P7816.D	02/06/2020	15:02
	STD020 280-485097/23	P7817.D	02/06/2020	15:23
	STD10 280-485097/24	P7818.D	02/06/2020	15:44
	STD50 280-485097/25	P7819.D	02/06/2020	16:05
	STD75 280-485097/26	P7820.D	02/06/2020	16:27
	STD100 280-485097/27	P7821.D	02/06/2020	16:48
	STD200 280-485097/28	P7822.D	02/06/2020	17:09
	ICV 280-485097/29	P7824.D	02/06/2020	17:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: P1658A.D BFB Injection Date: 06/01/2020

Instrument ID: VMS_P BFB Injection Time: 16:26

Analysis Batch No.: 496958

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	50.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	64.2	
175	5.0 - 9.0 % of mass 174	5.3	(8.3) 1
176	95.0 - 101.0 % of mass 174	61.9	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.1	(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
	STD005 280-496958/12	P1658.D	06/01/2020	16:26
	STD010 280-496958/13	P1659.D	06/01/2020	16:47
	STD020 280-496958/14	P1660.D	06/01/2020	17:09
	STD050 280-496958/15	P1661.D	06/01/2020	17:30
	STD10 280-496958/16	P1662.D	06/01/2020	17:51
	STD75 280-496958/18	P1664.D	06/01/2020	18:33
	STD100 280-496958/19	P1665.D	06/01/2020	18:55
	STD200 280-496958/20	P1666.D	06/01/2020	19:16
	ICIS 280-496958/17	P1669.D	06/01/2020	20:33
	ICV 280-496958/21	P1670.D	06/01/2020	20:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: P2850.D BFB Injection Date: 06/29/2020

Instrument ID: VMS_P BFB Injection Time: 21:13

Analysis Batch No.: 500579

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.0	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	60.9	
175	5.0 - 9.0 % of mass 174	4.9	(8.0) 1
176	95.0 - 101.0 % of mass 174	58.2	(95.6) 1
177	5.0 - 9.0 % of mass 176	3.8	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-500579/2	P2851.D	06/29/2020	21:41
	CCV 280-500579/3	P2852.D	06/29/2020	22:03
	LCS 280-500579/4	P2853.D	06/29/2020	22:24
	LCSD 280-500579/5	P2854.D	06/29/2020	22:45
	LCS 280-500579/6	P2855.D	06/29/2020	23:07
	LCSD 280-500579/7	P2856.D	06/29/2020	23:28
	MB 280-500579/9	P2858.D	06/30/2020	0:11
RW-8105PS-20200622	280-138090-1	P2867.D	06/30/2020	3:23
RW-5898B1-20200622	280-138090-2	P2868.D	06/30/2020	3:44
RW-8048P-20200622	280-138090-3	P2869.D	06/30/2020	4:06
RW-2172F-20200622	280-138090-12	P2870.D	06/30/2020	4:27
RW-7773P-20200622	280-138090-13	P2871.D	06/30/2020	4:48
RW-7677P-20200622	280-138090-14	P2872.D	06/30/2020	5:09
RW-7677P-20200622 MS	280-138090-14 MS	P2873.D	06/30/2020	5:31
RW-7677P-20200622 MSD	280-138090-14 MSD	P2874.D	06/30/2020	5:52
RW-7677PQ-20200622	280-138090-15	P2875.D	06/30/2020	6:13
RW-7070B-20200622	280-138090-16	P2876.D	06/30/2020	6:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: P2970.D BFB Injection Date: 07/01/2020

Instrument ID: VMS_P BFB Injection Time: 22:01

Analysis Batch No.: 500875

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.9	
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	50.0 - 120.00 % of mass 95	65.4	
175	5.0 - 9.0 % of mass 174	5.4	(8.3) 1
176	95.0 - 101.0 % of mass 174	63.1	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.1	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-500875/2	P2971.D	07/01/2020	22:36
	CCV 280-500875/3	P2972.D	07/01/2020	22:57
	LCS 280-500875/4	P2973.D	07/01/2020	23:18
	LCSD 280-500875/5	P2974.D	07/01/2020	23:40
	LCS 280-500875/6	P2975.D	07/02/2020	0:01
	LCSD 280-500875/7	P2976.D	07/02/2020	0:22
	MB 280-500875/9	P2978.D	07/02/2020	1:05
RW-2879M-20200624	280-138090-9	P2979.D	07/02/2020	1:26
RW-7586P-20200624	280-138090-10	P2980.D	07/02/2020	1:47
RW-8030P-20200624	280-138090-11	P2981.D	07/02/2020	2:09

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: R5903.D BFB Injection Date: 06/03/2020

Instrument ID: VMS_R1 BFB Injection Time: 09:32

Analysis Batch No.: 497166

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.0	
75	30.0 - 60.0 % of mass 95	51.0	
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	50.0 - 120.00 % of mass 95	69.1	
175	5.0 - 9.0 % of mass 174	5.5	(8.0) 1
176	95.0 - 101.0 % of mass 174	67.9	(98.3) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.9) 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
	ICIS 280-497166/39	R5910.D	06/03/2020	12:03
	STD010 280-497166/45	R5915.D	06/03/2020	13:49
	STD020 280-497166/46	R5919.D	06/03/2020	15:14
	STD10 280-497166/48	R5920.D	06/03/2020	15:36
	STD50 280-497166/49	R5921.D	06/03/2020	15:57
	STD75 280-497166/50	R5922.D	06/03/2020	16:18
	STD100 280-497166/51	R5923.D	06/03/2020	16:40
	STD200 280-497166/52	R5924.D	06/03/2020	17:01
	ICV 280-497166/53	R5925.D	06/03/2020	17:22

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: R5931.D BFB Injection Date: 06/04/2020

Instrument ID: VMS_R1 BFB Injection Time: 10:15

Analysis Batch No.: 497370

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.5	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	0.9	(1.4) 1
174	50.0 - 120.00 % of mass 95	68.5	
175	5.0 - 9.0 % of mass 174	4.6	(6.7) 1
176	95.0 - 101.0 % of mass 174	67.1	(98.0) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.0) 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
	STD005 280-497370/14	R5934.D	06/04/2020	12:50
	STD010 280-497370/15	R5935.D	06/04/2020	13:12
	STD020 280-497370/16	R5936.D	06/04/2020	13:33
	STD050 280-497370/17	R5937.D	06/04/2020	13:54
	STD10 280-497370/18	R5938.D	06/04/2020	14:15
	ICIS 280-497370/19	R5939.D	06/04/2020	14:37
	STD75 280-497370/20	R5940.D	06/04/2020	14:58
	STD100 280-497370/21	R5941.D	06/04/2020	15:20
	STD200 280-497370/22	R5942.D	06/04/2020	15:41
	ICV 280-497370/23	R5943.D	06/04/2020	16:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: R6969.D BFB Injection Date: 06/29/2020

Instrument ID: VMS_R1 BFB Injection Time: 21:12

Analysis Batch No.: 500580

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.6	
75	30.0 - 60.0 % of mass 95	51.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	72.9	
175	5.0 - 9.0 % of mass 174	5.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	69.7	(95.6) 1
177	5.0 - 9.0 % of mass 176	4.7	(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 280-500580/3	R6971.D	06/29/2020	22:03
	CCV 280-500580/2	R6972.D	06/29/2020	22:25
	LCS 280-500580/4	R6973.D	06/29/2020	23:06
	LCSD 280-500580/5	R6974.D	06/29/2020	23:28
	LCS 280-500580/6	R6975.D	06/29/2020	23:49
	LCSD 280-500580/7	R6976.D	06/30/2020	0:10
	MB 280-500580/9	R6978.D	06/30/2020	0:53
RW-7244P-20200623	280-138090-4	R6987.D	06/30/2020	4:07
RW-7350P-20200623	280-138090-5	R6988.D	06/30/2020	4:29
RW-8035P-20200623	280-138090-6	R6989.D	06/30/2020	4:50
RW-2237H-20200623	280-138090-7	R6990.D	06/30/2020	5:11
RW-8012P-20200623	280-138090-8	R6991.D	06/30/2020	5:33
RW-8249P-20200623	280-138090-17	R6992.D	06/30/2020	5:54
RW-2151H-20200623	280-138090-18	R6993.D	06/30/2020	6:15
RW-7688P-20200623	280-138090-19	R6994.D	06/30/2020	6:36
RW-7688P-20200623 MS	280-138090-19 MS	R6995.D	06/30/2020	6:58
RW-7688P-20200623 MSD	280-138090-19 MSD	R6996.D	06/30/2020	7:19
RW-7688PQ-20200623	280-138090-20	R6997.D	06/30/2020	7:40
RW-8284P-20200623	280-138090-21	R6998.D	06/30/2020	8:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab File ID: R7172.D BFB Injection Date: 07/06/2020

Instrument ID: VMS_R1 BFB Injection Time: 07:55

Analysis Batch No.: 501117

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	48.9	
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	0.4	(0.6) 1
174	50.0 - 120.00 % of mass 95	75.8	
175	5.0 - 9.0 % of mass 174	5.8	(7.6) 1
176	95.0 - 101.0 % of mass 174	75.3	(99.4) 1
177	5.0 - 9.0 % of mass 176	4.4	(5.8) 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 280-501117/2	R7173.D	07/06/2020	8:31
	CCV 280-501117/3	R7174.D	07/06/2020	8:52
	CCV 280-501117/13	R7176.D	07/06/2020	9:50
	LCS 280-501117/4	R7177.D	07/06/2020	10:47
	MB 280-501117/9	R7179.D	07/06/2020	11:30
	LCSD 280-501117/5	R7180.D	07/06/2020	11:51
	LCS 280-501117/6	R7181.D	07/06/2020	12:13
	LCSD 280-501117/7	R7182.D	07/06/2020	12:34
TB-01-20200625	280-138090-22	R7183.D	07/06/2020	12:56

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Sample No.: ICIS 280-496958/17 Date Analyzed: 06/01/2020 20:33

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): P1669.D Heated Purge: (Y/N) N

Calibration ID: 44775

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2594633	5.11	589468	7.65	851368	9.87
UPPER LIMIT		5189266	5.61	1178936	8.15	1702736	10.37
LOWER LIMIT		1297317	4.61	294734	7.15	425684	9.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-496958/21		2590465	5.11	590999	7.65	849842	9.87
CCV 280-500579/2		2644021	5.11	584008	7.64	821679	9.87
CCV 280-500579/3		2575696	5.11	561495	7.65	791573	9.87
LCS 280-500579/4		2592968	5.11	586666	7.64	822245	9.87
LCSD 280-500579/5		2613020	5.11	581311	7.65	815687	9.87
LCS 280-500579/6		2575491	5.11	577116	7.64	809869	9.87
LCSD 280-500579/7		2527416	5.11	565331	7.64	794948	9.87
MB 280-500579/9		2521342	5.11	561207	7.64	793078	9.87
280-138090-1	RW-8105PS-20200622	2550330	5.11	565637	7.64	788942	9.87
280-138090-2	RW-5898B1-20200622	2526106	5.11	561060	7.64	794159	9.87
280-138090-3	RW-8048P-20200622	2546184	5.10	567163	7.65	797471	9.87
280-138090-12	RW-2172F-20200622	2572333	5.11	575668	7.64	822587	9.87
280-138090-13	RW-7773P-20200622	2556062	5.11	574118	7.64	799694	9.87
280-138090-14	RW-7677P-20200622	2508112	5.11	555989	7.64	787833	9.87
280-138090-14 MS	RW-7677P-20200622 MS	2593508	5.11	570099	7.64	817263	9.87
280-138090-14 MSD	RW-7677P-20200622 MSD	2559968	5.10	571651	7.65	813241	9.87
280-138090-15	RW-7677PQ-20200622	2515460	5.11	564111	7.64	767352	9.87
280-138090-16	RW-7070B-20200622	2505093	5.11	557845	7.64	792948	9.87
CCV 280-500875/2		2490498	5.11	575029	7.64	822908	9.87
CCV 280-500875/3		2379676	5.11	547834	7.64	787597	9.87
LCS 280-500875/4		2302917	5.11	526470	7.65	754608	9.87
LCSD 280-500875/5		2329191	5.11	540610	7.64	771461	9.87
LCS 280-500875/6		2306779	5.11	537361	7.64	763920	9.87
LCSD 280-500875/7		2330114	5.11	537012	7.65	777056	9.87
MB 280-500875/9		2296585	5.10	525168	7.65	751382	9.87
280-138090-9	RW-2879M-20200624	2344299	5.11	539164	7.65	800610	9.87
280-138090-10	RW-7586P-20200624	2299618	5.11	518489	7.65	770361	9.87
280-138090-11	RW-8030P-20200624	2220111	5.11	516030	7.64	731682	9.87

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 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Sample No.: ICIS 280-497166/39 Date Analyzed: 06/03/2020 12:03

Instrument ID: VMS_R1 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): R5910.D Heated Purge: (Y/N) N

Calibration ID: 44885

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2459398	5.03	548103	7.55	890481	9.77
UPPER LIMIT		4918796	5.53	1096206	8.05	1780962	10.27
LOWER LIMIT		1229699	4.53	274052	7.05	445241	9.27
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-497166/53		2848288	5.03	619951	7.55	996647	9.77

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 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Sample No.: ICIS 280-497370/19 Date Analyzed: 06/04/2020 14:37

Instrument ID: VMS_R1 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): R5939.D Heated Purge: (Y/N) N

Calibration ID: 44916

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1944857	5.01	436788	7.52	673826	9.74
UPPER LIMIT		3889714	5.51	873576	8.02	1347652	10.24
LOWER LIMIT		972429	4.51	218394	7.02	336913	9.24
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-497370/23		2115357	5.01	466370	7.53	721226	9.75
CCV 280-500580/3		1671941	5.01	379447	7.52	599819	9.74
CCV 280-500580/2		1740612	5.01	400851	7.52	614879	9.74
LCS 280-500580/4		1768854	5.01	407085	7.52	637108	9.74
LCSD 280-500580/5		1739138	5.01	398010	7.52	629903	9.75
LCS 280-500580/6		1804148	5.01	411813	7.52	641203	9.75
LCSD 280-500580/7		1746791	5.01	403138	7.52	630630	9.75
MB 280-500580/9		1699654	5.01	393892	7.52	624403	9.75
280-138090-4	RW-7244P-20200623	1685233	5.01	382291	7.52	604868	9.75
280-138090-5	RW-7350P-20200623	1659249	5.01	370078	7.52	598526	9.75
280-138090-6	RW-8035P-20200623	1737079	5.01	393865	7.52	598069	9.75
280-138090-7	RW-2237H-20200623	1611065	5.01	362249	7.52	573867	9.74
280-138090-8	RW-8012P-20200623	1694364	5.01	386411	7.52	584492	9.75
280-138090-17	RW-8249P-20200623	1657689	5.01	380318	7.52	579380	9.75
280-138090-18	RW-2151H-20200623	1624772	5.01	368789	7.52	586818	9.74
280-138090-19	RW-7688P-20200623	1654828	5.01	382489	7.53	586782	9.75
280-138090-19 MS	RW-7688P-20200623 MS	1683950	5.01	377755	7.53	601126	9.74
280-138090-19 MSD	RW-7688P-20200623 MSD	1774385	5.01	399348	7.52	628035	9.75
280-138090-20	RW-7688PQ-20200623	1690952	5.01	385836	7.52	617890	9.74
280-138090-21	RW-8284P-20200623	1718754	5.01	390359	7.52	617477	9.75
CCV 280-501117/2		2275588	5.00	523353	7.52	810129	9.75
CCV 280-501117/3		2238968	5.01	510960	7.52	801605	9.74
CCV 280-501117/13		2248379	5.01	526570	7.52	818497	9.74
LCS 280-501117/4		2266842	5.00	520873	7.52	833584	9.74
MB 280-501117/9		2295193	5.01	526778	7.52	816866	9.75
LCSD 280-501117/5		2264976	5.01	528396	7.52	816602	9.74
LCS 280-501117/6		2271973	5.01	518024	7.52	801308	9.74
LCSD 280-501117/7		2322728	5.01	531781	7.52	822633	9.74

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 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Sample No.: ICIS 280-497370/19 Date Analyzed: 06/04/2020 14:37

Instrument ID: VMS_R1 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): R5939.D Heated Purge: (Y/N) N

Calibration ID: 44916

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1944857	5.01	436788	7.52	673826	9.74
UPPER LIMIT		3889714	5.51	873576	8.02	1347652	10.24
LOWER LIMIT		972429	4.51	218394	7.02	336913	9.24
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-138090-22	TB-01-20200625	2261600	5.01	519815	7.52	809505	9.74

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 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8105PS-20200622 Lab Sample ID: 280-138090-1

Matrix: Water Lab File ID: P2867.D

Analysis Method: 8260B Date Collected: 06/22/2020 12:20

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 03:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8105PS-20200622 Lab Sample ID: 280-138090-1

Matrix: Water Lab File ID: P2867.D

Analysis Method: 8260B Date Collected: 06/22/2020 12:20

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 03:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2867.D
Lims ID: 280-138090-A-1
Client ID: RW-8105PS-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 03:23:30 ALS Bottle#: 17 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-1 pH
Misc. Info.: 280-0092884-021
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:41:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.112	-0.001	99	2550330	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.645	-0.001	87	565637	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.872	-0.001	97	788942	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.604	0.001	93	602995	49.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.858	4.868	-0.010	96	680357	47.1	
$ 6 Toluene-d8 (Surr)	98	6.367	6.366	0.001	93	2480027	49.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	84	871784	50.1	
10 Dichlorodifluoromethane	85		1.670				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.171				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.888				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.268				ND	
51 Methacrylonitrile	41		4.384				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

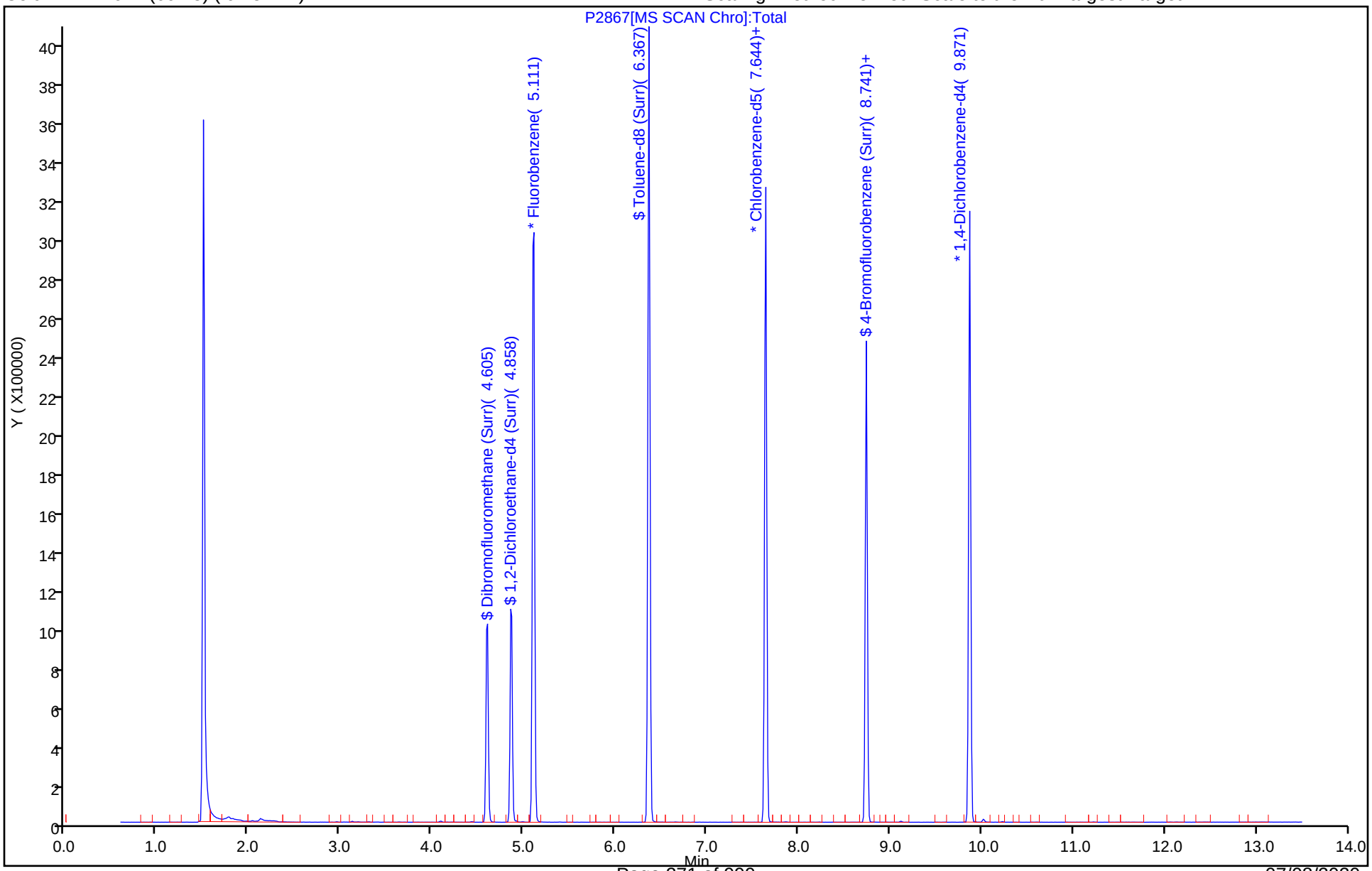
Report Date: 30-Jun-2020 20:49:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2867.D

Injection Date:	30-Jun-2020 03:23:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-A-1	Lab Sample ID:	280-138090-1	Worklist Smp#:	21
Client ID:	RW-8105PS-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2867.D				
Lims ID:	280-138090-A-1				
Client ID:	RW-8105PS-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 03:23:30	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-1 pH				
Misc. Info.:	280-0092884-021				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:47:46	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 30-Jun-2020 20:41:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.1	98.19
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.1	94.15
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.66
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.1	100.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-5898B1-20200622 Lab Sample ID: 280-138090-2

Matrix: Water Lab File ID: P2868.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:15

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 03:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-5898B1-20200622 Lab Sample ID: 280-138090-2

Matrix: Water Lab File ID: P2868.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:15

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 03:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	0.78	J	1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2868.D
Lims ID: 280-138090-B-2
Client ID: RW-5898B1-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 03:44:30 ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-B-2 pH
Misc. Info.: 280-0092884-022
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:41:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.112	-0.002	99	2526106	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	561060	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.872	-0.003	97	794159	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	92	602892	49.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	676958	47.3	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2475968	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	83	868558	49.6	
10 Dichlorodifluoromethane	85		1.670				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.171				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.888				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.268				ND	
51 Methacrylonitrile	41		4.384				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.384	5.385	-0.001	96	7965	0.7804	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

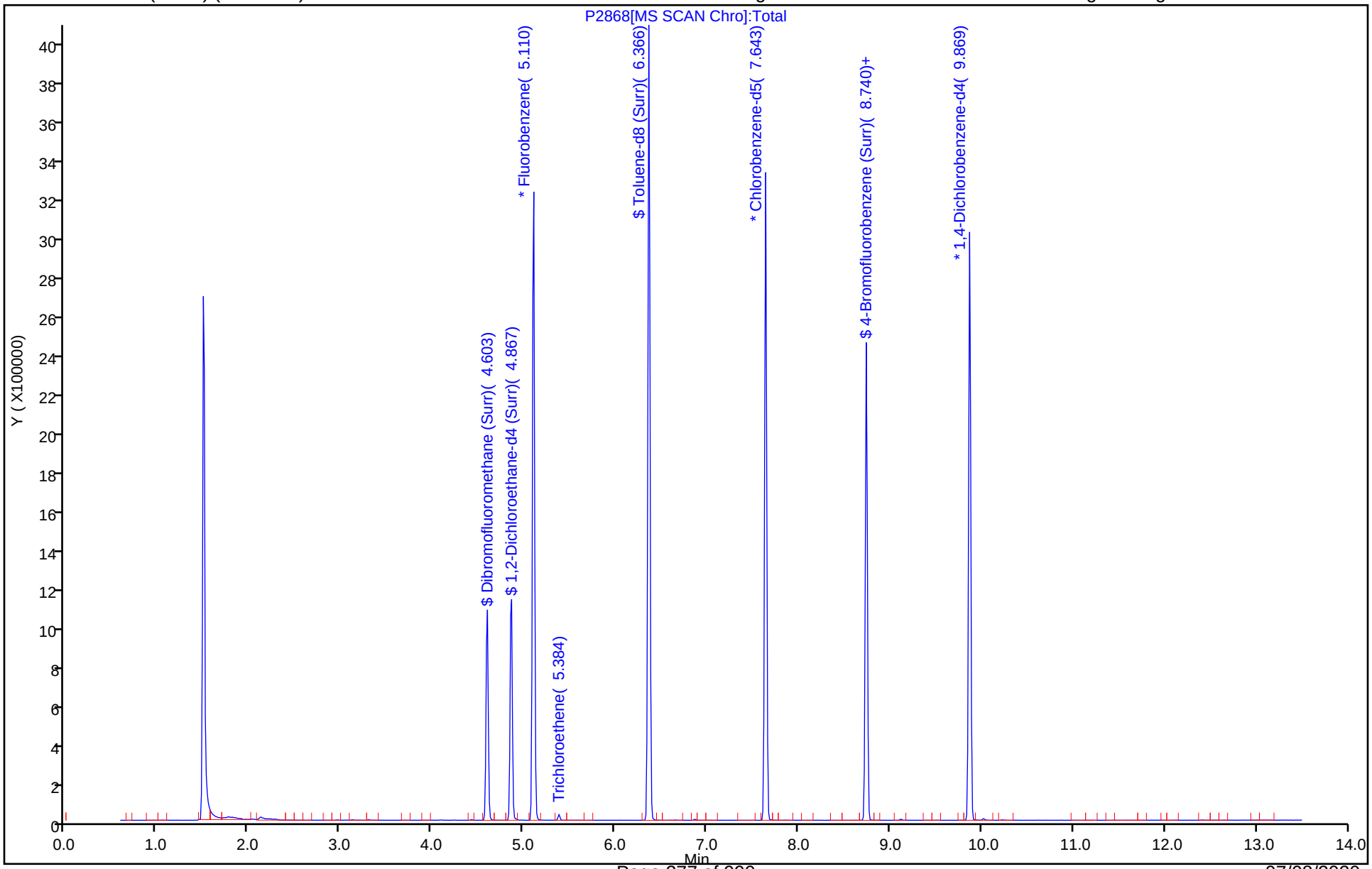
Report Date: 30-Jun-2020 20:49:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2868.D

Injection Date:	30-Jun-2020 03:44:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-B-2	Lab Sample ID:	280-138090-2	Worklist Smp#:	22
Client ID:	RW-5898B1-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2868.D				
Lims ID:	280-138090-B-2				
Client ID:	RW-5898B1-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 03:44:30	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-B-2 pH				
Misc. Info.:	280-0092884-022				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:47:46	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

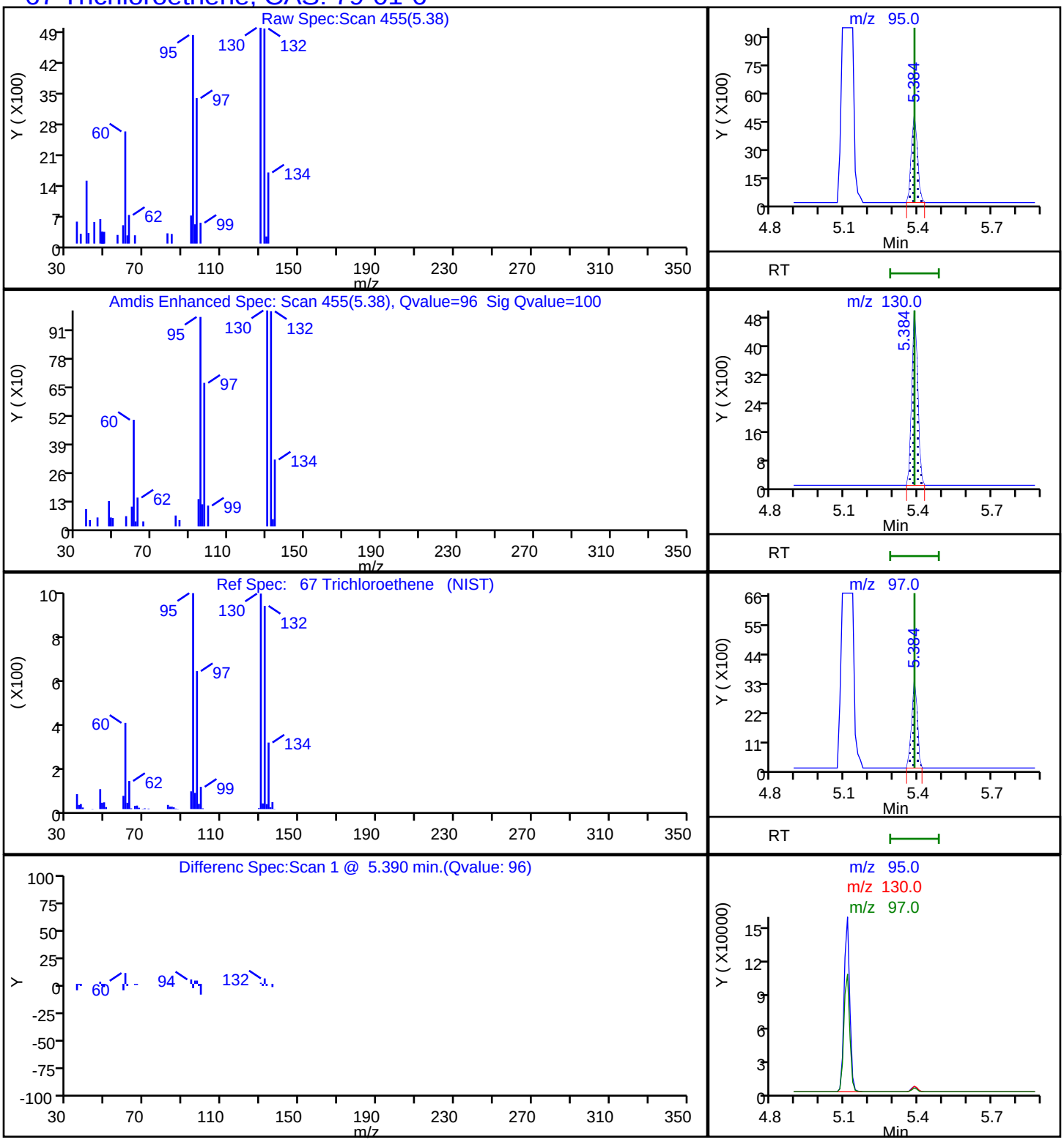
First Level Reviewer: petuninp Date: 30-Jun-2020 20:41:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.6	99.11
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.3	94.58
$ 6 Toluene-d8 (Surr)	50.0	50.2	100.30
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.6	99.10

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2868.D		
Injection Date:	30-Jun-2020 03:44:30	Instrument ID:	VMS_P
Lims ID:	280-138090-B-2	Lab Sample ID:	280-138090-2
Client ID:	RW-5898B1-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	18 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8048P-20200622 Lab Sample ID: 280-138090-3

Matrix: Water Lab File ID: P2869.D

Analysis Method: 8260B Date Collected: 06/22/2020 16:58

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	0.16	J	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8048P-20200622 Lab Sample ID: 280-138090-3

Matrix: Water Lab File ID: P2869.D

Analysis Method: 8260B Date Collected: 06/22/2020 16:58

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	0.71	J	1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	4.0		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2869.D
Lims ID: 280-138090-C-3
Client ID: RW-8048P-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 04:06:30 ALS Bottle#: 19 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-3 pH
Misc. Info.: 280-0092884-023
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:42:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.102	5.112	-0.010	98	2546184	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.645	0.000	87	567163	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.872	0.000	97	797471	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	605946	49.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	684022	47.4	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2488346	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	84	878977	49.9	
10 Dichlorodifluoromethane	85		1.670				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.171				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.888				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.247	4.245	0.002	79	1723	0.1592	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.268				ND	
51 Methacrylonitrile	41		4.384				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.387	5.385	0.002	98	41449	4.03	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.875	6.873	0.002	93	4898	0.7084	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

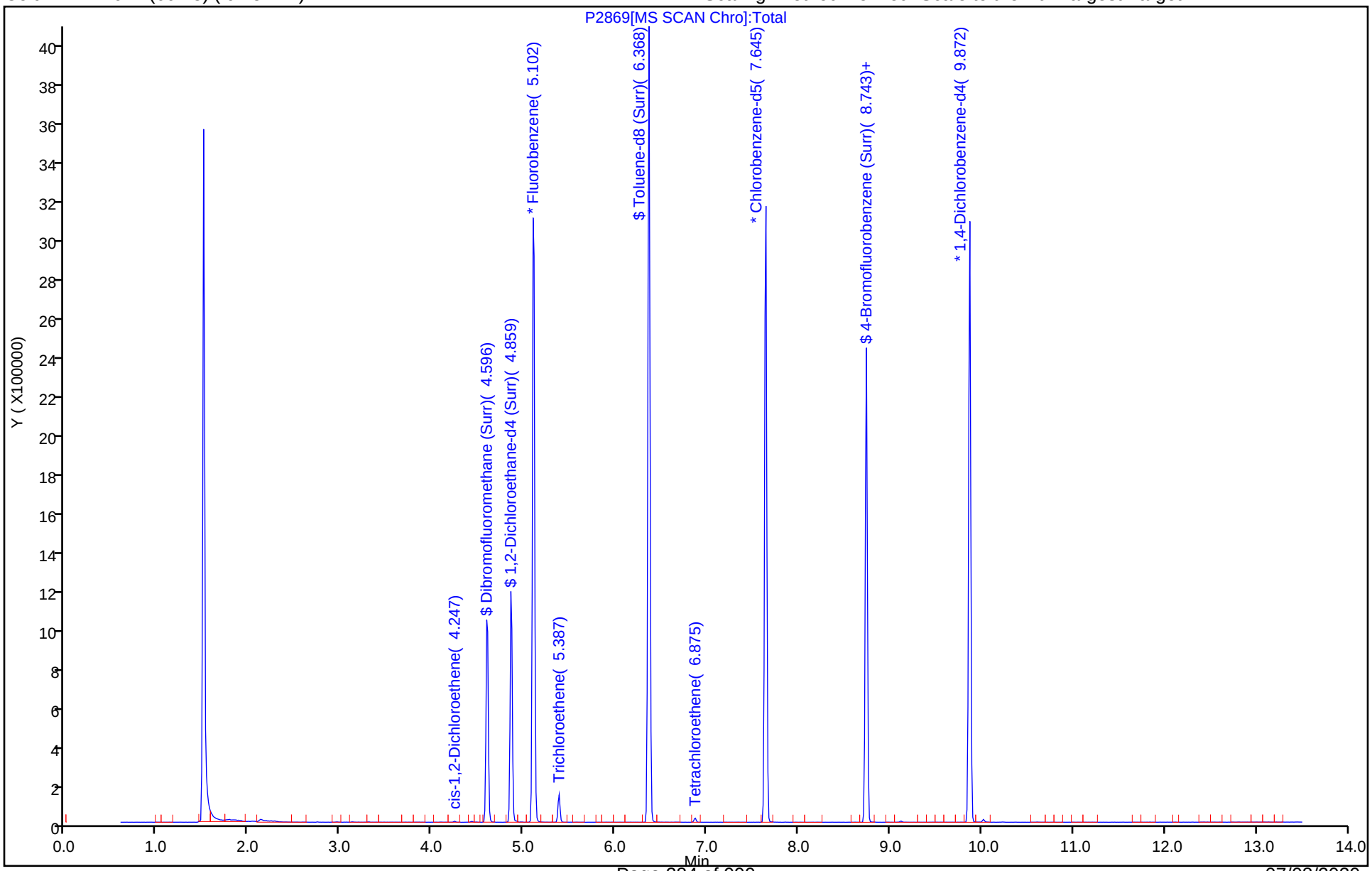
Report Date: 30-Jun-2020 20:49:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2869.D

Injection Date:	30-Jun-2020 04:06:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-C-3	Lab Sample ID:	280-138090-3	Worklist Smp#:	23
Client ID:	RW-8048P-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2869.D				
Lims ID:	280-138090-C-3				
Client ID:	RW-8048P-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 04:06:30	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-3 pH				
Misc. Info.:	280-0092884-023				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:47:46	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

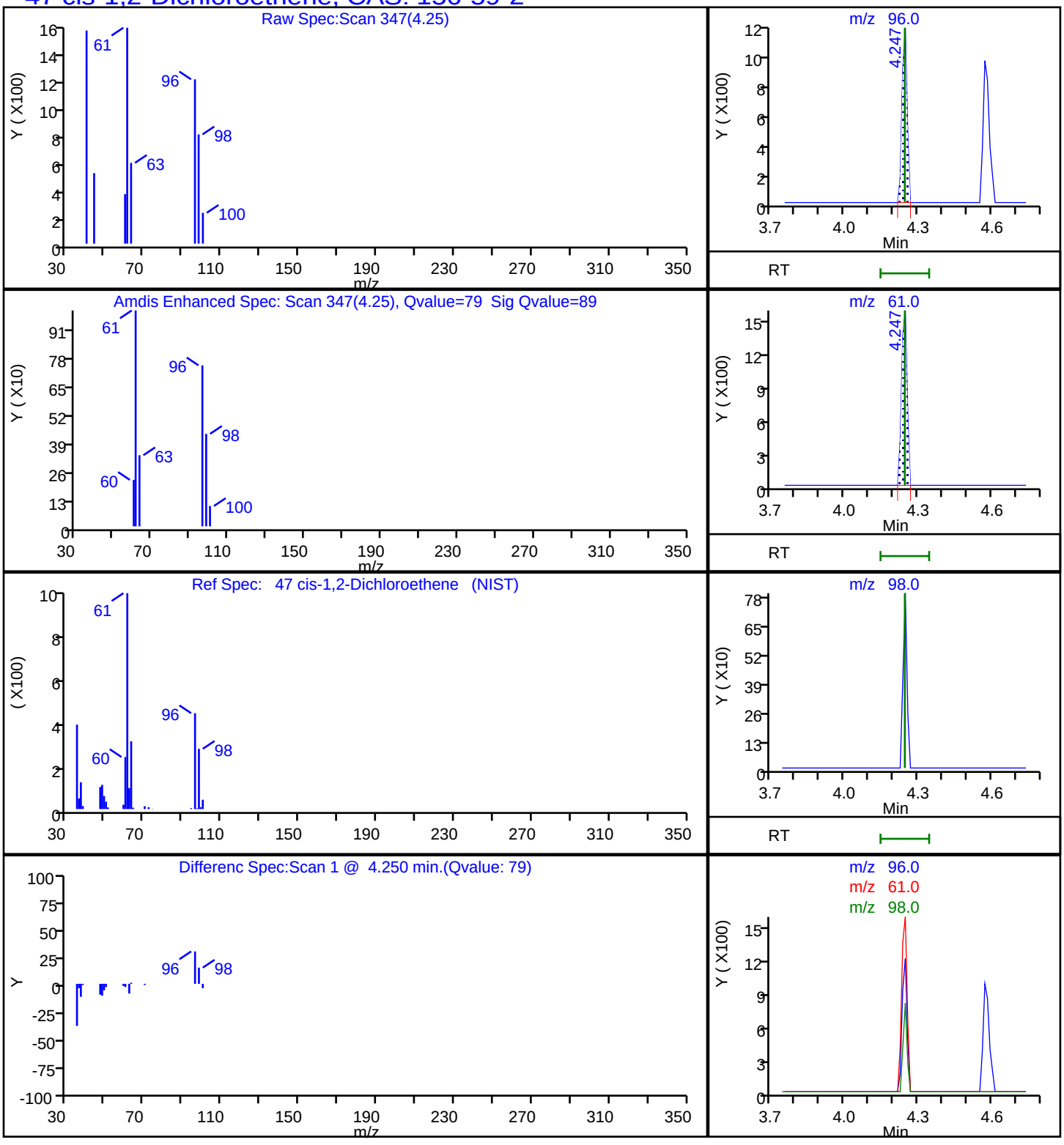
First Level Reviewer: petuninp Date: 30-Jun-2020 20:42:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.4	98.83
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.81
$ 6 Toluene-d8 (Surr)	50.0	49.9	99.72
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.9	99.87

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2869.D				
Injection Date:	30-Jun-2020 04:06:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-C-3	Lab Sample ID:	280-138090-3		
Client ID:	RW-8048P-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2

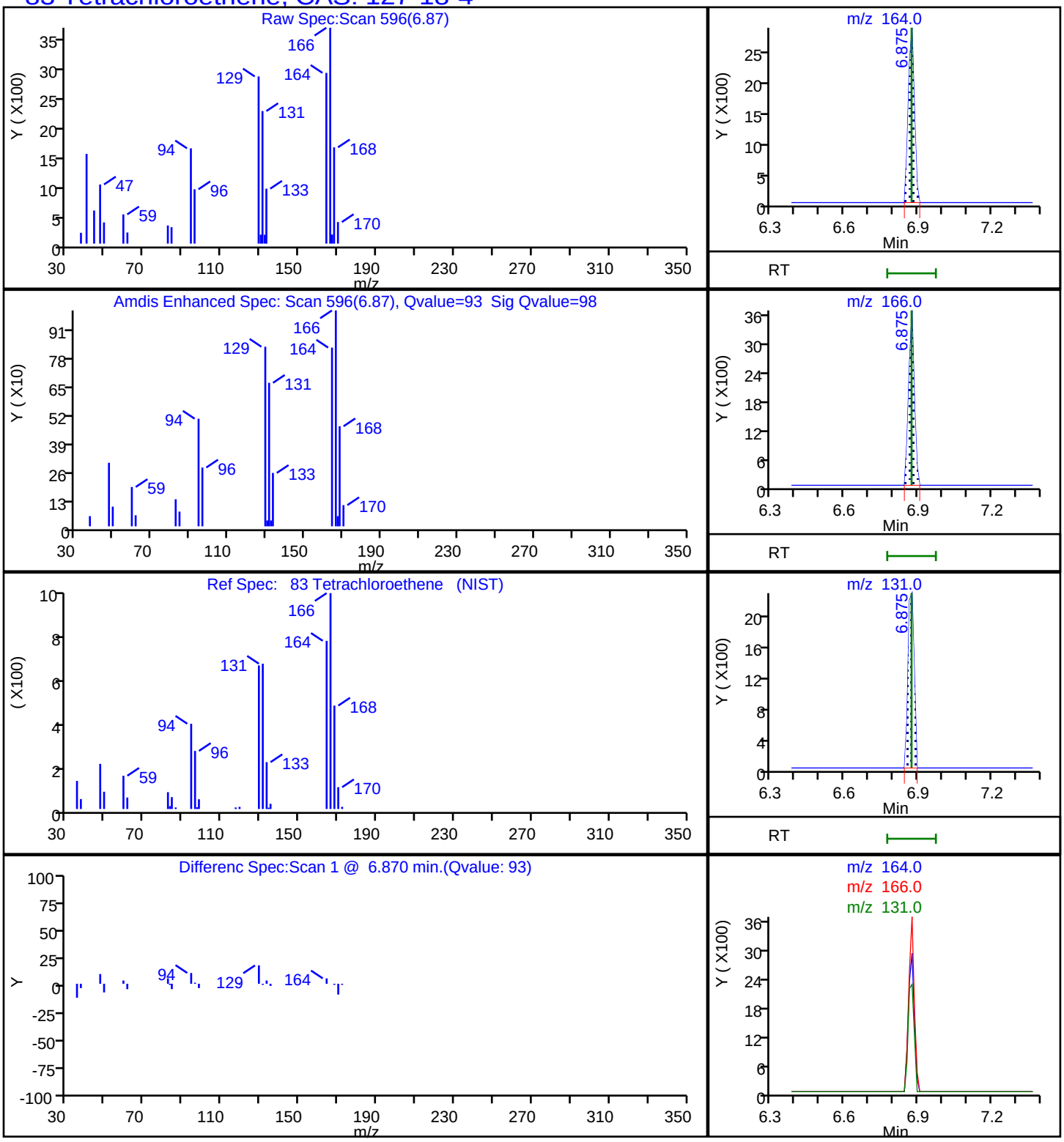


Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2869.D

Injection Date:	30-Jun-2020 04:06:30	Instrument ID:	VMS_P
Lims ID:	280-138090-C-3	Lab Sample ID:	280-138090-3
Client ID:	RW-8048P-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	19 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

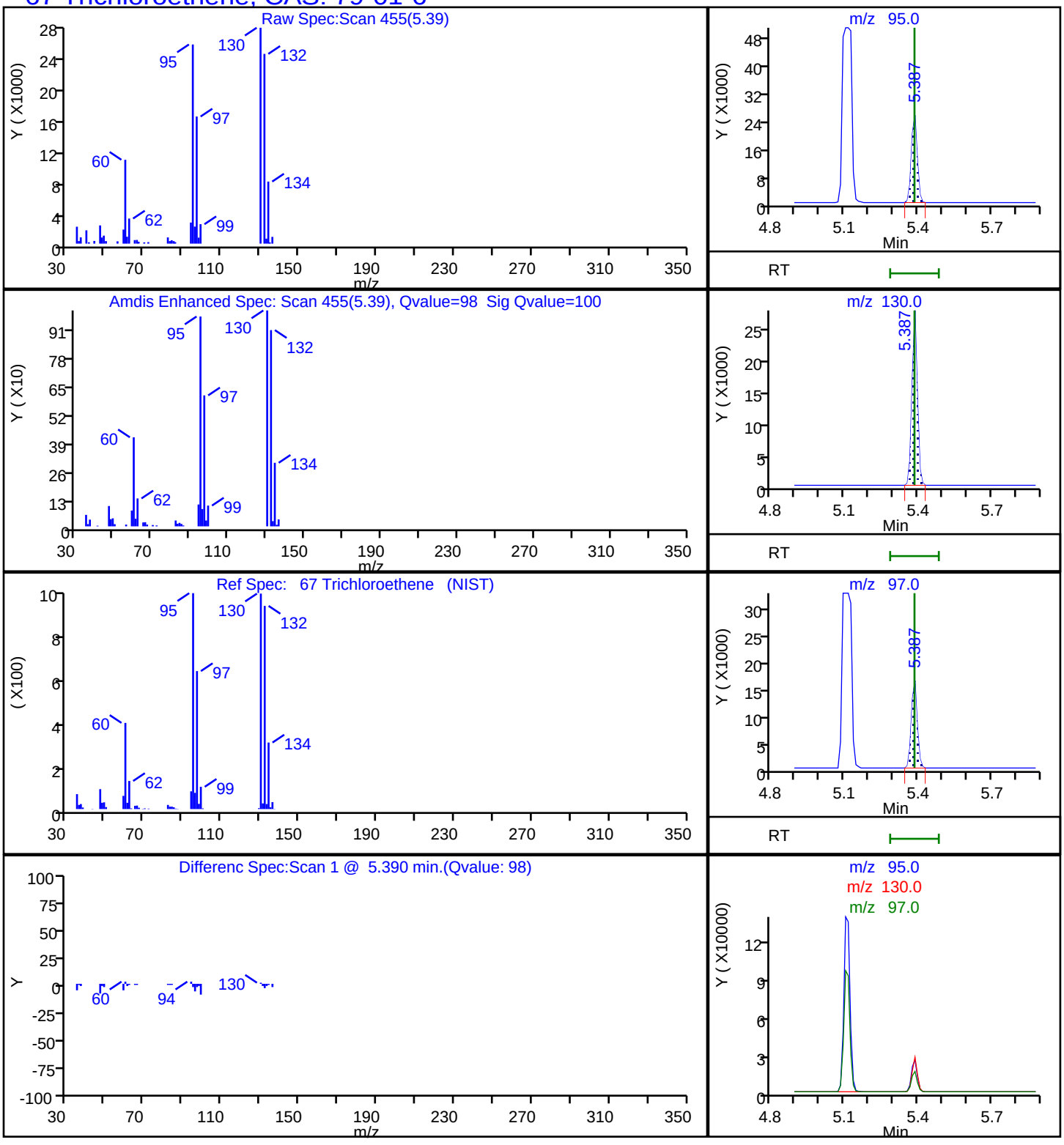
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2869.D		
Injection Date:	30-Jun-2020 04:06:30	Instrument ID:	VMS_P
Lims ID:	280-138090-C-3	Lab Sample ID:	280-138090-3
Client ID:	RW-8048P-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	19 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7244P-20200623 Lab Sample ID: 280-138090-4

Matrix: Water Lab File ID: R6987.D

Analysis Method: 8260B Date Collected: 06/23/2020 09:00

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7244P-20200623 Lab Sample ID: 280-138090-4

Matrix: Water Lab File ID: R6987.D

Analysis Method: 8260B Date Collected: 06/23/2020 09:00

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	103		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6987.D
Lims ID: 280-138090-A-4
Client ID: RW-7244P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 04:07:30 ALS Bottle#: 18 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-4 pH
Misc. Info.: 280-0092885-021
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:24:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1685233	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	382291	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	604868	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	438786	51.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	531325	51.1	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1630619	49.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	603948	47.7	
10 Dichlorodifluoromethane	85		1.655				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
17 Trichlorofluoromethane	101		2.488				ND	
21 Acrolein	56		2.802				ND	
23 1,1-Dichloroethene	96		2.885				ND	
24 Acetone	43		2.900				ND	
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	
28 Acetonitrile	41		3.106				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.241				ND	
33 Acrylonitrile	53		3.398				ND	
35 trans-1,2-Dichloroethene	96		3.440				ND	
39 Vinyl acetate	43		3.728				ND	
40 1,1-Dichloroethane	63		3.755				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
45 2-Butanone (MEK)	43		4.133				ND	
47 cis-1,2-Dichloroethene	96		4.156				ND	
48 2,2-Dichloropropane	77		4.167				ND	
49 Propionitrile	54		4.182				ND	
51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
67 Trichloroethene	95		5.280				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

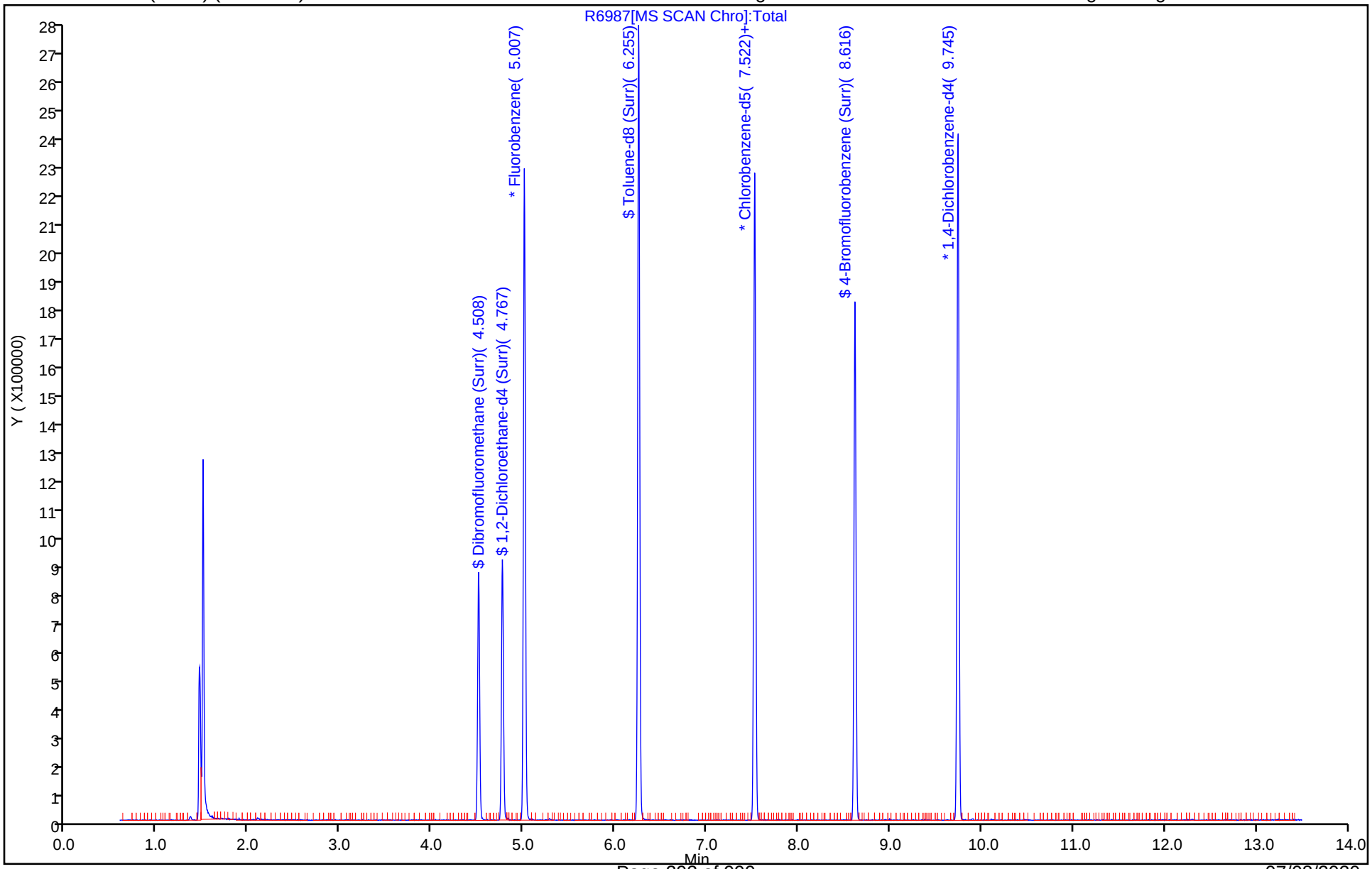
Report Date: 30-Jun-2020 20:29:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6987.D

Injection Date:	30-Jun-2020 04:07:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-A-4	Lab Sample ID:	280-138090-4	Worklist Smp#:	21
Client ID:	RW-7244P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6987.D				
Lims ID:	280-138090-A-4				
Client ID:	RW-7244P-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 04:07:30	ALS Bottle#:	18	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-4 pH				
Misc. Info.:	280-0092885-021				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:24:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	51.6	103.18
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	51.1	102.11
$ 6 Toluene-d8 (Surr)	50.0	49.2	98.43
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.33

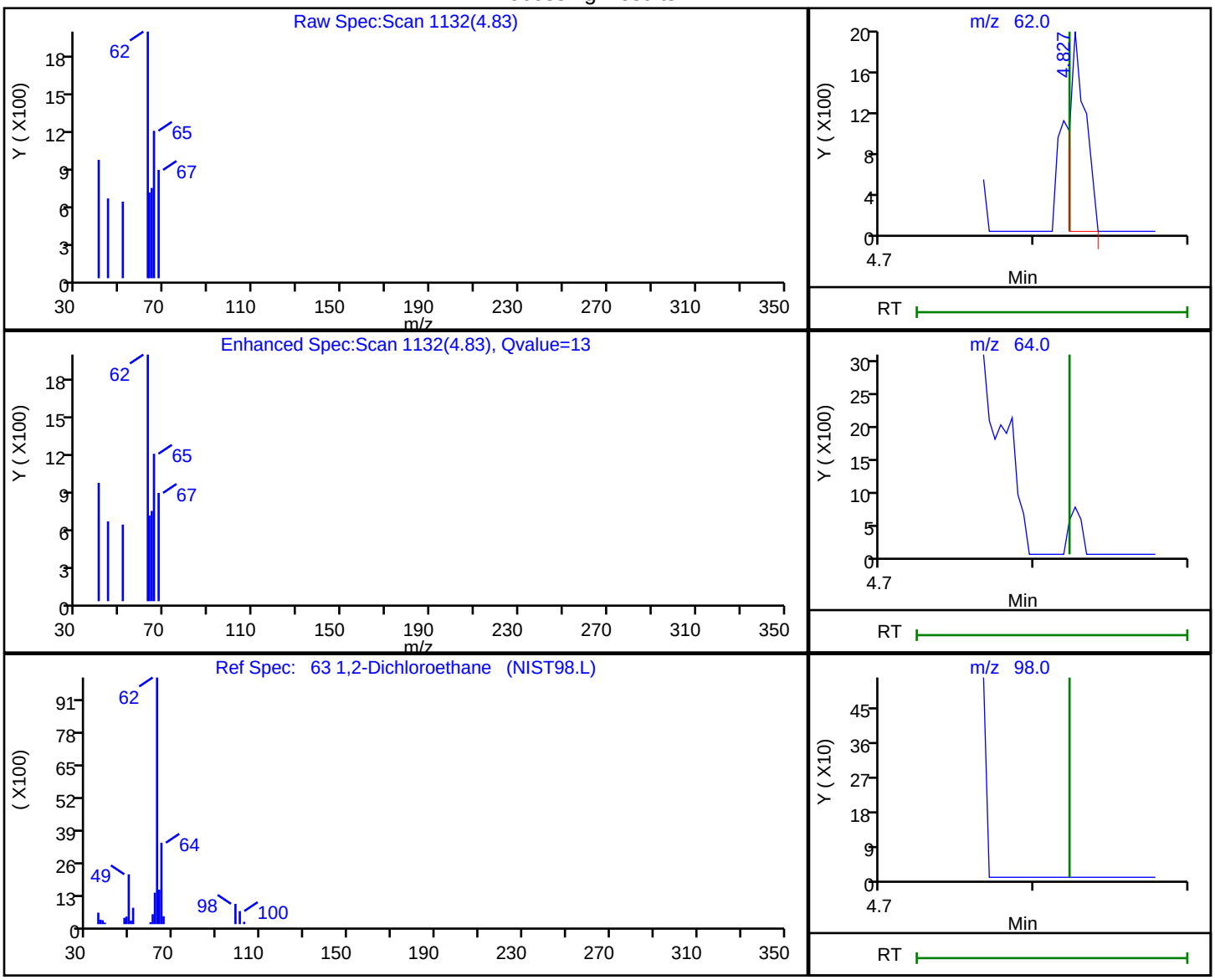
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6987.D				
Injection Date:	30-Jun-2020 04:07:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-4	Lab Sample ID:	280-138090-4		
Client ID:	RW-7244P-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	18	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.83	62.00	1333	0.143032
4.82	64.00	0	
4.82	98.00	0	

Reviewer: petuninp, 30-Jun-2020 20:24:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7350P-20200623 Lab Sample ID: 280-138090-5

Matrix: Water Lab File ID: R6988.D

Analysis Method: 8260B Date Collected: 06/23/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7350P-20200623 Lab Sample ID: 280-138090-5

Matrix: Water Lab File ID: R6988.D

Analysis Method: 8260B Date Collected: 06/23/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6988.D
Lims ID: 280-138090-A-5
Client ID: RW-7350P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 04:29:30 ALS Bottle#: 19 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-5 pH
Misc. Info.: 280-0092885-022
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.006	5.007	-0.001	99	1659249	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	370078	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	598526	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	421544	50.3	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	522358	51.0	
$	6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1595133	49.7	
$	7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	86	586673	46.8	
	10 Dichlorodifluoromethane	85		1.655				ND	
	11 Chloromethane	50		1.828				ND	
	12 Vinyl chloride	62		1.918				ND	
	14 Bromomethane	94		2.195				ND	
	15 Chloroethane	64		2.285				ND	
	17 Trichlorofluoromethane	101		2.488				ND	
	21 Acrolein	56		2.802				ND	
	23 1,1-Dichloroethene	96		2.885				ND	
	24 Acetone	43		2.900				ND	
	26 Iodomethane	142		3.001				ND	
	27 Carbon disulfide	76		3.061				ND	
	28 Acetonitrile	41		3.106				ND	
	30 3-Chloro-1-propene	41		3.147				ND	
	31 Methylene Chloride	84		3.241				ND	
	33 Acrylonitrile	53		3.398				ND	
	35 trans-1,2-Dichloroethene	96		3.440				ND	
	39 Vinyl acetate	43		3.728				ND	
	40 1,1-Dichloroethane	63		3.755				ND	
	42 2-Chloro-1,3-butadiene	53		3.803				ND	
	45 2-Butanone (MEK)	43		4.133				ND	
	47 cis-1,2-Dichloroethene	96		4.156				ND	
	48 2,2-Dichloropropane	77		4.167				ND	
	49 Propionitrile	54		4.182				ND	
	51 Methacrylonitrile	41		4.294				ND	
	52 Chlorobromomethane	128		4.332				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	
67 Trichloroethene	95		5.280				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

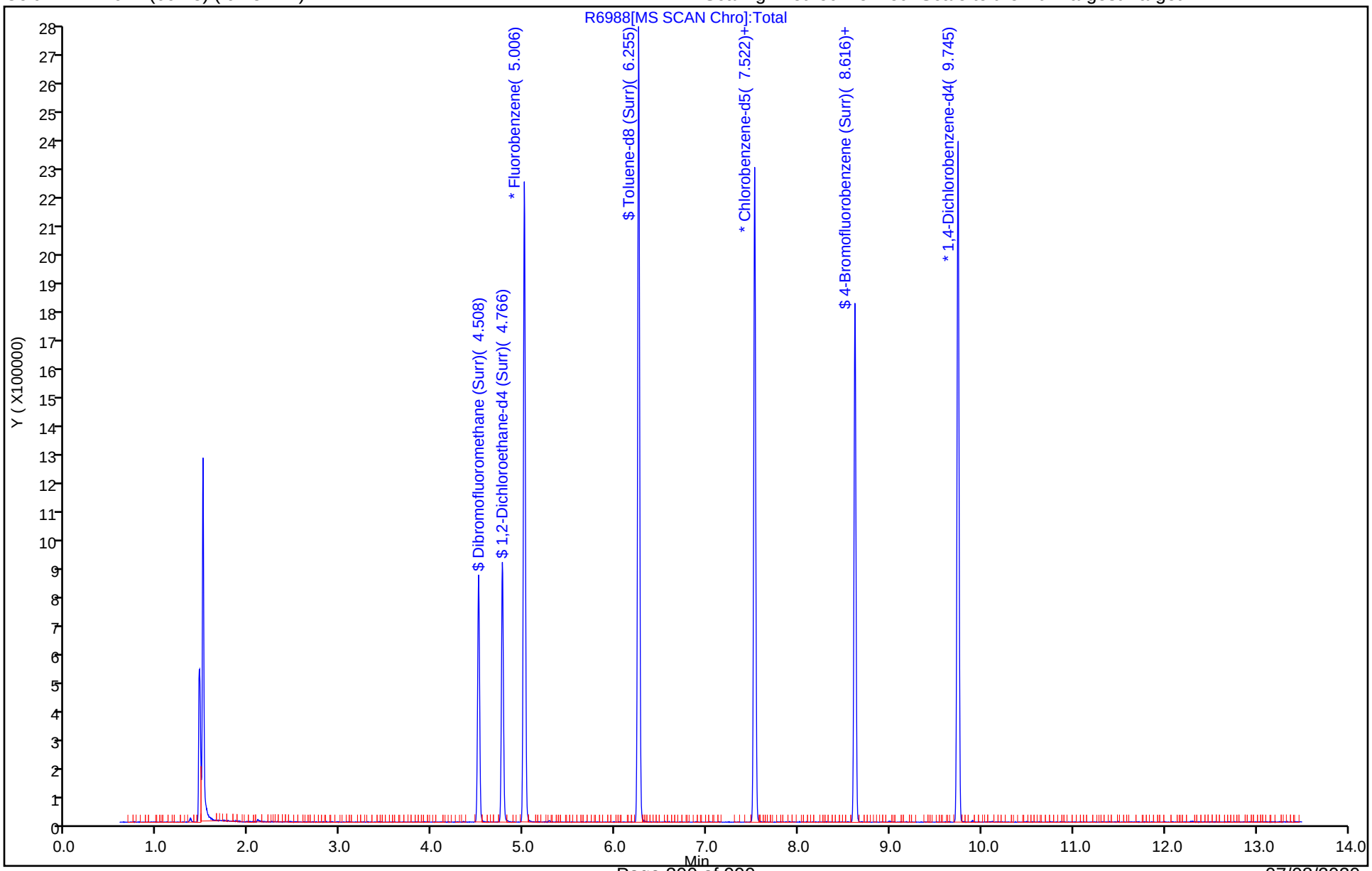
Report Date: 30-Jun-2020 20:29:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6988.D

Injection Date:	30-Jun-2020 04:29:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-A-5	Lab Sample ID:	280-138090-5	Worklist Smp#:	22
Client ID:	RW-7350P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6988.D
Lims ID: 280-138090-A-5
Client ID: RW-7350P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 04:29:30 ALS Bottle#: 19 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-5 pH
Misc. Info.: 280-0092885-022
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.3	100.68
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	51.0	101.95
$ 6 Toluene-d8 (Surr)	50.0	49.7	99.46
$ 7 4-Bromofluorobenzene (Surr)	50.0	46.8	93.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8035P-20200623 Lab Sample ID: 280-138090-6

Matrix: Water Lab File ID: R6989.D

Analysis Method: 8260B Date Collected: 06/23/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8035P-20200623 Lab Sample ID: 280-138090-6

Matrix: Water Lab File ID: R6989.D

Analysis Method: 8260B Date Collected: 06/23/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6989.D
Lims ID: 280-138090-B-6
Client ID: RW-8035P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 04:50:30 ALS Bottle#: 20 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-B-6 pH
Misc. Info.: 280-0092885-023
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.006	5.007	-0.001	99	1737079	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	393865	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	598069	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	436323	49.8	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	532853	49.7	
$	6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	94	1669086	48.9	
$	7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	615191	49.1	
	10 Dichlorodifluoromethane	85		1.655				ND	
	11 Chloromethane	50		1.828				ND	
	12 Vinyl chloride	62		1.918				ND	
	14 Bromomethane	94		2.195				ND	
	15 Chloroethane	64		2.285				ND	
	17 Trichlorofluoromethane	101		2.488				ND	
	21 Acrolein	56		2.802				ND	
	23 1,1-Dichloroethene	96		2.885				ND	
	24 Acetone	43		2.900				ND	
	26 Iodomethane	142		3.001				ND	
	27 Carbon disulfide	76		3.061				ND	
	28 Acetonitrile	41		3.106				ND	
	30 3-Chloro-1-propene	41		3.147				ND	
	31 Methylene Chloride	84		3.241				ND	
	33 Acrylonitrile	53		3.398				ND	
	35 trans-1,2-Dichloroethene	96		3.440				ND	
	39 Vinyl acetate	43		3.728				ND	
	40 1,1-Dichloroethane	63		3.755				ND	
	42 2-Chloro-1,3-butadiene	53		3.803				ND	
	45 2-Butanone (MEK)	43		4.133				ND	
	47 cis-1,2-Dichloroethene	96		4.156				ND	
	48 2,2-Dichloropropane	77		4.167				ND	
	49 Propionitrile	54		4.182				ND	
	51 Methacrylonitrile	41		4.294				ND	
	52 Chlorobromomethane	128		4.332				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	
67 Trichloroethene	95		5.280				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

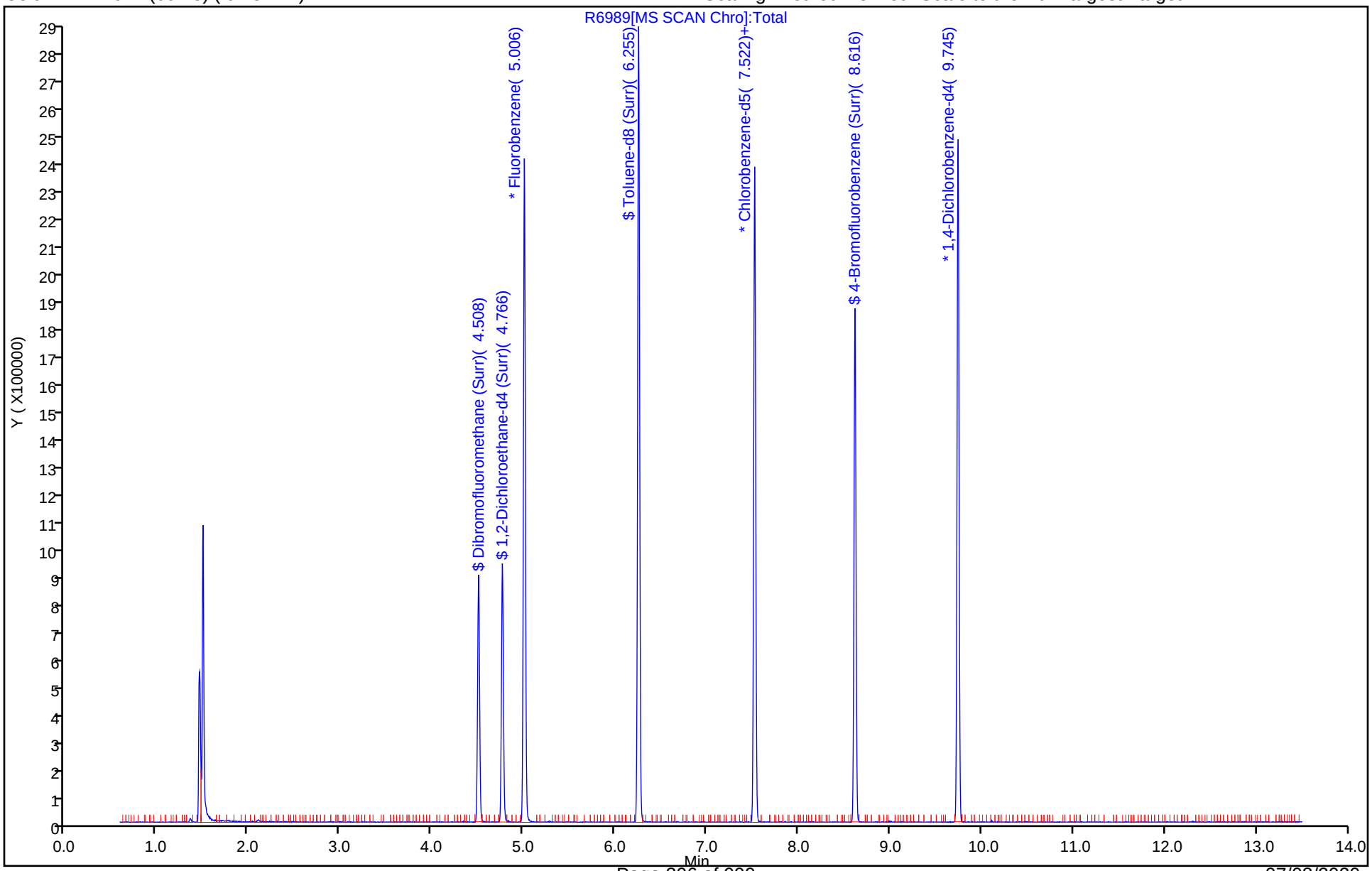
Report Date: 30-Jun-2020 20:29:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6989.D

Injection Date:	30-Jun-2020 04:50:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-B-6	Lab Sample ID:	280-138090-6	Worklist Smp#:	23
Client ID:	RW-8035P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6989.D
Lims ID: 280-138090-B-6
Client ID: RW-8035P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 04:50:30 ALS Bottle#: 20 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-B-6 pH
Misc. Info.: 280-0092885-023
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.8	99.54
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.7	99.34
$ 6 Toluene-d8 (Surr)	50.0	48.9	97.79
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.1	98.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2237H-20200623 Lab Sample ID: 280-138090-7

Matrix: Water Lab File ID: R6990.D

Analysis Method: 8260B Date Collected: 06/23/2020 15:06

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2237H-20200623 Lab Sample ID: 280-138090-7

Matrix: Water Lab File ID: R6990.D

Analysis Method: 8260B Date Collected: 06/23/2020 15:06

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	1.9		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	9.8	B	1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D
Lims ID: 280-138090-A-7
Client ID: RW-2237H-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 05:11:30 ALS Bottle#: 21 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-7 pH
Misc. Info.: 280-0092885-024
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:25:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1611065	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	362249	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	573867	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	413965	50.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	509348	51.2	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1563105	49.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.617	8.620	-0.003	86	577488	48.0	
10 Dichlorodifluoromethane	85		1.655				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
17 Trichlorofluoromethane	101		2.488				ND	
21 Acrolein	56		2.802				ND	
23 1,1-Dichloroethene	96		2.885				ND	
24 Acetone	43		2.900				ND	
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	
28 Acetonitrile	41		3.106				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.241				ND	
33 Acrylonitrile	53		3.398				ND	
35 trans-1,2-Dichloroethene	96		3.440				ND	
39 Vinyl acetate	43		3.728				ND	
40 1,1-Dichloroethane	63		3.755				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
45 2-Butanone (MEK)	43		4.133				ND	
47 cis-1,2-Dichloroethene	96		4.156				ND	U
48 2,2-Dichloropropane	77		4.167				ND	
49 Propionitrile	54		4.182				ND	
51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
67 Trichloroethene	95	5.280	5.280	0.000	96	59340	9.81	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164	6.753	6.753	0.000	88	7194	1.88	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

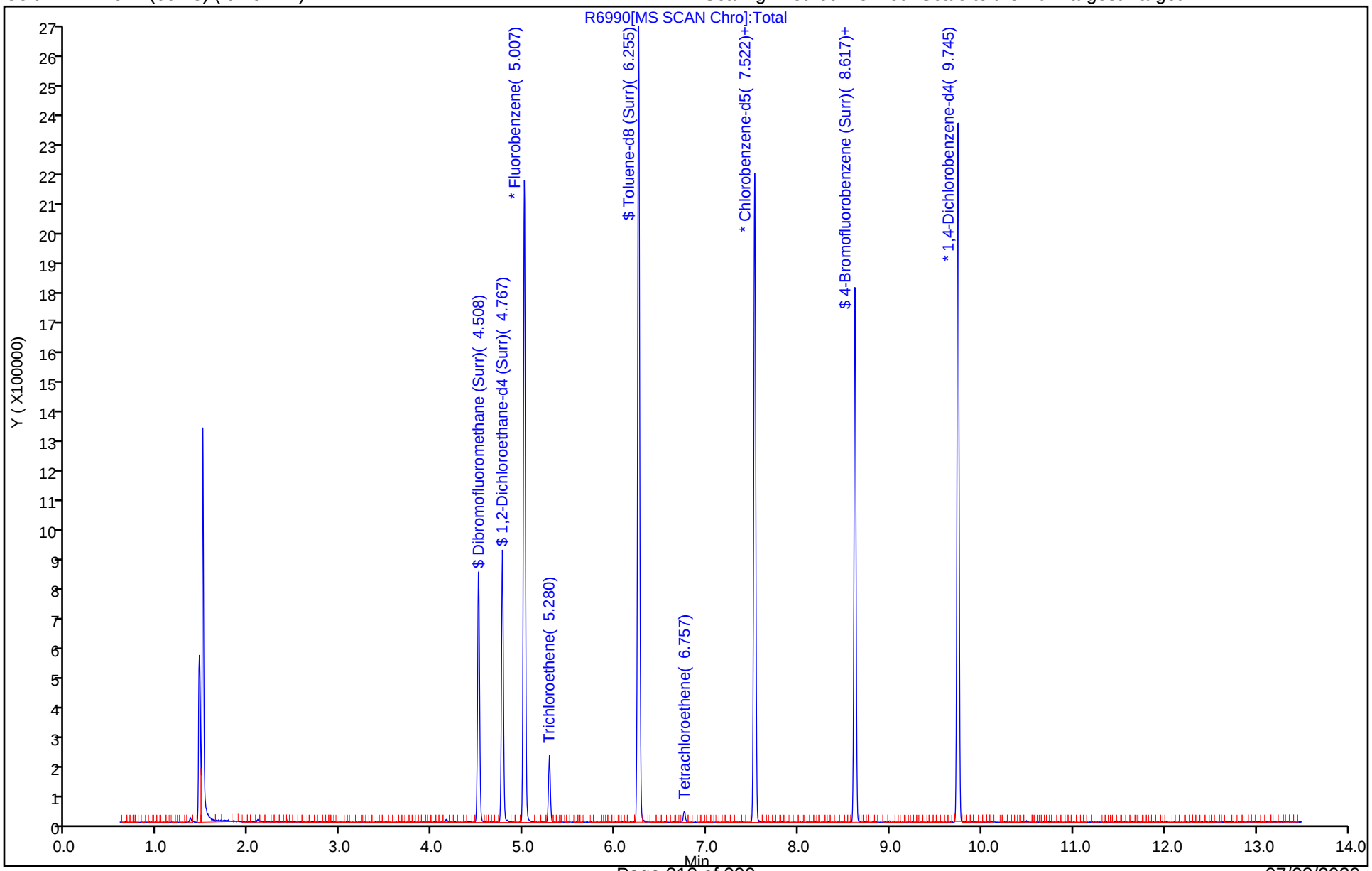
Report Date: 30-Jun-2020 20:29:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D

Injection Date:	30-Jun-2020 05:11:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-A-7	Lab Sample ID:	280-138090-7	Worklist Smp#:	24
Client ID:	RW-2237H-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D				
Lims ID:	280-138090-A-7				
Client ID:	RW-2237H-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 05:11:30	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-7 pH				
Misc. Info.:	280-0092885-024				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:25:18		

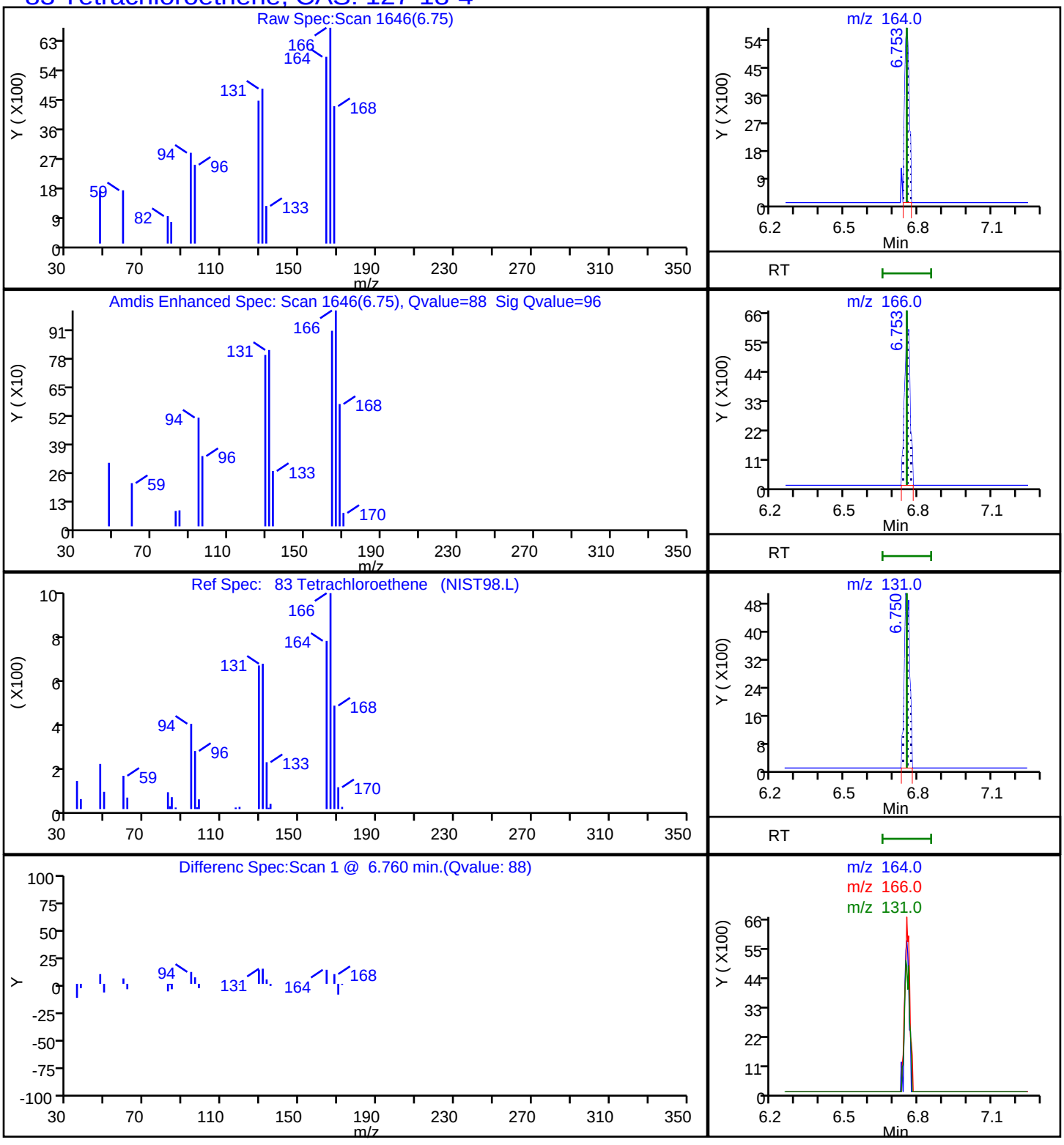
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.9	101.83
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	51.2	102.39
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.57
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.0	96.08

Report Date: 30-Jun-2020 20:29:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D		
Injection Date:	30-Jun-2020 05:11:30	Instrument ID:	VMS_R1
Lims ID:	280-138090-A-7	Lab Sample ID:	280-138090-7
Client ID:	RW-2237H-20200623		
Operator ID:	PETUNINP	ALS Bottle#:	21 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

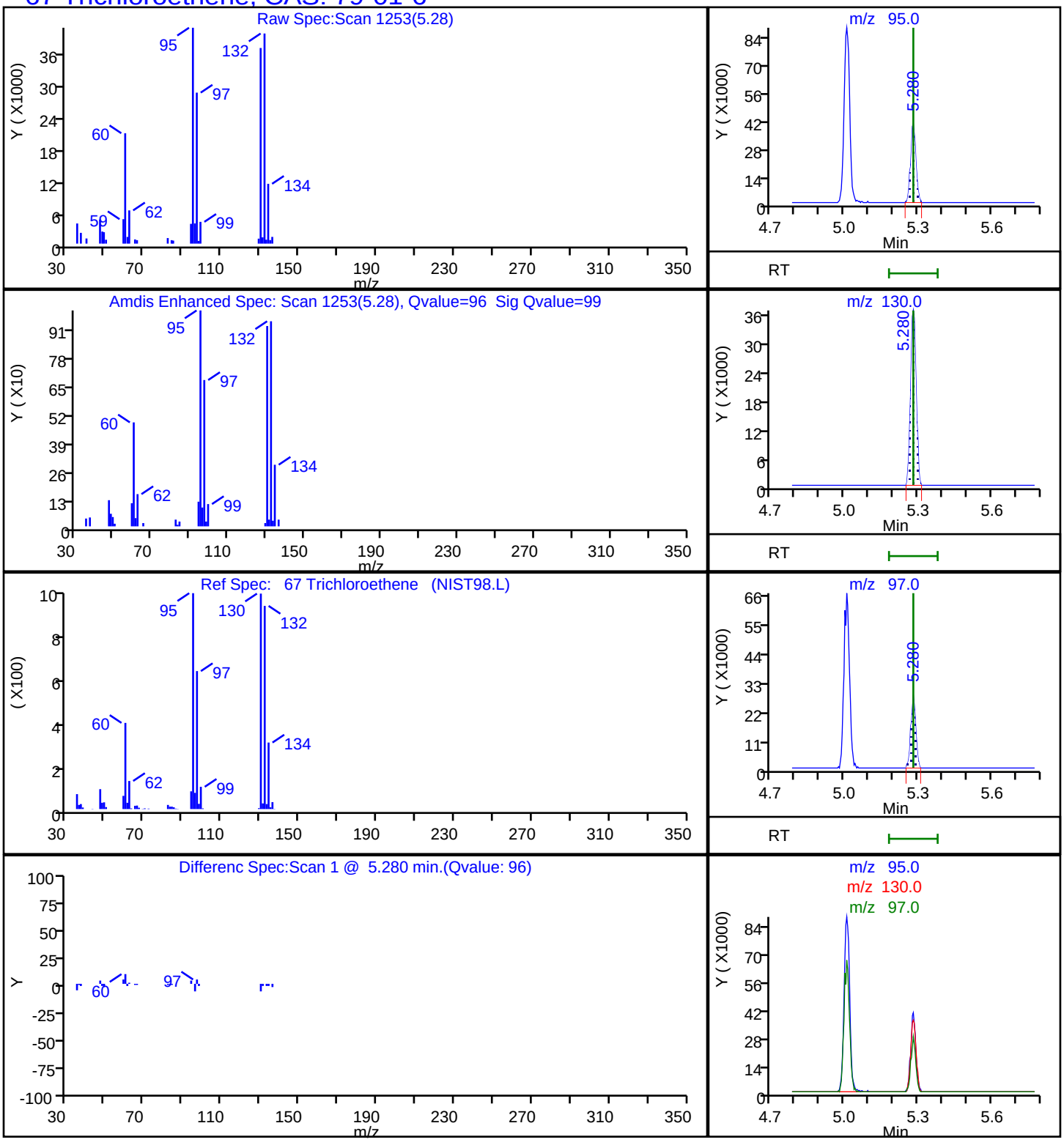
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D		
Injection Date:	30-Jun-2020 05:11:30	Instrument ID:	VMS_R1
Lims ID:	280-138090-A-7	Lab Sample ID:	280-138090-7
Client ID:	RW-2237H-20200623		
Operator ID:	PETUNINP	ALS Bottle#:	21 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



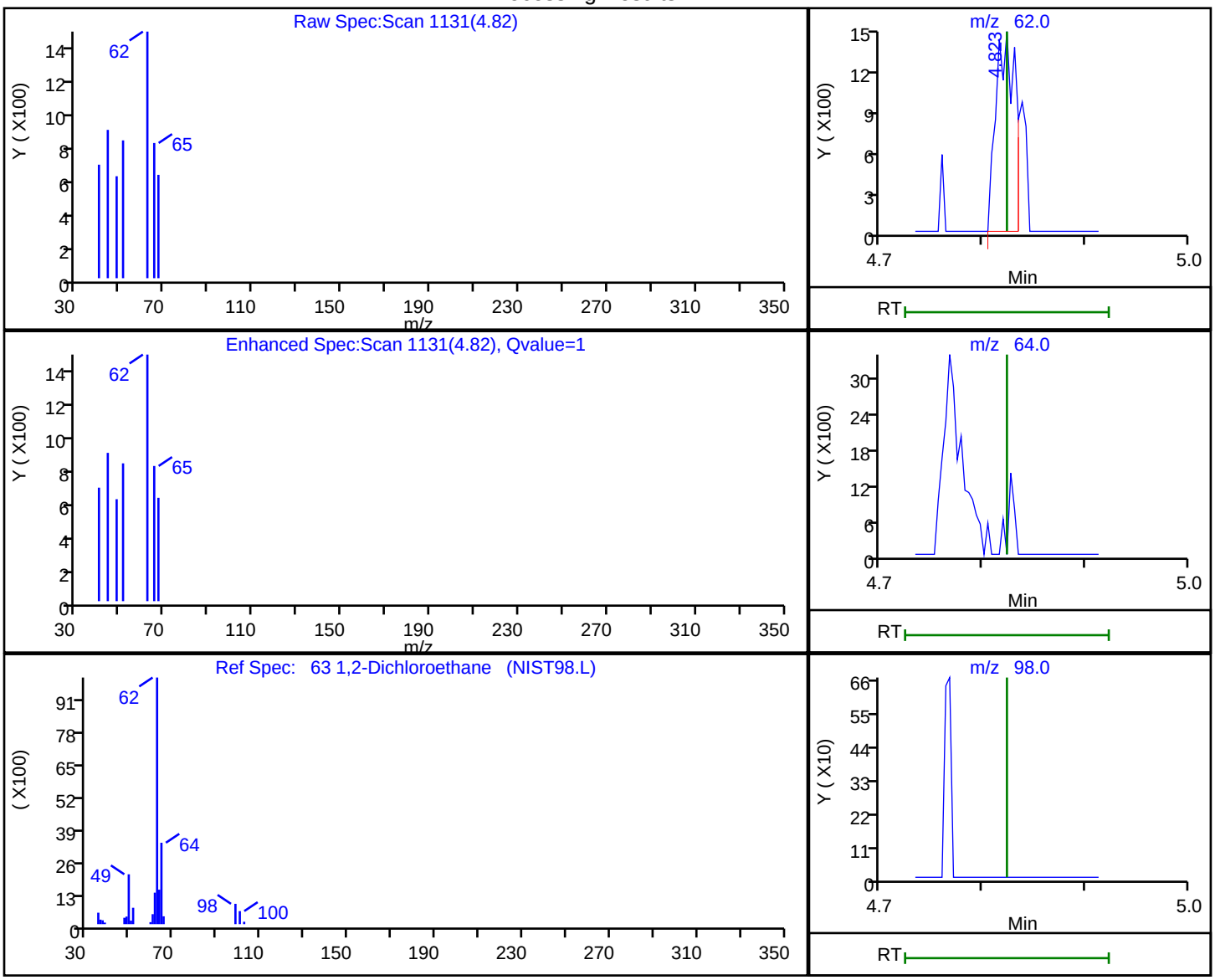
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D				
Injection Date:	30-Jun-2020 05:11:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-7	Lab Sample ID:	280-138090-7		
Client ID:	RW-2237H-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.82	62.00	1835	0.205962
4.82	64.00	0	
4.82	98.00	0	

Reviewer: petuninp, 30-Jun-2020 20:25:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

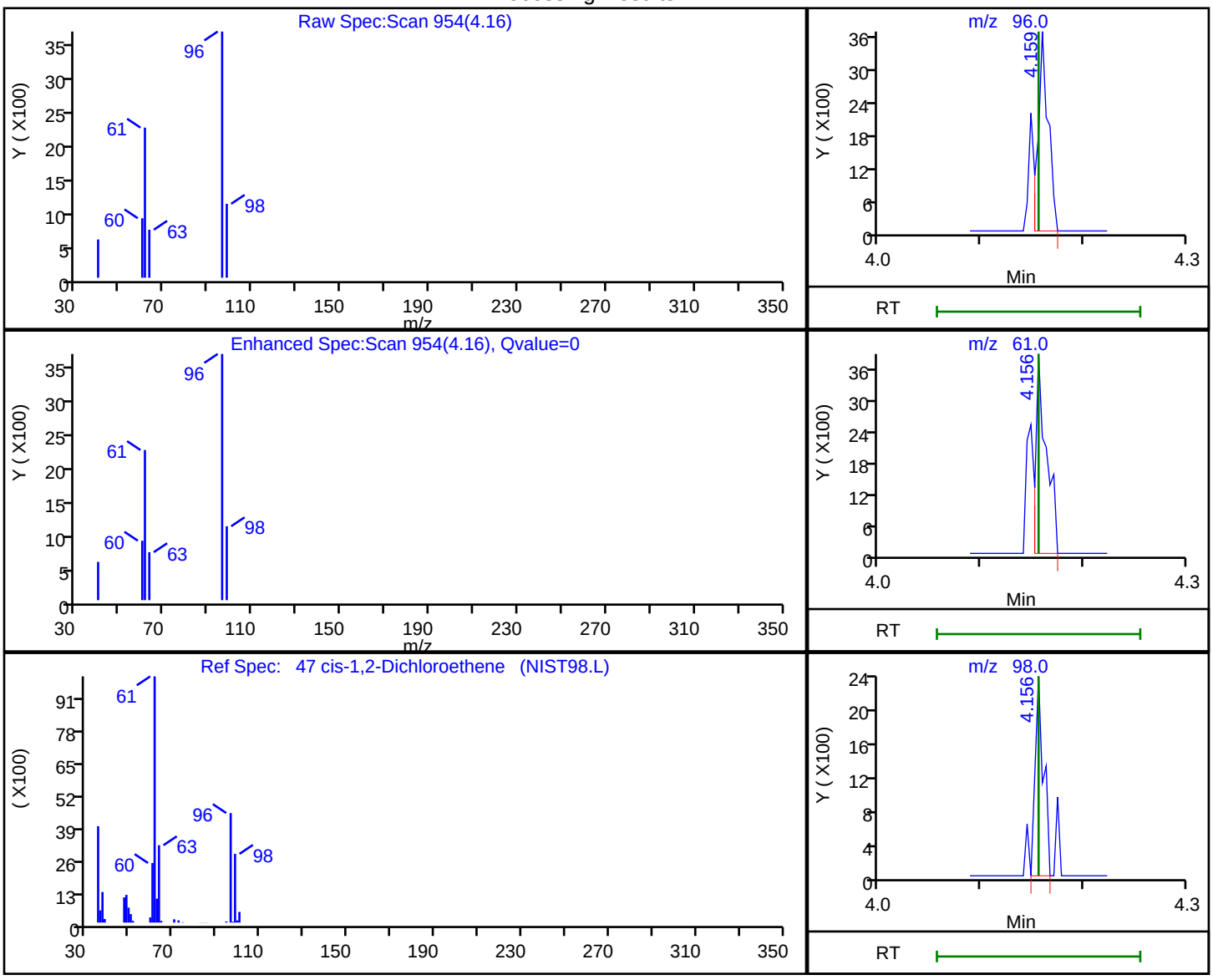
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6990.D				
Injection Date:	30-Jun-2020 05:11:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-7	Lab Sample ID:	280-138090-7		
Client ID:	RW-2237H-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2

Processing Results



RT	Mass	Response	Amount
4.16	96.00	2468	0.390150
4.16	61.00	2727	
4.16	98.00	1324	

Reviewer: petuninp, 30-Jun-2020 20:25:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8012P-20200623 Lab Sample ID: 280-138090-8

Matrix: Water Lab File ID: R6991.D

Analysis Method: 8260B Date Collected: 06/23/2020 16:10

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8012P-20200623 Lab Sample ID: 280-138090-8

Matrix: Water Lab File ID: R6991.D

Analysis Method: 8260B Date Collected: 06/23/2020 16:10

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	1.9	B	1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6991.D
Lims ID: 280-138090-C-8
Client ID: RW-8012P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 05:33:30 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-8 pH
Misc. Info.: 280-0092885-025
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:25:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	1694364	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	386411	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	584492	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	431498	50.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	518085	49.5	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1629092	48.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.620	8.620	0.000	85	604997	49.4	
10 Dichlorodifluoromethane	85		1.655				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
17 Trichlorofluoromethane	101		2.488				ND	
21 Acrolein	56		2.802				ND	
23 1,1-Dichloroethene	96		2.885				ND	
24 Acetone	43		2.900				ND	
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	
28 Acetonitrile	41		3.106				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.241				ND	
33 Acrylonitrile	53		3.398				ND	
35 trans-1,2-Dichloroethene	96		3.440				ND	
39 Vinyl acetate	43		3.728				ND	
40 1,1-Dichloroethane	63		3.755				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
45 2-Butanone (MEK)	43		4.133				ND	
47 cis-1,2-Dichloroethene	96		4.156				ND	
48 2,2-Dichloropropane	77		4.167				ND	
49 Propionitrile	54		4.182				ND	
51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	
67 Trichloroethene	95	5.280	5.280	0.000	95	11833	1.86	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

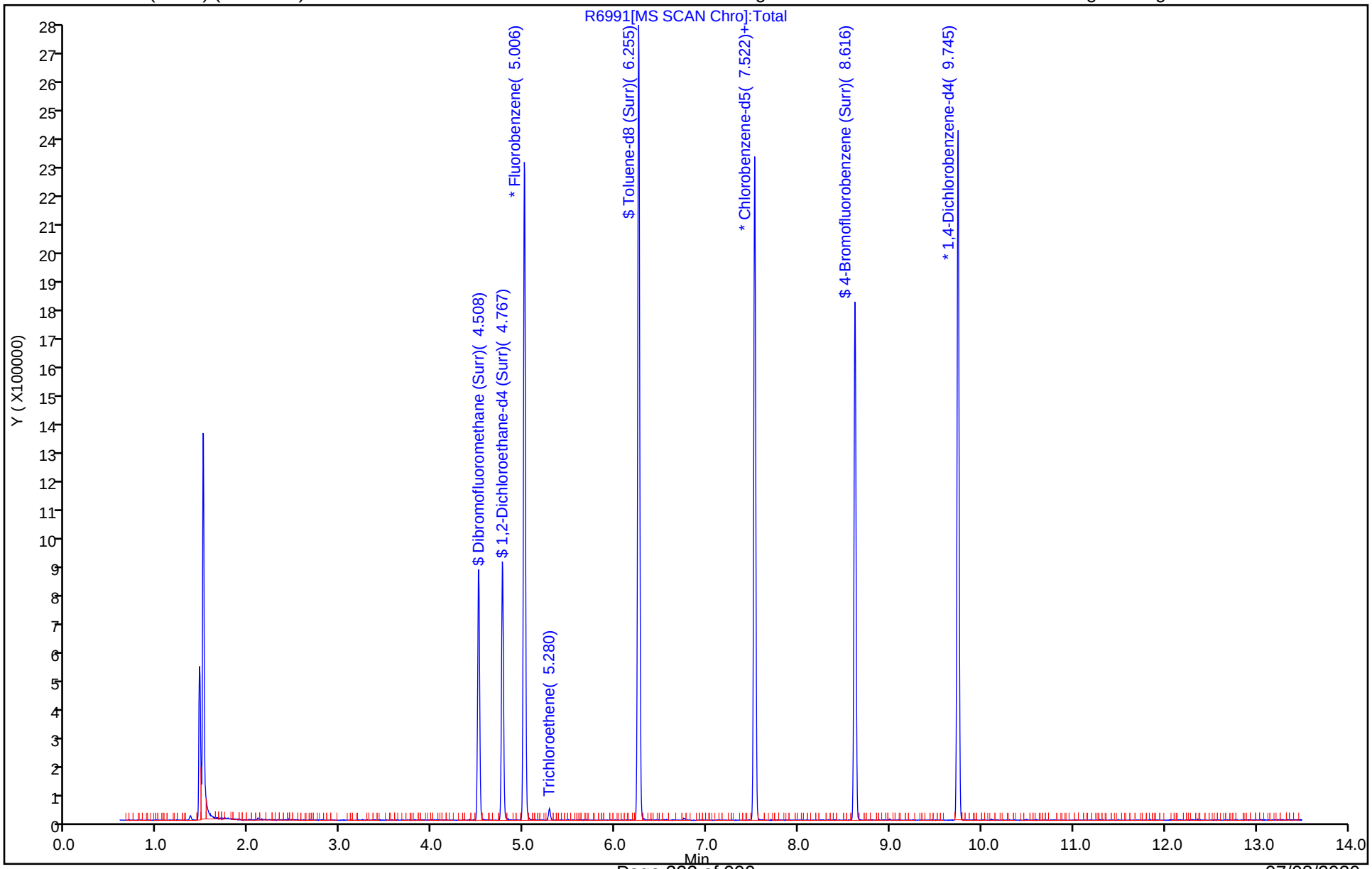
Report Date: 30-Jun-2020 20:29:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6991.D

Injection Date:	30-Jun-2020 05:33:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-C-8	Lab Sample ID:	280-138090-8	Worklist Smp#:	25
Client ID:	RW-8012P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

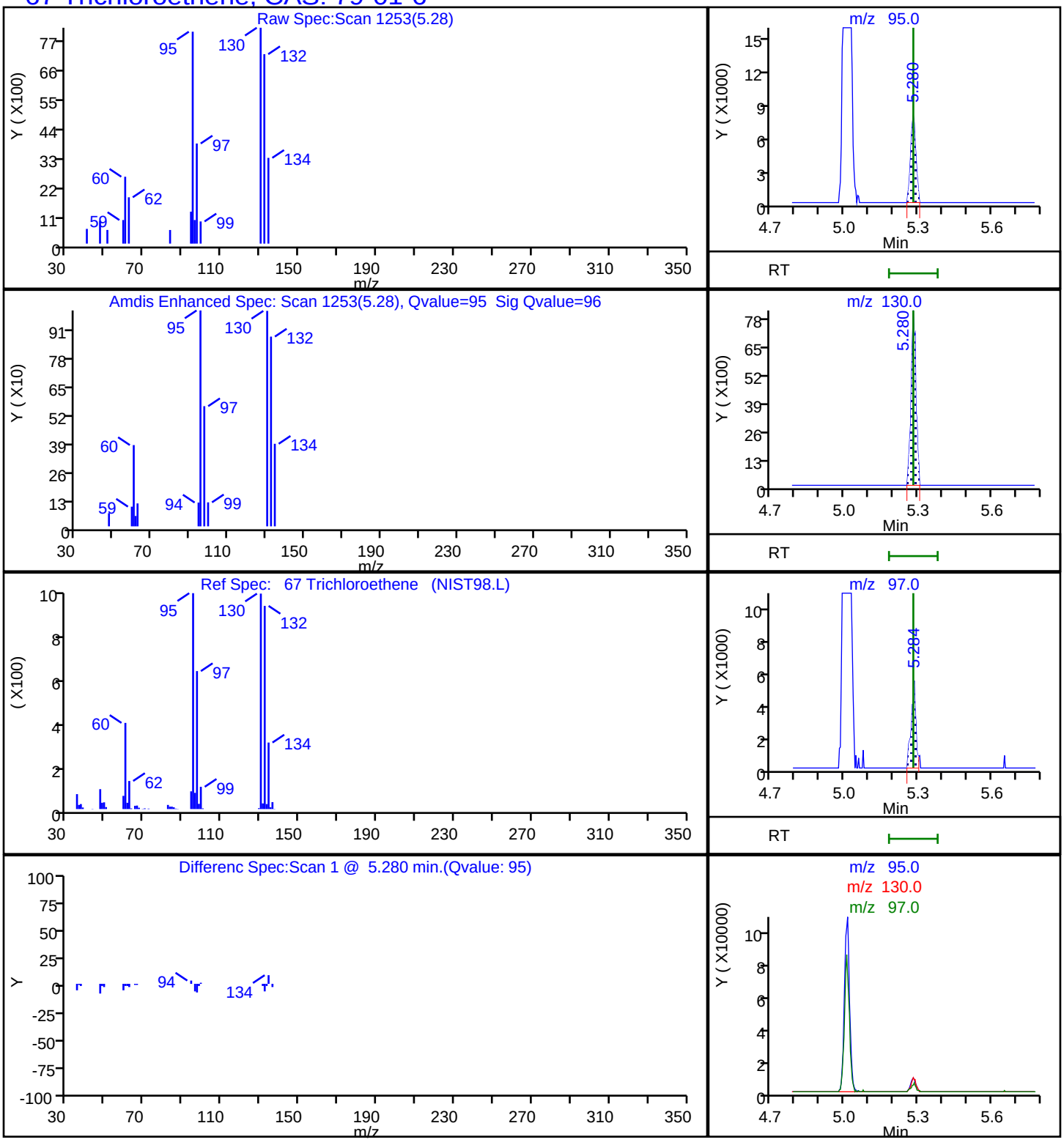
Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6991.D				
Lims ID:	280-138090-C-8				
Client ID:	RW-8012P-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 05:33:30	ALS Bottle#:	22	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-8 pH				
Misc. Info.:	280-0092885-025				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:25:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.5	100.92
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	99.02
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.29
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.4	98.83

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6991.D		
Injection Date:	30-Jun-2020 05:33:30	Instrument ID:	VMS_R1
Lims ID:	280-138090-C-8	Lab Sample ID:	280-138090-8
Client ID:	RW-8012P-20200623		
Operator ID:	PETUNINP	ALS Bottle#:	22 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2879M-20200624 Lab Sample ID: 280-138090-9

Matrix: Water Lab File ID: P2979.D

Analysis Method: 8260B Date Collected: 06/24/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2879M-20200624 Lab Sample ID: 280-138090-9

Matrix: Water Lab File ID: P2979.D

Analysis Method: 8260B Date Collected: 06/24/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2979.D
Lims ID: 280-138090-C-9
Client ID: RW-2879M-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 01:26:30 ALS Bottle#: 9 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-9 pH
Misc. Info.: 280-0092961-013
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:04:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.109	0.004	99	2344299	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	539164	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	97	800610	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.604	0.002	93	569574	50.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	627113	47.2	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2337914	49.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	84	884964	50.1	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

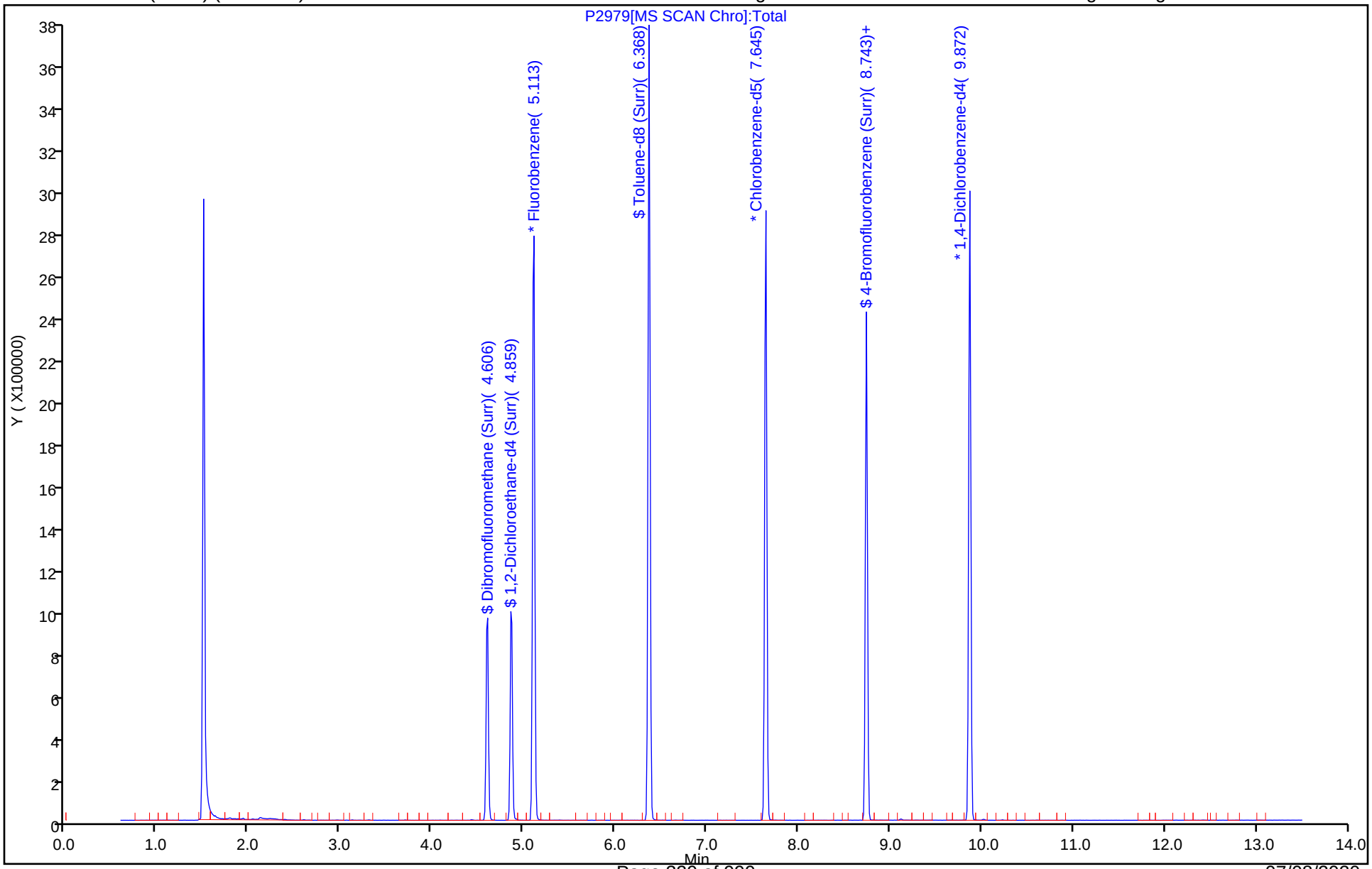
Report Date: 02-Jul-2020 22:13:19 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2979.D

Injection Date:	02-Jul-2020 01:26:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-C-9	Lab Sample ID:	280-138090-9	Worklist Smp#:	13
Client ID:	RW-2879M-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2979.D				
Lims ID:	280-138090-C-9				
Client ID:	RW-2879M-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 01:26:30	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-9 pH				
Misc. Info.:	280-0092961-013				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

First Level Reviewer: petuninp Date: 02-Jul-2020 22:04:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.90
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.2	94.41
$ 6 Toluene-d8 (Surr)	50.0	49.3	98.56
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.1	100.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7586P-20200624 Lab Sample ID: 280-138090-10

Matrix: Water Lab File ID: P2980.D

Analysis Method: 8260B Date Collected: 06/24/2020 11:35

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7586P-20200624 Lab Sample ID: 280-138090-10

Matrix: Water Lab File ID: P2980.D

Analysis Method: 8260B Date Collected: 06/24/2020 11:35

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2980.D
Lims ID: 280-138090-C-10
Client ID: RW-7586P-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 01:47:30 ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-10 pH
Misc. Info.: 280-0092961-014
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2299618	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	518489	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	96	770361	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.595	4.604	-0.009	93	555958	50.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	616771	47.3	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2291540	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	85	819166	48.2	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	
53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

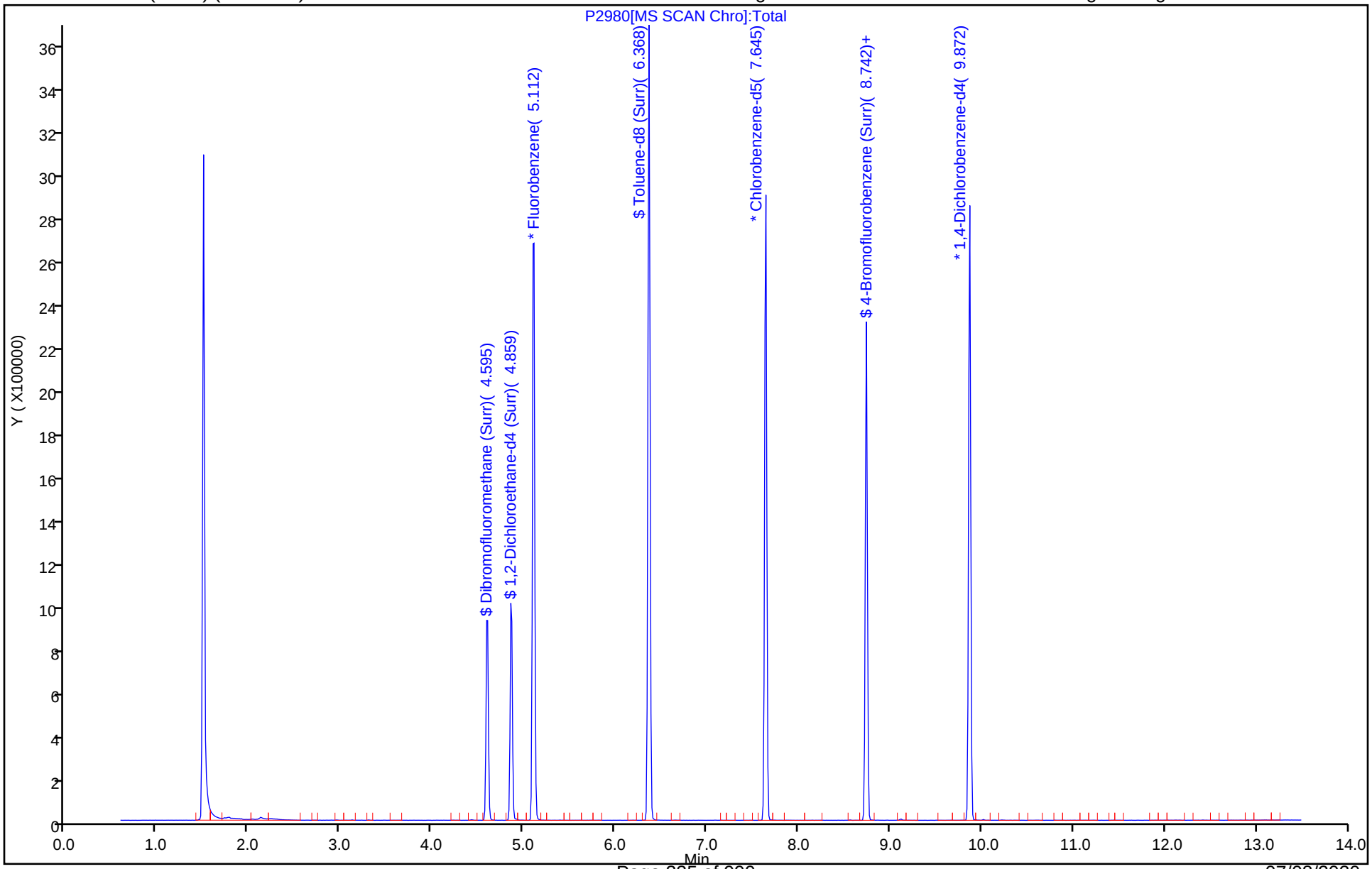
Report Date: 02-Jul-2020 22:13:19 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2980.D

Injection Date:	02-Jul-2020 01:47:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-C-10	Lab Sample ID:	280-138090-10	Worklist Smp#:	14
Client ID:	RW-7586P-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2980.D				
Lims ID:	280-138090-C-10				
Client ID:	RW-7586P-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 01:47:30	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-10 pH				
Misc. Info.:	280-0092961-014				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.40
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.3	94.66
$ 6 Toluene-d8 (Surr)	50.0	50.2	100.46
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.2	96.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8030P-20200624 Lab Sample ID: 280-138090-11

Matrix: Water Lab File ID: P2981.D

Analysis Method: 8260B Date Collected: 06/24/2020 13:40

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 02:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	0.36	J	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8030P-20200624 Lab Sample ID: 280-138090-11

Matrix: Water Lab File ID: P2981.D

Analysis Method: 8260B Date Collected: 06/24/2020 13:40

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 02:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	1.3		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	7.1		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2981.D
Lims ID: 280-138090-C-11
Client ID: RW-8030P-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 02:09:30 ALS Bottle#: 11 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-11 pH
Misc. Info.: 280-0092961-015
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:05:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2220111	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	86	516030	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.868	9.869	-0.001	96	731682	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	536889	50.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.866	4.868	-0.002	96	598261	47.6	
$ 6 Toluene-d8 (Surr)	98	6.365	6.366	-0.001	93	2210705	48.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.739	8.741	-0.002	84	784814	48.6	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.244	4.245	-0.001	80	3429	0.3633	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.383	5.385	-0.002	98	63754	7.11	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.871	6.873	-0.002	92	8338	1.33	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

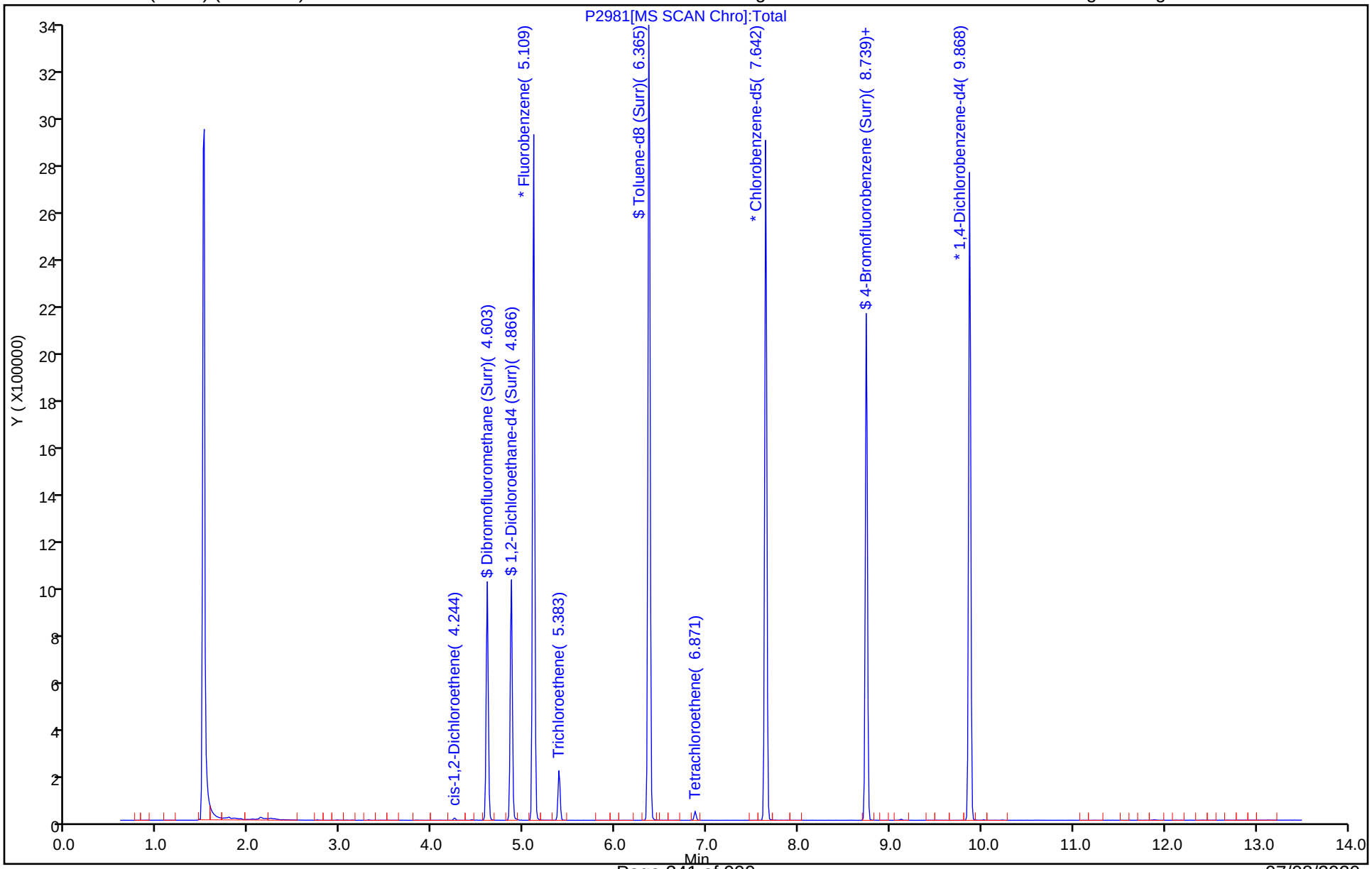
mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 02-Jul-2020 22:13:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2981.D				
Injection Date:	02-Jul-2020 02:09:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-C-11	Lab Sample ID:	280-138090-11	Worklist Smp#:	15
Client ID:	RW-8030P-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2981.D				
Lims ID:	280-138090-C-11				
Client ID:	RW-8030P-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 02:09:30	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-11 pH				
Misc. Info.:	280-0092961-015				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

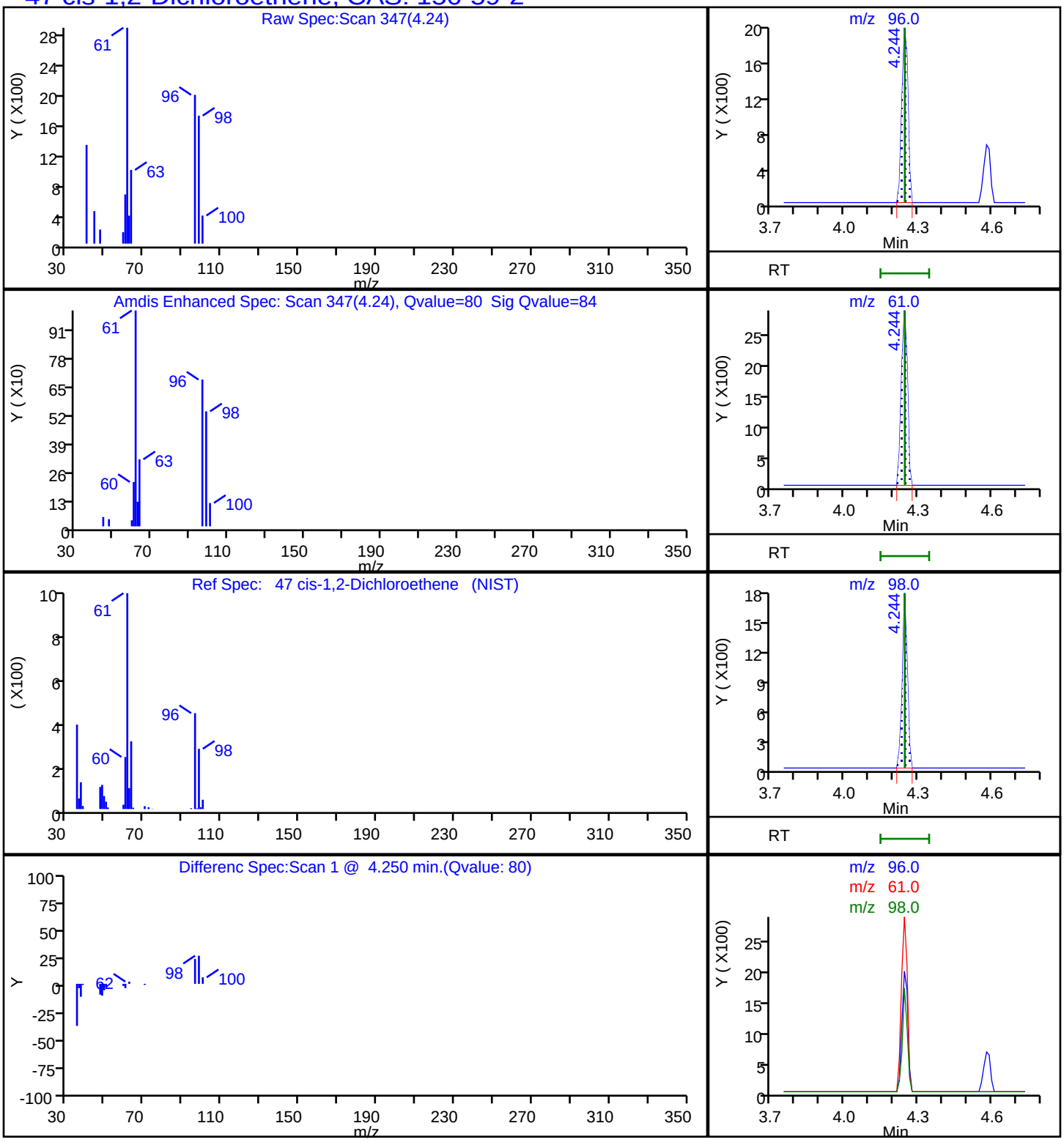
First Level Reviewer: petuninp Date: 02-Jul-2020 22:05:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.43
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.11
$ 6 Toluene-d8 (Surr)	50.0	48.7	97.37
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.6	97.19

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2981.D				
Injection Date:	02-Jul-2020 02:09:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-C-11	Lab Sample ID:	280-138090-11		
Client ID:	RW-8030P-20200624				
Operator ID:	PETUNINP	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

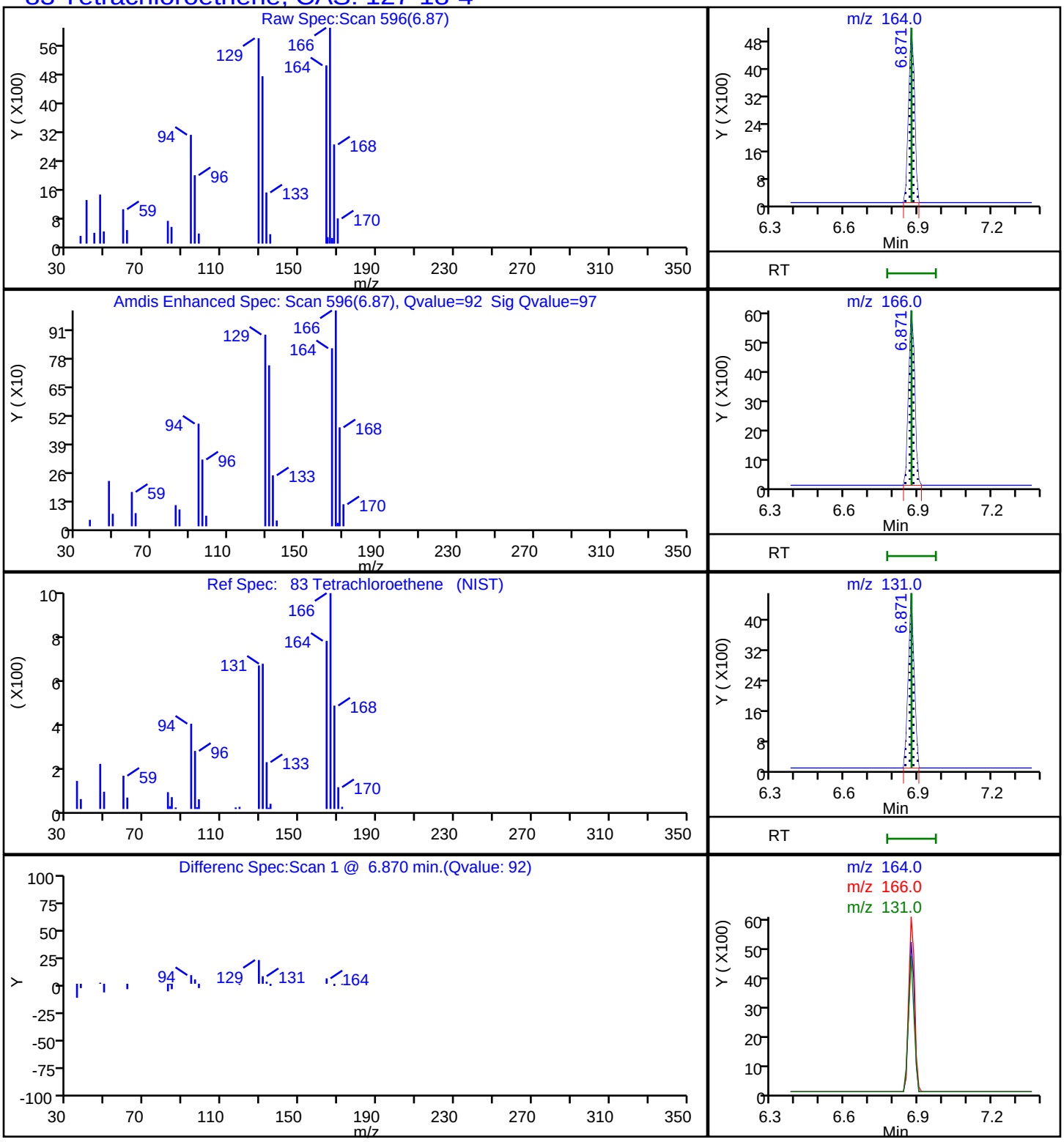
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2981.D		
Injection Date:	02-Jul-2020 02:09:30	Instrument ID:	VMS_P
Lims ID:	280-138090-C-11	Lab Sample ID:	280-138090-11
Client ID:	RW-8030P-20200624		
Operator ID:	PETUNINP	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



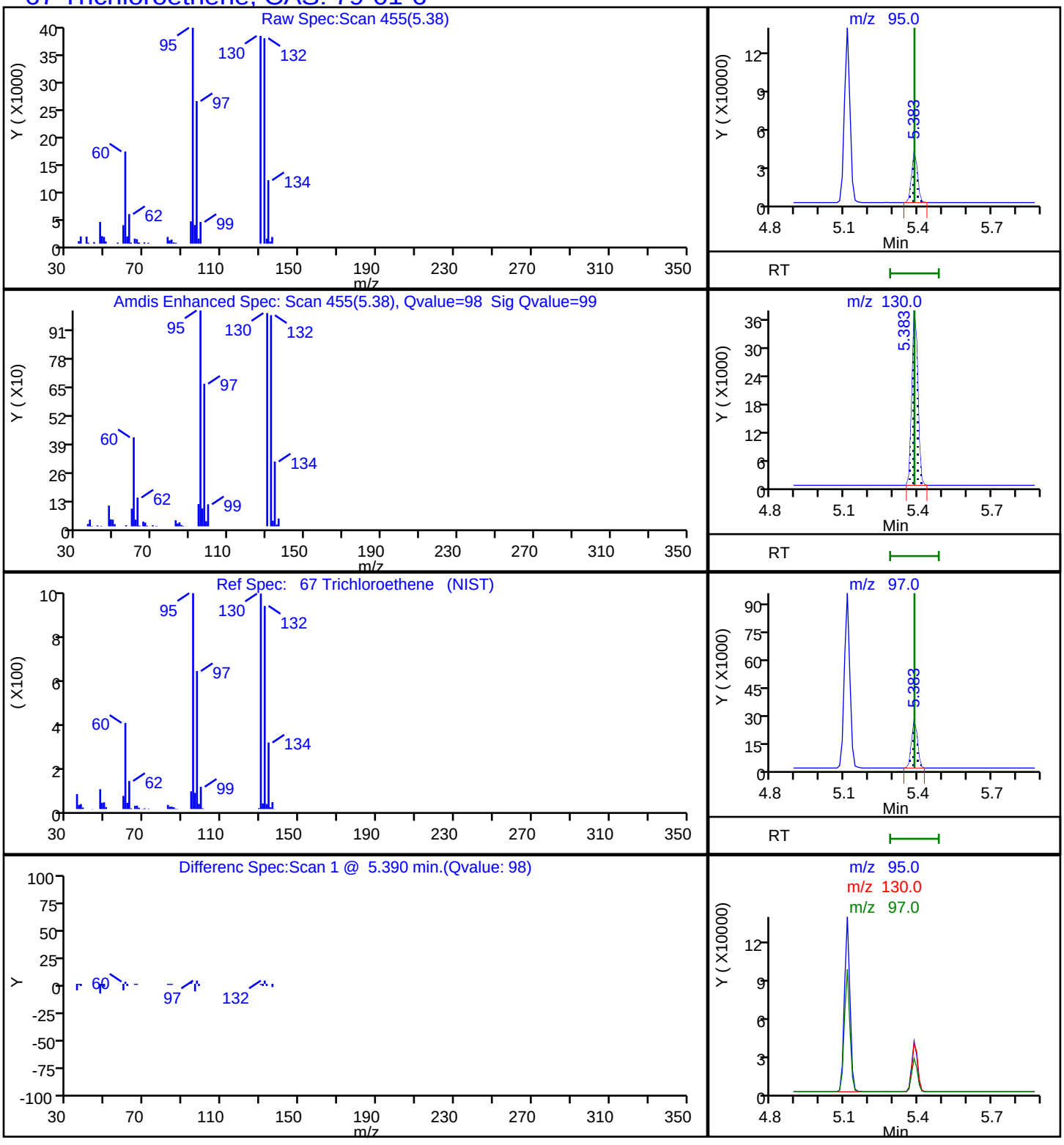
Report Date: 02-Jul-2020 22:13:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2981.D

Injection Date:	02-Jul-2020 02:09:30	Instrument ID:	VMS_P
Lims ID:	280-138090-C-11	Lab Sample ID:	280-138090-11
Client ID:	RW-8030P-20200624		
Operator ID:	PETUNINP	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2172F-20200622 Lab Sample ID: 280-138090-12

Matrix: Water Lab File ID: P2870.D

Analysis Method: 8260B Date Collected: 06/22/2020 11:54

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2172F-20200622 Lab Sample ID: 280-138090-12

Matrix: Water Lab File ID: P2870.D

Analysis Method: 8260B Date Collected: 06/22/2020 11:54

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2870.D
Lims ID: 280-138090-A-12
Client ID: RW-2172F-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 04:27:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-12 pH
Misc. Info.: 280-0092884-024
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.110	5.112	-0.002	99	2572333	50.0	
*	2 Chlorobenzene-d5	119	7.642	7.645	-0.003	87	575668	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.872	-0.003	97	822587	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	611639	49.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	698130	47.9	
$	6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2530495	50.0	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	83	890078	49.0	
	10 Dichlorodifluoromethane	85		1.670				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.171				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.888				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.268				ND	
	51 Methacrylonitrile	41		4.384				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

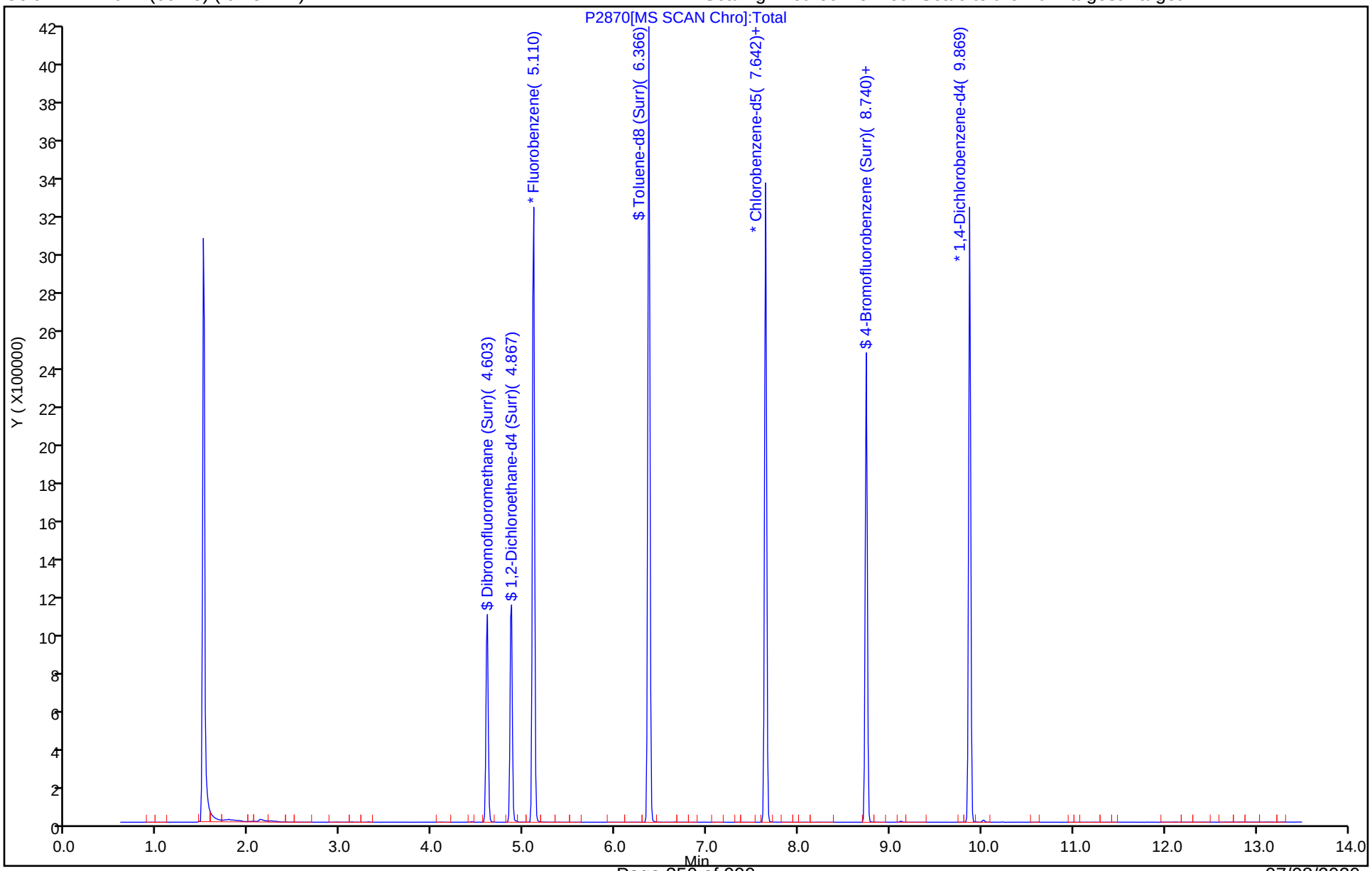
Report Date: 30-Jun-2020 20:49:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2870.D

Injection Date:	30-Jun-2020 04:27:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-A-12	Lab Sample ID:	280-138090-12	Worklist Smp#:	24
Client ID:	RW-2172F-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2870.D
Lims ID: 280-138090-A-12
Client ID: RW-2172F-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 04:27:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-12 pH
Misc. Info.: 280-0092884-024
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.4	98.75
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.9	95.79
$ 6 Toluene-d8 (Surr)	50.0	50.0	99.91
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.0	98.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7773P-20200622 Lab Sample ID: 280-138090-13

Matrix: Water Lab File ID: P2871.D

Analysis Method: 8260B Date Collected: 06/22/2020 13:42

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7773P-20200622 Lab Sample ID: 280-138090-13

Matrix: Water Lab File ID: P2871.D

Analysis Method: 8260B Date Collected: 06/22/2020 13:42

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 04:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2871.D
Lims ID: 280-138090-C-13
Client ID: RW-7773P-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 04:48:30 ALS Bottle#: 21 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-13 pH
Misc. Info.: 280-0092884-025
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.109	5.112	-0.003	99	2556062	50.0	
*	2 Chlorobenzene-d5	119	7.642	7.645	-0.003	87	574118	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.872	-0.003	97	799694	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	92	611947	49.7	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	690324	47.7	
$	6 Toluene-d8 (Surr)	98	6.365	6.366	-0.001	93	2513773	49.8	
$	7 4-Bromofluorobenzene (Surr)	95	8.739	8.741	-0.002	82	886818	50.2	
	10 Dichlorodifluoromethane	85		1.670				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.171				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.888				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.268				ND	
	51 Methacrylonitrile	41		4.384				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

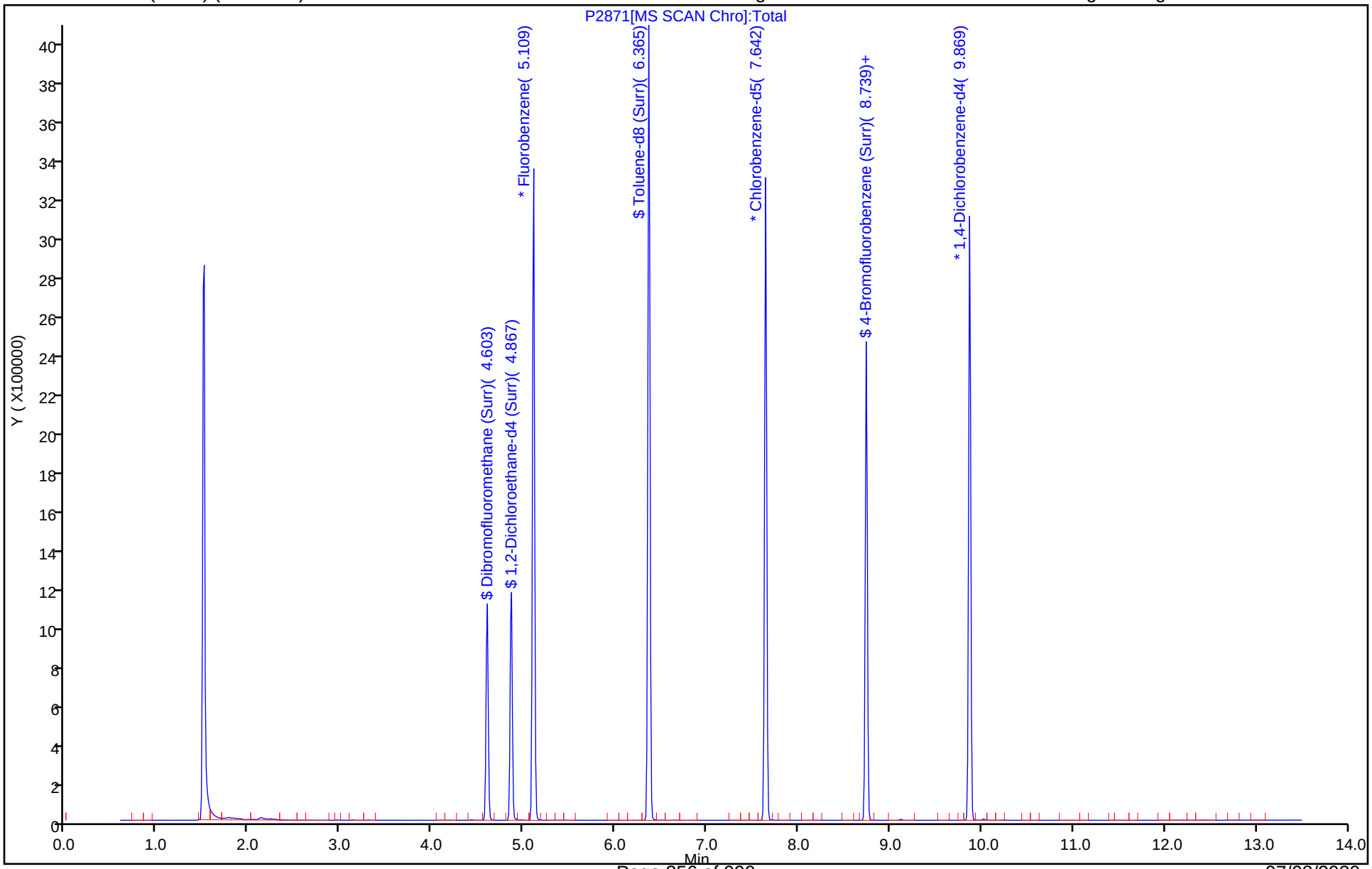
Report Date: 30-Jun-2020 20:49:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2871.D

Injection Date:	30-Jun-2020 04:48:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-C-13	Lab Sample ID:	280-138090-13	Worklist Smp#:	25
Client ID:	RW-7773P-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2871.D				
Lims ID:	280-138090-C-13				
Client ID:	RW-7773P-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 04:48:30	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-13 pH				
Misc. Info.:	280-0092884-025				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:47:46	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.7	99.42
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.32
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.52
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.2	100.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677P-20200622 Lab Sample ID: 280-138090-14

Matrix: Water Lab File ID: P2872.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:04

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND	F1	2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	0.27	J	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677P-20200622 Lab Sample ID: 280-138090-14

Matrix: Water Lab File ID: P2872.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:04

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	* F1 F2	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	1.2		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	5.9		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2872.D
Lims ID: 280-138090-B-14
Client ID: RW-7677P-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 05:09:30 ALS Bottle#: 22 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-B-14 pH
Misc. Info.: 280-0092884-026
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:44:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.112	-0.001	99	2508112	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	555989	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.872	-0.002	97	787833	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	593102	49.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.857	4.868	-0.011	96	677508	47.7	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2436360	49.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	83	862287	49.6	
$ 8 Trifluorotoluene (Surr)	1		0.000				ND	
$ 9 BFB	95		3.569				ND	
10 Dichlorodifluoromethane	85		1.670				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
13 Ethylene oxide	43	2.124	2.200	-0.076	94	1238	NC	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
16 Dichlorofluoromethane	67		2.494				ND	
17 Trichlorofluoromethane	101		2.536				ND	
18 Ethanol	45		2.643				ND	
19 Ethyl ether	59		2.747				ND	
20 Propene oxide	58		2.791				ND	
21 Acrolein	56		2.852				ND	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
25 Isopropyl alcohol	45		3.044				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.171				ND	
29 Methyl acetate	43		3.190				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59		3.348				ND	
33 Acrylonitrile	53		3.464				ND	
34 Methyl tert-butyl ether	73		3.496				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
36 Hexane	57		3.707				ND	
38 Vinyl acetate	43		3.802				ND	
37 Chlorotrifluoroethene	116		3.818				ND	
40 Isopropyl ether	87		3.825				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.888				ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027				ND	
43 Tert-butyl ethyl ether	59		4.089				ND	
44 2-Butanone (MEK)	43		4.214				ND	
46 Ethyl acetate	43		4.226				ND	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	81	2906	0.2725	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.268				ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307				ND	
50 sec-Butyl Alcohol	45		4.330				ND	
51 Methacrylonitrile	41		4.384				ND	
53 Chlorobromomethane	128		4.425				ND	
52 Tetrahydrofuran	42		4.435				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
56 Cyclohexane	56		4.689				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
62 Tert-amyl methyl ether	73		4.965				ND	
63 n-Butanol	56		4.965				ND	
66 n-Heptane	43		5.079				ND	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089				ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131				ND	
67 Trichloroethene	95	5.385	5.385	0.000	97	59756	5.90	
68 2-Pentanone	43		5.480				ND	
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
72 1,4-Dioxane	88		5.638				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
75 2-Nitropropane	41		5.946				ND	
76 2-Chloroethyl vinyl ether	63		5.987				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.873	6.873	0.000	90	7822	1.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
87 Tetrahydrothiophene	60		7.117				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
89 1-Chlorohexane	91		7.633				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
97 Isopropylbenzene	105		8.572				ND	
98 cis-1,4-Dichloro-2-butene	53		8.616				ND	
99 Cyclohexanone	55		8.667				ND	U
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
101 Bromobenzene	156		8.889				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
104 N-Propylbenzene	120		8.973				ND	
105 2-Chlorotoluene	126		9.068				ND	
106 1,3,5-Trimethylbenzene	105		9.142				ND	
107 4-Chlorotoluene	126		9.184				ND	
108 tert-Butylbenzene	119		9.448				ND	
109 1,2,4-Trimethylbenzene	105		9.511				ND	
110 sec-Butylbenzene	134		9.669				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
112 4-Isopropyltoluene	119		9.817				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
114 1,2,3-Trimethylbenzene	105		9.914				ND	
115 n-Butylbenzene	91		10.218				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
118 1,3,5-Trichlorobenzene	180		11.222				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
120 Hexachlorobutadiene	225		12.002				ND	
121 Naphthalene	128		12.128				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
125 2,2,3-Trimethylbutane	1		0.000				ND	
123 3,3-Dimethylpentane	1		0.000				ND	
128 2,4-Dimethylpentane	1		0.000				ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
126 3-Ethylpentane	1		0.000				ND	
129 n-Nonyl Aldehyde	1		0.000				ND	
127 Pentachloroethane	167		0.000				ND	
132 2-Methylhexane	1		0.000				ND	
131 Propene oxide TIC	58		0.000				ND	
135 3-Methylhexane	1		0.000				ND	
138 Dimethyl disulfide	1		0.000				ND	
124 2,3-Dimethylpentane	1		0.000				ND	
134 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 1-Chlorohexane TIC	1		0.000				ND	
133 Methyl cyclohexane TIC	1		0.000				ND	
137 Cyclohexane TIC	1		0.000				ND	
S 139 1,2-Dichloroethene, Total (URS)	96				0		0.2725	
S 142 Xylenes, Total	106		0.000				ND	
S 141 TAH	1				0		0	7
S 140 Trihalomethanes, Total	1		0.000				ND	
S 143 Xylenes, Total (URS)	1		0.000				ND	
S 146 Total BTEX	1		0.000				ND	
S 145 1,3-Dichloropropene, Total	1		0.000				ND	
S 144 1,2-Dichloroethene, Total	1				0		0.2725	
T 149 Propene TIC	1		0.000				ND	
T 151 Dicyclopentadiene TIC	1		0.000				ND	
T 152 2,3-dichloro-1-propene TIC	75		0.000				ND	
T 148 n-Nonane TIC	1		0.000				ND	
T 154 Dichloroacetonitrile TIC	74		0.000				ND	
T 153 2-Butoxyethanol TIC	1		0.000				ND	
T 147 1,3-Butadiene TIC	1		0.000				ND	
T 150 4-Ethyltoluene TIC	1		0.000				ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

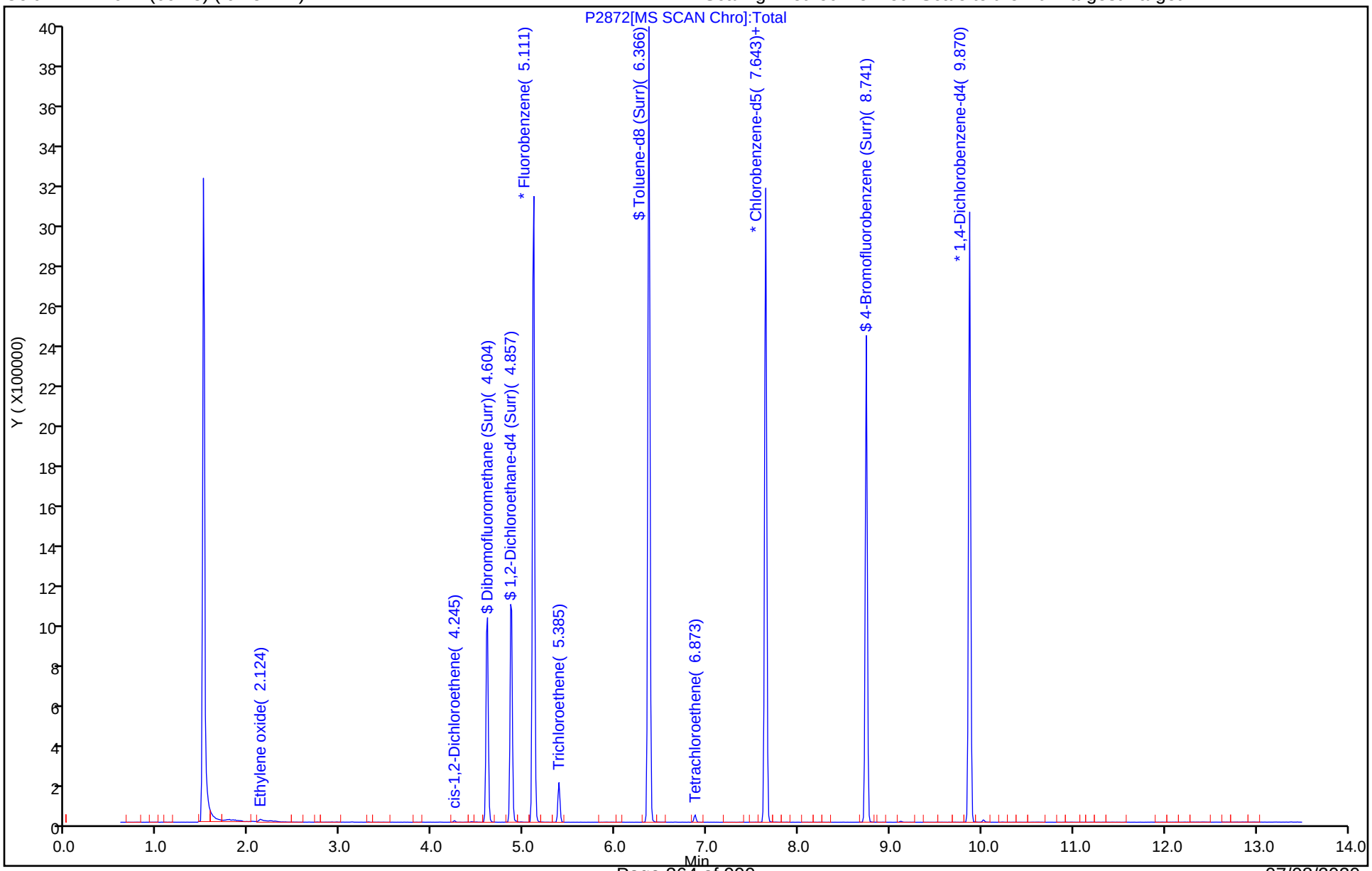
Report Date: 30-Jun-2020 20:49:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2872.D

Injection Date:	30-Jun-2020 05:09:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-B-14	Lab Sample ID:	280-138090-14	Worklist Smp#:	26
Client ID:	RW-7677P-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2872.D				
Lims ID:	280-138090-B-14				
Client ID:	RW-7677P-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 05:09:30	ALS Bottle#:	22	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-B-14 pH				
Misc. Info.:	280-0092884-026				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:47:46	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 30-Jun-2020 20:44:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.1	98.20
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.34
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.60
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.6	99.18

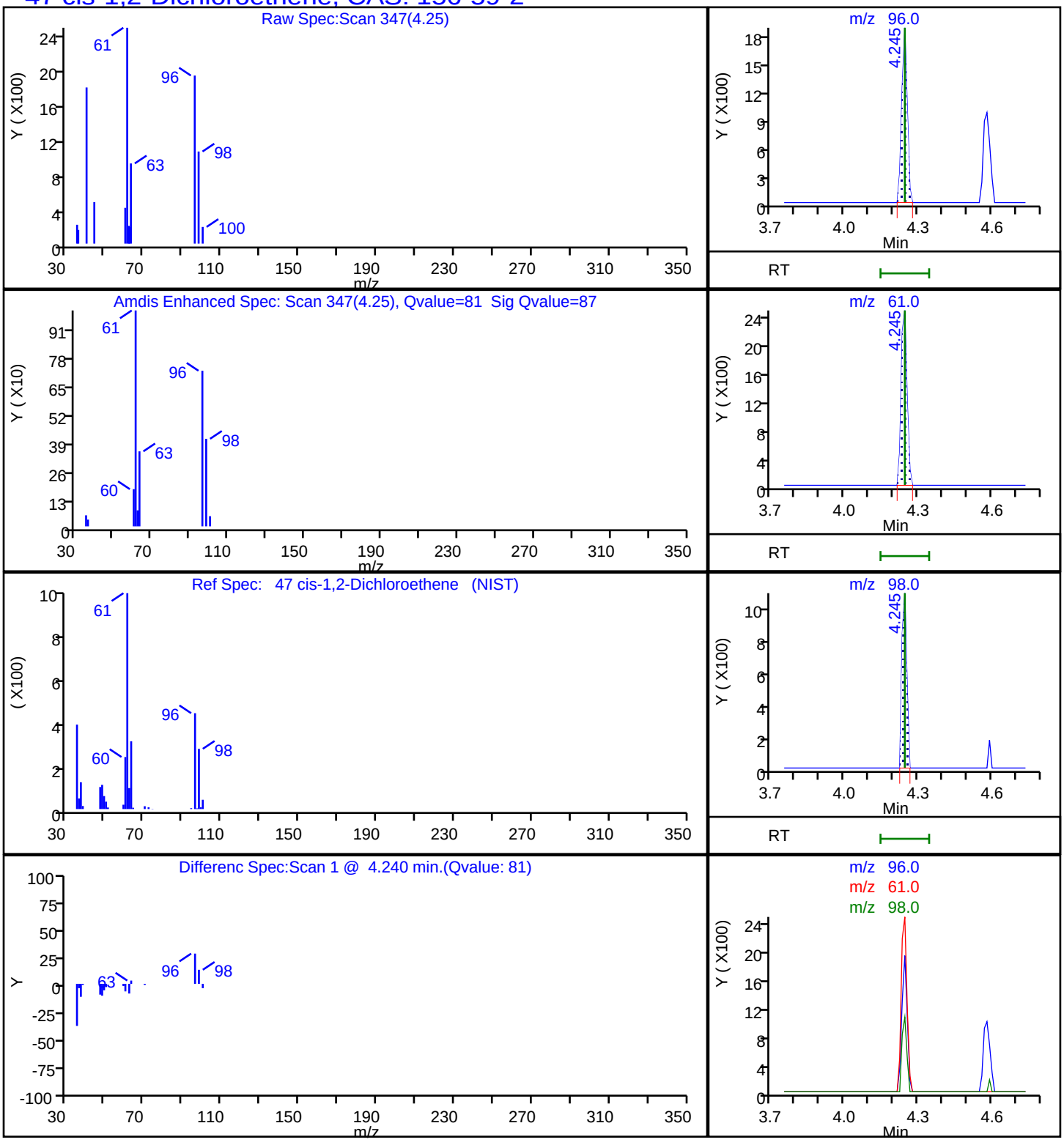
Report Date: 30-Jun-2020 20:49:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2872.D

Injection Date:	30-Jun-2020 05:09:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-B-14	Lab Sample ID:	280-138090-14		
Client ID:	RW-7677P-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	22	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2



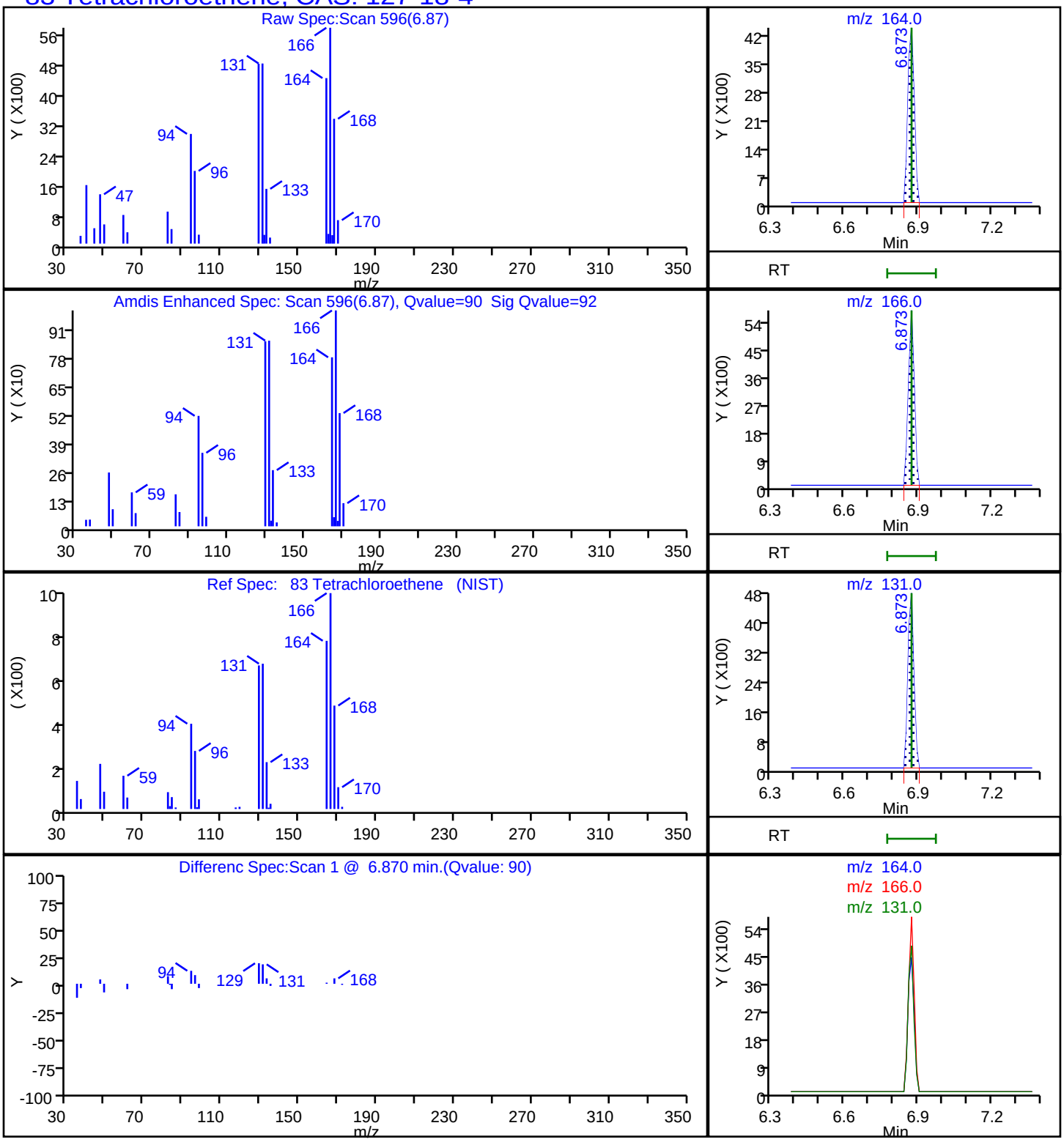
Report Date: 30-Jun-2020 20:49:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2872.D

Injection Date:	30-Jun-2020 05:09:30	Instrument ID:	VMS_P
Lims ID:	280-138090-B-14	Lab Sample ID:	280-138090-14
Client ID:	RW-7677P-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	22 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

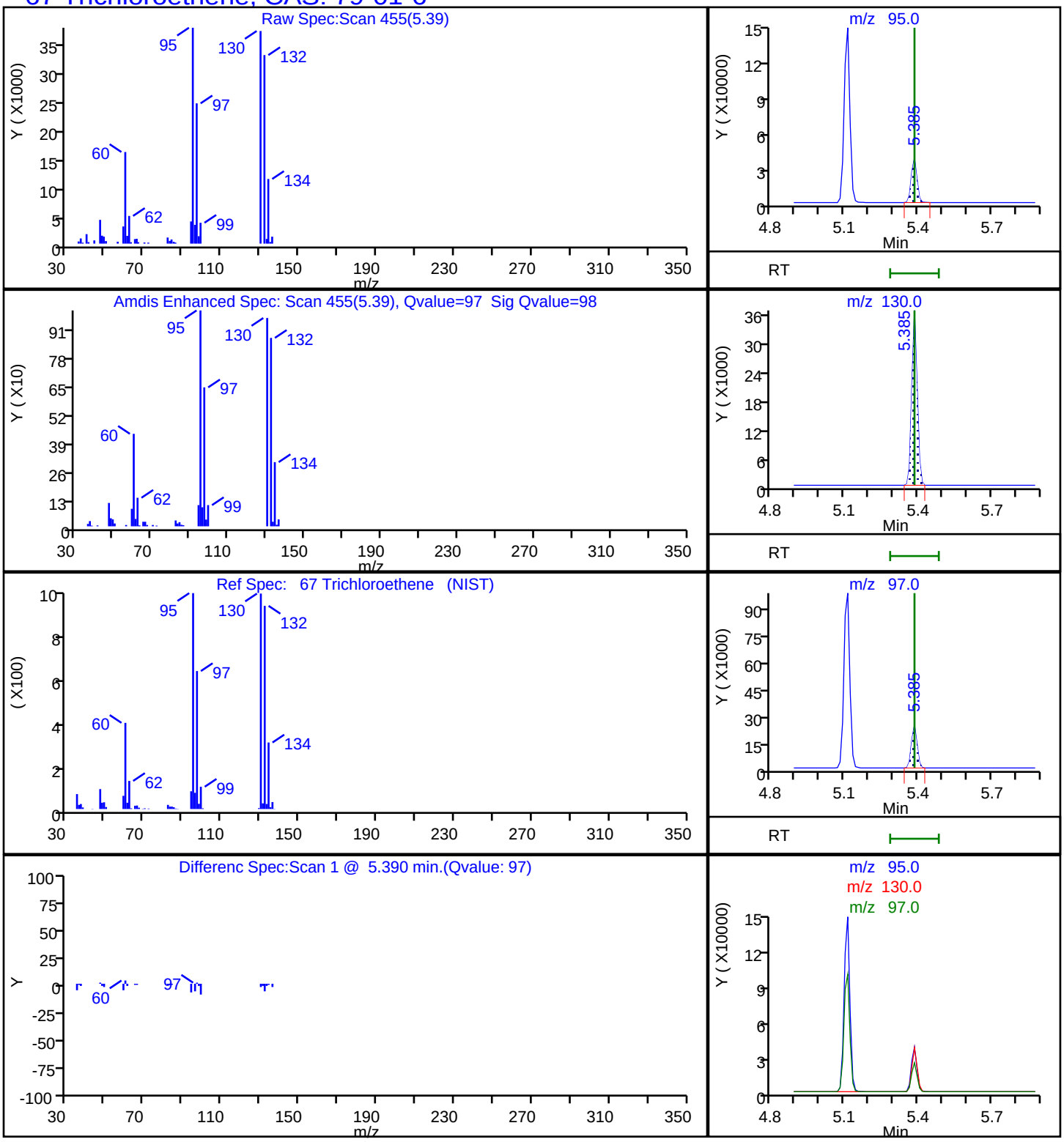
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2872.D		
Injection Date:	30-Jun-2020 05:09:30	Instrument ID:	VMS_P
Lims ID:	280-138090-B-14	Lab Sample ID:	280-138090-14
Client ID:	RW-7677P-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	22 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677PQ-20200622 Lab Sample ID: 280-138090-15

Matrix: Water Lab File ID: P2875.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:09

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	0.31	J	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677PQ-20200622 Lab Sample ID: 280-138090-15

Matrix: Water Lab File ID: P2875.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:09

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	1.2		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	5.8		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	101		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2875.D
Lims ID: 280-138090-A-15
Client ID: RW-7677PQ-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 06:13:30 ALS Bottle#: 25 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-15 pH
Misc. Info.: 280-0092884-029
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:00 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:49:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.112	-0.002	99	2515460	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	564111	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.872	-0.002	97	767352	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	587381	48.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.857	4.868	-0.011	95	660992	46.4	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2456964	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	83	854892	50.5	
10 Dichlorodifluoromethane	85		1.670				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56	2.862	2.852	0.010	97	2043	0.9655	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.171				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53	3.464	3.464	0.000	95	2852	0.6160	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.888				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	81	3318	0.3103	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.268				ND	
51 Methacrylonitrile	41		4.384				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41	4.751	4.752	-0.001	15	299	0.7685	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.385	5.385	0.000	99	58516	5.76	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.873	6.873	0.000	94	8252	1.20	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180	11.853	11.854	-0.001	88	1667	0.1799	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

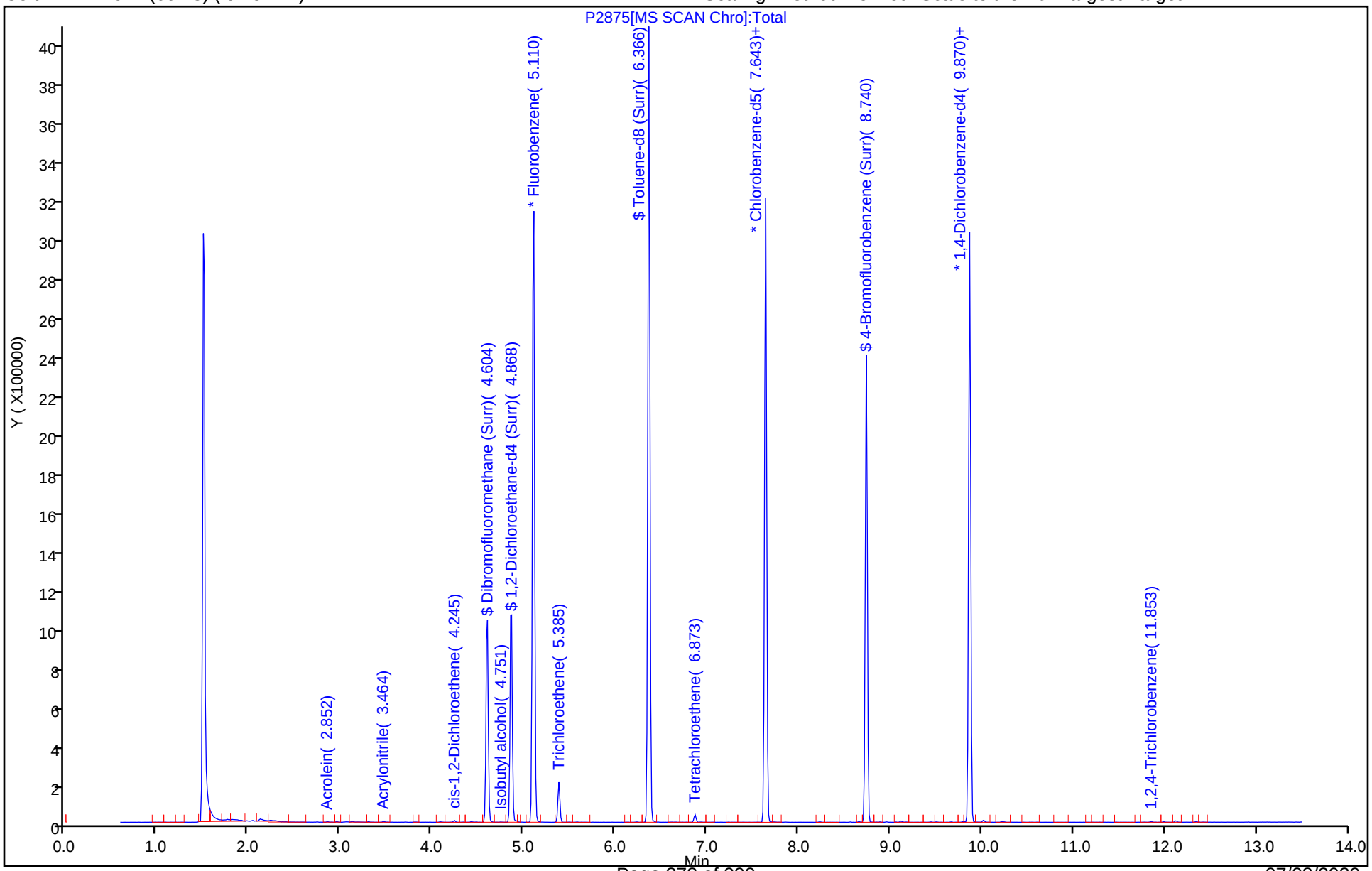
Report Date: 30-Jun-2020 20:51:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2875.D

Injection Date:	30-Jun-2020 06:13:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-A-15	Lab Sample ID:	280-138090-15	Worklist Smp#:	29
Client ID:	RW-7677PQ-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2875.D				
Lims ID:	280-138090-A-15				
Client ID:	RW-7677PQ-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 06:13:30	ALS Bottle#:	25	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-15 pH				
Misc. Info.:	280-0092884-029				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:51:00	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

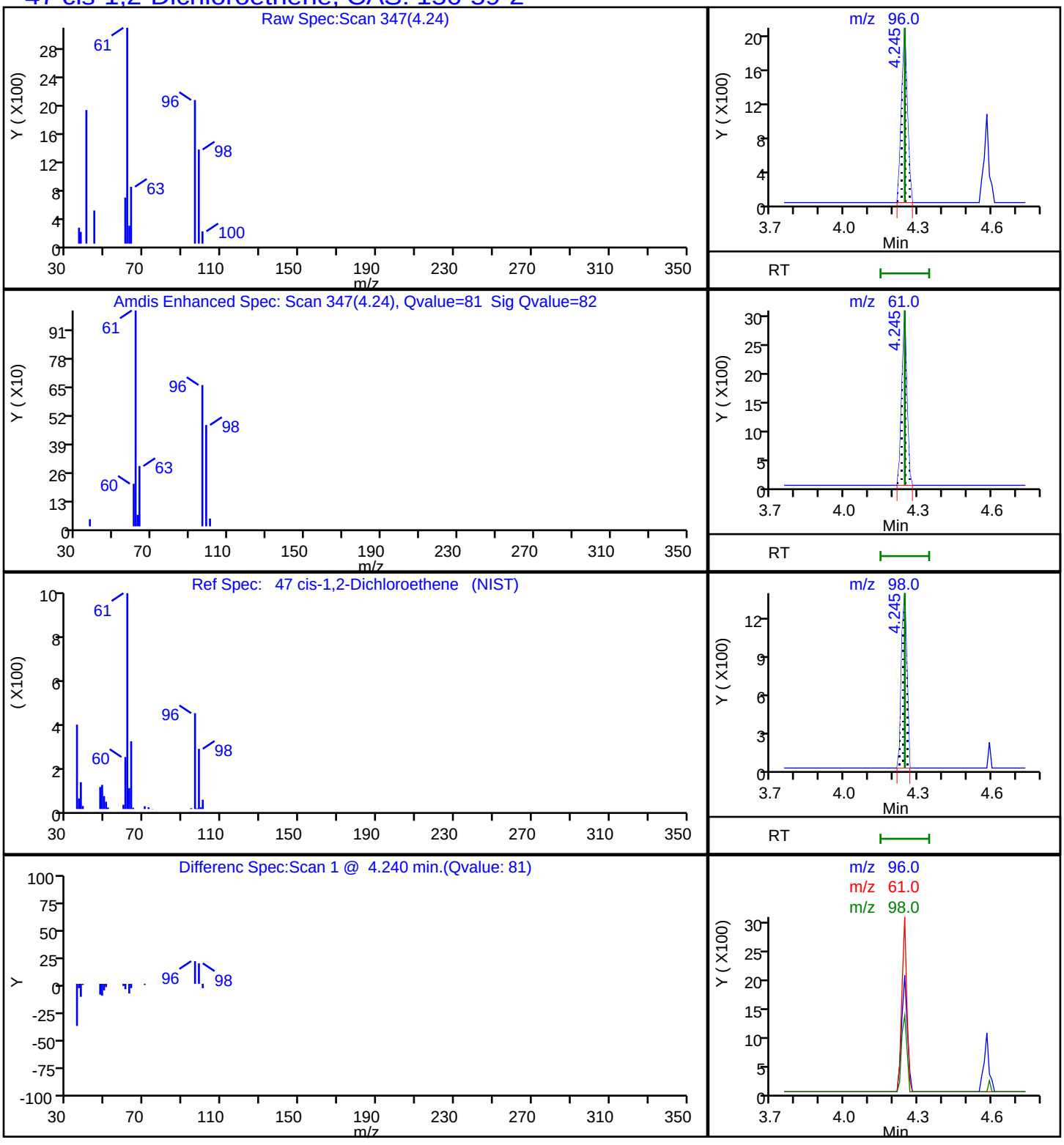
First Level Reviewer: petuninp Date: 30-Jun-2020 20:49:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	48.5	96.97
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.4	92.74
$ 6 Toluene-d8 (Surr)	50.0	49.5	99.00
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.5	100.95

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2875.D		
Injection Date:	30-Jun-2020 06:13:30	Instrument ID:	VMS_P
Lims ID:	280-138090-A-15	Lab Sample ID:	280-138090-15
Client ID:	RW-7677PQ-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	25 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

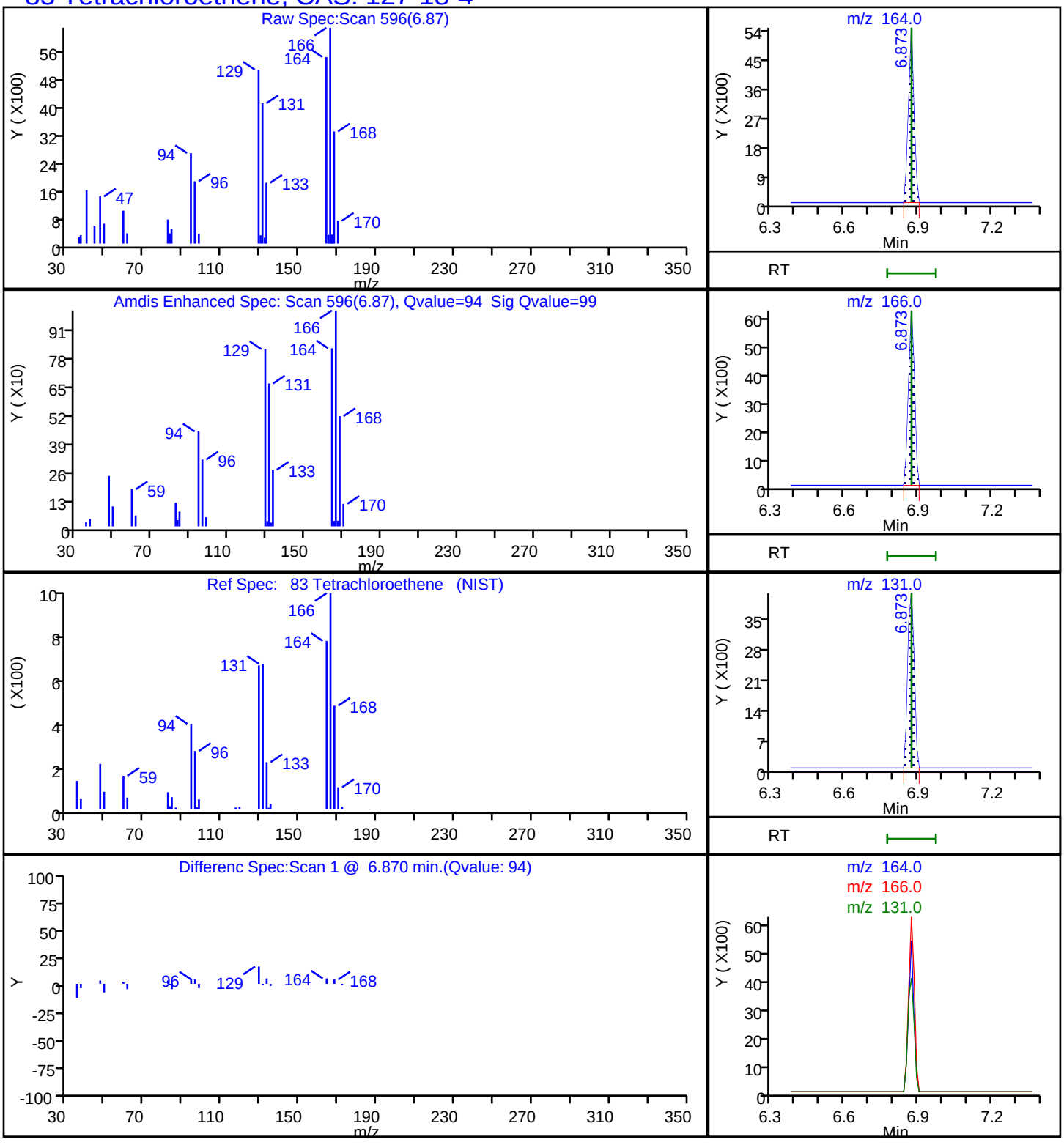
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2875.D		
Injection Date:	30-Jun-2020 06:13:30	Instrument ID:	VMS_P
Lims ID:	280-138090-A-15	Lab Sample ID:	280-138090-15
Client ID:	RW-7677PQ-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	25 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

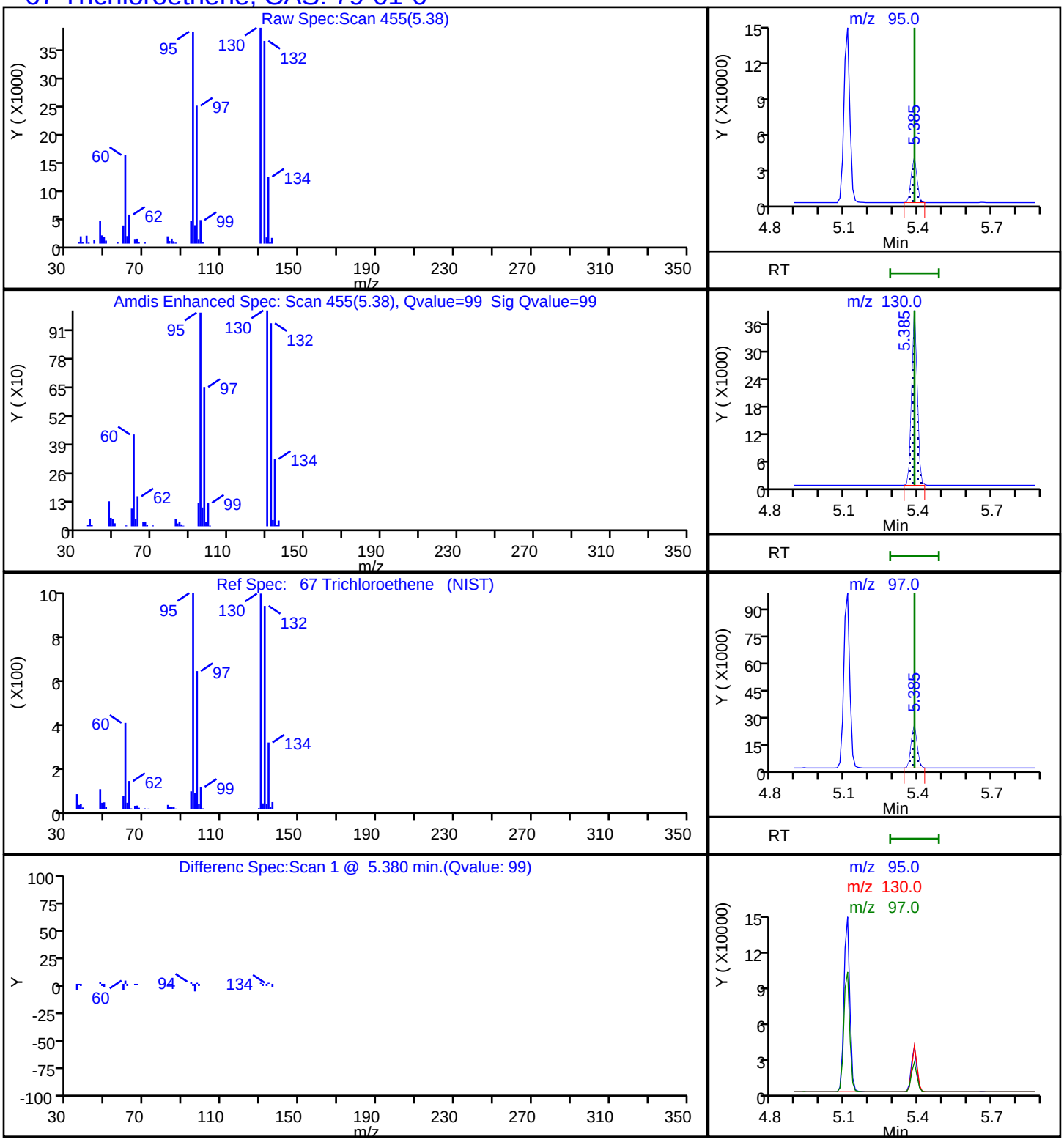
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2875.D		
Injection Date:	30-Jun-2020 06:13:30	Instrument ID:	VMS_P
Lims ID:	280-138090-A-15	Lab Sample ID:	280-138090-15
Client ID:	RW-7677PQ-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	25 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7070B-20200622 Lab Sample ID: 280-138090-16

Matrix: Water Lab File ID: P2876.D

Analysis Method: 8260B Date Collected: 06/22/2020 16:48

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	0.19	J	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7070B-20200622 Lab Sample ID: 280-138090-16

Matrix: Water Lab File ID: P2876.D

Analysis Method: 8260B Date Collected: 06/22/2020 16:48

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND	*	1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	0.59	J	1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	3.4		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2876.D
Lims ID: 280-138090-C-16
Client ID: RW-7070B-20200622
Sample Type: Client
Inject. Date: 30-Jun-2020 06:34:30 ALS Bottle#: 26 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-16 pH
Misc. Info.: 280-0092884-030
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:00 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:49:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.112	-0.002	99	2505093	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	557845	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.872	-0.002	97	792948	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	92	593308	49.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.857	4.868	-0.011	96	680739	48.0	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2449689	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	82	867974	49.6	
10 Dichlorodifluoromethane	85		1.670				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.171				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.888				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	75	2074	0.1948	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.268				ND	
51 Methacrylonitrile	41		4.384				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.385	5.385	0.000	97	34689	3.43	
70 1,2-Dichloropropane	63		5.596				ND	
71 Methyl methacrylate	100		5.598				ND	
73 Dibromomethane	93		5.659				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.873	6.873	0.000	89	4036	0.5935	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.424				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.889				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

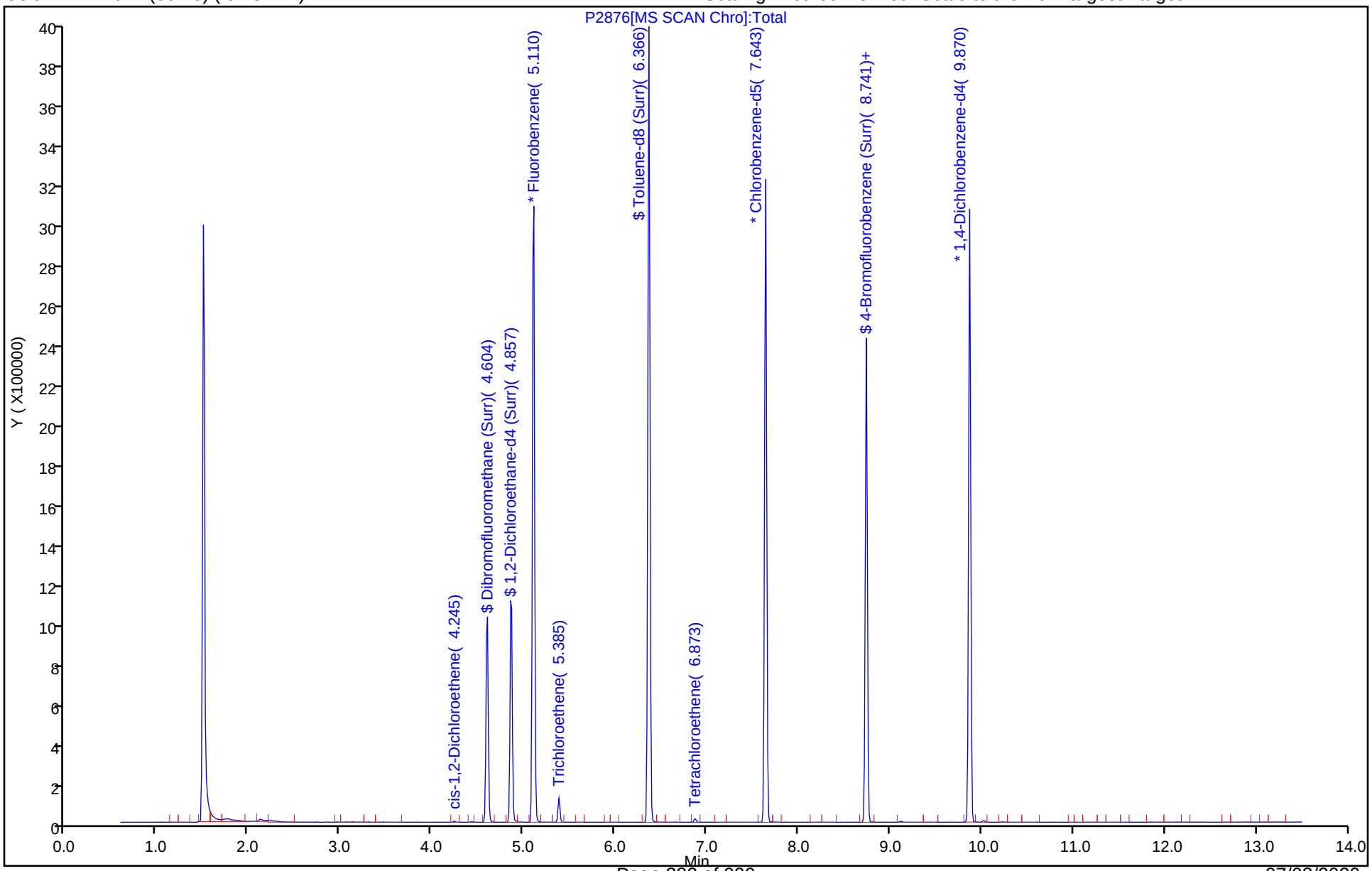
Report Date: 30-Jun-2020 20:51:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2876.D

Injection Date:	30-Jun-2020 06:34:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-C-16	Lab Sample ID:	280-138090-16	Worklist Smp#:	30
Client ID:	RW-7070B-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2876.D				
Lims ID:	280-138090-C-16				
Client ID:	RW-7070B-20200622				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 06:34:30	ALS Bottle#:	26	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-16 pH				
Misc. Info.:	280-0092884-030				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:51:00	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

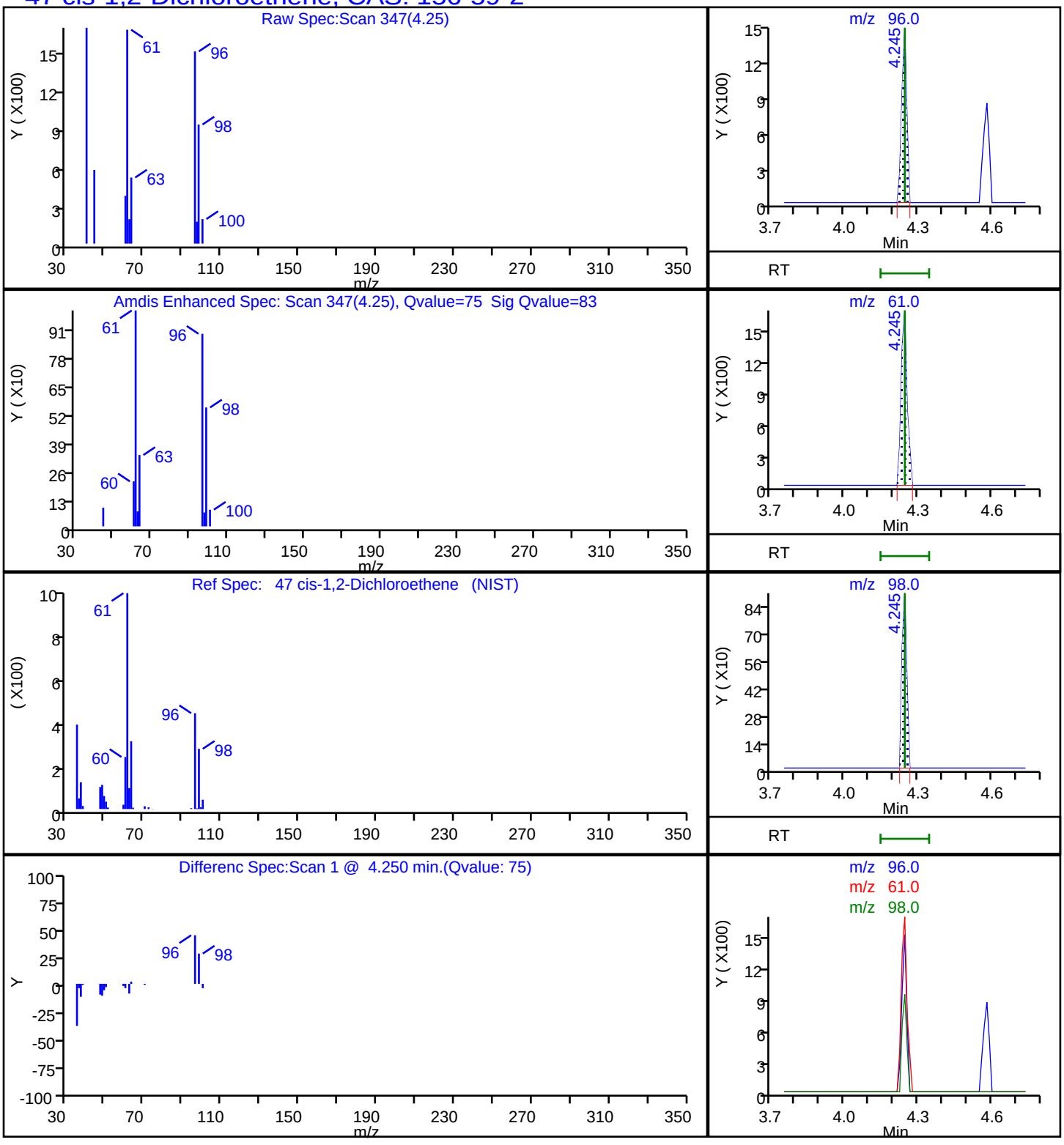
First Level Reviewer: petuninp Date: 30-Jun-2020 20:49:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.2	98.36
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	95.91
$ 6 Toluene-d8 (Surr)	50.0	49.9	99.81
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.6	99.19

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2876.D				
Injection Date:	30-Jun-2020 06:34:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-C-16	Lab Sample ID:	280-138090-16		
Client ID:	RW-7070B-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	26	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

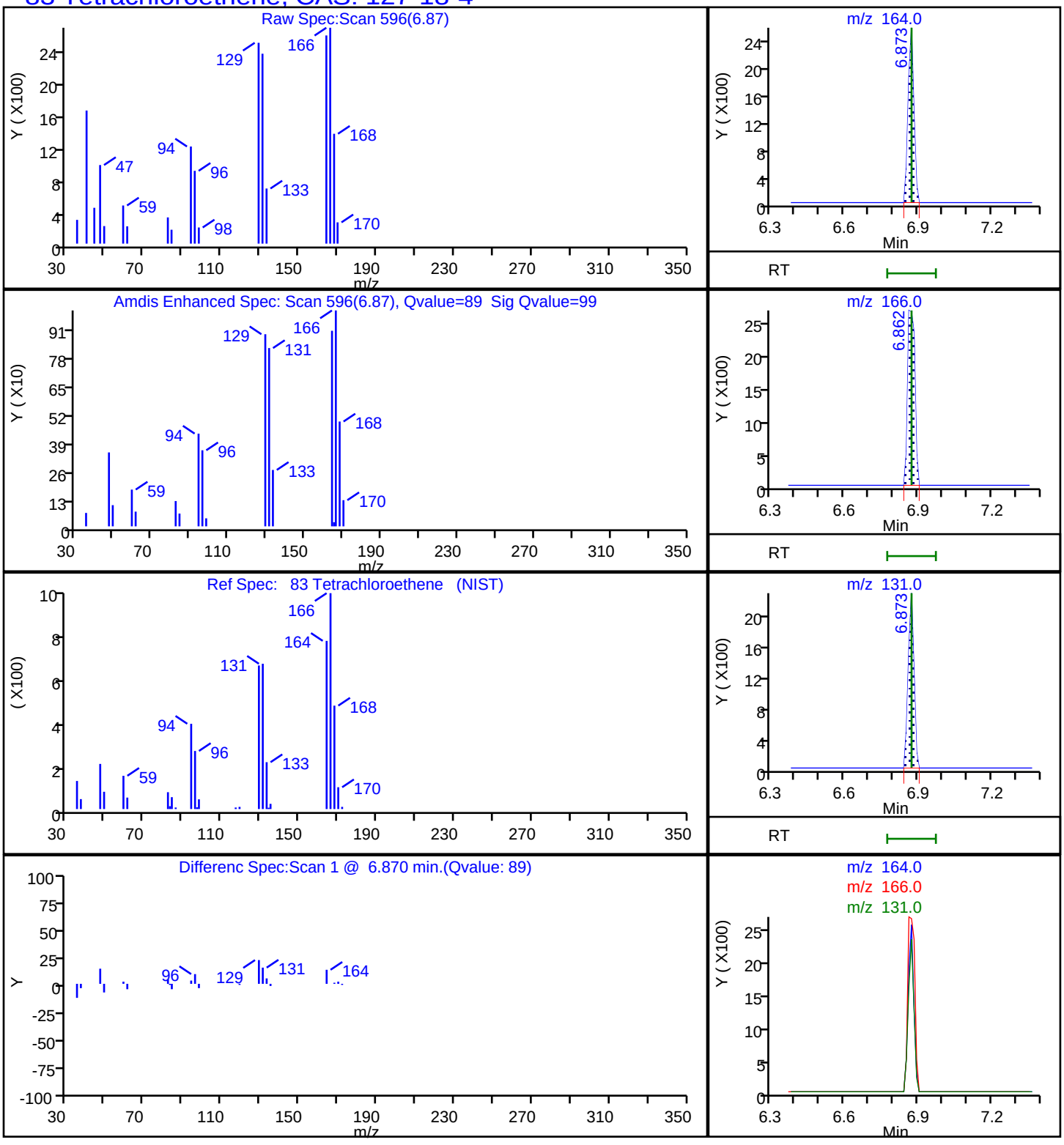
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2876.D		
Injection Date:	30-Jun-2020 06:34:30	Instrument ID:	VMS_P
Lims ID:	280-138090-C-16	Lab Sample ID:	280-138090-16
Client ID:	RW-7070B-20200622		
Operator ID:	PETUNINP	ALS Bottle#:	26 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

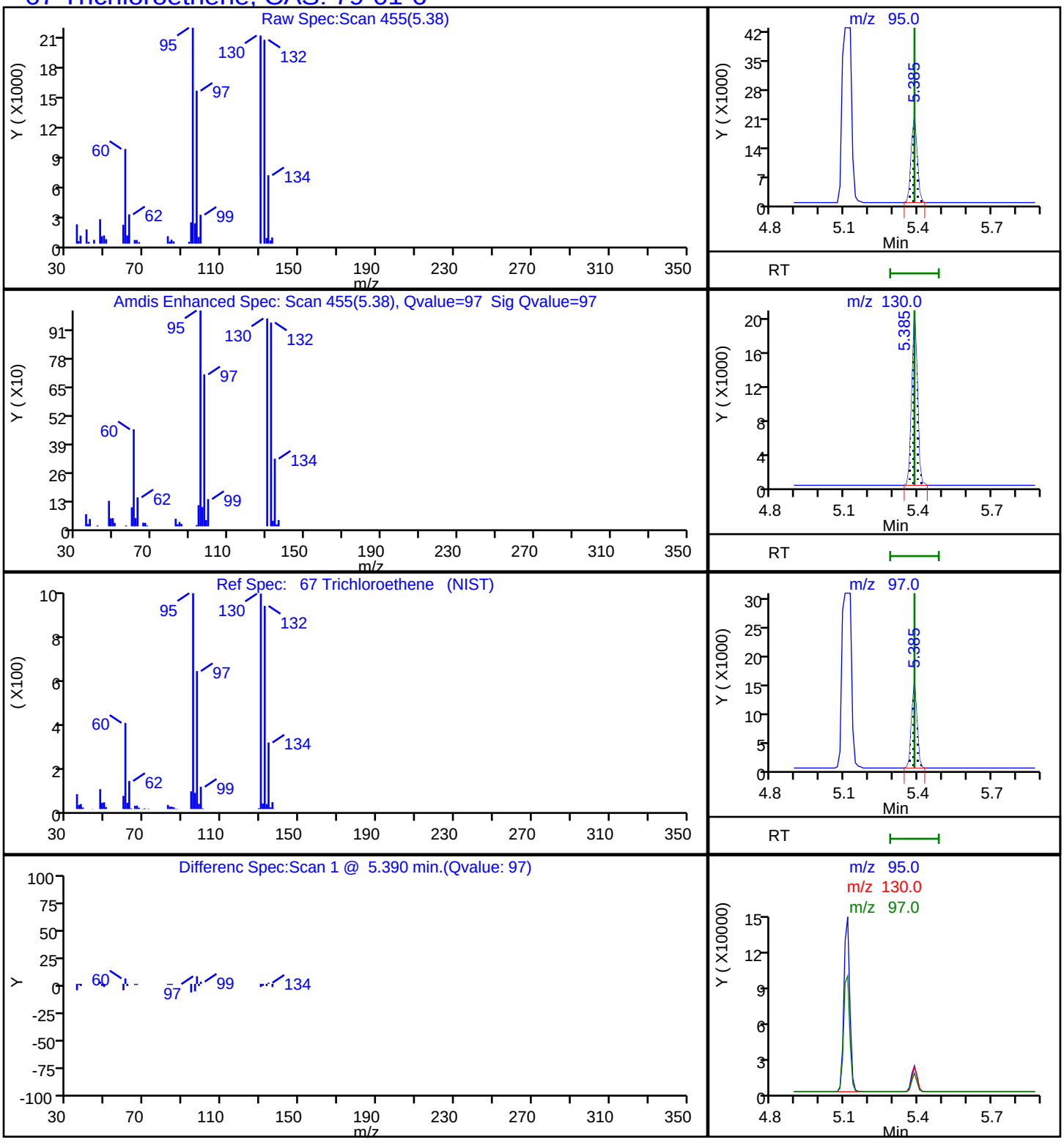
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2876.D				
Injection Date:	30-Jun-2020 06:34:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-C-16	Lab Sample ID:	280-138090-16		
Client ID:	RW-7070B-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	26	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8249P-20200623 Lab Sample ID: 280-138090-17

Matrix: Water Lab File ID: R6992.D

Analysis Method: 8260B Date Collected: 06/23/2020 10:22

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8249P-20200623 Lab Sample ID: 280-138090-17

Matrix: Water Lab File ID: R6992.D

Analysis Method: 8260B Date Collected: 06/23/2020 10:22

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6992.D
Lims ID: 280-138090-B-17
Client ID: RW-8249P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 05:54:30 ALS Bottle#: 23 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-B-17 pH
Misc. Info.: 280-0092885-026
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:25:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1657689	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	380318	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	579380	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	426233	50.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	511722	50.0	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1599469	48.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	590205	48.6	
10 Dichlorodifluoromethane	85		1.655				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
17 Trichlorofluoromethane	101		2.488				ND	
21 Acrolein	56		2.802				ND	
23 1,1-Dichloroethene	96		2.885				ND	
24 Acetone	43		2.900				ND	
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	
28 Acetonitrile	41		3.106				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.241				ND	
33 Acrylonitrile	53		3.398				ND	
35 trans-1,2-Dichloroethene	96		3.440				ND	
39 Vinyl acetate	43		3.728				ND	
40 1,1-Dichloroethane	63		3.755				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
45 2-Butanone (MEK)	43		4.133				ND	
47 cis-1,2-Dichloroethene	96		4.156				ND	
48 2,2-Dichloropropane	77		4.167				ND	
49 Propionitrile	54		4.182				ND	
51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
67 Trichloroethene	95		5.280				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

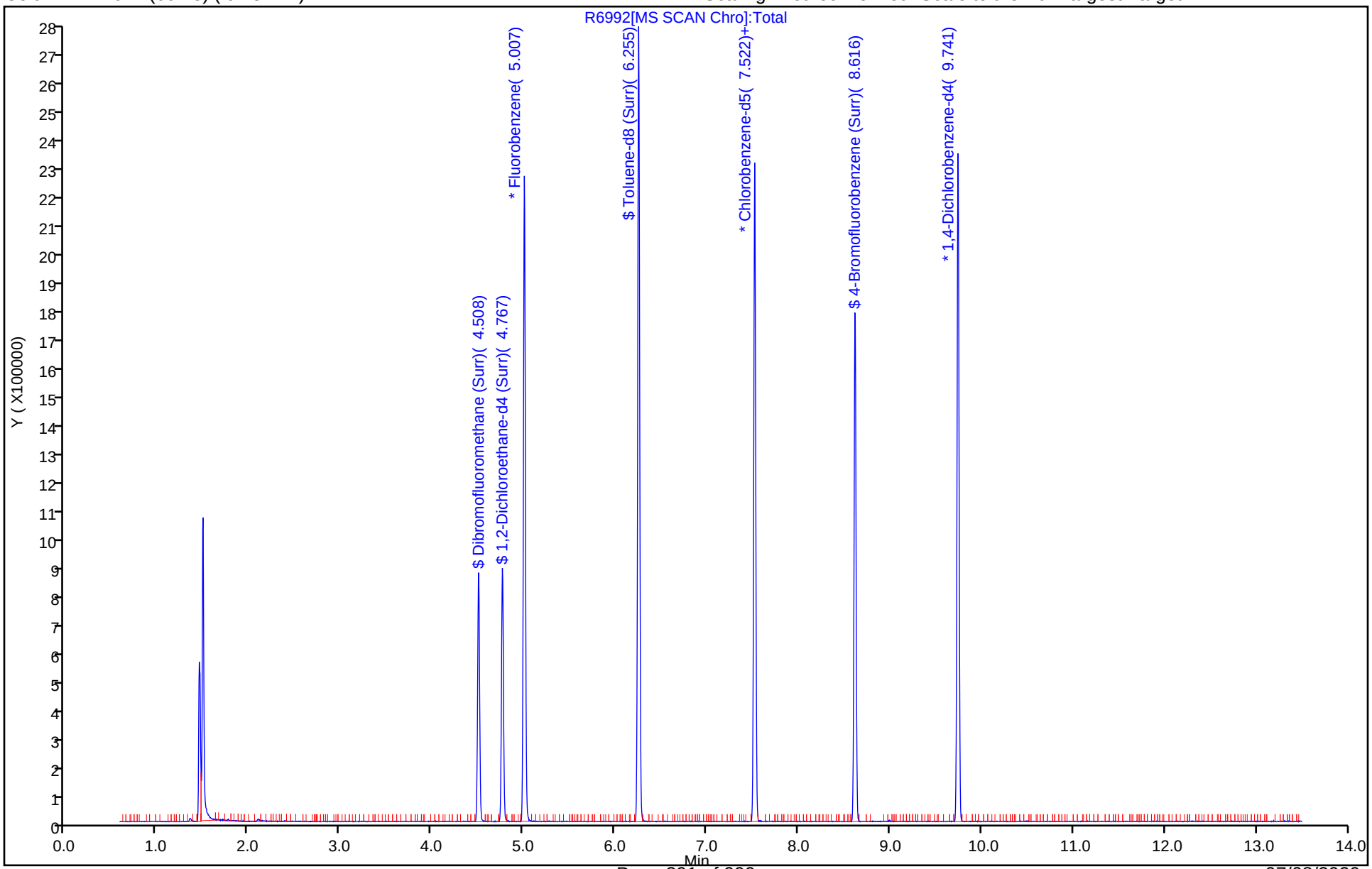
Report Date: 30-Jun-2020 20:29:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6992.D

Injection Date:	30-Jun-2020 05:54:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-B-17	Lab Sample ID:	280-138090-17	Worklist Smp#:	26
Client ID:	RW-8249P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6992.D				
Lims ID:	280-138090-B-17				
Client ID:	RW-8249P-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 05:54:30	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-B-17 pH				
Misc. Info.:	280-0092885-026				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 30-Jun-2020 20:25:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.9	101.90
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.0	99.97
$ 6 Toluene-d8 (Surr)	50.0	48.5	97.05
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.6	97.26

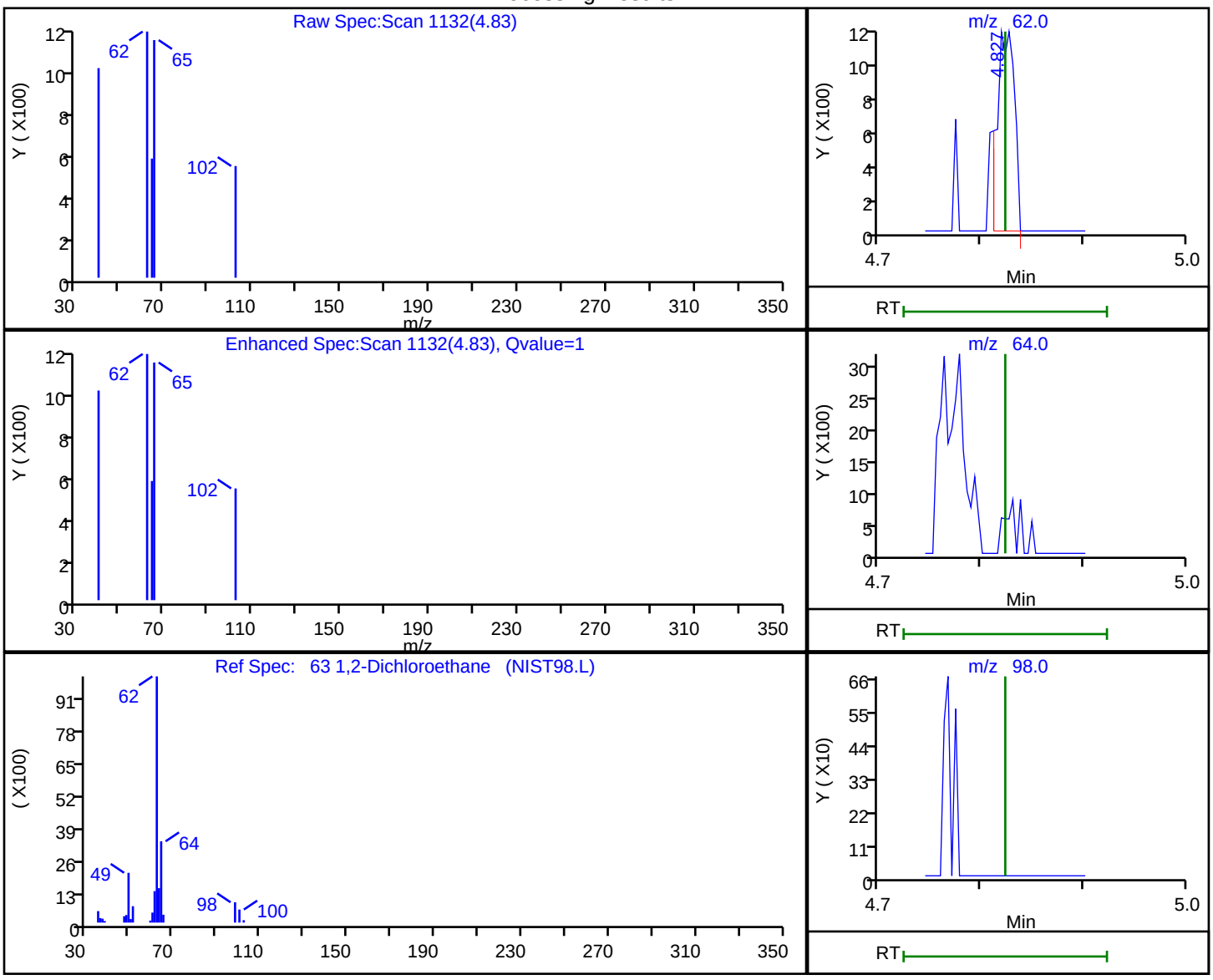
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6992.D				
Injection Date:	30-Jun-2020 05:54:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-B-17	Lab Sample ID:	280-138090-17		
Client ID:	RW-8249P-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.83	62.00	1329	0.144973
4.82	64.00	0	
4.82	98.00	0	

Reviewer: petuninp, 30-Jun-2020 20:25:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2151H-20200623 Lab Sample ID: 280-138090-18

Matrix: Water Lab File ID: R6993.D

Analysis Method: 8260B Date Collected: 06/23/2020 13:03

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	0.38	J	1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-2151H-20200623 Lab Sample ID: 280-138090-18

Matrix: Water Lab File ID: R6993.D

Analysis Method: 8260B Date Collected: 06/23/2020 13:03

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	5.8	B	1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6993.D
Lims ID: 280-138090-C-18
Client ID: RW-2151H-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 06:15:30 ALS Bottle#: 24 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-18 pH
Misc. Info.: 280-0092885-027
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:25:57

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.006	5.007	-0.001	99	1624772	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	368789	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	586818	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	417963	51.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.763	4.767	-0.004	0	508557	50.7	
$	6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1574437	49.3	
$	7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	596022	48.5	
	10 Dichlorodifluoromethane	85		1.655				ND	
	11 Chloromethane	50		1.828				ND	
	12 Vinyl chloride	62		1.918				ND	
	14 Bromomethane	94		2.195				ND	
	15 Chloroethane	64		2.285				ND	
	17 Trichlorofluoromethane	101		2.488				ND	
	21 Acrolein	56		2.802				ND	
	23 1,1-Dichloroethene	96		2.885				ND	
	24 Acetone	43		2.900				ND	
	26 Iodomethane	142		3.001				ND	
	27 Carbon disulfide	76		3.061				ND	
	28 Acetonitrile	41		3.106				ND	
	30 3-Chloro-1-propene	41		3.147				ND	
	31 Methylene Chloride	84		3.241				ND	
	33 Acrylonitrile	53		3.398				ND	
	35 trans-1,2-Dichloroethene	96		3.440				ND	
	39 Vinyl acetate	43		3.728				ND	
	40 1,1-Dichloroethane	63		3.755				ND	
	42 2-Chloro-1,3-butadiene	53		3.803				ND	
	45 2-Butanone (MEK)	43		4.133				ND	
	47 cis-1,2-Dichloroethene	96	4.156	4.156	0.000	1	2416	0.3787	
	48 2,2-Dichloropropane	77		4.167				ND	
	49 Propionitrile	54		4.182				ND	
	51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
67 Trichloroethene	95	5.276	5.280	-0.004	96	35577	5.83	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

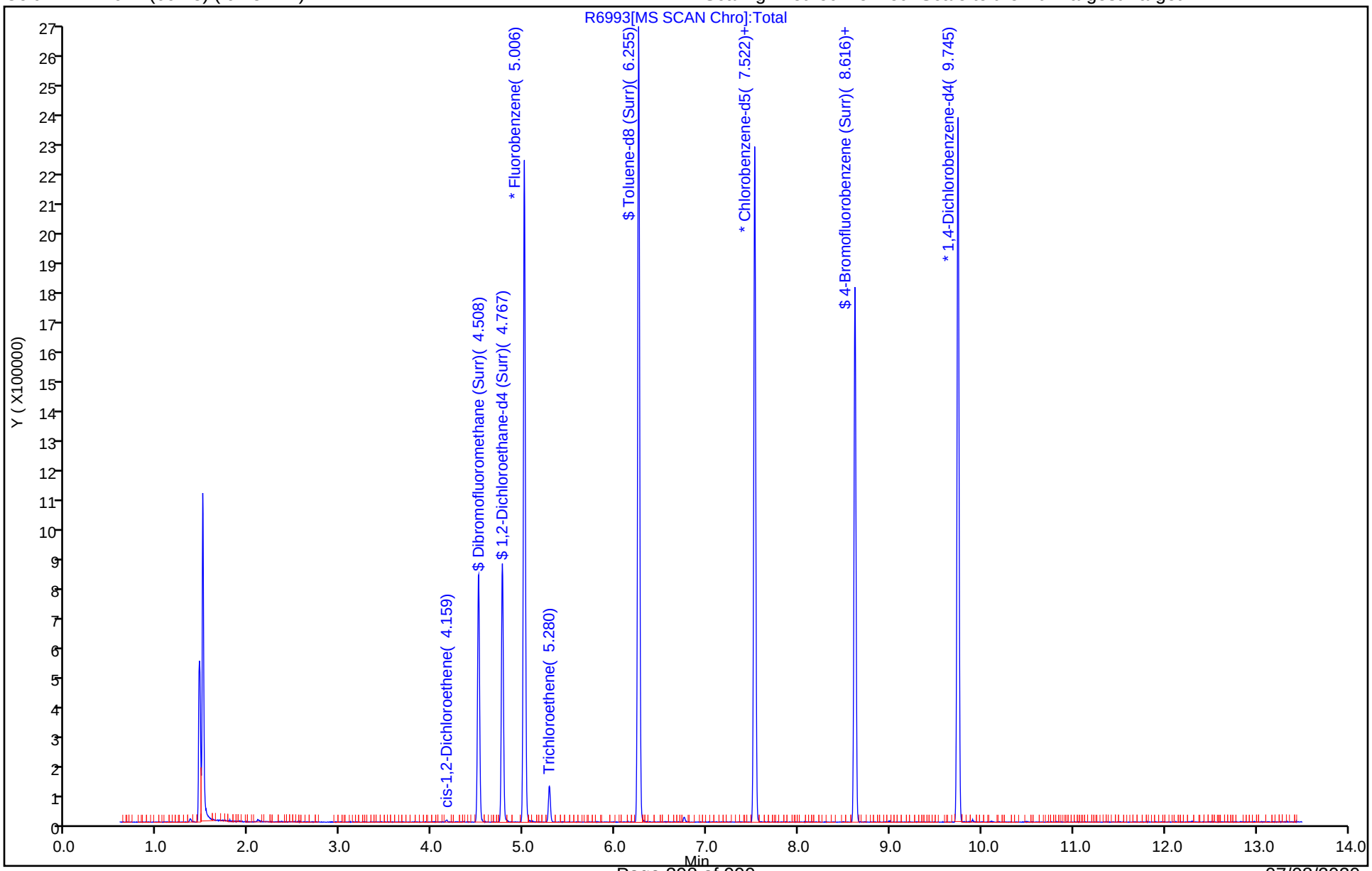
Report Date: 30-Jun-2020 20:29:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6993.D

Injection Date:	30-Jun-2020 06:15:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-C-18	Lab Sample ID:	280-138090-18	Worklist Smp#:	27
Client ID:	RW-2151H-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6993.D				
Lims ID:	280-138090-C-18				
Client ID:	RW-2151H-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 06:15:30	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-18 pH				
Misc. Info.:	280-0092885-027				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

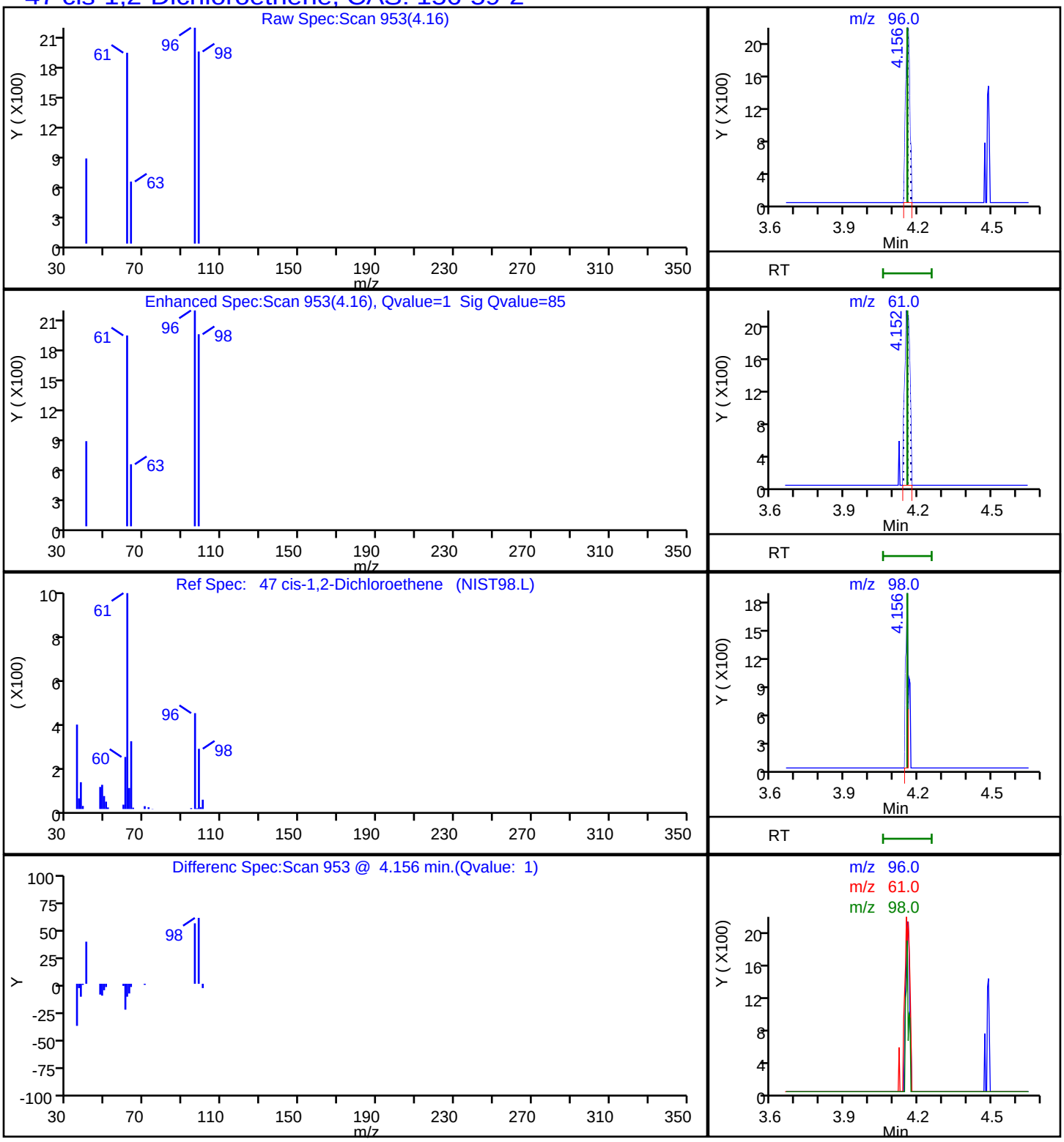
First Level Reviewer: petuninp Date: 30-Jun-2020 20:25:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	51.0	101.95
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.7	101.37
$ 6 Toluene-d8 (Surr)	50.0	49.3	98.52
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.5	96.98

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6993.D				
Injection Date:	30-Jun-2020 06:15:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-C-18	Lab Sample ID:	280-138090-18		
Client ID:	RW-2151H-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

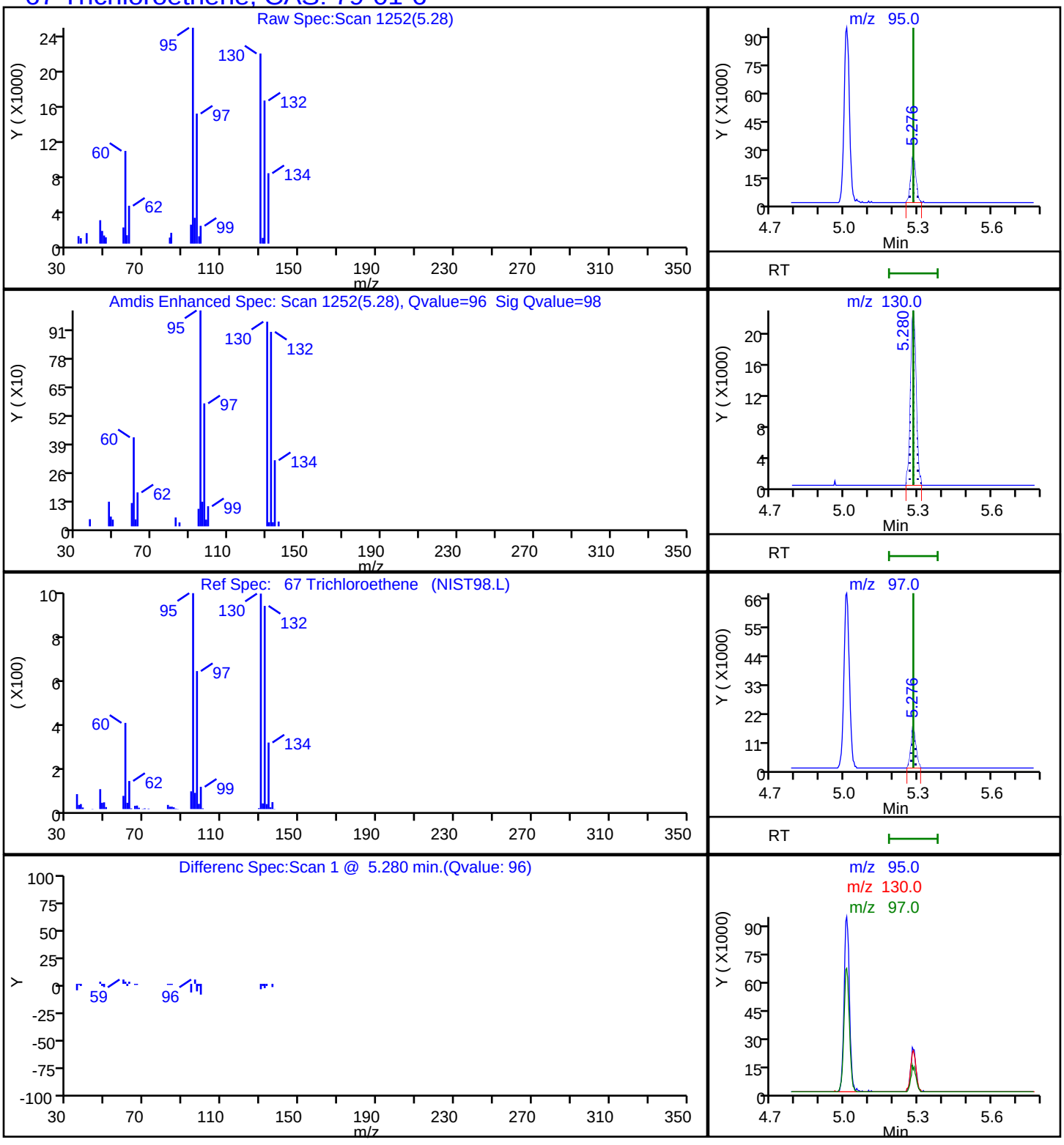
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6993.D				
Injection Date:	30-Jun-2020 06:15:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-C-18	Lab Sample ID:	280-138090-18		
Client ID:	RW-2151H-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

67 Trichloroethene, CAS: 79-01-6



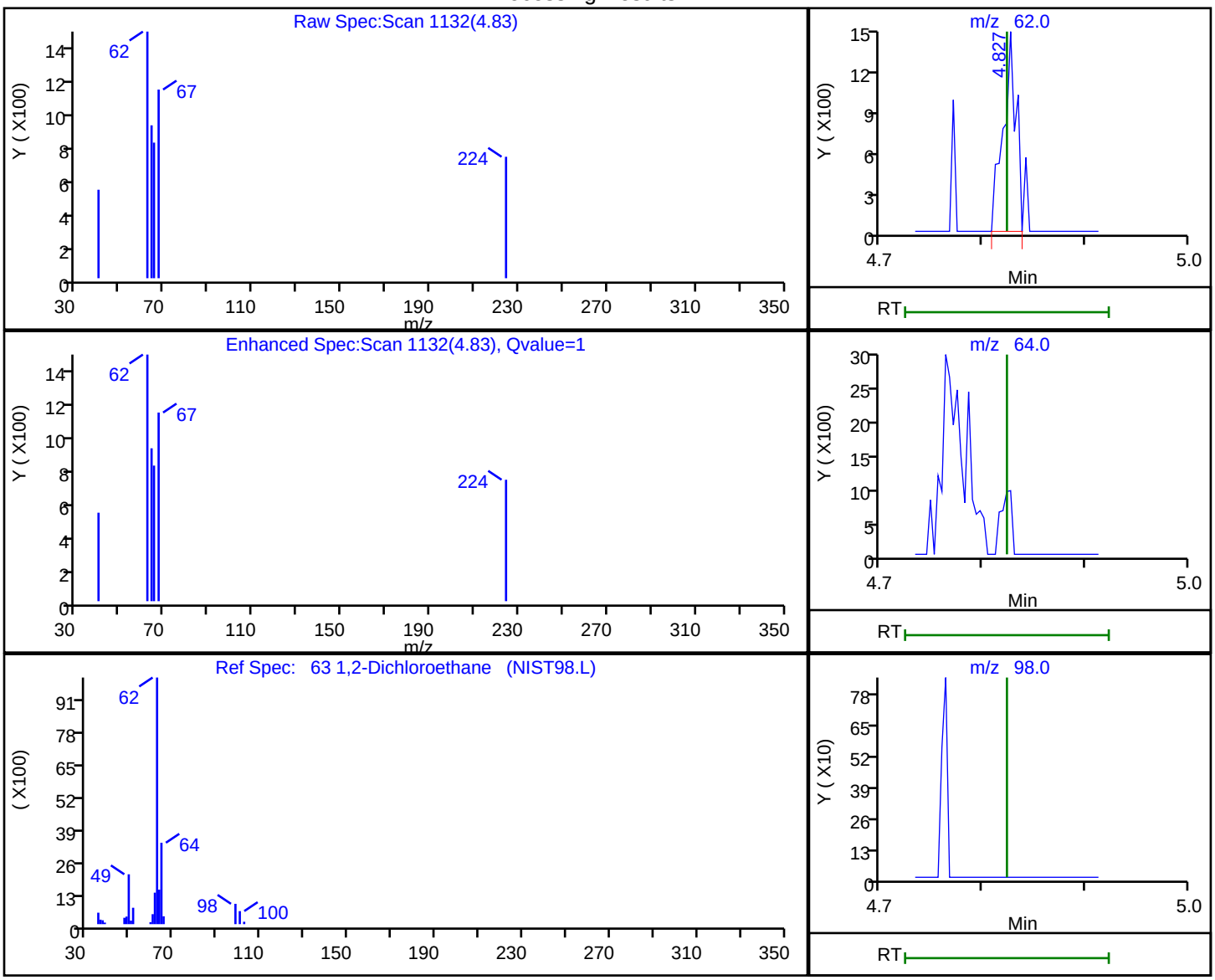
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6993.D				
Injection Date:	30-Jun-2020 06:15:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-C-18	Lab Sample ID:	280-138090-18		
Client ID:	RW-2151H-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.83	62.00	1318	0.146685
4.82	64.00	0	
4.82	98.00	0	

Reviewer: petuninp, 30-Jun-2020 20:25:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688P-20200623 Lab Sample ID: 280-138090-19

Matrix: Water Lab File ID: R6994.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:21

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688P-20200623 Lab Sample ID: 280-138090-19

Matrix: Water Lab File ID: R6994.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:21

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6994.D
Lims ID: 280-138090-C-19
Client ID: RW-7688P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 06:36:30 ALS Bottle#: 25 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-19 pH
Misc. Info.: 280-0092885-028
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:26:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1654828	50.0	
* 2 Chlorobenzene-d5	119	7.526	7.522	0.004	86	382489	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	586782	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	426258	51.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	519447	50.8	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1618827	48.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	592035	48.2	
$ 8 Trifluorotoluene (Surr)	1		0.000				ND	
$ 9 BFB	95		3.516				ND	
10 Dichlorodifluoromethane	85		1.655				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
13 Ethylene oxide	43		2.165				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
16 Dichlorofluoromethane	67		2.454				ND	
17 Trichlorofluoromethane	101		2.488				ND	
18 Ethanol	45		2.604				ND	
19 Ethyl ether	59		2.697				ND	
20 Propene oxide	58		2.739				ND	
21 Acrolein	56		2.802				ND	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.881				ND	
23 1,1-Dichloroethene	96		2.885				ND	
24 Acetone	43		2.900				ND	
25 Isopropyl alcohol	45		2.990				ND	
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	
28 Acetonitrile	41		3.106				ND	
29 Methyl acetate	43		3.125				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.241				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59		3.282				ND	
33 Acrylonitrile	53		3.398				ND	
34 Methyl tert-butyl ether	73		3.425				ND	
35 trans-1,2-Dichloroethene	96		3.440				ND	
36 Chlorotrifluoroethene	116		3.531				ND	
37 Hexane	57		3.627				ND	
38 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.727				ND	
39 Vinyl acetate	43		3.728				ND	
41 Isopropyl ether	87		3.751				ND	
40 1,1-Dichloroethane	63		3.755				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
43 2-Chloro-1,1,1-Trifluoroethane	118		3.951				ND	
44 Tert-butyl ethyl ether	59		4.009				ND	
45 2-Butanone (MEK)	43		4.133				ND	
46 Ethyl acetate	43		4.144				ND	
47 cis-1,2-Dichloroethene	96		4.156				ND	
48 2,2-Dichloropropane	77		4.167				ND	
49 Propionitrile	54		4.182				ND	
50 sec-Butyl Alcohol	45		4.242				ND	
51 Methacrylonitrile	41		4.294				ND	
52 Chlorobromomethane	128		4.332				ND	
53 Tetrahydrofuran	42		4.339				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
56 Cyclohexane	56		4.591				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
58 1,2-Dichloro-1,1,2-trifluoroetha	117		4.678				ND	
61 1,1,1-Trifluoro-2,2-dichloroetha	83		4.706				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
64 Tert-amyl methyl ether	73		4.864				ND	
65 n-Heptane	43		4.980				ND	
66 n-Butanol	56		5.145				ND	
67 Trichloroethene	95		5.280				ND	
68 2-Pentanone	43		5.381				ND	
69 Methylcyclohexane	55		5.471				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
72 1,4-Dioxane	88		5.531				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
75 2-Nitropropane	41		5.843				ND	
76 2-Chloroethyl vinyl ether	63		5.880				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
86 Tetrahydrothiophene	60		6.997				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
89 1-Chlorohexane	91		7.507				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
97 Isopropylbenzene	105		8.444				ND	
98 cis-1,4-Dichloro-2-butene	53		8.493				ND	
99 Cyclohexanone	55		8.542				ND	U
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
101 Bromobenzene	156		8.763				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
104 N-Propylbenzene	120		8.845				ND	
105 2-Chlorotoluene	126		8.939				ND	
106 1,3,5-Trimethylbenzene	105		9.014				ND	
107 4-Chlorotoluene	126		9.055				ND	
108 tert-Butylbenzene	119		9.325				ND	
110 1,2,4-Trimethylbenzene	105		9.381				ND	
109 Pentachloroethane	167		9.392				ND	
111 sec-Butylbenzene	134		9.542				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
113 4-Isopropyltoluene	119		9.689				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
115 1,2,3-Trimethylbenzene	105		9.786				ND	
116 n-Butylbenzene	91		10.094				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
119 1,3,5-Trichlorobenzene	180		11.087				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
121 Hexachlorobutadiene	225		11.863				ND	
122 Naphthalene	128		11.994				ND	
123 1,2,3-Trichlorobenzene	180		12.211				ND	
125 3-Ethylpentane	1		0.000				ND	
124 3-Methylhexane	1		0.000				ND	
132 3,3-Dimethylpentane	1		0.000				ND	
128 2,4-Dimethylpentane	1		0.000				ND	
126 Dimethyl disulfide	1		0.000				ND	
167 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
133 2-Methylhexane	1		0.000				ND	
165 t-Amyl alcohol	1		0.000				ND	
166 Ethyl acrylate	55		0.000				ND	
131 2,3-Dimethylpentane	1		0.000				ND	
130 2,2-Dimethylpentane	1		0.000				ND	
127 n-Nonyl Aldehyde	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
129 2,2,3-Trimethylbutane	1		0.000				ND	
134 Propene oxide TIC	58		5.334				ND	
S 135 1,2-Dichloroethene, Total (URS)	96		2.000				ND	
S 139 Xylenes, Total (URS)	1		0.000				ND	
S 138 Xylenes, Total	106		0.000				ND	
S 140 Trihalomethanes, Total	1		0.000				ND	
S 142 TAH	1				0		0	
S 136 1,3-Dichloropropene, Total	1		0.000				ND	
S 141 1,2-Dichloroethene, Total	1		0.000				ND	
S 137 Total BTEX	1		0.000				ND	
T 143 Dichloroacetonitrile TIC	74		1.000				ND	
T 146 Propene TIC	1		0.000				ND	
T 144 1,3-Butadiene TIC	1		0.000				ND	
T 150 4-Ethyltoluene TIC	1		0.000				ND	
T 152 Methyl cyclohexane TIC	1		0.000				ND	
T 148 Dicyclopentadiene TIC	1		0.000				ND	
T 147 2-Butoxyethanol TIC	1		0.000				ND	
T 149 2,3-dichloro-1-propene TIC	75		0.000				ND	
T 145 1-Chlorohexane TIC	1		0.000				ND	
T 151 n-Nonane TIC	1		0.000				ND	
T 153 Cyclohexane TIC	1		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

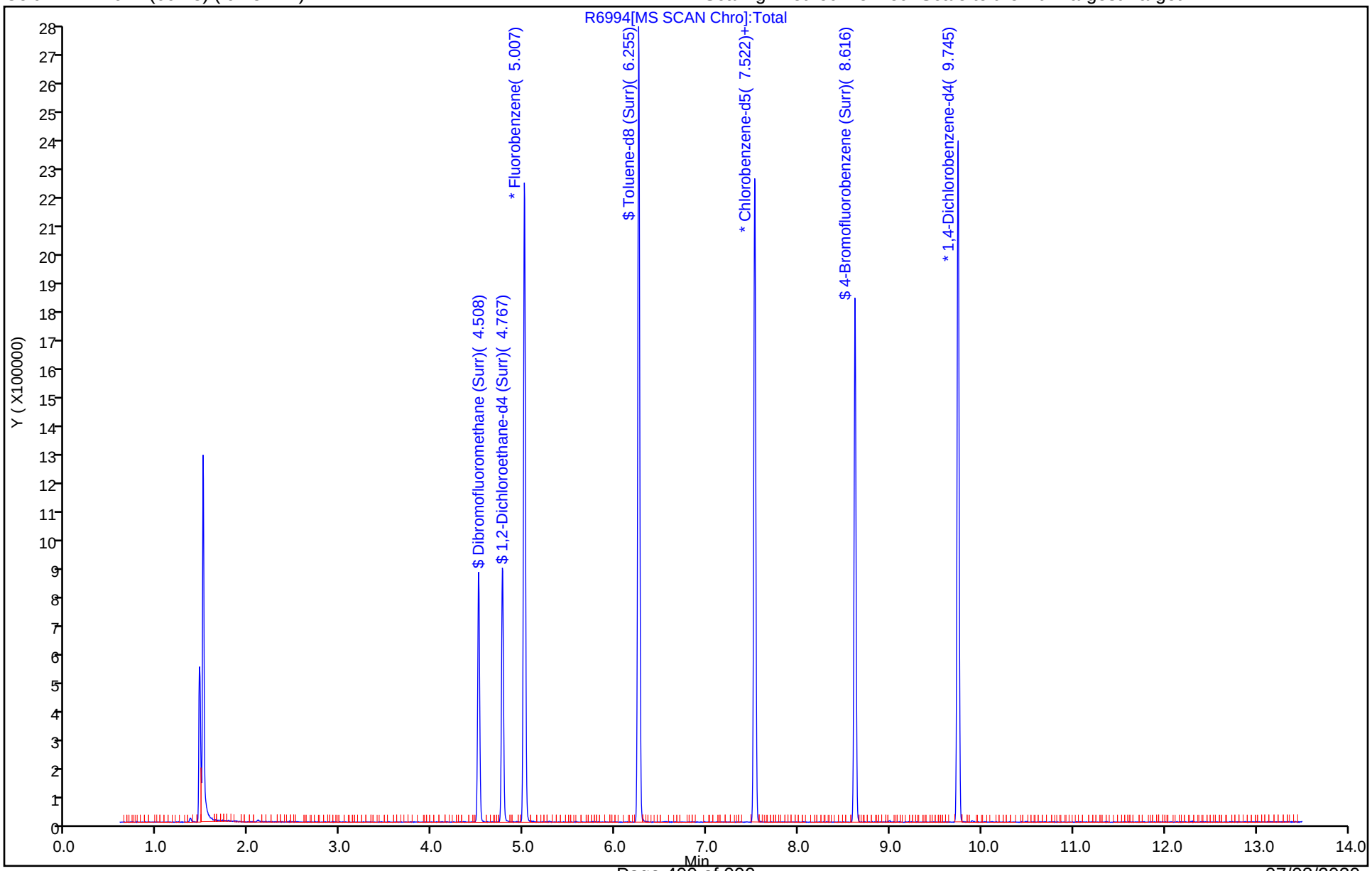
Report Date: 30-Jun-2020 20:30:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6994.D

Injection Date:	30-Jun-2020 06:36:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-C-19	Lab Sample ID:	280-138090-19	Worklist Smp#:	28
Client ID:	RW-7688P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6994.D				
Lims ID:	280-138090-C-19				
Client ID:	RW-7688P-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 06:36:30	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-19 pH				
Misc. Info.:	280-0092885-028				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:26:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	51.0	102.08
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.8	101.66
$ 6 Toluene-d8 (Surr)	50.0	48.8	97.67
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.2	96.33

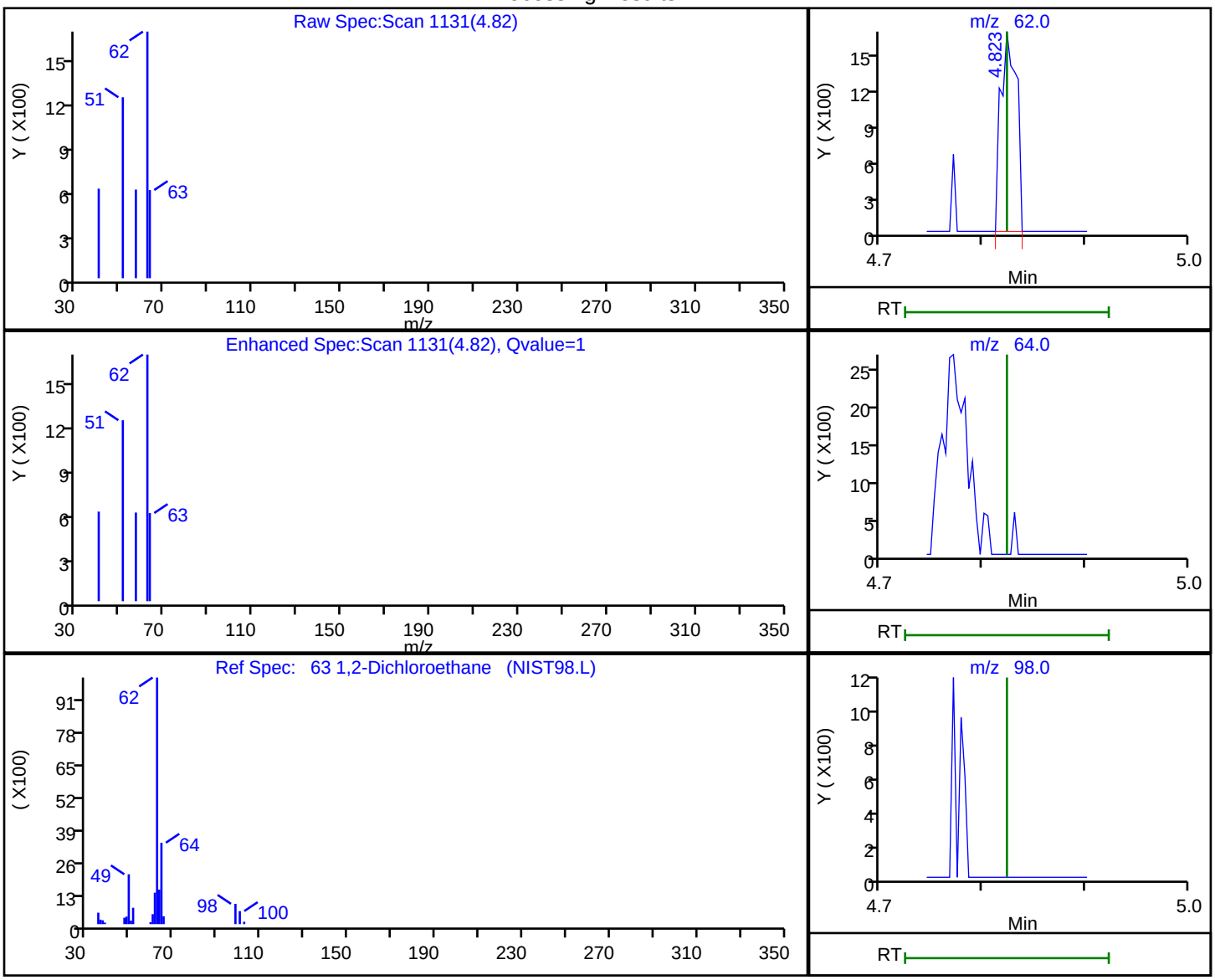
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6994.D				
Injection Date:	30-Jun-2020 06:36:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-C-19	Lab Sample ID:	280-138090-19		
Client ID:	RW-7688P-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.82	62.00	1734	0.189479
4.82	64.00	0	
4.82	98.00	0	

Reviewer: petuninp, 30-Jun-2020 20:26:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688PQ-20200623 Lab Sample ID: 280-138090-20

Matrix: Water Lab File ID: R6997.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:26

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 07:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688PQ-20200623 Lab Sample ID: 280-138090-20

Matrix: Water Lab File ID: R6997.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:26

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 07:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6997.D
Lims ID: 280-138090-A-20
Client ID: RW-7688PQ-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 07:40:30 ALS Bottle#: 28 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-20 pH
Misc. Info.: 280-0092885-031
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:03 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:29:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	1690952	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	385836	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	617890	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	93	434185	50.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	524012	50.2	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1653170	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	618623	47.8	
10 Dichlorodifluoromethane	85		1.655				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
17 Trichlorofluoromethane	101		2.488				ND	
21 Acrolein	56		2.802				ND	
23 1,1-Dichloroethene	96		2.885				ND	
24 Acetone	43		2.900				ND	U
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	U
28 Acetonitrile	41		3.106				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.241				ND	
33 Acrylonitrile	53		3.398				ND	
35 trans-1,2-Dichloroethene	96		3.440				ND	
39 Vinyl acetate	43		3.728				ND	
40 1,1-Dichloroethane	63		3.755				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
45 2-Butanone (MEK)	43		4.133				ND	
47 cis-1,2-Dichloroethene	96		4.156				ND	
48 2,2-Dichloropropane	77		4.167				ND	
49 Propionitrile	54		4.182				ND	
51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	
67 Trichloroethene	95		5.280				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

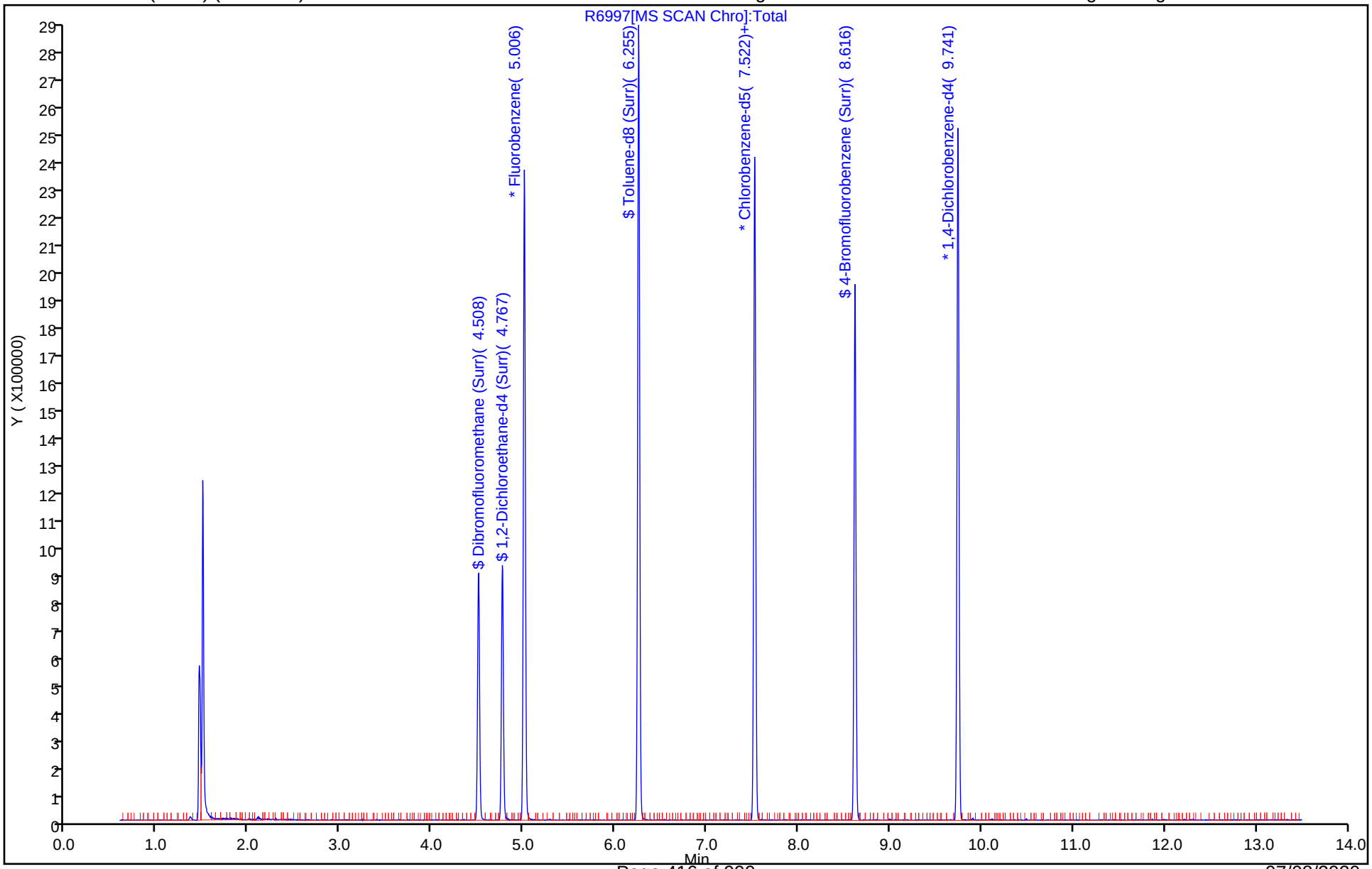
Report Date: 30-Jun-2020 20:31:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6997.D

Injection Date:	30-Jun-2020 07:40:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-A-20	Lab Sample ID:	280-138090-20	Worklist Smp#:	31
Client ID:	RW-7688PQ-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6997.D				
Lims ID:	280-138090-A-20				
Client ID:	RW-7688PQ-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 07:40:30	ALS Bottle#:	28	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-20 pH				
Misc. Info.:	280-0092885-031				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:31:03	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:29:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.9	101.76
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.2	100.36
$ 6 Toluene-d8 (Surr)	50.0	49.4	98.87
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.8	95.59

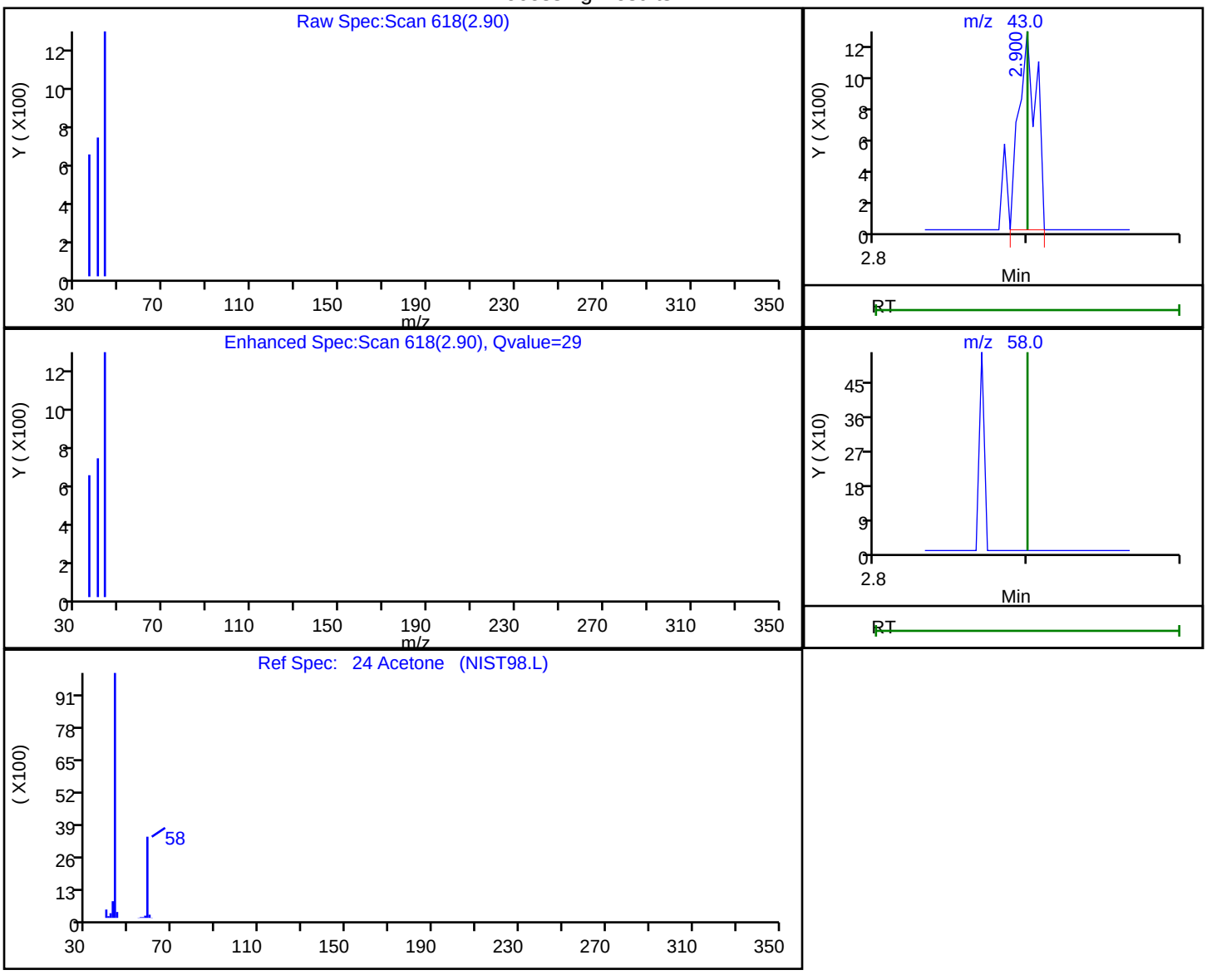
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6997.D				
Injection Date:	30-Jun-2020 07:40:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-20	Lab Sample ID:	280-138090-20		
Client ID:	RW-7688PQ-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	28	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.90	43.00	1012	0.416884
2.90	58.00	0	

Reviewer: petuninp, 30-Jun-2020 20:28:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

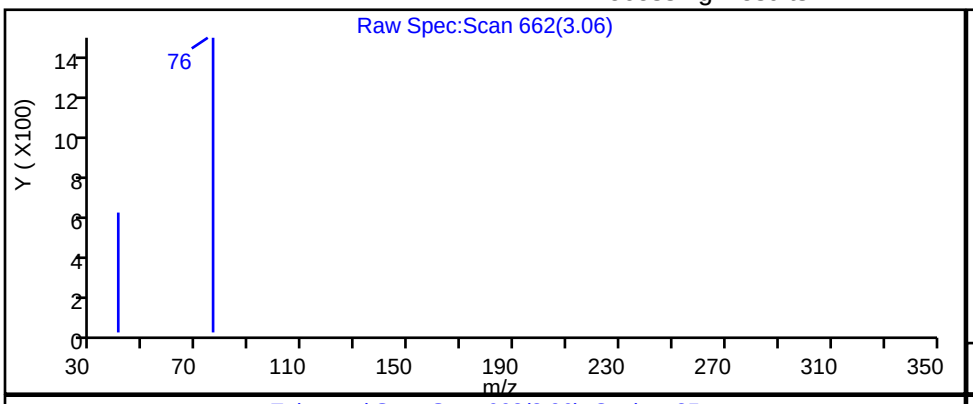
User Disabled Compound Report

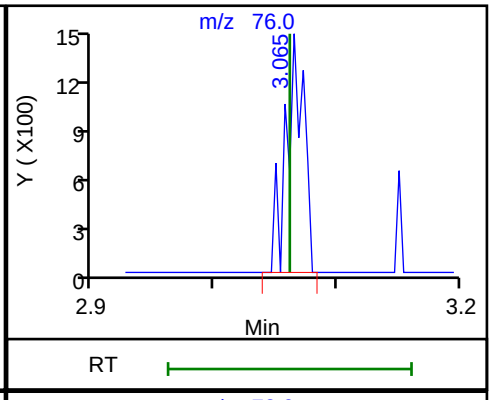
Eurofins TestAmerica, Denver

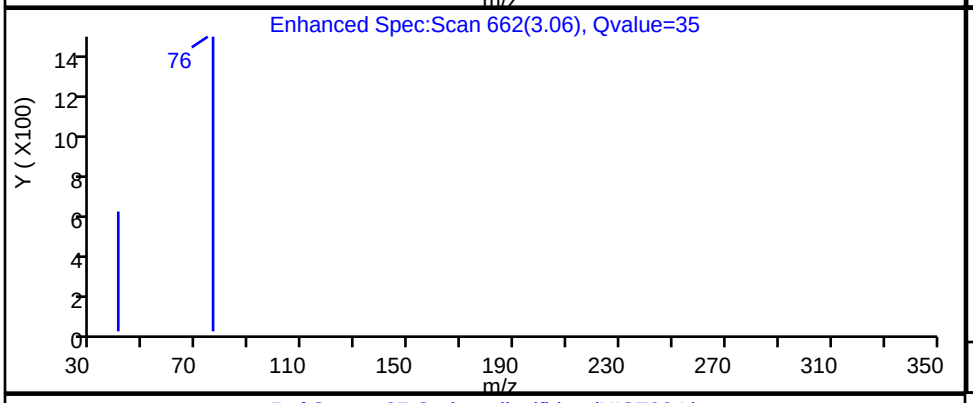
Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6997.D				
Injection Date:	30-Jun-2020 07:40:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-20	Lab Sample ID:	280-138090-20		
Client ID:	RW-7688PQ-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	28	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

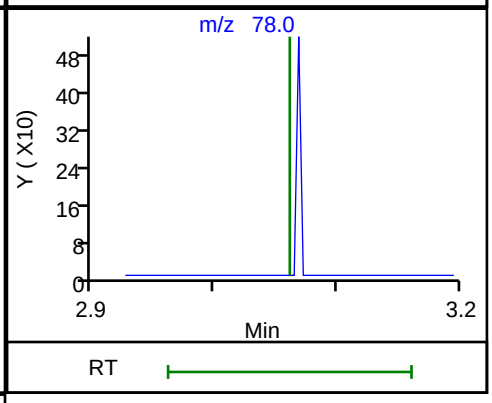
27 Carbon disulfide, CAS: 75-15-0

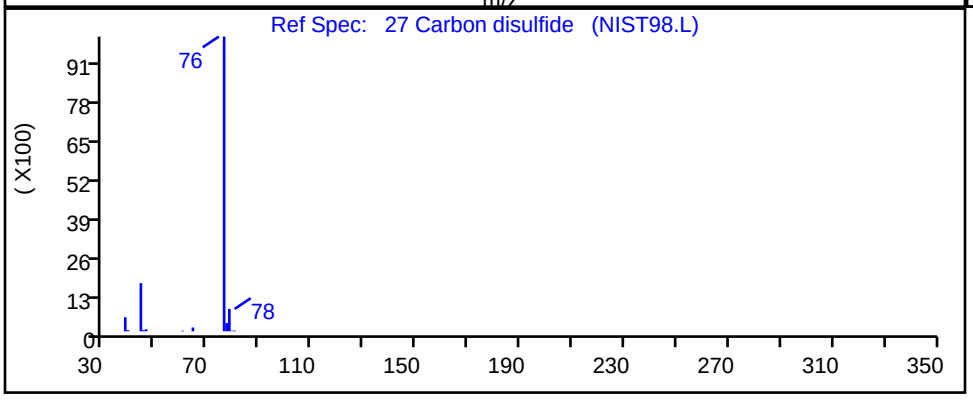
Processing Results











RT	Mass	Response	Amount
3.06	76.00	1438	0.420106
3.06	78.00	0	

Reviewer: petuninp, 30-Jun-2020 20:29:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8284P-20200623 | Lab Sample ID: 280-138090-21

Matrix: Water | Lab File ID: R6998.D

Analysis Method: 8260B | Date Collected: 06/23/2020 16:12

Sample wt/vol: 5(mL) | Date Analyzed: 06/30/2020 08:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

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

Analysis Batch No.: 500580 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-8284P-20200623 Lab Sample ID: 280-138090-21

Matrix: Water Lab File ID: R6998.D

Analysis Method: 8260B Date Collected: 06/23/2020 16:12

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 08:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	0.93	J	1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	3.9	B	1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6998.D
Lims ID: 280-138090-A-21
Client ID: RW-8284P-20200623
Sample Type: Client
Inject. Date: 30-Jun-2020 08:02:30 ALS Bottle#: 29 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-21 pH
Misc. Info.: 280-0092885-032
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:03 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:29:33

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.007	5.007	0.000	99	1718754	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	390359	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	617477	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.504	4.508	-0.004	93	436971	50.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	537696	50.7	
$	6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1653637	48.9	
$	7 4-Bromofluorobenzene (Surr)	95	8.617	8.620	-0.003	86	620146	47.9	
	10 Dichlorodifluoromethane	85		1.655				ND	
	11 Chloromethane	50		1.828				ND	
	12 Vinyl chloride	62		1.918				ND	
	14 Bromomethane	94		2.195				ND	
	15 Chloroethane	64		2.285				ND	
	17 Trichlorofluoromethane	101		2.488				ND	
	21 Acrolein	56		2.802				ND	
	23 1,1-Dichloroethene	96		2.885				ND	
	24 Acetone	43		2.900				ND	
	26 Iodomethane	142		3.001				ND	
	27 Carbon disulfide	76		3.061				ND	
	28 Acetonitrile	41		3.106				ND	
	30 3-Chloro-1-propene	41		3.147				ND	
	31 Methylene Chloride	84		3.241				ND	
	33 Acrylonitrile	53		3.398				ND	
	35 trans-1,2-Dichloroethene	96		3.440				ND	
	39 Vinyl acetate	43		3.728				ND	
	40 1,1-Dichloroethane	63		3.755				ND	
	42 2-Chloro-1,3-butadiene	53		3.803				ND	
	45 2-Butanone (MEK)	43		4.133				ND	
	47 cis-1,2-Dichloroethene	96		4.156				ND	
	48 2,2-Dichloropropane	77		4.167				ND	
	49 Propionitrile	54		4.182				ND	
	51 Methacrylonitrile	41		4.294				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.332				ND	
54 Chloroform	83		4.392				ND	
55 1,1,1-Trichloroethane	97		4.534				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.658				ND	
62 Benzene	78		4.797				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
67 Trichloroethene	95	5.280	5.280	0.000	94	25462	3.95	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.558				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.026				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127				ND	
79 Toluene	91		6.315				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164	6.753	6.753	0.000	85	2879	0.9255	
84 1,3-Dichloropropane	76		6.810				ND	
85 2-Hexanone	43		6.828				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.107				ND	
95 Styrene	104		8.122				ND	
96 Bromoform	173		8.298				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	
103 1,2,3-Trichloropropane	110		8.796				ND	
112 1,3-Dichlorobenzene	146		9.670				ND	
114 1,4-Dichlorobenzene	146		9.767				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

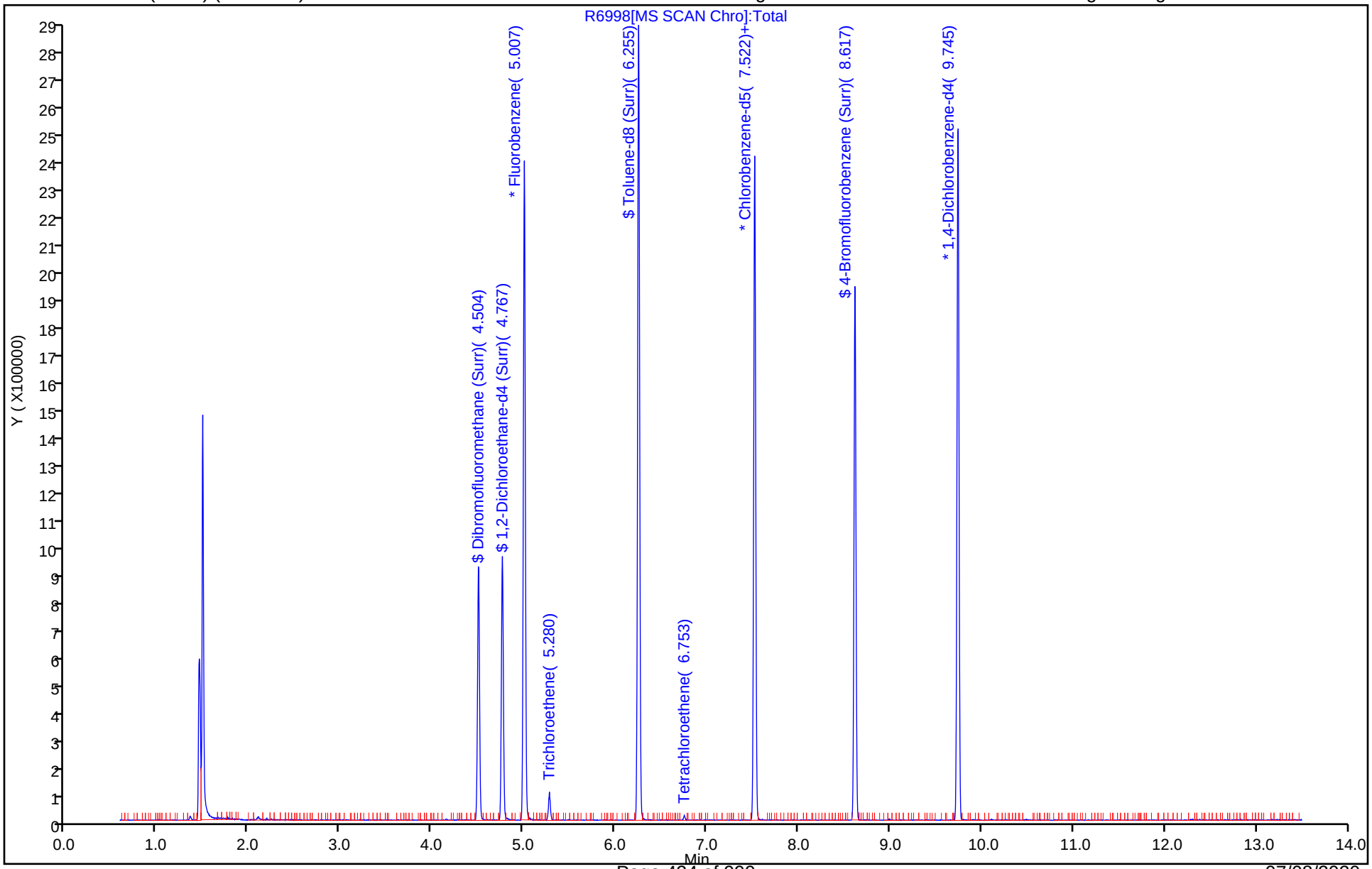
Report Date: 30-Jun-2020 20:31:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6998.D

Injection Date:	30-Jun-2020 08:02:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-A-21	Lab Sample ID:	280-138090-21	Worklist Smp#:	32
Client ID:	RW-8284P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6998.D				
Lims ID:	280-138090-A-21				
Client ID:	RW-8284P-20200623				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 08:02:30	ALS Bottle#:	29	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-21 pH				
Misc. Info.:	280-0092885-032				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:31:03	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:29:33		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.75
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.7	101.31
$ 6 Toluene-d8 (Surr)	50.0	48.9	97.75
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.9	95.89

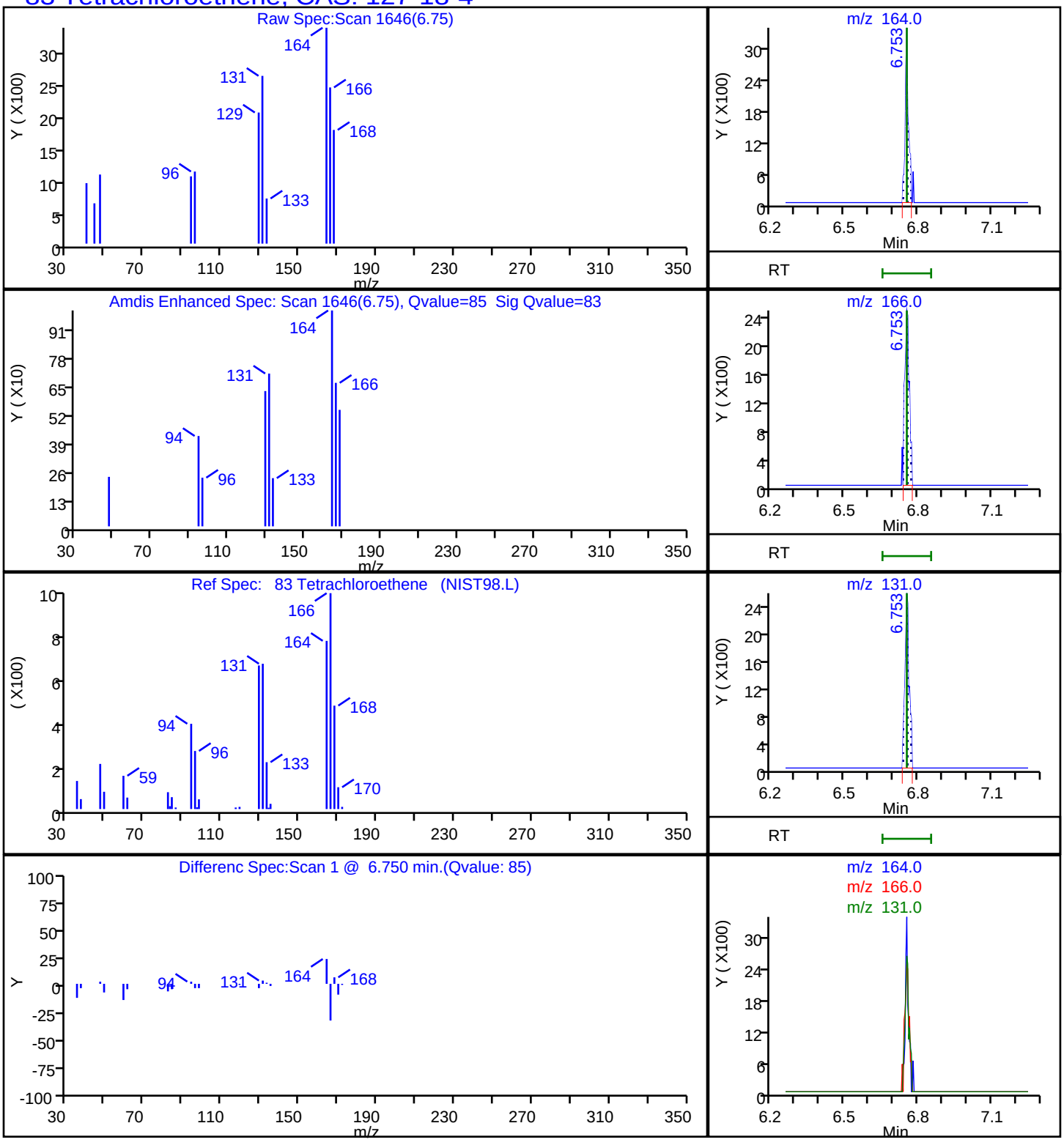
Report Date: 30-Jun-2020 20:31:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6998.D

Injection Date:	30-Jun-2020 08:02:30	Instrument ID:	VMS_R1
Lims ID:	280-138090-A-21	Lab Sample ID:	280-138090-21
Client ID:	RW-8284P-20200623		
Operator ID:	PETUNINP	ALS Bottle#:	29 Worklist Smp#: 32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4

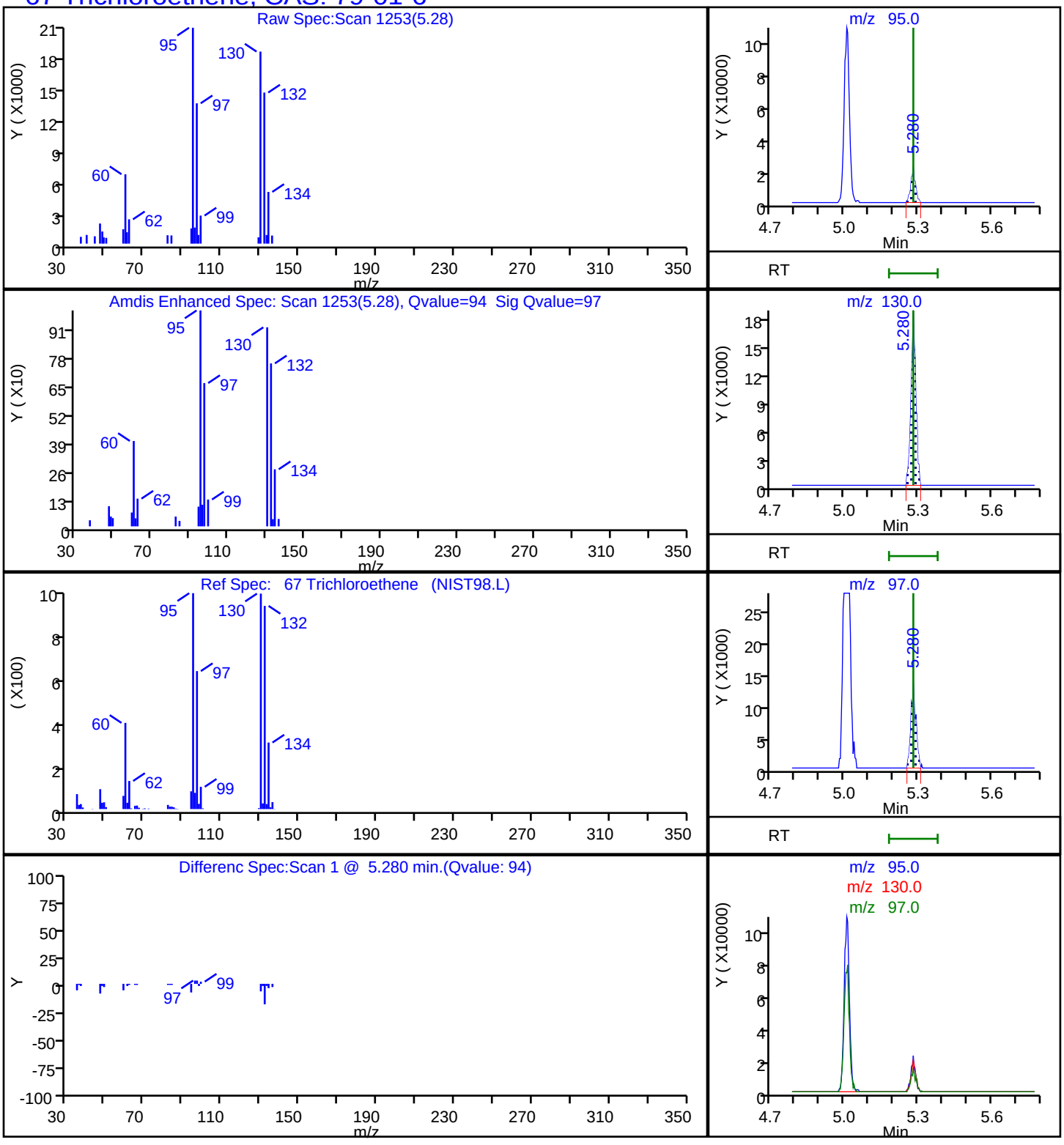


Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6998.D

Injection Date:	30-Jun-2020 08:02:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-21	Lab Sample ID:	280-138090-21		
Client ID:	RW-8284P-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	29	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

67 Trichloroethene, CAS: 79-01-6



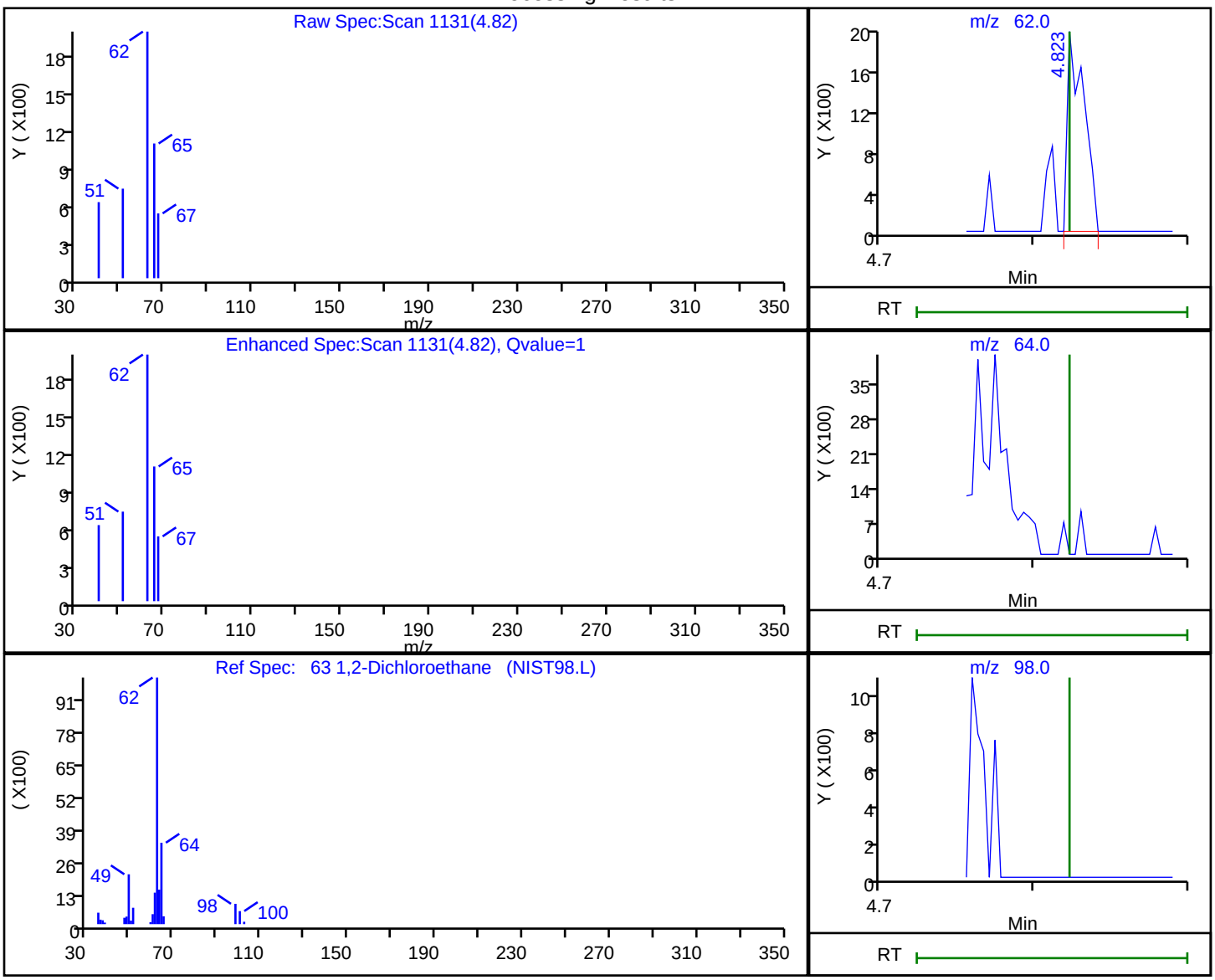
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6998.D				
Injection Date:	30-Jun-2020 08:02:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-A-21	Lab Sample ID:	280-138090-21		
Client ID:	RW-8284P-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	29	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.82	62.00	1515	0.159391
4.82	64.00	0	
4.82	98.00	0	

Reviewer: petuninp, 30-Jun-2020 20:29:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: TB-01-20200625 Lab Sample ID: 280-138090-22

Matrix: Water Lab File ID: R7183.D

Analysis Method: 8260B Date Collected: 06/25/2020 10:30

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 12:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: TB-01-20200625 Lab Sample ID: 280-138090-22

Matrix: Water Lab File ID: R7183.D

Analysis Method: 8260B Date Collected: 06/25/2020 10:30

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 12:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7183.D
Lims ID: 280-138090-B-22
Client ID: TB-01-20200625
Sample Type: Client
Inject. Date: 06-Jul-2020 12:56:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-b-22 pH
Misc. Info.: 280-0093029-014
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:52:08 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

First Level Reviewer: peppinga Date: 06-Jul-2020 14:02:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	2261600	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.518	0.004	85	519815	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	809505	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	92	580913	50.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	635370	45.5	
$ 6 Toluene-d8 (Surr)	98	6.255	6.251	0.004	93	2175644	48.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.617	0.000	86	803095	47.4	
10 Dichlorodifluoromethane	85		1.652				ND	
11 Chloromethane	50		1.828				ND	
12 Vinyl chloride	62		1.918				ND	
14 Bromomethane	94		2.195				ND	
15 Chloroethane	64		2.285				ND	
17 Trichlorofluoromethane	101		2.484				ND	
21 Acrolein	56		2.799				ND	
23 1,1-Dichloroethene	96		2.881				ND	
24 Acetone	43	2.896	2.900	-0.004	76	2067	0.6366	
26 Iodomethane	142		3.001				ND	
27 Carbon disulfide	76		3.061				ND	U
28 Acetonitrile	41		3.106				ND	
30 3-Chloro-1-propene	41		3.147				ND	
31 Methylene Chloride	84		3.237				ND	
33 Acrylonitrile	53		3.398				ND	
35 trans-1,2-Dichloroethene	96		3.436				ND	
39 Vinyl acetate	43		3.728				ND	
40 1,1-Dichloroethane	63		3.751				ND	
42 2-Chloro-1,3-butadiene	53		3.803				ND	
45 2-Butanone (MEK)	43		4.129				ND	
47 cis-1,2-Dichloroethene	96		4.152				ND	
48 2,2-Dichloropropane	77		4.163				ND	
49 Propionitrile	54		4.178				ND	
51 Methacrylonitrile	41		4.290				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Chlorobromomethane	128		4.328				ND	
54 Chloroform	83		4.388				ND	
55 1,1,1-Trichloroethane	97		4.530				ND	
57 1,1-Dichloropropene	75		4.643				ND	
59 Carbon tetrachloride	117		4.647				ND	
60 Isobutyl alcohol	41		4.654				ND	
62 Benzene	78		4.793				ND	
63 1,2-Dichloroethane	62		4.823				ND	U
67 Trichloroethene	95		5.276				ND	
70 1,2-Dichloropropane	63		5.483				ND	
71 Methyl methacrylate	100		5.490				ND	
73 Dibromomethane	93		5.550				ND	
74 Dichlorobromomethane	83		5.678				ND	
77 cis-1,3-Dichloropropene	75		6.022				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.124				ND	
79 Toluene	91		6.307				ND	
80 trans-1,3-Dichloropropene	75		6.487				ND	
81 Ethyl methacrylate	69		6.510				ND	
82 1,1,2-Trichloroethane	97		6.660				ND	
83 Tetrachloroethene	164		6.753				ND	
84 1,3-Dichloropropane	76		6.806				ND	
85 2-Hexanone	43		6.825				ND	
87 Chlorodibromomethane	129		7.001				ND	
88 Ethylene Dibromide	107		7.117				ND	
90 Chlorobenzene	112		7.548				ND	
91 1,1,1,2-Tetrachloroethane	131		7.619				ND	
92 Ethylbenzene	106		7.627				ND	
93 m-Xylene & p-Xylene	106		7.743				ND	
94 o-Xylene	106		8.099				ND	
95 Styrene	104		8.118				ND	
96 Bromoform	173		8.302				ND	
100 1,1,2,2-Tetrachloroethane	83		8.729				ND	
102 trans-1,4-Dichloro-2-butene	53		8.770				ND	
103 1,2,3-Trichloropropane	110		8.793				ND	
112 1,3-Dichlorobenzene	146		9.666				ND	
114 1,4-Dichlorobenzene	146		9.764				ND	
117 1,2-Dichlorobenzene	146		10.120				ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899				ND	
120 1,2,4-Trichlorobenzene	180		11.724				ND	
S 138 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

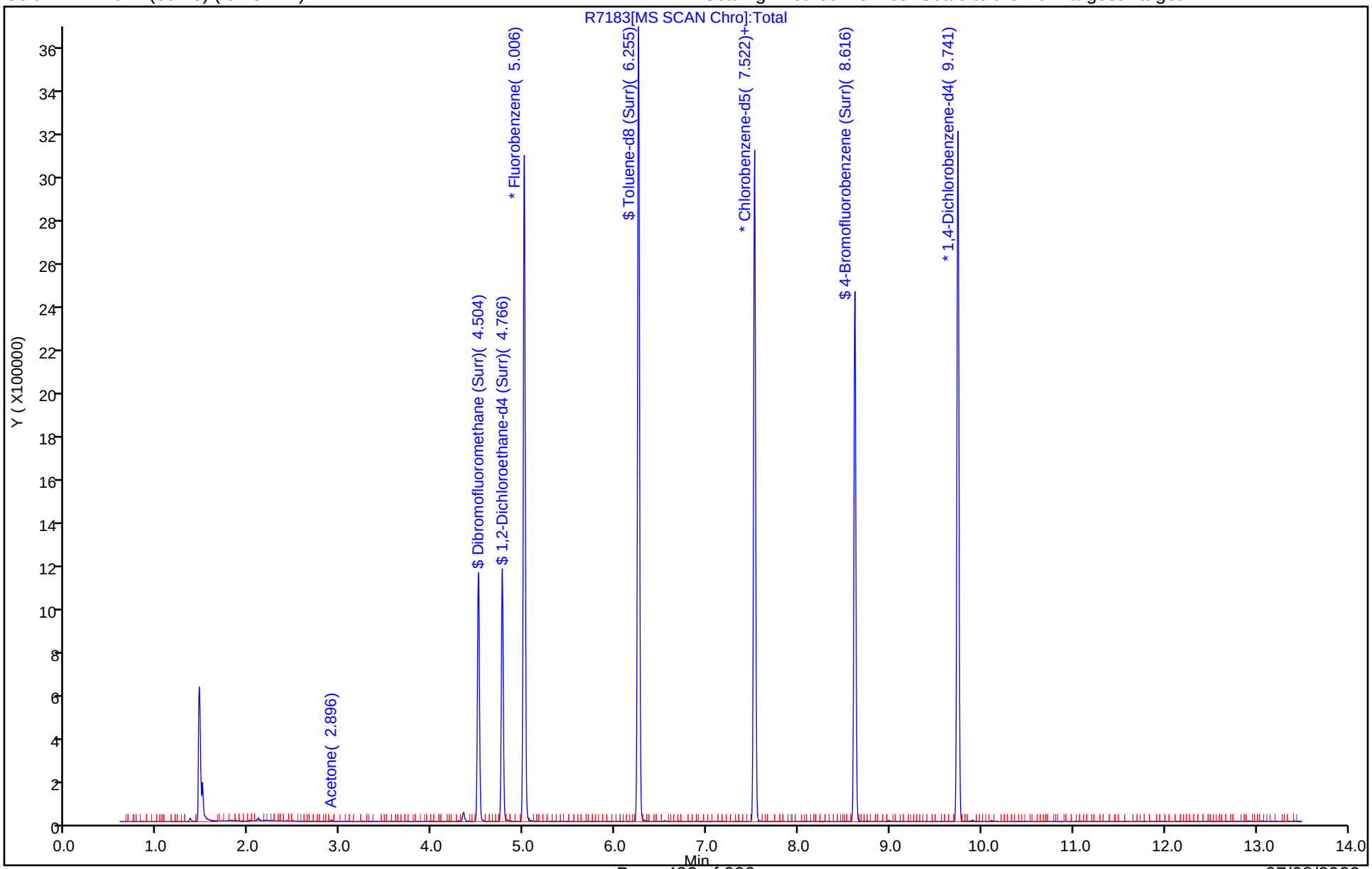
Report Date: 07-Jul-2020 08:57:45 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7183.D

Injection Date:	06-Jul-2020 12:56:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	280-138090-B-22	Lab Sample ID:	280-138090-22	Worklist Smp#:	14
Client ID:	TB-01-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7183.D
Lims ID: 280-138090-B-22
Client ID: TB-01-20200625
Sample Type: Client
Inject. Date: 06-Jul-2020 12:56:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-b-22 pH
Misc. Info.: 280-0093029-014
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:52:08 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

First Level Reviewer: peppinga Date: 06-Jul-2020 14:02:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.9	101.79
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	45.5	90.98
$ 6 Toluene-d8 (Surr)	50.0	48.3	96.58
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.4	94.72

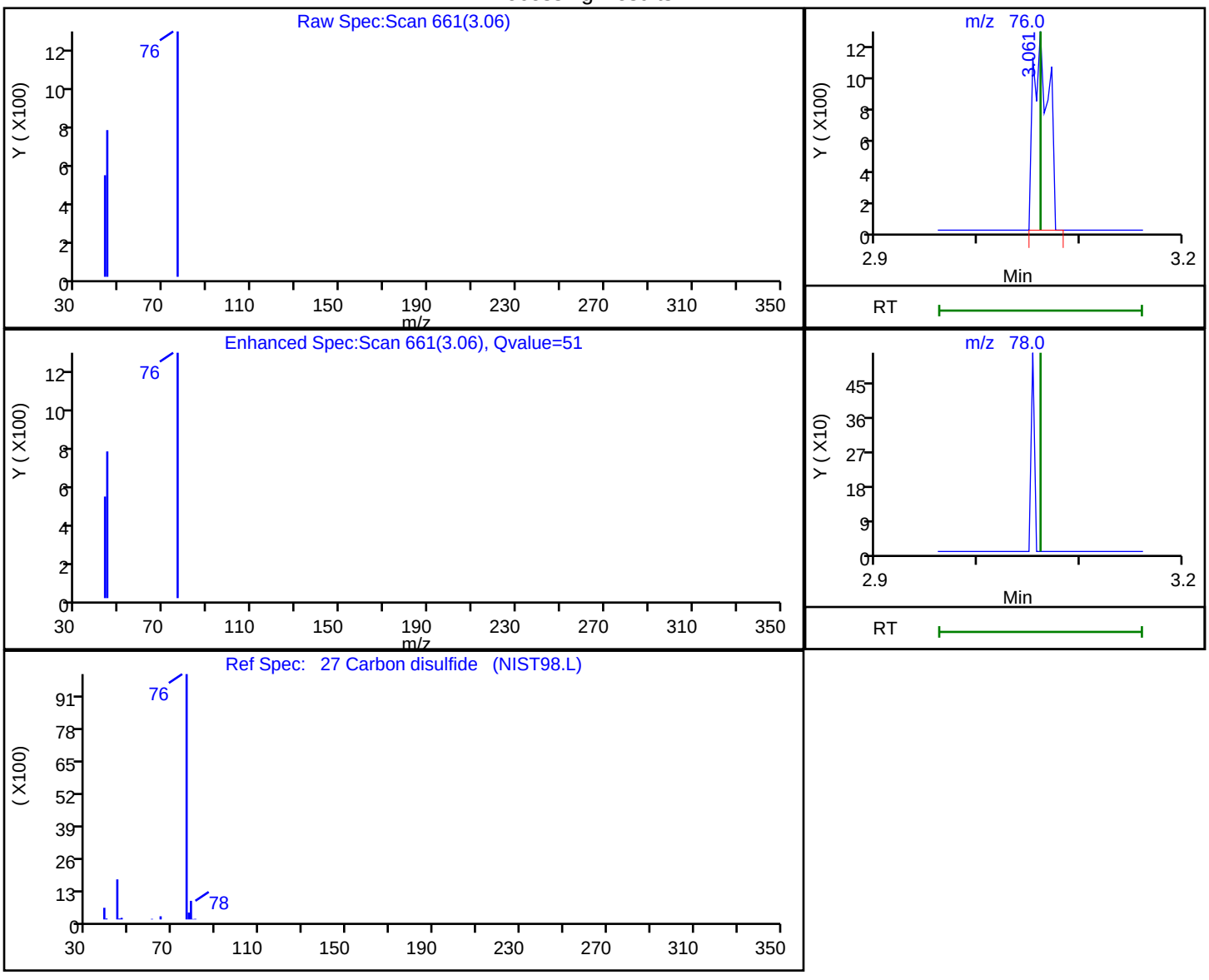
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7183.D				
Injection Date:	06-Jul-2020 12:56:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-B-22	Lab Sample ID:	280-138090-22		
Client ID:	TB-01-20200625				
Operator ID:	PEPPINGA	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.06	76.00	1317	0.387655
3.06	78.00	0	

Reviewer: peppinga, 06-Jul-2020 14:01:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

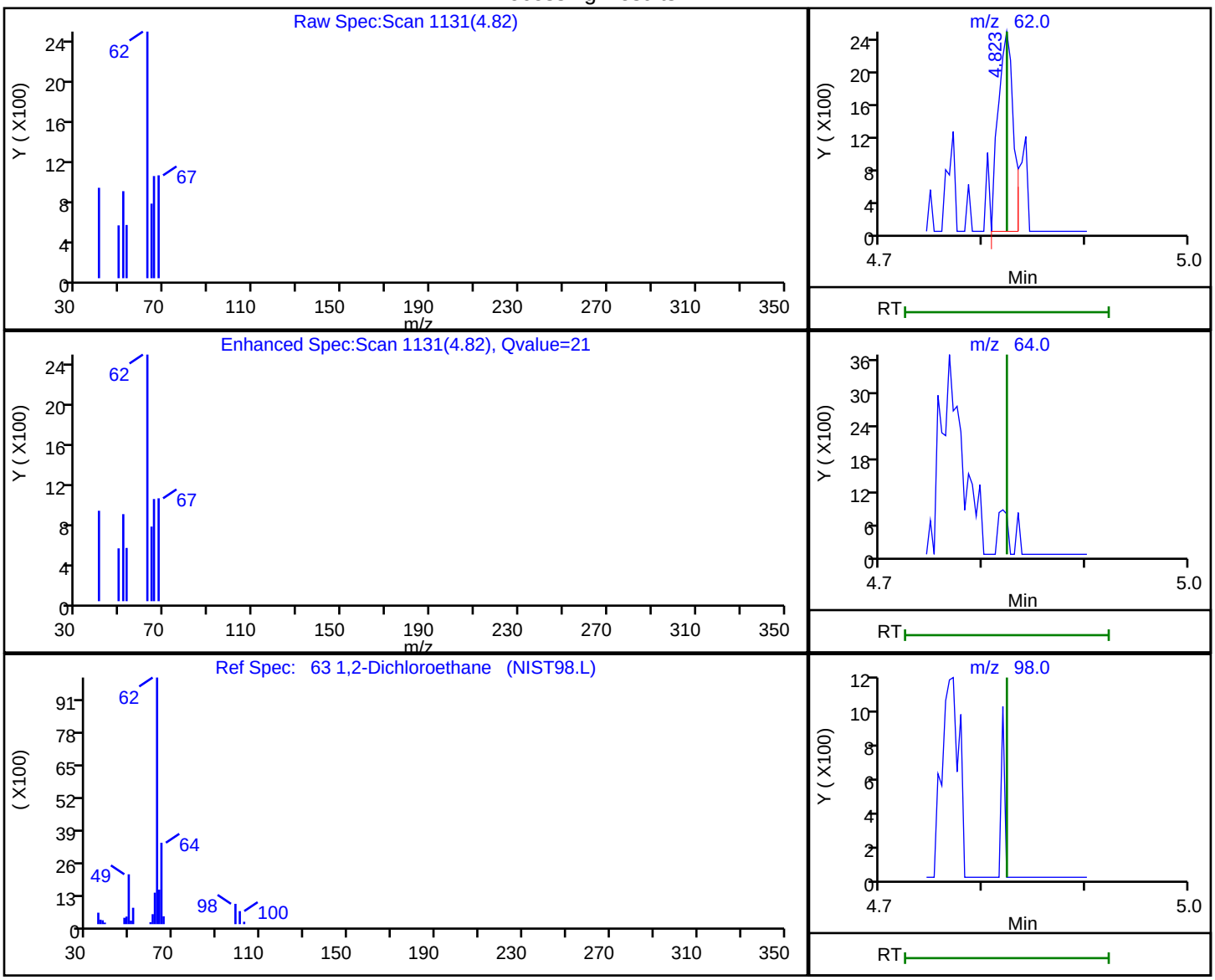
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7183.D				
Injection Date:	06-Jul-2020 12:56:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-B-22	Lab Sample ID:	280-138090-22		
Client ID:	TB-01-20200625				
Operator ID:	PEPPINGA	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.82	62.00	2488	0.198929
4.82	64.00	0	
4.82	98.00	0	

Reviewer: peppinga, 06-Jul-2020 14:01:44

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, Denver Job No.: 280-138090-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-485097/21	P7815.D
Level 2	STD010 280-485097/22	P7816.D
Level 3	STD020 280-485097/23	P7817.D
Level 4	STD10 280-485097/24	P7818.D
Level 5	STD50 280-485097/25	P7819.D
Level 6	STD75 280-485097/26	P7820.D
Level 7	STD100 280-485097/27	P7821.D
Level 8	STD200 280-485097/28	P7822.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								
Ethanol	0.0051 0.0034	0.0047 0.0034	0.0040 0.0038	0.0036	0.0035	Lin2	0.0502	0.0036							0.9970		0.9900
Propene oxide	0.0536 0.0484	0.0503 0.0459	0.0504 0.0402	0.0468	0.0487	Ave		0.0480				8.3		15.0			
2-Propanol	0.0290 0.0178	0.0229 0.0176	0.0213 0.0203	0.0184	0.0181	Lin2	0.0523	0.0183							0.9970		0.9900
Acetonitrile	0.0447 0.0335	0.0414 0.0331	0.0351 0.0370	0.0334	0.0343	Ave		0.0366				11.7		15.0			
Di-isopropyl ether (DIPE)	0.1931 0.1535	0.1727 0.1507	0.1763 0.1587	0.1586	0.1578	Ave		0.1652				8.7		15.0			
Chloroprene	0.3645 0.2744	0.3248 0.2726	0.3268 0.2897	0.2845	0.2827	Ave		0.3025				10.8		15.0			
Tert-butyl ethyl ether	0.6910 0.5744	0.6625 0.5512	0.6647 0.5890	0.5801	0.5843	Ave		0.6122				8.5		15.0			
Ethyl acetate	0.2629 0.1774	0.2259 0.1707	0.2199 0.1836	0.1834	0.1814	Lin2	0.0870	0.1808							0.9970		0.9900
Propionitrile	0.0464 0.0362	0.0421 0.0359	0.0407 0.0400	0.0371	0.0371	Ave		0.0394				9.1		15.0			
Methacrylonitrile	0.1731 0.1396	0.1631 0.1344	0.1676 0.1434	0.1464	0.1435	Ave		0.1514				9.5		15.0			
Tert-amyl methyl ether	0.6786 0.5545	0.6388 0.5355	0.6351 0.5693	0.5592	0.5750	Ave		0.5932				8.6		15.0			
n-Butanol	0.0119 0.0068	0.0089 0.0066	0.0079 0.0069	0.0071	0.0071	Lin2	0.0609	0.0068							0.9990		0.9900
Methyl methacrylate	0.0596 0.0598	0.0565 0.0578	0.0626 0.0636	0.0602	0.0621	Ave		0.0603				4.0		15.0			
2-Nitropropane	0.0702 0.0547	0.0629 0.0538	0.0529 0.0599	0.0527	0.0547	Ave		0.0577				10.8		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

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								
Tetrahydrothiophene	0.3169 0.2385	0.2537 0.2311	0.2795 0.2461	0.2418	0.2402	Lin2	0.0718	0.2396							0.9960		0.9900
cis-1,4-Dichloro-2-butene	+++++ 0.2584	0.2505 0.2187	0.2091 0.2502	0.2151	0.2419	Ave		0.2348				8.5		15.0			
1,2,3-Trimethylbenzene	2.4094 1.9932	2.2179 1.9158	2.1349 2.0566	2.0022	2.0212	Ave		2.0939				7.5		15.0			
1,3,5-Trichlorobenzene	0.7968 0.6732	0.7164 0.6499	0.6899 0.7148	0.6410	0.6796	Ave		0.6952				7.1		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-485097/21	P7815.D
Level 2	STD010 280-485097/22	P7816.D
Level 3	STD020 280-485097/23	P7817.D
Level 4	STD10 280-485097/24	P7818.D
Level 5	STD50 280-485097/25	P7819.D
Level 6	STD75 280-485097/26	P7820.D
Level 7	STD100 280-485097/27	P7821.D
Level 8	STD200 280-485097/28	P7822.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
Ethanol	FB	Lin2	3813 386767	7092 522577	11881 1121959	52902	263486	30.0 4500	60.0 6000	120 12000	600	3000
Propene oxide	FB	Ave	66917 9105013	127251 11652040	246604 19830208	1152842	6051020	50.0 7500	100 10000	200 20000	1000	5000
2-Propanol	FB	Lin2	3616 334122	5798 447418	10447 999643	45263	225483	5.00 750	10.0 1000	20.0 2000	100	500
Acetonitrile	FB	Ave	5578 630440	10465 839233	17199 1824759	82477	426465	5.00 750	10.0 1000	20.0 2000	100	500
Di-isopropyl ether (DIPE)	FB	Ave	2410 288623	4368 382091	8627 783010	39118	196097	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Chloroprene	FB	Ave	4549 515887	8213 691242	15993 1429550	70162	351403	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Tert-butyl ethyl ether	FB	Ave	8623 1079705	16753 1397782	32530 2905958	143048	726330	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl acetate	FB	Lin2	6561 666797	11426 865735	21526 1812179	90461	450989	1.00 150	2.00 200	4.00 400	20.0	100
Propionitrile	FB	Ave	5788 681378	10633 910532	19932 1975705	91476	461672	5.00 750	10.0 1000	20.0 2000	100	500
Methacrylonitrile	FB	Ave	21606 2623920	41242 3408887	82039 7076095	361071	1783664	5.00 750	10.0 1000	20.0 2000	100	500
Tert-amyl methyl ether	FB	Ave	8468 1042279	16153 1358095	31081 2808808	137903	714678	0.500 75.0	1.00 100	2.00 200	10.0	50.0
n-Butanol	FB	Lin2	3701 318735	5595 421393	9657 855999	43793	220595	12.5 1875	25.0 2500	50.0 5000	250	1250
Methyl methacrylate	FB	Ave	1488 224808	2858 292960	6131 627312	29672	154429	1.00 150	2.00 200	4.00 400	20.0	100
2-Nitropropane	FB	Ave	1752 205534	3183 273130	5174 590761	25974	135936	1.00 150	2.00 200	4.00 400	20.0	100
Tetrahydrothiophene	CBNZ d5	Lin2	1886 202908	2813 268588	5980 565994	26122	146877	1.00 150	2.00 200	4.00 400	20.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

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
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 350708	4563 420706	7996 948600	37767	220680	+++++ 150	2.00 200	4.00 400	20.0	100
1,2,3-Trimethylbenzene	DCBd 4	Ave	10871 1352748	20200 1842560	40822 3898885	175771	922141	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	3595 456876	6525 625016	13192 1355172	56276	310039	0.500 75.0	1.00 100	2.00 200	10.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7815.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Feb-2020 14:40:30 ALS Bottle#: 11 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:40 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:25:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.193	5.184	0.009	98	1247929	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.726	7.727	-0.001	90	297556	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.953	9.954	-0.001	98	451194	50.0	50.0	
13 Ethylene oxide	43	2.270	2.263	0.007	99	27024	50.0	0	
18 Ethanol	45	2.724	2.727	-0.003	97	3813	30.0	28.8	
20 Propene oxide	58	2.872	2.865	0.007	96	66917	50.0	55.8	
25 Isopropyl alcohol	45	3.125	3.118	0.007	98	3616	5.00	5.06	a
28 Acetonitrile	41	3.252	3.245	0.007	98	5578	5.00	6.11	
40 Isopropyl ether	87	3.906	3.909	-0.003	94	2410	0.5000	0.5846	
41 2-Chloro-1,3-butadiene	53	3.969	3.962	0.007	93	4549	0.5000	0.6025	
43 Tert-butyl ethyl ether	59	4.170	4.173	-0.003	98	8623	0.5000	0.5644	
46 Ethyl acetate	43	4.307	4.310	-0.003	97	6561	1.00	0.9725	
49 Propionitrile	54	4.349	4.342	0.007	97	5788	5.00	5.88	
51 Methacrylonitrile	41	4.465	4.458	0.007	92	21606	5.00	5.72	
62 Tert-amyl methyl ether	73	5.046	5.039	0.007	88	8468	0.5000	0.5719	
63 n-Butanol	56	5.046	5.039	0.007	52	3701	12.5	12.9	
71 Methyl methacrylate	100	5.679	5.672	0.007	91	1488	1.00	0.9891	
75 2-Nitropropane	41	6.038	6.031	0.008	97	1752	1.00	1.22	
87 Tetrahydrothiophene	60	7.198	7.202	-0.004	87	1886	1.00	1.02	
98 cis-1,4-Dichloro-2-butene	53	8.697	8.700	-0.003	85	3074	1.00	1.45	
114 1,2,3-Trimethylbenzene	105	9.995	9.998	-0.003	94	10871	0.5000	0.5753	
118 1,3,5-Trichlorobenzene	180	11.303	11.307	-0.004	94	3595	0.5000	0.5731	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

mv-IS_00001	Amount Added:	5.00	Units: uL
MV-Supp A_00041	Amount Added:	0.50	Units: uL

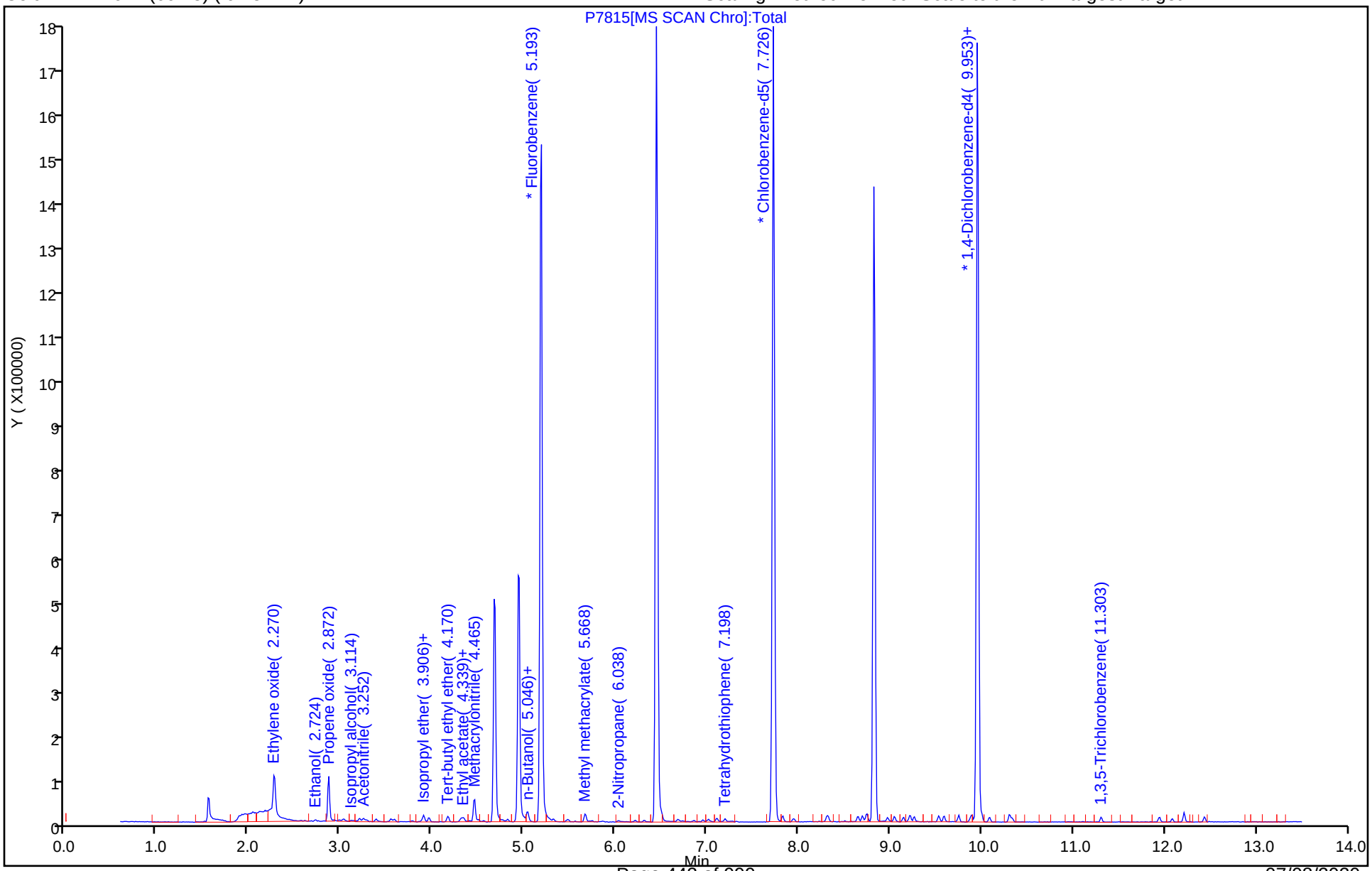
Report Date: 06-Feb-2020 21:41:40 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7815.D

Injection Date:	06-Feb-2020 14:40:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

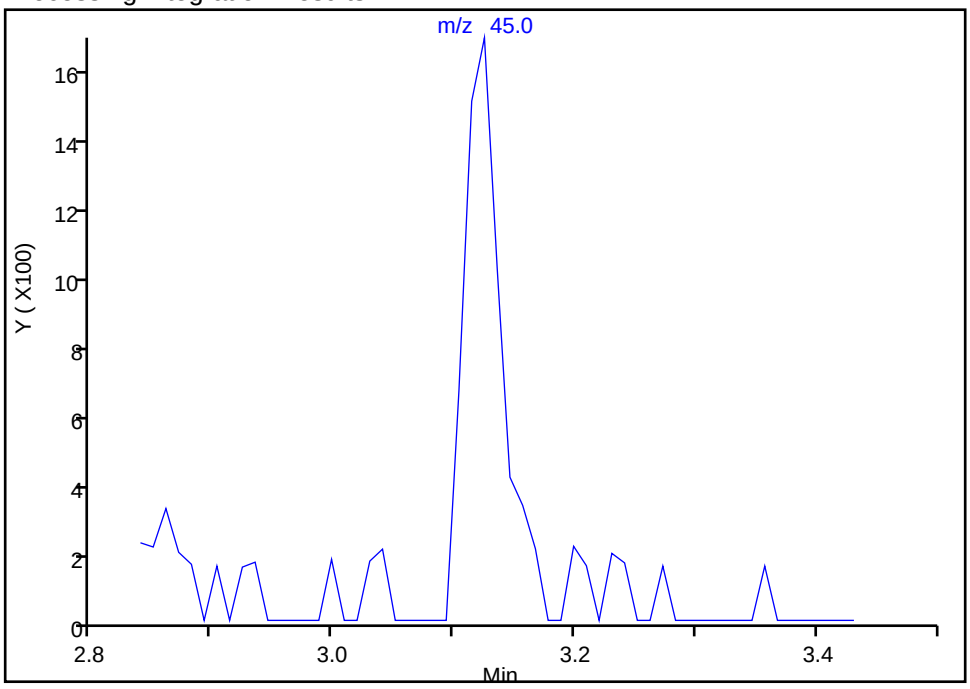
Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7815.D
Injection Date: 06-Feb-2020 14:40:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

25 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

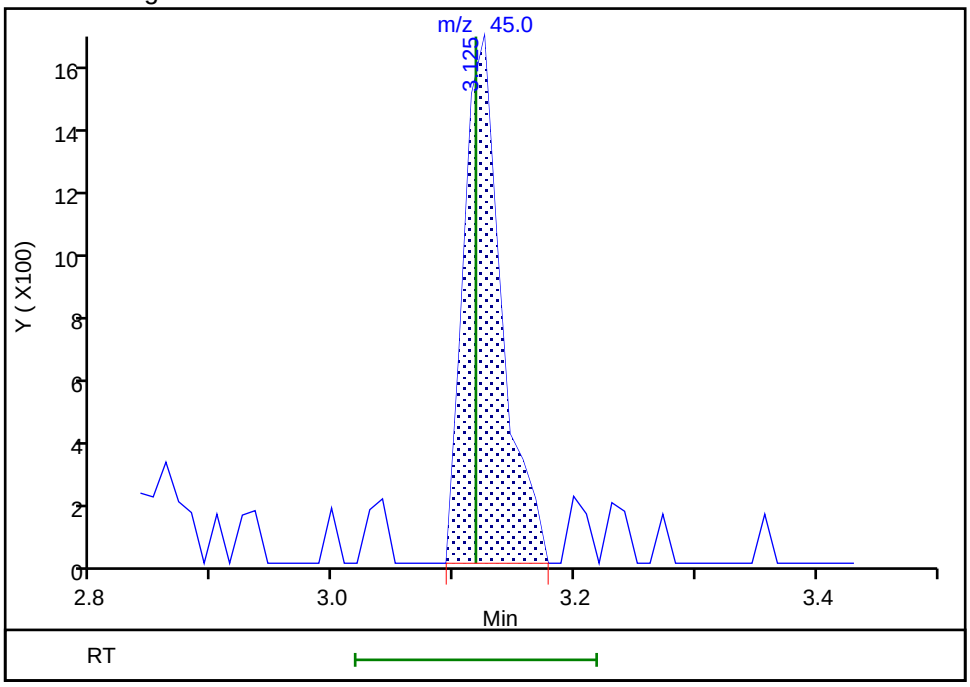
Not Detected
Expected RT: 3.12

Processing Integration Results



Manual Integration Results

RT: 3.13
Area: 3616
Amount: 5.059068
Amount Units: ug/l



Reviewer: zhangji, 06-Feb-2020 21:05:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7816.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Feb-2020 15:02:30 ALS Bottle#: 12 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:43 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.186	5.184	0.002	98	1264294	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.730	7.727	0.003	96	277191	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.956	9.954	0.002	97	455376	50.0	50.0	
13 Ethylene oxide	43	2.274	2.263	0.011	99	46634	100.0	0	
18 Ethanol	45	2.728	2.727	0.001	98	7092	60.0	64.6	
20 Propene oxide	58	2.865	2.865	0.000	96	127251	100.0	104.7	
25 Isopropyl alcohol	45	3.118	3.118	0.000	98	5798	10.0	9.67	
28 Acetonitrile	41	3.245	3.245	0.000	99	10465	10.0	11.3	
40 Isopropyl ether	87	3.910	3.909	0.001	92	4368	1.00	1.05	
41 2-Chloro-1,3-butadiene	53	3.962	3.962	0.000	93	8213	1.00	1.07	
43 Tert-butyl ethyl ether	59	4.173	4.173	0.000	96	16753	1.00	1.08	
46 Ethyl acetate	43	4.311	4.310	0.001	98	11426	2.00	2.02	
49 Propionitrile	54	4.342	4.342	0.000	97	10633	10.0	10.7	
51 Methacrylonitrile	41	4.458	4.458	0.000	92	41242	10.0	10.8	
62 Tert-amyl methyl ether	73	5.039	5.039	0.000	89	16153	1.00	1.08	
63 n-Butanol	56	5.039	5.039	0.000	51	5595	25.0	23.6	
71 Methyl methacrylate	100	5.672	5.672	0.000	88	2858	2.00	1.88	
75 2-Nitropropane	41	6.031	6.031	0.001	94	3183	2.00	2.18	
87 Tetrahydrothiophene	60	7.202	7.202	0.000	90	2813	2.00	1.82	
98 cis-1,4-Dichloro-2-butene	53	8.701	8.700	0.001	86	4563	2.00	2.13	
114 1,2,3-Trimethylbenzene	105	9.999	9.998	0.001	94	20200	1.00	1.06	
118 1,3,5-Trichlorobenzene	180	11.307	11.307	0.000	96	6525	1.00	1.03	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 1.00 Units: uL

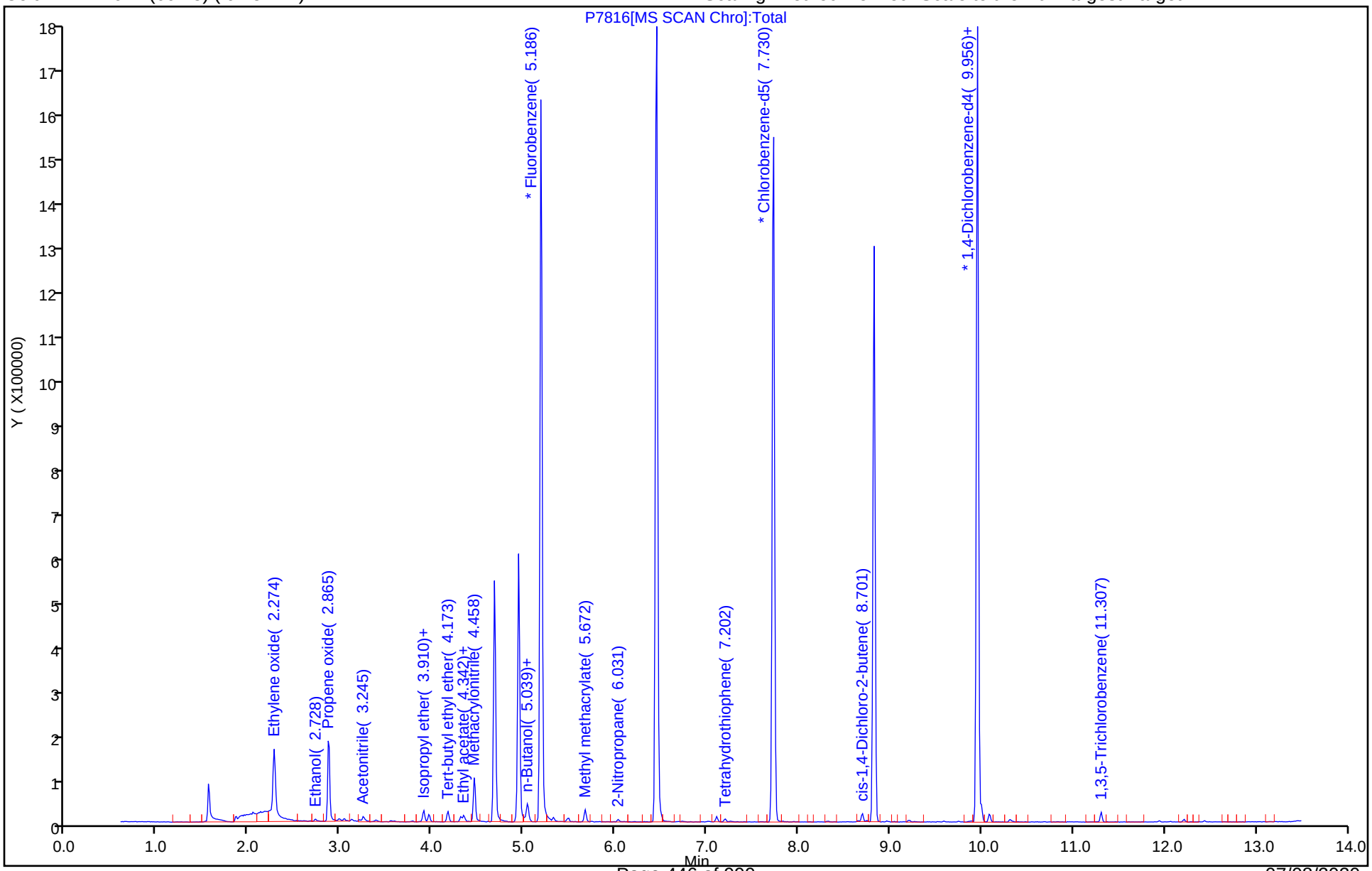
Report Date: 06-Feb-2020 21:41:43 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7816.D

Injection Date:	06-Feb-2020 15:02:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7817.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Feb-2020 15:23:30 ALS Bottle#: 13 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:45 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.195	5.184	0.011	99	1223412	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.728	7.727	0.001	89	267397	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.954	9.954	0.000	98	478042	50.0	50.0	
13 Ethylene oxide	43	2.272	2.263	0.009	99	91171	200.0	0	
18 Ethanol	45	2.725	2.727	-0.002	99	11881	120.0	122.1	
20 Propene oxide	58	2.873	2.865	0.008	96	246604	200.0	209.8	
25 Isopropyl alcohol	45	3.116	3.118	-0.002	98	10447	20.0	20.5	
28 Acetonitrile	41	3.243	3.245	-0.002	99	17199	20.0	19.2	
40 Isopropyl ether	87	3.907	3.909	-0.002	94	8627	2.00	2.13	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	15993	2.00	2.16	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	97	32530	2.00	2.17	
46 Ethyl acetate	43	4.308	4.310	-0.002	98	21526	4.00	4.38	
49 Propionitrile	54	4.340	4.342	-0.002	97	19932	20.0	20.6	
51 Methacrylonitrile	41	4.456	4.458	-0.002	94	82039	20.0	22.1	
62 Tert-amyl methyl ether	73	5.037	5.039	-0.002	89	31081	2.00	2.14	
63 n-Butanol	56	5.047	5.039	0.008	51	9657	50.0	49.2	
71 Methyl methacrylate	100	5.670	5.672	-0.002	91	6131	4.00	4.16	
75 2-Nitropropane	41	6.029	6.031	-0.002	98	5174	4.00	3.66	
87 Tetrahydrothiophene	60	7.200	7.202	-0.002	92	5980	4.00	4.37	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	86	7996	4.00	3.56	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	96	40822	2.00	2.04	
118 1,3,5-Trichlorobenzene	180	11.305	11.307	-0.002	94	13192	2.00	1.98	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 2.00 Units: uL

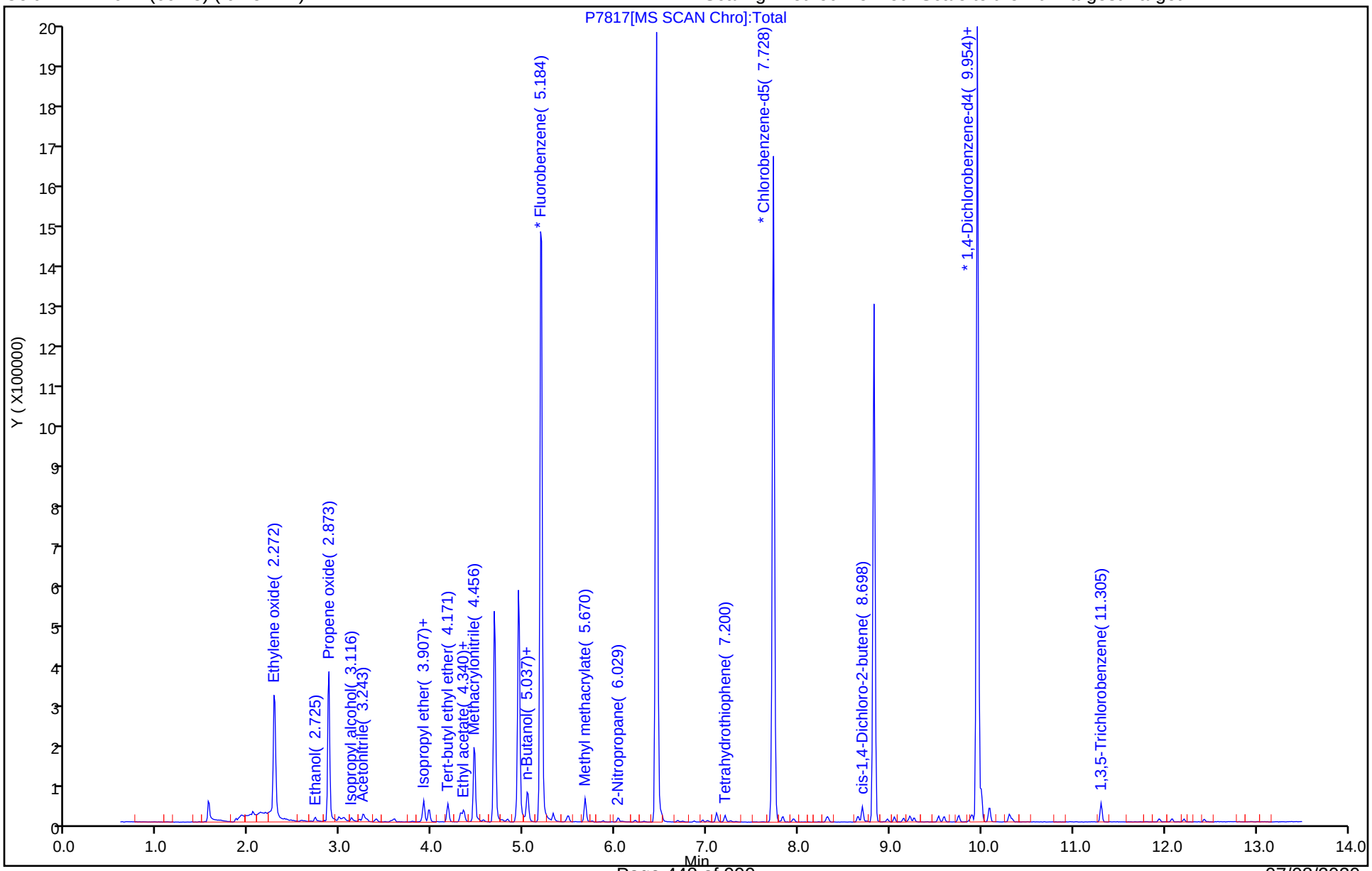
Report Date: 06-Feb-2020 21:41:45 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7817.D

Injection Date:	06-Feb-2020 15:23:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD020			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7818.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Feb-2020 15:44:30 ALS Bottle#: 14 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:47 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.194	5.184	0.010	99	1232949	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.727	7.727	0.000	90	270130	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.954	9.954	0.000	97	438951	50.0	50.0	
13 Ethylene oxide	43	2.271	2.263	0.008	99	398769	1000.0	0	
18 Ethanol	45	2.725	2.727	-0.002	99	52902	600.0	587.7	
20 Propene oxide	58	2.873	2.865	0.008	96	1152842	1000.0	973.1	
25 Isopropyl alcohol	45	3.115	3.118	-0.003	99	45263	100.0	97.5	
28 Acetonitrile	41	3.242	3.245	-0.003	99	82477	100.0	91.4	
40 Isopropyl ether	87	3.907	3.909	-0.002	93	39118	10.0	9.60	
41 2-Chloro-1,3-butadiene	53	3.970	3.962	0.008	93	70162	10.0	9.41	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	98	143048	10.0	9.48	
46 Ethyl acetate	43	4.308	4.310	-0.002	99	90461	20.0	19.8	
49 Propionitrile	54	4.350	4.342	0.008	99	91476	100.0	94.0	
51 Methacrylonitrile	41	4.456	4.458	-0.002	93	361071	100.0	96.7	
62 Tert-amyl methyl ether	73	5.036	5.039	-0.003	88	137903	10.0	9.43	
63 n-Butanol	56	5.046	5.039	0.007	52	43793	250.0	252.7	
71 Methyl methacrylate	100	5.669	5.672	-0.003	91	29672	20.0	20.0	
75 2-Nitropropane	41	6.028	6.031	-0.002	98	25974	20.0	18.2	
87 Tetrahydrothiophene	60	7.199	7.202	-0.003	93	26122	20.0	19.9	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	87	37767	20.0	18.3	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	99	175771	10.0	9.56	
118 1,3,5-Trichlorobenzene	180	11.304	11.307	-0.003	96	56276	10.0	9.22	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 10.00 Units: uL

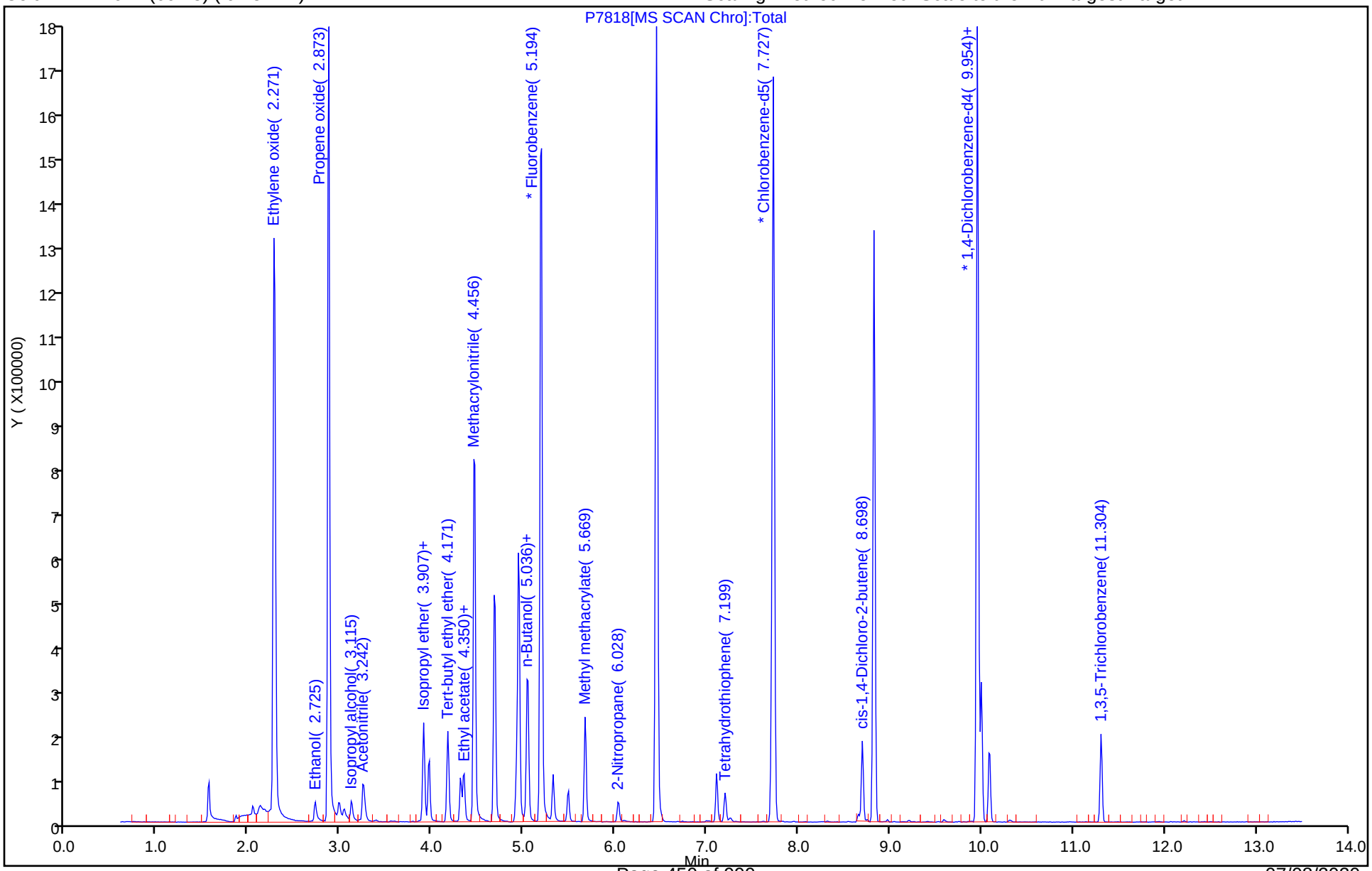
Report Date: 06-Feb-2020 21:41:48 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7818.D

Injection Date:	06-Feb-2020 15:44:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD10			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7819.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Feb-2020 16:05:30 ALS Bottle#: 15 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:50 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.186	5.186	0.000	98	1243008	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.730	7.730	0.000	90	305720	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.956	9.956	0.000	96	456226	50.0	50.0	
13 Ethylene oxide	43	2.263	2.263	0.000	100	1139191	5000.0	0	
18 Ethanol	45	2.727	2.727	0.000	99	263486	3000.0	2958.7	
20 Propene oxide	58	2.865	2.865	0.000	96	6051020	5000.0	5066.3	
25 Isopropyl alcohol	45	3.118	3.118	0.000	99	225483	500.0	493.0	
28 Acetonitrile	41	3.245	3.245	0.000	99	426465	500.0	469.0	
40 Isopropyl ether	87	3.909	3.909	0.000	93	196097	50.0	47.8	
41 2-Chloro-1,3-butadiene	53	3.962	3.962	0.000	96	351403	50.0	46.7	
43 Tert-butyl ethyl ether	59	4.173	4.173	0.000	98	726330	50.0	47.7	
46 Ethyl acetate	43	4.310	4.310	0.000	99	450989	100.0	99.8	
49 Propionitrile	54	4.342	4.342	0.000	98	461672	500.0	470.7	
51 Methacrylonitrile	41	4.458	4.458	0.000	92	1783664	500.0	473.9	
62 Tert-amyl methyl ether	73	5.039	5.039	0.000	88	714678	50.0	48.5	
63 n-Butanol	56	5.039	5.039	0.000	52	220595	1250.0	1298.4	
71 Methyl methacrylate	100	5.672	5.672	0.000	90	154429	100.0	103.1	
75 2-Nitropropane	41	6.031	6.031	0.000	99	135936	100.0	94.7	
87 Tetrahydrothiophene	60	7.202	7.202	0.000	93	146877	100.0	100.0	
98 cis-1,4-Dichloro-2-butene	53	8.700	8.700	0.000	84	220680	100.0	103.0	
114 1,2,3-Trimethylbenzene	105	9.998	9.998	0.000	99	922141	50.0	48.3	
118 1,3,5-Trichlorobenzene	180	11.307	11.307	0.000	96	310039	50.0	48.9	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 50.00 Units: uL

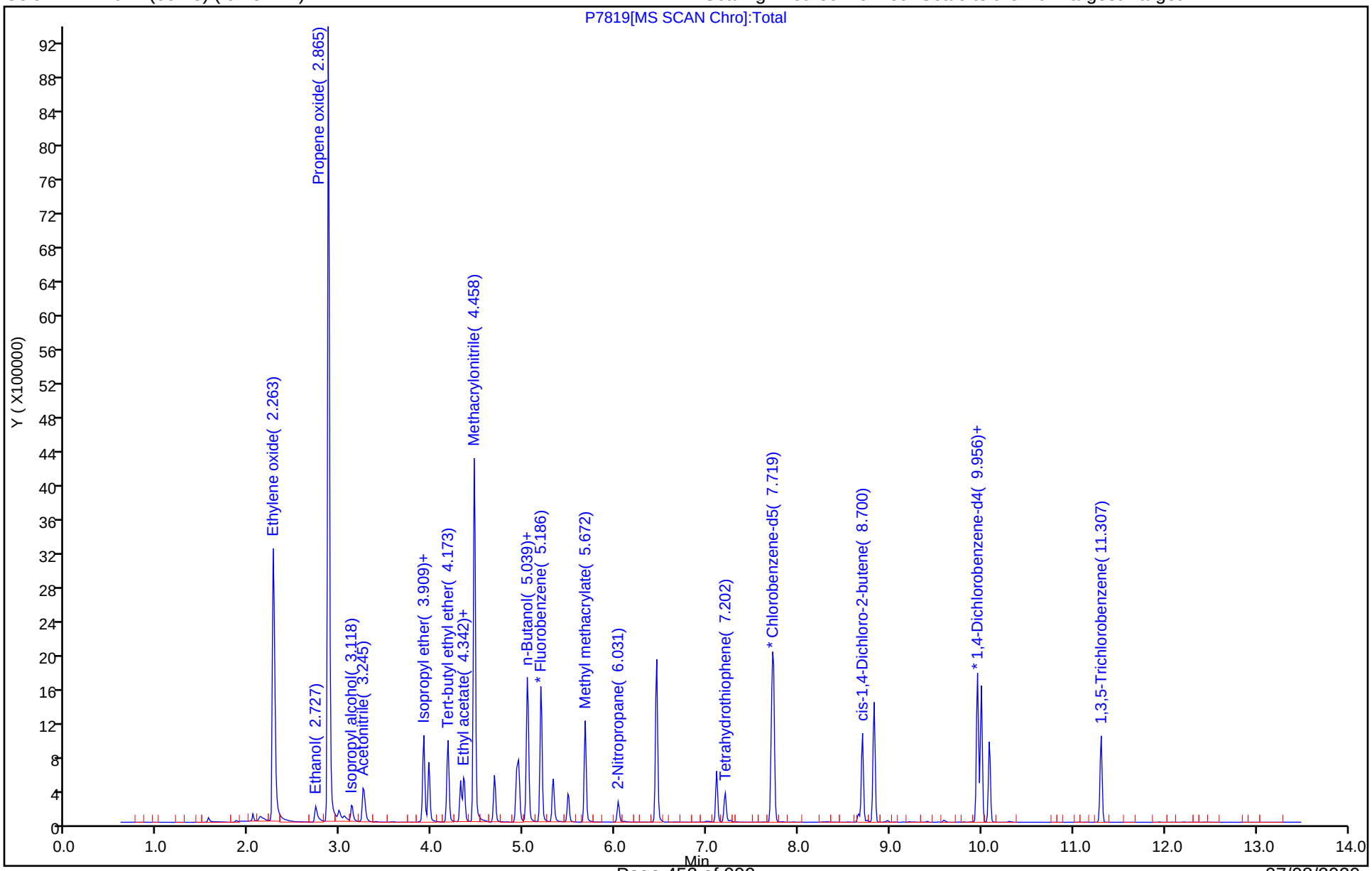
Report Date: 06-Feb-2020 21:41:50 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7819.D

Injection Date:	06-Feb-2020 16:05:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD50			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7820.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Feb-2020 16:27:30 ALS Bottle#: 16 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:52 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.185	5.186	-0.001	98	1253199	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.728	7.730	-0.002	94	283554	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.955	9.956	-0.001	97	452464	50.0	50.0	
13 Ethylene oxide	43	2.272	2.263	0.009	100	2351644	7500.0	0	
18 Ethanol	45	2.726	2.727	-0.001	99	386767	4500.0	4314.1	
20 Propene oxide	58	2.863	2.865	-0.002	96	9105013	7500.0	7561.3	
25 Isopropyl alcohol	45	3.117	3.118	-0.001	99	334122	750.0	725.9	
28 Acetonitrile	41	3.243	3.245	-0.002	99	630440	750.0	687.7	
40 Isopropyl ether	87	3.908	3.909	-0.001	93	288623	75.0	69.7	
41 2-Chloro-1,3-butadiene	53	3.961	3.962	-0.001	94	515887	75.0	68.0	
43 Tert-butyl ethyl ether	59	4.172	4.173	-0.001	98	1079705	75.0	70.4	
46 Ethyl acetate	43	4.309	4.310	-0.001	99	666797	150.0	146.7	
49 Propionitrile	54	4.341	4.342	-0.001	98	681378	750.0	689.1	
51 Methacrylonitrile	41	4.457	4.458	-0.001	92	2623920	750.0	691.5	
62 Tert-amyl methyl ether	73	5.037	5.039	-0.002	89	1042279	75.0	70.1	
63 n-Butanol	56	5.037	5.039	-0.002	51	318735	1875.0	1864.7	
71 Methyl methacrylate	100	5.670	5.672	-0.002	90	224808	150.0	148.8	
75 2-Nitropropane	41	6.029	6.031	-0.001	99	205534	150.0	142.1	
87 Tetrahydrothiophene	60	7.200	7.202	-0.002	93	202908	150.0	149.0	
98 cis-1,4-Dichloro-2-butene	53	8.699	8.700	-0.001	85	350708	150.0	165.0	
114 1,2,3-Trimethylbenzene	105	9.997	9.998	-0.001	98	1352748	75.0	71.4	
118 1,3,5-Trichlorobenzene	180	11.306	11.307	-0.001	96	456876	75.0	72.6	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 75.00 Units: uL

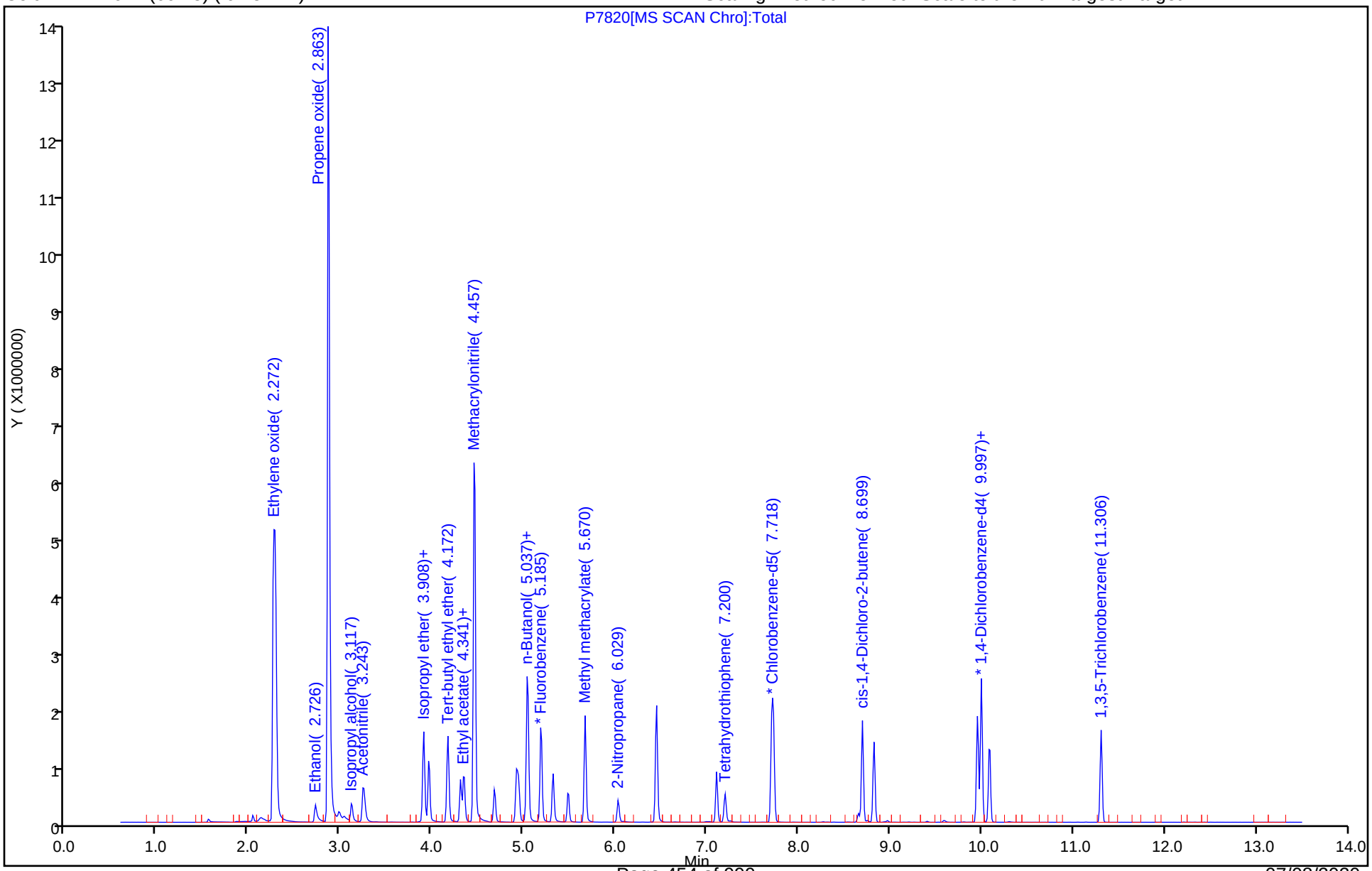
Report Date: 06-Feb-2020 21:41:53 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7820.D

Injection Date:	06-Feb-2020 16:27:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7821.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Feb-2020 16:48:30 ALS Bottle#: 17 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:55 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:27:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.186	5.186	0.000	98	1268036	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.729	7.730	-0.001	89	290596	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.956	9.956	0.000	96	480877	50.0	50.0	
13 Ethylene oxide	43	2.263	2.263	0.000	100	2331310	10000	0	
18 Ethanol	45	2.727	2.727	0.000	100	522577	6000.0	5765.5	
20 Propene oxide	58	2.865	2.865	0.000	97	11652040	10000	9563.3	
25 Isopropyl alcohol	45	3.118	3.118	0.000	98	447418	1000.0	961.6	
28 Acetonitrile	41	3.244	3.245	-0.001	99	839233	1000.0	904.8	
40 Isopropyl ether	87	3.909	3.909	0.000	93	382091	100.0	91.2	
41 2-Chloro-1,3-butadiene	53	3.962	3.962	0.000	93	691242	100.0	90.1	
43 Tert-butyl ethyl ether	59	4.173	4.173	0.000	97	1397782	100.0	90.0	
46 Ethyl acetate	43	4.310	4.310	0.000	99	865735	200.0	188.3	
49 Propionitrile	54	4.342	4.342	0.000	98	910532	1000.0	910.1	
51 Methacrylonitrile	41	4.458	4.458	0.000	92	3408887	1000.0	887.8	
62 Tert-amyl methyl ether	73	5.038	5.039	-0.001	88	1358095	100.0	90.3	
63 n-Butanol	56	5.038	5.039	-0.001	52	421393	2500.0	2439.2	
71 Methyl methacrylate	100	5.672	5.672	0.000	90	292960	200.0	191.7	
75 2-Nitropropane	41	6.030	6.031	0.000	99	273130	200.0	186.6	
87 Tetrahydrothiophene	60	7.202	7.202	0.000	93	268588	200.0	192.6	
98 cis-1,4-Dichloro-2-butene	53	8.700	8.700	0.000	84	420706	200.0	186.3	
114 1,2,3-Trimethylbenzene	105	9.998	9.998	0.000	99	1842560	100.0	91.5	
118 1,3,5-Trichlorobenzene	180	11.307	11.307	0.000	97	625016	100.0	93.5	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 100.00 Units: uL

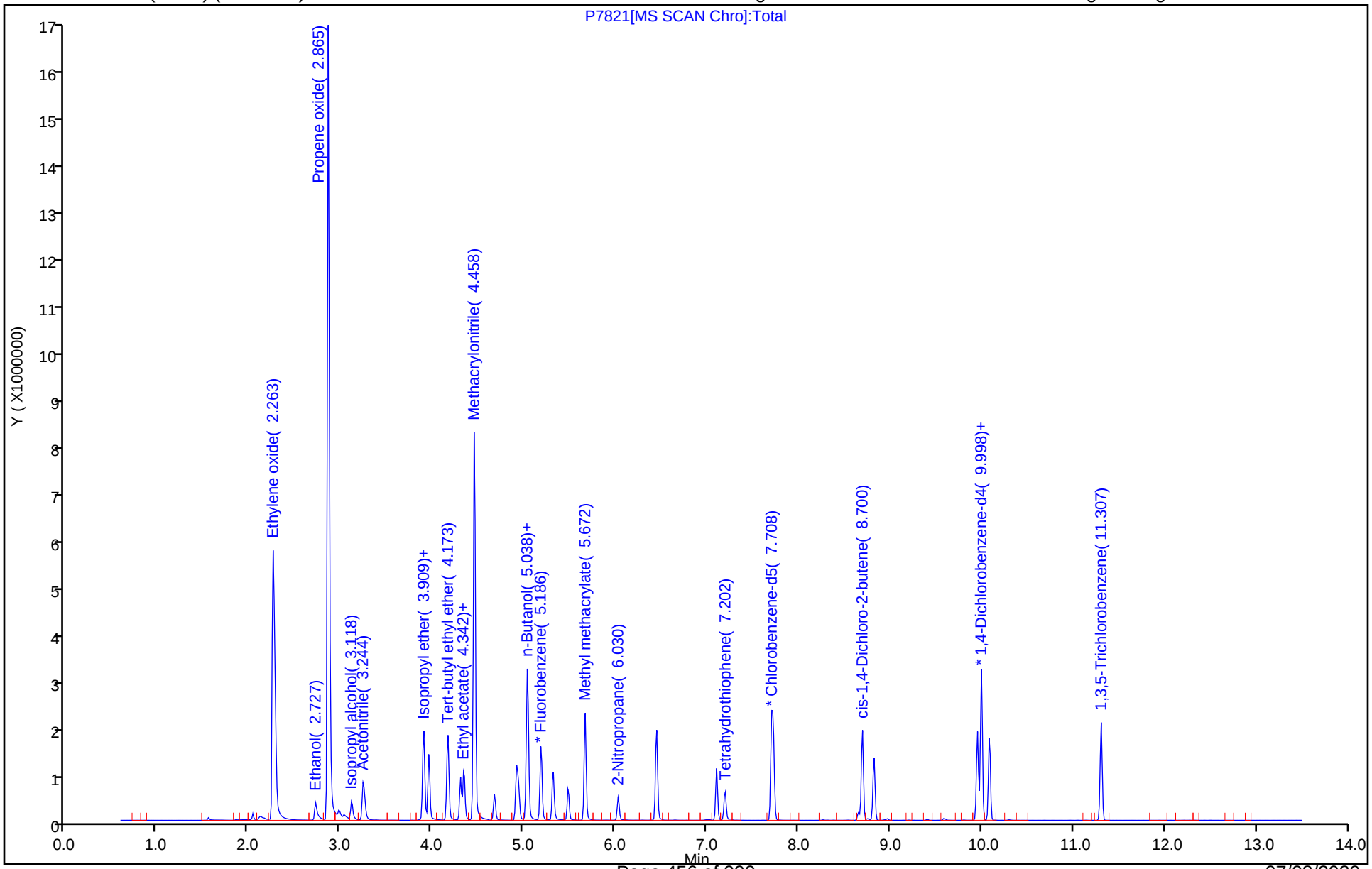
Report Date: 06-Feb-2020 21:41:55 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7821.D

Injection Date:	06-Feb-2020 16:48:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD100			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 06-Feb-2020 17:09:30 ALS Bottle#: 18 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:58 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:30:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.185	5.186	-0.001	98	1233461	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.728	7.730	-0.002	90	287435	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.954	9.956	-0.002	97	473957	50.0	50.0	
13 Ethylene oxide	43	2.251	2.263	-0.012	99	2022955	20000	0	
18 Ethanol	45	2.736	2.727	0.009	99	1121959	12000	12742	
20 Propene oxide	58	2.863	2.865	-0.002	99	19830208	20000	16732	
25 Isopropyl alcohol	45	3.127	3.118	0.009	99	999643	2000.0	2212.5	
28 Acetonitrile	41	3.253	3.245	0.008	99	1824759	2000.0	2022.4	
40 Isopropyl ether	87	3.908	3.909	-0.001	93	783010	200.0	192.2	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	1429550	200.0	191.6	
43 Tert-butyl ethyl ether	59	4.172	4.173	-0.001	97	2905958	200.0	192.4	
46 Ethyl acetate	43	4.309	4.310	-0.001	99	1812179	400.0	405.8	
49 Propionitrile	54	4.351	4.342	0.009	98	1975705	2000.0	2030.1	
51 Methacrylonitrile	41	4.467	4.458	0.009	90	7076095	2000.0	1894.5	
62 Tert-amyl methyl ether	73	5.037	5.039	-0.002	89	2808808	200.0	191.9	
63 n-Butanol	56	5.037	5.039	-0.002	51	855999	5000.0	5103.5	
71 Methyl methacrylate	100	5.670	5.672	-0.002	90	627312	400.0	421.9	
75 2-Nitropropane	41	6.029	6.031	-0.001	100	590761	400.0	414.9	
87 Tetrahydrothiophene	60	7.200	7.202	-0.002	92	565994	400.0	410.6	
98 cis-1,4-Dichloro-2-butene	53	8.699	8.700	-0.001	84	948600	400.0	426.1	
114 1,2,3-Trimethylbenzene	105	9.997	9.998	-0.001	99	3898885	200.0	196.4	
118 1,3,5-Trichlorobenzene	180	11.305	11.307	-0.002	96	1355172	200.0	205.6	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 200.00 Units: uL

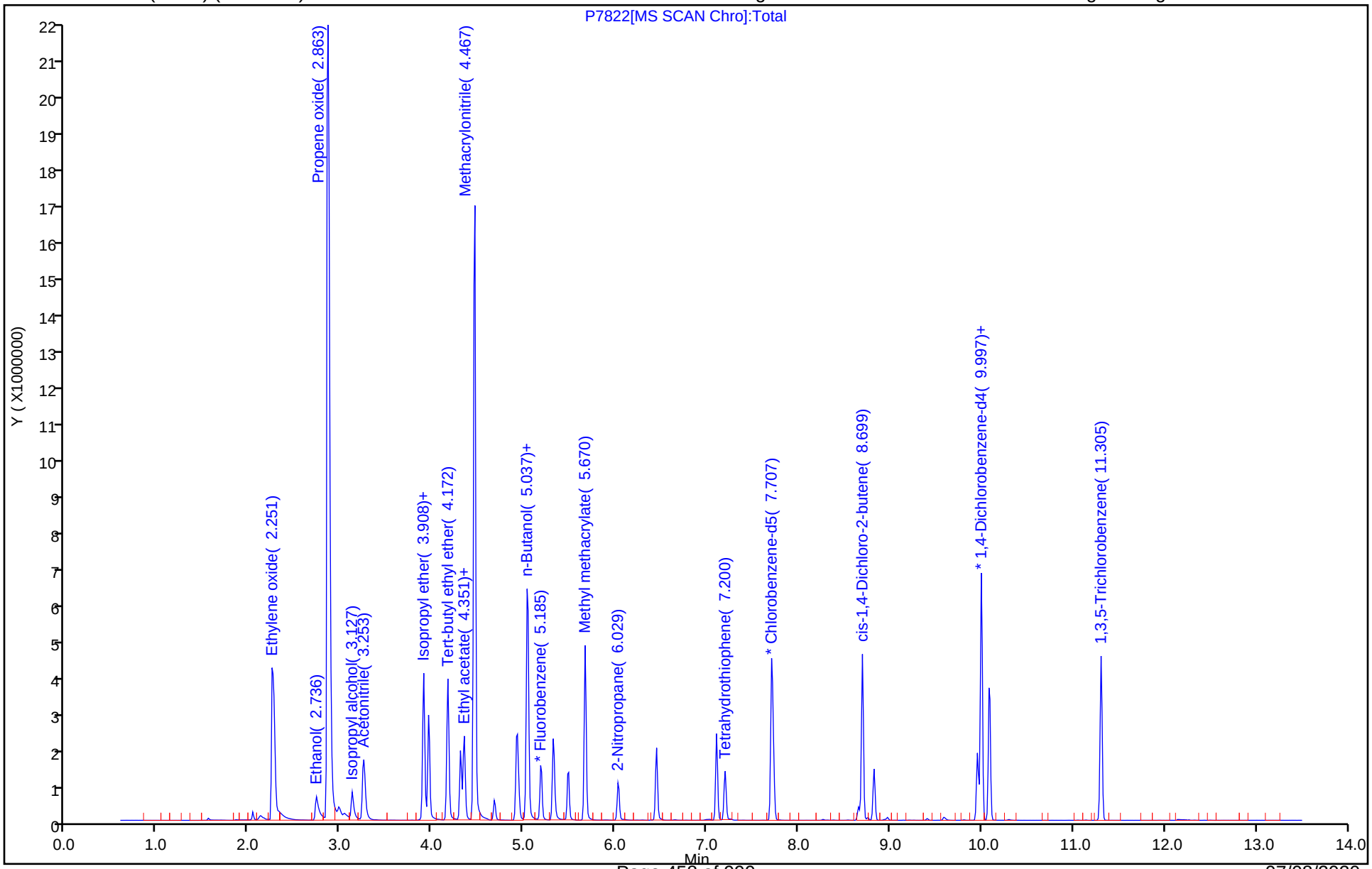
Report Date: 06-Feb-2020 21:41:58 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Injection Date:	06-Feb-2020 17:09:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD200			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-496958/12	P1658.D
Level 2	STD010 280-496958/13	P1659.D
Level 3	STD020 280-496958/14	P1660.D
Level 4	STD050 280-496958/15	P1661.D
Level 5	STD10 280-496958/16	P1662.D
Level 6	ICIS 280-496958/17	P1669.D
Level 7	STD75 280-496958/18	P1664.D
Level 8	STD100 280-496958/19	P1665.D
Level 9	STD200 280-496958/20	P1666.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 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1280 0.1501	0.1149 0.1496	0.1184 0.1413	0.1587 0.1427	0.1584	Ave		0.1402				11.6		15.0			
Chloromethane	0.3232 0.1998	0.2299 0.1994	0.1964 0.1852	0.2155 0.1824	0.2026	Lin2	0.0602	0.1892			0.1000				0.9930		0.9900
Vinyl chloride	0.2314 0.2184	0.2062 0.2201	0.2196 0.2055	0.2372 0.2023	0.2292	Ave		0.2189				5.6		30.0			
Bromomethane	+++++ 0.1030	0.2168 0.0763	0.1525 0.0850	0.0951 0.0778	0.0993	Lin1	0.1403	0.0808							0.9900		0.9900
Chloroethane	0.1523 0.1415	0.1337 0.1375	0.1415 0.1307	0.1471 0.1256	0.1447	Ave		0.1394				6.0		15.0			
Dichlorofluoromethane	0.3296 0.3281	0.3209 0.3327	0.3261 0.3139	0.3386 0.3130	0.3265	Ave		0.3255				2.6		15.0			
Trichlorofluoromethane	0.2742 0.2655	0.2673 0.2726	0.2651 0.2571	0.2943 0.2576	0.2782	Ave		0.2702				4.2		15.0			
Ethyl ether	0.1803 0.1669	0.1772 0.1686	0.1768 0.1674	0.1630 0.1640	0.1681	Ave		0.1703				3.7		15.0			
Acrolein	0.0464 0.0387	0.0442 0.0411	0.0442 0.0400	0.0422 0.0401	0.0417	Ave		0.0421				5.8		15.0			
1,1-Dichloroethene	0.1645 0.1668	0.1700 0.1626	0.1758 0.1551	0.1451 0.1545	0.1629	Ave		0.1619				5.7		30.0			
Freon 113	0.1331 0.1247	0.1318 0.1206	0.1304 0.1126	0.1084 0.1136	0.1213	Ave		0.1218				7.4		15.0			
Acetone	0.1008 0.0577	0.0916 0.0653	0.0854 0.0641	0.0735 0.0639	0.0682	Lin2	0.0807	0.0659							0.9910		0.9900
Iodomethane	+++++ 0.1499	0.1131 0.1719	0.0708 0.1647	0.0661 0.1537	0.0868	Lin	-0.110	0.1579							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
Carbon disulfide	0.8046 0.5572	0.5575 0.5272	0.5575 0.5112	0.4694 0.5023	0.5159	Lin2	0.1307	0.5000							0.9910		0.9900
Methyl acetate	0.1762 0.1493	0.1830 0.1684	0.1808 0.1658	0.1691 0.1676	0.1690	Ave		0.1699				5.8		15.0			
Allyl chloride	0.2966 0.2956	0.2886 0.2775	0.2992 0.2698	0.2475 0.2436	0.2799	Ave		0.2776				7.4		15.0			
Methylene Chloride	0.3943 0.1958	0.2548 0.1923	0.2351 0.1896	0.1969 0.1844	0.1984	Lin2	0.0975	0.1851							0.9950		0.9900
Tert-butyl alcohol (2-methyl-2-propanol)	0.0197 0.0184	0.0219 0.0224	0.0231 0.0224	0.0243 0.0232	0.0220	Ave		0.0219				8.4		15.0			
Acrylonitrile	0.0998 0.0828	0.0983 0.0906	0.0994 0.0885	0.0917 0.0865	0.0907	Ave		0.0920				6.5		15.0			
Methyl tert-butyl ether	0.5313 0.5438	0.5599 0.5554	0.5707 0.5501	0.5156 0.5436	0.5496	Ave		0.5467				2.9		15.0			
trans-1,2-Dichloroethene	0.2346 0.1914	0.1978 0.1852	0.1995 0.1799	0.1702 0.1777	0.1837	Ave		0.1911				9.9		15.0			
Hexane	1.2201 1.2204	1.2431 1.1594	1.2484 1.0737	1.0435 1.0817	1.2042	Ave		1.1661				6.8		15.0			
Vinyl acetate	0.4272 0.4424	0.4172 0.4249	0.4244 0.3910	0.3953 0.3763	0.4080	Ave		0.4119				5.1		15.0			
1,1-Dichloroethane	0.3531 0.3521	0.3670 0.3507	0.3738 0.3391	0.3257 0.3306	0.3553	Ave		0.3497			0.1000	4.5		15.0			
2-Butanone (MEK)	0.1132 0.0956	0.1174 0.1097	0.1212 0.1069	0.1179 0.1067	0.1144	Ave		0.1115				7.0		15.0			
cis-1,2-Dichloroethene	0.2455 0.2107	0.2225 0.2080	0.2256 0.2042	0.1901 0.2008	0.2057	Ave		0.2126				7.7		15.0			
2,2-Dichloropropane	0.2346 0.2600	0.2323 0.2427	0.2428 0.2372	0.2097 0.2386	0.2324	Ave		0.2367				5.6		15.0			
sec-Butyl Alcohol	+++++ 0.0156	0.0160 0.0191	0.0167 0.0191	0.0192 0.0194	0.0183	Ave		0.0179				8.8		15.0			
Chlorobromomethane	0.1103 0.0951	0.0986 0.0924	0.1046 0.0900	0.0866 0.0859	0.0935	Ave		0.0952				8.5		15.0			
Tetrahydrofuran	+++++ 0.0637	0.0813 0.0734	0.0776 0.0720	0.0751 0.0733	0.0747	Ave		0.0739				6.8		15.0			
Chloroform	0.3713 0.3304	0.3491 0.3268	0.3704 0.3197	0.3106 0.3113	0.3322	Ave		0.3358				6.9		30.0			
1,1,1-Trichloroethane	0.2799 0.2695	0.2716 0.2667	0.2885 0.2571	0.2408 0.2562	0.2622	Ave		0.2658				5.3		15.0			
Cyclohexane	0.3614 0.3471	0.3496 0.3429	0.3564 0.3206	0.3006 0.3220	0.3469	Ave		0.3386				5.9		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3014 0.2783	0.2937 0.2786	0.2930 0.2674	0.2522 0.2646	0.2773	Ave		0.2785				5.6		15.0			
Carbon tetrachloride	0.2212 0.2289	0.2101 0.2239	0.2296 0.2168	0.1898 0.2187	0.2191	Ave		0.2176				5.5		15.0			
Isobutyl alcohol	0.0068 0.0067	0.0075 0.0081	0.0078 0.0080	0.0086 0.0081	0.0080	Ave		0.0077				8.2		15.0			
Benzene	0.8807 0.8178	0.8781 0.8113	0.8863 0.7917	0.7662 0.7598	0.8136	Ave		0.8229				5.9		15.0			
1,2-Dichloroethane	0.4331 0.2570	0.3464 0.2591	0.3180 0.2537	0.2691 0.2459	0.2705	Lin2	0.0904	0.2561							0.9990		0.9900
n-Heptane	0.2867 0.2516	0.2656 0.2374	0.2668 0.2208	0.2149 0.2277	0.2392	Ave		0.2456				9.7		15.0			
Trichloroethene	0.2440 0.2033	0.2019 0.1960	0.2175 0.1916	0.1770 0.1915	0.1954	Ave		0.2020				9.5		15.0			
2-Pentanone	0.1509 0.1490	0.1666 0.1703	0.1741 0.1669	0.1754 0.1662	0.1709	Ave		0.1656				5.7		15.0			
Methylcyclohexane	0.2890 0.2592	0.2645 0.2551	0.2720 0.2394	0.2292 0.2426	0.2580	Ave		0.2566				7.0		15.0			
1,2-Dichloropropane	0.2162 0.2134	0.2200 0.2148	0.2192 0.2098	0.1974 0.2099	0.2128	Ave		0.2126				3.2		30.0			
1,4-Dioxane	0.0030 0.0026	0.0031 0.0030	0.0029 0.0029	0.0032 0.0030	0.0030	Ave		0.0030				5.6		15.0			
Dibromomethane	+++++ 0.1195	0.1306 0.1219	0.1256 0.1200	0.1175 0.1187	0.1217	Ave		0.1219				3.5		15.0			
Dichlorobromomethane	0.2692 0.2494	0.2373 0.2498	0.2577 0.2450	0.2275 0.2439	0.2403	Ave		0.2467				4.9		15.0			
2-Chloroethyl vinyl ether	0.1569 0.1449	0.1343 0.1583	0.1369 0.1500	0.1445 0.1530	0.1449	Ave		0.1471				5.6		15.0			
cis-1,3-Dichloropropene	1.3517 1.4097	1.2827 1.4222	1.3118 1.3849	1.1948 1.3836	1.3273	Ave		1.3410				5.3		15.0			
4-Methyl-2-pentanone (MIBK)	0.1902 0.1945	0.2117 0.2207	0.2257 0.2146	0.2242 0.2085	0.2238	Ave		0.2126				6.1		15.0			
Toluene	0.9569 0.8515	0.9193 0.8435	0.9477 0.8155	0.7939 0.7860	0.8538	Ave		0.8631				7.4		30.0			
trans-1,3-Dichloropropene	0.3010 0.2849	0.2412 0.2870	0.2559 0.2884	0.2309 0.2899	0.2520	Ave		0.2701				9.3		15.0			
Ethyl methacrylate	1.1290 1.2396	1.1658 1.3132	1.2049 1.2925	1.1698 1.2821	1.2639	Ave		1.2290				5.3		15.0			
1,1,2-Trichloroethane	0.1726 0.1720	0.1814 0.1758	0.1781 0.1721	0.1706 0.1713	0.1728	Ave		0.1741				2.1		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
Tetrachloroethene	0.6677 0.6145	0.6612 0.6056	0.6400 0.5746	0.5482 0.5751	0.5991	Ave		0.6096				6.7		15.0			
1,3-Dichloropropane	1.5992 1.4048	1.5251 1.4367	1.5542 1.3983	1.4090 1.3710	1.4762	Ave		1.4638				5.4		15.0			
2-Hexanone	0.5975 0.6030	0.6705 0.7005	0.7016 0.6807	0.7322 0.6547	0.7095	Ave		0.6723				6.9		15.0			
Chlorodibromomethane	0.7724 0.7764	0.6982 0.7967	0.7313 0.7836	0.6931 0.7792	0.7432	Ave		0.7527				5.1		15.0			
1,2-Dibromoethane	0.9651 0.7802	0.8162 0.8052	0.8192 0.7939	0.7446 0.7842	0.8129	Ave		0.8135				7.6		15.0			
1-Chlorohexane	1.8983 1.1687	1.4843 1.1328	1.3488 1.0878	1.0391 1.0718	1.1516	Lin2	0.4010	1.0933							0.9960		0.9900
Chlorobenzene	2.8431 2.2931	2.4882 2.2828	2.5613 2.2170	2.1276 2.1592	2.3153	Ave		2.3653			0.3000	9.7		15.0			
1,1,1,2-Tetrachloroethane	0.7470 0.7531	0.7135 0.7599	0.7208 0.7428	0.6719 0.7404	0.7068	Ave		0.7285				3.8		15.0			
Ethylbenzene	1.4916 1.2986	1.2985 1.3009	1.3772 1.2389	1.1724 1.2245	1.2833	Ave		1.2984				7.1		30.0			
m-Xylene & p-Xylene	1.7050 1.5716	1.6188 1.5634	1.6599 1.5211	1.3964 1.4782	1.5437	Ave		1.5620				6.0		15.0			
o-Xylene	1.6131 1.5082	1.4768 1.5167	1.6055 1.4652	1.3796 1.4336	1.5065	Ave		1.5006				5.0		15.0			
Styrene	2.6597 2.6050	2.4800 2.6021	2.6301 2.5303	2.2837 2.4262	2.5330	Ave		2.5278				4.7		15.0			
Bromoform	0.3772 0.4628	0.4078 0.4907	0.4224 0.4905	0.4134 0.4976	0.4420	Ave		0.4449			0.1000	9.6		15.0			
Isopropylbenzene	2.9207 2.6388	2.5972 2.6100	2.7993 2.4965	2.4207 2.4416	2.6282	Ave		2.6170				6.2		15.0			
Cyclohexanone	0.0425 0.0446	0.0481 0.0532	0.0526 0.0527	0.0587 0.0523	0.0561	Ave		0.0512				10.2		15.0			
1,1,2,2-Tetrachloroethane	0.8348 0.7118	0.8025 0.7375	0.7913 0.7239	0.8059 0.7211	0.7746	Ave		0.7670			0.3000	5.8		15.0			
Bromobenzene	0.7371 0.6049	0.6137 0.5992	0.6435 0.5917	0.5840 0.5870	0.5954	Ave		0.6174				7.8		15.0			
trans-1,4-Dichloro-2-butene	0.2012 0.1997	0.1801 0.2105	0.2016 0.2108	0.2070 0.2135	0.2092	Ave		0.2037				5.0		15.0			
1,2,3-Trichloropropane	0.2640 0.2073	0.2509 0.2189	0.2606 0.2148	0.2352 0.2141	0.2286	Ave		0.2327				9.1		15.0			
N-Propylbenzene	0.8025 0.7397	0.7405 0.7190	0.7765 0.7021	0.6300 0.6985	0.7180	Ave		0.7252				6.8		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
2-Chlorotoluene	0.6633 0.6172	0.6146 0.6083	0.6690 0.5897	0.5711 0.5913	0.6015	Ave		0.6140				5.3		15.0			
1,3,5-Trimethylbenzene	2.3551 2.1752	2.1731 2.1703	2.2493 2.0577	1.9914 2.0094	2.1530	Ave		2.1483				5.4		15.0			
4-Chlorotoluene	0.7545 0.6430	0.6464 0.6311	0.6551 0.6215	0.5833 0.6135	0.6400	Ave		0.6432				7.3		15.0			
tert-Butylbenzene	2.0608 1.8063	1.8002 1.7795	1.8966 1.7171	1.6183 1.6943	1.8020	Ave		1.7972				7.1		15.0			
1,2,4-Trimethylbenzene	2.4448 2.2016	2.1610 2.1649	2.2655 2.0984	2.0025 2.0249	2.1787	Ave		2.1714				6.1		15.0			
sec-Butylbenzene	0.5745 0.5380	0.5150 0.5254	0.5725 0.5014	0.4806 0.5092	0.5140	Ave		0.5256				6.0		15.0			
1,3-Dichlorobenzene	+++++ 1.1241	1.1551 1.1220	1.1918 1.0918	1.0646 1.0774	1.1141	Ave		1.1176				3.7		15.0			
4-Isopropyltoluene	2.4070 2.2834	2.1853 2.2155	2.2701 2.1420	1.9940 2.0784	2.2002	Ave		2.1973				5.5		15.0			
1,4-Dichlorobenzene	+++++ 1.1395	1.2920 1.1360	1.2862 1.0997	1.0905 1.0898	1.1263	Ave		1.1575				7.2		15.0			
n-Butylbenzene	2.3154 2.1037	2.1183 2.0423	2.1364 1.9557	1.8360 1.9070	2.0269	Ave		2.0491				6.9		15.0			
1,2-Dichlorobenzene	1.2828 1.0736	1.1374 1.0901	1.1690 1.0550	1.0580 1.0431	1.0822	Ave		1.1101				6.9		15.0			
1,2-Dibromo-3-Chloropropane	0.1158 0.1202	0.1217 0.1385	0.1267 0.1382	0.1354 0.1477	0.1274	Ave		0.1302				8.0		15.0			
1,2,4-Trichlorobenzene	+++++ 0.6191	0.6124 0.6199	0.6022 0.6100	0.5585 0.6283	0.5803	Ave		0.6038				3.9		15.0			
Hexachlorobutadiene	+++++ 0.2332	0.2237 0.2212	0.2383 0.2125	0.1939 0.2252	0.2098	Ave		0.2197				6.4		15.0			
Naphthalene	2.1471 1.8713	1.8463 2.0171	1.8364 1.9970	1.9310 2.0064	1.9153	Ave		1.9520				5.1		15.0			
1,2,3-Trichlorobenzene	+++++ 0.5563	0.5614 0.5723	0.5535 0.5616	0.5351 0.5738	0.5284	Ave		0.5553				2.9		15.0			
Dibromofluoromethane (Surr)	0.2407 0.2398	0.2411 0.2413	0.2405 0.2421	0.2404 0.2413	0.2400	Ave		0.2408				0.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2860 0.2733	0.2901 0.2807	0.2886 0.2795	0.2868 0.2766	0.2884	Ave		0.2833				2.1		15.0			
Toluene-d8 (Surr)	4.4266 4.3600	4.4563 4.3900	4.4525 4.3492	4.4175 4.3184	4.4261	Ave		4.3996				1.1		15.0			
4-Bromofluorobenzene (Surr)	1.1116 1.1011	1.1177 1.0955	1.1073 1.0784	1.1155 1.0882	1.1173	Ave		1.1036				1.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-496958/12	P1658.D
Level 2	STD010 280-496958/13	P1659.D
Level 3	STD020 280-496958/14	P1660.D
Level 4	STD050 280-496958/15	P1661.D
Level 5	STD10 280-496958/16	P1662.D
Level 6	ICIS 280-496958/17	P1669.D
Level 7	STD75 280-496958/18	P1664.D
Level 8	STD100 280-496958/19	P1665.D
Level 9	STD200 280-496958/20	P1666.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 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	3150 389403	5476 565032	11244 732362	38285 1521181	76509	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Lin2	7957 518425	10961 753095	18647 960082	51981 1944451	97832	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	5697 566674	9829 831473	20856 1065051	57213 2156770	110707	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Lin1	+++++ 267351	10332 288045	14480 440495	22950 829108	47958	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloroethane	FB	Ave	3750 367238	6373 519320	13433 677138	35486 1338855	69871	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	8114 851263	15298 1256526	30965 1626866	81685 3337067	157676	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	6751 688909	12743 1029796	25172 1332462	70991 2746174	134330	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	4438 433032	8448 636933	16790 867417	39315 1748580	81198	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	11284 992240	20816 1531495	41406 2049494	100409 4216625	198934	4.94 494	9.88 741	19.8 988	49.4 1975	98.8
1,1-Dichloroethene	FB	Ave	4050 432834	8105 614318	16694 803768	35001 1646977	78660	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Freon 113	FB	Ave	3277 323522	6283 455666	12382 583334	26144 1210821	58580	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Lin2	9926 599119	17462 986514	32447 1328269	70934 2724330	131651	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Iodomethane	FB	Lin	+++++ 388838	5391 649402	6724 853782	15949 1638641	41908	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon disulfide	FB	Lin2	19807 1445817	26575 1991209	52942 2649300	113233 5354499	249116	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

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SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methyl acetate	FB	Ave	8673 774814	17449 1272496	34344 1718245	81580 3572489	163271	1.00 100	2.00 150	4.00 200	10.0 400	20.0
Allyl chloride	FB	Ave	7301 767084	13759 1048018	28409 1398353	59709 2597002	135183	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Lin2	9706 508123	12146 726350	22322 982723	47489 1965595	95819	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tert-butyl alcohol (2-methyl-2-propanol)	FB	Ave	4840 476237	10427 844878	21901 1163015	58678 2468347	106253	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	24558 2147902	46835 3422488	94418 4584473	221256 9225550	437925	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	13079 1410931	26688 2097701	54197 2851275	124365 5795702	265416	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	5776 496599	9430 699589	18947 932241	41058 1894659	88732	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Ave	6679 719384	13212 991684	26560 1270824	56864 2650185	130470	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	21034 2295944	39777 3210150	80611 4053327	190703 8022993	394091	1.00 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	8693 913640	17492 1324489	35499 1757478	78561 3524595	171592	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	11145 992035	22389 1657714	46020 2217162	113733 4551845	221028	2.00 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	6043 546752	10604 785590	21423 1058127	45860 2140264	99347	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Ave	5776 674576	11073 916619	23061 1229414	50592 2543532	112216	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	+++++ 1213494	22900 2164234	47471 2977506	138755 6200156	265274	+++++ 1500	30.0 2250	60.0 3000	150 6000	300
Chlorobromomethane	FB	Ave	2716 246645	4702 349155	9931 466481	20887 916158	45134	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	+++++ 330688	7747 554326	14739 746007	36254 1562767	72173	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
Chloroform	FB	Ave	9141 857391	16640 1234280	35178 1656789	74923 3319211	160425	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	6890 699182	12946 1007366	27396 1332750	58098 2730851	126621	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	8897 900566	16664 1295262	33843 1661826	72517 3432828	167527	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	7420 722099	14002 1052218	27826 1385678	60834 2820470	133932	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	5446 593951	10013 845679	21806 1123442	45792 2331188	105812	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

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			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Isobutyl alcohol	FB	Ave	4174 435234	8906 768829	18462 1036679	51802 2158330	96963	12.5 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	21681 2121944	41858 3064336	84162 4103192	184836 8100543	392915	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Lin2	10662 666788	16511 978504	30197 1314638	64913 2621872	130615	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Heptane	FB	Ave	7057 652907	12658 896848	25333 1144406	51836 2427879	115523	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	FB	Ave	6006 527518	9625 740389	20658 992812	42697 2041486	94360	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	14862 1546919	31765 2572976	66130 3459479	169279 7086221	330037	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Methylcyclohexane	FB	Ave	7113 672553	12607 963441	25828 1240952	55290 2586376	124604	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	5321 553580	10485 811193	20818 1087577	47629 2237217	102772	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	1456 134765	2933 224792	5492 304422	15477 629142	29303	10.0 1000	20.0 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	+++++ 310055	6224 460404	11931 622019	28351 1265341	58752	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorobromomethane	FB	Ave	6627 647111	11312 943348	24474 1269877	54885 2599633	116062	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	3862 375914	6403 598010	12997 777645	34848 1631027	69995	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	7399 830989	13633 1216450	27908 1639115	65109 3390099	143800	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	18727 2019078	40359 3333758	85733 4449408	216321 8889699	432244	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	23555 2209256	43821 3185871	89995 4226712	191514 8379887	412287	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Ave	7409 739208	11495 1084089	24304 1494637	55704 3090342	121709	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Ave	6180 730677	12391 1123161	25633 1529747	63746 3141319	136938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	4248 446203	8647 664027	16908 892221	41158 1826181	83459	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Ave	3655 362210	7028 517985	13615 680115	29875 1409071	64911	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Ave	8754 828087	16209 1228848	33064 1654933	76780 3359188	159930	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Ave	13083 1421906	28505 2396568	59708 3222482	159597 6416464	307466	2.00 200	4.00 300	8.00 400	20.0 800	40.0

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			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	4228 457646	7421 681438	15559 927388	37770 1909184	80520	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromoethane	CBNZ d5	Ave	5283 459893	8675 688729	17428 939615	40577 1921283	88076	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Lin2	10391 688923	15776 968916	28696 1287435	56622 2625923	124764	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chlorobenzene	CBNZ d5	Ave	15563 1351697	26446 1952494	54491 2623954	115938 5290337	250839	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4089 443921	7583 649959	15334 879154	36611 1814145	76578	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylbenzene	CBNZ d5	Ave	8165 765475	13801 1112684	29300 1466328	63884 3000265	139031	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	9333 926436	17205 1337167	35314 1800340	76090 3621670	167252	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZ d5	Ave	8830 889019	15696 1297286	34157 1734182	75177 3512399	163211	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZ d5	Ave	14559 1535593	26358 2225643	55954 2994821	124441 5944526	274427	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZ d5	Ave	2065 272832	4334 419665	8987 580498	22527 1219200	47885	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isopropylbenzene	DCBd 4	Ave	22793 2246623	39516 3269113	85484 4297903	188253 8473631	412530	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZ d5	Ave	9304 1051966	20432 1820858	44758 2497231	127996 5123084	242913	20.0 2000	40.0 3000	80.0 4000	200 8000	400
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6515 606034	12209 923777	24163 1246192	62677 2502476	121592	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd 4	Ave	5752 514975	9337 750457	19650 1018637	45419 2037374	93464	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1570 169990	2740 263640	6156 362926	16098 740899	32840	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	2060 176525	3818 274122	7957 369781	18290 742902	35882	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd 4	Ave	6263 629799	11266 900621	23713 1208674	48994 2424282	112695	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chlorotoluene	DCBd 4	Ave	5176 525501	9351 761914	20430 1015287	44412 2052197	94413	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	18379 1851899	33063 2718338	68689 3542571	154872 6973832	337938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Chlorotoluene	DCBd 4	Ave	5888 547434	9835 790475	20005 1069992	45363 2129083	100456	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
tert-Butylbenzene	DCBd 4	Ave	16082 1537848	27390 2228828	57918 2956162	125850 5880094	282847	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2,4-Trimethylbenzene	DCBd 4	Ave	19079 1874413	32879 2711650	69183 3612602	155733 7027541	341971	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butylbenzene	DCBd 4	Ave	4483 458007	7836 658067	17482 863268	37379 1767152	80672	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 957029	17575 1405320	36396 1879660	82789 3739315	174866	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Isopropyltoluene	DCBd 4	Ave	18784 1944009	33248 2775007	69322 3687575	155069 7213150	345360	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 970134	19657 1422924	39277 1893150	84803 3782164	176794	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Butylbenzene	DCBd 4	Ave	18069 1790989	32229 2558085	65241 3366903	142782 6618361	318151	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	10011 914029	17305 1365427	35697 1816228	82278 3619991	169871	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	904 102294	1852 173521	3868 237845	10531 512443	19998	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 527062	9317 776485	18390 1050224	43433 2180721	91087	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 198550	3403 277038	7277 365804	15077 781505	32937	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd 4	Ave	16756 1593185	28091 2526472	56079 3438073	150170 6963268	300637	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 473636	8541 716876	16904 966833	41611 1991580	82932	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	592424 622098	574659 607631	571033 627480	579846 643049	579503	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	704070 709192	691353 706747	685163 724426	691950 737268	696272	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	2423114 2570054	2368182 2503188	2368091 2573814	2407178 2645158	2397674	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	867490 937409	850285 914750	845318 928259	867537 944124	876843	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jun-2020 16:26:30 ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:31 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 09:01:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.113	-0.001	98	2461662	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.646	-0.002	87	547396	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.873	-0.002	98	780394	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.607	-0.002	92	592424	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.869	4.871	-0.002	97	704070	50.0	50.5	
$ 6 Toluene-d8 (Surr)	98	6.367	6.369	-0.002	93	2423114	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.743	-0.001	85	867490	50.0	50.4	
10 Dichlorodifluoromethane	85	1.671	1.662	0.009	97	3150	0.5000	0.4563	a
11 Chloromethane	50	1.840	1.842	-0.002	99	7957	0.5000	0.5358	a
12 Vinyl chloride	62	1.946	1.937	0.009	97	5697	0.5000	0.5286	
14 Bromomethane	94	2.241	2.232	0.009	88	6640	0.5000	-0.0676	a
15 Chloroethane	64	2.326	2.327	-0.001	98	3750	0.5000	0.5464	
16 Dichlorofluoromethane	67	2.505	2.496	0.009	97	8114	0.5000	0.5063	
17 Trichlorofluoromethane	101	2.537	2.538	-0.001	97	6751	0.5000	0.5075	
19 Ethyl ether	59	2.748	2.749	-0.001	92	4438	0.5000	0.5294	
21 Acrolein	56	2.853	2.855	-0.002	99	11284	4.94	5.45	
22 1,1-Dichloroethene	96	2.948	2.939	0.009	95	4050	0.5000	0.5080	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.948	2.939	0.009	81	3277	0.5000	0.5463	
24 Acetone	43	2.959	2.960	-0.001	100	9926	2.00	1.84	a
26 Iodomethane	142	3.075	3.066	0.009	98	5837	0.5000	1.45	a
27 Carbon disulfide	76	3.128	3.129	-0.001	99	19807	0.5000	0.5433	a
29 Methyl acetate	43	3.191	3.193	-0.002	98	8673	1.00	1.04	
30 3-Chloro-1-propene	41	3.212	3.214	-0.002	90	7301	0.5000	0.5342	
31 Methylene Chloride	84	3.307	3.309	-0.002	92	9706	0.5000	0.5381	a
32 2-Methyl-2-propanol	59	3.349	3.351	-0.002	97	4840	5.00	4.49	
33 Acrylonitrile	53	3.476	3.467	0.009	97	24558	5.00	5.42	
34 Methyl tert-butyl ether	73	3.497	3.499	-0.002	96	13079	0.5000	0.4859	
35 trans-1,2-Dichloroethene	96	3.518	3.509	0.009	96	5776	0.5000	0.6138	
36 Hexane	57	3.708	3.710	-0.002	92	6679	0.5000	0.5232	
38 Vinyl acetate	43	3.814	3.805	0.009	95	21034	1.00	1.04	
39 1,1-Dichloroethane	63	3.835	3.836	-0.001	95	8693	0.5000	0.5049	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.225	4.216	0.009	99	11145	2.00	2.03	
47 cis-1,2-Dichloroethene	96	4.246	4.248	-0.002	83	6043	0.5000	0.5775	
48 2,2-Dichloropropane	77	4.257	4.258	-0.001	90	5776	0.5000	0.4956	
50 sec-Butyl Alcohol	45	4.331	4.322	0.009	96	9480	15.0	10.7	
52 Tetrahydrofuran	42	4.436	4.427	0.009	96	4387	1.00	1.21	
53 Chlorobromomethane	128	4.426	4.427	-0.001	96	2716	0.5000	0.5793	
54 Chloroform	83	4.489	4.480	0.009	92	9141	0.5000	0.5530	
55 1,1,1-Trichloroethane	97	4.626	4.628	-0.002	97	6890	0.5000	0.5264	
56 Cyclohexane	56	4.689	4.691	-0.002	91	8897	0.5000	0.5337	
57 1,1-Dichloropropene	75	4.742	4.744	-0.002	95	7420	0.5000	0.5411	
59 Carbon tetrachloride	117	4.753	4.754	-0.001	93	5446	0.5000	0.5084	
58 Isobutyl alcohol	41	4.753	4.754	-0.001	87	4174	12.5	11.0	
60 Benzene	78	4.901	4.902	-0.001	95	21681	0.5000	0.5352	
61 1,2-Dichloroethane	62	4.922	4.923	-0.001	95	10662	0.5000	0.4925	
66 n-Heptane	43	5.080	5.082	-0.002	73	7057	0.5000	0.5835	
67 Trichloroethene	95	5.386	5.388	-0.002	96	6006	0.5000	0.6038	
68 2-Pentanone	43	5.491	5.483	0.008	98	14862	2.00	1.82	
69 Methylcyclohexane	55	5.586	5.578	0.008	91	7113	0.5000	0.5631	
70 1,2-Dichloropropane	63	5.597	5.599	-0.002	96	5321	0.5000	0.5084	
72 1,4-Dioxane	88	5.639	5.630	0.009	77	1456	10.0	10.0	
73 Dibromomethane	93	5.671	5.662	0.009	91	4066	0.5000	0.6773	
74 Dichlorobromomethane	83	5.787	5.789	-0.002	98	6627	0.5000	0.5457	
76 2-Chloroethyl vinyl ether	63	5.998	5.989	0.009	89	3862	0.5000	0.5333	
77 cis-1,3-Dichloropropene	75	6.146	6.137	0.009	94	7399	0.5000	0.5040	
78 4-Methyl-2-pentanone (MIBK)	43	6.241	6.242	-0.001	96	18727	2.00	1.79	
79 Toluene	91	6.431	6.432	-0.001	98	23555	0.5000	0.5543	
80 trans-1,3-Dichloropropene	75	6.610	6.601	0.009	97	7409	0.5000	0.5571	
81 Ethyl methacrylate	69	6.631	6.622	0.009	88	6180	0.5000	0.4593	
82 1,1,2-Trichloroethane	97	6.779	6.781	-0.002	90	4248	0.5000	0.4957	
83 Tetrachloroethene	164	6.874	6.876	-0.002	87	3655	0.5000	0.5477	
84 1,3-Dichloropropane	76	6.927	6.928	-0.001	89	8754	0.5000	0.5462	
85 2-Hexanone	43	6.948	6.939	0.009	94	13083	2.00	1.78	
86 Chlorodibromomethane	129	7.127	7.118	0.009	89	4228	0.5000	0.5131	
88 Ethylene Dibromide	107	7.243	7.245	-0.002	98	5283	0.5000	0.5932	
89 1-Chlorohexane	91	7.634	7.635	-0.001	67	10391	0.5000	0.5014	
90 Chlorobenzene	112	7.676	7.678	-0.002	92	15563	0.5000	0.6010	
92 Ethylbenzene	106	7.750	7.751	-0.001	99	8165	0.5000	0.5744	
91 1,1,1,2-Tetrachloroethane	131	7.750	7.751	-0.001	91	4089	0.5000	0.5127	
93 m-Xylene & p-Xylene	106	7.866	7.868	-0.002	99	9333	0.5000	0.5458	
94 o-Xylene	106	8.235	8.226	0.009	95	8830	0.5000	0.5375	
95 Styrene	104	8.246	8.247	-0.001	94	14559	0.5000	0.5261	
96 Bromoform	173	8.436	8.427	0.009	91	2065	0.5000	0.4239	
97 Isopropylbenzene	105	8.573	8.575	-0.002	95	22793	0.5000	0.5580	
99 Cyclohexanone	55	8.668	8.670	-0.002	93	9304	20.0	16.6	
100 1,1,2,2-Tetrachloroethane	83	8.858	8.859	-0.001	93	6515	0.5000	0.5442	
101 Bromobenzene	156	8.889	8.891	-0.002	96	5752	0.5000	0.5969	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.891	-0.002	44	1570	0.5000	0.4938	
103 1,2,3-Trichloropropane	110	8.921	8.923	-0.002	83	2060	0.5000	0.5672	
104 N-Propylbenzene	120	8.974	8.965	0.009	99	6263	0.5000	0.5533	
105 2-Chlorotoluene	126	9.069	9.071	-0.002	95	5176	0.5000	0.5401	
106 1,3,5-Trimethylbenzene	105	9.143	9.144	-0.001	94	18379	0.5000	0.5481	
107 4-Chlorotoluene	126	9.185	9.187	-0.002	97	5888	0.5000	0.5866	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.449	9.450	-0.001	92	16082	0.5000	0.5733	
109 1,2,4-Trimethylbenzene	105	9.512	9.514	-0.002	97	19079	0.5000	0.5630	
110 sec-Butylbenzene	134	9.670	9.672	-0.002	94	4483	0.5000	0.5465	
111 1,3-Dichlorobenzene	146	9.797	9.799	-0.002	97	11444	0.5000	0.6561	
112 4-Isopropyltoluene	119	9.818	9.820	-0.002	96	18784	0.5000	0.5477	
113 1,4-Dichlorobenzene	146	9.903	9.904	-0.001	88	12135	0.5000	0.6717	
115 n-Butylbenzene	91	10.219	10.221	-0.002	98	18069	0.5000	0.5650	
116 1,2-Dichlorobenzene	146	10.261	10.252	0.009	96	10011	0.5000	0.5778	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.033	-0.001	74	904	0.5000	0.4449	
119 1,2,4-Trichlorobenzene	180	11.865	11.856	0.009	93	6414	0.5000	0.6805	
120 Hexachlorobutadiene	225	12.003	12.004	-0.001	94	2919	0.5000	0.8512	
121 Naphthalene	128	12.129	12.131	-0.002	97	16756	0.5000	0.5500	
122 1,2,3-Trichlorobenzene	180	12.351	12.352	-0.001	93	5564	0.5000	0.6420	
S 139 1,2-Dichloroethene, Total (URS)	96				0		1.00	1.19	
S 142 Xylenes, Total	106				0		1.00	1.08	
S 140 Trihalomethanes, Total	1				0		2.00	2.04	
S 143 Xylenes, Total (URS)	1				0		1.00	1.08	
S 146 Total BTEX	1				0			2.75	
S 145 1,3-Dichloropropene, Total	1				0		1.00	1.06	
S 144 1,2-Dichloroethene, Total	1				0		1.00	1.19	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-Gas A_00058	Amount Added:	0.10	Units: uL	
MV-MegaMainA_00034	Amount Added:	0.25	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

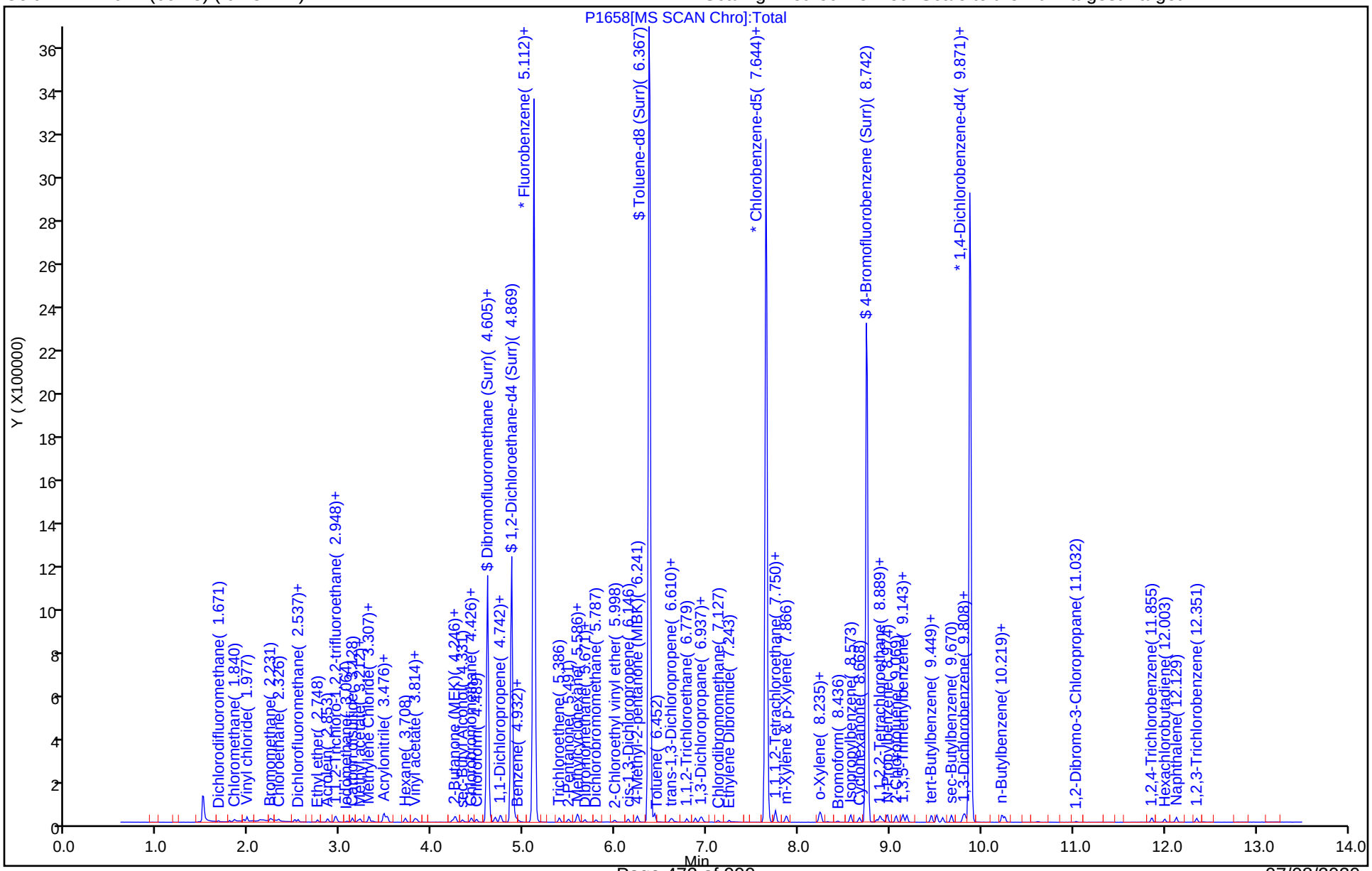
Report Date: 02-Jun-2020 11:15:32 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D

Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

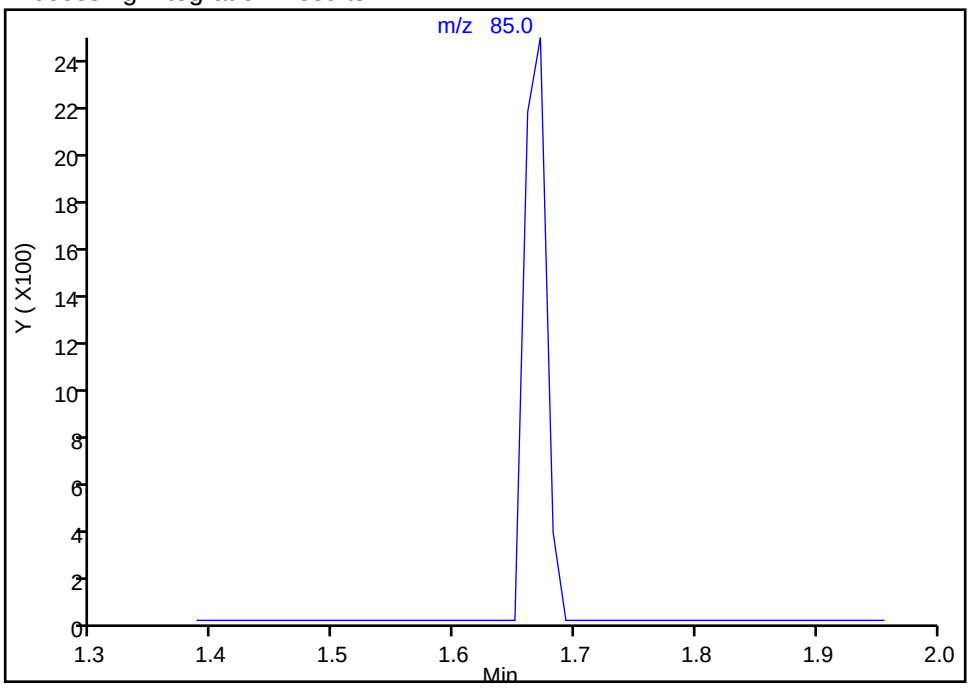
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

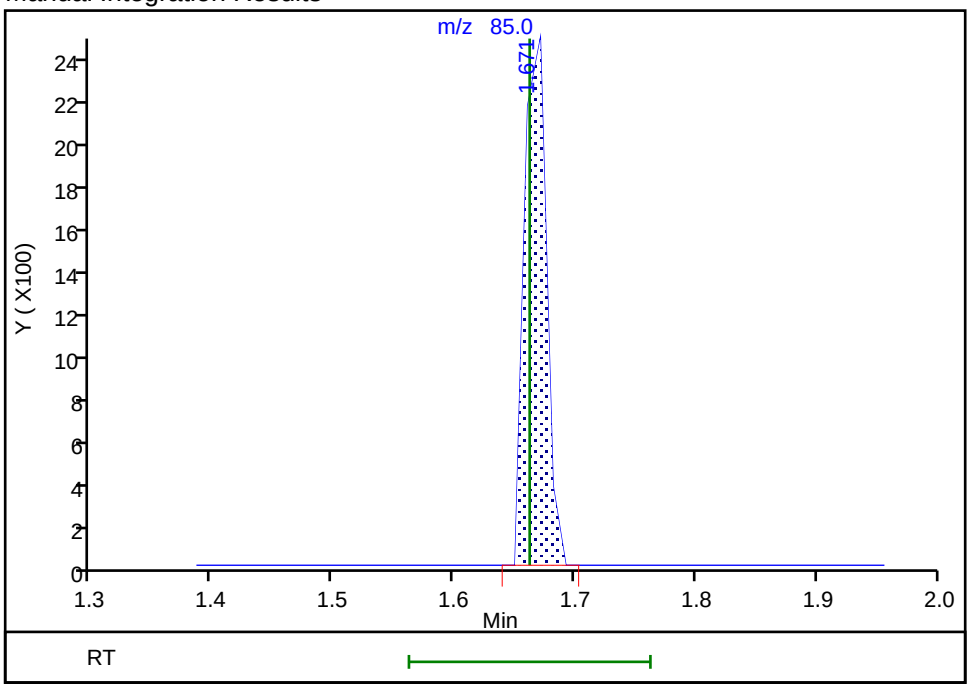
Not Detected
Expected RT: 1.66

Processing Integration Results



Manual Integration Results

RT: 1.67
Area: 3150
Amount: 0.456263
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:32
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

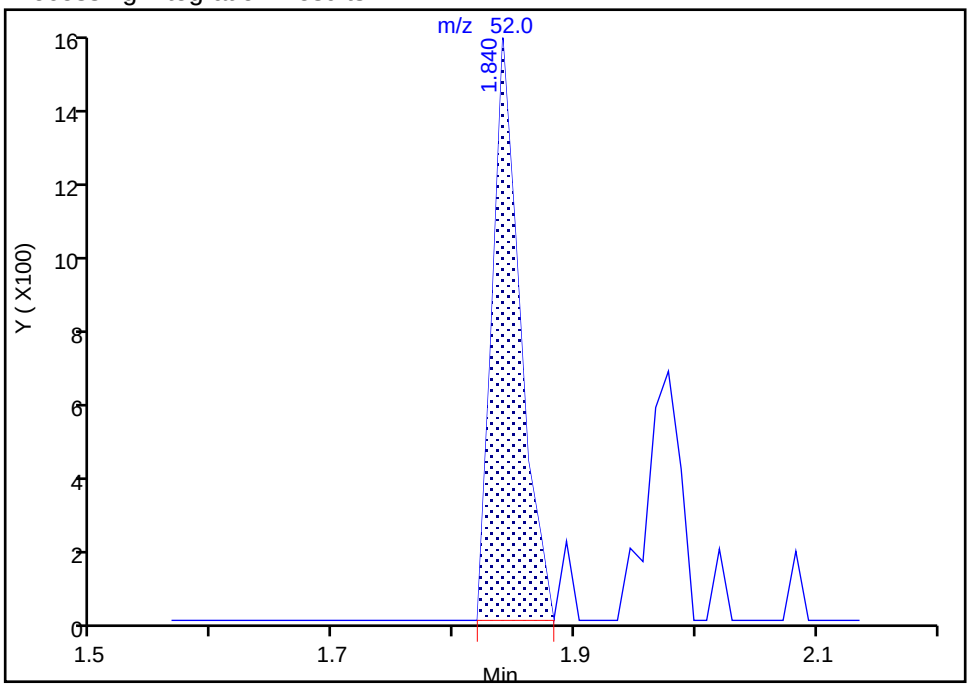
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 2

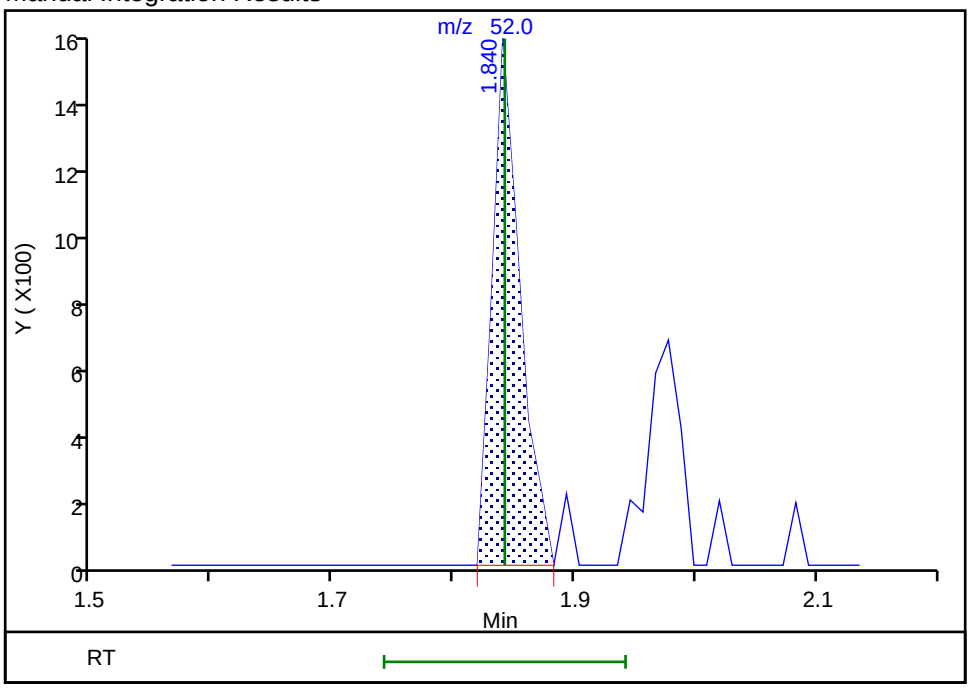
Processing Integration Results

RT: 1.84
Area: 2445
Amount: 0.535842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 2445
Amount: 0.535842
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

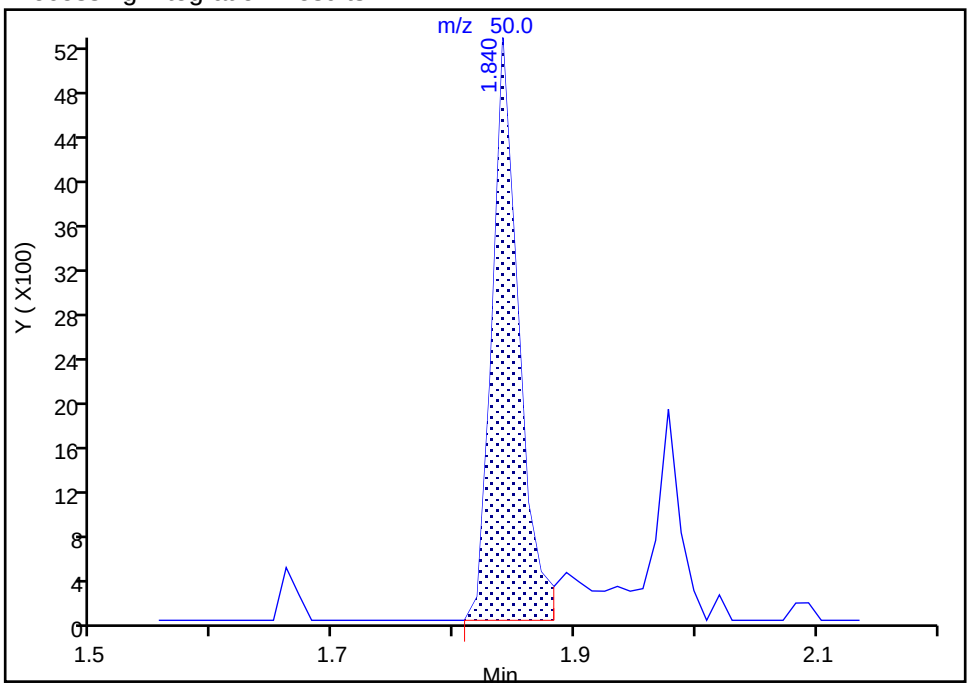
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

11 Chloromethane, CAS: 74-87-3

Signal: 1

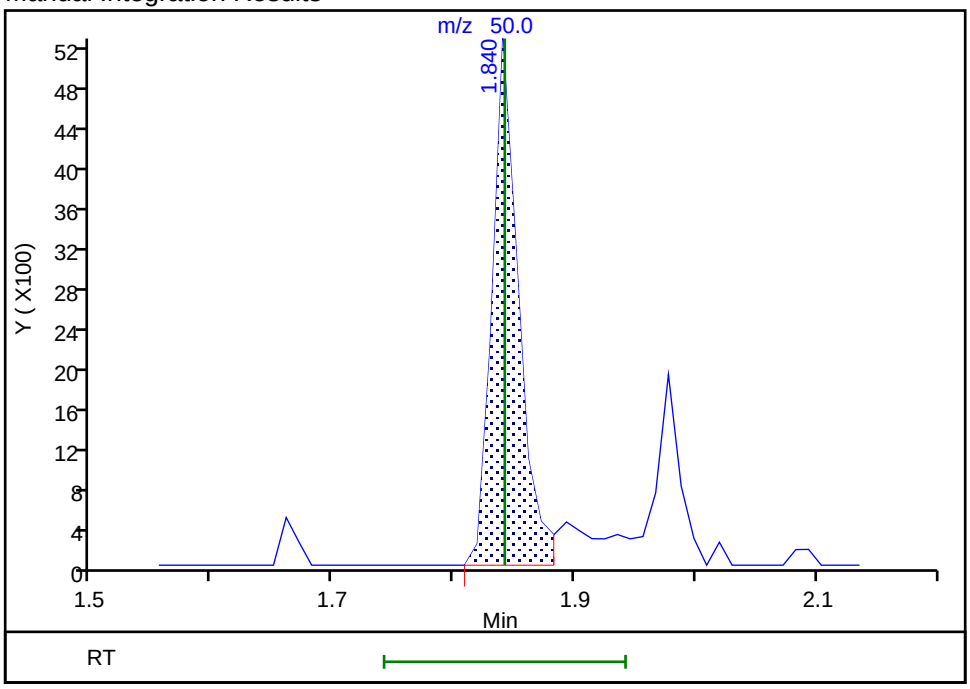
Processing Integration Results

RT: 1.84
Area: 7957
Amount: 0.535842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 7957
Amount: 0.535842
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:41
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

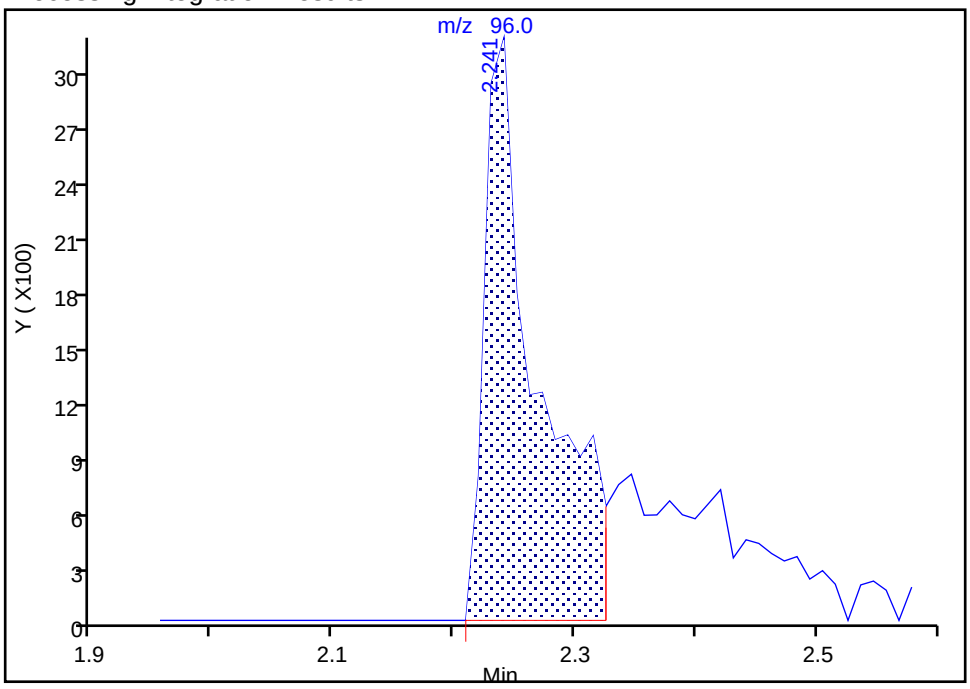
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

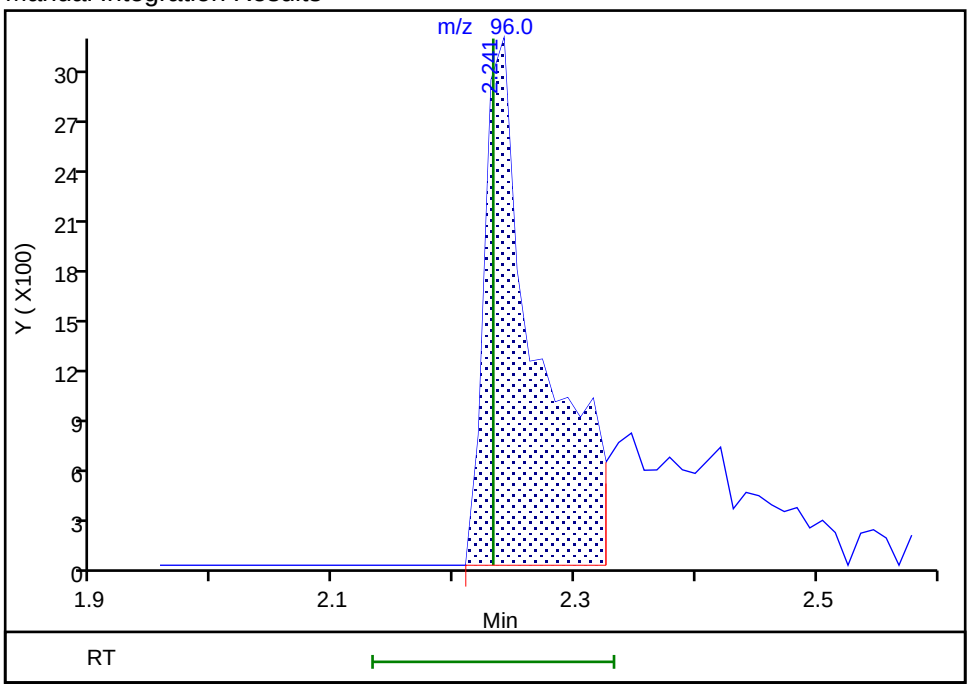
Processing Integration Results

RT: 2.24
Area: 9950
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.24
Area: 9950
Amount: -0.067594
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

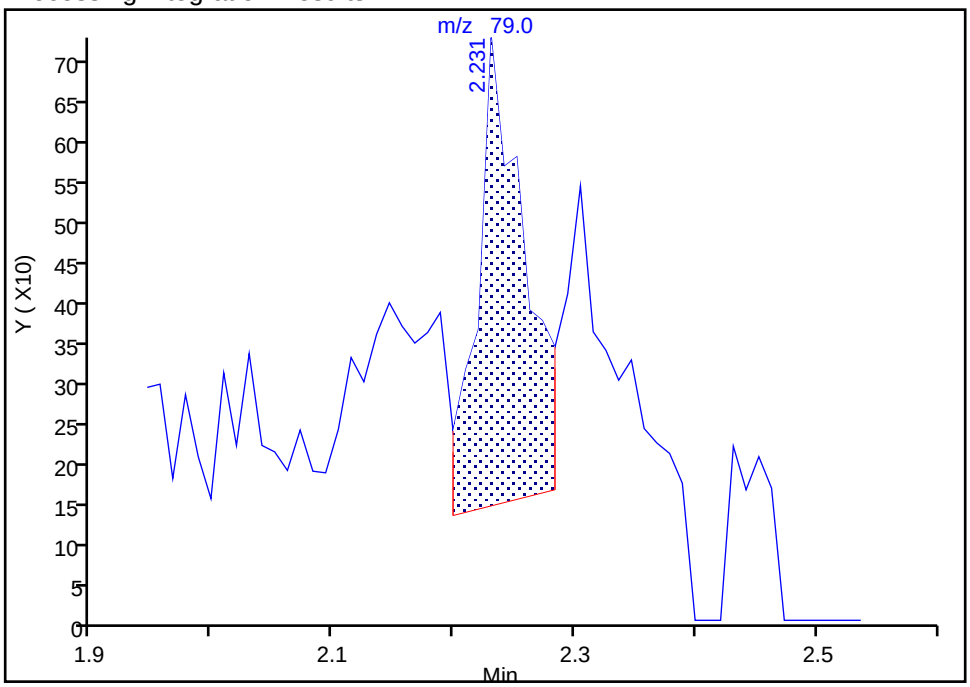
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

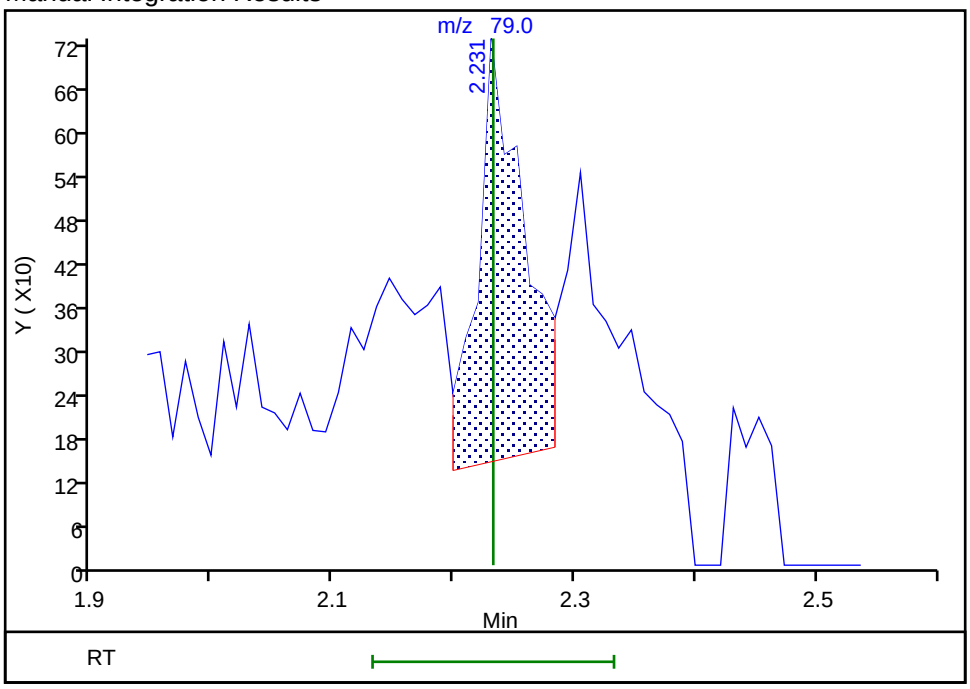
Processing Integration Results

RT: 2.23
Area: 1614
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.23
Area: 1614
Amount: -0.067594
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

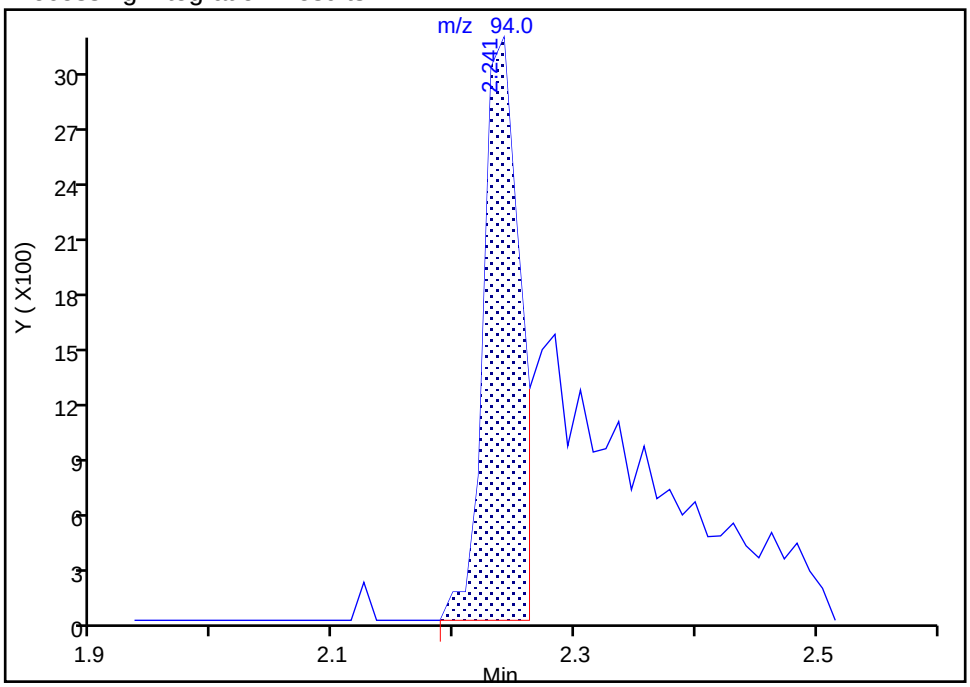
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

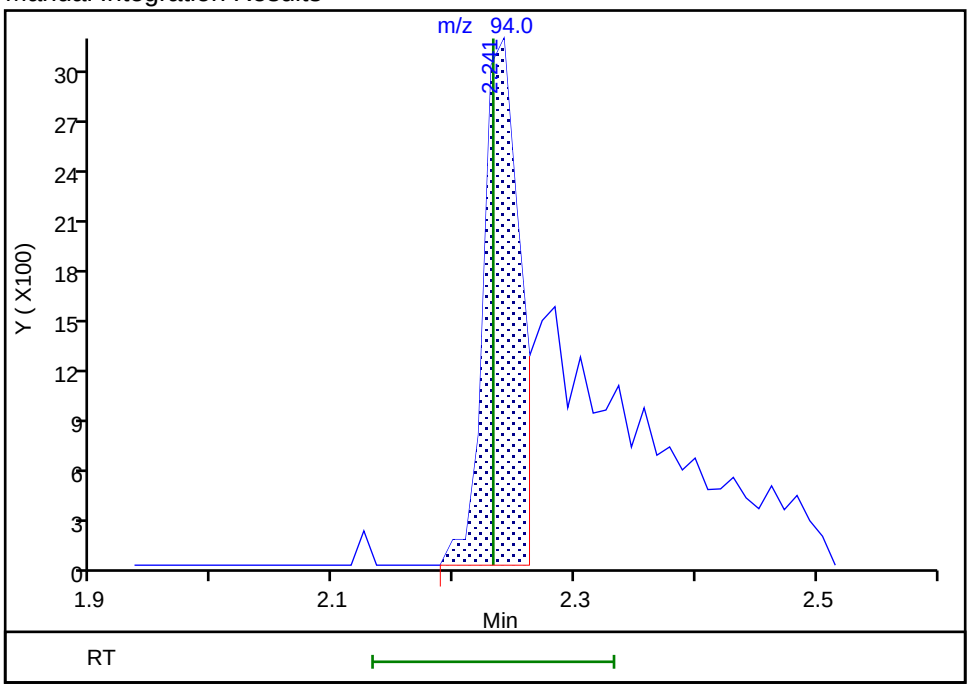
Processing Integration Results

RT: 2.24
Area: 6640
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.24
Area: 6640
Amount: -0.067594
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:49
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

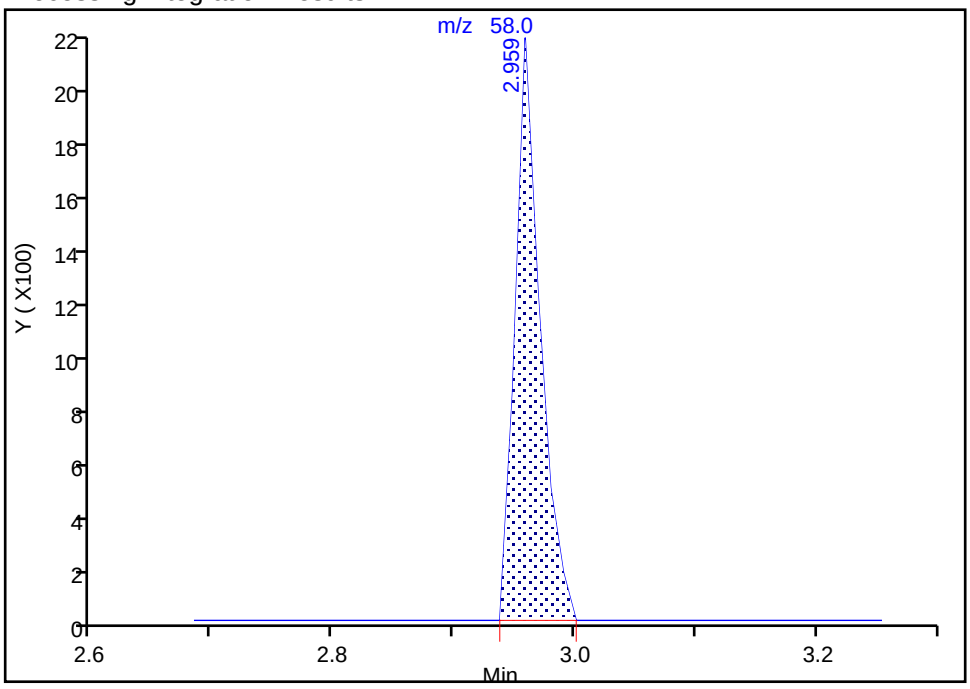
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

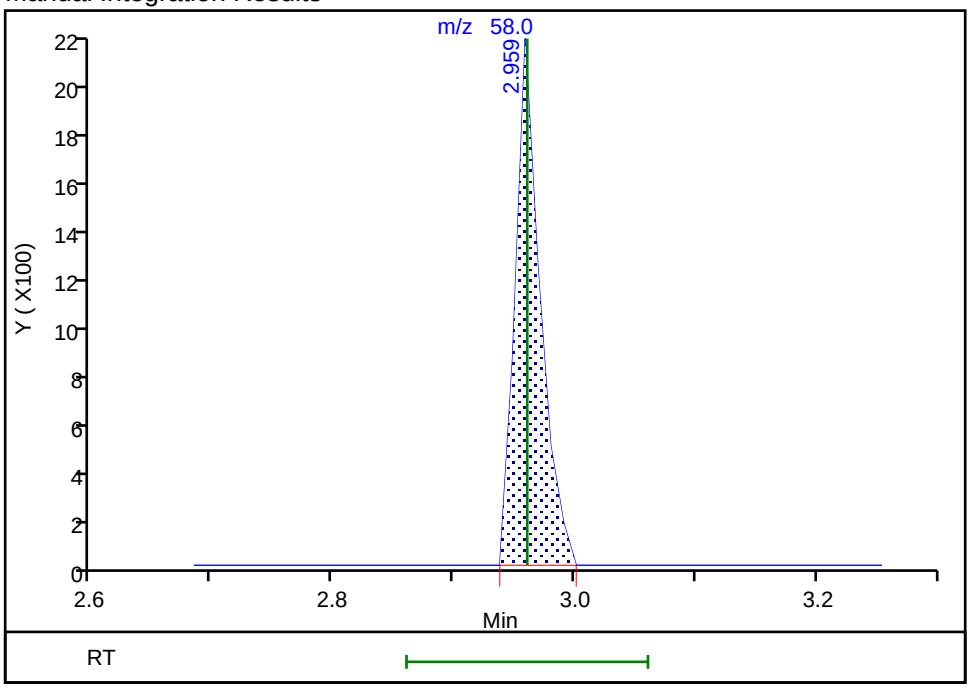
Processing Integration Results

RT: 2.96
Area: 3044
Amount: 1.910701
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 3044
Amount: 1.835879
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

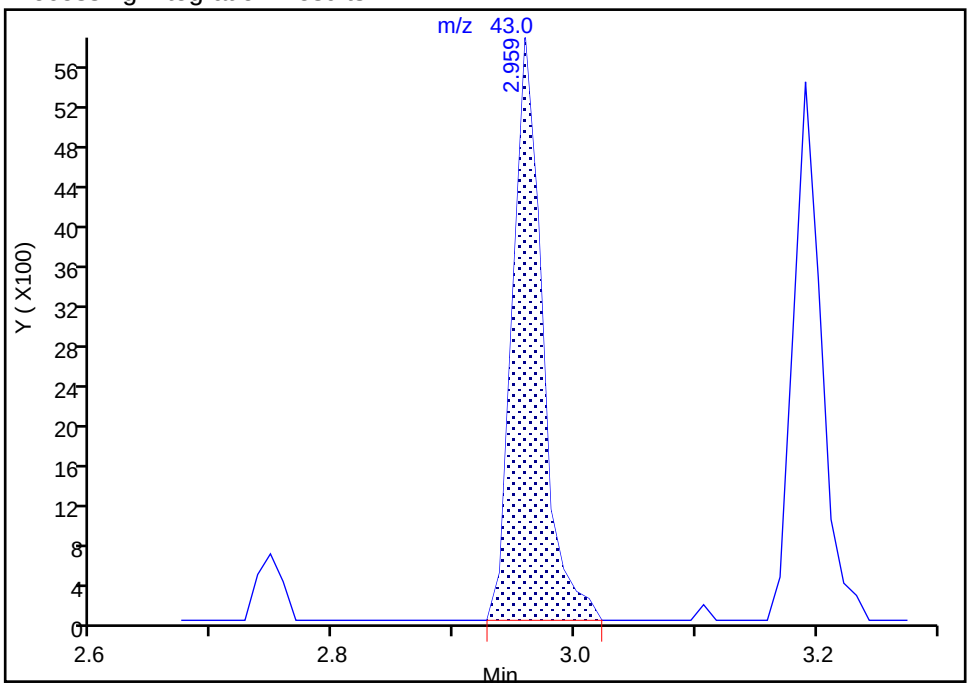
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 1

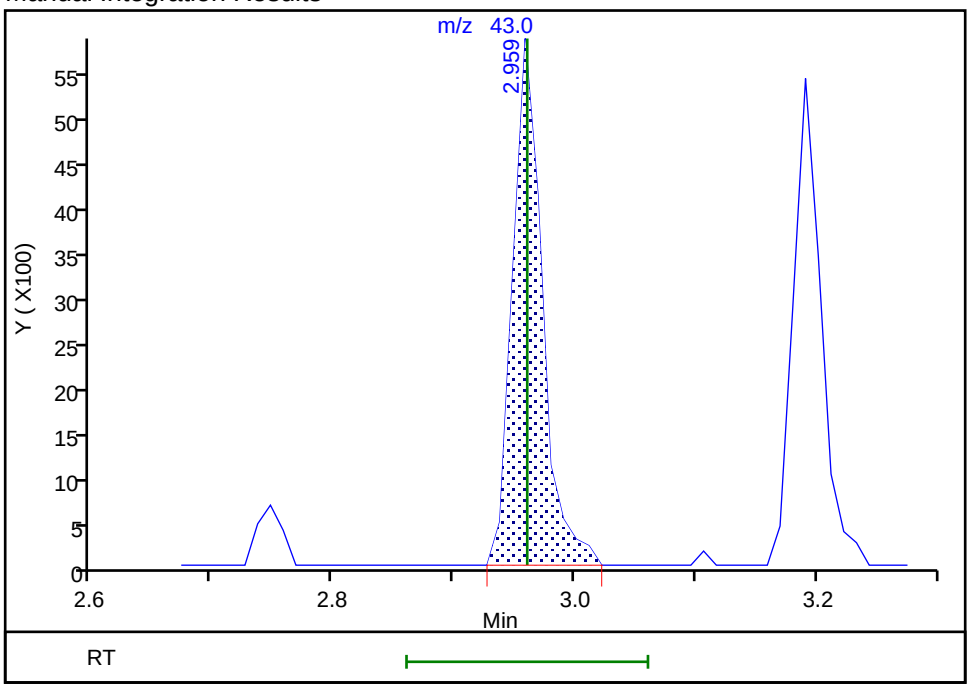
Processing Integration Results

RT: 2.96
Area: 9926
Amount: 1.910701
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 9926
Amount: 1.835879
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:00
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

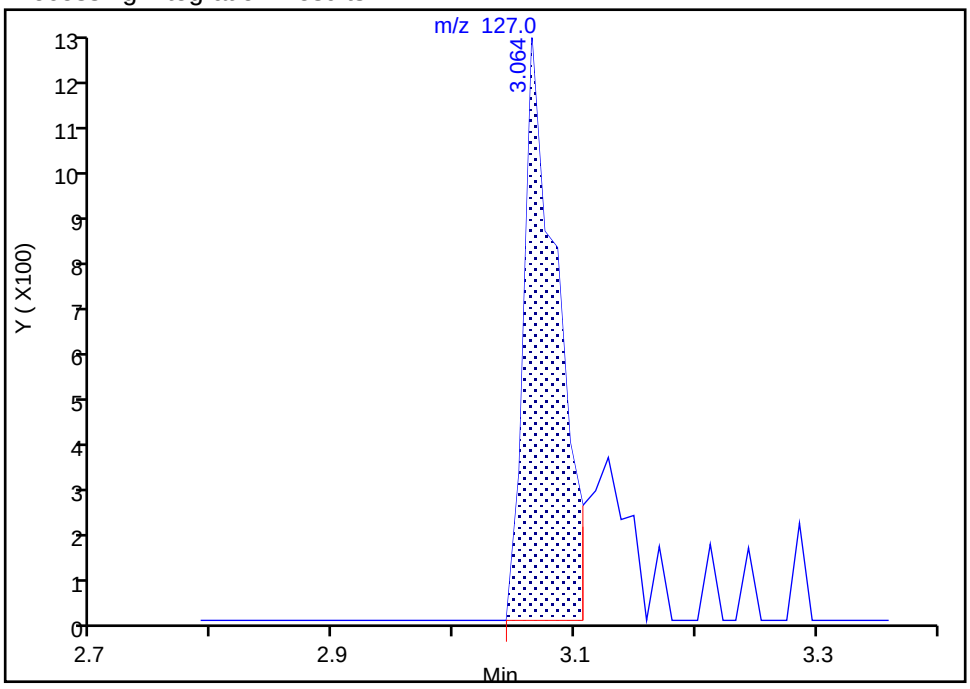
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 2

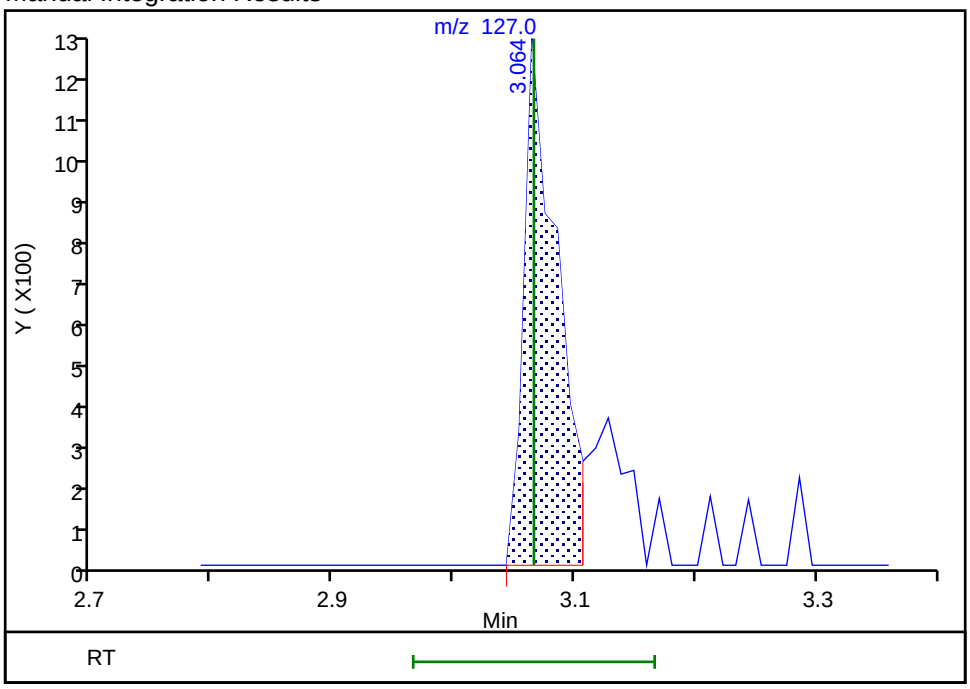
Processing Integration Results

RT: 3.06
Area: 2479
Amount: 0.870495
Amount Units: ug/l



Manual Integration Results

RT: 3.06
Area: 2479
Amount: 1.450023
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

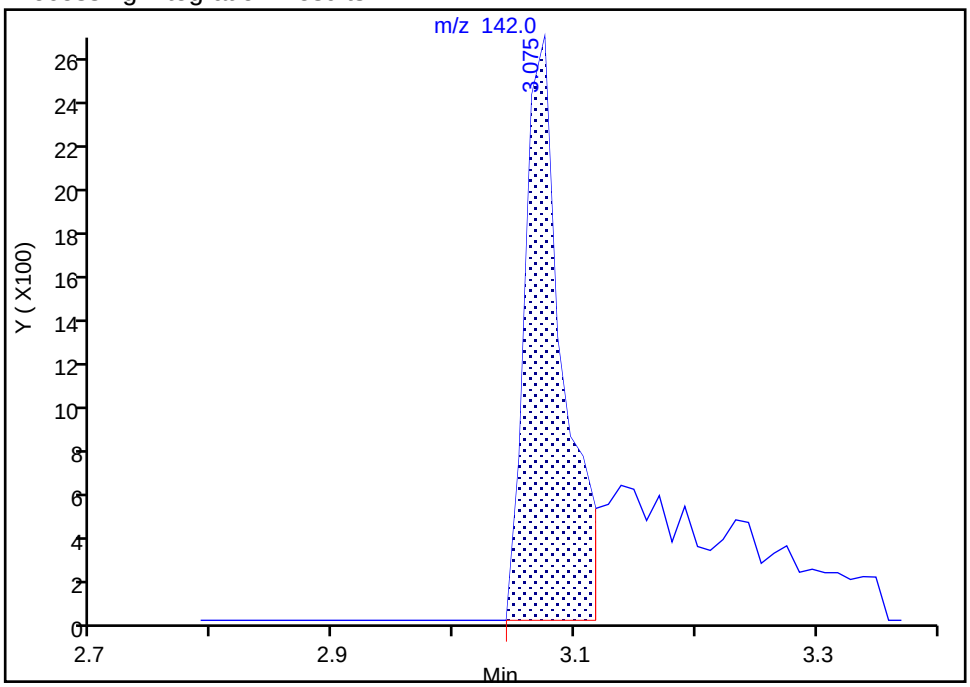
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

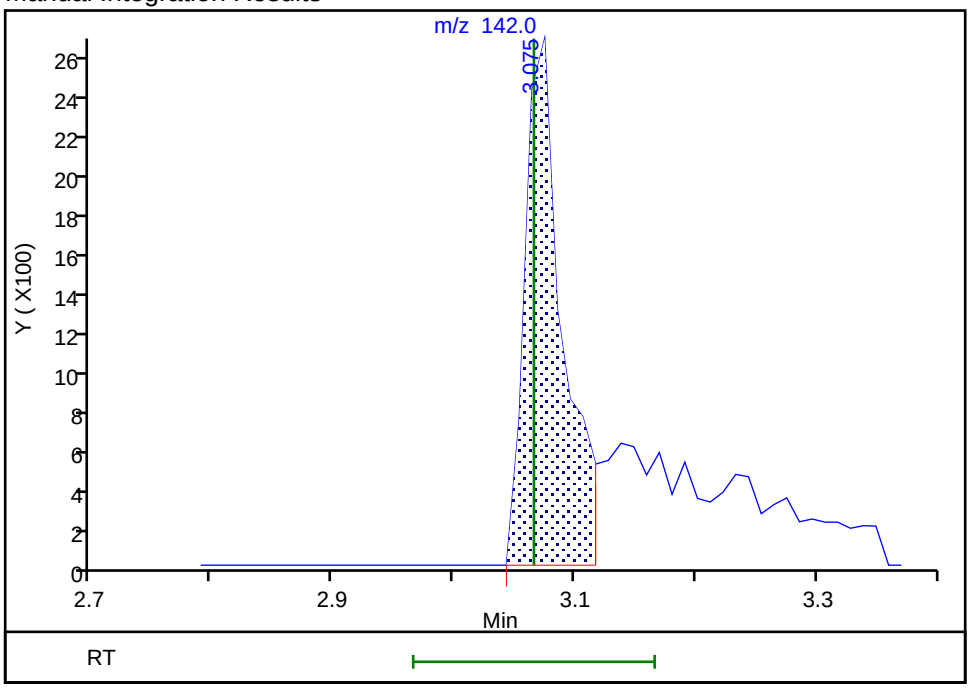
Processing Integration Results

RT: 3.07
Area: 5837
Amount: 0.870495
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 5837
Amount: 1.450023
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:06
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

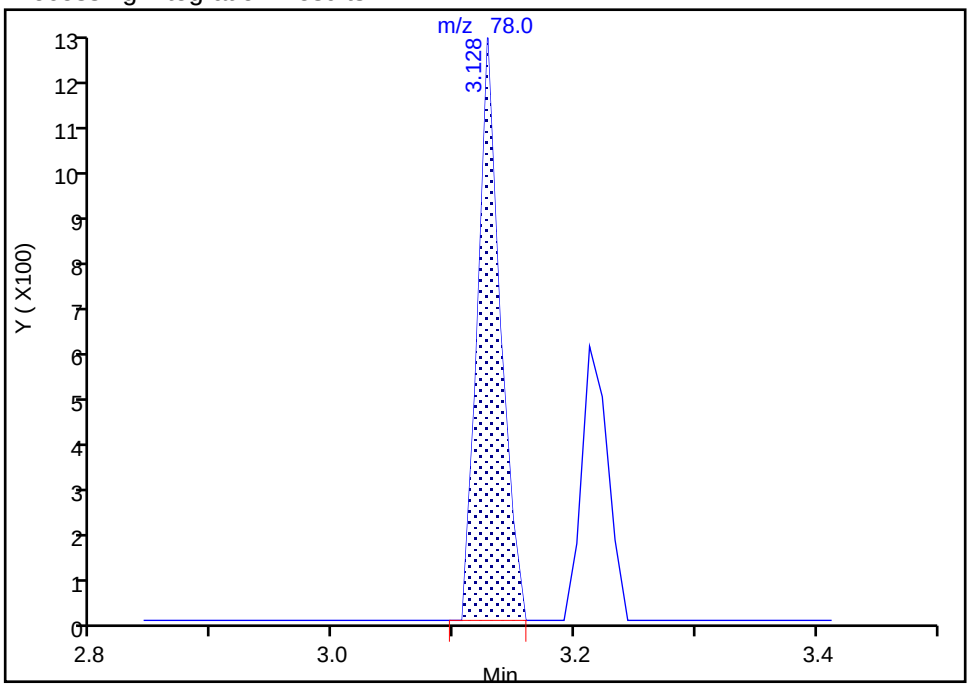
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 2

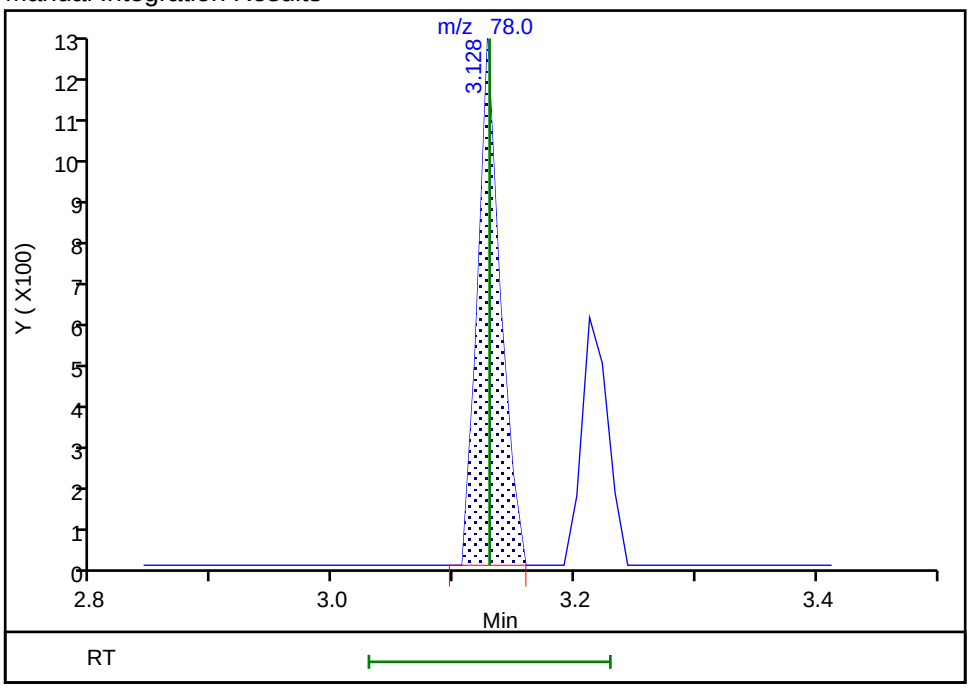
Processing Integration Results

RT: 3.13
Area: 1670
Amount: 0.543289
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 1670
Amount: 0.543289
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

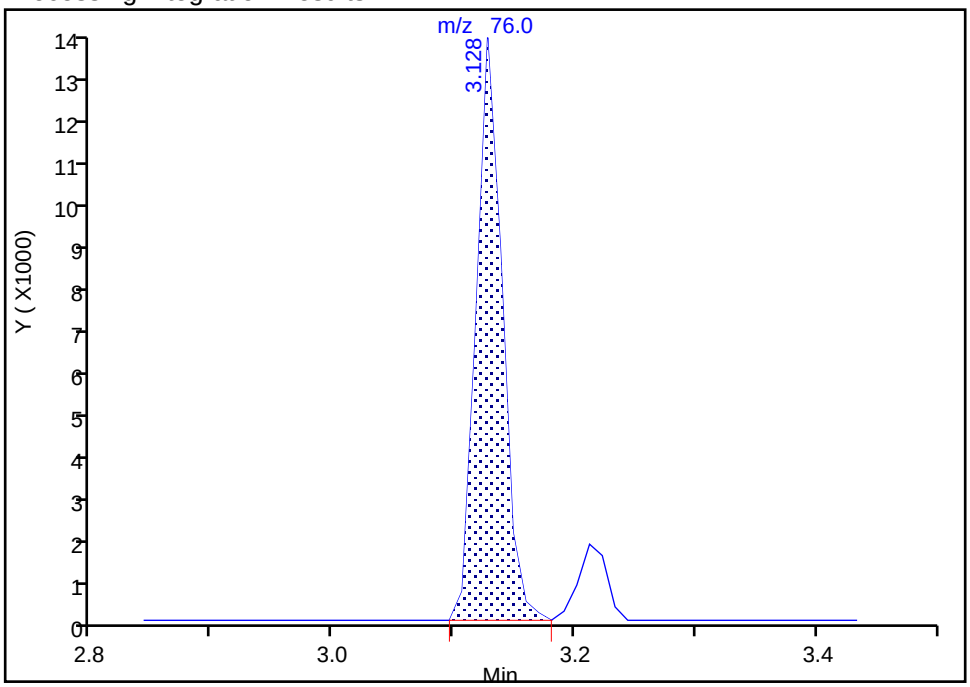
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 1

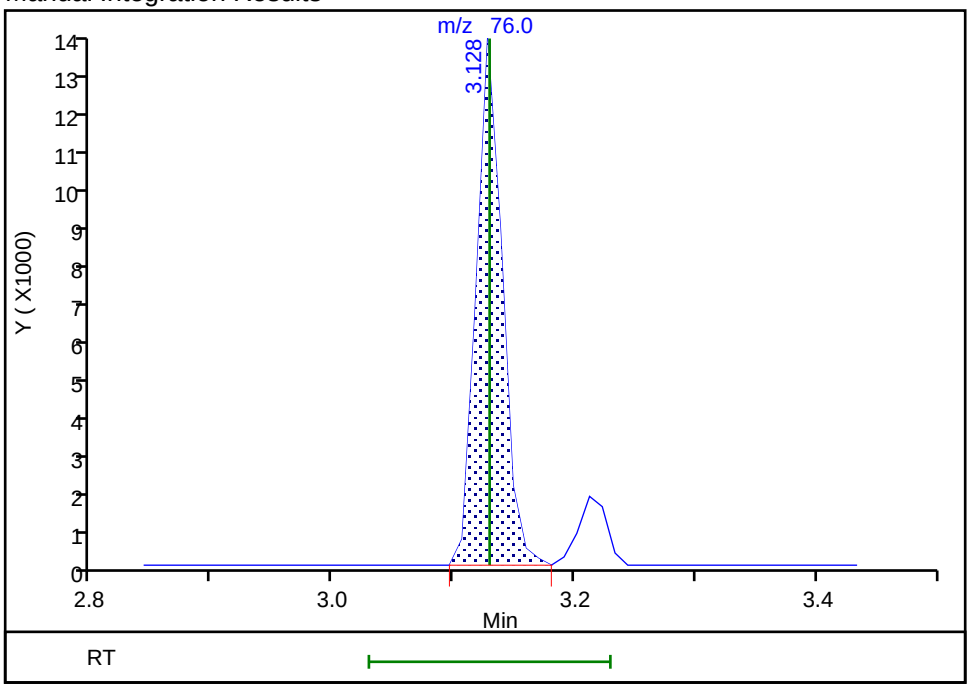
Processing Integration Results

RT: 3.13
Area: 19807
Amount: 0.543289
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 19807
Amount: 0.543289
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:14
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

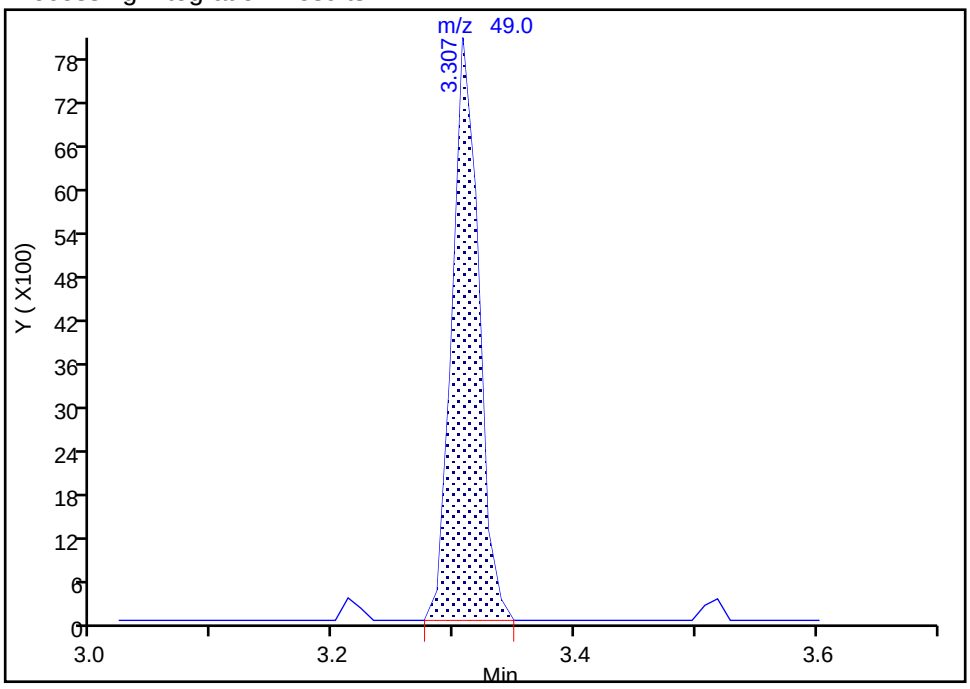
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 2

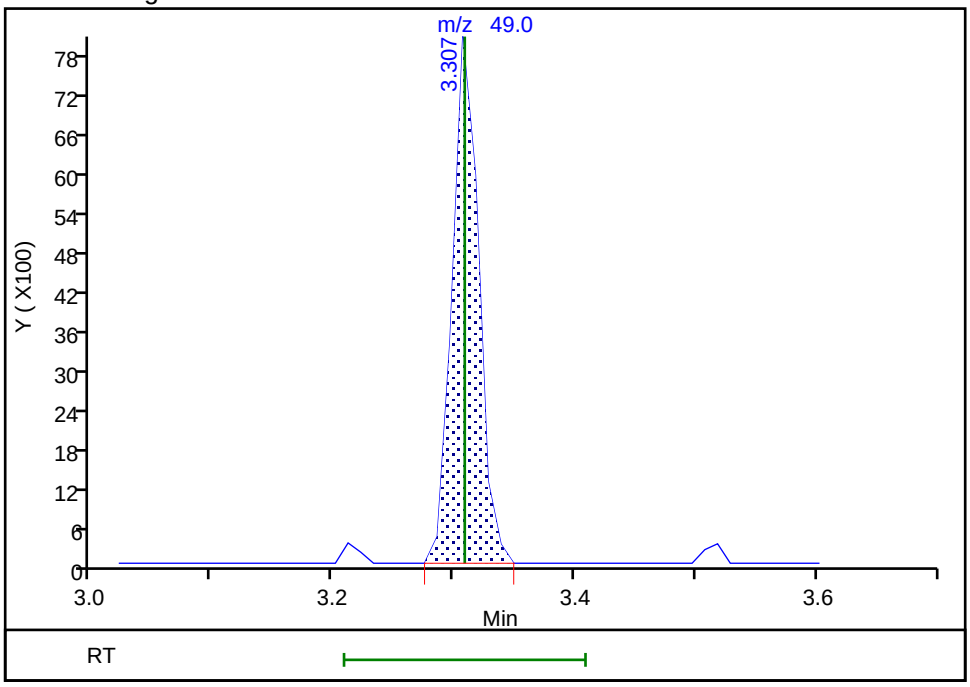
Processing Integration Results

RT: 3.31
Area: 12214
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 12214
Amount: 0.538075
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

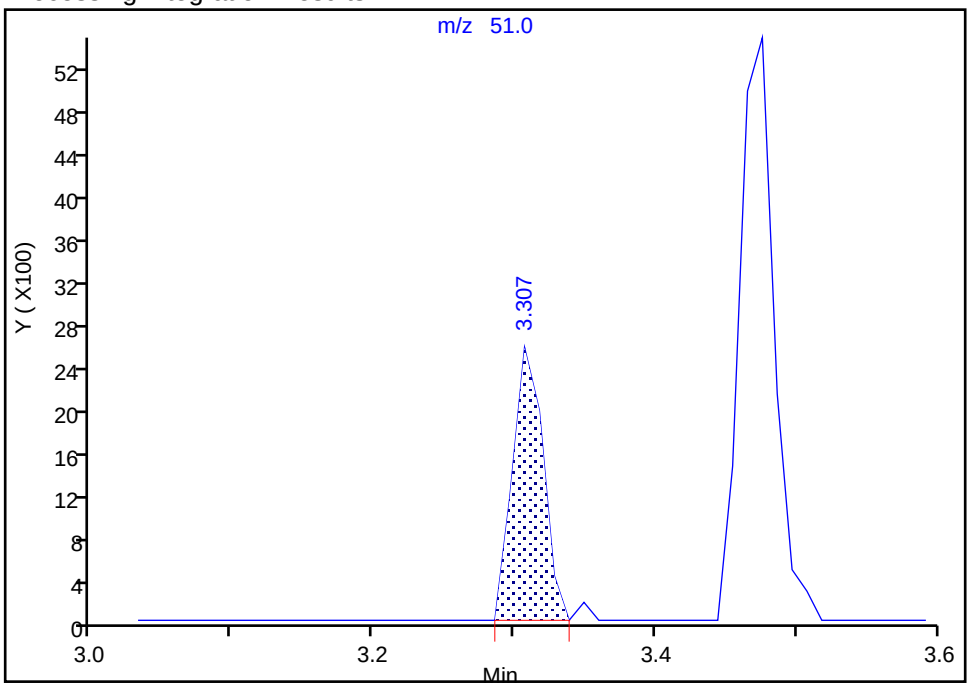
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 3

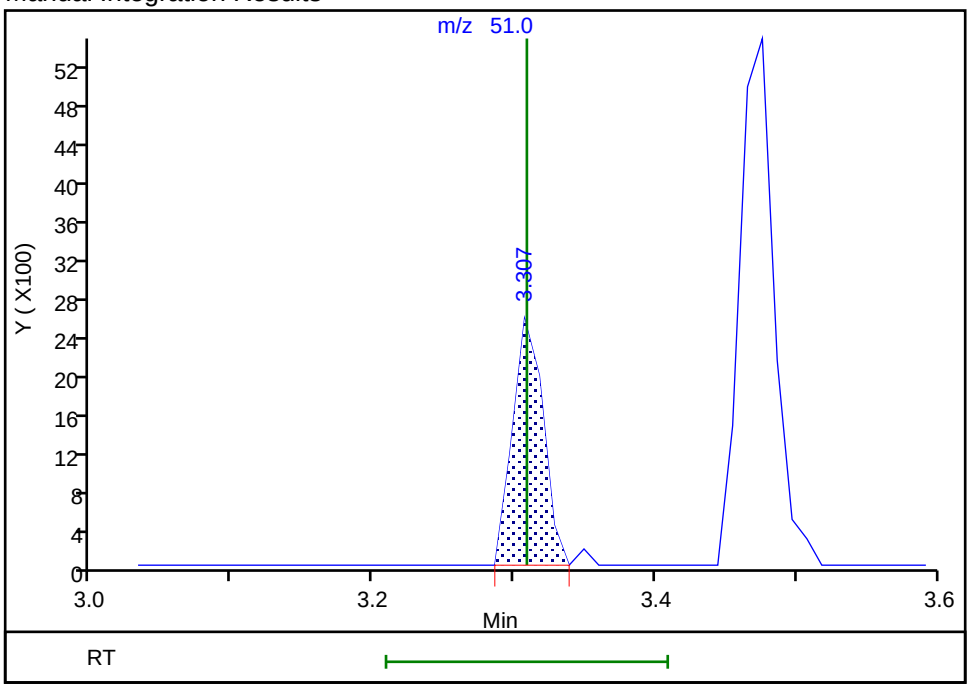
Processing Integration Results

RT: 3.31
Area: 3864
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 3864
Amount: 0.538075
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

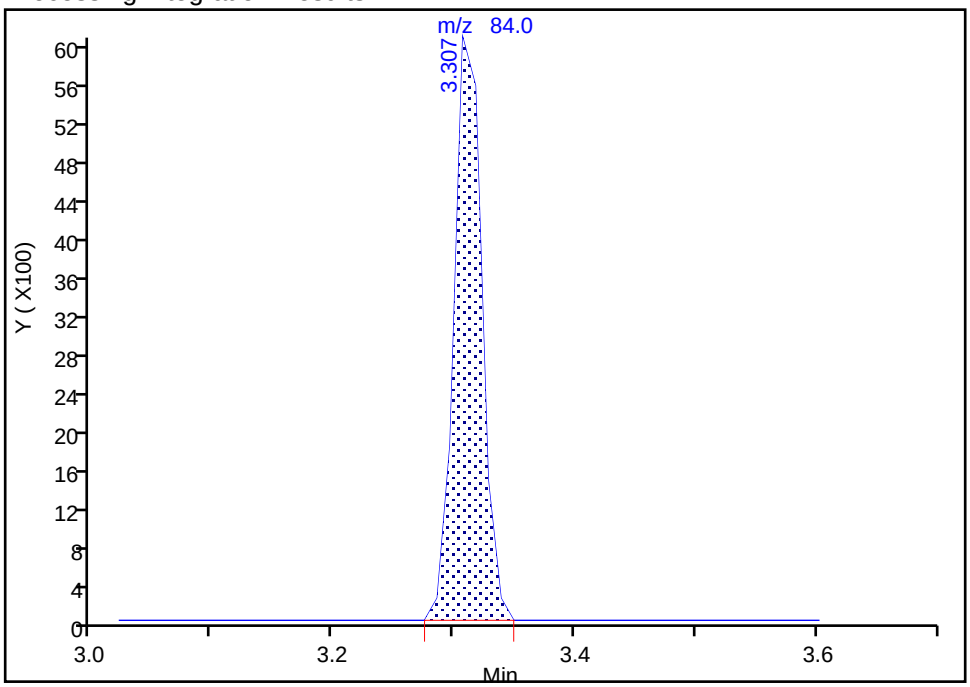
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

Signal: 1

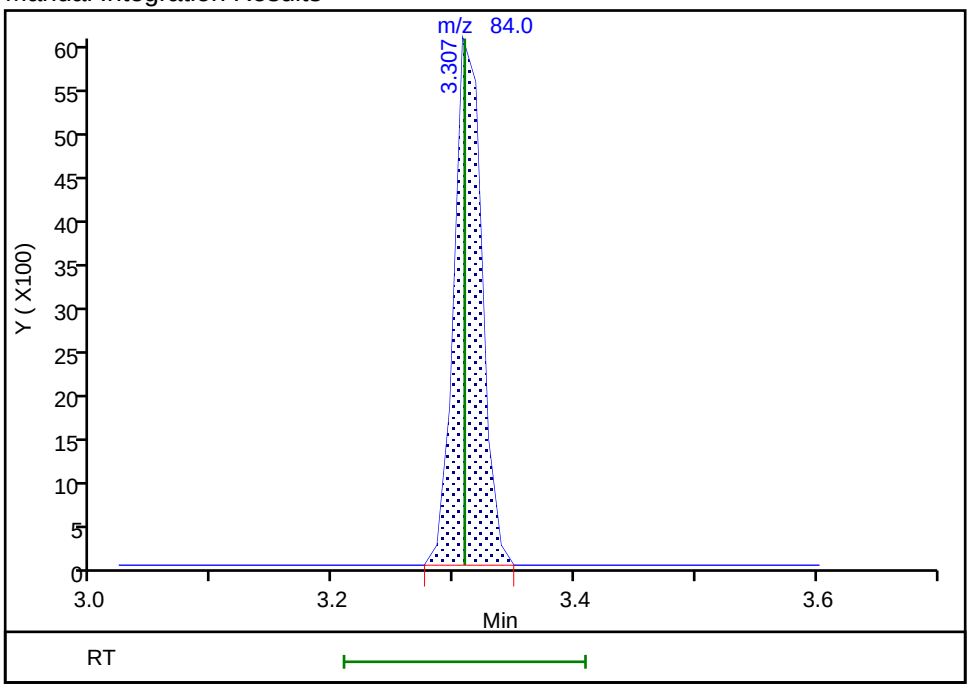
Processing Integration Results

RT: 3.31
Area: 9706
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 9706
Amount: 0.538075
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:20
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

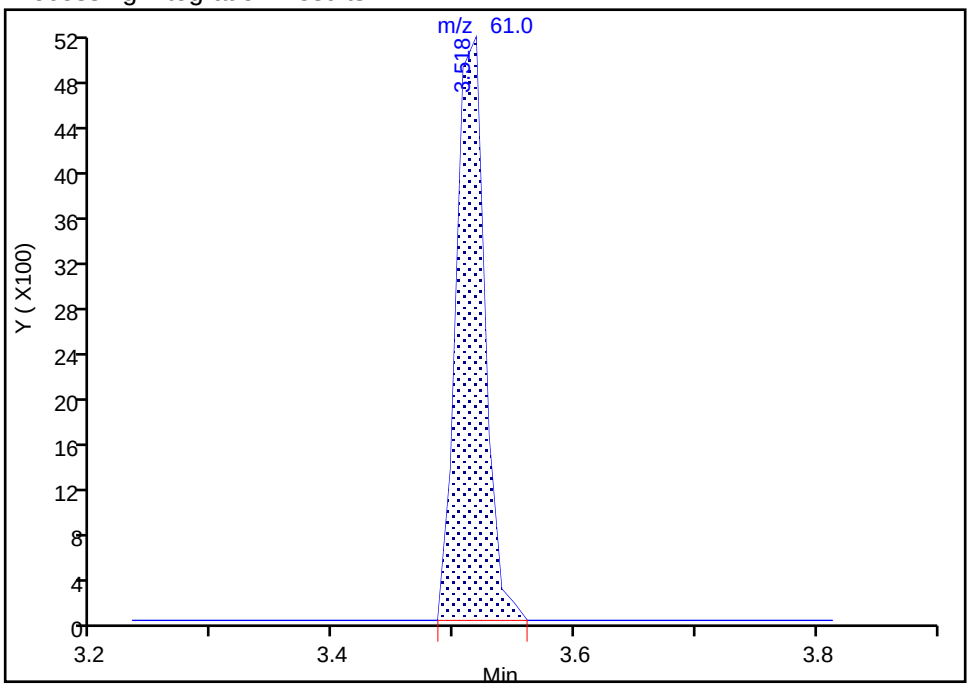
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 2

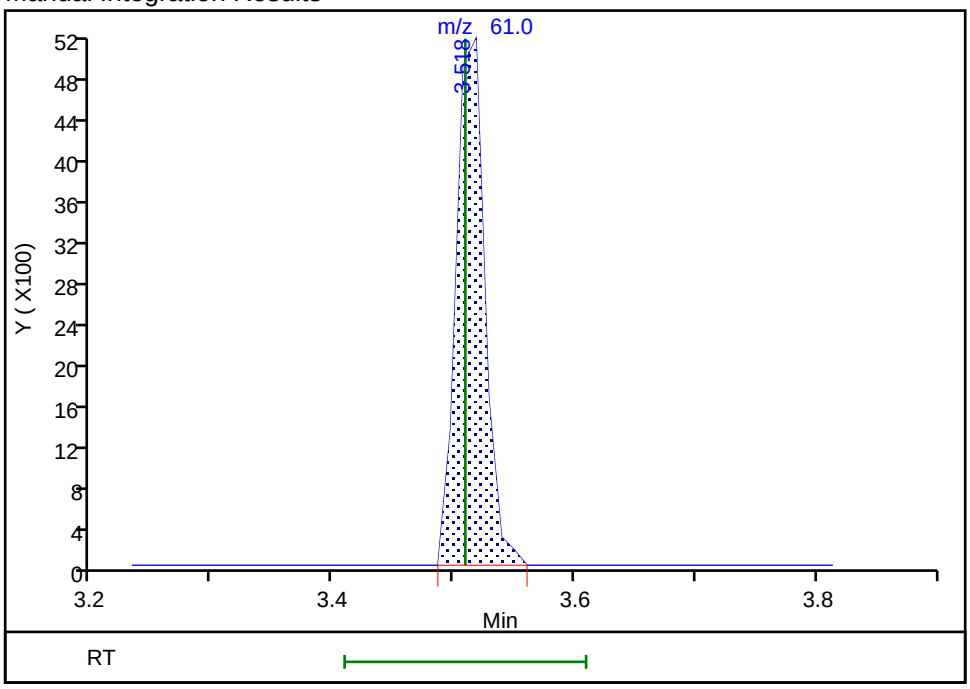
Processing Integration Results

RT: 3.52
Area: 8533
Amount: 0.613827
Amount Units: ug/l



Manual Integration Results

RT: 3.52
Area: 8533
Amount: 0.613827
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

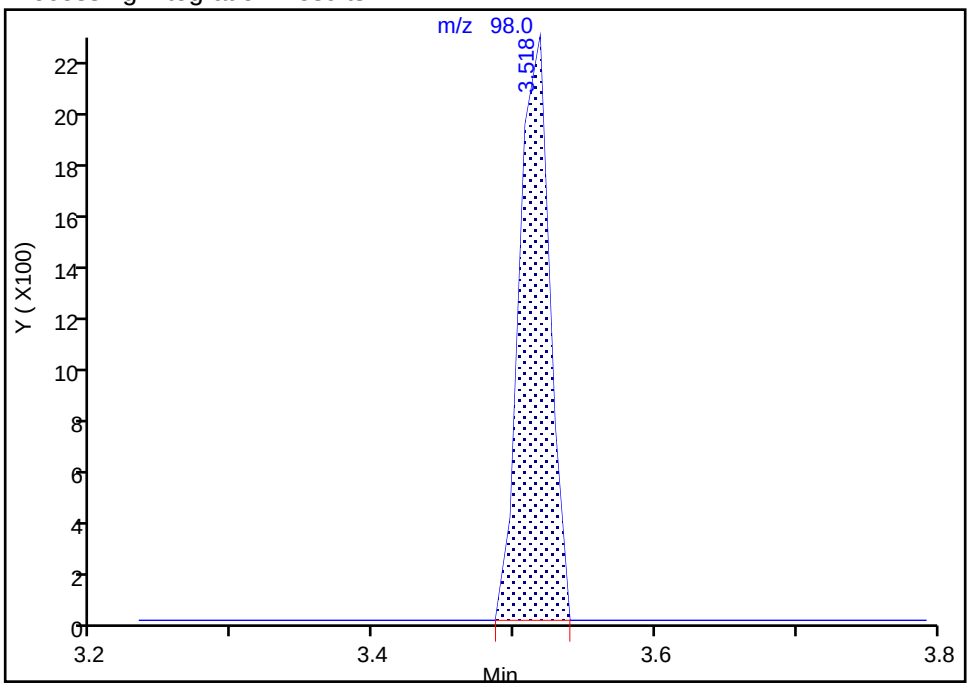
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 3

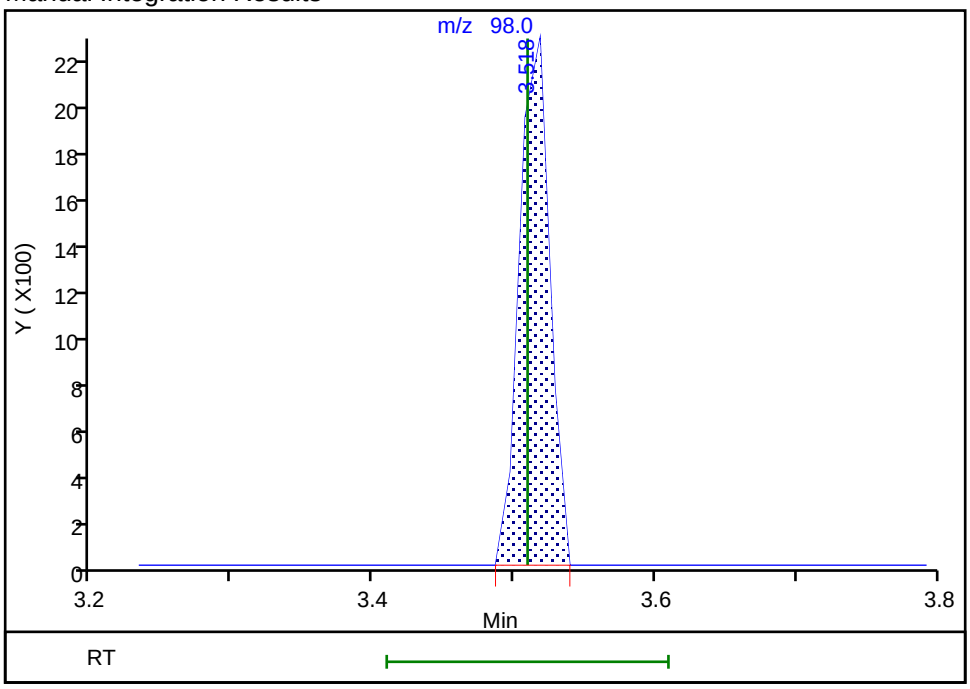
Processing Integration Results

RT: 3.52
Area: 3414
Amount: 0.613827
Amount Units: ug/l



Manual Integration Results

RT: 3.52
Area: 3414
Amount: 0.613827
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

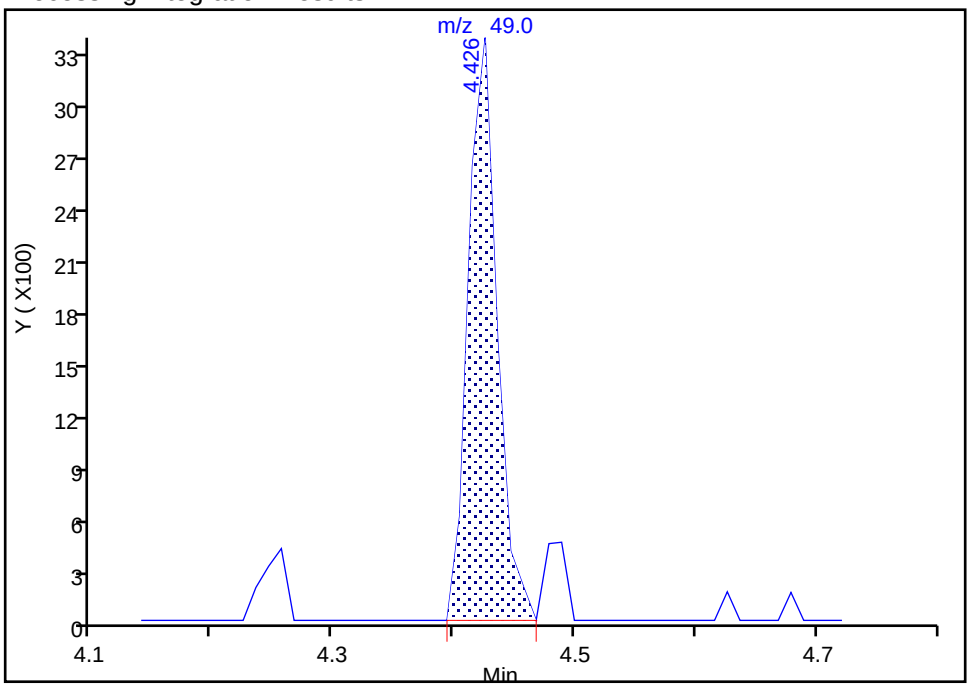
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

53 Chlorobromomethane, CAS: 74-97-5

Signal: 2

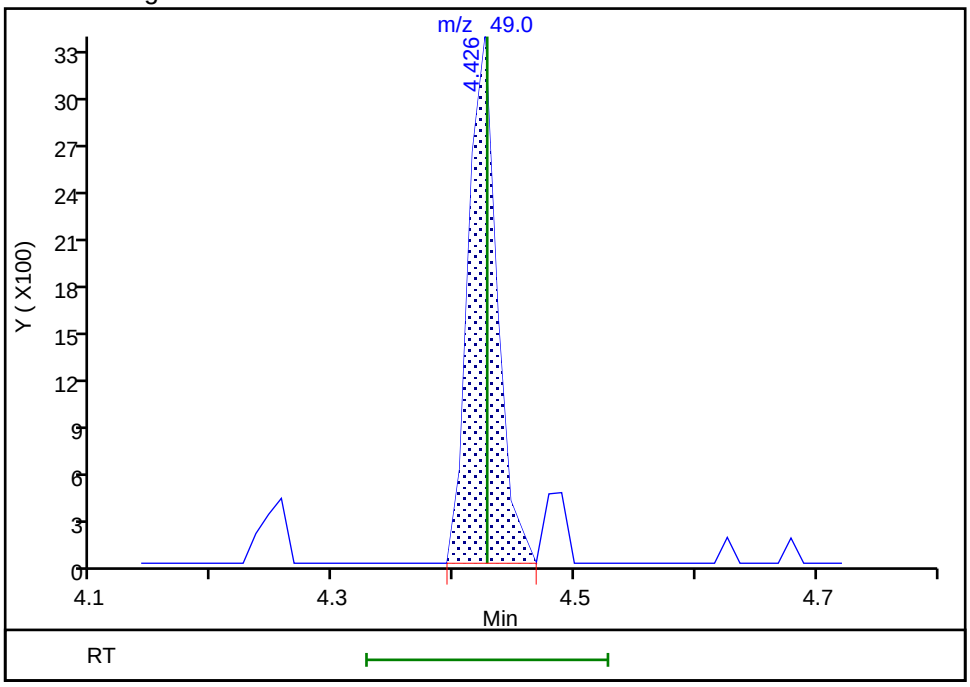
Processing Integration Results

RT: 4.43
Area: 5484
Amount: 0.579310
Amount Units: ug/l



Manual Integration Results

RT: 4.43
Area: 5484
Amount: 0.579310
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

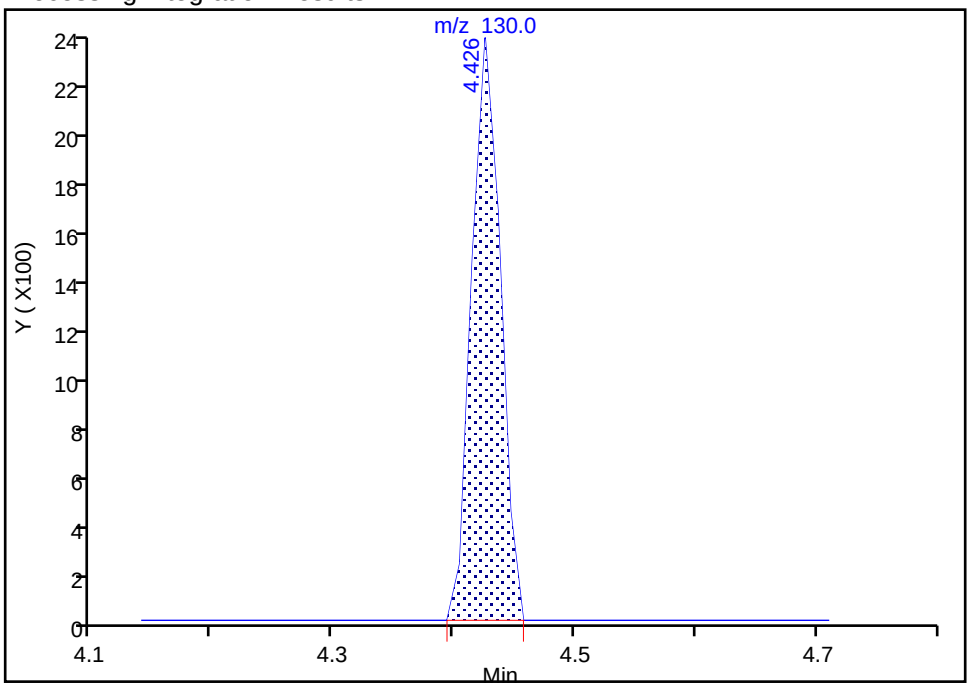
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

53 Chlorobromomethane, CAS: 74-97-5

Signal: 3

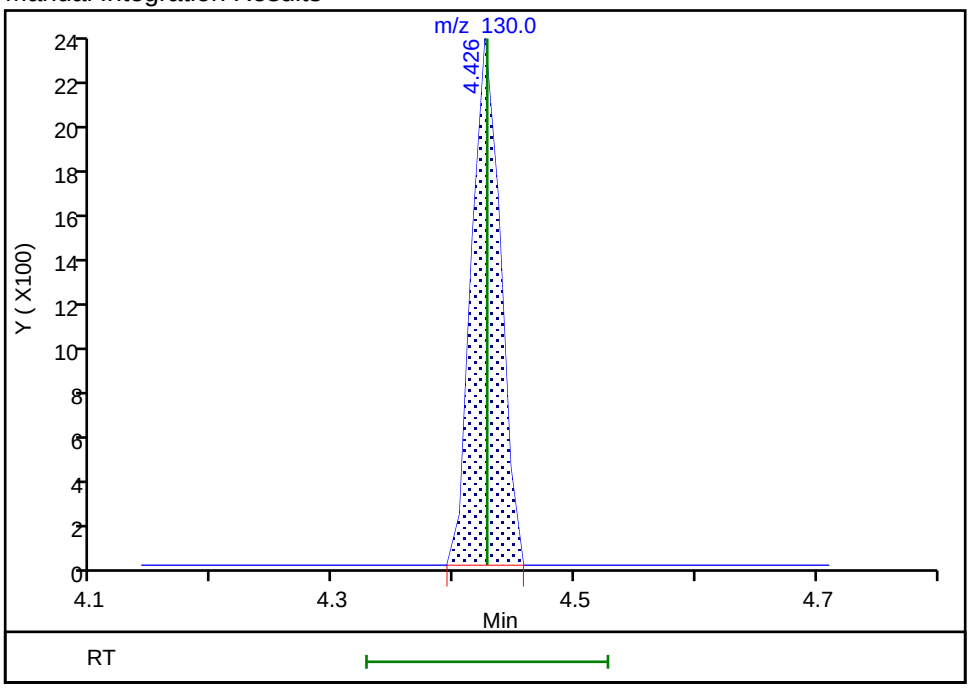
Processing Integration Results

RT: 4.43
Area: 3865
Amount: 0.579310
Amount Units: ug/l



Manual Integration Results

RT: 4.43
Area: 3865
Amount: 0.579310
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

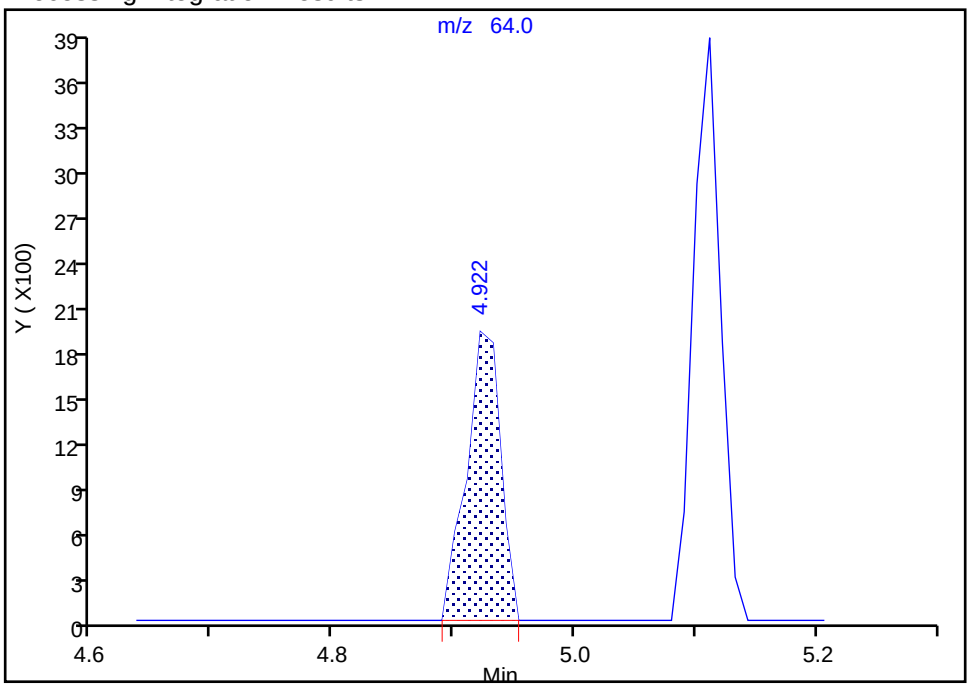
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 2

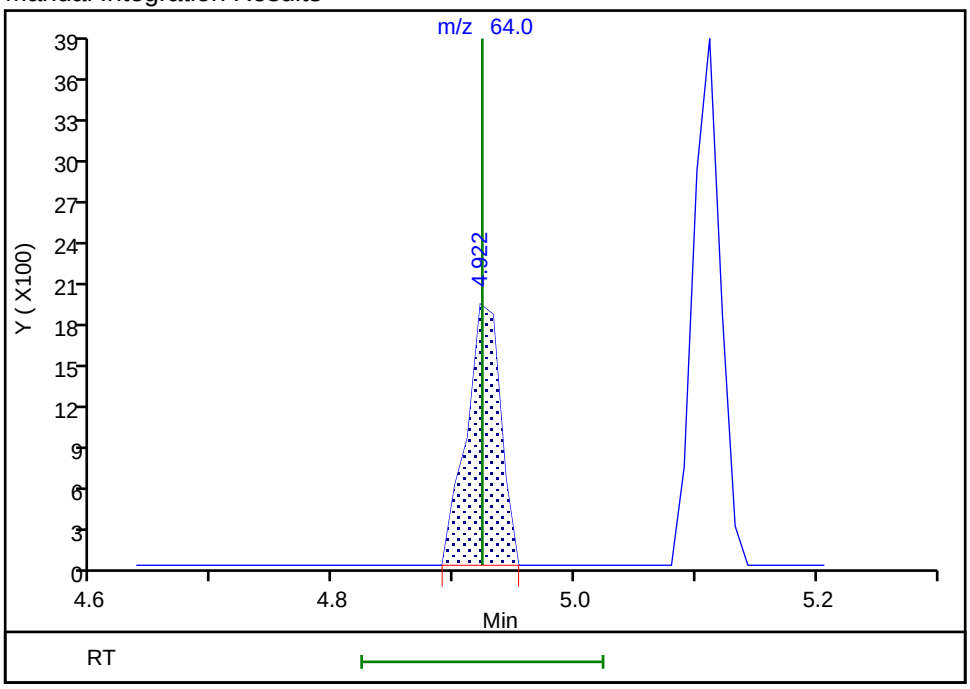
Processing Integration Results

RT: 4.92
Area: 3752
Amount: 0.492521
Amount Units: ug/l



Manual Integration Results

RT: 4.92
Area: 3752
Amount: 0.492521
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:53:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

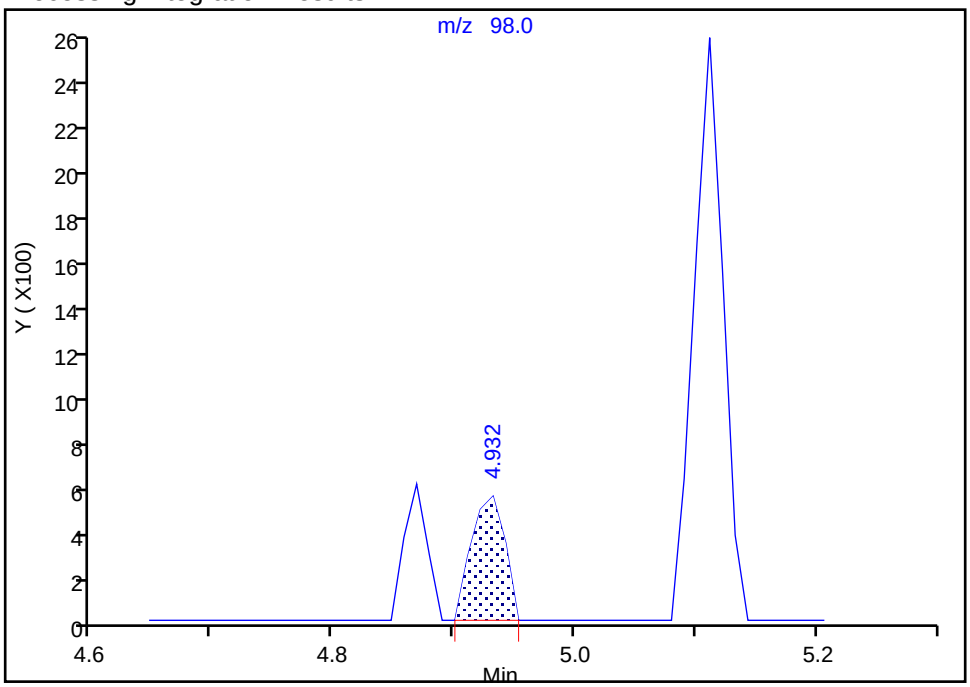
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 3

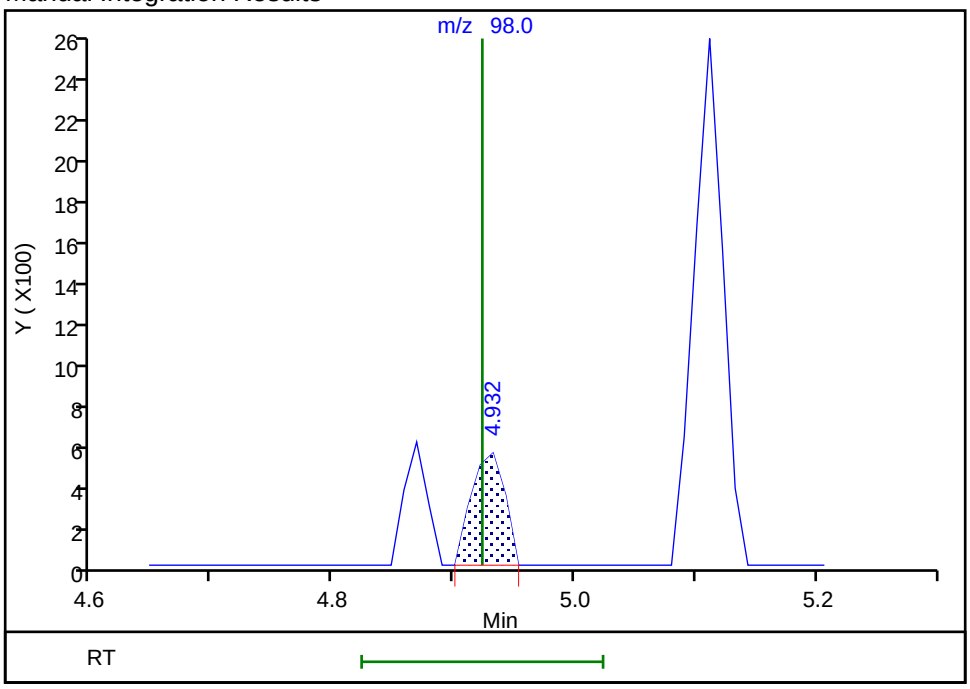
Processing Integration Results

RT: 4.93
Area: 1057
Amount: 0.492521
Amount Units: ug/l



Manual Integration Results

RT: 4.93
Area: 1057
Amount: 0.492521
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:53:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

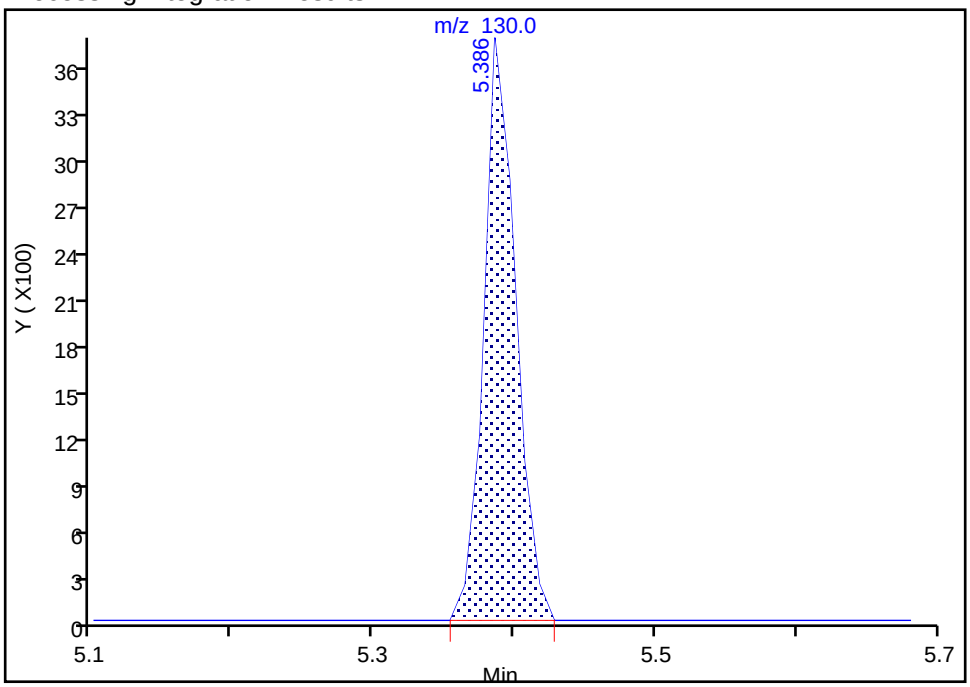
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6

Signal: 2

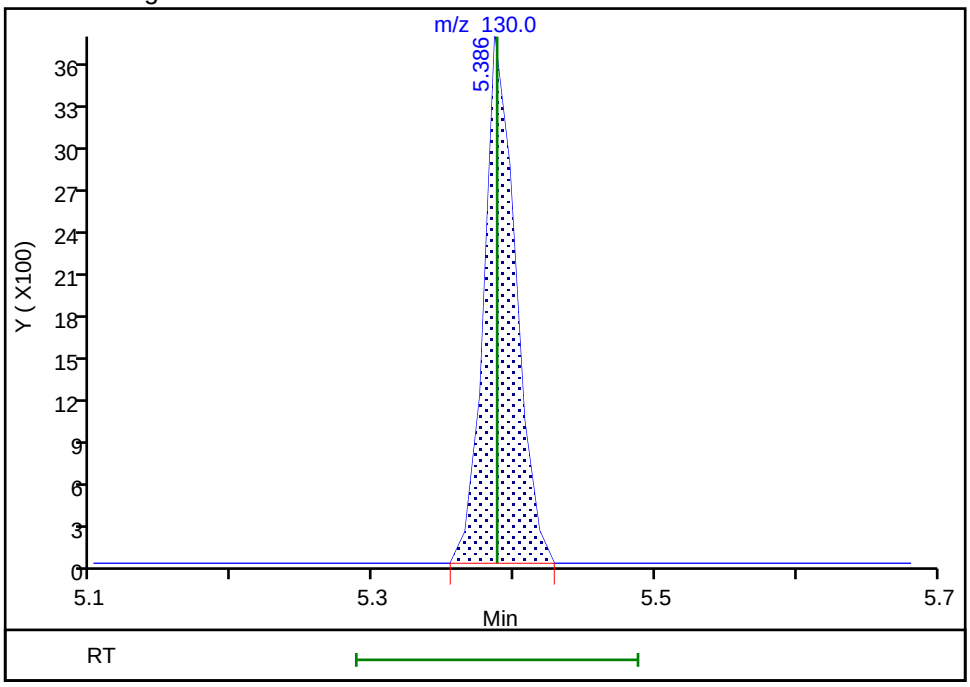
Processing Integration Results

RT: 5.39
Area: 5848
Amount: 0.603840
Amount Units: ug/l



Manual Integration Results

RT: 5.39
Area: 5848
Amount: 0.603840
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

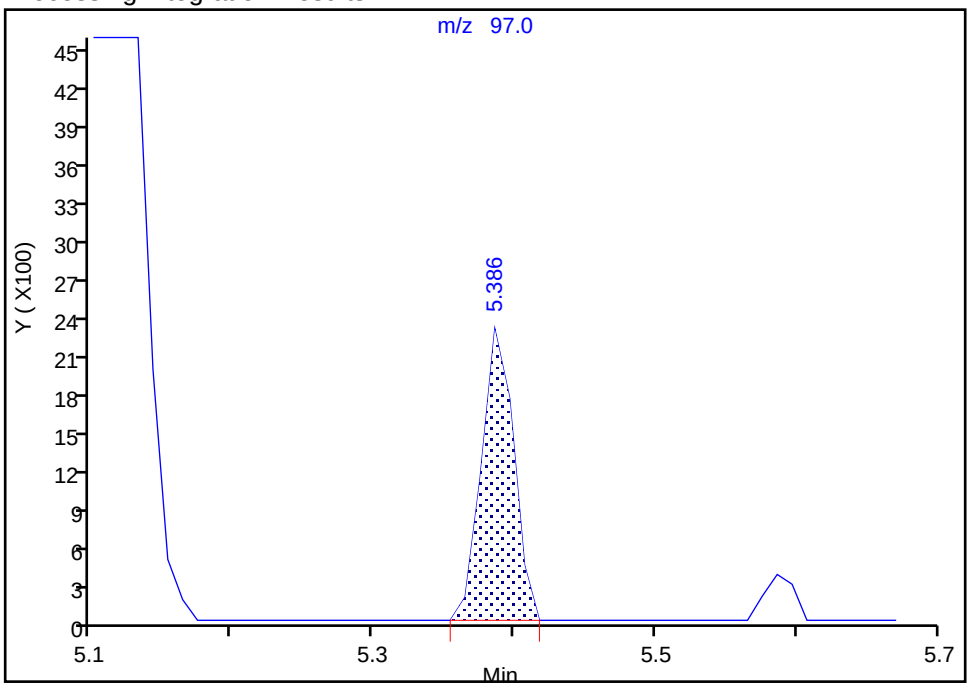
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6

Signal: 3

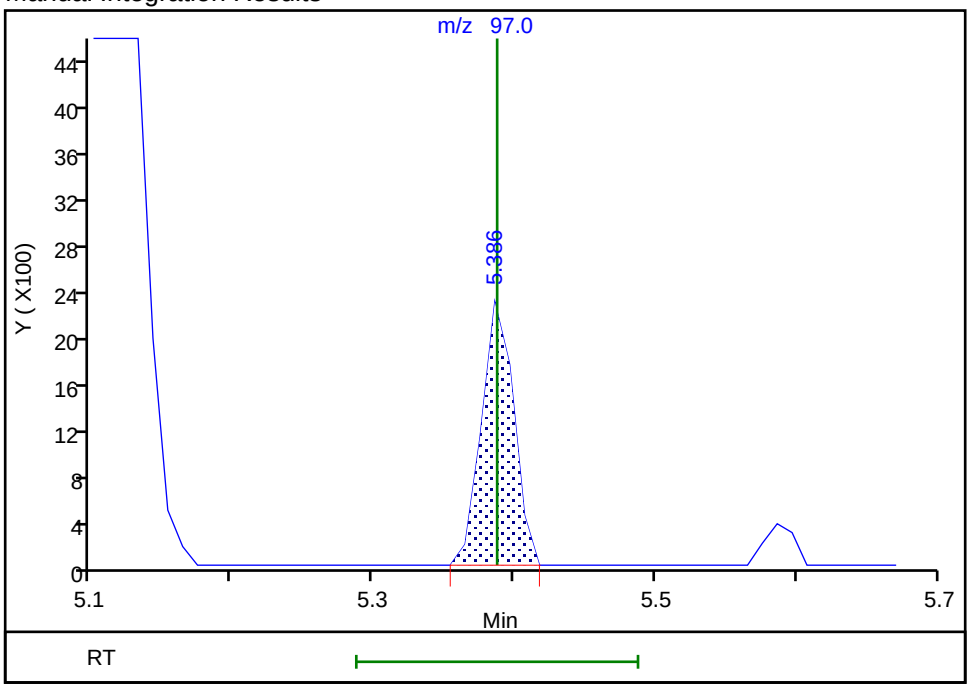
Processing Integration Results

RT: 5.39
Area: 3641
Amount: 0.603840
Amount Units: ug/l



Manual Integration Results

RT: 5.39
Area: 3641
Amount: 0.603840
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

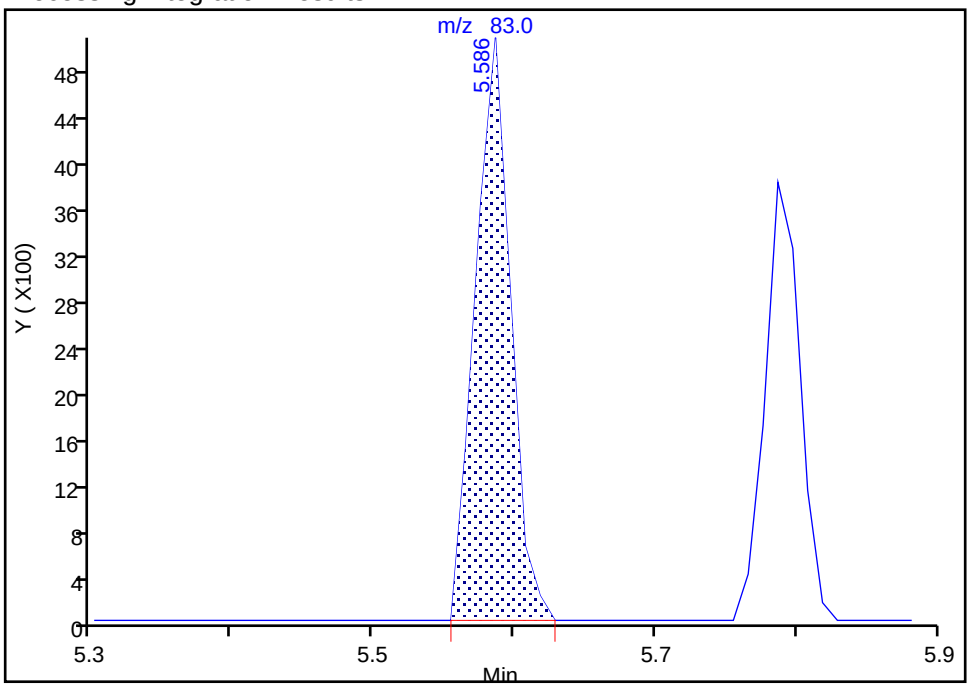
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

69 Methylcyclohexane, CAS: 108-87-2

Signal: 2

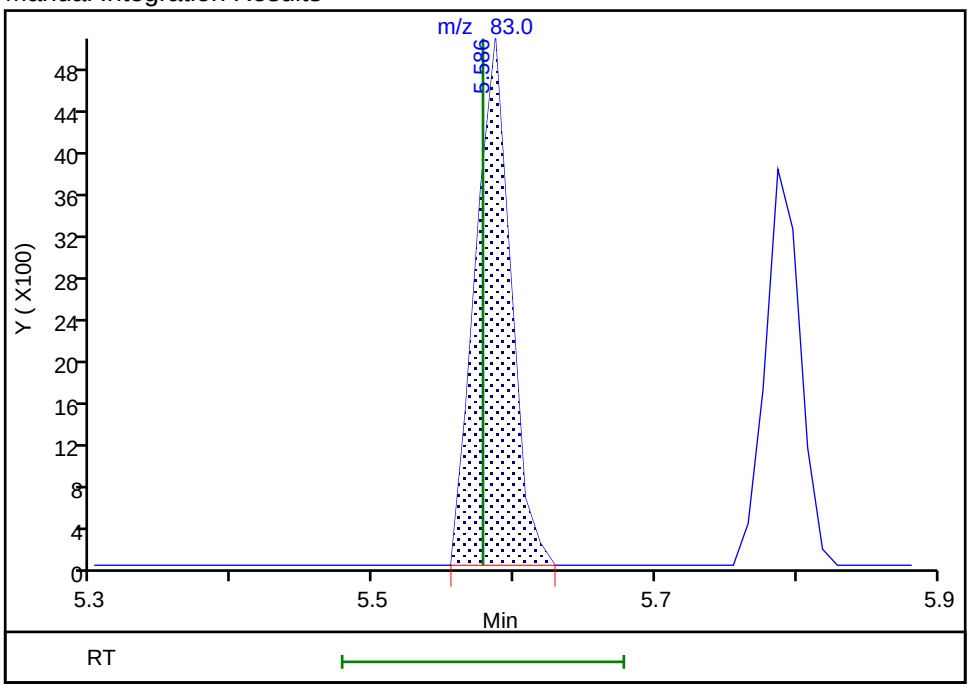
Processing Integration Results

RT: 5.59
Area: 8849
Amount: 0.563143
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 8849
Amount: 0.563143
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

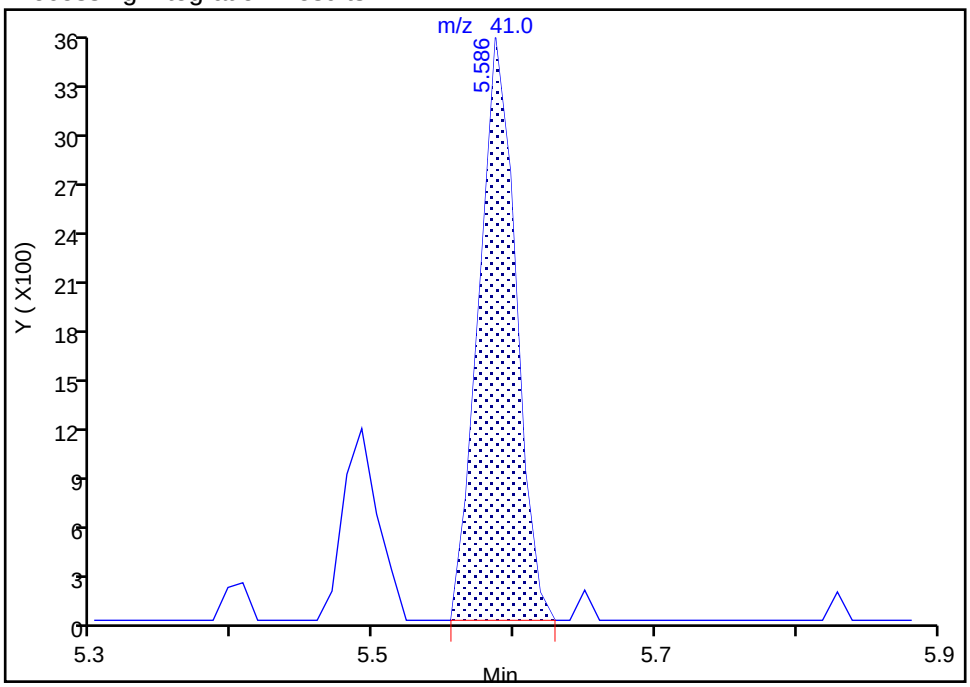
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

69 Methylcyclohexane, CAS: 108-87-2

Signal: 3

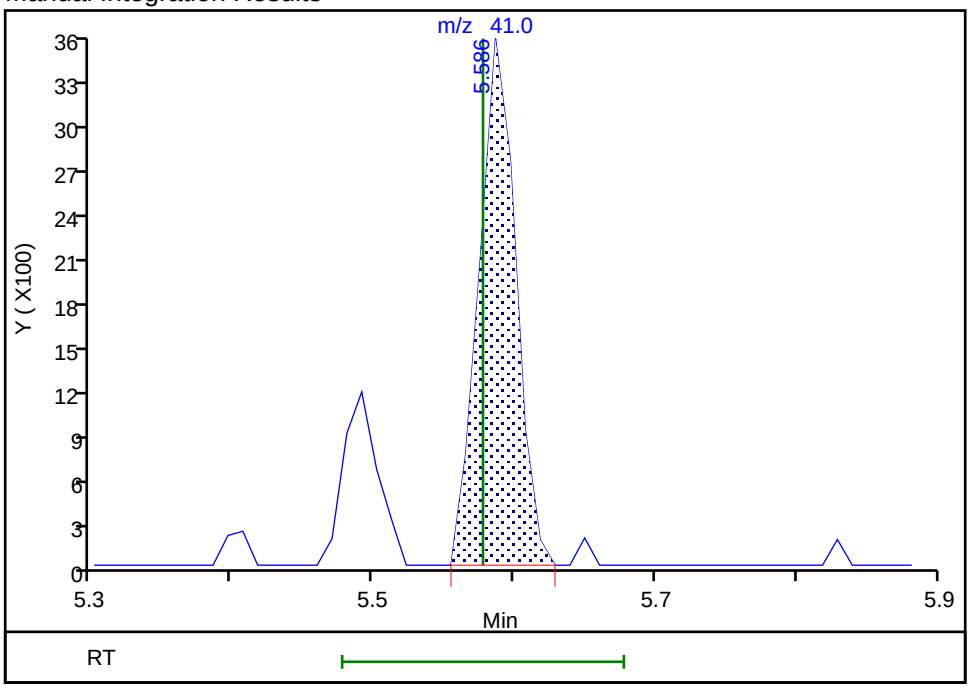
Processing Integration Results

RT: 5.59
Area: 6507
Amount: 0.563143
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 6507
Amount: 0.563143
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

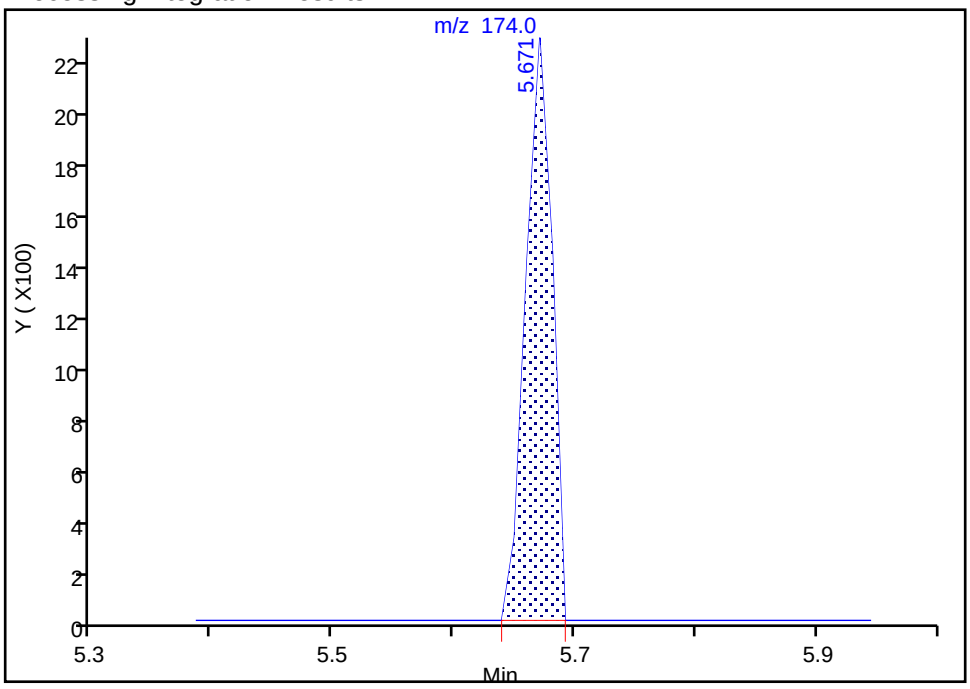
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

73 Dibromomethane, CAS: 74-95-3

Signal: 2

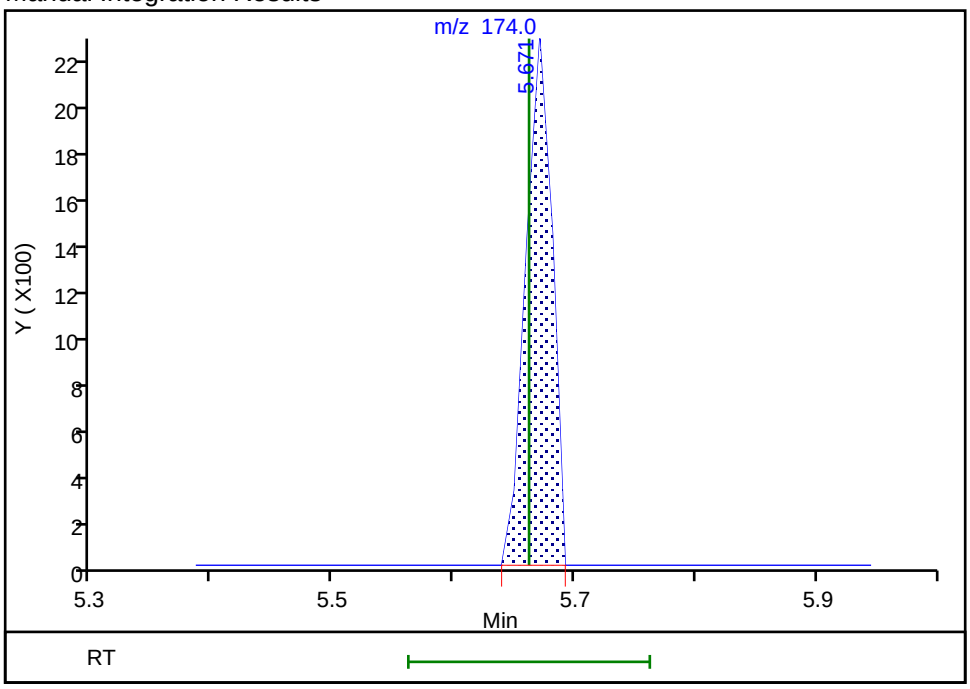
Processing Integration Results

RT: 5.67
Area: 3416
Amount: 0.651614
Amount Units: ug/l



Manual Integration Results

RT: 5.67
Area: 3416
Amount: 0.677285
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

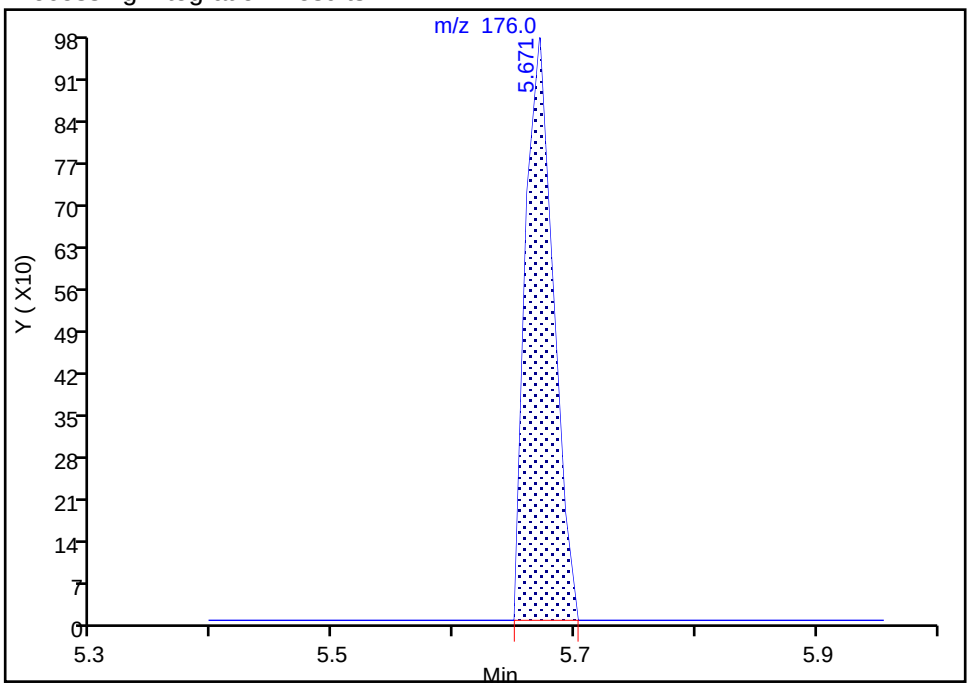
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

73 Dibromomethane, CAS: 74-95-3

Signal: 3

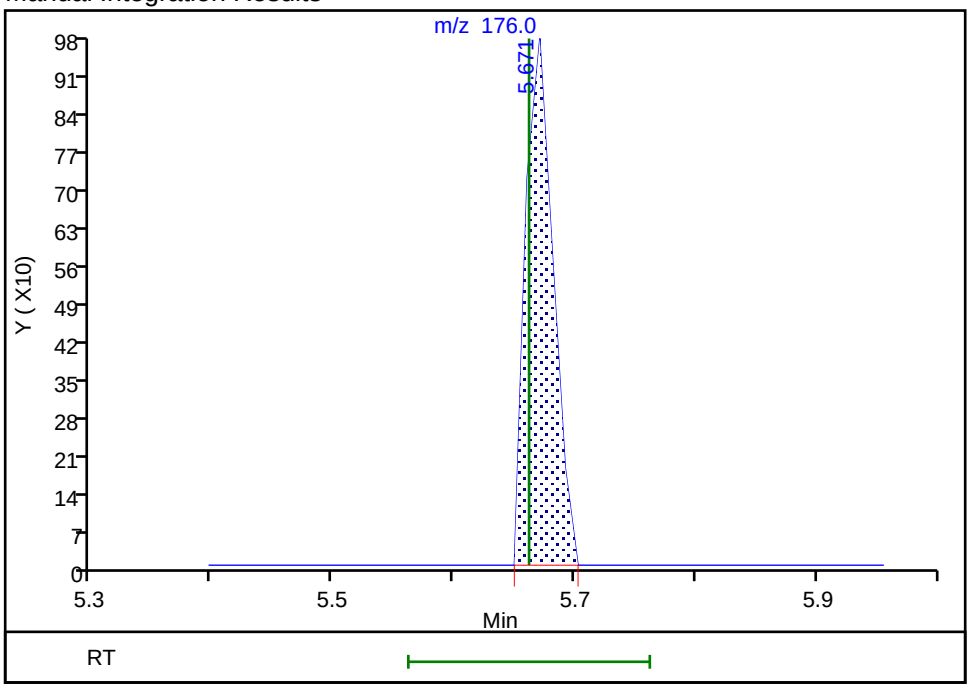
Processing Integration Results

RT: 5.67
Area: 1549
Amount: 0.651614
Amount Units: ug/l



Manual Integration Results

RT: 5.67
Area: 1549
Amount: 0.677285
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

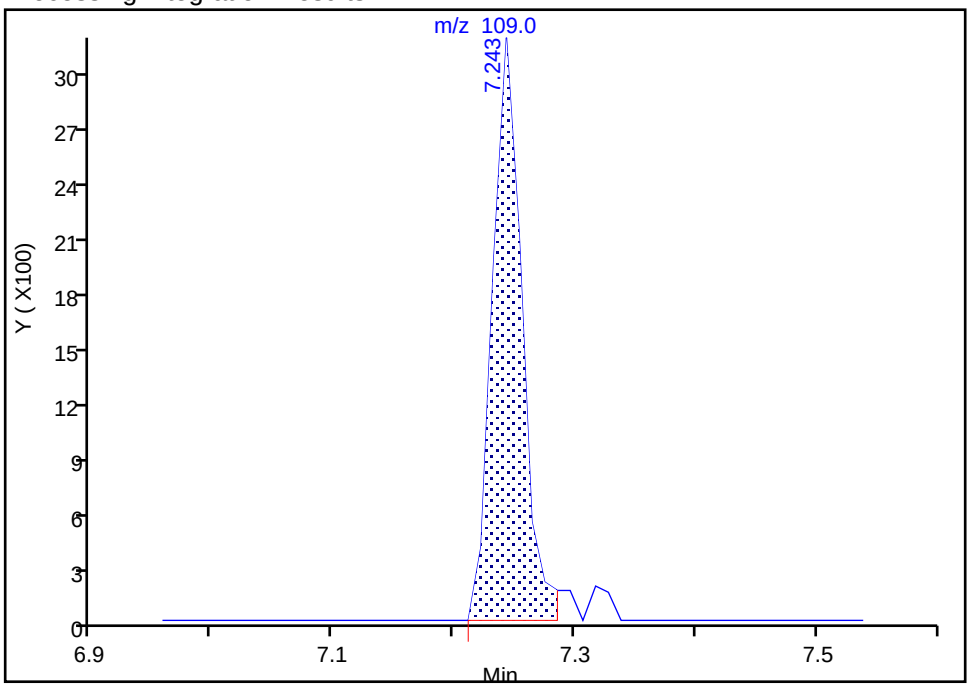
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

88 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

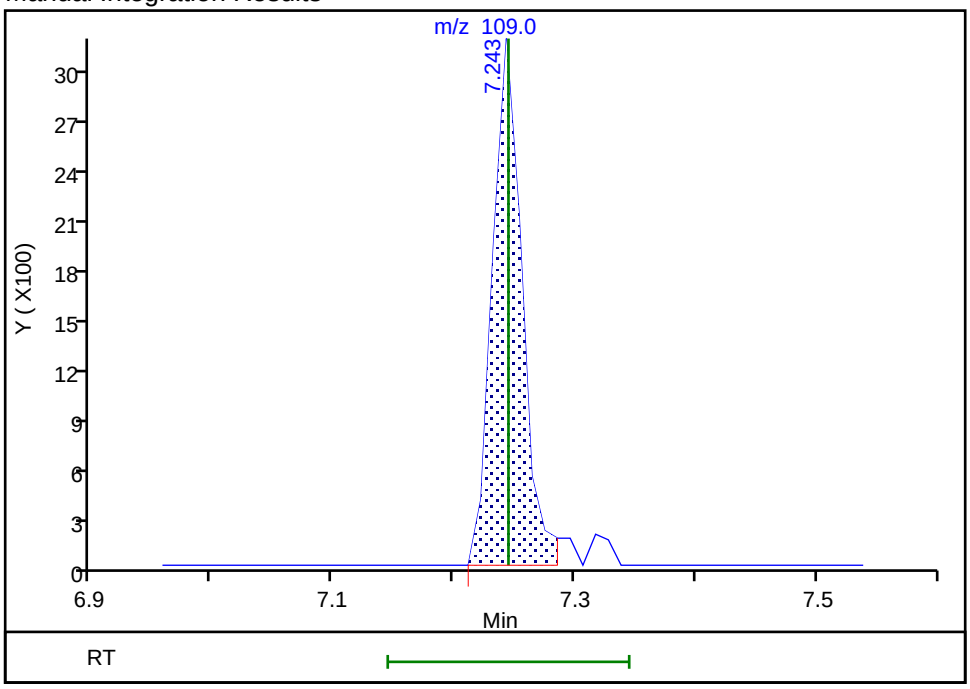
Processing Integration Results

RT: 7.24
Area: 5416
Amount: 0.593181
Amount Units: ug/l



Manual Integration Results

RT: 7.24
Area: 5416
Amount: 0.593181
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

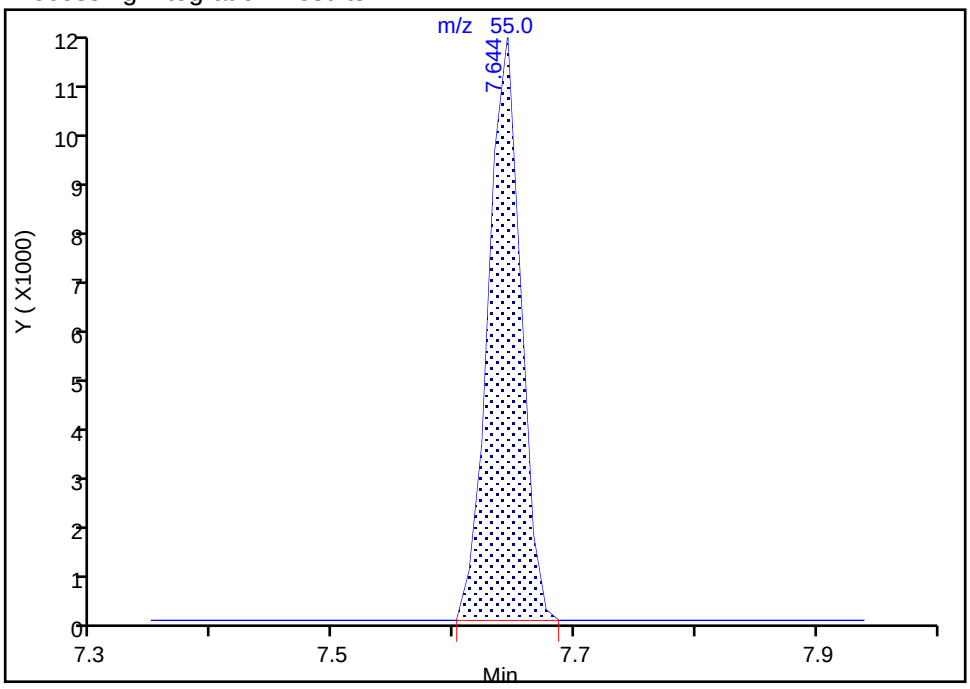
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

89 1-Chlorohexane, CAS: 544-10-5

Signal: 2

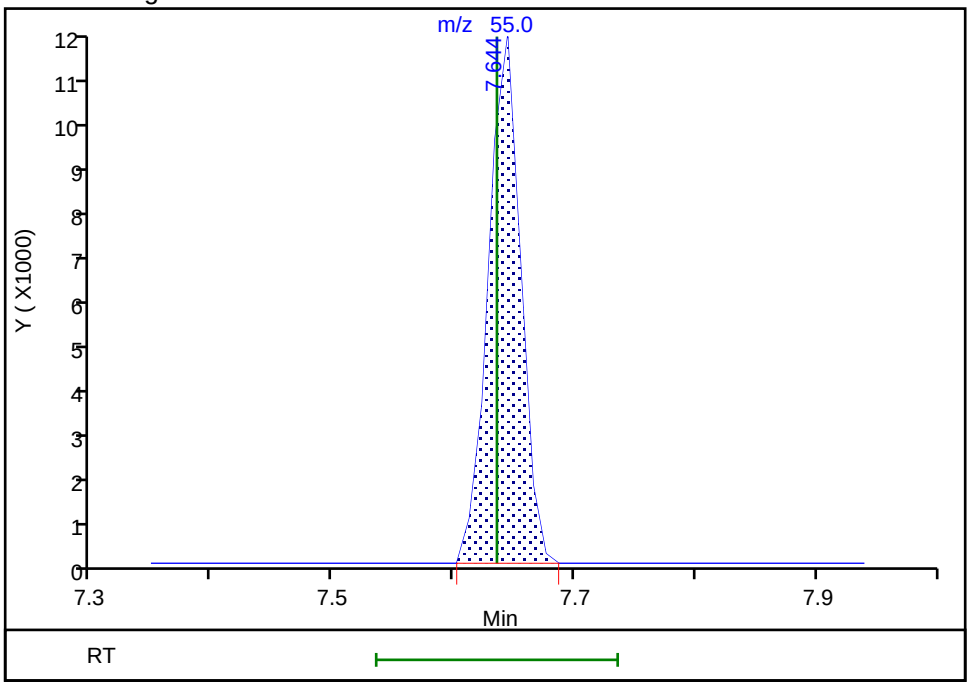
Processing Integration Results

RT: 7.64
Area: 22259
Amount: 0.501364
Amount Units: ug/l



Manual Integration Results

RT: 7.64
Area: 22259
Amount: 0.501364
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:54:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

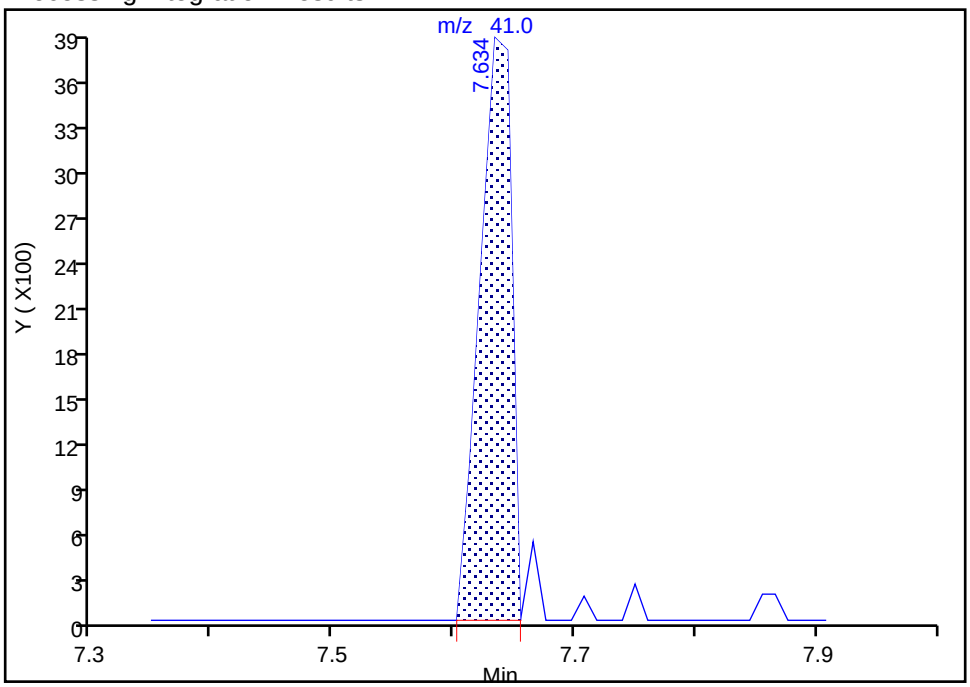
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

89 1-Chlorohexane, CAS: 544-10-5

Signal: 3

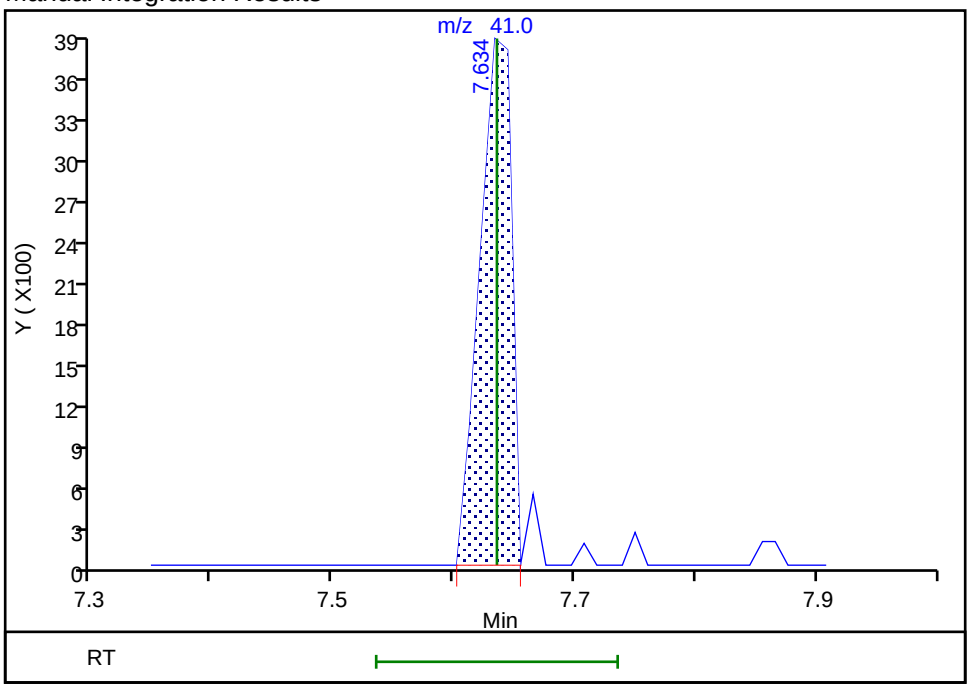
Processing Integration Results

RT: 7.63
Area: 6954
Amount: 0.501364
Amount Units: ug/l



Manual Integration Results

RT: 7.63
Area: 6954
Amount: 0.501364
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:54:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

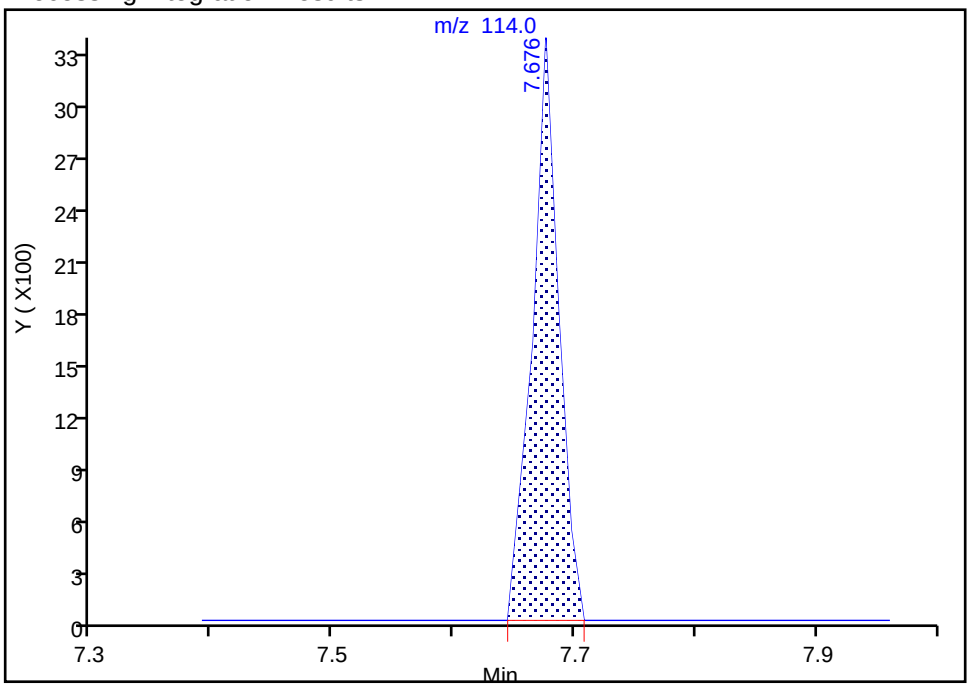
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

90 Chlorobenzene, CAS: 108-90-7

Signal: 2

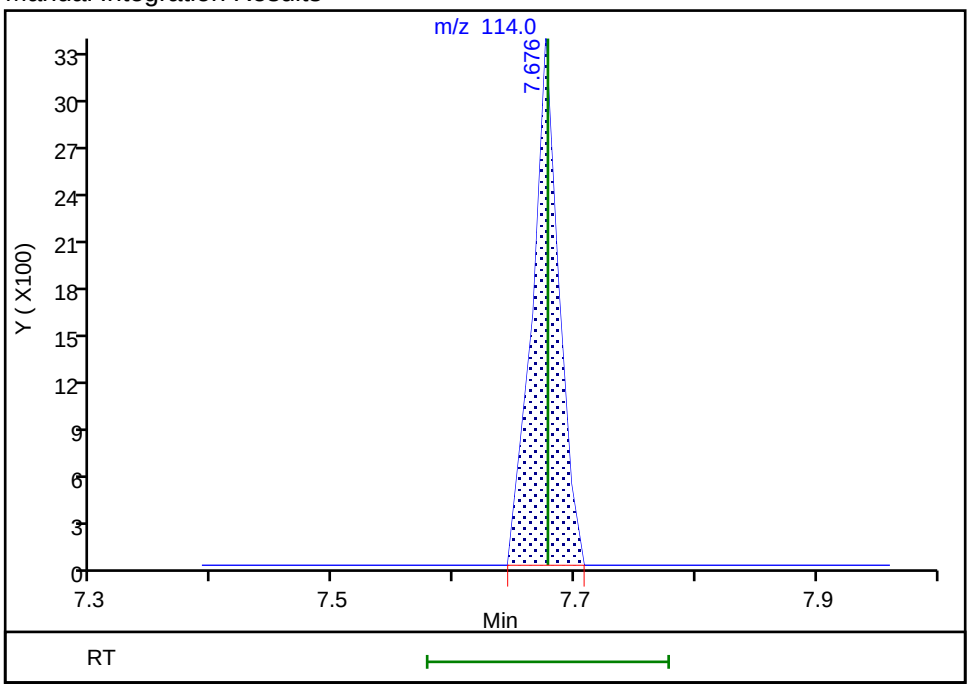
Processing Integration Results

RT: 7.68
Area: 5153
Amount: 0.601004
Amount Units: ug/l



Manual Integration Results

RT: 7.68
Area: 5153
Amount: 0.601004
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

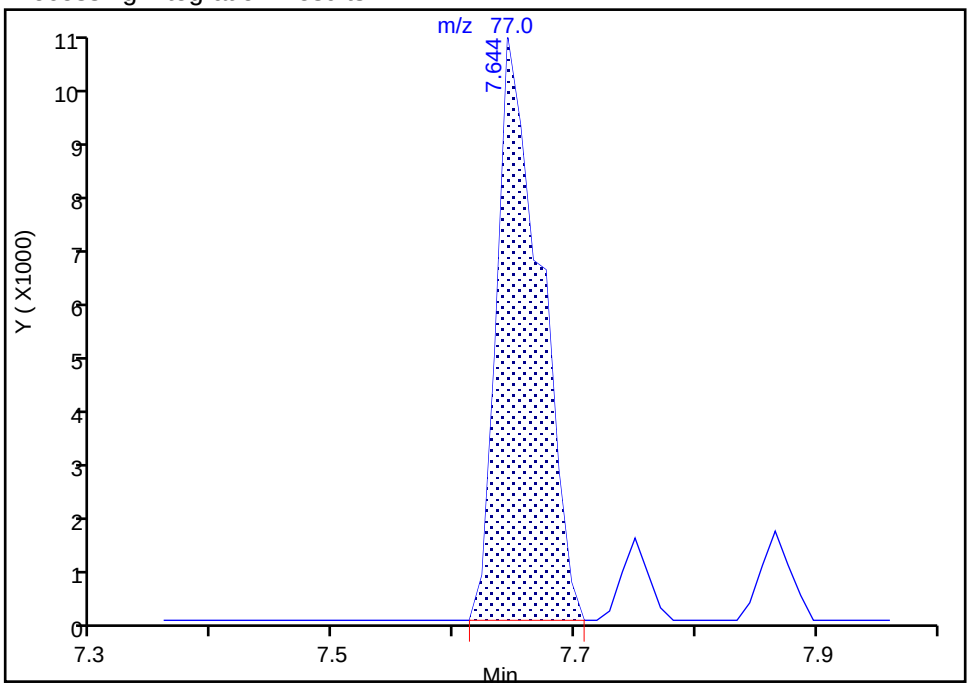
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

90 Chlorobenzene, CAS: 108-90-7

Signal: 3

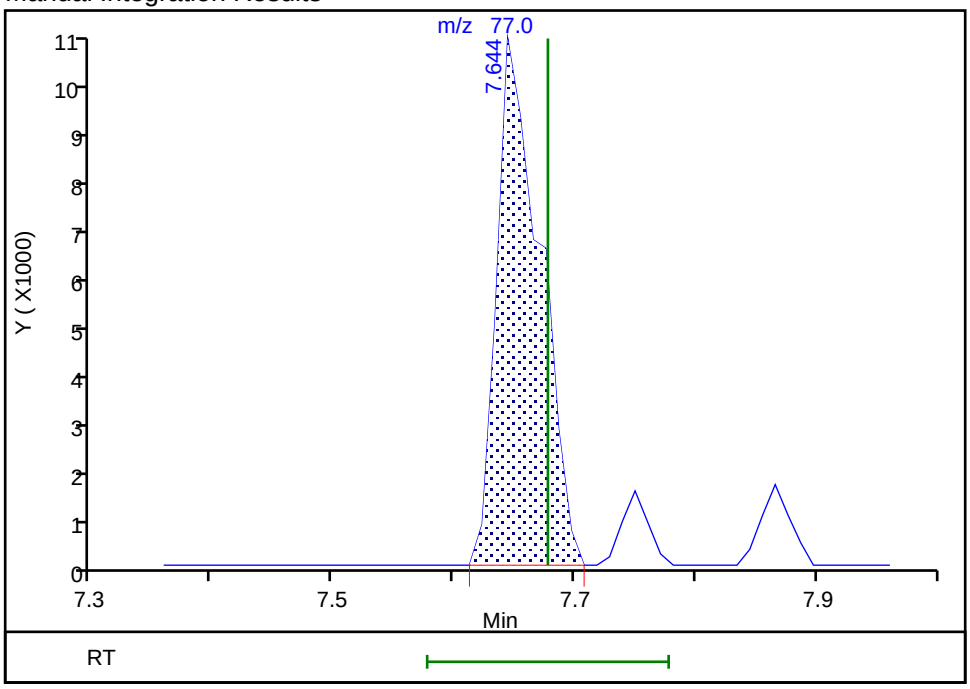
Processing Integration Results

RT: 7.64
Area: 25302
Amount: 0.601004
Amount Units: ug/l



Manual Integration Results

RT: 7.64
Area: 25302
Amount: 0.601004
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

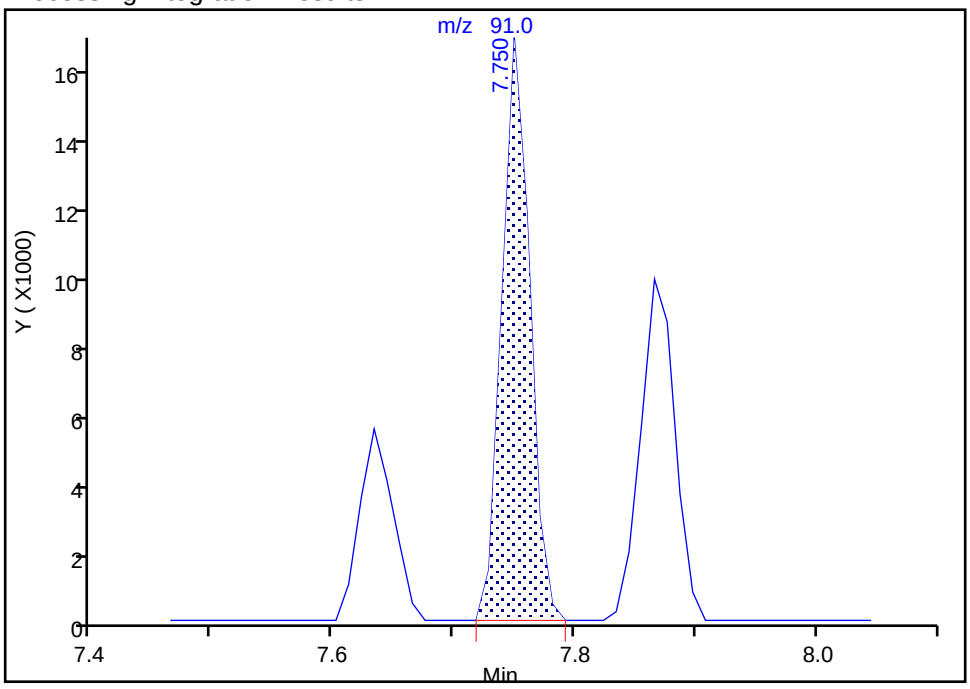
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Signal: 2

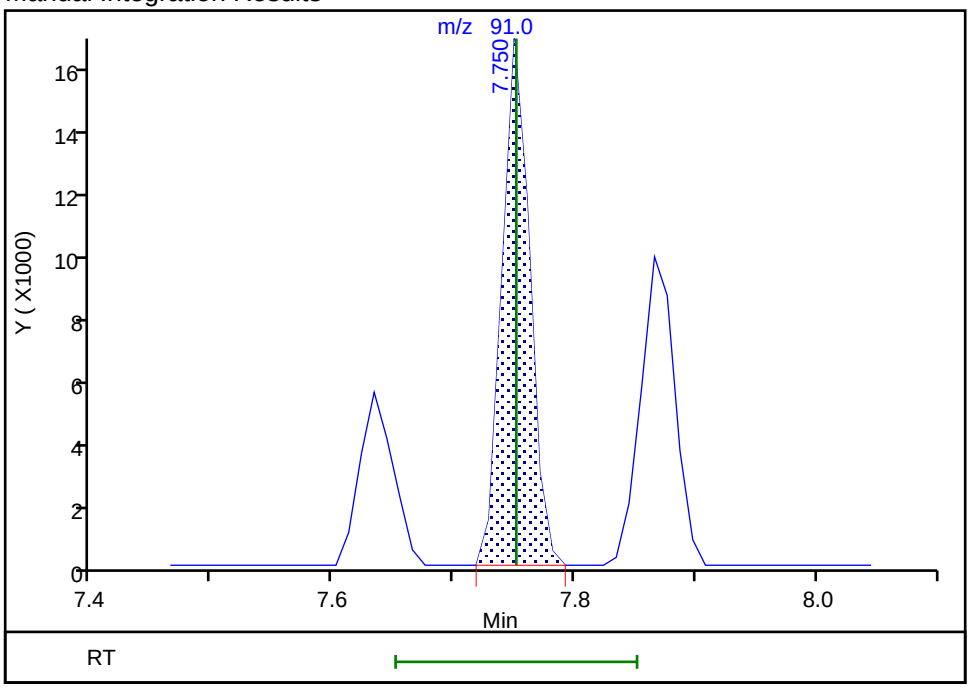
Processing Integration Results

RT: 7.75
Area: 26158
Amount: 0.574387
Amount Units: ug/l



Manual Integration Results

RT: 7.75
Area: 26158
Amount: 0.574387
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

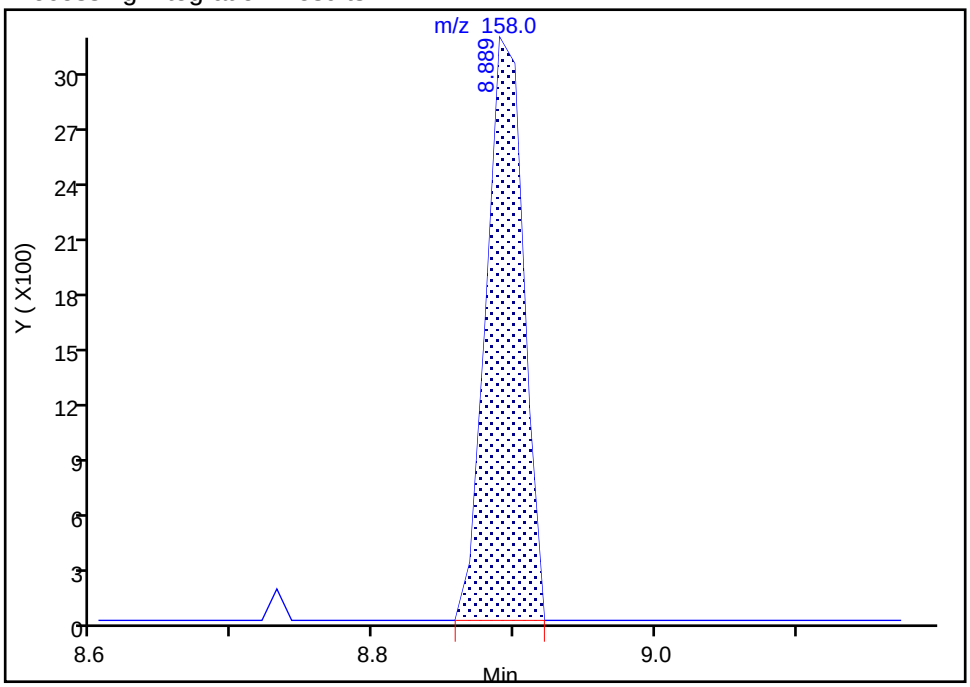
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

101 Bromobenzene, CAS: 108-86-1

Signal: 2

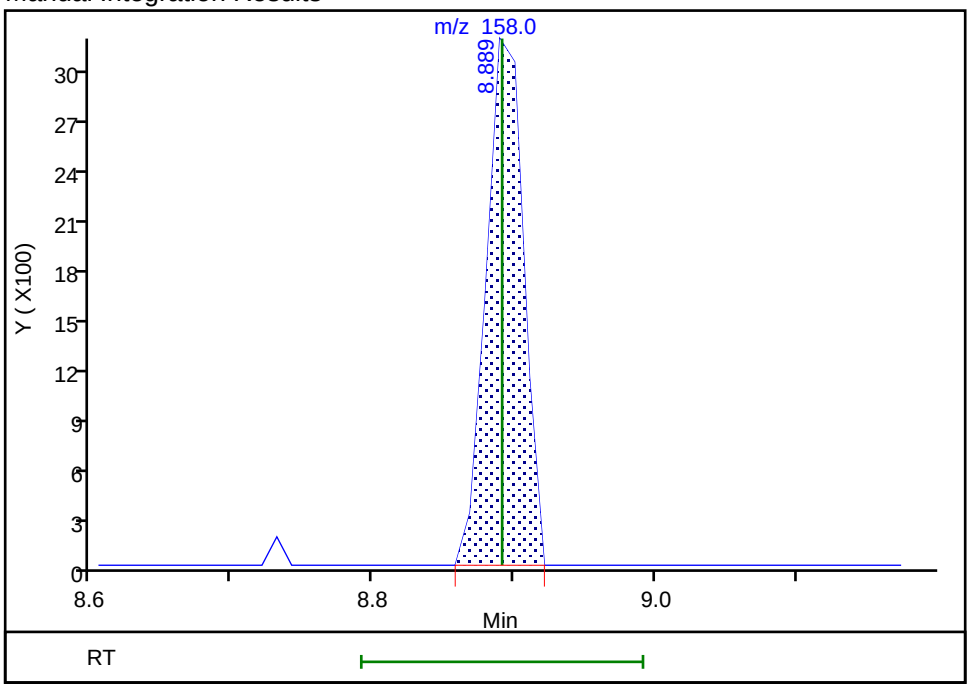
Processing Integration Results

RT: 8.89
Area: 5772
Amount: 0.596925
Amount Units: ug/l



Manual Integration Results

RT: 8.89
Area: 5772
Amount: 0.596925
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

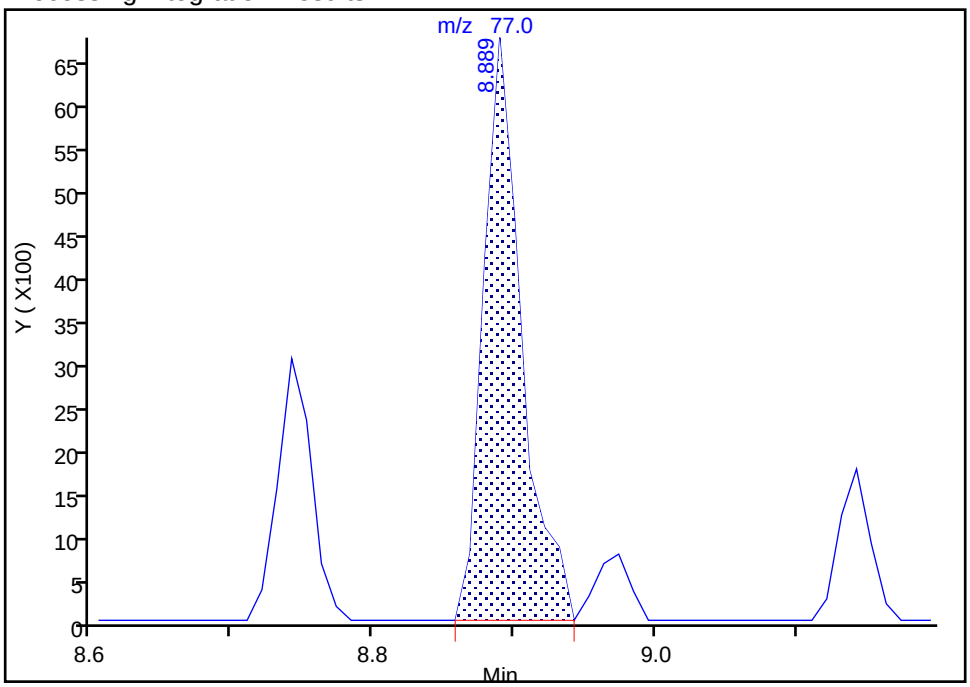
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

101 Bromobenzene, CAS: 108-86-1

Signal: 3

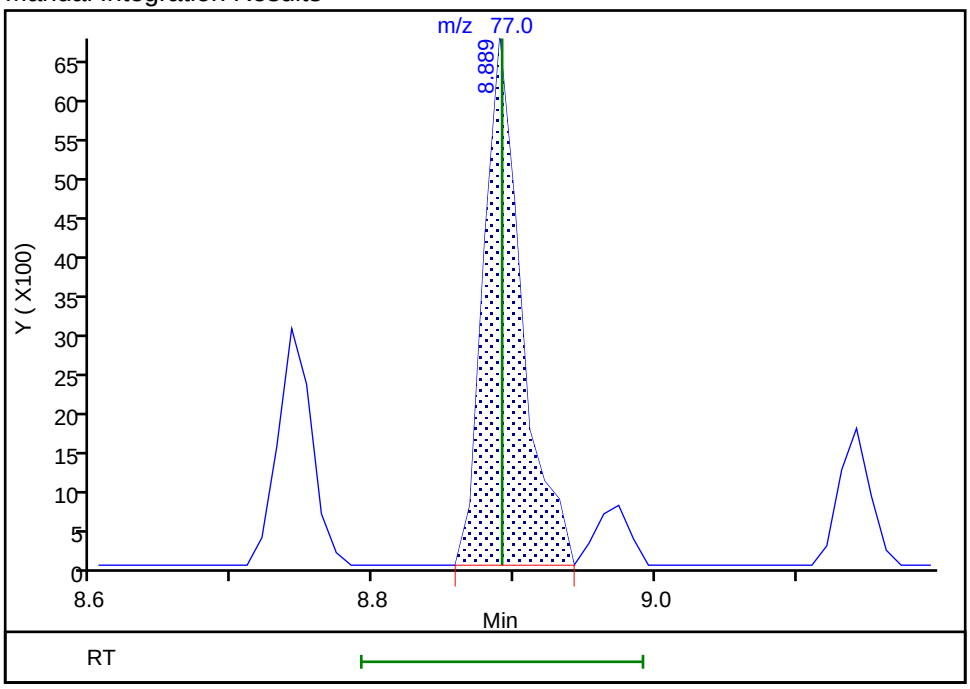
Processing Integration Results

RT: 8.89
Area: 12681
Amount: 0.596925
Amount Units: ug/l



Manual Integration Results

RT: 8.89
Area: 12681
Amount: 0.596925
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

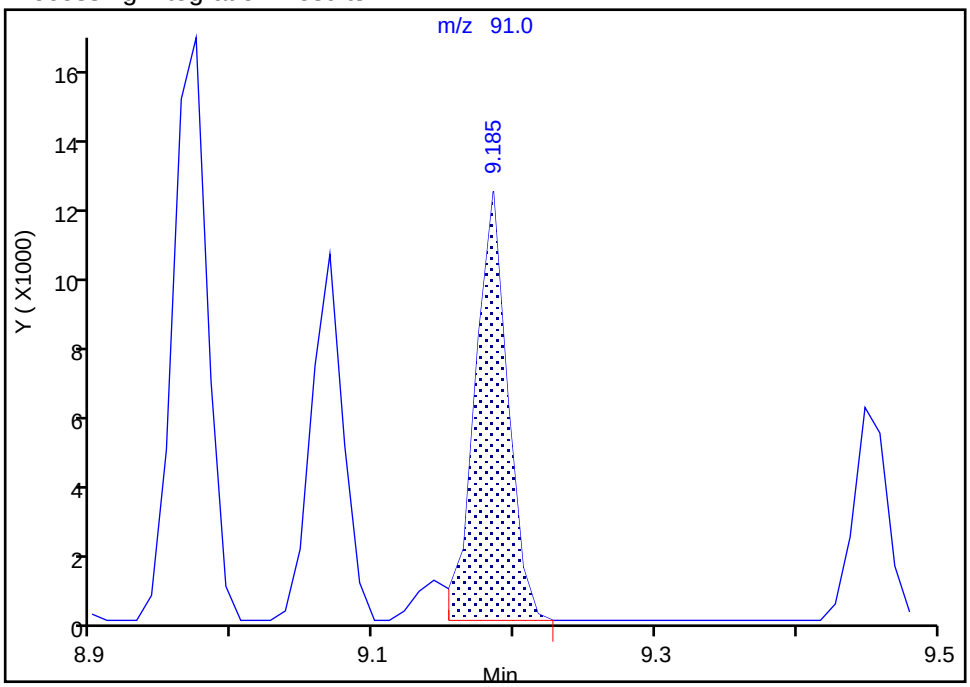
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 2

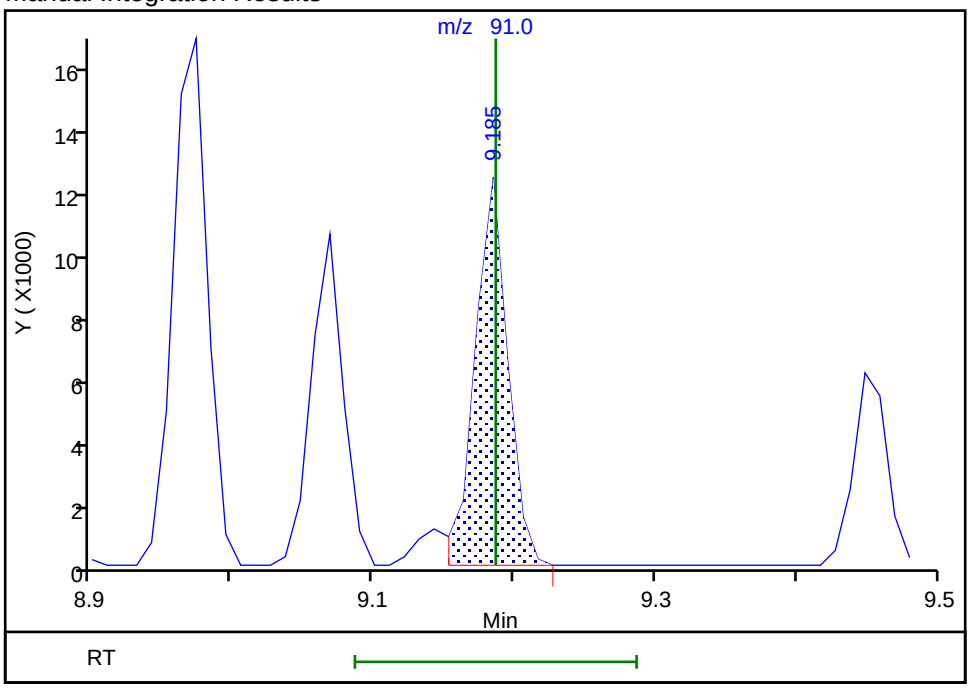
Processing Integration Results

RT: 9.18
Area: 20157
Amount: 0.586554
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 20157
Amount: 0.586554
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

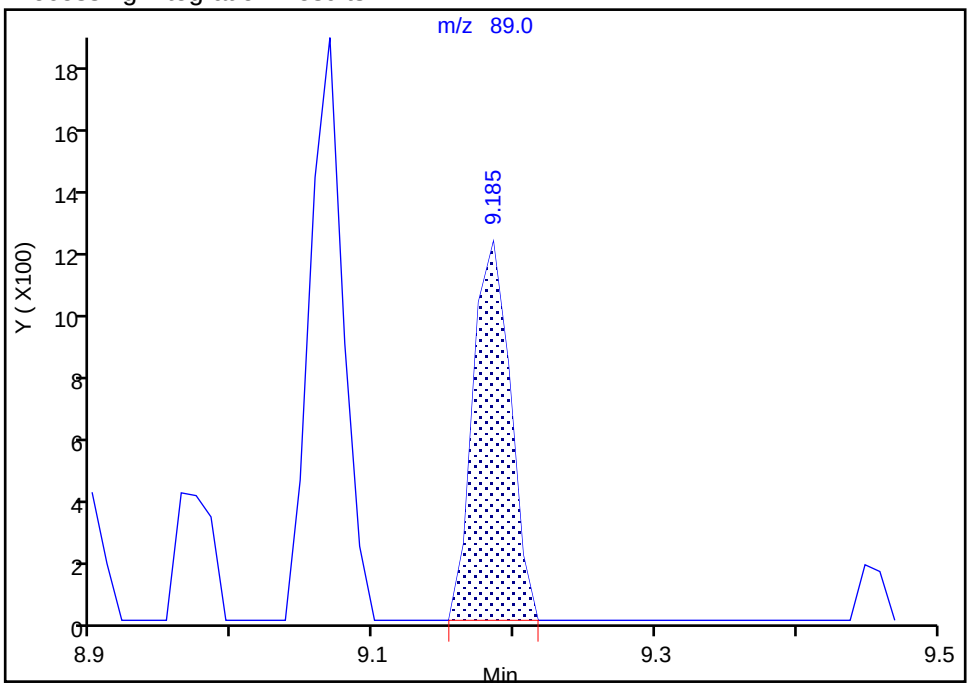
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 3

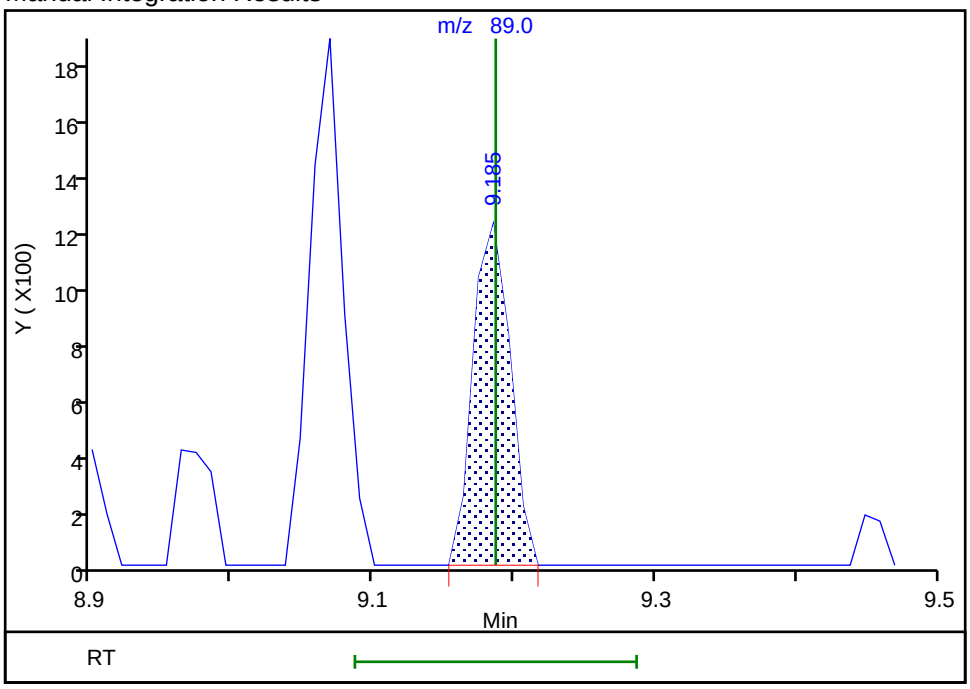
Processing Integration Results

RT: 9.18
Area: 2250
Amount: 0.586554
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 2250
Amount: 0.586554
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

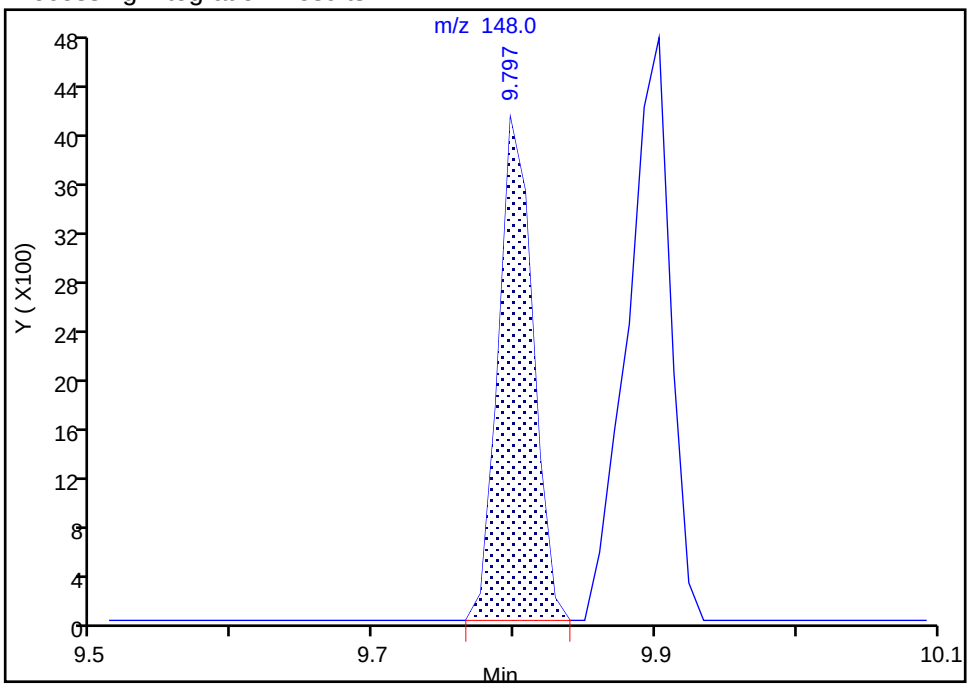
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

111 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 2

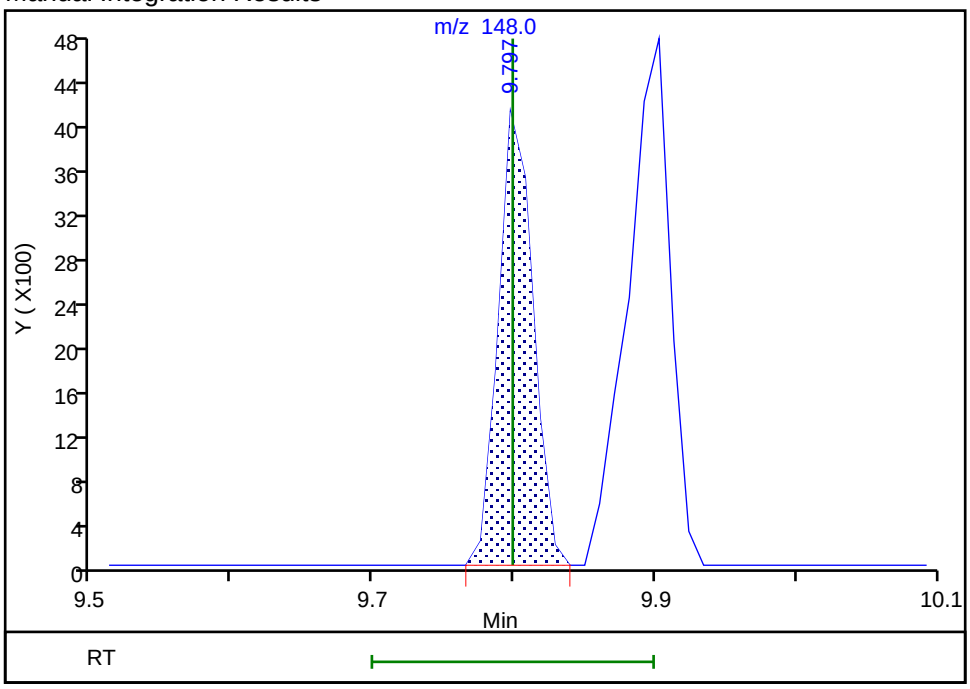
Processing Integration Results

RT: 9.80
Area: 7073
Amount: 0.634067
Amount Units: ug/l



Manual Integration Results

RT: 9.80
Area: 7073
Amount: 0.656056
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

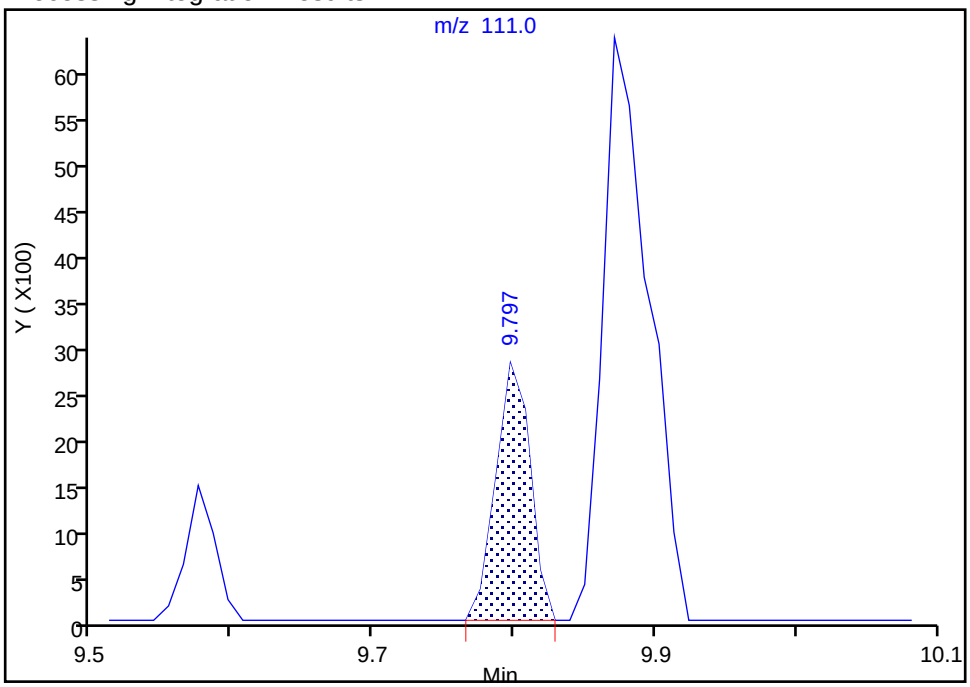
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

111 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 3

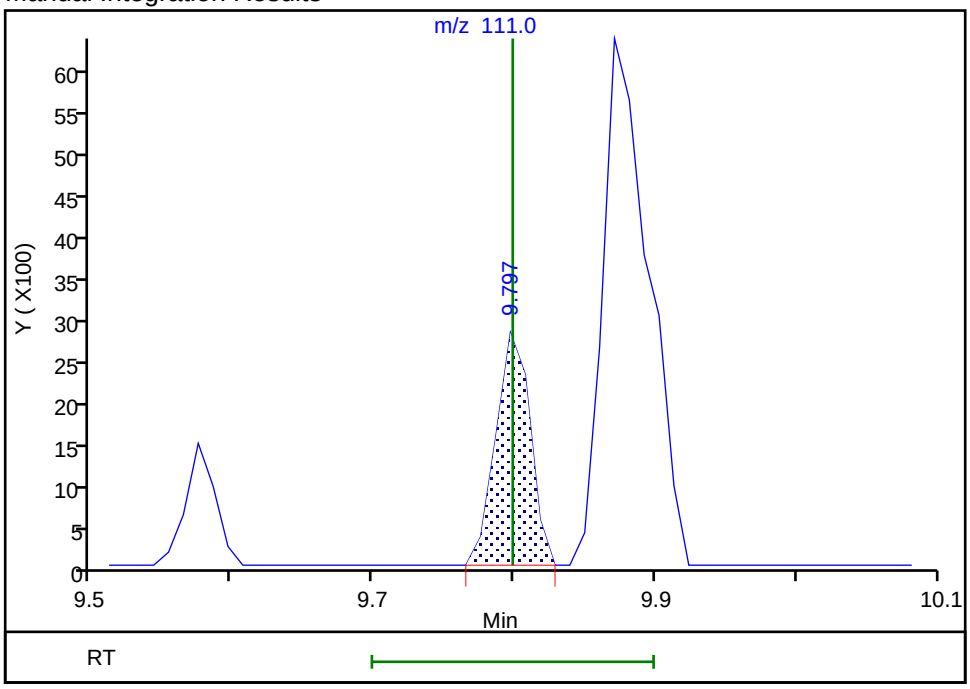
Processing Integration Results

RT: 9.80
Area: 4742
Amount: 0.634067
Amount Units: ug/l



Manual Integration Results

RT: 9.80
Area: 4742
Amount: 0.656056
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

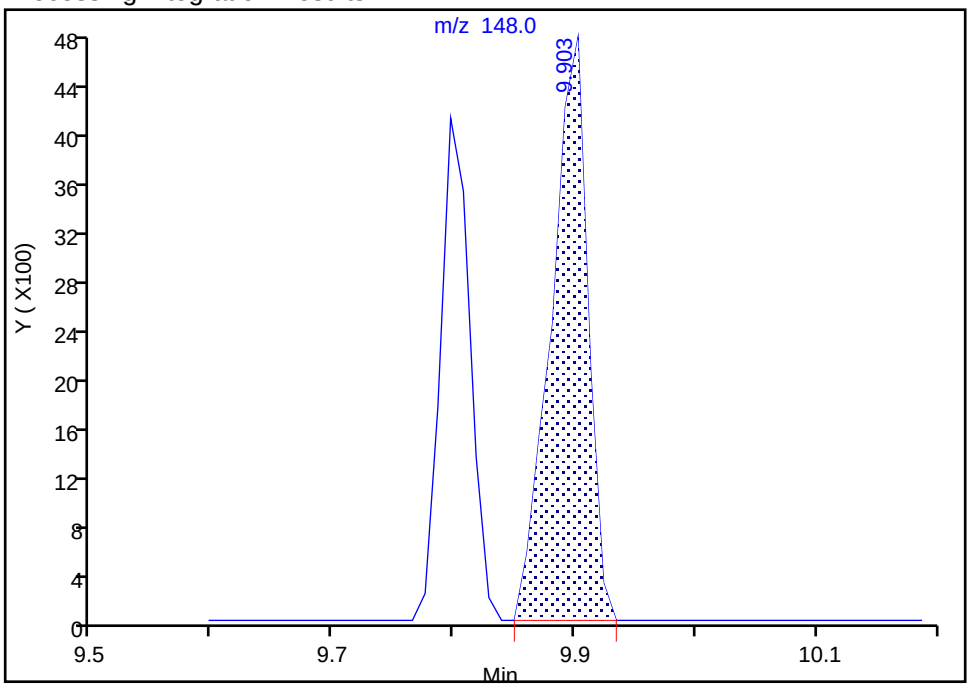
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 2

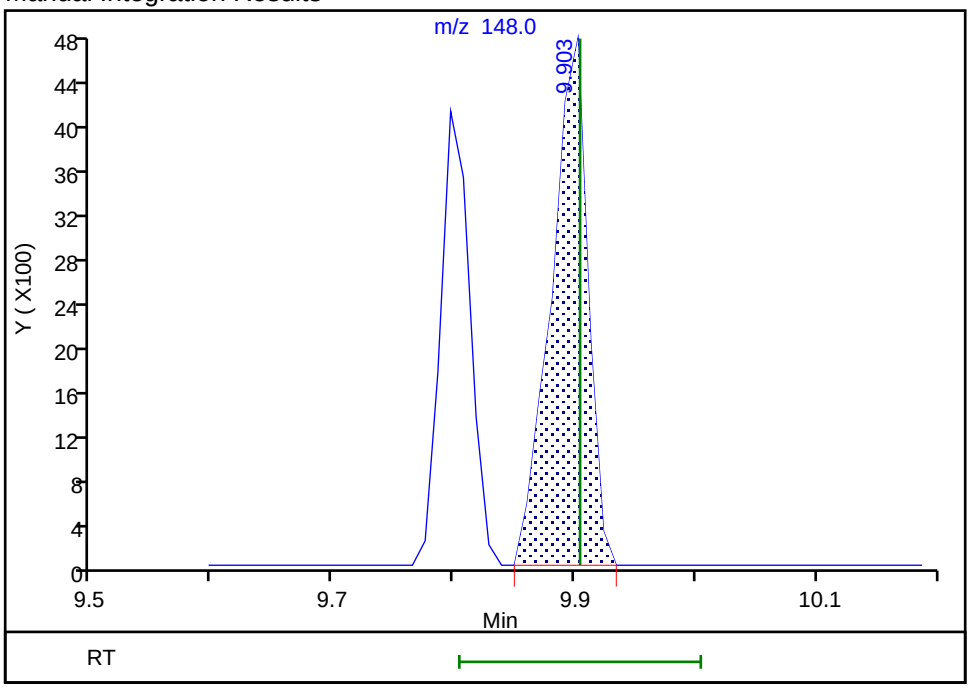
Processing Integration Results

RT: 9.90
Area: 10077
Amount: 0.647016
Amount Units: ug/l



Manual Integration Results

RT: 9.90
Area: 10077
Amount: 0.671704
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

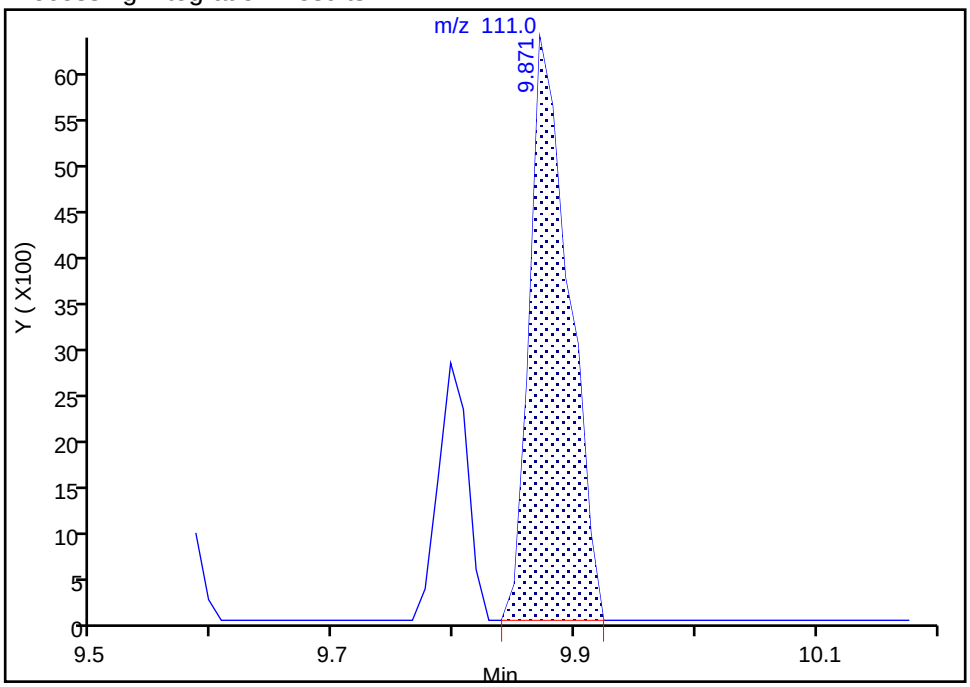
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 3

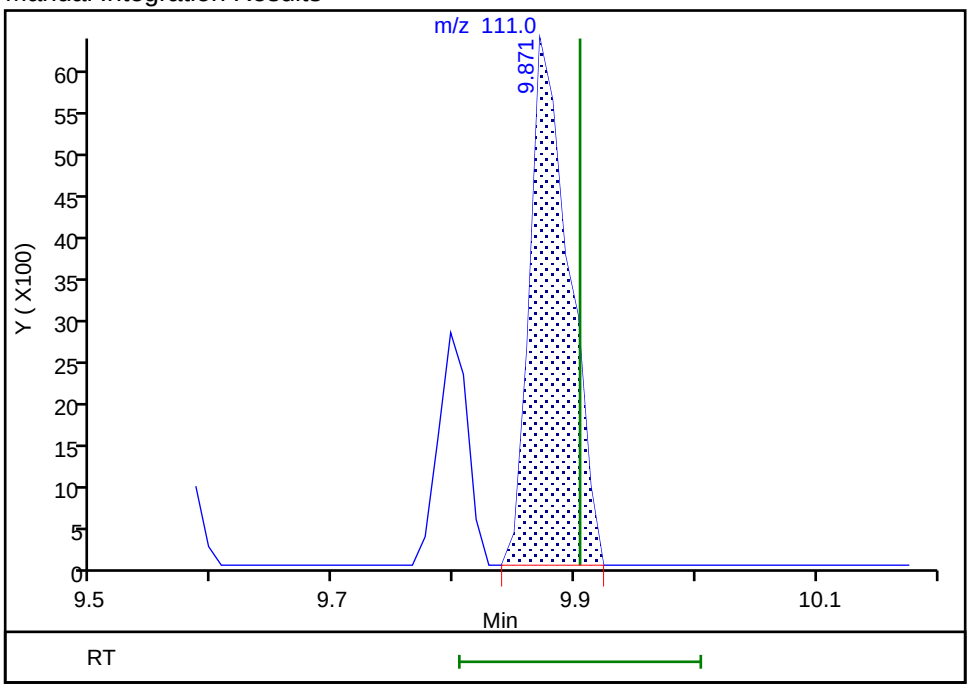
Processing Integration Results

RT: 9.87
Area: 14296
Amount: 0.647016
Amount Units: ug/l



Manual Integration Results

RT: 9.87
Area: 14296
Amount: 0.671704
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

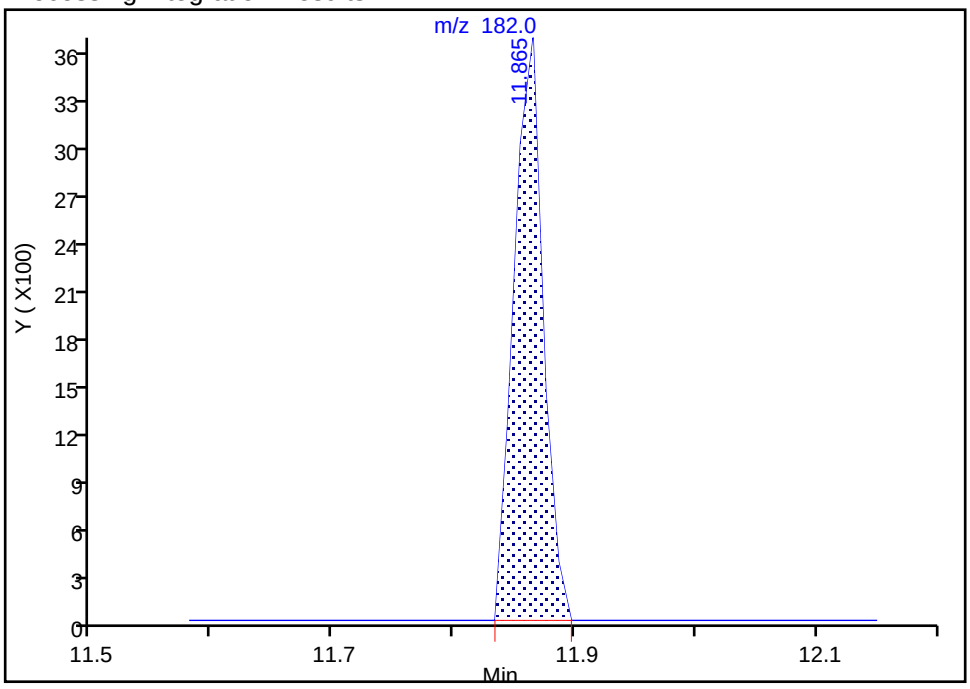
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

119 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 2

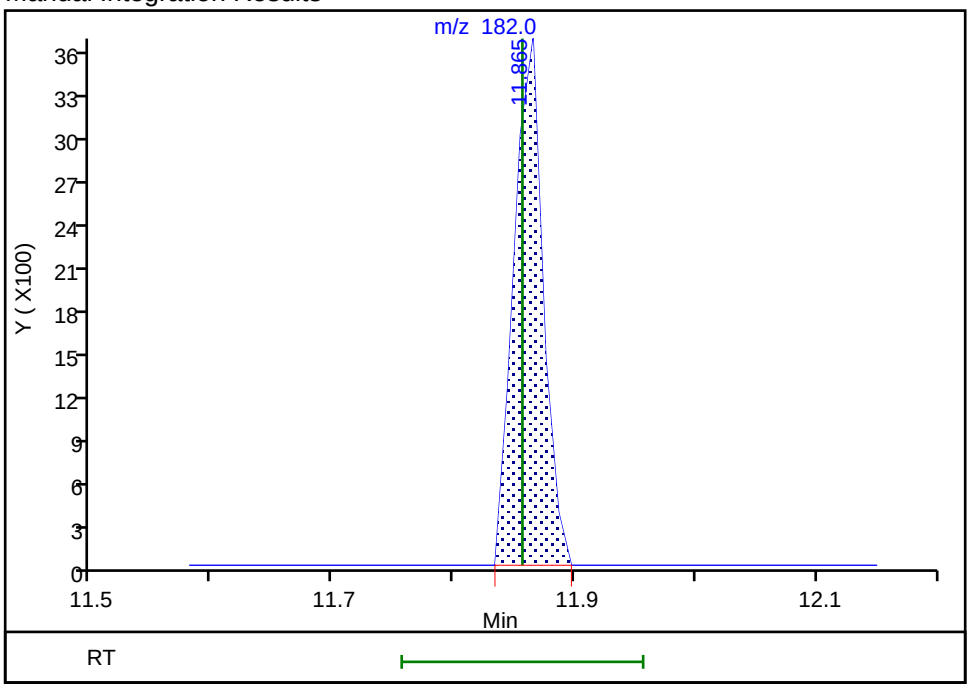
Processing Integration Results

RT: 11.87
Area: 6077
Amount: 0.654297
Amount Units: ug/l



Manual Integration Results

RT: 11.87
Area: 6077
Amount: 0.680549
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

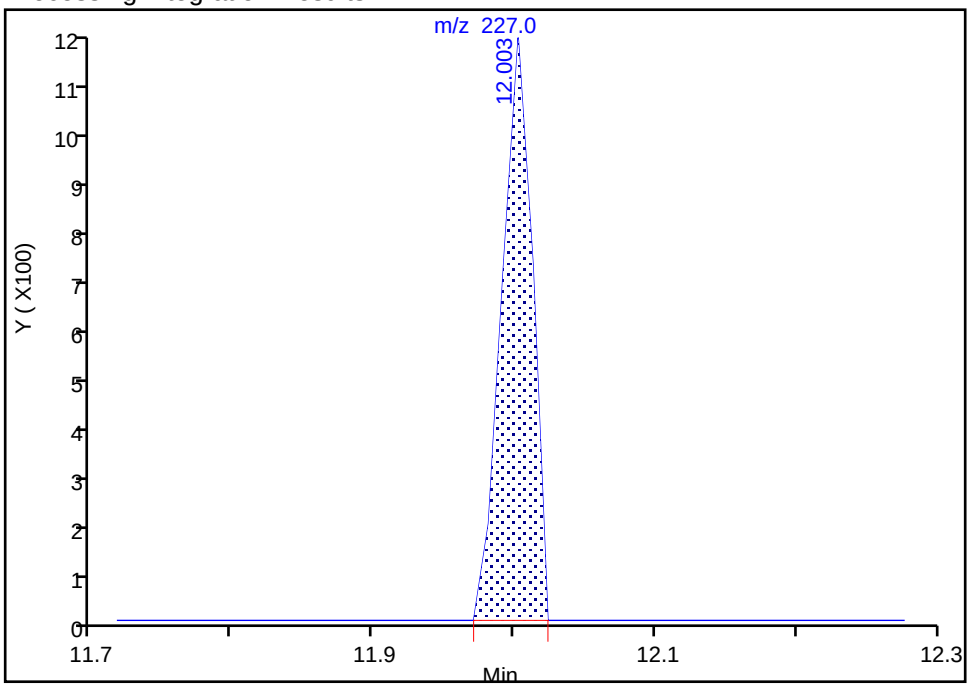
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 2

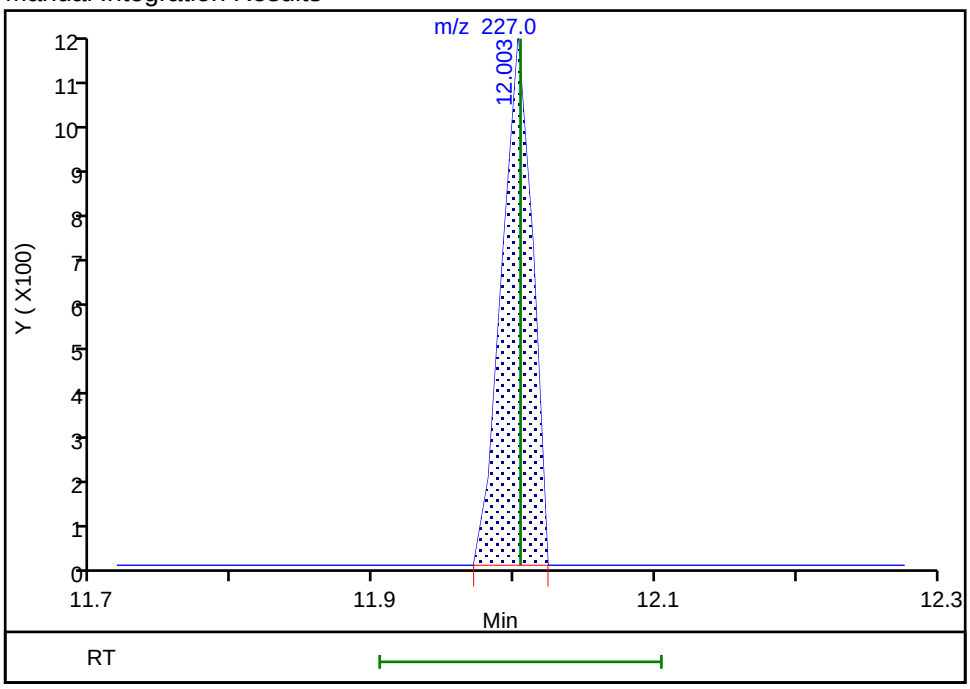
Processing Integration Results

RT: 12.00
Area: 1731
Amount: 0.680887
Amount Units: ug/l



Manual Integration Results

RT: 12.00
Area: 1731
Amount: 0.851194
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

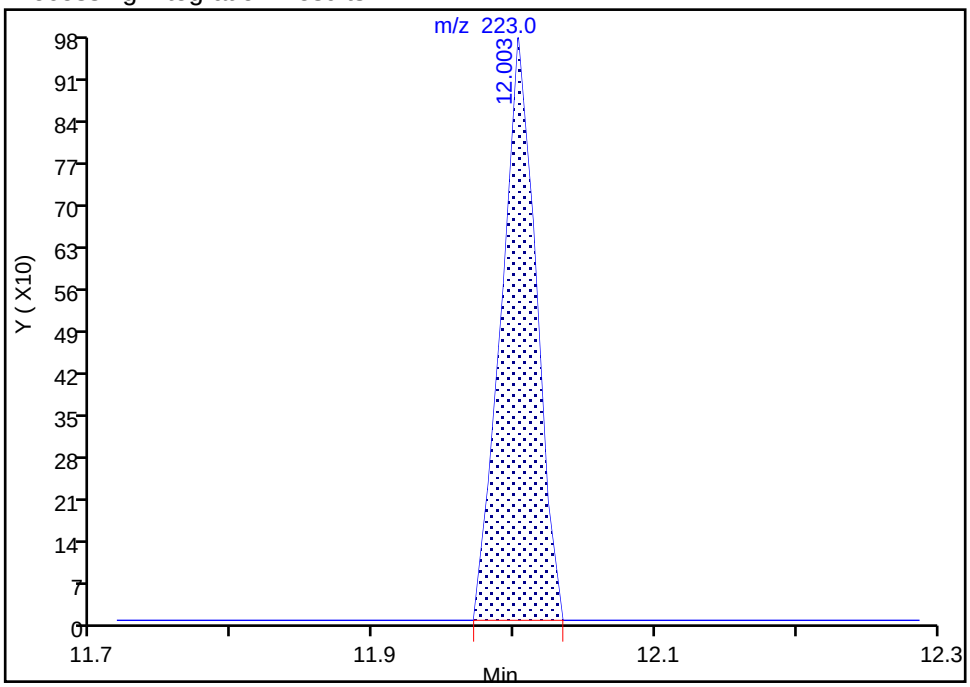
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 3

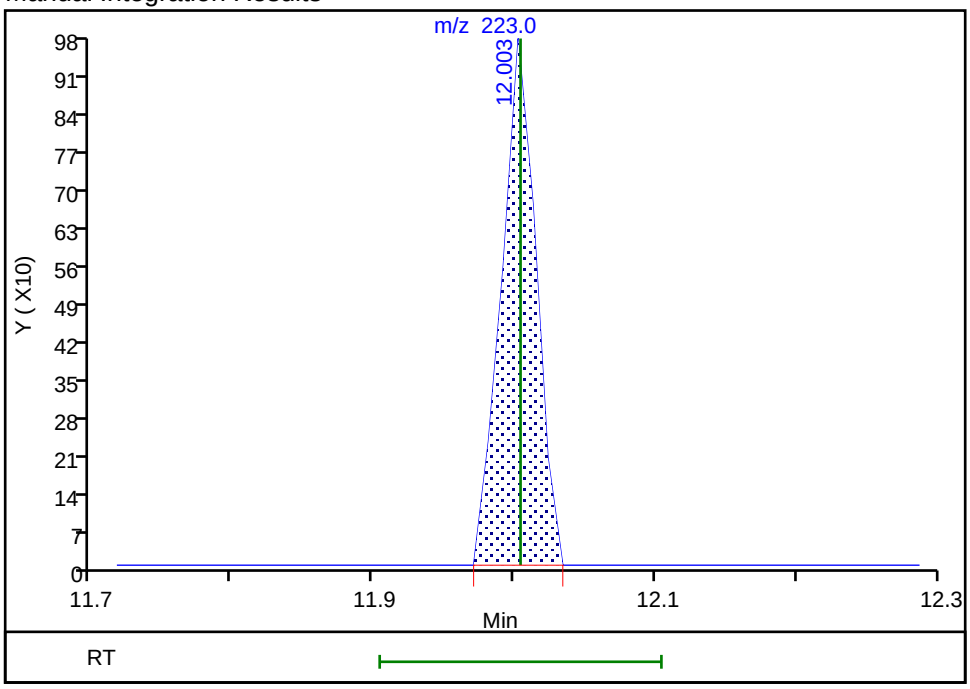
Processing Integration Results

RT: 12.00
Area: 1658
Amount: 0.680887
Amount Units: ug/l



Manual Integration Results

RT: 12.00
Area: 1658
Amount: 0.851194
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

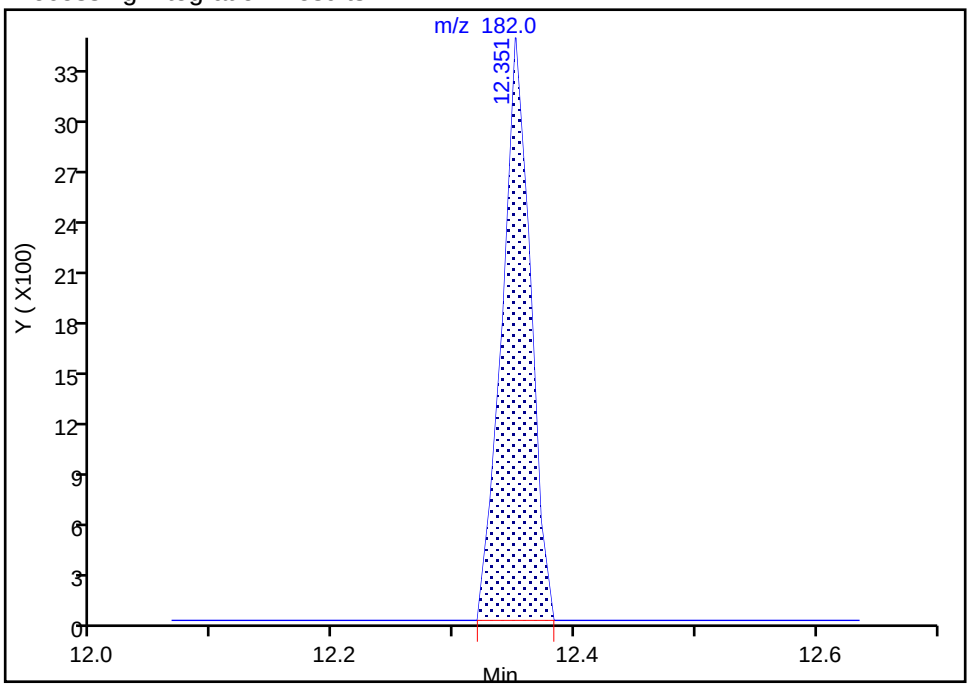
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

122 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 2

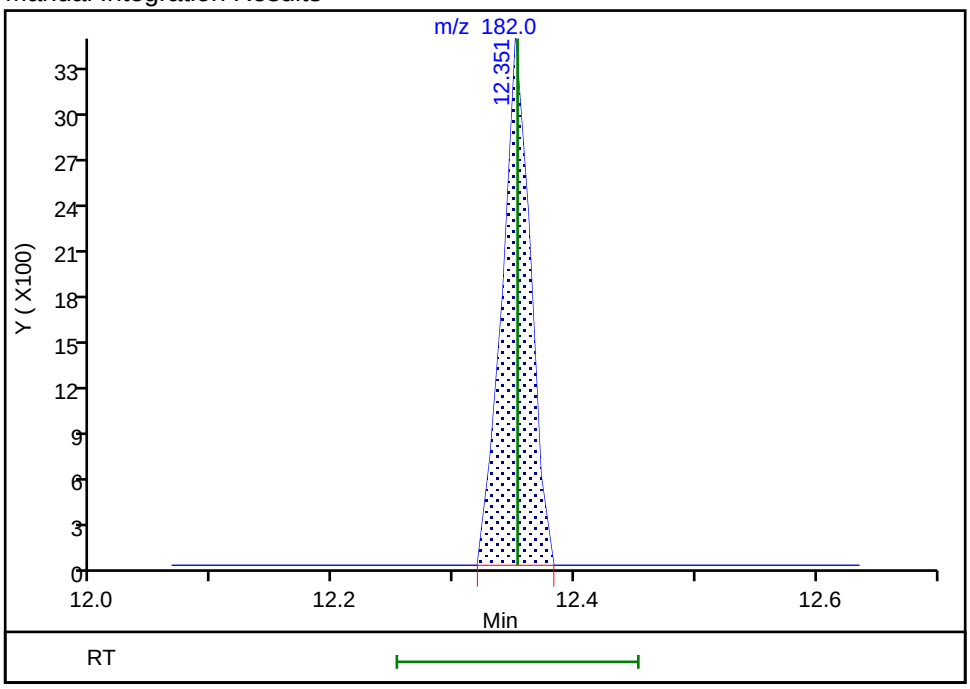
Processing Integration Results

RT: 12.35
Area: 5631
Amount: 0.622333
Amount Units: ug/l



Manual Integration Results

RT: 12.35
Area: 5631
Amount: 0.641966
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jun-2020 16:47:30 ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:43 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.114	5.113	0.001	99	2383354	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	87	531421	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	97	760731	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	574659	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.871	-0.011	97	691353	50.0	51.2	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2368182	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.743	0.001	83	850285	50.0	50.6	
10 Dichlorodifluoromethane	85	1.663	1.662	0.001	97	5476	1.00	0.8192	
11 Chloromethane	50	1.842	1.842	0.000	100	10961	1.00	0.8970	
12 Vinyl chloride	62	1.937	1.937	0.000	98	9829	1.00	0.9420	
14 Bromomethane	94	2.233	2.232	0.001	88	10332	1.00	0.9459	
15 Chloroethane	64	2.328	2.327	0.001	97	6373	1.00	0.9591	
16 Dichlorofluoromethane	67	2.497	2.496	0.001	96	15298	1.00	0.9860	
17 Trichlorofluoromethane	101	2.528	2.538	-0.010	98	12743	1.00	0.9893	
19 Ethyl ether	59	2.750	2.749	0.001	92	8448	1.00	1.04	
21 Acrolein	56	2.855	2.855	0.000	99	20816	9.88	10.4	
22 1,1-Dichloroethene	96	2.940	2.939	0.001	98	8105	1.00	1.05	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.940	2.939	0.001	75	6283	1.00	1.08	
24 Acetone	43	2.961	2.960	0.001	99	17462	4.00	4.34	
26 Iodomethane	142	3.066	3.066	0.000	98	5391	1.00	1.42	
27 Carbon disulfide	76	3.130	3.129	0.001	99	26575	1.00	0.8537	
29 Methyl acetate	43	3.193	3.193	0.000	98	17449	2.00	2.15	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	92	13759	1.00	1.04	
31 Methylene Chloride	84	3.309	3.309	0.000	93	12146	1.00	0.8495	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	97	10427	10.0	9.98	
33 Acrylonitrile	53	3.467	3.467	0.000	100	46835	10.0	10.7	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	94	26688	1.00	1.02	
35 trans-1,2-Dichloroethene	96	3.510	3.509	0.001	97	9430	1.00	1.04	
36 Hexane	57	3.710	3.710	0.000	92	13212	1.00	1.07	
38 Vinyl acetate	43	3.805	3.805	0.000	97	39777	2.00	2.03	
39 1,1-Dichloroethane	63	3.837	3.836	0.001	96	17492	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.217	4.216	0.001	98	22389	4.00	4.21	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	82	10604	1.00	1.05	
48 2,2-Dichloropropane	77	4.259	4.258	0.001	91	11073	1.00	0.9814	
50 sec-Butyl Alcohol	45	4.333	4.322	0.011	98	22900	30.0	26.8	
52 Tetrahydrofuran	42	4.428	4.427	0.001	87	7747	2.00	2.20	
53 Chlorobromomethane	128	4.428	4.427	0.001	97	4702	1.00	1.04	
54 Chloroform	83	4.480	4.480	0.000	93	16640	1.00	1.04	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	96	12946	1.00	1.02	
56 Cyclohexane	56	4.692	4.691	0.001	87	16664	1.00	1.03	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	95	14002	1.00	1.05	
59 Carbon tetrachloride	117	4.744	4.754	-0.010	92	10013	1.00	0.9655	
58 Isobutyl alcohol	41	4.755	4.754	0.001	90	8906	25.0	24.2	
60 Benzene	78	4.892	4.902	-0.010	96	41858	1.00	1.07	
61 1,2-Dichloroethane	62	4.924	4.923	0.001	97	16511	1.00	1.00	
66 n-Heptane	43	5.082	5.082	0.000	91	12658	1.00	1.08	
67 Trichloroethene	95	5.388	5.388	0.000	96	9625	1.00	1.00	
68 2-Pentanone	43	5.483	5.483	0.000	98	31765	4.00	4.02	
69 Methylcyclohexane	55	5.578	5.578	0.000	92	12607	1.00	1.03	
70 1,2-Dichloropropane	63	5.588	5.599	-0.011	96	10485	1.00	1.03	
72 1,4-Dioxane	88	5.631	5.630	0.001	87	2933	20.0	20.8	
73 Dibromomethane	93	5.662	5.662	0.000	93	6224	1.00	1.07	
74 Dichlorobromomethane	83	5.789	5.789	0.000	98	11312	1.00	0.9620	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	6403	1.00	0.9133	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	94	13633	1.00	0.9565	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.242	-0.010	96	40359	4.00	3.98	
79 Toluene	91	6.422	6.432	-0.010	98	43821	1.00	1.07	
80 trans-1,3-Dichloropropene	75	6.602	6.601	0.001	92	11495	1.00	0.8927	
81 Ethyl methacrylate	69	6.623	6.622	0.001	89	12391	1.00	0.9486	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	90	8647	1.00	1.04	
83 Tetrachloroethene	164	6.876	6.876	0.000	92	7028	1.00	1.08	
84 1,3-Dichloropropane	76	6.929	6.928	0.001	89	16209	1.00	1.04	
85 2-Hexanone	43	6.939	6.939	0.000	97	28505	4.00	3.99	
86 Chlorodibromomethane	129	7.119	7.118	0.001	87	7421	1.00	0.9276	
88 Ethylene Dibromide	107	7.235	7.245	-0.010	100	8675	1.00	1.00	
89 1-Chlorohexane	91	7.636	7.635	0.001	79	15776	1.00	0.99	
90 Chlorobenzene	112	7.667	7.678	-0.011	94	26446	1.00	1.05	
92 Ethylbenzene	106	7.752	7.751	0.001	99	13801	1.00	1.00	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.751	-0.010	79	7583	1.00	0.9794	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	17205	1.00	1.04	
94 o-Xylene	106	8.227	8.226	0.001	97	15696	1.00	0.9842	
95 Styrene	104	8.248	8.247	0.001	94	26358	1.00	0.9811	
96 Bromoform	173	8.427	8.427	0.000	91	4334	1.00	0.9165	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	39516	1.00	0.99	
99 Cyclohexanone	55	8.659	8.670	-0.011	93	20432	40.0	37.5	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.859	-0.010	94	12209	1.00	1.05	
101 Bromobenzene	156	8.892	8.891	0.001	95	9337	1.00	0.99	
102 trans-1,4-Dichloro-2-butene	53	8.892	8.891	0.001	51	2740	1.00	0.8840	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	86	3818	1.00	1.08	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	11266	1.00	1.02	
105 2-Chlorotoluene	126	9.060	9.071	-0.011	95	9351	1.00	1.00	
106 1,3,5-Trimethylbenzene	105	9.134	9.144	-0.010	94	33063	1.00	1.01	
107 4-Chlorotoluene	126	9.187	9.187	0.000	98	9835	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.451	9.450	0.001	93	27390	1.00	1.00	
109 1,2,4-Trimethylbenzene	105	9.504	9.514	-0.010	96	32879	1.00	1.00	
110 sec-Butylbenzene	134	9.672	9.672	0.000	95	7836	1.00	0.9799	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	96	17575	1.00	1.03	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	33248	1.00	0.99	
113 1,4-Dichlorobenzene	146	9.894	9.904	-0.010	89	19657	1.00	1.12	
115 n-Butylbenzene	91	10.221	10.221	0.000	97	32229	1.00	1.03	
116 1,2-Dichlorobenzene	146	10.253	10.252	0.001	97	17305	1.00	1.02	
117 1,2-Dibromo-3-Chloropropane	157	11.034	11.033	0.001	80	1852	1.00	0.9351	
119 1,2,4-Trichlorobenzene	180	11.857	11.856	0.001	94	9317	1.00	1.01	
120 Hexachlorobutadiene	225	11.994	12.004	-0.010	93	3403	1.00	1.02	
121 Naphthalene	128	12.121	12.131	-0.010	98	28091	1.00	0.9459	
122 1,2,3-Trichlorobenzene	180	12.353	12.352	0.001	94	8541	1.00	1.01	
S 139 1,2-Dichloroethene, Total (URS)	96				0		2.00	2.08	
S 142 Xylenes, Total	106				0		2.00	2.02	
S 140 Trihalomethanes, Total	1				0		4.00	3.85	
S 143 Xylenes, Total (URS)	1				0		2.00	2.02	
S 146 Total BTEX	1				0			5.15	
S 145 1,3-Dichloropropene, Total	1				0		2.00	1.85	
S 144 1,2-Dichloroethene, Total	1				0		2.00	2.08	

Reagents:

MV-Gas A_00058	Amount Added:	0.20	Units: uL	
MV-MegaMainA_00034	Amount Added:	0.50	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

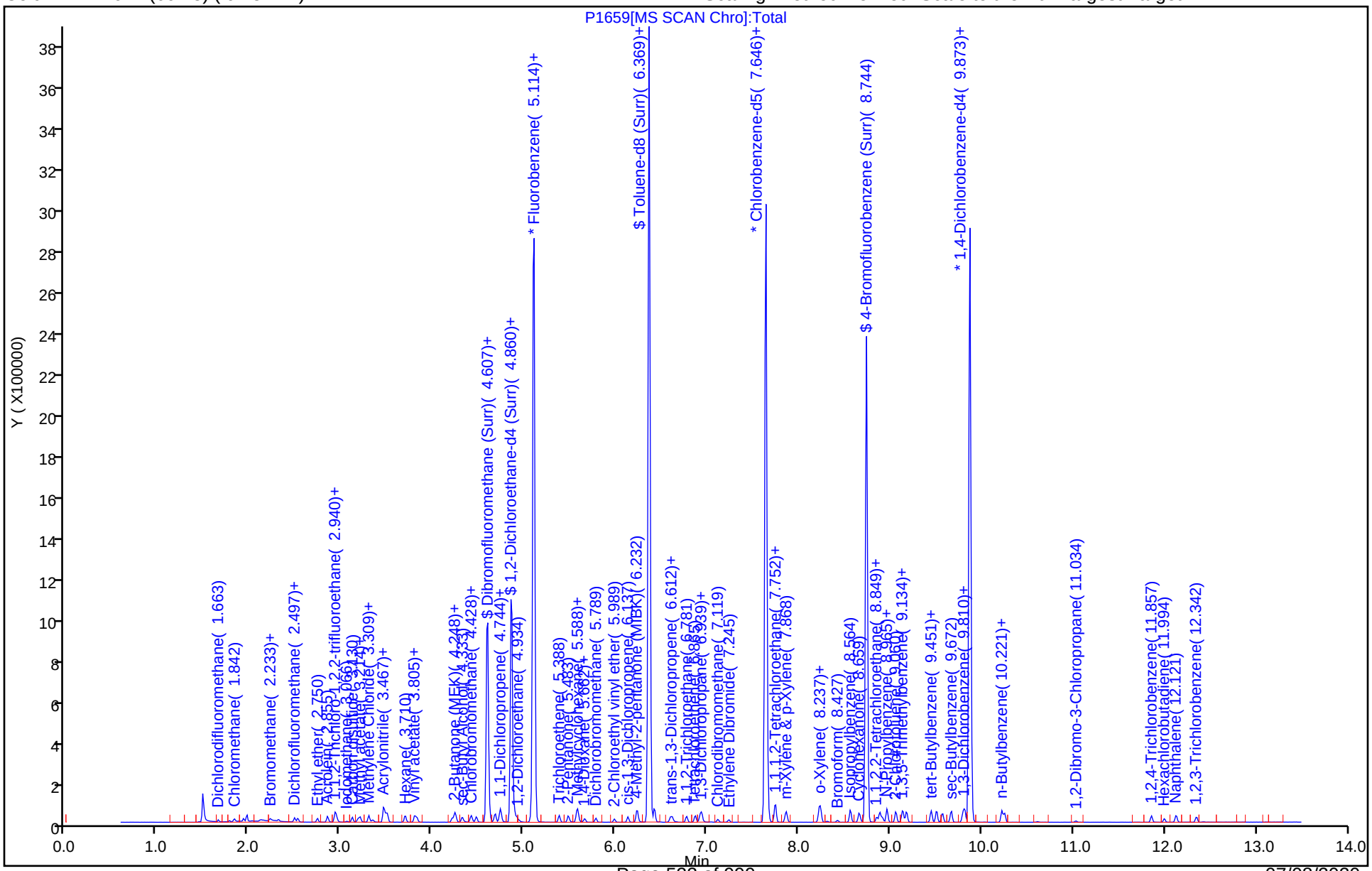
Report Date: 02-Jun-2020 11:15:44 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D

Injection Date:	01-Jun-2020 16:47:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

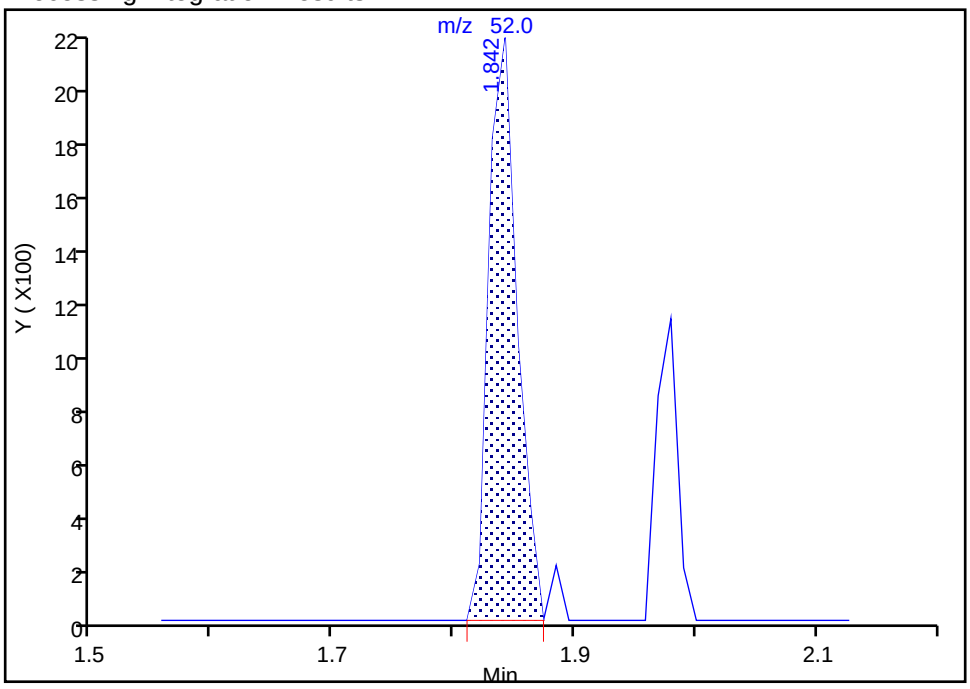
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 2

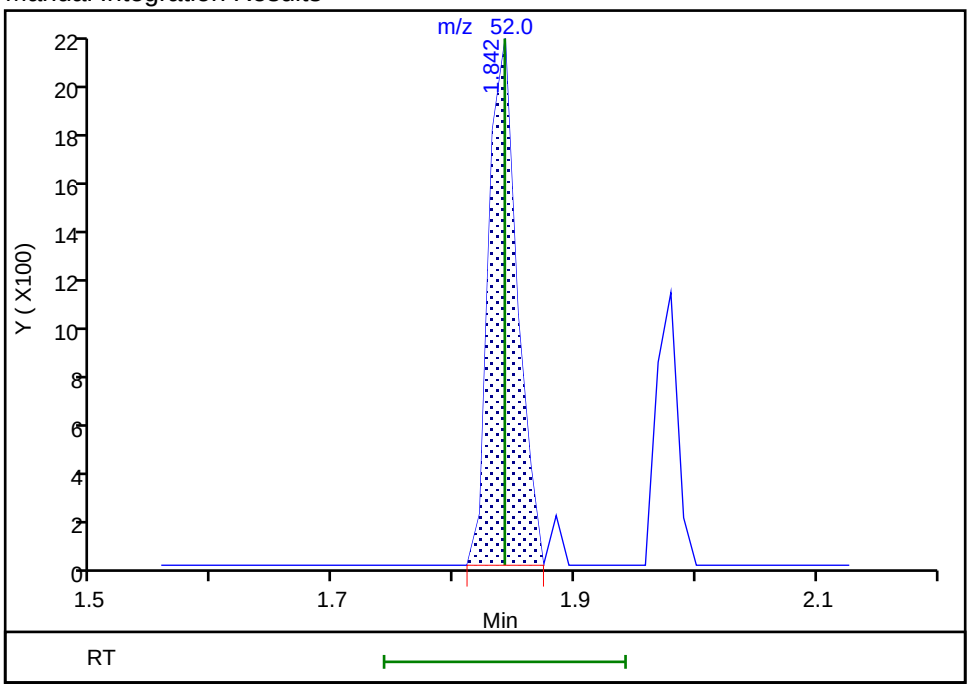
Processing Integration Results

RT: 1.84
Area: 3460
Amount: 1.141745
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 3460
Amount: 0.897043
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

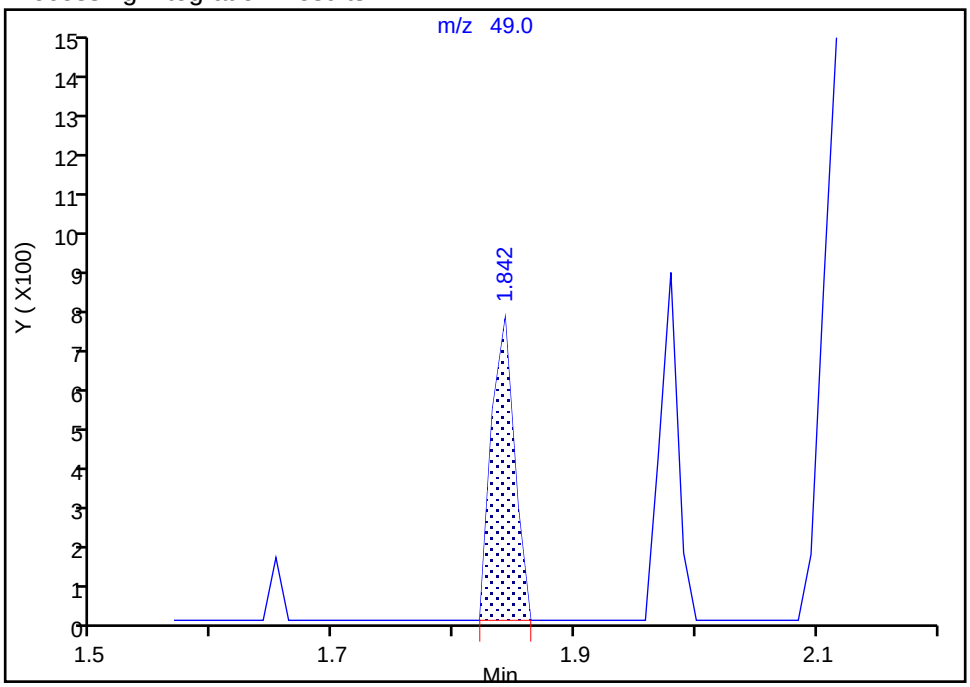
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 3

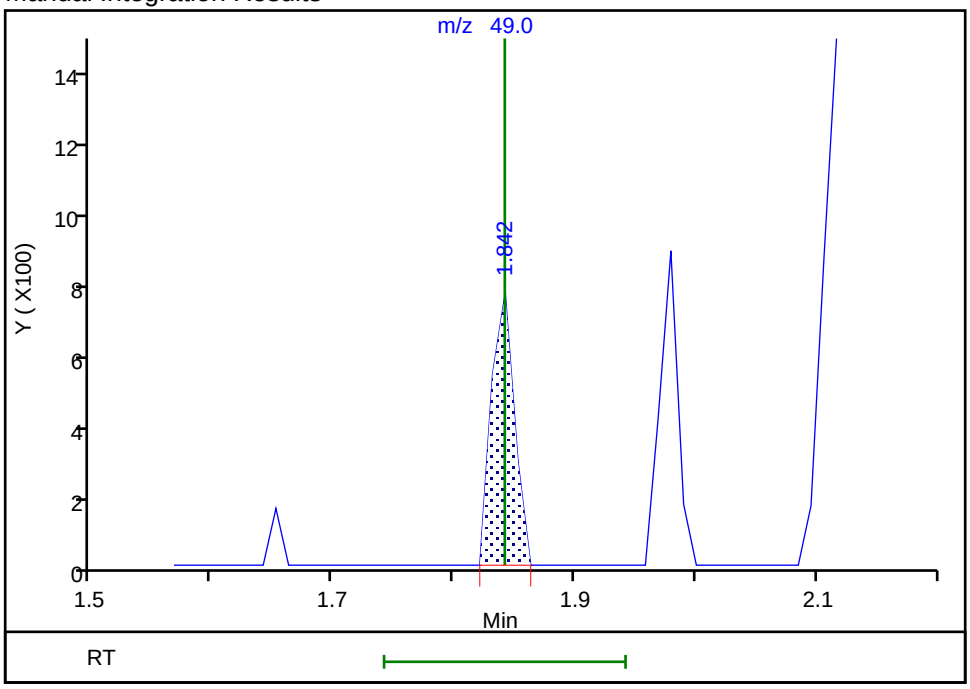
Processing Integration Results

RT: 1.84
Area: 1020
Amount: 1.141745
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 1020
Amount: 0.897043
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

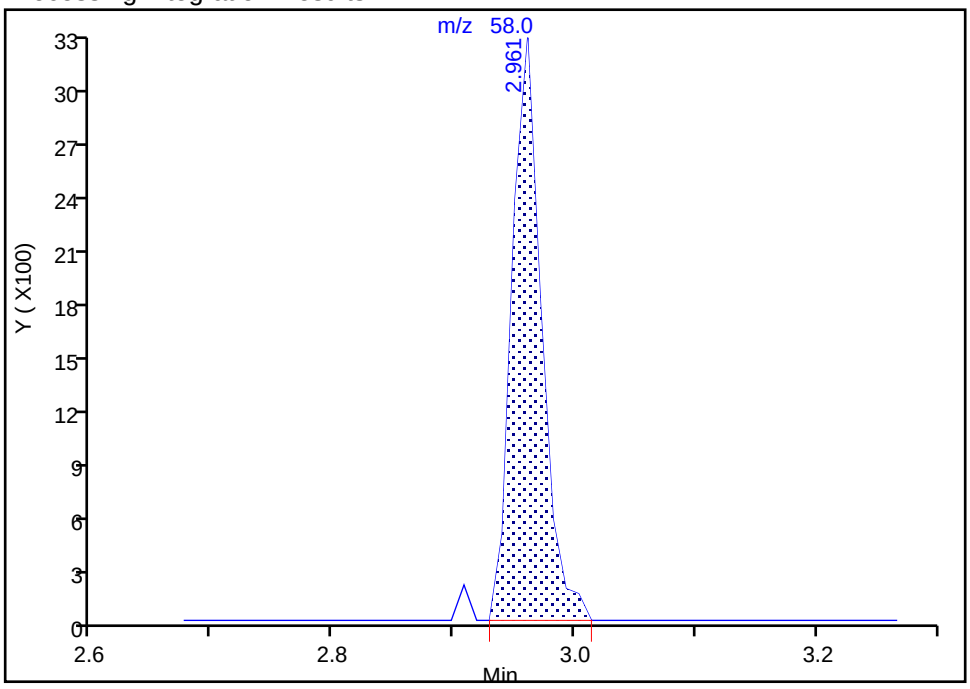
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

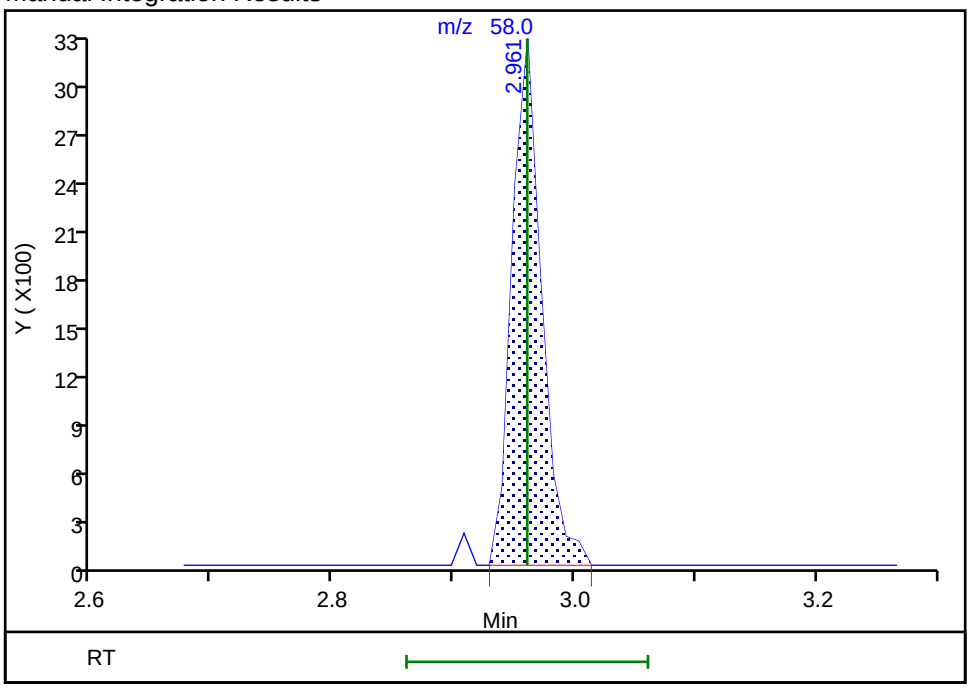
Processing Integration Results

RT: 2.96
Area: 5597
Amount: 4.336547
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 5597
Amount: 4.336547
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jun-2020 17:09:30 ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:54 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 08:07:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.113	0.000	99	2374045	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.646	-0.001	87	531862	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.873	-0.001	97	763439	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.607	-0.001	93	571033	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.870	4.871	-0.001	98	685163	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2368091	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.743	0.000	83	845318	50.0	50.2	
10 Dichlorodifluoromethane	85	1.662	1.662	0.000	98	11244	2.00	1.69	
11 Chloromethane	50	1.841	1.842	-0.001	99	18647	2.00	1.76	
12 Vinyl chloride	62	1.936	1.937	-0.001	97	20856	2.00	2.01	
14 Bromomethane	94	2.232	2.232	0.000	88	14480	2.00	2.04	
15 Chloroethane	64	2.327	2.327	0.000	98	13433	2.00	2.03	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	30965	2.00	2.00	
17 Trichlorofluoromethane	101	2.538	2.538	0.000	97	25172	2.00	1.96	
19 Ethyl ether	59	2.749	2.749	0.000	91	16790	2.00	2.08	
21 Acrolein	56	2.854	2.855	-0.001	99	41406	19.8	20.7	
22 1,1-Dichloroethene	96	2.939	2.939	0.000	97	16694	2.00	2.17	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.939	0.000	72	12382	2.00	2.14	
24 Acetone	43	2.960	2.960	0.000	99	32447	8.00	9.15	
26 Iodomethane	142	3.066	3.066	0.000	96	6724	2.00	1.60	M
27 Carbon disulfide	76	3.129	3.129	0.000	99	52942	2.00	1.97	
29 Methyl acetate	43	3.192	3.193	-0.001	98	34344	4.00	4.26	
30 3-Chloro-1-propene	41	3.213	3.214	-0.001	92	28409	2.00	2.16	
31 Methylene Chloride	84	3.308	3.309	-0.001	92	22322	2.00	2.01	
32 2-Methyl-2-propanol	59	3.350	3.351	-0.001	96	21901	20.0	21.0	
33 Acrylonitrile	53	3.467	3.467	0.000	99	94418	20.0	21.6	
34 Methyl tert-butyl ether	73	3.498	3.499	-0.001	96	54197	2.00	2.09	
35 trans-1,2-Dichloroethene	96	3.509	3.509	0.000	97	18947	2.00	2.09	
36 Hexane	57	3.709	3.710	-0.001	91	26560	2.00	2.14	
38 Vinyl acetate	43	3.804	3.805	-0.001	97	80611	4.00	4.12	
39 1,1-Dichloroethane	63	3.836	3.836	0.000	96	35499	2.00	2.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.216	4.216	0.000	99	46020	8.00	8.70	
47 cis-1,2-Dichloroethene	96	4.247	4.248	-0.001	84	21423	2.00	2.12	
48 2,2-Dichloropropane	77	4.258	4.258	0.000	92	23061	2.00	2.05	
50 sec-Butyl Alcohol	45	4.321	4.322	-0.001	97	47471	60.0	55.8	
52 Tetrahydrofuran	42	4.427	4.427	0.000	88	14739	4.00	4.20	
53 Chlorobromomethane	128	4.427	4.427	0.000	98	9931	2.00	2.20	
54 Chloroform	83	4.480	4.480	0.000	93	35178	2.00	2.21	
55 1,1,1-Trichloroethane	97	4.627	4.628	-0.001	98	27396	2.00	2.17	
56 Cyclohexane	56	4.691	4.691	0.000	89	33843	2.00	2.10	
57 1,1-Dichloropropene	75	4.743	4.744	-0.001	96	27826	2.00	2.10	
59 Carbon tetrachloride	117	4.743	4.754	-0.011	91	21806	2.00	2.11	
58 Isobutyl alcohol	41	4.743	4.754	-0.011	95	18462	50.0	50.3	
60 Benzene	78	4.891	4.902	-0.011	96	84162	2.00	2.15	
61 1,2-Dichloroethane	62	4.923	4.923	0.000	98	30197	2.00	2.13	
66 n-Heptane	43	5.081	5.082	-0.001	91	25333	2.00	2.17	
67 Trichloroethene	95	5.387	5.388	-0.001	97	20658	2.00	2.15	
68 2-Pentanone	43	5.482	5.483	-0.001	99	66130	8.00	8.41	
69 Methylcyclohexane	55	5.577	5.578	-0.001	93	25828	2.00	2.12	
70 1,2-Dichloropropane	63	5.598	5.599	-0.001	97	20818	2.00	2.06	
72 1,4-Dioxane	88	5.630	5.630	0.000	94	5492	40.0	39.1	
73 Dibromomethane	93	5.662	5.662	0.000	95	11931	2.00	2.06	
74 Dichlorobromomethane	83	5.788	5.789	-0.001	100	24474	2.00	2.09	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	12997	2.00	1.86	
77 cis-1,3-Dichloropropene	75	6.136	6.137	-0.001	96	27908	2.00	1.96	
78 4-Methyl-2-pentanone (MIBK)	43	6.242	6.242	0.000	95	85733	8.00	8.49	
79 Toluene	91	6.432	6.432	0.000	98	89995	2.00	2.20	
80 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	93	24304	2.00	1.89	
81 Ethyl methacrylate	69	6.622	6.622	0.000	90	25633	2.00	1.96	
82 1,1,2-Trichloroethane	97	6.780	6.781	-0.001	91	16908	2.00	2.05	
83 Tetrachloroethene	164	6.875	6.876	-0.001	96	13615	2.00	2.10	
84 1,3-Dichloropropane	76	6.928	6.928	0.000	90	33064	2.00	2.12	
85 2-Hexanone	43	6.938	6.939	-0.001	96	59708	8.00	8.35	
86 Chlorodibromomethane	129	7.118	7.118	0.000	91	15559	2.00	1.94	
88 Ethylene Dibromide	107	7.234	7.245	-0.011	99	17428	2.00	2.01	
89 1-Chlorohexane	91	7.624	7.635	-0.011	94	28696	2.00	2.10	
90 Chlorobenzene	112	7.677	7.678	-0.001	96	54491	2.00	2.17	
92 Ethylbenzene	106	7.751	7.751	0.000	99	29300	2.00	2.12	
91 1,1,1,2-Tetrachloroethane	131	7.740	7.751	-0.011	92	15334	2.00	1.98	
93 m-Xylene & p-Xylene	106	7.867	7.868	-0.001	99	35314	2.00	2.13	
94 o-Xylene	106	8.226	8.226	0.000	96	34157	2.00	2.14	
95 Styrene	104	8.247	8.247	0.000	95	55954	2.00	2.08	
96 Bromoform	173	8.426	8.427	-0.001	92	8987	2.00	1.90	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	85484	2.00	2.14	
99 Cyclohexanone	55	8.659	8.670	-0.011	92	44758	80.0	82.2	
100 1,1,2,2-Tetrachloroethane	83	8.848	8.859	-0.011	94	24163	2.00	2.06	
101 Bromobenzene	156	8.891	8.891	0.000	97	19650	2.00	2.08	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	51	6156	2.00	1.98	
103 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	83	7957	2.00	2.24	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	23713	2.00	2.14	
105 2-Chlorotoluene	126	9.070	9.071	-0.001	96	20430	2.00	2.18	
106 1,3,5-Trimethylbenzene	105	9.144	9.144	0.000	93	68689	2.00	2.09	
107 4-Chlorotoluene	126	9.186	9.187	-0.001	98	20005	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.450	9.450	0.000	93	57918	2.00	2.11	
109 1,2,4-Trimethylbenzene	105	9.503	9.514	-0.011	97	69183	2.00	2.09	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	17482	2.00	2.18	
111 1,3-Dichlorobenzene	146	9.798	9.799	-0.001	96	36396	2.00	2.13	
112 4-Isopropyltoluene	119	9.819	9.820	-0.001	96	69322	2.00	2.07	
113 1,4-Dichlorobenzene	146	9.893	9.904	-0.011	93	39277	2.00	2.22	
115 n-Butylbenzene	91	10.220	10.221	-0.001	98	65241	2.00	2.09	
116 1,2-Dichlorobenzene	146	10.252	10.252	0.000	95	35697	2.00	2.11	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.033	0.000	78	3868	2.00	1.95	
119 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	94	18390	2.00	1.99	
120 Hexachlorobutadiene	225	12.004	12.004	0.000	94	7277	2.00	2.17	
121 Naphthalene	128	12.130	12.131	-0.001	97	56079	2.00	1.88	
122 1,2,3-Trichlorobenzene	180	12.352	12.352	0.000	94	16904	2.00	1.99	
S 139 1,2-Dichloroethene, Total (URS)	96				0		4.00	4.21	
S 142 Xylenes, Total	106				0		4.00	4.27	
S 140 Trihalomethanes, Total	1				0		8.00	8.14	
S 143 Xylenes, Total (URS)	1				0		4.00	4.27	
S 146 Total BTEX	1				0			10.7	
S 145 1,3-Dichloropropene, Total	1				0		4.00	3.85	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.21	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Gas A_00058	Amount Added:	0.40	Units: uL	
MV-MegaMainA_00034	Amount Added:	1.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:15:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D

Injection Date: 01-Jun-2020 17:09:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

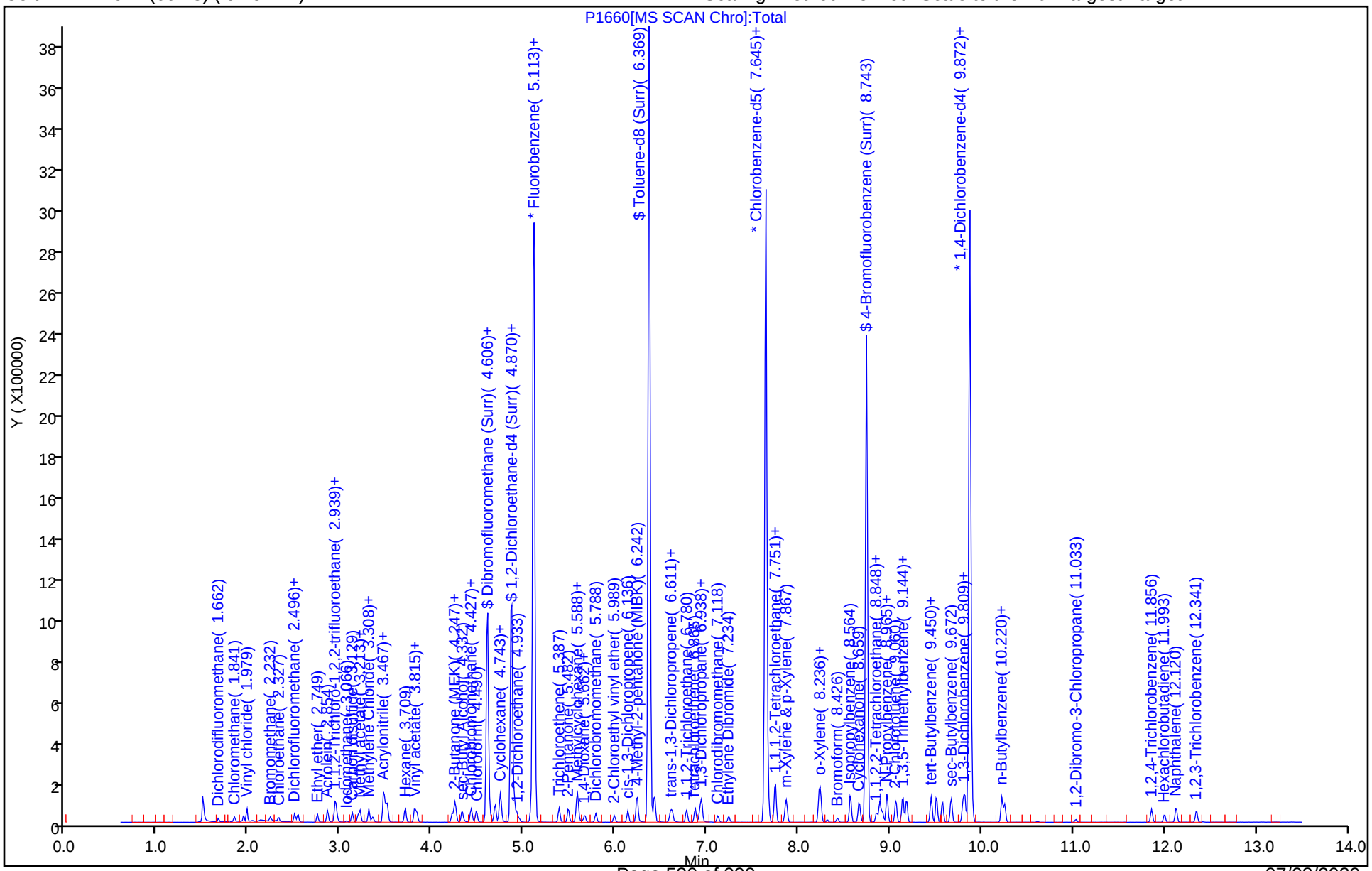
Lims ID: STD020 Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

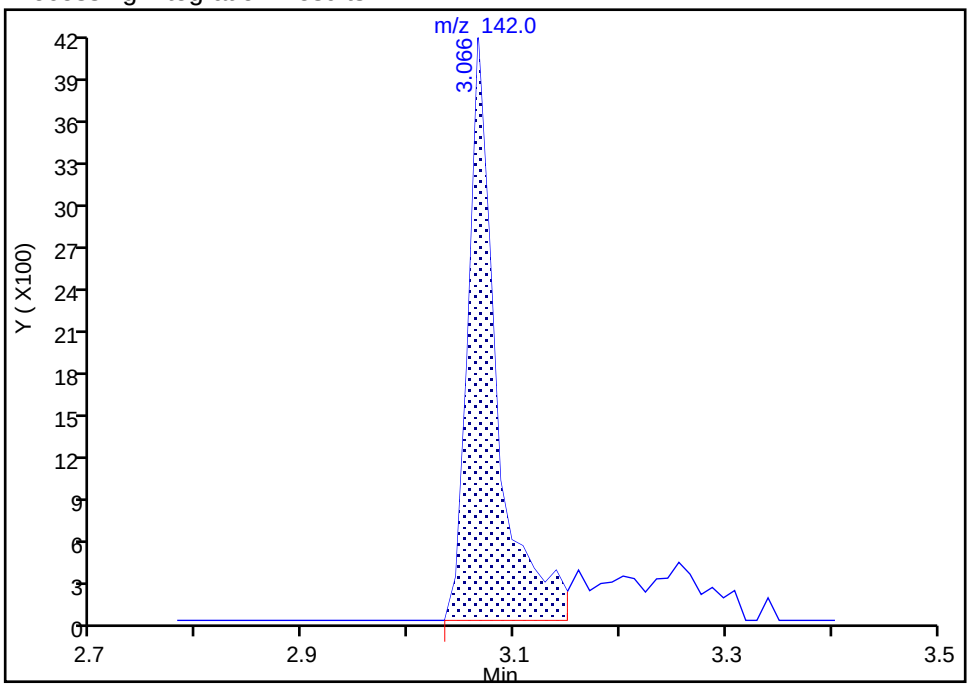
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D
Injection Date: 01-Jun-2020 17:09:30 Instrument ID: VMS_P
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

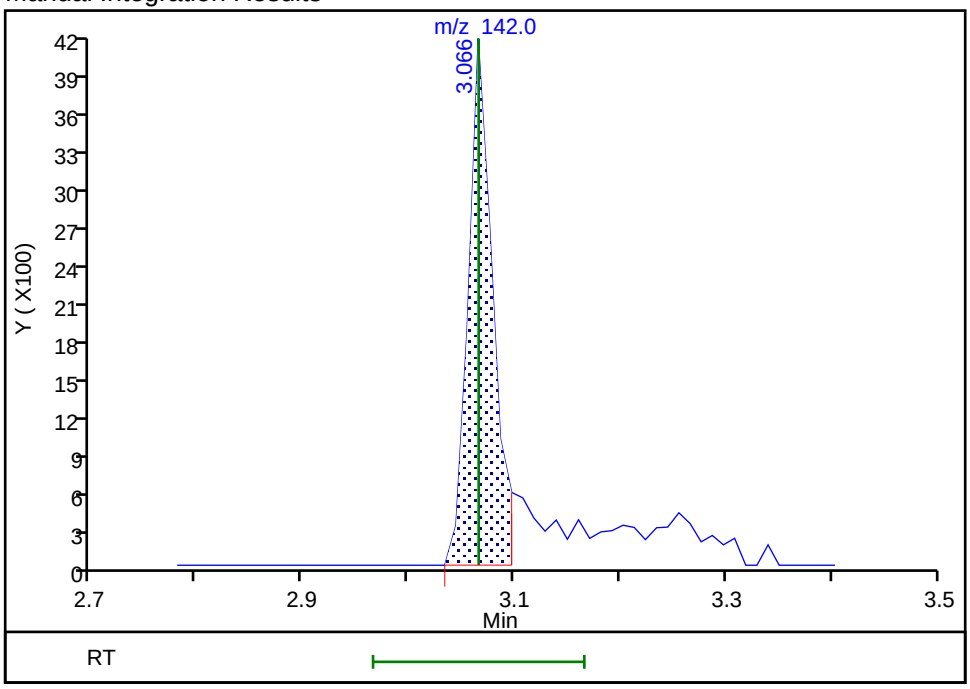
Processing Integration Results

RT: 3.07
Area: 7827
Amount: 3.551540
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 6724
Amount: 1.596067
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 09:06:25
Audit Action: Manually Integrated Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1661.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jun-2020 17:30:30 ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:06 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:00:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.113	-0.003	98	2412254	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	87	544917	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.873	-0.003	97	777688	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.607	-0.003	92	579846	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.871	-0.003	98	691950	50.0	50.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2407178	50.0	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.743	-0.003	82	867537	50.0	50.5	
10 Dichlorodifluoromethane	85	1.670	1.662	0.008	99	38285	5.00	5.66	
11 Chloromethane	50	1.839	1.842	-0.003	99	51981	5.00	5.38	
12 Vinyl chloride	62	1.944	1.937	0.007	98	57213	5.00	5.42	
14 Bromomethane	94	2.229	2.232	-0.003	89	22950	5.00	4.15	
15 Chloroethane	64	2.324	2.327	-0.003	100	35486	5.00	5.28	
16 Dichlorofluoromethane	67	2.493	2.496	-0.003	97	81685	5.00	5.20	
17 Trichlorofluoromethane	101	2.535	2.538	-0.003	98	70991	5.00	5.45	
19 Ethyl ether	59	2.747	2.749	-0.003	90	39315	5.00	4.79	
21 Acrolein	56	2.852	2.855	-0.003	99	100409	49.4	49.5	
22 1,1-Dichloroethene	96	2.947	2.939	0.008	98	35001	5.00	4.48	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.947	2.939	0.008	71	26144	5.00	4.45	
24 Acetone	43	2.958	2.960	-0.002	100	70934	20.0	21.1	
26 Iodomethane	142	3.063	3.066	-0.003	99	15949	5.00	2.79	
27 Carbon disulfide	76	3.126	3.129	-0.003	99	113233	5.00	4.43	
29 Methyl acetate	43	3.190	3.193	-0.003	98	81580	10.0	9.95	
30 3-Chloro-1-propene	41	3.211	3.214	-0.003	92	59709	5.00	4.46	
31 Methylene Chloride	84	3.306	3.309	-0.003	90	47489	5.00	4.79	
32 2-Methyl-2-propanol	59	3.348	3.351	-0.003	97	58678	50.0	55.5	
33 Acrylonitrile	53	3.475	3.467	0.008	98	221256	50.0	49.8	
34 Methyl tert-butyl ether	73	3.496	3.499	-0.003	96	124365	5.00	4.72	
35 trans-1,2-Dichloroethene	96	3.517	3.509	0.008	98	41058	5.00	4.45	
36 Hexane	57	3.707	3.710	-0.003	90	56864	5.00	4.47	
38 Vinyl acetate	43	3.812	3.805	0.007	97	190703	10.0	9.60	
39 1,1-Dichloroethane	63	3.833	3.836	-0.003	96	78561	5.00	4.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.216	-0.003	99	113733	20.0	21.2	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	83	45860	5.00	4.47	
48 2,2-Dichloropropane	77	4.256	4.258	-0.002	93	50592	5.00	4.43	
50 sec-Butyl Alcohol	45	4.329	4.322	0.007	98	138755	150.0	160.5	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	36254	10.0	10.2	
53 Chlorobromomethane	128	4.424	4.427	-0.003	98	20887	5.00	4.55	
54 Chloroform	83	4.488	4.480	0.008	93	74923	5.00	4.63	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	99	58098	5.00	4.53	
56 Cyclohexane	56	4.688	4.691	-0.003	89	72517	5.00	4.44	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	96	60834	5.00	4.53	
59 Carbon tetrachloride	117	4.752	4.754	-0.002	77	45792	5.00	4.36	
58 Isobutyl alcohol	41	4.752	4.754	-0.002	94	51802	125.0	138.8	
60 Benzene	78	4.899	4.902	-0.003	94	184836	5.00	4.66	
61 1,2-Dichloroethane	62	4.920	4.923	-0.003	97	64913	5.00	4.90	
66 n-Heptane	43	5.079	5.082	-0.003	88	51836	5.00	4.37	
67 Trichloroethene	95	5.385	5.388	-0.003	97	42697	5.00	4.38	
68 2-Pentanone	43	5.490	5.483	0.007	99	169279	20.0	21.2	
69 Methylcyclohexane	55	5.585	5.578	0.007	92	55290	5.00	4.47	
70 1,2-Dichloropropane	63	5.596	5.599	-0.003	97	47629	5.00	4.64	
72 1,4-Dioxane	88	5.627	5.630	-0.003	92	15477	100.0	108.4	
73 Dibromomethane	93	5.670	5.662	0.008	93	28351	5.00	4.82	
74 Dichlorobromomethane	83	5.786	5.789	-0.003	99	54885	5.00	4.61	
76 2-Chloroethyl vinyl ether	63	5.986	5.989	-0.003	92	34848	5.00	4.91	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	96	65109	5.00	4.46	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.242	-0.003	96	216321	20.0	21.1	
79 Toluene	91	6.429	6.432	-0.003	98	191514	5.00	4.60	
80 trans-1,3-Dichloropropene	75	6.598	6.601	-0.003	95	55704	5.00	4.27	
81 Ethyl methacrylate	69	6.619	6.622	-0.003	89	63746	5.00	4.76	
82 1,1,2-Trichloroethane	97	6.778	6.781	-0.003	90	41158	5.00	4.90	
83 Tetrachloroethene	164	6.873	6.876	-0.003	94	29875	5.00	4.50	
84 1,3-Dichloropropane	76	6.925	6.928	-0.003	97	76780	5.00	4.81	
85 2-Hexanone	43	6.936	6.939	-0.003	95	159597	20.0	21.8	
86 Chlorodibromomethane	129	7.126	7.118	0.008	89	37770	5.00	4.60	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	40577	5.00	4.58	
89 1-Chlorohexane	91	7.632	7.635	-0.003	95	56622	5.00	4.39	
90 Chlorobenzene	112	7.675	7.678	-0.003	93	115938	5.00	4.50	
92 Ethylbenzene	106	7.749	7.751	-0.002	99	63884	5.00	4.51	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.751	-0.002	43	36611	5.00	4.61	
93 m-Xylene & p-Xylene	106	7.865	7.868	-0.003	100	76090	5.00	4.47	
94 o-Xylene	106	8.223	8.226	-0.003	98	75177	5.00	4.60	
95 Styrene	104	8.245	8.247	-0.003	94	124441	5.00	4.52	
96 Bromoform	173	8.424	8.427	-0.003	93	22527	5.00	4.65	
97 Isopropylbenzene	105	8.572	8.575	-0.003	96	188253	5.00	4.62	
99 Cyclohexanone	55	8.667	8.670	-0.003	92	127996	200.0	229.4	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.859	-0.002	94	62677	5.00	5.25	
101 Bromobenzene	156	8.888	8.891	-0.003	96	45419	5.00	4.73	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.891	-0.003	76	16098	5.00	5.08	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	18290	5.00	5.05	
104 N-Propylbenzene	120	8.973	8.965	0.008	99	48994	5.00	4.34	
105 2-Chlorotoluene	126	9.068	9.071	-0.003	96	44412	5.00	4.65	
106 1,3,5-Trimethylbenzene	105	9.142	9.144	-0.002	93	154872	5.00	4.63	
107 4-Chlorotoluene	126	9.184	9.187	-0.003	98	45363	5.00	4.53	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.450	-0.002	93	125850	5.00	4.50	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	155733	5.00	4.61	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	94	37379	5.00	4.57	
111 1,3-Dichlorobenzene	146	9.796	9.799	-0.003	96	82789	5.00	4.76	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	97	155069	5.00	4.54	
113 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	84803	5.00	4.71	
115 n-Butylbenzene	91	10.218	10.221	-0.003	98	142782	5.00	4.48	
116 1,2-Dichlorobenzene	146	10.250	10.252	-0.002	97	82278	5.00	4.77	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.033	-0.003	88	10531	5.00	5.20	
119 1,2,4-Trichlorobenzene	180	11.854	11.856	-0.002	92	43433	5.00	4.62	
120 Hexachlorobutadiene	225	12.001	12.004	-0.003	96	15077	5.00	4.41	
121 Naphthalene	128	12.128	12.131	-0.003	97	150170	5.00	4.95	
122 1,2,3-Trichlorobenzene	180	12.350	12.352	-0.002	94	41611	5.00	4.82	
S 139 1,2-Dichloroethene, Total (URS)	96				0		10.0	8.92	
S 142 Xylenes, Total	106				0		10.0	9.07	
S 140 Trihalomethanes, Total	1				0		20.0	18.5	
S 143 Xylenes, Total (URS)	1				0		10.0	9.07	
S 146 Total BTEX	1				0			22.8	
S 145 1,3-Dichloropropene, Total	1				0		10.0	8.73	
S 144 1,2-Dichloroethene, Total	1				0		10.0	8.92	

Reagents:

MV-Gas A_00058	Amount Added:	1.00	Units: uL	
MV-MegaMainA_00034	Amount Added:	2.50	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:16:07 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1661.D

Injection Date: 01-Jun-2020 17:30:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

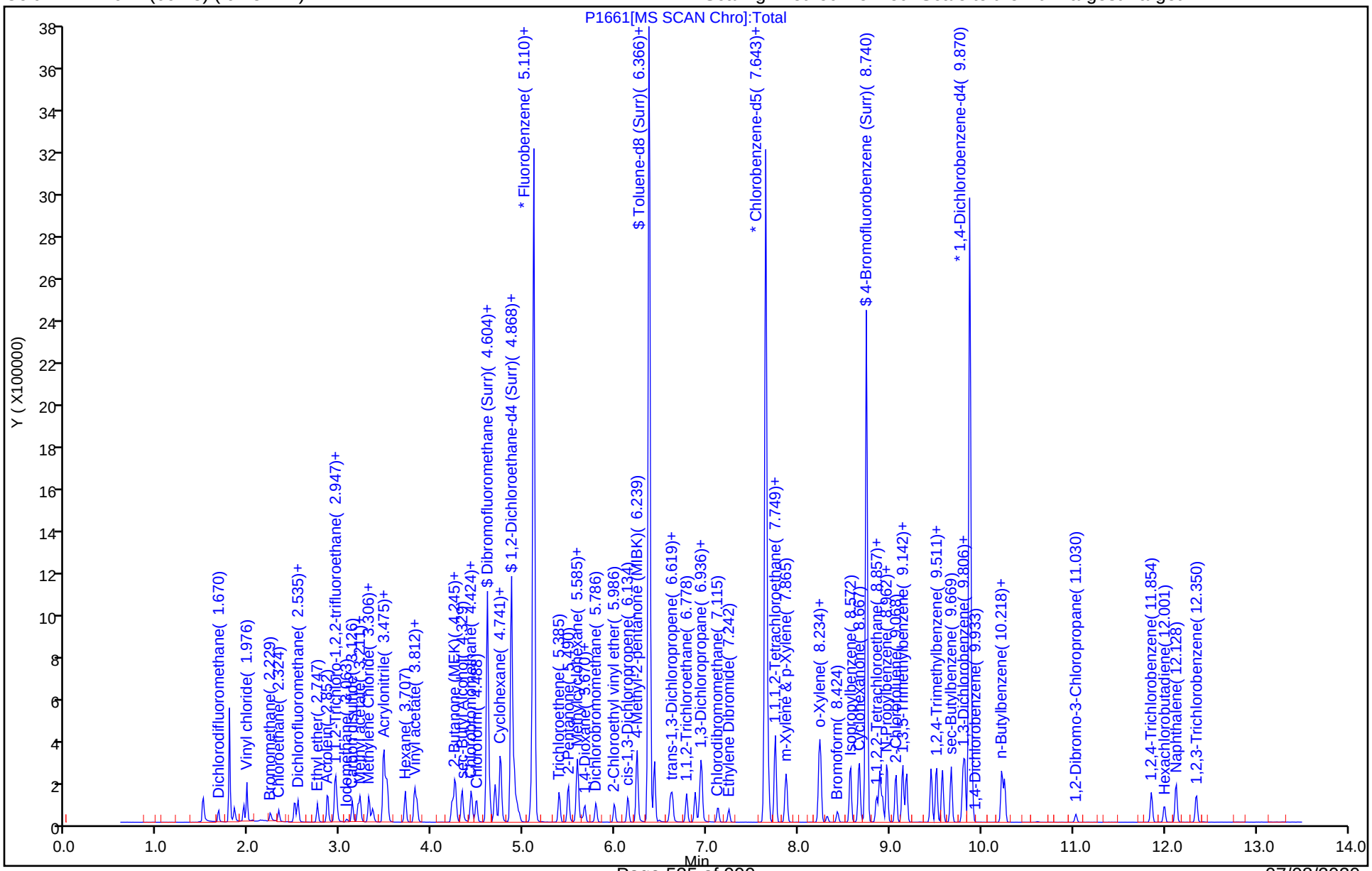
Lims ID: STD050 Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1662.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jun-2020 17:51:30 ALS Bottle#: 5 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:17 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:54:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.110	0.000	98	2414558	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	88	541707	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	784820	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.603	0.000	92	579503	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.867	0.000	98	696272	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2397674	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.740	0.000	83	876843	50.0	50.6	
10 Dichlorodifluoromethane	85	1.670	1.670	0.000	99	76509	10.0	11.3	
11 Chloromethane	50	1.838	1.838	0.000	99	97832	10.0	10.4	
12 Vinyl chloride	62	1.944	1.944	0.000	98	110707	10.0	10.5	
14 Bromomethane	94	2.229	2.229	0.000	90	47958	10.0	10.6	
15 Chloroethane	64	2.324	2.324	0.000	100	69871	10.0	10.4	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	157676	10.0	10.0	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	97	134330	10.0	10.3	
19 Ethyl ether	59	2.746	2.746	0.000	92	81198	10.0	9.88	
21 Acrolein	56	2.851	2.851	0.000	100	198934	98.8	97.9	
22 1,1-Dichloroethene	96	2.946	2.946	0.000	97	78660	10.0	10.1	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.946	2.946	0.000	71	58580	10.0	9.96	
24 Acetone	43	2.957	2.957	0.000	100	131651	40.0	40.2	
26 Iodomethane	142	3.062	3.062	0.000	99	41908	10.0	6.20	
27 Carbon disulfide	76	3.126	3.126	0.000	99	249116	10.0	10.1	
29 Methyl acetate	43	3.189	3.189	0.000	98	163271	20.0	19.9	
30 3-Chloro-1-propene	41	3.210	3.210	0.000	92	135183	10.0	10.1	
31 Methylene Chloride	84	3.305	3.305	0.000	92	95819	10.0	10.2	
32 2-Methyl-2-propanol	59	3.347	3.347	0.000	97	106253	100.0	100.4	
33 Acrylonitrile	53	3.474	3.474	0.000	98	437925	100.0	98.5	
34 Methyl tert-butyl ether	73	3.495	3.495	0.000	95	265416	10.0	10.1	
35 trans-1,2-Dichloroethene	96	3.516	3.516	0.000	98	88732	10.0	9.61	
36 Hexane	57	3.706	3.706	0.000	91	130470	10.0	10.3	
38 Vinyl acetate	43	3.812	3.812	0.000	97	394091	20.0	19.8	
39 1,1-Dichloroethane	63	3.833	3.833	0.000	96	171592	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
44 2-Butanone (MEK)	43	4.213	4.213	0.000	100	221028	40.0	41.1	
47 cis-1,2-Dichloroethene	96	4.244	4.244	0.000	83	99347	10.0	9.68	
48 2,2-Dichloropropane	77	4.255	4.255	0.000	91	112216	10.0	9.82	
50 sec-Butyl Alcohol	45	4.329	4.329	0.000	98	265274	300.0	306.5	
52 Tetrahydrofuran	42	4.434	4.434	0.000	88	72173	20.0	20.2	
53 Chlorobromomethane	128	4.424	4.424	0.000	98	45134	10.0	9.81	
54 Chloroform	83	4.487	4.487	0.000	93	160425	10.0	9.89	
55 1,1,1-Trichloroethane	97	4.624	4.624	0.000	98	126621	10.0	9.86	
56 Cyclohexane	56	4.688	4.688	0.000	89	167527	10.0	10.2	
57 1,1-Dichloropropene	75	4.740	4.740	0.000	96	133932	10.0	9.96	
59 Carbon tetrachloride	117	4.751	4.751	0.000	84	105812	10.0	10.1	
58 Isobutyl alcohol	41	4.751	4.751	0.000	94	96963	250.0	259.6	
60 Benzene	78	4.899	4.899	0.000	93	392915	10.0	9.89	
61 1,2-Dichloroethane	62	4.920	4.920	0.000	97	130615	10.0	10.2	
66 n-Heptane	43	5.078	5.078	0.000	92	115523	10.0	9.74	
67 Trichloroethene	95	5.384	5.384	0.000	97	94360	10.0	9.67	
68 2-Pentanone	43	5.490	5.490	0.000	99	330037	40.0	41.3	
69 Methylcyclohexane	55	5.585	5.585	0.000	92	124604	10.0	10.1	
70 1,2-Dichloropropane	63	5.595	5.595	0.000	96	102772	10.0	10.0	
72 1,4-Dioxane	88	5.637	5.637	0.000	93	29303	200.0	205.1	
73 Dibromomethane	93	5.669	5.669	0.000	94	58752	10.0	9.98	
74 Dichlorobromomethane	83	5.785	5.785	0.000	100	116062	10.0	9.74	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	92	69995	10.0	9.85	
77 cis-1,3-Dichloropropene	75	6.133	6.133	0.000	96	143800	10.0	9.90	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.239	0.000	96	432244	40.0	42.1	
79 Toluene	91	6.429	6.429	0.000	97	412287	10.0	9.89	
80 trans-1,3-Dichloropropene	75	6.598	6.598	0.000	96	121709	10.0	9.33	
81 Ethyl methacrylate	69	6.619	6.619	0.000	89	136938	10.0	10.3	
82 1,1,2-Trichloroethane	97	6.777	6.777	0.000	91	83459	10.0	9.93	
83 Tetrachloroethene	164	6.872	6.872	0.000	94	64911	10.0	9.83	
84 1,3-Dichloropropane	76	6.925	6.925	0.000	97	159930	10.0	10.1	
85 2-Hexanone	43	6.946	6.946	0.000	95	307466	40.0	42.2	
86 Chlorodibromomethane	129	7.125	7.125	0.000	91	80520	10.0	9.87	
88 Ethylene Dibromide	107	7.241	7.241	0.000	97	88076	10.0	10.0	
89 1-Chlorohexane	91	7.632	7.632	0.000	98	124764	10.0	10.2	
90 Chlorobenzene	112	7.674	7.674	0.000	95	250839	10.0	9.79	
92 Ethylbenzene	106	7.748	7.748	0.000	99	139031	10.0	9.88	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.748	0.000	94	76578	10.0	9.70	
93 m-Xylene & p-Xylene	106	7.864	7.864	0.000	100	167252	10.0	9.88	
94 o-Xylene	106	8.223	8.223	0.000	97	163211	10.0	10.0	
95 Styrene	104	8.244	8.244	0.000	94	274427	10.0	10.0	
96 Bromoform	173	8.423	8.423	0.000	94	47885	10.0	9.93	
97 Isopropylbenzene	105	8.571	8.571	0.000	96	412530	10.0	10.0	
99 Cyclohexanone	55	8.666	8.666	0.000	91	242913	400.0	437.9	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.856	0.000	94	121592	10.0	10.1	
101 Bromobenzene	156	8.888	8.888	0.000	96	93464	10.0	9.64	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	83	32840	10.0	10.3	
103 1,2,3-Trichloropropane	110	8.919	8.919	0.000	83	35882	10.0	9.82	
104 N-Propylbenzene	120	8.972	8.972	0.000	99	112695	10.0	9.90	
105 2-Chlorotoluene	126	9.067	9.067	0.000	96	94413	10.0	9.80	
106 1,3,5-Trimethylbenzene	105	9.141	9.141	0.000	94	337938	10.0	10.0	
107 4-Chlorotoluene	126	9.183	9.183	0.000	97	100456	10.0	9.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.447	9.447	0.000	93	282847	10.0	10.0	
109 1,2,4-Trimethylbenzene	105	9.510	9.510	0.000	97	341971	10.0	10.0	
110 sec-Butylbenzene	134	9.669	9.669	0.000	95	80672	10.0	9.78	
111 1,3-Dichlorobenzene	146	9.795	9.795	0.000	97	174866	10.0	9.97	
112 4-Isopropyltoluene	119	9.816	9.816	0.000	97	345360	10.0	10.0	
113 1,4-Dichlorobenzene	146	9.901	9.901	0.000	93	176794	10.0	9.73	
115 n-Butylbenzene	91	10.217	10.217	0.000	98	318151	10.0	9.89	
116 1,2-Dichlorobenzene	146	10.249	10.249	0.000	95	169871	10.0	9.75	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.030	0.000	81	19998	10.0	9.79	
119 1,2,4-Trichlorobenzene	180	11.853	11.853	0.000	94	91087	10.0	9.61	
120 Hexachlorobutadiene	225	12.001	12.001	0.000	97	32937	10.0	9.55	
121 Naphthalene	128	12.127	12.127	0.000	97	300637	10.0	9.81	
122 1,2,3-Trichlorobenzene	180	12.349	12.349	0.000	96	82932	10.0	9.51	
S 139 1,2-Dichloroethene, Total (URS)	96				0		20.0	19.3	
S 142 Xylenes, Total	106				0		20.0	19.9	
S 140 Trihalomethanes, Total	1				0		40.0	39.4	
S 143 Xylenes, Total (URS)	1				0		20.0	19.9	
S 146 Total BTEX	1				0			49.6	
S 145 1,3-Dichloropropene, Total	1				0		20.0	19.2	
S 144 1,2-Dichloroethene, Total	1				0		20.0	19.3	

Reagents:

MV-Gas A_00058	Amount Added:	2.00	Units: uL	
MV-MegaMainA_00034	Amount Added:	5.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:16:18 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1662.D

Injection Date: 01-Jun-2020 17:51:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

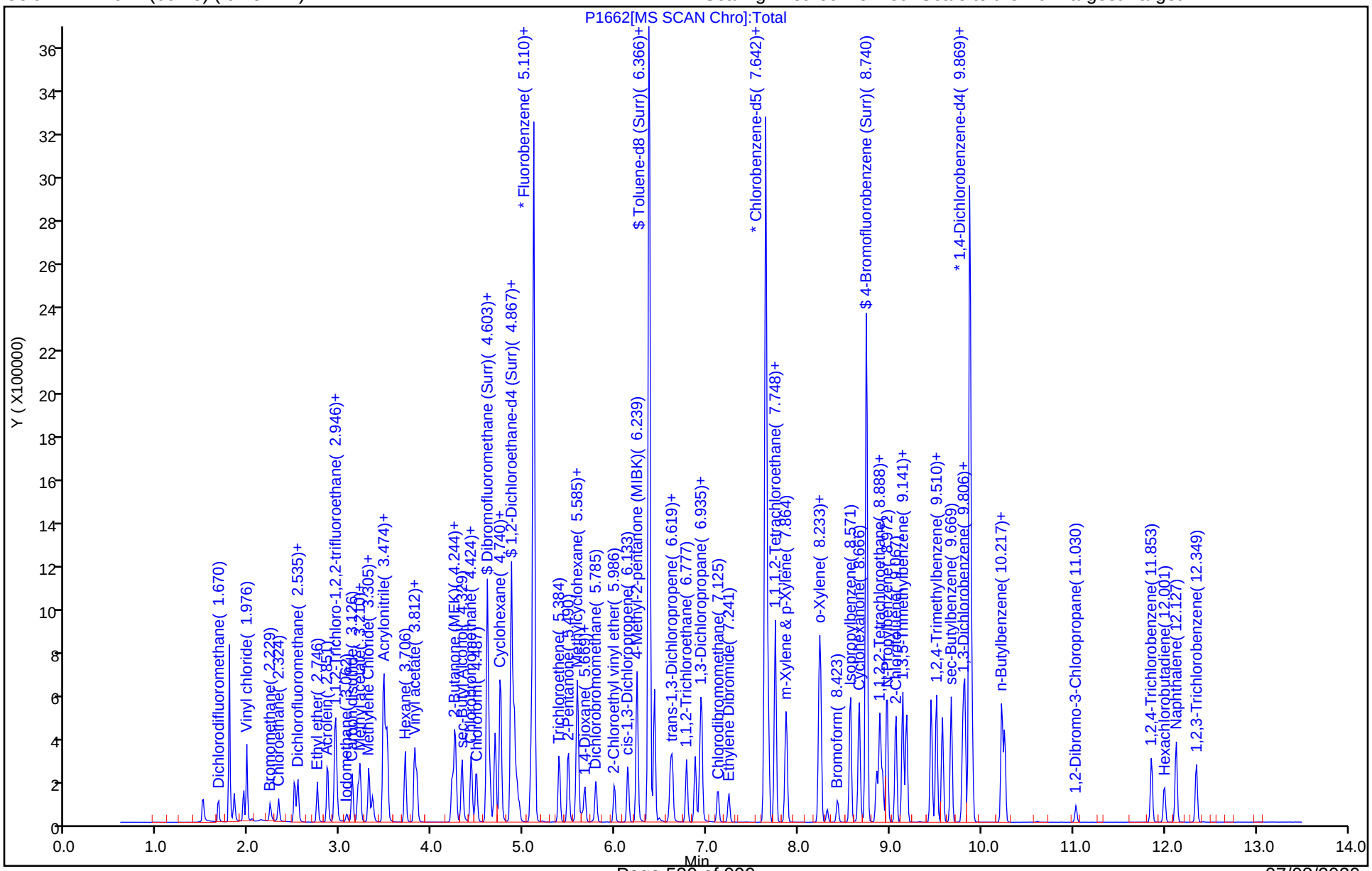
Lims ID: STD10 Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 01-Jun-2020 20:33:30 ALS Bottle#: 12 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:29 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 09:23:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.113	0.000	99	2594633	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	87	589468	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	96	851368	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	622098	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.871	4.871	0.000	97	709192	50.0	48.2	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2570054	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.743	0.000	84	937409	50.0	49.9	
10 Dichlorodifluoromethane	85	1.662	1.662	0.000	99	389403	50.0	53.5	
11 Chloromethane	50	1.842	1.842	0.000	99	518425	50.0	52.5	
12 Vinyl chloride	62	1.937	1.937	0.000	98	566674	50.0	49.9	
14 Bromomethane	94	2.232	2.232	0.000	90	267351	50.0	62.0	
15 Chloroethane	64	2.327	2.327	0.000	99	367238	50.0	50.8	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	851263	50.0	50.4	
17 Trichlorofluoromethane	101	2.538	2.538	0.000	98	688909	50.0	49.1	
19 Ethyl ether	59	2.749	2.749	0.000	90	433032	50.0	49.0	
21 Acrolein	56	2.855	2.855	0.000	100	992240	493.8	454.6	
22 1,1-Dichloroethene	96	2.939	2.939	0.000	98	432834	50.0	51.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.939	0.000	72	323522	50.0	51.2	
24 Acetone	43	2.960	2.960	0.000	100	599119	200.0	174.0	
26 Iodomethane	142	3.066	3.066	0.000	99	388838	50.0	48.2	
27 Carbon disulfide	76	3.129	3.129	0.000	99	1445817	50.0	55.5	
29 Methyl acetate	43	3.193	3.193	0.000	98	774814	100.0	87.9	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	94	767084	50.0	53.3	
31 Methylene Chloride	84	3.309	3.309	0.000	92	508123	50.0	52.4	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	98	476237	500.0	418.8	
33 Acrylonitrile	53	3.467	3.467	0.000	99	2147902	500.0	449.8	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	95	1410931	50.0	49.7	
35 trans-1,2-Dichloroethene	96	3.509	3.509	0.000	99	496599	50.0	50.1	
36 Hexane	57	3.710	3.710	0.000	91	719384	50.0	52.3	
38 Vinyl acetate	43	3.805	3.805	0.000	97	2295944	100.0	107.4	
39 1,1-Dichloroethane	63	3.836	3.836	0.000	96	913640	50.0	50.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.216	4.216	0.000	99	992035	200.0	171.5	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	83	546752	50.0	49.6	
48 2,2-Dichloropropane	77	4.258	4.258	0.000	88	674576	50.0	54.9	
50 sec-Butyl Alcohol	45	4.322	4.322	0.000	99	1213494	1500.0	1304.7	
53 Chlorobromomethane	128	4.427	4.427	0.000	98	246645	50.0	49.9	
52 Tetrahydrofuran	42	4.427	4.427	0.000	88	330688	100.0	86.2	
54 Chloroform	83	4.480	4.480	0.000	92	857391	50.0	49.2	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	99	699182	50.0	50.7	
56 Cyclohexane	56	4.691	4.691	0.000	89	900566	50.0	51.3	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	97	722099	50.0	50.0	
59 Carbon tetrachloride	117	4.754	4.754	0.000	93	593951	50.0	52.6	
58 Isobutyl alcohol	41	4.754	4.754	0.000	93	435234	1250.0	1084.5	
60 Benzene	78	4.902	4.902	0.000	95	2121944	50.0	49.7	
61 1,2-Dichloroethane	62	4.923	4.923	0.000	98	666788	50.0	49.8	
66 n-Heptane	43	5.082	5.082	0.000	91	652907	50.0	51.2	
67 Trichloroethene	95	5.388	5.388	0.000	98	527518	50.0	50.3	
68 2-Pentanone	43	5.483	5.483	0.000	99	1546919	200.0	180.0	
69 Methylcyclohexane	55	5.578	5.578	0.000	93	672553	50.0	50.5	
70 1,2-Dichloropropane	63	5.599	5.599	0.000	97	553580	50.0	50.2	
72 1,4-Dioxane	88	5.630	5.630	0.000	91	134765	1000.0	877.8	
73 Dibromomethane	93	5.662	5.662	0.000	93	310055	50.0	49.0	
74 Dichlorobromomethane	83	5.789	5.789	0.000	99	647111	50.0	50.6	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	375914	50.0	49.3	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	96	830989	50.0	52.6	
78 4-Methyl-2-pentanone (MIBK)	43	6.242	6.242	0.000	95	2019078	200.0	183.0	
79 Toluene	91	6.432	6.432	0.000	98	2209256	50.0	49.3	
80 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	97	739208	50.0	52.7	
81 Ethyl methacrylate	69	6.622	6.622	0.000	88	730677	50.0	50.4	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	91	446203	50.0	49.4	
83 Tetrachloroethene	164	6.876	6.876	0.000	94	362210	50.0	50.4	
84 1,3-Dichloropropane	76	6.928	6.928	0.000	97	828087	50.0	48.0	
85 2-Hexanone	43	6.939	6.939	0.000	95	1421906	200.0	179.4	
86 Chlorodibromomethane	129	7.118	7.118	0.000	90	457646	50.0	51.6	
88 Ethylene Dibromide	107	7.245	7.245	0.000	98	459893	50.0	48.0	
89 1-Chlorohexane	91	7.635	7.635	0.000	97	688923	50.0	53.1	
90 Chlorobenzene	112	7.678	7.678	0.000	93	1351697	50.0	48.5	
92 Ethylbenzene	106	7.751	7.751	0.000	99	765475	50.0	50.0	
91 1,1,1,2-Tetrachloroethane	131	7.751	7.751	0.000	94	443921	50.0	51.7	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	926436	50.0	50.3	
94 o-Xylene	106	8.226	8.226	0.000	96	889019	50.0	50.3	
95 Styrene	104	8.247	8.247	0.000	94	1535593	50.0	51.5	
96 Bromoform	173	8.427	8.427	0.000	95	272832	50.0	52.0	
97 Isopropylbenzene	105	8.575	8.575	0.000	96	2246623	50.0	50.4	
99 Cyclohexanone	55	8.670	8.670	0.000	91	1051966	2000.0	1742.8	
100 1,1,2,2-Tetrachloroethane	83	8.859	8.859	0.000	93	606034	50.0	46.4	
101 Bromobenzene	156	8.891	8.891	0.000	96	514975	50.0	49.0	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	88	169990	50.0	49.0	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	82	176525	50.0	44.6	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	629799	50.0	51.0	
105 2-Chlorotoluene	126	9.071	9.071	0.000	96	525501	50.0	50.3	
106 1,3,5-Trimethylbenzene	105	9.144	9.144	0.000	94	1851899	50.0	50.6	
107 4-Chlorotoluene	126	9.187	9.187	0.000	97	547434	50.0	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.450	9.450	0.000	93	1537848	50.0	50.3	
109 1,2,4-Trimethylbenzene	105	9.514	9.514	0.000	97	1874413	50.0	50.7	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	458007	50.0	51.2	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	98	957029	50.0	50.3	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	1944009	50.0	52.0	
113 1,4-Dichlorobenzene	146	9.904	9.904	0.000	95	970134	50.0	49.2	
115 n-Butylbenzene	91	10.221	10.221	0.000	98	1790989	50.0	51.3	
116 1,2-Dichlorobenzene	146	10.252	10.252	0.000	96	914029	50.0	48.4	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.033	0.000	83	102294	50.0	46.2	
119 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	94	527062	50.0	51.3	
120 Hexachlorobutadiene	225	12.004	12.004	0.000	98	198550	50.0	53.1	
121 Naphthalene	128	12.131	12.131	0.000	97	1593185	50.0	47.9	
122 1,2,3-Trichlorobenzene	180	12.352	12.352	0.000	95	473636	50.0	50.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	99.6	
S 142 Xylenes, Total	106				0		100.0	100.6	
S 140 Trihalomethanes, Total	1				0		200.0	203.3	
S 143 Xylenes, Total (URS)	1				0		100.0	100.6	
S 145 1,3-Dichloropropene, Total	1				0		100.0	105.3	
S 144 1,2-Dichloroethene, Total	1				0		100.0	99.6	

Reagents:

MV-Gas A_00058	Amount Added: 10.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 25.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

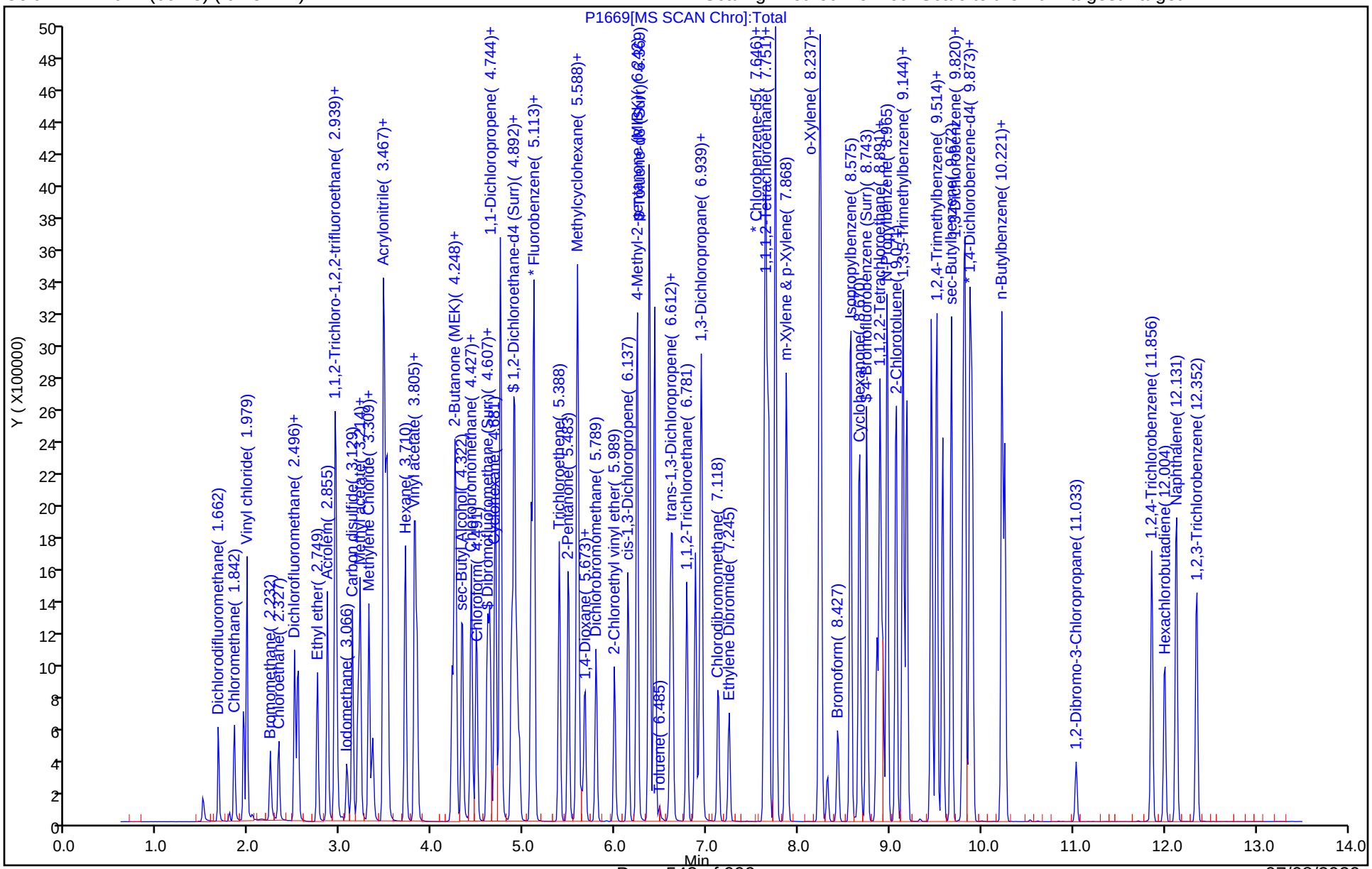
Report Date: 02-Jun-2020 11:16:30 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Injection Date:	01-Jun-2020 20:33:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICIS			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1664.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jun-2020 18:33:30 ALS Bottle#: 7 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:41 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:41:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.113	-0.002	98	2518102	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	86	570208	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.873	-0.003	96	835018	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.607	-0.003	95	607631	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.871	-0.003	97	706747	50.0	49.5	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2503188	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.743	-0.002	83	914750	50.0	49.6	
10 Dichlorodifluoromethane	85	1.660	1.662	-0.002	99	565032	75.0	80.0	
11 Chloromethane	50	1.839	1.842	-0.003	99	753095	75.0	78.7	
12 Vinyl chloride	62	1.945	1.937	0.008	98	831473	75.0	75.4	
14 Bromomethane	94	2.219	2.232	-0.013	90	288045	75.0	69.1	
15 Chloroethane	64	2.314	2.327	-0.013	99	519320	75.0	74.0	
16 Dichlorofluoromethane	67	2.494	2.496	-0.002	97	1256526	75.0	76.7	
17 Trichlorofluoromethane	101	2.525	2.538	-0.013	98	1029796	75.0	75.7	
19 Ethyl ether	59	2.747	2.749	-0.002	91	636933	75.0	74.3	
21 Acrolein	56	2.852	2.855	-0.003	100	1531495	740.6	723.0	
22 1,1-Dichloroethene	96	2.937	2.939	-0.002	97	614318	75.0	75.3	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.939	-0.002	72	455666	75.0	74.3	
24 Acetone	43	2.958	2.960	-0.002	99	986514	300.0	296.2	
26 Iodomethane	142	3.063	3.066	-0.003	99	649402	75.0	82.4	
27 Carbon disulfide	76	3.127	3.129	-0.002	99	1991209	75.0	78.8	
29 Methyl acetate	43	3.190	3.193	-0.003	98	1272496	150.0	148.7	
30 3-Chloro-1-propene	41	3.211	3.214	-0.003	93	1048018	75.0	75.0	
31 Methylene Chloride	84	3.306	3.309	-0.003	91	726350	75.0	77.4	
32 2-Methyl-2-propanol	59	3.348	3.351	-0.003	98	844878	750.0	765.5	
33 Acrylonitrile	53	3.464	3.467	-0.003	98	3422488	750.0	738.5	
34 Methyl tert-butyl ether	73	3.496	3.499	-0.003	95	2097701	75.0	76.2	
35 trans-1,2-Dichloroethene	96	3.507	3.509	-0.002	98	699589	75.0	72.7	
36 Hexane	57	3.707	3.710	-0.003	90	991684	75.0	74.6	
38 Vinyl acetate	43	3.802	3.805	-0.003	97	3210150	150.0	154.8	
39 1,1-Dichloroethane	63	3.834	3.836	-0.002	96	1324489	75.0	75.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.214	4.216	-0.002	99	1657714	300.0	295.3	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	83	785590	75.0	73.4	
48 2,2-Dichloropropane	77	4.256	4.258	-0.002	90	916619	75.0	76.9	
50 sec-Butyl Alcohol	45	4.330	4.322	0.008	99	2164234	2250.0	2397.6	
53 Chlorobromomethane	128	4.425	4.427	-0.002	98	349155	75.0	72.8	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	554326	150.0	149.0	
54 Chloroform	83	4.477	4.480	-0.003	92	1234280	75.0	73.0	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	98	1007366	75.0	75.2	
56 Cyclohexane	56	4.689	4.691	-0.002	89	1295262	75.0	76.0	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	98	1052218	75.0	75.0	
59 Carbon tetrachloride	117	4.752	4.754	-0.002	95	845679	75.0	77.2	
58 Isobutyl alcohol	41	4.752	4.754	-0.002	95	768829	1875.0	1973.9	
60 Benzene	78	4.900	4.902	-0.002	95	3064336	75.0	73.9	
61 1,2-Dichloroethane	62	4.921	4.923	-0.002	98	978504	75.0	75.5	
66 n-Heptane	43	5.079	5.082	-0.003	92	896848	75.0	72.5	
67 Trichloroethene	95	5.385	5.388	-0.003	98	740389	75.0	72.8	
68 2-Pentanone	43	5.480	5.483	-0.003	99	2572976	300.0	308.5	
69 Methylcyclohexane	55	5.586	5.578	0.008	92	963441	75.0	74.6	
70 1,2-Dichloropropane	63	5.596	5.599	-0.003	97	811193	75.0	75.8	
72 1,4-Dioxane	88	5.638	5.630	0.008	92	224792	1500.0	1508.6	
73 Dibromomethane	93	5.670	5.662	0.008	93	460404	75.0	75.0	
74 Dichlorobromomethane	83	5.786	5.789	-0.003	100	943348	75.0	75.9	
76 2-Chloroethyl vinyl ether	63	5.987	5.989	-0.002	91	598010	75.0	80.7	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	96	1216450	75.0	79.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.242	-0.002	95	3333758	300.0	311.3	
79 Toluene	91	6.430	6.432	-0.002	98	3185871	75.0	73.3	
80 trans-1,3-Dichloropropene	75	6.599	6.601	-0.002	97	1084089	75.0	79.7	
81 Ethyl methacrylate	69	6.620	6.622	-0.002	86	1123161	75.0	80.1	
82 1,1,2-Trichloroethane	97	6.778	6.781	-0.003	91	664027	75.0	75.7	
83 Tetrachloroethene	164	6.873	6.876	-0.003	94	517985	75.0	74.5	
84 1,3-Dichloropropane	76	6.926	6.928	-0.002	98	1228848	75.0	73.6	
85 2-Hexanone	43	6.936	6.939	-0.003	95	2396568	300.0	312.6	
86 Chlorodibromomethane	129	7.126	7.118	0.008	90	681438	75.0	79.4	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	688729	75.0	74.2	
89 1-Chlorohexane	91	7.633	7.635	-0.002	97	968916	75.0	77.3	
90 Chlorobenzene	112	7.675	7.678	-0.003	94	1952494	75.0	72.4	
92 Ethylbenzene	106	7.749	7.751	-0.002	98	1112684	75.0	75.1	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.751	-0.002	95	649959	75.0	78.2	
93 m-Xylene & p-Xylene	106	7.865	7.868	-0.003	99	1337167	75.0	75.1	
94 o-Xylene	106	8.224	8.226	-0.002	97	1297286	75.0	75.8	
95 Styrene	104	8.245	8.247	-0.002	94	2225643	75.0	77.2	
96 Bromoform	173	8.424	8.427	-0.003	95	419665	75.0	82.7	
97 Isopropylbenzene	105	8.572	8.575	-0.003	96	3269113	75.0	74.8	
99 Cyclohexanone	55	8.667	8.670	-0.003	91	1820858	3000.0	3118.6	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.859	-0.002	93	923777	75.0	72.1	
101 Bromobenzene	156	8.889	8.891	-0.002	95	750457	75.0	72.8	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.891	-0.002	87	263640	75.0	77.5	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	274122	75.0	70.5	
104 N-Propylbenzene	120	8.973	8.965	0.008	99	900621	75.0	74.4	
105 2-Chlorotoluene	126	9.068	9.071	-0.003	96	761914	75.0	74.3	
106 1,3,5-Trimethylbenzene	105	9.142	9.144	-0.002	94	2718338	75.0	75.8	
107 4-Chlorotoluene	126	9.184	9.187	-0.003	97	790475	75.0	73.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.450	-0.002	93	2228828	75.0	74.3	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	2711650	75.0	74.8	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	94	658067	75.0	75.0	
111 1,3-Dichlorobenzene	146	9.796	9.799	-0.003	97	1405320	75.0	75.3	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	97	2775007	75.0	75.6	
113 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	95	1422924	75.0	73.6	
115 n-Butylbenzene	91	10.218	10.221	-0.003	98	2558085	75.0	74.8	
116 1,2-Dichlorobenzene	146	10.250	10.252	-0.002	98	1365427	75.0	73.6	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.033	-0.002	83	173521	75.0	79.8	
119 1,2,4-Trichlorobenzene	180	11.854	11.856	-0.002	94	776485	75.0	77.0	
120 Hexachlorobutadiene	225	12.002	12.004	-0.002	97	277038	75.0	75.5	
121 Naphthalene	128	12.128	12.131	-0.003	98	2526472	75.0	77.5	
122 1,2,3-Trichlorobenzene	180	12.350	12.352	-0.002	95	716876	75.0	77.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		150.0	146.1	
S 142 Xylenes, Total	106				0		150.0	150.9	
S 140 Trihalomethanes, Total	1				0		300.0	311.0	
S 143 Xylenes, Total (URS)	1				0		150.0	150.9	
S 146 Total BTEX	1				0			373.3	
S 145 1,3-Dichloropropene, Total	1				0		150.0	159.2	
S 144 1,2-Dichloroethene, Total	1				0		150.0	146.1	

Reagents:

MV-Gas A_00058	Amount Added: 15.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 37.50	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

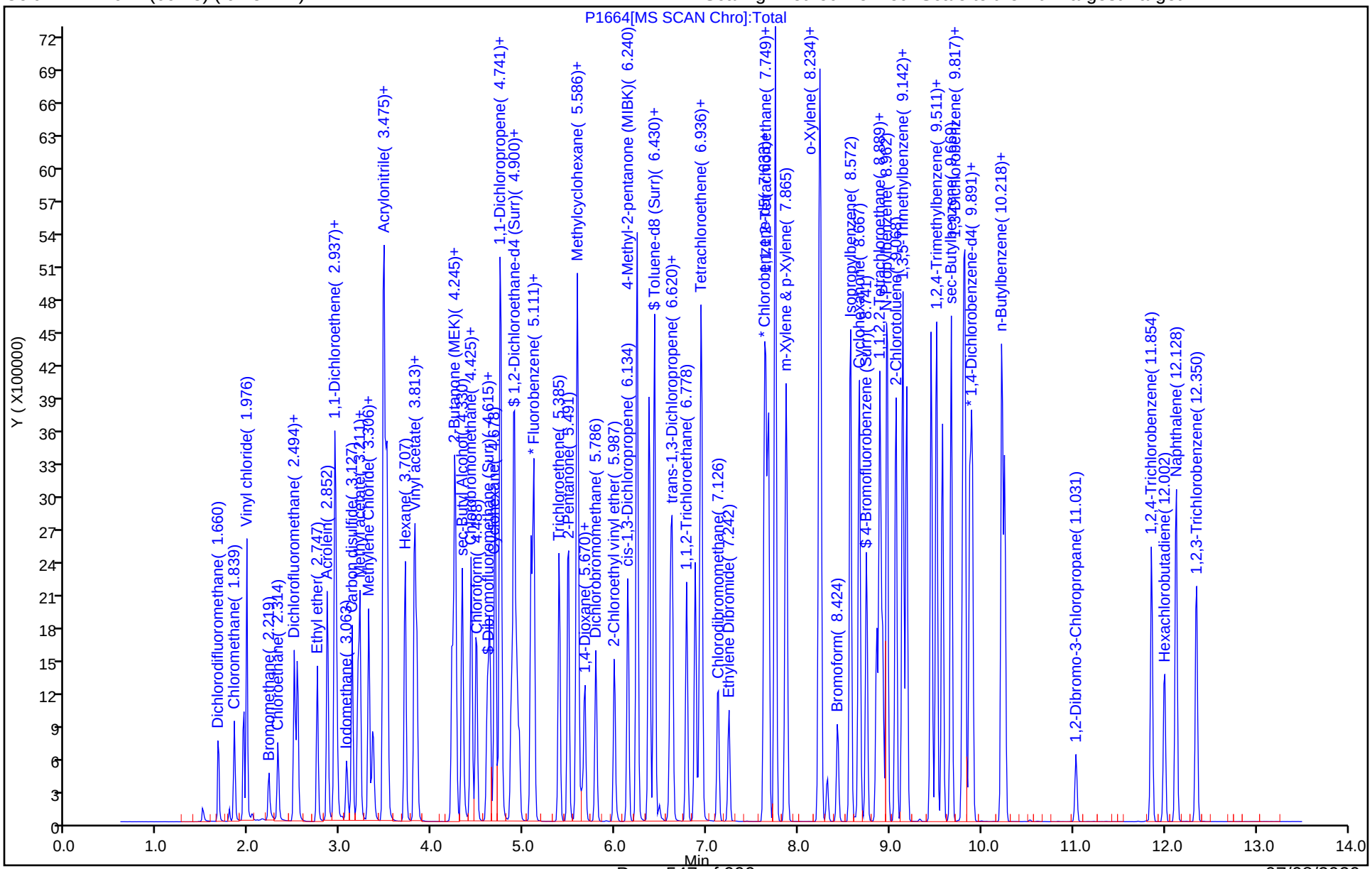
Report Date: 02-Jun-2020 11:16:42 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1664.D

Injection Date:	01-Jun-2020 18:33:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Jun-2020 18:55:30 ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:54 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:04:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.113	-0.001	98	2591417	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.646	-0.001	86	591785	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.873	-0.002	96	860796	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.607	-0.001	93	627480	50.0	50.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.869	4.871	-0.002	97	724426	50.0	49.3	
$ 6 Toluene-d8 (Surr)	98	6.368	6.369	-0.001	93	2573814	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.743	-0.001	84	928259	50.0	48.9	
10 Dichlorodifluoromethane	85	1.661	1.662	-0.001	99	732362	100.0	100.8	
11 Chloromethane	50	1.841	1.842	-0.001	99	960082	100.0	97.6	
12 Vinyl chloride	62	1.946	1.937	0.009	98	1065051	100.0	93.9	
14 Bromomethane	94	2.221	2.232	-0.011	90	440495	100.0	103.5	
15 Chloroethane	64	2.316	2.327	-0.011	99	677138	100.0	93.7	
16 Dichlorofluoromethane	67	2.495	2.496	-0.001	97	1626866	100.0	96.4	
17 Trichlorofluoromethane	101	2.527	2.538	-0.011	98	1332462	100.0	95.1	
19 Ethyl ether	59	2.748	2.749	-0.001	92	867417	100.0	98.3	
21 Acrolein	56	2.854	2.855	-0.001	100	2049494	987.5	940.2	
22 1,1-Dichloroethene	96	2.938	2.939	-0.001	97	803768	100.0	95.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.938	2.939	-0.001	71	583334	100.0	92.4	
24 Acetone	43	2.959	2.960	-0.001	100	1328269	400.0	387.8	
26 Iodomethane	142	3.065	3.066	-0.001	98	853782	100.0	105.0	
27 Carbon disulfide	76	3.128	3.129	-0.001	99	2649300	100.0	102.0	
29 Methyl acetate	43	3.192	3.193	-0.001	98	1718245	200.0	195.1	
30 3-Chloro-1-propene	41	3.213	3.214	-0.001	94	1398353	100.0	97.2	
31 Methylene Chloride	84	3.308	3.309	-0.001	92	982723	100.0	101.9	
32 2-Methyl-2-propanol	59	3.350	3.351	-0.001	98	1163015	1000.0	1023.9	
33 Acrylonitrile	53	3.466	3.467	-0.001	98	4584473	1000.0	961.2	
34 Methyl tert-butyl ether	73	3.498	3.499	-0.001	95	2851275	100.0	100.6	
35 trans-1,2-Dichloroethene	96	3.508	3.509	-0.001	98	932241	100.0	94.1	
36 Hexane	57	3.709	3.710	-0.001	90	1270824	100.0	92.1	
38 Vinyl acetate	43	3.804	3.805	-0.001	97	4053327	200.0	189.9	
39 1,1-Dichloroethane	63	3.835	3.836	-0.001	96	1757478	100.0	97.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.215	4.216	-0.001	99	2217162	400.0	383.8	
47 cis-1,2-Dichloroethene	96	4.247	4.248	-0.001	82	1058127	100.0	96.0	
48 2,2-Dichloropropane	77	4.257	4.258	-0.001	88	1229414	100.0	100.2	
50 sec-Butyl Alcohol	45	4.331	4.322	0.009	99	2977506	3000.0	3205.3	
53 Chlorobromomethane	128	4.426	4.427	-0.001	98	466481	100.0	94.5	
52 Tetrahydrofuran	42	4.426	4.427	-0.001	87	746007	200.0	194.8	
54 Chloroform	83	4.479	4.480	-0.001	92	1656789	100.0	95.2	
55 1,1,1-Trichloroethane	97	4.627	4.628	-0.001	98	1332750	100.0	96.7	
56 Cyclohexane	56	4.690	4.691	-0.001	89	1661826	100.0	94.7	
57 1,1-Dichloropropene	75	4.743	4.744	-0.001	98	1385678	100.0	96.0	
59 Carbon tetrachloride	117	4.753	4.754	-0.001	95	1123442	100.0	99.6	
58 Isobutyl alcohol	41	4.753	4.754	-0.001	95	1036679	2500.0	2586.3	
60 Benzene	78	4.891	4.902	-0.011	97	4103192	100.0	96.2	
61 1,2-Dichloroethane	62	4.922	4.923	-0.001	97	1314638	100.0	98.7	
66 n-Heptane	43	5.080	5.082	-0.002	92	1144406	100.0	89.9	
67 Trichloroethene	95	5.387	5.388	-0.001	98	992812	100.0	94.8	
68 2-Pentanone	43	5.482	5.483	-0.001	99	3459479	400.0	403.1	
69 Methylcyclohexane	55	5.576	5.578	-0.002	93	1240952	100.0	93.3	
70 1,2-Dichloropropane	63	5.598	5.599	-0.001	97	1087577	100.0	98.7	
72 1,4-Dioxane	88	5.629	5.630	-0.001	93	304422	2000.0	1985.3	
73 Dibromomethane	93	5.661	5.662	-0.001	94	622019	100.0	98.4	
74 Dichlorobromomethane	83	5.788	5.789	-0.001	100	1269877	100.0	99.3	
76 2-Chloroethyl vinyl ether	63	5.988	5.989	-0.001	91	777645	100.0	102.0	
77 cis-1,3-Dichloropropene	75	6.136	6.137	-0.001	98	1639115	100.0	103.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.241	6.242	-0.001	95	4449408	400.0	403.7	
79 Toluene	91	6.431	6.432	-0.001	98	4226712	100.0	94.5	
80 trans-1,3-Dichloropropene	75	6.600	6.601	-0.001	97	1494637	100.0	106.8	
81 Ethyl methacrylate	69	6.621	6.622	-0.001	88	1529747	100.0	105.2	
82 1,1,2-Trichloroethane	97	6.780	6.781	-0.001	91	892221	100.0	98.9	
83 Tetrachloroethene	164	6.874	6.876	-0.002	94	680115	100.0	94.3	
84 1,3-Dichloropropane	76	6.927	6.928	-0.001	98	1654933	100.0	95.5	
85 2-Hexanone	43	6.938	6.939	-0.001	95	3222482	400.0	405.0	
86 Chlorodibromomethane	129	7.117	7.118	-0.001	90	927388	100.0	104.1	
88 Ethylene Dibromide	107	7.244	7.245	-0.001	98	939615	100.0	97.6	
89 1-Chlorohexane	91	7.634	7.635	-0.001	96	1287435	100.0	99.1	
90 Chlorobenzene	112	7.676	7.678	-0.002	94	2623954	100.0	93.7	
92 Ethylbenzene	106	7.750	7.751	-0.001	98	1466328	100.0	95.4	
91 1,1,1,2-Tetrachloroethane	131	7.750	7.751	-0.001	95	879154	100.0	102.0	
93 m-Xylene & p-Xylene	106	7.866	7.868	-0.002	99	1800340	100.0	97.4	
94 o-Xylene	106	8.225	8.226	-0.001	97	1734182	100.0	97.6	
95 Styrene	104	8.246	8.247	-0.001	95	2994821	100.0	100.1	
96 Bromoform	173	8.426	8.427	-0.001	95	580498	100.0	110.2	
97 Isopropylbenzene	105	8.573	8.575	-0.002	96	4297903	100.0	95.4	
99 Cyclohexanone	55	8.668	8.670	-0.002	91	2497231	4000.0	4121.1	
100 1,1,2,2-Tetrachloroethane	83	8.858	8.859	-0.001	94	1246192	100.0	94.4	
101 Bromobenzene	156	8.890	8.891	-0.001	96	1018637	100.0	95.8	
102 trans-1,4-Dichloro-2-butene	53	8.890	8.891	-0.001	88	362926	100.0	103.5	
103 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	84	369781	100.0	92.3	
104 N-Propylbenzene	120	8.974	8.965	0.009	99	1208674	100.0	96.8	
105 2-Chlorotoluene	126	9.069	9.071	-0.002	96	1015287	100.0	96.0	
106 1,3,5-Trimethylbenzene	105	9.143	9.144	-0.001	94	3542571	100.0	95.8	
107 4-Chlorotoluene	126	9.186	9.187	-0.001	97	1069992	100.0	96.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.449	9.450	-0.001	93	2956162	100.0	95.5	
109 1,2,4-Trimethylbenzene	105	9.513	9.514	-0.001	97	3612602	100.0	96.6	
110 sec-Butylbenzene	134	9.671	9.672	-0.001	94	863268	100.0	95.4	
111 1,3-Dichlorobenzene	146	9.798	9.799	-0.001	97	1879660	100.0	97.7	
112 4-Isopropyltoluene	119	9.819	9.820	-0.001	97	3687575	100.0	97.5	
113 1,4-Dichlorobenzene	146	9.903	9.904	-0.001	94	1893150	100.0	95.0	
115 n-Butylbenzene	91	10.220	10.221	-0.001	98	3366903	100.0	95.4	
116 1,2-Dichlorobenzene	146	10.251	10.252	-0.001	98	1816228	100.0	95.0	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.033	-0.001	83	237845	100.0	106.1	
119 1,2,4-Trichlorobenzene	180	11.855	11.856	-0.001	94	1050224	100.0	101.0	
120 Hexachlorobutadiene	225	12.003	12.004	-0.001	98	365804	100.0	96.7	
121 Naphthalene	128	12.130	12.131	-0.001	97	3438073	100.0	102.3	
122 1,2,3-Trichlorobenzene	180	12.351	12.352	-0.001	95	966833	100.0	101.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		200.0	190.2	
S 142 Xylenes, Total	106				0		200.0	195.0	
S 140 Trihalomethanes, Total	1				0		400.0	408.9	
S 143 Xylenes, Total (URS)	1				0		200.0	195.0	
S 146 Total BTEX	1				0			481.1	
S 145 1,3-Dichloropropene, Total	1				0		200.0	210.0	
S 144 1,2-Dichloroethene, Total	1				0		200.0	190.2	

Reagents:

MV-Gas A_00058	Amount Added:	20.00	Units: uL	
MV-MegaMainA_00034	Amount Added:	50.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:16:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D

Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

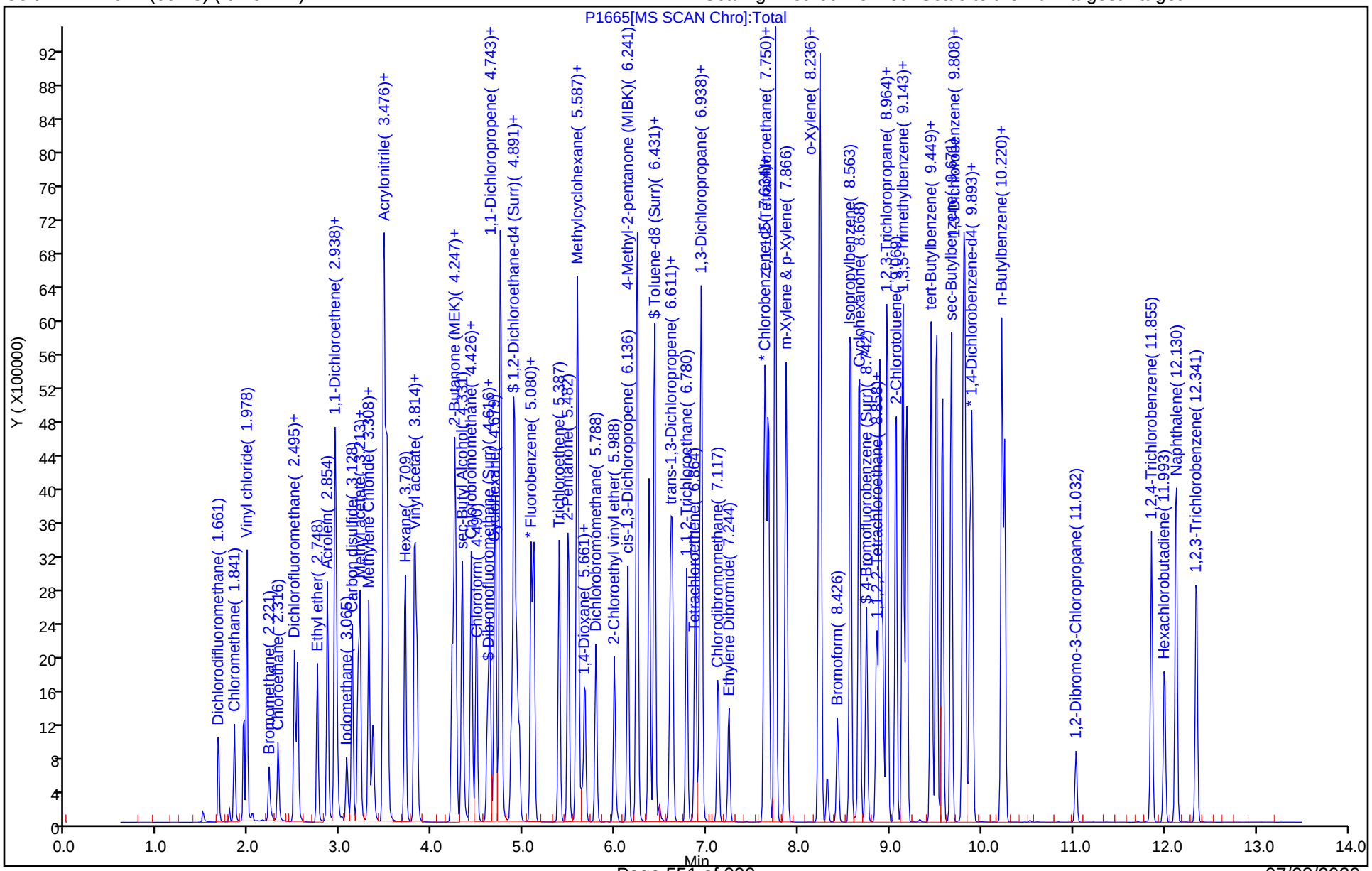
Lims ID: STD100 Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

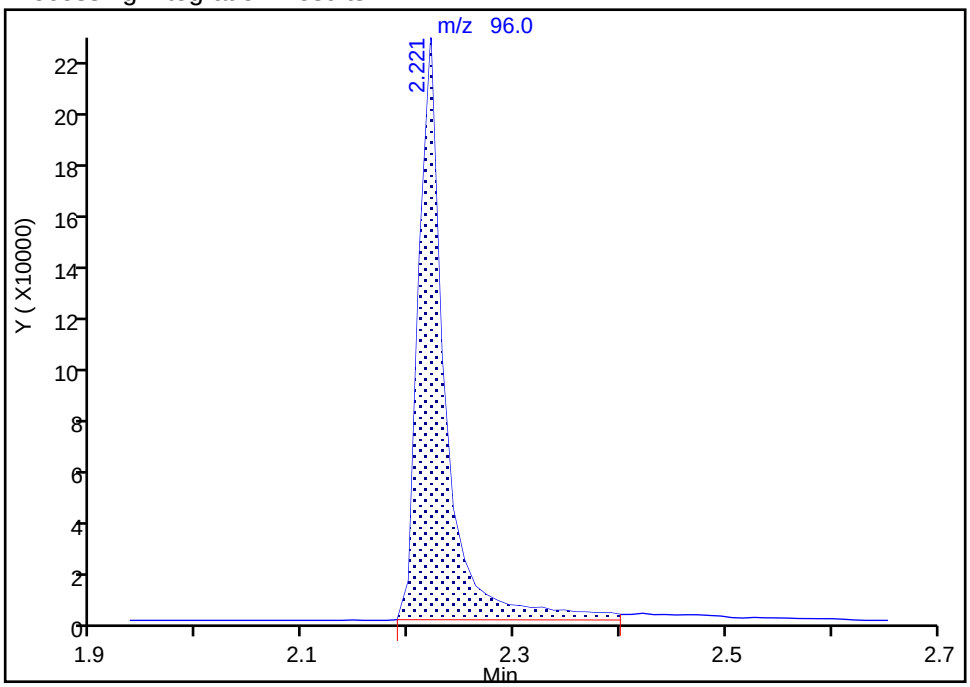
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P
Lims ID: STD100
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

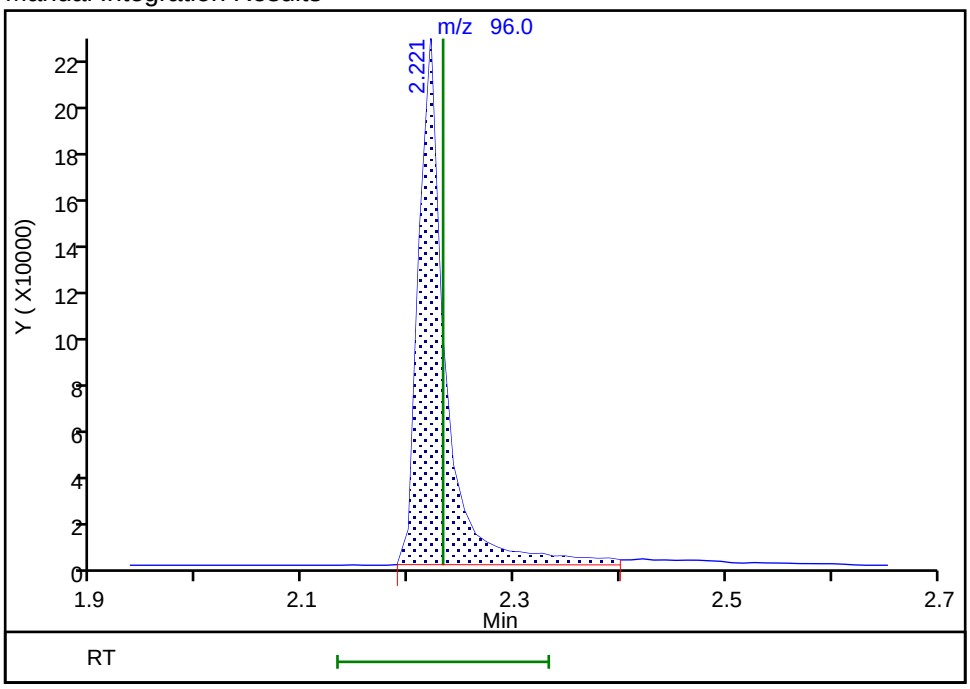
Processing Integration Results

RT: 2.22
Area: 398358
Amount: 71.854497
Amount Units: ug/l



Manual Integration Results

RT: 2.22
Area: 398358
Amount: 103.4548
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

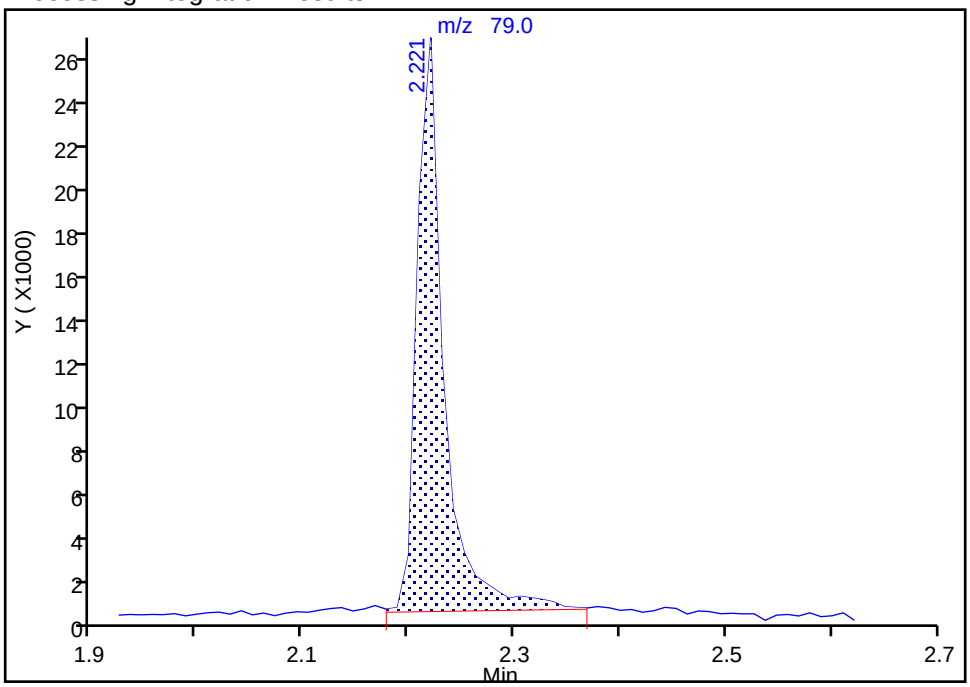
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P
Lims ID: STD100
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

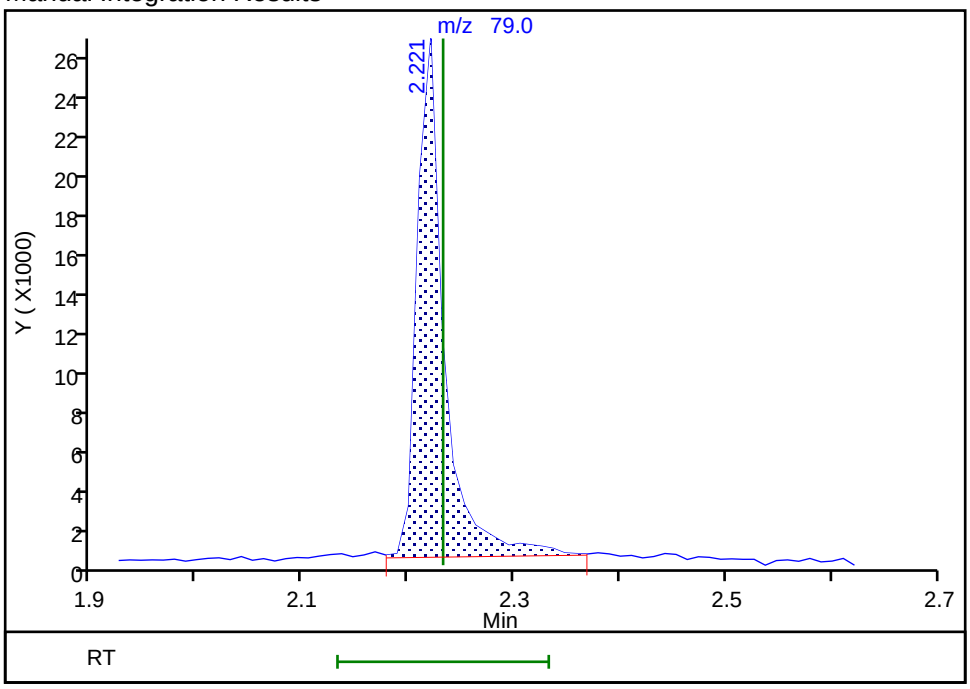
Processing Integration Results

RT: 2.22
Area: 45689
Amount: 71.854497
Amount Units: ug/l



Manual Integration Results

RT: 2.22
Area: 45689
Amount: 103.4548
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-Jun-2020 19:16:30 ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:17:08 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:22:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.113	-0.003	98	2665192	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	88	612530	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.873	-0.004	97	867641	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.607	-0.004	92	643049	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.871	-0.004	95	737268	50.0	48.8	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2645158	50.0	49.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.743	-0.003	85	944124	50.0	49.3	
10 Dichlorodifluoromethane	85	1.670	1.662	0.008	99	1521181	200.0	203.5	
11 Chloromethane	50	1.839	1.842	-0.003	99	1944451	200.0	192.5	
12 Vinyl chloride	62	1.944	1.937	0.007	98	2156770	200.0	184.8	
14 Bromomethane	94	2.208	2.232	-0.024	90	829108	200.0	190.8	
15 Chloroethane	64	2.314	2.327	-0.013	99	1338855	200.0	180.2	
16 Dichlorofluoromethane	67	2.493	2.496	-0.003	97	3337067	200.0	192.3	
17 Trichlorofluoromethane	101	2.525	2.538	-0.013	98	2746174	200.0	190.7	
19 Ethyl ether	59	2.746	2.749	-0.003	91	1748580	200.0	192.7	
21 Acrolein	56	2.852	2.855	-0.003	100	4216625	1975.0	1880.7	
22 1,1-Dichloroethene	96	2.936	2.939	-0.003	98	1646977	200.0	190.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.936	2.939	-0.003	72	1210821	200.0	186.5	
24 Acetone	43	2.957	2.960	-0.003	100	2724330	800.0	774.7	
26 Iodomethane	142	3.063	3.066	-0.003	99	1638641	200.0	195.4	
27 Carbon disulfide	76	3.126	3.129	-0.003	99	5354499	200.0	200.6	
29 Methyl acetate	43	3.189	3.193	-0.004	97	3572489	400.0	394.4	
30 3-Chloro-1-propene	41	3.210	3.214	-0.004	94	2597002	200.0	175.5	
31 Methylene Chloride	84	3.305	3.309	-0.004	91	1965595	200.0	198.6	
32 2-Methyl-2-propanol	59	3.358	3.351	0.007	98	2468347	2000.0	2112.9	
33 Acrylonitrile	53	3.474	3.467	0.007	98	9225550	2000.0	1880.7	
34 Methyl tert-butyl ether	73	3.495	3.499	-0.004	95	5795702	200.0	198.9	
35 trans-1,2-Dichloroethene	96	3.506	3.509	-0.003	98	1894659	200.0	186.0	
36 Hexane	57	3.706	3.710	-0.004	90	2650185	200.0	185.5	
38 Vinyl acetate	43	3.812	3.805	0.007	97	8022993	400.0	365.4	
39 1,1-Dichloroethane	63	3.833	3.836	-0.003	96	3524595	200.0	189.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.216	-0.003	99	4551845	800.0	766.2	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	82	2140264	200.0	188.9	
48 2,2-Dichloropropane	77	4.255	4.258	-0.003	89	2543532	200.0	201.6	
50 sec-Butyl Alcohol	45	4.329	4.322	0.007	99	6200156	6000.0	6489.7	
53 Chlorobromomethane	128	4.424	4.427	-0.003	98	916158	200.0	180.5	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	1562767	400.0	396.8	
54 Chloroform	83	4.487	4.480	0.007	93	3319211	200.0	185.5	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	99	2730851	200.0	192.7	
56 Cyclohexane	56	4.688	4.691	-0.003	89	3432828	200.0	190.2	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	97	2820470	200.0	190.0	
59 Carbon tetrachloride	117	4.751	4.754	-0.003	95	2331188	200.0	201.0	
58 Isobutyl alcohol	41	4.751	4.754	-0.003	95	2158330	5000.0	5235.6	
60 Benzene	78	4.899	4.902	-0.003	96	8100543	200.0	184.7	
61 1,2-Dichloroethane	62	4.920	4.923	-0.003	97	2621872	200.0	191.7	
66 n-Heptane	43	5.078	5.082	-0.004	92	2427879	200.0	185.4	
67 Trichloroethene	95	5.384	5.388	-0.004	98	2041486	200.0	189.6	
68 2-Pentanone	43	5.490	5.483	0.007	98	7086221	800.0	802.8	
69 Methylcyclohexane	55	5.585	5.578	0.007	92	2586376	200.0	189.1	
70 1,2-Dichloropropane	63	5.595	5.599	-0.004	97	2237217	200.0	197.4	
72 1,4-Dioxane	88	5.638	5.630	0.008	93	629142	4000.0	3989.3	
73 Dibromomethane	93	5.669	5.662	0.007	94	1265341	200.0	194.7	
74 Dichlorobromomethane	83	5.785	5.789	-0.004	100	2599633	200.0	197.7	
76 2-Chloroethyl vinyl ether	63	5.986	5.989	-0.003	91	1631027	200.0	208.0	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	97	3390099	200.0	206.4	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.242	-0.003	94	8889699	800.0	784.3	
79 Toluene	91	6.429	6.432	-0.003	99	8379887	200.0	182.1	
80 trans-1,3-Dichloropropene	75	6.609	6.601	0.007	97	3090342	200.0	214.6	
81 Ethyl methacrylate	69	6.619	6.622	-0.003	88	3141319	200.0	208.6	
82 1,1,2-Trichloroethane	97	6.777	6.781	-0.004	90	1826181	200.0	196.8	
83 Tetrachloroethene	164	6.872	6.876	-0.004	93	1409071	200.0	188.7	
84 1,3-Dichloropropane	76	6.925	6.928	-0.003	98	3359188	200.0	187.3	
85 2-Hexanone	43	6.946	6.939	0.007	94	6416464	800.0	779.1	
86 Chlorodibromomethane	129	7.126	7.118	0.008	90	1909184	200.0	207.1	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	1921283	200.0	192.8	
89 1-Chlorohexane	91	7.632	7.635	-0.003	98	2625923	200.0	195.7	
90 Chlorobenzene	112	7.674	7.678	-0.004	93	5290337	200.0	182.6	
92 Ethylbenzene	106	7.748	7.751	-0.003	98	3000265	200.0	188.6	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.751	-0.003	96	1814145	200.0	203.3	
93 m-Xylene & p-Xylene	106	7.864	7.868	-0.004	99	3621670	200.0	189.3	
94 o-Xylene	106	8.234	8.226	0.008	96	3512399	200.0	191.1	
95 Styrene	104	8.244	8.247	-0.003	94	5944526	200.0	192.0	
96 Bromoform	173	8.434	8.427	0.007	95	1219200	200.0	223.7	
97 Isopropylbenzene	105	8.571	8.575	-0.004	96	8473631	200.0	186.6	
99 Cyclohexanone	55	8.666	8.670	-0.004	90	5123084	8000.0	8168.1	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.859	-0.003	94	2502476	200.0	188.0	
101 Bromobenzene	156	8.888	8.891	-0.003	96	2037374	200.0	190.2	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.891	-0.003	79	740899	200.0	209.6	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	742902	200.0	184.0	
104 N-Propylbenzene	120	8.972	8.965	0.007	98	2424282	200.0	192.6	
105 2-Chlorotoluene	126	9.067	9.071	-0.004	98	2052197	200.0	192.6	
106 1,3,5-Trimethylbenzene	105	9.141	9.144	-0.003	95	6973832	200.0	187.1	
107 4-Chlorotoluene	126	9.183	9.187	-0.004	97	2129083	200.0	190.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.447	9.450	-0.003	93	5880094	200.0	188.5	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	7027541	200.0	186.5	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	95	1767152	200.0	193.7	
111 1,3-Dichlorobenzene	146	9.795	9.799	-0.004	98	3739315	200.0	192.8	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	96	7213150	200.0	189.2	
113 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	3782164	200.0	188.3	
115 n-Butylbenzene	91	10.218	10.221	-0.003	97	6618361	200.0	186.1	
116 1,2-Dichlorobenzene	146	10.249	10.252	-0.003	95	3619991	200.0	187.9	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.033	-0.003	84	512443	200.0	226.9	
119 1,2,4-Trichlorobenzene	180	11.853	11.856	-0.003	94	2180721	200.0	208.1	
120 Hexachlorobutadiene	225	12.001	12.004	-0.003	98	781505	200.0	205.0	
121 Naphthalene	128	12.128	12.131	-0.003	98	6963268	200.0	205.6	
122 1,2,3-Trichlorobenzene	180	12.349	12.352	-0.003	95	1991580	200.0	206.7	
S 139 1,2-Dichloroethene, Total (URS)	96				0		400.0	374.9	
S 142 Xylenes, Total	106				0		400.0	380.3	
S 140 Trihalomethanes, Total	1				0		800.0	813.9	
S 143 Xylenes, Total (URS)	1				0		400.0	380.3	
S 146 Total BTEX	1				0			935.8	
S 145 1,3-Dichloropropene, Total	1				0		400.0	421.0	
S 144 1,2-Dichloroethene, Total	1				0		400.0	374.9	

Reagents:

MV-Gas A_00058	Amount Added: 40.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 100.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

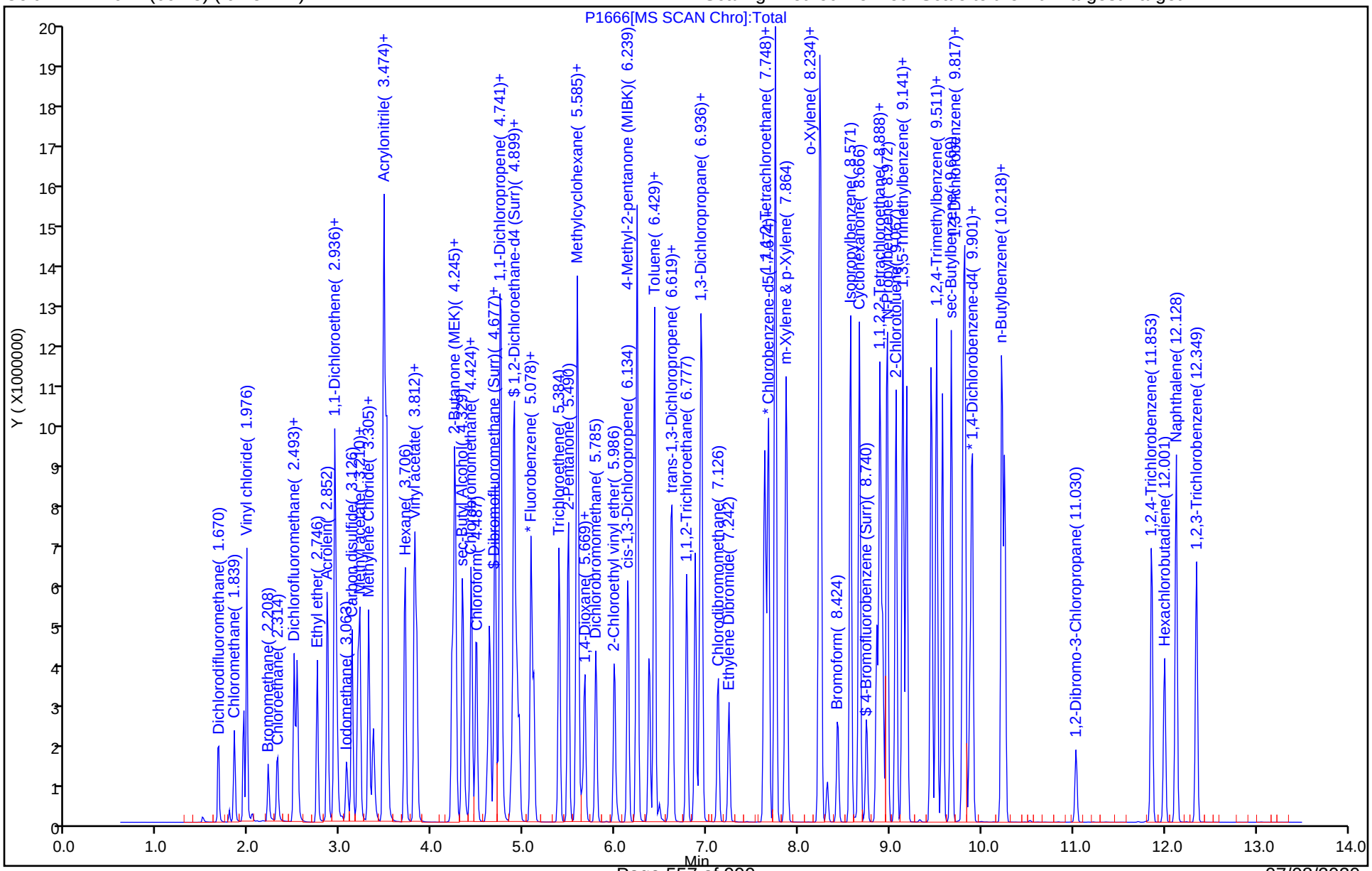
Report Date: 02-Jun-2020 11:17:09 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D

Injection Date:	01-Jun-2020 19:16:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD200			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

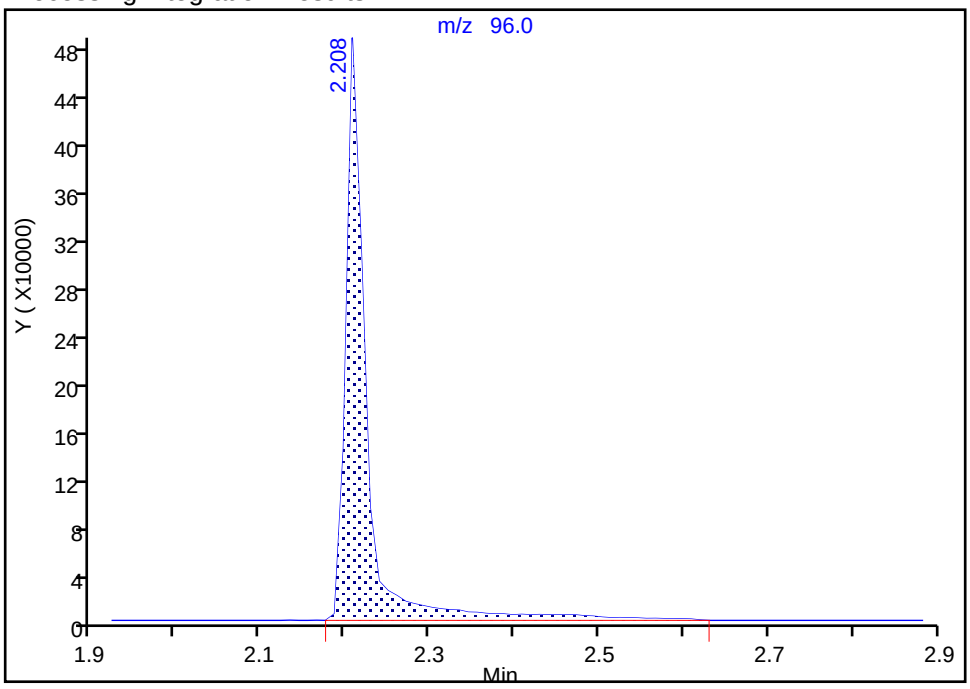
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Injection Date: 01-Jun-2020 19:16:30 Instrument ID: VMS_P
Lims ID: STD200
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

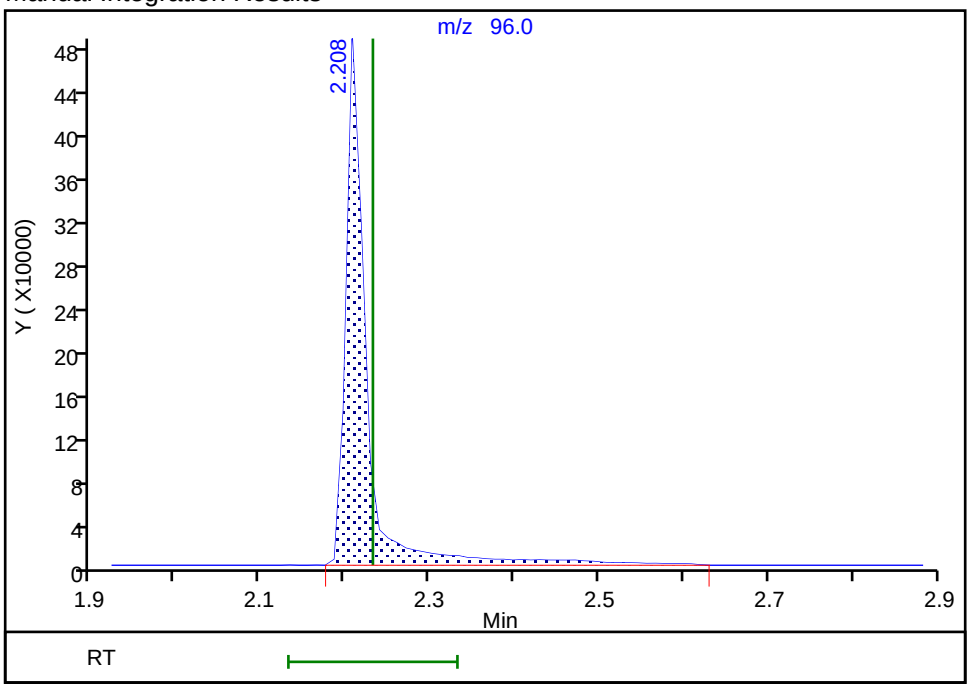
Processing Integration Results

RT: 2.21
Area: 807928
Amount: 190.7761
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 807928
Amount: 190.7761
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

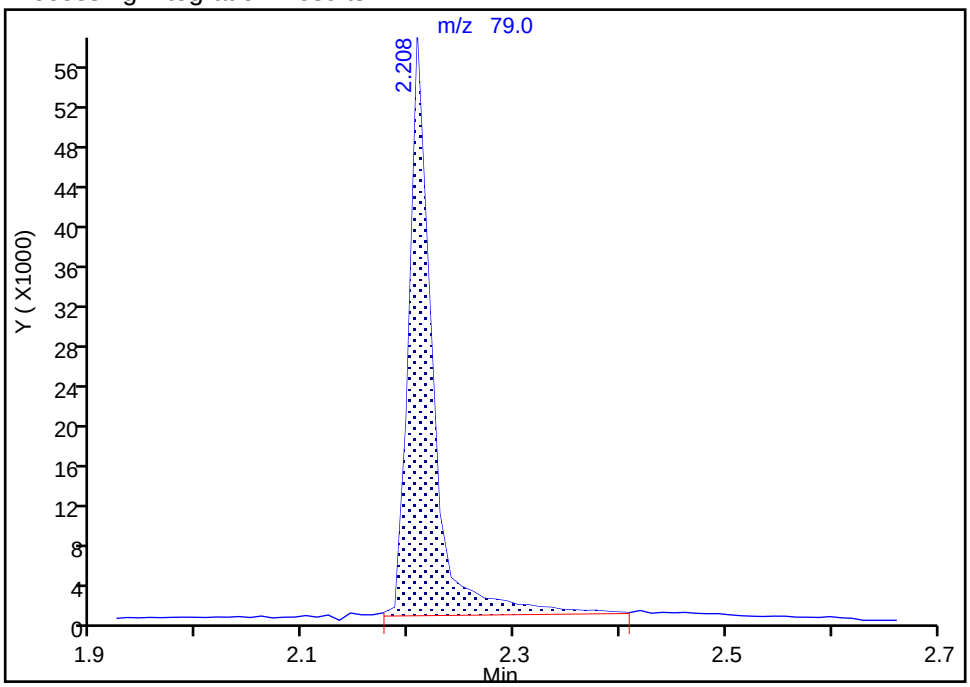
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D				
Injection Date:	01-Jun-2020 19:16:30	Instrument ID:	VMS_P		
Lims ID:	STD200				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	9	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

14 Bromomethane, CAS: 74-83-9

Signal: 3

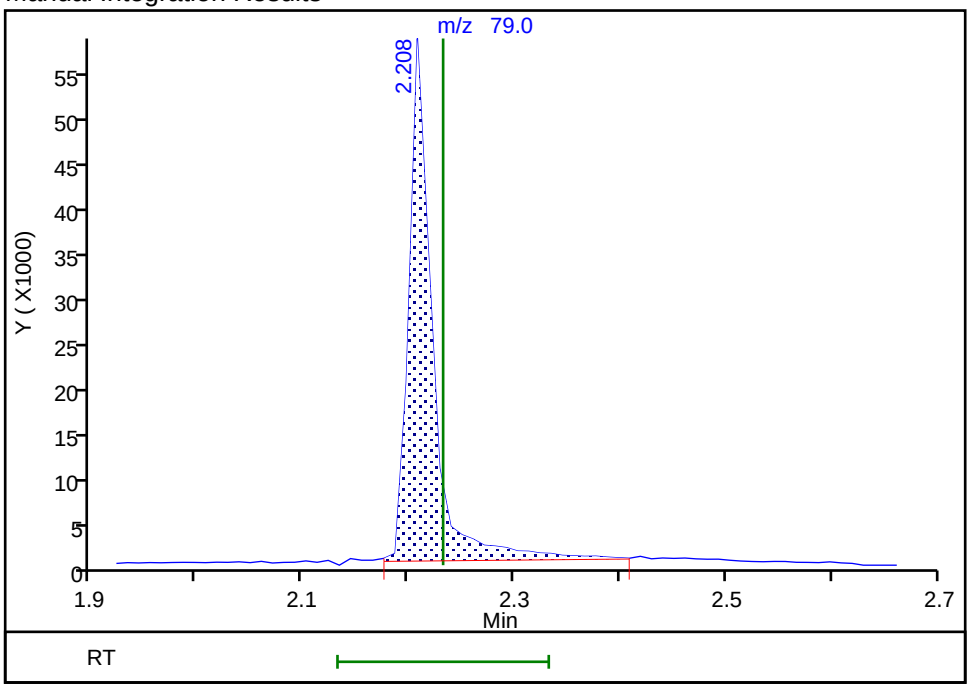
Processing Integration Results

RT: 2.21
Area: 90258
Amount: 190.7761
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 90258
Amount: 190.7761
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:25

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, Denver Job No.: 280-138090-1 Analy Batch No.: 497166

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 13:49 Calibration End Date: 06/03/2020 17:01 Calibration ID: 44868

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-497166/45	R5915.D
Level 2	STD020 280-497166/46	R5919.D
Level 3	STD10 280-497166/48	R5920.D
Level 4	STD50 280-497166/49	R5921.D
Level 5	STD75 280-497166/50	R5922.D
Level 6	STD100 280-497166/51	R5923.D
Level 7	STD200 280-497166/52	R5924.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								
Ethylene oxide	0.0061 0.0076	0.0064 0.0064	0.0072	0.0070	0.0086	Ave		0.0070				12.5		15.0			
Ethanol	0.0023 0.0026	0.0021 0.0027	0.0026	0.0026	0.0028	Ave		0.0025				9.6		15.0			
Propene oxide	0.0321 +++++	0.0295 +++++	0.0373	0.0411	0.0349	Ave		0.0350				12.9		15.0			
2-Propanol	+++++ 0.0143	0.0076 0.0155	0.0119	0.0143	0.0152	Lin2	-0.148	0.0147							0.9970		0.9900
Acetonitrile	0.0315 0.0311	0.0237 0.0328	0.0324	0.0333	0.0333	Ave		0.0312				10.8		15.0			
Di-isopropyl ether (DIPE)	+++++ 0.1514	0.1182 0.1628	0.1409	0.1614	0.1620	Ave		0.1494				11.7		15.0			
Chloroprene	0.1479 0.2910	0.1563 0.3084	0.2544	0.3101	0.3017	Lin1	-0.220	0.3047							0.9990		0.9900
Tert-butyl ethyl ether	+++++ 0.5525	0.4405 0.5874	0.4866	0.5645	0.5814	Ave		0.5355				11.0		15.0			
Ethyl acetate	0.1811 0.2078	0.2438 0.2223	0.2038	0.2120	0.2298	Ave		0.2144				9.4		15.0			
Propionitrile	0.0301 0.0347	0.0285 0.0375	0.0351	0.0382	0.0377	Ave		0.0345				11.2		15.0			
Methacrylonitrile	0.1214 0.1325	0.1143 0.1284	0.1352	0.1439	0.1442	Ave		0.1314				8.4		15.0			
Tert-amyl methyl ether	0.4385 0.5027	0.4305 0.5397	0.4502	0.5182	0.5311	Ave		0.4873				9.5		15.0			
n-Butanol	0.0022 0.0069	0.0023 0.0080	0.0049	0.0068	0.0074	Lin1	-0.217	0.0075							0.9940		0.9900
Methyl methacrylate	0.0273 0.0598	0.0370 0.0629	0.0538	0.0617	0.0634	Lin2	-0.073	0.0609							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497166

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 13:49 Calibration End Date: 06/03/2020 17:01 Calibration ID: 44868

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-Nitropropane	0.0275 0.0494	0.0262 0.0566	0.0353	0.0469	0.0508	Lin1	-0.094	0.0529							0.9930		0.9900
Tetrahydrothiophene	0.1161 0.1587	0.1040 0.1720	0.1441	0.1680	0.1726	Lin1	-0.179	0.1690							0.9980		0.9900
cis-1,4-Dichloro-2-butene	0.0986 0.1874	0.1209 0.2153	0.1571	0.1930	0.1984	Lin2	-0.210	0.1919							0.9900		0.9900
1,2,3-Trimethylbenzene	1.8349 2.2697	1.7557 2.4735	1.9948	2.4266	2.3301	Ave		2.1550				13.5		15.0			
1,3,5-Trichlorobenzene	0.6211 0.7114	0.5393 0.7934	0.6364	0.7730	0.7414	Ave		0.6880				13.4		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 497166

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 13:49 Calibration End Date: 06/03/2020 17:01 Calibration ID: 44868

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-497166/45	R5915.D
Level 2	STD020 280-497166/46	R5919.D
Level 3	STD10 280-497166/48	R5920.D
Level 4	STD50 280-497166/49	R5921.D
Level 5	STD75 280-497166/50	R5922.D
Level 6	STD100 280-497166/51	R5923.D
Level 7	STD200 280-497166/52	R5924.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
Ethylene oxide	FB	Ave	33148 4551137	67383 7471398	369514	1888596	3545629	100 10000	200 20000	1000	5000	7500
Ethanol	FB	Ave	7501 921371	13090 1867039	79357	416008	686788	60.0 6000	120 12000	600	3000	4500
Propene oxide	FB	Ave	173848 +++++	311264 +++++	1912184	11132789	14333391	100 +++++	200 +++++	1000	5000	7500
2-Propanol	FB	Lin2	+++++ 850774	7990 1820540	60933	386162	623751	+++++ 1000	20.0 2000	100	500	750
Acetonitrile	FB	Ave	17048 1853092	25074 3845024	165953	901608	1366683	10.0 1000	20.0 2000	100	500	750
Di-isopropyl ether (DIPE)	FB	Ave	+++++ 903029	12480 1906976	72266	437048	664638	+++++ 100	2.00 200	10.0	50.0	75.0
Chloroprene	FB	Lin1	8009 1735981	16499 3611386	130429	839861	1238040	1.00 100	2.00 200	10.0	50.0	75.0
Tert-butyl ethyl ether	FB	Ave	+++++ 3296465	46506 6878565	249481	1528870	2385817	+++++ 100	2.00 200	10.0	50.0	75.0
Ethyl acetate	FB	Ave	19610 2480133	51472 5206134	208965	1148340	1886534	2.00 200	4.00 400	20.0	100	150
Propionitrile	FB	Ave	16298 2071914	30046 4389110	180022	1035865	1547419	10.0 1000	20.0 2000	100	500	750
Methacrylonitrile	FB	Ave	65701 7907398	120647 15036956	693148	3896213	5916841	10.0 1000	20.0 2000	100	500	750
Tert-amyl methyl ether	FB	Ave	23738 2999484	45450 6320850	230824	1403456	2179729	1.00 100	2.00 200	10.0	50.0	75.0
n-Butanol	FB	Lin1	2942 1027535	5993 2341860	62683	461353	754494	25.0 2500	50.0 5000	250	1250	1875
Methyl methacrylate	FB	Lin2	2960 713956	7813 1473817	55134	334428	520220	2.00 200	4.00 400	20.0	100	150
2-Nitropropane	FB	Lin1	2980 589317	5532 1325887	36168	253885	416745	2.00 200	4.00 400	20.0	100	150

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497166

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 13:49 Calibration End Date: 06/03/2020 17:01 Calibration ID: 44868

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
Tetrahydrothiophene	CBNZ d5	Lin1	2772 417783	5027 889068	32441	198433	313018	2.00 200	4.00 400	20.0	100	150
cis-1,4-Dichloro-2-butene	DCBd 4	Lin2	3792 775981	9102 1697292	58389	361985	569534	2.00 200	4.00 400	20.0	100	150
1,2,3-Trimethylbenzene	DCBd 4	Ave	35275 4699646	66094 9749546	370614	2275647	3344607	1.00 100	2.00 200	10.0	50.0	75.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	11941 1472968	20302 3127255	118236	724887	1064216	1.00 100	2.00 200	10.0	50.0	75.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5915.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Jun-2020 13:49:30 ALS Bottle#: 12 Worklist Smp#: 45
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010 SUPP
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:14 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

First Level Reviewer: peppinga Date: 04-Jun-2020 07:52:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	99	2706886	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	85	596646	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	95	961244	50.0	50.0	
13 Ethylene oxide	43	2.180	2.173	0.007	100	33148	100.0	86.9	
18 Ethanol	45	2.641	2.630	0.011	73	7501	60.0	55.3	
20 Propene oxide	58	2.761	2.757	0.004	96	173848	100.0	91.8	
25 Isopropyl alcohol	45	3.012	3.012	0.000	69	5496	10.0	17.0	
28 Acetonitrile	41	3.140	3.128	0.012	89	17048	10.0	10.1	
41 Isopropyl ether	87	3.777	3.777	0.000	84	4884	1.00	0.6037	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	42	8009	1.00	1.21	
44 Tert-butyl ethyl ether	59	4.036	4.036	0.000	90	16108	1.00	0.5557	
46 Ethyl acetate	43	4.174	4.171	0.003	92	19610	2.00	1.69	
49 Propionitrile	54	4.212	4.208	0.004	71	16298	10.0	8.71	
51 Methacrylonitrile	41	4.321	4.317	0.004	92	65701	10.0	9.24	
64 Tert-amyl methyl ether	73	4.887	4.887	0.000	88	23738	1.00	0.8998	
66 n-Butanol	56	5.179	5.171	0.008	66	2942	25.0	36.0	
71 Methyl methacrylate	100	5.509	5.513	-0.004	57	2960	2.00	2.10	
75 2-Nitropropane	41	5.873	5.872	0.000	59	2980	2.00	2.82	
86 Tetrahydrothiophene	60	7.027	7.023	0.004	5	2772	2.00	2.43	
98 cis-1,4-Dichloro-2-butene	53	8.523	8.523	0.000	50	3792	2.00	2.12	
115 1,2,3-Trimethylbenzene	105	9.809	9.816	-0.007	79	35275	1.00	0.8514	
119 1,3,5-Trichlorobenzene	180	11.117	11.121	-0.004	51	11941	1.00	0.9028	
165 t-Amyl alcohol	1		0.000				ND	ND	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00044	Amount Added:	1.00	Units: uL
mv-Cent IS_00006	Amount Added:	5.00	Units: uL

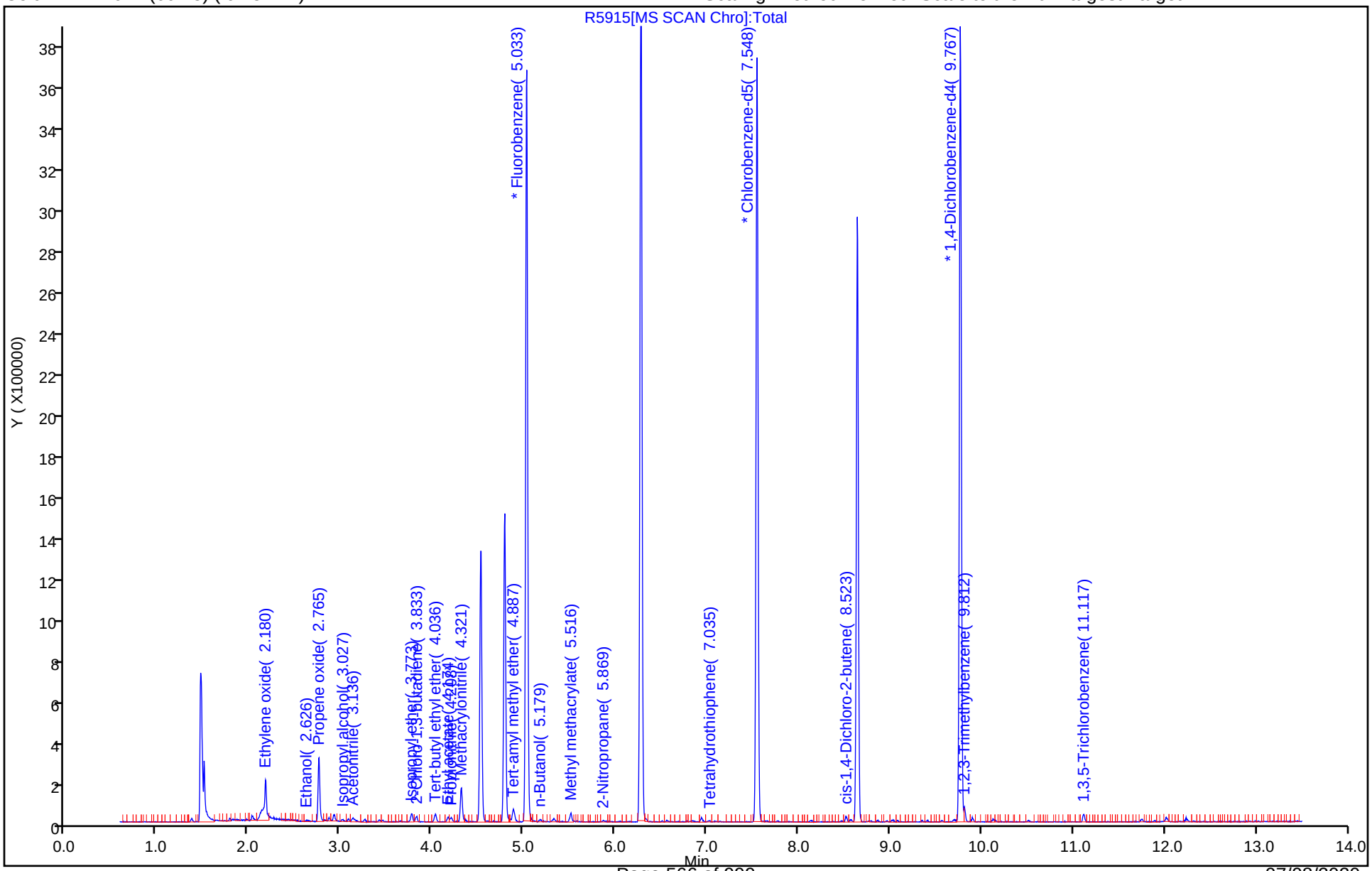
Report Date: 04-Jun-2020 14:24:15 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5915.D

Injection Date:	03-Jun-2020 13:49:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD010			Worklist Smp#:	45
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5919.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Jun-2020 15:14:30 ALS Bottle#: 16 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020 SUPP
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:18 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

First Level Reviewer: peppinga Date: 04-Jun-2020 14:21:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	98	2639508	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	604440	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	941123	50.0	50.0	
13 Ethylene oxide	43	2.180	2.173	0.007	100	67383	200.0	181.1	
18 Ethanol	45	2.637	2.630	0.007	84	13090	120.0	99.0	
20 Propene oxide	58	2.761	2.757	0.004	96	311264	200.0	168.5	
25 Isopropyl alcohol	45	3.020	3.012	0.008	68	7990	20.0	20.3	
28 Acetonitrile	41	3.128	3.128	0.000	99	25074	20.0	15.2	
41 Isopropyl ether	87	3.781	3.777	0.004	95	12480	2.00	1.58	
42 2-Chloro-1,3-butadiene	53	3.833	3.826	0.007	92	16499	2.00	1.75	
44 Tert-butyl ethyl ether	59	4.035	4.036	-0.001	95	46506	2.00	1.65	
46 Ethyl acetate	43	4.167	4.171	-0.004	98	51472	4.00	4.55	
49 Propionitrile	54	4.204	4.208	-0.004	99	30046	20.0	16.5	
51 Methacrylonitrile	41	4.317	4.317	0.000	93	120647	20.0	17.4	
64 Tert-amyl methyl ether	73	4.894	4.887	0.007	90	45450	2.00	1.77	
66 n-Butanol	56	5.175	5.171	0.004	70	5993	50.0	43.9	
71 Methyl methacrylate	100	5.516	5.513	0.003	91	7813	4.00	3.63	
75 2-Nitropropane	41	5.872	5.872	0.000	87	5532	4.00	3.76	
86 Tetrahydrothiophene	60	7.023	7.023	0.000	85	5027	4.00	3.52	
98 cis-1,4-Dichloro-2-butene	53	8.526	8.523	0.003	78	9102	4.00	3.61	
115 1,2,3-Trimethylbenzene	105	9.812	9.816	-0.004	98	66094	2.00	1.63	
119 1,3,5-Trichlorobenzene	180	11.124	11.121	0.003	93	20302	2.00	1.57	a
166 Ethyl acrylate	55		0.000				ND	ND	
165 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags
a - User Assigned ID

Reagents:

MV-Supp A_00044	Amount Added:	2.00	Units: uL
mv-Cent IS_00006	Amount Added:	5.00	Units: uL

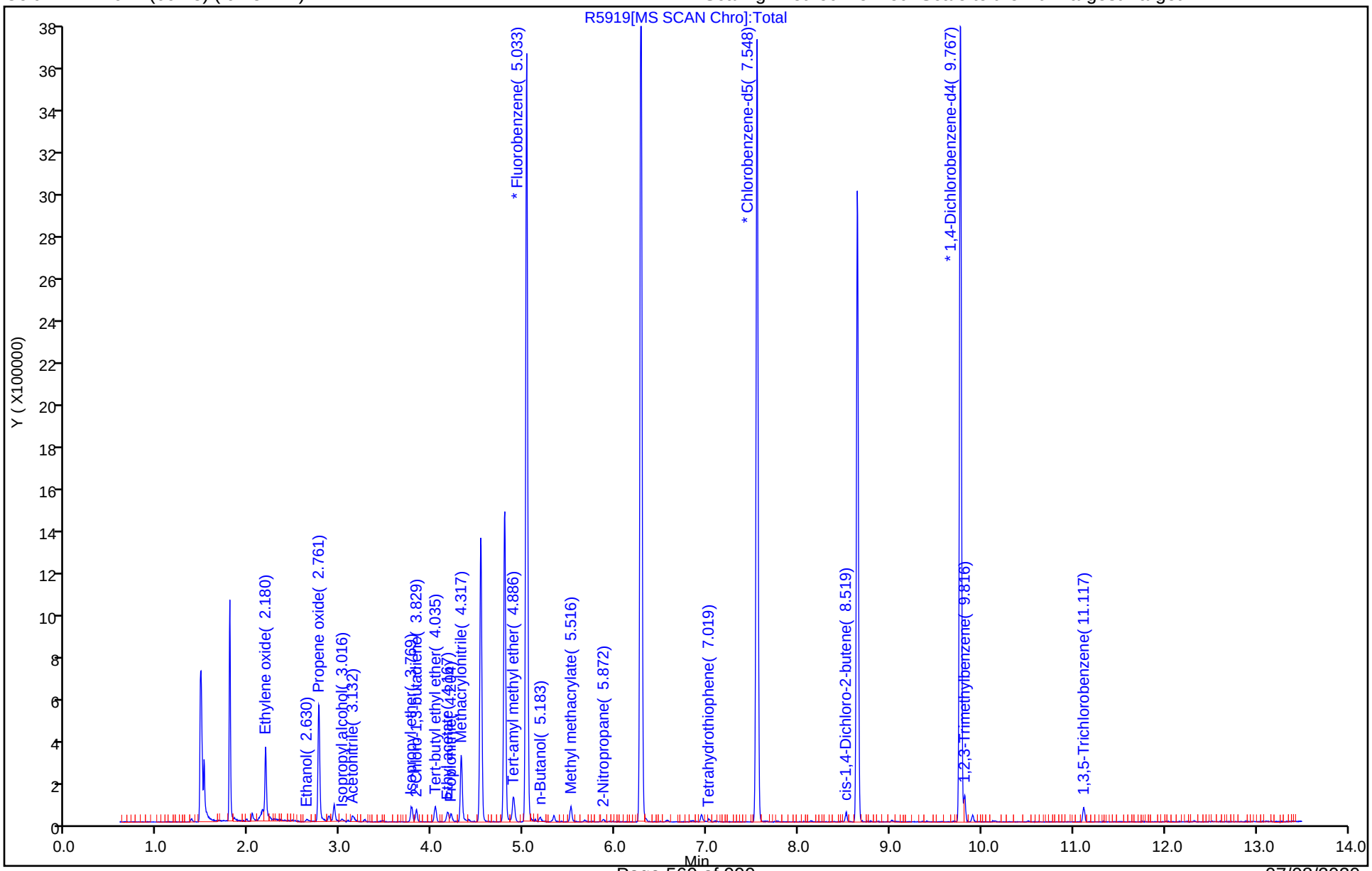
Report Date: 04-Jun-2020 14:24:18 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5919.D

Injection Date:	03-Jun-2020 15:14:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD020			Worklist Smp#:	46
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

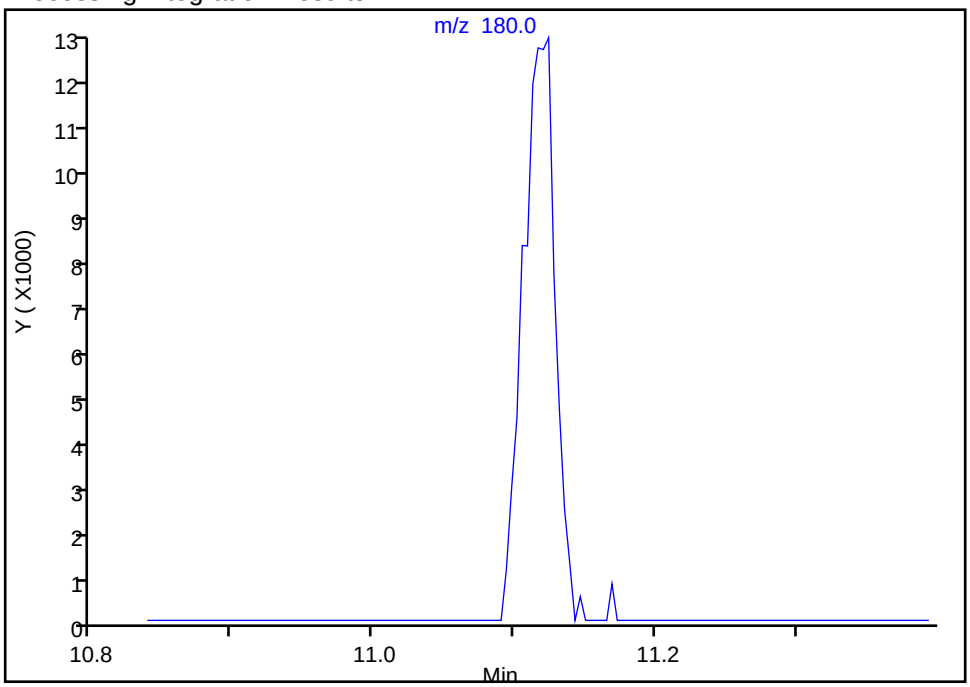
Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5919.D				
Injection Date:	03-Jun-2020 15:14:30	Instrument ID:	VMS_R1		
Lims ID:	STD020				
Client ID:					
Operator ID:	PEPPINGA	ALS Bottle#:	16	Worklist Smp#:	46
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

119 1,3,5-Trichlorobenzene, CAS: 108-70-3

Signal: 1

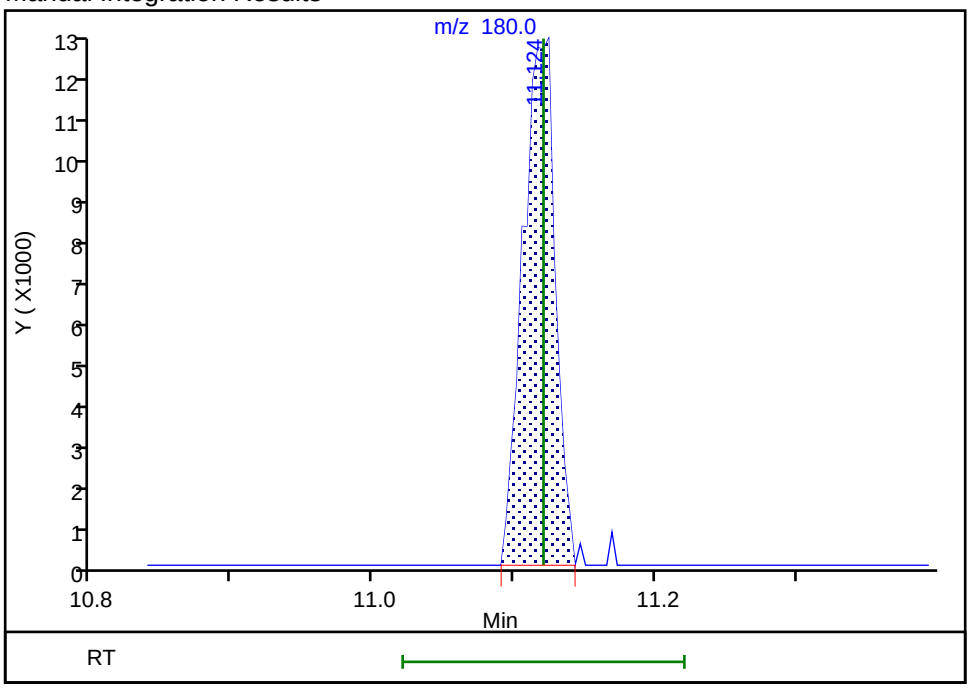
Not Detected
Expected RT: 11.12

Processing Integration Results



Manual Integration Results

RT: 11.12
Area: 20302
Amount: 1.567750
Amount Units: ug/l



Reviewer: peppinga, 04-Jun-2020 14:20:52
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5920.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Jun-2020 15:36:30 ALS Bottle#: 17 Worklist Smp#: 48
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10SUPP
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:21 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	99	2563734	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	562933	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	928968	50.0	50.0	
13 Ethylene oxide	43	2.180	2.173	0.007	100	369514	1000.0	1022.6	
18 Ethanol	45	2.633	2.630	0.003	99	79357	600.0	617.8	
20 Propene oxide	58	2.761	2.757	0.004	96	1912184	1000.0	1066.0	
25 Isopropyl alcohol	45	3.012	3.012	0.000	98	60933	100.0	90.8	
28 Acetonitrile	41	3.136	3.128	0.008	99	165953	100.0	103.9	
41 Isopropyl ether	87	3.777	3.777	0.000	95	72266	10.0	9.43	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	92	130429	10.0	9.07	
44 Tert-butyl ethyl ether	59	4.035	4.036	-0.001	98	249481	10.0	9.09	
46 Ethyl acetate	43	4.174	4.171	0.003	99	208965	20.0	19.0	
49 Propionitrile	54	4.208	4.208	0.000	99	180022	100.0	101.6	
51 Methacrylonitrile	41	4.317	4.317	0.000	92	693148	100.0	102.9	
64 Tert-amyl methyl ether	73	4.890	4.887	0.003	88	230824	10.0	9.24	
66 n-Butanol	56	5.179	5.171	0.008	86	62683	250.0	191.2	
71 Methyl methacrylate	100	5.512	5.513	-0.001	91	55134	20.0	18.9	
75 2-Nitropropane	41	5.872	5.872	0.000	95	36168	20.0	15.1	
86 Tetrahydrothiophene	60	7.019	7.023	-0.004	90	32441	20.0	18.1	
98 cis-1,4-Dichloro-2-butene	53	8.523	8.523	0.000	93	58389	20.0	17.5	
115 1,2,3-Trimethylbenzene	105	9.816	9.816	0.000	99	370614	10.0	9.26	
119 1,3,5-Trichlorobenzene	180	11.117	11.121	-0.004	94	118236	10.0	9.25	
165 t-Amyl alcohol	1		0.000				ND	ND	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00044	Amount Added: 10.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

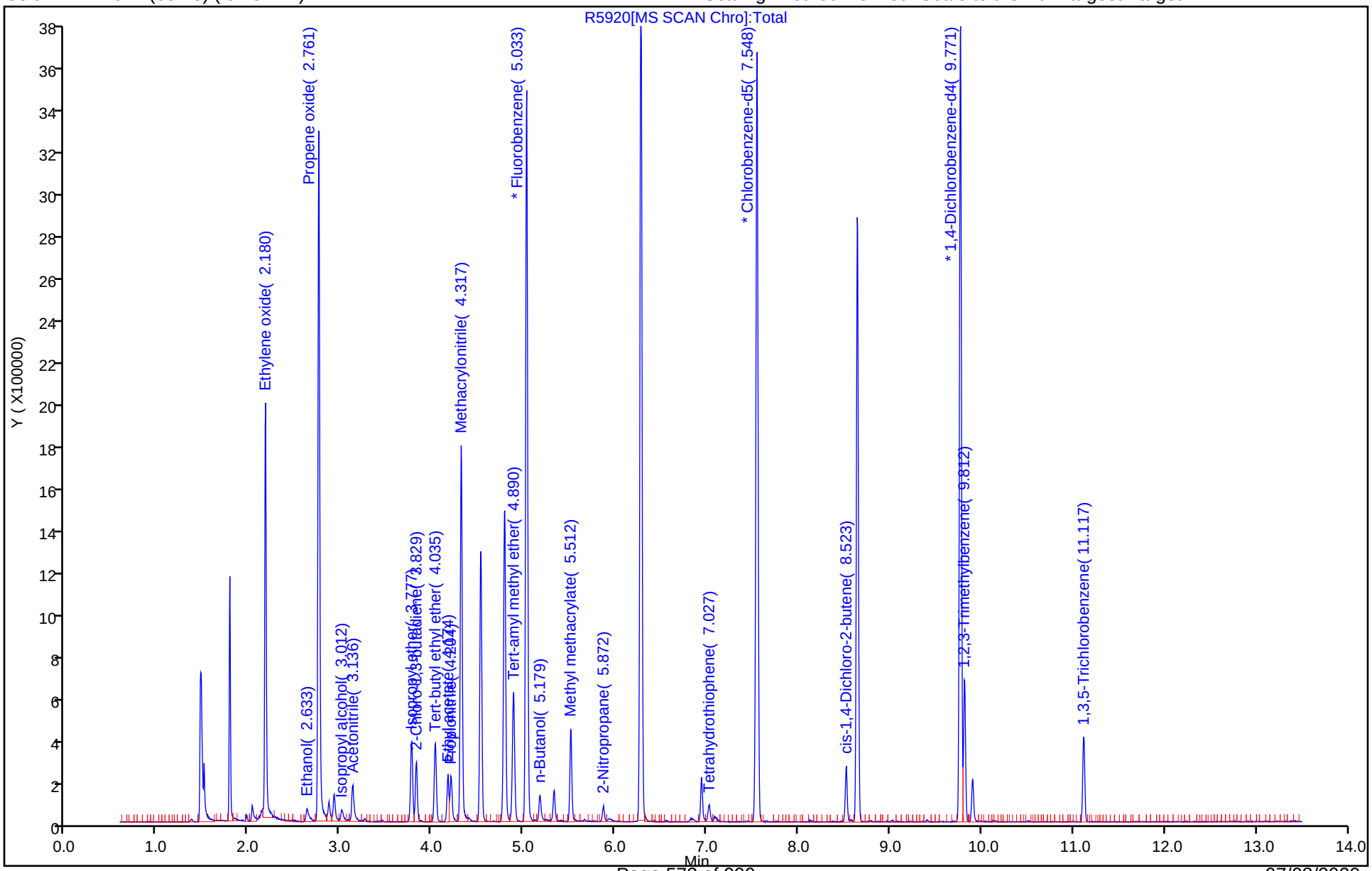
Report Date: 04-Jun-2020 14:24:21 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5920.D

Injection Date:	03-Jun-2020 15:36:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD10			Worklist Smp#:	48
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5921.D
Lims ID: std50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Jun-2020 15:57:30 ALS Bottle#: 18 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:24 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	99	2708216	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	590521	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	937796	50.0	50.0	
13 Ethylene oxide	43	2.176	2.176	0.000	100	1888596	5000.0	4947.5	
18 Ethanol	45	2.637	2.637	0.000	100	416008	3000.0	3066.0	
20 Propene oxide	58	2.761	2.761	0.000	96	11132789	5000.0	5875.2	
25 Isopropyl alcohol	45	3.020	3.020	0.000	99	386162	500.0	494.4	
28 Acetonitrile	41	3.132	3.132	0.000	99	901608	500.0	534.3	
41 Isopropyl ether	87	3.773	3.773	0.000	95	437048	50.0	54.0	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	92	839861	50.0	51.6	
44 Tert-butyl ethyl ether	59	4.036	4.036	0.000	98	1528870	50.0	52.7	
46 Ethyl acetate	43	4.171	4.171	0.000	99	1148340	100.0	98.9	
49 Propionitrile	54	4.208	4.208	0.000	99	1035865	500.0	553.6	
51 Methacrylonitrile	41	4.317	4.317	0.000	92	3896213	500.0	547.4	
64 Tert-amyl methyl ether	73	4.887	4.887	0.000	88	1403456	50.0	53.2	
66 n-Butanol	56	5.175	5.175	0.000	90	461353	1250.0	1160.3	
71 Methyl methacrylate	100	5.513	5.513	0.000	91	334428	100.0	102.6	
75 2-Nitropropane	41	5.869	5.869	0.000	96	253885	100.0	90.4	
86 Tetrahydrothiophene	60	7.023	7.023	0.000	93	198433	100.0	100.5	
98 cis-1,4-Dichloro-2-butene	53	8.523	8.523	0.000	94	361985	100.0	101.7	
115 1,2,3-Trimethylbenzene	105	9.812	9.812	0.000	99	2275647	50.0	56.3	
119 1,3,5-Trichlorobenzene	180	11.117	11.117	0.000	96	724887	50.0	56.2	
166 Ethyl acrylate	55		0.000				ND	ND	
165 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00044	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

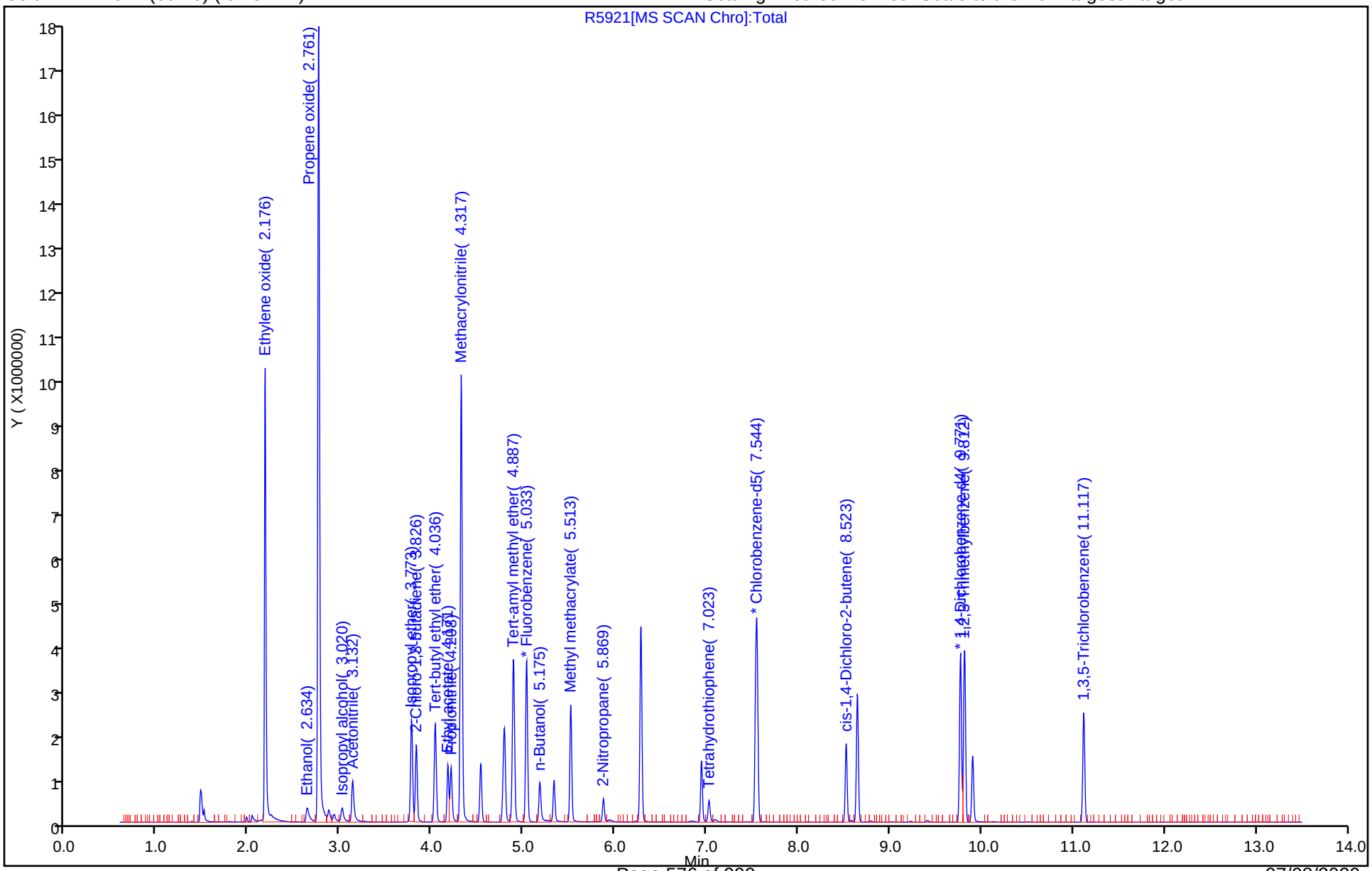
Report Date: 04-Jun-2020 14:24:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5921.D

Injection Date:	03-Jun-2020 15:57:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	std50			Worklist Smp#:	49
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5922.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Jun-2020 16:18:30 ALS Bottle#: 19 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:27 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	99	2735910	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	604648	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	956920	50.0	50.0	
13 Ethylene oxide	43	2.173	2.173	0.000	99	3545629	7500.0	9194.4	e
18 Ethanol	45	2.630	2.630	0.000	99	686788	4500.0	5010.4	
20 Propene oxide	58	2.757	2.757	0.000	96	14333391	7500.0	7487.7	e
25 Isopropyl alcohol	45	3.012	3.012	0.000	99	623751	750.0	784.5	
28 Acetonitrile	41	3.128	3.128	0.000	99	1366683	750.0	801.7	
41 Isopropyl ether	87	3.777	3.777	0.000	94	664638	75.0	81.3	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	92	1238040	75.0	75.0	
44 Tert-butyl ethyl ether	59	4.036	4.036	0.000	98	2385817	75.0	81.4	
46 Ethyl acetate	43	4.171	4.171	0.000	99	1886534	150.0	160.8	
49 Propionitrile	54	4.208	4.208	0.000	99	1547419	750.0	818.6	
51 Methacrylonitrile	41	4.317	4.317	0.000	92	5916841	750.0	822.9	
64 Tert-amyl methyl ether	73	4.887	4.887	0.000	97	2179729	75.0	81.8	
66 n-Butanol	56	5.171	5.171	0.000	87	754494	1875.0	1860.5	
71 Methyl methacrylate	100	5.513	5.513	0.000	92	520220	150.0	157.3	
75 2-Nitropropane	41	5.872	5.872	0.000	98	416745	150.0	145.7	
86 Tetrahydrothiophene	60	7.023	7.023	0.000	93	313018	150.0	154.3	
98 cis-1,4-Dichloro-2-butene	53	8.523	8.523	0.000	92	569534	150.0	156.1	
115 1,2,3-Trimethylbenzene	105	9.816	9.816	0.000	99	3344607	75.0	81.1	
119 1,3,5-Trichlorobenzene	180	11.121	11.121	0.000	96	1064216	75.0	80.8	
165 t-Amyl alcohol	1		0.000				ND	ND	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
e - Potential Peak Saturated

Reagents:

MV-Supp A_00044	Amount Added: 75.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

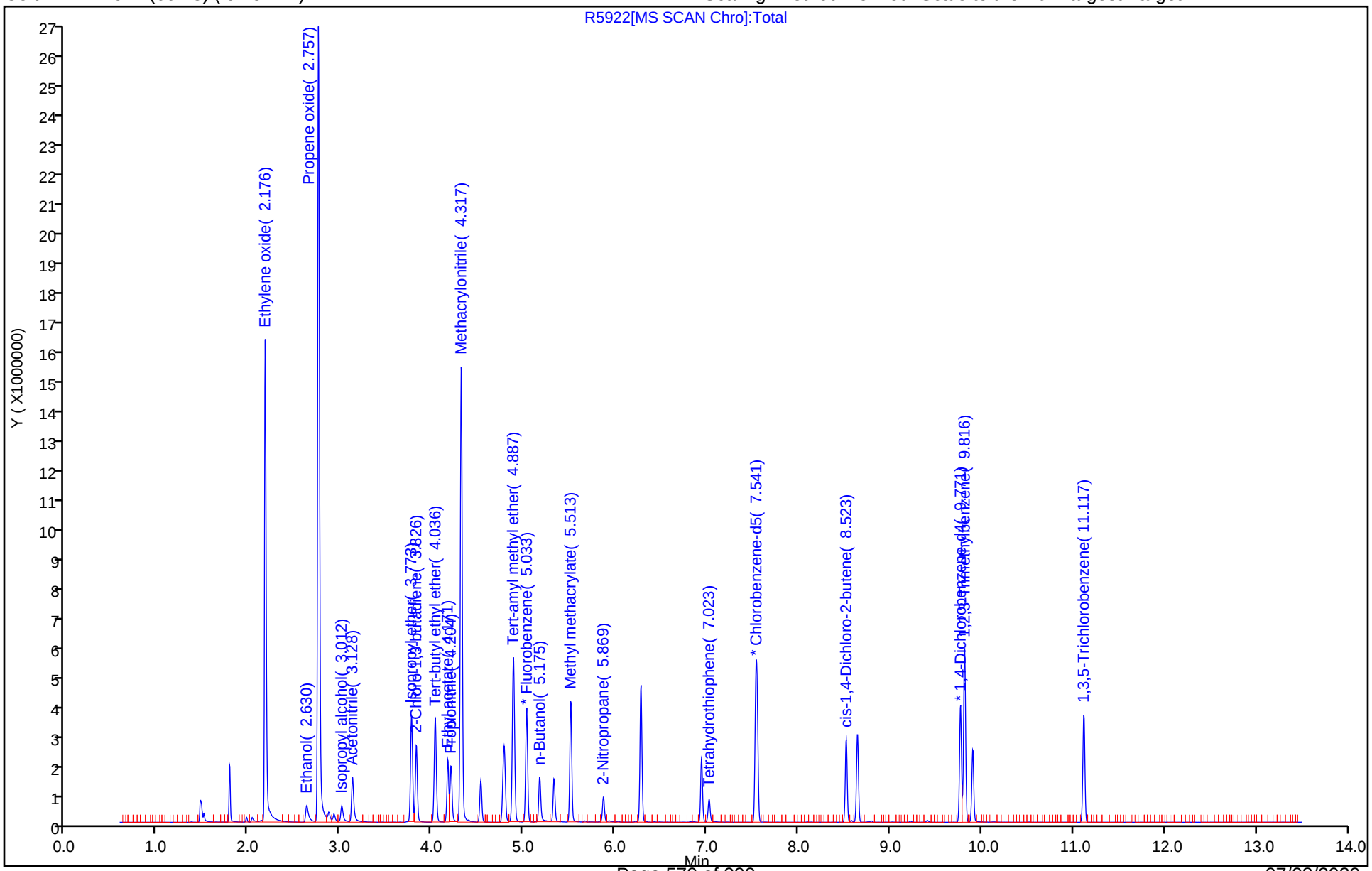
Report Date: 04-Jun-2020 14:24:28 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5922.D

Injection Date:	03-Jun-2020 16:18:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD75			Worklist Smp#:	50
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5923.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Jun-2020 16:40:30 ALS Bottle#: 20 Worklist Smp#: 51
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:31 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

First Level Reviewer: peppinga Date: 04-Jun-2020 07:52:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.029	5.033	-0.004	99	2983232	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	658044	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	1035288	50.0	50.0	
13 Ethylene oxide	43	2.169	2.173	-0.004	97	4551137	10000	10823	e
18 Ethanol	45	2.630	2.630	0.000	100	921371	6000.0	6164.6	
20 Propene oxide	58	2.753	2.757	-0.004	96	14580919	10000	6985.5	e
25 Isopropyl alcohol	45	3.016	3.012	0.004	99	850774	1000.0	978.7	
28 Acetonitrile	41	3.128	3.128	0.000	99	1853092	1000.0	996.9	
41 Isopropyl ether	87	3.777	3.777	0.000	96	903029	100.0	101.3	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	91	1735981	100.0	96.2	
44 Tert-butyl ethyl ether	59	4.032	4.036	-0.004	98	3296465	100.0	103.2	
46 Ethyl acetate	43	4.170	4.171	-0.001	99	2480133	200.0	193.9	
49 Propionitrile	54	4.204	4.208	-0.004	99	2071914	1000.0	1005.2	
51 Methacrylonitrile	41	4.317	4.317	0.000	92	7907398	1000.0	1008.6	
64 Tert-amyl methyl ether	73	4.890	4.887	0.003	89	2999484	100.0	103.2	
66 n-Butanol	56	5.175	5.171	0.004	87	1027535	2500.0	2316.5	
71 Methyl methacrylate	100	5.512	5.513	-0.001	92	713956	200.0	197.7	
75 2-Nitropropane	41	5.872	5.872	0.000	97	589317	200.0	188.5	
86 Tetrahydrothiophene	60	7.023	7.023	0.000	92	417783	200.0	188.9	
98 cis-1,4-Dichloro-2-butene	53	8.523	8.523	0.000	91	775981	200.0	196.4	
115 1,2,3-Trimethylbenzene	105	9.816	9.816	0.000	99	4699646	100.0	105.3	
119 1,3,5-Trichlorobenzene	180	11.117	11.121	-0.004	96	1472968	100.0	103.4	
166 Ethyl acrylate	55		0.000				ND	ND	
165 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

e - Potential Peak Saturated

Reagents:

MV-Supp A_00044	Amount Added: 100.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

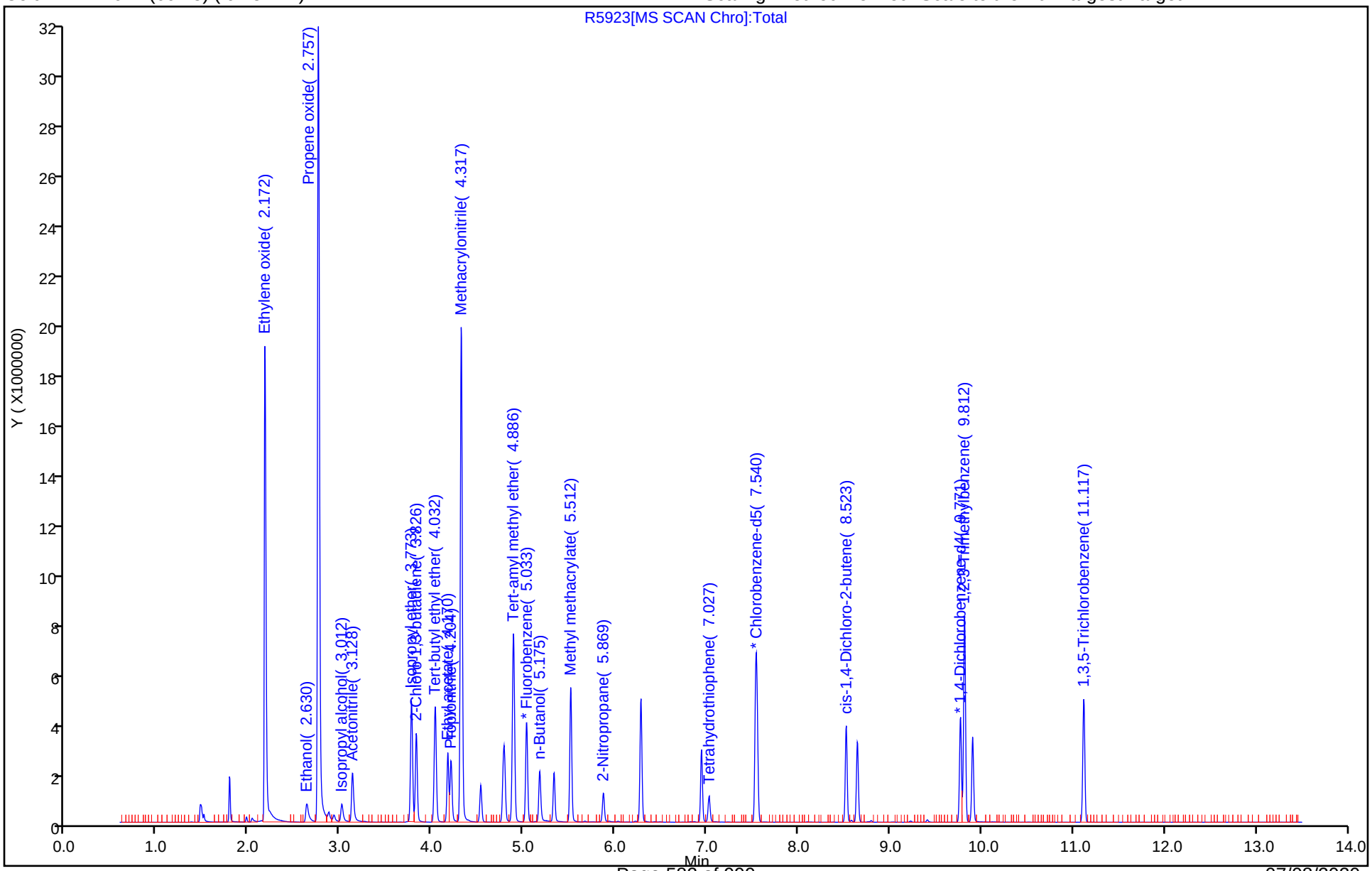
Report Date: 04-Jun-2020 14:24:31 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5923.D

Injection Date:	03-Jun-2020 16:40:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD100			Worklist Smp#:	51
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Jun-2020 17:01:30 ALS Bottle#: 21 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:34 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

First Level Reviewer: sumichrastr Date: 03-Jun-2020 22:14:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	99	2927720	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	646188	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	985406	50.0	50.0	
13 Ethylene oxide	43	2.161	2.173	-0.012	95	7471398	20000	18105	e
18 Ethanol	45	2.637	2.630	0.007	100	1867039	12000	12729	
20 Propene oxide	58	2.746	2.757	-0.011	96	19191662	20000	9368.8	e
25 Isopropyl alcohol	45	3.020	3.012	0.008	99	1820540	2000.0	2122.2	
28 Acetonitrile	41	3.132	3.128	0.004	99	3845024	2000.0	2107.7	
41 Isopropyl ether	87	3.773	3.777	-0.004	95	1906976	200.0	217.9	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	91	3611386	200.0	203.2	
44 Tert-butyl ethyl ether	59	4.032	4.036	-0.004	98	6878565	200.0	219.4	
46 Ethyl acetate	43	4.170	4.171	-0.001	99	5206134	400.0	414.7	
49 Propionitrile	54	4.208	4.208	0.000	99	4389110	2000.0	2169.7	
51 Methacrylonitrile	41	4.317	4.317	0.000	88	15036956	2000.0	1954.4	e
64 Tert-amyl methyl ether	73	4.890	4.887	0.003	99	6320850	200.0	221.5	
66 n-Butanol	56	5.175	5.171	0.004	87	2341860	5000.0	5341.6	
71 Methyl methacrylate	100	5.512	5.513	-0.001	91	1473817	400.0	414.4	
75 2-Nitropropane	41	5.869	5.872	-0.003	96	1325887	400.0	429.7	
86 Tetrahydrothiophene	60	7.023	7.023	0.000	92	889068	400.0	408.2	
98 cis-1,4-Dichloro-2-butene	53	8.523	8.523	0.000	90	1697292	400.0	449.8	
115 1,2,3-Trimethylbenzene	105	9.816	9.816	0.000	99	9749546	200.0	229.6	
119 1,3,5-Trichlorobenzene	180	11.117	11.121	-0.004	97	3127255	200.0	230.6	
165 t-Amyl alcohol	1		0.000				ND	ND	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

e - Potential Peak Saturated

Reagents:

MV-Supp A_00044	Amount Added: 200.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

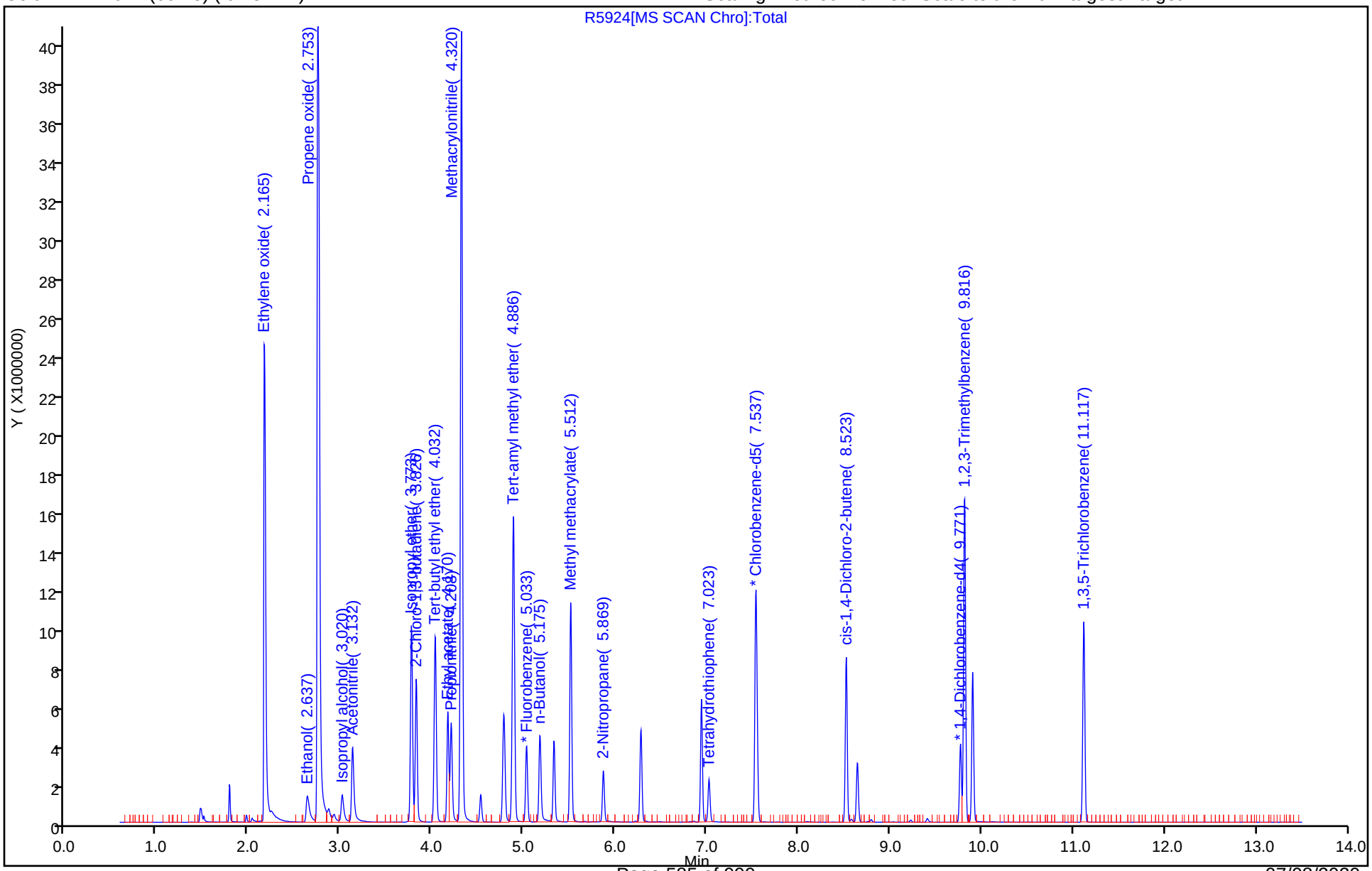
Report Date: 04-Jun-2020 14:24:34 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Injection Date:	03-Jun-2020 17:01:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD200			Worklist Smp#:	52
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-497370/14	R5934.D
Level 2	STD010 280-497370/15	R5935.D
Level 3	STD020 280-497370/16	R5936.D
Level 4	STD050 280-497370/17	R5937.D
Level 5	STD10 280-497370/18	R5938.D
Level 6	ICIS 280-497370/19	R5939.D
Level 7	STD75 280-497370/20	R5940.D
Level 8	STD100 280-497370/21	R5941.D
Level 9	STD200 280-497370/22	R5942.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 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2106	+++++ 0.2006	0.1481 0.2179	0.1856 +++++	0.1712	Ave		0.1890				13.9		15.0			
Chloromethane	0.2224 0.2080	0.1572 0.1999	0.1753 0.2063	0.1665 0.2332	0.1644	Ave		0.1926			0.1000	14.3		15.0			
Vinyl chloride	0.1916 0.1981	0.1724 0.1908	0.1715 0.2041	0.1571 +++++	0.1609	Ave		0.1808				9.8		30.0			
Bromomethane	+++++ 0.0904	0.1035 0.0866	0.1062 0.0971	0.1047 0.1088	0.0879	Ave		0.0982				9.0		15.0			
Chloroethane	+++++ 0.1179	0.1048 0.1130	0.0966 0.1174	0.1008 0.1268	0.0997	Ave		0.1096				9.8		15.0			
Dichlorofluoromethane	+++++ 0.2971	0.3206 0.2838	0.2742 0.2944	0.2385 0.3218	0.2404	Ave		0.2839				11.2		15.0			
Trichlorofluoromethane	0.2242 0.2907	0.2242 0.2825	0.2524 0.2962	0.2438 0.3321	0.2385	Ave		0.2650				14.0		15.0			
Ethyl ether	0.1371 0.1620	0.1478 0.1573	0.1301 0.1678	0.1636 0.1654	0.1443	Ave		0.1528				8.9		15.0			
Acrolein	+++++ 0.0392	0.0323 0.0371	0.0303 0.0396	0.0361 0.0386	0.0330	Ave		0.0358				9.8		15.0			
Freon 113	+++++ 0.0912	+++++ 0.0972	0.0925 0.0974	0.1090 0.1026	0.0874	Ave		0.0968				7.6		15.0			
1,1-Dichloroethene	+++++ 0.1291	0.0910 0.1326	0.1188 0.1399	0.1321 0.1465	0.1227	Lin2	-0.044	0.1367							0.9970		0.9900
Acetone	+++++ 0.0713	0.0969 0.0669	0.0632 0.0706	0.0693 0.0724	0.0636	Ave		0.0718				14.9		15.0			
Iodomethane	0.0834 0.1515	0.0759 +++++	0.0636 +++++	0.0799 +++++	0.0865	Qua	-0.001	0.0705	0.0016209						1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

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 9	LVL 5		B	M1	M2								
Carbon disulfide	+++++ 0.3820	0.3560 0.3876	0.3368 0.4041	0.4031 0.4336	0.3591	Lin1	-0.131	0.4131							0.9970		0.9900
Methyl acetate	+++++ 0.1703	0.1543 0.1569	0.1348 0.1692	0.1532 0.1749	0.1411	Ave		0.1568				9.1		15.0			
Allyl chloride	+++++ 0.2438	0.1972 0.2430	0.2193 0.2545	0.2511 0.2340	0.2327	Ave		0.2344				8.0		15.0			
Methylene Chloride	+++++ 0.1873	0.2175 0.1898	0.1781 0.1946	0.1967 0.1981	0.1759	Ave		0.1923				6.8		15.0			
Tert-butyl alcohol (2-methyl-2-propanol)	+++++ 0.0235	+++++ 0.0230	0.0109 0.0249	0.0183 0.0265	0.0182	Lin2	-0.279	0.0241							0.9930		0.9900
Acrylonitrile	0.0783 0.0959	0.0765 0.0905	0.0759 0.0960	0.0871 0.0950	0.0826	Ave		0.0864				9.7		15.0			
Methyl tert-butyl ether	0.2471 0.5817	0.5057 0.5726	0.4601 0.6069	0.5682 0.6107	0.4976	Lin2	-0.155	0.5830							0.9930		0.9900
trans-1,2-Dichloroethene	0.1507 0.1649	0.1318 0.1729	0.1482 0.1768	0.1706 0.1817	0.1543	Ave		0.1613				10.0		15.0			
Hexane	+++++ 0.6849	+++++ 0.7178	0.5435 0.7218	0.7367 0.7552	0.6315	Lin2	-0.324	0.7238							0.9950		0.9900
Vinyl acetate	+++++ 0.4798	0.3202 0.4592	0.3271 0.5018	0.4025 0.4593	0.3830	Lin1	-0.482	0.4722							0.9980		0.9900
1,1-Dichloroethane	0.3089 0.3334	0.2935 0.3369	0.2929 0.3586	0.3395 0.3554	0.3155	Ave		0.3261			0.1000	7.5		15.0			
2-Butanone (MEK)	+++++ 0.1195	0.0889 0.1106	0.0926 0.1187	0.1023 0.1197	0.0997	Ave		0.1065				11.6		15.0			
cis-1,2-Dichloroethene	+++++ 0.1993	0.1680 0.2041	0.1798 0.2156	0.1981 0.2157	0.1899	Ave		0.1963				8.5		15.0			
2,2-Dichloropropane	+++++ 0.2481	0.1520 0.2593	0.1983 0.2704	0.2502 0.2827	0.2213	Lin2	-0.113	0.2615							0.9950		0.9900
sec-Butyl Alcohol	+++++ 0.0210	+++++ 0.0201	0.0111 0.0218	0.0147 0.0228	0.0153	Lin1	-0.990	0.0221							0.9970		0.9900
Chlorobromomethane	+++++ 0.0941	0.0573 0.0956	0.0612 0.1015	0.0947 0.0986	0.0960	Lin2	-0.046	0.0981							0.9940		0.9900
Tetrahydrofuran	+++++ 0.0779	0.0657 0.0715	0.0622 0.0768	0.0672 0.0787	0.0610	Ave		0.0701				10.1		15.0			
Chloroform	0.3435 0.3444	0.3218 0.3490	0.3034 0.3627	0.3647 0.3670	0.3291	Ave		0.3428				6.3		30.0			
1,1,1-Trichloroethane	+++++ 0.2850	0.2282 0.2966	0.1739 0.3142	0.2868 0.3180	0.2659	Lin1	-0.171	0.3105							0.9980		0.9900
Cyclohexane	+++++ 0.2729	0.2032 0.2739	0.2366 0.2897	0.2735 0.3022	0.2554	Ave		0.2634				11.9		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

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 9	LVL 5		B	M1	M2								
1,1-Dichloropropene	+++++ 0.2647	0.2044 0.2744	0.2163 0.2860	0.2684 0.2890	0.2467	Ave		0.2562				12.2		15.0			
Carbon tetrachloride	+++++ 0.2475	0.1840 0.2550	0.2019 0.2666	0.2465 0.2774	0.2174	Ave		0.2370				13.8		15.0			
Isobutyl alcohol	+++++ 0.0085	0.0047 0.0081	0.0055 0.0088	0.0072 0.0091	0.0067	Lin2	-0.103	0.0083							0.9910		0.9900
Benzene	+++++ 0.7761	0.7113 0.7864	0.6787 0.8258	0.8356 0.8295	0.7148	Ave		0.7698				7.9		15.0			
1,2-Dichloroethane	0.2915 0.2867	0.1759 0.2888	0.2801 0.2999	0.3036 0.2945	0.2675	Ave		0.2765				14.2		15.0			
n-Heptane	+++++ 0.1667	+++++ 0.1649	0.1169 0.1706	0.1751 0.1803	0.1504	Ave		0.1607				13.4		15.0			
Trichloroethene	0.1636 0.1918	0.1685 0.1994	0.1736 0.2069	0.1904 0.2139	0.1813	Ave		0.1877				9.2		15.0			
2-Pentanone	+++++ 0.1848	0.1211 0.1747	0.1247 0.1868	0.1638 0.1892	0.1547	Lin2	-0.274	0.1783							0.9940		0.9900
Methylcyclohexane	+++++ 0.2103	0.1803 0.2165	0.1865 0.2240	0.2181 0.2319	0.1958	Ave		0.2079				8.9		15.0			
1,2-Dichloropropane	+++++ 0.2042	0.0681 0.2083	0.1870 0.2192	0.1988 0.2203	0.1884	Lin1	-0.131	0.2171							0.9990		0.9900
1,4-Dioxane	+++++ 0.0037	+++++ 0.0035	+++++ 0.0037	0.0028 0.0037	0.0031	Ave		0.0034				11.2		15.0			
Dibromomethane	0.1139 0.1308	0.1082 0.1320	0.1244 0.1397	0.1296 0.1397	0.1229	Ave		0.1268				8.4		15.0			
Dichlorobromomethane	0.2097 0.2701	0.2575 0.2768	0.2059 0.2950	0.2634 0.2958	0.2465	Ave		0.2579				12.6		15.0			
2-Chloroethyl vinyl ether	0.0319 0.1577	0.0743 0.1511	0.1096 0.1553	0.1080 0.1720	0.1113	Lin1	-0.101	0.1624							0.9950		0.9900
cis-1,3-Dichloropropene	+++++ 1.4901	0.9050 1.5320	1.0795 1.5979	1.3532 1.6321	1.2797	Lin2	-0.679	1.5156							0.9950		0.9900
4-Methyl-2-pentanone (MIBK)	0.1568 0.2348	0.1493 0.2231	0.1632 0.2400	0.1978 0.2380	0.1964	Lin1	-0.330	0.2352							0.9990		0.9900
Toluene	+++++ 0.8265	0.6936 0.8456	0.6968 0.8819	0.8557 0.8993	0.7677	Ave		0.8084				9.9		30.0			
trans-1,3-Dichloropropene	+++++ 0.3174	0.2018 0.3232	0.2237 0.3498	0.2654 0.3559	0.2614	Lin1	-0.250	0.3450							0.9970		0.9900
Ethyl methacrylate	0.2473 1.3107	0.3481 1.3219	0.8371 1.3681	1.1332 1.3891	1.0646	Lin1	-0.848	1.3651							0.9990		0.9900
1,1,2-Trichloroethane	0.1316 0.1845	0.1742 0.1883	0.1583 0.2013	0.1877 0.1986	0.1719	Ave		0.1774				12.3		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

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 9	LVL 5		B	M1	M2								
Tetrachloroethene	0.4492 0.5938	0.4774 0.6402	0.3056 0.6379	0.6321 0.6766	0.5487	Lin1	-0.234	0.6514							0.9970		0.9900
1,3-Dichloropropane	0.7996 1.5484	1.3809 1.5778	1.3020 1.6321	1.6073 1.6236	1.4246	Lin2	-0.367	1.5900							0.9960		0.9900
2-Hexanone	0.2769 0.7498	0.4793 0.7221	0.5133 0.7375	0.6336 0.7432	0.6001	Lin2	-0.898	0.7022							0.9940		0.9900
Chlorodibromomethane	0.9092 0.9175	0.5726 0.9569	0.7157 0.9758	0.8960 0.9952	0.8042	Lin1	-0.264	0.9732							0.9980		0.9900
1,2-Dibromoethane	+++++ 0.9216	0.4869 0.9370	0.3228 0.9480	0.8781 0.9728	0.8263	Lin1	-0.752	0.9605							0.9990		0.9900
1-Chlorohexane	+++++ 1.1337	0.7424 1.1770	1.0402 1.1647	1.1716 1.2448	1.0289	Ave		1.0879				14.4		15.0			
Chlorobenzene	2.2945 2.3201	2.1116 2.4061	1.8902 2.4620	2.4395 2.5107	2.1761	Ave		2.2901			0.3000	8.7		15.0			
1,1,1,2-Tetrachloroethane	0.3382 0.8317	0.7009 0.8719	0.7088 0.8922	0.8310 0.9033	0.7544	Lin2	-0.248	0.8652							0.9960		0.9900
Ethylbenzene	0.9618 1.2308	1.1374 1.3009	1.0597 1.2998	0.8301 1.3330	1.1139	Ave		1.1408				14.9		30.0			
m-Xylene & p-Xylene	0.8369 1.5526	0.8250 1.6054	0.6513 1.6248	1.5503 1.6582	1.4300	Lin1	-0.767	1.6317							0.9990		0.9900
o-Xylene	1.3318 1.5068	0.6997 1.5785	1.2572 1.5781	1.4814 1.6117	1.4112	Lin1	-0.473	1.5863							0.9990		0.9900
Styrene	2.1159 2.6579	2.1678 2.8028	2.0875 2.8202	2.6192 2.8529	2.4004	Ave		2.5027				12.6		15.0			
Bromoform	+++++ 0.6139	0.2838 0.6324	0.2685 0.6613	0.4827 0.6908	0.5090	Lin1	-0.650	0.6680			0.1000				0.9970		0.9900
Isopropylbenzene	2.2658 2.5806	2.0354 2.7303	2.1727 2.6712	2.6102 2.8154	2.2621	Ave		2.4604				11.3		15.0			
Cyclohexanone	0.0214 0.0716	0.0421 0.0711	0.0423 0.0740	0.0620 0.0777	0.0602	Lin1	-1.585	0.0750							0.9980		0.9900
1,1,2,2-Tetrachloroethane	+++++ 0.8579	0.6511 0.8443	0.3308 0.8545	0.8028 0.8548	0.7164	Lin1	-0.506	0.8559			0.3000				0.9990		0.9900
Bromobenzene	0.4356 0.6136	0.6101 0.6376	0.5291 0.6356	0.6266 0.6501	0.5653	Ave		0.5893				11.8		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2445	+++++ 0.2439	0.0843 0.2482	0.2394 0.2502	0.2040	Lin2	-0.309	0.2539							0.9900		0.9900
1,2,3-Trichloropropane	0.1653 0.2637	0.1637 0.2595	0.1188 0.2637	0.2756 0.2676	0.2226	Lin1	-0.100	0.2650							0.9990		0.9900
N-Propylbenzene	0.5413 0.6754	0.6392 0.7090	0.5792 0.7007	0.6937 0.7281	0.6342	Ave		0.6556				9.6		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

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 9	LVL 5		B	M1	M2								
2-Chlorotoluene	0.6168 0.6017	0.4937 0.6203	0.5978 0.6193	0.5923 0.6444	0.5443	Ave		0.5923				7.8		15.0			
1,3,5-Trimethylbenzene	2.0278 2.1808	1.6987 2.3075	1.7119 2.2799	2.1408 2.3755	2.0082	Ave		2.0812				11.8		15.0			
4-Chlorotoluene	0.6517 0.6346	0.4654 0.6529	0.5069 0.6590	0.6382 0.6784	0.5623	Ave		0.6055				12.5		15.0			
tert-Butylbenzene	1.6117 1.7820	1.5282 1.8561	1.4142 1.8242	1.8065 1.9320	1.5842	Ave		1.7044				10.2		15.0			
1,2,4-Trimethylbenzene	2.0607 2.2747	1.8039 2.3687	1.7336 2.3551	2.1786 2.4316	2.0227	Ave		2.1366				11.7		15.0			
sec-Butylbenzene	0.2481 0.4832	0.3010 0.5207	0.4035 0.5165	0.4703 0.5486	0.4426	Lin2	-0.142	0.4981							0.9930		0.9900
1,3-Dichlorobenzene	0.9880 1.1605	0.9788 1.2339	0.9556 1.2343	1.2258 1.2522	1.0774	Ave		1.1230				11.0		15.0			
4-Isopropyltoluene	1.6181 2.2502	1.6956 2.3423	1.8407 2.3089	2.2093 2.4000	2.0038	Ave		2.0743				14.2		15.0			
1,4-Dichlorobenzene	1.3000 1.2205	0.9345 1.2649	1.0558 1.2460	1.2634 1.2822	1.0967	Ave		1.1849				10.7		15.0			
n-Butylbenzene	0.9671 2.0611	1.4779 2.1718	1.5729 2.1252	1.9936 2.2241	1.7950	Lin2	-0.582	2.0700							0.9950		0.9900
1,2-Dichlorobenzene	1.0939 1.1965	0.9600 1.2424	0.9749 1.2548	1.1770 1.2559	1.0931	Ave		1.1387				10.1		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1827	+++++ 0.1762	0.1061 0.1873	0.1605 0.1980	0.1436	Lin1	-0.220	0.1915							0.9980		0.9900
1,2,4-Trichlorobenzene	0.5767 0.7283	0.5328 0.7535	0.5119 0.7760	0.7109 0.8013	0.6165	Lin1	-0.256	0.7771							0.9980		0.9900
Hexachlorobutadiene	+++++ 0.2414	0.1531 0.2461	0.1574 0.2427	0.1083 0.2611	0.2085	Lin1	-0.217	0.2525							0.9960		0.9900
Naphthalene	+++++ 2.6665	1.9042 2.6537	1.8462 2.7008	2.3124 2.7563	2.2371	Lin2	-0.875	2.5869							0.9930		0.9900
1,2,3-Trichlorobenzene	+++++ 0.7334	0.3760 0.7350	0.5275 0.7496	0.6650 0.7517	0.6125	Lin2	-0.367	0.7286							0.9970		0.9900
Dibromofluoromethane (Surr)	0.2523 0.2552	0.2518 0.2473	0.2554 0.2581	0.2502 0.2480	0.2528	Ave		0.2523				1.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3148 0.3110	0.3149 0.2981	0.3120 0.3123	0.3039 0.3002	0.3119	Ave		0.3088				2.1		15.0			
Toluene-d8 (Surr)	4.3401 4.3402	4.3257 4.3874	4.3293 4.2837	4.2880 4.3985	4.3086	Ave		4.3335				0.9		15.0			
4-Bromofluorobenzene (Surr)	1.0604 1.0435	1.0486 1.0585	1.0461 1.0499	1.0462 1.0385	1.0347	Ave		1.0474				0.8		15.0			

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, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-497370/14	R5934.D
Level 2	STD010 280-497370/15	R5935.D
Level 3	STD020 280-497370/16	R5936.D
Level 4	STD050 280-497370/17	R5937.D
Level 5	STD10 280-497370/18	R5938.D
Level 6	ICIS 280-497370/19	R5939.D
Level 7	STD75 280-497370/20	R5940.D
Level 8	STD100 280-497370/21	R5941.D
Level 9	STD200 280-497370/22	R5942.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 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 409632	+++++ 621530	11299 881259	34633 +++++	66543	+++++ 50.0	+++++ 75.0	2.00 100	5.00 +++++	10.0
Chloromethane	FB	Ave	4207 404542	5776 619498	13379 834231	31064 1953201	63915	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	3625 385326	6333 591058	13085 825176	29302 +++++	62531	0.500 50.0	1.00 75.0	2.00 100	5.00 +++++	10.0
Bromomethane	FB	Ave	+++++ 175765	3803 268302	8106 392737	19538 911320	34152	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloroethane	FB	Ave	+++++ 229375	3852 350137	7375 474713	18806 1061969	38752	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	+++++ 577828	11780 879181	20927 1190551	44492 2695128	93465	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	4241 565395	8239 875320	19260 1197815	45486 2781214	92719	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	2594 315092	5429 487502	9926 678718	30523 1385343	56087	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	+++++ 752126	11735 1135574	22863 1581107	66546 3195524	126545	+++++ 494	9.88 741	19.8 988	49.4 1975	98.8
Freon 113	FB	Ave	+++++ 177274	+++++ 301273	7059 394052	20333 859453	33983	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
1,1-Dichloroethene	FB	Lin2	+++++ 251145	3345 410853	9067 565640	24646 1226618	47694	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Ave	+++++ 554718	14244 828819	19302 1142207	51693 2426297	98875	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
Iodomethane	FB	Qua	1577 294687	2788 +++++	4854 +++++	14911 +++++	33628	0.500 50.0	1.00 +++++	2.00 +++++	5.00 +++++	10.0
Carbon disulfide	FB	Lin1	+++++ 742984	13080 1200837	25703 1634140	75201 3631091	139587	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methyl acetate	FB	Ave	+++++ 662462	11340 972033	20571 1368321	57180 2929415	109720	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
Allyl chloride	FB	Ave	+++++ 474164	7245 752757	16738 1029230	46847 1959220	90473	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Ave	+++++ 364237	7992 588151	13595 787027	36704 1658679	68384	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tert-butyl alcohol (2-methyl-2-propanol)	FB	Lin2	+++++ 457185	+++++ 711561	8333 1008636	34180 2220566	70642	+++++ 500	+++++ 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	14802 1864213	28102 2804695	57940 3883195	162533 7958319	321099	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Lin2	4674 1131262	18580 1774093	35114 2454076	106006 5113933	193439	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	2850 320689	4843 535577	11306 714919	31820 1521944	59992	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Lin2	+++++ 299175	+++++ 491175	9304 666456	30254 1431321	54814	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Lin1	+++++ 1866194	23528 2845388	49921 4058461	150181 7692032	297748	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	5843 648387	10782 1043906	22351 1449951	63332 2976631	122657	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	+++++ 929831	13071 1370901	28263 1919715	76337 4010780	154969	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 387645	6174 632384	13725 871696	36950 1806348	73841	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Lin2	+++++ 482598	5584 803491	15132 1093596	46675 2367640	86014	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Lin1	+++++ 1224968	+++++ 1867573	25335 2645112	82125 5716871	178430	+++++ 1500	+++++ 2250	60.0 3000	150 6000	300
Chlorobromomethane	FB	Lin2	+++++ 182982	2104 296176	4672 410633	17658 826047	37325	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	+++++ 302861	4825 443039	9495 620937	25063 1318248	47421	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
Chloroform	FB	Ave	6497 669713	11823 1081246	23155 1466675	68038 3073639	127936	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Lin1	+++++ 554338	8385 919094	13274 1270514	53514 2662765	103348	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	+++++ 530766	7467 848677	18053 1171430	51032 2531185	99298	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	+++++ 514823	7510 850219	16505 1156339	50071 2420141	95921	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	+++++ 481440	6761 790001	15410 1078039	45985 2322959	84503	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Isobutyl alcohol	FB	Lin2	+++++ 412831	4282 625837	10453 889372	33424 1911949	65190	+++++ 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	+++++ 1509328	26133 2436664	51794 3339187	155881 6946633	277885	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Ave	5513 557686	6461 894851	21374 1212771	56648 2466601	103996	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Heptane	FB	Ave	+++++ 324167	+++++ 510945	8921 689807	32660 1510003	58471	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
Trichloroethene	FB	Ave	3095 373053	6191 617945	13251 836451	35512 1791238	70464	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Lin2	+++++ 1437855	17797 2165444	38060 3021725	122214 6336171	240528	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
Methylcyclohexane	FB	Ave	+++++ 409049	6626 670766	14236 905748	40691 1941740	76102	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Lin1	+++++ 397149	2502 645330	14270 886238	37083 1845231	73243	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	+++++ 145310	+++++ 216186	+++++ 301796	10492 622225	24345	+++++ 1000	+++++ 1500	+++++ 2000	100 4000	200
Dibromomethane	FB	Ave	2154 254437	3977 408905	9490 564920	24182 1170253	47769	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorobromomethane	FB	Ave	3967 525336	9460 857486	15716 1192709	49138 2477585	95827	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Lin1	603 306786	2730 468256	8366 628028	20156 1440304	43275	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZ d5	Lin2	+++++ 650841	7414 1048269	18479 1475436	55571 3093208	111077	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Methyl-2-pentanone (MIBK)	FB	Lin1	11862 1826904	21941 2765281	49827 3881612	147610 7971605	305457	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	+++++ 1607394	25485 2619953	53173 3566053	159641 7531083	298453	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Lin1	+++++ 617218	7416 1001465	17074 1414422	49517 2980073	101622	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Lin1	1034 572511	2852 904501	14330 1263285	46539 2632675	92408	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	2490 358838	6399 583484	12081 814039	35025 1663189	66827	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Lin1	1878 259360	3911 438052	5232 589063	25960 1282320	47623	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Lin2	3343 676339	11313 1079616	22288 1507080	66007 3077161	123654	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Lin2	4630 1310041	15706 1976468	35149 2723877	104084 5634090	208343	2.00 200	4.00 300	8.00 400	20.0 800	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorodibromomethane	CBNZ d5	Lin1	3801 400744	4691 654747	12252 901021	36798 1886231	69803	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromoethane	CBNZ d5	Lin1	+++++ 402553	3989 641124	5526 875355	36063 1843644	71720	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Ave	+++++ 495205	6082 805385	17807 1075440	48113 2359274	89305	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chlorobenzene	CBNZ d5	Ave	9593 1013413	17299 1646406	32356 2273338	100184 4758333	188888	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Lin2	1414 363291	5742 596632	12133 823815	34126 1711945	65483	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylbenzene	CBNZ d5	Ave	4021 537585	9318 890154	18140 1200243	34089 2526267	96686	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZ d5	Lin1	3499 678178	6759 1098514	11149 1500288	63666 3142656	124127	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZ d5	Lin1	5568 658148	5732 1080082	21521 1457172	60835 3054460	122489	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZ d5	Ave	8846 1160938	17759 1917870	35734 2604123	107562 5406930	208354	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZ d5	Lin1	+++++ 268145	2325 432738	4596 610659	19824 1309220	44181	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isopropylbenzene	DCBd 4	Ave	14532 1738855	25265 2869779	56881 3823108	164627 8177943	307847	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZ d5	Lin1	3582 1251685	13792 1945579	28955 2731585	101917 5890455	208866	20.0 2000	40.0 3000	80.0 4000	200 8000	400
1,1,2,2-Tetrachloroethane	DCBd 4	Lin1	+++++ 578062	8082 887393	8660 1222974	50633 2482780	97490	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd 4	Ave	2794 413484	7573 670219	13852 909707	39518 1888269	76925	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin2	+++++ 164720	+++++ 256347	2208 355206	15101 726891	27766	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichloropropane	DCBd 4	Lin1	1060 177668	2032 272758	3109 377426	17385 777405	30291	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd 4	Ave	3472 455106	7934 745240	15163 1002893	43749 2114863	86305	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chlorotoluene	DCBd 4	Ave	3956 405439	6128 651960	15650 886296	37359 1871649	74076	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	13006 1469480	21085 2425437	44818 3263027	135019 6900028	273283	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Chlorotoluene	DCBd 4	Ave	4180 427621	5777 686279	13270 943203	40249 1970485	76522	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
tert-Butylbenzene	DCBd 4	Ave	10337 1200764	18969 1950975	37024 2610843	113937 5611758	215593	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1 Analy Batch No.: 497370

SDG No.:

Instrument ID: VMS_R1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2020 12:50 Calibration End Date: 06/04/2020 15:41 Calibration ID: 44916

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2,4-Trimethylbenzene	DCBd 4	Ave	13217 1532785	22391 2489768	45387 3370728	137404 7063094	275260	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butylbenzene	DCBd 4	Lin2	1591 325598	3736 547280	10565 739288	29663 1593457	60235	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	6337 781946	12150 1296909	25019 1766566	77308 3637316	146622	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Isopropyltoluene	DCBd 4	Ave	10378 1516210	21047 2461956	48191 3304556	139339 6971165	272689	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	8338 822384	11599 1329544	27640 1783310	79683 3724472	149246	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Butylbenzene	DCBd 4	Lin2	6203 1388842	18344 2282780	41178 3041696	125734 6460327	244278	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	7016 806263	11916 1305922	25522 1795921	74233 3648009	148754	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	+++++ 123120	+++++ 185246	2779 268013	10124 574983	19542	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	3699 490743	6613 791977	13402 1110625	44836 2327605	83903	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd 4	Lin1	+++++ 162682	1900 258660	4122 347353	6830 758419	28374	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd 4	Lin2	+++++ 1796762	23636 2789332	48334 3865544	145842 8006274	304440	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichlorobenzene	DCBd 4	Lin2	+++++ 494202	4667 772547	13811 1072926	41940 2183442	83350	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	477178 496238	462509 510916	487336 521815	466690 519230	491356	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	595460 604911	578422 615678	595160 631459	567014 628438	606253	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1814533 1895761	1771881 2001432	1852718 1977707	1760961 2084039	1869916	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	680095 703111	650821 741701	684658 751340	659812 754098	704028	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Jun-2020 12:50:30 ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:46:57 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: peppinga Date: 08-Jun-2020 13:45:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.010	-0.004	99	1891556	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	418082	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	641371	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	92	477178	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	595460	50.0	51.0	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1814533	50.0	50.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.620	8.620	0.000	84	680095	50.0	50.6	
10 Dichlorodifluoromethane	85	1.663	1.655	0.008	1	3061	0.5000	0.4281	
11 Chloromethane	50	1.831	1.828	0.003	98	4207	0.5000	0.5774	a
12 Vinyl chloride	62	1.921	1.921	0.000	93	3625	0.5000	0.5300	
14 Bromomethane	94	2.206	2.191	0.015	21	2826	0.5000	0.7611	
15 Chloroethane	64	2.289	2.285	0.004	17	1198	0.5000	0.2888	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	21	2613	0.5000	0.2433	
17 Trichlorofluoromethane	101	2.495	2.487	0.008	14	4241	0.5000	0.4231	
19 Ethyl ether	59	2.697	2.697	0.000	42	2594	0.5000	0.4487	
21 Acrolein	56	2.806	2.806	0.000	38	4694	4.94	3.47	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.877	2.881	-0.004	1	1157	0.5000	0.3161	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	44	2176	0.5000	0.7418	
24 Acetone	43	2.903	2.904	-0.001	96	11000	2.00	4.05	
26 Iodomethane	142	3.001	3.005	-0.004	52	1577	0.5000	0.5998	a
27 Carbon disulfide	76	3.065	3.065	0.000	98	9018	0.5000	0.8943	
29 Methyl acetate	43		3.128				ND	ND	
30 3-Chloro-1-propene	41	3.155	3.151	0.004	37	2000	0.5000	0.2255	
31 Methylene Chloride	84	3.248	3.241	0.007	91	6423	0.5000	0.8831	
32 2-Methyl-2-propanol	59	3.286	3.286	0.000	33	1752	5.00	13.5	a
33 Acrylonitrile	53	3.398	3.402	-0.004	97	14802	5.00	4.53	
34 Methyl tert-butyl ether	73	3.432	3.428	0.004	77	4674	0.5000	0.4779	
35 trans-1,2-Dichloroethene	96	3.443	3.440	0.003	80	2850	0.5000	0.4670	
37 Hexane	57	3.631	3.631	0.000	38	1593	0.5000	0.7112	
39 Vinyl acetate	43	3.736	3.732	0.004	96	12408	1.00	1.71	
40 1,1-Dichloroethane	63	3.751	3.754	-0.003	40	5843	0.5000	0.4737	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.137	4.133	0.004	67	5994	2.00	1.49	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	25	2634	0.5000	0.3546	
48 2,2-Dichloropropane	77	4.170	4.171	-0.001	29	3702	0.5000	0.8079	a
50 sec-Butyl Alcohol	45	4.242	4.246	-0.004	68	5465	15.0	51.4	
52 Chlorobromomethane	128	4.332	4.332	0.000	25	1740	0.5000	0.9409	
53 Tetrahydrofuran	42		4.347				ND	ND	
54 Chloroform	83	4.388	4.392	-0.004	84	6497	0.5000	0.5009	
55 1,1,1-Trichloroethane	97	4.542	4.534	0.008	24	3557	0.5000	0.8520	
56 Cyclohexane	56	4.594	4.590	0.004	86	2087	0.5000	0.2094	
57 1,1-Dichloropropene	75		4.647				ND	ND	
59 Carbon tetrachloride	117	4.643	4.650	-0.007	14	1700	0.5000	0.1896	
60 Isobutyl alcohol	41	4.658	4.662	-0.004	41	1694	12.5	17.9	
62 Benzene	78	4.800	4.797	0.003	88	8088	0.5000	0.2777	
63 1,2-Dichloroethane	62	4.830	4.827	0.003	62	5513	0.5000	0.5270	
65 n-Heptane	43		4.980				ND	ND	
67 Trichloroethene	95	5.280	5.284	-0.004	83	3095	0.5000	0.4358	
68 2-Pentanone	43	5.381	5.385	-0.004	94	5258	2.00	2.32	
69 Methylcyclohexane	55	5.479	5.475	0.004	84	2374	0.5000	0.3018	
70 1,2-Dichloropropane	63		5.486				ND	ND	
72 1,4-Dioxane	88		5.531				ND	ND	
73 Dibromomethane	93	5.561	5.558	0.003	33	2154	0.5000	0.4490	
74 Dichlorobromomethane	83	5.681	5.681	0.000	14	3967	0.5000	0.4067	
76 2-Chloroethyl vinyl ether	63	5.891	5.884	0.007	1	603	0.5000	0.7226	
77 cis-1,3-Dichloropropene	75	6.033	6.026	0.007	89	5261	0.5000	0.8634	a
78 4-Methyl-2-pentanone (MIBK)	43	6.131	6.127	0.004	97	11862	2.00	2.74	
79 Toluene	91		6.315				ND	ND	
80 trans-1,3-Dichloropropene	75		6.491				ND	ND	
81 Ethyl methacrylate	69	6.521	6.513	0.008	1	1034	0.5000	0.7122	
82 1,1,2-Trichloroethane	97	6.667	6.663	0.004	75	2490	0.5000	0.3710	
83 Tetrachloroethene	164	6.757	6.757	0.000	84	1878	0.5000	0.7042	
84 1,3-Dichloropropane	76	6.806	6.810	-0.004	45	3343	0.5000	0.4825	
85 2-Hexanone	43	6.832	6.828	0.004	64	4630	2.00	2.07	
87 Chlorodibromomethane	129	7.001	7.005	-0.004	1	3801	0.5000	0.7383	
88 Ethylene Dibromide	107	7.124	7.121	0.003	36	2265	0.5000	1.07	
89 1-Chlorohexane	91		7.507				ND	ND	
90 Chlorobenzene	112	7.552	7.552	0.000	91	9593	0.5000	0.5010	
91 1,1,1,2-Tetrachloroethane	131	7.627	7.623	0.004	41	1414	0.5000	0.4821	
92 Ethylbenzene	106	7.623	7.627	-0.004	96	4021	0.5000	0.4215	
93 m-Xylene & p-Xylene	106	7.747	7.747	0.000	0	3499	0.5000	0.7263	
94 o-Xylene	106	8.103	8.103	0.000	92	5568	0.5000	0.7180	
95 Styrene	104	8.121	8.122	-0.001	86	8846	0.5000	0.4227	
96 Bromoform	173		8.302				ND	ND	
97 Isopropylbenzene	105	8.448	8.444	0.004	95	14532	0.5000	0.4604	
99 Cyclohexanone	55	8.538	8.541	-0.003	93	3582	20.0	26.8	
100 1,1,2,2-Tetrachloroethane	83	8.736	8.729	0.007	1	4360	0.5000	0.9878	
101 Bromobenzene	156	8.755	8.763	-0.008	85	2794	0.5000	0.3696	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	ND	
103 1,2,3-Trichloropropane	110	8.800	8.793	0.007	1	1060	0.5000	0.6889	
104 N-Propylbenzene	120	8.845	8.841	0.004	97	3472	0.5000	0.4128	
105 2-Chlorotoluene	126	8.935	8.939	-0.004	94	3956	0.5000	0.5207	
106 1,3,5-Trimethylbenzene	105	9.017	9.014	0.003	92	13006	0.5000	0.4872	
107 4-Chlorotoluene	126	9.055	9.055	0.000	94	4180	0.5000	0.5382	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	87	10337	0.5000	0.4728	
110 1,2,4-Trimethylbenzene	105	9.385	9.381	0.004	94	13217	0.5000	0.4822	
111 sec-Butylbenzene	134	9.535	9.542	-0.007	92	1591	0.5000	0.5350	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	24	6337	0.5000	0.4399	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	95	10378	0.5000	0.3900	
114 1,4-Dichlorobenzene	146	9.763	9.767	-0.004	35	8338	0.5000	0.5486	
116 n-Butylbenzene	91	10.090	10.093	-0.003	38	6203	0.5000	0.5149	
117 1,2-Dichlorobenzene	146	10.127	10.123	0.004	92	7016	0.5000	0.4803	
118 1,2-Dibromo-3-Chloropropane	157	1.456	10.899	-9.443	43	914	0.5000	1.52	
120 1,2,4-Trichlorobenzene	180	11.720	11.720	0.000	89	3699	0.5000	0.7009	
121 Hexachlorobutadiene	225	11.866	11.863	0.003	1	1008	0.5000	1.17	Ma
122 Naphthalene	128		11.990				ND	ND	
123 1,2,3-Trichlorobenzene	180		12.211				ND	ND	
S 135 1,2-Dichloroethene, Total (URS)	96				0		1.00	0.8217	
S 139 Xylenes, Total (URS)	1				0		1.00	1.44	
S 138 Xylenes, Total	106				0		1.00	1.44	
S 140 Trihalomethanes, Total	1				0		2.00	1.65	
S 136 1,3-Dichloropropene, Total	1				0		1.00	0.8634	
S 141 1,2-Dichloroethene, Total	1				0		1.00	0.8217	
S 137 Total BTEX	1				0			2.14	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	0.25	Units: uL	
MV-Gas A_00057	Amount Added:	0.10	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

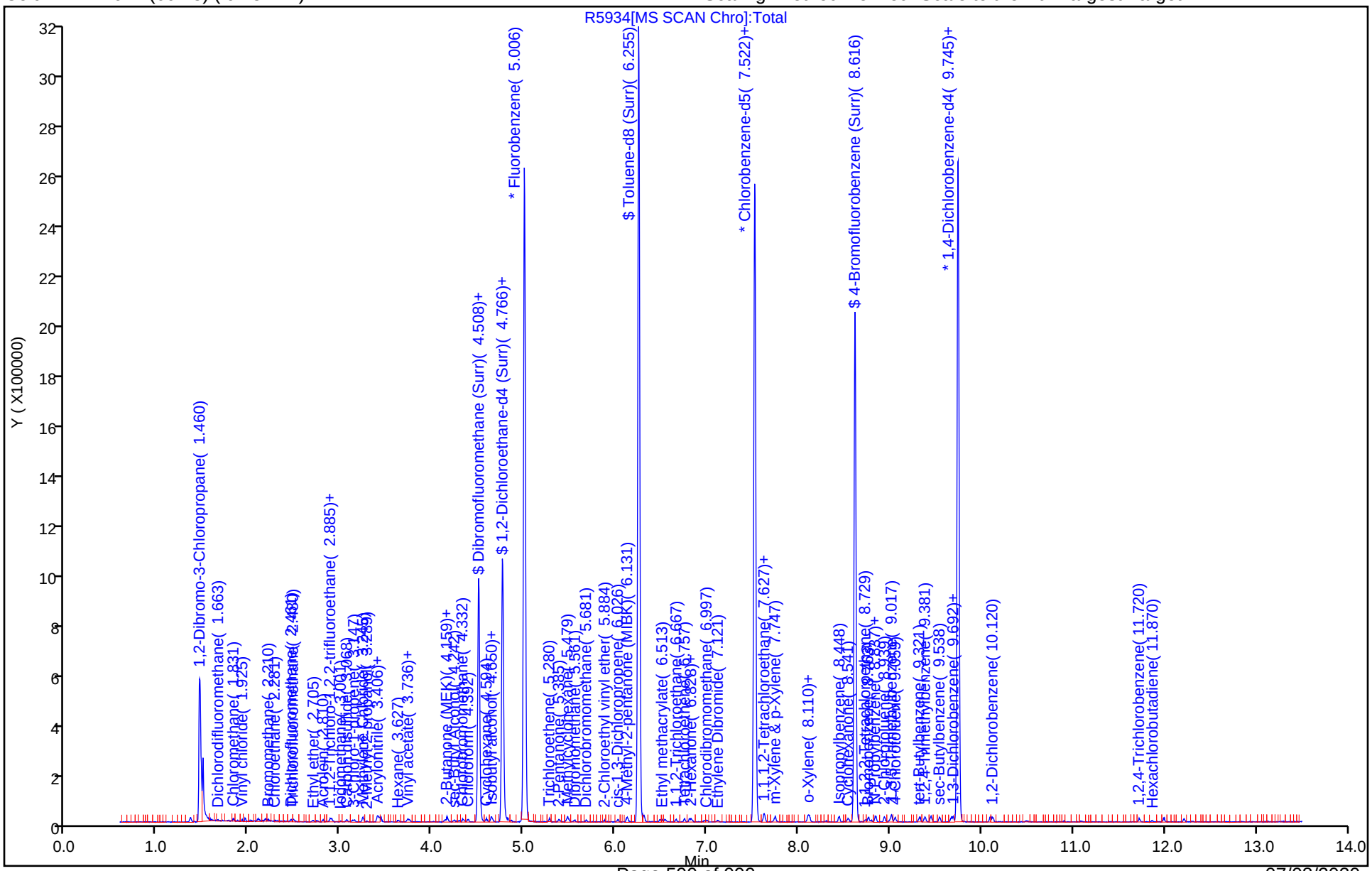
Report Date: 08-Jun-2020 13:46:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D

Injection Date:	04-Jun-2020 12:50:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD005			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

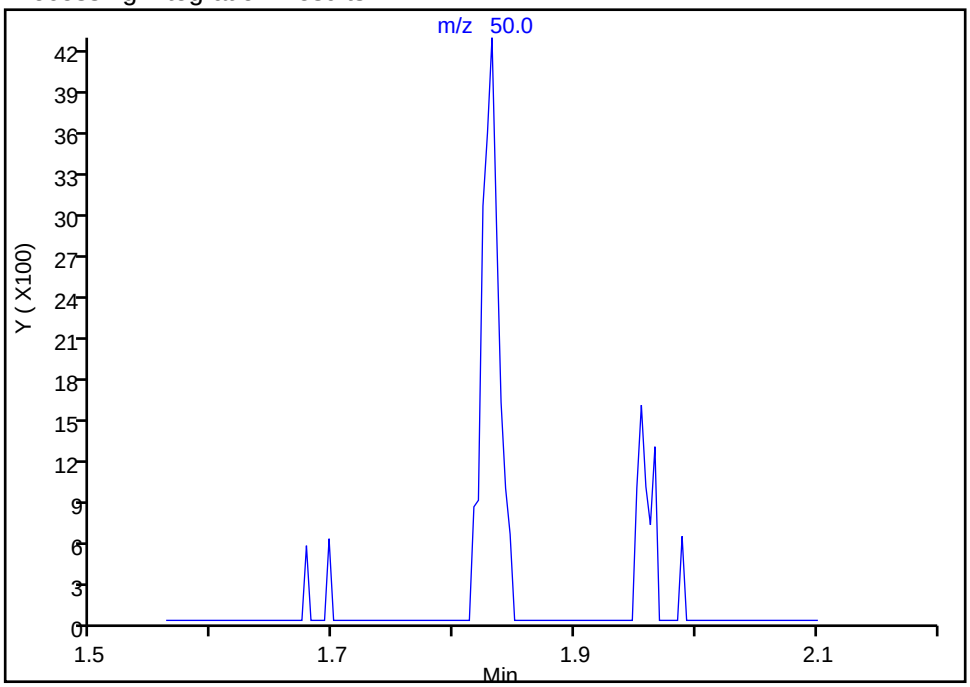
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

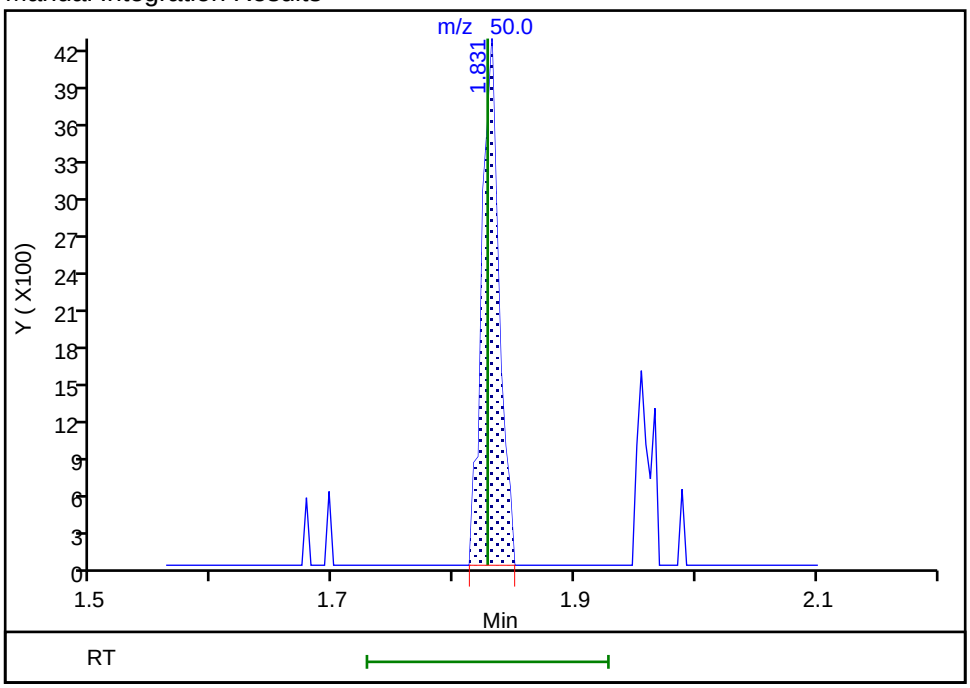
Not Detected
Expected RT: 1.83

Processing Integration Results



Manual Integration Results

RT: 1.83
Area: 4207
Amount: 0.577407
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 07:45:53
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

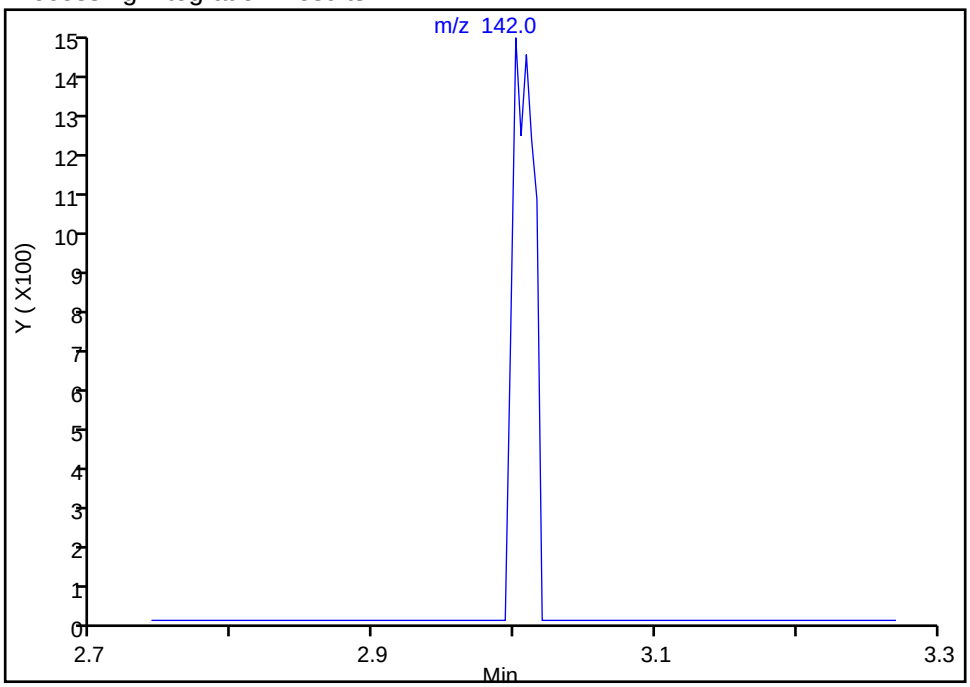
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

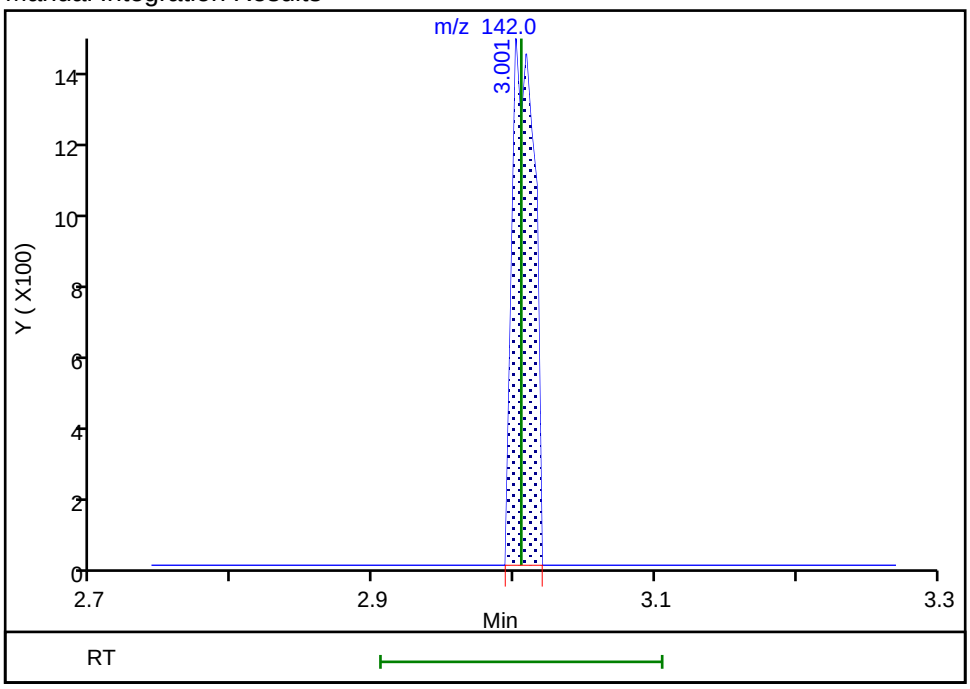
Not Detected
Expected RT: 3.00

Processing Integration Results



Manual Integration Results

RT: 3.00
Area: 1577
Amount: 0.599827
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:32:51
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

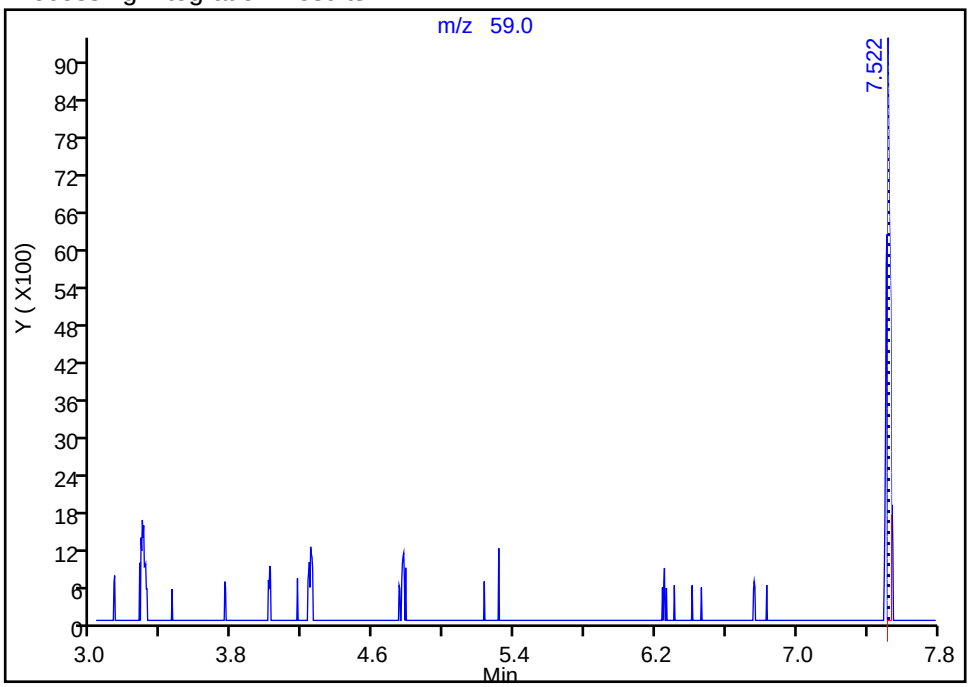
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

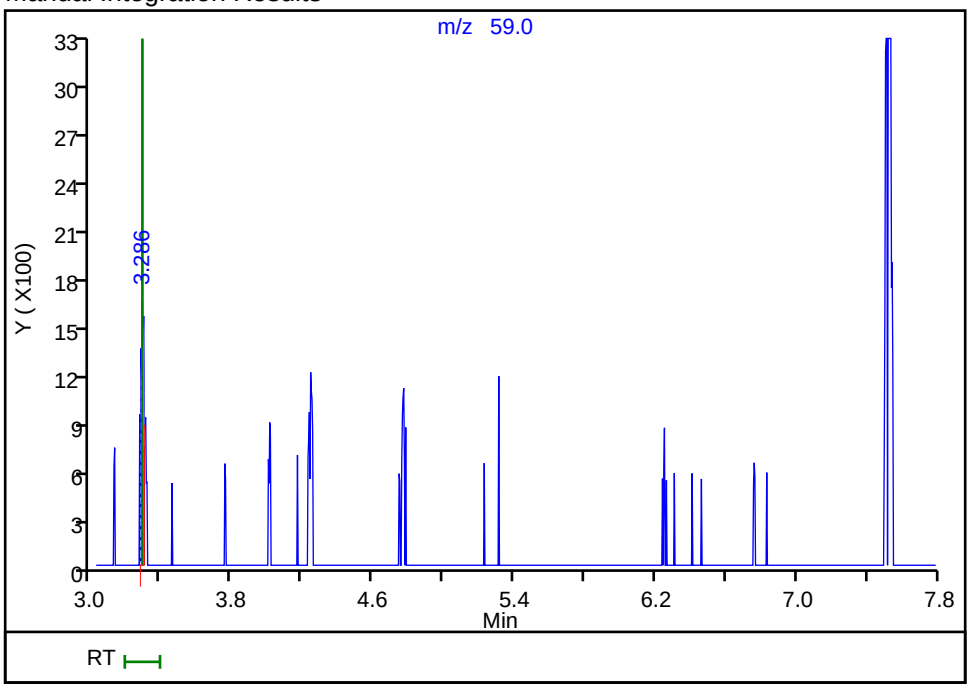
Processing Integration Results

RT: 7.52
Area: 8086
Amount: 17.346185
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 1752
Amount: 13.462352
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:39:26
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

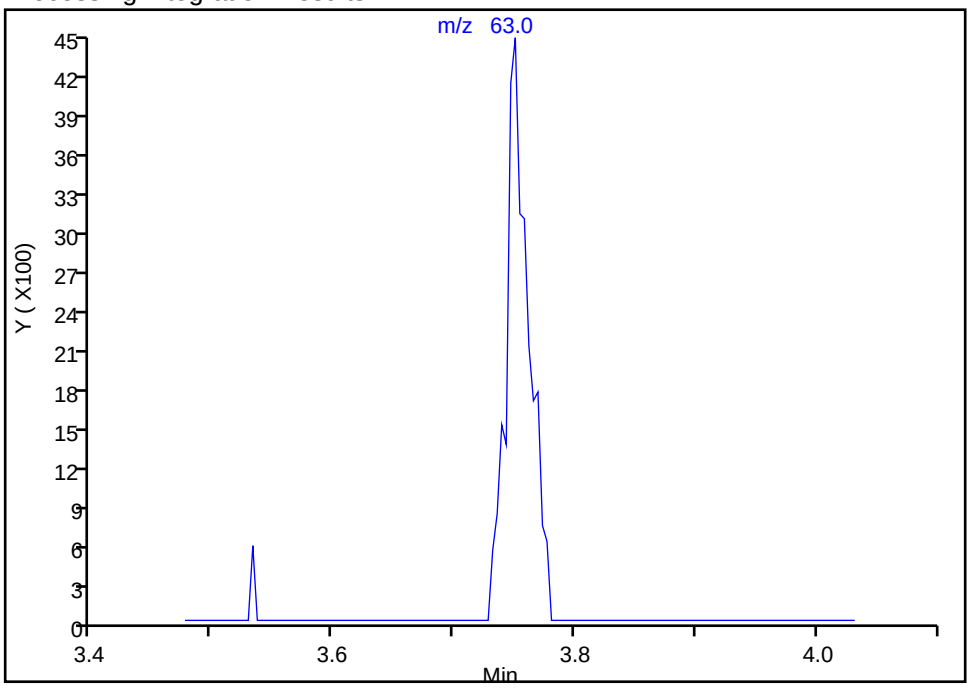
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

40 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

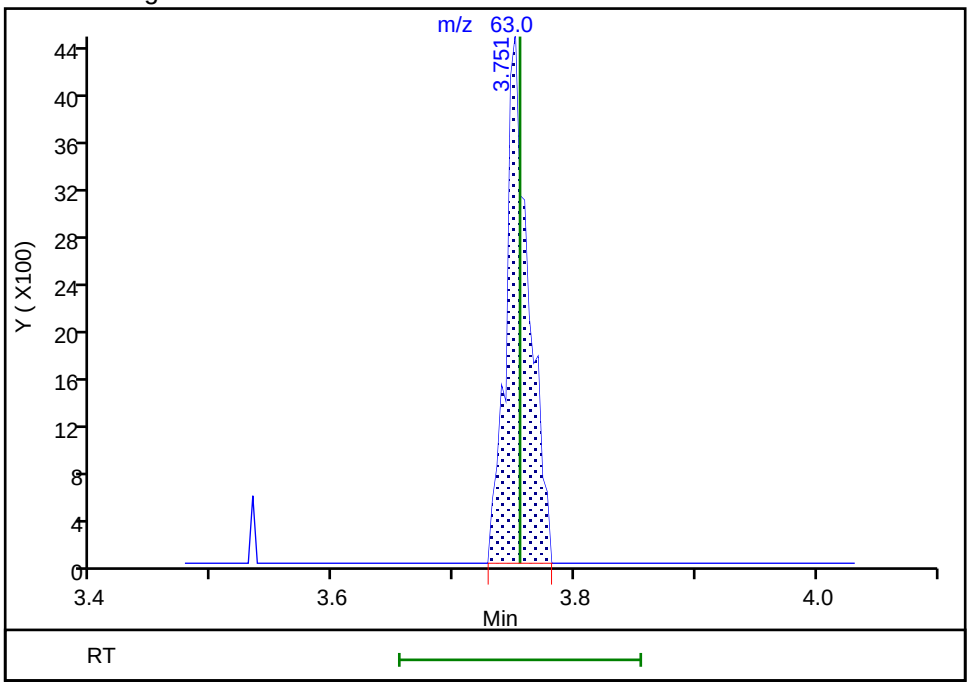
Not Detected
Expected RT: 3.75

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 5843
Amount: 0.473683
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:43:54
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

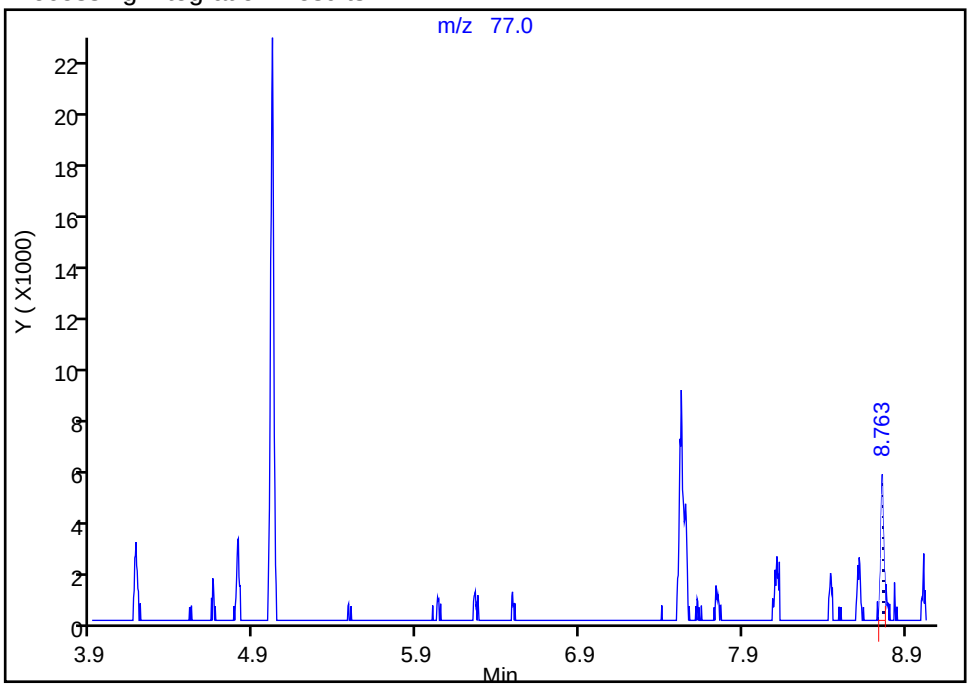
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

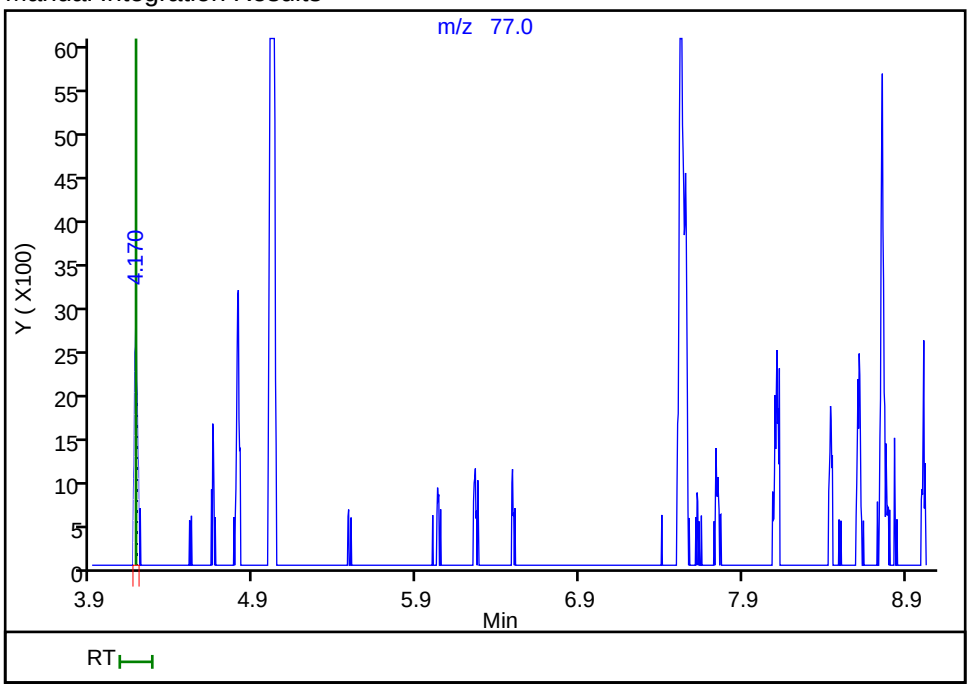
Processing Integration Results

RT: 8.76
Area: 6773
Amount: 1.484025
Amount Units: ug/l



Manual Integration Results

RT: 4.17
Area: 3702
Amount: 0.807875
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 11:15:39
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

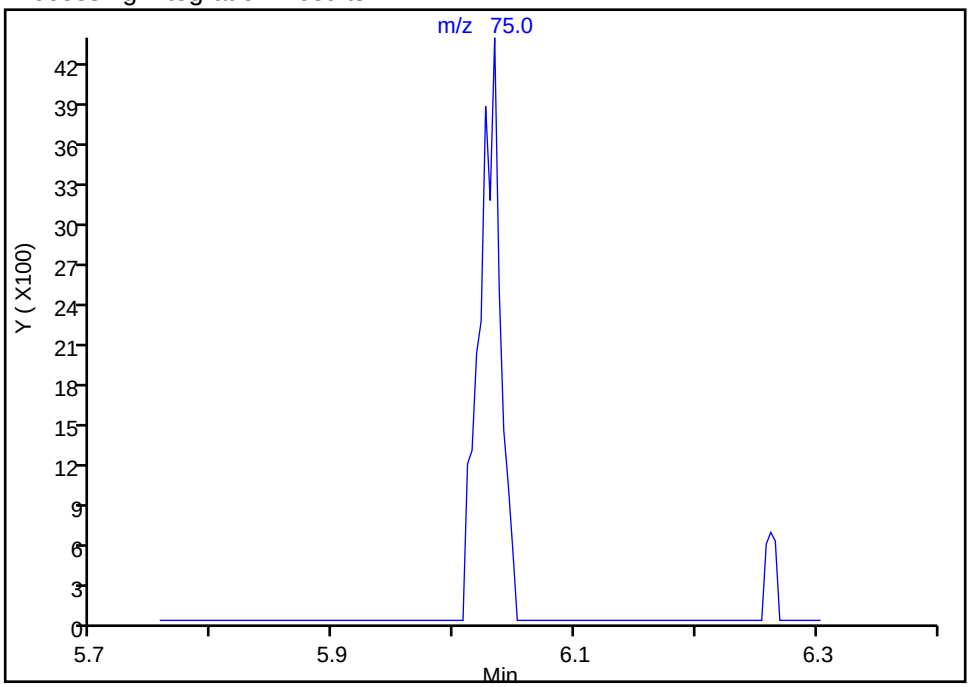
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

77 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

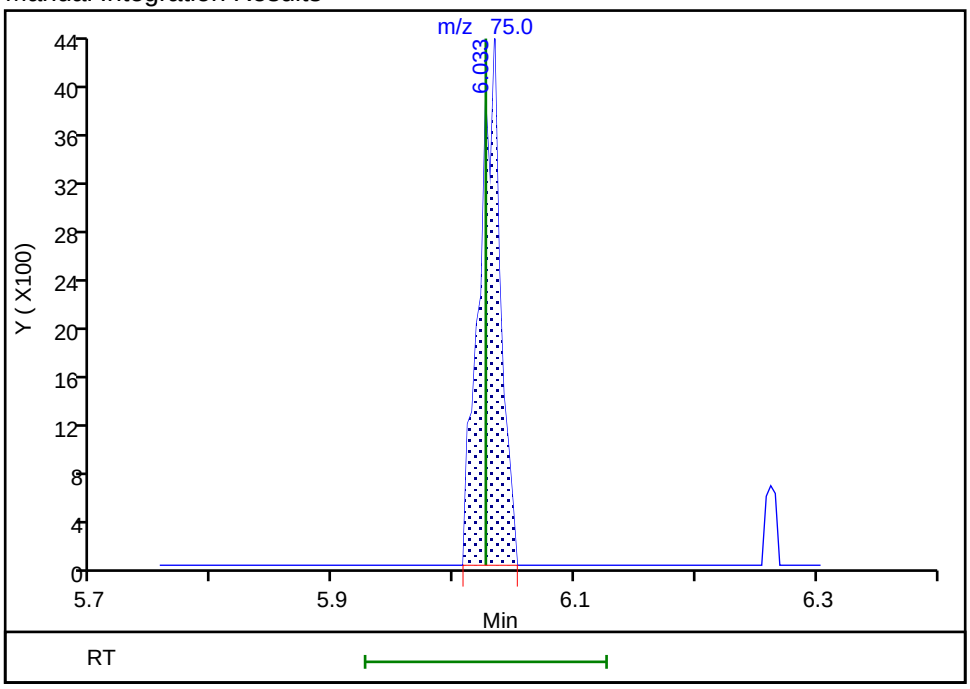
Not Detected
Expected RT: 6.03

Processing Integration Results



Manual Integration Results

RT: 6.03
Area: 5261
Amount: 0.863382
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 12:11:14
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

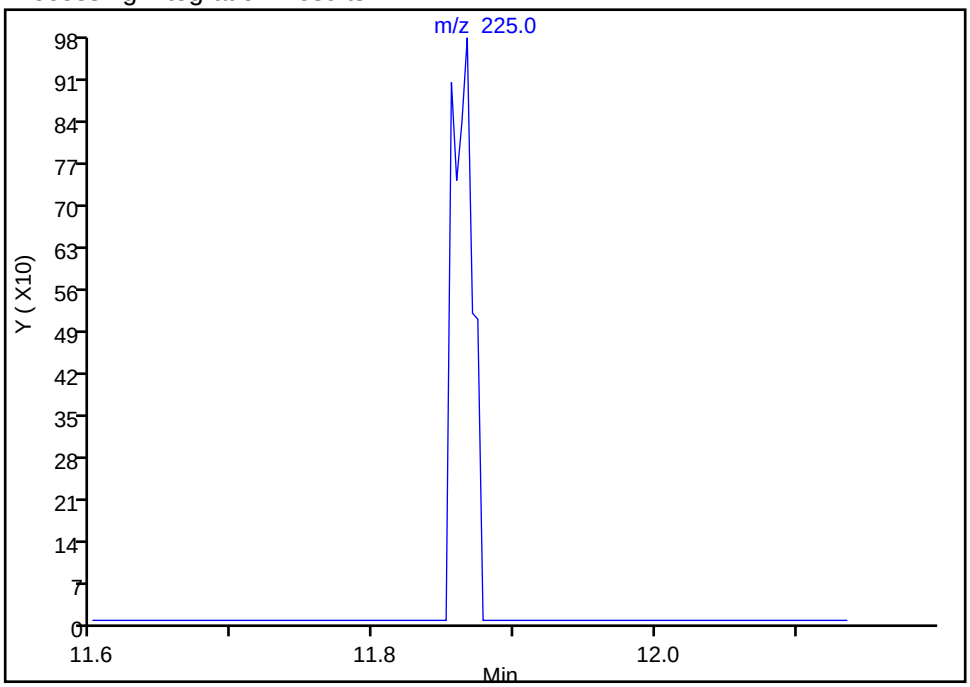
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5934.D
Injection Date: 04-Jun-2020 12:50:30 Instrument ID: VMS_R1
Lims ID: STD005
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

121 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

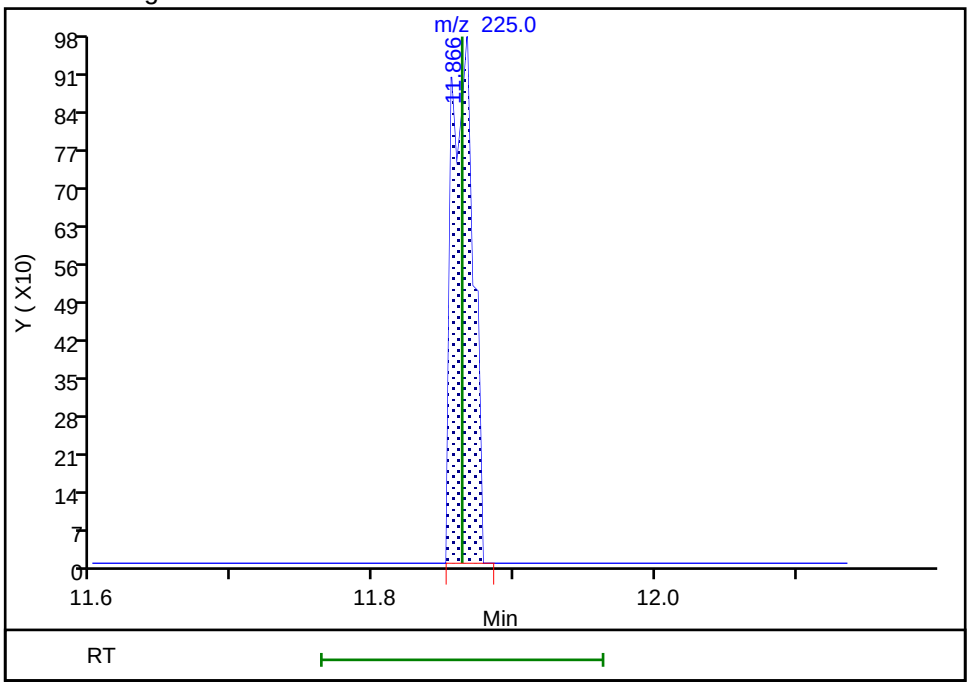
Not Detected
Expected RT: 11.86

Processing Integration Results



Manual Integration Results

RT: 11.87
Area: 1008
Amount: 1.170997
Amount Units: ug/l



Reviewer: peppinga, 08-Jun-2020 13:46:04
Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Jun-2020 13:12:30 ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:19 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: peppinga Date: 04-Jun-2020 14:00:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	99	1837025	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	409615	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	620628	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	91	462509	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.770	4.767	0.003	0	578422	50.0	51.0	
$ 6 Toluene-d8 (Surr)	98	6.259	6.255	0.004	94	1771881	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	84	650821	50.0	50.1	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	95	5109	1.00	0.7357	
11 Chloromethane	50	1.828	1.828	0.000	96	5776	1.00	0.8163	
12 Vinyl chloride	62	1.921	1.921	0.000	95	6333	1.00	0.9534	
14 Bromomethane	94	2.199	2.191	0.008	72	3803	1.00	1.05	
15 Chloroethane	64	2.289	2.285	0.004	48	3852	1.00	0.9562	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	95	11780	1.00	1.13	
17 Trichlorofluoromethane	101	2.491	2.487	0.004	94	8239	1.00	0.8463	
19 Ethyl ether	59	2.694	2.697	-0.003	89	5429	1.00	0.9669	
21 Acrolein	56	2.802	2.806	-0.004	93	11735	9.88	8.93	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.889	2.881	0.008	17	1768	1.00	0.4973	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	49	3345	1.00	0.9870	
24 Acetone	43	2.900	2.904	-0.004	82	14244	4.00	5.40	
26 Iodomethane	142	3.005	3.005	0.000	53	2788	1.00	1.07	Ma
27 Carbon disulfide	76	3.065	3.065	0.000	98	13080	1.00	1.18	
29 Methyl acetate	43	3.128	3.128	0.000	96	11340	2.00	1.97	
30 3-Chloro-1-propene	41	3.151	3.151	0.000	72	7245	1.00	0.8411	
31 Methylene Chloride	84	3.245	3.241	0.004	92	7992	1.00	1.13	
32 2-Methyl-2-propanol	59	3.286	3.286	0.000	57	5584	10.0	17.8	a
33 Acrylonitrile	53	3.398	3.402	-0.004	96	28102	10.0	8.85	
34 Methyl tert-butyl ether	73	3.425	3.428	-0.003	90	18580	1.00	1.13	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	63	4843	1.00	0.8172	
37 Hexane	57	3.631	3.631	0.000	85	4734	1.00	1.25	
39 Vinyl acetate	43	3.732	3.732	0.000	97	23528	2.00	2.38	
40 1,1-Dichloroethane	63	3.755	3.754	0.000	95	10782	1.00	0.9000	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.141	4.133	0.008	99	13071	4.00	3.34	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	79	6174	1.00	0.8560	
48 2,2-Dichloropropane	77	4.171	4.171	0.000	55	5584	1.00	1.01	a
50 sec-Butyl Alcohol	45	4.246	4.246	0.000	96	13154	30.0	61.0	a
52 Chlorobromomethane	128	4.336	4.332	0.004	55	2104	1.00	1.06	
53 Tetrahydrofuran	42	4.343	4.347	-0.004	84	4825	2.00	1.87	
54 Chloroform	83	4.388	4.392	-0.004	88	11823	1.00	0.9386	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	91	8385	1.00	1.28	
56 Cyclohexane	56	4.590	4.590	0.000	81	7467	1.00	0.7715	
57 1,1-Dichloropropene	75	4.643	4.647	-0.004	87	7510	1.00	0.7977	
59 Carbon tetrachloride	117	4.650	4.650	0.000	91	6761	1.00	0.7763	
60 Isobutyl alcohol	41	4.665	4.662	0.003	58	4282	25.0	26.6	
62 Benzene	78	4.800	4.797	0.003	90	26133	1.00	0.9240	
63 1,2-Dichloroethane	62	4.830	4.827	0.003	84	6461	1.00	0.6360	
65 n-Heptane	43	4.977	4.980	-0.003	54	1161	1.00	0.1966	
67 Trichloroethene	95	5.280	5.284	-0.004	91	6191	1.00	0.8977	
68 2-Pentanone	43	5.389	5.385	0.004	97	17797	4.00	4.25	
69 Methylcyclohexane	55	5.464	5.475	-0.011	78	6626	1.00	0.8673	Ma
70 1,2-Dichloropropane	63	5.479	5.486	-0.007	33	2502	1.00	0.9185	
72 1,4-Dioxane	88		5.531				ND	ND	
73 Dibromomethane	93	5.558	5.558	0.000	88	3977	1.00	0.8537	
74 Dichlorobromomethane	83	5.681	5.681	0.000	97	9460	1.00	1.00	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	85	2730	1.00	1.08	
77 cis-1,3-Dichloropropene	75	6.030	6.026	0.004	94	7414	1.00	1.05	a
78 4-Methyl-2-pentanone (MIBK)	43	6.131	6.127	0.004	94	21941	4.00	3.94	
79 Toluene	91	6.311	6.315	-0.004	95	25485	1.00	0.8581	
80 trans-1,3-Dichloropropene	75	6.487	6.491	-0.004	91	7416	1.00	1.31	
81 Ethyl methacrylate	69	6.517	6.513	0.004	26	2852	1.00	0.8766	
82 1,1,2-Trichloroethane	97	6.667	6.663	0.004	88	6399	1.00	0.9818	
83 Tetrachloroethene	164	6.750	6.757	-0.007	91	3911	1.00	1.09	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	85	11313	1.00	1.10	
85 2-Hexanone	43	6.836	6.828	0.008	93	15706	4.00	4.01	
87 Chlorodibromomethane	129	7.005	7.005	0.000	87	4691	1.00	0.8596	
88 Ethylene Dibromide	107	7.125	7.121	0.004	20	3989	1.00	1.29	
89 1-Chlorohexane	91	7.518	7.507	0.011	38	6082	1.00	0.6824	
90 Chlorobenzene	112	7.548	7.552	-0.004	91	17299	1.00	0.9221	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	82	5742	1.00	1.10	
92 Ethylbenzene	106	7.631	7.627	0.004	98	9318	1.00	1.00	
93 m-Xylene & p-Xylene	106	7.747	7.747	0.000	0	6759	1.00	0.9755	
94 o-Xylene	106	8.099	8.103	-0.004	84	5732	1.00	0.7393	
95 Styrene	104	8.122	8.122	0.000	96	17759	1.00	0.8662	
96 Bromoform	173	8.298	8.302	-0.004	24	2325	1.00	1.40	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	25265	1.00	0.8273	
99 Cyclohexanone	55	8.545	8.541	0.004	91	13792	40.0	43.6	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	11	8082	1.00	1.35	
101 Bromobenzene	156	8.763	8.763	0.000	96	7573	1.00	1.04	
102 trans-1,4-Dichloro-2-butene	53		8.766				ND	ND	
103 1,2,3-Trichloropropane	110	8.793	8.793	0.000	27	2032	1.00	0.99	
104 N-Propylbenzene	120	8.841	8.841	0.000	98	7934	1.00	0.9749	
105 2-Chlorotoluene	126	8.931	8.939	-0.008	93	6128	1.00	0.8335	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	91	21085	1.00	0.8162	
107 4-Chlorotoluene	126	9.055	9.055	0.000	96	5777	1.00	0.7687	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	92	18969	1.00	0.8967	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	95	22391	1.00	0.8443	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	3736	1.00	0.8903	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	95	12150	1.00	0.8717	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	95	21047	1.00	0.8174	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	91	11599	1.00	0.7886	
116 n-Butylbenzene	91	10.097	10.093	0.004	97	18344	1.00	1.00	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	92	11916	1.00	0.8430	
118 1,2-Dibromo-3-Chloropropane	157	10.918	10.899	0.019	1	139	1.00	1.21	
120 1,2,4-Trichlorobenzene	180	11.724	11.720	0.004	88	6613	1.00	1.02	
121 Hexachlorobutadiene	225	11.867	11.863	0.004	80	1900	1.00	1.47	a
122 Naphthalene	128	11.990	11.990	0.000	95	23636	1.00	1.07	
123 1,2,3-Trichlorobenzene	180	12.219	12.211	0.008	90	4667	1.00	1.02	
S 135 1,2-Dichloroethene, Total (URS)	96				0		2.00	1.67	
S 139 Xylenes, Total (URS)	1				0		2.00	1.71	
S 138 Xylenes, Total	106				0		2.00	1.71	
S 140 Trihalomethanes, Total	1				0		4.00	4.20	
S 136 1,3-Dichloropropene, Total	1				0		2.00	2.35	
S 141 1,2-Dichloroethene, Total	1				0		2.00	1.67	
S 137 Total BTEX	1				0			4.49	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	0.50	Units: uL	
MV-Gas A_00057	Amount Added:	0.20	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

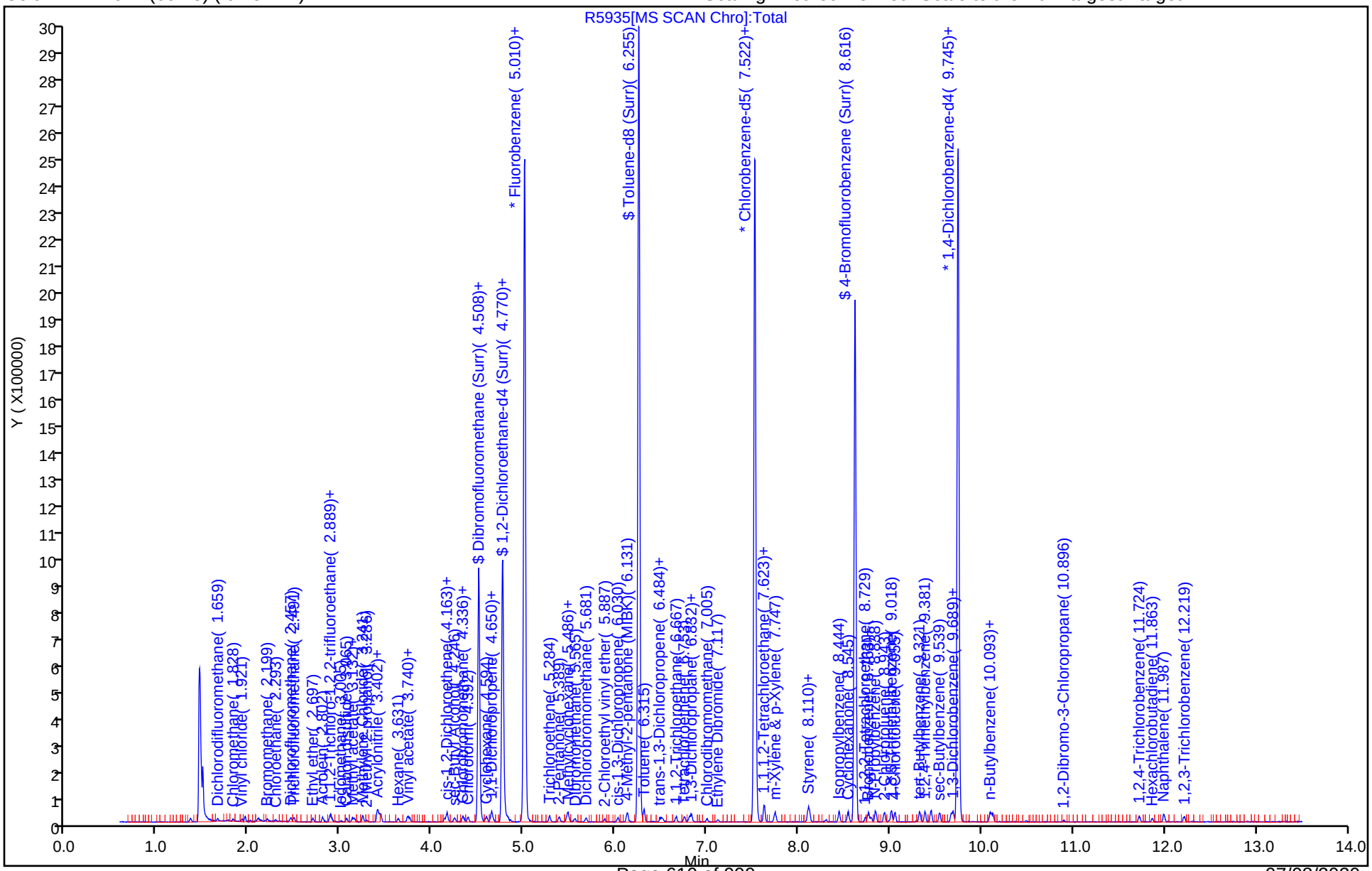
Report Date: 08-Jun-2020 13:48:20 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D

Injection Date:	04-Jun-2020 13:12:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD010			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

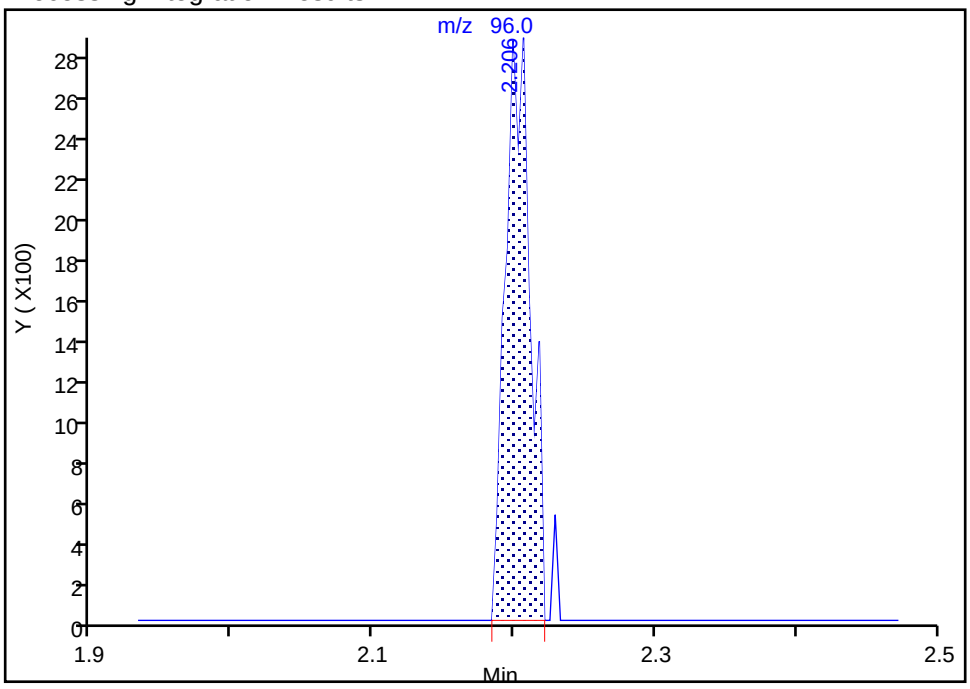
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

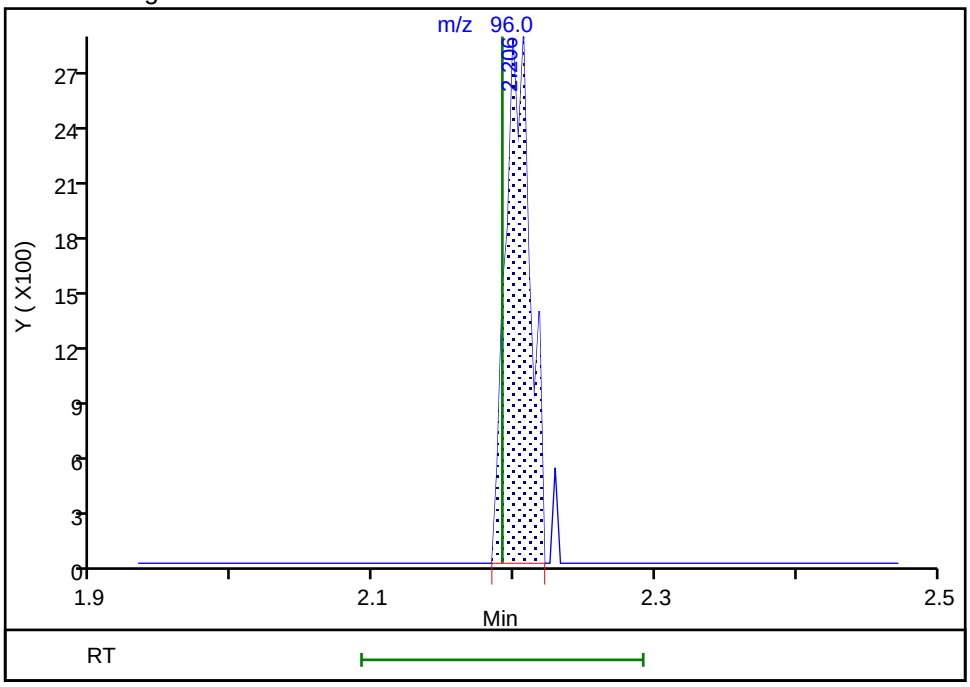
Processing Integration Results

RT: 2.21
Area: 3462
Amount: 1.054581
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 3462
Amount: 1.054581
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:26:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

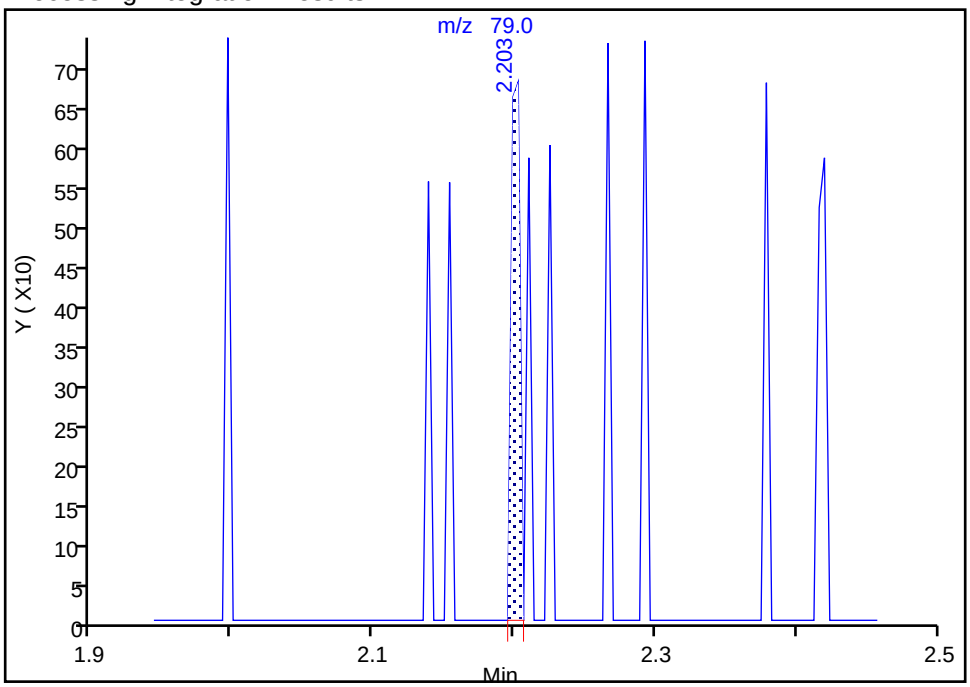
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

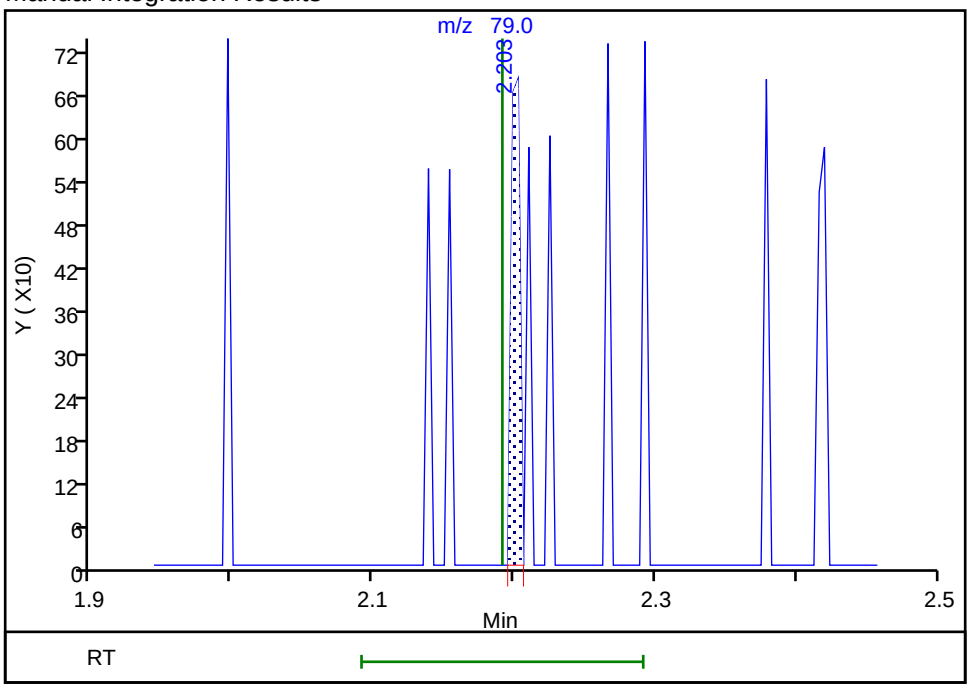
Processing Integration Results

RT: 2.20
Area: 302
Amount: 1.054581
Amount Units: ug/l



Manual Integration Results

RT: 2.20
Area: 302
Amount: 1.054581
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:26:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

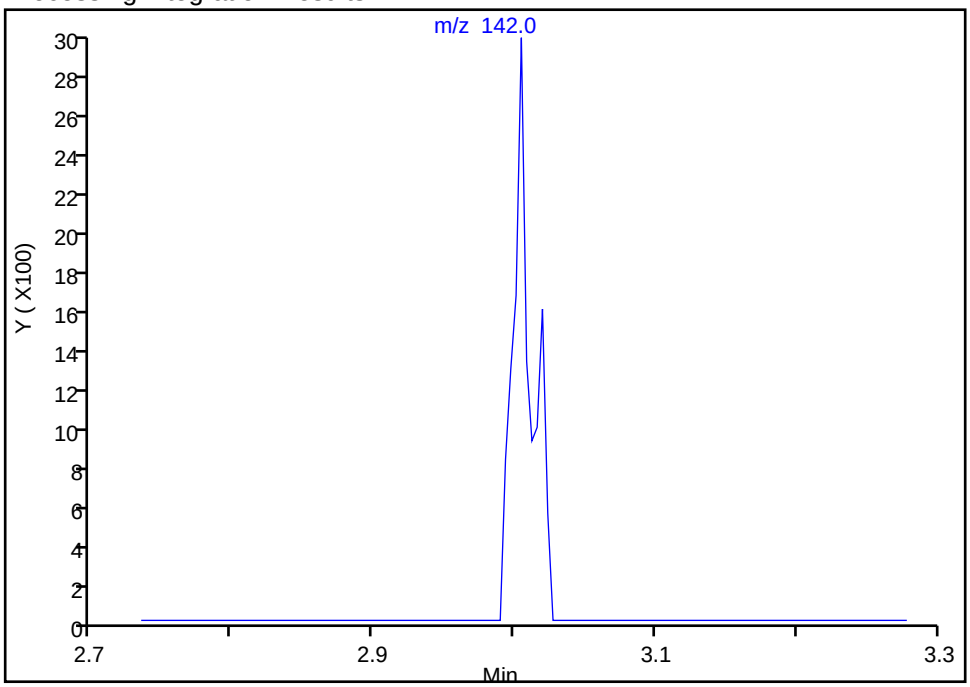
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

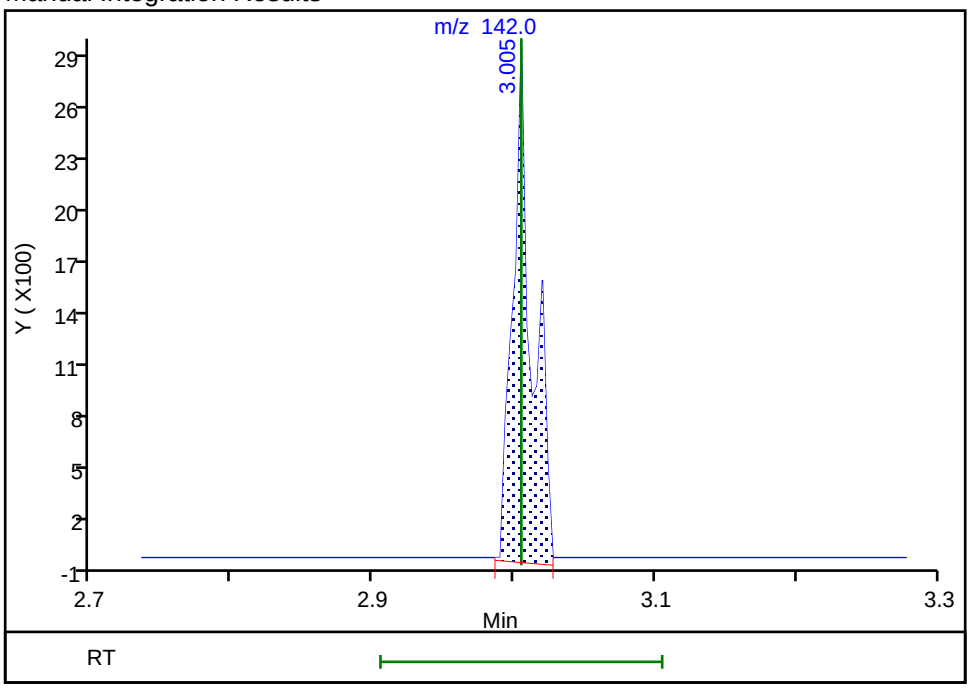
Not Detected
Expected RT: 3.00

Processing Integration Results



Manual Integration Results

RT: 3.00
Area: 2788
Amount: 1.067009
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:35:22
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

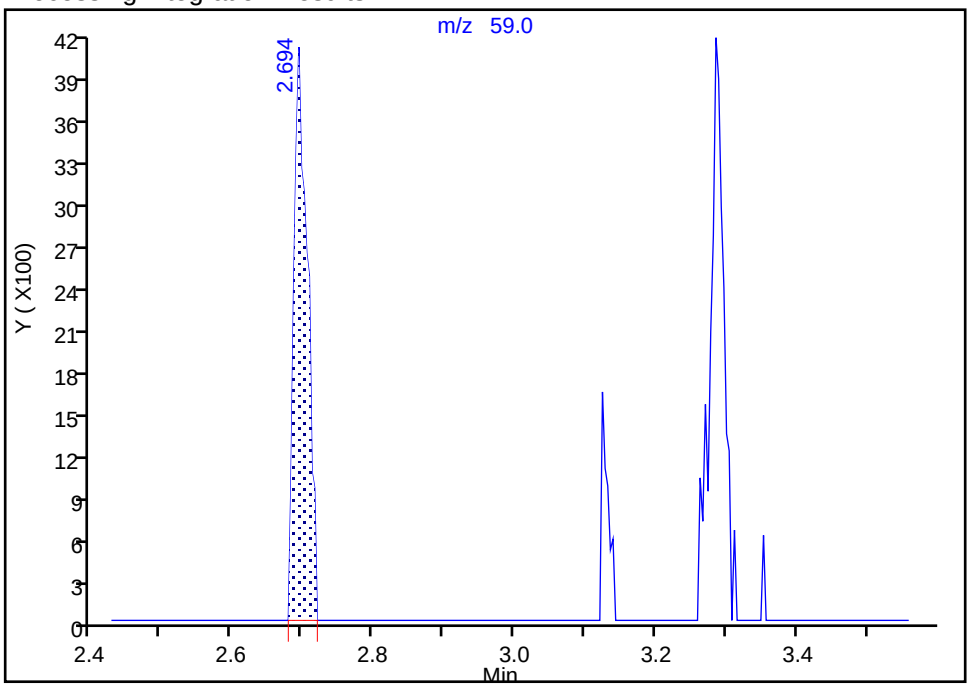
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

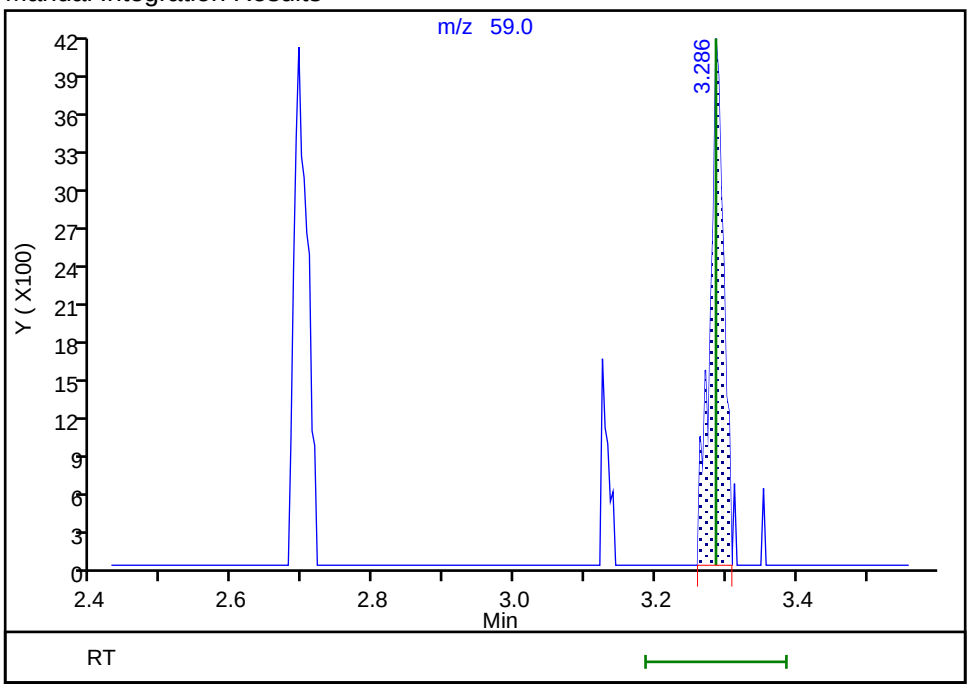
Processing Integration Results

RT: 2.69
Area: 5429
Amount: 6.555442
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 5584
Amount: 17.839740
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:24:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver

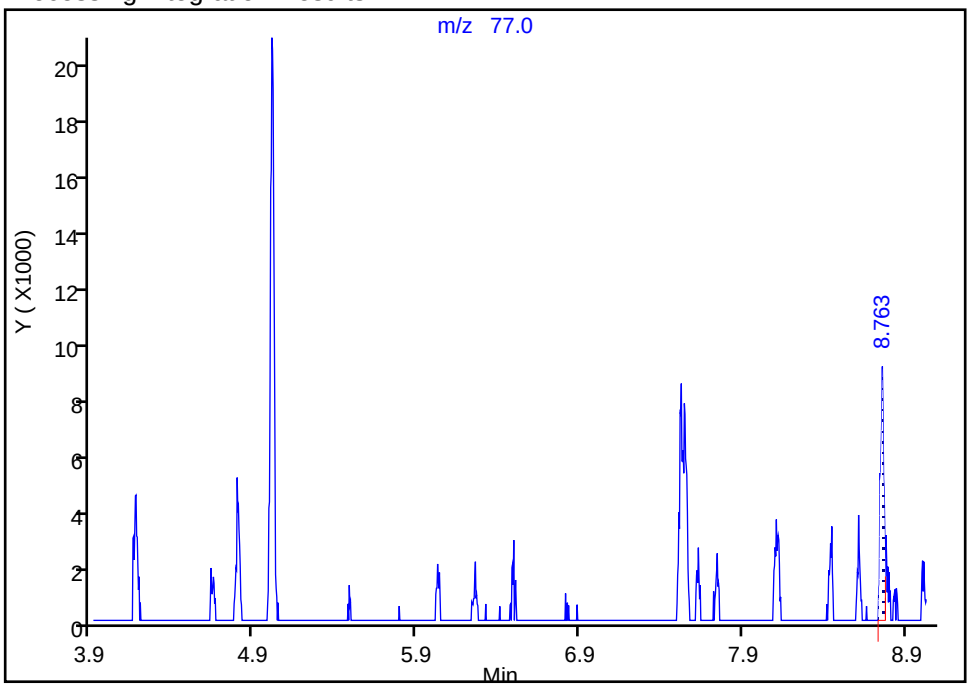
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

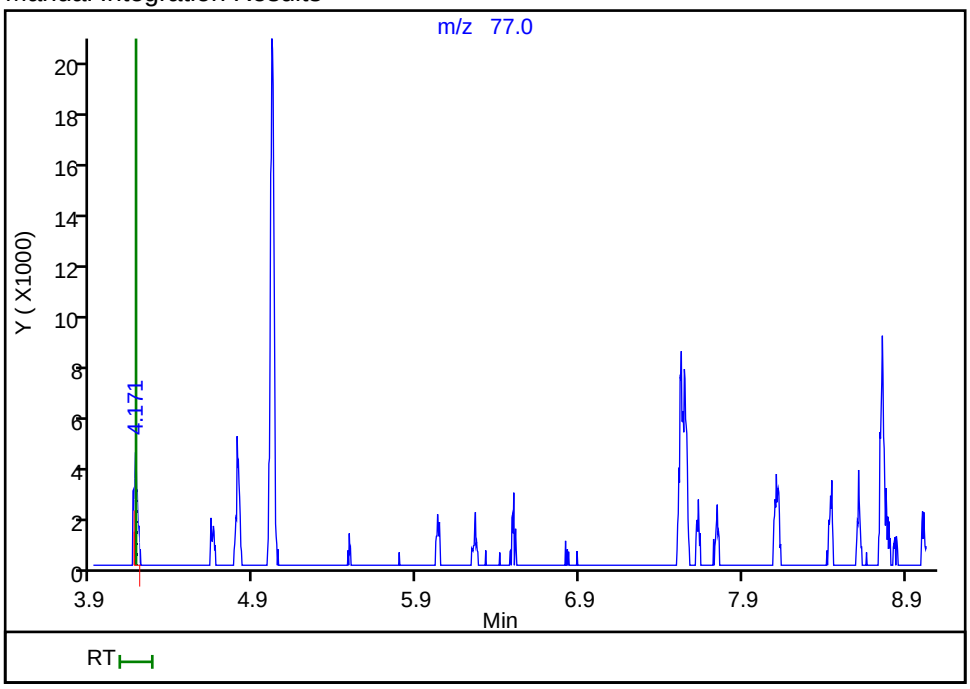
Processing Integration Results

RT: 8.76
Area: 12725
Amount: 1.108659
Amount Units: ug/l



Manual Integration Results

RT: 4.17
Area: 5584
Amount: 1.014874
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 20:41:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

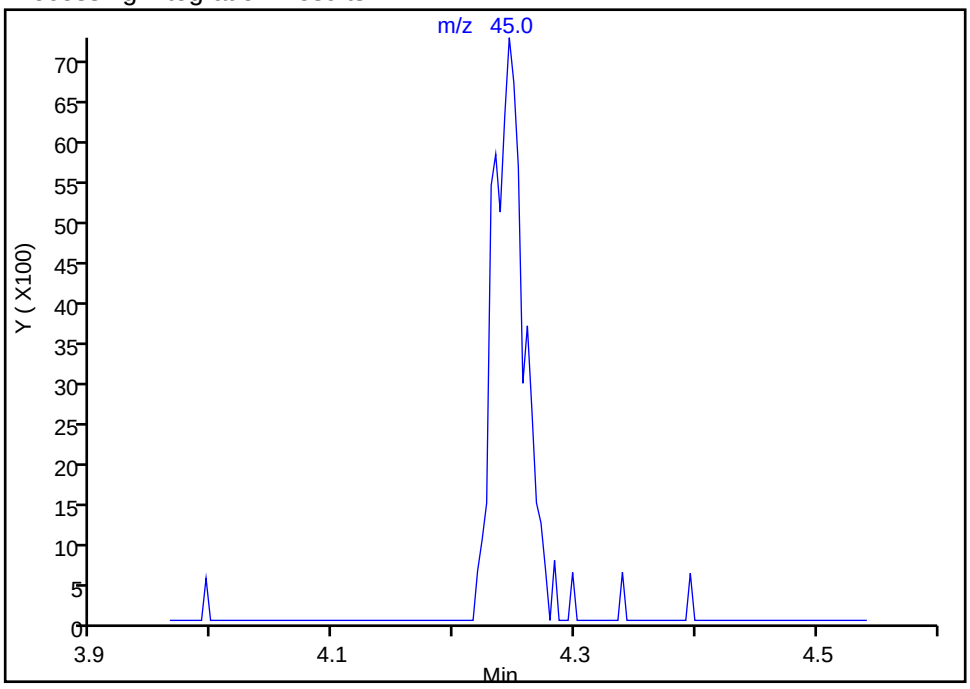
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

50 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

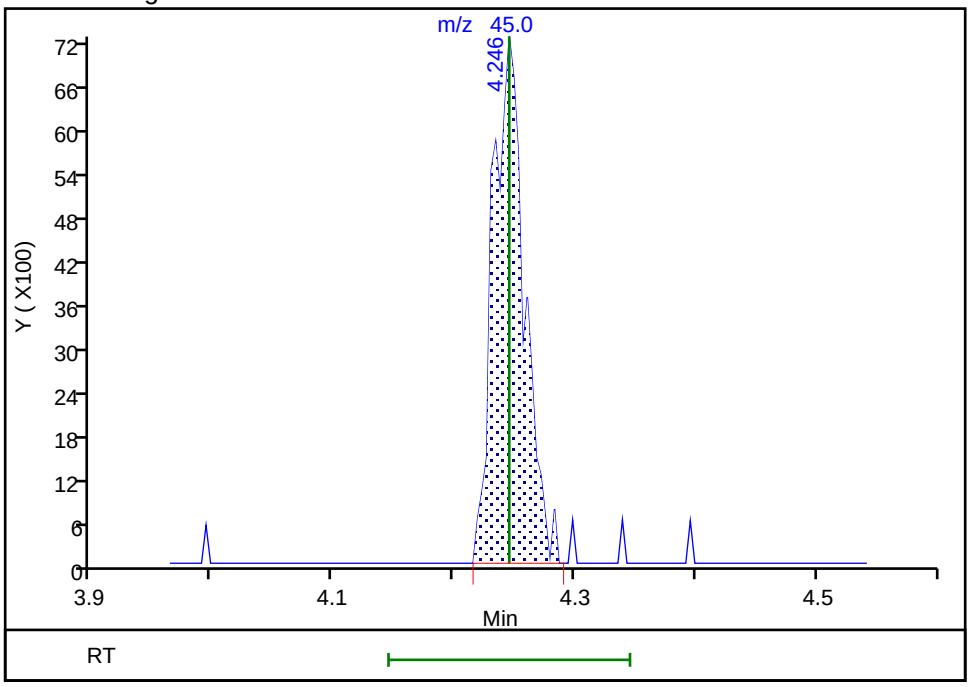
Not Detected
Expected RT: 4.25

Processing Integration Results



RT: 4.25
Area: 13154
Amount: 61.017621
Amount Units: ug/l

Manual Integration Results



Reviewer: peppinga, 05-Jun-2020 08:44:42
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

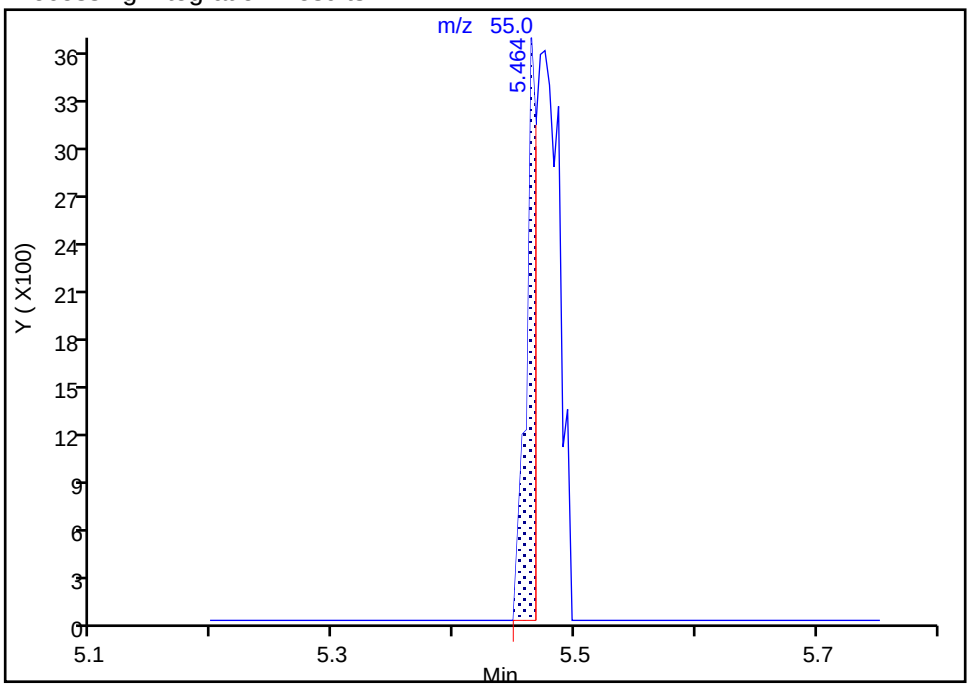
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

69 Methylcyclohexane, CAS: 108-87-2

Signal: 1

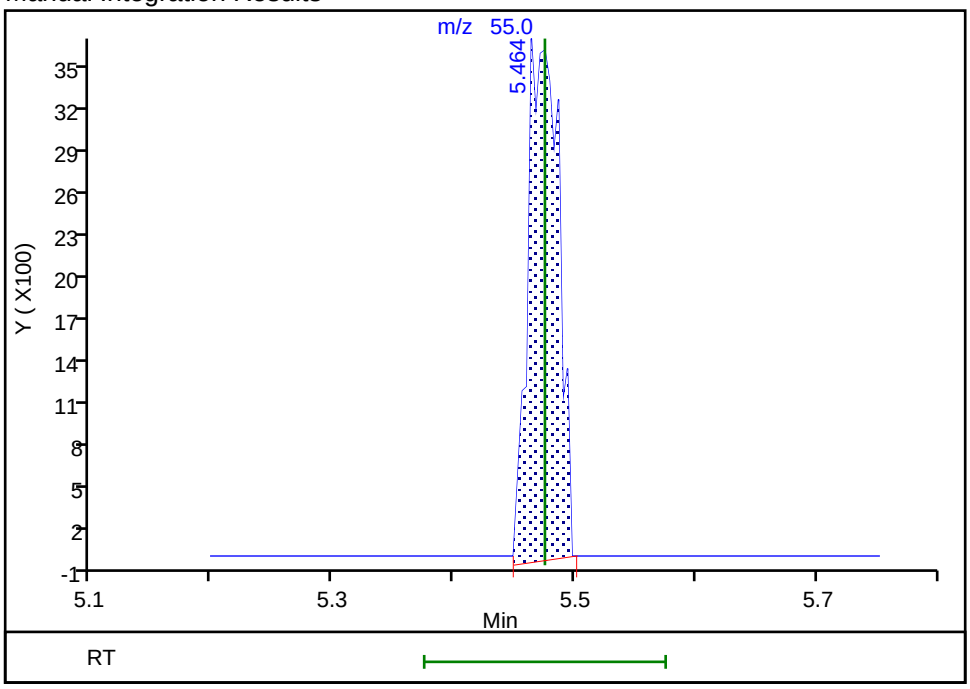
Processing Integration Results

RT: 5.46
Area: 2204
Amount: 0.323566
Amount Units: ug/l



Manual Integration Results

RT: 5.46
Area: 6626
Amount: 0.867345
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 08:53:06
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

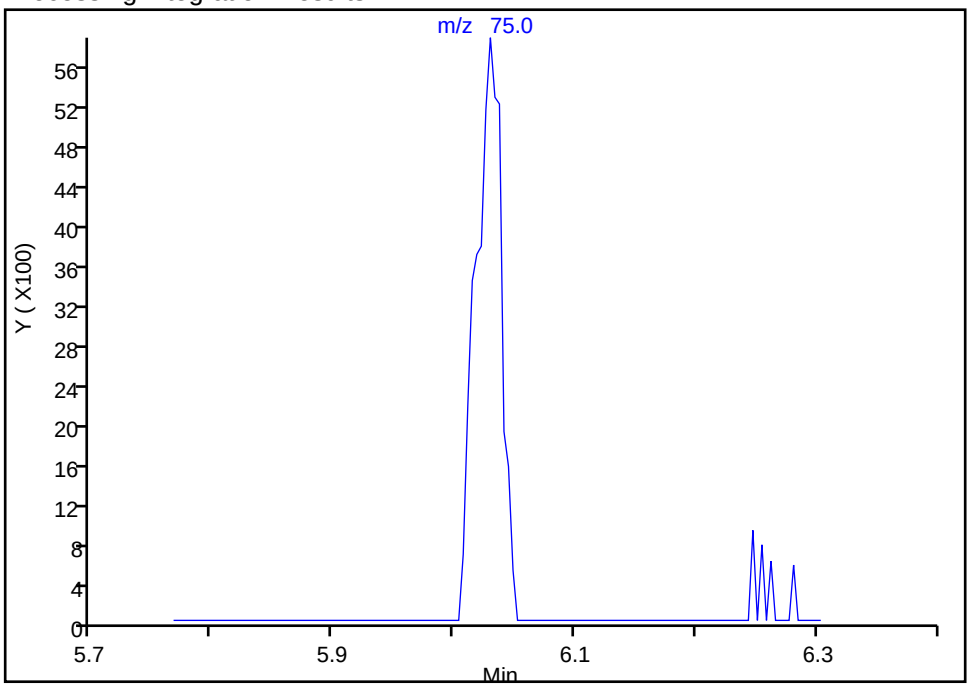
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

77 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

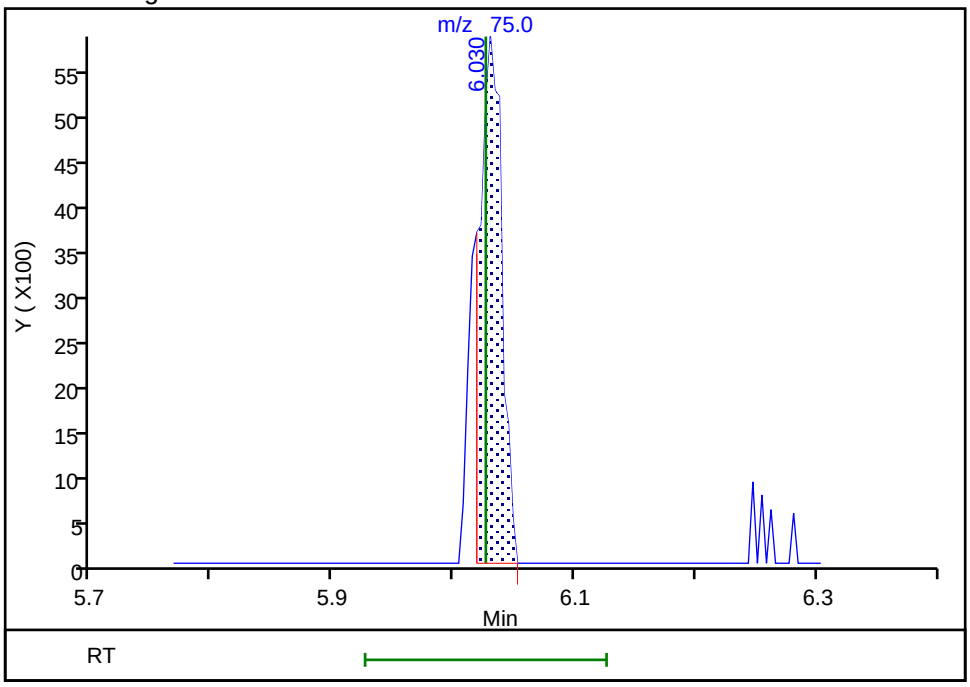
Not Detected
Expected RT: 6.03

Processing Integration Results



Manual Integration Results

RT: 6.03
Area: 7414
Amount: 1.045360
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 12:11:30
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

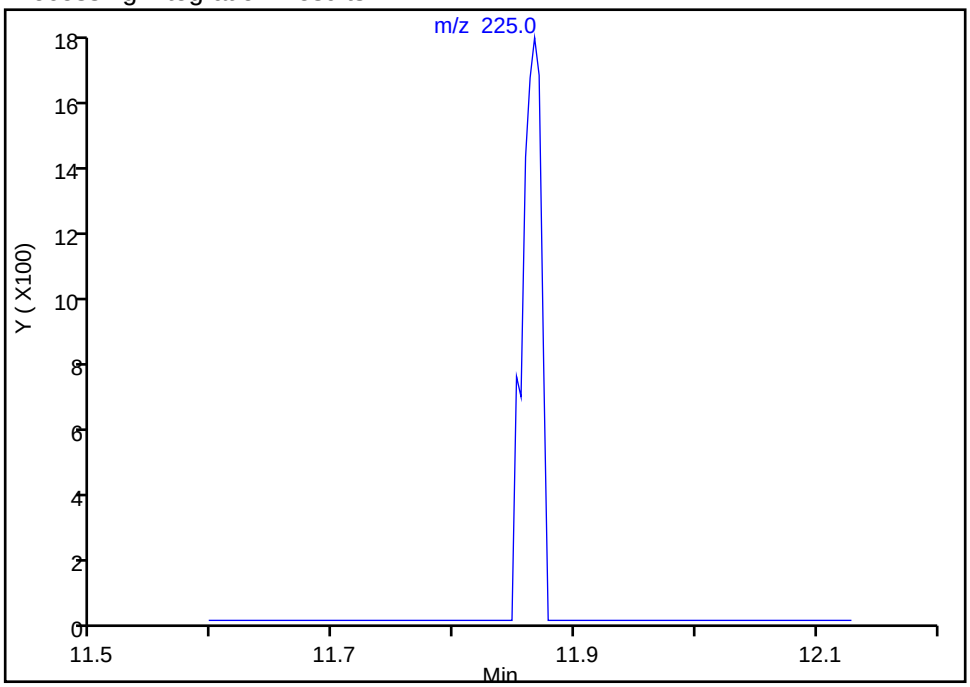
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5935.D
Injection Date: 04-Jun-2020 13:12:30 Instrument ID: VMS_R1
Lims ID: STD010
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

121 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

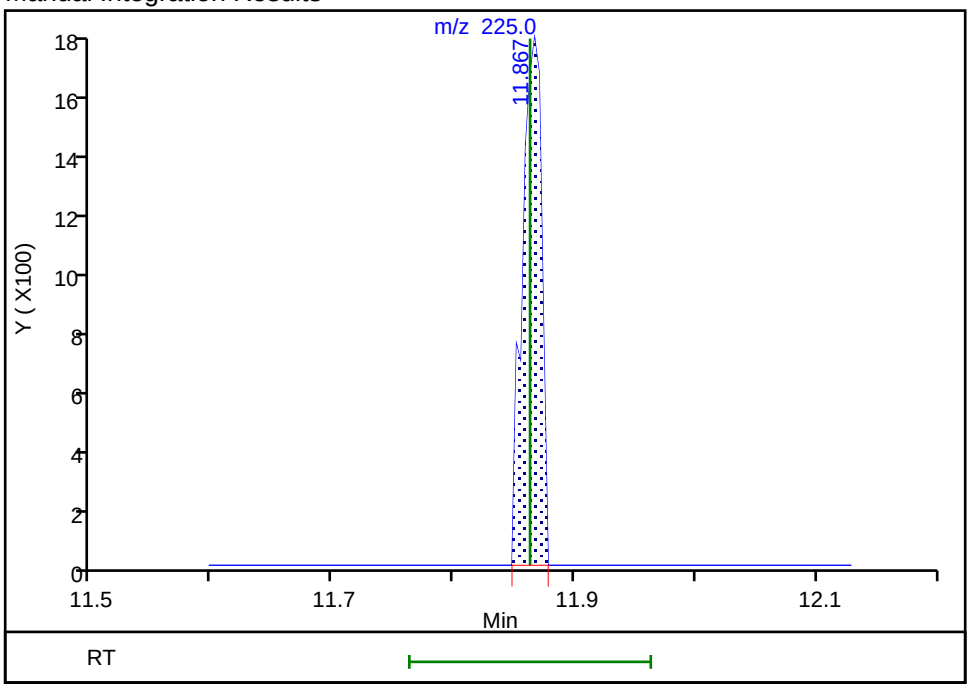
Not Detected
Expected RT: 11.86

Processing Integration Results



Manual Integration Results

RT: 11.87
Area: 1900
Amount: 1.466025
Amount Units: ug/l



Reviewer: peppinga, 08-Jun-2020 13:45:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5936.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Jun-2020 13:33:30 ALS Bottle#: 5 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:24 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 17:06:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	99	1907855	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.526	7.522	0.004	87	427951	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	654505	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.512	4.512	0.000	92	487336	50.0	50.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	595160	50.0	50.5	
$ 6 Toluene-d8 (Surr)	98	6.259	6.255	0.004	93	1852718	50.0	50.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.620	8.620	0.000	83	684658	50.0	49.9	
10 Dichlorodifluoromethane	85	1.659	1.655	0.004	97	11299	2.00	1.57	
11 Chloromethane	50	1.828	1.828	0.000	98	13379	2.00	1.82	
12 Vinyl chloride	62	1.929	1.921	0.008	96	13085	2.00	1.90	
14 Bromomethane	94	2.206	2.191	0.015	91	8106	2.00	2.16	
15 Chloroethane	64	2.296	2.285	0.011	96	7375	2.00	1.76	M
16 Dichlorofluoromethane	67	2.461	2.454	0.007	96	20927	2.00	1.93	
17 Trichlorofluoromethane	101	2.491	2.487	0.004	96	19260	2.00	1.90	
19 Ethyl ether	59	2.697	2.697	0.000	94	9926	2.00	1.70	
21 Acrolein	56	2.806	2.806	0.000	99	22863	19.8	16.7	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.885	2.881	0.004	68	7059	2.00	1.91	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	96	9067	2.00	2.06	
24 Acetone	43	2.907	2.904	0.003	99	19302	8.00	7.05	
26 Iodomethane	142	3.009	3.005	0.004	51	4854	2.00	1.75	
27 Carbon disulfide	76	3.069	3.065	0.003	99	25703	2.00	1.95	
29 Methyl acetate	43	3.125	3.128	-0.003	96	20571	4.00	3.44	
30 3-Chloro-1-propene	41	3.151	3.151	0.000	92	16738	2.00	1.87	
31 Methylene Chloride	84	3.248	3.241	0.007	94	13595	2.00	1.85	
32 2-Methyl-2-propanol	59	3.293	3.286	0.007	97	8333	20.0	20.6	a
33 Acrylonitrile	53	3.402	3.402	0.000	98	57940	20.0	17.6	
34 Methyl tert-butyl ether	73	3.428	3.428	0.000	94	35114	2.00	1.84	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	98	11306	2.00	1.84	
37 Hexane	57	3.635	3.631	0.004	90	9304	2.00	1.95	
39 Vinyl acetate	43	3.736	3.732	0.004	96	49921	4.00	3.79	
40 1,1-Dichloroethane	63	3.755	3.754	0.000	95	22351	2.00	1.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.137	4.133	0.004	100	28263	8.00	6.95	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	82	13725	2.00	1.83	
48 2,2-Dichloropropane	77	4.167	4.171	-0.004	83	15132	2.00	1.95	
50 sec-Butyl Alcohol	45	4.246	4.246	0.000	96	25335	60.0	74.9	
52 Chlorobromomethane	128	4.336	4.332	0.004	96	4672	2.00	1.72	
53 Tetrahydrofuran	42	4.347	4.347	0.000	95	9495	4.00	3.55	
54 Chloroform	83	4.392	4.392	0.000	92	23155	2.00	1.77	
55 1,1,1-Trichloroethane	97	4.538	4.534	0.004	94	13274	2.00	1.67	
56 Cyclohexane	56	4.594	4.590	0.004	90	18053	2.00	1.80	
57 1,1-Dichloropropene	75	4.643	4.647	-0.004	93	16505	2.00	1.69	
59 Carbon tetrachloride	117	4.650	4.650	0.000	93	15410	2.00	1.70	
60 Isobutyl alcohol	41	4.658	4.662	-0.004	66	10453	50.0	45.6	
62 Benzene	78	4.797	4.797	0.000	90	51794	2.00	1.76	
63 1,2-Dichloroethane	62	4.823	4.827	-0.004	84	21374	2.00	2.03	
65 n-Heptane	43	4.984	4.980	0.004	40	8921	2.00	1.45	
67 Trichloroethene	95	5.284	5.284	0.000	92	13251	2.00	1.85	
68 2-Pentanone	43	5.389	5.385	0.004	99	38060	8.00	7.13	
69 Methylcyclohexane	55	5.468	5.475	-0.007	93	14236	2.00	1.79	
70 1,2-Dichloropropane	63	5.490	5.486	0.004	94	14270	2.00	2.33	
72 1,4-Dioxane	88	5.528	5.531	-0.003	34	2912	40.0	22.2	
73 Dibromomethane	93	5.558	5.558	0.000	88	9490	2.00	1.96	
74 Dichlorobromomethane	83	5.681	5.681	0.000	98	15716	2.00	1.60	
76 2-Chloroethyl vinyl ether	63	5.880	5.884	-0.004	92	8366	2.00	1.97	
77 cis-1,3-Dichloropropene	75	6.030	6.026	0.004	93	18479	2.00	1.87	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	49827	8.00	6.95	
79 Toluene	91	6.315	6.315	0.000	98	53173	2.00	1.72	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	95	17074	2.00	2.02	
81 Ethyl methacrylate	69	6.513	6.513	0.000	64	14330	2.00	1.85	
82 1,1,2-Trichloroethane	97	6.663	6.663	0.000	90	12081	2.00	1.78	
83 Tetrachloroethene	164	6.753	6.757	-0.004	67	5232	2.00	1.30	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	86	22288	2.00	1.87	
85 2-Hexanone	43	6.832	6.828	0.004	94	35149	8.00	7.13	
87 Chlorodibromomethane	129	7.001	7.005	-0.004	85	12252	2.00	1.74	
88 Ethylene Dibromide	107	7.117	7.121	-0.004	50	5526	2.00	1.46	
89 1-Chlorohexane	91	7.511	7.507	0.004	33	17807	2.00	1.91	
90 Chlorobenzene	112	7.548	7.552	-0.004	94	32356	2.00	1.65	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	44	12133	2.00	1.93	
92 Ethylbenzene	106	7.627	7.627	0.000	98	18140	2.00	1.86	
93 m-Xylene & p-Xylene	106	7.739	7.747	-0.008	0	11149	2.00	1.27	
94 o-Xylene	106	8.107	8.103	0.004	95	21521	2.00	1.88	
95 Styrene	104	8.122	8.122	0.000	92	35734	2.00	1.67	
96 Bromoform	173	8.302	8.302	0.000	87	4596	2.00	1.78	
97 Isopropylbenzene	105	8.444	8.444	0.000	94	56881	2.00	1.77	
99 Cyclohexanone	55	8.538	8.541	-0.003	92	28955	80.0	66.3	
100 1,1,2,2-Tetrachloroethane	83	8.725	8.729	-0.004	34	8660	2.00	1.36	
101 Bromobenzene	156	8.763	8.763	0.000	97	13852	2.00	1.80	
102 trans-1,4-Dichloro-2-butene	53	8.774	8.766	0.008	30	2208	2.00	1.88	
103 1,2,3-Trichloropropane	110	8.800	8.793	0.007	78	3109	2.00	1.27	
104 N-Propylbenzene	120	8.845	8.841	0.004	99	15163	2.00	1.77	
105 2-Chlorotoluene	126	8.939	8.939	0.000	97	15650	2.00	2.02	
106 1,3,5-Trimethylbenzene	105	9.010	9.014	-0.004	93	44818	2.00	1.65	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	13270	2.00	1.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.321	9.325	-0.004	93	37024	2.00	1.66	
110 1,2,4-Trimethylbenzene	105	9.385	9.381	0.004	98	45387	2.00	1.62	
111 sec-Butylbenzene	134	9.542	9.542	0.000	95	10565	2.00	1.91	
112 1,3-Dichlorobenzene	146	9.666	9.666	0.000	94	25019	2.00	1.70	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	96	48191	2.00	1.77	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	89	27640	2.00	1.78	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	41178	2.00	1.80	
117 1,2-Dichlorobenzene	146	10.120	10.123	-0.003	96	25522	2.00	1.71	
118 1,2-Dibromo-3-Chloropropane	157	10.903	10.899	0.004	76	2779	2.00	2.25	
120 1,2,4-Trichlorobenzene	180	11.728	11.720	0.008	80	13402	2.00	1.65	
121 Hexachlorobutadiene	225	11.867	11.863	0.004	84	4122	2.00	2.11	
122 Naphthalene	128	11.990	11.990	0.000	96	48334	2.00	1.77	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	94	13811	2.00	1.95	
S 135 1,2-Dichloroethene, Total (URS)	96				0		4.00	3.67	
S 139 Xylenes, Total (URS)	1				0		4.00	3.15	
S 138 Xylenes, Total	106				0		4.00	3.15	
S 140 Trihalomethanes, Total	1				0		8.00	6.89	
S 136 1,3-Dichloropropene, Total	1				0		4.00	3.89	
S 141 1,2-Dichloroethene, Total	1				0		4.00	3.67	
S 137 Total BTEX	1				0			8.50	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	1.00	Units: uL		
MV-Gas A_00057	Amount Added:	0.40	Units: uL		
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent	

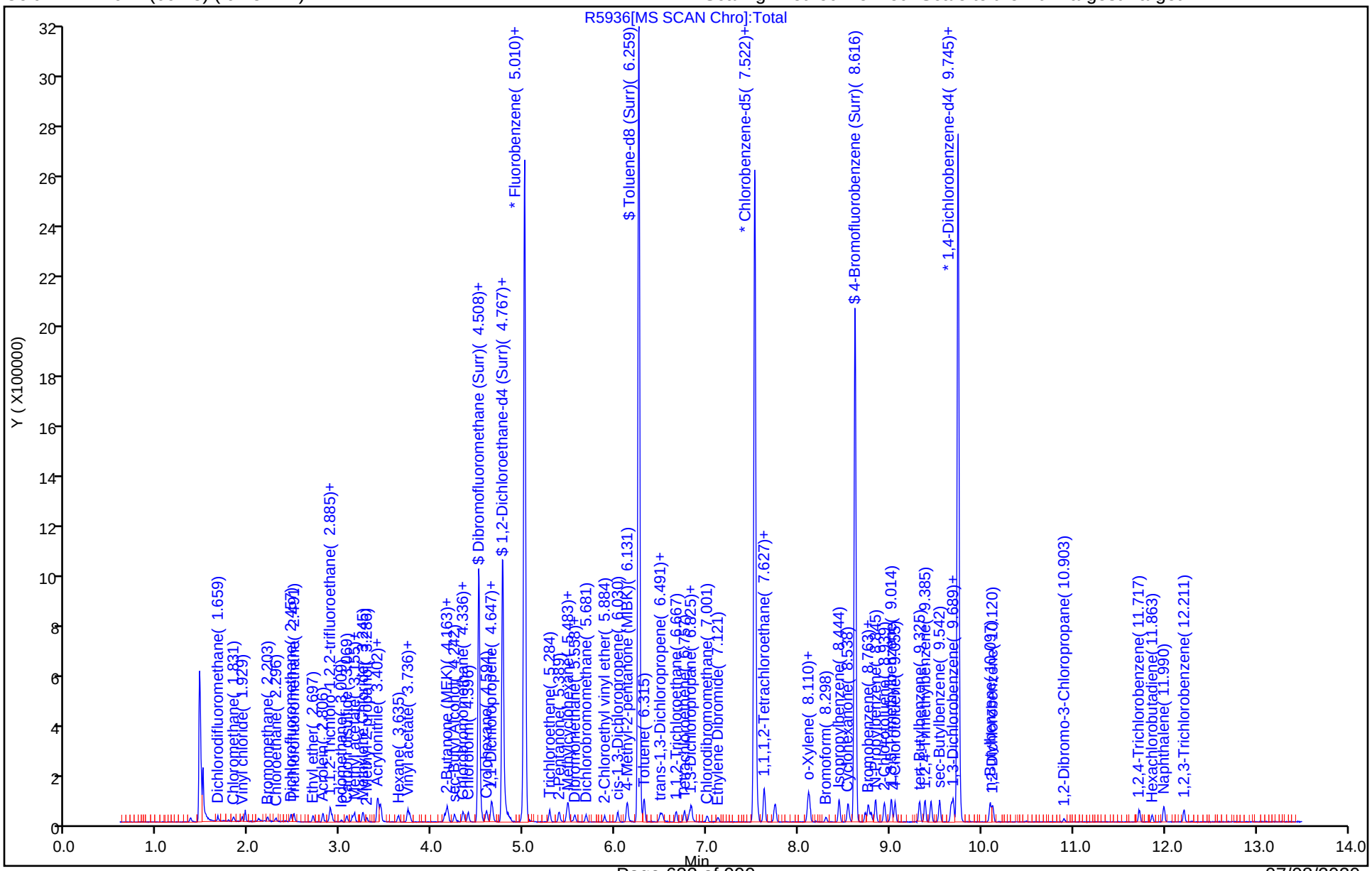
Report Date: 08-Jun-2020 13:48:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5936.D

Injection Date:	04-Jun-2020 13:33:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD020			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

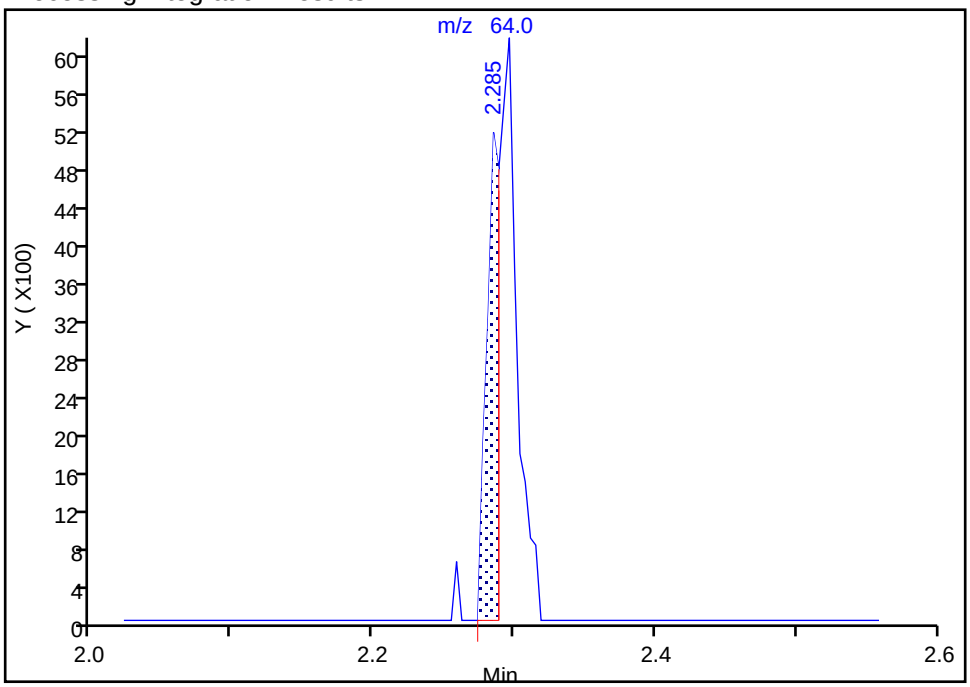
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5936.D
Injection Date: 04-Jun-2020 13:33:30 Instrument ID: VMS_R1
Lims ID: STD020
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 5 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

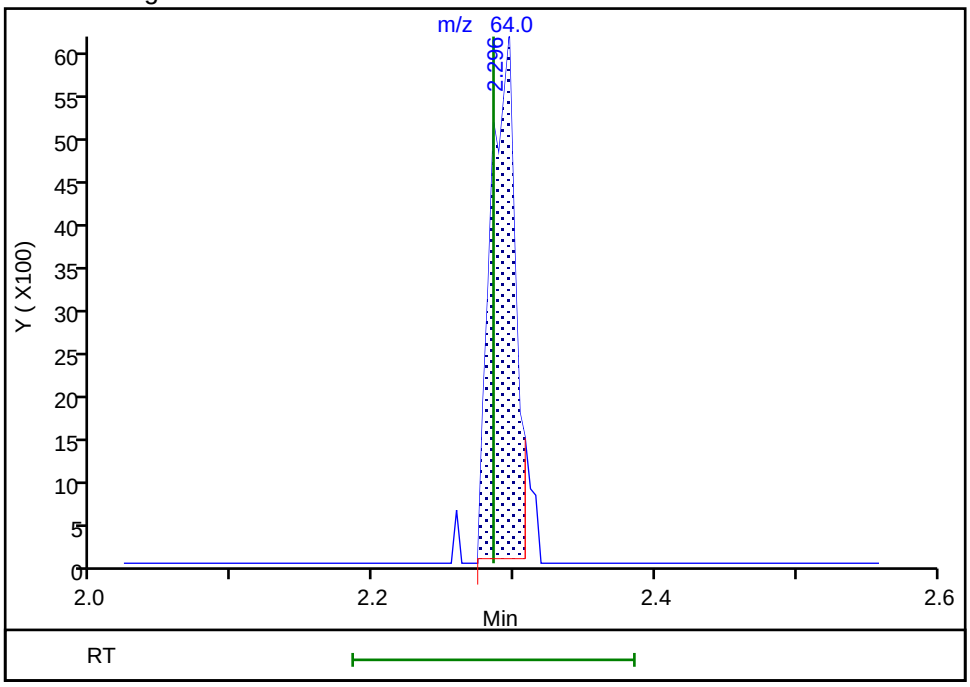
Processing Integration Results

RT: 2.29
Area: 3359
Amount: 1.958527
Amount Units: ug/l



Manual Integration Results

RT: 2.30
Area: 7375
Amount: 1.762853
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 07:49:31
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

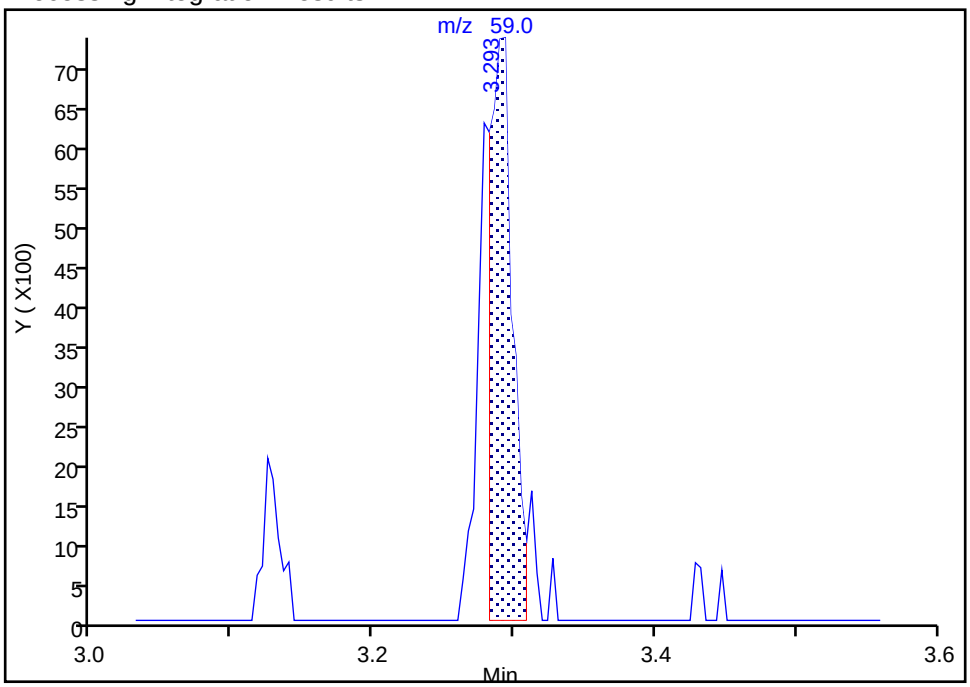
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5936.D
Injection Date: 04-Jun-2020 13:33:30 Instrument ID: VMS_R1
Lims ID: STD020
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 5 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

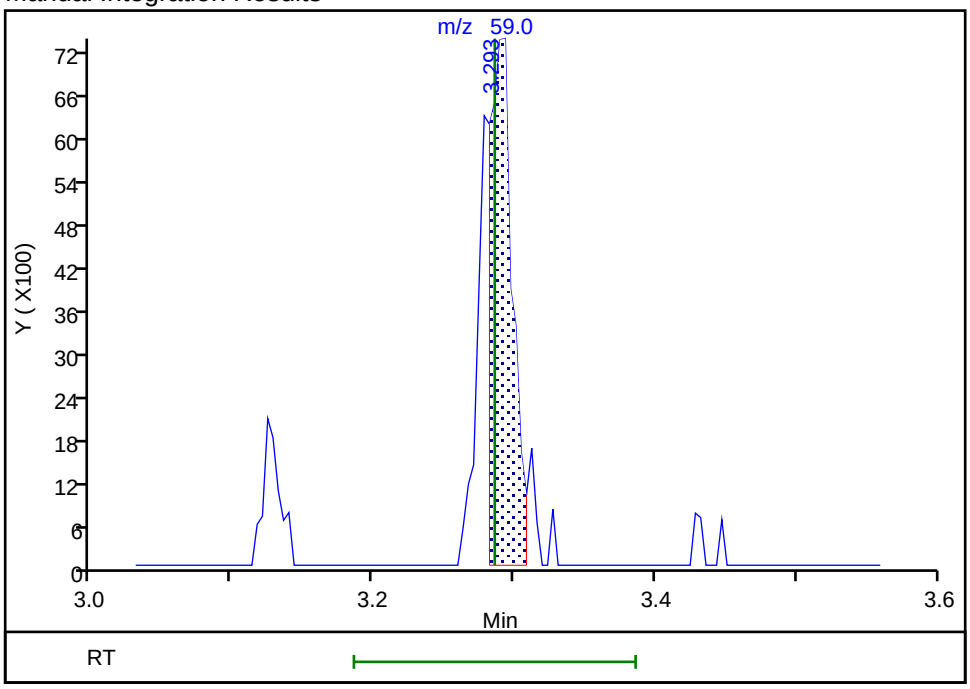
Processing Integration Results

RT: 3.29
Area: 8333
Amount: 9.688425
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 8333
Amount: 20.590339
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:24:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5937.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Jun-2020 13:54:30 ALS Bottle#: 6 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:29 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 16:33:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	99	1865606	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	410671	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	630695	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	92	466690	50.0	49.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	567014	50.0	49.2	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1760961	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	84	659812	50.0	49.9	
10 Dichlorodifluoromethane	85	1.659	1.655	0.004	99	34633	5.00	4.91	
11 Chloromethane	50	1.828	1.828	0.000	98	31064	5.00	4.32	
12 Vinyl chloride	62	1.921	1.921	0.000	96	29302	5.00	4.34	
14 Bromomethane	94	2.199	2.191	0.008	90	19538	5.00	5.33	
15 Chloroethane	64	2.293	2.285	0.008	98	18806	5.00	4.60	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	95	44492	5.00	4.20	
17 Trichlorofluoromethane	101	2.491	2.487	0.004	95	45486	5.00	4.60	
19 Ethyl ether	59	2.697	2.697	0.000	88	30523	5.00	5.35	
21 Acrolein	56	2.806	2.806	0.000	99	66546	49.4	49.8	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.885	2.881	0.004	69	20333	5.00	5.63	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	96	24646	5.00	5.15	
24 Acetone	43	2.904	2.904	0.000	100	51693	20.0	19.3	
26 Iodomethane	142	3.005	3.005	0.000	96	14911	5.00	5.09	
27 Carbon disulfide	76	3.068	3.065	0.003	99	75201	5.00	5.20	
29 Methyl acetate	43	3.132	3.128	0.004	97	57180	10.0	9.77	
30 3-Chloro-1-propene	41	3.151	3.151	0.000	92	46847	5.00	5.36	
31 Methylene Chloride	84	3.245	3.241	0.004	95	36704	5.00	5.12	
32 2-Methyl-2-propanol	59	3.290	3.286	0.004	95	34180	50.0	49.5	a
33 Acrylonitrile	53	3.402	3.402	0.000	98	162533	50.0	50.4	
34 Methyl tert-butyl ether	73	3.428	3.428	0.000	95	106006	5.00	5.14	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	97	31820	5.00	5.29	
37 Hexane	57	3.631	3.631	0.000	90	30254	5.00	5.54	
39 Vinyl acetate	43	3.732	3.732	0.000	97	150181	10.0	9.54	
40 1,1-Dichloroethane	63	3.758	3.754	0.004	96	63332	5.00	5.21	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	99	76337	20.0	19.2	
47 cis-1,2-Dichloroethene	96	4.156	4.159	-0.003	82	36950	5.00	5.04	
48 2,2-Dichloropropane	77	4.171	4.171	0.000	89	46675	5.00	5.22	
50 sec-Butyl Alcohol	45	4.242	4.246	-0.004	99	82125	150.0	144.4	
52 Chlorobromomethane	128	4.339	4.332	0.007	96	17658	5.00	5.30	
53 Tetrahydrofuran	42	4.347	4.347	0.000	87	25063	10.0	9.58	
54 Chloroform	83	4.396	4.392	0.004	93	68038	5.00	5.32	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	98	53514	5.00	5.17	
56 Cyclohexane	56	4.594	4.590	0.004	90	51032	5.00	5.19	
57 1,1-Dichloropropene	75	4.643	4.647	-0.004	93	50071	5.00	5.24	
59 Carbon tetrachloride	117	4.650	4.650	0.000	95	45985	5.00	5.20	
60 Isobutyl alcohol	41	4.662	4.662	0.000	91	33424	125.0	120.8	
62 Benzene	78	4.797	4.797	0.000	94	155881	5.00	5.43	
63 1,2-Dichloroethane	62	4.827	4.827	0.000	97	56648	5.00	5.49	
65 n-Heptane	43	4.980	4.980	0.000	89	32660	5.00	5.45	
67 Trichloroethene	95	5.284	5.284	0.000	96	35512	5.00	5.07	
68 2-Pentanone	43	5.385	5.385	0.000	99	122214	20.0	19.9	
69 Methylcyclohexane	55	5.475	5.475	0.000	93	40691	5.00	5.24	
70 1,2-Dichloropropane	63	5.486	5.486	0.000	93	37083	5.00	5.18	
72 1,4-Dioxane	88	5.535	5.531	0.004	84	10492	100.0	81.8	
73 Dibromomethane	93	5.558	5.558	0.000	89	24182	5.00	5.11	
74 Dichlorobromomethane	83	5.685	5.681	0.004	97	49138	5.00	5.11	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	92	20156	5.00	3.95	
77 cis-1,3-Dichloropropene	75	6.030	6.026	0.004	96	55571	5.00	4.91	
78 4-Methyl-2-pentanone (MIBK)	43	6.131	6.127	0.004	97	147610	20.0	18.2	
79 Toluene	91	6.315	6.315	0.000	98	159641	5.00	5.29	
80 trans-1,3-Dichloropropene	75	6.487	6.491	-0.004	96	49517	5.00	4.57	
81 Ethyl methacrylate	69	6.510	6.513	-0.003	83	46539	5.00	4.77	
82 1,1,2-Trichloroethane	97	6.667	6.663	0.004	91	35025	5.00	5.29	
83 Tetrachloroethene	164	6.757	6.757	0.000	91	25960	5.00	5.21	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	88	66007	5.00	5.29	
85 2-Hexanone	43	6.832	6.828	0.004	97	104084	20.0	19.3	
87 Chlorodibromomethane	129	7.001	7.005	-0.004	92	36798	5.00	4.87	
88 Ethylene Dibromide	107	7.117	7.121	-0.004	99	36063	5.00	5.35	
89 1-Chlorohexane	91	7.507	7.507	0.000	96	48113	5.00	5.38	
90 Chlorobenzene	112	7.556	7.552	0.004	95	100184	5.00	5.33	
91 1,1,1,2-Tetrachloroethane	131	7.619	7.623	-0.004	43	34126	5.00	5.09	
92 Ethylbenzene	106	7.623	7.627	-0.004	97	34089	5.00	3.64	
93 m-Xylene & p-Xylene	106	7.743	7.747	-0.004	0	63666	5.00	5.22	
94 o-Xylene	106	8.107	8.103	0.004	96	60835	5.00	4.97	
95 Styrene	104	8.118	8.122	-0.004	94	107562	5.00	5.23	
96 Bromoform	173	8.302	8.302	0.000	90	19824	5.00	4.59	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	164627	5.00	5.30	
99 Cyclohexanone	55	8.545	8.541	0.004	93	101917	200.0	186.6	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	95	50633	5.00	5.28	
101 Bromobenzene	156	8.763	8.763	0.000	96	39518	5.00	5.32	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	64	15101	5.00	5.93	
103 1,2,3-Trichloropropane	110	8.793	8.793	0.000	81	17385	5.00	5.58	
104 N-Propylbenzene	120	8.845	8.841	0.004	99	43749	5.00	5.29	
105 2-Chlorotoluene	126	8.935	8.939	-0.004	95	37359	5.00	5.00	
106 1,3,5-Trimethylbenzene	105	9.018	9.014	0.004	93	135019	5.00	5.14	
107 4-Chlorotoluene	126	9.051	9.055	-0.004	98	40249	5.00	5.27	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.329	9.325	0.004	92	113937	5.00	5.30	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	137404	5.00	5.10	
111 sec-Butylbenzene	134	9.546	9.542	0.004	94	29663	5.00	5.01	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	96	77308	5.00	5.46	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	139339	5.00	5.33	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	95	79683	5.00	5.33	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	125734	5.00	5.10	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	95	74233	5.00	5.17	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	85	10124	5.00	5.34	
120 1,2,4-Trichlorobenzene	180	11.724	11.720	0.004	93	44836	5.00	4.90	
121 Hexachlorobutadiene	225	11.867	11.863	0.004	71	6830	5.00	3.00	
122 Naphthalene	128	11.990	11.990	0.000	97	145842	5.00	4.81	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	92	41940	5.00	5.07	
S 135 1,2-Dichloroethene, Total (URS)	96				0		10.0	10.3	
S 139 Xylenes, Total (URS)	1				0		10.0	10.2	
S 138 Xylenes, Total	106				0		10.0	10.2	
S 140 Trihalomethanes, Total	1				0		20.0	19.9	
S 136 1,3-Dichloropropene, Total	1				0		10.0	9.48	
S 141 1,2-Dichloroethene, Total	1				0		10.0	10.3	
S 137 Total BTEX	1				0			24.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	2.50	Units: uL	
MV-Gas A_00057	Amount Added:	1.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

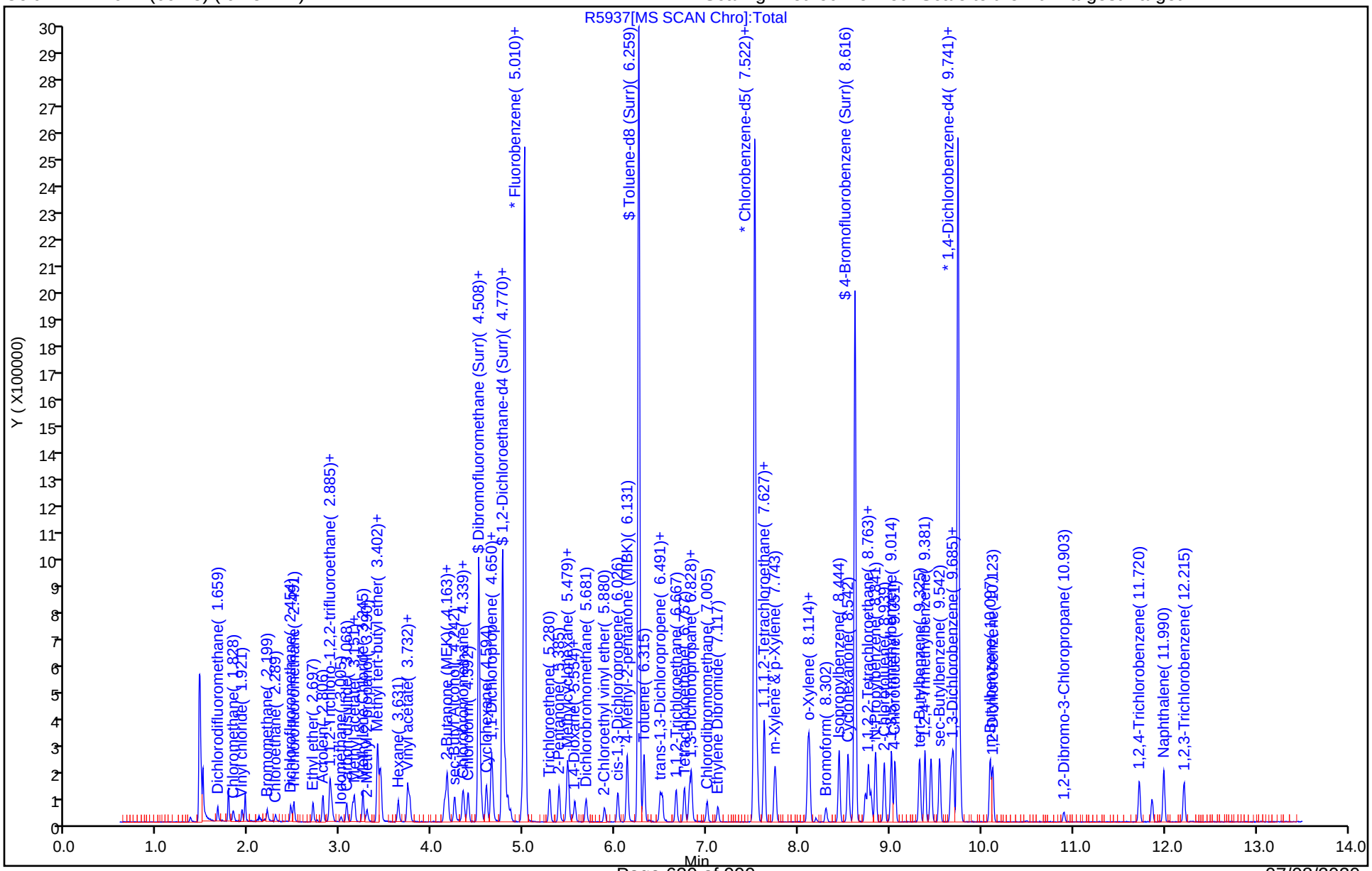
Report Date: 08-Jun-2020 13:48:30 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5937.D

Injection Date:	04-Jun-2020 13:54:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD050			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

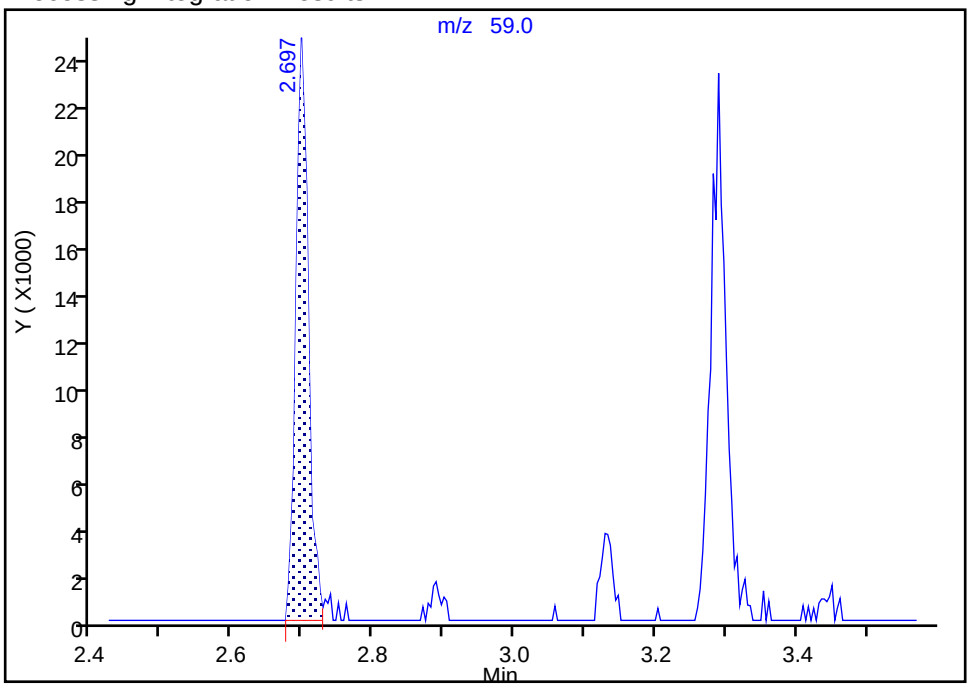
Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5937.D				
Injection Date:	04-Jun-2020 13:54:30	Instrument ID:	VMS_R1		
Lims ID:	STD050				
Client ID:					
Operator ID:	PEPPINGA	ALS Bottle#:	6	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

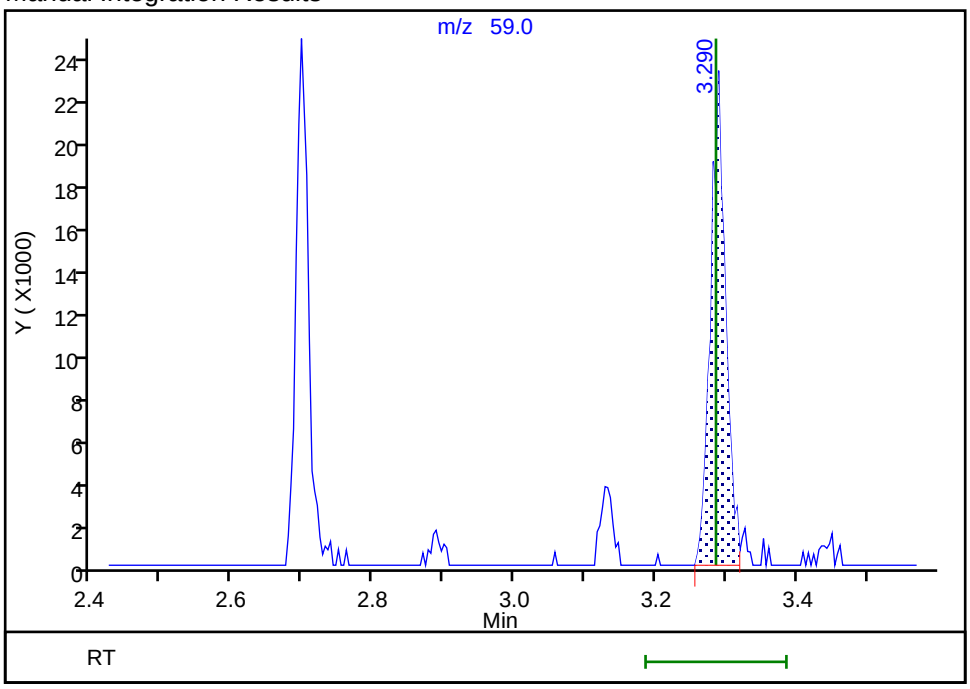
Processing Integration Results

RT: 2.70
Area: 30523
Amount: 36.645550
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 34180
Amount: 49.490323
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:23:35

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5938.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Jun-2020 14:15:30 ALS Bottle#: 7 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:35 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 16:43:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	99	1943714	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	433999	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.745	0.000	97	680432	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	491356	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.770	4.770	0.000	0	606253	50.0	50.5	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1869916	50.0	49.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.617	8.617	0.000	83	704028	50.0	49.4	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	66543	10.0	9.06	
11 Chloromethane	50	1.824	1.824	0.000	99	63915	10.0	8.54	
12 Vinyl chloride	62	1.921	1.921	0.000	97	62531	10.0	8.90	
14 Bromomethane	94	2.199	2.199	0.000	91	34152	10.0	8.95	
15 Chloroethane	64	2.289	2.289	0.000	99	38752	10.0	9.09	
16 Dichlorofluoromethane	67	2.458	2.458	0.000	97	93465	10.0	8.47	
17 Trichlorofluoromethane	101	2.487	2.487	0.000	98	92719	10.0	9.00	
19 Ethyl ether	59	2.697	2.697	0.000	92	56087	10.0	9.44	
21 Acrolein	56	2.802	2.802	0.000	99	126545	98.8	91.0	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.885	2.885	0.000	63	33983	10.0	9.03	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	96	47694	10.0	9.29	
24 Acetone	43	2.904	2.904	0.000	98	98875	40.0	35.4	
26 Iodomethane	142	3.005	3.005	0.000	99	33628	10.0	10.0	
27 Carbon disulfide	76	3.065	3.065	0.000	99	139587	10.0	9.01	
29 Methyl acetate	43	3.129	3.129	0.000	98	109720	20.0	18.0	
30 3-Chloro-1-propene	41	3.151	3.151	0.000	92	90473	10.0	9.93	
31 Methylene Chloride	84	3.245	3.245	0.000	95	68384	10.0	9.15	
32 2-Methyl-2-propanol	59	3.290	3.290	0.000	96	70642	100.0	86.8	a
33 Acrylonitrile	53	3.402	3.402	0.000	98	321099	100.0	95.6	
34 Methyl tert-butyl ether	73	3.425	3.425	0.000	95	193439	10.0	8.80	
35 trans-1,2-Dichloroethene	96	3.443	3.443	0.000	97	59992	10.0	9.57	
37 Hexane	57	3.631	3.631	0.000	89	54814	10.0	9.17	
39 Vinyl acetate	43	3.732	3.732	0.000	97	297748	20.0	17.2	
40 1,1-Dichloroethane	63	3.751	3.751	0.000	96	122657	10.0	9.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	100	154969	40.0	37.4	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	83	73841	10.0	9.68	
48 2,2-Dichloropropane	77	4.174	4.174	0.000	89	86014	10.0	8.90	Ma
50 sec-Butyl Alcohol	45	4.242	4.242	0.000	97	178430	300.0	252.5	
52 Chlorobromomethane	128	4.332	4.332	0.000	98	37325	10.0	10.3	
53 Tetrahydrofuran	42	4.343	4.343	0.000	86	47421	20.0	17.4	
54 Chloroform	83	4.392	4.392	0.000	92	127936	10.0	9.60	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	97	103348	10.0	9.11	
56 Cyclohexane	56	4.594	4.594	0.000	89	99298	10.0	9.70	
57 1,1-Dichloropropene	75	4.647	4.647	0.000	96	95921	10.0	9.63	
59 Carbon tetrachloride	117	4.650	4.650	0.000	96	84503	10.0	9.17	
60 Isobutyl alcohol	41	4.658	4.658	0.000	95	65190	250.0	215.3	
62 Benzene	78	4.797	4.797	0.000	95	277885	10.0	9.29	
63 1,2-Dichloroethane	62	4.830	4.830	0.000	98	103996	10.0	9.67	
65 n-Heptane	43	4.980	4.980	0.000	89	58471	10.0	9.36	
67 Trichloroethene	95	5.280	5.280	0.000	96	70464	10.0	9.66	
68 2-Pentanone	43	5.385	5.385	0.000	99	240528	40.0	36.2	
69 Methylcyclohexane	55	5.475	5.475	0.000	93	76102	10.0	9.41	
70 1,2-Dichloropropane	63	5.490	5.490	0.000	96	73243	10.0	9.28	
72 1,4-Dioxane	88	5.531	5.531	0.000	91	24345	200.0	182.3	
73 Dibromomethane	93	5.561	5.561	0.000	92	47769	10.0	9.69	
74 Dichlorobromomethane	83	5.681	5.681	0.000	99	95827	10.0	9.56	
76 2-Chloroethyl vinyl ether	63	5.880	5.880	0.000	89	43275	10.0	7.48	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	95	111077	10.0	8.89	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	305457	40.0	34.8	
79 Toluene	91	6.319	6.319	0.000	98	298453	10.0	9.50	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	89	101622	10.0	8.30	
81 Ethyl methacrylate	69	6.514	6.514	0.000	89	92408	10.0	8.42	
82 1,1,2-Trichloroethane	97	6.663	6.663	0.000	91	66827	10.0	9.69	
83 Tetrachloroethene	164	6.757	6.757	0.000	94	47623	10.0	8.78	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	88	123654	10.0	9.19	
85 2-Hexanone	43	6.832	6.832	0.000	97	208343	40.0	35.5	
87 Chlorodibromomethane	129	7.001	7.001	0.000	90	69803	10.0	8.53	
88 Ethylene Dibromide	107	7.121	7.121	0.000	96	71720	10.0	9.39	
89 1-Chlorohexane	91	7.507	7.507	0.000	96	89305	10.0	9.46	
90 Chlorobenzene	112	7.548	7.548	0.000	95	188888	10.0	9.50	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	43	65483	10.0	9.01	
92 Ethylbenzene	106	7.631	7.631	0.000	99	96686	10.0	9.76	
93 m-Xylene & p-Xylene	106	7.739	7.739	0.000	0	124127	10.0	9.23	
94 o-Xylene	106	8.103	8.103	0.000	97	122489	10.0	9.19	
95 Styrene	104	8.122	8.122	0.000	94	208354	10.0	9.59	
96 Bromoform	173	8.302	8.302	0.000	93	44181	10.0	8.59	
97 Isopropylbenzene	105	8.444	8.444	0.000	96	307847	10.0	9.19	
99 Cyclohexanone	55	8.542	8.542	0.000	92	208866	400.0	342.0	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	97490	10.0	8.96	
101 Bromobenzene	156	8.763	8.763	0.000	97	76925	10.0	9.59	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.770	0.000	73	27766	10.0	9.26	
103 1,2,3-Trichloropropane	110	8.796	8.796	0.000	83	30291	10.0	8.78	
104 N-Propylbenzene	120	8.845	8.845	0.000	99	86305	10.0	9.67	
105 2-Chlorotoluene	126	8.939	8.939	0.000	95	74076	10.0	9.19	
106 1,3,5-Trimethylbenzene	105	9.018	9.018	0.000	93	273283	10.0	9.65	
107 4-Chlorotoluene	126	9.059	9.059	0.000	98	76522	10.0	9.29	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	215593	10.0	9.30	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	97	275260	10.0	9.47	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	60235	10.0	9.17	
112 1,3-Dichlorobenzene	146	9.666	9.666	0.000	96	146622	10.0	9.59	
113 4-Isopropyltoluene	119	9.689	9.689	0.000	97	272689	10.0	9.66	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	93	149246	10.0	9.26	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	244278	10.0	8.95	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	95	148754	10.0	9.60	
118 1,2-Dibromo-3-Chloropropane	157	10.896	10.896	0.000	80	19542	10.0	8.64	
120 1,2,4-Trichlorobenzene	180	11.720	11.720	0.000	93	83903	10.0	8.26	
121 Hexachlorobutadiene	225	11.867	11.867	0.000	91	28374	10.0	9.12	
122 Naphthalene	128	11.994	11.994	0.000	97	304440	10.0	8.99	
123 1,2,3-Trichlorobenzene	180	12.215	12.215	0.000	94	83350	10.0	8.91	
S 135 1,2-Dichloroethene, Total (URS)	96				0		20.0	19.2	
S 139 Xylenes, Total (URS)	1				0		20.0	18.4	
S 138 Xylenes, Total	106				0		20.0	18.4	
S 140 Trihalomethanes, Total	1				0		40.0	36.3	
S 136 1,3-Dichloropropene, Total	1				0		20.0	17.2	
S 141 1,2-Dichloroethene, Total	1				0		20.0	19.2	
S 137 Total BTEX	1				0			47.0	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	5.00	Units: uL	
MV-Gas A_00057	Amount Added:	2.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

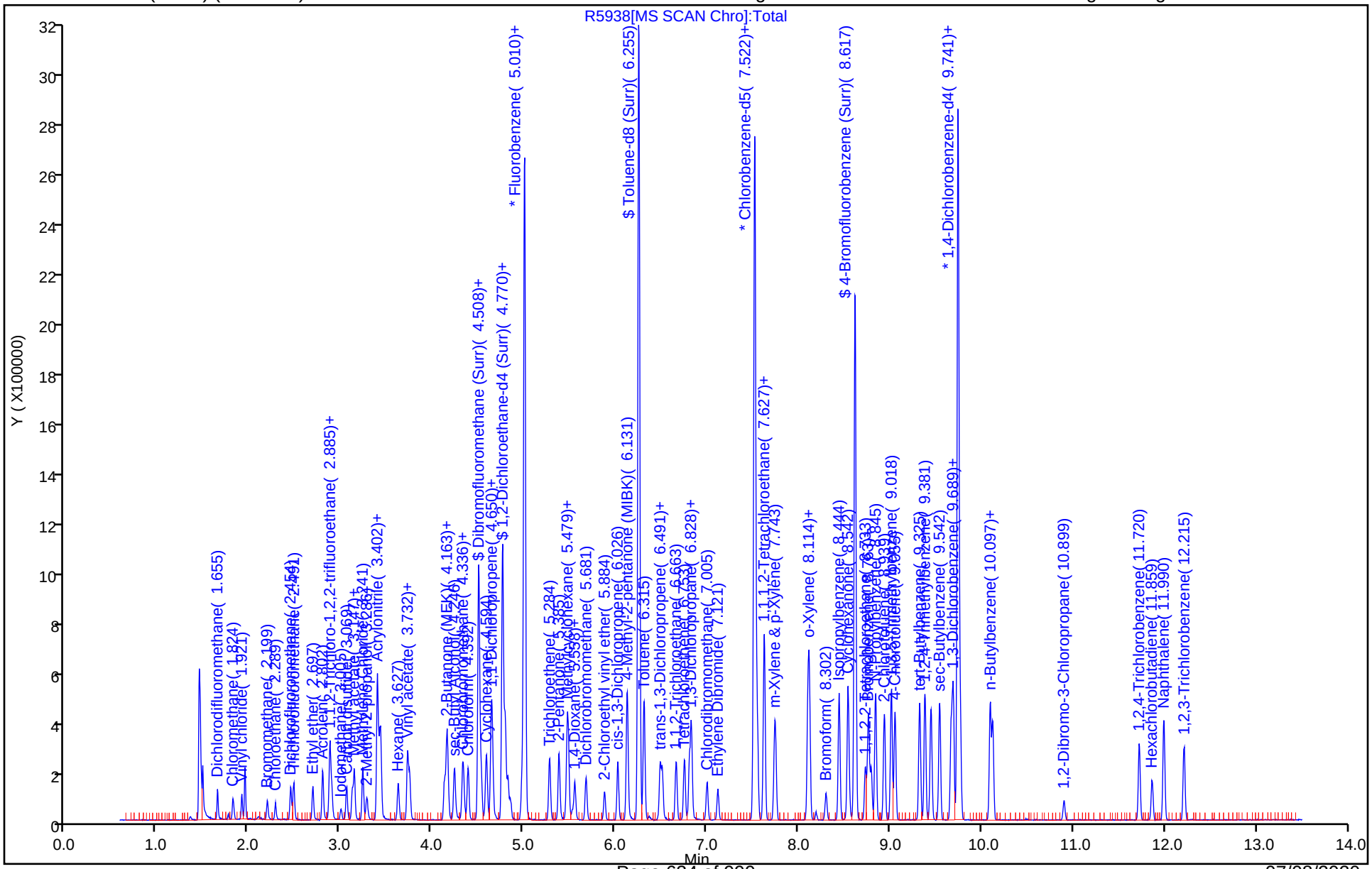
Report Date: 08-Jun-2020 13:48:36 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5938.D

Injection Date:	04-Jun-2020 14:15:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD10			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

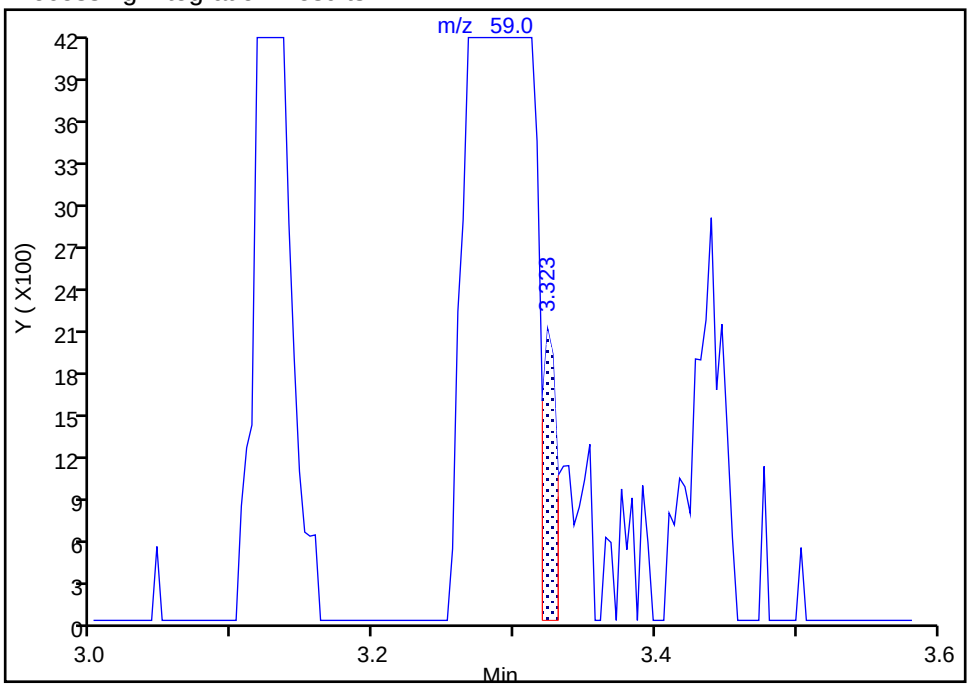
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5938.D
Injection Date: 04-Jun-2020 14:15:30 Instrument ID: VMS_R1
Lims ID: STD10
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 7 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

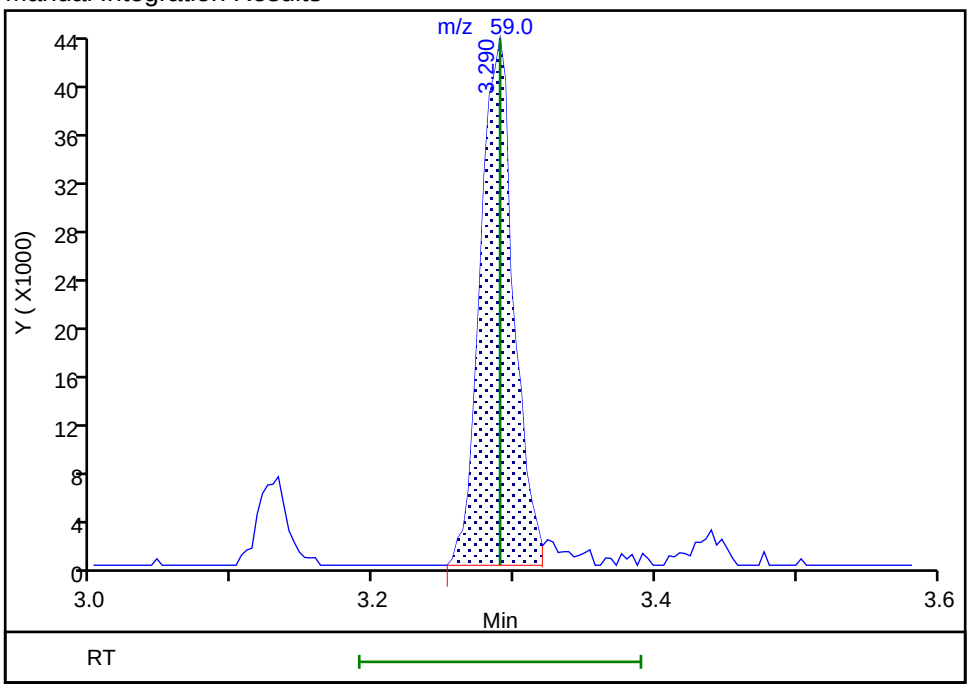
Processing Integration Results

RT: 3.32
Area: 1485
Amount: 1.877474
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 70642
Amount: 86.818574
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:23:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

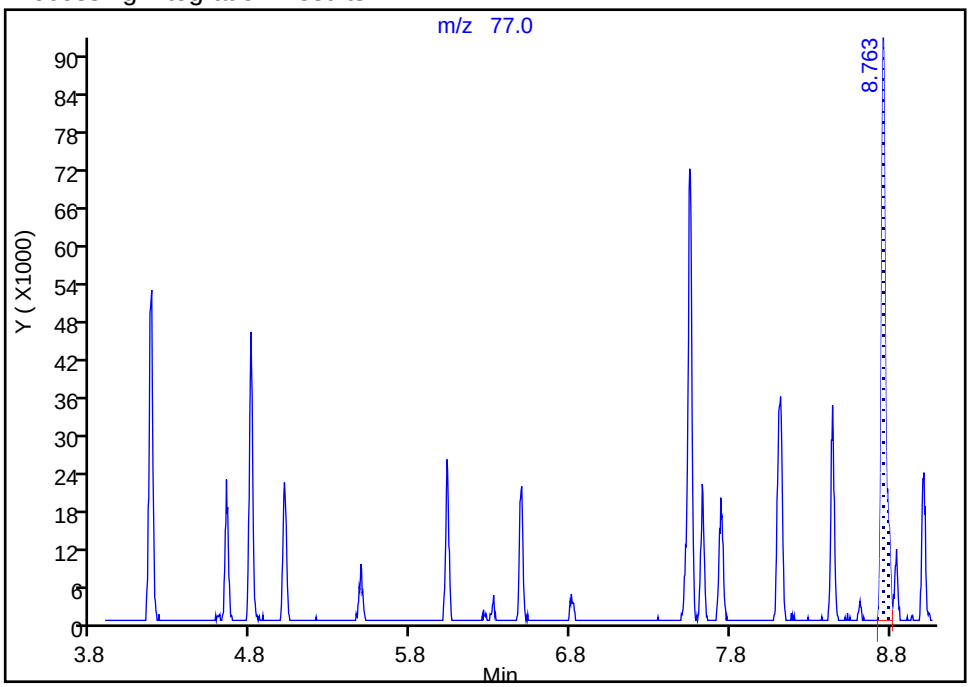
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5938.D
Injection Date: 04-Jun-2020 14:15:30 Instrument ID: VMS_R1
Lims ID: STD10
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 7 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

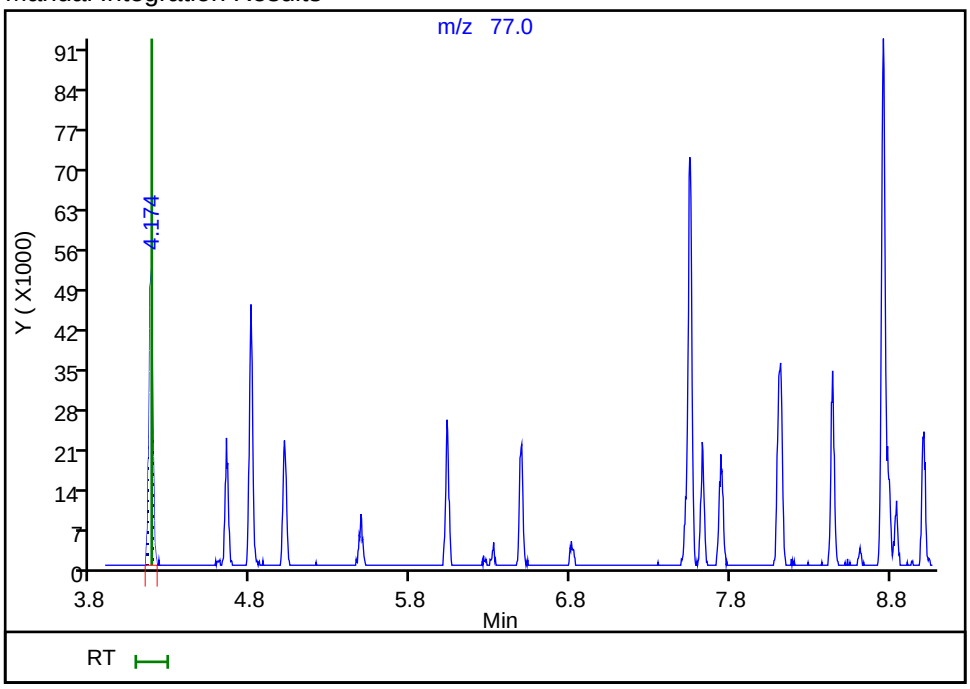
Processing Integration Results

RT: 8.76
Area: 172359
Amount: 16.738851
Amount Units: ug/l



Manual Integration Results

RT: 4.17
Area: 86014
Amount: 8.895136
Amount Units: ug/l



Reviewer: peppinga, 05-Jun-2020 11:31:37
Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5939.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 04-Jun-2020 14:37:30 ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:42 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 16:39:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.010	5.010	0.000	99	1944857	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	436788	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	673826	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.512	4.512	0.000	92	496238	50.0	50.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	604911	50.0	50.4	
$	6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	94	1895761	50.0	50.1	
$	7 4-Bromofluorobenzene (Surr)	95	8.620	8.620	0.000	83	703111	50.0	49.8	
	10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	409632	50.0	55.7	
	11 Chloromethane	50	1.828	1.828	0.000	99	404542	50.0	54.0	
	12 Vinyl chloride	62	1.921	1.921	0.000	98	385326	50.0	54.8	
	14 Bromomethane	94	2.191	2.191	0.000	90	175765	50.0	46.0	
	15 Chloroethane	64	2.285	2.285	0.000	100	229375	50.0	53.8	
	16 Dichlorofluoromethane	67	2.454	2.454	0.000	96	577828	50.0	52.3	
	17 Trichlorofluoromethane	101	2.487	2.487	0.000	98	565395	50.0	54.9	
	19 Ethyl ether	59	2.697	2.697	0.000	92	315092	50.0	53.0	
	21 Acrolein	56	2.806	2.806	0.000	99	752126	493.8	540.3	
	22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	94	177274	50.0	47.1	
	23 1,1-Dichloroethene	96	2.885	2.885	0.000	97	251145	50.0	47.5	
	24 Acetone	43	2.904	2.904	0.000	100	554718	200.0	198.7	
	26 Iodomethane	142	3.005	3.005	0.000	98	294687	50.0	50.0	
	27 Carbon disulfide	76	3.065	3.065	0.000	99	742984	50.0	46.6	
	29 Methyl acetate	43	3.128	3.128	0.000	98	662462	100.0	108.6	
	30 3-Chloro-1-propene	41	3.151	3.151	0.000	93	474164	50.0	52.0	
	31 Methylene Chloride	84	3.241	3.241	0.000	93	364237	50.0	48.7	
	32 2-Methyl-2-propanol	59	3.286	3.286	0.000	97	457185	500.0	498.4	a
	33 Acrylonitrile	53	3.402	3.402	0.000	98	1864213	500.0	554.6	
	34 Methyl tert-butyl ether	73	3.428	3.428	0.000	95	1131262	50.0	50.1	
	35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	97	320689	50.0	51.1	
	37 Hexane	57	3.631	3.631	0.000	91	299175	50.0	47.8	
	39 Vinyl acetate	43	3.732	3.732	0.000	97	1866194	100.0	102.6	
	40 1,1-Dichloroethane	63	3.754	3.754	0.000	96	648387	50.0	51.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	99	929831	200.0	224.4	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	83	387645	50.0	50.8	
48 2,2-Dichloropropane	77	4.171	4.171	0.000	87	482598	50.0	47.9	
50 sec-Butyl Alcohol	45	4.246	4.246	0.000	99	1224968	1500.0	1469.9	
52 Chlorobromomethane	128	4.332	4.332	0.000	98	182982	50.0	48.4	
53 Tetrahydrofuran	42	4.347	4.347	0.000	89	302861	100.0	111.1	
54 Chloroform	83	4.392	4.392	0.000	93	669713	50.0	50.2	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	98	554338	50.0	46.4	
56 Cyclohexane	56	4.590	4.590	0.000	91	530766	50.0	51.8	
57 1,1-Dichloropropene	75	4.647	4.647	0.000	96	514823	50.0	51.7	
59 Carbon tetrachloride	117	4.650	4.650	0.000	96	481440	50.0	52.2	
60 Isobutyl alcohol	41	4.662	4.662	0.000	94	412831	1250.0	1296.3	
62 Benzene	78	4.797	4.797	0.000	96	1509328	50.0	50.4	
63 1,2-Dichloroethane	62	4.827	4.827	0.000	98	557686	50.0	51.9	
65 n-Heptane	43	4.980	4.980	0.000	91	324167	50.0	51.9	
67 Trichloroethene	95	5.284	5.284	0.000	98	373053	50.0	51.1	
68 2-Pentanone	43	5.385	5.385	0.000	99	1437855	200.0	208.9	
69 Methylcyclohexane	55	5.475	5.475	0.000	92	409049	50.0	50.6	
70 1,2-Dichloropropane	63	5.486	5.486	0.000	96	397149	50.0	47.6	
72 1,4-Dioxane	88	5.531	5.531	0.000	93	145310	1000.0	1087.3	
73 Dibromomethane	93	5.558	5.558	0.000	92	254437	50.0	51.6	
74 Dichlorobromomethane	83	5.681	5.681	0.000	99	525336	50.0	52.4	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	91	306786	50.0	49.2	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	650841	50.0	49.6	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	97	1826904	200.0	201.1	
79 Toluene	91	6.315	6.315	0.000	98	1607394	50.0	51.1	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	88	617218	50.0	46.7	
81 Ethyl methacrylate	69	6.513	6.513	0.000	88	572511	50.0	48.6	
82 1,1,2-Trichloroethane	97	6.663	6.663	0.000	92	358838	50.0	52.0	
83 Tetrachloroethene	164	6.757	6.757	0.000	94	259360	50.0	45.9	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	91	676339	50.0	48.9	
85 2-Hexanone	43	6.828	6.828	0.000	95	1310041	200.0	214.8	
87 Chlorodibromomethane	129	7.005	7.005	0.000	90	400744	50.0	47.4	
88 Ethylene Dibromide	107	7.121	7.121	0.000	99	402553	50.0	48.8	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	495205	50.0	52.1	
90 Chlorobenzene	112	7.552	7.552	0.000	94	1013413	50.0	50.7	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	92	363291	50.0	48.4	
92 Ethylbenzene	106	7.627	7.627	0.000	99	537585	50.0	53.9	
93 m-Xylene & p-Xylene	106	7.747	7.747	0.000	0	678178	50.0	48.0	
94 o-Xylene	106	8.103	8.103	0.000	97	658148	50.0	47.8	
95 Styrene	104	8.122	8.122	0.000	94	1160938	50.0	53.1	
96 Bromoform	173	8.302	8.302	0.000	94	268145	50.0	46.9	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	1738855	50.0	52.4	
99 Cyclohexanone	55	8.541	8.541	0.000	92	1251685	2000.0	1932.0	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	578062	50.0	50.7	
101 Bromobenzene	156	8.763	8.763	0.000	97	413484	50.0	52.1	
102 trans-1,4-Dichloro-2-butene	53	8.766	8.766	0.000	76	164720	50.0	49.4	
103 1,2,3-Trichloropropane	110	8.793	8.793	0.000	85	177668	50.0	50.1	
104 N-Propylbenzene	120	8.841	8.841	0.000	99	455106	50.0	51.5	
105 2-Chlorotoluene	126	8.939	8.939	0.000	96	405439	50.0	50.8	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	1469480	50.0	52.4	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	427621	50.0	52.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	1200764	50.0	52.3	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	1532785	50.0	53.2	
111 sec-Butylbenzene	134	9.542	9.542	0.000	95	325598	50.0	48.8	
112 1,3-Dichlorobenzene	146	9.666	9.666	0.000	97	781946	50.0	51.7	
113 4-Isopropyltoluene	119	9.689	9.689	0.000	97	1516210	50.0	54.2	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	94	822384	50.0	51.5	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	1388842	50.0	50.1	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	96	806263	50.0	52.5	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	83	123120	50.0	48.8	
120 1,2,4-Trichlorobenzene	180	11.720	11.720	0.000	94	490743	50.0	47.2	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	96	162682	50.0	48.7	
122 Naphthalene	128	11.990	11.990	0.000	97	1796762	50.0	51.9	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	96	494202	50.0	50.8	
S 135 1,2-Dichloroethene, Total (URS)	96				0		100.0	101.9	
S 139 Xylenes, Total (URS)	1				0		100.0	95.8	
S 138 Xylenes, Total	106				0		100.0	95.8	
S 140 Trihalomethanes, Total	1				0		200.0	196.9	
S 136 1,3-Dichloropropene, Total	1				0		100.0	96.3	
S 141 1,2-Dichloroethene, Total	1				0		100.0	101.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	25.00	Units: uL	
MV-Gas A_00057	Amount Added:	10.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

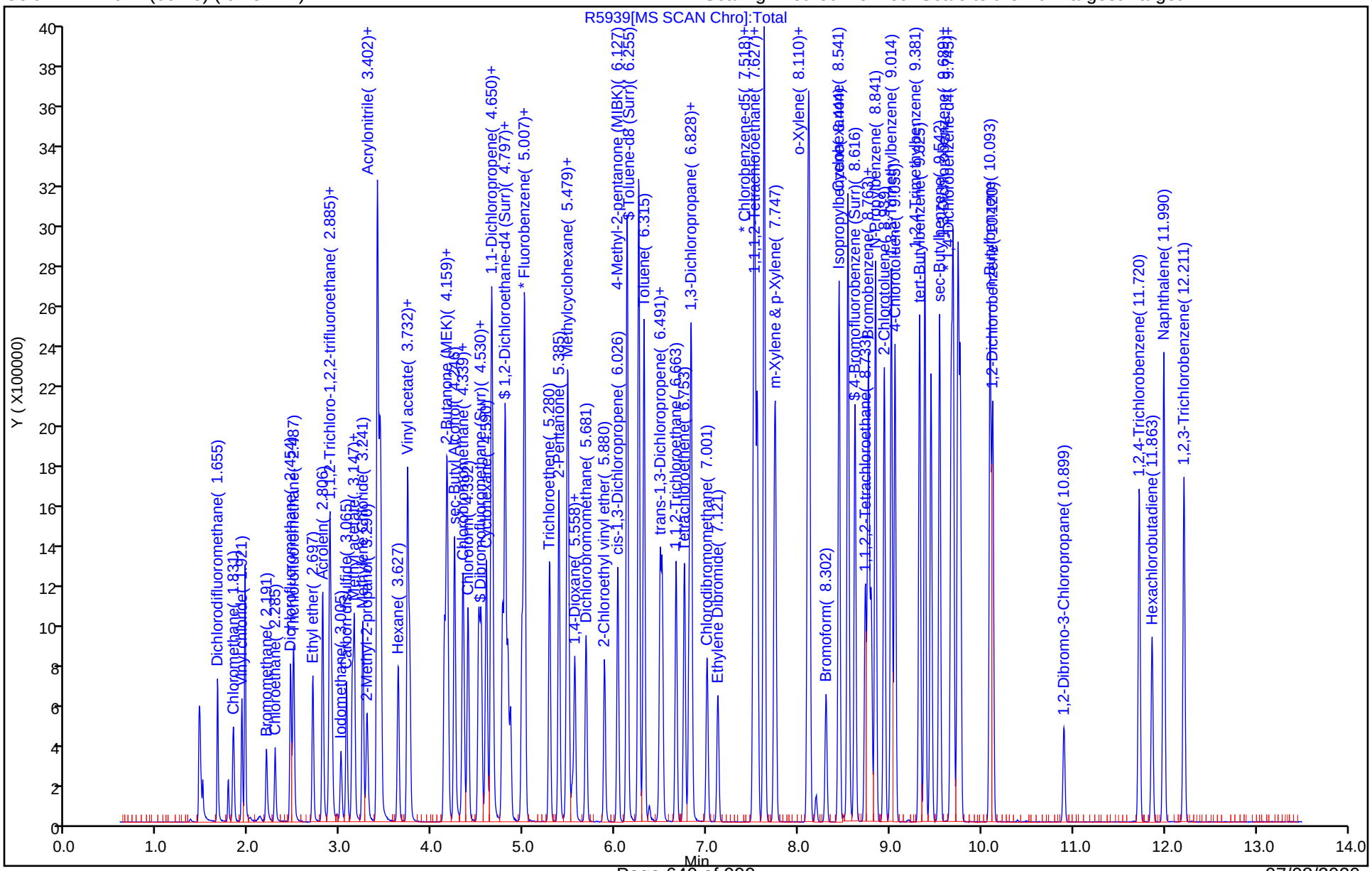
Report Date: 08-Jun-2020 13:48:43 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5939.D

Injection Date:	04-Jun-2020 14:37:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	ICIS			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

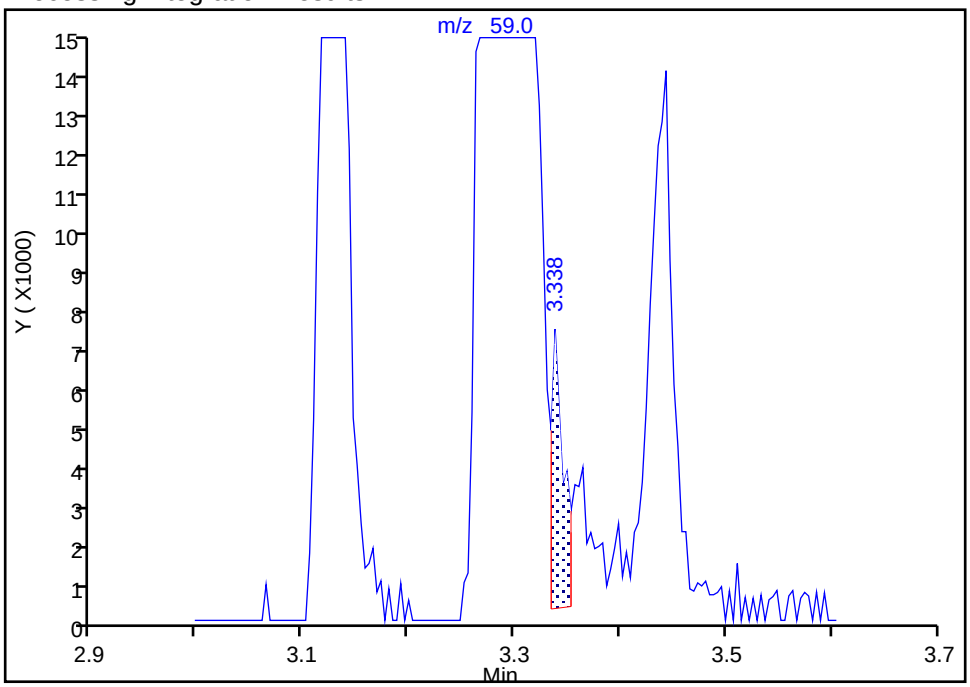
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5939.D
Injection Date: 04-Jun-2020 14:37:30 Instrument ID: VMS_R1
Lims ID: ICIS
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

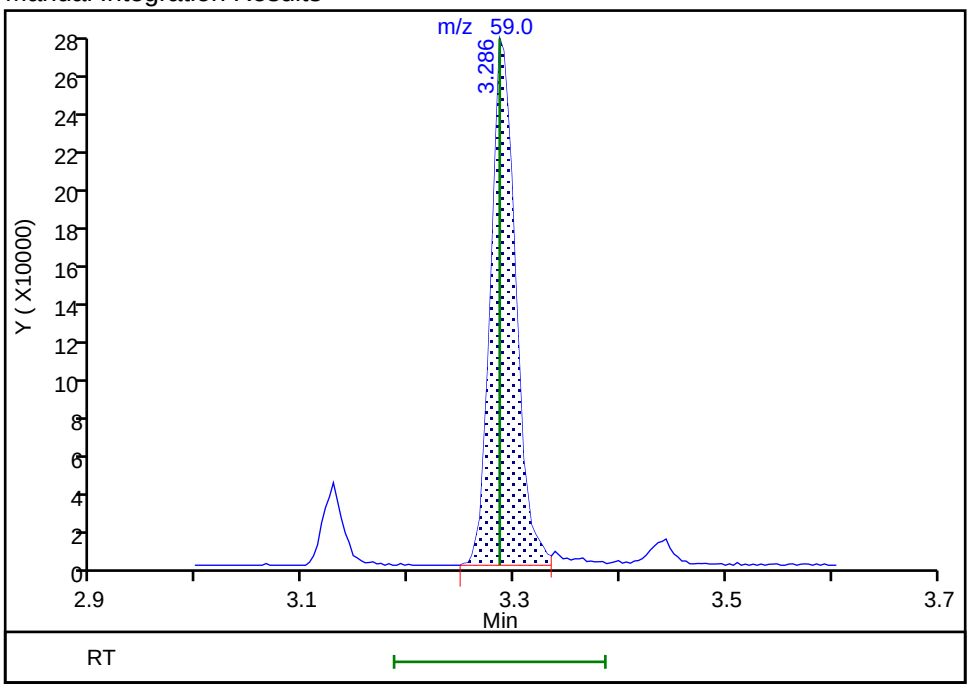
Processing Integration Results

RT: 3.34
Area: 5753
Amount: 8.324370
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 457185
Amount: 498.4242
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:22:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5940.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Jun-2020 14:58:30 ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:50 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 17:22:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.010	-0.004	99	2065584	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.526	7.522	0.004	87	456174	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	700729	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	92	510916	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	615678	50.0	48.3	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	2001432	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	84	741701	50.0	50.5	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	621530	75.0	79.6	
11 Chloromethane	50	1.828	1.828	0.000	99	619498	75.0	77.9	
12 Vinyl chloride	62	1.921	1.921	0.000	98	591058	75.0	79.1	
14 Bromomethane	94	2.184	2.191	-0.007	92	268302	75.0	66.2	
15 Chloroethane	64	2.281	2.285	-0.004	99	350137	75.0	77.3	
16 Dichlorofluoromethane	67	2.450	2.454	-0.004	97	879181	75.0	75.0	
17 Trichlorofluoromethane	101	2.484	2.487	-0.003	98	875320	75.0	80.0	
19 Ethyl ether	59	2.694	2.697	-0.003	91	487502	75.0	77.2	
21 Acrolein	56	2.802	2.806	-0.004	100	1135574	740.6	768.1	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	95	301273	75.0	75.4	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	96	410853	75.0	73.1	
24 Acetone	43	2.903	2.904	-0.001	100	828819	300.0	279.5	
26 Iodomethane	142	3.001	3.005	-0.004	99	512070	75.0	68.4	
27 Carbon disulfide	76	3.061	3.065	-0.004	99	1200837	75.0	70.7	
29 Methyl acetate	43	3.128	3.128	0.000	98	972033	150.0	150.0	
30 3-Chloro-1-propene	41	3.147	3.151	-0.004	92	752757	75.0	77.7	
31 Methylene Chloride	84	3.241	3.241	0.000	92	588151	75.0	74.0	
32 2-Methyl-2-propanol	59	3.290	3.286	0.004	98	711561	750.0	725.0	a
33 Acrylonitrile	53	3.402	3.402	0.000	99	2804695	750.0	785.6	
34 Methyl tert-butyl ether	73	3.425	3.428	-0.003	95	1774093	75.0	73.9	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	98	535577	75.0	80.4	
37 Hexane	57	3.627	3.631	-0.004	91	491175	75.0	74.8	
39 Vinyl acetate	43	3.732	3.732	0.000	97	2845388	150.0	146.9	
40 1,1-Dichloroethane	63	3.754	3.754	0.000	96	1043906	75.0	77.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	100	1370901	300.0	311.6	
47 cis-1,2-Dichloroethene	96	4.156	4.159	-0.003	83	632384	75.0	78.0	
48 2,2-Dichloropropane	77	4.171	4.171	0.000	87	803491	75.0	74.8	
50 sec-Butyl Alcohol	45	4.245	4.246	-0.001	99	1867573	2250.0	2090.5	
52 Chlorobromomethane	128	4.332	4.332	0.000	98	296176	75.0	73.6	
53 Tetrahydrofuran	42	4.343	4.347	-0.004	87	443039	150.0	153.0	
54 Chloroform	83	4.392	4.392	0.000	93	1081246	75.0	76.3	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	98	919094	75.0	72.2	
56 Cyclohexane	56	4.590	4.590	0.000	89	848677	75.0	78.0	
57 1,1-Dichloropropene	75	4.647	4.647	0.000	98	850219	75.0	80.3	
59 Carbon tetrachloride	117	4.650	4.650	0.000	96	790001	75.0	80.7	
60 Isobutyl alcohol	41	4.662	4.662	0.000	95	625837	1875.0	1844.9	
62 Benzene	78	4.797	4.797	0.000	96	2436664	75.0	76.6	
63 1,2-Dichloroethane	62	4.827	4.827	0.000	97	894851	75.0	78.3	
65 n-Heptane	43	4.980	4.980	0.000	91	510945	75.0	77.0	
67 Trichloroethene	95	5.284	5.284	0.000	98	617945	75.0	79.7	
68 2-Pentanone	43	5.385	5.385	0.000	99	2165444	300.0	295.5	
69 Methylcyclohexane	55	5.475	5.475	0.000	91	670766	75.0	78.1	
70 1,2-Dichloropropane	63	5.486	5.486	0.000	96	645330	75.0	72.5	
72 1,4-Dioxane	88	5.531	5.531	0.000	93	216186	1500.0	1523.1	
73 Dibromomethane	93	5.558	5.558	0.000	92	408905	75.0	78.1	
74 Dichlorobromomethane	83	5.681	5.681	0.000	99	857486	75.0	80.5	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	91	468256	75.0	70.4	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	1048269	75.0	76.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	2765281	300.0	286.0	
79 Toluene	91	6.315	6.315	0.000	98	2619953	75.0	78.5	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	90	1001465	75.0	71.0	
81 Ethyl methacrylate	69	6.510	6.513	-0.003	87	904501	75.0	73.2	
82 1,1,2-Trichloroethane	97	6.663	6.663	0.000	92	583484	75.0	79.6	
83 Tetrachloroethene	164	6.753	6.757	-0.004	93	438052	75.0	74.1	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	90	1079616	75.0	74.7	
85 2-Hexanone	43	6.832	6.828	0.004	96	1976468	300.0	309.8	
87 Chlorodibromomethane	129	7.004	7.005	-0.001	94	654747	75.0	74.0	
88 Ethylene Dibromide	107	7.121	7.121	0.000	99	641124	75.0	73.9	
89 1-Chlorohexane	91	7.511	7.507	0.004	97	805385	75.0	81.1	
90 Chlorobenzene	112	7.552	7.552	0.000	93	1646406	75.0	78.8	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	94	596632	75.0	75.9	
92 Ethylbenzene	106	7.627	7.627	0.000	99	890154	75.0	85.5	
93 m-Xylene & p-Xylene	106	7.747	7.747	0.000	0	1098514	75.0	74.3	
94 o-Xylene	106	8.107	8.103	0.004	97	1080082	75.0	74.9	
95 Styrene	104	8.122	8.122	0.000	95	1917870	75.0	84.0	
96 Bromoform	173	8.302	8.302	0.000	95	432738	75.0	72.0	
97 Isopropylbenzene	105	8.444	8.444	0.000	96	2869779	75.0	83.2	
99 Cyclohexanone	55	8.541	8.541	0.000	92	1945579	3000.0	2865.1	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	887393	75.0	74.6	
101 Bromobenzene	156	8.763	8.763	0.000	96	670219	75.0	81.2	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	68	256347	75.0	73.3	
103 1,2,3-Trichloropropane	110	8.796	8.793	0.003	84	272758	75.0	73.8	
104 N-Propylbenzene	120	8.841	8.841	0.000	99	745240	75.0	81.1	
105 2-Chlorotoluene	126	8.939	8.939	0.000	96	651960	75.0	78.5	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	2425437	75.0	83.2	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	686279	75.0	80.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	1950975	75.0	81.7	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	2489768	75.0	83.1	
111 sec-Butylbenzene	134	9.542	9.542	0.000	95	547280	75.0	78.7	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	97	1296909	75.0	82.4	
113 4-Isopropyltoluene	119	9.689	9.689	-0.001	97	2461956	75.0	84.7	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	93	1329544	75.0	80.1	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	2282780	75.0	79.0	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	96	1305922	75.0	81.8	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	83	185246	75.0	70.2	
120 1,2,4-Trichlorobenzene	180	11.724	11.720	0.004	93	791977	75.0	73.0	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	96	258660	75.0	74.0	
122 Naphthalene	128	11.990	11.990	0.000	98	2789332	75.0	77.3	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	95	772547	75.0	76.2	
S 135 1,2-Dichloroethene, Total (URS)	96				0		150.0	158.3	
S 139 Xylenes, Total (URS)	1				0		150.0	149.2	
S 138 Xylenes, Total	106				0		150.0	149.2	
S 140 Trihalomethanes, Total	1				0		300.0	302.8	
S 136 1,3-Dichloropropene, Total	1				0		150.0	147.2	
S 141 1,2-Dichloroethene, Total	1				0		150.0	158.3	
S 137 Total BTEX	1				0			389.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	37.50	Units: uL	
MV-Gas A_00057	Amount Added:	15.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

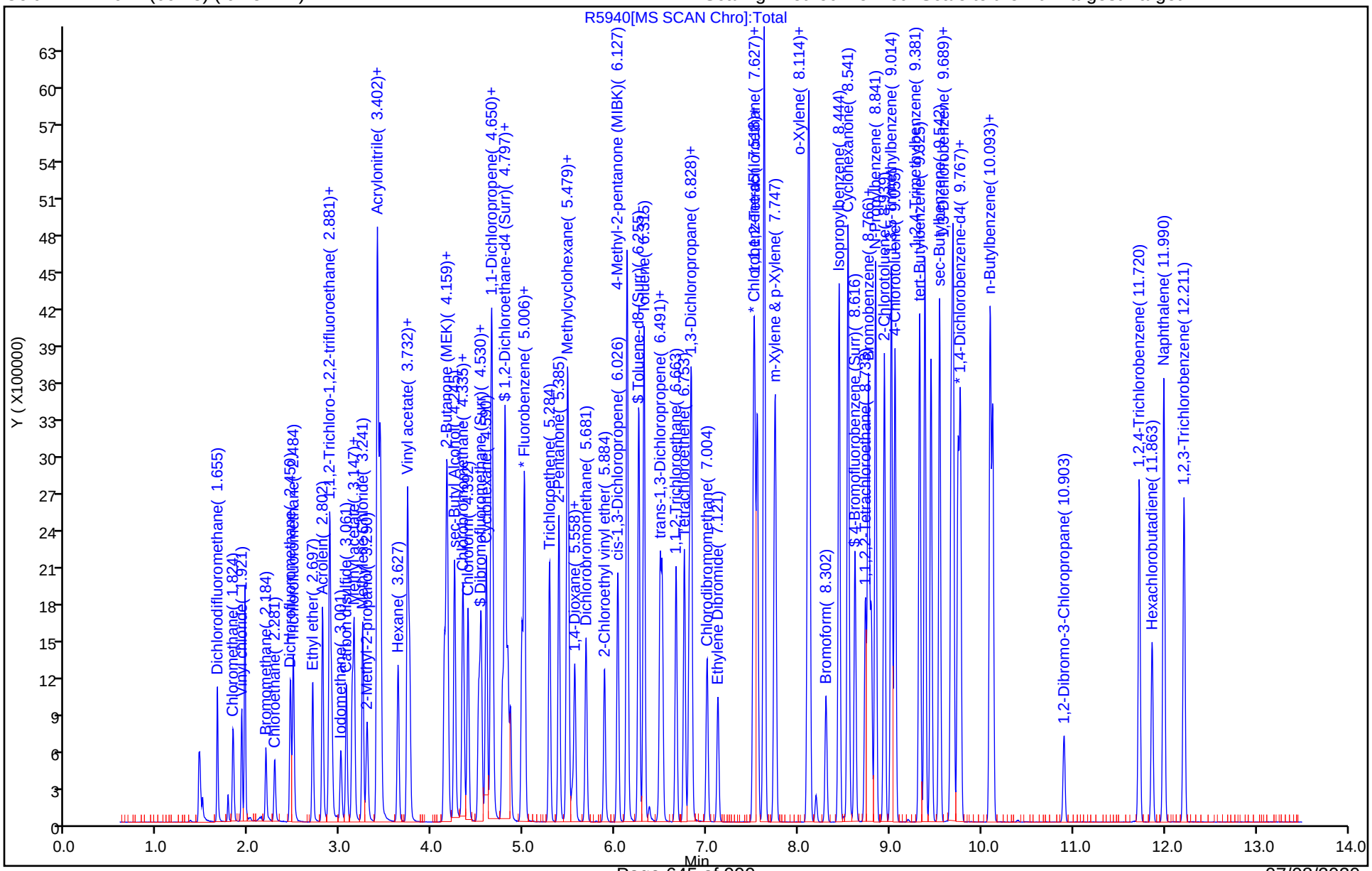
Report Date: 08-Jun-2020 13:48:52 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5940.D

Injection Date:	04-Jun-2020 14:58:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD75			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

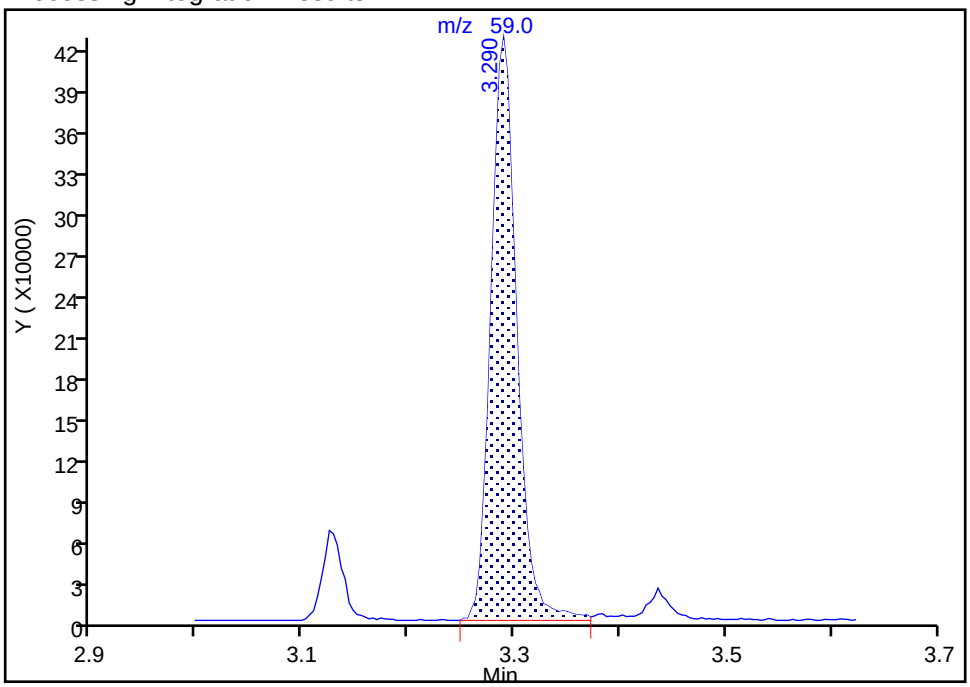
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5940.D
Injection Date: 04-Jun-2020 14:58:30 Instrument ID: VMS_R1
Lims ID: STD75
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

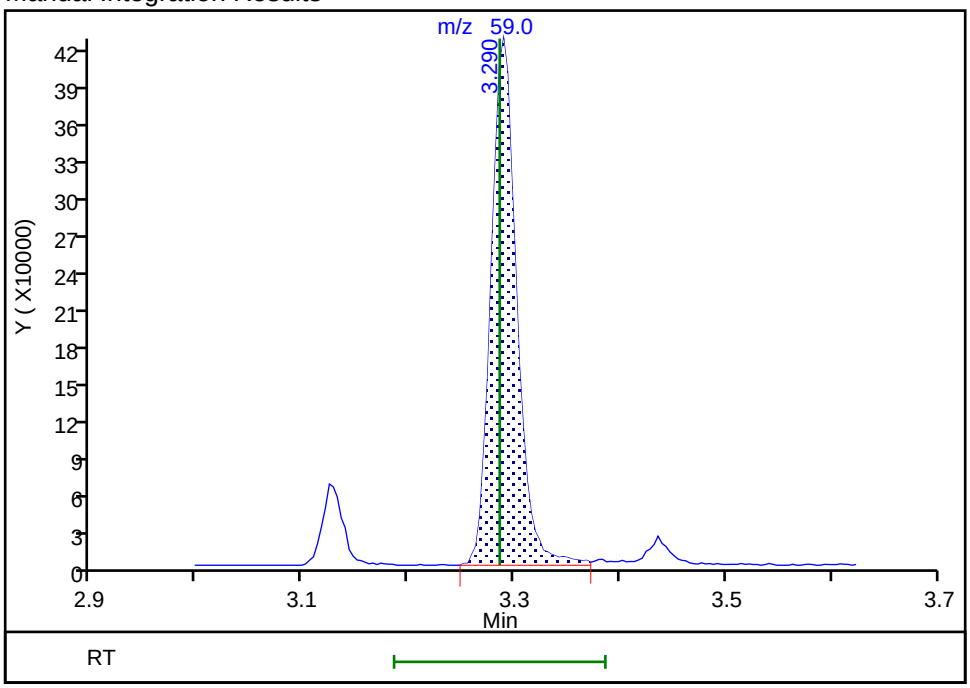
Processing Integration Results

RT: 3.29
Area: 711561
Amount: 969.4245
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 711561
Amount: 725.0326
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:22:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5941.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Jun-2020 15:20:30 ALS Bottle#: 10 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:48:58 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 17:21:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	99	2021871	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	461687	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	715620	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	92	521815	50.0	51.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	631459	50.0	50.6	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1977707	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	91	751340	50.0	50.1	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	881259	100.0	115.3	
11 Chloromethane	50	1.828	1.828	0.000	99	834231	100.0	107.1	
12 Vinyl chloride	62	1.921	1.921	0.000	98	825176	100.0	112.9	
14 Bromomethane	94	2.187	2.191	-0.004	91	392737	100.0	99.0	
15 Chloroethane	64	2.285	2.285	0.000	100	474713	100.0	107.1	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	96	1190551	100.0	103.7	
17 Trichlorofluoromethane	101	2.484	2.487	-0.003	98	1197815	100.0	111.8	
19 Ethyl ether	59	2.697	2.697	0.000	91	678718	100.0	109.8	
21 Acrolein	56	2.802	2.806	-0.004	100	1581107	987.5	1092.6	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	95	394052	100.0	100.7	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	97	565640	100.0	102.6	
24 Acetone	43	2.903	2.904	-0.001	100	1142207	400.0	393.5	
26 Iodomethane	142	3.005	3.005	0.000	100	726386	100.0	85.8	
27 Carbon disulfide	76	3.065	3.065	0.000	99	1634140	100.0	98.2	
29 Methyl acetate	43	3.128	3.128	0.000	97	1368321	200.0	215.7	
30 3-Chloro-1-propene	41	3.147	3.151	-0.004	92	1029230	100.0	108.6	
31 Methylene Chloride	84	3.241	3.241	0.000	93	787027	100.0	101.2	
32 2-Methyl-2-propanol	59	3.290	3.286	0.004	98	1008636	1000.0	1044.8	a
33 Acrylonitrile	53	3.402	3.402	0.000	99	3883195	1000.0	1111.1	
34 Methyl tert-butyl ether	73	3.424	3.428	-0.004	95	2454076	100.0	104.4	
35 trans-1,2-Dichloroethene	96	3.439	3.440	-0.001	98	714919	100.0	109.6	
37 Hexane	57	3.627	3.631	-0.004	91	666456	100.0	100.2	
39 Vinyl acetate	43	3.732	3.732	0.000	97	4058461	200.0	213.5	
40 1,1-Dichloroethane	63	3.754	3.754	0.000	96	1449951	100.0	110.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	100	1919715	400.0	445.7	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	83	871696	100.0	109.8	
48 2,2-Dichloropropane	77	4.167	4.171	-0.004	86	1093596	100.0	103.9	
50 sec-Butyl Alcohol	45	4.245	4.246	-0.001	99	2645112	3000.0	3004.8	
52 Chlorobromomethane	128	4.332	4.332	0.000	98	410633	100.0	104.0	
53 Tetrahydrofuran	42	4.343	4.347	-0.004	88	620937	200.0	219.0	
54 Chloroform	83	4.392	4.392	0.000	93	1466675	100.0	105.8	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	98	1270514	100.0	101.7	
56 Cyclohexane	56	4.594	4.590	0.004	90	1171430	100.0	110.0	
57 1,1-Dichloropropene	75	4.643	4.647	-0.004	97	1156339	100.0	111.6	
59 Carbon tetrachloride	117	4.650	4.650	0.000	97	1078039	100.0	112.5	
60 Isobutyl alcohol	41	4.662	4.662	0.000	96	889372	2500.0	2672.9	
62 Benzene	78	4.796	4.797	-0.001	96	3339187	100.0	107.3	
63 1,2-Dichloroethane	62	4.826	4.827	-0.001	98	1212771	100.0	108.5	
65 n-Heptane	43	4.980	4.980	0.000	92	689807	100.0	106.2	
67 Trichloroethene	95	5.280	5.284	-0.004	98	836451	100.0	110.2	
68 2-Pentanone	43	5.385	5.385	0.000	99	3021725	400.0	420.7	
69 Methylcyclohexane	55	5.475	5.475	0.000	92	905748	100.0	107.7	
70 1,2-Dichloropropane	63	5.486	5.486	0.000	96	886238	100.0	101.5	
72 1,4-Dioxane	88	5.531	5.531	0.000	92	301796	2000.0	2172.3	
73 Dibromomethane	93	5.557	5.558	-0.001	92	564920	100.0	110.2	
74 Dichlorobromomethane	83	5.681	5.681	0.000	99	1192709	100.0	114.4	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	91	628028	100.0	96.3	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	1475436	100.0	105.9	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	97	3881612	400.0	409.5	
79 Toluene	91	6.315	6.315	0.000	99	3566053	100.0	109.1	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	89	1414422	100.0	102.1	
81 Ethyl methacrylate	69	6.513	6.513	0.000	88	1263285	100.0	100.8	
82 1,1,2-Trichloroethane	97	6.667	6.663	0.004	91	814039	100.0	113.5	
83 Tetrachloroethene	164	6.757	6.757	0.000	95	589063	100.0	98.3	
84 1,3-Dichloropropane	76	6.809	6.810	-0.001	90	1507080	100.0	102.9	
85 2-Hexanone	43	6.832	6.828	0.004	96	2723877	400.0	421.4	
87 Chlorodibromomethane	129	7.004	7.005	-0.001	90	901021	100.0	100.5	
88 Ethylene Dibromide	107	7.121	7.121	0.000	99	875355	100.0	99.5	
89 1-Chlorohexane	91	7.510	7.507	0.003	97	1075440	100.0	107.1	
90 Chlorobenzene	112	7.552	7.552	0.000	93	2273338	100.0	107.5	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	94	823815	100.0	103.4	
92 Ethylbenzene	106	7.627	7.627	0.000	99	1200243	100.0	113.9	
93 m-Xylene & p-Xylene	106	7.743	7.747	-0.004	0	1500288	100.0	100.0	
94 o-Xylene	106	8.103	8.103	0.000	98	1457172	100.0	99.8	
95 Styrene	104	8.122	8.122	0.000	95	2604123	100.0	112.7	
96 Bromoform	173	8.301	8.302	-0.001	94	610659	100.0	100.0	
97 Isopropylbenzene	105	8.444	8.444	0.000	96	3823108	100.0	108.6	
99 Cyclohexanone	55	8.541	8.541	0.000	92	2731585	4000.0	3966.4	
100 1,1,2,2-Tetrachloroethane	83	8.733	8.729	0.004	94	1222974	100.0	100.4	
101 Bromobenzene	156	8.763	8.763	0.000	97	909707	100.0	107.9	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	73	355206	100.0	99.0	
103 1,2,3-Trichloropropane	110	8.796	8.793	0.003	84	377426	100.0	99.9	
104 N-Propylbenzene	120	8.841	8.841	0.000	99	1002893	100.0	106.9	
105 2-Chlorotoluene	126	8.939	8.939	0.000	95	886296	100.0	104.6	
106 1,3,5-Trimethylbenzene	105	9.017	9.014	0.003	94	3263027	100.0	109.5	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	943203	100.0	108.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	2610843	100.0	107.0	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	3370728	100.0	110.2	
111 sec-Butylbenzene	134	9.542	9.542	0.000	95	739288	100.0	104.0	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	97	1766566	100.0	109.9	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	3304556	100.0	111.3	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	93	1783310	100.0	105.2	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	3041696	100.0	103.0	
117 1,2-Dichlorobenzene	146	10.120	10.123	-0.003	96	1795921	100.0	110.2	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	83	268013	100.0	98.9	
120 1,2,4-Trichlorobenzene	180	11.724	11.720	0.004	94	1110625	100.0	100.2	
121 Hexachlorobutadiene	225	11.866	11.863	0.003	96	347353	100.0	97.0	
122 Naphthalene	128	11.990	11.990	0.000	98	3865544	100.0	104.7	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	95	1072926	100.0	103.4	
S 135 1,2-Dichloroethene, Total (URS)	96				0		200.0	219.4	
S 139 Xylenes, Total (URS)	1				0		200.0	199.8	
S 138 Xylenes, Total	106				0		200.0	199.8	
S 140 Trihalomethanes, Total	1				0		400.0	420.7	
S 136 1,3-Dichloropropene, Total	1				0		200.0	208.0	
S 141 1,2-Dichloroethene, Total	1				0		200.0	219.4	
S 137 Total BTEX	1				0			530.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added:	50.00	Units: uL	
MV-Gas A_00057	Amount Added:	20.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

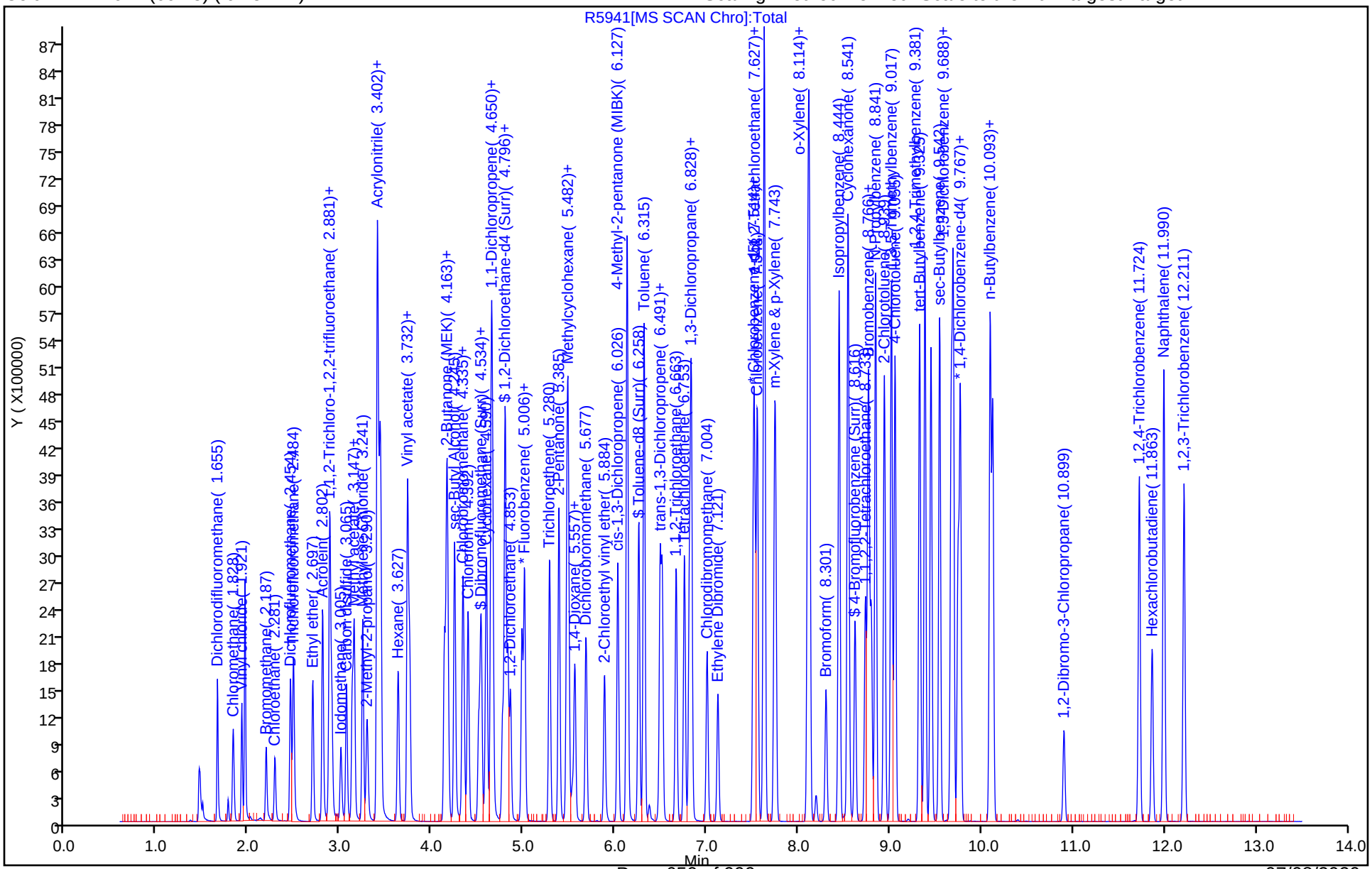
Report Date: 08-Jun-2020 13:48:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5941.D

Injection Date:	04-Jun-2020 15:20:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD100			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

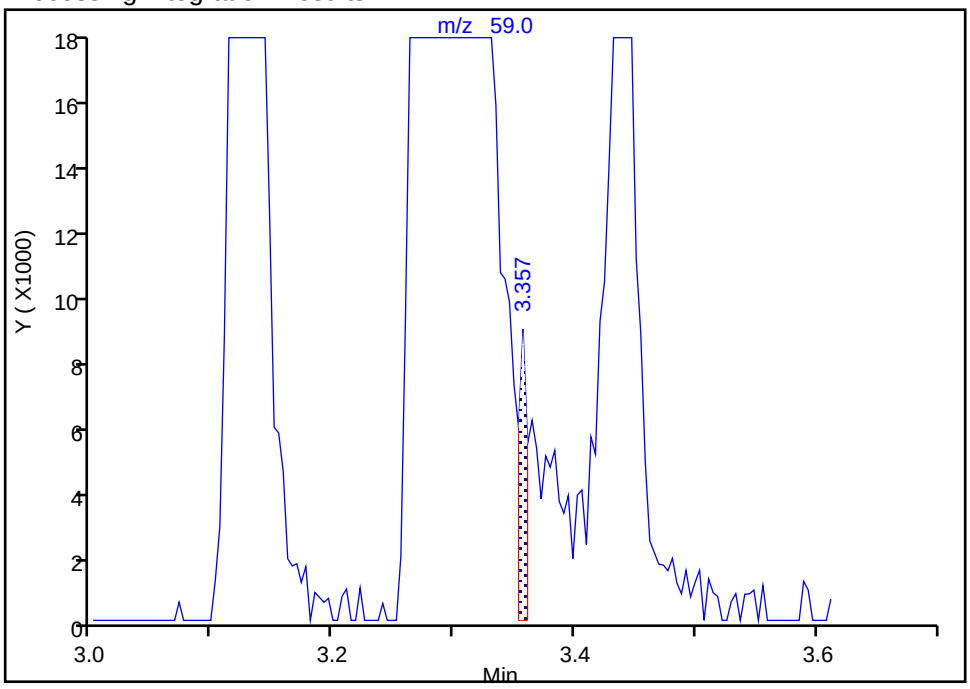
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5941.D
Injection Date: 04-Jun-2020 15:20:30 Instrument ID: VMS_R1
Lims ID: STD100
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 10 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

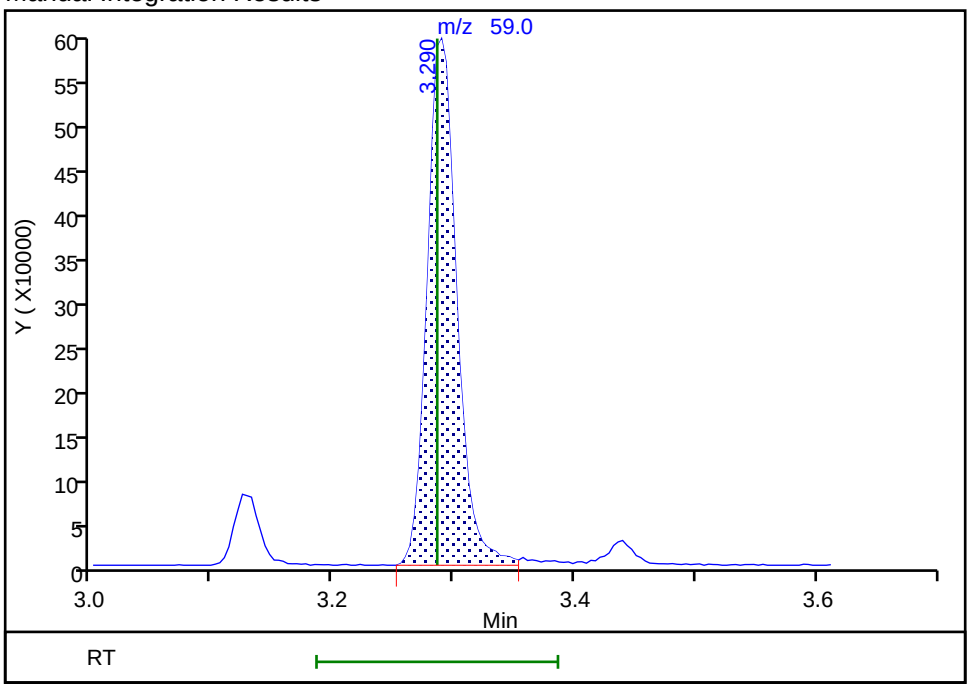
Processing Integration Results

RT: 3.36
Area: 4474
Amount: 7.371931
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 1008636
Amount: 1044.7783
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:21:27
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 04-Jun-2020 15:41:30 ALS Bottle#: 11 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 08-Jun-2020 13:49:06 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1039

First Level Reviewer: sumichrastr Date: 04-Jun-2020 17:21:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	98	2093621	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	473809	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	726167	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	92	519230	50.0	49.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.770	4.767	0.003	0	628438	50.0	48.6	
$ 6 Toluene-d8 (Surr)	98	6.258	6.255	0.003	93	2084039	50.0	50.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.620	8.620	0.000	85	754098	50.0	49.6	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	2026286	200.0	256.0	
11 Chloromethane	50	1.828	1.828	0.000	99	1953201	200.0	242.2	
12 Vinyl chloride	62	1.921	1.921	0.000	98	1943956	200.0	256.8	
14 Bromomethane	94	2.180	2.191	-0.011	93	911320	200.0	221.7	
15 Chloroethane	64	2.277	2.285	-0.008	100	1061969	200.0	231.3	
16 Dichlorofluoromethane	67	2.450	2.454	-0.004	97	2695128	200.0	226.8	
17 Trichlorofluoromethane	101	2.484	2.487	-0.003	98	2781214	200.0	250.7	
19 Ethyl ether	59	2.697	2.697	0.000	90	1385343	200.0	216.5	
21 Acrolein	56	2.802	2.806	-0.004	100	3195524	1975.0	2132.6	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	96	859453	200.0	212.1	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	97	1226618	200.0	214.6	
24 Acetone	43	2.903	2.904	-0.001	100	2426297	800.0	807.3	
26 Iodomethane	142	3.001	3.005	-0.004	100	1576524	200.0	132.2	
27 Carbon disulfide	76	3.065	3.065	0.000	99	3631091	200.0	210.3	
29 Methyl acetate	43	3.128	3.128	0.000	98	2929415	400.0	446.1	
30 3-Chloro-1-propene	41	3.147	3.151	-0.004	92	1959220	200.0	199.6	
31 Methylene Chloride	84	3.241	3.241	0.000	92	1658679	200.0	206.0	
32 2-Methyl-2-propanol	59	3.293	3.286	0.007	99	2220566	2000.0	2208.3	a
33 Acrylonitrile	53	3.402	3.402	0.000	99	7958319	2000.0	2199.2	
34 Methyl tert-butyl ether	73	3.428	3.428	0.000	94	5113933	200.0	209.7	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	98	1521944	200.0	225.3	
37 Hexane	57	3.627	3.631	-0.004	92	1431321	200.0	209.1	
39 Vinyl acetate	43	3.732	3.732	0.000	97	7692032	400.0	390.0	
40 1,1-Dichloroethane	63	3.754	3.754	0.000	96	2976631	200.0	218.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	100	4010780	800.0	899.4	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	83	1806348	200.0	219.7	
48 2,2-Dichloropropane	77	4.170	4.171	-0.001	86	2367640	200.0	216.7	
50 sec-Butyl Alcohol	45	4.249	4.246	0.003	99	5716871	6000.0	6223.0	
52 Chlorobromomethane	128	4.335	4.332	0.003	98	826047	200.0	201.6	
53 Tetrahydrofuran	42	4.343	4.347	-0.004	88	1318248	400.0	449.0	
54 Chloroform	83	4.392	4.392	0.000	93	3073639	200.0	214.1	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	98	2662765	200.0	205.4	
56 Cyclohexane	56	4.590	4.590	0.000	90	2531185	200.0	229.5	
57 1,1-Dichloropropene	75	4.643	4.647	-0.004	97	2420141	200.0	225.6	
59 Carbon tetrachloride	117	4.650	4.650	0.000	96	2322959	200.0	234.0	
60 Isobutyl alcohol	41	4.662	4.662	0.000	93	1911949	5000.0	5535.7	
62 Benzene	78	4.797	4.797	-0.001	96	6946633	200.0	215.5	
63 1,2-Dichloroethane	62	4.826	4.827	-0.001	97	2466601	200.0	213.0	
65 n-Heptane	43	4.980	4.980	0.000	92	1510003	200.0	224.4	
67 Trichloroethene	95	5.280	5.284	-0.004	98	1791238	200.0	227.9	
68 2-Pentanone	43	5.385	5.385	0.000	99	6336171	800.0	850.3	
69 Methylcyclohexane	55	5.475	5.475	0.000	92	1941740	200.0	223.0	
70 1,2-Dichloropropane	63	5.486	5.486	0.000	97	1845231	200.0	203.6	
72 1,4-Dioxane	88	5.531	5.531	0.000	92	622225	4000.0	4325.2	
73 Dibromomethane	93	5.557	5.558	-0.001	93	1170253	200.0	220.4	
74 Dichlorobromomethane	83	5.681	5.681	0.000	100	2477585	200.0	229.5	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	91	1440304	200.0	212.4	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	3093208	200.0	215.8	
78 4-Methyl-2-pentanone (MIBK)	43	6.131	6.127	0.004	96	7971605	800.0	810.8	
79 Toluene	91	6.315	6.315	0.000	98	7531083	200.0	222.5	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	89	2980073	200.0	207.0	
81 Ethyl methacrylate	69	6.513	6.513	0.000	88	2632675	200.0	204.1	
82 1,1,2-Trichloroethane	97	6.663	6.663	0.000	92	1663189	200.0	223.9	
83 Tetrachloroethene	164	6.757	6.757	0.000	94	1282320	200.0	208.1	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	90	3077161	200.0	204.5	
85 2-Hexanone	43	6.832	6.828	0.004	95	5634090	800.0	848.0	
87 Chlorodibromomethane	129	7.004	7.005	-0.001	90	1886231	200.0	204.8	
88 Ethylene Dibromide	107	7.121	7.121	0.000	98	1843644	200.0	203.3	
89 1-Chlorohexane	91	7.511	7.507	0.004	97	2359274	200.0	228.8	
90 Chlorobenzene	112	7.552	7.552	0.000	94	4758333	200.0	219.3	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	95	1711945	200.0	209.1	
92 Ethylbenzene	106	7.630	7.627	0.003	99	2526267	200.0	233.7	
93 m-Xylene & p-Xylene	106	7.747	7.747	0.000	0	3142656	200.0	203.7	
94 o-Xylene	106	8.107	8.103	0.004	97	3054460	200.0	203.5	
95 Styrene	104	8.122	8.122	0.000	94	5406930	200.0	228.0	
96 Bromoform	173	8.301	8.302	-0.001	95	1309220	200.0	207.8	
97 Isopropylbenzene	105	8.444	8.444	0.000	96	8177943	200.0	228.9	
99 Cyclohexanone	55	8.545	8.541	0.004	92	5890455	8000.0	8311.1	
100 1,1,2,2-Tetrachloroethane	83	8.733	8.729	0.004	94	2482780	200.0	200.3	
101 Bromobenzene	156	8.763	8.763	0.000	97	1888269	200.0	220.6	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	77	726891	200.0	198.4	
103 1,2,3-Trichloropropane	110	8.796	8.793	0.003	84	777405	200.0	202.4	
104 N-Propylbenzene	120	8.845	8.841	0.004	99	2114863	200.0	222.1	
105 2-Chlorotoluene	126	8.939	8.939	0.000	96	1871649	200.0	217.6	
106 1,3,5-Trimethylbenzene	105	9.017	9.014	0.003	94	6900028	200.0	228.3	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	1970485	200.0	224.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	5611758	200.0	226.7	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	7063094	200.0	227.6	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	1593457	200.0	220.6	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	96	3637316	200.0	223.0	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	6971165	200.0	231.4	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	93	3724472	200.0	216.4	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	6460327	200.0	215.2	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	96	3648009	200.0	220.6	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	85	574983	200.0	207.8	
120 1,2,4-Trichlorobenzene	180	11.724	11.720	0.004	94	2327605	200.0	206.6	
121 Hexachlorobutadiene	225	11.866	11.863	0.003	97	758419	200.0	207.7	
122 Naphthalene	128	11.994	11.990	0.004	97	8006274	200.0	213.4	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	95	2183442	200.0	206.9	
S 135 1,2-Dichloroethene, Total (URS)	96				0		400.0	445.1	
S 139 Xylenes, Total (URS)	1				0		400.0	407.2	
S 138 Xylenes, Total	106				0		400.0	407.2	
S 140 Trihalomethanes, Total	1				0		800.0	856.2	
S 136 1,3-Dichloropropene, Total	1				0		400.0	422.8	
S 141 1,2-Dichloroethene, Total	1				0		400.0	445.1	
S 137 Total BTEX	1				0			1078.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00034	Amount Added: 100.00	Units: uL	
MV-Gas A_00057	Amount Added: 40.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

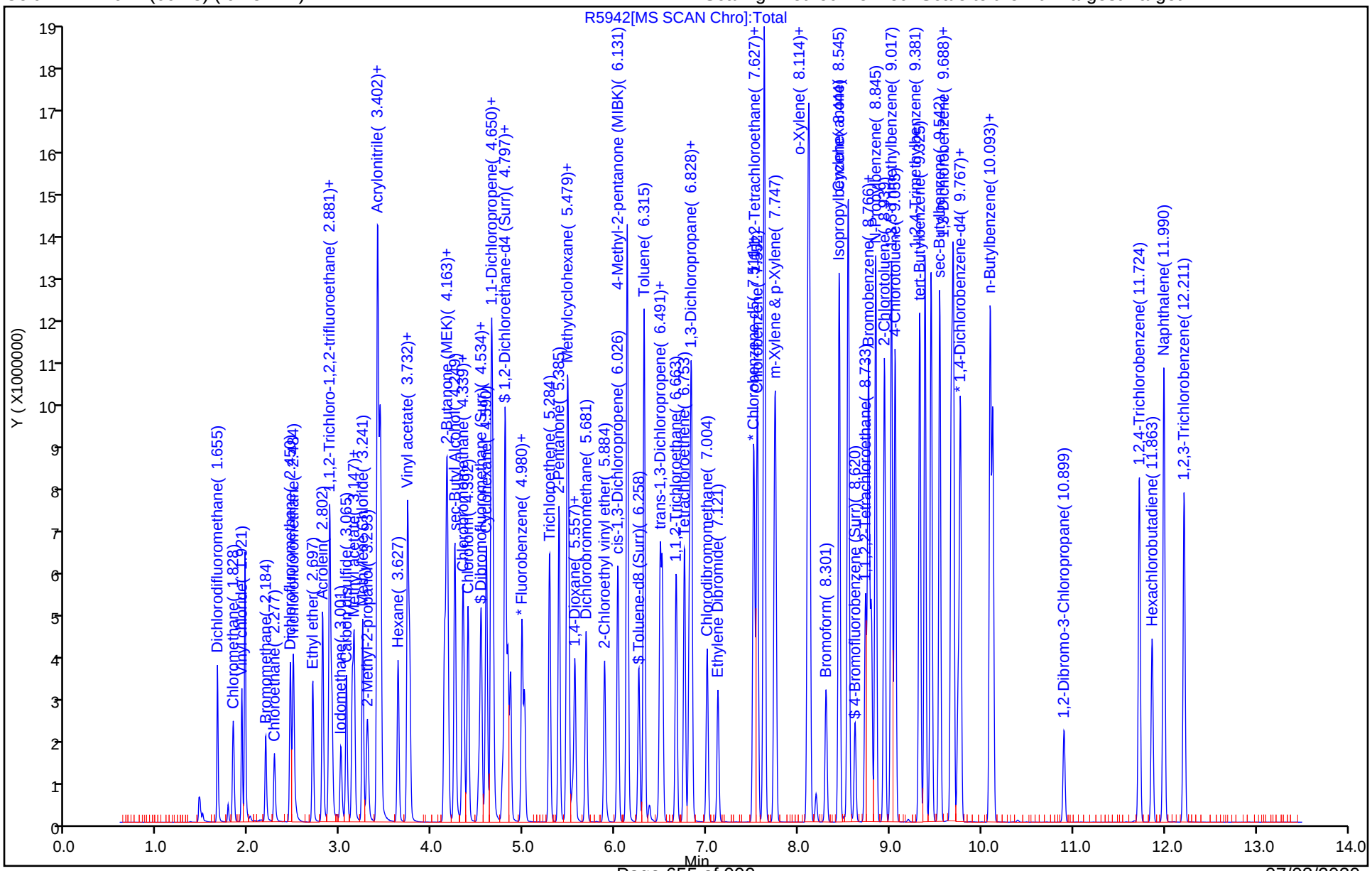
Report Date: 08-Jun-2020 13:49:07 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Injection Date:	04-Jun-2020 15:41:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	STD200			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

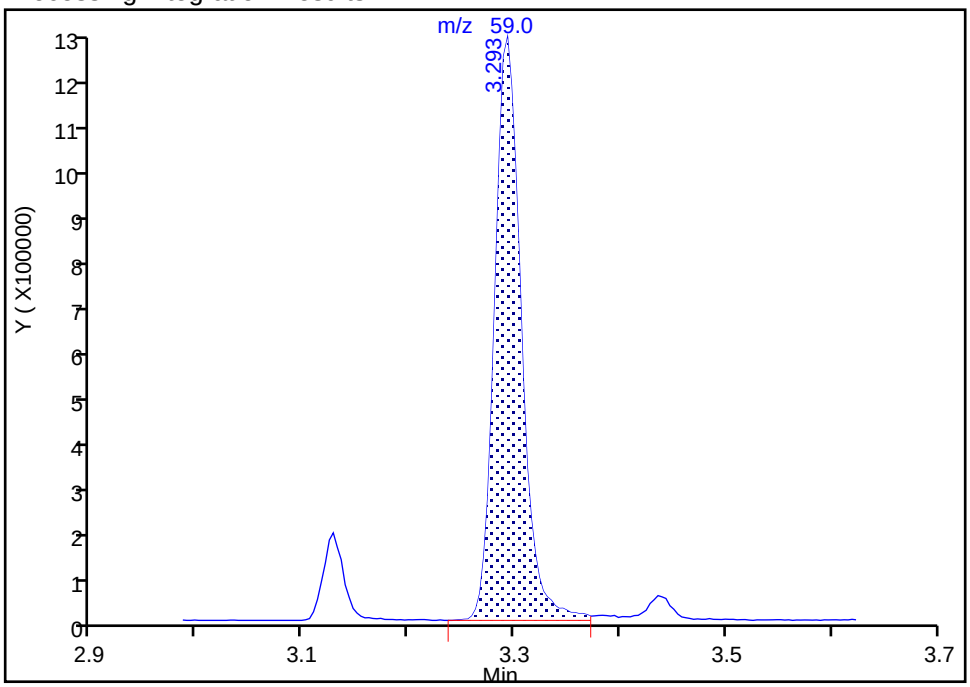
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D
Injection Date: 04-Jun-2020 15:41:30 Instrument ID: VMS_R1
Lims ID: STD200
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 11 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

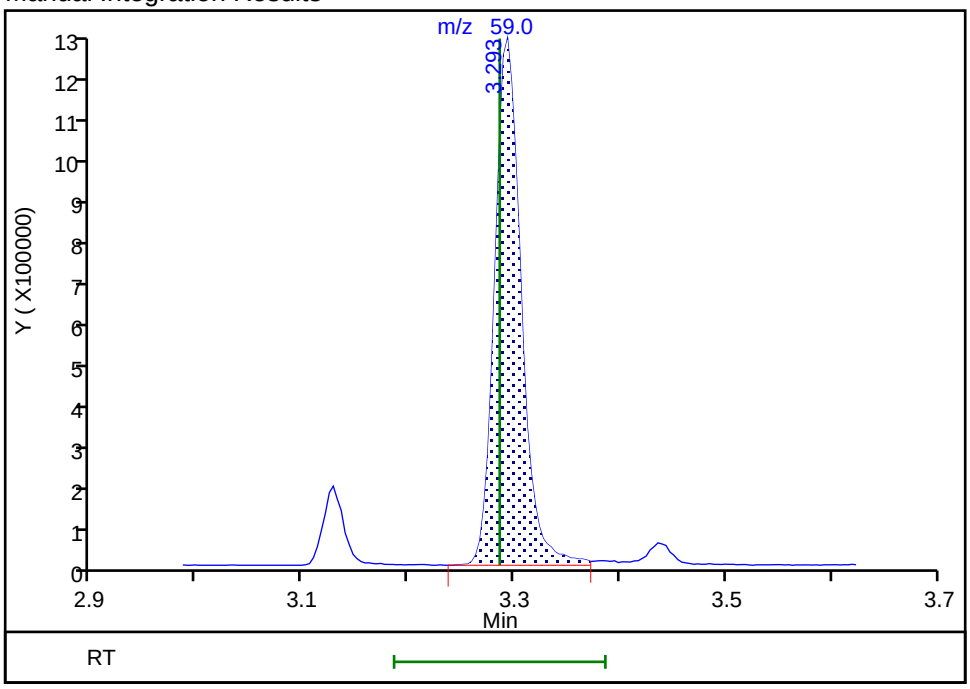
Processing Integration Results

RT: 3.29
Area: 2220566
Amount: 3533.4939
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 2220566
Amount: 2208.3081
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:20:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-485097/29 Calibration Date: 02/06/2020 17:52

Instrument ID: VMS_P Calib Start Date: 09/21/2019 22:00

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 09/22/2019 00:27

Lab File ID: P7824.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Qua					5000	-100.0*	55.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 06-Feb-2020 17:52:30 ALS Bottle#: 20 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:58 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:31:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.194	5.186	0.008	99	1256464	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.727	7.730	-0.003	91	281025	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.953	9.956	-0.003	96	467124	50.0	50.0	
13 Ethylene oxide	43		2.263				5000.0	ND	
18 Ethanol	45	2.725	2.727	-0.002	99	269102	3000.0	2989.5	
20 Propene oxide	58	2.873	2.865	0.008	96	4972828	5000.0	4119.0	
25 Isopropyl alcohol	45	3.115	3.118	-0.003	99	228970	500.0	495.3	
28 Acetonitrile	41	3.242	3.245	-0.003	99	426975	500.0	464.6	
40 Isopropyl ether	87	3.907	3.909	-0.002	93	197060	50.0	47.5	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	344910	50.0	45.4	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	98	708803	50.0	46.1	
46 Ethyl acetate	43	4.308	4.310	-0.002	99	539486	100.0	118.3	
49 Propionitrile	54	4.350	4.342	0.008	98	468527	500.0	472.6	
51 Methacrylonitrile	41	4.455	4.458	-0.003	93	1830338	500.0	481.1	
62 Tert-amyl methyl ether	73	5.036	5.039	-0.003	90	711330	50.0	47.7	
63 n-Butanol	56	5.046	5.039	0.007	50	200033	1250.0	1163.9	
71 Methyl methacrylate	100	5.669	5.672	-0.003	90	161027	100.0	106.3	
75 2-Nitropropane	41	6.028	6.031	-0.002	99	150683	100.0	103.9	
87 Tetrahydrothiophene	60	7.199	7.202	-0.003	91	25753	100.0	18.8	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	86	167756	100.0	76.5	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	98	929821	50.0	47.5	
118 1,3,5-Trichlorobenzene	180	11.304	11.307	-0.003	96	300818	50.0	46.3	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp B_00026 Amount Added: 50.00 Units: uL

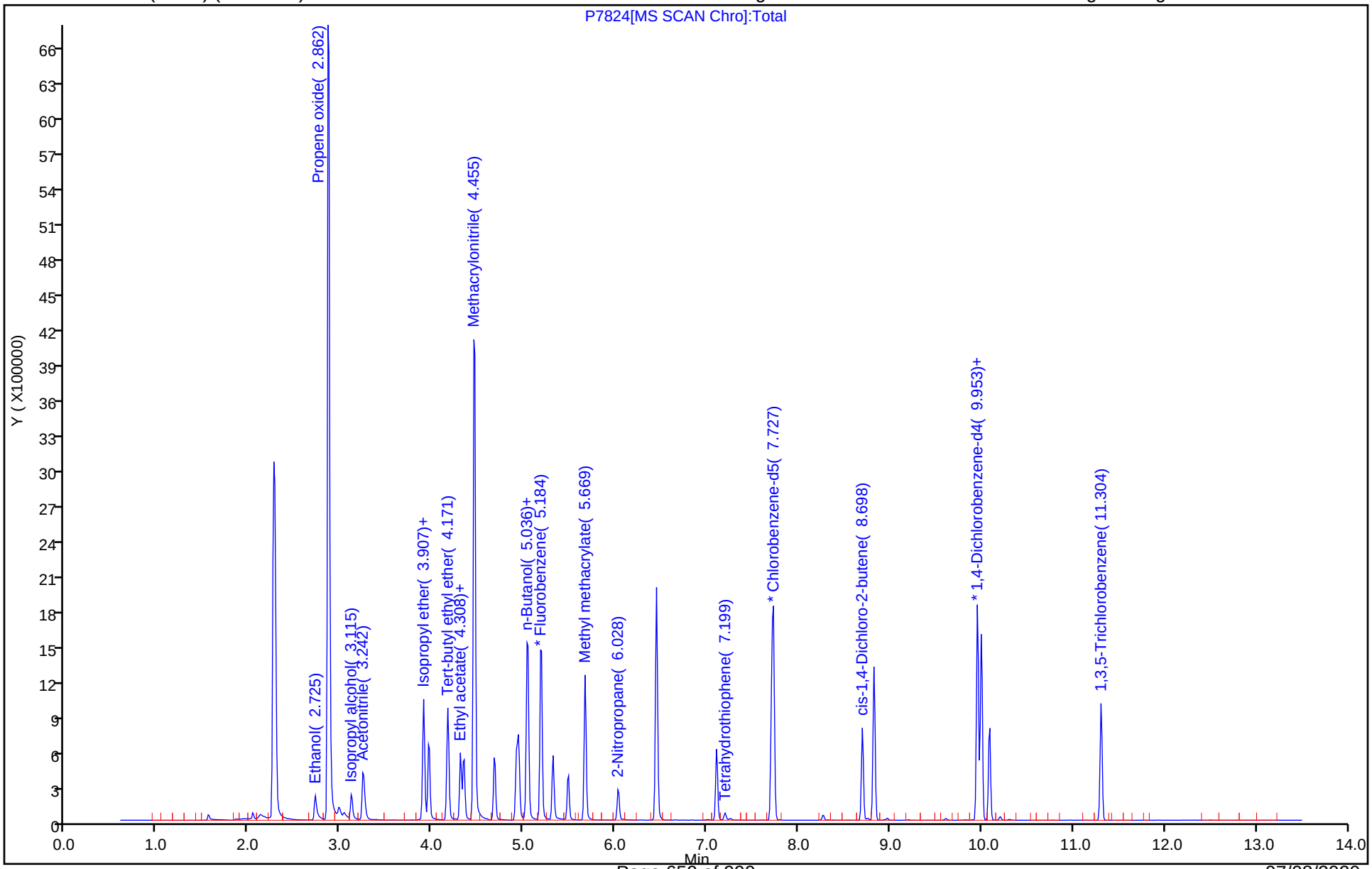
Report Date: 06-Feb-2020 21:42:00 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D

Injection Date:	06-Feb-2020 17:52:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-485097/29 Calibration Date: 02/06/2020 17:52

Instrument ID: VMS_P Calib Start Date: 02/06/2020 14:40

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 02/06/2020 17:09

Lab File ID: P7824.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0036		2990	3000	-0.3	55.0
Propene oxide	Ave	0.0480	0.0396		4120	5000	-17.6	
2-Propanol	Lin2		0.0182		495	500	-0.9	55.0
Acetonitrile	Ave	0.0366	0.0340		465	500	-7.1	55.0
Di-isopropyl ether (DIPE)	Ave	0.1652	0.1568		47.5	50.0	-5.1	35.0
Chloroprene	Ave	0.3025	0.2745		45.4	50.0	-9.3	35.0
Tert-butyl ethyl ether	Ave	0.6122	0.5641		46.1	50.0	-7.8	35.0
Ethyl acetate	Lin2		0.2147		118	100	18.3	55.0
Propionitrile	Ave	0.0394	0.0373		473	500	-5.5	55.0
Methacrylonitrile	Ave	0.1514	0.1457		481	500	-3.8	55.0
Tert-amyl methyl ether	Ave	0.5932	0.5661		47.7	50.0	-4.6	35.0
n-Butanol	Lin2		0.0064		1160	1250	-6.9	55.0
Methyl methacrylate	Ave	0.0603	0.0641		106	100	6.3	35.0
2-Nitropropane	Ave	0.0577	0.0600		104	100	3.9	55.0
Tetrahydrothiophene	Lin2		0.0458		18.8	100	-81.2*	55.0
cis-1,4-Dichloro-2-butene	Ave	0.2348	0.1796		76.5	100	-23.5	55.0
1,2,3-Trimethylbenzene	Ave	2.094	1.991		47.5	50.0	-4.9	35.0
1,3,5-Trichlorobenzene	Ave	0.6952	0.6440		46.3	50.0	-7.4	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 06-Feb-2020 17:52:30 ALS Bottle#: 20 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:58 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:31:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.194	5.186	0.008	99	1256464	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.727	7.730	-0.003	91	281025	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.953	9.956	-0.003	96	467124	50.0	50.0	
13 Ethylene oxide	43		2.263				5000.0	ND	
18 Ethanol	45	2.725	2.727	-0.002	99	269102	3000.0	2989.5	
20 Propene oxide	58	2.873	2.865	0.008	96	4972828	5000.0	4119.0	
25 Isopropyl alcohol	45	3.115	3.118	-0.003	99	228970	500.0	495.3	
28 Acetonitrile	41	3.242	3.245	-0.003	99	426975	500.0	464.6	
40 Isopropyl ether	87	3.907	3.909	-0.002	93	197060	50.0	47.5	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	344910	50.0	45.4	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	98	708803	50.0	46.1	
46 Ethyl acetate	43	4.308	4.310	-0.002	99	539486	100.0	118.3	
49 Propionitrile	54	4.350	4.342	0.008	98	468527	500.0	472.6	
51 Methacrylonitrile	41	4.455	4.458	-0.003	93	1830338	500.0	481.1	
62 Tert-amyl methyl ether	73	5.036	5.039	-0.003	90	711330	50.0	47.7	
63 n-Butanol	56	5.046	5.039	0.007	50	200033	1250.0	1163.9	
71 Methyl methacrylate	100	5.669	5.672	-0.003	90	161027	100.0	106.3	
75 2-Nitropropane	41	6.028	6.031	-0.002	99	150683	100.0	103.9	
87 Tetrahydrothiophene	60	7.199	7.202	-0.003	91	25753	100.0	18.8	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	86	167756	100.0	76.5	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	98	929821	50.0	47.5	
118 1,3,5-Trichlorobenzene	180	11.304	11.307	-0.003	96	300818	50.0	46.3	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp B_00026 Amount Added: 50.00 Units: uL

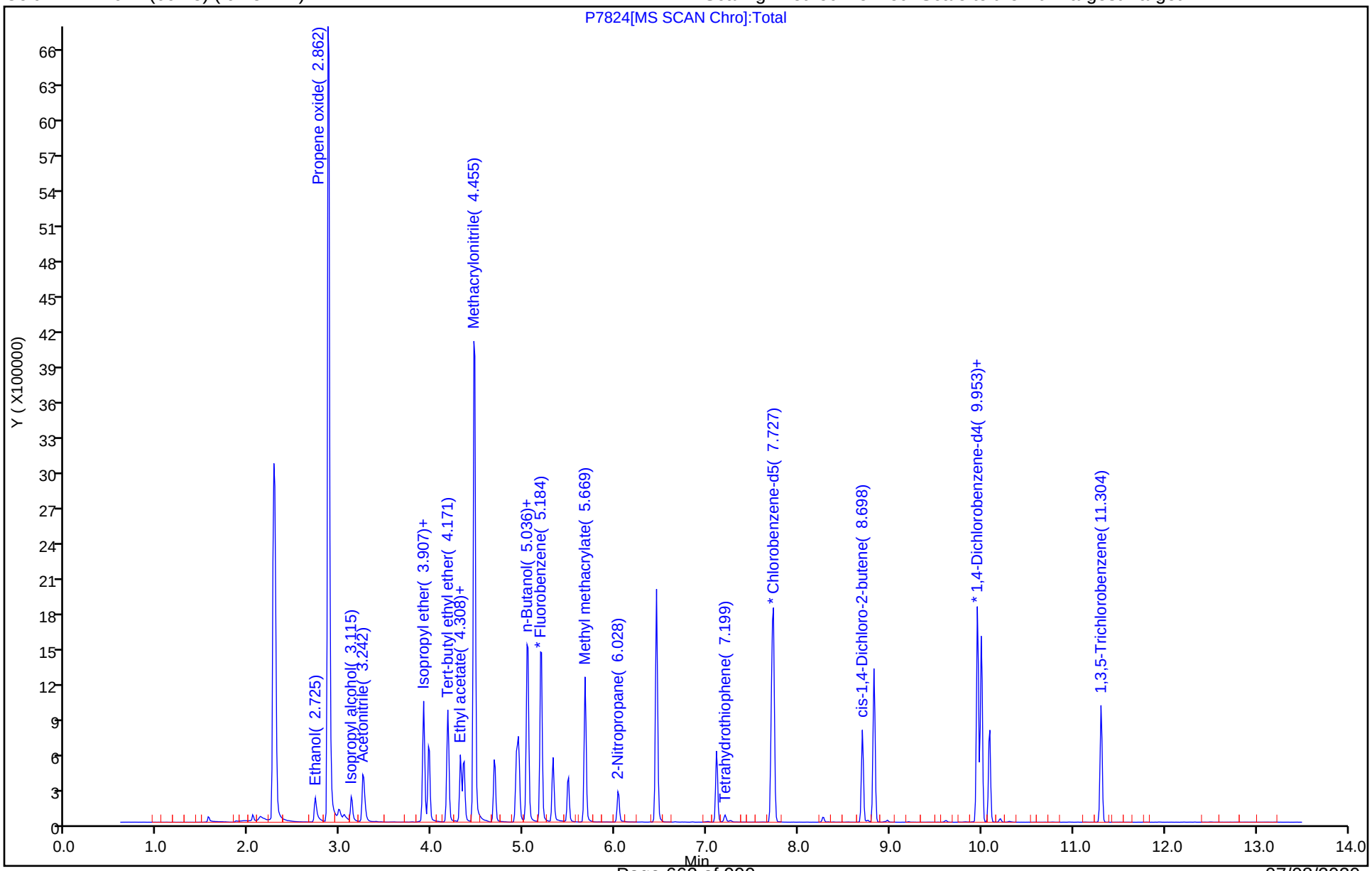
Report Date: 06-Feb-2020 21:42:00 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D

Injection Date:	06-Feb-2020 17:52:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1453		51.8	50.0	3.6	55.0
Chloromethane	Lin2		0.1887	0.1000	49.6	50.0	-0.9	35.0
Vinyl chloride	Ave	0.2189	0.2085		47.6	50.0	-4.8	35.0
Bromomethane	Lin1		0.0986		59.3	50.0	18.6	35.0
Chloroethane	Ave	0.1394	0.1352		48.5	50.0	-3.0	35.0
Dichlorofluoromethane	Ave	0.3255	0.3170		48.7	50.0	-2.6	55.0
Trichlorofluoromethane	Ave	0.2702	0.2606		48.2	50.0	-3.5	50.0
Ethyl ether	Ave	0.1703	0.1694		49.7	50.0	-0.5	35.0
Acrolein	Ave	0.0421	0.0417		489	494	-0.9	55.0
1,1-Dichloroethene	Ave	0.1619	0.1671		51.6	50.0	3.2	35.0
Freon 113	Ave	0.1218	0.1268		52.1	50.0	4.1	55.0
Acetone	Lin2		0.0650		196	200	-1.9	55.0
Iodomethane	Lin		0.1623		52.1	50.0	4.2	35.0
Carbon disulfide	Lin2		0.5468		54.4	50.0	8.8	55.0
Methyl acetate	Ave	0.1699	0.1636		96.3	100	-3.7	55.0
Allyl chloride	Ave	0.2776	0.2915		52.5	50.0	5.0	35.0
Methylene Chloride	Lin2		0.1954		52.2	50.0	4.5	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0219	0.0225		513	500	2.5	55.0
Acrylonitrile	Ave	0.0920	0.0897		487	500	-2.5	55.0
Methyl tert-butyl ether	Ave	0.5467	0.5582		51.1	50.0	2.1	35.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1874		49.0	50.0	-1.9	35.0
Hexane	Ave	1.166	1.244		53.3	50.0	6.7	35.0
Vinyl acetate	Ave	0.4119	0.4582		111	100	11.2	55.0
1,1-Dichloroethane	Ave	0.3497	0.3524	0.1000	50.4	50.0	0.8	35.0
2-Butanone (MEK)	Ave	0.1115	0.1083		194	200	-2.8	55.0
cis-1,2-Dichloroethene	Ave	0.2126	0.2101		49.4	50.0	-1.2	35.0
2,2-Dichloropropane	Ave	0.2367	0.2614		55.2	50.0	10.4	35.0
sec-Butyl Alcohol	Ave	0.0179	0.0189		1580	1500	5.5	
Chlorobromomethane	Ave	0.0952	0.0954		50.1	50.0	0.2	35.0
Tetrahydrofuran	Ave	0.0739	0.0713		96.4	100	-3.6	55.0
Chloroform	Ave	0.3358	0.3273		48.7	50.0	-2.5	35.0
1,1,1-Trichloroethane	Ave	0.2658	0.2723		51.2	50.0	2.4	35.0
Cyclohexane	Ave	0.3386	0.3585		52.9	50.0	5.9	35.0
1,1-Dichloropropene	Ave	0.2785	0.2843		51.0	50.0	2.1	35.0
Carbon tetrachloride	Ave	0.2176	0.2292		52.7	50.0	5.3	35.0
Isobutyl alcohol	Ave	0.0077	0.0079		1270	1250	1.9	55.0
Benzene	Ave	0.8229	0.8202		49.8	50.0	-0.3	35.0
1,2-Dichloroethane	Lin2		0.2558		49.6	50.0	-0.8	35.0
n-Heptane	Ave	0.2456	0.2584		52.6	50.0	5.2	50.0
Trichloroethene	Ave	0.2020	0.2010		49.8	50.0	-0.5	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.1656	0.1691		204	200	2.1	55.0
Methylcyclohexane	Ave	0.2566	0.2686		52.4	50.0	4.7	35.0
1,2-Dichloropropane	Ave	0.2126	0.2140		50.3	50.0	0.6	35.0
1,4-Dioxane	Ave	0.0030	0.0030		1010	1000	0.6	55.0
Dibromomethane	Ave	0.1219	0.1204		49.4	50.0	-1.3	35.0
Dichlorobromomethane	Ave	0.2467	0.2486		50.4	50.0	0.8	35.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1503		51.1	50.0	2.2	55.0
cis-1,3-Dichloropropene	Ave	1.341	1.414		52.7	50.0	5.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.2193		206	200	3.1	55.0
Toluene	Ave	0.8631	0.8530		49.4	50.0	-1.2	35.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2886		53.4	50.0	6.8	35.0
Ethyl methacrylate	Ave	1.229	1.295		52.7	50.0	5.4	35.0
1,1,2-Trichloroethane	Ave	0.1741	0.1763		50.6	50.0	1.3	35.0
Tetrachloroethene	Ave	0.6096	0.6135		50.3	50.0	0.7	35.0
1,3-Dichloropropane	Ave	1.464	1.424		48.6	50.0	-2.7	35.0
2-Hexanone	Ave	0.6723	0.6895		205	200	2.6	55.0
Chlorodibromomethane	Ave	0.7527	0.7872		52.3	50.0	4.6	35.0
1,2-Dibromoethane	Ave	0.8135	0.8100		49.8	50.0	-0.4	35.0
1-Chlorohexane	Lin2		1.161		52.7	50.0	5.4	35.0
Chlorobenzene	Ave	2.365	2.298	0.3000	48.6	50.0	-2.8	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7514		51.6	50.0	3.1	35.0
Ethylbenzene	Ave	1.298	1.290		49.7	50.0	-0.7	35.0
m-Xylene & p-Xylene	Ave	1.562	1.584		50.7	50.0	1.4	35.0
o-Xylene	Ave	1.501	1.513		50.4	50.0	0.8	35.0
Styrene	Ave	2.528	2.615		51.7	50.0	3.4	35.0
Bromoform	Ave	0.4449	0.4897	0.1000	55.0	50.0	10.1	35.0
Isopropylbenzene	Ave	2.617	2.692		51.4	50.0	2.9	35.0
Cyclohexanone	Ave	0.0512	0.0546		2130	2000	6.7	35.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.7505	0.3000	48.9	50.0	-2.2	35.0
Bromobenzene	Ave	0.6174	0.6124		49.6	50.0	-0.8	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.2119		52.0	50.0	4.0	55.0
1,2,3-Trichloropropane	Ave	0.2327	0.2186		47.0	50.0	-6.0	35.0
N-Propylbenzene	Ave	0.7252	0.7431		51.2	50.0	2.5	35.0
2-Chlorotoluene	Ave	0.6140	0.6168		50.2	50.0	0.5	35.0
1,3,5-Trimethylbenzene	Ave	2.148	2.205		51.3	50.0	2.7	35.0
4-Chlorotoluene	Ave	0.6432	0.6402		49.8	50.0	-0.5	35.0
tert-Butylbenzene	Ave	1.797	1.838		51.1	50.0	2.3	35.0
1,2,4-Trimethylbenzene	Ave	2.171	2.206		50.8	50.0	1.6	35.0
sec-Butylbenzene	Ave	0.5256	0.5368		51.1	50.0	2.1	35.0
1,3-Dichlorobenzene	Ave	1.118	1.136		50.8	50.0	1.7	35.0
4-Isopropyltoluene	Ave	2.197	2.296		52.2	50.0	4.5	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.157	1.154		49.8	50.0	-0.3	35.0
n-Butylbenzene	Ave	2.049	2.105		51.4	50.0	2.7	35.0
1,2-Dichlorobenzene	Ave	1.110	1.097		49.4	50.0	-1.2	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1356		52.1	50.0	4.1	55.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.6273		51.9	50.0	3.9	35.0
Hexachlorobutadiene	Ave	0.2197	0.2319		52.8	50.0	5.5	35.0
Naphthalene	Ave	1.952	2.027		51.9	50.0	3.8	35.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5696		51.3	50.0	2.6	35.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2402		49.9	50.0	-0.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2725		48.1	50.0	-3.8	35.0
Toluene-d8 (Surr)	Ave	4.400	4.350		49.4	50.0	-1.1	35.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.092		49.5	50.0	-1.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1670.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 01-Jun-2020 20:54:30 ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:17:08 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: seifertj Date: 02-Jun-2020 08:01:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.114	5.113	0.001	99	2590465	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	86	590999	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	96	849842	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	622271	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.871	-0.011	97	705775	50.0	48.1	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2570994	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.743	0.001	84	928285	50.0	49.5	
10 Dichlorodifluoromethane	85	1.663	1.662	0.001	99	376358	50.0	51.8	
11 Chloromethane	50	1.842	1.842	0.000	99	488912	50.0	49.6	
12 Vinyl chloride	62	1.937	1.937	0.000	98	539997	50.0	47.6	
14 Bromomethane	94	2.233	2.232	0.001	90	255462	50.0	59.3	
15 Chloroethane	64	2.328	2.327	0.001	100	350208	50.0	48.5	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	821160	50.0	48.7	
17 Trichlorofluoromethane	101	2.539	2.538	0.001	98	675149	50.0	48.2	
19 Ethyl ether	59	2.750	2.749	0.001	91	438827	50.0	49.7	
21 Acrolein	56	2.855	2.855	0.000	100	1065819	493.8	489.1	
22 1,1-Dichloroethene	96	2.940	2.939	0.001	98	432725	50.0	51.6	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.940	2.939	0.001	73	328549	50.0	52.1	
24 Acetone	43	2.961	2.960	0.001	100	673920	200.0	196.2	
26 Iodomethane	142	3.066	3.066	0.000	98	420437	50.0	52.1	
27 Carbon disulfide	76	3.130	3.129	0.001	99	1416370	50.0	54.4	
29 Methyl acetate	43	3.193	3.193	0.000	97	847714	100.0	96.3	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	93	755062	50.0	52.5	
31 Methylene Chloride	84	3.309	3.309	0.000	92	506201	50.0	52.2	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	98	582058	500.0	512.6	
33 Acrylonitrile	53	3.467	3.467	0.000	98	2323499	500.0	487.3	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	95	1445927	50.0	51.1	
35 trans-1,2-Dichloroethene	96	3.510	3.509	0.001	98	485470	50.0	49.0	
36 Hexane	57	3.710	3.710	0.000	90	735288	50.0	53.3	
38 Vinyl acetate	43	3.805	3.805	0.000	97	2373910	100.0	111.2	
39 1,1-Dichloroethane	63	3.837	3.836	0.001	96	912856	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.217	4.216	0.001	99	1122134	200.0	194.3	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	82	544236	50.0	49.4	
48 2,2-Dichloropropane	77	4.259	4.258	0.001	88	677059	50.0	55.2	
50 sec-Butyl Alcohol	45	4.322	4.322	0.000	99	1469949	1500.0	1583.0	
53 Chlorobromomethane	128	4.428	4.427	0.001	98	247207	50.0	50.1	
52 Tetrahydrofuran	42	4.428	4.427	0.001	87	369171	100.0	96.4	
54 Chloroform	83	4.480	4.480	0.000	92	847798	50.0	48.7	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	98	705497	50.0	51.2	
56 Cyclohexane	56	4.691	4.691	0.000	89	928773	50.0	52.9	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	97	736563	50.0	51.0	
59 Carbon tetrachloride	117	4.744	4.754	-0.010	83	593714	50.0	52.7	
58 Isobutyl alcohol	41	4.744	4.754	-0.010	94	510443	1250.0	1273.9	
60 Benzene	78	4.892	4.902	-0.010	96	2124641	50.0	49.8	
61 1,2-Dichloroethane	62	4.924	4.923	0.001	97	662615	50.0	49.6	
66 n-Heptane	43	5.082	5.082	0.000	92	669267	50.0	52.6	
67 Trichloroethene	95	5.388	5.388	0.000	99	520749	50.0	49.8	
68 2-Pentanone	43	5.483	5.483	0.000	99	1751955	200.0	204.2	
69 Methylcyclohexane	55	5.578	5.578	0.000	93	695871	50.0	52.4	
70 1,2-Dichloropropane	63	5.588	5.599	-0.011	97	554297	50.0	50.3	
72 1,4-Dioxane	88	5.631	5.630	0.001	93	154164	1000.0	1005.7	
73 Dibromomethane	93	5.662	5.662	0.000	95	311781	50.0	49.4	
74 Dichlorobromomethane	83	5.789	5.789	0.000	99	643971	50.0	50.4	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	389335	50.0	51.1	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	96	835385	50.0	52.7	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.242	-0.010	96	2271889	200.0	206.2	
79 Toluene	91	6.433	6.432	0.001	98	2209611	50.0	49.4	
80 trans-1,3-Dichloropropene	75	6.602	6.601	0.001	97	747539	50.0	53.4	
81 Ethyl methacrylate	69	6.623	6.622	0.001	88	765502	50.0	52.7	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	90	456702	50.0	50.6	
83 Tetrachloroethene	164	6.876	6.876	0.000	94	362600	50.0	50.3	
84 1,3-Dichloropropane	76	6.929	6.928	0.001	96	841677	50.0	48.6	
85 2-Hexanone	43	6.939	6.939	0.000	95	1630059	200.0	205.1	
86 Chlorodibromomethane	129	7.119	7.118	0.001	90	465207	50.0	52.3	
88 Ethylene Dibromide	107	7.245	7.245	0.000	98	478705	50.0	49.8	
89 1-Chlorohexane	91	7.625	7.635	-0.010	98	685928	50.0	52.7	
90 Chlorobenzene	112	7.678	7.678	0.000	94	1358393	50.0	48.6	
92 Ethylbenzene	106	7.752	7.751	0.001	98	762280	50.0	49.7	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.751	-0.010	95	444052	50.0	51.6	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	936078	50.0	50.7	
94 o-Xylene	106	8.227	8.226	0.001	97	893993	50.0	50.4	
95 Styrene	104	8.248	8.247	0.001	94	1545341	50.0	51.7	
96 Bromoform	173	8.427	8.427	0.000	95	289434	50.0	55.0	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	2287684	50.0	51.4	
99 Cyclohexanone	55	8.659	8.670	-0.011	91	1291007	2000.0	2133.3	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.859	-0.010	93	637840	50.0	48.9	
101 Bromobenzene	156	8.891	8.891	0.000	96	520421	50.0	49.6	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	65	180098	50.0	52.0	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	85	185801	50.0	47.0	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	631481	50.0	51.2	
105 2-Chlorotoluene	126	9.071	9.071	0.000	96	524183	50.0	50.2	
106 1,3,5-Trimethylbenzene	105	9.145	9.144	0.001	94	1874231	50.0	51.3	
107 4-Chlorotoluene	126	9.187	9.187	0.000	97	544107	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.451	9.450	0.001	93	1561925	50.0	51.1	
109 1,2,4-Trimethylbenzene	105	9.504	9.514	-0.010	97	1874354	50.0	50.8	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	456208	50.0	51.1	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	98	965515	50.0	50.8	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	1950964	50.0	52.2	
113 1,4-Dichlorobenzene	146	9.894	9.904	-0.010	94	980422	50.0	49.8	
115 n-Butylbenzene	91	10.221	10.221	0.000	98	1788798	50.0	51.4	
116 1,2-Dichlorobenzene	146	10.253	10.252	0.001	98	932406	50.0	49.4	
117 1,2-Dibromo-3-Chloropropane	157	11.034	11.033	0.001	84	115195	50.0	52.1	
119 1,2,4-Trichlorobenzene	180	11.857	11.856	0.001	94	533137	50.0	51.9	
120 Hexachlorobutadiene	225	12.005	12.004	0.001	96	197049	50.0	52.8	
121 Naphthalene	128	12.121	12.131	-0.010	98	1722522	50.0	51.9	
122 1,2,3-Trichlorobenzene	180	12.353	12.352	0.001	95	484072	50.0	51.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	98.4	
S 142 Xylenes, Total	106				0		100.0	101.1	
S 140 Trihalomethanes, Total	1				0		200.0	206.4	
S 143 Xylenes, Total (URS)	1				0		100.0	101.1	
S 145 1,3-Dichloropropene, Total	1				0		100.0	106.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	98.4	

Reagents:

MV-MegaMain B_00031	Amount Added: 25.00	Units: uL	
MV-Gas B_00060	Amount Added: 10.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

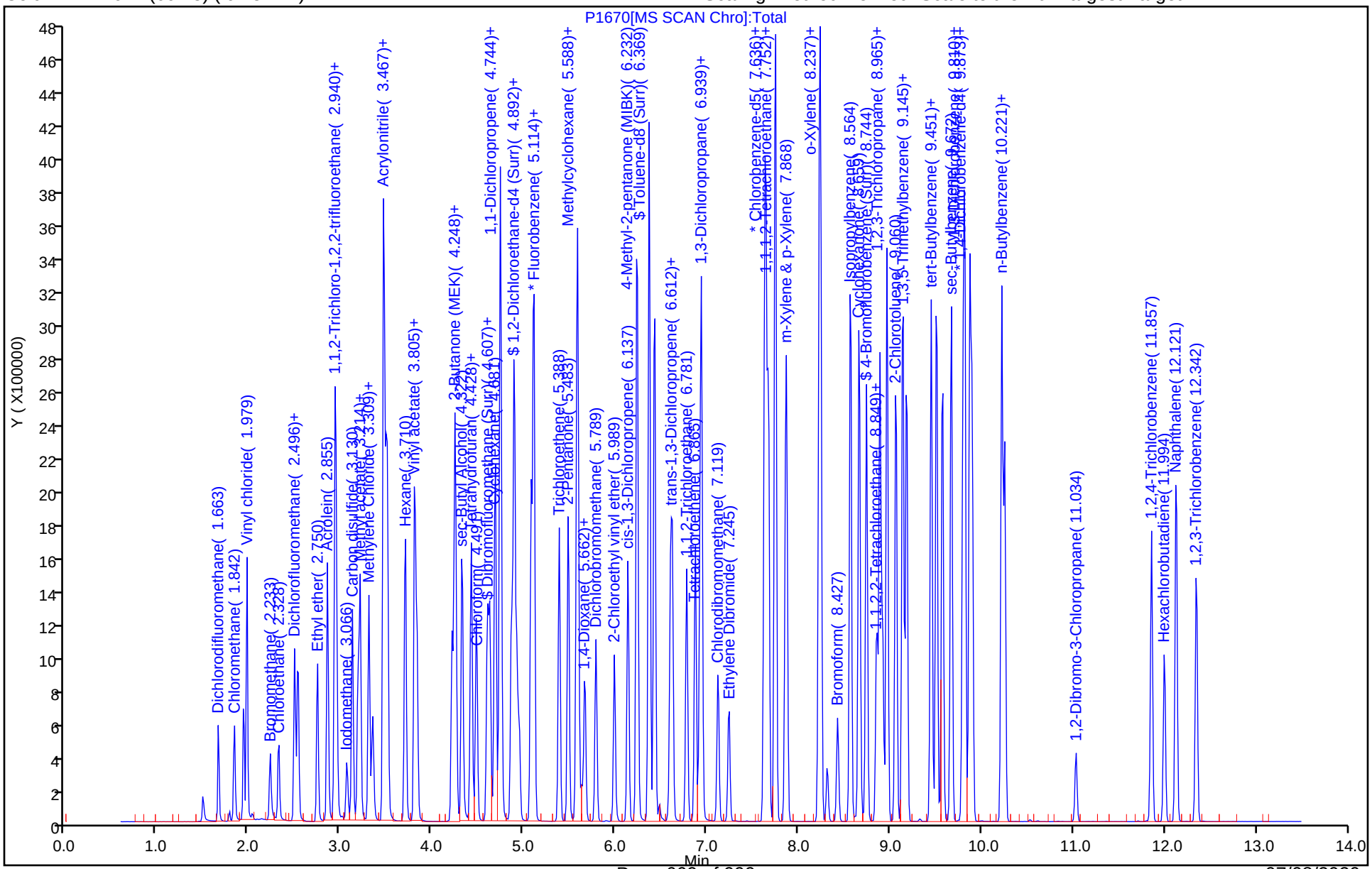
Report Date: 02-Jun-2020 12:20:29 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1670.D

Injection Date:	01-Jun-2020 20:54:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500579/2 Calibration Date: 06/29/2020 21:41

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2851.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1674		59.7	50.0	19.3	50.0
Chloromethane	Lin2		0.1971	0.1000	51.8	50.0	3.5	35.0
Vinyl chloride	Ave	0.2189	0.2346		53.6	50.0	7.2	20.0
Bromomethane	Lin1		0.0795		47.5	50.0	-5.1	35.0
Chloroethane	Ave	0.1394	0.1429		51.3	50.0	2.5	35.0
Dichlorofluoromethane	Ave	0.3255	0.3327		51.1	50.0	2.2	50.0
Trichlorofluoromethane	Ave	0.2702	0.2735		50.6	50.0	1.2	50.0
Ethyl ether	Ave	0.1703	0.1759		51.7	50.0	3.3	35.0
Acrolein	Ave	0.0421	0.0354		415	494	-15.9	50.0
1,1-Dichloroethene	Ave	0.1619	0.1496		46.2	50.0	-7.6	20.0
Freon 113	Ave	0.1218	0.1033		42.4	50.0	-15.2	50.0
Acetone	Lin2		0.0696		210	200	5.1	50.0
Iodomethane	Lin		0.1246		40.2	50.0	-19.7	35.0
Carbon disulfide	Lin2		0.4805		47.8	50.0	-4.4	50.0
Methyl acetate	Ave	0.1699	0.1797		106	100	5.7	50.0
Allyl chloride	Ave	0.2776	0.3080		55.5	50.0	10.9	35.0
Methylene Chloride	Lin2		0.1947		52.1	50.0	4.1	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0219	0.0232		528	500	5.7	50.0
Acrylonitrile	Ave	0.0920	0.0959		521	500	4.2	50.0
Methyl tert-butyl ether	Ave	0.5467	0.5611		51.3	50.0	2.6	35.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1788		46.8	50.0	-6.4	35.0
Hexane	Ave	1.166	1.066		45.7	50.0	-8.6	35.0
Vinyl acetate	Ave	0.4119	0.4964		121	100	20.5	50.0
1,1-Dichloroethane	Ave	0.3497	0.3569	0.1000	51.0	50.0	2.1	35.0
2-Butanone (MEK)	Ave	0.1115	0.1129		203	200	1.3	50.0
cis-1,2-Dichloroethene	Ave	0.2126	0.2061		48.5	50.0	-3.0	35.0
2,2-Dichloropropane	Ave	0.2367	0.2446		51.7	50.0	3.3	35.0
sec-Butyl Alcohol	Ave	0.0179	0.0199		1670	1500	11.2	50.0
Chlorobromomethane	Ave	0.0952	0.0920		48.3	50.0	-3.4	35.0
Tetrahydrofuran	Ave	0.0739	0.0759		103	100	2.7	50.0
Chloroform	Ave	0.3358	0.3218		47.9	50.0	-4.2	20.0
1,1,1-Trichloroethane	Ave	0.2658	0.2561		48.2	50.0	-3.7	35.0
Cyclohexane	Ave	0.3386	0.3308		48.8	50.0	-2.3	35.0
1,1-Dichloropropene	Ave	0.2785	0.2751		49.4	50.0	-1.2	35.0
Carbon tetrachloride	Ave	0.2176	0.2127		48.9	50.0	-2.2	35.0
Isobutyl alcohol	Ave	0.0077	0.0084		1360	1250	8.4	50.0
Benzene	Ave	0.8229	0.8084		49.1	50.0	-1.8	35.0
1,2-Dichloroethane	Lin2		0.2517		48.8	50.0	-2.4	35.0
n-Heptane	Ave	0.2456	0.2359		48.0	50.0	-4.0	50.0
Trichloroethene	Ave	0.2020	0.1914		47.4	50.0	-5.3	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500579/2 Calibration Date: 06/29/2020 21:41

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2851.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.1656	0.1786		216	200	7.8	50.0
Methylcyclohexane	Ave	0.2566	0.2537		49.5	50.0	-1.1	35.0
1,2-Dichloropropane	Ave	0.2126	0.2195		51.6	50.0	3.3	20.0
1,4-Dioxane	Ave	0.0030	0.0030		1020	1000	2.0	50.0
Dibromomethane	Ave	0.1219	0.1203		49.3	50.0	-1.3	35.0
Dichlorobromomethane	Ave	0.2467	0.2482		50.3	50.0	0.6	35.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1707		58.0	50.0	16.1	50.0
cis-1,3-Dichloropropene	Ave	1.341	1.467		54.7	50.0	9.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.2310		217	200	8.6	50.0
Toluene	Ave	0.8631	0.8304		48.1	50.0	-3.8	20.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2888		53.5	50.0	6.9	35.0
Ethyl methacrylate	Ave	1.229	1.374		55.9	50.0	11.8	35.0
1,1,2-Trichloroethane	Ave	0.1741	0.1765		50.7	50.0	1.4	35.0
Tetrachloroethene	Ave	0.6096	0.6049		49.6	50.0	-0.8	35.0
1,3-Dichloropropane	Ave	1.464	1.487		50.8	50.0	1.6	35.0
2-Hexanone	Ave	0.6723	0.7533		224	200	12.0	50.0
Chlorodibromomethane	Ave	0.7527	0.8019		53.3	50.0	6.5	35.0
1,2-Dibromoethane	Ave	0.8135	0.8180		50.3	50.0	0.5	35.0
1-Chlorohexane	Lin2		1.163		52.8	50.0	5.6	35.0
Chlorobenzene	Ave	2.365	2.304	0.3000	48.7	50.0	-2.6	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7492		51.4	50.0	2.8	35.0
Ethylbenzene	Ave	1.298	1.290		49.7	50.0	-0.7	20.0
m-Xylene & p-Xylene	Ave	1.562	1.576		50.5	50.0	0.9	35.0
o-Xylene	Ave	1.501	1.512		50.4	50.0	0.8	35.0
Styrene	Ave	2.528	2.613		51.7	50.0	3.4	35.0
Bromoform	Ave	0.4449	0.4878	0.1000	54.8	50.0	9.6	35.0
Isopropylbenzene	Ave	2.617	2.725		52.1	50.0	4.1	35.0
Cyclohexanone	Ave	0.0512	0.0611		2390	2000	19.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.8287	0.3000	54.0	50.0	8.0	35.0
Bromobenzene	Ave	0.6174	0.6148		49.8	50.0	-0.4	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.2152		52.8	50.0	5.6	50.0
1,2,3-Trichloropropane	Ave	0.2327	0.2344		50.4	50.0	0.7	35.0
N-Propylbenzene	Ave	0.7252	0.7467		51.5	50.0	3.0	35.0
2-Chlorotoluene	Ave	0.6140	0.6212		50.6	50.0	1.2	35.0
1,3,5-Trimethylbenzene	Ave	2.148	2.218		51.6	50.0	3.2	35.0
4-Chlorotoluene	Ave	0.6432	0.6466		50.3	50.0	0.5	35.0
tert-Butylbenzene	Ave	1.797	1.825		50.8	50.0	1.5	35.0
1,2,4-Trimethylbenzene	Ave	2.171	2.236		51.5	50.0	3.0	35.0
sec-Butylbenzene	Ave	0.5256	0.5292		50.3	50.0	0.7	35.0
1,3-Dichlorobenzene	Ave	1.118	1.156		51.7	50.0	3.5	35.0
4-Isopropyltoluene	Ave	2.197	2.267		51.6	50.0	3.2	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500579/2 Calibration Date: 06/29/2020 21:41

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2851.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.157	1.170		50.5	50.0	1.0	35.0
n-Butylbenzene	Ave	2.049	2.097		51.2	50.0	2.3	35.0
1,2-Dichlorobenzene	Ave	1.110	1.121		50.5	50.0	1.0	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1421		54.6	50.0	9.1	50.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.6081		50.4	50.0	0.7	35.0
Hexachlorobutadiene	Ave	0.2197	0.1993		45.4	50.0	-9.3	35.0
Naphthalene	Ave	1.952	2.104		53.9	50.0	7.8	35.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5583		50.3	50.0	0.5	35.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2377		49.4	50.0	-1.3	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2681		47.3	50.0	-5.4	35.0
Toluene-d8 (Surr)	Ave	4.400	4.394		49.9	50.0	-0.1	35.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.097		49.7	50.0	-0.6	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2851.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 21:41:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:10 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.111	0.000	98	2644021	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.643	0.000	87	584008	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.870	0.000	97	821679	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	94	628441	50.0	49.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	708785	50.0	47.3	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2566303	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	84	901019	50.0	49.7	
10 Dichlorodifluoromethane	85	1.670	1.670	0.000	99	442477	50.0	59.7	
11 Chloromethane	50	1.839	1.839	0.000	99	521088	50.0	51.8	
12 Vinyl chloride	62	1.945	1.945	0.000	98	620174	50.0	53.6	
14 Bromomethane	94	2.230	2.230	0.000	90	210202	50.0	47.5	
15 Chloroethane	64	2.325	2.325	0.000	100	377885	50.0	51.3	
16 Dichlorofluoromethane	67	2.494	2.494	0.000	97	879567	50.0	51.1	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	98	723118	50.0	50.6	
19 Ethyl ether	59	2.747	2.747	0.000	92	465116	50.0	51.7	
21 Acrolein	56	2.852	2.852	0.000	100	923832	493.8	415.4	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	68	273122	50.0	42.4	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	96	395602	50.0	46.2	
24 Acetone	43	2.958	2.958	0.000	100	736297	200.0	210.2	
26 Iodomethane	142	3.063	3.063	0.000	99	329442	50.0	40.2	
27 Carbon disulfide	76	3.127	3.127	0.000	99	1270466	50.0	47.8	
29 Methyl acetate	43	3.190	3.190	0.000	98	950065	100.0	105.7	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	93	814233	50.0	55.5	
31 Methylene Chloride	84	3.306	3.306	0.000	94	514770	50.0	52.1	
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	98	612270	500.0	528.3	
33 Acrylonitrile	53	3.464	3.464	0.000	98	2534964	500.0	520.9	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	1483593	50.0	51.3	
35 trans-1,2-Dichloroethene	96	3.517	3.517	0.000	97	472786	50.0	46.8	
36 Hexane	57	3.707	3.707	0.000	92	622302	50.0	45.7	
38 Vinyl acetate	43	3.802	3.802	0.000	97	2625198	100.0	120.5	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	943648	50.0	51.0	
44 2-Butanone (MEK)	43	4.214	4.214	0.000	100	1194481	200.0	202.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	83	544943	50.0	48.5	
48 2,2-Dichloropropane	77	4.256	4.256	0.000	91	646625	50.0	51.7	
50 sec-Butyl Alcohol	45	4.330	4.330	0.000	99	1580409	1500.0	1667.5	
53 Chlorobromomethane	128	4.425	4.425	0.000	97	243152	50.0	48.3	
52 Tetrahydrofuran	42	4.435	4.435	0.000	89	401098	100.0	102.7	
54 Chloroform	83	4.477	4.477	0.000	93	850703	50.0	47.9	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	99	677112	50.0	48.2	
56 Cyclohexane	56	4.689	4.689	0.000	89	874607	50.0	48.8	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	96	727245	50.0	49.4	
59 Carbon tetrachloride	117	4.752	4.752	0.000	78	562487	50.0	48.9	
58 Isobutyl alcohol	41	4.752	4.752	0.000	93	554299	1250.0	1355.4	
60 Benzene	78	4.900	4.900	0.000	95	2137377	50.0	49.1	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	665541	50.0	48.8	
66 n-Heptane	43	5.079	5.079	0.000	92	623610	50.0	48.0	
67 Trichloroethene	95	5.385	5.385	0.000	98	505952	50.0	47.4	
68 2-Pentanone	43	5.480	5.480	0.000	99	1888774	200.0	215.7	
69 Methylcyclohexane	55	5.586	5.586	0.000	92	670881	50.0	49.5	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	98	580423	50.0	51.6	
72 1,4-Dioxane	88	5.638	5.638	0.000	92	159620	1000.0	1020.2	
73 Dibromomethane	93	5.659	5.659	0.000	93	318181	50.0	49.3	
74 Dichlorobromomethane	83	5.786	5.786	0.000	99	656297	50.0	50.3	
76 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	91	451447	50.0	58.0	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	96	856794	50.0	54.7	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	96	2443028	200.0	217.3	
79 Toluene	91	6.430	6.430	0.000	98	2195684	50.0	48.1	
80 trans-1,3-Dichloropropene	75	6.599	6.599	0.000	97	763677	50.0	53.5	
81 Ethyl methacrylate	69	6.620	6.620	0.000	89	802565	50.0	55.9	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	466743	50.0	50.7	
83 Tetrachloroethene	164	6.873	6.873	0.000	94	353235	50.0	49.6	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	98	868684	50.0	50.8	
85 2-Hexanone	43	6.947	6.947	0.000	96	1759606	200.0	224.1	
86 Chlorodibromomethane	129	7.126	7.126	0.000	90	468310	50.0	53.3	
88 Ethylene Dibromide	107	7.242	7.242	0.000	98	477690	50.0	50.3	
89 1-Chlorohexane	91	7.633	7.633	0.000	98	679234	50.0	52.8	
90 Chlorobenzene	112	7.675	7.675	0.000	94	1345535	50.0	48.7	
92 Ethylbenzene	106	7.749	7.749	0.000	98	753267	50.0	49.7	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	91	437508	50.0	51.4	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	920654	50.0	50.5	
94 o-Xylene	106	8.224	8.224	0.000	97	883309	50.0	50.4	
95 Styrene	104	8.245	8.245	0.000	95	1525976	50.0	51.7	
96 Bromoform	173	8.424	8.424	0.000	94	284900	50.0	54.8	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	2239102	50.0	52.1	
99 Cyclohexanone	55	8.667	8.667	0.000	91	1427961	2000.0	2387.9	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	680931	50.0	54.0	
101 Bromobenzene	156	8.889	8.889	0.000	96	505159	50.0	49.8	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.889	0.000	83	176847	50.0	52.8	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	85	192602	50.0	50.4	
104 N-Propylbenzene	120	8.973	8.973	0.000	99	613519	50.0	51.5	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	510426	50.0	50.6	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	93	1822304	50.0	51.6	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	531303	50.0	50.3	
108 tert-Butylbenzene	119	9.448	9.448	0.000	94	1499532	50.0	50.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	1837572	50.0	51.5	
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	434801	50.0	50.3	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	98	950055	50.0	51.7	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	1862632	50.0	51.6	
113 1,4-Dichlorobenzene	146	9.902	9.902	0.000	95	961027	50.0	50.5	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	1723029	50.0	51.2	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	921450	50.0	50.5	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	82	116732	50.0	54.6	
119 1,2,4-Trichlorobenzene	180	11.854	11.854	0.000	94	499696	50.0	50.4	
120 Hexachlorobutadiene	225	12.002	12.002	0.000	97	163783	50.0	45.4	
121 Naphthalene	128	12.128	12.128	0.000	97	1728674	50.0	53.9	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	95	458759	50.0	50.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	95.3	
S 142 Xylenes, Total	106				0		100.0	100.9	
S 140 Trihalomethanes, Total	1				0		200.0	206.3	
S 143 Xylenes, Total (URS)	1				0		100.0	100.9	
S 145 1,3-Dichloropropene, Total	1				0		100.0	108.2	
S 144 1,2-Dichloroethene, Total	1				0		100.0	95.3	

Reagents:

MV-MegaMainA_00034	Amount Added:	25.00	Units: uL	
MV-Gas A_00060	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 30-Jun-2020 20:51:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2851.D

Injection Date: 29-Jun-2020 21:41:30 Instrument ID: VMS_P Operator ID: PETUNINP

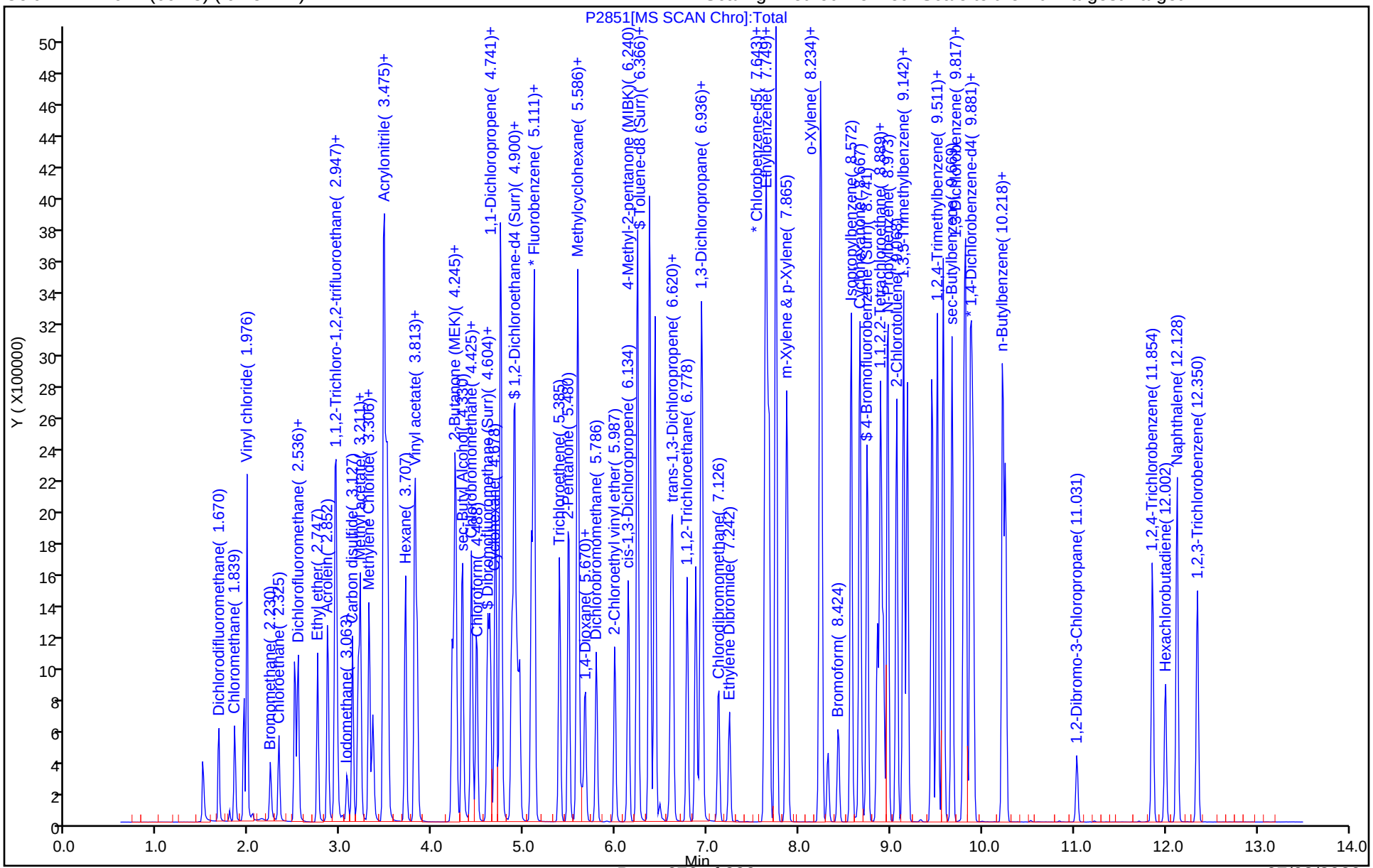
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500579/3 Calibration Date: 06/29/2020 22:03

Instrument ID: VMS_P Calib Start Date: 09/21/2019 22:00

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 09/22/2019 00:27

Lab File ID: P2852.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Qua		0.0132			5000		50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2852.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 22:03:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub168

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 29-Jun-2020 23:32:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.112	0.000	99	2575696	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.645	0.000	88	561495	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.872	0.000	96	791573	50.0	50.0	
13 Ethylene oxide	43	2.200	2.200	0.000	100	3393793	NC	NC	
18 Ethanol	45	2.643	2.643	0.000	99	470404	3000.0	2547.2	
20 Propene oxide	58	2.791	2.791	0.000	97	11227570	5000.0	4536.6	
25 Isopropyl alcohol	45	3.044	3.044	0.000	99	417647	500.0	440.4	
28 Acetonitrile	41	3.171	3.171	0.000	99	877654	500.0	465.8	
40 Isopropyl ether	87	3.825	3.825	0.000	95	427010	50.0	50.2	
41 2-Chloro-1,3-butadiene	53	3.888	3.888	0.000	90	786292	50.0	50.5	
43 Tert-butyl ethyl ether	59	4.089	4.089	0.000	97	1449723	50.0	46.0	
46 Ethyl acetate	43	4.226	4.226	0.000	99	1155095	100.0	123.5	
49 Propionitrile	54	4.268	4.268	0.000	99	975462	500.0	480.0	
51 Methacrylonitrile	41	4.384	4.384	0.000	91	3731310	500.0	478.4	
62 Tert-amyl methyl ether	73	4.965	4.965	0.000	82	1319173	50.0	43.2	
63 n-Butanol	56	4.965	4.965	0.000	50	562002	1250.0	1598.4	
71 Methyl methacrylate	100	5.598	5.598	0.000	91	310426	100.0	100.0	
75 2-Nitropropane	41	5.946	5.946	0.000	97	252497	100.0	84.9	
87 Tetrahydrothiophene	60	7.117	7.117	0.000	92	170146	100.0	59.2	
98 cis-1,4-Dichloro-2-butene	53	8.616	8.616	0.000	87	319267	100.0	85.9	
114 1,2,3-Trimethylbenzene	105	9.914	9.914	0.000	98	1747679	50.0	52.7	
118 1,3,5-Trichlorobenzene	180	11.222	11.222	0.000	96	510319	50.0	46.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp A_00044	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

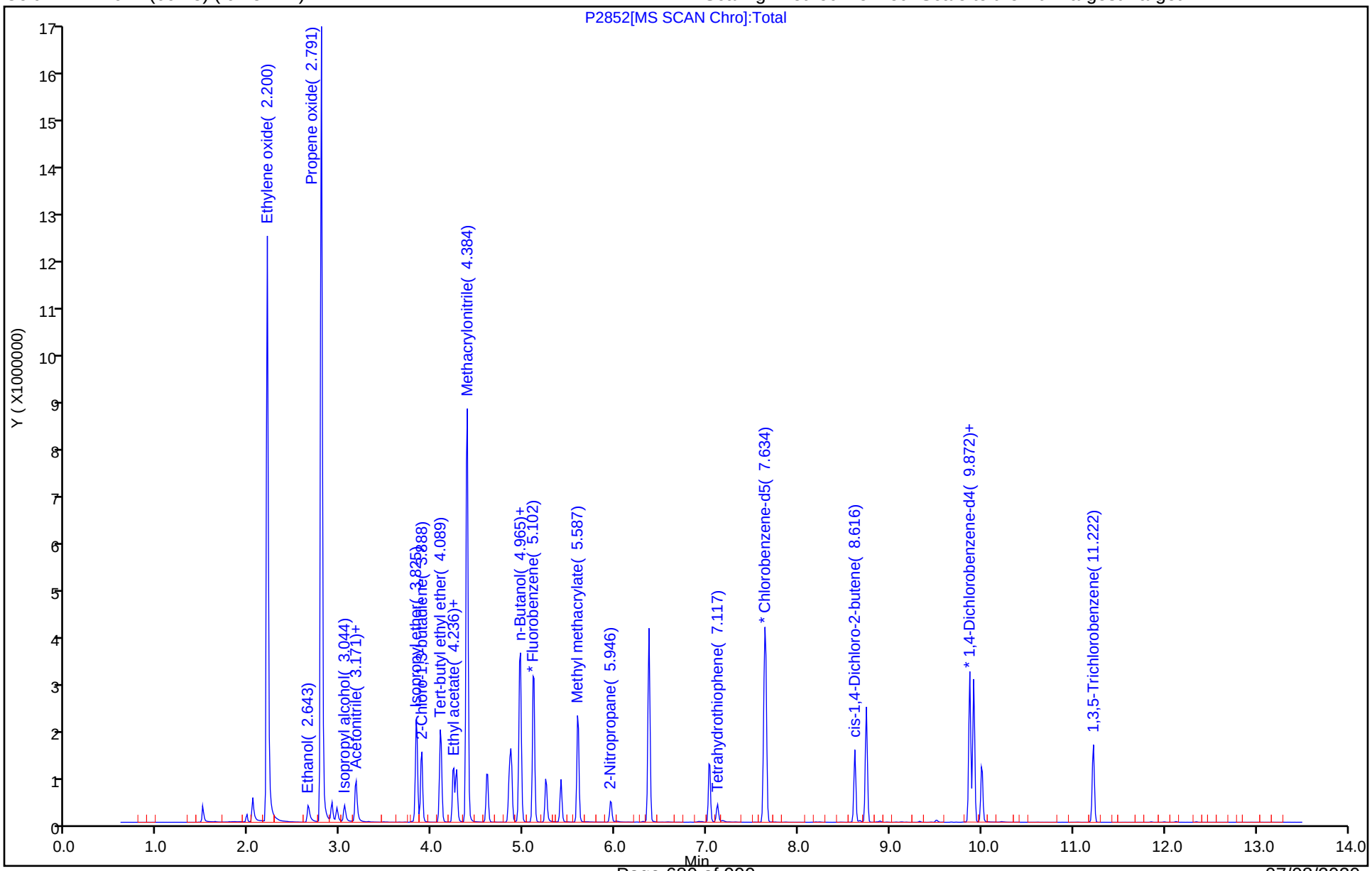
Report Date: 30-Jun-2020 20:51:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2852.D

Injection Date:	29-Jun-2020 22:03:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500579/3 Calibration Date: 06/29/2020 22:03

Instrument ID: VMS_P Calib Start Date: 02/06/2020 14:40

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 02/06/2020 17:09

Lab File ID: P2852.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0030		2550	3000	-15.1	50.0
Propene oxide	Ave	0.0480	0.0436		4540	5000	-9.3	50.0
2-Propanol	Lin2		0.0162		440	500	-11.9	50.0
Acetonitrile	Ave	0.0366	0.0341		466	500	-6.8	50.0
Di-isopropyl ether (DIPE)	Ave	0.1652	0.1658		50.2	50.0	0.4	35.0
Chloroprene	Ave	0.3025	0.3053		50.5	50.0	0.9	35.0
Tert-butyl ethyl ether	Ave	0.6122	0.5629		46.0	50.0	-8.1	35.0
Ethyl acetate	Lin2		0.2242		124	100	23.5	50.0
Propionitrile	Ave	0.0394	0.0379		480	500	-4.0	50.0
Methacrylonitrile	Ave	0.1514	0.1449		478	500	-4.3	50.0
n-Butanol	Lin2		0.0087		1600	1250	27.9	50.0
Tert-amyl methyl ether	Ave	0.5932	0.5122		43.2	50.0	-13.7	35.0
Methyl methacrylate	Ave	0.0603	0.0603		100	100	-0.0	35.0
2-Nitropropane	Ave	0.0577	0.0490		84.9	100	-15.1	50.0
Tetrahydrothiophene	Lin2		0.1515		59.2	100	-40.8	50.0
cis-1,4-Dichloro-2-butene	Ave	0.2348	0.2017		85.9	100	-14.1	50.0
1,2,3-Trimethylbenzene	Ave	2.094	2.208		52.7	50.0	5.4	35.0
1,3,5-Trichlorobenzene	Ave	0.6952	0.6447		46.4	50.0	-7.3	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2852.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 22:03:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub168

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 29-Jun-2020 23:32:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.112	0.000	99	2575696	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.645	0.000	88	561495	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.872	0.000	96	791573	50.0	50.0	
13 Ethylene oxide	43	2.200	2.200	0.000	100	3393793	NC	NC	
18 Ethanol	45	2.643	2.643	0.000	99	470404	3000.0	2547.2	
20 Propene oxide	58	2.791	2.791	0.000	97	11227570	5000.0	4536.6	
25 Isopropyl alcohol	45	3.044	3.044	0.000	99	417647	500.0	440.4	
28 Acetonitrile	41	3.171	3.171	0.000	99	877654	500.0	465.8	
40 Isopropyl ether	87	3.825	3.825	0.000	95	427010	50.0	50.2	
41 2-Chloro-1,3-butadiene	53	3.888	3.888	0.000	90	786292	50.0	50.5	
43 Tert-butyl ethyl ether	59	4.089	4.089	0.000	97	1449723	50.0	46.0	
46 Ethyl acetate	43	4.226	4.226	0.000	99	1155095	100.0	123.5	
49 Propionitrile	54	4.268	4.268	0.000	99	975462	500.0	480.0	
51 Methacrylonitrile	41	4.384	4.384	0.000	91	3731310	500.0	478.4	
62 Tert-amyl methyl ether	73	4.965	4.965	0.000	82	1319173	50.0	43.2	
63 n-Butanol	56	4.965	4.965	0.000	50	562002	1250.0	1598.4	
71 Methyl methacrylate	100	5.598	5.598	0.000	91	310426	100.0	100.0	
75 2-Nitropropane	41	5.946	5.946	0.000	97	252497	100.0	84.9	
87 Tetrahydrothiophene	60	7.117	7.117	0.000	92	170146	100.0	59.2	
98 cis-1,4-Dichloro-2-butene	53	8.616	8.616	0.000	87	319267	100.0	85.9	
114 1,2,3-Trimethylbenzene	105	9.914	9.914	0.000	98	1747679	50.0	52.7	
118 1,3,5-Trichlorobenzene	180	11.222	11.222	0.000	96	510319	50.0	46.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp A_00044	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

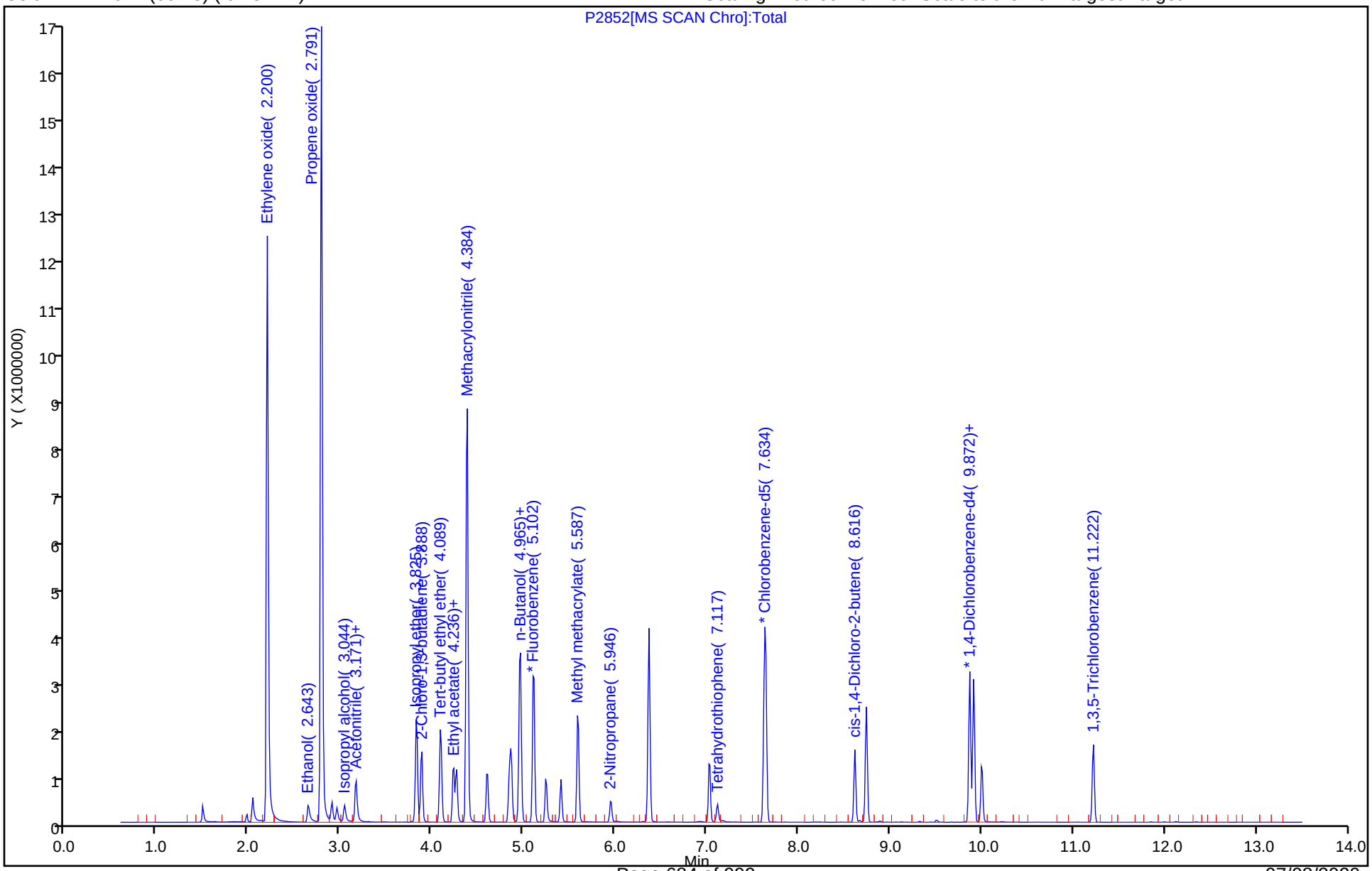
Report Date: 30-Jun-2020 20:51:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2852.D

Injection Date:	29-Jun-2020 22:03:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500875/2 Calibration Date: 07/01/2020 22:36

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1627		58.0	50.0	16.0	50.0
Chloromethane	Lin2		0.1915	0.1000	50.3	50.0	0.6	35.0
Vinyl chloride	Ave	0.2189	0.2325		53.1	50.0	6.2	20.0
Bromomethane	Lin1		0.0742		44.2	50.0	-11.6	35.0
Chloroethane	Ave	0.1394	0.1440		51.7	50.0	3.3	35.0
Dichlorofluoromethane	Ave	0.3255	0.3357		51.6	50.0	3.1	50.0
Trichlorofluoromethane	Ave	0.2702	0.2796		51.7	50.0	3.5	50.0
Ethyl ether	Ave	0.1703	0.1606		47.2	50.0	-5.7	35.0
Acrolein	Ave	0.0421	0.0286		336	494	-32.0	50.0
1,1-Dichloroethene	Ave	0.1619	0.1401		43.3	50.0	-13.5	20.0
Freon 113	Ave	0.1218	0.1053		43.2	50.0	-13.6	50.0
Acetone	Lin2		0.0538		162	200	-19.0	50.0
Iodomethane	Lin		0.1332		42.9	50.0	-14.2	35.0
Carbon disulfide	Lin2		0.4388		43.6	50.0	-12.8	50.0
Methyl acetate	Ave	0.1699	0.1427		84.0	100	-16.0	50.0
Allyl chloride	Ave	0.2776	0.2533		45.6	50.0	-8.7	35.0
Methylene Chloride	Lin2		0.1810		48.4	50.0	-3.3	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0219	0.0177		404	500	-19.2	50.0
Acrylonitrile	Ave	0.0920	0.0791		430	500	-14.0	50.0
Methyl tert-butyl ether	Ave	0.5467	0.5085		46.5	50.0	-7.0	35.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1723		45.1	50.0	-9.9	35.0
Hexane	Ave	1.166	0.8746		37.5	50.0	-25.0	35.0
Vinyl acetate	Ave	0.4119	0.4095		99.4	100	-0.6	50.0
1,1-Dichloroethane	Ave	0.3497	0.3218	0.1000	46.0	50.0	-8.0	35.0
2-Butanone (MEK)	Ave	0.1115	0.0919		165	200	-17.6	50.0
cis-1,2-Dichloroethene	Ave	0.2126	0.1976		46.5	50.0	-7.0	35.0
2,2-Dichloropropane	Ave	0.2367	0.2341		49.5	50.0	-1.1	35.0
sec-Butyl Alcohol	Ave	0.0179	0.0150		1250	1500	-16.5	50.0
Chlorobromomethane	Ave	0.0952	0.0926		48.6	50.0	-2.8	35.0
Tetrahydrofuran	Ave	0.0739	0.0609		82.5	100	-17.5	50.0
Chloroform	Ave	0.3358	0.3093		46.1	50.0	-7.9	20.0
1,1,1-Trichloroethane	Ave	0.2658	0.2541		47.8	50.0	-4.4	35.0
Cyclohexane	Ave	0.3386	0.2966		43.8	50.0	-12.4	35.0
1,1-Dichloropropene	Ave	0.2785	0.2562		46.0	50.0	-8.0	35.0
Carbon tetrachloride	Ave	0.2176	0.2134		49.1	50.0	-1.9	35.0
Isobutyl alcohol	Ave	0.0077	0.0064		1030	1250	-17.7	50.0
Benzene	Ave	0.8229	0.7555		45.9	50.0	-8.2	35.0
1,2-Dichloroethane	Lin2		0.2402		46.6	50.0	-6.9	35.0
n-Heptane	Ave	0.2456	0.2064		42.0	50.0	-16.0	50.0
Trichloroethene	Ave	0.2020	0.1845		45.7	50.0	-8.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500875/2 Calibration Date: 07/01/2020 22:36

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.1656	0.1417		171	200	-14.4	50.0
Methylcyclohexane	Ave	0.2566	0.2299		44.8	50.0	-10.4	35.0
1,2-Dichloropropane	Ave	0.2126	0.2012		47.3	50.0	-5.4	20.0
1,4-Dioxane	Ave	0.0030	0.0026		868	1000	-13.2	50.0
Dibromomethane	Ave	0.1219	0.1143		46.9	50.0	-6.2	35.0
Dichlorobromomethane	Ave	0.2467	0.2383		48.3	50.0	-3.4	35.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1505		51.2	50.0	2.3	50.0
cis-1,3-Dichloropropene	Ave	1.341	1.323		49.3	50.0	-1.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.1866		176	200	-12.2	50.0
Toluene	Ave	0.8631	0.7878		45.6	50.0	-8.7	20.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2726		50.5	50.0	0.9	35.0
Ethyl methacrylate	Ave	1.229	1.158		47.1	50.0	-5.8	35.0
1,1,2-Trichloroethane	Ave	0.1741	0.1681		48.3	50.0	-3.4	35.0
Tetrachloroethene	Ave	0.6096	0.5667		46.5	50.0	-7.0	35.0
1,3-Dichloropropane	Ave	1.464	1.324		45.2	50.0	-9.5	35.0
2-Hexanone	Ave	0.6723	0.5645		168	200	-16.0	50.0
Chlorodibromomethane	Ave	0.7527	0.7605		50.5	50.0	1.0	35.0
1,2-Dibromoethane	Ave	0.8135	0.7584		46.6	50.0	-6.8	35.0
1-Chlorohexane	Lin2		1.075		48.8	50.0	-2.4	35.0
Chlorobenzene	Ave	2.365	2.172	0.3000	45.9	50.0	-8.2	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7088		48.7	50.0	-2.7	35.0
Ethylbenzene	Ave	1.298	1.206		46.4	50.0	-7.1	20.0
m-Xylene & p-Xylene	Ave	1.562	1.460		46.7	50.0	-6.5	35.0
o-Xylene	Ave	1.501	1.409		46.9	50.0	-6.1	35.0
Styrene	Ave	2.528	2.425		48.0	50.0	-4.1	35.0
Bromoform	Ave	0.4449	0.4529	0.1000	50.9	50.0	1.8	35.0
Isopropylbenzene	Ave	2.617	2.518		48.1	50.0	-3.8	35.0
Cyclohexanone	Ave	0.0512	0.0455		1780	2000	-11.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.6875	0.3000	44.8	50.0	-10.4	35.0
Bromobenzene	Ave	0.6174	0.5741		46.5	50.0	-7.0	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.1766		43.3	50.0	-13.3	50.0
1,2,3-Trichloropropane	Ave	0.2327	0.1965		42.2	50.0	-15.5	35.0
N-Propylbenzene	Ave	0.7252	0.6954		47.9	50.0	-4.1	35.0
2-Chlorotoluene	Ave	0.6140	0.5836		47.5	50.0	-4.9	35.0
1,3,5-Trimethylbenzene	Ave	2.148	2.037		47.4	50.0	-5.2	35.0
4-Chlorotoluene	Ave	0.6432	0.6062		47.1	50.0	-5.7	35.0
tert-Butylbenzene	Ave	1.797	1.710		47.6	50.0	-4.8	35.0
1,2,4-Trimethylbenzene	Ave	2.171	2.065		47.6	50.0	-4.9	35.0
sec-Butylbenzene	Ave	0.5256	0.4973		47.3	50.0	-5.4	35.0
1,3-Dichlorobenzene	Ave	1.118	1.069		47.8	50.0	-4.4	35.0
4-Isopropyltoluene	Ave	2.197	2.088		47.5	50.0	-5.0	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500875/2 Calibration Date: 07/01/2020 22:36

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.157	1.089		47.0	50.0	-5.9	35.0
n-Butylbenzene	Ave	2.049	1.912		46.6	50.0	-6.7	35.0
1,2-Dichlorobenzene	Ave	1.110	1.024		46.1	50.0	-7.7	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1180		45.3	50.0	-9.4	50.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.5788		47.9	50.0	-4.1	35.0
Hexachlorobutadiene	Ave	0.2197	0.1960		44.6	50.0	-10.8	35.0
Naphthalene	Ave	1.952	1.883		48.2	50.0	-3.5	35.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5336		48.0	50.0	-3.9	35.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2403		49.9	50.0	-0.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2641		46.6	50.0	-6.8	35.0
Toluene-d8 (Surr)	Ave	4.400	4.222		48.0	50.0	-4.0	35.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.071		48.5	50.0	-3.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2971.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jul-2020 22:36:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:31 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.111	0.000	99	2490498	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.643	0.000	86	575029	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.870	0.000	96	822908	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	598565	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	97	657620	50.0	46.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	92	2427760	50.0	48.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	86	881231	50.0	48.5	
10 Dichlorodifluoromethane	85	1.660	1.660	0.000	99	405195	50.0	58.0	
11 Chloromethane	50	1.839	1.839	0.000	99	477011	50.0	50.3	
12 Vinyl chloride	62	1.945	1.945	0.000	98	578972	50.0	53.1	
14 Bromomethane	94	2.230	2.230	0.000	90	184892	50.0	44.2	
15 Chloroethane	64	2.325	2.325	0.000	100	358678	50.0	51.7	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	836108	50.0	51.6	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	97	696242	50.0	51.7	
19 Ethyl ether	59	2.747	2.747	0.000	90	399919	50.0	47.2	
21 Acrolein	56	2.852	2.852	0.000	100	703559	493.8	335.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	72	262144	50.0	43.2	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	348885	50.0	43.3	
24 Acetone	43	2.958	2.958	0.000	100	535427	200.0	162.0	
26 Iodomethane	142	3.063	3.063	0.000	98	331670	50.0	42.9	
27 Carbon disulfide	76	3.127	3.127	0.000	98	1092911	50.0	43.6	
29 Methyl acetate	43	3.190	3.190	0.000	97	711007	100.0	84.0	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	630917	50.0	45.6	
31 Methylene Chloride	84	3.306	3.306	0.000	91	450778	50.0	48.4	
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	98	440956	500.0	403.9	
33 Acrylonitrile	53	3.464	3.464	0.000	99	1970843	500.0	430.0	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	1266344	50.0	46.5	
35 trans-1,2-Dichloroethene	96	3.517	3.517	0.000	99	429012	50.0	45.1	
36 Hexane	57	3.707	3.707	0.000	90	502903	50.0	37.5	
38 Vinyl acetate	43	3.802	3.802	0.000	97	2039872	100.0	99.4	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	801399	50.0	46.0	
44 2-Butanone (MEK)	43	4.214	4.214	0.000	100	914989	200.0	164.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	82	492227	50.0	46.5	
48 2,2-Dichloropropane	77	4.256	4.256	0.000	88	583128	50.0	49.5	
50 sec-Butyl Alcohol	45	4.330	4.330	0.000	99	1117984	1500.0	1252.3	
53 Chlorobromomethane	128	4.425	4.425	0.000	98	230528	50.0	48.6	
52 Tetrahydrofuran	42	4.435	4.435	0.000	88	303462	100.0	82.5	
54 Chloroform	83	4.477	4.477	0.000	92	770246	50.0	46.1	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	98	632749	50.0	47.8	
56 Cyclohexane	56	4.688	4.688	0.000	88	738670	50.0	43.8	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	638019	50.0	46.0	
59 Carbon tetrachloride	117	4.752	4.752	0.000	92	531580	50.0	49.1	
58 Isobutyl alcohol	41	4.752	4.752	0.000	93	396259	1250.0	1028.6	
60 Benzene	78	4.900	4.900	0.000	95	1881538	50.0	45.9	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	598254	50.0	46.6	
66 n-Heptane	43	5.079	5.079	0.000	91	513920	50.0	42.0	
67 Trichloroethene	95	5.385	5.385	0.000	99	459384	50.0	45.7	
68 2-Pentanone	43	5.480	5.480	0.000	99	1411842	200.0	171.2	
69 Methylcyclohexane	55	5.585	5.585	0.000	92	572645	50.0	44.8	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	97	500968	50.0	47.3	
72 1,4-Dioxane	88	5.638	5.638	0.000	92	127892	1000.0	867.8	
73 Dibromomethane	93	5.670	5.670	0.000	94	284775	50.0	46.9	
74 Dichlorobromomethane	83	5.786	5.786	0.000	100	593526	50.0	48.3	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	91	374881	50.0	51.2	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	760675	50.0	49.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	95	1858995	200.0	175.5	
79 Toluene	91	6.430	6.430	0.000	98	1961975	50.0	45.6	
80 trans-1,3-Dichloropropene	75	6.599	6.599	0.000	97	678891	50.0	50.5	
81 Ethyl methacrylate	69	6.620	6.620	0.000	88	665894	50.0	47.1	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	418586	50.0	48.3	
83 Tetrachloroethene	164	6.873	6.873	0.000	94	325875	50.0	46.5	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	96	761477	50.0	45.2	
85 2-Hexanone	43	6.947	6.947	0.000	95	1298330	200.0	167.9	
86 Chlorodibromomethane	129	7.126	7.126	0.000	90	437281	50.0	50.5	
88 Ethylene Dibromide	107	7.242	7.242	0.000	98	436117	50.0	46.6	
89 1-Chlorohexane	91	7.633	7.633	0.000	97	618322	50.0	48.8	
90 Chlorobenzene	112	7.675	7.675	0.000	95	1248684	50.0	45.9	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	96	407590	50.0	48.7	
92 Ethylbenzene	106	7.749	7.749	0.000	98	693597	50.0	46.4	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	839600	50.0	46.7	
94 o-Xylene	106	8.224	8.224	0.000	97	809987	50.0	46.9	
95 Styrene	104	8.245	8.245	0.000	94	1394309	50.0	48.0	
96 Bromoform	173	8.435	8.435	0.000	95	260400	50.0	50.9	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	2072219	50.0	48.1	
99 Cyclohexanone	55	8.667	8.667	0.000	90	1045879	2000.0	1776.3	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	565709	50.0	44.8	
101 Bromobenzene	156	8.888	8.888	0.000	96	472429	50.0	46.5	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	80	145303	50.0	43.3	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	84	161725	50.0	42.2	
104 N-Propylbenzene	120	8.973	8.973	0.000	99	572229	50.0	47.9	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	480265	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	94	1676366	50.0	47.4	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	498870	50.0	47.1	
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	1407288	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	1699500	50.0	47.6	
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	409256	50.0	47.3	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	879589	50.0	47.8	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	1718594	50.0	47.5	
113 1,4-Dichlorobenzene	146	9.902	9.902	0.000	95	895865	50.0	47.0	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	1573087	50.0	46.6	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	97	842928	50.0	46.1	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	83	97085	50.0	45.3	
119 1,2,4-Trichlorobenzene	180	11.854	11.854	0.000	94	476335	50.0	47.9	
120 Hexachlorobutadiene	225	12.002	12.002	0.000	97	161263	50.0	44.6	
121 Naphthalene	128	12.128	12.128	0.000	97	1549470	50.0	48.2	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	95	439140	50.0	48.0	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	91.6	
S 142 Xylenes, Total	106				0		100.0	93.7	
S 140 Trihalomethanes, Total	1				0		200.0	195.8	
S 143 Xylenes, Total (URS)	1				0		100.0	93.7	
S 145 1,3-Dichloropropene, Total	1				0		100.0	99.8	
S 144 1,2-Dichloroethene, Total	1				0		100.0	91.6	

Reagents:

MV-MegaMainA_00034	Amount Added:	25.00	Units: uL	
MV-Gas A_00060	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jul-2020 22:13:32 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2971.D

Injection Date: 01-Jul-2020 22:36:30 Instrument ID: VMS_P Operator ID: PETUNINP

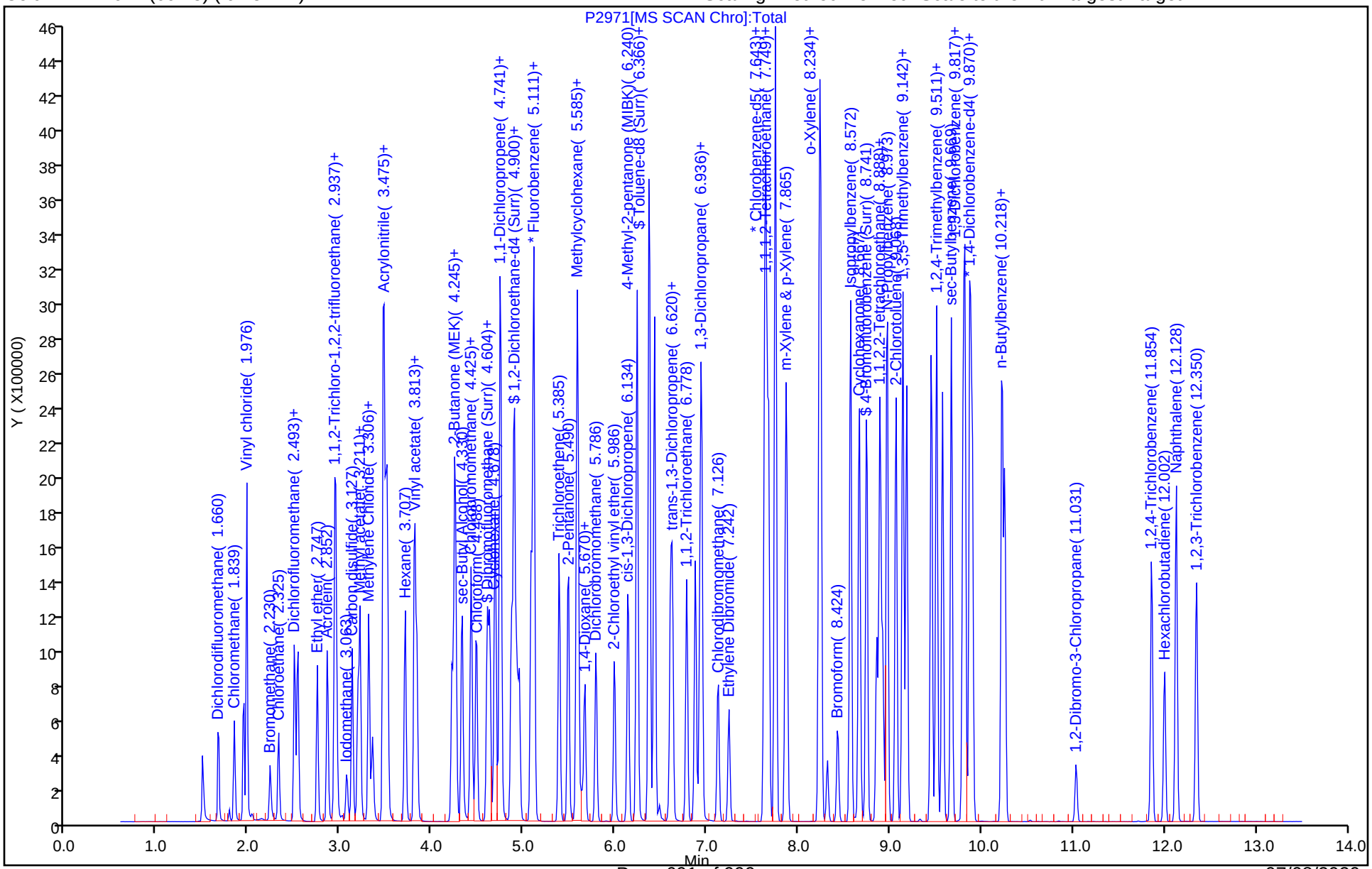
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500875/3 Calibration Date: 07/01/2020 22:57

Instrument ID: VMS_P Calib Start Date: 09/21/2019 22:00

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 09/22/2019 00:27

Lab File ID: P2972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Qua		0.0125			5000		50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jul-2020 22:57:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub168

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2379676	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	547834	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	787597	50.0	50.0	
13 Ethylene oxide	43	2.197	2.197	0.000	100	2978817	NC	NC	
18 Ethanol	45	2.640	2.640	0.000	99	452443	3000.0	2652.3	
20 Propene oxide	58	2.788	2.788	0.000	97	10684211	5000.0	4672.6	
25 Isopropyl alcohol	45	3.041	3.041	0.000	99	358083	500.0	408.5	
28 Acetonitrile	41	3.168	3.168	0.000	99	721100	500.0	414.3	
40 Isopropyl ether	87	3.832	3.832	0.000	95	390605	50.0	49.7	
41 2-Chloro-1,3-butadiene	53	3.885	3.885	0.000	90	693022	50.0	48.1	
43 Tert-butyl ethyl ether	59	4.096	4.096	0.000	97	1298021	50.0	44.6	
46 Ethyl acetate	43	4.233	4.233	0.000	99	978218	100.0	113.2	
49 Propionitrile	54	4.265	4.265	0.000	99	857075	500.0	456.5	
51 Methacrylonitrile	41	4.381	4.381	0.000	90	3147526	500.0	436.8	
62 Tert-amyl methyl ether	73	4.962	4.962	0.000	84	1209069	50.0	42.8	
63 n-Butanol	56	4.962	4.962	0.000	49	484476	1250.0	1490.8	
71 Methyl methacrylate	100	5.595	5.595	0.000	90	289586	100.0	100.9	
75 2-Nitropropane	41	5.954	5.954	0.000	96	222867	100.0	81.1	
87 Tetrahydrothiophene	60	7.114	7.114	0.000	91	151685	100.0	54.1	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.613	0.000	87	285058	100.0	77.1	
114 1,2,3-Trimethylbenzene	105	9.911	9.911	0.000	98	1659025	50.0	50.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.219	0.000	97	496731	50.0	45.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp A_00044 Amount Added: 50.00 Units: uL
mv-Cent IS_00006 Amount Added: 5.00 Units: uL

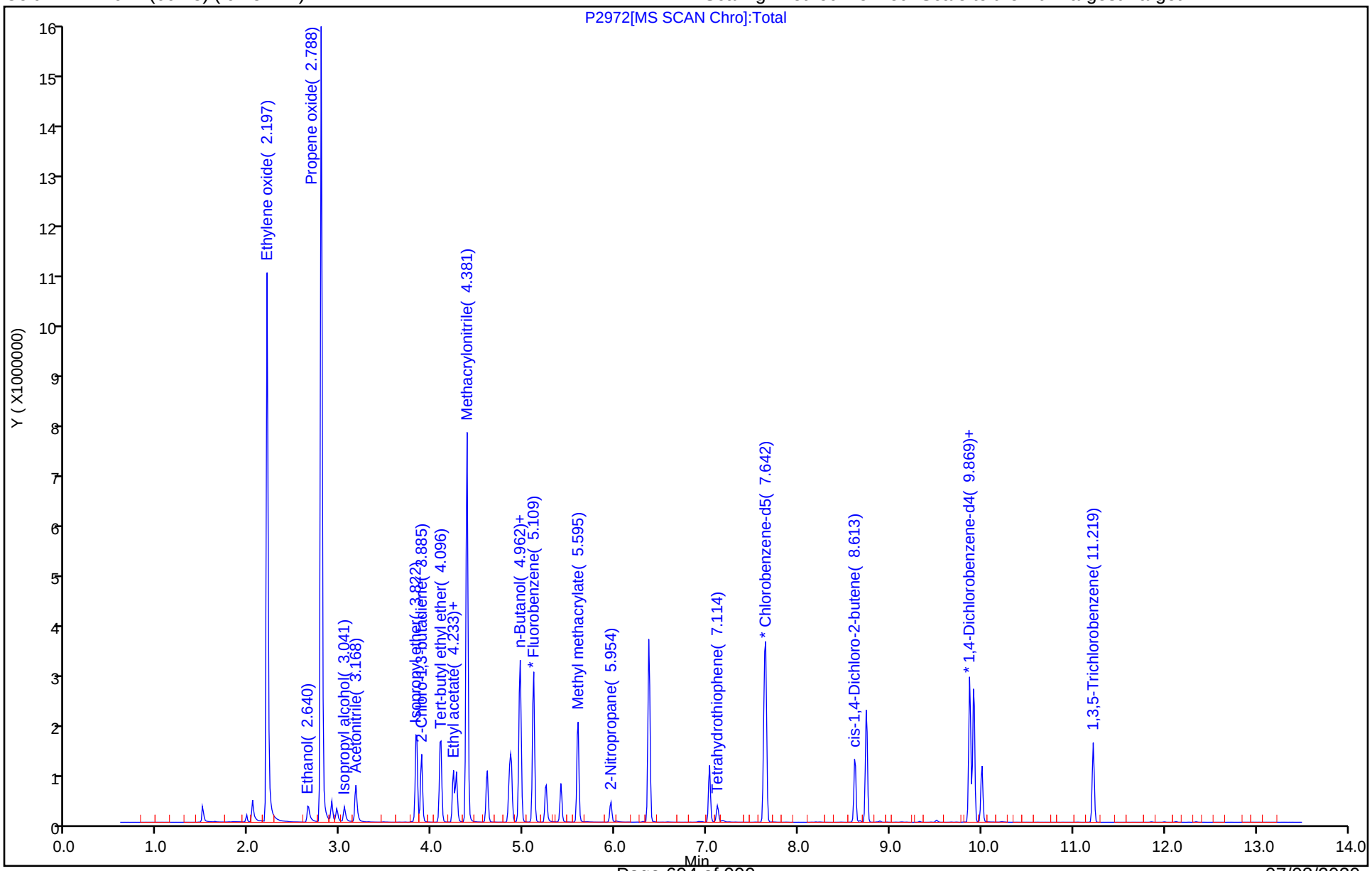
Report Date: 02-Jul-2020 22:13:34 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D

Injection Date:	01-Jul-2020 22:57:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500875/3 Calibration Date: 07/01/2020 22:57

Instrument ID: VMS_P Calib Start Date: 02/06/2020 14:40

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 02/06/2020 17:09

Lab File ID: P2972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0032		2650	3000	-11.6	50.0
Propene oxide	Ave	0.0480	0.0449		4670	5000	-6.5	50.0
2-Propanol	Lin2		0.0151		408	500	-18.3	50.0
Acetonitrile	Ave	0.0366	0.0303		414	500	-17.1	50.0
Di-isopropyl ether (DIPE)	Ave	0.1652	0.1641		49.7	50.0	-0.6	35.0
Chloroprene	Ave	0.3025	0.2912		48.1	50.0	-3.7	35.0
Tert-butyl ethyl ether	Ave	0.6122	0.5455		44.6	50.0	-10.9	35.0
Ethyl acetate	Lin2		0.2055		113	100	13.2	50.0
Propionitrile	Ave	0.0394	0.0360		456	500	-8.7	50.0
Methacrylonitrile	Ave	0.1514	0.1323		437	500	-12.6	50.0
n-Butanol	Lin2		0.0081		1490	1250	19.3	50.0
Tert-amyl methyl ether	Ave	0.5932	0.5081		42.8	50.0	-14.4	35.0
Methyl methacrylate	Ave	0.0603	0.0609		101	100	0.9	35.0
2-Nitropropane	Ave	0.0577	0.0468		81.1	100	-18.9	50.0
Tetrahydrothiophene	Lin2		0.1384		54.1	100	-45.9	50.0
cis-1,4-Dichloro-2-butene	Ave	0.2348	0.1810		77.1	100	-22.9	50.0
1,2,3-Trimethylbenzene	Ave	2.094	2.106		50.3	50.0	0.6	35.0
1,3,5-Trichlorobenzene	Ave	0.6952	0.6307		45.4	50.0	-9.3	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jul-2020 22:57:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub168

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2379676	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	547834	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	787597	50.0	50.0	
13 Ethylene oxide	43	2.197	2.197	0.000	100	2978817	NC	NC	
18 Ethanol	45	2.640	2.640	0.000	99	452443	3000.0	2652.3	
20 Propene oxide	58	2.788	2.788	0.000	97	10684211	5000.0	4672.6	
25 Isopropyl alcohol	45	3.041	3.041	0.000	99	358083	500.0	408.5	
28 Acetonitrile	41	3.168	3.168	0.000	99	721100	500.0	414.3	
40 Isopropyl ether	87	3.832	3.832	0.000	95	390605	50.0	49.7	
41 2-Chloro-1,3-butadiene	53	3.885	3.885	0.000	90	693022	50.0	48.1	
43 Tert-butyl ethyl ether	59	4.096	4.096	0.000	97	1298021	50.0	44.6	
46 Ethyl acetate	43	4.233	4.233	0.000	99	978218	100.0	113.2	
49 Propionitrile	54	4.265	4.265	0.000	99	857075	500.0	456.5	
51 Methacrylonitrile	41	4.381	4.381	0.000	90	3147526	500.0	436.8	
62 Tert-amyl methyl ether	73	4.962	4.962	0.000	84	1209069	50.0	42.8	
63 n-Butanol	56	4.962	4.962	0.000	49	484476	1250.0	1490.8	
71 Methyl methacrylate	100	5.595	5.595	0.000	90	289586	100.0	100.9	
75 2-Nitropropane	41	5.954	5.954	0.000	96	222867	100.0	81.1	
87 Tetrahydrothiophene	60	7.114	7.114	0.000	91	151685	100.0	54.1	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.613	0.000	87	285058	100.0	77.1	
114 1,2,3-Trimethylbenzene	105	9.911	9.911	0.000	98	1659025	50.0	50.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.219	0.000	97	496731	50.0	45.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp A_00044 Amount Added: 50.00 Units: uL
mv-Cent IS_00006 Amount Added: 5.00 Units: uL

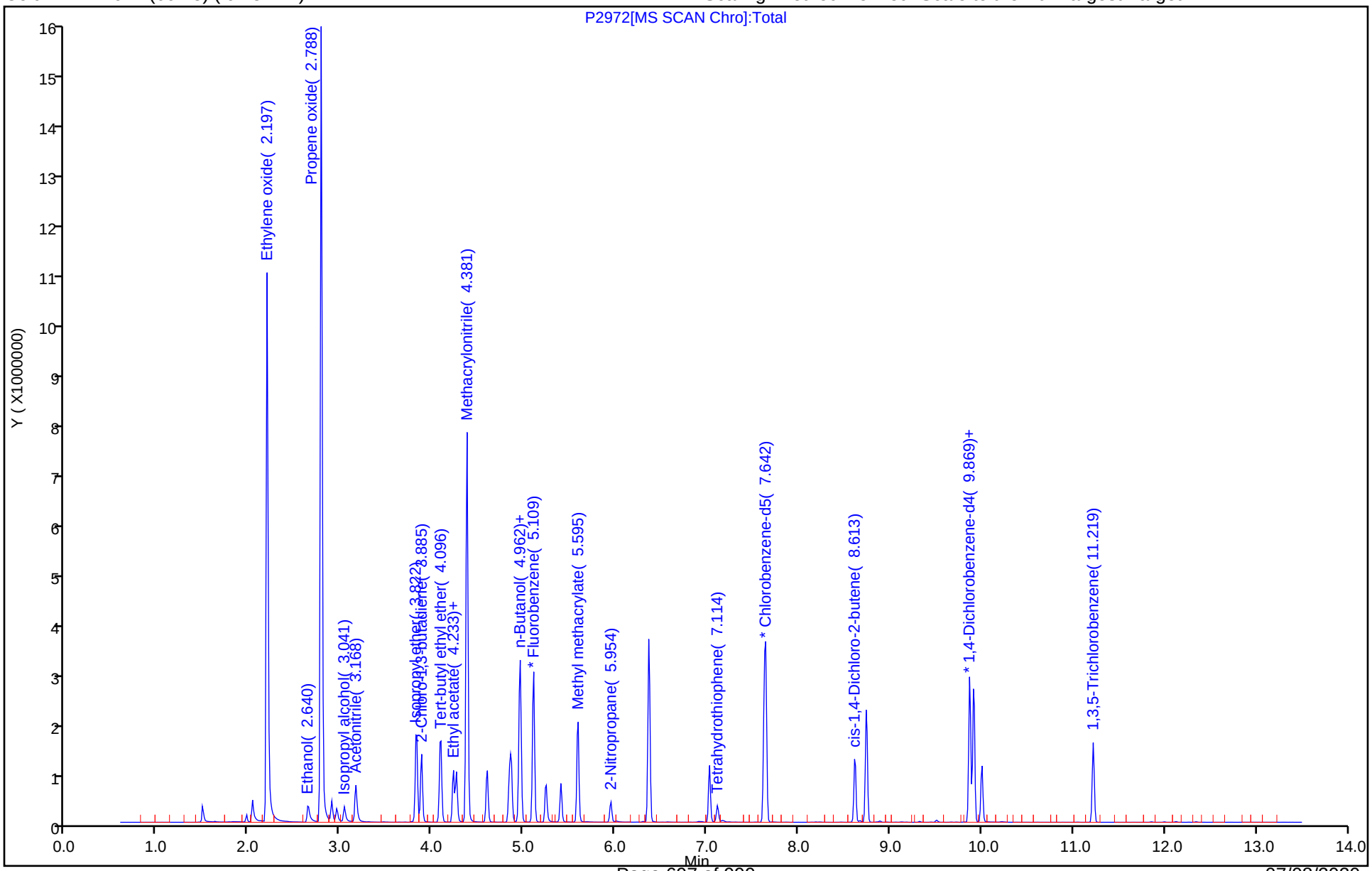
Report Date: 02-Jul-2020 22:13:34 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D

Injection Date:	01-Jul-2020 22:57:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-497166/53 Calibration Date: 06/03/2020 17:22

Instrument ID: VMS_R1 Calib Start Date: 06/03/2020 13:49

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/03/2020 17:01

Lab File ID: R5925.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Ave	0.0070	0.0086		6130	5000	22.6	55.0
Ethanol	Ave	0.0025	0.0027		3220	3000	7.4	55.0
Propene oxide	Ave	0.0350	0.0413		5890	5000	17.9	
2-Propanol	Lin2		0.0134		466	500	-6.8	55.0
Acetonitrile	Ave	0.0312	0.0314		505	500	0.9	55.0
Di-isopropyl ether (DIPE)	Ave	0.1494	0.1551		51.9	50.0	3.8	35.0
Chloroprene	Lin1		0.2748		45.8	50.0	-8.3	35.0
Tert-butyl ethyl ether	Ave	0.5355	0.5505		51.4	50.0	2.8	35.0
Ethyl acetate	Ave	0.2144	0.2138		99.7	100	-0.3	55.0
Propionitrile	Ave	0.0345	0.0350		507	500	1.4	55.0
Methacrylonitrile	Ave	0.1314	0.1329		506	500	1.1	55.0
Tert-amyl methyl ether	Ave	0.4873	0.5196		53.3	50.0	6.6	35.0
n-Butanol	Lin1		0.0062		1070	1250	-14.7	55.0
Methyl methacrylate	Lin2		0.0600		99.7	100	-0.3	35.0
2-Nitropropane	Lin1		0.0452		87.3	100	-12.7	55.0
Tetrahydrothiophene	Lin1		0.1596		95.5	100	-4.5	55.0
cis-1,4-Dichloro-2-butene	Lin2		0.2010		106	100	5.8	55.0
1,2,3-Trimethylbenzene	Ave	2.155	2.274		52.8	50.0	5.5	35.0
1,3,5-Trichlorobenzene	Ave	0.6880	0.7144		51.9	50.0	3.8	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5925.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Jun-2020 17:22:30 ALS Bottle#: 22 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV RR
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:24:34 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.033	5.033	0.000	98	2848288	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.548	7.548	0.000	87	619951	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.771	9.771	0.000	97	996647	50.0	50.0	
13 Ethylene oxide	43	2.180	2.173	0.007	100	2460205	5000.0	6128.0	
18 Ethanol	45	2.633	2.630	0.003	99	459694	3000.0	3221.4	
20 Propene oxide	58	2.761	2.757	0.004	96	11747849	5000.0	5894.9	
25 Isopropyl alcohol	45	3.012	3.012	0.000	98	382414	500.0	466.1	
28 Acetonitrile	41	3.132	3.128	0.004	99	895411	500.0	504.5	
41 Isopropyl ether	87	3.777	3.777	0.000	95	441791	50.0	51.9	
42 2-Chloro-1,3-butadiene	53	3.826	3.826	0.000	92	782832	50.0	45.8	
44 Tert-butyl ethyl ether	59	4.035	4.036	-0.001	98	1567837	50.0	51.4	
46 Ethyl acetate	43	4.170	4.171	-0.001	99	1217816	100.0	99.7	
49 Propionitrile	54	4.208	4.208	0.000	99	998176	500.0	507.2	
51 Methacrylonitrile	41	4.317	4.317	0.000	92	3785187	500.0	505.7	
64 Tert-amyl methyl ether	73	4.890	4.887	0.003	89	1480006	50.0	53.3	
66 n-Butanol	56	5.175	5.171	0.004	87	444648	1250.0	1065.7	
71 Methyl methacrylate	100	5.516	5.513	0.003	92	341887	100.0	99.7	
75 2-Nitropropane	41	5.872	5.872	0.000	98	257723	100.0	87.3	
86 Tetrahydrothiophene	60	7.027	7.023	0.004	92	197830	100.0	95.5	
98 cis-1,4-Dichloro-2-butene	53	8.519	8.523	-0.004	93	400647	100.0	105.8	
115 1,2,3-Trimethylbenzene	105	9.812	9.816	-0.004	99	2266026	50.0	52.8	
119 1,3,5-Trichlorobenzene	180	11.117	11.121	-0.004	97	712005	50.0	51.9	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00027	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

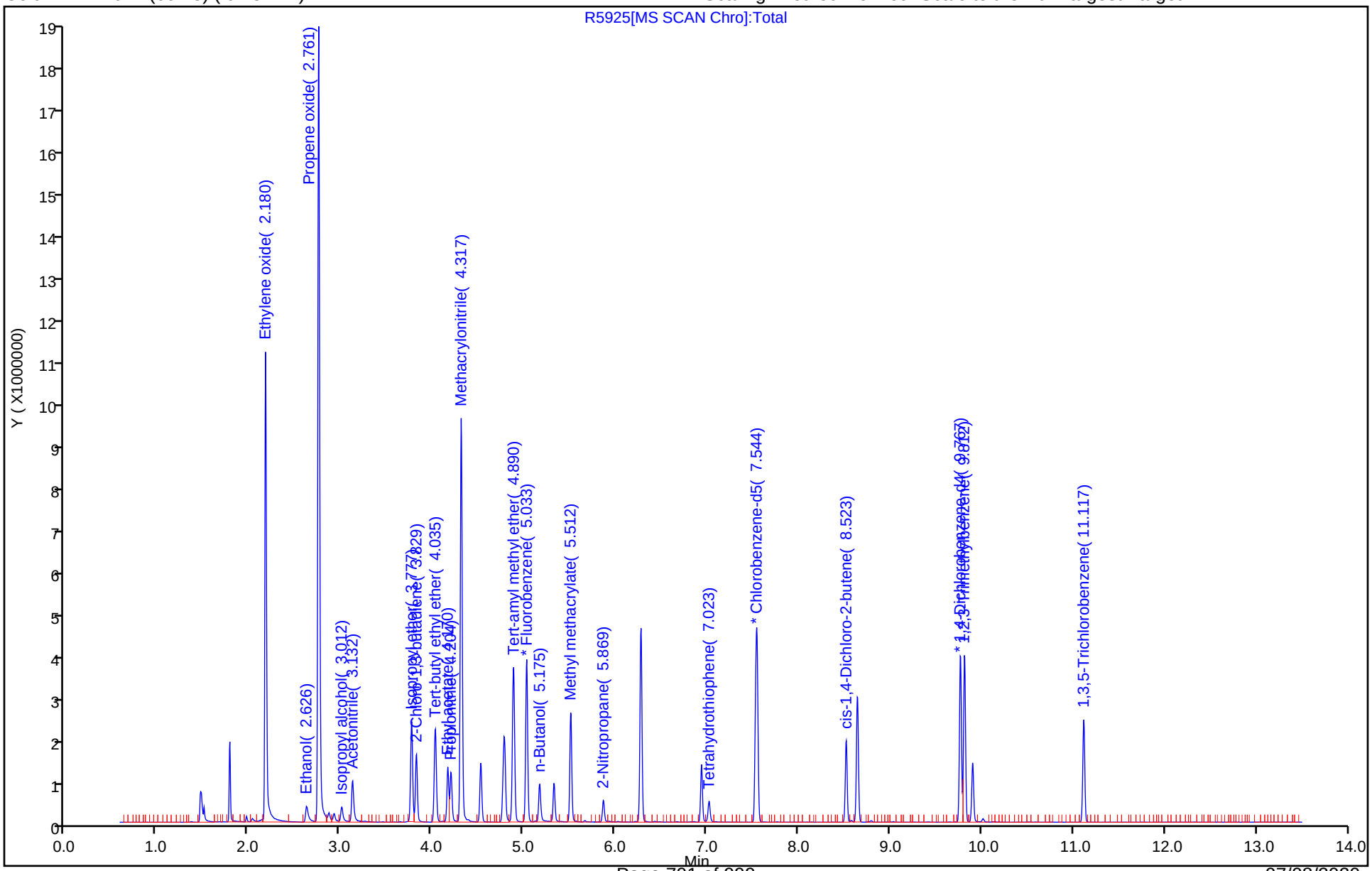
Report Date: 04-Jun-2020 14:24:37 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5925.D

Injection Date:	03-Jun-2020 17:22:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	ICV			Worklist Smp#:	53
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-497370/23 Calibration Date: 06/04/2020 16:02

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R5943.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1890	0.1557		41.2	50.0	-17.6	55.0
Chloromethane	Ave	0.1926	0.1809	0.1000	47.0	50.0	-6.1	35.0
Vinyl chloride	Ave	0.1808	0.1889		52.2	50.0	4.5	35.0
Bromomethane	Ave	0.0982	0.1041		53.0	50.0	6.1	35.0
Chloroethane	Ave	0.1096	0.1160		52.9	50.0	5.8	35.0
Dichlorofluoromethane	Ave	0.2839	0.2975		52.4	50.0	4.8	55.0
Trichlorofluoromethane	Ave	0.2650	0.2899		54.7	50.0	9.4	50.0
Ethyl ether	Ave	0.1528	0.1624		53.1	50.0	6.2	35.0
Acrolein	Ave	0.0358	0.0388		535	494	8.4	55.0
Freon 113	Ave	0.0968	0.1090		56.3	50.0	12.6	55.0
1,1-Dichloroethene	Lin2		0.1518		55.8	50.0	11.6	35.0
Acetone	Ave	0.0718	0.0659		184	200	-8.2	55.0
Iodomethane	Qua		0.1398		47.4	50.0	-5.1	35.0
Carbon disulfide	Lin1		0.4782		58.2	50.0	16.4	55.0
Methyl acetate	Ave	0.1568	0.1646		105	100	5.0	55.0
Allyl chloride	Ave	0.2344	0.2481		52.9	50.0	5.8	35.0
Methylene Chloride	Ave	0.1923	0.1871		48.7	50.0	-2.7	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Lin2		0.0229		486	500	-2.7	55.0
Acrylonitrile	Ave	0.0864	0.0910		526	500	5.3	55.0
Methyl tert-butyl ether	Lin2		0.5570		48.0	50.0	-3.9	35.0
trans-1,2-Dichloroethene	Ave	0.1613	0.1725		53.5	50.0	6.9	35.0
Hexane	Lin2		0.9610		66.8	50.0	33.7	35.0
Vinyl acetate	Lin1		0.4205		90.1	100	-9.9	55.0
1,1-Dichloroethane	Ave	0.3261	0.3222	0.1000	49.4	50.0	-1.2	35.0
2-Butanone (MEK)	Ave	0.1065	0.1103		207	200	3.5	55.0
cis-1,2-Dichloroethene	Ave	0.1963	0.2016		51.3	50.0	2.7	35.0
2,2-Dichloropropane	Lin2		0.2406		46.4	50.0	-7.1	35.0
sec-Butyl Alcohol	Lin1		0.0201		1410	1500	-6.1	55.0
Chlorobromomethane	Lin2		0.0905		46.6	50.0	-6.8	35.0
Tetrahydrofuran	Ave	0.0701	0.0725		103	100	3.5	55.0
Chloroform	Ave	0.3428	0.3184		46.4	50.0	-7.1	35.0
1,1,1-Trichloroethane	Lin1		0.2754		44.9	50.0	-10.2	35.0
Cyclohexane	Ave	0.2634	0.3009		57.1	50.0	14.2	35.0
1,1-Dichloropropene	Ave	0.2562	0.2511		49.0	50.0	-2.0	35.0
Carbon tetrachloride	Ave	0.2370	0.2378		50.2	50.0	0.3	35.0
Isobutyl alcohol	Lin2		0.0079		1200	1250	-3.9	55.0
Benzene	Ave	0.7698	0.7359		47.8	50.0	-4.4	35.0
1,2-Dichloroethane	Ave	0.2765	0.2691		48.7	50.0	-2.7	35.0
n-Heptane	Ave	0.1607	0.1727		53.7	50.0	7.5	50.0
Trichloroethene	Ave	0.1877	0.1854		49.4	50.0	-1.2	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-497370/23 Calibration Date: 06/04/2020 16:02

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R5943.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Lin2		0.1812		205	200	2.4	55.0
Methylcyclohexane	Ave	0.2079	0.2174		52.3	50.0	4.6	35.0
1,2-Dichloropropane	Lin1		0.1982		46.3	50.0	-7.5	35.0
1,4-Dioxane	Ave	0.0034	0.0032		926	1000	-7.4	55.0
Dibromomethane	Ave	0.1268	0.1285		50.7	50.0	1.4	35.0
Dichlorobromomethane	Ave	0.2579	0.2585		50.1	50.0	0.3	35.0
2-Chloroethyl vinyl ether	Lin1		0.1606		50.1	50.0	0.1	55.0
cis-1,3-Dichloropropene	Lin2		1.441		48.0	50.0	-4.0	35.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2196		188	200	-5.9	55.0
Toluene	Ave	0.8084	0.7686		47.5	50.0	-4.9	35.0
trans-1,3-Dichloropropene	Lin1		0.2846		42.0	50.0	-16.1	35.0
Ethyl methacrylate	Lin1		1.277		47.4	50.0	-5.2	35.0
1,1,2-Trichloroethane	Ave	0.1774	0.1777		50.1	50.0	0.2	35.0
Tetrachloroethene	Lin1		0.5867		45.4	50.0	-9.2	35.0
1,3-Dichloropropane	Lin2		1.483		46.9	50.0	-6.3	35.0
2-Hexanone	Lin2		0.7071		203	200	1.3	55.0
Chlorodibromomethane	Lin1		0.8749		45.2	50.0	-9.6	35.0
1,2-Dibromoethane	Lin1		0.9020		47.7	50.0	-4.5	35.0
1-Chlorohexane	Ave	1.088	1.120		51.5	50.0	3.0	35.0
Chlorobenzene	Ave	2.290	2.250	0.3000	49.1	50.0	-1.8	35.0
1,1,1,2-Tetrachloroethane	Lin2		0.7969		46.3	50.0	-7.3	35.0
Ethylbenzene	Ave	1.141	1.186		52.0	50.0	4.0	35.0
m-Xylene & p-Xylene	Lin1		1.477		45.7	50.0	-8.6	35.0
o-Xylene	Lin1		1.465		46.5	50.0	-7.1	35.0
Styrene	Ave	2.503	2.585		51.6	50.0	3.3	35.0
Bromoform	Lin1		0.5958	0.1000	45.6	50.0	-8.9	35.0
Isopropylbenzene	Ave	2.460	2.439		49.6	50.0	-0.9	35.0
Cyclohexanone	Lin1		0.0674		1820	2000	-9.1	35.0
1,1,2,2-Tetrachloroethane	Lin1		0.7934	0.3000	46.9	50.0	-6.1	35.0
Bromobenzene	Ave	0.5893	0.6062		51.4	50.0	2.9	35.0
trans-1,4-Dichloro-2-butene	Lin2		0.2301		46.5	50.0	-6.9	55.0
1,2,3-Trichloropropane	Lin1		0.2473		47.0	50.0	-5.9	35.0
N-Propylbenzene	Ave	0.6556	0.6288		48.0	50.0	-4.1	35.0
2-Chlorotoluene	Ave	0.5923	0.5622		47.5	50.0	-5.1	35.0
1,3,5-Trimethylbenzene	Ave	2.081	2.068		49.7	50.0	-0.6	35.0
4-Chlorotoluene	Ave	0.6055	0.5868		48.5	50.0	-3.1	35.0
tert-Butylbenzene	Ave	1.704	1.654		48.5	50.0	-3.0	35.0
1,2,4-Trimethylbenzene	Ave	2.137	2.134		49.9	50.0	-0.1	35.0
sec-Butylbenzene	Lin2		0.4546		45.9	50.0	-8.2	35.0
1,3-Dichlorobenzene	Ave	1.123	1.116		49.7	50.0	-0.6	35.0
4-Isopropyltoluene	Ave	2.074	2.051		49.4	50.0	-1.1	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: ICV 280-497370/23 Calibration Date: 06/04/2020 16:02

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R5943.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.185	1.148		48.5	50.0	-3.1	35.0
n-Butylbenzene	Lin2		1.890		45.9	50.0	-8.1	35.0
1,2-Dichlorobenzene	Ave	1.139	1.120		49.2	50.0	-1.7	35.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1810		48.4	50.0	-3.2	55.0
1,2,4-Trichlorobenzene	Lin1		0.7073		45.8	50.0	-8.3	35.0
Hexachlorobutadiene	Lin1		0.2265		45.9	50.0	-8.1	35.0
Naphthalene	Lin2		2.579		50.2	50.0	0.4	35.0
1,2,3-Trichlorobenzene	Lin2		0.6826		47.3	50.0	-5.3	35.0
Dibromofluoromethane (Surr)	Ave	0.2523	0.2468		48.9	50.0	-2.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3088	0.2947		47.7	50.0	-4.6	35.0
Toluene-d8 (Surr)	Ave	4.334	4.428		51.1	50.0	2.2	35.0
4-Bromofluorobenzene (Surr)	Ave	1.047	1.030		49.2	50.0	-1.7	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5943.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 04-Jun-2020 16:02:30 ALS Bottle#: 12 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2020 14:06:54 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: sumichrastr Date: 04-Jun-2020 16:42:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.010	5.010	0.000	99	2115357	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.525	7.522	0.003	87	466370	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	96	721226	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.512	-0.004	92	522075	50.0	48.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.770	4.767	0.003	0	623292	50.0	47.7	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	2065118	50.0	51.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	742612	50.0	49.2	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	329388	50.0	41.2	
11 Chloromethane	50	1.828	1.828	0.000	99	382639	50.0	47.0	
12 Vinyl chloride	62	1.921	1.921	0.000	98	399572	50.0	52.2	
14 Bromomethane	94	2.195	2.191	0.004	91	220204	50.0	53.0	
15 Chloroethane	64	2.289	2.285	0.004	99	245344	50.0	52.9	
16 Dichlorofluoromethane	67	2.457	2.454	0.003	97	629215	50.0	52.4	
17 Trichlorofluoromethane	101	2.487	2.487	0.000	98	613144	50.0	54.7	
19 Ethyl ether	59	2.697	2.697	0.000	92	343455	50.0	53.1	
21 Acrolein	56	2.806	2.806	0.000	99	810369	493.8	535.3	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	94	230534	50.0	56.3	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	97	321009	50.0	55.8	
24 Acetone	43	2.903	2.904	-0.001	100	557633	200.0	183.6	
26 Iodomethane	142	3.005	3.005	0.000	100	295659	50.0	47.4	
27 Carbon disulfide	76	3.065	3.065	0.000	99	1011535	50.0	58.2	
29 Methyl acetate	43	3.128	3.128	0.000	98	696450	100.0	105.0	
30 3-Chloro-1-propene	41	3.151	3.151	0.000	93	524870	50.0	52.9	
31 Methylene Chloride	84	3.241	3.241	0.000	93	395735	50.0	48.7	
32 2-Methyl-2-propanol	59	3.289	3.286	0.003	98	484994	500.0	486.4	a
33 Acrylonitrile	53	3.402	3.402	0.000	100	1924833	500.0	526.4	
34 Methyl tert-butyl ether	73	3.424	3.428	-0.004	95	1178335	50.0	48.0	
35 trans-1,2-Dichloroethene	96	3.439	3.440	-0.001	98	364858	50.0	53.5	
37 Hexane	57	3.631	3.631	0.000	91	448194	50.0	66.8	
39 Vinyl acetate	43	3.732	3.732	0.000	97	1778879	100.0	90.1	
40 1,1-Dichloroethane	63	3.754	3.754	0.000	96	681500	50.0	49.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 2-Butanone (MEK)	43	4.133	4.133	0.000	100	932938	200.0	207.0	
47 cis-1,2-Dichloroethene	96	4.159	4.159	0.000	82	426465	50.0	51.3	
48 2,2-Dichloropropane	77	4.170	4.171	-0.001	88	508999	50.0	46.4	
50 sec-Butyl Alcohol	45	4.245	4.246	-0.001	99	1274715	1500.0	1408.2	
52 Chlorobromomethane	128	4.335	4.332	0.003	98	191470	50.0	46.6	
53 Tetrahydrofuran	42	4.347	4.347	0.000	87	306910	100.0	103.5	
54 Chloroform	83	4.395	4.392	0.003	93	673505	50.0	46.4	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	97	582490	50.0	44.9	
56 Cyclohexane	56	4.594	4.590	0.004	89	636564	50.0	57.1	
57 1,1-Dichloropropene	75	4.646	4.647	-0.001	97	531078	50.0	49.0	
59 Carbon tetrachloride	117	4.650	4.650	0.000	96	503057	50.0	50.2	
60 Isobutyl alcohol	41	4.661	4.662	-0.001	96	415946	1250.0	1201.7	
62 Benzene	78	4.796	4.797	-0.001	95	1556583	50.0	47.8	
63 1,2-Dichloroethane	62	4.826	4.827	-0.001	97	569257	50.0	48.7	
65 n-Heptane	43	4.980	4.980	0.000	91	365326	50.0	53.7	
67 Trichloroethene	95	5.284	5.284	0.000	97	392253	50.0	49.4	
68 2-Pentanone	43	5.385	5.385	0.000	99	1533320	200.0	204.8	
69 Methylcyclohexane	55	5.475	5.475	0.000	92	459903	50.0	52.3	
70 1,2-Dichloropropane	63	5.486	5.486	0.000	96	419352	50.0	46.3	
72 1,4-Dioxane	88	5.531	5.531	0.000	94	134562	1000.0	925.7	
73 Dibromomethane	93	5.557	5.558	-0.001	91	271914	50.0	50.7	
74 Dichlorobromomethane	83	5.681	5.681	0.000	99	546856	50.0	50.1	
76 2-Chloroethyl vinyl ether	63	5.884	5.884	0.000	91	339647	50.0	50.1	
77 cis-1,3-Dichloropropene	75	6.030	6.026	0.004	96	672131	50.0	48.0	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	95	1858475	200.0	188.2	
79 Toluene	91	6.315	6.315	0.000	98	1625802	50.0	47.5	
80 trans-1,3-Dichloropropene	75	6.491	6.491	0.000	97	601960	50.0	42.0	
81 Ethyl methacrylate	69	6.513	6.513	0.000	89	595359	50.0	47.4	
82 1,1,2-Trichloroethane	97	6.663	6.663	0.000	91	375872	50.0	50.1	
83 Tetrachloroethene	164	6.757	6.757	0.000	93	273622	50.0	45.4	
84 1,3-Dichloropropane	76	6.809	6.810	-0.001	89	691450	50.0	46.9	
85 2-Hexanone	43	6.828	6.828	0.000	95	1319008	200.0	202.7	
87 Chlorodibromomethane	129	7.004	7.005	-0.001	91	408015	50.0	45.2	
88 Ethylene Dibromide	107	7.121	7.121	0.000	99	420685	50.0	47.7	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	522462	50.0	51.5	
90 Chlorobenzene	112	7.552	7.552	0.000	94	1049242	50.0	49.1	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.623	0.000	95	371627	50.0	46.3	
92 Ethylbenzene	106	7.627	7.627	0.000	98	553319	50.0	52.0	
93 m-Xylene & p-Xylene	106	7.747	7.747	0.000	0	688608	50.0	45.7	
94 o-Xylene	106	8.106	8.103	0.003	97	683039	50.0	46.5	
95 Styrene	104	8.121	8.122	-0.001	95	1205361	50.0	51.6	
96 Bromoform	173	8.301	8.302	-0.001	94	277876	50.0	45.6	
97 Isopropylbenzene	105	8.444	8.444	0.000	96	1759017	50.0	49.6	
99 Cyclohexanone	55	8.541	8.541	0.000	91	1256682	2000.0	1817.9	
100 1,1,2,2-Tetrachloroethane	83	8.733	8.729	0.003	94	572182	50.0	46.9	
101 Bromobenzene	156	8.763	8.763	-0.001	96	437211	50.0	51.4	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	80	165974	50.0	46.5	
103 1,2,3-Trichloropropane	110	8.796	8.793	0.003	84	178374	50.0	47.0	
104 N-Propylbenzene	120	8.845	8.841	0.004	99	453505	50.0	48.0	
105 2-Chlorotoluene	126	8.939	8.939	0.000	95	405504	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	9.017	9.014	0.003	94	1491424	50.0	49.7	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	423202	50.0	48.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	1192815	50.0	48.5	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	97	1538975	50.0	49.9	
111 sec-Butylbenzene	134	9.542	9.542	0.000	95	327890	50.0	45.9	
112 1,3-Dichlorobenzene	146	9.670	9.666	0.004	97	805095	50.0	49.7	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	1479497	50.0	49.4	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	94	828142	50.0	48.5	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	1363366	50.0	45.9	
117 1,2-Dichlorobenzene	146	10.123	10.123	0.000	97	807669	50.0	49.2	
118 1,2-Dibromo-3-Chloropropane	157	10.903	10.899	0.004	85	130553	50.0	48.4	
120 1,2,4-Trichlorobenzene	180	11.720	11.720	0.000	94	510110	50.0	45.8	
121 Hexachlorobutadiene	225	11.866	11.863	0.003	96	163352	50.0	45.9	
122 Naphthalene	128	11.990	11.990	0.000	97	1859714	50.0	50.2	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	94	492304	50.0	47.3	
S 135 1,2-Dichloroethene, Total (URS)	96				0		100.0	104.8	
S 141 1,2-Dichloroethene, Total	1				0		100.0	104.8	
S 136 1,3-Dichloropropene, Total	1				0		100.0	90.0	
S 140 Trihalomethanes, Total	1				0		200.0	187.3	
S 138 Xylenes, Total	106				0		100.0	92.2	
S 139 Xylenes, Total (URS)	1				0		100.0	92.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMain B_00031	Amount Added:	25.00	Units: uL	
MV-Gas B_00060	Amount Added:	10.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

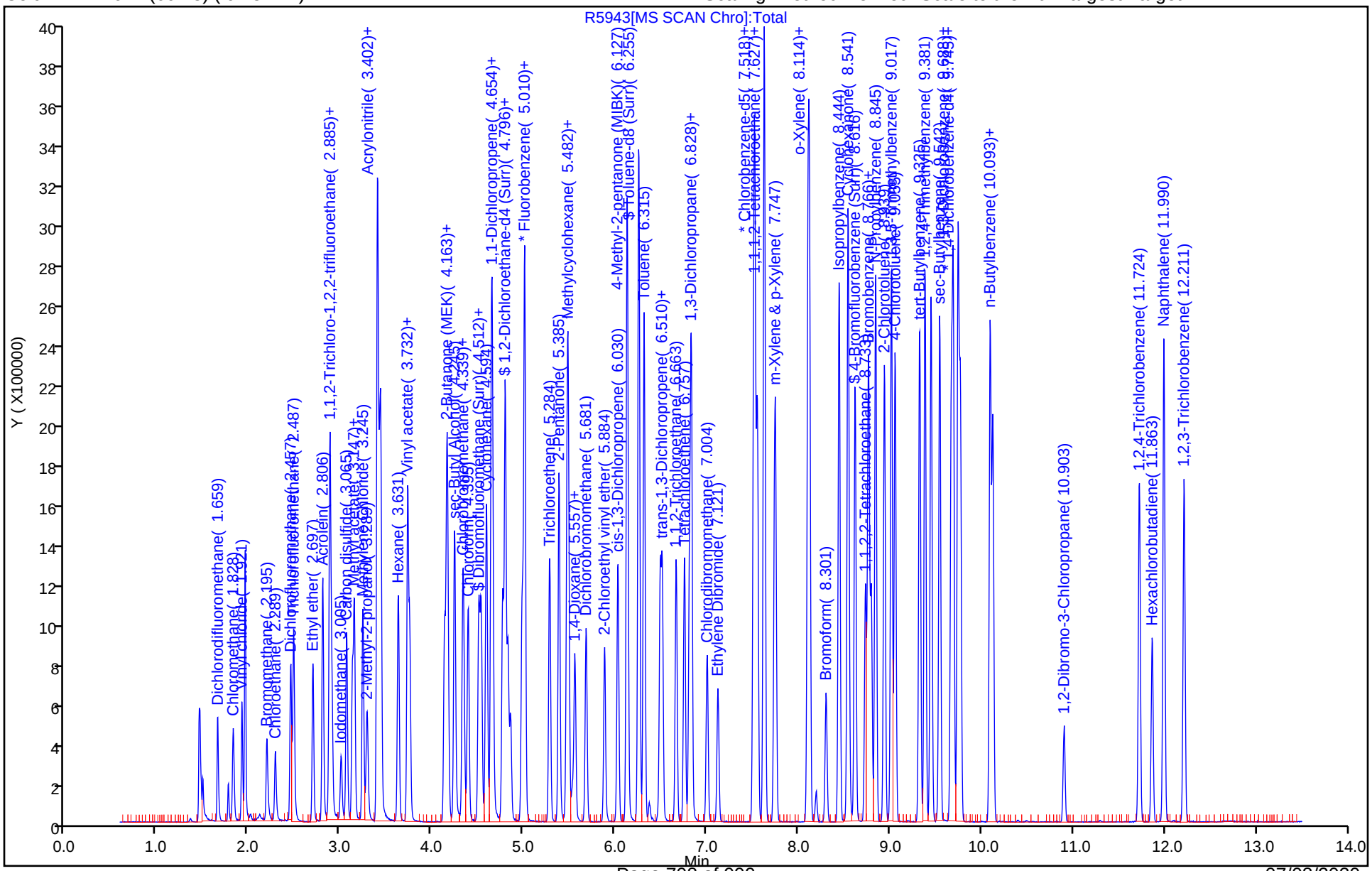
Report Date: 05-Jun-2020 14:07:03 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5943.D

Injection Date:	04-Jun-2020 16:02:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	ICV			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

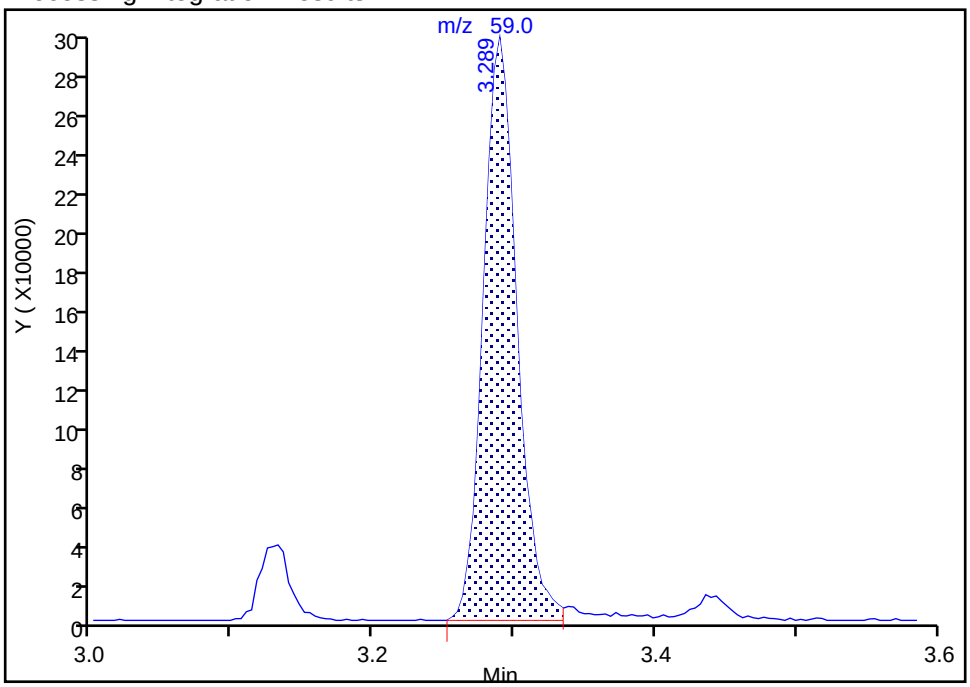
Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5943.D
Injection Date: 04-Jun-2020 16:02:30 Instrument ID: VMS_R1
Lims ID: ICV
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 12 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

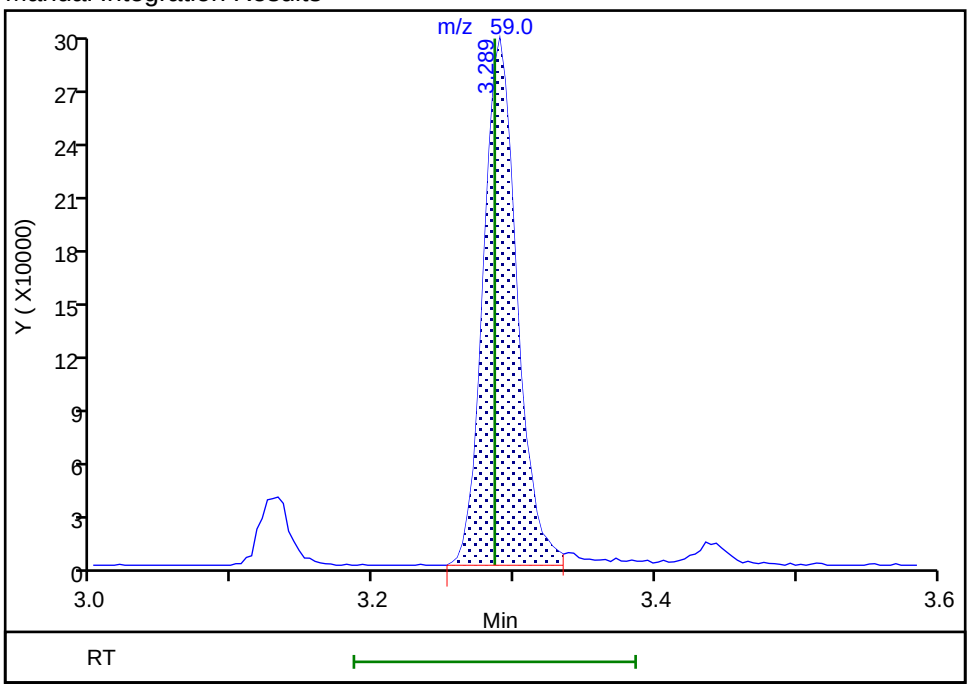
Processing Integration Results

RT: 3.29
Area: 484994
Amount: 507.5136
Amount Units: ug/l



Manual Integration Results

RT: 3.29
Area: 484994
Amount: 486.4093
Amount Units: ug/l



Reviewer: sumichrastr, 04-Jun-2020 17:25:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500580/3 Calibration Date: 06/29/2020 22:03

Instrument ID: VMS_R1 Calib Start Date: 06/03/2020 13:49

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/03/2020 17:01

Lab File ID: R6971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Ave	0.0070	0.0113		8030	5000	60.5*	50.0
Ethanol	Ave	0.0025	0.0029		3470	3000	15.6	50.0
Propene oxide	Ave	0.0350	0.0457		6530	5000	30.7	50.0
2-Propanol	Lin2		0.0142		491	500	-1.8	50.0
Acetonitrile	Ave	0.0312	0.0327		525	500	5.1	50.0
Di-isopropyl ether (DIPE)	Ave	0.1494	0.1636		54.7	50.0	9.4	35.0
Chloroprene	Lin1		0.3263		54.3	50.0	8.5	35.0
Tert-butyl ethyl ether	Ave	0.5355	0.5920		55.3	50.0	10.6	35.0
Ethyl acetate	Ave	0.2144	0.2122		99.0	100	-1.0	50.0
Propionitrile	Ave	0.0345	0.0378		547	500	9.4	50.0
Methacrylonitrile	Ave	0.1314	0.1406		535	500	7.0	50.0
Tert-amyl methyl ether	Ave	0.4873	0.5449		55.9	50.0	11.8	35.0
n-Butanol	Lin1		0.0070		1190	1250	-5.1	50.0
Methyl methacrylate	Lin2		0.0649		108	100	7.8	35.0
2-Nitropropane	Lin1		0.0540		104	100	3.8	50.0
Tetrahydrothiophene	Lin1		0.1549		92.8	100	-7.2	50.0
cis-1,4-Dichloro-2-butene	Lin2		0.2113		111	100	11.2	50.0
1,2,3-Trimethylbenzene	Ave	2.155	2.303		53.4	50.0	6.9	35.0
1,3,5-Trichlorobenzene	Ave	0.6880	0.7570		55.0	50.0	10.0	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6971.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 22:03:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 29-Jun-2020 22:41:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1671941	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	379447	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	97	599819	50.0	50.0	
13 Ethylene oxide	43	2.165	2.165	0.000	100	1891554	5000.0	8026.6	
18 Ethanol	45	2.604	2.604	0.000	99	290562	3000.0	3468.7	
20 Propene oxide	58	2.739	2.739	0.000	96	7643498	5000.0	6533.9	
25 Isopropyl alcohol	45	2.990	2.990	0.000	98	236743	500.0	491.0	
28 Acetonitrile	41	3.106	3.106	0.000	99	547313	500.0	525.3	
41 Isopropyl ether	87	3.751	3.751	0.000	94	273462	50.0	54.7	
42 2-Chloro-1,3-butadiene	53	3.803	3.803	0.000	92	545467	50.0	54.3	
44 Tert-butyl ethyl ether	59	4.009	4.009	0.000	98	989791	50.0	55.3	
46 Ethyl acetate	43	4.144	4.144	0.000	99	709717	100.0	99.0	
49 Propionitrile	54	4.182	4.182	0.000	99	631950	500.0	547.0	
51 Methacrylonitrile	41	4.294	4.294	0.000	91	2350976	500.0	535.1	
64 Tert-amyl methyl ether	73	4.864	4.864	0.000	93	911021	50.0	55.9	
66 n-Butanol	56	5.145	5.145	0.000	87	291263	1250.0	1185.9	
71 Methyl methacrylate	100	5.490	5.490	0.000	90	217087	100.0	107.8	
75 2-Nitropropane	41	5.843	5.843	0.000	96	180502	100.0	103.8	
86 Tetrahydrothiophene	60	6.997	6.997	0.000	92	117569	100.0	92.8	
98 cis-1,4-Dichloro-2-butene	53	8.493	8.493	0.000	91	253470	100.0	111.2	
115 1,2,3-Trimethylbenzene	105	9.786	9.786	0.000	99	1381614	50.0	53.4	
119 1,3,5-Trichlorobenzene	180	11.087	11.087	0.000	96	454033	50.0	55.0	
165 t-Amyl alcohol	1		0.000				ND	ND	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00044	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

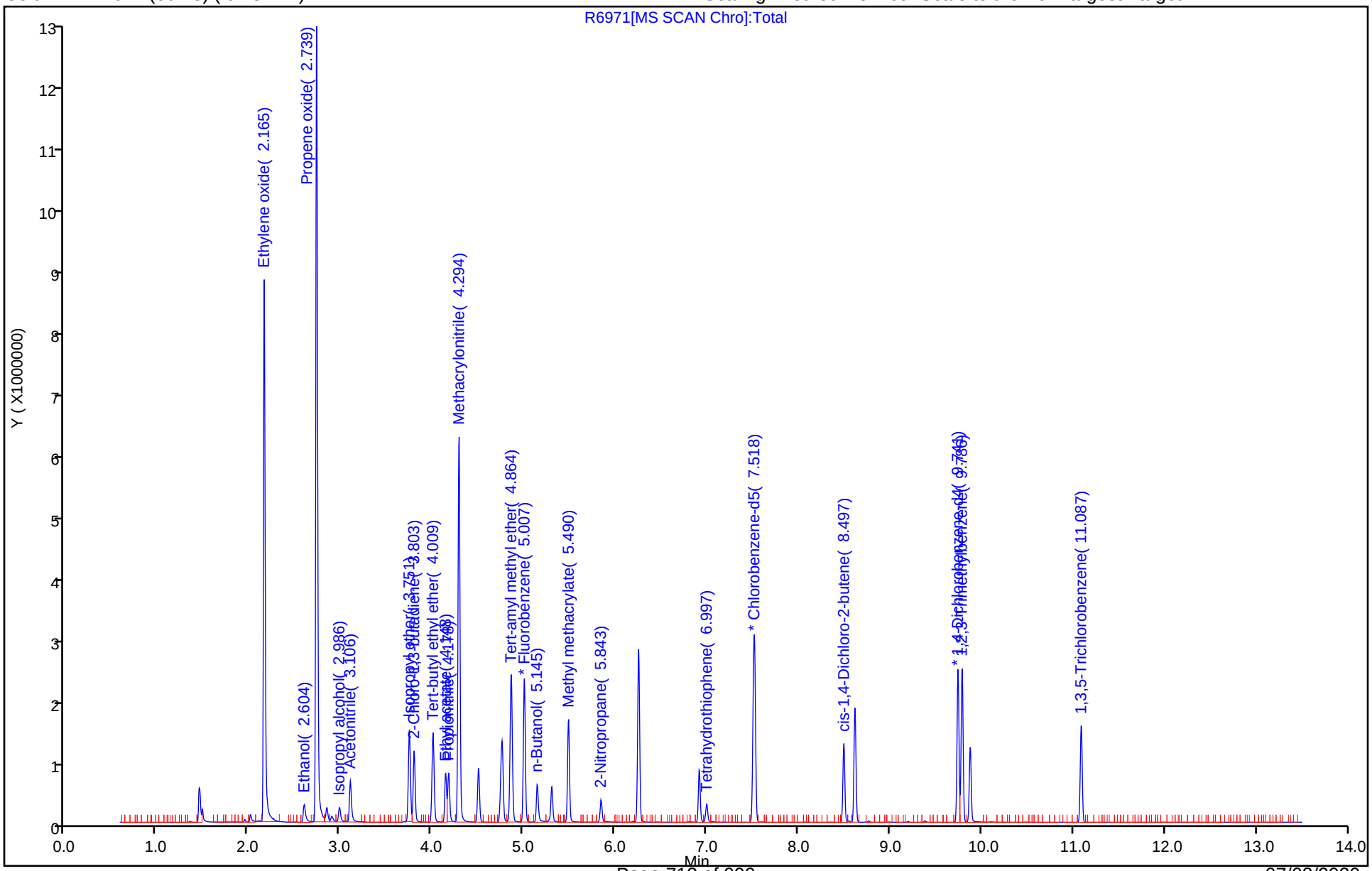
Report Date: 30-Jun-2020 20:31:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6971.D

Injection Date:	29-Jun-2020 22:03:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500580/2 Calibration Date: 06/29/2020 22:25

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R6972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1890	0.1902		50.3	50.0	0.6	50.0
Chloromethane	Ave	0.1926	0.2044	0.1000	53.1	50.0	6.1	35.0
Vinyl chloride	Ave	0.1808	0.2137		59.1	50.0	18.2	20.0
Bromomethane	Ave	0.0982	0.1043		53.1	50.0	6.3	35.0
Chloroethane	Ave	0.1096	0.1275		58.1	50.0	16.3	35.0
Dichlorofluoromethane	Ave	0.2839	0.3295		58.0	50.0	16.1	50.0
Trichlorofluoromethane	Ave	0.2650	0.3313		62.5	50.0	25.0	50.0
Ethyl ether	Ave	0.1528	0.1639		26.8	25.0	7.2	35.0
Acrolein	Ave	0.0358	0.0308		212	247	-14.0	50.0
Freon 113	Ave	0.0968	0.1188		30.7	25.0	22.8	50.0
1,1-Dichloroethene	Lin2		0.1551		28.7	25.0	14.7	20.0
Acetone	Ave	0.0718	0.0673		93.8	100	-6.2	50.0
Iodomethane	Qua		0.2046		38.5	25.0	54.0*	35.0
Carbon disulfide	Lin1		0.4639		28.4	25.0	13.6	50.0
Methyl acetate	Ave	0.1568	0.1556		49.6	50.0	-0.8	50.0
Allyl chloride	Ave	0.2344	0.2595		27.7	25.0	10.7	35.0
Methylene Chloride	Ave	0.1923	0.2013		26.2	25.0	4.7	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Lin2		0.0214		233	250	-6.9	50.0
Acrylonitrile	Ave	0.0864	0.0918		265	250	6.2	50.0
Methyl tert-butyl ether	Lin2		0.5913		25.6	25.0	2.5	35.0
trans-1,2-Dichloroethene	Ave	0.1613	0.1904		29.5	25.0	18.0	35.0
Hexane	Lin2		0.8616		30.2	25.0	20.8	35.0
Vinyl acetate	Lin1		0.4572		49.4	50.0	-1.2	50.0
1,1-Dichloroethane	Ave	0.3261	0.3531	0.1000	27.1	25.0	8.3	35.0
2-Butanone (MEK)	Ave	0.1065	0.1065		100	100	-0.0	50.0
cis-1,2-Dichloroethene	Ave	0.1963	0.2201		28.0	25.0	12.1	35.0
2,2-Dichloropropane	Lin2		0.2916		28.3	25.0	13.3	35.0
sec-Butyl Alcohol	Lin1		0.0178		647	750	-13.7	50.0
Chlorobromomethane	Lin2		0.1029		26.7	25.0	6.8	35.0
Tetrahydrofuran	Ave	0.0701	0.0680		48.5	50.0	-2.9	50.0
Chloroform	Ave	0.3428	0.3667		26.7	25.0	6.9	20.0
1,1,1-Trichloroethane	Lin1		0.3124		25.7	25.0	2.8	35.0
Cyclohexane	Ave	0.2634	0.2963		28.1	25.0	12.5	35.0
1,1-Dichloropropene	Ave	0.2562	0.2868		28.0	25.0	11.9	35.0
Carbon tetrachloride	Ave	0.2370	0.2669		28.1	25.0	12.6	35.0
Isobutyl alcohol	Lin2		0.0079		609	625	-2.6	50.0
Benzene	Ave	0.7698	0.8203		26.6	25.0	6.6	35.0
1,2-Dichloroethane	Ave	0.2765	0.3048		27.6	25.0	10.2	35.0
n-Heptane	Ave	0.1607	0.1838		28.6	25.0	14.4	50.0
Trichloroethene	Ave	0.1877	0.2158		28.7	25.0	15.0	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500580/2 Calibration Date: 06/29/2020 22:25

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R6972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Lin2		0.1634		93.2	100	-6.8	50.0
Methylcyclohexane	Ave	0.2079	0.2286		27.5	25.0	9.9	35.0
1,2-Dichloropropane	Lin1		0.2087		24.6	25.0	-1.5	20.0
1,4-Dioxane	Ave	0.0034	0.0036		520	500	3.9	50.0
Dibromomethane	Ave	0.1268	0.1400		27.6	25.0	10.4	35.0
Dichlorobromomethane	Ave	0.2579	0.2778		26.9	25.0	7.7	35.0
2-Chloroethyl vinyl ether	Lin1		0.1522		47.5	50.0	-5.0	50.0
cis-1,3-Dichloropropene	Lin2		1.442		24.2	25.0	-3.1	35.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2142		92.5	100	-7.5	50.0
Toluene	Ave	0.8084	0.8648		26.7	25.0	7.0	20.0
trans-1,3-Dichloropropene	Lin1		0.3085		23.1	25.0	-7.7	35.0
Ethyl methacrylate	Lin1		1.236		23.3	25.0	-7.0	35.0
1,1,2-Trichloroethane	Ave	0.1774	0.1912		26.9	25.0	7.8	35.0
Tetrachloroethene	Lin1		0.6655		25.9	25.0	3.6	35.0
1,3-Dichloropropane	Lin2		1.562		24.8	25.0	-0.8	35.0
2-Hexanone	Lin2		0.6573		94.9	100	-5.1	50.0
Chlorodibromomethane	Lin1		0.8960		23.3	25.0	-6.8	35.0
1,2-Dibromoethane	Lin1		0.9051		24.3	25.0	-2.6	35.0
1-Chlorohexane	Ave	1.088	1.122		25.8	25.0	3.1	35.0
Chlorobenzene	Ave	2.290	2.412	0.3000	26.3	25.0	5.3	35.0
1,1,1,2-Tetrachloroethane	Lin2		0.8503		24.9	25.0	-0.6	35.0
Ethylbenzene	Ave	1.141	1.304		28.6	25.0	14.3	20.0
m-Xylene & p-Xylene	Lin1		1.589		24.8	25.0	-0.7	35.0
o-Xylene	Lin1		1.573		25.1	25.0	0.3	35.0
Styrene	Ave	2.503	2.719		27.2	25.0	8.7	35.0
Bromoform	Lin1		0.5779	0.1000	22.6	25.0	-9.6	35.0
Isopropylbenzene	Ave	2.460	2.662		27.0	25.0	8.2	35.0
Cyclohexanone	Lin1		0.0531		729	1000	-27.1	50.0
1,1,2,2-Tetrachloroethane	Lin1		0.8068	0.3000	24.2	25.0	-3.4	35.0
Bromobenzene	Ave	0.5893	0.6438		27.3	25.0	9.3	35.0
trans-1,4-Dichloro-2-butene	Lin2		0.2210		23.0	25.0	-8.1	50.0
1,2,3-Trichloropropane	Lin1		0.2519		24.1	25.0	-3.4	35.0
N-Propylbenzene	Ave	0.6556	0.6949		26.5	25.0	6.0	35.0
2-Chlorotoluene	Ave	0.5923	0.6173		26.1	25.0	4.2	35.0
1,3,5-Trimethylbenzene	Ave	2.081	2.238		26.9	25.0	7.5	35.0
4-Chlorotoluene	Ave	0.6055	0.6529		27.0	25.0	7.8	35.0
tert-Butylbenzene	Ave	1.704	1.792		26.3	25.0	5.1	35.0
1,2,4-Trimethylbenzene	Ave	2.137	2.296		26.9	25.0	7.5	35.0
sec-Butylbenzene	Lin2		0.5233		26.6	25.0	6.2	35.0
1,3-Dichlorobenzene	Ave	1.123	1.241		27.6	25.0	10.5	35.0
4-Isopropyltoluene	Ave	2.074	2.263		27.3	25.0	9.1	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-500580/2 Calibration Date: 06/29/2020 22:25

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R6972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.185	1.274		26.9	25.0	7.5	35.0
n-Butylbenzene	Lin2		2.037		24.9	25.0	-0.4	35.0
1,2-Dichlorobenzene	Ave	1.139	1.246		27.4	25.0	9.4	35.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1706		23.4	25.0	-6.4	50.0
1,2,4-Trichlorobenzene	Lin1		0.7411		24.2	25.0	-3.3	35.0
Hexachlorobutadiene	Lin1		0.2421		24.8	25.0	-0.7	35.0
Naphthalene	Lin2		2.501		24.5	25.0	-2.0	35.0
1,2,3-Trichlorobenzene	Lin2		0.7253		25.4	25.0	1.6	35.0
Dibromofluoromethane (Surr)	Ave	0.2523	0.2548		50.5	50.0	1.0	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3088	0.3063		49.6	50.0	-0.8	35.0
Toluene-d8 (Surr)	Ave	4.334	4.270		49.3	50.0	-1.5	35.0
4-Bromofluorobenzene (Surr)	Ave	1.047	1.031		49.2	50.0	-1.5	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6972.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 22:25:30 ALS Bottle#: 3 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: PETUNINP Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub170

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:09 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1740612	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	400851	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	614879	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	93	443573	50.0	50.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	533148	50.0	49.6	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1711822	50.0	49.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.620	8.620	0.000	86	634065	50.0	49.2	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	331096	50.0	50.3	
11 Chloromethane	50	1.828	1.828	0.000	99	355700	50.0	53.1	
12 Vinyl chloride	62	1.918	1.918	0.000	98	371968	50.0	59.1	
14 Bromomethane	94	2.195	2.195	0.000	91	181565	50.0	53.1	
15 Chloroethane	64	2.285	2.285	0.000	100	221945	50.0	58.1	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	97	573533	50.0	58.0	
17 Trichlorofluoromethane	101	2.488	2.488	0.000	97	576619	50.0	62.5	
19 Ethyl ether	59	2.697	2.697	0.000	91	142638	25.0	26.8	
21 Acrolein	56	2.802	2.802	0.000	99	264595	246.9	212.4	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	68	103420	25.0	30.7	
23 1,1-Dichloroethene	96	2.885	2.885	0.000	97	134983	25.0	28.7	
24 Acetone	43	2.900	2.900	0.000	100	234307	100.0	93.8	
26 Iodomethane	142	3.001	3.001	0.000	99	178031	25.0	38.5	
27 Carbon disulfide	76	3.061	3.061	0.000	99	403751	25.0	28.4	
29 Methyl acetate	43	3.125	3.125	0.000	97	270809	50.0	49.6	
30 3-Chloro-1-propene	41	3.147	3.147	0.000	90	225870	25.0	27.7	
31 Methylene Chloride	84	3.241	3.241	0.000	90	175214	25.0	26.2	
32 2-Methyl-2-propanol	59	3.282	3.282	0.000	98	185828	250.0	232.7	
33 Acrylonitrile	53	3.398	3.398	0.000	98	798713	250.0	265.5	
34 Methyl tert-butyl ether	73	3.425	3.425	0.000	94	514588	25.0	25.6	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	99	165715	25.0	29.5	
37 Hexane	57	3.627	3.627	0.000	91	172690	25.0	30.2	
39 Vinyl acetate	43	3.728	3.728	0.000	97	795736	50.0	49.4	
40 1,1-Dichloroethane	63	3.755	3.755	0.000	96	307292	25.0	27.1	
45 2-Butanone (MEK)	43	4.133	4.133	0.000	99	370661	100.0	100.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.156	4.156	0.000	82	191534	25.0	28.0	
48 2,2-Dichloropropane	77	4.167	4.167	0.000	87	253804	25.0	28.3	
50 sec-Butyl Alcohol	45	4.242	4.242	0.000	98	463319	750.0	647.1	
52 Chlorobromomethane	128	4.332	4.332	0.000	96	89563	25.0	26.7	
53 Tetrahydrofuran	42	4.339	4.339	0.000	88	118438	50.0	48.5	
54 Chloroform	83	4.392	4.392	0.000	93	319108	25.0	26.7	
55 1,1,1-Trichloroethane	97	4.534	4.534	0.000	98	271865	25.0	25.7	
56 Cyclohexane	56	4.591	4.591	0.000	88	257898	25.0	28.1	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	97	249608	25.0	28.0	
59 Carbon tetrachloride	117	4.647	4.647	0.000	94	232238	25.0	28.1	
60 Isobutyl alcohol	41	4.658	4.658	0.000	94	171549	625.0	608.5	
62 Benzene	78	4.797	4.797	0.000	96	713892	25.0	26.6	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	97	265225	25.0	27.6	
65 n-Heptane	43	4.980	4.980	0.000	88	159999	25.0	28.6	
67 Trichloroethene	95	5.280	5.280	0.000	98	187823	25.0	28.7	
68 2-Pentanone	43	5.381	5.381	0.000	99	568985	100.0	93.2	
69 Methylcyclohexane	55	5.471	5.471	0.000	91	198934	25.0	27.5	
70 1,2-Dichloropropane	63	5.483	5.483	0.000	94	181651	25.0	24.6	
72 1,4-Dioxane	88	5.531	5.531	0.000	90	62156	500.0	519.7	
73 Dibromomethane	93	5.558	5.558	0.000	92	121830	25.0	27.6	
74 Dichlorobromomethane	83	5.678	5.678	0.000	99	241778	25.0	26.9	
76 2-Chloroethyl vinyl ether	63	5.880	5.880	0.000	92	264925	50.0	47.5	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	288941	25.0	24.2	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	745688	100.0	92.5	
79 Toluene	91	6.315	6.315	0.000	99	752629	25.0	26.7	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	89	268510	25.0	23.1	
81 Ethyl methacrylate	69	6.510	6.510	0.000	88	247658	25.0	23.3	
82 1,1,2-Trichloroethane	97	6.660	6.660	0.000	92	166392	25.0	26.9	
83 Tetrachloroethene	164	6.753	6.753	0.000	96	133378	25.0	25.9	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	89	313062	25.0	24.8	
85 2-Hexanone	43	6.828	6.828	0.000	95	526945	100.0	94.9	
87 Chlorodibromomethane	129	7.001	7.001	0.000	89	179588	25.0	23.3	
88 Ethylene Dibromide	107	7.117	7.117	0.000	98	181403	25.0	24.3	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	224897	25.0	25.8	
90 Chlorobenzene	112	7.548	7.548	0.000	94	483352	25.0	26.3	
91 1,1,1,2-Tetrachloroethane	131	7.619	7.619	0.000	94	170423	25.0	24.9	
92 Ethylbenzene	106	7.627	7.627	0.000	98	261297	25.0	28.6	
93 m-Xylene & p-Xylene	106	7.743	7.743	0.000	0	318542	25.0	24.8	
94 o-Xylene	106	8.107	8.107	0.000	96	315195	25.0	25.1	
95 Styrene	104	8.122	8.122	0.000	96	545043	25.0	27.2	
96 Bromoform	173	8.298	8.298	0.000	94	115827	25.0	22.6	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	818279	25.0	27.0	
99 Cyclohexanone	55	8.542	8.542	0.000	91	425522	1000.0	729.0	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	95	248027	25.0	24.2	
101 Bromobenzene	156	8.763	8.763	0.000	96	197939	25.0	27.3	
102 trans-1,4-Dichloro-2-butene	53	8.766	8.766	0.000	59	67955	25.0	23.0	
103 1,2,3-Trichloropropane	110	8.796	8.796	0.000	83	77452	25.0	24.1	
104 N-Propylbenzene	120	8.845	8.845	0.000	99	213642	25.0	26.5	
105 2-Chlorotoluene	126	8.939	8.939	0.000	96	189785	25.0	26.1	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	688072	25.0	26.9	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	200730	25.0	27.0	
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	550838	25.0	26.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	705965	25.0	26.9	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	160892	25.0	26.6	
112 1,3-Dichlorobenzene	146	9.670	9.670	0.000	97	381599	25.0	27.6	
113 4-Isopropyltoluene	119	9.689	9.689	0.000	97	695725	25.0	27.3	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	95	391652	25.0	26.9	
116 n-Butylbenzene	91	10.094	10.094	0.000	98	626379	25.0	24.9	
117 1,2-Dichlorobenzene	146	10.120	10.120	0.000	96	383103	25.0	27.4	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	85	52437	25.0	23.4	
120 1,2,4-Trichlorobenzene	180	11.724	11.724	0.000	94	227827	25.0	24.2	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	95	74420	25.0	24.8	
122 Naphthalene	128	11.994	11.994	0.000	97	768896	25.0	24.5	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	95	222969	25.0	25.4	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	57.5	
S 139 Xylenes, Total (URS)	1				0		50.0	49.9	
S 138 Xylenes, Total	106				0		50.0	49.9	
S 140 Trihalomethanes, Total	1				0		100.0	99.6	
S 136 1,3-Dichloropropene, Total	1				0		50.0	47.3	
S 141 1,2-Dichloroethene, Total	1				0		50.0	57.5	

Reagents:

MV-MegaMainA_00034	Amount Added:	12.50	Units: uL	
MV-Gas A_00060	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

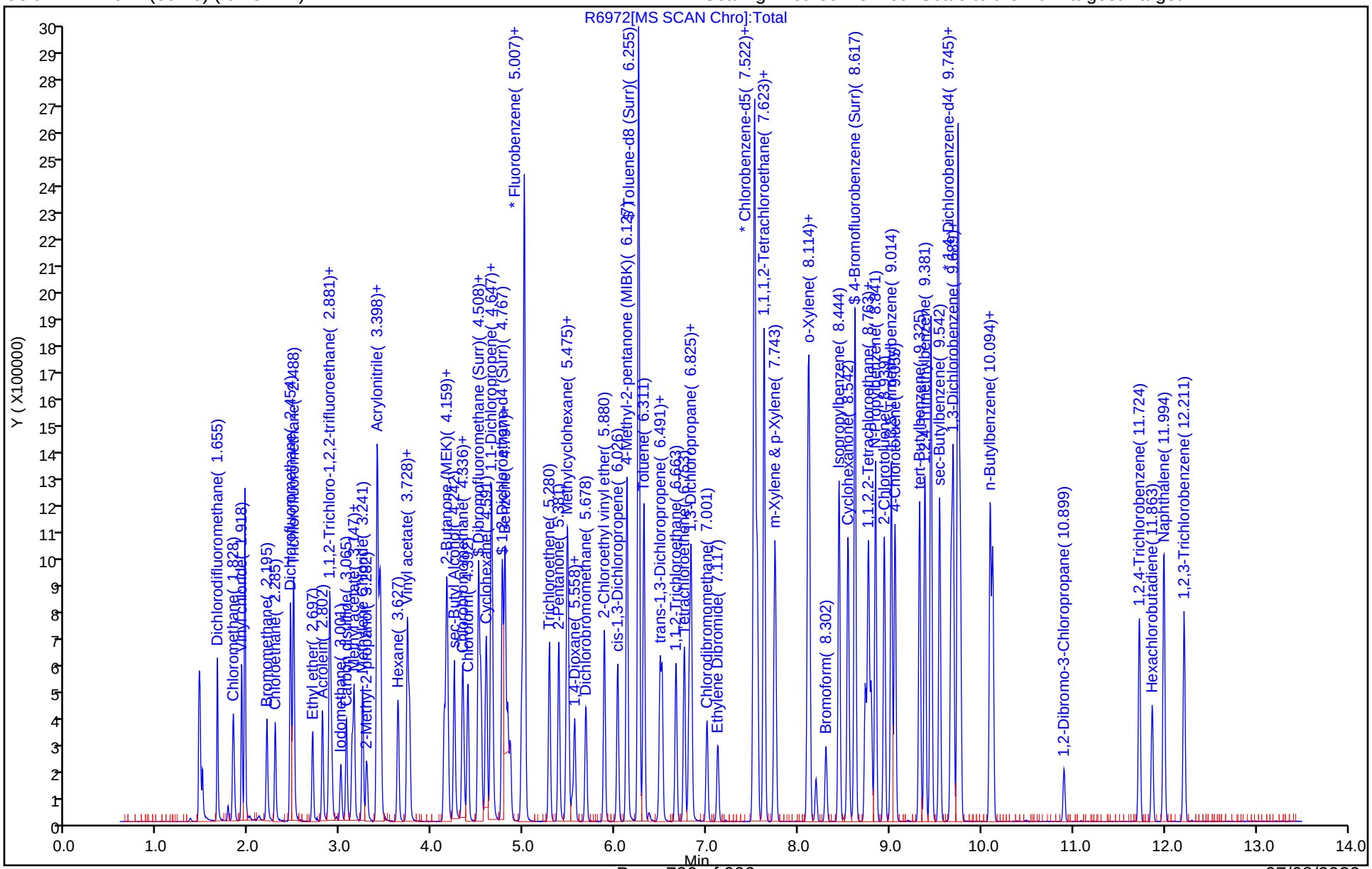
Report Date: 30-Jun-2020 20:31:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6972.D

Injection Date:	29-Jun-2020 22:25:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-501117/2 Calibration Date: 07/06/2020 08:31

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R7173.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.1528	0.1441		23.6	25.0	-5.7	35.0
Acrolein	Ave	0.0358	0.0261		180	247	-27.2	50.0
Freon 113	Ave	0.0968	0.1004		25.9	25.0	3.8	50.0
1,1-Dichloroethene	Lin2		0.1296		24.0	25.0	-3.9	20.0
Acetone	Ave	0.0718	0.0562		78.3	100	-21.7	50.0
Iodomethane	Qua		0.1708		34.0	25.0	36.0*	35.0
Carbon disulfide	Lin1		0.4081		25.0	25.0	0.0	50.0
Methyl acetate	Ave	0.1568	0.1365		43.5	50.0	-12.9	50.0
Allyl chloride	Ave	0.2344	0.2193		23.4	25.0	-6.5	35.0
Methylene Chloride	Ave	0.1923	0.1764		22.9	25.0	-8.3	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Lin2		0.0174		191	250	-23.5	50.0
Acrylonitrile	Ave	0.0864	0.0810		234	250	-6.3	50.0
Methyl tert-butyl ether	Lin2		0.5100		22.1	25.0	-11.5	35.0
trans-1,2-Dichloroethene	Ave	0.1613	0.1586		24.6	25.0	-1.7	35.0
Hexane	Lin2		0.7334		25.8	25.0	3.1	35.0
Vinyl acetate	Lin1		0.3892		42.2	50.0	-15.5	50.0
1,1-Dichloroethane	Ave	0.3261	0.2908	0.1000	22.3	25.0	-10.8	35.0
2-Butanone (MEK)	Ave	0.1065	0.0882		82.8	100	-17.2	50.0
cis-1,2-Dichloroethene	Ave	0.1963	0.1870		23.8	25.0	-4.8	35.0
2,2-Dichloropropane	Lin2		0.2259		22.0	25.0	-11.9	35.0
sec-Butyl Alcohol	Lin1		0.0147		543	750	-27.6	50.0
Chlorobromomethane	Lin2		0.0931		24.2	25.0	-3.2	35.0
Tetrahydrofuran	Ave	0.0701	0.0600		42.8	50.0	-14.4	50.0
Chloroform	Ave	0.3428	0.3051		22.2	25.0	-11.0	20.0
1,1,1-Trichloroethane	Lin1		0.2473		20.5	25.0	-18.1	35.0
Cyclohexane	Ave	0.2634	0.2501		23.7	25.0	-5.1	35.0
1,1-Dichloropropene	Ave	0.2562	0.2310		22.5	25.0	-9.8	35.0
Carbon tetrachloride	Ave	0.2370	0.2062		21.7	25.0	-13.0	35.0
Isobutyl alcohol	Lin2		0.0060		465	625	-25.6	50.0
Benzene	Ave	0.7698	0.6999		22.7	25.0	-9.1	35.0
1,2-Dichloroethane	Ave	0.2765	0.2519		22.8	25.0	-8.9	35.0
n-Heptane	Ave	0.1607	0.1614		25.1	25.0	0.4	50.0
Trichloroethene	Ave	0.1877	0.1757		23.4	25.0	-6.4	35.0
2-Pentanone	Lin2		0.1390		79.5	100	-20.5	50.0
Methylcyclohexane	Ave	0.2079	0.1899		22.8	25.0	-8.7	35.0
1,2-Dichloropropane	Lin1		0.1858		22.0	25.0	-12.0	20.0
1,4-Dioxane	Ave	0.0034	0.0030		439	500	-12.2	50.0
Dibromomethane	Ave	0.1268	0.1198		23.6	25.0	-5.5	35.0
Dichlorobromomethane	Ave	0.2579	0.2422		23.5	25.0	-6.1	35.0
cis-1,3-Dichloropropene	Lin2		1.267		21.4	25.0	-14.6	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-501117/2 Calibration Date: 07/06/2020 08:31

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R7173.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Methyl-2-pentanone (MIBK)	Lin1		0.1778		77.0	100	-23.0	50.0
Toluene	Ave	0.8084	0.7464		23.1	25.0	-7.7	20.0
trans-1,3-Dichloropropene	Lin1		0.2728		20.5	25.0	-18.0	35.0
Ethyl methacrylate	Lin1		1.019		19.3	25.0	-22.8	35.0
1,1,2-Trichloroethane	Ave	0.1774	0.1671		23.6	25.0	-5.8	35.0
Tetrachloroethene	Lin1		0.5313		20.8	25.0	-17.0	35.0
1,3-Dichloropropane	Lin2		1.322		21.0	25.0	-15.9	35.0
2-Hexanone	Lin2		0.5512		79.8	100	-20.2	50.0
Chlorodibromomethane	Lin1		0.7944		20.7	25.0	-17.3	35.0
1,2-Dibromoethane	Lin1		0.7952		21.5	25.0	-14.1	35.0
1-Chlorohexane	Ave	1.088	0.9218		21.2	25.0	-15.3	35.0
Chlorobenzene	Ave	2.290	2.090	0.3000	22.8	25.0	-8.8	35.0
1,1,1,2-Tetrachloroethane	Lin2		0.7251		21.2	25.0	-15.0	35.0
Ethylbenzene	Ave	1.141	1.097		24.0	25.0	-3.8	20.0
m-Xylene & p-Xylene	Lin1		1.361		21.3	25.0	-14.7	35.0
o-Xylene	Lin1		1.351		21.6	25.0	-13.7	35.0
Styrene	Ave	2.503	2.357		23.5	25.0	-5.8	35.0
Bromoform	Lin1		0.5362	0.1000	21.0	25.0	-15.8	35.0
Isopropylbenzene	Ave	2.460	2.233		22.7	25.0	-9.2	35.0
Cyclohexanone	Lin1		0.0518		712	1000	-28.8	50.0
1,1,2,2-Tetrachloroethane	Lin1		0.6929	0.3000	20.8	25.0	-16.7	35.0
Bromobenzene	Ave	0.5893	0.5641		23.9	25.0	-4.3	35.0
trans-1,4-Dichloro-2-butene	Lin2		0.1894		19.9	25.0	-20.5	50.0
1,2,3-Trichloropropane	Lin1		0.2235		21.5	25.0	-14.2	35.0
N-Propylbenzene	Ave	0.6556	0.5978		22.8	25.0	-8.8	35.0
2-Chlorotoluene	Ave	0.5923	0.5380		22.7	25.0	-9.2	35.0
1,3,5-Trimethylbenzene	Ave	2.081	1.928		23.2	25.0	-7.4	35.0
4-Chlorotoluene	Ave	0.6055	0.5555		22.9	25.0	-8.3	35.0
tert-Butylbenzene	Ave	1.704	1.542		22.6	25.0	-9.5	35.0
1,2,4-Trimethylbenzene	Ave	2.137	1.966		23.0	25.0	-8.0	35.0
sec-Butylbenzene	Lin2		0.4335		22.0	25.0	-11.8	35.0
1,3-Dichlorobenzene	Ave	1.123	1.069		23.8	25.0	-4.8	35.0
4-Isopropyltoluene	Ave	2.074	1.962		23.7	25.0	-5.4	35.0
1,4-Dichlorobenzene	Ave	1.185	1.104		23.3	25.0	-6.8	35.0
n-Butylbenzene	Lin2		1.740		21.3	25.0	-14.8	35.0
1,2-Dichlorobenzene	Ave	1.139	1.097		24.1	25.0	-3.6	35.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1463		20.2	25.0	-19.0	50.0
1,2,4-Trichlorobenzene	Lin1		0.6470		21.1	25.0	-15.4	35.0
Hexachlorobutadiene	Lin1		0.2081		21.5	25.0	-14.1	35.0
Naphthalene	Lin2		2.136		21.0	25.0	-16.1	35.0
1,2,3-Trichlorobenzene	Lin2		0.6209		21.8	25.0	-12.8	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-501117/2 Calibration Date: 07/06/2020 08:31

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R7173.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2523	0.2471		49.0	50.0	-2.1	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3088	0.2695		43.6	50.0	-12.7	35.0
Toluene-d8 (Surr)	Ave	4.334	4.259		49.1	50.0	-1.7	35.0
4-Bromofluorobenzene (Surr)	Ave	1.047	1.017		48.6	50.0	-2.9	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7173.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 06-Jul-2020 08:31:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub172

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:02 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.003	5.003	0.000	99	2275588	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.518	7.518	0.000	86	523353	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.745	0.000	96	810129	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	92	562347	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.763	4.763	0.000	0	613205	50.0	43.6	
$ 6 Toluene-d8 (Surr)	98	6.251	6.251	0.000	93	2228804	50.0	49.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.616	0.000	86	824079	50.0	48.6	
19 Ethyl ether	59	2.694	2.694	0.000	90	163943	25.0	23.6	
21 Acrolein	56	2.799	2.799	0.000	99	292821	246.9	179.8	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.877	2.877	0.000	65	114267	25.0	25.9	
23 1,1-Dichloroethene	96	2.881	2.881	0.000	96	147471	25.0	24.0	
24 Acetone	43	2.900	2.900	0.000	100	255706	100.0	78.3	
26 Iodomethane	142	3.001	3.001	0.000	99	194354	25.0	34.0	
27 Carbon disulfide	76	3.061	3.061	0.000	99	464298	25.0	25.0	
29 Methyl acetate	43	3.125	3.125	0.000	97	310698	50.0	43.5	
30 3-Chloro-1-propene	41	3.147	3.147	0.000	92	249472	25.0	23.4	
31 Methylene Chloride	84	3.237	3.237	0.000	92	200707	25.0	22.9	
32 2-Methyl-2-propanol	59	3.278	3.278	0.000	98	197507	250.0	191.3	
33 Acrylonitrile	53	3.398	3.398	0.000	100	921598	250.0	234.3	
34 Methyl tert-butyl ether	73	3.421	3.421	0.000	94	580261	25.0	22.1	
35 trans-1,2-Dichloroethene	96	3.436	3.436	0.000	99	180436	25.0	24.6	
37 Hexane	57	3.623	3.623	0.000	91	191902	25.0	25.8	
39 Vinyl acetate	43	3.728	3.728	0.000	97	885664	50.0	42.2	
40 1,1-Dichloroethane	63	3.751	3.751	0.000	96	330885	25.0	22.3	
45 2-Butanone (MEK)	43	4.129	4.129	0.000	99	401193	100.0	82.8	
47 cis-1,2-Dichloroethene	96	4.152	4.152	0.000	82	212736	25.0	23.8	
48 2,2-Dichloropropane	77	4.163	4.163	0.000	87	256980	25.0	22.0	
50 sec-Butyl Alcohol	45	4.238	4.238	0.000	98	501204	750.0	543.2	
52 Chlorobromomethane	128	4.328	4.328	0.000	97	105901	25.0	24.2	
53 Tetrahydrofuran	42	4.339	4.339	0.000	85	136530	50.0	42.8	
54 Chloroform	83	4.388	4.388	0.000	93	347089	25.0	22.2	
55 1,1,1-Trichloroethane	97	4.530	4.530	0.000	98	281413	25.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
56 Cyclohexane	56	4.587	4.587	0.000	89	284500	25.0	23.7	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	97	262866	25.0	22.5	
59 Carbon tetrachloride	117	4.647	4.647	0.000	96	234568	25.0	21.7	
60 Isobutyl alcohol	41	4.654	4.654	0.000	95	170225	625.0	464.9	
62 Benzene	78	4.793	4.793	0.000	96	796354	25.0	22.7	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	97	286619	25.0	22.8	
65 n-Heptane	43	4.973	4.973	0.000	93	183621	25.0	25.1	
67 Trichloroethene	95	5.276	5.276	0.000	99	199925	25.0	23.4	
68 2-Pentanone	43	5.381	5.381	0.000	99	632758	100.0	79.5	
69 Methylcyclohexane	55	5.468	5.468	0.000	92	216116	25.0	22.8	
70 1,2-Dichloropropane	63	5.483	5.483	0.000	95	211352	25.0	22.0	
72 1,4-Dioxane	88	5.528	5.528	0.000	92	68611	500.0	438.8	
73 Dibromomethane	93	5.550	5.550	0.000	93	136326	25.0	23.6	
74 Dichlorobromomethane	83	5.678	5.678	0.000	99	275544	25.0	23.5	
77 cis-1,3-Dichloropropene	75	6.022	6.022	0.000	96	331673	25.0	21.4	
78 4-Methyl-2-pentanone (MIBK)	43	6.124	6.124	0.000	95	809127	100.0	77.0	
79 Toluene	91	6.307	6.307	0.000	99	849210	25.0	23.1	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	88	310402	25.0	20.5	
81 Ethyl methacrylate	69	6.510	6.510	0.000	88	266769	25.0	19.3	
82 1,1,2-Trichloroethane	97	6.660	6.660	0.000	91	190128	25.0	23.6	
83 Tetrachloroethene	164	6.753	6.753	0.000	94	139025	25.0	20.8	
84 1,3-Dichloropropane	76	6.806	6.806	0.000	90	346011	25.0	21.0	
85 2-Hexanone	43	6.825	6.825	0.000	95	576936	100.0	79.8	
87 Chlorodibromomethane	129	7.001	7.001	0.000	90	207885	25.0	20.7	
88 Ethylene Dibromide	107	7.117	7.117	0.000	97	208079	25.0	21.5	
89 1-Chlorohexane	91	7.507	7.507	0.000	96	241209	25.0	21.2	
90 Chlorobenzene	112	7.548	7.548	0.000	94	546795	25.0	22.8	
91 1,1,1,2-Tetrachloroethane	131	7.619	7.619	0.000	93	189739	25.0	21.2	
92 Ethylbenzene	106	7.627	7.627	0.000	98	287072	25.0	24.0	
93 m-Xylene & p-Xylene	106	7.743	7.743	0.000	0	356223	25.0	21.3	
94 o-Xylene	106	8.099	8.099	0.000	97	353416	25.0	21.6	
95 Styrene	104	8.118	8.118	0.000	95	616687	25.0	23.5	
96 Bromoform	173	8.302	8.302	0.000	95	140310	25.0	21.0	
97 Isopropylbenzene	105	8.440	8.440	0.000	95	904505	25.0	22.7	
99 Cyclohexanone	55	8.542	8.542	0.000	91	542510	1000.0	712.4	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	280667	25.0	20.8	
101 Bromobenzene	156	8.759	8.759	0.000	95	228487	25.0	23.9	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.770	0.000	78	76717	25.0	19.9	
103 1,2,3-Trichloropropane	110	8.793	8.793	0.000	83	90535	25.0	21.5	
104 N-Propylbenzene	120	8.841	8.841	0.000	99	242151	25.0	22.8	
105 2-Chlorotoluene	126	8.935	8.935	0.000	96	217935	25.0	22.7	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	781030	25.0	23.2	
107 4-Chlorotoluene	126	9.051	9.051	0.000	98	225007	25.0	22.9	
108 tert-Butylbenzene	119	9.321	9.321	0.000	93	624671	25.0	22.6	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	97	796465	25.0	23.0	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	175580	25.0	22.0	
112 1,3-Dichlorobenzene	146	9.666	9.666	0.000	97	433140	25.0	23.8	
113 4-Isopropyltoluene	119	9.689	9.689	0.000	97	794902	25.0	23.7	
114 1,4-Dichlorobenzene	146	9.764	9.764	0.000	95	447175	25.0	23.3	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	704852	25.0	21.3	
117 1,2-Dichlorobenzene	146	10.120	10.120	0.000	97	444477	25.0	24.1	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	85	59278	25.0	20.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 1,2,4-Trichlorobenzene	180	11.724	11.724	0.000	94	262061	25.0	21.1	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	96	84306	25.0	21.5	
122 Naphthalene	128	11.990	11.990	0.000	97	865084	25.0	21.0	
123 1,2,3-Trichlorobenzene	180	12.208	12.208	0.000	94	251502	25.0	21.8	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	48.4	
S 139 Xylenes, Total (URS)	1				0		50.0	42.9	
S 138 Xylenes, Total	106				0		50.0	42.9	
S 140 Trihalomethanes, Total	1				0		100.0	87.4	
S 136 1,3-Dichloropropene, Total	1				0		50.0	41.8	
S 141 1,2-Dichloroethene, Total	1				0		50.0	48.4	

Reagents:

MV-MegaMainA_00034	Amount Added:	12.50	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

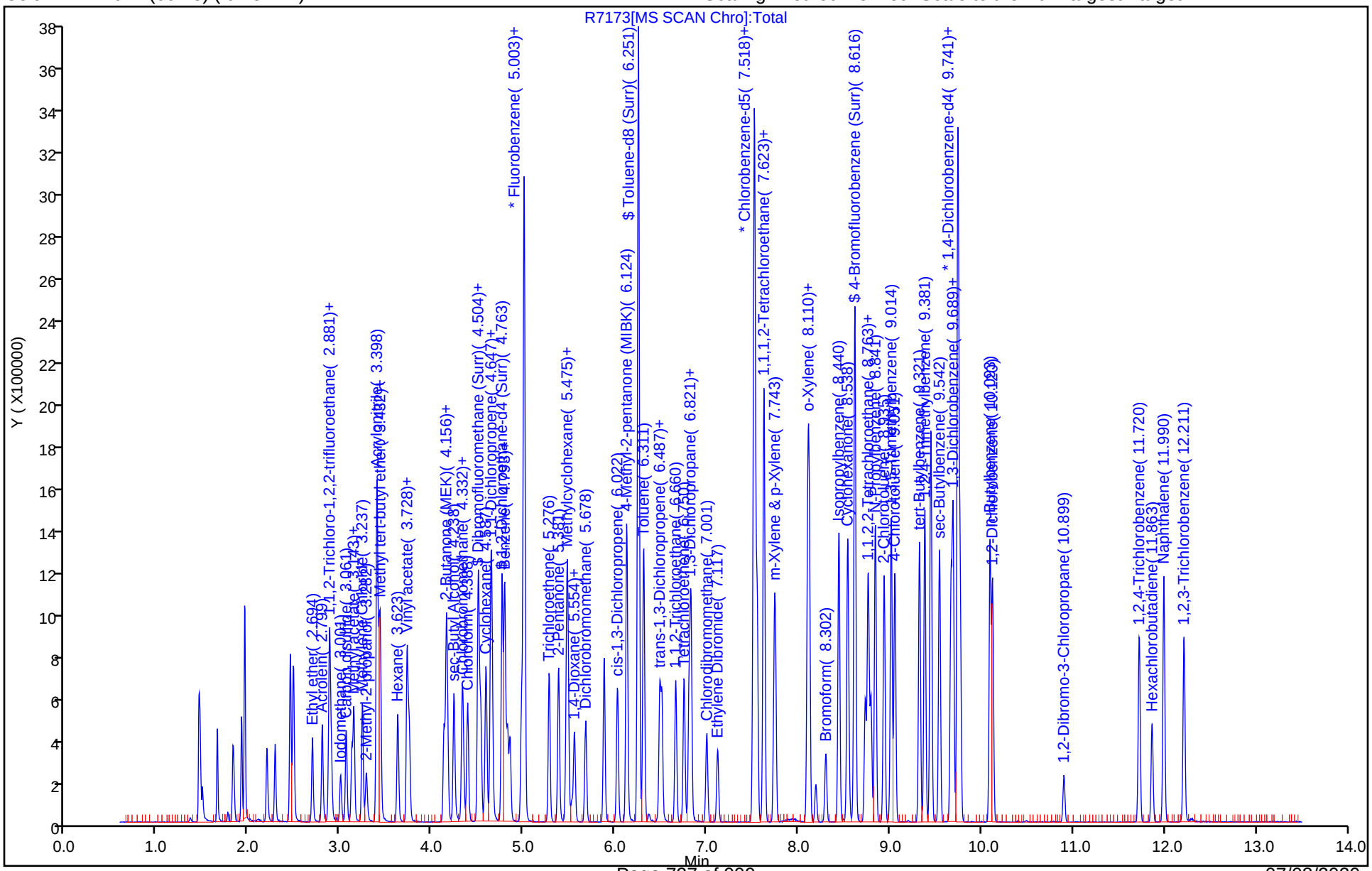
Report Date: 07-Jul-2020 08:58:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7173.D

Injection Date:	06-Jul-2020 08:31:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-501117/3 Calibration Date: 07/06/2020 08:52

Instrument ID: VMS_R1 Calib Start Date: 06/03/2020 13:49

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/03/2020 17:01

Lab File ID: R7174.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Ave	0.0070	0.0100		7100	5000	42.0	50.0
Ethanol	Ave	0.0025	0.0026		3130	3000	4.2	50.0
Propene oxide	Ave	0.0350	0.0420		6000	5000	20.0	50.0
2-Propanol	Lin2		0.0132		459	500	-8.3	50.0
Acetonitrile	Ave	0.0312	0.0304		487	500	-2.5	50.0
Di-isopropyl ether (DIPE)	Ave	0.1494	0.1558		52.1	50.0	4.2	35.0
Chloroprene	Lin1		0.2924		48.7	50.0	-2.6	35.0
Tert-butyl ethyl ether	Ave	0.5355	0.5480		51.2	50.0	2.3	35.0
Ethyl acetate	Ave	0.2144	0.1892		88.2	100	-11.8	50.0
Propionitrile	Ave	0.0345	0.0346		501	500	0.3	50.0
Methacrylonitrile	Ave	0.1314	0.1271		484	500	-3.3	50.0
Tert-amyl methyl ether	Ave	0.4873	0.5039		51.7	50.0	3.4	35.0
n-Butanol	Lin1		0.0065		1110	1250	-11.1	50.0
Methyl methacrylate	Lin2		0.0605		100	100	0.5	35.0
2-Nitropropane	Lin1		0.0488		94.0	100	-6.0	50.0
Tetrahydrothiophene	Lin1		0.1402		84.1	100	-15.9	50.0
cis-1,4-Dichloro-2-butene	Lin2		0.1916		101	100	0.9	50.0
1,2,3-Trimethylbenzene	Ave	2.155	2.189		50.8	50.0	1.6	35.0
1,3,5-Trichlorobenzene	Ave	0.6880	0.7255		52.7	50.0	5.5	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7174.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 06-Jul-2020 08:52:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:04 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

First Level Reviewer: peppinga Date: 06-Jul-2020 09:29:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.006	0.000	99	2238968	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	510960	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	801605	50.0	50.0	
13 Ethylene oxide	43	2.165	2.165	0.000	100	2241167	5000.0	7101.7	
18 Ethanol	45	2.600	2.600	0.000	100	350587	3000.0	3125.4	
20 Propene oxide	58	2.735	2.735	0.000	96	9402087	5000.0	6001.7	
25 Isopropyl alcohol	45	2.982	2.982	0.000	99	295659	500.0	458.6	
28 Acetonitrile	41	3.106	3.106	0.000	99	679994	500.0	487.4	
41 Isopropyl ether	87	3.751	3.751	0.000	94	348734	50.0	52.1	
42 2-Chloro-1,3-butadiene	53	3.803	3.803	0.000	91	654663	50.0	48.7	
44 Tert-butyl ethyl ether	59	4.009	4.009	0.000	98	1226948	50.0	51.2	
46 Ethyl acetate	43	4.144	4.144	0.000	99	847013	100.0	88.2	
49 Propionitrile	54	4.178	4.178	0.000	99	775470	500.0	501.3	
51 Methacrylonitrile	41	4.290	4.290	0.000	91	2845277	500.0	483.6	
64 Tert-amyl methyl ether	73	4.864	4.864	0.000	98	1128169	50.0	51.7	
66 n-Butanol	56	5.145	5.145	0.000	86	364845	1250.0	1111.1	
71 Methyl methacrylate	100	5.490	5.490	0.000	89	270826	100.0	100.5	
75 2-Nitropropane	41	5.842	5.842	0.000	96	218432	100.0	94.0	
86 Tetrahydrothiophene	60	6.997	6.997	0.000	91	143316	100.0	84.1	
98 cis-1,4-Dichloro-2-butene	53	8.493	8.493	0.000	89	307095	100.0	100.9	
115 1,2,3-Trimethylbenzene	105	9.786	9.786	0.000	99	1754729	50.0	50.8	
119 1,3,5-Trichlorobenzene	180	11.087	11.087	0.000	97	581570	50.0	52.7	
165 t-Amyl alcohol	1		0.000				ND	ND	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00044	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

Report Date: 07-Jul-2020 08:58:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7174.D

Injection Date:	06-Jul-2020 08:52:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Lab Sample ID: CCV 280-501117/13 Calibration Date: 07/06/2020 09:50

Instrument ID: VMS_R1 Calib Start Date: 06/04/2020 12:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2020 15:41

Lab File ID: R7176.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1890	0.1390		36.8	50.0	-26.4	50.0
Chloromethane	Ave	0.1926	0.1569	0.1000	40.7	50.0	-18.5	35.0
Vinyl chloride	Ave	0.1808	0.1532		42.4	50.0	-15.3	20.0
Bromomethane	Ave	0.0982	0.0863		44.0	50.0	-12.1	35.0
Chloroethane	Ave	0.1096	0.1006		45.9	50.0	-8.3	35.0
Dichlorofluoromethane	Ave	0.2839	0.2469		43.5	50.0	-13.0	50.0
Trichlorofluoromethane	Ave	0.2650	0.2276		43.0	50.0	-14.1	50.0
2-Chloroethyl vinyl ether	Lin1		0.1211		37.9	50.0	-24.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2523	0.2527		50.1	50.0	0.1	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3088	0.2731		44.2	50.0	-11.6	35.0
Toluene-d8 (Surr)	Ave	4.334	4.153		47.9	50.0	-4.2	35.0
4-Bromofluorobenzene (Surr)	Ave	1.047	1.007		48.1	50.0	-3.9	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7176.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 06-Jul-2020 09:50:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV G
Operator ID: PEPPINGA Instrument ID: VMS_R1
Sublist: chrom-AQ_VMSR1_8260*sub171

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.007	5.007	0.000	99	2248379	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.518	7.518	0.000	86	526570	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	818497	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	92	568131	50.0	50.1	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	613988	50.0	44.2	
$	6 Toluene-d8 (Surr)	98	6.251	6.251	0.000	93	2186702	50.0	47.9	
$	7 4-Bromofluorobenzene (Surr)	95	8.617	8.617	0.000	86	823997	50.0	48.1	
	10 Dichlorodifluoromethane	85	1.652	1.652	0.000	99	312581	50.0	36.8	
	11 Chloromethane	50	1.828	1.828	0.000	98	352807	50.0	40.7	
	12 Vinyl chloride	62	1.918	1.918	0.000	98	344460	50.0	42.4	
	14 Bromomethane	94	2.195	2.195	0.000	92	194031	50.0	44.0	
	15 Chloroethane	64	2.285	2.285	0.000	99	226120	50.0	45.9	
	16 Dichlorofluoromethane	67	2.450	2.450	0.000	97	555155	50.0	43.5	
	17 Trichlorofluoromethane	101	2.484	2.484	0.000	98	511807	50.0	43.0	
	76 2-Chloroethyl vinyl ether	63	5.876	5.876	0.000	92	272301	50.0	37.9	

Reagents:

MV-Gas A_00061 Amount Added: 10.00 Units: uL
mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

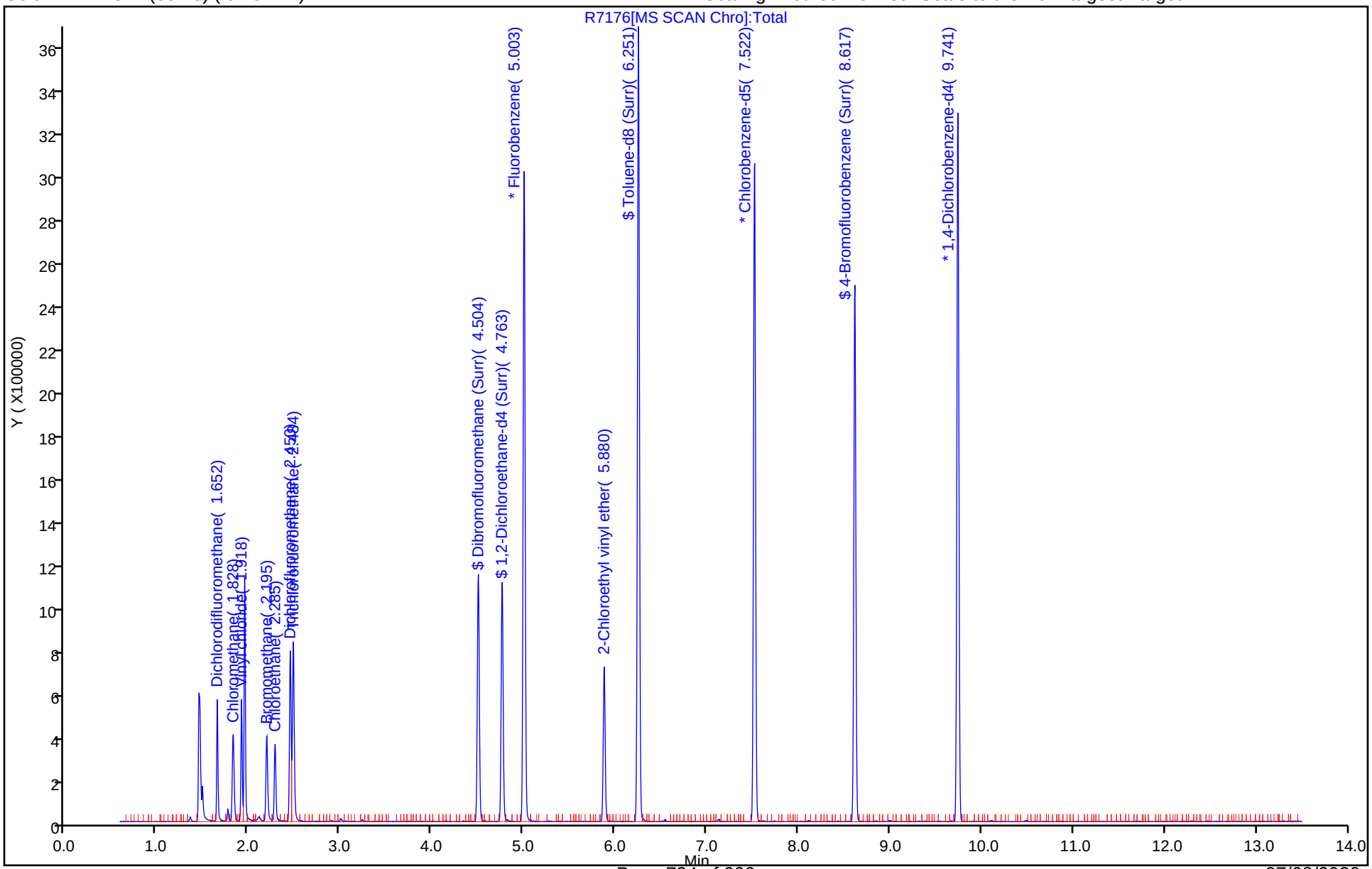
Report Date: 07-Jul-2020 08:58:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7176.D

Injection Date:	06-Jul-2020 09:50:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	CCV			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Feb-2020 10:25:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:42:02 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.643	3.643	0.000	0	67940	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

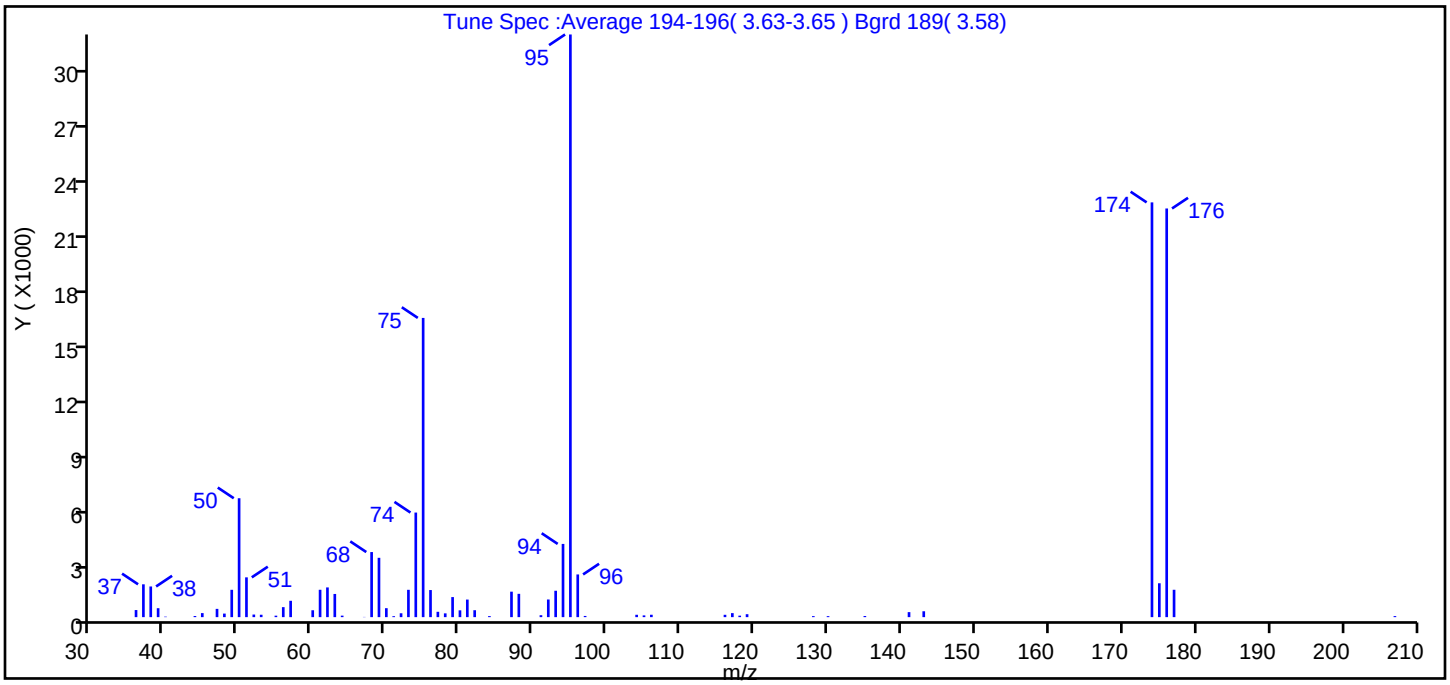
mv-Cent BFB_00001 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D
Injection Date: 06-Feb-2020 10:25:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	71.2
175	5 to 9% of m/z 174	5.8 (8.2)
176	Greater than 95% but less than 101% of m/z 174	70.1 (98.5)
177	5 to 9% of m/z 176	4.7 (6.7)

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 06-Feb-2020 10:25:30
Spectrum: Tune Spec :Average 194-196(3.63-3.65) Bgrd 189(3.58)
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	381	60.00	370	79.00	1077	116.00	126
37.00	1763	61.00	1470	80.00	366	117.00	216
38.00	1647	62.00	1596	81.00	944	118.00	80
39.00	480	63.00	1245	82.00	372	119.00	158
40.00	26	64.00	81	84.00	55	128.00	54
44.00	60	67.00	11	87.00	1368	130.00	53
45.00	217	68.00	3495	88.00	1252	135.00	60
47.00	444	69.00	3186	91.00	104	141.00	269
48.00	191	70.00	481	92.00	948	143.00	316
49.00	1468	71.00	51	93.00	1417	174.00	22272
50.00	6385	72.00	208	94.00	3932	175.00	1819
51.00	2137	73.00	1468	95.00	31288	176.00	21944
52.00	140	74.00	5616	96.00	2293	177.00	1470
53.00	129	75.00	16068	97.00	64	207.00	56
55.00	79	76.00	1455	104.00	127		
56.00	537	77.00	287	105.00	94		
57.00	878	78.00	203	106.00	129		

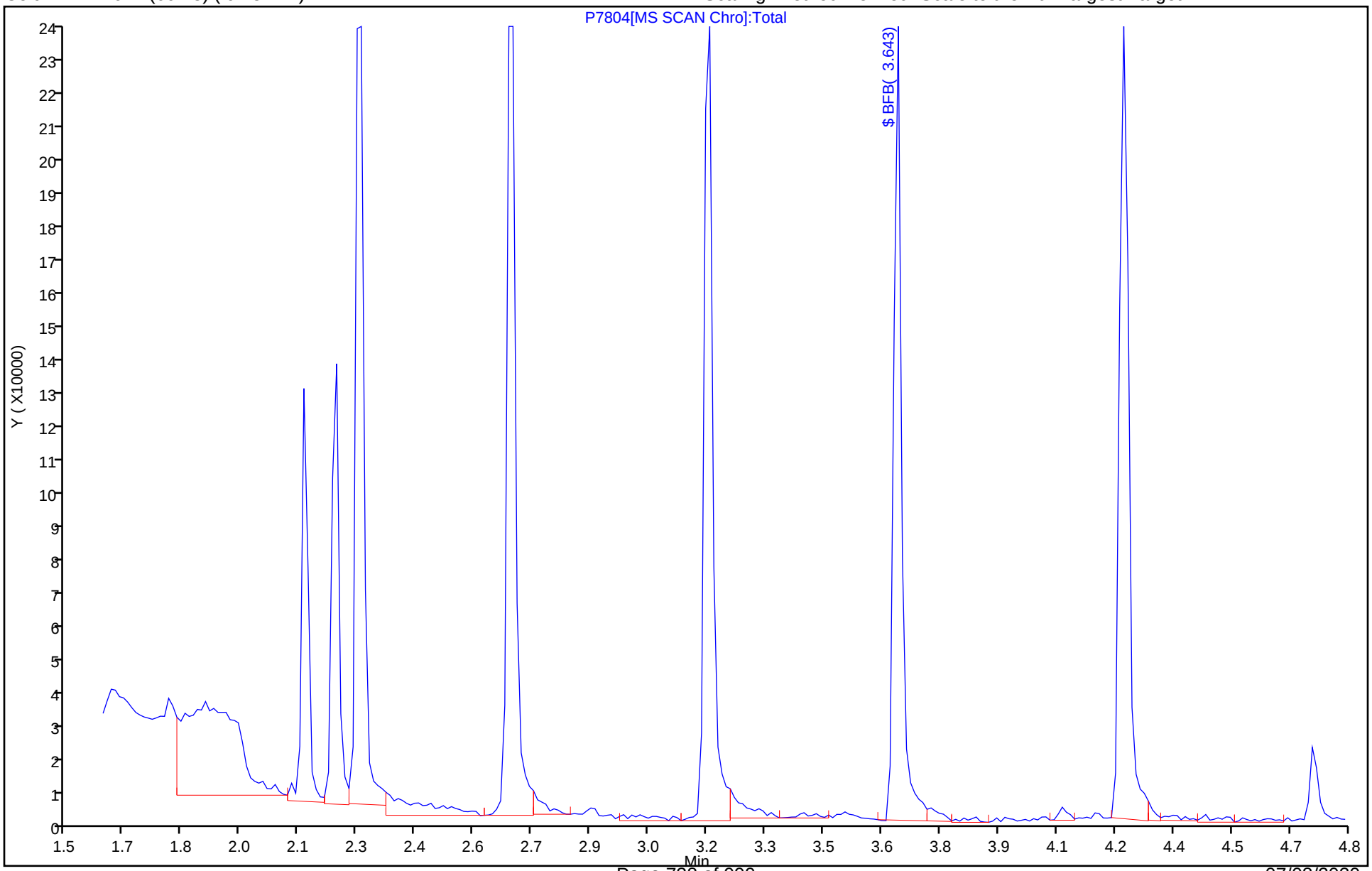
Report Date: 06-Feb-2020 21:42:03 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D

Injection Date:	06-Feb-2020 10:25:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Jun-2020 16:26:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 01-Jun-2020 22:08:33 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1050

First Level Reviewer: ornelasg Date: 01-Jun-2020 22:05:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	8.742	8.742	0.000	0	867490	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

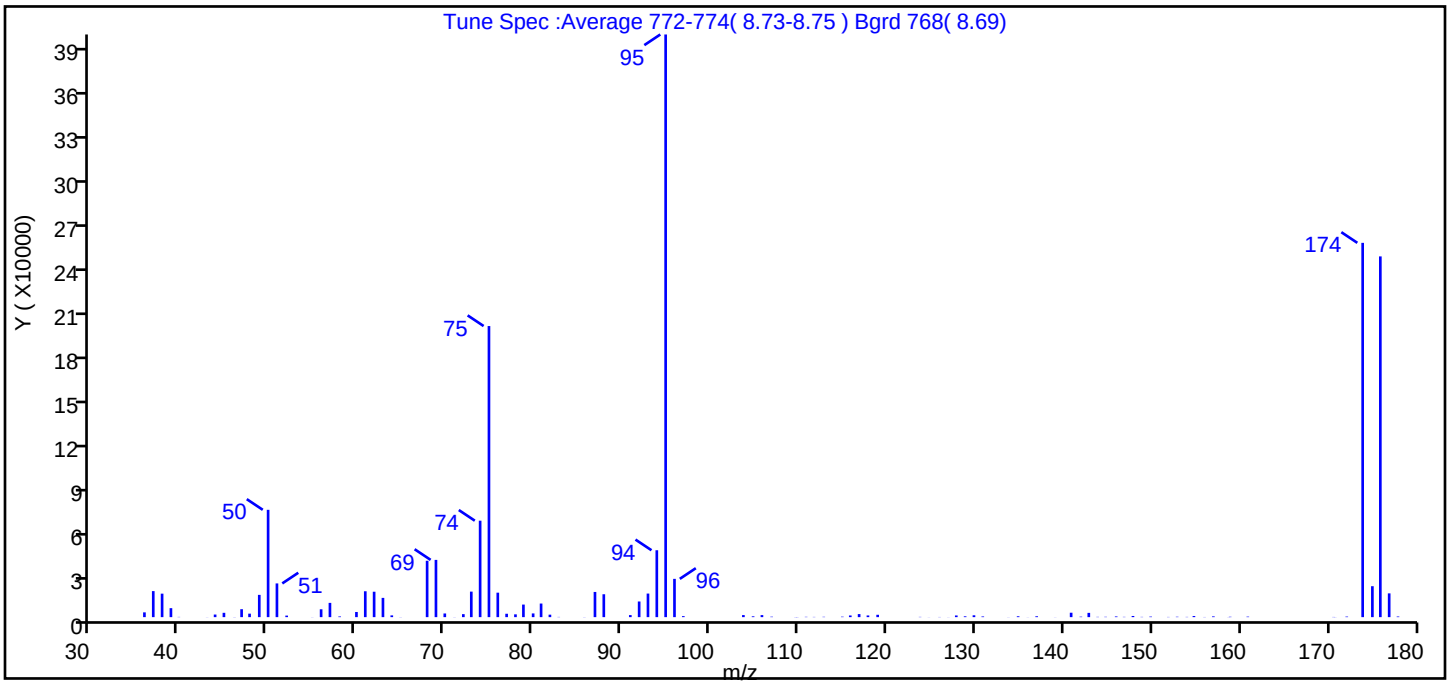
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.4
75	30 to 60% of m/z 95	50.0
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	64.2
175	5 to 9% of m/z 174	5.3 (8.3)
176	Greater than 95% but less than 101% of m/z 174	61.9 (96.4)
177	5 to 9% of m/z 176	4.1 (6.6)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 01-Jun-2020 16:26:30
Spectrum: Tune Spec :Average 772-774(8.73-8.75) Bgrd 768(8.69)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3230	70.00	2479	107.00	303	144.00	188
37.00	17584	71.00	77	110.00	86	145.00	230
38.00	15864	72.00	2025	110.00	99	146.00	470
39.00	6066	73.00	17240	111.00	215	147.00	187
40.00	154	74.00	65144	112.00	152	148.00	779
43.00	59	75.00	196608	113.00	226	149.00	174
44.00	1759	76.00	16528	115.00	319	150.00	371
45.00	2924	77.00	2291	116.00	1125	152.00	141
46.00	93	78.00	1894	117.00	2068	153.00	270
47.00	5367	79.00	8494	118.00	1141	154.00	164
48.00	2358	80.00	2509	119.00	1593	155.00	739
49.00	15041	81.00	9191	124.00	174	156.00	113
50.00	72488	82.00	1672	125.00	54	157.00	502
51.00	22776	83.00	142	126.00	121	159.00	56
52.00	1047	86.00	82	127.00	57	159.00	255
55.00	65	87.00	17016	128.00	1132	161.00	345
56.00	5313	88.00	15465	129.00	551	171.00	131
57.00	9635	91.00	1375	130.00	1251	171.00	70
58.00	459	92.00	10577	131.00	460	172.00	383
60.00	3483	93.00	15925	134.00	62	174.00	252800
61.00	17480	94.00	45184	135.00	583	175.00	20896
62.00	17168	95.00	393536	136.00	54	176.00	243648
63.00	13012	96.00	25856	137.00	591	177.00	16056
64.00	1189	97.00	668	139.00	58	178.00	431
65.00	79	104.00	1393	141.00	2986		
68.00	38072	105.00	552	142.00	313		
69.00	38664	106.00	1381	143.00	2887		

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

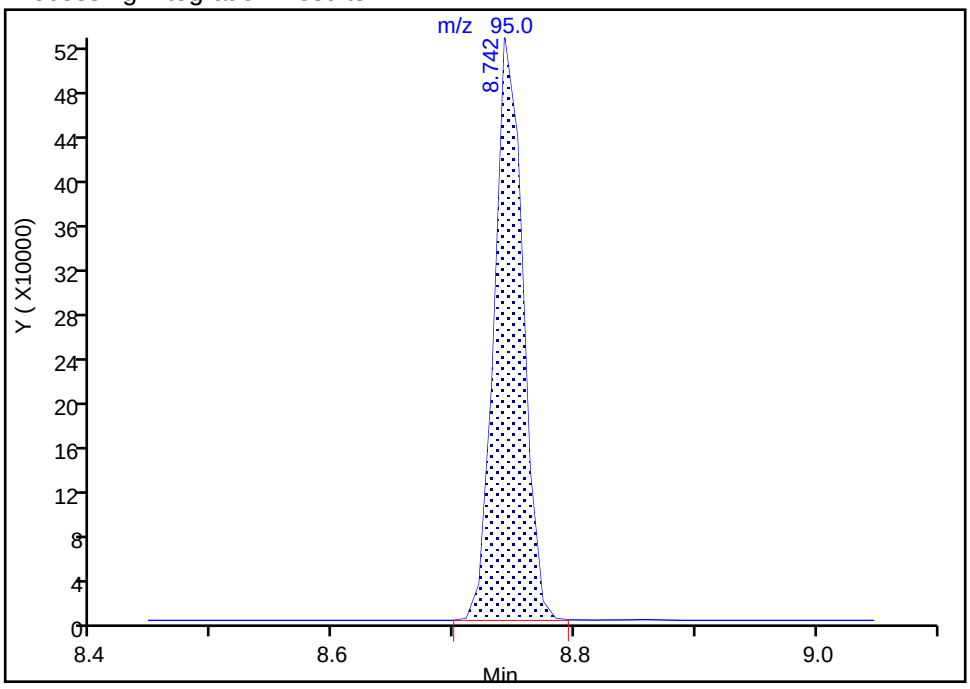
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

$ 9 BFB, CAS: 460-00-4

Signal: 1

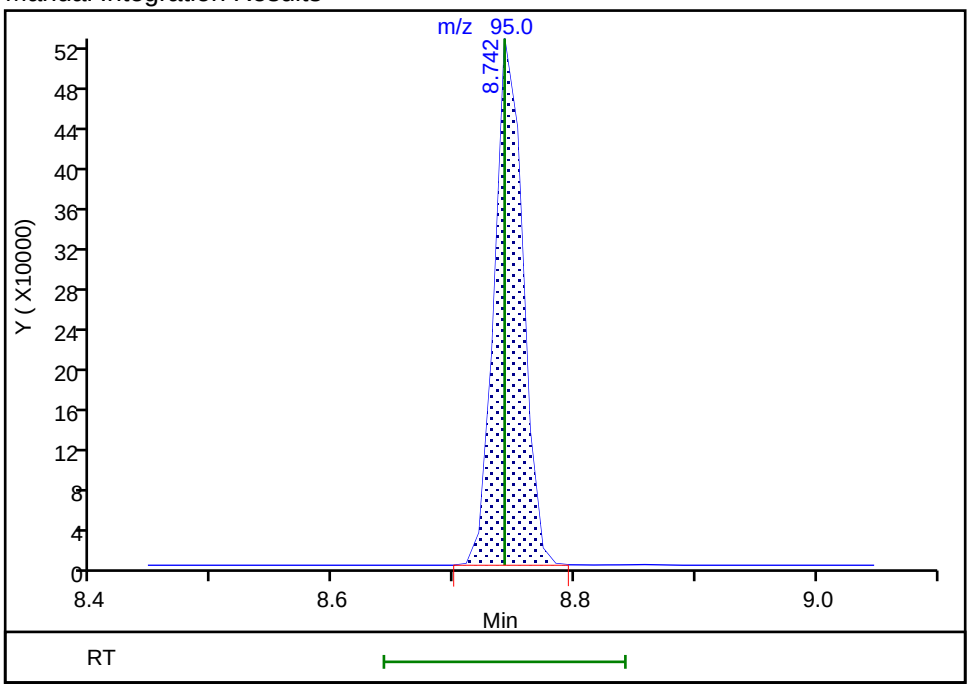
Processing Integration Results

RT: 8.74
Area: 867490
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 8.74
Area: 867490
Amount: 0
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 22:05:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

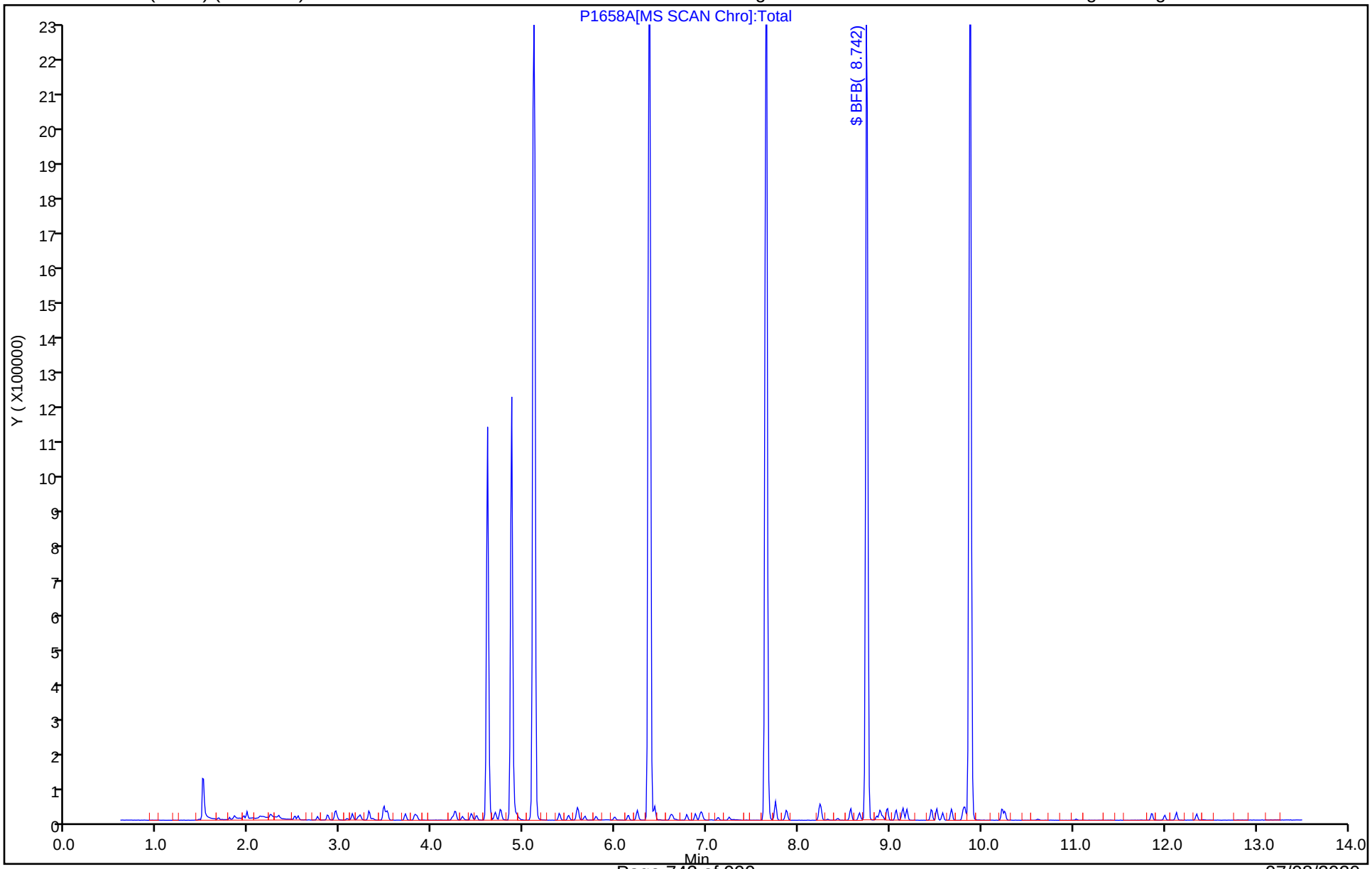
Report Date: 01-Jun-2020 22:08:34 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D

Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2850.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	29-Jun-2020 21:13:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	2.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:51:09	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.569	3.569	0.000	72	800058	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

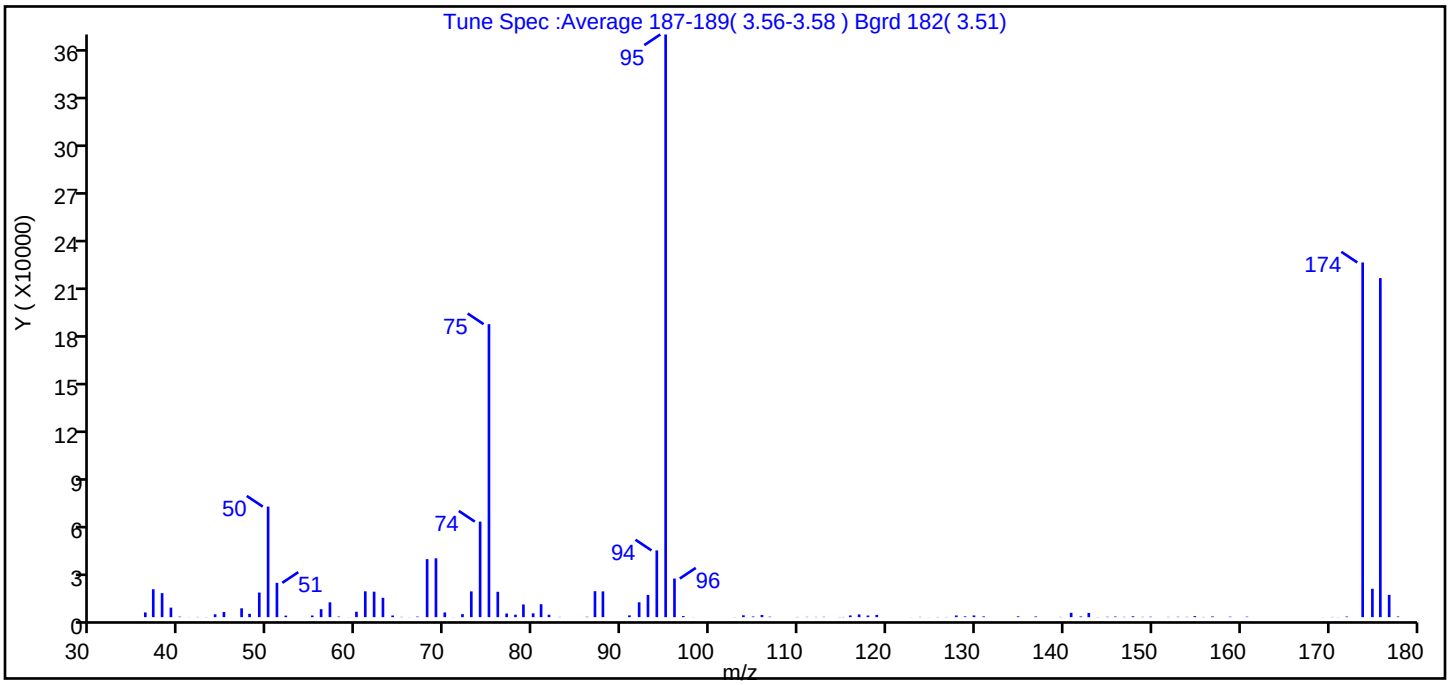
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2850.D
Injection Date: 29-Jun-2020 21:13:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: PETUNINP ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.0
75	30 to 60% of m/z 95	50.3
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	60.9
175	5 to 9% of m/z 174	4.9 (8.0)
176	Greater than 95% but less than 101% of m/z 174	58.2 (95.6)
177	5 to 9% of m/z 176	3.8 (6.6)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2850.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 29-Jun-2020 21:13:30
Spectrum: Tune Spec :Average 187-189(3.56-3.58) Bgrd 182(3.51)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2919	67.00	336	103.00	77	142.00	424
37.00	17272	68.00	35936	104.00	1150	143.00	2621
38.00	14876	69.00	36440	105.00	412	144.00	106
39.00	5900	70.00	2907	106.00	1342	145.00	232
40.00	288	71.00	59	107.00	279	146.00	362
41.00	56	72.00	1875	110.00	138	147.00	174
42.00	133	73.00	15947	111.00	182	148.00	527
43.00	78	74.00	59192	112.00	139	149.00	170
44.00	1754	75.00	181504	113.00	201	150.00	258
45.00	3176	76.00	15715	115.00	106	152.00	146
47.00	5478	77.00	2249	115.00	123	153.00	232
48.00	2076	78.00	1503	116.00	1041	154.00	169
49.00	15233	79.00	7862	117.00	1688	155.00	638
50.00	68472	80.00	2363	118.00	1004	156.00	129
51.00	21256	81.00	8027	119.00	1385	157.00	422
52.00	949	82.00	1462	123.00	63	159.00	291
55.00	994	83.00	143	124.00	147	161.00	297
56.00	4939	86.00	237	125.00	53	169.00	50
57.00	9193	87.00	16066	126.00	122	170.00	127
58.00	355	88.00	15965	127.00	107	171.00	62
59.00	56	91.00	1091	128.00	1039	172.00	382
60.00	3347	92.00	9210	129.00	470	174.00	219712
61.00	16003	93.00	13753	130.00	1054	175.00	17560
62.00	15773	94.00	41336	131.00	462	176.00	210048
63.00	11961	95.00	360960	135.00	501	177.00	13801
64.00	1017	96.00	23912	137.00	426	178.00	394
65.00	166	97.00	665	140.00	142		
66.00	62	98.00	69	141.00	2696		

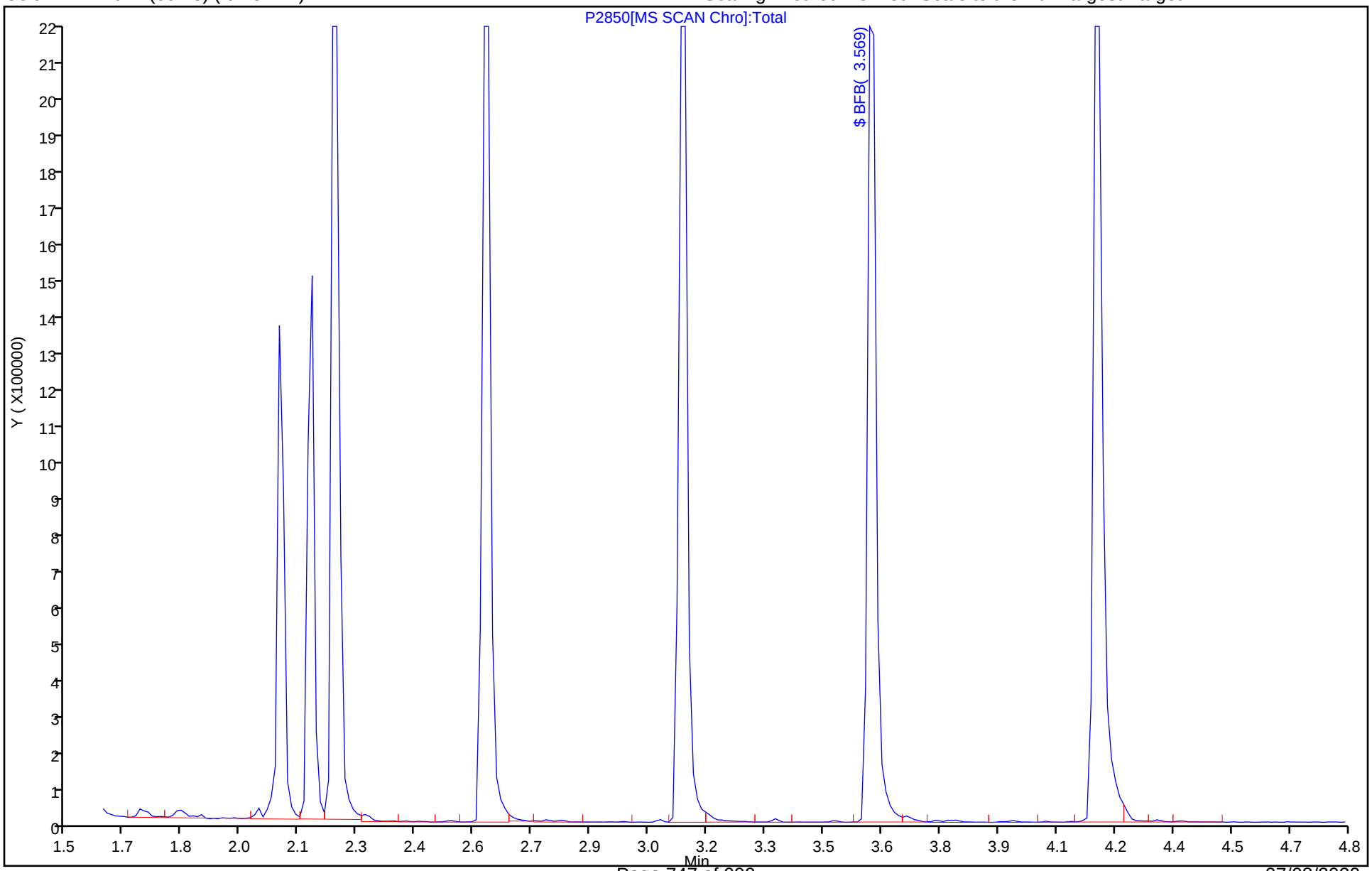
Report Date: 30-Jun-2020 20:51:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2850.D

Injection Date:	29-Jun-2020 21:13:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Jul-2020 22:01:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:30 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.569	3.569	0.000	75	754439	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

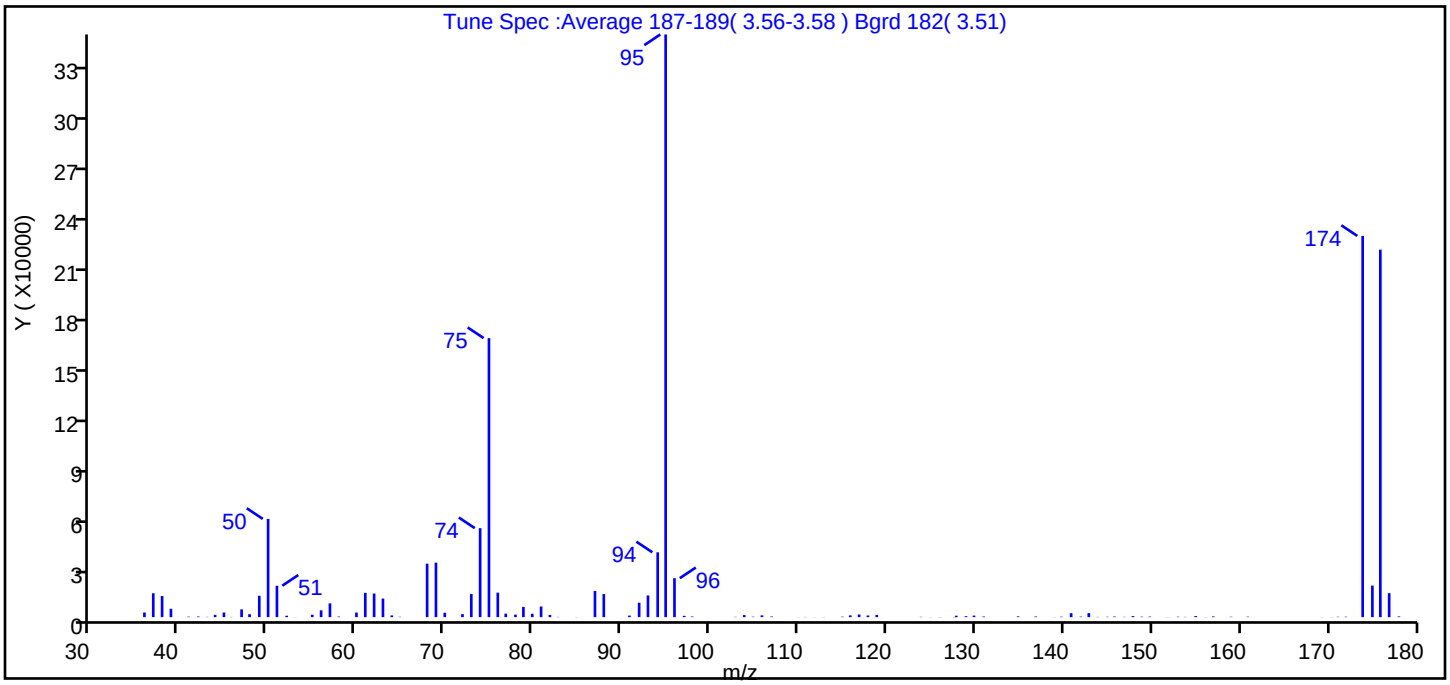
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D
Injection Date: 01-Jul-2020 22:01:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: PETUNINP ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.9
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	65.4
175	5 to 9% of m/z 174	5.4 (8.3)
176	Greater than 95% but less than 101% of m/z 174	63.1 (96.4)
177	5 to 9% of m/z 176	4.1 (6.5)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 01-Jul-2020 22:01:30
Spectrum: Tune Spec :Average 187-189(3.56-3.58) Bgrd 182(3.51)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2733	68.00	31456	104.00	1214	143.00	2369
37.00	14066	69.00	32056	105.00	243	144.00	135
38.00	12416	70.00	2601	106.00	1050	145.00	204
39.00	4936	72.00	1791	107.00	363	146.00	363
41.00	271	73.00	13636	110.00	59	147.00	164
42.00	363	74.00	52344	111.00	111	148.00	631
43.00	157	75.00	164160	112.00	57	149.00	257
44.00	1328	76.00	14408	113.00	98	150.00	318
45.00	2717	77.00	2054	115.00	266	152.00	75
46.00	132	78.00	1472	116.00	1035	152.00	60
47.00	4575	79.00	6046	117.00	1568	153.00	256
48.00	1776	80.00	2006	118.00	978	154.00	151
49.00	12579	81.00	6259	119.00	1270	155.00	646
50.00	57784	82.00	1278	124.00	183	156.00	79
51.00	18496	83.00	142	125.00	62	157.00	416
52.00	827	85.00	71	126.00	86	159.00	237
53.00	70	87.00	15420	128.00	110	161.00	259
55.00	1404	88.00	13586	128.00	847	169.00	55
56.00	4012	91.00	903	129.00	558	170.00	61
57.00	8111	92.00	8492	130.00	922	171.00	213
58.00	340	93.00	12773	131.00	365	172.00	243
60.00	2699	94.00	38136	135.00	447	174.00	224256
61.00	14282	95.00	342784	137.00	378	175.00	18568
62.00	13899	96.00	22912	139.00	81	176.00	216192
63.00	10920	97.00	761	140.00	261	177.00	14129
64.00	1027	98.00	345	141.00	2337	178.00	408
65.00	201	103.00	168	142.00	307		

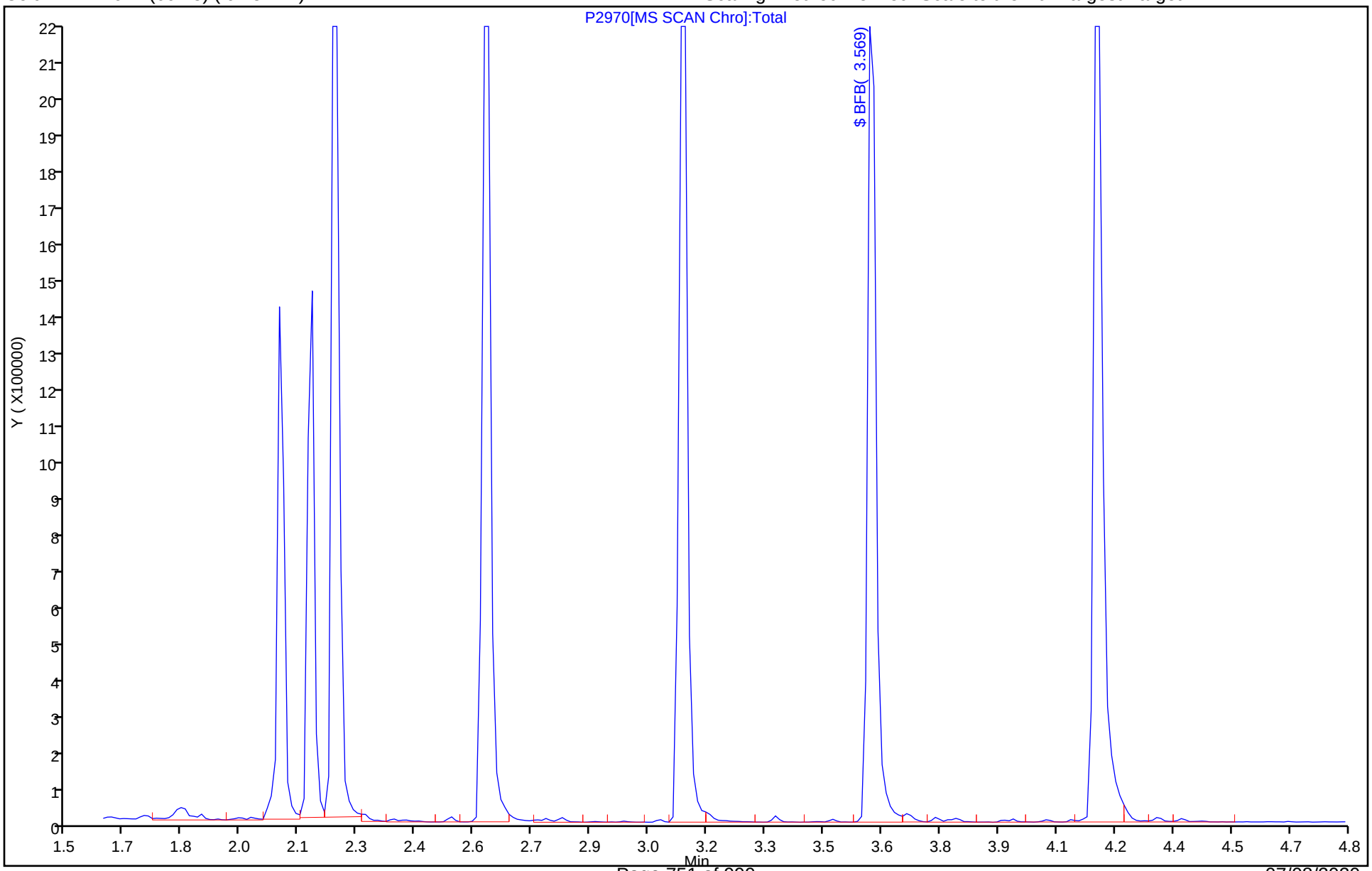
Report Date: 02-Jul-2020 22:13:30 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D

Injection Date:	01-Jul-2020 22:01:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5903.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Jun-2020 09:32:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 04-Jun-2020 14:32:46 Calib Date: 03-Jun-2020 17:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5924.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1025

First Level Reviewer: peppinga Date: 03-Jun-2020 10:12:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.535	3.535	0.000	83	824349	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

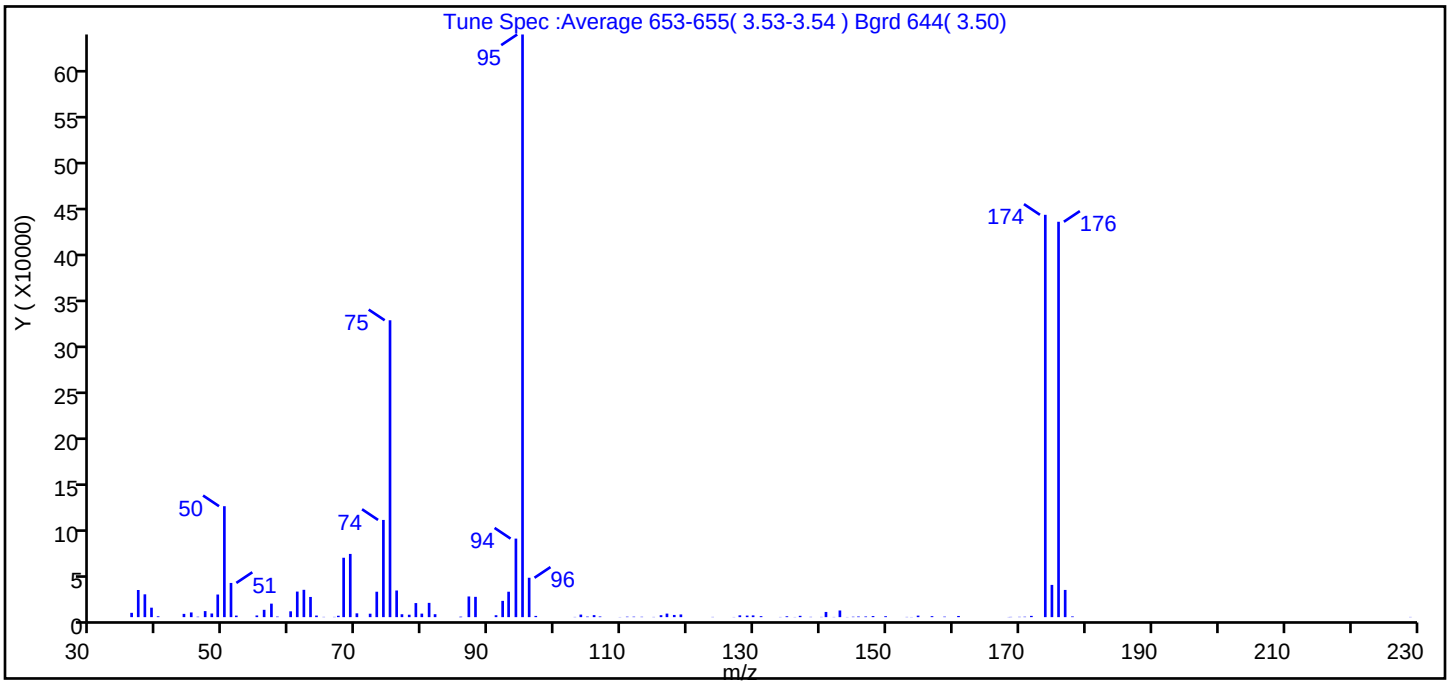
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5903.D
Injection Date: 03-Jun-2020 09:32:30 Instrument ID: VMS_R1
Lims ID: BFB
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.0
75	30 to 60% of m/z 95	51.0
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	69.1
175	5 to 9% of m/z 174	5.5 (8.0)
176	Greater than 95% but less than 101% of m/z 174	67.9 (98.3)
177	5 to 9% of m/z 176	4.7 (6.9)

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5903.D\AQ_VMSR1_8260.rslt\spectra.d
Injection Date: 03-Jun-2020 09:32:30
Spectrum: Tune Spec :Average 653-655(3.53-3.54) Bgrd 644(3.50)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4682	68.00	64480	104.00	2767	142.00	215
37.00	29472	69.00	68640	105.00	586	143.00	7214
38.00	24776	70.00	4129	106.00	2191	144.00	183
39.00	10282	72.00	3737	107.00	701	145.00	460
40.00	894	73.00	27600	110.00	172	146.00	687
44.00	3557	74.00	105536	111.00	505	147.00	725
45.00	5090	75.00	322304	112.00	509	148.00	1162
46.00	457	76.00	28928	113.00	392	150.00	1015
47.00	6551	77.00	3147	115.00	241	153.00	248
48.00	3972	78.00	2632	116.00	2123	154.00	167
49.00	24560	79.00	15272	117.00	3854	155.00	1637
50.00	120448	80.00	3832	118.00	2385	157.00	1066
51.00	37144	81.00	15498	119.00	2916	159.00	541
52.00	1692	82.00	3205	124.00	249	161.00	1271
55.00	1816	86.00	250	127.00	187	168.00	182
56.00	7964	86.00	478	128.00	1950	169.00	276
57.00	14667	87.00	22448	129.00	1676	170.00	343
58.00	597	88.00	22032	130.00	1893	171.00	455
60.00	6333	91.00	2069	131.00	1064	172.00	1379
61.00	27752	92.00	17664	134.00	205	174.00	436800
62.00	29680	93.00	27600	135.00	941	175.00	35000
63.00	21928	94.00	85264	136.00	180	176.00	429248
64.00	1742	95.00	632576	137.00	1442	177.00	29552
65.00	271	96.00	42760	138.00	314	178.00	766
67.00	264	97.00	1350	140.00	255	229.00	221
67.00	1511	103.00	235	141.00	5645		

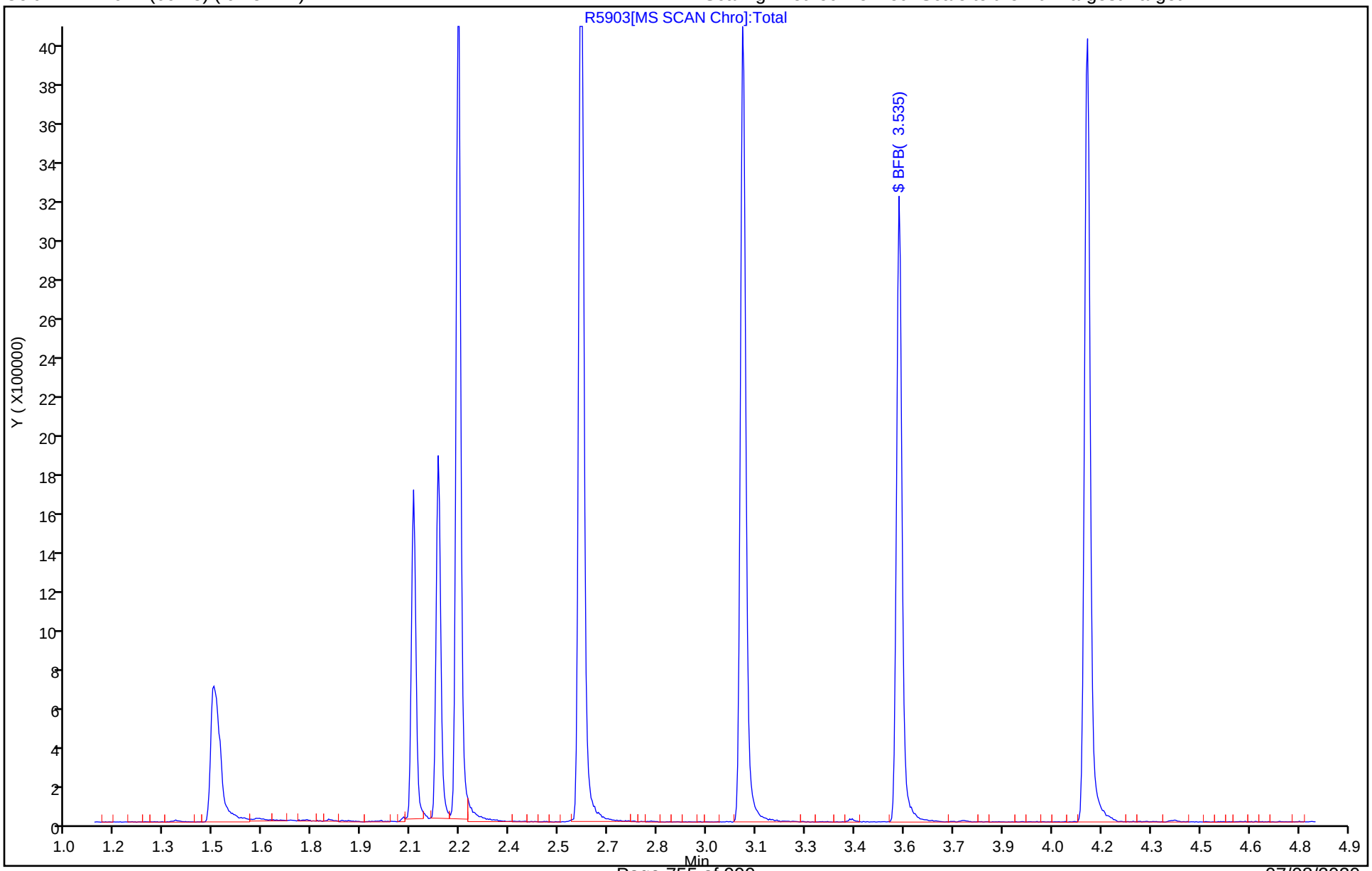
Report Date: 04-Jun-2020 14:32:46 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b\R5903.D

Injection Date:	03-Jun-2020 09:32:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5931.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Jun-2020 10:15:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2020 12:23:39 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: peppinga Date: 04-Jun-2020 10:28:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.516	3.516	0.000	83	644290	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

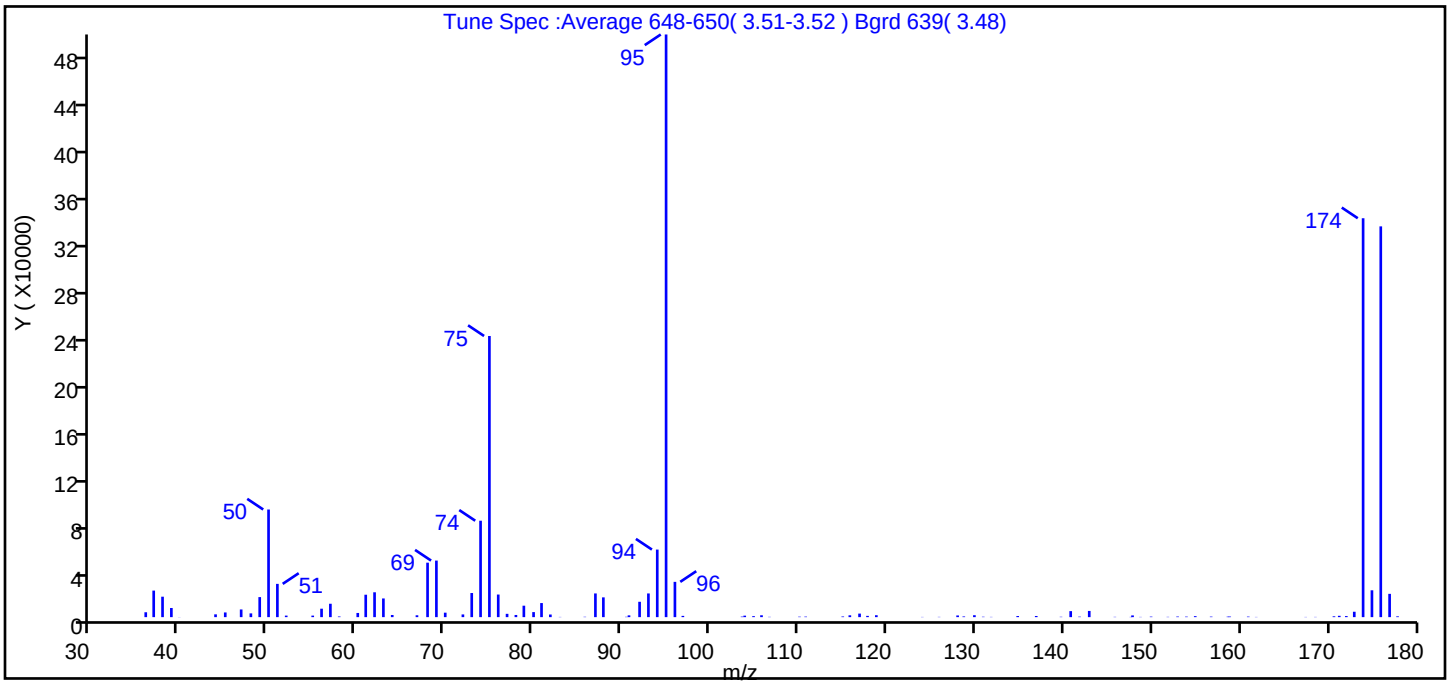
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5931.D
Injection Date: 04-Jun-2020 10:15:30 Instrument ID: VMS_R1
Lims ID: BFB
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.5
75	30 to 60% of m/z 95	48.3
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	0.9 (1.4)
174	50 to 120% of m/z 95	68.5
175	5 to 9% of m/z 174	4.6 (6.7)
176	Greater than 95% but less than 101% of m/z 174	67.1 (98.0)
177	5 to 9% of m/z 176	4.0 (6.0)

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5931.D\AQ_VMSR1_8260.rslt\spectra.d
Injection Date: 04-Jun-2020 10:15:30
Spectrum: Tune Spec :Average 648-650(3.51-3.52) Bgrd 639(3.48)
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	4118	70.00	3764	104.00	1253	148.00	200
37.00	22368	72.00	2293	105.00	839	148.00	1459
38.00	17224	73.00	20328	106.00	1578	149.00	196
39.00	7710	74.00	81232	107.00	246	150.00	446
40.00	100	75.00	236864	110.00	396	152.00	244
44.00	2365	76.00	19048	111.00	446	153.00	503
45.00	3954	77.00	2793	115.00	560	154.00	448
47.00	6476	78.00	1822	116.00	1548	155.00	826
48.00	3171	79.00	9645	117.00	2988	157.00	449
49.00	16888	80.00	4250	118.00	1067	159.00	410
50.00	90680	81.00	11865	119.00	1618	159.00	477
51.00	28032	82.00	2221	124.00	178	161.00	453
52.00	1300	83.00	183	126.00	223	162.00	175
55.00	1287	86.00	300	128.00	1414	167.00	173
56.00	7120	87.00	19968	129.00	585	168.00	193
57.00	11283	88.00	16664	130.00	1629	171.00	694
58.00	550	90.00	284	131.00	344	171.00	1131
60.00	3521	91.00	1504	132.00	206	172.00	911
61.00	18888	92.00	12943	135.00	928	173.00	4548
62.00	20944	93.00	19968	137.00	967	174.00	336064
63.00	15745	94.00	56920	140.00	309	175.00	22624
64.00	1812	95.00	490880	141.00	5062	176.00	329216
67.00	1575	96.00	29728	142.00	406	177.00	19624
68.00	45888	97.00	1063	143.00	5227	178.00	667
69.00	47656	104.00	452	146.00	244		

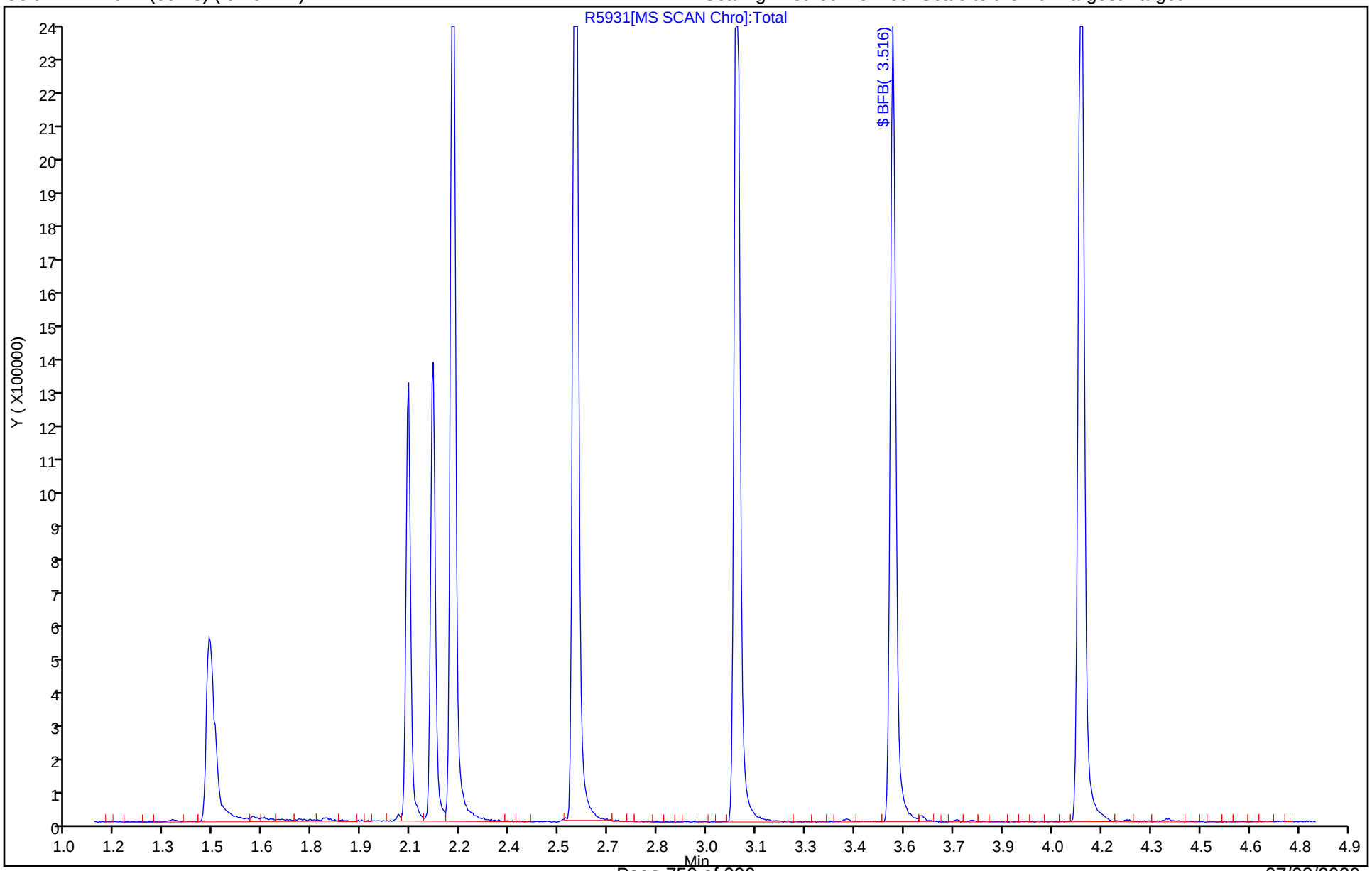
Report Date: 05-Jun-2020 12:23:39 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5931.D

Injection Date:	04-Jun-2020 10:15:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6969.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 29-Jun-2020 21:12:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:08 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.516	3.516	0.000	84	562089	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

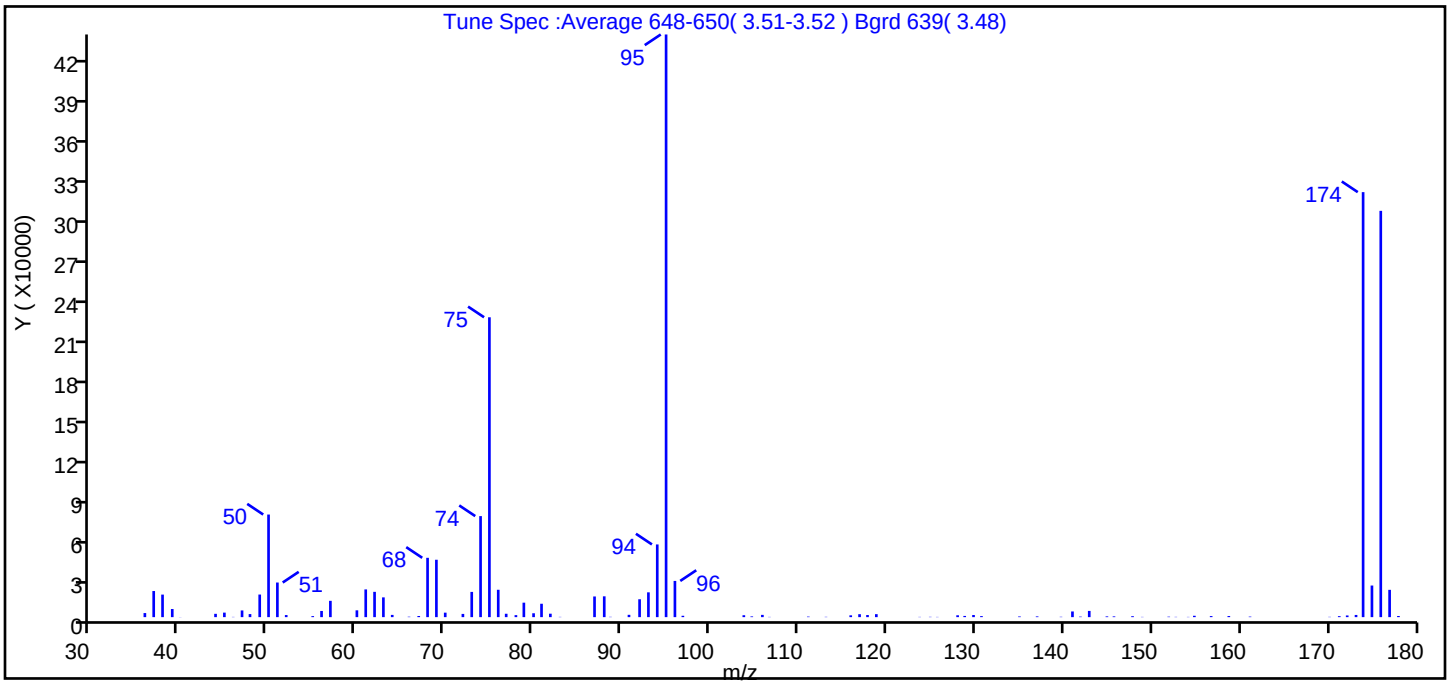
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6969.D
Injection Date: 29-Jun-2020 21:12:30 Instrument ID: VMS_R1
Lims ID: BFB
Client ID:
Operator ID: PETUNINP ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.6
75	30 to 60% of m/z 95	51.5
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	72.9
175	5 to 9% of m/z 174	5.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	69.7 (95.6)
177	5 to 9% of m/z 176	4.7 (6.7)

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6969.D\AQ_VMSR1_8260.rslt\spectra.d
Injection Date: 29-Jun-2020 21:12:30
Spectrum: Tune Spec :Average 648-650(3.51-3.52) Bgrd 639(3.48)
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	3062	67.00	855	95.00	436608	141.00	4264
37.00	19568	68.00	44456	96.00	27136	142.00	393
38.00	16896	69.00	43008	97.00	1019	143.00	4664
39.00	6084	70.00	3360	104.00	1437	145.00	568
40.00	90	72.00	2423	105.00	550	146.00	562
44.00	2487	73.00	18912	106.00	1699	148.00	698
45.00	3392	74.00	75712	107.00	181	149.00	186
46.00	180	75.00	224704	111.00	402	152.00	357
47.00	5022	76.00	20512	113.00	232	153.00	210
48.00	2294	77.00	2540	116.00	1360	154.00	185
49.00	16936	78.00	1504	117.00	2210	155.00	1027
50.00	76880	79.00	10846	118.00	1588	157.00	793
51.00	25944	80.00	2907	119.00	2236	159.00	822
52.00	1556	81.00	10036	124.00	191	161.00	405
55.00	765	82.00	2583	125.00	235	170.00	222
56.00	4636	83.00	193	126.00	173	171.00	738
57.00	12222	87.00	15491	128.00	1399	172.00	1258
60.00	5109	88.00	15599	129.00	906	173.00	1637
61.00	20776	89.00	233	130.00	1592	174.00	318464
62.00	18960	91.00	1743	131.00	770	175.00	23688
63.00	14816	92.00	13407	135.00	510	176.00	304448
64.00	1681	93.00	18592	137.00	557	177.00	20464
66.00	326	94.00	54480	140.00	268	178.00	858

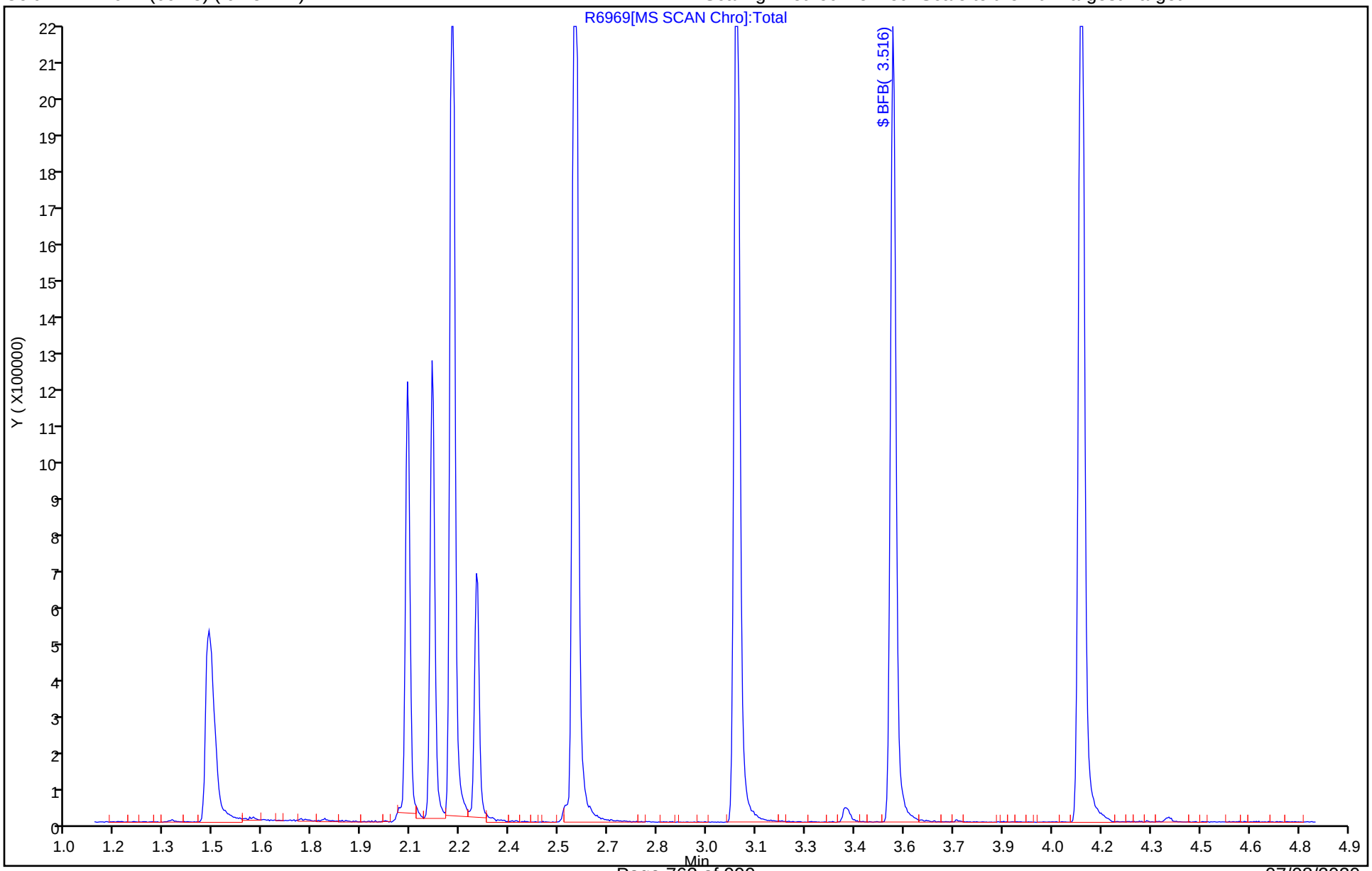
Report Date: 30-Jun-2020 20:31:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6969.D

Injection Date:	29-Jun-2020 21:12:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7172.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Jul-2020 07:55:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:01 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.516	3.516	0.000	86	748531	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

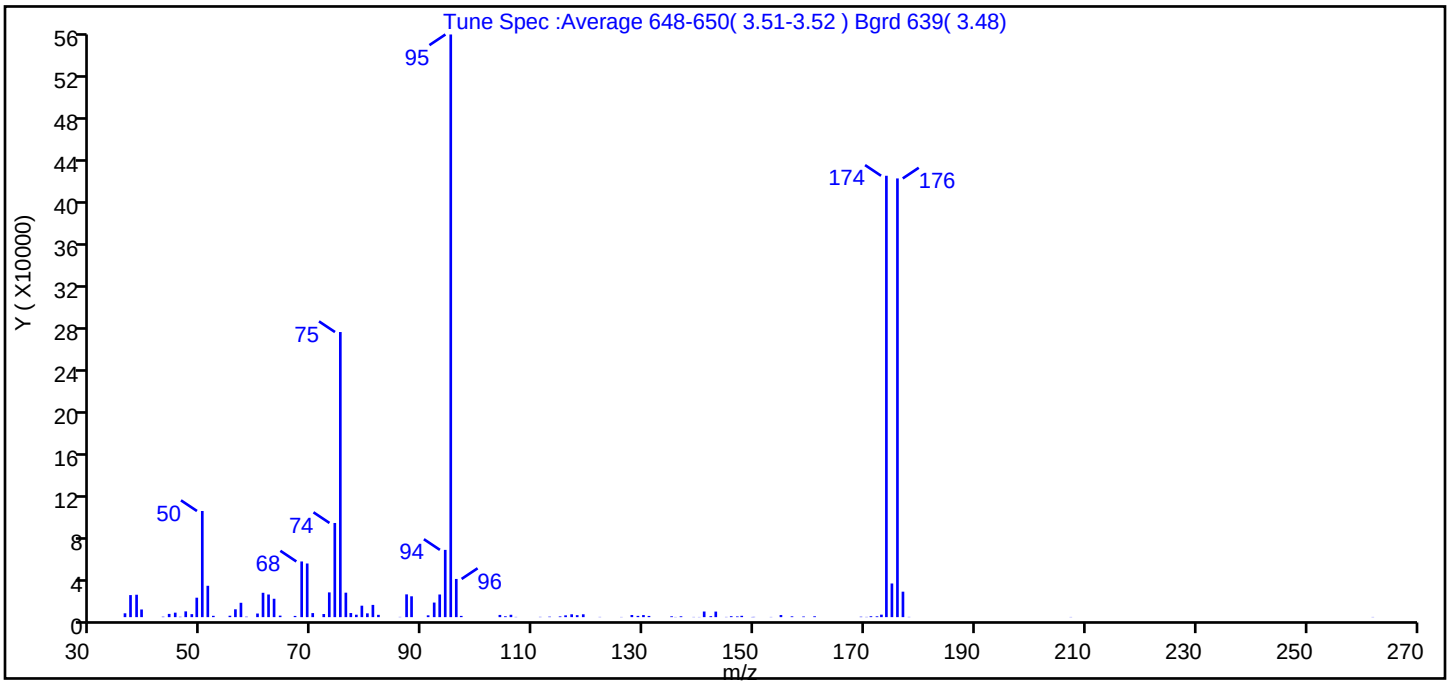
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7172.D
Injection Date: 06-Jul-2020 07:55:30 Instrument ID: VMS_R1
Lims ID: BFB
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	48.9
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.6)
174	50 to 120% of m/z 95	75.8
175	5 to 9% of m/z 174	5.8 (7.6)
176	Greater than 95% but less than 101% of m/z 174	75.3 (99.4)
177	5 to 9% of m/z 176	4.4 (5.8)

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7172.D\AQ_VMSR1_8260.rslt\spectra.d
Injection Date: 06-Jul-2020 07:55:30
Spectrum: Tune Spec :Average 648-650(3.51-3.52) Bgrd 639(3.48)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3687	68.00	53440	104.00	2126	143.00	5339
37.00	21176	69.00	51496	105.00	847	145.00	223
38.00	21504	70.00	3893	106.00	2266	146.00	905
39.00	7356	72.00	2997	107.00	221	147.00	682
43.00	422	73.00	23752	111.00	268	148.00	1283
44.00	3111	74.00	90392	113.00	465	150.00	179
45.00	4300	75.00	273664	115.00	706	150.00	254
46.00	354	76.00	23488	116.00	1710	153.00	199
47.00	5544	77.00	3947	117.00	2746	155.00	2025
48.00	2887	78.00	2337	118.00	1903	157.00	769
49.00	18672	79.00	10996	119.00	2734	159.00	603
50.00	101880	80.00	3647	122.00	217	161.00	824
51.00	30104	81.00	11750	126.00	184	169.00	414
52.00	1269	82.00	2213	128.00	2054	170.00	233
55.00	1345	86.00	225	129.00	1231	171.00	882
56.00	7534	87.00	21864	130.00	1989	172.00	800
57.00	13782	88.00	20016	131.00	1161	173.00	2383
58.00	436	91.00	1738	135.00	807	174.00	423680
60.00	3479	92.00	13994	136.00	177	175.00	32312
61.00	23376	93.00	21744	137.00	799	176.00	421120
62.00	21736	94.00	64568	139.00	203	177.00	24448
63.00	17648	95.00	559296	140.00	180	178.00	235
64.00	1469	96.00	36664	141.00	5407	207.00	181
67.00	1179	97.00	1207	142.00	927	262.00	182

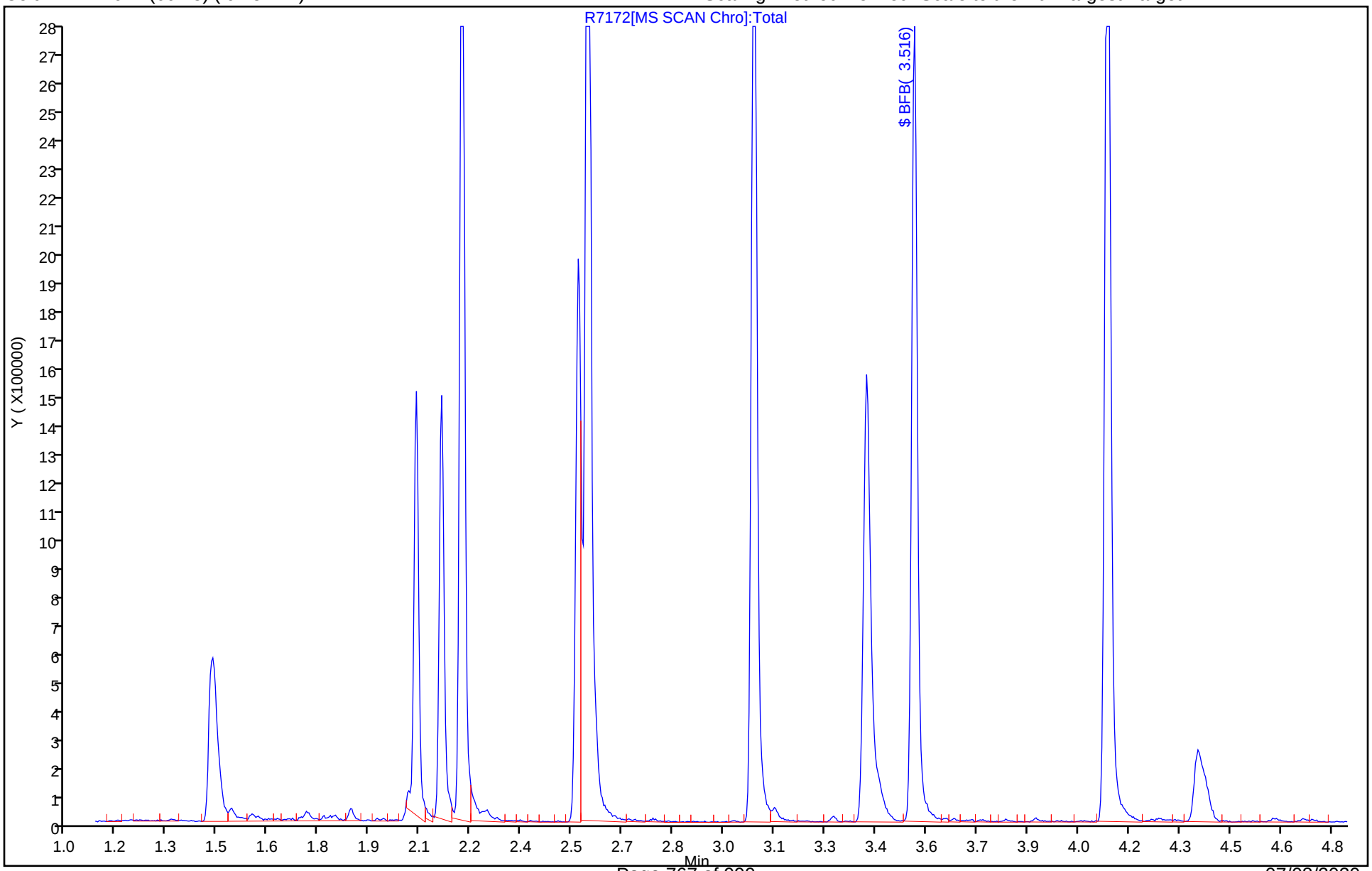
Report Date: 07-Jul-2020 08:58:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7172.D

Injection Date:	06-Jul-2020 07:55:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500579/9

Matrix: Water Lab File ID: P2858.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 00:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500579/9

Matrix: Water Lab File ID: P2858.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 00:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	101		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2858.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Jun-2020 00:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.112	0.000	99	2521342	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.645	-0.001	87	561207	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.872	-0.001	97	793078	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.604	0.001	93	597253	50.0	49.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.858	4.868	-0.010	95	678679	50.0	47.5	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2481666	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	83	869547	50.0	49.7	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95		3.569					ND	
10 Dichlorodifluoromethane	85		1.670					ND	
11 Chloromethane	50		1.839					ND	
12 Vinyl chloride	62		1.945					ND	
13 Ethylene oxide	43	2.125	2.200	-0.075	90	1064		NC	
14 Bromomethane	94		2.230					ND	
15 Chloroethane	64		2.325					ND	
16 Dichlorofluoromethane	67		2.494					ND	
17 Trichlorofluoromethane	101		2.536					ND	
18 Ethanol	45		2.643					ND	
19 Ethyl ether	59		2.747					ND	
20 Propene oxide	58	2.801	2.791	0.010	36	674		0.2782	
21 Acrolein	56		2.852					ND	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937					ND	
22 1,1-Dichloroethene	96		2.937					ND	
24 Acetone	43		2.958					ND	
25 Isopropyl alcohol	45		3.044					ND	
26 Iodomethane	142		3.063					ND	
27 Carbon disulfide	76		3.127					ND	
28 Acetonitrile	41		3.171					ND	
29 Methyl acetate	43		3.190					ND	
30 3-Chloro-1-propene	41		3.211					ND	
31 Methylene Chloride	84		3.306					ND	
32 2-Methyl-2-propanol	59		3.348					ND	
33 Acrylonitrile	53		3.464					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Methyl tert-butyl ether	73		3.496					ND	
35 trans-1,2-Dichloroethene	96		3.517					ND	
36 Hexane	57		3.707					ND	
38 Vinyl acetate	43		3.802					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
40 Isopropyl ether	87		3.825					ND	
39 1,1-Dichloroethane	63		3.834					ND	
41 2-Chloro-1,3-butadiene	53		3.888					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
43 Tert-butyl ethyl ether	59		4.089					ND	
44 2-Butanone (MEK)	43		4.214					ND	
46 Ethyl acetate	43		4.226					ND	
47 cis-1,2-Dichloroethene	96		4.245					ND	
48 2,2-Dichloropropane	77		4.256					ND	
49 Propionitrile	54		4.268					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
50 sec-Butyl Alcohol	45		4.330					ND	
51 Methacrylonitrile	41		4.384					ND	
53 Chlorobromomethane	128		4.425					ND	
52 Tetrahydrofuran	42		4.435					ND	
54 Chloroform	83		4.477					ND	
55 1,1,1-Trichloroethane	97		4.625					ND	
56 Cyclohexane	56		4.689					ND	
57 1,1-Dichloropropene	75		4.741					ND	
59 Carbon tetrachloride	117		4.752					ND	
58 Isobutyl alcohol	41		4.752					ND	
60 Benzene	78		4.900					ND	
61 1,2-Dichloroethane	62		4.921					ND	
62 Tert-amyl methyl ether	73		4.965					ND	
63 n-Butanol	56		4.965					ND	
66 n-Heptane	43		5.079					ND	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131					ND	
67 Trichloroethene	95		5.385					ND	
68 2-Pentanone	43		5.480					ND	
69 Methylcyclohexane	55		5.586					ND	
70 1,2-Dichloropropane	63		5.596					ND	
71 Methyl methacrylate	100		5.598					ND	
72 1,4-Dioxane	88		5.638					ND	
73 Dibromomethane	93		5.659					ND	
74 Dichlorobromomethane	83		5.786					ND	
75 2-Nitropropane	41		5.946					ND	
76 2-Chloroethyl vinyl ether	63		5.987					ND	
77 cis-1,3-Dichloropropene	75		6.134					ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240					ND	
79 Toluene	91		6.430					ND	
80 trans-1,3-Dichloropropene	75		6.599					ND	
81 Ethyl methacrylate	69		6.620					ND	
82 1,1,2-Trichloroethane	97		6.778					ND	
83 Tetrachloroethene	164		6.873					ND	
84 1,3-Dichloropropane	76		6.926					ND	
85 2-Hexanone	43		6.947					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Tetrahydrothiophene	60		7.117					ND	
86 Chlorodibromomethane	129		7.126					ND	
88 Ethylene Dibromide	107		7.242					ND	
89 1-Chlorohexane	91		7.633					ND	
90 Chlorobenzene	112		7.675					ND	
92 Ethylbenzene	106		7.749					ND	
91 1,1,1,2-Tetrachloroethane	131		7.749					ND	
93 m-Xylene & p-Xylene	106		7.865					ND	
94 o-Xylene	106		8.224					ND	
95 Styrene	104		8.245					ND	
96 Bromoform	173		8.424					ND	
97 Isopropylbenzene	105		8.572					ND	
98 cis-1,4-Dichloro-2-butene	53		8.616					ND	
99 Cyclohexanone	55	8.742	8.667	0.075	36	2038		3.55	
100 1,1,2,2-Tetrachloroethane	83		8.857					ND	
101 Bromobenzene	156		8.889					ND	
102 trans-1,4-Dichloro-2-butene	53		8.889					ND	
103 1,2,3-Trichloropropane	110		8.920					ND	
104 N-Propylbenzene	120		8.973					ND	
105 2-Chlorotoluene	126		9.068					ND	
106 1,3,5-Trimethylbenzene	105		9.142					ND	
107 4-Chlorotoluene	126		9.184					ND	
108 tert-Butylbenzene	119		9.448					ND	
109 1,2,4-Trimethylbenzene	105		9.511					ND	
110 sec-Butylbenzene	134		9.669					ND	
111 1,3-Dichlorobenzene	146		9.796					ND	
112 4-Isopropyltoluene	119		9.817					ND	
113 1,4-Dichlorobenzene	146		9.902					ND	
114 1,2,3-Trimethylbenzene	105		9.914					ND	
115 n-Butylbenzene	91		10.218					ND	
116 1,2-Dichlorobenzene	146		10.250					ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031					ND	
118 1,3,5-Trichlorobenzene	180		11.222					ND	
119 1,2,4-Trichlorobenzene	180		11.854					ND	
120 Hexachlorobutadiene	225		12.002					ND	
121 Naphthalene	128		12.128					ND	
122 1,2,3-Trichlorobenzene	180		12.350					ND	
133 Methyl cyclohexane TIC	1		0.000					ND	
136 1-Chlorohexane TIC	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
127 Pentachloroethane	167		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
137 Cyclohexane TIC	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
125 2,2,3-Trimethylbutane	1		0.000				ND		
S 139 1,2-Dichloroethene, Total (URS)	96		2.000				ND		
S 142 Xylenes, Total	106		0.000				ND		
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000				ND		
S 143 Xylenes, Total (URS)	1		0.000				ND		
S 146 Total BTEX	1		0.000				ND		
S 145 1,3-Dichloropropene, Total	1		0.000				ND		
S 144 1,2-Dichloroethene, Total	1		0.000				ND		

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

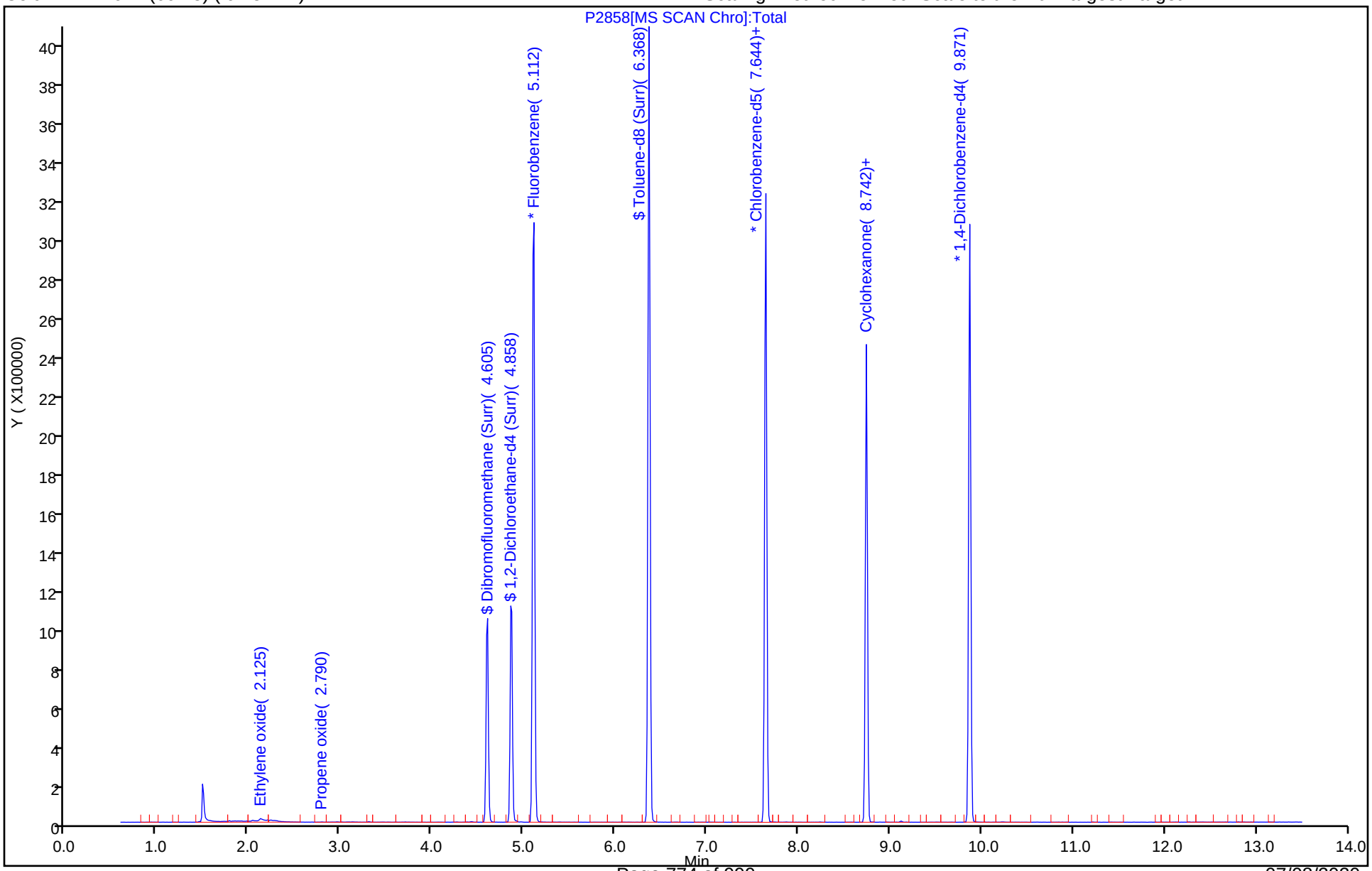
Report Date: 30-Jun-2020 20:51:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2858.D

Injection Date:	30-Jun-2020 00:11:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2858.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Jun-2020 00:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.2	98.37
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	95.00
$ 6 Toluene-d8 (Surr)	50.0	50.3	100.51
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.7	99.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500580/9

Matrix: Water Lab File ID: R6978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 00:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	0.208	J	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500580/9

Matrix: Water Lab File ID: R6978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 00:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	0.383	J	1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	103		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6978.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Jun-2020 00:53:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 01-Jul-2020 11:33:26 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1044

First Level Reviewer: chantajirochn Date: 01-Jul-2020 12:16:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	1699654	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	87	393892	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	624403	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	441588	50.0	51.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	-0.001	0	543803	50.0	51.8	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1631896	50.0	47.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	628425	50.0	48.0	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95		3.516					ND	
10 Dichlorodifluoromethane	85		1.655					ND	
11 Chloromethane	50		1.828					ND	
12 Vinyl chloride	62		1.918					ND	
13 Ethylene oxide	43		2.165					ND	
14 Bromomethane	94		2.195					ND	
15 Chloroethane	64		2.285					ND	
16 Dichlorofluoromethane	67		2.454					ND	
17 Trichlorofluoromethane	101		2.488					ND	
18 Ethanol	45		2.604					ND	
19 Ethyl ether	59		2.697					ND	
20 Propene oxide	58		2.739					ND	
21 Acrolein	56		2.802					ND	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.881					ND	
23 1,1-Dichloroethene	96		2.885					ND	
24 Acetone	43		2.900					ND	
25 Isopropyl alcohol	45		2.990					ND	
26 Iodomethane	142		3.001					ND	
27 Carbon disulfide	76		3.061					ND	
28 Acetonitrile	41		3.106					ND	
29 Methyl acetate	43		3.125					ND	
30 3-Chloro-1-propene	41		3.147					ND	
31 Methylene Chloride	84		3.241					ND	
32 2-Methyl-2-propanol	59		3.282					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53		3.398					ND	
34 Methyl tert-butyl ether	73		3.425					ND	
35 trans-1,2-Dichloroethene	96		3.440					ND	
36 Chlorotrifluoroethene	116		3.531					ND	
37 Hexane	57		3.627					ND	
38 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.727					ND	
39 Vinyl acetate	43		3.728					ND	
41 Isopropyl ether	87		3.751					ND	
40 1,1-Dichloroethane	63		3.755					ND	
42 2-Chloro-1,3-butadiene	53		3.803					ND	
43 2-Chloro-1,1,1-Trifluoroethane	118		3.951					ND	
44 Tert-butyl ethyl ether	59		4.009					ND	
45 2-Butanone (MEK)	43		4.133					ND	
46 Ethyl acetate	43		4.144					ND	
47 cis-1,2-Dichloroethene	96		4.156					ND	
48 2,2-Dichloropropane	77		4.167					ND	
49 Propionitrile	54		4.182					ND	
50 sec-Butyl Alcohol	45		4.242					ND	
51 Methacrylonitrile	41		4.294					ND	
52 Chlorobromomethane	128		4.332					ND	
53 Tetrahydrofuran	42		4.339					ND	
54 Chloroform	83		4.392					ND	
55 1,1,1-Trichloroethane	97		4.534					ND	
56 Cyclohexane	56		4.591					ND	
57 1,1-Dichloropropene	75		4.643					ND	
59 Carbon tetrachloride	117		4.647					ND	
60 Isobutyl alcohol	41		4.658					ND	
58 1,2-Dichloro-1,1,2-trifluoroetha	117		4.678					ND	
61 1,1,1-Trifluoro-2,2-dichloroetha	83		4.706					ND	
62 Benzene	78		4.797					ND	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	4	1955		0.2080	
64 Tert-amyl methyl ether	73		4.864					ND	
65 n-Heptane	43		4.980					ND	
66 n-Butanol	56		5.145					ND	
67 Trichloroethene	95	5.276	5.280	-0.004	89	2445		0.3832	
68 2-Pentanone	43		5.381					ND	
69 Methylcyclohexane	55		5.471					ND	
70 1,2-Dichloropropane	63		5.483					ND	
71 Methyl methacrylate	100		5.490					ND	
72 1,4-Dioxane	88		5.531					ND	
73 Dibromomethane	93		5.558					ND	
74 Dichlorobromomethane	83		5.678					ND	
75 2-Nitropropane	41		5.843					ND	
76 2-Chloroethyl vinyl ether	63		5.880					ND	
77 cis-1,3-Dichloropropene	75		6.026					ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.127					ND	
79 Toluene	91		6.315					ND	
80 trans-1,3-Dichloropropene	75		6.487					ND	
81 Ethyl methacrylate	69		6.510					ND	
82 1,1,2-Trichloroethane	97		6.660					ND	
83 Tetrachloroethene	164		6.753					ND	
84 1,3-Dichloropropane	76		6.810					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43		6.828					ND	
86 Tetrahydrothiophene	60		6.997					ND	
87 Chlorodibromomethane	129		7.001					ND	
88 Ethylene Dibromide	107		7.117					ND	
89 1-Chlorohexane	91		7.507					ND	U
90 Chlorobenzene	112		7.548					ND	
91 1,1,1,2-Tetrachloroethane	131		7.619					ND	
92 Ethylbenzene	106		7.627					ND	
93 m-Xylene & p-Xylene	106		7.743					ND	
94 o-Xylene	106		8.107					ND	
95 Styrene	104		8.122					ND	
96 Bromoform	173		8.298					ND	
97 Isopropylbenzene	105		8.444					ND	
98 cis-1,4-Dichloro-2-butene	53		8.493					ND	
99 Cyclohexanone	55		8.542					ND	
100 1,1,2,2-Tetrachloroethane	83		8.729					ND	
101 Bromobenzene	156		8.763					ND	
102 trans-1,4-Dichloro-2-butene	53		8.766					ND	
103 1,2,3-Trichloropropane	110		8.796					ND	
104 N-Propylbenzene	120		8.845					ND	
105 2-Chlorotoluene	126		8.939					ND	
106 1,3,5-Trimethylbenzene	105		9.014					ND	
107 4-Chlorotoluene	126		9.055					ND	
108 tert-Butylbenzene	119		9.325					ND	
110 1,2,4-Trimethylbenzene	105		9.381					ND	
109 Pentachloroethane	167		9.392					ND	
111 sec-Butylbenzene	134		9.542					ND	
112 1,3-Dichlorobenzene	146		9.670					ND	
113 4-Isopropyltoluene	119		9.689					ND	
114 1,4-Dichlorobenzene	146		9.767					ND	
115 1,2,3-Trimethylbenzene	105		9.786					ND	
116 n-Butylbenzene	91		10.094					ND	
117 1,2-Dichlorobenzene	146		10.120					ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899					ND	
119 1,3,5-Trichlorobenzene	180		11.087					ND	
120 1,2,4-Trichlorobenzene	180		11.724					ND	
121 Hexachlorobutadiene	225		11.863					ND	
122 Naphthalene	128		11.994					ND	
123 1,2,3-Trichlorobenzene	180		12.211					ND	
125 3-Ethylpentane	1		0.000					ND	
124 3-Methylhexane	1		0.000					ND	
132 3,3-Dimethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
126 Dimethyl disulfide	1		0.000					ND	
167 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
133 2-Methylhexane	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
166 Ethyl acrylate	55		0.000					ND	
131 2,3-Dimethylpentane	1		0.000					ND	
130 2,2-Dimethylpentane	1		0.000					ND	
127 n-Nonyl Aldehyde	1		0.000					ND	
129 2,2,3-Trimethylbutane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
134 Propene oxide TIC	58		5.334				ND		
S 135 1,2-Dichloroethene, Total (URS)	96		2.000				ND		
S 139 Xylenes, Total (URS)	1		0.000				ND		
S 138 Xylenes, Total	106		0.000				ND		
S 140 Trihalomethanes, Total	1		0.000				ND		
S 142 TAH	1				0			0	
S 136 1,3-Dichloropropene, Total	1		0.000				ND		
S 141 1,2-Dichloroethene, Total	1		0.000				ND		
S 137 Total BTEX	1		0.000				ND		

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

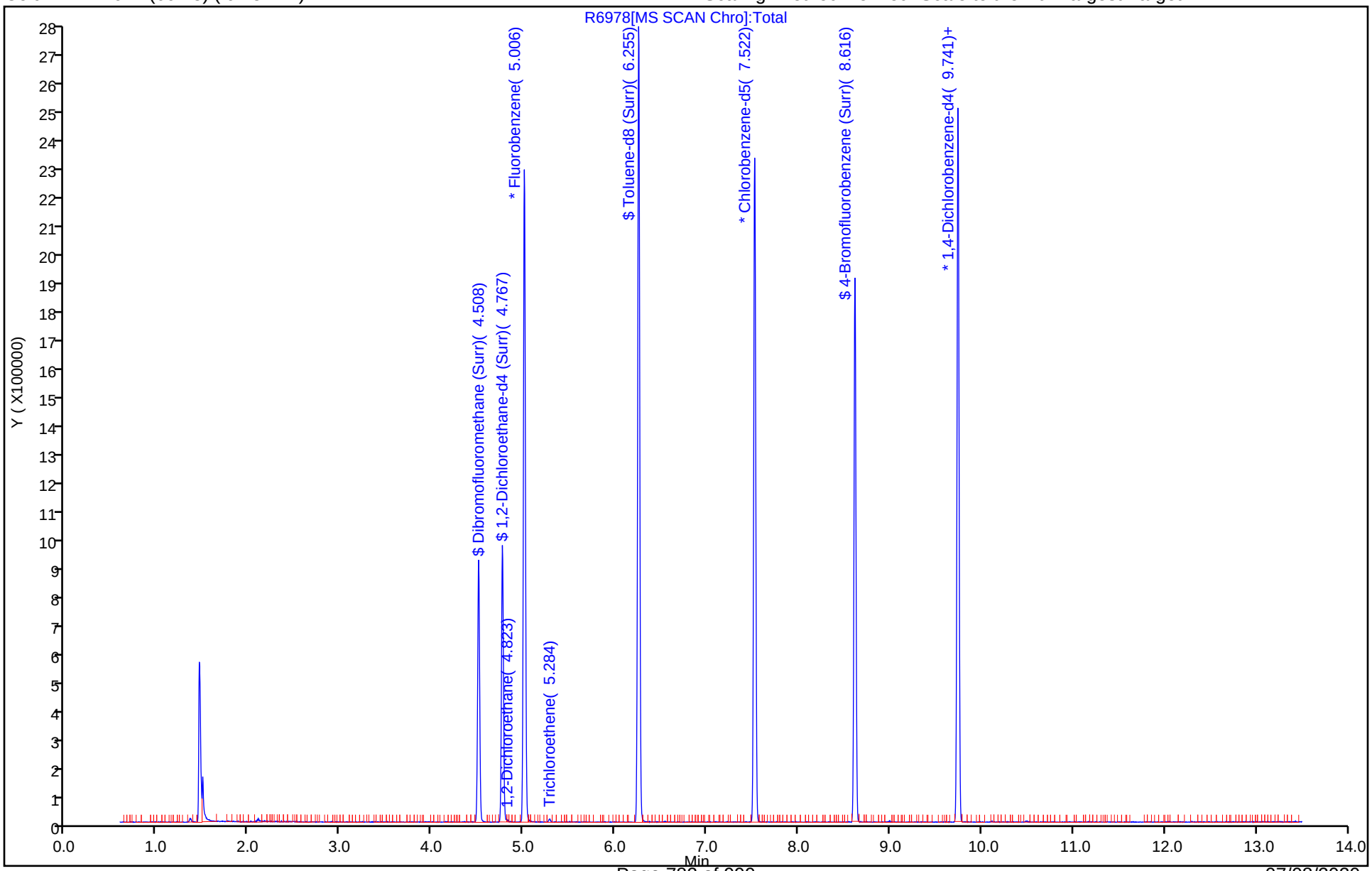
Report Date: 01-Jul-2020 12:16:35 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6978.D

Injection Date:	30-Jun-2020 00:53:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6978.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	30-Jun-2020 00:53:30	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	01-Jul-2020 11:33:26	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1044				

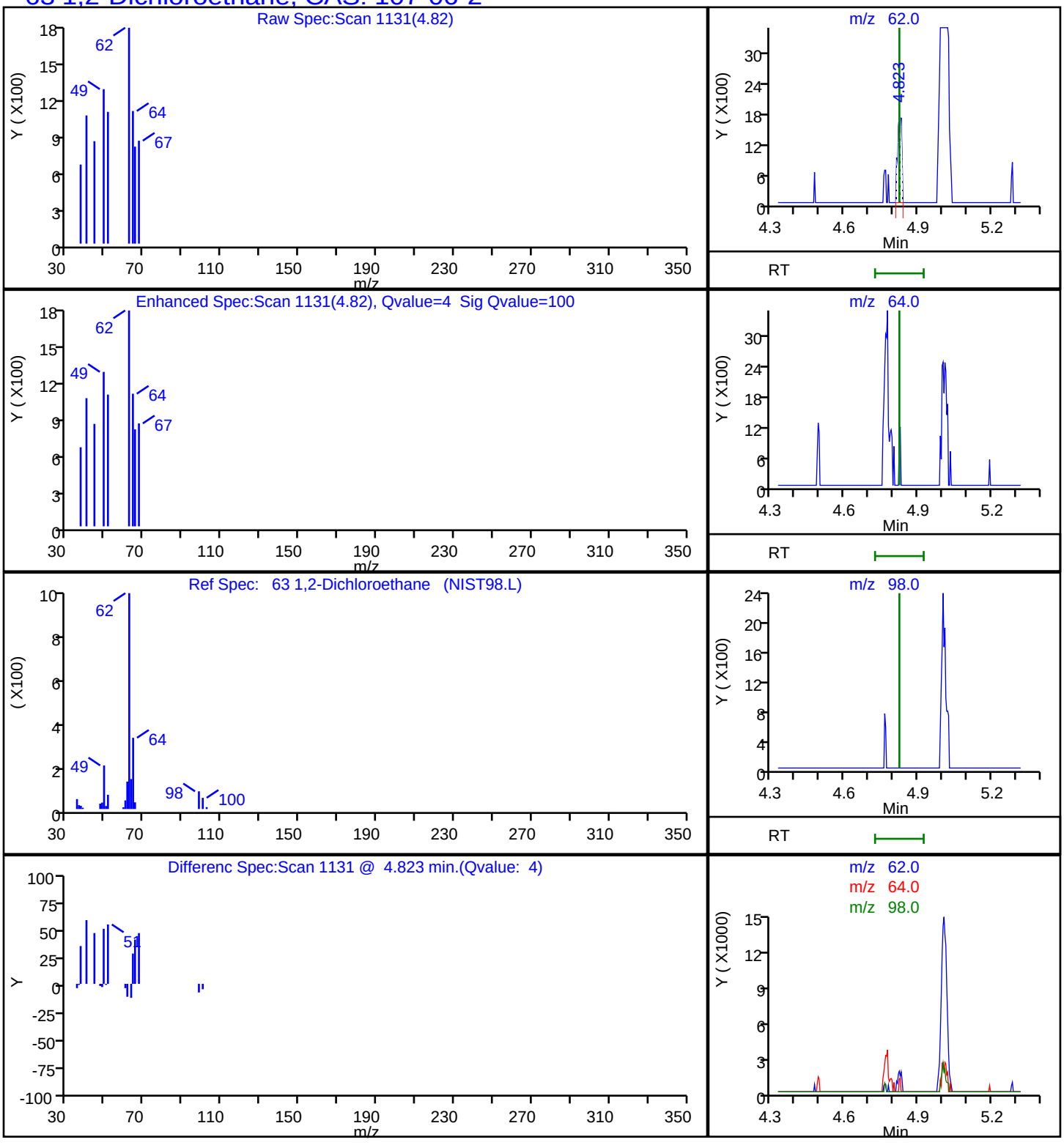
First Level Reviewer: chantajirochn Date: 01-Jul-2020 12:16:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	51.5	102.96
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	51.8	103.62
$ 6 Toluene-d8 (Surr)	50.0	47.8	95.60
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.0	96.09

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6978.D
Injection Date: 30-Jun-2020 00:53:30 Instrument ID: VMS_R1
Lims ID: MB
Client ID:
Operator ID: PETUNINP ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

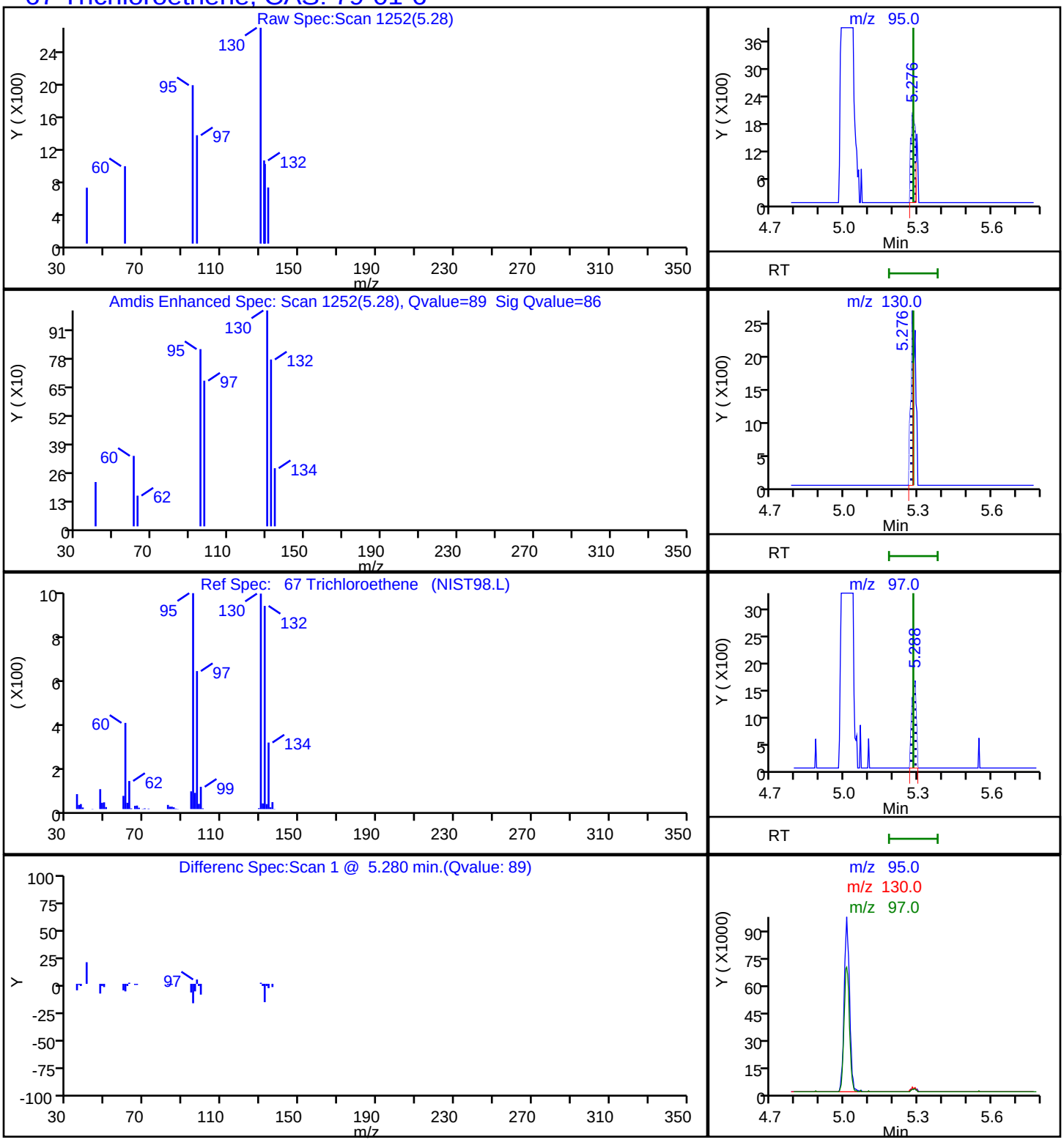
63 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6978.D
Injection Date: 30-Jun-2020 00:53:30 Instrument ID: VMS_R1
Lims ID: MB
Client ID:
Operator ID: PETUNINP ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500875/9

Matrix: Water Lab File ID: P2978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500875/9

Matrix: Water Lab File ID: P2978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2978.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jul-2020 01:05:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.103	5.109	-0.006	99	2296585	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.646	7.642	0.004	86	525168	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.873	9.869	0.004	96	751382	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	550324	50.0	49.8	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	97	616572	50.0	47.4	
$	6 Toluene-d8 (Surr)	98	6.369	6.366	0.003	93	2267142	50.0	49.1	
$	7 4-Bromofluorobenzene (Surr)	95	8.744	8.741	0.003	85	810344	50.0	48.9	
$	8 Trifluorotoluene (Surr)	1		0.000					ND	
$	9 BFB	95		3.569					ND	
	10 Dichlorodifluoromethane	85		1.660					ND	
	11 Chloromethane	50		1.839					ND	
	12 Vinyl chloride	62		1.945					ND	
	13 Ethylene oxide	43		2.197					ND	
	14 Bromomethane	94		2.230					ND	
	15 Chloroethane	64		2.325					ND	
	16 Dichlorofluoromethane	67		2.493					ND	
	17 Trichlorofluoromethane	101		2.536					ND	
	18 Ethanol	45		2.640					ND	
	19 Ethyl ether	59		2.747					ND	
	20 Propene oxide	58	2.792	2.788	0.004	39	604		0.2737	
	21 Acrolein	56		2.852					ND	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937					ND	
	22 1,1-Dichloroethene	96		2.937					ND	
	24 Acetone	43		2.958					ND	
	25 Isopropyl alcohol	45		3.041					ND	
	26 Iodomethane	142		3.063					ND	
	27 Carbon disulfide	76		3.127					ND	
	28 Acetonitrile	41		3.168					ND	
	29 Methyl acetate	43		3.190					ND	
	30 3-Chloro-1-propene	41		3.211					ND	
	31 Methylene Chloride	84		3.306					ND	
	32 2-Methyl-2-propanol	59		3.348					ND	
	33 Acrylonitrile	53		3.464					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Methyl tert-butyl ether	73		3.496					ND	
35 trans-1,2-Dichloroethene	96		3.517					ND	
36 Hexane	57		3.707					ND	
38 Vinyl acetate	43		3.802					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
40 Isopropyl ether	87		3.832					ND	
39 1,1-Dichloroethane	63		3.834					ND	
41 2-Chloro-1,3-butadiene	53		3.885					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
43 Tert-butyl ethyl ether	59		4.096					ND	
44 2-Butanone (MEK)	43		4.214					ND	
46 Ethyl acetate	43		4.233					ND	
47 cis-1,2-Dichloroethene	96		4.245					ND	
48 2,2-Dichloropropane	77		4.256					ND	
49 Propionitrile	54		4.265					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
50 sec-Butyl Alcohol	45		4.330					ND	
51 Methacrylonitrile	41		4.381					ND	
53 Chlorobromomethane	128		4.425					ND	
52 Tetrahydrofuran	42		4.435					ND	
54 Chloroform	83		4.477					ND	
55 1,1,1-Trichloroethane	97		4.625					ND	
56 Cyclohexane	56		4.688					ND	
57 1,1-Dichloropropene	75		4.741					ND	
59 Carbon tetrachloride	117		4.752					ND	
58 Isobutyl alcohol	41		4.752					ND	
60 Benzene	78		4.900					ND	
61 1,2-Dichloroethane	62		4.921					ND	
62 Tert-amyl methyl ether	73		4.962					ND	
63 n-Butanol	56		4.962					ND	
66 n-Heptane	43		5.079					ND	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131					ND	
67 Trichloroethene	95		5.385					ND	
68 2-Pentanone	43		5.480					ND	
69 Methylcyclohexane	55		5.585					ND	
71 Methyl methacrylate	100		5.595					ND	
70 1,2-Dichloropropane	63		5.596					ND	
72 1,4-Dioxane	88		5.638					ND	
73 Dibromomethane	93		5.670					ND	
74 Dichlorobromomethane	83		5.786					ND	
75 2-Nitropropane	41		5.954					ND	
76 2-Chloroethyl vinyl ether	63		5.986					ND	
77 cis-1,3-Dichloropropene	75		6.134					ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240					ND	
79 Toluene	91		6.430					ND	
80 trans-1,3-Dichloropropene	75		6.599					ND	
81 Ethyl methacrylate	69		6.620					ND	
82 1,1,2-Trichloroethane	97		6.778					ND	
83 Tetrachloroethene	164		6.873					ND	
84 1,3-Dichloropropane	76		6.926					ND	
85 2-Hexanone	43		6.947					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Tetrahydrothiophene	60		7.114					ND	
86 Chlorodibromomethane	129		7.126					ND	
88 Ethylene Dibromide	107		7.242					ND	
89 1-Chlorohexane	91		7.633					ND	
90 Chlorobenzene	112		7.675					ND	
91 1,1,1,2-Tetrachloroethane	131		7.749					ND	
92 Ethylbenzene	106		7.749					ND	
93 m-Xylene & p-Xylene	106		7.865					ND	
94 o-Xylene	106		8.224					ND	
95 Styrene	104		8.245					ND	
96 Bromoform	173		8.435					ND	
97 Isopropylbenzene	105		8.572					ND	
98 cis-1,4-Dichloro-2-butene	53		8.613					ND	
99 Cyclohexanone	55	8.744	8.667	0.077	36	1924		3.58	
100 1,1,2,2-Tetrachloroethane	83		8.857					ND	
101 Bromobenzene	156		8.888					ND	
102 trans-1,4-Dichloro-2-butene	53		8.888					ND	
103 1,2,3-Trichloropropane	110		8.920					ND	
104 N-Propylbenzene	120		8.973					ND	
105 2-Chlorotoluene	126		9.068					ND	
106 1,3,5-Trimethylbenzene	105		9.142					ND	
107 4-Chlorotoluene	126		9.184					ND	
108 tert-Butylbenzene	119		9.448					ND	
109 1,2,4-Trimethylbenzene	105		9.511					ND	
110 sec-Butylbenzene	134		9.669					ND	
111 1,3-Dichlorobenzene	146		9.796					ND	
112 4-Isopropyltoluene	119		9.817					ND	
113 1,4-Dichlorobenzene	146		9.902					ND	
114 1,2,3-Trimethylbenzene	105		9.911					ND	
115 n-Butylbenzene	91		10.218					ND	
116 1,2-Dichlorobenzene	146		10.250					ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031					ND	
118 1,3,5-Trichlorobenzene	180		11.219					ND	
119 1,2,4-Trichlorobenzene	180		11.854					ND	
120 Hexachlorobutadiene	225		12.002					ND	
121 Naphthalene	128		12.128					ND	
122 1,2,3-Trichlorobenzene	180		12.350					ND	
131 Propene oxide TIC	58		0.000					ND	
125 2,2,3-Trimethylbutane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
136 1-Chlorohexane TIC	1		0.000					ND	
137 Cyclohexane TIC	1		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
133 Methyl cyclohexane TIC	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 Pentachloroethane	167		0.000				ND		
S 139 1,2-Dichloroethene, Total (URS)	96		2.000				ND		
S 142 Xylenes, Total	106		0.000				ND		
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000				ND		
S 143 Xylenes, Total (URS)	1		0.000				ND		
S 146 Total BTEX	1		0.000				ND		
S 145 1,3-Dichloropropene, Total	1		0.000				ND		
S 144 1,2-Dichloroethene, Total	1		0.000				ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

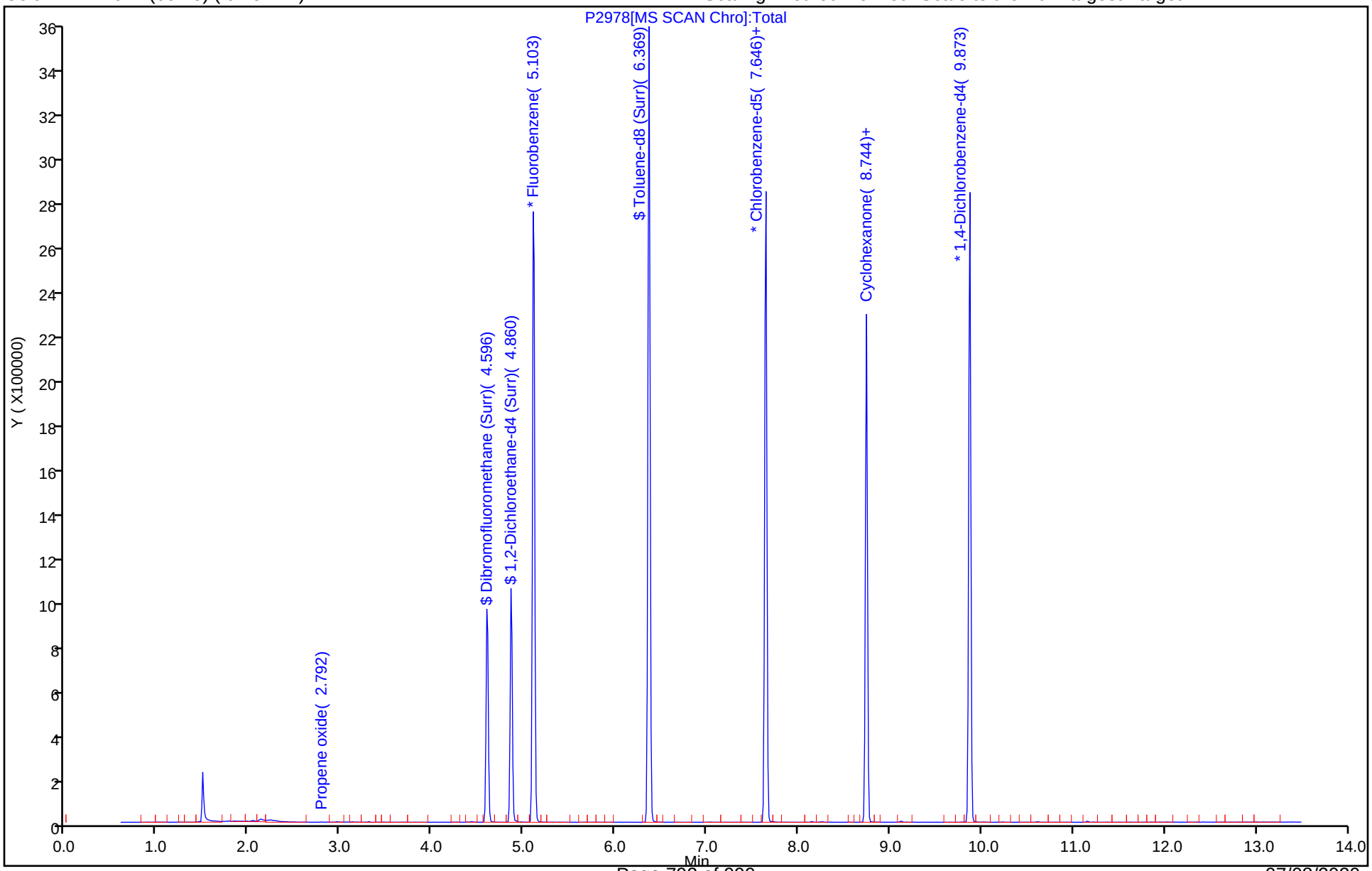
Report Date: 02-Jul-2020 22:13:42 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2978.D

Injection Date:	02-Jul-2020 01:05:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2978.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jul-2020 01:05:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.8	99.51
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.75
$ 6 Toluene-d8 (Surr)	50.0	49.1	98.12
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.9	97.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-501117/9

Matrix: Water Lab File ID: R7179.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 11:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-501117/9

Matrix: Water Lab File ID: R7179.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 11:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7179.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Jul-2020 11:30:30 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

First Level Reviewer: peppinga Date: 06-Jul-2020 12:08:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	2295193	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.518	0.004	86	526778	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	96	816866	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	93	574922	50.0	49.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	634325	50.0	44.8	
$ 6 Toluene-d8 (Surr)	98	6.255	6.251	0.004	93	2207479	50.0	48.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.617	0.000	86	815740	50.0	47.7	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95		3.516					ND	
10 Dichlorodifluoromethane	85		1.652					ND	
11 Chloromethane	50		1.828					ND	
12 Vinyl chloride	62		1.918					ND	
13 Ethylene oxide	43		2.165					ND	
14 Bromomethane	94		2.195					ND	
15 Chloroethane	64		2.285					ND	
16 Dichlorofluoromethane	67		2.450					ND	
17 Trichlorofluoromethane	101		2.484					ND	
18 Ethanol	45		2.600					ND	
19 Ethyl ether	59		2.694					ND	
20 Propene oxide	58		2.735					ND	
21 Acrolein	56		2.799					ND	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.877					ND	
23 1,1-Dichloroethene	96		2.881					ND	
24 Acetone	43	2.903	2.900	0.003	69	1752		0.5317	
25 Isopropyl alcohol	45		2.982					ND	
26 Iodomethane	142		3.001					ND	
27 Carbon disulfide	76		3.061					ND	U
28 Acetonitrile	41		3.106					ND	
29 Methyl acetate	43		3.125					ND	
30 3-Chloro-1-propene	41		3.147					ND	
31 Methylene Chloride	84		3.237					ND	
32 2-Methyl-2-propanol	59		3.278					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53		3.398					ND	
34 Methyl tert-butyl ether	73		3.421					ND	
35 trans-1,2-Dichloroethene	96		3.436					ND	
36 Chlorotrifluoroethene	116		3.531					ND	
37 Hexane	57		3.623					ND	
38 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.727					ND	
39 Vinyl acetate	43		3.728					ND	
41 Isopropyl ether	87		3.751					ND	
40 1,1-Dichloroethane	63		3.751					ND	
42 2-Chloro-1,3-butadiene	53		3.803					ND	
43 2-Chloro-1,1,1-Trifluoroethane	118		3.951					ND	
44 Tert-butyl ethyl ether	59		4.009					ND	
45 2-Butanone (MEK)	43		4.129					ND	
46 Ethyl acetate	43		4.144					ND	
47 cis-1,2-Dichloroethene	96		4.152					ND	
48 2,2-Dichloropropane	77		4.163					ND	
49 Propionitrile	54		4.178					ND	
50 sec-Butyl Alcohol	45		4.238					ND	
51 Methacrylonitrile	41		4.290					ND	
52 Chlorobromomethane	128		4.328					ND	
53 Tetrahydrofuran	42		4.339					ND	
54 Chloroform	83		4.388					ND	
55 1,1,1-Trichloroethane	97		4.530					ND	
56 Cyclohexane	56		4.587					ND	
57 1,1-Dichloropropene	75		4.643					ND	
59 Carbon tetrachloride	117		4.647					ND	
60 Isobutyl alcohol	41		4.654					ND	
58 1,2-Dichloro-1,1,2-trifluoroetha	117		4.678					ND	
61 1,1,1-Trifluoro-2,2-dichloroetha	83		4.706					ND	
62 Benzene	78		4.793					ND	
63 1,2-Dichloroethane	62		4.823					ND	U
64 Tert-amyl methyl ether	73		4.864					ND	
65 n-Heptane	43		4.973					ND	
66 n-Butanol	56		5.145					ND	
67 Trichloroethene	95		5.276					ND	
68 2-Pentanone	43		5.381					ND	
69 Methylcyclohexane	55		5.468					ND	
70 1,2-Dichloropropane	63		5.483					ND	
71 Methyl methacrylate	100		5.490					ND	
72 1,4-Dioxane	88		5.528					ND	
73 Dibromomethane	93		5.550					ND	
74 Dichlorobromomethane	83		5.678					ND	
75 2-Nitropropane	41		5.842					ND	
76 2-Chloroethyl vinyl ether	63		5.876					ND	
77 cis-1,3-Dichloropropene	75		6.022					ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.124					ND	
79 Toluene	91		6.307					ND	
80 trans-1,3-Dichloropropene	75		6.487					ND	
81 Ethyl methacrylate	69		6.510					ND	
82 1,1,2-Trichloroethane	97		6.660					ND	
83 Tetrachloroethene	164		6.753					ND	
84 1,3-Dichloropropane	76		6.806					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43		6.825					ND	
86 Tetrahydrothiophene	60		6.997					ND	
87 Chlorodibromomethane	129		7.001					ND	
88 Ethylene Dibromide	107		7.117					ND	
89 1-Chlorohexane	91		7.507					ND	U
90 Chlorobenzene	112		7.548					ND	
91 1,1,1,2-Tetrachloroethane	131		7.619					ND	
92 Ethylbenzene	106		7.627					ND	
93 m-Xylene & p-Xylene	106		7.743					ND	
94 o-Xylene	106		8.099					ND	
95 Styrene	104		8.118					ND	
96 Bromoform	173		8.302					ND	
97 Isopropylbenzene	105		8.440					ND	
98 cis-1,4-Dichloro-2-butene	53		8.493					ND	
99 Cyclohexanone	55		8.542					ND	U
100 1,1,2,2-Tetrachloroethane	83		8.729					ND	
101 Bromobenzene	156		8.759					ND	
102 trans-1,4-Dichloro-2-butene	53		8.770					ND	
103 1,2,3-Trichloropropane	110		8.793					ND	
104 N-Propylbenzene	120		8.841					ND	
105 2-Chlorotoluene	126		8.935					ND	
106 1,3,5-Trimethylbenzene	105		9.014					ND	
107 4-Chlorotoluene	126		9.051					ND	
108 tert-Butylbenzene	119		9.321					ND	
110 1,2,4-Trimethylbenzene	105		9.381					ND	
109 Pentachloroethane	167		9.392					ND	
111 sec-Butylbenzene	134		9.542					ND	
112 1,3-Dichlorobenzene	146		9.666					ND	
113 4-Isopropyltoluene	119		9.689					ND	
114 1,4-Dichlorobenzene	146		9.764					ND	
115 1,2,3-Trimethylbenzene	105		9.786					ND	
116 n-Butylbenzene	91		10.093					ND	
117 1,2-Dichlorobenzene	146		10.120					ND	
118 1,2-Dibromo-3-Chloropropane	157		10.899					ND	
119 1,3,5-Trichlorobenzene	180		11.087					ND	
120 1,2,4-Trichlorobenzene	180		11.724					ND	
121 Hexachlorobutadiene	225		11.863					ND	
122 Naphthalene	128		11.990					ND	
123 1,2,3-Trichlorobenzene	180		12.208					ND	
133 2-Methylhexane	1		0.000					ND	
130 2,2-Dimethylpentane	1		0.000					ND	
131 2,3-Dimethylpentane	1		0.000					ND	
127 n-Nonyl Aldehyde	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
132 3,3-Dimethylpentane	1		0.000					ND	
125 3-Ethylpentane	1		0.000					ND	
126 Dimethyl disulfide	1		0.000					ND	
129 2,2,3-Trimethylbutane	1		0.000					ND	
166 Ethyl acrylate	55		0.000					ND	
124 3-Methylhexane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
167 1-Chloro-1-fluoroethane TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
134 Propene oxide TIC	58		5.334				ND		
S 135 1,2-Dichloroethene, Total (URS)	96		2.000				ND		
S 139 Xylenes, Total (URS)	1		0.000				ND		
S 138 Xylenes, Total	106		0.000				ND		
S 140 Trihalomethanes, Total	1		0.000				ND		
S 142 TAH	1				0			0	
S 136 1,3-Dichloropropene, Total	1		0.000				ND		
S 141 1,2-Dichloroethene, Total	1		0.000				ND		
S 137 Total BTEX	1		0.000				ND		

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

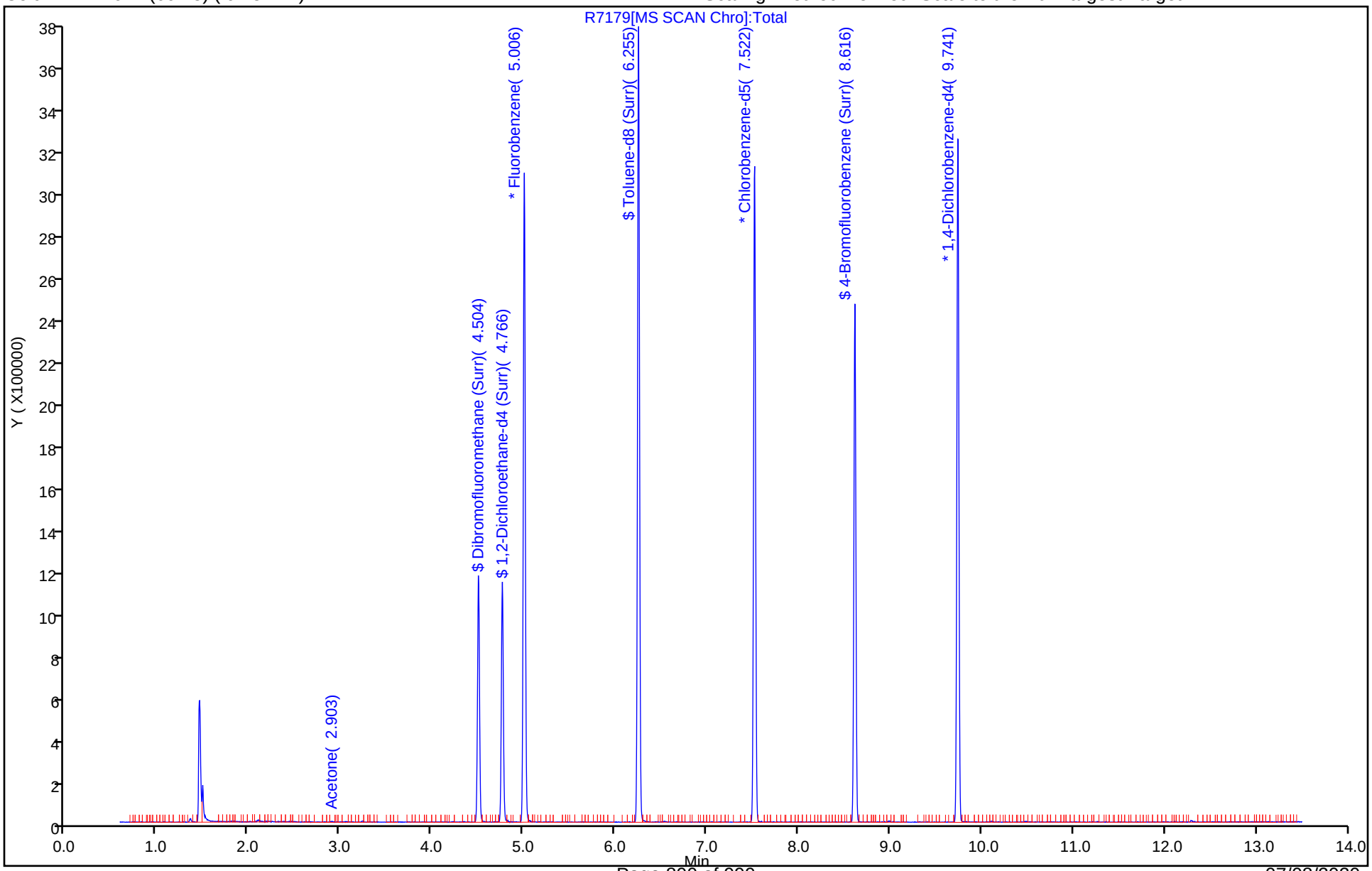
Report Date: 07-Jul-2020 08:58:14 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7179.D

Injection Date:	06-Jul-2020 11:30:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7179.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Jul-2020 11:30:30 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

First Level Reviewer: peppinga Date: 06-Jul-2020 12:08:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.6	99.27
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	44.8	89.50
$ 6 Toluene-d8 (Surr)	50.0	48.4	96.70
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.35

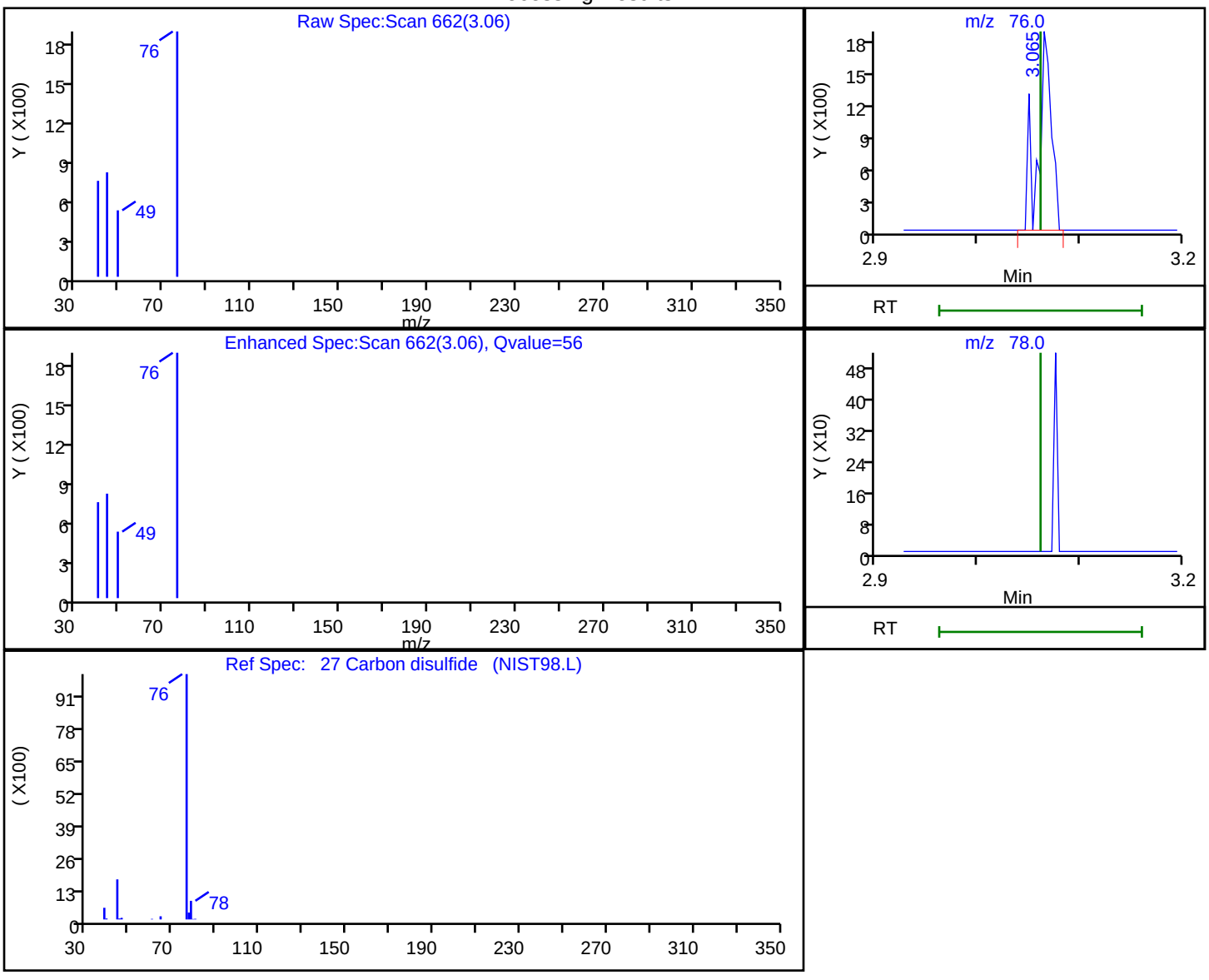
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7179.D
Injection Date: 06-Jul-2020 11:30:30 Instrument ID: VMS_R1
Lims ID: MB
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.06	76.00	1668	0.405136
3.06	78.00	0	

Reviewer: peppinga, 06-Jul-2020 12:08:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

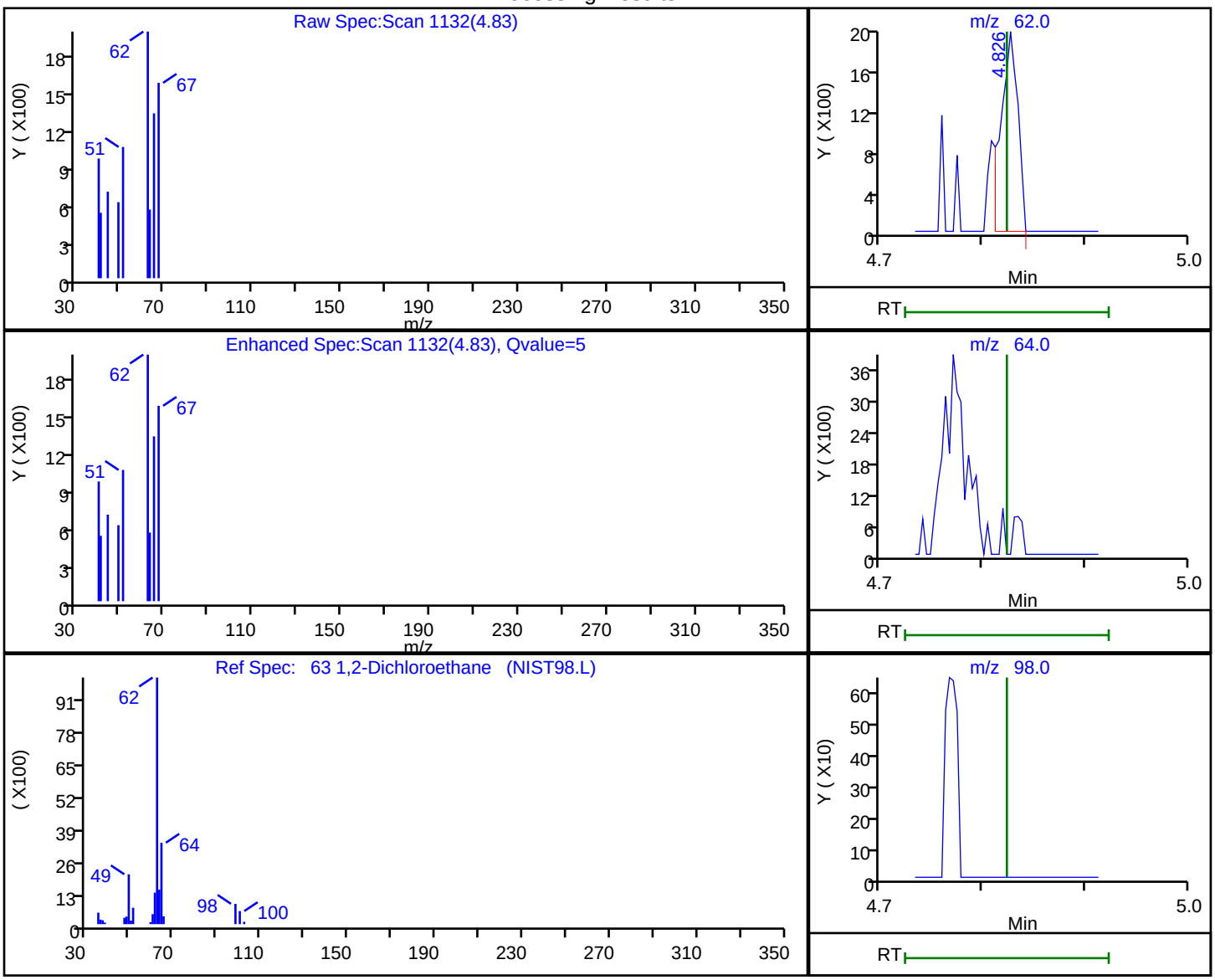
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7179.D
Injection Date: 06-Jul-2020 11:30:30 Instrument ID: VMS_R1
Lims ID: MB
Client ID:
Operator ID: PEPPINGA ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSR1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

63 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.83	62.00	2193	0.172776
4.82	64.00	0	
4.82	98.00	0	

Reviewer: peppinga, 06-Jul-2020 12:08:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500579/4

Matrix: Water Lab File ID: P2853.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	101		10	1.9
107-02-8	Acrolein	141		20	2.8
107-13-1	Acrylonitrile	260		20	1.4
71-43-2	Benzene	22.2		1.0	0.16
74-97-5	Chlorobromomethane	22.3		1.0	0.10
75-27-4	Dichlorobromomethane	23.9		1.0	0.17
75-25-2	Bromoform	24.2		1.0	0.46
74-83-9	Bromomethane	21.5		2.0	0.21
78-93-3	2-Butanone (MEK)	105		6.0	2.0
75-15-0	Carbon disulfide	15.2		2.0	0.17
56-23-5	Carbon tetrachloride	21.1		1.0	0.19
108-90-7	Chlorobenzene	22.6		1.0	0.17
124-48-1	Chlorodibromomethane	24.5		1.0	0.17
75-00-3	Chloroethane	21.6		2.0	0.41
67-66-3	Chloroform	22.1		1.0	0.16
74-87-3	Chloromethane	19.0		2.0	0.30
107-05-1	Allyl chloride	21.7		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	26.4		5.0	0.47
74-95-3	Dibromomethane	23.5		1.0	0.17
95-50-1	1,2-Dichlorobenzene	22.6		1.0	0.15
541-73-1	1,3-Dichlorobenzene	23.8		1.0	0.13
106-46-7	1,4-Dichlorobenzene	23.8		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	24.8		3.0	0.80
75-71-8	Dichlorodifluoromethane	16.3		2.0	0.31
75-34-3	1,1-Dichloroethane	22.2		1.0	0.22
107-06-2	1,2-Dichloroethane	23.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.4		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	20.1		1.0	0.15
75-35-4	1,1-Dichloroethene	17.7		1.0	0.23
78-87-5	1,2-Dichloropropane	24.5		1.0	0.18
142-28-9	1,3-Dichloropropane	23.6		1.0	0.090
594-20-7	2,2-Dichloropropane	23.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	24.8		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.6		3.0	0.19
563-58-6	1,1-Dichloropropene	21.1		1.0	0.19
100-41-4	Ethylbenzene	22.8		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500579/4

Matrix: Water Lab File ID: P2853.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	26.0		3.0	0.86
591-78-6	2-Hexanone	111		5.0	1.7
74-88-4	Iodomethane	13.7		1.0	0.23
78-83-1	Isobutyl alcohol	704		110	37
75-09-2	Methylene Chloride	22.6		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	111		5.0	0.98
100-42-5	Styrene	24.0		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.3		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	25.7		1.0	0.21
127-18-4	Tetrachloroethene	22.2		1.0	0.20
108-88-3	Toluene	22.7		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	23.2		1.0	0.21
71-55-6	1,1,1-Trichloroethane	21.4		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.0		1.0	0.27
79-01-6	Trichloroethene	21.7		1.0	0.16
75-69-4	Trichlorofluoromethane	20.0		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.9		2.5	0.33
108-05-4	Vinyl acetate	54.9		3.0	0.94
75-01-4	Vinyl chloride	20.3		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	23.3		2.0	0.15
95-47-6	o-Xylene	23.5		1.0	0.19
1330-20-7	Xylenes, Total	46.8		2.0	0.19
106-93-4	1,2-Dibromoethane	23.6		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2853.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 22:24:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.112	-0.001	99	2592968	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	586666	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.872	-0.002	96	822245	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	92	611708	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	704475	50.0	47.9	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2557536	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	82	905560	50.0	49.9	
10 Dichlorodifluoromethane	85	1.670	1.670	0.000	99	118237	25.0	16.3	
11 Chloromethane	50	1.839	1.839	0.000	99	189391	25.0	19.0	
12 Vinyl chloride	62	1.945	1.945	0.000	98	230197	25.0	20.3	
14 Bromomethane	94	2.230	2.230	0.000	90	97436	25.0	21.5	
15 Chloroethane	64	2.325	2.325	0.000	100	156266	25.0	21.6	
16 Dichlorofluoromethane	67	2.494	2.494	0.000	97	366980	25.0	21.7	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	98	280760	25.0	20.0	
19 Ethyl ether	59	2.747	2.747	0.000	92	210551	25.0	23.8	
21 Acrolein	56	2.852	2.852	0.000	100	307231	246.9	140.9	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	65	93638	25.0	14.8	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	149002	25.0	17.7	
24 Acetone	43	2.958	2.958	0.000	100	350561	100.0	101.4	
26 Iodomethane	142	3.063	3.063	0.000	98	106368	25.0	13.7	
27 Carbon disulfide	76	3.127	3.127	0.000	99	399730	25.0	15.2	
29 Methyl acetate	43	3.190	3.190	0.000	98	461883	50.0	52.4	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	312729	25.0	21.7	
31 Methylene Chloride	84	3.306	3.306	0.000	93	222402	25.0	22.6	
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	98	305510	250.0	268.8	
33 Acrylonitrile	53	3.464	3.464	0.000	99	1240381	250.0	259.9	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	687951	25.0	24.3	
35 trans-1,2-Dichloroethene	96	3.507	3.517	-0.010	98	199025	25.0	20.1	
36 Hexane	57	3.707	3.707	0.000	91	176054	25.0	12.9	
38 Vinyl acetate	43	3.802	3.802	0.000	97	1173347	50.0	54.9	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	401939	25.0	22.2	
44 2-Butanone (MEK)	43	4.214	4.214	0.000	100	606221	100.0	104.9	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	83	246774	25.0	22.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.256	4.256	0.000	90	282657	25.0	23.0	
50 sec-Butyl Alcohol	45	4.319	4.330	-0.011	99	806090	750.0	867.2	
53 Chlorobromomethane	128	4.425	4.425	0.000	98	109994	25.0	22.3	
52 Tetrahydrofuran	42	4.425	4.435	-0.010	89	207567	50.0	54.2	
54 Chloroform	83	4.477	4.477	0.000	93	385491	25.0	22.1	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	99	295524	25.0	21.4	
56 Cyclohexane	56	4.689	4.689	0.000	89	322740	25.0	18.4	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	96	304972	25.0	21.1	
59 Carbon tetrachloride	117	4.741	4.752	-0.011	70	238177	25.0	21.1	
58 Isobutyl alcohol	41	4.741	4.752	-0.011	94	282204	625.0	703.6	
60 Benzene	78	4.889	4.900	-0.011	96	947088	25.0	22.2	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	310791	25.0	23.1	
66 n-Heptane	43	5.079	5.079	0.000	92	230882	25.0	18.1	
67 Trichloroethene	95	5.385	5.385	0.000	97	226959	25.0	21.7	
68 2-Pentanone	43	5.480	5.480	0.000	99	1000175	100.0	116.5	
69 Methylcyclohexane	55	5.575	5.586	-0.011	93	265687	25.0	20.0	
70 1,2-Dichloropropane	63	5.586	5.596	-0.010	98	270194	25.0	24.5	
72 1,4-Dioxane	88	5.628	5.638	-0.010	94	77970	500.0	508.2	
73 Dibromomethane	93	5.659	5.659	0.000	94	148589	25.0	23.5	
74 Dichlorobromomethane	83	5.786	5.786	0.000	99	305979	25.0	23.9	
76 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	90	191651	25.0	25.1	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	96	389840	25.0	24.8	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	96	1221061	100.0	110.7	
79 Toluene	91	6.430	6.430	0.000	98	1016033	25.0	22.7	
80 trans-1,3-Dichloropropene	75	6.599	6.599	0.000	96	331007	25.0	23.6	
81 Ethyl methacrylate	69	6.620	6.620	0.000	89	375422	25.0	26.0	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	225795	25.0	25.0	
83 Tetrachloroethene	164	6.873	6.873	0.000	95	158970	25.0	22.2	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	98	404792	25.0	23.6	
85 2-Hexanone	43	6.936	6.947	-0.011	96	871744	100.0	110.5	
86 Chlorodibromomethane	129	7.116	7.126	-0.010	90	216140	25.0	24.5	
88 Ethylene Dibromide	107	7.242	7.242	0.000	98	224901	25.0	23.6	
89 1-Chlorohexane	91	7.622	7.633	-0.011	98	327423	25.0	25.2	
90 Chlorobenzene	112	7.675	7.675	0.000	97	627985	25.0	22.6	
92 Ethylbenzene	106	7.749	7.749	0.000	98	347238	25.0	22.8	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	95	199221	25.0	23.3	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	426226	25.0	23.3	
94 o-Xylene	106	8.224	8.224	0.000	97	413361	25.0	23.5	
95 Styrene	104	8.245	8.245	0.000	95	712311	25.0	24.0	
96 Bromoform	173	8.424	8.424	0.000	94	126544	25.0	24.2	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	1049564	25.0	24.4	
99 Cyclohexanone	55	8.667	8.667	0.000	91	789176	1000.0	1313.7	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	323553	25.0	25.7	
101 Bromobenzene	156	8.889	8.889	0.000	96	238460	25.0	23.5	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.889	0.000	85	83060	25.0	24.8	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	82	91557	25.0	23.9	
104 N-Propylbenzene	120	8.962	8.973	-0.011	99	284434	25.0	23.8	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	237924	25.0	23.6	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	94	843734	25.0	23.9	
107 4-Chlorotoluene	126	9.184	9.184	0.000	98	249298	25.0	23.6	
108 tert-Butylbenzene	119	9.448	9.448	0.000	94	692767	25.0	23.4	
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	872070	25.0	24.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	201617	25.0	23.3	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	98	436710	25.0	23.8	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	862045	25.0	23.9	
113 1,4-Dichlorobenzene	146	9.902	9.902	0.000	95	453220	25.0	23.8	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	805804	25.0	23.9	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	412676	25.0	22.6	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	82	56590	25.0	26.4	
119 1,2,4-Trichlorobenzene	180	11.854	11.854	0.000	94	230267	25.0	23.2	
120 Hexachlorobutadiene	225	12.002	12.002	0.000	96	73736	25.0	20.4	
121 Naphthalene	128	12.128	12.128	0.000	97	821352	25.0	25.6	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	94	209691	25.0	23.0	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	42.5	
S 142 Xylenes, Total	106				0		50.0	46.7	
S 140 Trihalomethanes, Total	1				0		100.0	94.8	
S 143 Xylenes, Total (URS)	1				0		50.0	46.7	
S 145 1,3-Dichloropropene, Total	1				0		50.0	48.4	
S 144 1,2-Dichloroethene, Total	1				0		50.0	42.5	

Reagents:

MV-Gas B_00064	Amount Added: 5.00	Units: uL	
MV-MegaMain B_00031	Amount Added: 12.50	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

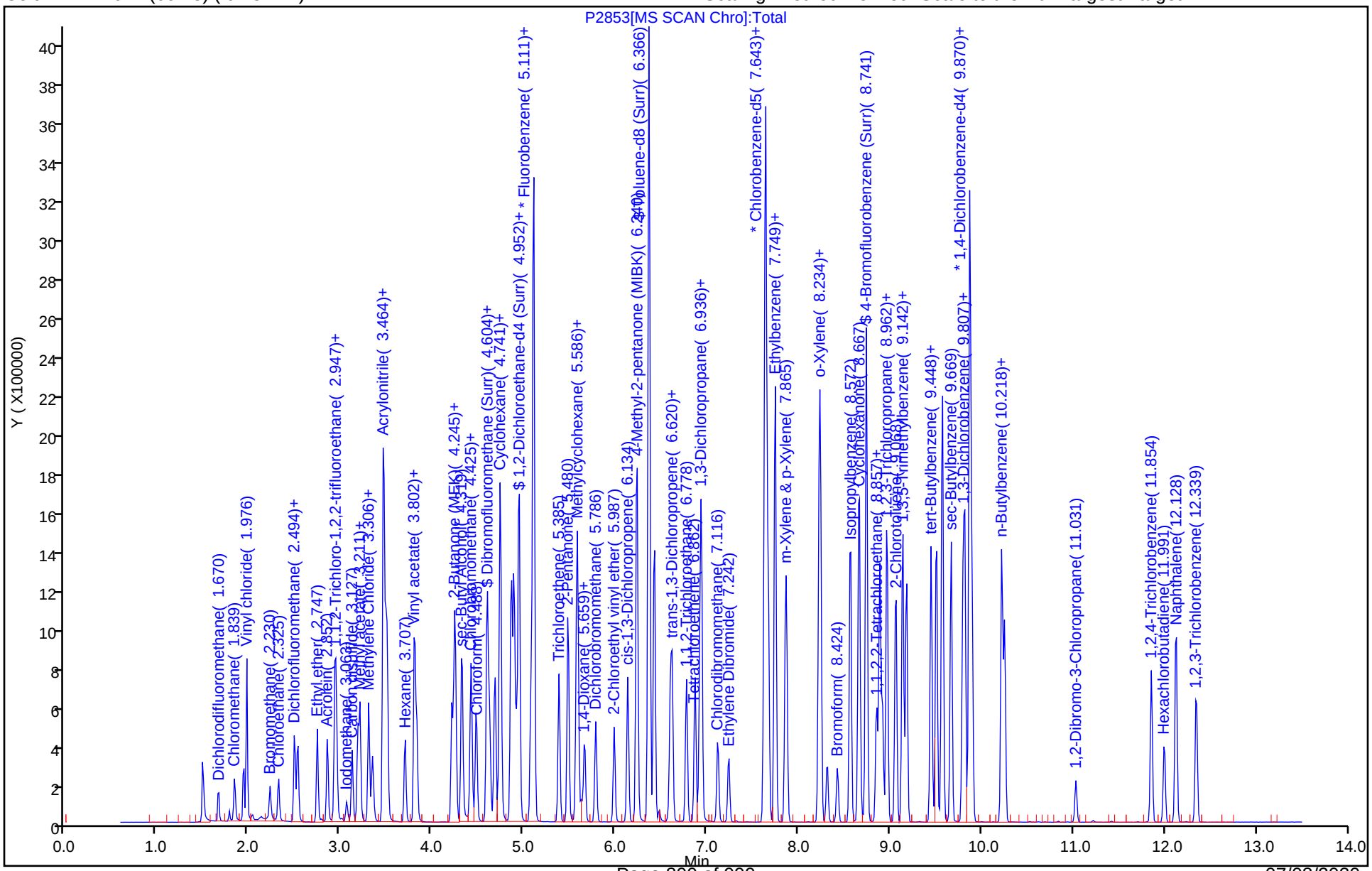
Report Date: 30-Jun-2020 20:51:15 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2853.D

Injection Date:	29-Jun-2020 22:24:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2853.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 22:24:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.0	97.97
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.9	95.89
$ 6 Toluene-d8 (Surr)	50.0	49.5	99.09
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.9	99.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500579/6

Matrix: Water Lab File ID: P2855.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	233		30	9.6
126-99-8	Chloroprene	23.4		1.0	0.21
126-98-7	Methacrylonitrile	238		10	1.6
80-62-6	Methyl methacrylate	51.1		4.0	1.1
107-12-0	Propionitrile	246		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	101		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2855.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 23:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 29-Jun-2020 23:33:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.112	-0.003	98	2575491	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.645	-0.003	88	577116	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.872	-0.003	97	809869	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	607216	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.866	4.868	-0.002	96	694604	50.0	47.6	
$ 6 Toluene-d8 (Surr)	98	6.365	6.366	-0.001	93	2526339	50.0	49.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.739	8.741	-0.002	82	900441	50.0	50.4	
13 Ethylene oxide	43	2.197	2.200	-0.003	100	1607233	NC	NC	
18 Ethanol	45	2.650	2.643	0.007	99	243145	1500.0	1309.9	
20 Propene oxide	58	2.788	2.791	-0.003	97	5902834	2500.0	2385.3	
25 Isopropyl alcohol	45	3.041	3.044	-0.003	98	204281	250.0	214.0	
28 Acetonitrile	41	3.167	3.171	-0.004	99	439124	250.0	233.1	
40 Isopropyl ether	87	3.832	3.825	0.007	95	213612	25.0	25.1	
41 2-Chloro-1,3-butadiene	53	3.885	3.888	-0.003	90	364684	25.0	23.4	
43 Tert-butyl ethyl ether	59	4.096	4.089	0.007	97	709756	25.0	22.5	
46 Ethyl acetate	43	4.233	4.226	0.007	99	597952	50.0	63.7	
49 Propionitrile	54	4.265	4.268	-0.003	99	500556	250.0	246.3	
51 Methacrylonitrile	41	4.381	4.384	-0.003	91	1859989	250.0	238.5	
62 Tert-amyl methyl ether	73	4.961	4.965	-0.004	86	688178	25.0	22.5	
63 n-Butanol	56	4.961	4.965	-0.004	51	263395	625.0	744.4	
71 Methyl methacrylate	100	5.595	5.598	-0.003	92	158586	50.0	51.1	
75 2-Nitropropane	41	5.953	5.946	0.007	98	120405	50.0	40.5	
87 Tetrahydrothiophene	60	7.114	7.117	-0.003	92	85981	50.0	29.1	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.616	-0.003	89	169886	50.0	44.7	
114 1,2,3-Trimethylbenzene	105	9.911	9.914	-0.003	99	890945	25.0	26.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.222	-0.003	96	259240	25.0	23.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

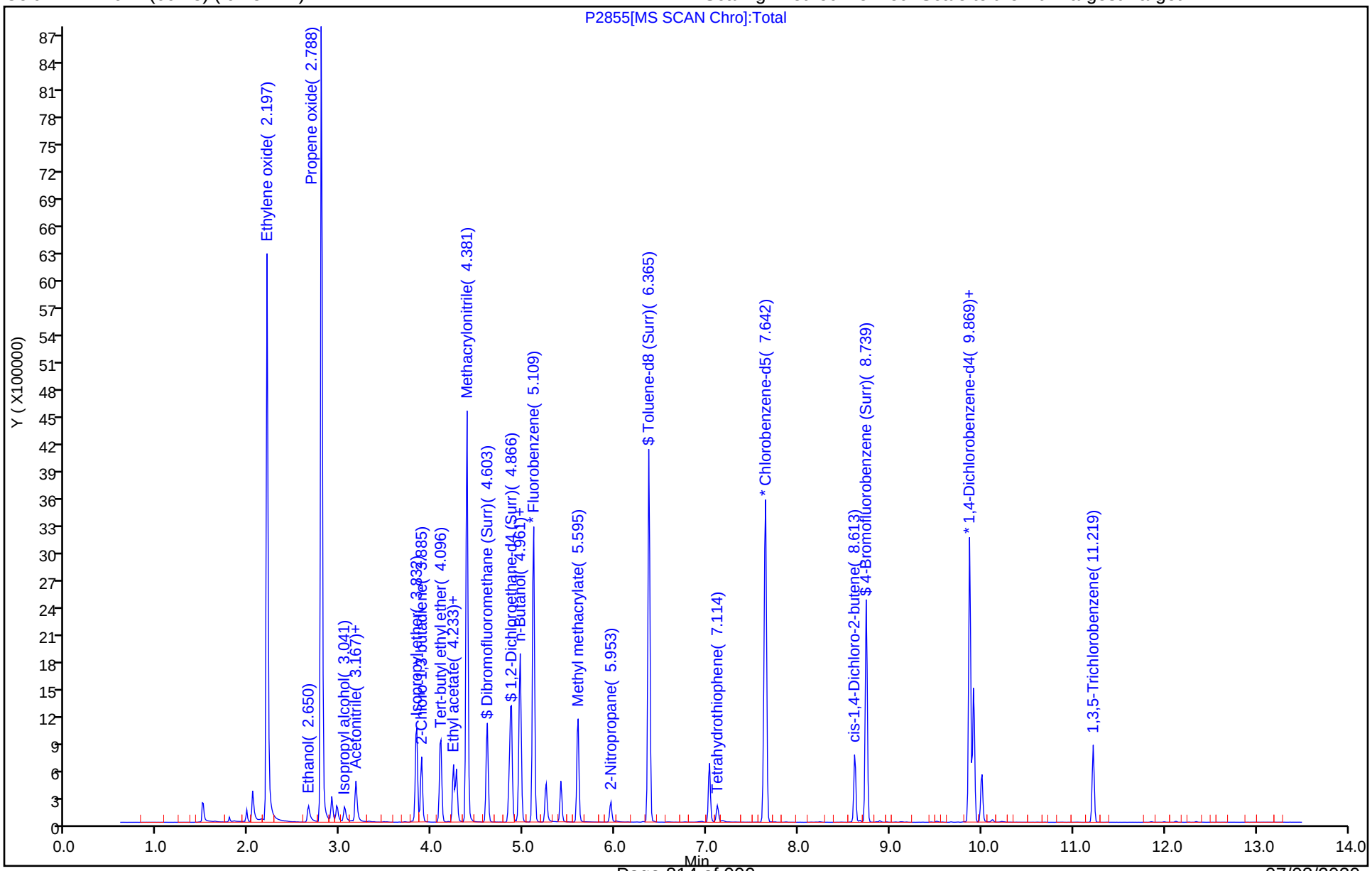
Report Date: 30-Jun-2020 20:51:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2855.D

Injection Date:	29-Jun-2020 23:07:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2855.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	29-Jun-2020 23:07:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCS S				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:51:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 29-Jun-2020 23:33:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.0	97.91
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.18
$ 6 Toluene-d8 (Surr)	50.0	49.7	99.50
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.4	100.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500580/4

Matrix: Water Lab File ID: R6973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	78.8		10	1.9
107-02-8	Acrolein	127		20	2.8
107-13-1	Acrylonitrile	240		20	1.4
71-43-2	Benzene	24.4		1.0	0.16
74-97-5	Chlorobromomethane	25.8		1.0	0.10
75-27-4	Dichlorobromomethane	26.8		1.0	0.17
75-25-2	Bromoform	22.3		1.0	0.46
74-83-9	Bromomethane	25.2		2.0	0.21
78-93-3	2-Butanone (MEK)	88.0		6.0	2.0
75-15-0	Carbon disulfide	19.2		2.0	0.17
56-23-5	Carbon tetrachloride	25.8		1.0	0.19
108-90-7	Chlorobenzene	25.3		1.0	0.17
124-48-1	Chlorodibromomethane	22.8		1.0	0.17
75-00-3	Chloroethane	25.1		2.0	0.41
67-66-3	Chloroform	25.5		1.0	0.16
74-87-3	Chloromethane	20.0		2.0	0.30
107-05-1	Allyl chloride	23.8		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	21.2		5.0	0.47
74-95-3	Dibromomethane	27.0		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.7		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.8		1.0	0.13
106-46-7	1,4-Dichlorobenzene	26.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	21.5		3.0	0.80
75-71-8	Dichlorodifluoromethane	14.5		2.0	0.31
75-34-3	1,1-Dichloroethane	24.7		1.0	0.22
107-06-2	1,2-Dichloroethane	25.9		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	26.8		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	25.8		1.0	0.15
75-35-4	1,1-Dichloroethene	22.8		1.0	0.23
78-87-5	1,2-Dichloropropane	23.5		1.0	0.18
142-28-9	1,3-Dichloropropane	23.3		1.0	0.090
594-20-7	2,2-Dichloropropane	25.4		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	23.3		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	21.7		3.0	0.19
563-58-6	1,1-Dichloropropene	24.7		1.0	0.19
100-41-4	Ethylbenzene	27.6		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500580/4

Matrix: Water Lab File ID: R6973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	21.8		3.0	0.86
591-78-6	2-Hexanone	84.2		5.0	1.7
74-88-4	Iodomethane	28.9		1.0	0.23
78-83-1	Isobutyl alcohol	511		110	37
75-09-2	Methylene Chloride	24.4		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	82.1		5.0	0.98
100-42-5	Styrene	26.8		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.9		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	22.6		1.0	0.21
127-18-4	Tetrachloroethene	23.6		1.0	0.20
108-88-3	Toluene	25.6		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	23.9		1.0	0.21
71-55-6	1,1,1-Trichloroethane	23.9		1.0	0.16
79-00-5	1,1,2-Trichloroethane	26.0		1.0	0.27
79-01-6	Trichloroethene	28.1		1.0	0.16
75-69-4	Trichlorofluoromethane	26.8		2.0	0.29
96-18-4	1,2,3-Trichloropropane	22.8		2.5	0.33
108-05-4	Vinyl acetate	44.9		3.0	0.94
75-01-4	Vinyl chloride	23.1		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.7		2.0	0.15
95-47-6	o-Xylene	24.5		1.0	0.19
1330-20-7	Xylenes, Total	49.2		2.0	0.19
106-93-4	1,2-Dibromoethane	23.2		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 23:06:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1768854	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	407085	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	637108	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.508	-0.004	92	450981	50.0	50.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	537135	50.0	49.2	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1717782	50.0	48.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.617	8.620	-0.004	86	637294	50.0	47.8	
10 Dichlorodifluoromethane	85	1.652	1.655	-0.003	98	97087	25.0	14.5	
11 Chloromethane	50	1.824	1.828	-0.004	99	135934	25.0	20.0	
12 Vinyl chloride	62	1.918	1.918	0.000	98	147998	25.0	23.1	
14 Bromomethane	94	2.191	2.195	-0.004	90	87514	25.0	25.2	
15 Chloroethane	64	2.285	2.285	0.000	99	97494	25.0	25.1	
16 Dichlorofluoromethane	67	2.450	2.454	-0.004	96	257383	25.0	25.6	
17 Trichlorofluoromethane	101	2.484	2.488	-0.004	97	251492	25.0	26.8	
19 Ethyl ether	59	2.694	2.697	-0.003	92	138818	25.0	25.7	
21 Acrolein	56	2.802	2.802	0.000	99	160953	246.9	127.1	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.877	2.881	-0.004	63	75566	25.0	22.1	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	96	108969	25.0	22.8	
24 Acetone	43	2.900	2.900	0.000	100	200182	100.0	78.8	
26 Iodomethane	142	3.001	3.001	0.000	99	119868	25.0	28.9	
27 Carbon disulfide	76	3.061	3.061	0.000	99	276282	25.0	19.2	
29 Methyl acetate	43	3.121	3.125	-0.004	97	253243	50.0	45.6	
30 3-Chloro-1-propene	41	3.147	3.147	0.000	91	197243	25.0	23.8	
31 Methylene Chloride	84	3.237	3.241	-0.004	91	165914	25.0	24.4	
32 2-Methyl-2-propanol	59	3.282	3.282	0.000	97	171928	250.0	212.9	
33 Acrylonitrile	53	3.398	3.398	0.000	99	733767	250.0	240.0	
34 Methyl tert-butyl ether	73	3.421	3.425	-0.004	94	492474	25.0	24.1	
35 trans-1,2-Dichloroethene	96	3.436	3.440	-0.004	99	147452	25.0	25.8	
37 Hexane	57	3.623	3.627	-0.004	91	108241	25.0	18.8	
39 Vinyl acetate	43	3.728	3.728	0.000	97	732715	50.0	44.9	
40 1,1-Dichloroethane	63	3.751	3.755	-0.004	96	284801	25.0	24.7	
45 2-Butanone (MEK)	43	4.129	4.133	-0.004	99	331643	100.0	88.0	
47 cis-1,2-Dichloroethene	96	4.156	4.156	0.000	82	186090	25.0	26.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.163	4.167	-0.004	88	230713	25.0	25.4	
50 sec-Butyl Alcohol	45	4.238	4.242	-0.004	98	414402	750.0	574.9	
52 Chlorobromomethane	128	4.328	4.332	-0.004	98	87978	25.0	25.8	
53 Tetrahydrofuran	42	4.343	4.339	0.004	86	105288	50.0	42.5	
54 Chloroform	83	4.388	4.392	-0.004	93	308815	25.0	25.5	
55 1,1,1-Trichloroethane	97	4.530	4.534	-0.004	98	256025	25.0	23.9	
56 Cyclohexane	56	4.587	4.591	-0.003	89	214455	25.0	23.0	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	96	223550	25.0	24.7	
59 Carbon tetrachloride	117	4.647	4.647	0.000	94	216734	25.0	25.8	
60 Isobutyl alcohol	41	4.654	4.658	-0.004	95	145858	625.0	511.2	
62 Benzene	78	4.793	4.797	-0.004	96	665224	25.0	24.4	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	98	253331	25.0	25.9	
65 n-Heptane	43	4.980	4.980	0.000	91	124500	25.0	21.9	
67 Trichloroethene	95	5.280	5.280	0.000	99	186349	25.0	28.1	
68 2-Pentanone	43	5.381	5.381	0.000	99	536468	100.0	86.6	
69 Methylcyclohexane	55	5.468	5.471	-0.003	91	170679	25.0	23.2	
70 1,2-Dichloropropane	63	5.486	5.483	0.003	94	175871	25.0	23.5	
72 1,4-Dioxane	88	5.524	5.531	-0.007	91	54041	500.0	444.6	
73 Dibromomethane	93	5.558	5.558	0.000	92	121287	25.0	27.0	
74 Dichlorobromomethane	83	5.678	5.678	0.000	99	244772	25.0	26.8	
76 2-Chloroethyl vinyl ether	63	5.884	5.880	0.004	91	120980	25.0	21.7	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	95	282523	25.0	23.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	671909	100.0	82.1	
79 Toluene	91	6.315	6.315	0.000	99	730890	25.0	25.6	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	89	255689	25.0	21.7	
81 Ethyl methacrylate	69	6.510	6.510	0.000	89	235802	25.0	21.8	
82 1,1,2-Trichloroethane	97	6.660	6.660	0.000	91	163107	25.0	26.0	
83 Tetrachloroethene	164	6.750	6.753	-0.003	94	123064	25.0	23.6	
84 1,3-Dichloropropane	76	6.806	6.810	-0.004	89	298593	25.0	23.3	
85 2-Hexanone	43	6.828	6.828	0.000	96	474023	100.0	84.2	
87 Chlorodibromomethane	129	7.001	7.001	0.000	89	178441	25.0	22.8	
88 Ethylene Dibromide	107	7.121	7.117	0.004	99	174966	25.0	23.2	
89 1-Chlorohexane	91	7.507	7.507	0.000	96	230006	25.0	26.0	
90 Chlorobenzene	112	7.552	7.548	0.004	94	471045	25.0	25.3	
91 1,1,1,2-Tetrachloroethane	131	7.619	7.619	0.000	91	166065	25.0	23.9	
92 Ethylbenzene	106	7.627	7.627	0.000	98	256002	25.0	27.6	
93 m-Xylene & p-Xylene	106	7.743	7.743	0.000	0	321897	25.0	24.7	
94 o-Xylene	106	8.103	8.107	-0.004	96	312722	25.0	24.5	
95 Styrene	104	8.118	8.122	-0.004	94	546427	25.0	26.8	
96 Bromoform	173	8.302	8.298	0.004	95	116105	25.0	22.3	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	804005	25.0	25.6	
99 Cyclohexanone	55	8.542	8.542	0.000	91	406077	1000.0	686.3	
100 1,1,2,2-Tetrachloroethane	83	8.733	8.729	0.004	94	240197	25.0	22.6	
101 Bromobenzene	156	8.763	8.763	0.000	95	202831	25.0	27.0	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	59	65643	25.0	21.5	
103 1,2,3-Trichloropropane	110	8.793	8.796	-0.003	83	75630	25.0	22.8	
104 N-Propylbenzene	120	8.841	8.845	-0.004	99	212681	25.0	25.5	
105 2-Chlorotoluene	126	8.939	8.939	0.000	95	186395	25.0	24.7	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	674860	25.0	25.4	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	200333	25.0	26.0	
108 tert-Butylbenzene	119	9.321	9.325	-0.004	93	544726	25.0	25.1	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	97	723088	25.0	26.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 sec-Butylbenzene	134	9.546	9.542	0.004	94	154291	25.0	24.6	
112 1,3-Dichlorobenzene	146	9.670	9.670	0.000	97	369541	25.0	25.8	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	692758	25.0	26.2	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	95	393024	25.0	26.0	
116 n-Butylbenzene	91	10.093	10.094	-0.001	98	618537	25.0	23.7	
117 1,2-Dichlorobenzene	146	10.123	10.120	0.003	96	373364	25.0	25.7	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	82	48831	25.0	21.2	
120 1,2,4-Trichlorobenzene	180	11.724	11.724	0.000	93	233423	25.0	23.9	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	97	80832	25.0	26.0	
122 Naphthalene	128	11.994	11.994	0.000	97	729245	25.0	22.5	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	96	224992	25.0	24.7	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	52.6	
S 139 Xylenes, Total (URS)	1				0		50.0	49.2	
S 138 Xylenes, Total	106				0		50.0	49.2	
S 140 Trihalomethanes, Total	1				0		100.0	97.4	
S 136 1,3-Dichloropropene, Total	1				0		50.0	45.0	
S 141 1,2-Dichloroethene, Total	1				0		50.0	52.6	

Reagents:

MV-MegaMain B_00031	Amount Added:	12.50	Units: uL	
MV-Gas B_00064	Amount Added:	5.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

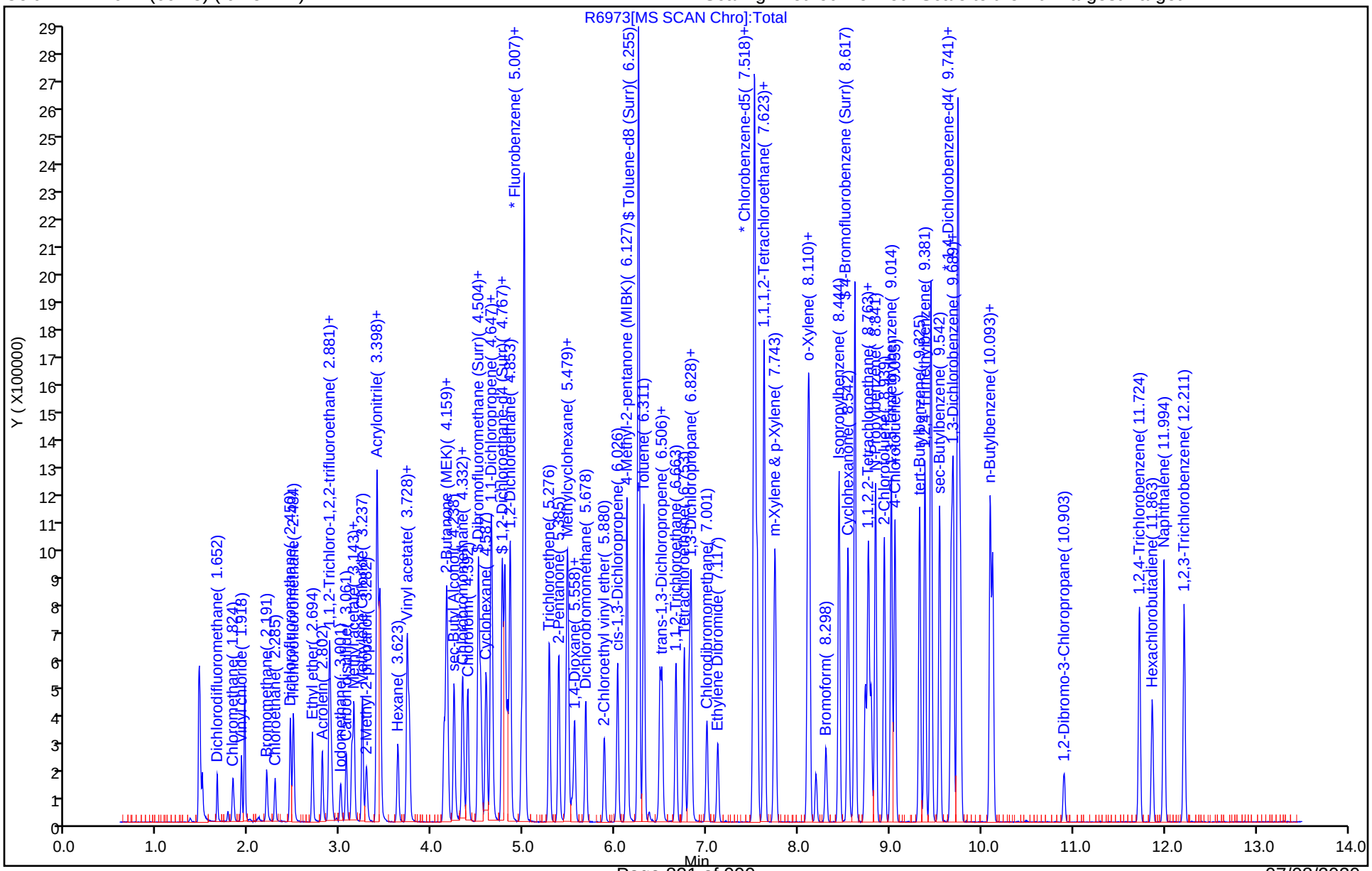
Report Date: 30-Jun-2020 20:31:14 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6973.D

Injection Date:	29-Jun-2020 23:06:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 23:06:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.5	101.04
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.2	98.34
$ 6 Toluene-d8 (Surr)	50.0	48.7	97.37
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.8	95.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500580/6

Matrix: Water Lab File ID: R6975.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	232		30	9.6
126-99-8	Chloroprene	24.8		1.0	0.21
126-98-7	Methacrylonitrile	252		10	1.6
80-62-6	Methyl methacrylate	50.5		4.0	1.1
107-12-0	Propionitrile	248		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6975.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 23:49:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	1804148	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	411813	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	641203	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	91	460522	50.0	50.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	554399	50.0	49.8	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1717232	50.0	48.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	86	656257	50.0	48.9	
13 Ethylene oxide	43	2.172	2.165	0.007	100	964883	2500.0	3794.3	
18 Ethanol	45	2.604	2.604	0.000	99	131850	1500.0	1458.7	
20 Propene oxide	58	2.742	2.739	0.003	96	4046455	2500.0	3205.5	
25 Isopropyl alcohol	45	2.986	2.990	-0.004	99	114559	250.0	225.7	
28 Acetonitrile	41	3.110	3.106	0.004	99	260446	250.0	231.7	
41 Isopropyl ether	87	3.754	3.751	0.003	95	148309	25.0	27.5	
42 2-Chloro-1,3-butadiene	53	3.807	3.803	0.004	91	265202	25.0	24.8	
44 Tert-butyl ethyl ether	59	4.009	4.009	0.000	97	499312	25.0	25.8	
46 Ethyl acetate	43	4.148	4.144	0.004	99	361978	50.0	46.8	
49 Propionitrile	54	4.182	4.182	0.000	99	309492	250.0	248.3	
51 Methacrylonitrile	41	4.294	4.294	0.000	91	1193500	250.0	251.7	
64 Tert-amyl methyl ether	73	4.868	4.864	0.004	90	480902	25.0	27.4	
66 n-Butanol	56	5.149	5.145	0.004	87	127578	625.0	498.5	
71 Methyl methacrylate	100	5.490	5.490	0.000	91	108285	50.0	50.5	
75 2-Nitropropane	41	5.846	5.843	0.003	97	83013	50.0	45.3	
86 Tetrahydrothiophene	60	7.001	6.997	0.004	92	55449	50.0	40.9	
98 cis-1,4-Dichloro-2-butene	53	8.496	8.493	0.003	93	133075	50.0	55.2	
115 1,2,3-Trimethylbenzene	105	9.786	9.786	0.000	99	697235	25.0	25.2	
119 1,3,5-Trichlorobenzene	180	11.090	11.087	0.003	96	225277	25.0	25.5	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Jun-2020 20:31:18 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6975.D

Injection Date:	29-Jun-2020 23:49:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6975.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 23:49:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.6	101.16
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.8	99.52
$ 6 Toluene-d8 (Surr)	50.0	48.1	96.23
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.9	97.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500875/4

Matrix: Water Lab File ID: P2973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	96.5		10	1.9
107-02-8	Acrolein	236		20	2.8
107-13-1	Acrylonitrile	246		20	1.4
71-43-2	Benzene	24.3		1.0	0.16
74-97-5	Chlorobromomethane	24.9		1.0	0.10
75-27-4	Dichlorobromomethane	24.9		1.0	0.17
75-25-2	Bromoform	26.8		1.0	0.46
74-83-9	Bromomethane	30.9		2.0	0.21
78-93-3	2-Butanone (MEK)	99.1		6.0	2.0
75-15-0	Carbon disulfide	27.9		2.0	0.17
56-23-5	Carbon tetrachloride	25.8		1.0	0.19
108-90-7	Chlorobenzene	24.2		1.0	0.17
124-48-1	Chlorodibromomethane	26.1		1.0	0.17
75-00-3	Chloroethane	28.5		2.0	0.41
67-66-3	Chloroform	23.9		1.0	0.16
74-87-3	Chloromethane	29.2		2.0	0.30
107-05-1	Allyl chloride	25.6		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	27.1		5.0	0.47
74-95-3	Dibromomethane	24.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.6		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.9		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.8		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	24.0		3.0	0.80
75-71-8	Dichlorodifluoromethane	36.9		2.0	0.31
75-34-3	1,1-Dichloroethane	24.7		1.0	0.22
107-06-2	1,2-Dichloroethane	23.8		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	25.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.9		1.0	0.15
75-35-4	1,1-Dichloroethene	26.9		1.0	0.23
78-87-5	1,2-Dichloropropane	24.9		1.0	0.18
142-28-9	1,3-Dichloropropane	23.6		1.0	0.090
594-20-7	2,2-Dichloropropane	27.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	25.5		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.1		3.0	0.19
563-58-6	1,1-Dichloropropene	24.6		1.0	0.19
100-41-4	Ethylbenzene	24.5		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500875/4

Matrix: Water Lab File ID: P2973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	25.7		3.0	0.86
591-78-6	2-Hexanone	105		5.0	1.7
74-88-4	Iodomethane	20.5		1.0	0.23
78-83-1	Isobutyl alcohol	656		110	37
75-09-2	Methylene Chloride	26.1		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	103		5.0	0.98
100-42-5	Styrene	25.4		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	25.4		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	25.0		1.0	0.21
127-18-4	Tetrachloroethene	25.5		1.0	0.20
108-88-3	Toluene	24.3		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.5		1.0	0.21
71-55-6	1,1,1-Trichloroethane	25.4		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.1		1.0	0.27
79-01-6	Trichloroethene	23.7		1.0	0.16
75-69-4	Trichlorofluoromethane	25.8		2.0	0.29
96-18-4	1,2,3-Trichloropropane	24.1		2.5	0.33
108-05-4	Vinyl acetate	52.0		3.0	0.94
75-01-4	Vinyl chloride	29.3		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.3		2.0	0.15
95-47-6	o-Xylene	24.8		1.0	0.19
1330-20-7	Xylenes, Total	49.1		2.0	0.19
106-93-4	1,2-Dibromoethane	24.4		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jul-2020 23:18:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.112	5.109	0.003	99	2302917	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	526470	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.871	9.869	0.002	96	754608	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.595	4.604	-0.009	93	552874	50.0	49.9	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	607288	50.0	46.5	
$	6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2253454	50.0	48.6	
$	7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	84	808198	50.0	48.5	
	10 Dichlorodifluoromethane	85	1.661	1.660	0.001	99	238331	25.0	36.9	
	11 Chloromethane	50	1.841	1.839	0.002	99	256917	25.0	29.2	
	12 Vinyl chloride	62	1.936	1.945	-0.009	98	295007	25.0	29.3	
	14 Bromomethane	94	2.231	2.230	0.001	90	121425	25.0	30.9	
	15 Chloroethane	64	2.326	2.325	0.001	100	183109	25.0	28.5	
	16 Dichlorofluoromethane	67	2.495	2.493	0.002	97	379163	25.0	25.3	
	17 Trichlorofluoromethane	101	2.527	2.536	-0.009	98	321376	25.0	25.8	
	19 Ethyl ether	59	2.748	2.747	0.001	91	194856	25.0	24.8	
	21 Acrolein	56	2.854	2.852	0.002	100	457306	246.9	236.1	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.938	2.937	0.001	72	146707	25.0	26.1	
	22 1,1-Dichloroethene	96	2.938	2.937	0.001	98	200771	25.0	26.9	
	24 Acetone	43	2.959	2.958	0.001	100	296556	100.0	96.5	
	26 Iodomethane	142	3.065	3.063	0.002	97	144150	25.0	20.5	
	27 Carbon disulfide	76	3.128	3.127	0.001	99	649077	25.0	27.9	
	29 Methyl acetate	43	3.191	3.190	0.001	98	382265	50.0	48.8	
	30 3-Chloro-1-propene	41	3.213	3.211	0.002	94	327068	25.0	25.6	
	31 Methylene Chloride	84	3.307	3.306	0.001	91	226645	25.0	26.1	
	32 2-Methyl-2-propanol	59	3.350	3.348	0.002	98	270667	250.0	268.1	
	33 Acrylonitrile	53	3.466	3.464	0.002	99	1042992	250.0	246.1	
	34 Methyl tert-butyl ether	73	3.497	3.496	0.001	94	620736	25.0	24.7	
	35 trans-1,2-Dichloroethene	96	3.508	3.517	-0.009	98	219109	25.0	24.9	
	36 Hexane	57	3.709	3.707	0.001	90	331857	25.0	27.0	
	38 Vinyl acetate	43	3.803	3.802	0.001	97	985594	50.0	52.0	
	39 1,1-Dichloroethane	63	3.835	3.834	0.001	96	397945	25.0	24.7	
	44 2-Butanone (MEK)	43	4.215	4.214	0.001	99	508784	100.0	99.1	
	47 cis-1,2-Dichloroethene	96	4.247	4.245	0.002	82	244289	25.0	25.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.257	4.256	0.001	88	294566	25.0	27.0	
50 sec-Butyl Alcohol	45	4.321	4.330	-0.009	99	662144	750.0	802.1	
53 Chlorobromomethane	128	4.426	4.425	0.001	97	109304	25.0	24.9	
52 Tetrahydrofuran	42	4.426	4.435	-0.009	89	170838	50.0	50.2	
54 Chloroform	83	4.479	4.477	0.002	92	368987	25.0	23.9	
55 1,1,1-Trichloroethane	97	4.627	4.625	0.002	98	311503	25.0	25.4	
56 Cyclohexane	56	4.690	4.688	0.002	87	402522	25.0	25.8	
57 1,1-Dichloropropene	75	4.743	4.741	0.002	97	315726	25.0	24.6	
59 Carbon tetrachloride	117	4.743	4.752	-0.009	82	259036	25.0	25.8	
58 Isobutyl alcohol	41	4.743	4.752	-0.009	93	233701	625.0	656.1	
60 Benzene	78	4.890	4.900	-0.010	96	921847	25.0	24.3	
61 1,2-Dichloroethane	62	4.922	4.921	0.001	97	284835	25.0	23.8	
66 n-Heptane	43	5.080	5.079	0.001	91	282667	25.0	25.0	
67 Trichloroethene	95	5.386	5.385	0.001	99	220965	25.0	23.7	
68 2-Pentanone	43	5.481	5.480	0.001	99	811223	100.0	106.4	
69 Methylcyclohexane	55	5.576	5.585	-0.009	92	293678	25.0	24.9	
70 1,2-Dichloropropane	63	5.587	5.596	-0.009	97	243492	25.0	24.9	
72 1,4-Dioxane	88	5.629	5.638	-0.009	93	71260	500.0	522.9	
73 Dibromomethane	93	5.661	5.670	-0.009	95	137248	25.0	24.4	
74 Dichlorobromomethane	83	5.787	5.786	0.001	100	282783	25.0	24.9	
76 2-Chloroethyl vinyl ether	63	5.988	5.986	0.002	90	182251	25.0	26.9	
77 cis-1,3-Dichloropropene	75	6.136	6.134	0.002	97	360144	25.0	25.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.231	6.240	-0.009	95	1008805	100.0	103.0	
79 Toluene	91	6.431	6.430	0.001	98	966119	25.0	24.3	
80 trans-1,3-Dichloropropene	75	6.600	6.599	0.001	97	300257	25.0	24.1	
81 Ethyl methacrylate	69	6.621	6.620	0.001	87	332025	25.0	25.7	
82 1,1,2-Trichloroethane	97	6.779	6.778	0.001	90	201250	25.0	25.1	
83 Tetrachloroethene	164	6.874	6.873	0.001	95	163521	25.0	25.5	
84 1,3-Dichloropropane	76	6.927	6.926	0.001	96	364390	25.0	23.6	
85 2-Hexanone	43	6.938	6.947	-0.009	93	745379	100.0	105.3	
86 Chlorodibromomethane	129	7.117	7.126	-0.009	90	206563	25.0	26.1	
88 Ethylene Dibromide	107	7.233	7.242	-0.009	97	209326	25.0	24.4	
89 1-Chlorohexane	91	7.624	7.633	-0.009	98	310009	25.0	26.6	
90 Chlorobenzene	112	7.676	7.675	0.001	95	601595	25.0	24.2	
91 1,1,1,2-Tetrachloroethane	131	7.740	7.749	-0.009	95	194504	25.0	25.4	
92 Ethylbenzene	106	7.750	7.749	0.001	98	335424	25.0	24.5	
93 m-Xylene & p-Xylene	106	7.866	7.865	0.001	99	399431	25.0	24.3	
94 o-Xylene	106	8.225	8.224	0.001	96	392105	25.0	24.8	
95 Styrene	104	8.246	8.245	0.001	95	676775	25.0	25.4	
96 Bromoform	173	8.426	8.435	-0.009	95	125336	25.0	26.8	
97 Isopropylbenzene	105	8.563	8.572	-0.009	96	1003971	25.0	25.4	
99 Cyclohexanone	55	8.658	8.667	-0.009	91	438246	1000.0	812.9	
100 1,1,2,2-Tetrachloroethane	83	8.848	8.857	-0.009	93	288861	25.0	25.0	
101 Bromobenzene	156	8.890	8.888	0.002	96	228182	25.0	24.5	
102 trans-1,4-Dichloro-2-butene	53	8.890	8.888	0.002	47	73886	25.0	24.0	
103 1,2,3-Trichloropropane	110	8.922	8.920	0.002	82	84577	25.0	24.1	
104 N-Propylbenzene	120	8.964	8.973	-0.009	99	271396	25.0	24.8	
105 2-Chlorotoluene	126	9.069	9.068	0.001	97	228790	25.0	24.7	
106 1,3,5-Trimethylbenzene	105	9.143	9.142	0.001	93	807062	25.0	24.9	
107 4-Chlorotoluene	126	9.185	9.184	0.001	97	239037	25.0	24.6	
108 tert-Butylbenzene	119	9.449	9.448	0.001	93	666175	25.0	24.6	
109 1,2,4-Trimethylbenzene	105	9.502	9.511	-0.009	97	814176	25.0	24.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 sec-Butylbenzene	134	9.671	9.669	0.002	94	194511	25.0	24.5	
111 1,3-Dichlorobenzene	146	9.797	9.796	0.001	97	419251	25.0	24.9	
112 4-Isopropyltoluene	119	9.819	9.817	0.002	97	824036	25.0	24.8	
113 1,4-Dichlorobenzene	146	9.892	9.902	-0.010	95	433010	25.0	24.8	
115 n-Butylbenzene	91	10.220	10.218	0.002	98	751416	25.0	24.3	
116 1,2-Dichlorobenzene	146	10.251	10.250	0.001	98	394929	25.0	23.6	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.031	0.001	84	53226	25.0	27.1	
119 1,2,4-Trichlorobenzene	180	11.855	11.854	0.001	94	222909	25.0	24.5	
120 Hexachlorobutadiene	225	12.003	12.002	0.001	94	78650	25.0	23.7	
121 Naphthalene	128	12.130	12.128	0.002	97	810229	25.0	27.5	
122 1,2,3-Trichlorobenzene	180	12.351	12.350	0.001	95	209826	25.0	25.0	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	49.8	
S 142 Xylenes, Total	106				0		50.0	49.1	
S 140 Trihalomethanes, Total	1				0		100.0	101.6	
S 143 Xylenes, Total (URS)	1				0		50.0	49.1	
S 145 1,3-Dichloropropene, Total	1				0		50.0	49.6	
S 144 1,2-Dichloroethene, Total	1				0		50.0	49.8	

Reagents:

MV-Gas B_00064	Amount Added: 5.00	Units: uL	
MV-MegaMain B_00031	Amount Added: 12.50	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 02-Jul-2020 22:13:36 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2973.D

Injection Date: 01-Jul-2020 23:18:30 Instrument ID: VMS_P Operator ID: PETUNINP

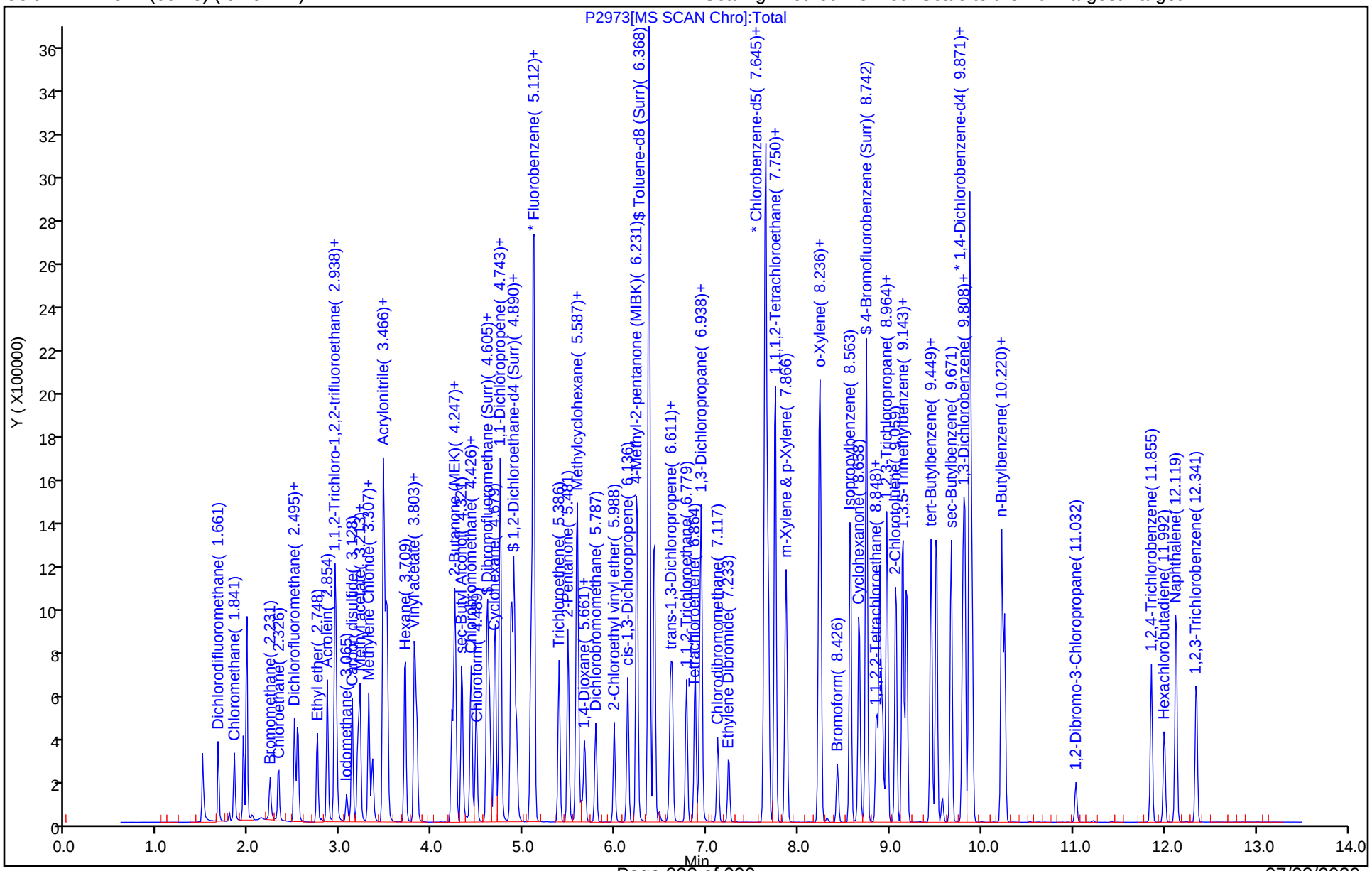
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jul-2020 23:18:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.70
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	93.07
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.29
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.5	97.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500875/6

Matrix: Water Lab File ID: P2975.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 00:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	206		30	9.6
126-99-8	Chloroprene	22.1		1.0	0.21
126-98-7	Methacrylonitrile	210		10	1.6
80-62-6	Methyl methacrylate	49.6		4.0	1.1
107-12-0	Propionitrile	225		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2975.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Jul-2020 00:01:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2306779	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	86	537361	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	763920	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	556117	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	97	613203	50.0	46.9	
$ 6 Toluene-d8 (Surr)	98	6.365	6.366	-0.001	93	2270107	50.0	48.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.739	8.741	-0.002	83	814469	50.0	48.3	
13 Ethylene oxide	43	2.197	2.197	0.000	100	1415436	NC	NC	
18 Ethanol	45	2.650	2.640	0.010	99	195766	1500.0	1176.1	
20 Propene oxide	58	2.788	2.788	0.000	97	4912369	2500.0	2216.3	
25 Isopropyl alcohol	45	3.041	3.041	0.000	99	164743	250.0	192.4	
28 Acetonitrile	41	3.168	3.168	0.000	99	347000	250.0	205.6	
40 Isopropyl ether	87	3.832	3.832	0.000	95	182262	25.0	23.9	
41 2-Chloro-1,3-butadiene	53	3.885	3.885	0.000	89	308020	25.0	22.1	
43 Tert-butyl ethyl ether	59	4.096	4.096	0.000	97	585662	25.0	20.7	
46 Ethyl acetate	43	4.233	4.233	0.000	99	477185	50.0	56.7	
49 Propionitrile	54	4.265	4.265	0.000	99	409353	250.0	224.9	
51 Methacrylonitrile	41	4.381	4.381	0.000	90	1467340	250.0	210.1	
62 Tert-amyl methyl ether	73	4.962	4.962	0.000	87	569801	25.0	20.8	
63 n-Butanol	56	4.962	4.962	0.000	50	214778	625.0	676.9	
71 Methyl methacrylate	100	5.595	5.595	0.000	91	137852	50.0	49.6	
75 2-Nitropropane	41	5.954	5.954	0.000	96	100147	50.0	37.6	
87 Tetrahydrothiophene	60	7.114	7.114	0.000	91	71146	50.0	25.9	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.613	0.000	88	142210	50.0	39.6	
114 1,2,3-Trimethylbenzene	105	9.911	9.911	0.000	98	778504	25.0	24.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.219	0.000	96	239285	25.0	22.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

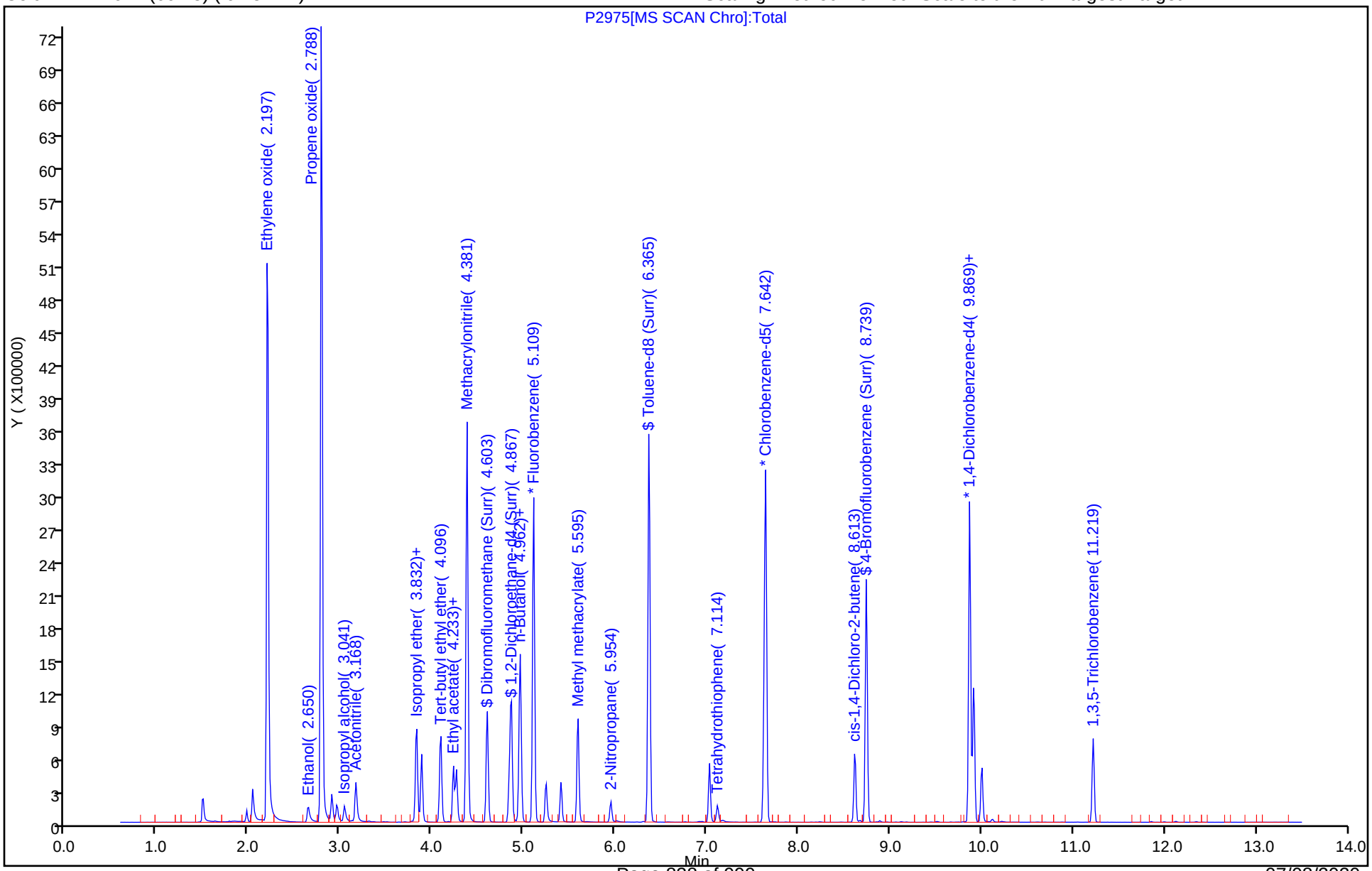
Report Date: 02-Jul-2020 22:13:41 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2975.D

Injection Date:	02-Jul-2020 00:01:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2975.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Jul-2020 00:01:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.12
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.9	93.82
$ 6 Toluene-d8 (Surr)	50.0	48.0	96.02
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.3	96.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-501117/4

Matrix: Water Lab File ID: R7177.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 10:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	74.4		10	1.9
107-02-8	Acrolein	216		20	2.8
107-13-1	Acrylonitrile	228		20	1.4
71-43-2	Benzene	20.8		1.0	0.16
74-97-5	Chlorobromomethane	22.5		1.0	0.10
75-27-4	Dichlorobromomethane	22.4		1.0	0.17
75-25-2	Bromoform	20.0		1.0	0.46
74-83-9	Bromomethane	26.5		2.0	0.21
78-93-3	2-Butanone (MEK)	79.8		6.0	2.0
75-15-0	Carbon disulfide	23.1		2.0	0.17
56-23-5	Carbon tetrachloride	19.2		1.0	0.19
108-90-7	Chlorobenzene	21.1		1.0	0.17
124-48-1	Chlorodibromomethane	18.9		1.0	0.17
75-00-3	Chloroethane	21.5		2.0	0.41
67-66-3	Chloroform	21.0		1.0	0.16
74-87-3	Chloromethane	16.8		2.0	0.30
107-05-1	Allyl chloride	22.3		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	18.9		5.0	0.47
74-95-3	Dibromomethane	22.1		1.0	0.17
95-50-1	1,2-Dichlorobenzene	20.9		1.0	0.15
541-73-1	1,3-Dichlorobenzene	21.3		1.0	0.13
106-46-7	1,4-Dichlorobenzene	21.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	18.6		3.0	0.80
75-71-8	Dichlorodifluoromethane	11.2		2.0	0.31
75-34-3	1,1-Dichloroethane	20.7		1.0	0.22
107-06-2	1,2-Dichloroethane	20.7		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.4		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	22.6		1.0	0.15
75-35-4	1,1-Dichloroethene	22.0		1.0	0.23
78-87-5	1,2-Dichloropropane	20.6		1.0	0.18
142-28-9	1,3-Dichloropropane	19.7		1.0	0.090
594-20-7	2,2-Dichloropropane	20.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	19.8		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	17.8		3.0	0.19
563-58-6	1,1-Dichloropropene	19.4		1.0	0.19
100-41-4	Ethylbenzene	22.0		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-501117/4

Matrix: Water Lab File ID: R7177.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 10:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	18.8		3.0	0.86
591-78-6	2-Hexanone	78.5		5.0	1.7
74-88-4	Iodomethane	26.3		1.0	0.23
78-83-1	Isobutyl alcohol	456		110	37
75-09-2	Methylene Chloride	21.8		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	73.3		5.0	0.98
100-42-5	Styrene	22.1		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	19.8		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	19.1		1.0	0.21
127-18-4	Tetrachloroethene	18.8		1.0	0.20
108-88-3	Toluene	20.8		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	19.7		1.0	0.21
71-55-6	1,1,1-Trichloroethane	18.2		1.0	0.16
79-00-5	1,1,2-Trichloroethane	22.0		1.0	0.27
79-01-6	Trichloroethene	20.3		1.0	0.16
75-69-4	Trichlorofluoromethane	21.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	19.1		2.5	0.33
108-05-4	Vinyl acetate	39.1		3.0	0.94
75-01-4	Vinyl chloride	19.1		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	19.5		2.0	0.15
95-47-6	o-Xylene	20.0		1.0	0.19
1330-20-7	Xylenes, Total	39.5		2.0	0.19
106-93-4	1,2-Dibromoethane	20.5		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	92		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7177.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Jul-2020 10:47:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.003	5.007	-0.004	99	2266842	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.518	7.518	0.000	87	520873	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	833584	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	93	569226	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.763	4.767	-0.004	0	621252	50.0	44.4	
$ 6 Toluene-d8 (Surr)	98	6.251	6.251	0.000	93	2200411	50.0	48.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.613	8.617	-0.003	87	802808	50.0	46.0	
10 Dichlorodifluoromethane	85	1.651	1.652	-0.001	99	96183	25.0	11.2	
11 Chloromethane	50	1.828	1.828	0.000	99	146806	25.0	16.8	
12 Vinyl chloride	62	1.918	1.918	0.000	97	156774	25.0	19.1	
14 Bromomethane	94	2.195	2.195	0.000	91	117765	25.0	26.5	
15 Chloroethane	64	2.285	2.285	0.000	99	106803	25.0	21.5	
16 Dichlorofluoromethane	67	2.450	2.450	0.000	97	281477	25.0	21.9	
17 Trichlorofluoromethane	101	2.484	2.484	0.000	96	258773	25.0	21.5	
19 Ethyl ether	59	2.694	2.694	0.000	89	163858	25.0	23.6	
21 Acrolein	56	2.798	2.799	-0.001	99	350843	246.9	216.3	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.873	2.877	-0.004	67	95962	25.0	21.9	
23 1,1-Dichloroethene	96	2.881	2.881	0.000	98	134155	25.0	22.0	
24 Acetone	43	2.900	2.900	0.000	100	242049	100.0	74.4	
26 Iodomethane	142	3.001	3.001	0.000	98	134498	25.0	26.3	
27 Carbon disulfide	76	3.061	3.061	0.000	99	426400	25.0	23.1	
29 Methyl acetate	43	3.125	3.125	0.000	98	297575	50.0	41.8	
30 3-Chloro-1-propene	41	3.143	3.147	-0.004	91	236823	25.0	22.3	
31 Methylene Chloride	84	3.237	3.237	0.000	91	189812	25.0	21.8	
32 2-Methyl-2-propanol	59	3.282	3.278	0.004	98	194211	250.0	189.0	
33 Acrylonitrile	53	3.398	3.398	0.000	99	892404	250.0	227.8	
34 Methyl tert-butyl ether	73	3.417	3.421	-0.004	94	545260	25.0	20.9	
35 trans-1,2-Dichloroethene	96	3.436	3.436	0.000	99	165483	25.0	22.6	
37 Hexane	57	3.623	3.623	0.000	91	190530	25.0	25.7	
39 Vinyl acetate	43	3.724	3.728	-0.004	97	815585	50.0	39.1	
40 1,1-Dichloroethane	63	3.747	3.751	-0.004	96	306455	25.0	20.7	
45 2-Butanone (MEK)	43	4.129	4.129	0.000	99	385132	100.0	79.8	
47 cis-1,2-Dichloroethene	96	4.155	4.152	0.003	82	199138	25.0	22.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.163	4.163	0.000	87	231682	25.0	20.0	
50 sec-Butyl Alcohol	45	4.238	4.238	0.000	98	475871	750.0	519.8	
52 Chlorobromomethane	128	4.328	4.328	0.000	97	97911	25.0	22.5	
53 Tetrahydrofuran	42	4.335	4.339	-0.004	86	132892	50.0	41.8	
54 Chloroform	83	4.388	4.388	0.000	93	325778	25.0	21.0	
55 1,1,1-Trichloroethane	97	4.527	4.530	-0.003	98	248246	25.0	18.2	
56 Cyclohexane	56	4.587	4.587	0.000	88	245635	25.0	20.6	
57 1,1-Dichloropropene	75	4.639	4.643	-0.004	97	225682	25.0	19.4	
59 Carbon tetrachloride	117	4.643	4.647	-0.004	93	206793	25.0	19.2	
60 Isobutyl alcohol	41	4.650	4.654	-0.004	94	166106	625.0	455.6	
62 Benzene	78	4.793	4.793	0.000	95	725941	25.0	20.8	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	97	259859	25.0	20.7	
65 n-Heptane	43	4.976	4.973	0.003	93	169351	25.0	23.2	
67 Trichloroethene	95	5.276	5.276	0.000	99	173165	25.0	20.3	
68 2-Pentanone	43	5.381	5.381	0.000	99	619809	100.0	78.2	
69 Methylcyclohexane	55	5.471	5.468	0.003	91	187833	25.0	19.9	
70 1,2-Dichloropropane	63	5.483	5.483	-0.001	96	196870	25.0	20.6	
72 1,4-Dioxane	88	5.524	5.528	-0.004	94	63314	500.0	406.5	
73 Dibromomethane	93	5.554	5.550	0.004	94	127294	25.0	22.1	
74 Dichlorobromomethane	83	5.674	5.678	-0.004	98	261475	25.0	22.4	
76 2-Chloroethyl vinyl ether	63	5.880	5.876	0.004	90	129542	25.0	18.2	
77 cis-1,3-Dichloropropene	75	6.022	6.022	0.000	96	305522	25.0	19.8	
78 4-Methyl-2-pentanone (MIBK)	43	6.124	6.124	0.000	96	767209	100.0	73.3	
79 Toluene	91	6.311	6.307	0.004	98	761912	25.0	20.8	
80 trans-1,3-Dichloropropene	75	6.483	6.487	-0.004	88	266850	25.0	17.8	
81 Ethyl methacrylate	69	6.510	6.510	0.000	89	258867	25.0	18.8	
82 1,1,2-Trichloroethane	97	6.660	6.660	0.000	90	176927	25.0	22.0	
83 Tetrachloroethene	164	6.753	6.753	0.000	94	125032	25.0	18.8	
84 1,3-Dichloropropane	76	6.806	6.806	0.000	87	322852	25.0	19.7	
85 2-Hexanone	43	6.825	6.825	0.000	96	564586	100.0	78.5	
87 Chlorodibromomethane	129	6.997	7.001	-0.004	91	188751	25.0	18.9	
88 Ethylene Dibromide	107	7.121	7.117	0.004	99	197185	25.0	20.5	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	216539	25.0	19.1	
90 Chlorobenzene	112	7.548	7.548	0.000	95	502273	25.0	21.1	
91 1,1,1,2-Tetrachloroethane	131	7.619	7.619	0.000	44	175654	25.0	19.8	
92 Ethylbenzene	106	7.627	7.627	0.000	98	260993	25.0	22.0	
93 m-Xylene & p-Xylene	106	7.743	7.743	0.000	0	323505	25.0	19.5	
94 o-Xylene	106	8.099	8.099	0.000	96	326253	25.0	20.0	
95 Styrene	104	8.118	8.118	0.000	94	575526	25.0	22.1	
96 Bromoform	173	8.301	8.302	-0.001	95	132403	25.0	20.0	
97 Isopropylbenzene	105	8.440	8.440	0.000	95	804975	25.0	19.6	
99 Cyclohexanone	55	8.538	8.542	-0.004	91	407088	1000.0	542.3	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	264617	25.0	19.1	
101 Bromobenzene	156	8.763	8.759	0.004	94	215643	25.0	21.9	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.770	0.000	80	73376	25.0	18.6	
103 1,2,3-Trichloropropane	110	8.789	8.793	-0.004	83	82823	25.0	19.1	
104 N-Propylbenzene	120	8.841	8.841	0.000	99	212473	25.0	19.4	
105 2-Chlorotoluene	126	8.939	8.935	0.004	96	199627	25.0	20.2	
106 1,3,5-Trimethylbenzene	105	9.010	9.014	-0.004	94	704127	25.0	20.3	
107 4-Chlorotoluene	126	9.055	9.051	0.004	98	211454	25.0	20.9	
108 tert-Butylbenzene	119	9.321	9.321	0.000	93	559361	25.0	19.7	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	97	745636	25.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	162438	25.0	19.8	
112 1,3-Dichlorobenzene	146	9.666	9.666	0.000	97	399272	25.0	21.3	
113 4-Isopropyltoluene	119	9.688	9.689	-0.001	97	710873	25.0	20.6	
114 1,4-Dichlorobenzene	146	9.767	9.764	0.003	95	414635	25.0	21.0	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	628107	25.0	18.5	
117 1,2-Dichlorobenzene	146	10.120	10.120	0.000	97	397548	25.0	20.9	
118 1,2-Dibromo-3-Chloropropane	157	10.899	10.899	0.000	82	56587	25.0	18.9	
120 1,2,4-Trichlorobenzene	180	11.720	11.724	-0.004	95	251357	25.0	19.7	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	97	79985	25.0	19.9	
122 Naphthalene	128	11.990	11.990	0.000	97	816953	25.0	19.3	
123 1,2,3-Trichlorobenzene	180	12.211	12.208	0.003	95	241875	25.0	20.4	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	45.0	
S 139 Xylenes, Total (URS)	1				0		50.0	39.5	
S 138 Xylenes, Total	106				0		50.0	39.5	
S 140 Trihalomethanes, Total	1				0		100.0	82.2	
S 136 1,3-Dichloropropene, Total	1				0		50.0	37.6	
S 141 1,2-Dichloroethene, Total	1				0		50.0	45.0	

Reagents:

MV-MegaMain B_00031	Amount Added:	12.50	Units: uL	
MV-Gas B_00064	Amount Added:	5.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

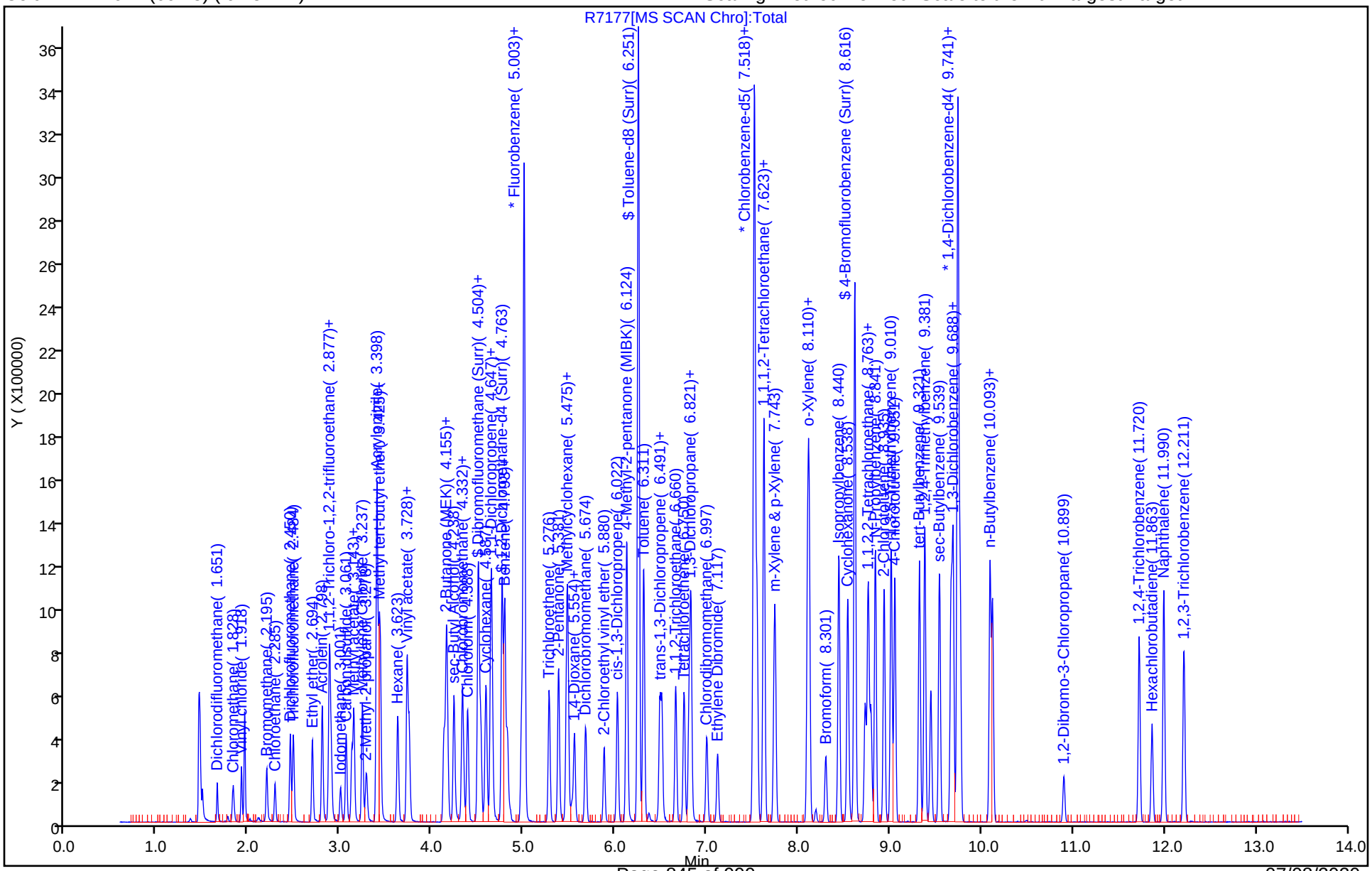
Report Date: 07-Jul-2020 08:58:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7177.D

Injection Date:	06-Jul-2020 10:47:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7177.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Jul-2020 10:47:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.8	99.51
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	44.4	88.76
$ 6 Toluene-d8 (Surr)	50.0	48.7	97.48
$ 7 4-Bromofluorobenzene (Surr)	50.0	46.0	91.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-501117/6

Matrix: Water Lab File ID: R7181.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 12:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	239		30	9.6
126-99-8	Chloroprene	22.7		1.0	0.21
126-98-7	Methacrylonitrile	233		10	1.6
80-62-6	Methyl methacrylate	50.6		4.0	1.1
107-12-0	Propionitrile	251		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7181.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Jul-2020 12:13:30 ALS Bottle#: 9 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Misc. Info.: 280-0093029-006
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

First Level Reviewer: peppinga Date: 06-Jul-2020 14:01:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	2271973	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.518	0.004	86	518024	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	801308	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	92	572978	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	627107	50.0	44.7	
$ 6 Toluene-d8 (Surr)	98	6.255	6.251	0.004	93	2182496	50.0	48.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.617	0.000	87	815344	50.0	48.6	
13 Ethylene oxide	43	2.165	2.165	0.000	99	1151497	2500.0	3595.8	
18 Ethanol	45	2.600	2.600	0.000	100	173757	1500.0	1526.5	
20 Propene oxide	58	2.739	2.735	0.004	96	4995351	2500.0	3142.4	
25 Isopropyl alcohol	45	2.986	2.982	0.004	99	135481	250.0	212.6	
28 Acetonitrile	41	3.106	3.106	0.000	98	339052	250.0	239.5	
41 Isopropyl ether	87	3.751	3.751	0.000	95	178367	25.0	26.3	
42 2-Chloro-1,3-butadiene	53	3.803	3.803	0.000	90	304343	25.0	22.7	
44 Tert-butyl ethyl ether	59	4.009	4.009	0.000	98	584505	25.0	24.0	
46 Ethyl acetate	43	4.148	4.144	0.004	99	433241	50.0	44.5	
49 Propionitrile	54	4.182	4.178	0.004	99	393512	250.0	250.7	
51 Methacrylonitrile	41	4.291	4.290	0.001	90	1388590	250.0	232.6	
64 Tert-amyl methyl ether	73	4.864	4.864	0.000	91	558827	25.0	25.2	
66 n-Butanol	56	5.145	5.145	0.000	87	162881	625.0	505.0	
71 Methyl methacrylate	100	5.486	5.490	-0.004	90	136717	50.0	50.6	
75 2-Nitropropane	41	5.846	5.842	0.004	95	99405	50.0	43.1	
86 Tetrahydrothiophene	60	6.997	6.997	0.000	91	65995	50.0	38.8	
98 cis-1,4-Dichloro-2-butene	53	8.493	8.493	0.000	90	160414	50.0	53.2	
115 1,2,3-Trimethylbenzene	105	9.786	9.786	0.000	98	865122	25.0	25.0	
119 1,3,5-Trichlorobenzene	180	11.087	11.087	0.000	95	288821	25.0	26.2	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00027	Amount Added:	25.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 07-Jul-2020 08:59:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7181.D

Injection Date:	06-Jul-2020 12:13:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7181.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	06-Jul-2020 12:13:30	ALS Bottle#:	9	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCS S				
Misc. Info.:	280-0093029-006				
Operator ID:	PEPPINGA	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	07-Jul-2020 08:58:05	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1022				

First Level Reviewer: peppinga Date: 06-Jul-2020 14:01:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.0	99.94
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	44.7	89.39
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.22
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.6	97.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500579/5

Matrix: Water Lab File ID: P2854.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 22:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	96.1		10	1.9
107-02-8	Acrolein	133		20	2.8
107-13-1	Acrylonitrile	248		20	1.4
71-43-2	Benzene	22.4		1.0	0.16
74-97-5	Chlorobromomethane	22.5		1.0	0.10
75-27-4	Dichlorobromomethane	23.7		1.0	0.17
75-25-2	Bromoform	24.7		1.0	0.46
74-83-9	Bromomethane	20.4		2.0	0.21
78-93-3	2-Butanone (MEK)	101		6.0	2.0
75-15-0	Carbon disulfide	15.5		2.0	0.17
56-23-5	Carbon tetrachloride	21.5		1.0	0.19
108-90-7	Chlorobenzene	23.4		1.0	0.17
124-48-1	Chlorodibromomethane	24.8		1.0	0.17
75-00-3	Chloroethane	22.0		2.0	0.41
67-66-3	Chloroform	22.5		1.0	0.16
74-87-3	Chloromethane	19.0		2.0	0.30
107-05-1	Allyl chloride	21.9		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	24.8		5.0	0.47
74-95-3	Dibromomethane	23.6		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.2		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.3		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	24.2		3.0	0.80
75-71-8	Dichlorodifluoromethane	16.6		2.0	0.31
75-34-3	1,1-Dichloroethane	22.3		1.0	0.22
107-06-2	1,2-Dichloroethane	22.9		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.4		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	20.3		1.0	0.15
75-35-4	1,1-Dichloroethene	17.7		1.0	0.23
78-87-5	1,2-Dichloropropane	24.4		1.0	0.18
142-28-9	1,3-Dichloropropane	23.8		1.0	0.090
594-20-7	2,2-Dichloropropane	23.3		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	25.5		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.4		3.0	0.19
563-58-6	1,1-Dichloropropene	21.1		1.0	0.19
100-41-4	Ethylbenzene	23.4		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500579/5

Matrix: Water Lab File ID: P2854.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 22:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	26.1		3.0	0.86
591-78-6	2-Hexanone	109		5.0	1.7
74-88-4	Iodomethane	16.6		1.0	0.23
78-83-1	Isobutyl alcohol	679		110	37
75-09-2	Methylene Chloride	22.7		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	107		5.0	0.98
100-42-5	Styrene	24.8		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.8		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	25.3		1.0	0.21
127-18-4	Tetrachloroethene	22.8		1.0	0.20
108-88-3	Toluene	23.1		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	23.5		1.0	0.21
71-55-6	1,1,1-Trichloroethane	21.9		1.0	0.16
79-00-5	1,1,2-Trichloroethane	24.4		1.0	0.27
79-01-6	Trichloroethene	21.6		1.0	0.16
75-69-4	Trichlorofluoromethane	20.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.6		2.5	0.33
108-05-4	Vinyl acetate	52.7		3.0	0.94
75-01-4	Vinyl chloride	20.5		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	23.9		2.0	0.15
95-47-6	o-Xylene	24.3		1.0	0.19
1330-20-7	Xylenes, Total	48.2		2.0	0.19
106-93-4	1,2-Dibromoethane	23.9		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2854.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Jun-2020 22:45:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.112	0.001	99	2613020	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.645	0.001	87	581311	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.872	0.000	96	815687	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	92	625329	50.0	49.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	96	701566	50.0	47.4	
$ 6 Toluene-d8 (Surr)	98	6.369	6.366	0.003	93	2551046	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	84	898459	50.0	49.9	
10 Dichlorodifluoromethane	85	1.662	1.670	-0.008	99	121565	25.0	16.6	
11 Chloromethane	50	1.842	1.839	0.003	99	190561	25.0	19.0	
12 Vinyl chloride	62	1.937	1.945	-0.008	98	234674	25.0	20.5	
14 Bromomethane	94	2.232	2.230	0.002	90	93606	25.0	20.4	
15 Chloroethane	64	2.327	2.325	0.002	100	160439	25.0	22.0	
16 Dichlorofluoromethane	67	2.496	2.494	0.002	97	367423	25.0	21.6	
17 Trichlorofluoromethane	101	2.528	2.536	-0.008	98	288842	25.0	20.5	
19 Ethyl ether	59	2.749	2.747	0.002	91	209730	25.0	23.6	
21 Acrolein	56	2.855	2.852	0.003	99	292944	246.9	133.3	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.937	0.002	67	96415	25.0	15.1	
22 1,1-Dichloroethene	96	2.939	2.937	0.002	97	149568	25.0	17.7	
24 Acetone	43	2.960	2.958	0.002	100	335089	100.0	96.1	
26 Iodomethane	142	3.066	3.063	0.003	98	131026	25.0	16.6	
27 Carbon disulfide	76	3.129	3.127	0.002	99	411786	25.0	15.5	
29 Methyl acetate	43	3.192	3.190	0.002	98	441665	50.0	49.7	
30 3-Chloro-1-propene	41	3.213	3.211	0.002	94	317341	25.0	21.9	
31 Methylene Chloride	84	3.308	3.306	0.002	94	224820	25.0	22.7	
32 2-Methyl-2-propanol	59	3.351	3.348	0.003	98	292561	250.0	255.4	
33 Acrylonitrile	53	3.467	3.464	0.003	99	1190986	250.0	247.6	
34 Methyl tert-butyl ether	73	3.498	3.496	0.002	95	687374	25.0	24.1	
35 trans-1,2-Dichloroethene	96	3.509	3.517	-0.008	98	203199	25.0	20.3	
36 Hexane	57	3.709	3.707	0.002	90	177061	25.0	13.1	
38 Vinyl acetate	43	3.804	3.802	0.002	97	1134793	50.0	52.7	
39 1,1-Dichloroethane	63	3.826	3.834	-0.008	96	407353	25.0	22.3	
44 2-Butanone (MEK)	43	4.216	4.214	0.002	100	588965	100.0	101.1	
47 cis-1,2-Dichloroethene	96	4.248	4.245	0.003	82	249197	25.0	22.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.258	4.256	0.002	89	288217	25.0	23.3	
50 sec-Butyl Alcohol	45	4.322	4.330	-0.008	99	779931	750.0	832.7	
53 Chlorobromomethane	128	4.427	4.425	0.002	98	112087	25.0	22.5	
52 Tetrahydrofuran	42	4.427	4.435	-0.008	89	199458	50.0	51.7	
54 Chloroform	83	4.480	4.477	0.003	93	394339	25.0	22.5	
55 1,1,1-Trichloroethane	97	4.628	4.625	0.003	99	303628	25.0	21.9	
56 Cyclohexane	56	4.680	4.689	-0.009	89	330575	25.0	18.7	
57 1,1-Dichloropropene	75	4.744	4.741	0.003	97	307529	25.0	21.1	
59 Carbon tetrachloride	117	4.744	4.752	-0.008	72	244520	25.0	21.5	
58 Isobutyl alcohol	41	4.744	4.752	-0.008	94	274515	625.0	679.2	
60 Benzene	78	4.891	4.900	-0.009	96	964916	25.0	22.4	
61 1,2-Dichloroethane	62	4.923	4.921	0.002	97	311664	25.0	22.9	
66 n-Heptane	43	5.081	5.079	0.002	92	236568	25.0	18.4	
67 Trichloroethene	95	5.387	5.385	0.002	99	228087	25.0	21.6	
68 2-Pentanone	43	5.482	5.480	0.002	99	959534	100.0	110.9	
69 Methylcyclohexane	55	5.577	5.586	-0.009	92	268870	25.0	20.1	
70 1,2-Dichloropropane	63	5.588	5.596	-0.008	98	270715	25.0	24.4	
72 1,4-Dioxane	88	5.630	5.638	-0.008	93	77948	500.0	504.1	
73 Dibromomethane	93	5.662	5.659	0.003	91	150310	25.0	23.6	
74 Dichlorobromomethane	83	5.788	5.786	0.002	99	305689	25.0	23.7	
76 2-Chloroethyl vinyl ether	63	5.989	5.987	0.002	91	184841	25.0	24.0	
77 cis-1,3-Dichloropropene	75	6.137	6.134	0.003	96	397331	25.0	25.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.240	-0.008	96	1184925	100.0	106.6	
79 Toluene	91	6.422	6.430	-0.008	98	1041627	25.0	23.1	
80 trans-1,3-Dichloropropene	75	6.601	6.599	0.002	97	329694	25.0	23.4	
81 Ethyl methacrylate	69	6.622	6.620	0.002	88	372393	25.0	26.1	
82 1,1,2-Trichloroethane	97	6.780	6.778	0.002	90	221971	25.0	24.4	
83 Tetrachloroethene	164	6.875	6.873	0.002	94	161415	25.0	22.8	
84 1,3-Dichloropropane	76	6.928	6.926	0.002	97	405086	25.0	23.8	
85 2-Hexanone	43	6.939	6.947	-0.008	95	853298	100.0	109.2	
86 Chlorodibromomethane	129	7.118	7.126	-0.008	90	216784	25.0	24.8	
88 Ethylene Dibromide	107	7.234	7.242	-0.008	98	226061	25.0	23.9	
89 1-Chlorohexane	91	7.625	7.633	-0.008	98	329556	25.0	25.6	
90 Chlorobenzene	112	7.667	7.675	-0.008	96	643131	25.0	23.4	
92 Ethylbenzene	106	7.751	7.749	0.002	98	353013	25.0	23.4	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.749	-0.008	95	201740	25.0	23.8	
93 m-Xylene & p-Xylene	106	7.867	7.865	0.002	99	434020	25.0	23.9	
94 o-Xylene	106	8.226	8.224	0.002	95	424462	25.0	24.3	
95 Styrene	104	8.237	8.245	-0.008	95	728875	25.0	24.8	
96 Bromoform	173	8.427	8.424	0.003	94	127717	25.0	24.7	
97 Isopropylbenzene	105	8.564	8.572	-0.008	96	1074072	25.0	25.2	
99 Cyclohexanone	55	8.659	8.667	-0.008	91	729847	1000.0	1226.1	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.857	-0.008	93	316261	25.0	25.3	
101 Bromobenzene	156	8.891	8.889	0.002	96	239940	25.0	23.8	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.889	0.002	77	80566	25.0	24.2	
103 1,2,3-Trichloropropane	110	8.923	8.920	0.003	85	89485	25.0	23.6	
104 N-Propylbenzene	120	8.965	8.973	-0.008	99	286996	25.0	24.3	
105 2-Chlorotoluene	126	9.060	9.068	-0.008	96	242814	25.0	24.2	
106 1,3,5-Trimethylbenzene	105	9.134	9.142	-0.008	93	862639	25.0	24.6	
107 4-Chlorotoluene	126	9.176	9.184	-0.008	98	254618	25.0	24.3	
108 tert-Butylbenzene	119	9.450	9.448	0.002	94	703950	25.0	24.0	
109 1,2,4-Trimethylbenzene	105	9.503	9.511	-0.008	97	875871	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 sec-Butylbenzene	134	9.672	9.669	0.003	94	207298	25.0	24.2	
111 1,3-Dichlorobenzene	146	9.798	9.796	0.002	98	442823	25.0	24.3	
112 4-Isopropyltoluene	119	9.820	9.817	0.003	97	880200	25.0	24.6	
113 1,4-Dichlorobenzene	146	9.893	9.902	-0.009	94	453355	25.0	24.0	
115 n-Butylbenzene	91	10.221	10.218	0.003	98	810211	25.0	24.2	
116 1,2-Dichlorobenzene	146	10.252	10.250	0.002	96	420480	25.0	23.2	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.031	0.002	82	52767	25.0	24.8	
119 1,2,4-Trichlorobenzene	180	11.856	11.854	0.002	94	231909	25.0	23.5	
120 Hexachlorobutadiene	225	11.993	12.002	-0.009	95	75418	25.0	21.0	
121 Naphthalene	128	12.120	12.128	-0.008	98	811548	25.0	25.5	
122 1,2,3-Trichlorobenzene	180	12.342	12.350	-0.008	95	210713	25.0	23.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	42.8	
S 142 Xylenes, Total	106				0		50.0	48.2	
S 140 Trihalomethanes, Total	1				0		100.0	95.6	
S 143 Xylenes, Total (URS)	1				0		50.0	48.2	
S 145 1,3-Dichloropropene, Total	1				0		50.0	48.8	
S 144 1,2-Dichloroethene, Total	1				0		50.0	42.8	

Reagents:

MV-Gas B_00064	Amount Added: 5.00	Units: uL	
MV-MegaMain B_00031	Amount Added: 12.50	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Jun-2020 20:51:18 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2854.D

Injection Date: 29-Jun-2020 22:45:30 Instrument ID: VMS_P Operator ID: PETUNINP

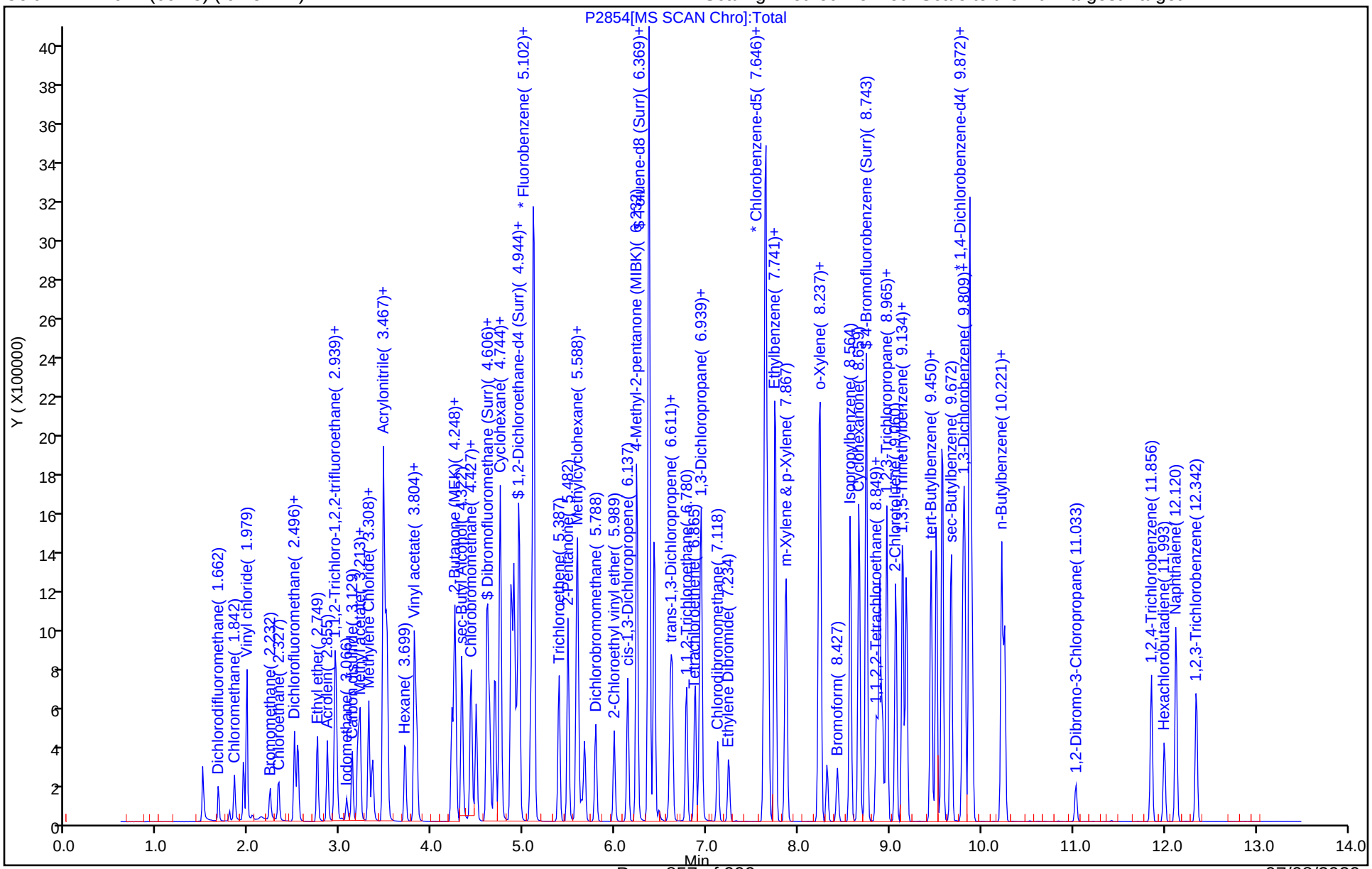
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2854.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Jun-2020 22:45:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.7	99.38
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.76
$ 6 Toluene-d8 (Surr)	50.0	49.9	99.75
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.9	99.81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500579/7

Matrix: Water Lab File ID: P2856.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	238		30	9.6
126-99-8	Chloroprene	23.5		1.0	0.21
126-98-7	Methacrylonitrile	241		10	1.6
80-62-6	Methyl methacrylate	51.2		4.0	1.1
107-12-0	Propionitrile	251		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2856.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Jun-2020 23:28:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:51:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 02:01:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.112	-0.002	99	2527416	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	565331	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.872	-0.003	96	794948	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	595955	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	684755	50.0	47.8	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2467329	50.0	49.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	84	872596	50.0	49.7	
13 Ethylene oxide	43	2.198	2.200	-0.002	100	1731458	NC	NC	
18 Ethanol	45	2.651	2.643	0.008	100	242045	1500.0	1329.0	
20 Propene oxide	58	2.789	2.791	-0.002	97	6026847	2500.0	2481.7	
25 Isopropyl alcohol	45	3.042	3.044	-0.002	99	202661	250.0	216.3	
28 Acetonitrile	41	3.168	3.171	-0.003	99	439694	250.0	237.8	
40 Isopropyl ether	87	3.833	3.825	0.008	95	210960	25.0	25.3	
41 2-Chloro-1,3-butadiene	53	3.886	3.888	-0.002	90	359423	25.0	23.5	
43 Tert-butyl ethyl ether	59	4.097	4.089	0.008	98	699019	25.0	22.6	
46 Ethyl acetate	43	4.234	4.226	0.008	99	596627	50.0	64.8	
49 Propionitrile	54	4.266	4.268	-0.002	99	500640	250.0	251.1	
51 Methacrylonitrile	41	4.382	4.384	-0.002	91	1846500	250.0	241.3	
62 Tert-amyl methyl ether	73	4.962	4.965	-0.003	85	674628	25.0	22.5	
63 n-Butanol	56	4.962	4.965	-0.003	50	261923	625.0	754.5	
71 Methyl methacrylate	100	5.596	5.598	-0.002	92	155983	50.0	51.2	
75 2-Nitropropane	41	5.954	5.946	0.008	97	120673	50.0	41.4	
87 Tetrahydrothiophene	60	7.115	7.117	-0.002	92	83539	50.0	28.9	
98 cis-1,4-Dichloro-2-butene	53	8.614	8.616	-0.002	89	164329	50.0	44.0	
114 1,2,3-Trimethylbenzene	105	9.912	9.914	-0.002	98	863651	25.0	25.9	
118 1,3,5-Trichlorobenzene	180	11.220	11.222	-0.002	96	248421	25.0	22.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

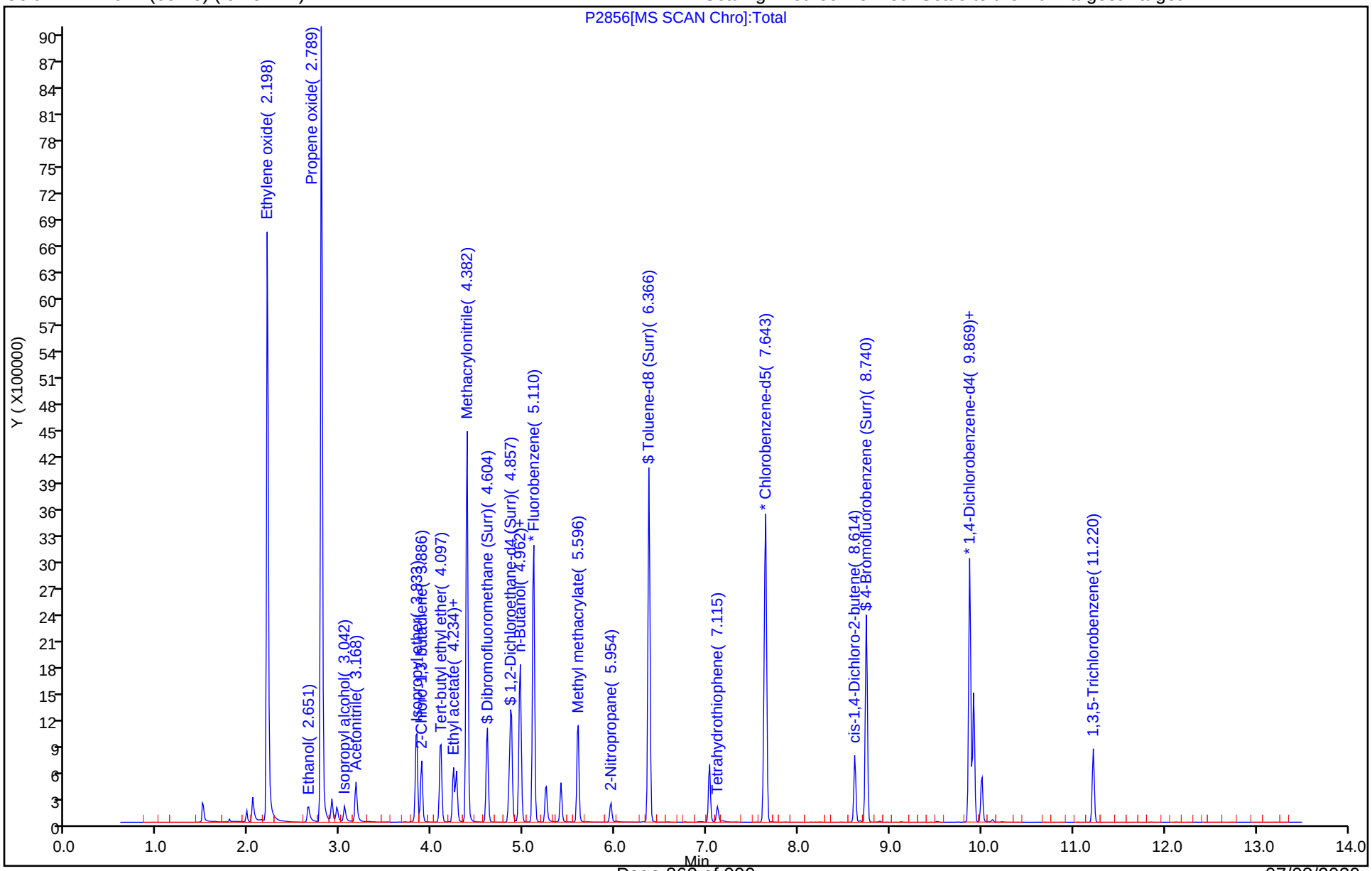
Report Date: 30-Jun-2020 20:51:21 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2856.D

Injection Date:	29-Jun-2020 23:28:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCSD			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2856.D				
Lims ID:	LCSD				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	29-Jun-2020 23:28:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	LCSD S				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:51:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 30-Jun-2020 02:01:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.0	97.92
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.8	95.62
$ 6 Toluene-d8 (Surr)	50.0	49.6	99.20
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.7	99.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500580/5

Matrix: Water Lab File ID: R6974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	93.2		10	1.9
107-02-8	Acrolein	148		20	2.8
107-13-1	Acrylonitrile	272		20	1.4
71-43-2	Benzene	25.7		1.0	0.16
74-97-5	Chlorobromomethane	26.6		1.0	0.10
75-27-4	Dichlorobromomethane	27.9		1.0	0.17
75-25-2	Bromoform	24.4		1.0	0.46
74-83-9	Bromomethane	23.6		2.0	0.21
78-93-3	2-Butanone (MEK)	102		6.0	2.0
75-15-0	Carbon disulfide	19.7		2.0	0.17
56-23-5	Carbon tetrachloride	26.5		1.0	0.19
108-90-7	Chlorobenzene	26.8		1.0	0.17
124-48-1	Chlorodibromomethane	24.1		1.0	0.17
75-00-3	Chloroethane	25.5		2.0	0.41
67-66-3	Chloroform	26.3		1.0	0.16
74-87-3	Chloromethane	20.0		2.0	0.30
107-05-1	Allyl chloride	24.5		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	22.8		5.0	0.47
74-95-3	Dibromomethane	27.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	27.2		1.0	0.15
541-73-1	1,3-Dichlorobenzene	26.8		1.0	0.13
106-46-7	1,4-Dichlorobenzene	26.6		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	23.5		3.0	0.80
75-71-8	Dichlorodifluoromethane	13.8		2.0	0.31
75-34-3	1,1-Dichloroethane	25.5		1.0	0.22
107-06-2	1,2-Dichloroethane	26.3		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	28.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	25.8		1.0	0.15
75-35-4	1,1-Dichloroethene	23.8		1.0	0.23
78-87-5	1,2-Dichloropropane	25.5		1.0	0.18
142-28-9	1,3-Dichloropropane	24.9		1.0	0.090
594-20-7	2,2-Dichloropropane	26.7		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	24.6		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	22.2		3.0	0.19
563-58-6	1,1-Dichloropropene	25.4		1.0	0.19
100-41-4	Ethylbenzene	28.3		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500580/5

Matrix: Water Lab File ID: R6974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/29/2020 23:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	23.8		3.0	0.86
591-78-6	2-Hexanone	97.9		5.0	1.7
74-88-4	Iodomethane	30.4		1.0	0.23
78-83-1	Isobutyl alcohol	594		110	37
75-09-2	Methylene Chloride	25.1		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	95.8		5.0	0.98
100-42-5	Styrene	28.1		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	24.8		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	24.1		1.0	0.21
127-18-4	Tetrachloroethene	25.6		1.0	0.20
108-88-3	Toluene	26.4		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.3		1.0	0.21
71-55-6	1,1,1-Trichloroethane	24.8		1.0	0.16
79-00-5	1,1,2-Trichloroethane	27.3		1.0	0.27
79-01-6	Trichloroethene	27.7		1.0	0.16
75-69-4	Trichlorofluoromethane	26.4		2.0	0.29
96-18-4	1,2,3-Trichloropropane	25.0		2.5	0.33
108-05-4	Vinyl acetate	48.9		3.0	0.94
75-01-4	Vinyl chloride	22.2		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.8		2.0	0.15
95-47-6	o-Xylene	25.3		1.0	0.19
1330-20-7	Xylenes, Total	50.1		2.0	0.19
106-93-4	1,2-Dibromoethane	25.2		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6974.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Jun-2020 23:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1739138	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	398010	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	96	629903	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.508	-0.004	92	444286	50.0	50.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	537580	50.0	50.1	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1712771	50.0	49.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.617	8.620	-0.003	85	631225	50.0	47.8	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	90600	25.0	13.8	
11 Chloromethane	50	1.828	1.828	0.000	99	134236	25.0	20.0	
12 Vinyl chloride	62	1.918	1.918	0.000	98	139853	25.0	22.2	
14 Bromomethane	94	2.199	2.195	0.004	90	80592	25.0	23.6	
15 Chloroethane	64	2.285	2.285	0.000	99	97165	25.0	25.5	
16 Dichlorofluoromethane	67	2.450	2.454	-0.004	97	248281	25.0	25.1	
17 Trichlorofluoromethane	101	2.484	2.488	-0.004	97	242989	25.0	26.4	
19 Ethyl ether	59	2.694	2.697	-0.003	91	144309	25.0	27.1	
21 Acrolein	56	2.802	2.802	0.000	100	183631	246.9	147.5	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.881				ND	ND	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	96	111665	25.0	23.8	
24 Acetone	43	2.900	2.900	0.000	100	232682	100.0	93.2	
26 Iodomethane	142	3.001	3.001	0.000	100	126342	25.0	30.4	
27 Carbon disulfide	76	3.061	3.061	0.000	99	277851	25.0	19.7	
29 Methyl acetate	43	3.125	3.125	0.000	98	289952	50.0	53.1	
30 3-Chloro-1-propene	41	3.147	3.147	0.000	92	200110	25.0	24.5	
31 Methylene Chloride	84	3.237	3.241	-0.004	92	167783	25.0	25.1	
32 2-Methyl-2-propanol	59	3.286	3.282	0.004	98	201606	250.0	251.6	
33 Acrylonitrile	53	3.398	3.398	0.000	99	818665	250.0	272.3	
34 Methyl tert-butyl ether	73	3.425	3.425	0.000	94	516423	25.0	25.7	
35 trans-1,2-Dichloroethene	96	3.436	3.440	-0.004	98	145013	25.0	25.8	
37 Hexane	57	3.627	3.627	0.000	90	105958	25.0	18.8	
39 Vinyl acetate	43	3.728	3.728	0.000	97	786238	50.0	48.9	
40 1,1-Dichloroethane	63	3.751	3.755	-0.004	96	289625	25.0	25.5	
45 2-Butanone (MEK)	43	4.133	4.133	0.000	100	379571	100.0	102.5	
47 cis-1,2-Dichloroethene	96	4.156	4.156	0.000	82	191198	25.0	28.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.167	4.167	0.000	87	239007	25.0	26.7	
50 sec-Butyl Alcohol	45	4.242	4.242	0.000	98	485430	750.0	676.3	
52 Chlorobromomethane	128	4.332	4.332	0.000	95	89234	25.0	26.6	
53 Tetrahydrofuran	42	4.343	4.339	0.004	88	126829	50.0	52.0	
54 Chloroform	83	4.388	4.392	-0.004	92	313804	25.0	26.3	
55 1,1,1-Trichloroethane	97	4.531	4.534	-0.004	97	262365	25.0	24.8	
56 Cyclohexane	56	4.590	4.591	0.000	88	216360	25.0	23.6	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	96	226399	25.0	25.4	
59 Carbon tetrachloride	117	4.647	4.647	0.000	94	218166	25.0	26.5	
60 Isobutyl alcohol	41	4.658	4.658	0.000	95	167187	625.0	593.9	
62 Benzene	78	4.793	4.797	-0.004	95	687352	25.0	25.7	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	98	253239	25.0	26.3	
65 n-Heptane	43	4.977	4.980	-0.003	92	130320	25.0	23.3	
67 Trichloroethene	95	5.280	5.280	0.000	99	180613	25.0	27.7	
68 2-Pentanone	43	5.381	5.381	0.000	99	624444	100.0	102.2	
69 Methylcyclohexane	55	5.471	5.471	0.000	91	174401	25.0	24.1	
70 1,2-Dichloropropane	63	5.483	5.483	0.000	89	187756	25.0	25.5	
72 1,4-Dioxane	88	5.528	5.531	-0.003	95	61633	500.0	515.7	
73 Dibromomethane	93	5.558	5.558	0.000	94	121039	25.0	27.4	
74 Dichlorobromomethane	83	5.678	5.678	0.000	99	250273	25.0	27.9	
76 2-Chloroethyl vinyl ether	63	5.880	5.880	0.000	90	127125	25.0	23.1	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	291396	25.0	24.6	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	772101	100.0	95.8	
79 Toluene	91	6.315	6.315	0.000	98	743430	25.0	26.4	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	88	257414	25.0	22.2	
81 Ethyl methacrylate	69	6.510	6.510	0.000	88	251883	25.0	23.8	
82 1,1,2-Trichloroethane	97	6.660	6.660	0.000	92	168473	25.0	27.3	
83 Tetrachloroethene	164	6.750	6.753	-0.003	95	130843	25.0	25.6	
84 1,3-Dichloropropane	76	6.810	6.810	0.000	90	312374	25.0	24.9	
85 2-Hexanone	43	6.828	6.828	0.000	95	540341	100.0	97.9	
87 Chlorodibromomethane	129	7.001	7.001	0.000	89	184605	25.0	24.1	
88 Ethylene Dibromide	107	7.117	7.117	0.000	98	187055	25.0	25.2	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	229724	25.0	26.5	
90 Chlorobenzene	112	7.548	7.548	0.000	95	489191	25.0	26.8	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.619	0.004	91	169165	25.0	24.8	
92 Ethylbenzene	106	7.627	7.627	0.000	99	256746	25.0	28.3	
93 m-Xylene & p-Xylene	106	7.747	7.743	0.004	0	316045	25.0	24.8	
94 o-Xylene	106	8.103	8.107	-0.004	97	315749	25.0	25.3	
95 Styrene	104	8.122	8.122	0.000	95	560396	25.0	28.1	
96 Bromoform	173	8.302	8.298	0.004	95	124336	25.0	24.4	
97 Isopropylbenzene	105	8.444	8.444	0.000	96	808353	25.0	26.1	
99 Cyclohexanone	55	8.542	8.542	0.000	91	461284	1000.0	794.0	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	253378	25.0	24.1	
101 Bromobenzene	156	8.763	8.763	0.000	96	203401	25.0	27.4	
102 trans-1,4-Dichloro-2-butene	53	8.766	8.766	0.000	58	71414	25.0	23.5	
103 1,2,3-Trichloropropane	110	8.796	8.796	0.000	84	82125	25.0	25.0	
104 N-Propylbenzene	120	8.841	8.845	-0.004	99	214089	25.0	25.9	
105 2-Chlorotoluene	126	8.939	8.939	0.000	96	194301	25.0	26.0	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	693543	25.0	26.5	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	203289	25.0	26.7	
108 tert-Butylbenzene	119	9.325	9.325	0.000	93	552538	25.0	25.7	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	722800	25.0	26.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	159600	25.0	25.7	
112 1,3-Dichlorobenzene	146	9.670	9.670	0.000	97	379482	25.0	26.8	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	699575	25.0	26.8	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	94	397068	25.0	26.6	
116 n-Butylbenzene	91	10.093	10.094	-0.001	98	625195	25.0	24.3	
117 1,2-Dichlorobenzene	146	10.123	10.120	0.003	97	389596	25.0	27.2	
118 1,2-Dibromo-3-Chloropropane	157	10.903	10.899	0.004	82	52359	25.0	22.8	
120 1,2,4-Trichlorobenzene	180	11.724	11.724	0.000	94	234587	25.0	24.3	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	93	74711	25.0	24.3	
122 Naphthalene	128	11.990	11.994	-0.004	97	794783	25.0	24.7	
123 1,2,3-Trichlorobenzene	180	12.215	12.211	0.004	95	236510	25.0	26.3	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	53.8	
S 139 Xylenes, Total (URS)	1				0		50.0	50.1	
S 138 Xylenes, Total	106				0		50.0	50.1	
S 140 Trihalomethanes, Total	1				0		100.0	102.7	
S 136 1,3-Dichloropropene, Total	1				0		50.0	46.8	
S 141 1,2-Dichloroethene, Total	1				0		50.0	53.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMain B_00031	Amount Added:	12.50	Units: uL	
MV-Gas B_00064	Amount Added:	5.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

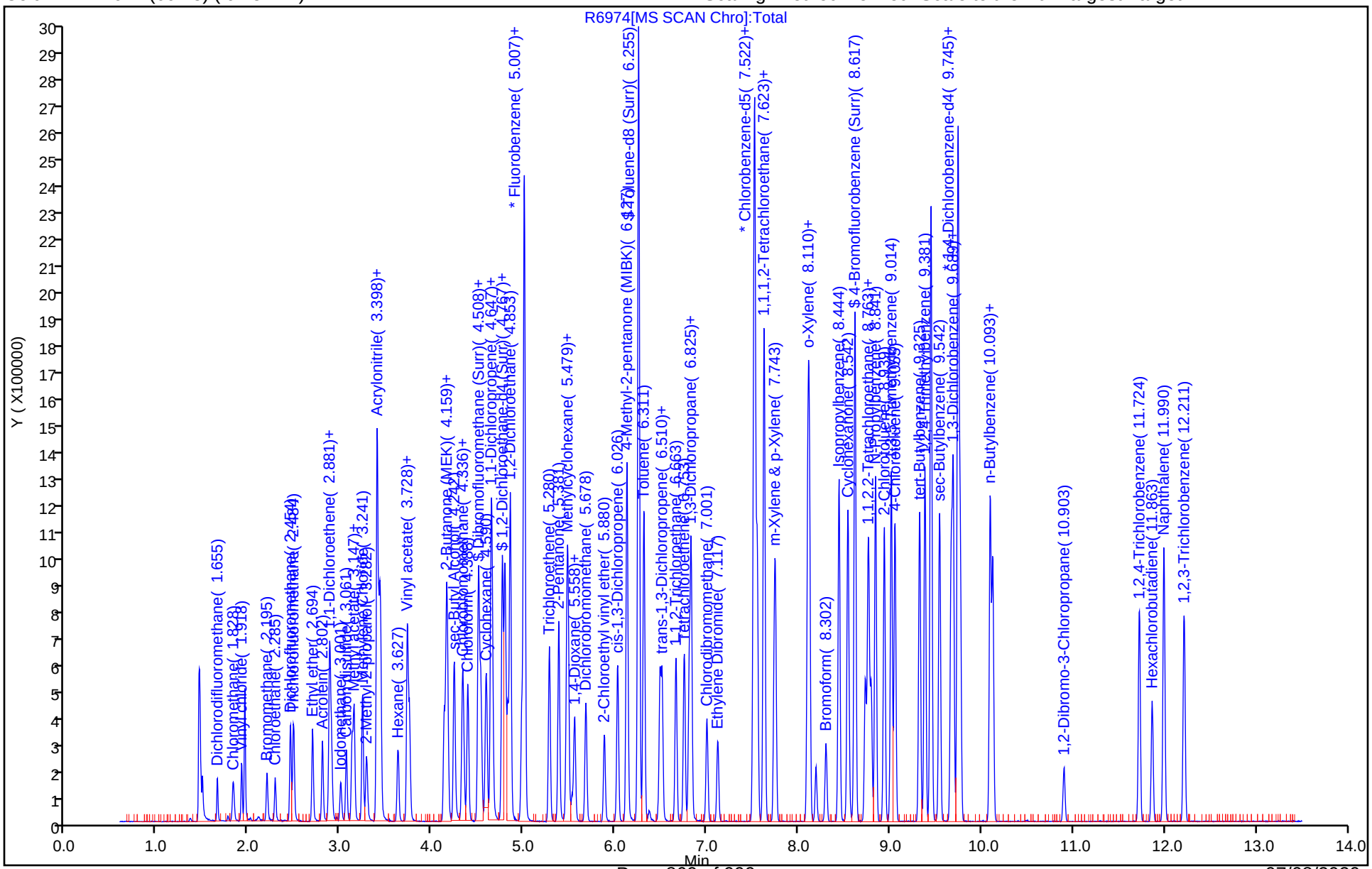
Report Date: 30-Jun-2020 20:31:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6974.D

Injection Date:	29-Jun-2020 23:28:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6974.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Jun-2020 23:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.6	101.24
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.1	100.11
$ 6 Toluene-d8 (Surr)	50.0	49.7	99.30
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.8	95.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500580/7

Matrix: Water Lab File ID: R6976.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 00:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	259		30	9.6
126-99-8	Chloroprene	24.8		1.0	0.21
126-98-7	Methacrylonitrile	257		10	1.6
80-62-6	Methyl methacrylate	54.2		4.0	1.1
107-12-0	Propionitrile	270		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	103		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6976.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 30-Jun-2020 00:10:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	1746791	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	403138	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	97	630630	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.508	-0.004	92	455644	50.0	51.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	550747	50.0	51.1	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1690855	50.0	48.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	86	642247	50.0	48.6	
13 Ethylene oxide	43	2.165	2.165	0.000	99	952841	2500.0	3870.0	
18 Ethanol	45	2.604	2.604	0.000	99	153238	1500.0	1751.0	
20 Propene oxide	58	2.738	2.739	-0.001	96	4041914	2500.0	3307.1	
25 Isopropyl alcohol	45	2.986	2.990	-0.004	98	118100	250.0	239.7	
28 Acetonitrile	41	3.106	3.106	0.000	100	281643	250.0	258.8	
41 Isopropyl ether	87	3.751	3.751	0.000	94	144234	25.0	27.6	
42 2-Chloro-1,3-butadiene	53	3.803	3.803	0.000	91	256772	25.0	24.8	
44 Tert-butyl ethyl ether	59	4.009	4.009	0.000	98	492075	25.0	26.3	
46 Ethyl acetate	43	4.148	4.144	0.004	99	356079	50.0	47.5	
49 Propionitrile	54	4.182	4.182	0.000	99	325590	250.0	269.8	
51 Methacrylonitrile	41	4.290	4.294	-0.004	91	1181606	250.0	257.4	
64 Tert-amyl methyl ether	73	4.864	4.864	0.000	90	474887	25.0	27.9	
66 n-Butanol	56	5.145	5.145	0.000	89	134394	625.0	539.8	
71 Methyl methacrylate	100	5.490	5.490	0.000	91	112845	50.0	54.2	
75 2-Nitropropane	41	5.846	5.843	0.003	98	83645	50.0	47.0	
86 Tetrahydrothiophene	60	7.001	6.997	0.004	89	55534	50.0	41.8	
98 cis-1,4-Dichloro-2-butene	53	8.496	8.493	0.003	93	139259	50.0	58.6	
115 1,2,3-Trimethylbenzene	105	9.786	9.786	0.000	99	718652	25.0	26.4	
119 1,3,5-Trichlorobenzene	180	11.087	11.087	0.000	96	230730	25.0	26.6	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

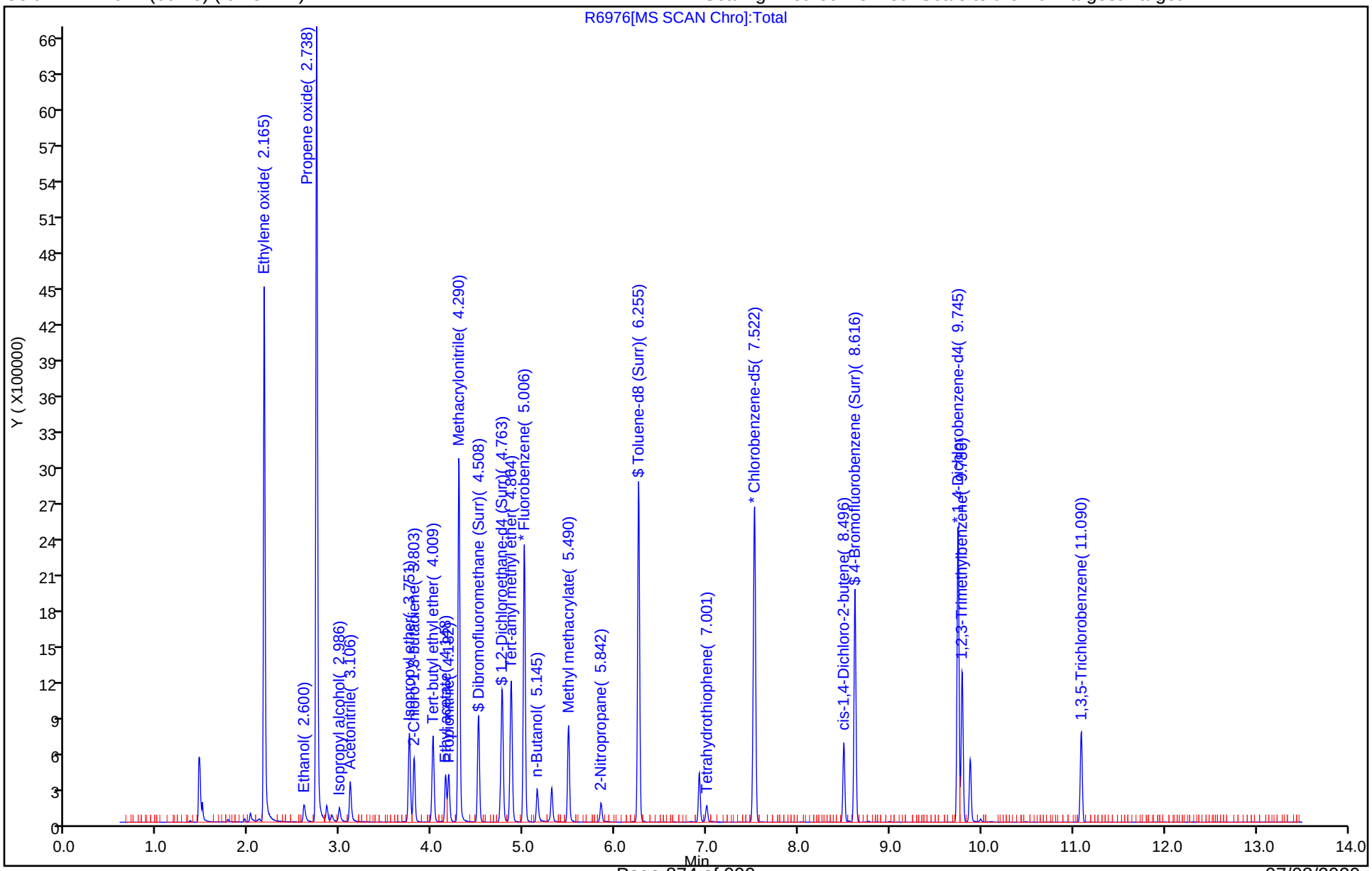
Report Date: 30-Jun-2020 20:31:19 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6976.D

Injection Date:	30-Jun-2020 00:10:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	LCSD			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6976.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 30-Jun-2020 00:10:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:12 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	51.7	103.37
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	51.1	102.11
$ 6 Toluene-d8 (Surr)	50.0	48.4	96.79
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.6	97.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500875/5

Matrix: Water Lab File ID: P2974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	94.6		10	1.9
107-02-8	Acrolein	236		20	2.8
107-13-1	Acrylonitrile	247		20	1.4
71-43-2	Benzene	23.8		1.0	0.16
74-97-5	Chlorobromomethane	25.2		1.0	0.10
75-27-4	Dichlorobromomethane	24.8		1.0	0.17
75-25-2	Bromoform	26.2		1.0	0.46
74-83-9	Bromomethane	28.2		2.0	0.21
78-93-3	2-Butanone (MEK)	99.0		6.0	2.0
75-15-0	Carbon disulfide	27.4		2.0	0.17
56-23-5	Carbon tetrachloride	25.4		1.0	0.19
108-90-7	Chlorobenzene	23.6		1.0	0.17
124-48-1	Chlorodibromomethane	25.5		1.0	0.17
75-00-3	Chloroethane	27.5		2.0	0.41
67-66-3	Chloroform	23.6		1.0	0.16
74-87-3	Chloromethane	27.6		2.0	0.30
107-05-1	Allyl chloride	25.5		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	27.1		5.0	0.47
74-95-3	Dibromomethane	24.7		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.5		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.0		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	23.8		3.0	0.80
75-71-8	Dichlorodifluoromethane	35.7		2.0	0.31
75-34-3	1,1-Dichloroethane	24.4		1.0	0.22
107-06-2	1,2-Dichloroethane	24.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.7		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.7		1.0	0.15
75-35-4	1,1-Dichloroethene	26.6		1.0	0.23
78-87-5	1,2-Dichloropropane	24.6		1.0	0.18
142-28-9	1,3-Dichloropropane	23.6		1.0	0.090
594-20-7	2,2-Dichloropropane	26.4		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	25.1		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.2		3.0	0.19
563-58-6	1,1-Dichloropropene	23.9		1.0	0.19
100-41-4	Ethylbenzene	23.7		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500875/5

Matrix: Water Lab File ID: P2974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	25.5		3.0	0.86
591-78-6	2-Hexanone	103		5.0	1.7
74-88-4	Iodomethane	22.2		1.0	0.23
78-83-1	Isobutyl alcohol	646		110	37
75-09-2	Methylene Chloride	25.5		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	102		5.0	0.98
100-42-5	Styrene	24.6		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	24.0		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	24.8		1.0	0.21
127-18-4	Tetrachloroethene	24.2		1.0	0.20
108-88-3	Toluene	24.1		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.0		1.0	0.21
71-55-6	1,1,1-Trichloroethane	24.8		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.3		1.0	0.27
79-01-6	Trichloroethene	23.9		1.0	0.16
75-69-4	Trichlorofluoromethane	26.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	24.3		2.5	0.33
108-05-4	Vinyl acetate	51.2		3.0	0.94
75-01-4	Vinyl chloride	28.2		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	23.8		2.0	0.15
95-47-6	o-Xylene	24.1		1.0	0.19
1330-20-7	Xylenes, Total	47.9		2.0	0.19
106-93-4	1,2-Dibromoethane	24.1		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2974.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jul-2020 23:40:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2329191	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	540610	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	771461	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	562284	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	623101	50.0	47.2	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2297194	50.0	48.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	84	829748	50.0	48.7	
10 Dichlorodifluoromethane	85	1.660	1.660	0.000	99	233081	25.0	35.7	
11 Chloromethane	50	1.839	1.839	0.000	99	246417	25.0	27.6	
12 Vinyl chloride	62	1.934	1.945	-0.011	98	287882	25.0	28.2	
14 Bromomethane	94	2.230	2.230	0.000	91	112697	25.0	28.2	
15 Chloroethane	64	2.325	2.325	0.000	100	178390	25.0	27.5	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	401576	25.0	26.5	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	98	333142	25.0	26.5	
19 Ethyl ether	59	2.747	2.747	0.000	90	195956	25.0	24.7	
21 Acrolein	56	2.852	2.852	0.000	100	463330	246.9	236.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	71	149177	25.0	26.3	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	200987	25.0	26.6	
24 Acetone	43	2.958	2.958	0.000	99	294094	100.0	94.6	
26 Iodomethane	142	3.063	3.063	0.000	97	158368	25.0	22.2	
27 Carbon disulfide	76	3.127	3.127	0.000	99	643977	25.0	27.4	
29 Methyl acetate	43	3.190	3.190	0.000	97	385427	50.0	48.7	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	329816	25.0	25.5	
31 Methylene Chloride	84	3.306	3.306	0.000	97	224772	25.0	25.5	
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	98	271697	250.0	266.1	
33 Acrylonitrile	53	3.464	3.464	0.000	99	1060624	250.0	247.4	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	94	628785	25.0	24.7	
35 trans-1,2-Dichloroethene	96	3.506	3.517	-0.011	99	219532	25.0	24.7	
36 Hexane	57	3.707	3.707	0.000	89	330834	25.0	26.2	
38 Vinyl acetate	43	3.802	3.802	0.000	97	982756	50.0	51.2	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	396740	25.0	24.4	
44 2-Butanone (MEK)	43	4.213	4.214	-0.001	100	514021	100.0	99.0	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	82	244495	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.256	4.256	0.000	88	291106	25.0	26.4	
50 sec-Butyl Alcohol	45	4.319	4.330	-0.011	99	680674	750.0	815.2	
53 Chlorobromomethane	128	4.425	4.425	0.000	97	111900	25.0	25.2	
52 Tetrahydrofuran	42	4.425	4.435	-0.010	89	174028	50.0	50.6	
54 Chloroform	83	4.477	4.477	0.000	92	369179	25.0	23.6	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	98	307282	25.0	24.8	
56 Cyclohexane	56	4.688	4.688	0.000	88	405820	25.0	25.7	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	309723	25.0	23.9	
59 Carbon tetrachloride	117	4.741	4.752	-0.011	82	257356	25.0	25.4	
58 Isobutyl alcohol	41	4.741	4.752	-0.011	94	232858	625.0	646.3	
60 Benzene	78	4.889	4.900	-0.011	96	913011	25.0	23.8	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	291811	25.0	24.1	
66 n-Heptane	43	5.079	5.079	0.000	91	289327	25.0	25.3	
67 Trichloroethene	95	5.385	5.385	0.000	99	225246	25.0	23.9	
68 2-Pentanone	43	5.480	5.480	0.000	99	815708	100.0	105.7	
69 Methylcyclohexane	55	5.575	5.585	-0.010	92	296731	25.0	24.8	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	97	243965	25.0	24.6	
72 1,4-Dioxane	88	5.628	5.638	-0.010	91	73084	500.0	530.3	
73 Dibromomethane	93	5.659	5.670	-0.011	94	140115	25.0	24.7	
74 Dichlorobromomethane	83	5.786	5.786	0.000	100	284643	25.0	24.8	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	91	194791	25.0	28.4	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	363627	25.0	25.1	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	95	1013731	100.0	102.3	
79 Toluene	91	6.430	6.430	0.000	98	968877	25.0	24.1	
80 trans-1,3-Dichloropropene	75	6.598	6.599	-0.001	97	304557	25.0	24.2	
81 Ethyl methacrylate	69	6.620	6.620	0.000	86	339341	25.0	25.5	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	204844	25.0	25.3	
83 Tetrachloroethene	164	6.873	6.873	0.000	95	159194	25.0	24.2	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	98	374087	25.0	23.6	
85 2-Hexanone	43	6.936	6.947	-0.011	95	749812	100.0	103.2	
86 Chlorodibromomethane	129	7.116	7.126	-0.010	91	207901	25.0	25.5	
88 Ethylene Dibromide	107	7.242	7.242	0.000	99	212015	25.0	24.1	
89 1-Chlorohexane	91	7.633	7.633	0.000	96	305567	25.0	25.5	
90 Chlorobenzene	112	7.675	7.675	0.000	97	603699	25.0	23.6	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	95	189082	25.0	24.0	
92 Ethylbenzene	106	7.749	7.749	0.000	98	333254	25.0	23.7	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	401310	25.0	23.8	
94 o-Xylene	106	8.224	8.224	0.000	97	390329	25.0	24.1	
95 Styrene	104	8.245	8.245	0.000	95	671252	25.0	24.6	
96 Bromoform	173	8.424	8.435	-0.011	94	126012	25.0	26.2	
97 Isopropylbenzene	105	8.572	8.572	0.000	95	997485	25.0	24.7	
99 Cyclohexanone	55	8.667	8.667	0.000	90	436813	1000.0	789.1	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	293342	25.0	24.8	
101 Bromobenzene	156	8.888	8.888	0.000	95	227646	25.0	23.9	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	85	74849	25.0	23.8	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	82	87129	25.0	24.3	
104 N-Propylbenzene	120	8.962	8.973	-0.011	99	272548	25.0	24.4	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	227429	25.0	24.0	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	93	812180	25.0	24.5	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	238361	25.0	24.0	
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	673167	25.0	24.3	
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	821981	25.0	24.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	195030	25.0	24.0	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	414556	25.0	24.0	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	829347	25.0	24.5	
113 1,4-Dichlorobenzene	146	9.901	9.902	-0.001	94	429419	25.0	24.0	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	752301	25.0	23.8	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	403198	25.0	23.5	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	85	54497	25.0	27.1	
119 1,2,4-Trichlorobenzene	180	11.854	11.854	0.000	94	223989	25.0	24.0	
120 Hexachlorobutadiene	225	12.001	12.002	-0.001	97	76077	25.0	22.4	
121 Naphthalene	128	12.128	12.128	0.000	97	761305	25.0	25.3	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	96	207203	25.0	24.2	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	49.3	
S 142 Xylenes, Total	106				0		50.0	47.8	
S 140 Trihalomethanes, Total	1				0		100.0	100.1	
S 143 Xylenes, Total (URS)	1				0		50.0	47.8	
S 145 1,3-Dichloropropene, Total	1				0		50.0	49.3	
S 144 1,2-Dichloroethene, Total	1				0		50.0	49.3	

Reagents:

MV-Gas B_00064	Amount Added: 5.00	Units: uL	
MV-MegaMain B_00031	Amount Added: 12.50	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

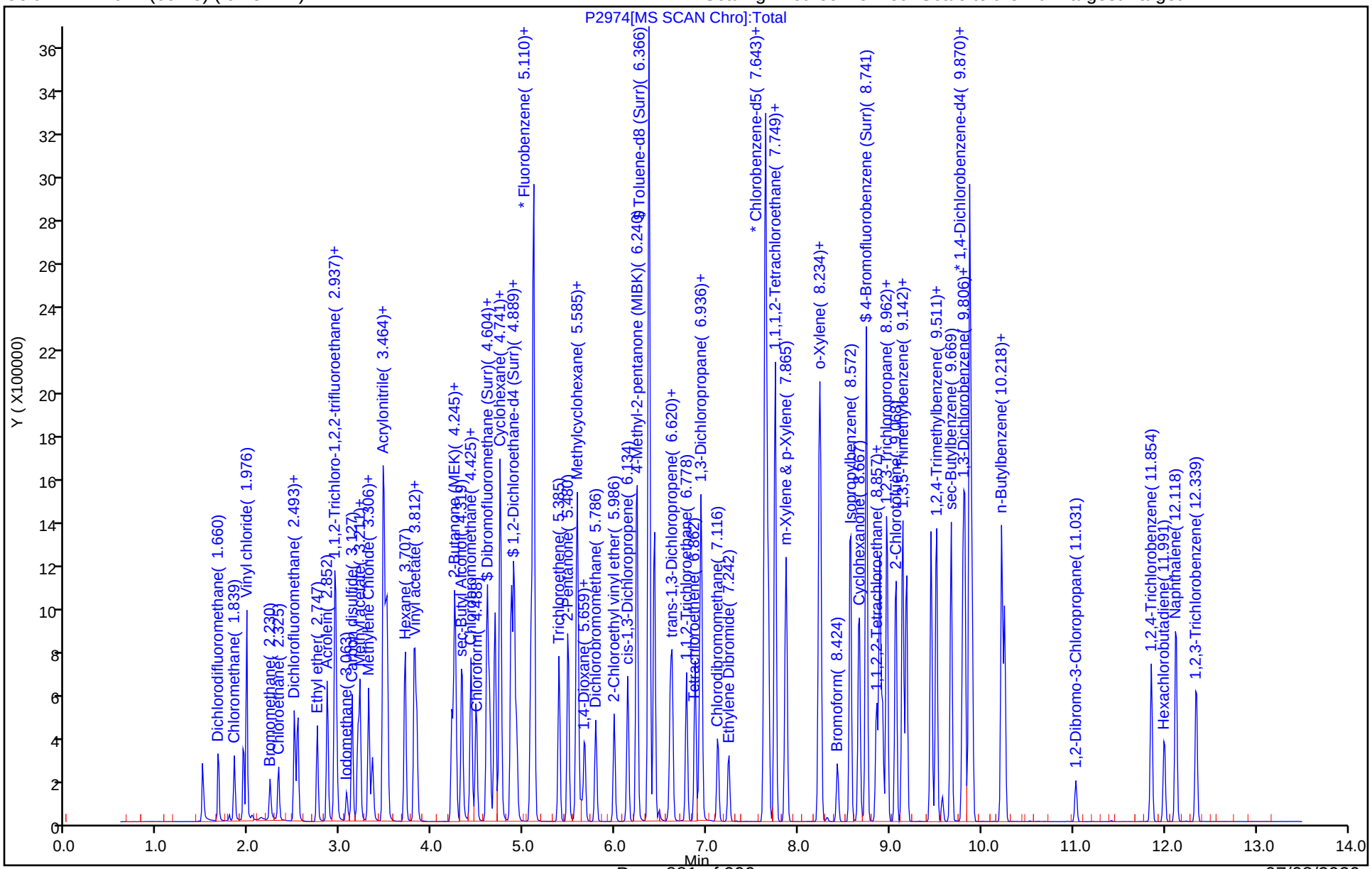
Report Date: 02-Jul-2020 22:13:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2974.D

Injection Date:	01-Jul-2020 23:40:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2974.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jul-2020 23:40:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.25
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.2	94.42
$ 6 Toluene-d8 (Surr)	50.0	48.3	96.58
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.7	97.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500875/7

Matrix: Water Lab File ID: P2976.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 00:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	230		30	9.6
126-99-8	Chloroprene	22.6		1.0	0.21
126-98-7	Methacrylonitrile	221		10	1.6
80-62-6	Methyl methacrylate	48.2		4.0	1.1
107-12-0	Propionitrile	243		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2976.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jul-2020 00:22:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.109	0.004	99	2330114	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.642	0.004	87	537012	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	96	777056	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	563910	50.0	50.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	97	631773	50.0	47.8	
$ 6 Toluene-d8 (Surr)	98	6.369	6.366	0.003	93	2294775	50.0	48.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	85	823824	50.0	48.0	
13 Ethylene oxide	43	2.200	2.197	0.003	100	1441573	NC	NC	
18 Ethanol	45	2.644	2.640	0.004	99	217687	1500.0	1296.1	
20 Propene oxide	58	2.791	2.788	0.003	97	5500680	2500.0	2456.8	
25 Isopropyl alcohol	45	3.045	3.041	0.004	99	181455	250.0	210.0	
28 Acetonitrile	41	3.171	3.168	0.003	99	391953	250.0	230.0	
40 Isopropyl ether	87	3.826	3.832	-0.006	95	196628	25.0	25.5	
41 2-Chloro-1,3-butadiene	53	3.889	3.885	0.004	90	318669	25.0	22.6	
43 Tert-butyl ethyl ether	59	4.089	4.096	-0.007	97	641396	25.0	22.5	
46 Ethyl acetate	43	4.227	4.233	-0.006	99	526783	50.0	62.0	
49 Propionitrile	54	4.269	4.265	0.004	99	447342	250.0	243.3	
51 Methacrylonitrile	41	4.374	4.381	-0.007	92	1558160	250.0	220.8	
62 Tert-amyl methyl ether	73	4.965	4.962	0.003	87	566683	25.0	20.5	
63 n-Butanol	56	4.965	4.962	0.003	50	205880	625.0	641.9	
71 Methyl methacrylate	100	5.598	5.595	0.003	90	135484	50.0	48.2	
75 2-Nitropropane	41	5.947	5.954	-0.007	97	98166	50.0	36.5	
87 Tetrahydrothiophene	60	7.118	7.114	0.004	92	67511	50.0	24.6	
98 cis-1,4-Dichloro-2-butene	53	8.617	8.613	0.004	87	139708	50.0	38.3	
114 1,2,3-Trimethylbenzene	105	9.915	9.911	0.004	97	759917	25.0	23.4	
118 1,3,5-Trichlorobenzene	180	11.223	11.219	0.004	97	226706	25.0	21.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

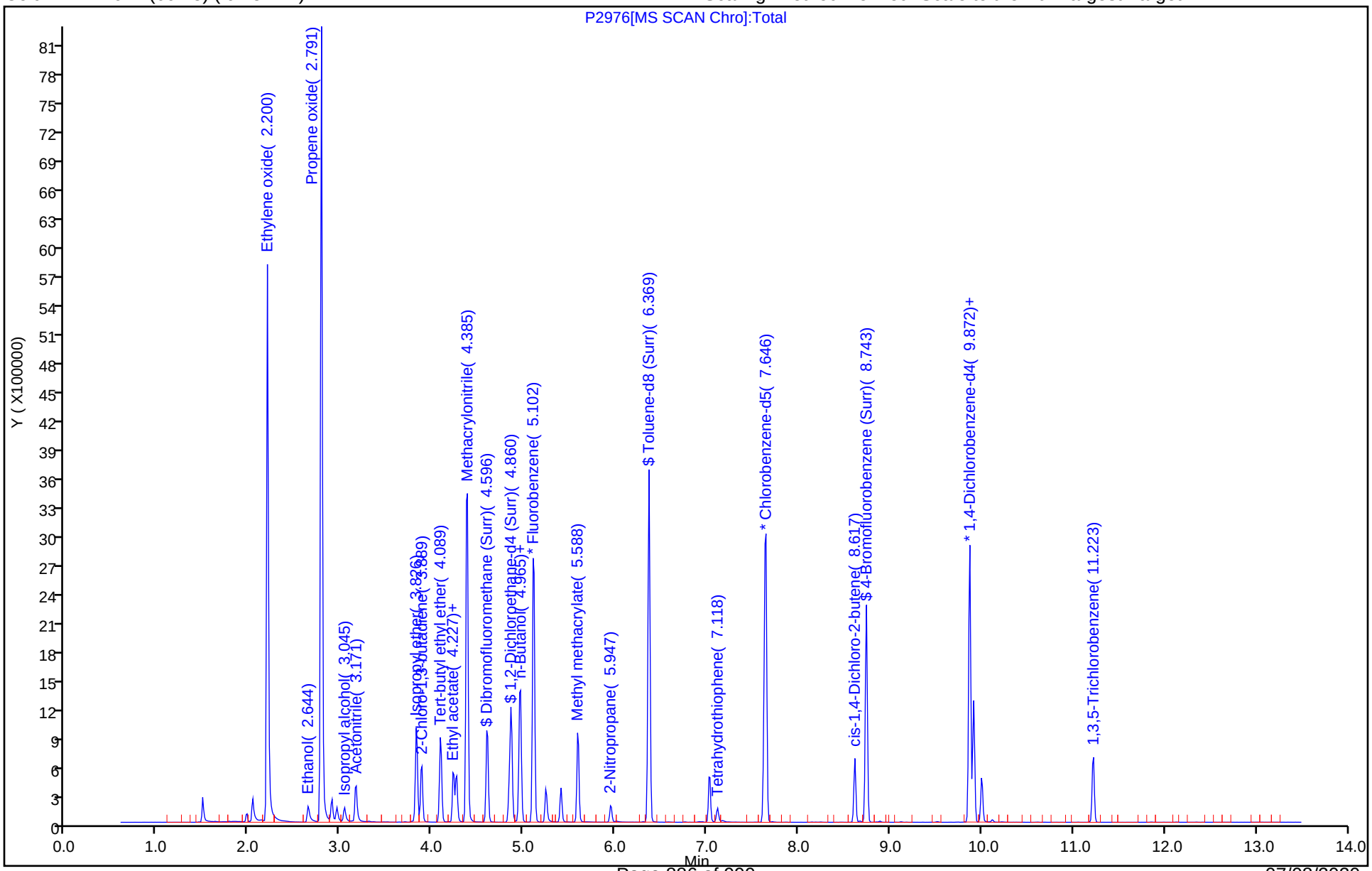
Report Date: 02-Jul-2020 22:13:41 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2976.D

Injection Date:	02-Jul-2020 00:22:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCSD			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2976.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jul-2020 00:22:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.3	100.50
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.8	95.69
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.13
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.0	96.07

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-501117/5

Matrix: Water Lab File ID: R7180.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 11:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	79.5		10	1.9
107-02-8	Acrolein	215		20	2.8
107-13-1	Acrylonitrile	235		20	1.4
71-43-2	Benzene	19.6		1.0	0.16
74-97-5	Chlorobromomethane	20.6		1.0	0.10
75-27-4	Dichlorobromomethane	20.7		1.0	0.17
75-25-2	Bromoform	18.9		1.0	0.46
74-83-9	Bromomethane	20.9		2.0	0.21
78-93-3	2-Butanone (MEK)	90.3		6.0	2.0
75-15-0	Carbon disulfide	21.3		2.0	0.17
56-23-5	Carbon tetrachloride	17.4		1.0	0.19
108-90-7	Chlorobenzene	19.3		1.0	0.17
124-48-1	Chlorodibromomethane	18.2		1.0	0.17
75-00-3	Chloroethane	22.0		2.0	0.41
67-66-3	Chloroform	19.9		1.0	0.16
74-87-3	Chloromethane	16.2		2.0	0.30
107-05-1	Allyl chloride	20.3		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	20.1		5.0	0.47
74-95-3	Dibromomethane	21.5		1.0	0.17
95-50-1	1,2-Dichlorobenzene	20.6		1.0	0.15
541-73-1	1,3-Dichlorobenzene	20.6		1.0	0.13
106-46-7	1,4-Dichlorobenzene	20.5		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	19.3		3.0	0.80
75-71-8	Dichlorodifluoromethane	10.8		2.0	0.31
75-34-3	1,1-Dichloroethane	19.5		1.0	0.22
107-06-2	1,2-Dichloroethane	20.4		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	21.3		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	20.7		1.0	0.15
75-35-4	1,1-Dichloroethene	21.2		1.0	0.23
78-87-5	1,2-Dichloropropane	19.0		1.0	0.18
142-28-9	1,3-Dichloropropane	19.2		1.0	0.090
594-20-7	2,2-Dichloropropane	17.9		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	18.4		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	17.2		3.0	0.19
563-58-6	1,1-Dichloropropene	18.3		1.0	0.19
100-41-4	Ethylbenzene	20.2		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-501117/5

Matrix: Water Lab File ID: R7180.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 11:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	18.8		3.0	0.86
591-78-6	2-Hexanone	83.6		5.0	1.7
74-88-4	Iodomethane	24.2		1.0	0.23
78-83-1	Isobutyl alcohol	535		110	37
75-09-2	Methylene Chloride	20.9		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	80.9		5.0	0.98
100-42-5	Styrene	20.5		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	18.5		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	20.1		1.0	0.21
127-18-4	Tetrachloroethene	17.4		1.0	0.20
108-88-3	Toluene	19.4		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	19.1		1.0	0.21
71-55-6	1,1,1-Trichloroethane	17.0		1.0	0.16
79-00-5	1,1,2-Trichloroethane	21.8		1.0	0.27
79-01-6	Trichloroethene	18.9		1.0	0.16
75-69-4	Trichlorofluoromethane	20.6		2.0	0.29
96-18-4	1,2,3-Trichloropropane	20.0		2.5	0.33
108-05-4	Vinyl acetate	38.2		3.0	0.94
75-01-4	Vinyl chloride	18.2		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	18.0		2.0	0.15
95-47-6	o-Xylene	18.2		1.0	0.19
1330-20-7	Xylenes, Total	36.2		2.0	0.19
106-93-4	1,2-Dibromoethane	19.7		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7180.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 06-Jul-2020 11:51:30 ALS Bottle#: 8 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 280-0093029-005
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.006	5.007	-0.001	99	2264976	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.518	0.004	86	528396	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	816602	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	92	573615	50.0	50.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.766	4.767	-0.001	0	625318	50.0	44.7	
$	6 Toluene-d8 (Surr)	98	6.251	6.251	0.000	93	2216417	50.0	48.4	
$	7 4-Bromofluorobenzene (Surr)	95	8.616	8.617	0.000	87	793497	50.0	46.4	
	10 Dichlorodifluoromethane	85	1.651	1.652	-0.001	99	92408	25.0	10.8	
	11 Chloromethane	50	1.828	1.828	0.000	99	141248	25.0	16.2	
	12 Vinyl chloride	62	1.918	1.918	0.000	97	149062	25.0	18.2	
	14 Bromomethane	94	2.191	2.195	-0.004	90	93113	25.0	20.9	
	15 Chloroethane	64	2.285	2.285	0.000	99	109236	25.0	22.0	
	16 Dichlorofluoromethane	67	2.450	2.450	0.000	96	279401	25.0	21.7	
	17 Trichlorofluoromethane	101	2.484	2.484	0.000	98	247730	25.0	20.6	
	19 Ethyl ether	59	2.693	2.694	-0.001	91	160755	25.0	23.2	
	21 Acrolein	56	2.798	2.799	-0.001	100	348410	246.9	214.9	
	22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.877	2.877	0.000	67	93762	25.0	21.4	
	23 1,1-Dichloroethene	96	2.881	2.881	0.000	98	129500	25.0	21.2	
	24 Acetone	43	2.900	2.900	0.000	100	258435	100.0	79.5	
	26 Iodomethane	142	3.001	3.001	0.000	100	120258	25.0	24.2	
	27 Carbon disulfide	76	3.061	3.061	0.000	99	391839	25.0	21.3	
	29 Methyl acetate	43	3.125	3.125	0.000	98	319633	50.0	45.0	
	30 3-Chloro-1-propene	41	3.147	3.147	0.000	91	215662	25.0	20.3	
	31 Methylene Chloride	84	3.237	3.237	0.000	91	181815	25.0	20.9	
	32 2-Methyl-2-propanol	59	3.286	3.278	0.008	97	223405	250.0	215.8	
	33 Acrylonitrile	53	3.398	3.398	0.000	99	920236	250.0	235.1	
	34 Methyl tert-butyl ether	73	3.424	3.421	0.003	95	538001	25.0	20.6	
	35 trans-1,2-Dichloroethene	96	3.436	3.436	0.000	99	151573	25.0	20.7	
	37 Hexane	57	3.627	3.623	0.004	91	177445	25.0	23.6	
	39 Vinyl acetate	43	3.728	3.728	0.000	97	795787	50.0	38.2	
	40 1,1-Dichloroethane	63	3.751	3.751	0.000	96	288397	25.0	19.5	
	45 2-Butanone (MEK)	43	4.129	4.129	0.000	100	435545	100.0	90.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.155	4.152	0.003	81	189168	25.0	21.3	
48 2,2-Dichloropropane	77	4.167	4.163	0.004	87	206447	25.0	17.9	
50 sec-Butyl Alcohol	45	4.242	4.238	0.004	98	549475	750.0	593.7	
52 Chlorobromomethane	128	4.332	4.328	0.004	96	89269	25.0	20.6	
53 Tetrahydrofuran	42	4.339	4.339	0.000	89	146382	50.0	46.1	
54 Chloroform	83	4.388	4.388	0.000	93	309239	25.0	19.9	
55 1,1,1-Trichloroethane	97	4.530	4.530	0.000	98	231117	25.0	17.0	
56 Cyclohexane	56	4.587	4.587	0.000	89	233757	25.0	19.6	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	97	212262	25.0	18.3	
59 Carbon tetrachloride	117	4.647	4.647	-0.001	95	186517	25.0	17.4	
60 Isobutyl alcohol	41	4.654	4.654	0.000	96	195560	625.0	534.7	
62 Benzene	78	4.793	4.793	0.000	95	681909	25.0	19.6	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	97	255968	25.0	20.4	
65 n-Heptane	43	4.980	4.973	0.007	93	159241	25.0	21.9	
67 Trichloroethene	95	5.276	5.276	0.000	99	160730	25.0	18.9	
68 2-Pentanone	43	5.381	5.381	0.000	99	675459	100.0	85.2	
69 Methylcyclohexane	55	5.467	5.468	-0.001	91	178615	25.0	19.0	
70 1,2-Dichloropropane	63	5.482	5.483	-0.001	95	181244	25.0	19.0	
72 1,4-Dioxane	88	5.527	5.528	-0.001	93	71625	500.0	460.2	
73 Dibromomethane	93	5.557	5.550	0.007	95	123548	25.0	21.5	
74 Dichlorobromomethane	83	5.674	5.678	-0.004	99	241905	25.0	20.7	
76 2-Chloroethyl vinyl ether	63	5.880	5.876	0.004	91	135710	25.0	19.1	
77 cis-1,3-Dichloropropene	75	6.022	6.022	0.000	97	287119	25.0	18.4	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.124	0.003	96	846548	100.0	80.9	
79 Toluene	91	6.311	6.307	0.004	98	711520	25.0	19.4	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	88	258278	25.0	17.2	
81 Ethyl methacrylate	69	6.510	6.510	0.000	89	262335	25.0	18.8	
82 1,1,2-Trichloroethane	97	6.660	6.660	0.000	91	174908	25.0	21.8	
83 Tetrachloroethene	164	6.749	6.753	-0.004	96	117234	25.0	17.4	
84 1,3-Dichloropropane	76	6.806	6.806	0.000	88	319447	25.0	19.2	
85 2-Hexanone	43	6.828	6.825	0.003	95	610750	100.0	83.6	
87 Chlorodibromomethane	129	7.001	7.001	0.000	91	184486	25.0	18.2	
88 Ethylene Dibromide	107	7.117	7.117	0.000	98	191678	25.0	19.7	
89 1-Chlorohexane	91	7.507	7.507	0.000	96	207934	25.0	18.1	
90 Chlorobenzene	112	7.548	7.548	0.000	94	467940	25.0	19.3	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.619	0.004	93	166491	25.0	18.5	
92 Ethylbenzene	106	7.627	7.627	0.000	98	243169	25.0	20.2	
93 m-Xylene & p-Xylene	106	7.743	7.743	0.000	0	301896	25.0	18.0	
94 o-Xylene	106	8.103	8.099	0.004	96	300523	25.0	18.2	
95 Styrene	104	8.118	8.118	0.000	94	543323	25.0	20.5	
96 Bromoform	173	8.301	8.302	-0.001	94	126495	25.0	18.9	
97 Isopropylbenzene	105	8.444	8.440	0.004	95	773556	25.0	19.3	
99 Cyclohexanone	55	8.538	8.542	-0.004	91	451611	1000.0	591.1	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	93	272255	25.0	20.1	
101 Bromobenzene	156	8.759	8.759	0.000	95	200199	25.0	20.8	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.770	0.000	75	75119	25.0	19.3	
103 1,2,3-Trichloropropane	110	8.793	8.793	-0.001	84	84813	25.0	20.0	
104 N-Propylbenzene	120	8.841	8.841	0.000	99	202643	25.0	18.9	
105 2-Chlorotoluene	126	8.939	8.935	0.004	96	184998	25.0	19.1	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	669234	25.0	19.7	
107 4-Chlorotoluene	126	9.055	9.051	0.004	98	198886	25.0	20.1	
108 tert-Butylbenzene	119	9.321	9.321	0.000	93	524782	25.0	18.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	97	706092	25.0	20.2	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	151630	25.0	18.9	
112 1,3-Dichlorobenzene	146	9.666	9.666	0.000	97	377047	25.0	20.6	
113 4-Isopropyltoluene	119	9.688	9.689	-0.001	97	666729	25.0	19.7	
114 1,4-Dichlorobenzene	146	9.767	9.764	0.003	96	397064	25.0	20.5	
116 n-Butylbenzene	91	10.093	10.093	0.000	98	602833	25.0	18.1	
117 1,2-Dichlorobenzene	146	10.120	10.120	0.000	98	383046	25.0	20.6	
118 1,2-Dibromo-3-Chloropropane	157	10.903	10.899	0.004	84	59174	25.0	20.1	
120 1,2,4-Trichlorobenzene	180	11.720	11.724	-0.004	94	237621	25.0	19.1	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	96	76736	25.0	19.5	
122 Naphthalene	128	11.990	11.990	0.000	97	837195	25.0	20.2	
123 1,2,3-Trichlorobenzene	180	12.211	12.208	0.003	96	246338	25.0	21.2	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	42.0	
S 139 Xylenes, Total (URS)	1				0		50.0	36.2	
S 138 Xylenes, Total	106				0		50.0	36.2	
S 140 Trihalomethanes, Total	1				0		100.0	77.7	
S 136 1,3-Dichloropropene, Total	1				0		50.0	35.6	
S 141 1,2-Dichloroethene, Total	1				0		50.0	42.0	

Reagents:

MV-MegaMain B_00031	Amount Added:	12.50	Units: uL	
MV-Gas B_00064	Amount Added:	5.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

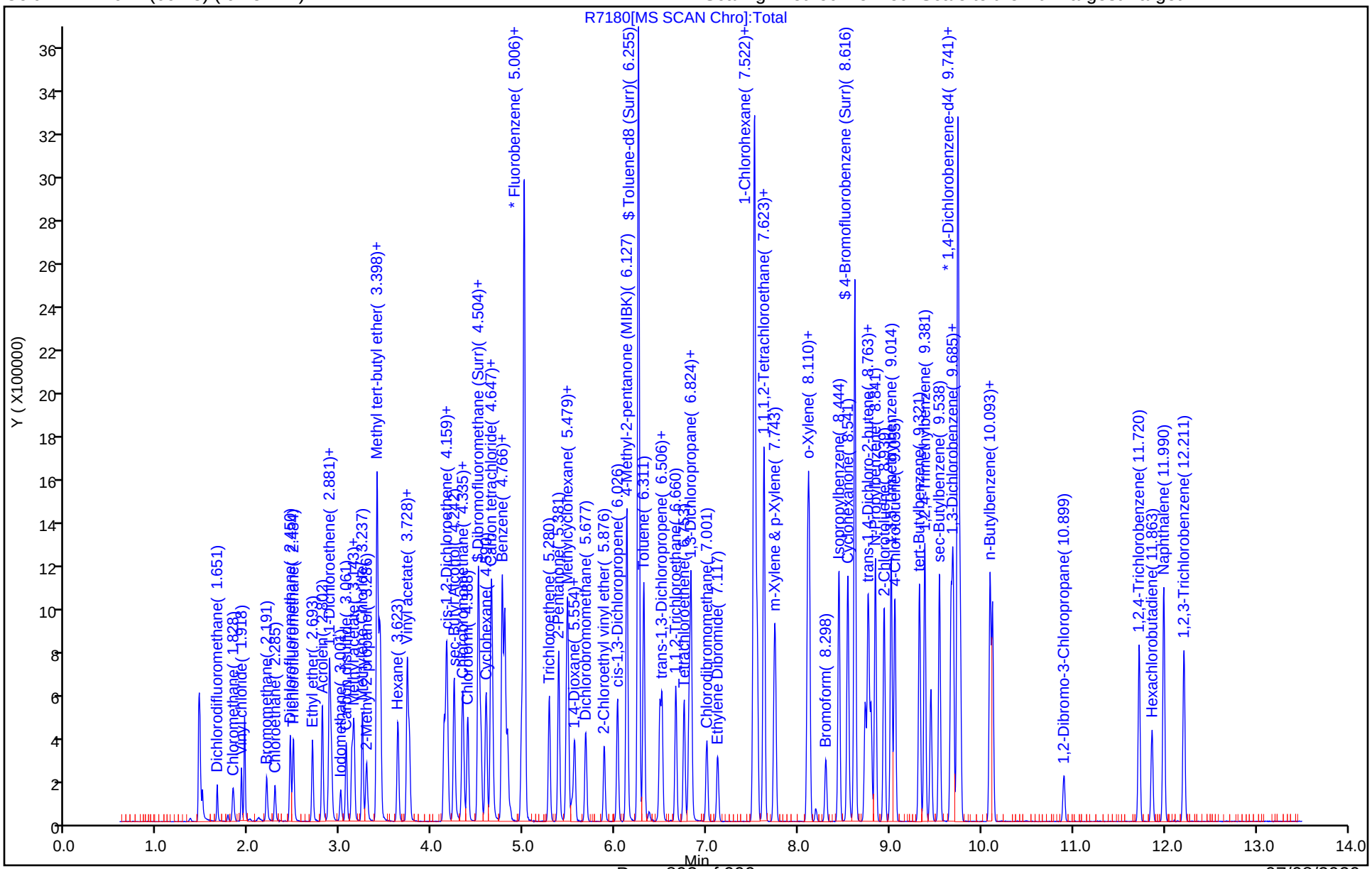
Report Date: 07-Jul-2020 08:59:14 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7180.D

Injection Date:	06-Jul-2020 11:51:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7180.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 06-Jul-2020 11:51:30 ALS Bottle#: 8 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 280-0093029-005
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.36
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	44.7	89.41
$ 6 Toluene-d8 (Surr)	50.0	48.4	96.80
$ 7 4-Bromofluorobenzene (Surr)	50.0	46.4	92.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-501117/7

Matrix: Water Lab File ID: R7182.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/06/2020 12:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 501117 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	222		30	9.6
126-99-8	Chloroprene	22.8		1.0	0.21
126-98-7	Methacrylonitrile	231		10	1.6
80-62-6	Methyl methacrylate	49.4		4.0	1.1
107-12-0	Propionitrile	242		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7182.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 06-Jul-2020 12:34:30 ALS Bottle#: 10 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Misc. Info.: 280-0093029-007
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.007	5.007	0.000	99	2322728	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.522	7.518	0.004	86	531781	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	822633	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.504	4.504	0.000	92	590292	50.0	50.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	639125	50.0	44.6	
$	6 Toluene-d8 (Surr)	98	6.251	6.251	0.000	93	2235404	50.0	48.5	
$	7 4-Bromofluorobenzene (Surr)	95	8.617	8.617	0.000	86	831255	50.0	48.2	
	13 Ethylene oxide	43	2.169	2.165	0.004	99	1195169	2500.0	3650.6	
	18 Ethanol	45	2.600	2.600	0.000	99	155090	1500.0	1332.7	
	20 Propene oxide	58	2.739	2.735	0.004	96	5046666	2500.0	3105.3	
	25 Isopropyl alcohol	45	2.986	2.982	0.004	99	130853	250.0	201.4	
	28 Acetonitrile	41	3.106	3.106	0.000	99	321319	250.0	222.0	
	41 Isopropyl ether	87	3.751	3.751	0.000	94	181203	25.0	26.1	
	42 2-Chloro-1,3-butadiene	53	3.803	3.803	0.000	90	312405	25.0	22.8	
	44 Tert-butyl ethyl ether	59	4.009	4.009	0.000	98	595199	25.0	23.9	
	46 Ethyl acetate	43	4.144	4.144	0.000	99	440888	50.0	44.3	
	49 Propionitrile	54	4.182	4.178	0.004	99	388452	250.0	242.0	
	51 Methacrylonitrile	41	4.291	4.290	0.001	91	1408444	250.0	230.7	
	64 Tert-amyl methyl ether	73	4.860	4.864	-0.004	89	574770	25.0	25.4	
	66 n-Butanol	56	5.149	5.145	0.004	86	145415	625.0	444.6	
	71 Methyl methacrylate	100	5.486	5.490	-0.004	90	136433	50.0	49.4	
	75 2-Nitropropane	41	5.843	5.842	0.001	94	97011	50.0	41.3	
	86 Tetrahydrothiophene	60	6.993	6.997	-0.004	90	66240	50.0	37.9	
	98 cis-1,4-Dichloro-2-butene	53	8.493	8.493	0.000	90	160234	50.0	51.8	
	115 1,2,3-Trimethylbenzene	105	9.786	9.786	0.000	98	877096	25.0	24.7	
	119 1,3,5-Trichlorobenzene	180	11.087	11.087	0.000	97	301588	25.0	26.6	
	166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00027	Amount Added:	25.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

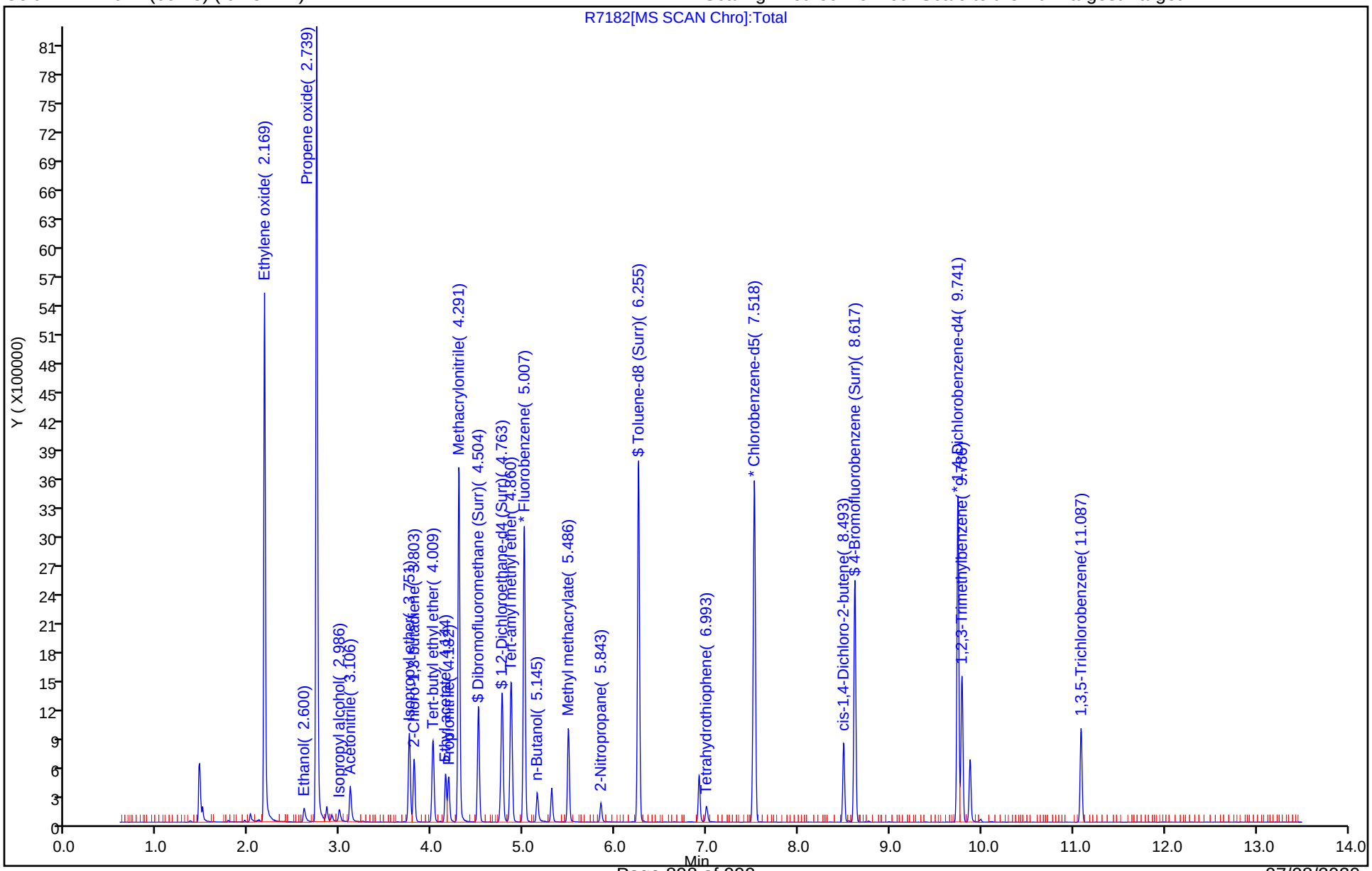
Report Date: 07-Jul-2020 08:59:17 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7182.D

Injection Date:	06-Jul-2020 12:34:30	Instrument ID:	VMS_R1	Operator ID:	PEPPINGA
Lims ID:	LCSD			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\R7182.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 06-Jul-2020 12:34:30 ALS Bottle#: 10 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Misc. Info.: 280-0093029-007
Operator ID: PEPPINGA Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2020 08:58:05 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1022

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.71
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	44.6	89.11
$ 6 Toluene-d8 (Surr)	50.0	48.5	97.00
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.2	96.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677P-20200622 MS Lab Sample ID: 280-138090-14 MS

Matrix: Water Lab File ID: P2873.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:04

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	94.0		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	203		20	2.8
107-13-1	Acrylonitrile	245		20	1.4
71-43-2	Benzene	23.5		1.0	0.16
74-97-5	Chlorobromomethane	23.2		1.0	0.10
75-27-4	Dichlorobromomethane	24.8		1.0	0.17
75-25-2	Bromoform	25.3		1.0	0.46
74-83-9	Bromomethane	10.1		2.0	0.21
78-93-3	2-Butanone (MEK)	97.8		6.0	2.0
75-15-0	Carbon disulfide	16.7		2.0	0.17
56-23-5	Carbon tetrachloride	22.9		1.0	0.19
108-90-7	Chlorobenzene	24.7		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	26.0		1.0	0.17
75-00-3	Chloroethane	22.2		2.0	0.41
67-66-3	Chloroform	23.2		1.0	0.16
74-87-3	Chloromethane	17.8		2.0	0.30
107-05-1	Allyl chloride	22.8		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	25.5		5.0	0.47
74-95-3	Dibromomethane	24.7		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.5		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.7		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.1		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	21.2		3.0	0.80
75-71-8	Dichlorodifluoromethane	16.7		2.0	0.31
75-34-3	1,1-Dichloroethane	23.4		1.0	0.22
107-06-2	1,2-Dichloroethane	23.4		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	21.5		1.0	0.15
75-35-4	1,1-Dichloroethene	18.9		1.0	0.23
78-87-5	1,2-Dichloropropane	25.4		1.0	0.18
142-28-9	1,3-Dichloropropane	24.5		1.0	0.090
594-20-7	2,2-Dichloropropane	22.9		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	25.7		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.6		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677P-20200622 MS Lab Sample ID: 280-138090-14 MS

Matrix: Water Lab File ID: P2873.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:04

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	22.6		1.0	0.19
100-41-4	Ethylbenzene	25.1		1.0	0.16
97-63-2	Ethyl methacrylate	26.8		3.0	0.86
591-78-6	2-Hexanone	106		5.0	1.7
74-88-4	Iodomethane	9.30		1.0	0.23
78-83-1	Isobutyl alcohol	643		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	23.5		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	104		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	25.9		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	25.2		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	25.4		1.0	0.21
127-18-4	Tetrachloroethene	25.1		1.0	0.20
108-88-3	Toluene	24.1		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	23.5		1.0	0.21
71-55-6	1,1,1-Trichloroethane	23.0		1.0	0.16
79-00-5	1,1,2-Trichloroethane	24.9		1.0	0.27
79-01-6	Trichloroethene	28.5		1.0	0.16
75-69-4	Trichlorofluoromethane	20.7		2.0	0.29
96-18-4	1,2,3-Trichloropropane	24.0		2.5	0.33
108-05-4	Vinyl acetate	52.1		3.0	0.94
75-01-4	Vinyl chloride	21.2		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	25.2		2.0	0.15
95-47-6	o-Xylene	25.7		1.0	0.19
1330-20-7	Xylenes, Total	50.9		2.0	0.19
106-93-4	1,2-Dibromoethane	24.1		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	102		80-125
460-00-4	4-Bromofluorobenzene (Surr)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2873.D
Lims ID: 280-138090-A-14 MS
Client ID: RW-7677P-20200622
Sample Type: MS
Inject. Date: 30-Jun-2020 05:31:30 ALS Bottle#: 23 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-A-14 MS pH
Misc. Info.: 280-0092884-027
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:47:46 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:45:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.112	-0.002	99	2593508	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.645	-0.002	87	570099	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.872	-0.003	96	817263	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	610281	50.0	48.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	688743	50.0	46.9	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2556065	50.0	51.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	82	904689	50.0	50.2	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95	3.506	3.569	-0.063	0	11389		NR	
10 Dichlorodifluoromethane	85	1.670	1.670	0.000	99	121359	25.0	16.7	
11 Chloromethane	50	1.839	1.839	0.000	99	177901	25.0	17.8	
12 Vinyl chloride	62	1.944	1.945	-0.001	98	240710	25.0	21.2	
13 Ethylene oxide	43	2.134	2.200	-0.066	67	1362		NC	
14 Bromomethane	94	2.229	2.230	-0.001	90	49408	25.0	10.1	
15 Chloroethane	64	2.324	2.325	-0.001	100	160775	25.0	22.2	
16 Dichlorofluoromethane	67	2.493	2.494	-0.001	97	375625	25.0	22.2	
17 Trichlorofluoromethane	101	2.535	2.536	-0.001	98	289883	25.0	20.7	
18 Ethanol	45		2.643					ND	
19 Ethyl ether	59	2.746	2.747	-0.001	91	214834	25.0	24.3	
20 Propene oxide	58		2.791					ND	U
21 Acrolein	56	2.852	2.852	0.000	100	442891	246.9	203.0	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.936	2.937	-0.001	65	101611	25.0	16.1	
22 1,1-Dichloroethene	96	2.936	2.937	-0.001	97	158709	25.0	18.9	
24 Acetone	43	2.957	2.958	-0.001	100	325213	100.0	94.0	
25 Isopropyl alcohol	45		3.044					ND	U
26 Iodomethane	142	3.063	3.063	0.000	97	70400	25.0	9.30	
27 Carbon disulfide	76	3.126	3.127	-0.001	99	439875	25.0	16.7	
28 Acetonitrile	41		3.171					ND	
29 Methyl acetate	43	3.189	3.190	-0.001	98	422502	50.0	47.9	
30 3-Chloro-1-propene	41	3.210	3.211	-0.001	95	327982	25.0	22.8	
31 Methylene Chloride	84	3.305	3.306	-0.001	94	231132	25.0	23.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	97	274733	250.0	241.7	
33 Acrylonitrile	53	3.464	3.464	0.000	99	1167374	250.0	244.6	
34 Methyl tert-butyl ether	73	3.495	3.496	-0.001	95	679894	25.0	24.0	
35 trans-1,2-Dichloroethene	96	3.506	3.517	-0.011	98	213354	25.0	21.5	
36 Hexane	57	3.706	3.707	-0.001	91	175361	25.0	13.2	
38 Vinyl acetate	43	3.801	3.802	-0.001	97	1113252	50.0	52.1	
37 Chlorotrifluoroethene	116		3.818					ND	
40 Isopropyl ether	87	3.823	3.825	-0.002	30	9962		1.16	
39 1,1-Dichloroethane	63	3.833	3.834	-0.001	96	424711	25.0	23.4	
41 2-Chloro-1,3-butadiene	53		3.888					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
43 Tert-butyl ethyl ether	59		4.089					ND	
44 2-Butanone (MEK)	43	4.213	4.214	-0.001	100	565293	100.0	97.8	
46 Ethyl acetate	43		4.226					ND	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	83	264570	25.0	24.0	
48 2,2-Dichloropropane	77	4.255	4.256	-0.001	89	280698	25.0	22.9	
49 Propionitrile	54		4.268					ND	U
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
50 sec-Butyl Alcohol	45	4.319	4.330	-0.011	99	736460	750.0	792.2	
51 Methacrylonitrile	41		4.384					ND	
53 Chlorobromomethane	128	4.424	4.425	-0.001	97	114565	25.0	23.2	
52 Tetrahydrofuran	42	4.424	4.435	-0.011	89	191761	50.0	50.0	
54 Chloroform	83	4.477	4.477	0.000	93	403967	25.0	23.2	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	98	317211	25.0	23.0	
56 Cyclohexane	56	4.688	4.689	-0.001	89	349529	25.0	19.9	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	326212	25.0	22.6	
59 Carbon tetrachloride	117	4.741	4.752	-0.011	92	258657	25.0	22.9	
58 Isobutyl alcohol	41	4.741	4.752	-0.011	93	257845	625.0	642.8	
60 Benzene	78	4.888	4.900	-0.012	96	1004908	25.0	23.5	
61 1,2-Dichloroethane	62	4.920	4.921	-0.001	97	316120	25.0	23.4	
62 Tert-amyl methyl ether	73		4.965					ND	
63 n-Butanol	56		4.965					ND	
66 n-Heptane	43	5.078	5.079	-0.001	92	226913	25.0	17.8	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131					ND	
67 Trichloroethene	95	5.384	5.385	-0.001	98	298203	25.0	28.5	
68 2-Pentanone	43	5.479	5.480	-0.001	99	925565	100.0	107.8	
69 Methylcyclohexane	55	5.574	5.586	-0.012	92	280939	25.0	21.1	
70 1,2-Dichloropropane	63	5.585	5.596	-0.011	98	280203	25.0	25.4	
71 Methyl methacrylate	100	5.595	5.598	-0.003	67	2136		0.6832	
72 1,4-Dioxane	88	5.627	5.638	-0.011	93	73258	500.0	477.4	
73 Dibromomethane	93	5.659	5.659	0.000	92	156326	25.0	24.7	
74 Dichlorobromomethane	83	5.785	5.786	-0.001	100	317539	25.0	24.8	
75 2-Nitropropane	41		5.946					ND	
76 2-Chloroethyl vinyl ether	63		5.987				ND	ND	U
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	96	392229	25.0	25.7	
78 4-Methyl-2-pentanone (MIBK)	43	6.229	6.240	-0.011	95	1144882	100.0	103.8	
79 Toluene	91	6.429	6.430	-0.001	98	1076868	25.0	24.1	
80 trans-1,3-Dichloropropene	75	6.598	6.599	-0.001	96	330636	25.0	23.6	
81 Ethyl methacrylate	69	6.619	6.620	-0.001	89	374913	25.0	26.8	
82 1,1,2-Trichloroethane	97	6.777	6.778	-0.001	91	224418	25.0	24.9	
83 Tetrachloroethene	164	6.872	6.873	-0.001	95	174567	25.0	25.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	6.925	6.926	-0.001	97	408409	25.0	24.5	
85 2-Hexanone	43	6.936	6.947	-0.011	96	810257	100.0	105.7	
87 Tetrahydrothiophene	60		7.117					ND	
86 Chlorodibromomethane	129	7.115	7.126	-0.011	91	223474	25.0	26.0	
88 Ethylene Dibromide	107	7.242	7.242	0.000	99	223712	25.0	24.1	
89 1-Chlorohexane	91	7.622	7.633	-0.011	98	341033	25.0	27.0	
90 Chlorobenzene	112	7.674	7.675	-0.001	96	667318	25.0	24.7	
92 Ethylbenzene	106	7.748	7.749	-0.001	98	372222	25.0	25.1	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.749	-0.001	42	209388	25.0	25.2	
93 m-Xylene & p-Xylene	106	7.864	7.865	-0.001	99	448718	25.0	25.2	
94 o-Xylene	106	8.223	8.224	-0.001	97	439744	25.0	25.7	
95 Styrene	104	8.244	8.245	-0.001	95	745303	25.0	25.9	
96 Bromoform	173	8.424	8.424	0.000	93	128403	25.0	25.3	
97 Isopropylbenzene	105	8.561	8.572	-0.011	96	1115599	25.0	26.1	
98 cis-1,4-Dichloro-2-butene	53		8.616					ND	U
99 Cyclohexanone	55	8.656	8.667	-0.011	91	424938	1000.0	727.9	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.857	-0.001	93	318501	25.0	25.4	
101 Bromobenzene	156	8.888	8.889	-0.001	96	248617	25.0	24.6	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.889	-0.001	45	70738	25.0	21.2	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	82	91343	25.0	24.0	
104 N-Propylbenzene	120	8.962	8.973	-0.011	99	298731	25.0	25.2	
105 2-Chlorotoluene	126	9.067	9.068	-0.001	96	253057	25.0	25.2	
106 1,3,5-Trimethylbenzene	105	9.141	9.142	-0.001	94	887944	25.0	25.3	
107 4-Chlorotoluene	126	9.183	9.184	-0.001	97	261742	25.0	24.9	
108 tert-Butylbenzene	119	9.447	9.448	-0.001	93	736948	25.0	25.1	
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	916282	25.0	25.8	
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	211870	25.0	24.7	
111 1,3-Dichlorobenzene	146	9.795	9.796	-0.001	97	450689	25.0	24.7	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	898754	25.0	25.0	
113 1,4-Dichlorobenzene	146	9.890	9.902	-0.012	94	456882	25.0	24.1	
114 1,2,3-Trimethylbenzene	105		9.914					ND	U
115 n-Butylbenzene	91	10.218	10.218	0.000	98	835815	25.0	25.0	
116 1,2-Dichlorobenzene	146	10.249	10.250	-0.001	96	426047	25.0	23.5	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.031	-0.001	82	54271	25.0	25.5	
118 1,3,5-Trichlorobenzene	180		11.222					ND	
119 1,2,4-Trichlorobenzene	180	11.853	11.854	-0.001	94	232353	25.0	23.5	
120 Hexachlorobutadiene	225	12.001	12.002	-0.001	96	78293	25.0	21.8	
121 Naphthalene	128	12.128	12.128	0.000	97	792910	25.0	24.9	
122 1,2,3-Trichlorobenzene	180	12.349	12.350	-0.001	95	210763	25.0	23.2	
125 2,2,3-Trimethylbutane	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
127 Pentachloroethane	167		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 1-Chlorohexane TIC	1		0.000					ND	
133 Methyl cyclohexane TIC	1		0.000					ND	
137 Cyclohexane TIC	1		0.000					ND	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	45.5	
S 142 Xylenes, Total	106				0		50.0	50.9	
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1				0		100.0	99.4	
S 143 Xylenes, Total (URS)	1				0		50.0	50.9	
S 146 Total BTEX	1				0			123.6	
S 145 1,3-Dichloropropene, Total	1				0		50.0	49.2	
S 144 1,2-Dichloroethene, Total	1				0		50.0	45.5	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected

Reagents:

MV-MegaMain B_00031	Amount Added:	25.00	Units: uL	
MV-Gas B_00064	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

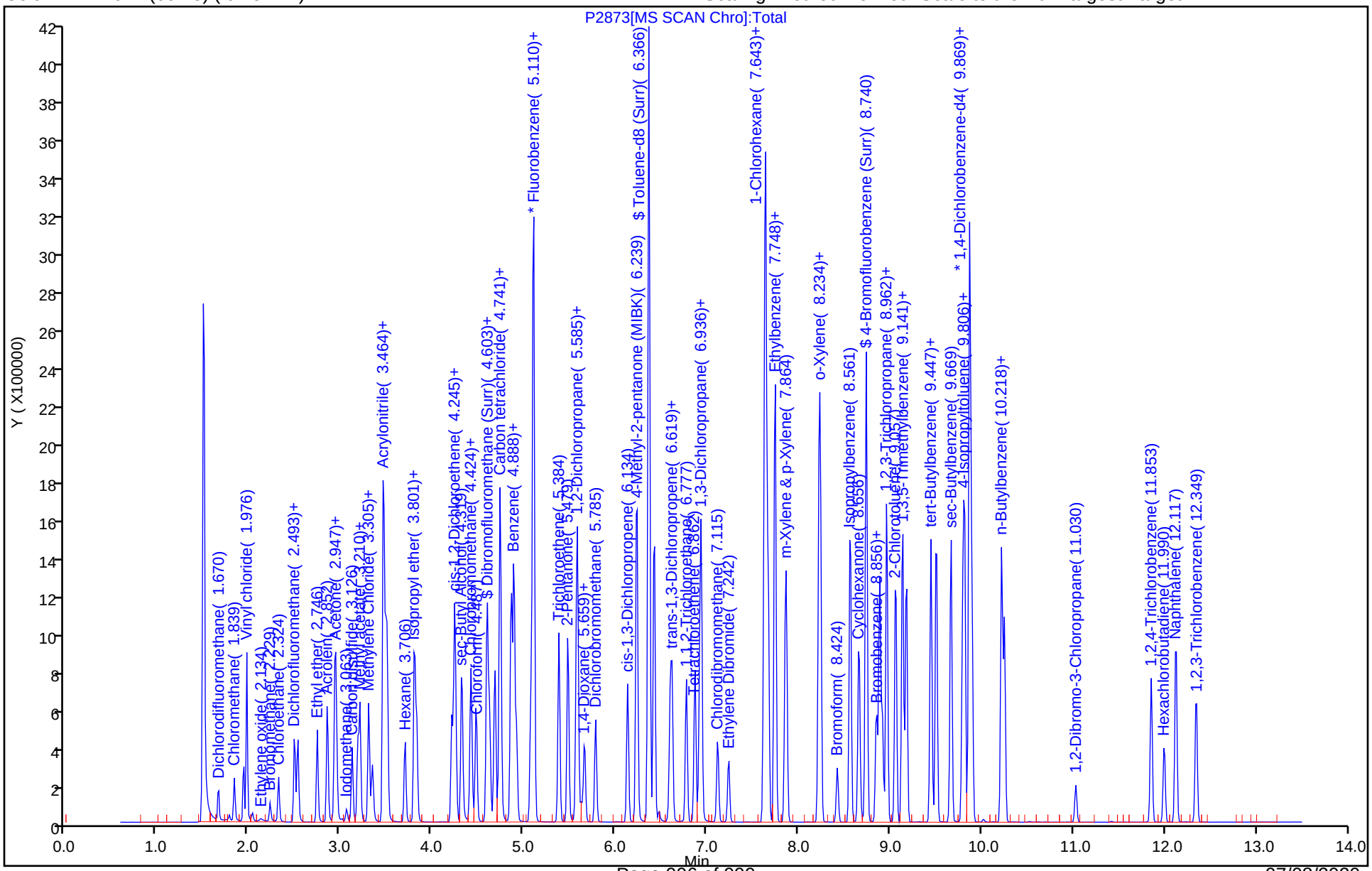
Report Date: 30-Jun-2020 20:50:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2873.D

Injection Date:	30-Jun-2020 05:31:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138090-A-14 MS			Worklist Smp#:	27
Client ID:	RW-7677P-20200622				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2873.D				
Lims ID:	280-138090-A-14 MS				
Client ID:	RW-7677P-20200622				
Sample Type:	MS				
Inject. Date:	30-Jun-2020 05:31:30	ALS Bottle#:	23	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-A-14 MS pH				
Misc. Info.:	280-0092884-027				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:47:46	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 30-Jun-2020 20:45:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	48.9	97.72
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.9	93.73
$ 6 Toluene-d8 (Surr)	50.0	51.0	101.91
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.2	100.31
$ 9 BFB	0	0	0.00

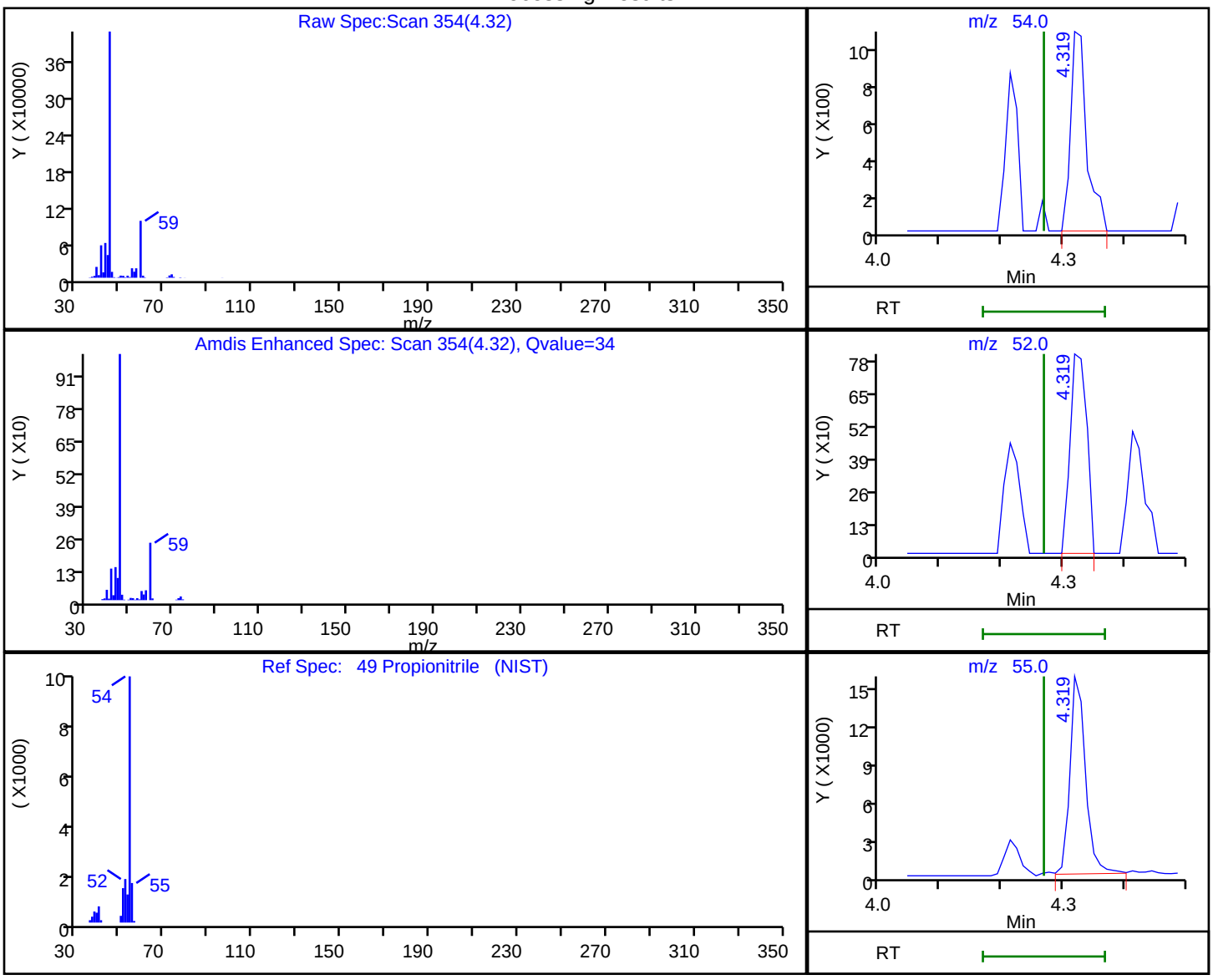
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2873.D				
Injection Date:	30-Jun-2020 05:31:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-A-14 MS				
Client ID:	RW-7677P-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	23	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

49 Propionitrile, CAS: 107-12-0

Processing Results



RT	Mass	Response	Amount
4.32	54.00	1977	0.966160
4.32	52.00	1522	
4.32	55.00	27203	

Reviewer: petuninp, 30-Jun-2020 20:44:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688P-20200623 MS Lab Sample ID: 280-138090-19 MS

Matrix: Water Lab File ID: R6995.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:21

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	85.1		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	247		20	2.8
107-13-1	Acrylonitrile	243		20	1.4
71-43-2	Benzene	25.2		1.0	0.16
74-97-5	Chlorobromomethane	25.4		1.0	0.10
75-27-4	Dichlorobromomethane	27.1		1.0	0.17
75-25-2	Bromoform	23.0		1.0	0.46
74-83-9	Bromomethane	21.1		2.0	0.21
78-93-3	2-Butanone (MEK)	90.6		6.0	2.0
75-15-0	Carbon disulfide	19.6		2.0	0.17
56-23-5	Carbon tetrachloride	26.8		1.0	0.19
108-90-7	Chlorobenzene	26.7		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	23.5		1.0	0.17
75-00-3	Chloroethane	23.7		2.0	0.41
67-66-3	Chloroform	26.3		1.0	0.16
74-87-3	Chloromethane	19.3		2.0	0.30
107-05-1	Allyl chloride	23.3		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	22.4		5.0	0.47
74-95-3	Dibromomethane	27.0		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.8		1.0	0.15
541-73-1	1,3-Dichlorobenzene	26.7		1.0	0.13
106-46-7	1,4-Dichlorobenzene	27.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	21.3		3.0	0.80
75-71-8	Dichlorodifluoromethane	13.8		2.0	0.31
75-34-3	1,1-Dichloroethane	25.4		1.0	0.22
107-06-2	1,2-Dichloroethane	26.9		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	26.4		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	26.6		1.0	0.15
75-35-4	1,1-Dichloroethene	22.8		1.0	0.23
78-87-5	1,2-Dichloropropane	24.2		1.0	0.18
142-28-9	1,3-Dichloropropane	24.1		1.0	0.090
594-20-7	2,2-Dichloropropane	23.6		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	23.3		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	20.5		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688P-20200623 MS Lab Sample ID: 280-138090-19 MS

Matrix: Water Lab File ID: R6995.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:21

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 06:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	25.9		1.0	0.19
100-41-4	Ethylbenzene	27.8		1.0	0.16
97-63-2	Ethyl methacrylate	22.3		3.0	0.86
591-78-6	2-Hexanone	88.6		5.0	1.7
74-88-4	Iodomethane	27.0		1.0	0.23
78-83-1	Isobutyl alcohol	538		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	24.0		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	85.7		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	28.1		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	25.0		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	23.5		1.0	0.21
127-18-4	Tetrachloroethene	25.1		1.0	0.20
108-88-3	Toluene	26.2		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	23.6		1.0	0.21
71-55-6	1,1,1-Trichloroethane	24.8		1.0	0.16
79-00-5	1,1,2-Trichloroethane	26.8		1.0	0.27
79-01-6	Trichloroethene	25.9		1.0	0.16
75-69-4	Trichlorofluoromethane	26.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.4		2.5	0.33
108-05-4	Vinyl acetate	41.6		3.0	0.94
75-01-4	Vinyl chloride	21.7		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	25.3		2.0	0.15
95-47-6	o-Xylene	25.5		1.0	0.19
1330-20-7	Xylenes, Total	50.8		2.0	0.19
106-93-4	1,2-Dibromoethane	23.3		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6995.D
Lims ID: 280-138090-C-19 MS
Client ID: RW-7688P-20200623
Sample Type: MS
Inject. Date: 30-Jun-2020 06:58:30 ALS Bottle#: 26 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-19 MS pH
Misc. Info.: 280-0092885-029
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:29:33 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:27:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.006	5.007	-0.001	99	1683950	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.526	7.522	0.004	87	377755	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.741	9.741	0.000	96	601126	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.504	4.508	-0.004	93	430868	50.0	50.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	515196	50.0	49.5	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	93	1639987	50.0	50.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	85	609421	50.0	48.4	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95	3.440	3.516	-0.076	0	6747		NR	
10 Dichlorodifluoromethane	85	1.651	1.655	-0.004	98	87896	25.0	13.8	
11 Chloromethane	50	1.824	1.828	-0.004	99	125223	25.0	19.3	
12 Vinyl chloride	62	1.918	1.918	0.000	97	131976	25.0	21.7	
13 Ethylene oxide	43		2.165					ND	U
14 Bromomethane	94	2.187	2.195	-0.008	90	69761	25.0	21.1	
15 Chloroethane	64	2.285	2.285	0.000	99	87462	25.0	23.7	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	97	248215	25.0	26.0	
17 Trichlorofluoromethane	101	2.484	2.488	-0.004	98	236120	25.0	26.5	
18 Ethanol	45		2.604					ND	
19 Ethyl ether	59	2.694	2.697	-0.003	92	130071	25.0	25.3	
20 Propene oxide	58		2.739					ND	U
21 Acrolein	56	2.802	2.802	0.000	99	298258	246.9	247.5	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.877	2.881	-0.004	65	70441	25.0	21.6	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	97	103479	25.0	22.8	
24 Acetone	43	2.903	2.900	0.003	100	205820	100.0	85.1	
25 Isopropyl alcohol	45		2.990					ND	U
26 Iodomethane	142	3.001	3.001	0.000	99	103777	25.0	27.0	
27 Carbon disulfide	76	3.061	3.061	0.000	99	267771	25.0	19.6	
28 Acetonitrile	41		3.106					ND	
29 Methyl acetate	43	3.125	3.125	0.000	98	237564	50.0	45.0	
30 3-Chloro-1-propene	41	3.147	3.147	0.000	90	183583	25.0	23.3	
31 Methylene Chloride	84	3.241	3.241	0.000	91	155718	25.0	24.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59	3.282	3.282	0.000	98	162291	250.0	211.2	
33 Acrylonitrile	53	3.398	3.398	0.000	98	706748	250.0	242.8	
34 Methyl tert-butyl ether	73	3.421	3.425	-0.004	95	456845	25.0	23.5	
35 trans-1,2-Dichloroethene	96	3.436	3.440	-0.004	99	144487	25.0	26.6	
36 Chlorotrifluoroethene	116		3.531					ND	
37 Hexane	57	3.623	3.627	-0.004	92	92519	25.0	17.4	
38 1,2-Dichloro-1,1,2,2-tetrafluoro	85	3.754	3.727	0.027	38	23692		NC	
39 Vinyl acetate	43	3.728	3.728	0.000	97	645860	50.0	41.6	
41 Isopropyl ether	87		3.751					ND	
40 1,1-Dichloroethane	63	3.751	3.755	-0.004	97	278639	25.0	25.4	
42 2-Chloro-1,3-butadiene	53		3.803					ND	
43 2-Chloro-1,1,1-Trifluoroethane	118		3.951					ND	
44 Tert-butyl ethyl ether	59		4.009					ND	
45 2-Butanone (MEK)	43	4.133	4.133	0.000	99	324986	100.0	90.6	
46 Ethyl acetate	43		4.144					ND	
47 cis-1,2-Dichloroethene	96	4.156	4.156	0.000	82	174450	25.0	26.4	
48 2,2-Dichloropropane	77	4.167	4.167	0.000	87	203731	25.0	23.6	
49 Propionitrile	54		4.182					ND	
50 sec-Butyl Alcohol	45	4.242	4.242	0.000	98	410375	750.0	596.2	
51 Methacrylonitrile	41		4.294					ND	
52 Chlorobromomethane	128	4.332	4.332	0.000	97	82194	25.0	25.4	
53 Tetrahydrofuran	42	4.343	4.339	0.004	86	106693	50.0	45.2	
54 Chloroform	83	4.392	4.392	0.000	93	304141	25.0	26.3	
55 1,1,1-Trichloroethane	97	4.530	4.534	-0.004	97	253123	25.0	24.8	
56 Cyclohexane	56	4.590	4.591	0.000	88	204501	25.0	23.0	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	96	223191	25.0	25.9	
59 Carbon tetrachloride	117	4.647	4.647	0.000	96	213955	25.0	26.8	
60 Isobutyl alcohol	41	4.654	4.658	-0.004	89	146262	625.0	537.8	
58 1,2-Dichloro-1,1,2-trifluoroetha	117		4.678					ND	
61 1,1,1-Trifluoro-2,2-dichloroetha	83		4.706					ND	
62 Benzene	78	4.793	4.797	-0.004	97	652569	25.0	25.2	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	98	250724	25.0	26.9	
64 Tert-amyl methyl ether	73		4.864					ND	
65 n-Heptane	43	4.976	4.980	-0.004	94	111866	25.0	20.7	
66 n-Butanol	56		5.145					ND	
67 Trichloroethene	95	5.276	5.280	-0.004	99	163803	25.0	25.9	
68 2-Pentanone	43	5.381	5.381	0.000	99	539246	100.0	91.3	
69 Methylcyclohexane	55	5.471	5.471	0.000	92	164611	25.0	23.5	
70 1,2-Dichloropropane	63	5.486	5.483	0.003	94	172706	25.0	24.2	
71 Methyl methacrylate	100		5.490					ND	
72 1,4-Dioxane	88	5.531	5.531	0.000	93	56321	500.0	486.7	
73 Dibromomethane	93	5.554	5.558	-0.004	93	115149	25.0	27.0	
74 Dichlorobromomethane	83	5.677	5.678	-0.001	99	235331	25.0	27.1	
75 2-Nitropropane	41		5.843					ND	
76 2-Chloroethyl vinyl ether	63		5.880				ND	ND	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	261290	25.0	23.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	96	667878	100.0	85.7	
79 Toluene	91	6.311	6.315	-0.004	99	712887	25.0	26.2	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	92	230257	25.0	20.5	
81 Ethyl methacrylate	69	6.513	6.510	0.003	89	223378	25.0	22.3	
82 1,1,2-Trichloroethane	97	6.663	6.660	0.003	91	159898	25.0	26.8	
83 Tetrachloroethene	164	6.753	6.753	0.000	95	121741	25.0	25.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	6.810	6.810	0.000	89	287312	25.0	24.1	
85 2-Hexanone	43	6.828	6.828	0.000	95	463167	100.0	88.6	
86 Tetrahydrothiophene	60		6.997					ND	
87 Chlorodibromomethane	129	7.001	7.001	0.000	90	170594	25.0	23.5	
88 Ethylene Dibromide	107	7.117	7.117	0.000	99	163416	25.0	23.3	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	213120	25.0	25.9	
90 Chlorobenzene	112	7.552	7.548	0.004	94	461857	25.0	26.7	
91 1,1,1,2-Tetrachloroethane	131	7.623	7.619	0.004	43	161431	25.0	25.0	
92 Ethylbenzene	106	7.627	7.627	0.000	99	239559	25.0	27.8	
93 m-Xylene & p-Xylene	106	7.747	7.743	0.004	0	306048	25.0	25.3	
94 o-Xylene	106	8.103	8.107	-0.004	97	301662	25.0	25.5	
95 Styrene	104	8.122	8.122	0.000	95	531136	25.0	28.1	
96 Bromoform	173	8.305	8.298	0.007	95	111356	25.0	23.0	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	777293	25.0	26.3	
98 cis-1,4-Dichloro-2-butene	53		8.493					ND	
99 Cyclohexanone	55	8.541	8.542	-0.001	91	291944	1000.0	536.5	
100 1,1,2,2-Tetrachloroethane	83	8.729	8.729	0.000	94	235677	25.0	23.5	
101 Bromobenzene	156	8.763	8.763	0.000	96	188068	25.0	26.5	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	55	61273	25.0	21.3	
103 1,2,3-Trichloropropane	110	8.793	8.796	-0.003	85	73358	25.0	23.4	
104 N-Propylbenzene	120	8.841	8.845	-0.004	100	205493	25.0	26.1	
105 2-Chlorotoluene	126	8.939	8.939	0.000	96	182663	25.0	25.7	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	667013	25.0	26.7	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	195406	25.0	26.8	
108 tert-Butylbenzene	119	9.325	9.325	0.000	92	526547	25.0	25.7	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	703073	25.0	27.4	
109 Pentachloroethane	167		9.392					ND	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	148592	25.0	25.1	
112 1,3-Dichlorobenzene	146	9.666	9.670	-0.004	97	360131	25.0	26.7	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	666499	25.0	26.7	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	95	384211	25.0	27.0	
115 1,2,3-Trimethylbenzene	105		9.786					ND	U
116 n-Butylbenzene	91	10.093	10.094	-0.001	98	595819	25.0	24.2	
117 1,2-Dichlorobenzene	146	10.123	10.120	0.003	96	353714	25.0	25.8	
118 1,2-Dibromo-3-Chloropropane	157	10.903	10.899	0.004	83	48865	25.0	22.4	
119 1,3,5-Trichlorobenzene	180		11.087					ND	
120 1,2,4-Trichlorobenzene	180	11.724	11.724	0.000	93	217237	25.0	23.6	
121 Hexachlorobutadiene	225	11.863	11.863	0.000	97	72357	25.0	24.7	
122 Naphthalene	128	11.990	11.994	-0.004	97	722346	25.0	23.6	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	95	213604	25.0	24.9	
125 3-Ethylpentane	1		0.000					ND	
124 3-Methylhexane	1		0.000					ND	
132 3,3-Dimethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
126 Dimethyl disulfide	1		0.000					ND	
167 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
133 2-Methylhexane	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
166 Ethyl acrylate	55		0.000					ND	
131 2,3-Dimethylpentane	1		0.000					ND	
130 2,2-Dimethylpentane	1		0.000					ND	
127 n-Nonyl Aldehyde	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 2,2,3-Trimethylbutane	1		0.000					ND	
134 Propene oxide TIC	58	5.381	5.334	0.047	25	42141		NR	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	53.0	
S 139 Xylenes, Total (URS)	1				0		50.0	50.8	
S 138 Xylenes, Total	106				0		50.0	50.8	
S 140 Trihalomethanes, Total	1				0		100.0	99.9	
S 142 TAH	1				0			0	
S 136 1,3-Dichloropropene, Total	1				0		50.0	43.8	
S 141 1,2-Dichloroethene, Total	1				0		50.0	53.0	
S 137 Total BTEX	1				0			129.9	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- U - Marked Undetected

Reagents:

MV-MegaMain B_00031	Amount Added:	25.00	Units: uL	
MV-Gas B_00064	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

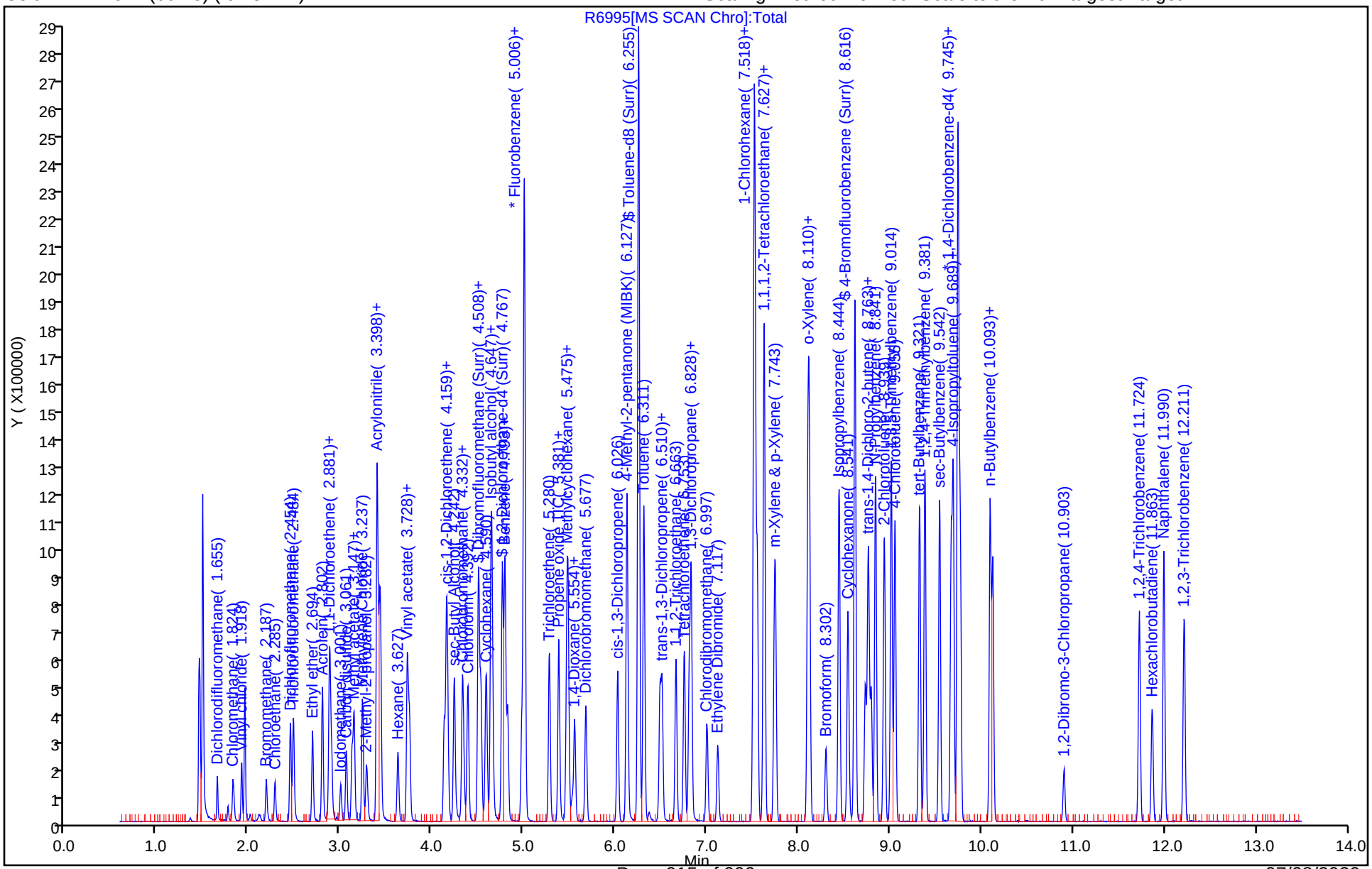
Report Date: 30-Jun-2020 20:30:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6995.D

Injection Date:	30-Jun-2020 06:58:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-C-19 MS			Worklist Smp#:	29
Client ID:	RW-7688P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6995.D				
Lims ID:	280-138090-C-19 MS				
Client ID:	RW-7688P-20200623				
Sample Type:	MS				
Inject. Date:	30-Jun-2020 06:58:30	ALS Bottle#:	26	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-19 MS pH				
Misc. Info.:	280-0092885-029				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:29:33	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:27:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.7	101.40
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	99.08
$ 6 Toluene-d8 (Surr)	50.0	50.1	100.18
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.4	96.80
$ 9 BFB	0	0	0.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677P-20200622 MSD Lab Sample ID: 280-138090-14 MSD

Matrix: Water Lab File ID: P2874.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:04

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	89.8		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	200		20	2.8
107-13-1	Acrylonitrile	235		20	1.4
71-43-2	Benzene	22.4		1.0	0.16
74-97-5	Chlorobromomethane	22.3		1.0	0.10
75-27-4	Dichlorobromomethane	23.6		1.0	0.17
75-25-2	Bromoform	24.0		1.0	0.46
74-83-9	Bromomethane	11.7		2.0	0.21
78-93-3	2-Butanone (MEK)	94.0		6.0	2.0
75-15-0	Carbon disulfide	15.7		2.0	0.17
56-23-5	Carbon tetrachloride	21.6		1.0	0.19
108-90-7	Chlorobenzene	22.9		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	24.5		1.0	0.17
75-00-3	Chloroethane	22.2		2.0	0.41
67-66-3	Chloroform	22.1		1.0	0.16
74-87-3	Chloromethane	18.2		2.0	0.30
107-05-1	Allyl chloride	21.3		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	25.1		5.0	0.47
74-95-3	Dibromomethane	23.0		1.0	0.17
95-50-1	1,2-Dichlorobenzene	22.4		1.0	0.15
541-73-1	1,3-Dichlorobenzene	23.4		1.0	0.13
106-46-7	1,4-Dichlorobenzene	23.3		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	20.4		3.0	0.80
75-71-8	Dichlorodifluoromethane	16.6		2.0	0.31
75-34-3	1,1-Dichloroethane	22.2		1.0	0.22
107-06-2	1,2-Dichloroethane	22.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.9		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	20.6		1.0	0.15
75-35-4	1,1-Dichloroethene	17.8		1.0	0.23
78-87-5	1,2-Dichloropropane	24.1		1.0	0.18
142-28-9	1,3-Dichloropropane	23.2		1.0	0.090
594-20-7	2,2-Dichloropropane	21.5		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	24.5		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	22.3		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7677P-20200622 MSD Lab Sample ID: 280-138090-14 MSD

Matrix: Water Lab File ID: P2874.D

Analysis Method: 8260B Date Collected: 06/22/2020 15:04

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 05:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	20.9		1.0	0.19
100-41-4	Ethylbenzene	23.3		1.0	0.16
97-63-2	Ethyl methacrylate	24.8		3.0	0.86
591-78-6	2-Hexanone	100		5.0	1.7
74-88-4	Iodomethane	12.4		1.0	0.23
78-83-1	Isobutyl alcohol	613		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	22.5		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	100		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	23.9		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.5		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	24.0		1.0	0.21
127-18-4	Tetrachloroethene	23.4		1.0	0.20
108-88-3	Toluene	22.9		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	22.1		1.0	0.21
71-55-6	1,1,1-Trichloroethane	21.8		1.0	0.16
79-00-5	1,1,2-Trichloroethane	23.8		1.0	0.27
79-01-6	Trichloroethene	26.9		1.0	0.16
75-69-4	Trichlorofluoromethane	20.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	22.9		2.5	0.33
108-05-4	Vinyl acetate	49.4		3.0	0.94
75-01-4	Vinyl chloride	20.9		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	23.6		2.0	0.15
95-47-6	o-Xylene	23.6		1.0	0.19
1330-20-7	Xylenes, Total	47.2		2.0	0.19
106-93-4	1,2-Dibromoethane	22.8		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2874.D
Lims ID: 280-138090-C-14 MSD
Client ID: RW-7677P-20200622
Sample Type: MSD
Inject. Date: 30-Jun-2020 05:52:30 ALS Bottle#: 24 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-14 MSD pH
Misc. Info.: 280-0092884-028
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:59:37 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:58:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.103	5.112	-0.009	99	2559968	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.645	0.001	87	571651	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.872	0.001	96	813241	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	610311	50.0	49.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	96	686936	50.0	47.4	
$ 6 Toluene-d8 (Surr)	98	6.369	6.366	0.003	93	2517575	50.0	50.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	85	889724	50.0	49.6	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95	3.520	3.569	-0.049	0	3627		NR	
10 Dichlorodifluoromethane	85	1.663	1.670	-0.007	99	119308	25.0	16.6	
11 Chloromethane	50	1.842	1.839	0.003	99	179068	25.0	18.2	
12 Vinyl chloride	62	1.937	1.945	-0.008	97	234480	25.0	20.9	
13 Ethylene oxide	43		2.200					ND	
14 Bromomethane	94	2.232	2.230	0.002	89	55709	25.0	11.7	
15 Chloroethane	64	2.327	2.325	0.002	100	158188	25.0	22.2	
16 Dichlorofluoromethane	67	2.496	2.494	0.002	97	368872	25.0	22.1	
17 Trichlorofluoromethane	101	2.528	2.536	-0.008	98	283108	25.0	20.5	
18 Ethanol	45		2.643					ND	
19 Ethyl ether	59	2.749	2.747	0.002	91	200151	25.0	23.0	
20 Propene oxide	58		2.791					ND	U
21 Acrolein	56	2.855	2.852	0.003	99	431144	246.9	200.2	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.937	0.002	65	90176	25.0	14.5	
22 1,1-Dichloroethene	96	2.939	2.937	0.002	97	147245	25.0	17.8	
24 Acetone	43	2.961	2.958	0.003	100	307078	100.0	89.8	
25 Isopropyl alcohol	45		3.044					ND	
26 Iodomethane	142	3.066	3.063	0.003	98	94955	25.0	12.4	
27 Carbon disulfide	76	3.129	3.127	0.002	99	409461	25.0	15.7	
28 Acetonitrile	41		3.171					ND	
29 Methyl acetate	43	3.182	3.190	-0.008	98	397725	50.0	45.7	
30 3-Chloro-1-propene	41	3.214	3.211	0.003	94	302740	25.0	21.3	
31 Methylene Chloride	84	3.309	3.306	0.003	93	218296	25.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59	3.351	3.348	0.003	98	266969	250.0	237.9	
33 Acrylonitrile	53	3.467	3.464	0.003	99	1109468	250.0	235.5	
34 Methyl tert-butyl ether	73	3.488	3.496	-0.008	95	649540	25.0	23.2	
35 trans-1,2-Dichloroethene	96	3.509	3.517	-0.008	97	201837	25.0	20.6	
36 Hexane	57	3.699	3.707	-0.008	91	159981	25.0	12.0	
38 Vinyl acetate	43	3.805	3.802	0.003	97	1041173	50.0	49.4	
37 Chlorotrifluoroethene	116		3.818					ND	
40 Isopropyl ether	87	3.826	3.825	0.001	42	9233		1.09	
39 1,1-Dichloroethane	63	3.826	3.834	-0.008	96	397882	25.0	22.2	
41 2-Chloro-1,3-butadiene	53		3.888					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
43 Tert-butyl ethyl ether	59		4.089					ND	
44 2-Butanone (MEK)	43	4.216	4.214	0.002	100	536575	100.0	94.0	a
46 Ethyl acetate	43		4.226					ND	U
47 cis-1,2-Dichloroethene	96	4.248	4.245	0.003	83	249399	25.0	22.9	
48 2,2-Dichloropropane	77	4.259	4.256	0.003	90	260421	25.0	21.5	
49 Propionitrile	54		4.268					ND	U
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
50 sec-Butyl Alcohol	45	4.322	4.330	-0.008	99	711306	750.0	775.1	
51 Methacrylonitrile	41		4.384					ND	
53 Chlorobromomethane	128	4.427	4.425	0.002	98	108651	25.0	22.3	
52 Tetrahydrofuran	42	4.427	4.435	-0.008	89	182640	50.0	48.3	
54 Chloroform	83	4.480	4.477	0.003	93	379303	25.0	22.1	
55 1,1,1-Trichloroethane	97	4.628	4.625	0.003	98	296830	25.0	21.8	
56 Cyclohexane	56	4.681	4.689	-0.008	89	320304	25.0	18.5	
57 1,1-Dichloropropene	75	4.733	4.741	-0.008	96	298306	25.0	20.9	
59 Carbon tetrachloride	117	4.744	4.752	-0.008	75	240205	25.0	21.6	
58 Isobutyl alcohol	41	4.744	4.752	-0.008	94	242703	625.0	612.9	
60 Benzene	78	4.892	4.900	-0.008	96	945534	25.0	22.4	
61 1,2-Dichloroethane	62	4.923	4.921	0.002	97	294049	25.0	22.1	
62 Tert-amyl methyl ether	73		4.965					ND	
63 n-Butanol	56		4.965					ND	
66 n-Heptane	43	5.082	5.079	0.003	92	210815	25.0	16.8	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131					ND	
67 Trichloroethene	95	5.388	5.385	0.003	99	278399	25.0	26.9	
68 2-Pentanone	43	5.483	5.480	0.003	99	868380	100.0	102.4	
69 Methylcyclohexane	55	5.578	5.586	-0.008	92	259065	25.0	19.7	
70 1,2-Dichloropropane	63	5.588	5.596	-0.008	98	262276	25.0	24.1	
71 Methyl methacrylate	100	5.588	5.598	-0.010	67	1961		0.6355	
72 1,4-Dioxane	88	5.630	5.638	-0.008	94	71041	500.0	469.0	
73 Dibromomethane	93	5.662	5.659	0.003	92	143297	25.0	23.0	
74 Dichlorobromomethane	83	5.789	5.786	0.003	99	298653	25.0	23.6	
75 2-Nitropropane	41		5.946					ND	
76 2-Chloroethyl vinyl ether	63		5.987				ND	ND	U
77 cis-1,3-Dichloropropene	75	6.137	6.134	0.003	96	375103	25.0	24.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.240	-0.008	96	1088578	100.0	100.0	
79 Toluene	91	6.422	6.430	-0.008	98	1011853	25.0	22.9	
80 trans-1,3-Dichloropropene	75	6.601	6.599	0.002	97	308648	25.0	22.3	
81 Ethyl methacrylate	69	6.622	6.620	0.002	89	348389	25.0	24.8	
82 1,1,2-Trichloroethane	97	6.781	6.778	0.003	90	211924	25.0	23.8	
83 Tetrachloroethene	164	6.876	6.873	0.003	95	163307	25.0	23.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	6.928	6.926	0.002	97	388325	25.0	23.2	
85 2-Hexanone	43	6.939	6.947	-0.008	94	770843	100.0	100.3	
87 Tetrahydrothiophene	60		7.117					ND	
86 Chlorodibromomethane	129	7.118	7.126	-0.008	90	211123	25.0	24.5	
88 Ethylene Dibromide	107	7.234	7.242	-0.008	98	212254	25.0	22.8	
89 1-Chlorohexane	91	7.625	7.633	-0.008	98	320690	25.0	25.3	
90 Chlorobenzene	112	7.667	7.675	-0.008	94	618221	25.0	22.9	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.749	-0.008	95	195423	25.0	23.5	
92 Ethylbenzene	106	7.752	7.749	0.003	98	346072	25.0	23.3	
93 m-Xylene & p-Xylene	106	7.868	7.865	0.003	99	421318	25.0	23.6	
94 o-Xylene	106	8.226	8.224	0.002	96	405108	25.0	23.6	
95 Styrene	104	8.237	8.245	-0.008	94	689532	25.0	23.9	
96 Bromoform	173	8.427	8.424	0.003	94	122140	25.0	24.0	
97 Isopropylbenzene	105	8.564	8.572	-0.008	96	1048944	25.0	24.6	
98 cis-1,4-Dichloro-2-butene	53		8.616					ND	
99 Cyclohexanone	55	8.659	8.667	-0.008	91	405768	1000.0	693.2	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.857	-0.008	93	299573	25.0	24.0	
101 Bromobenzene	156	8.891	8.889	0.002	96	230487	25.0	23.0	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.889	0.002	74	67654	25.0	20.4	
103 1,2,3-Trichloropropane	110	8.912	8.920	-0.008	82	86594	25.0	22.9	
104 N-Propylbenzene	120	8.965	8.973	-0.008	99	278087	25.0	23.6	
105 2-Chlorotoluene	126	9.060	9.068	-0.008	96	234007	25.0	23.4	
106 1,3,5-Trimethylbenzene	105	9.134	9.142	-0.008	94	833036	25.0	23.8	
107 4-Chlorotoluene	126	9.176	9.184	-0.008	98	248692	25.0	23.8	
108 tert-Butylbenzene	119	9.451	9.448	0.002	94	688523	25.0	23.6	
109 1,2,4-Trimethylbenzene	105	9.503	9.511	-0.008	97	844999	25.0	23.9	
110 sec-Butylbenzene	134	9.672	9.669	0.003	94	199041	25.0	23.3	
111 1,3-Dichlorobenzene	146	9.799	9.796	0.003	97	425212	25.0	23.4	
112 4-Isopropyltoluene	119	9.820	9.817	0.003	97	850025	25.0	23.8	
113 1,4-Dichlorobenzene	146	9.894	9.902	-0.008	95	438114	25.0	23.3	
114 1,2,3-Trimethylbenzene	105		9.914					ND	
115 n-Butylbenzene	91	10.221	10.218	0.003	98	765867	25.0	23.0	
116 1,2-Dichlorobenzene	146	10.253	10.250	0.003	96	404124	25.0	22.4	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.031	0.002	84	53139	25.0	25.1	
118 1,3,5-Trichlorobenzene	180		11.222					ND	
119 1,2,4-Trichlorobenzene	180	11.857	11.854	0.003	94	216993	25.0	22.1	
120 Hexachlorobutadiene	225	11.994	12.002	-0.008	96	73036	25.0	20.4	
121 Naphthalene	128	12.120	12.128	-0.008	97	756541	25.0	23.8	
122 1,2,3-Trichlorobenzene	180	12.342	12.350	-0.008	94	200456	25.0	22.2	
133 Methyl cyclohexane TIC	1		0.000					ND	
136 1-Chlorohexane TIC	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
127 Pentachloroethane	167		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
137 Cyclohexane TIC	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
125 2,2,3-Trimethylbutane	1		0.000					ND	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	43.5	
S 142 Xylenes, Total	106				0		50.0	47.2	
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1				0		100.0	94.3	
S 143 Xylenes, Total (URS)	1				0		50.0	47.2	
S 146 Total BTEX	1				0			115.9	
S 145 1,3-Dichloropropene, Total	1				0		50.0	46.8	
S 144 1,2-Dichloroethene, Total	1				0		50.0	43.5	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MV-MegaMain B_00031	Amount Added:	25.00	Units: uL	
MV-Gas B_00064	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 30-Jun-2020 20:59:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2874.D

Injection Date: 30-Jun-2020 05:52:30 Instrument ID: VMS_P Operator ID: PETUNINP

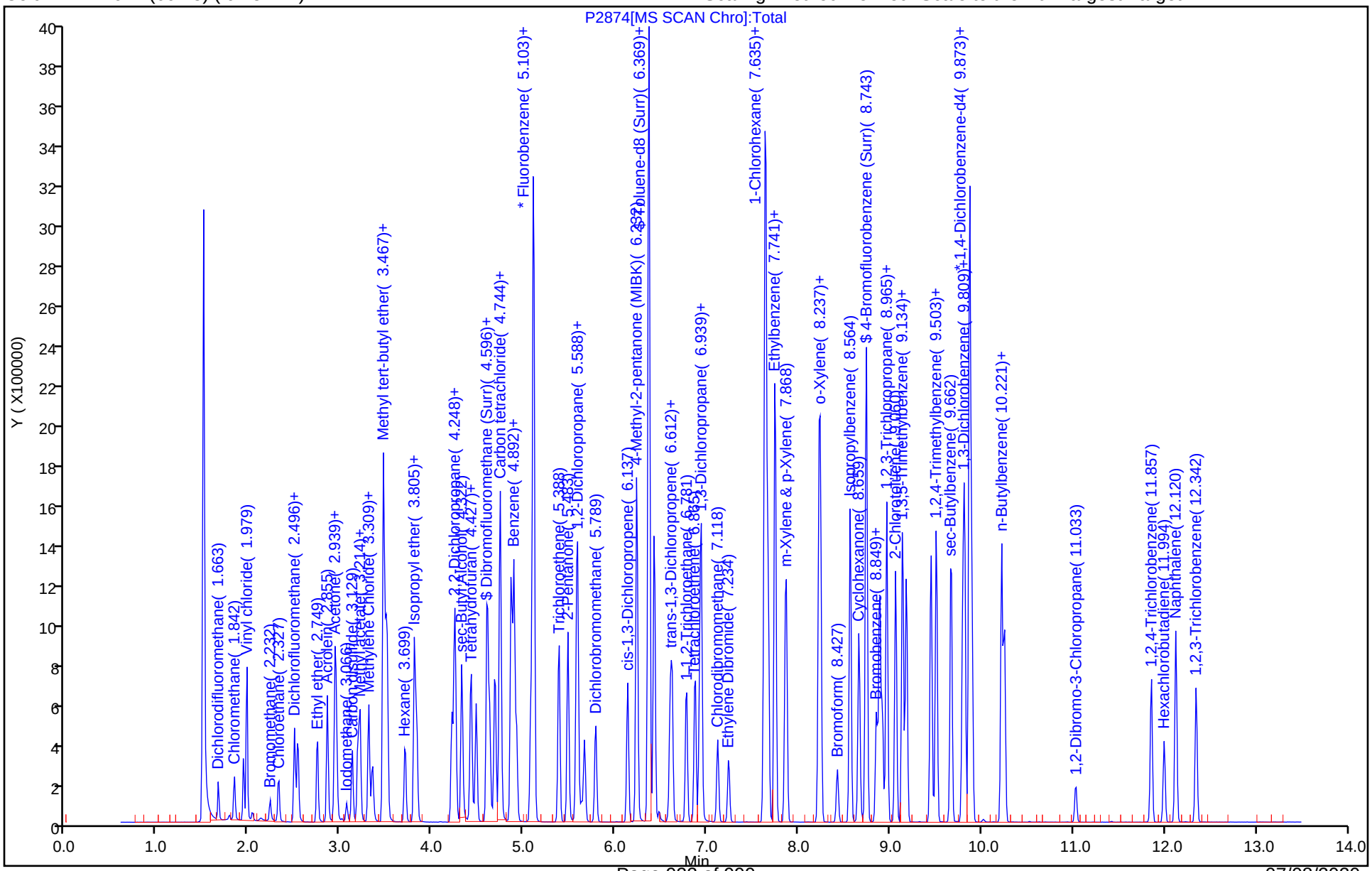
Lims ID: 280-138090-C-14 MSD Worklist Smp#: 28

Client ID: RW-7677P-20200622

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 24

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2874.D				
Lims ID:	280-138090-C-14 MSD				
Client ID:	RW-7677P-20200622				
Sample Type:	MSD				
Inject. Date:	30-Jun-2020 05:52:30	ALS Bottle#:	24	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-14 MSD pH				
Misc. Info.:	280-0092884-028				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:59:37	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				

First Level Reviewer: petuninp Date: 30-Jun-2020 20:58:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.5	99.01
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.70
$ 6 Toluene-d8 (Surr)	50.0	50.1	100.10
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.6	99.13
$ 9 BFB	0	0	0.00

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

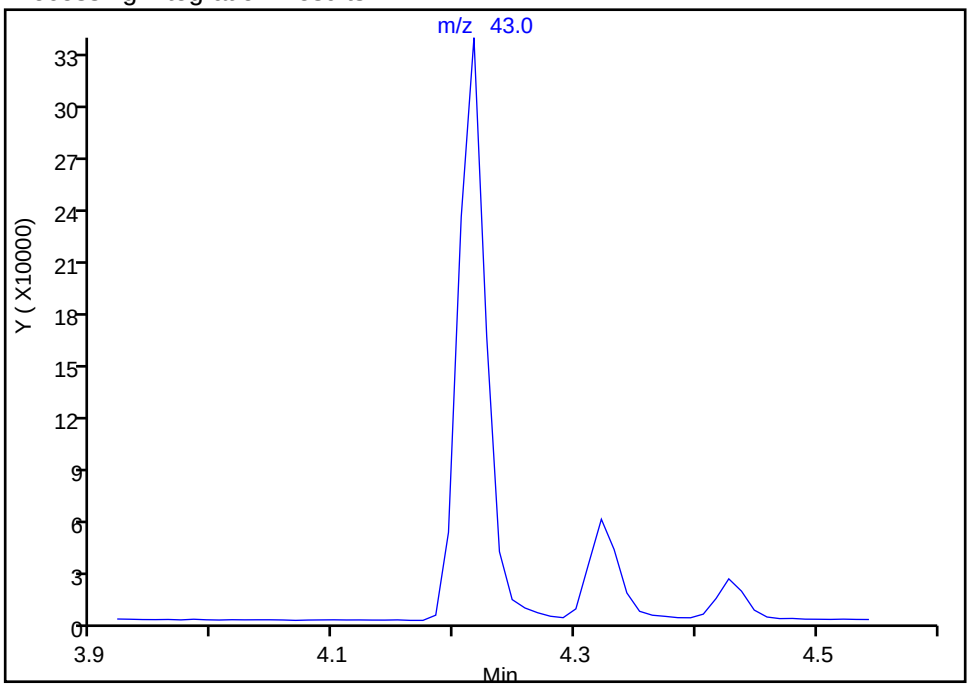
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2874.D				
Injection Date:	30-Jun-2020 05:52:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-C-14 MSD				
Client ID:	RW-7677P-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

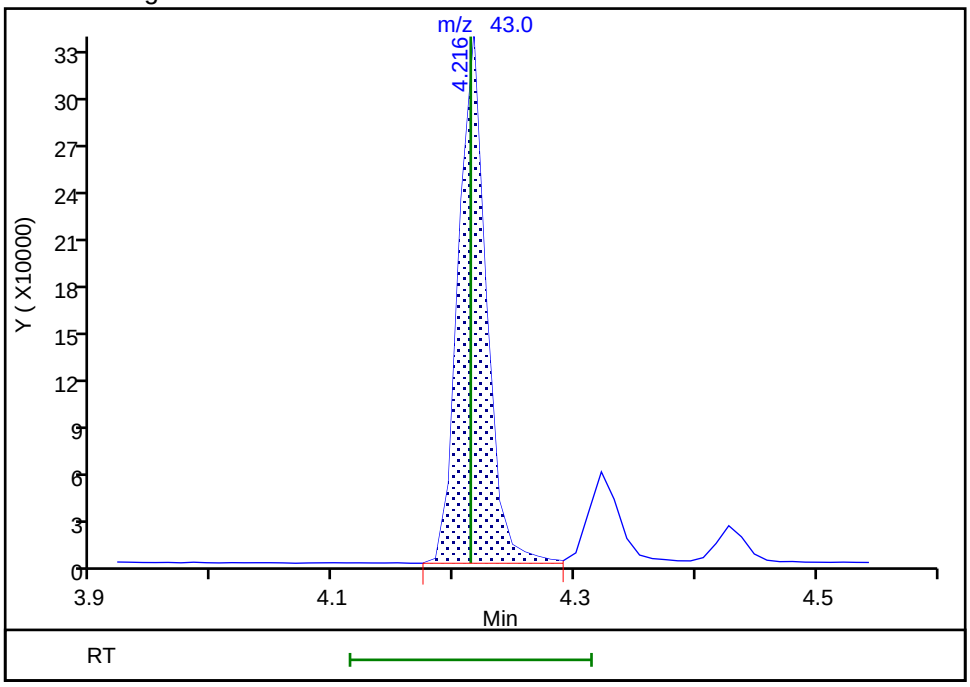
Processing Integration Results

Not Detected
Expected RT: 4.21



Manual Integration Results

RT: 4.22
Area: 536575
Amount: 94.033861
Amount Units: ug/l



Reviewer: petuninp, 30-Jun-2020 20:57:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

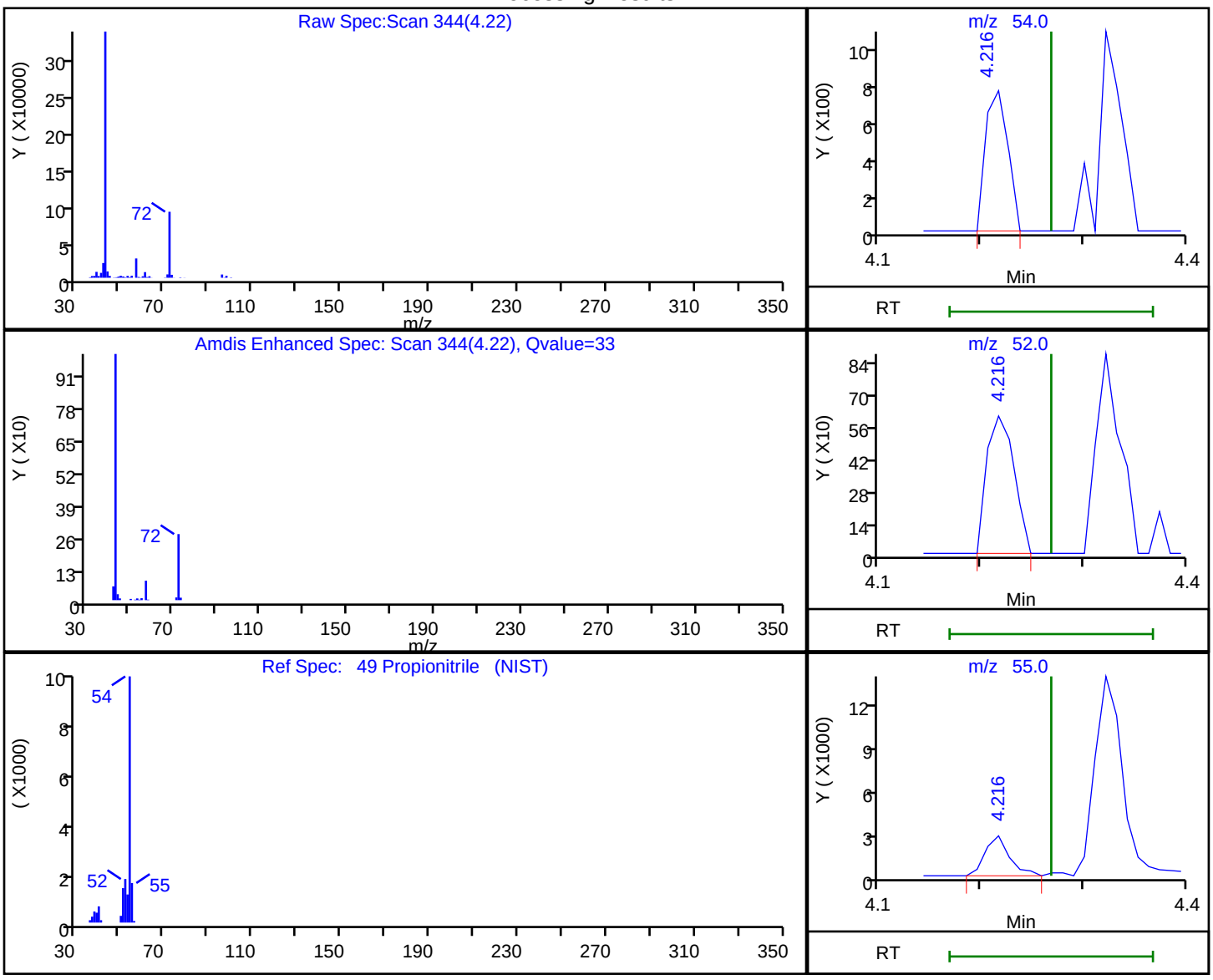
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200629-92884.b\P2874.D				
Injection Date:	30-Jun-2020 05:52:30	Instrument ID:	VMS_P		
Lims ID:	280-138090-C-14 MSD				
Client ID:	RW-7677P-20200622				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

49 Propionitrile, CAS: 107-12-0

Processing Results



RT	Mass	Response	Amount
4.22	54.00	1120	0.554515
4.22	52.00	1122	
4.22	55.00	4586	

Reviewer: petuninp, 30-Jun-2020 20:47:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688P-20200623 MSD Lab Sample ID: 280-138090-19 MSD

Matrix: Water Lab File ID: R6996.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:21

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 07:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	83.2		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	230		20	2.8
107-13-1	Acrylonitrile	238		20	1.4
71-43-2	Benzene	23.7		1.0	0.16
74-97-5	Chlorobromomethane	24.6		1.0	0.10
75-27-4	Dichlorobromomethane	25.5		1.0	0.17
75-25-2	Bromoform	22.9		1.0	0.46
74-83-9	Bromomethane	21.8		2.0	0.21
78-93-3	2-Butanone (MEK)	90.7		6.0	2.0
75-15-0	Carbon disulfide	18.2		2.0	0.17
56-23-5	Carbon tetrachloride	24.6		1.0	0.19
108-90-7	Chlorobenzene	25.3		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	22.7		1.0	0.17
75-00-3	Chloroethane	23.1		2.0	0.41
67-66-3	Chloroform	24.6		1.0	0.16
74-87-3	Chloromethane	18.3		2.0	0.30
107-05-1	Allyl chloride	21.8		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	21.9		5.0	0.47
74-95-3	Dibromomethane	25.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	26.0		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.4		1.0	0.13
106-46-7	1,4-Dichlorobenzene	26.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	20.6		3.0	0.80
75-71-8	Dichlorodifluoromethane	13.1		2.0	0.31
75-34-3	1,1-Dichloroethane	23.5		1.0	0.22
107-06-2	1,2-Dichloroethane	25.5		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	25.8		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.7		1.0	0.15
75-35-4	1,1-Dichloroethene	21.2		1.0	0.23
78-87-5	1,2-Dichloropropane	22.8		1.0	0.18
142-28-9	1,3-Dichloropropane	23.8		1.0	0.090
594-20-7	2,2-Dichloropropane	22.1		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.8		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	20.1		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Client Sample ID: RW-7688P-20200623 MSD Lab Sample ID: 280-138090-19 MSD

Matrix: Water Lab File ID: R6996.D

Analysis Method: 8260B Date Collected: 06/23/2020 14:21

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2020 07:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	24.0		1.0	0.19
100-41-4	Ethylbenzene	27.5		1.0	0.16
97-63-2	Ethyl methacrylate	21.9		3.0	0.86
591-78-6	2-Hexanone	90.7		5.0	1.7
74-88-4	Iodomethane	25.7		1.0	0.23
78-83-1	Isobutyl alcohol	565		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	23.1		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	84.2		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	26.6		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.5		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	22.7		1.0	0.21
127-18-4	Tetrachloroethene	24.2		1.0	0.20
108-88-3	Toluene	25.1		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	22.8		1.0	0.21
71-55-6	1,1,1-Trichloroethane	23.4		1.0	0.16
79-00-5	1,1,2-Trichloroethane	24.9		1.0	0.27
79-01-6	Trichloroethene	25.1		1.0	0.16
75-69-4	Trichlorofluoromethane	24.8		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.5		2.5	0.33
108-05-4	Vinyl acetate	41.5		3.0	0.94
75-01-4	Vinyl chloride	21.1		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.0		2.0	0.15
95-47-6	o-Xylene	23.9		1.0	0.19
1330-20-7	Xylenes, Total	47.9		2.0	0.19
106-93-4	1,2-Dibromoethane	23.4		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6996.D
Lims ID: 280-138090-C-19 MSD
Client ID: RW-7688P-20200623
Sample Type: MSD
Inject. Date: 30-Jun-2020 07:19:30 ALS Bottle#: 27 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138090-C-19 MSD pH
Misc. Info.: 280-0092885-030
Operator ID: PETUNINP Instrument ID: VMS_R1

Method: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 30-Jun-2020 20:31:03 Calib Date: 04-Jun-2020 15:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1037

First Level Reviewer: petuninp Date: 30-Jun-2020 20:28:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.007	5.007	0.000	99	1774385	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.522	7.522	0.000	86	399348	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.745	9.741	0.004	96	628035	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.508	4.508	0.000	92	451675	50.0	50.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.767	4.767	0.000	0	537848	50.0	49.1	
$ 6 Toluene-d8 (Surr)	98	6.255	6.255	0.000	94	1728738	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.616	8.620	-0.004	86	639971	50.0	48.6	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95	3.432	3.516	-0.084	0	7023		NR	
10 Dichlorodifluoromethane	85	1.655	1.655	0.000	99	87935	25.0	13.1	
11 Chloromethane	50	1.828	1.828	0.000	99	125337	25.0	18.3	
12 Vinyl chloride	62	1.921	1.918	0.003	98	135620	25.0	21.1	
13 Ethylene oxide	43		2.165					ND	U
14 Bromomethane	94	2.195	2.195	0.000	90	76080	25.0	21.8	
15 Chloroethane	64	2.285	2.285	0.000	99	89809	25.0	23.1	
16 Dichlorofluoromethane	67	2.454	2.454	0.000	97	242392	25.0	24.1	
17 Trichlorofluoromethane	101	2.487	2.488	-0.001	97	232799	25.0	24.8	
18 Ethanol	45		2.604					ND	
19 Ethyl ether	59	2.697	2.697	0.000	90	135178	25.0	24.9	
20 Propene oxide	58		2.739					ND	U
21 Acrolein	56	2.802	2.802	0.000	100	291973	246.9	229.9	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.881	2.881	0.000	62	69130	25.0	20.1	
23 1,1-Dichloroethene	96	2.881	2.885	-0.004	96	101350	25.0	21.2	
24 Acetone	43	2.904	2.900	0.004	99	211904	100.0	83.2	
25 Isopropyl alcohol	45		2.990					ND	
26 Iodomethane	142	3.001	3.001	0.000	99	102493	25.0	25.7	
27 Carbon disulfide	76	3.065	3.061	0.004	99	262704	25.0	18.2	
28 Acetonitrile	41		3.106					ND	
29 Methyl acetate	43	3.128	3.125	0.003	98	243877	50.0	43.8	
30 3-Chloro-1-propene	41	3.147	3.147	0.000	90	181235	25.0	21.8	
31 Methylene Chloride	84	3.241	3.241	0.000	90	157824	25.0	23.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59	3.282	3.282	0.000	97	175109	250.0	215.9	
33 Acrylonitrile	53	3.398	3.398	0.000	98	729990	250.0	238.0	
34 Methyl tert-butyl ether	73	3.425	3.425	0.000	95	481877	25.0	23.6	
35 trans-1,2-Dichloroethene	96	3.440	3.440	0.000	98	141675	25.0	24.7	
36 Chlorotrifluoroethene	116		3.531					ND	
37 Hexane	57	3.627	3.627	0.000	88	95494	25.0	17.0	
38 1,2-Dichloro-1,1,2,2-tetrafluoro	85		3.727					ND	
39 Vinyl acetate	43	3.728	3.728	0.000	97	678577	50.0	41.5	
41 Isopropyl ether	87		3.751					ND	U
40 1,1-Dichloroethane	63	3.751	3.755	-0.004	96	271363	25.0	23.5	
42 2-Chloro-1,3-butadiene	53		3.803					ND	
43 2-Chloro-1,1,1-Trifluoroethane	118		3.951					ND	
44 Tert-butyl ethyl ether	59		4.009					ND	
45 2-Butanone (MEK)	43	4.129	4.133	-0.004	100	342938	100.0	90.7	
46 Ethyl acetate	43		4.144					ND	
47 cis-1,2-Dichloroethene	96	4.156	4.156	0.000	82	179817	25.0	25.8	
48 2,2-Dichloropropane	77	4.167	4.167	0.000	87	200702	25.0	22.1	
49 Propionitrile	54		4.182					ND	U
50 sec-Butyl Alcohol	45	4.242	4.242	0.000	98	428581	750.0	591.3	
51 Methacrylonitrile	41		4.294					ND	
52 Chlorobromomethane	128	4.332	4.332	0.000	96	84012	25.0	24.6	
53 Tetrahydrofuran	42	4.343	4.339	0.004	90	117189	50.0	47.1	
54 Chloroform	83	4.392	4.392	0.000	93	299381	25.0	24.6	
55 1,1,1-Trichloroethane	97	4.530	4.534	-0.004	97	251678	25.0	23.4	
56 Cyclohexane	56	4.594	4.591	0.004	88	199385	25.0	21.3	
57 1,1-Dichloropropene	75	4.643	4.643	0.000	97	217862	25.0	24.0	
59 Carbon tetrachloride	117	4.647	4.647	0.000	96	207141	25.0	24.6	
60 Isobutyl alcohol	41	4.658	4.658	0.000	94	162016	625.0	564.7	
58 1,2-Dichloro-1,1,2-trifluoroetha	117		4.678					ND	
61 1,1,1-Trifluoro-2,2-dichloroetha	83		4.706					ND	
62 Benzene	78	4.797	4.797	0.000	96	648285	25.0	23.7	
63 1,2-Dichloroethane	62	4.823	4.823	0.000	98	249928	25.0	25.5	
64 Tert-amyl methyl ether	73		4.864					ND	
65 n-Heptane	43	4.980	4.980	0.000	88	107949	25.0	18.9	
66 n-Butanol	56		5.145					ND	
67 Trichloroethene	95	5.280	5.280	0.000	98	167014	25.0	25.1	
68 2-Pentanone	43	5.385	5.381	0.004	99	572574	100.0	92.0	
69 Methylcyclohexane	55	5.471	5.471	0.000	91	158443	25.0	21.5	
70 1,2-Dichloropropane	63	5.486	5.483	0.003	91	171004	25.0	22.8	
71 Methyl methacrylate	100		5.490					ND	
72 1,4-Dioxane	88	5.531	5.531	0.000	93	53656	500.0	440.1	
73 Dibromomethane	93	5.558	5.558	0.000	93	114495	25.0	25.4	
74 Dichlorobromomethane	83	5.681	5.678	0.003	99	233149	25.0	25.5	
75 2-Nitropropane	41		5.843					ND	
76 2-Chloroethyl vinyl ether	63		5.880				ND	ND	
77 cis-1,3-Dichloropropene	75	6.026	6.026	0.000	96	270324	25.0	22.8	
78 4-Methyl-2-pentanone (MIBK)	43	6.127	6.127	0.000	95	690853	100.0	84.2	
79 Toluene	91	6.311	6.315	-0.004	98	720273	25.0	25.1	
80 trans-1,3-Dichloropropene	75	6.487	6.487	0.000	89	236752	25.0	20.1	
81 Ethyl methacrylate	69	6.513	6.510	0.003	89	232306	25.0	21.9	
82 1,1,2-Trichloroethane	97	6.663	6.660	0.003	92	156566	25.0	24.9	
83 Tetrachloroethene	164	6.753	6.753	0.000	95	123858	25.0	24.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	6.810	6.810	0.000	89	299687	25.0	23.8	
85 2-Hexanone	43	6.832	6.828	0.004	96	501316	100.0	90.7	
86 Tetrahydrothiophene	60		6.997					ND	
87 Chlorodibromomethane	129	7.005	7.001	0.004	89	173968	25.0	22.7	
88 Ethylene Dibromide	107	7.121	7.117	0.004	98	173774	25.0	23.4	
89 1-Chlorohexane	91	7.507	7.507	0.000	97	215887	25.0	24.8	
90 Chlorobenzene	112	7.552	7.548	0.004	94	462053	25.0	25.3	
91 1,1,1,2-Tetrachloroethane	131	7.619	7.619	0.000	93	160180	25.0	23.5	
92 Ethylbenzene	106	7.627	7.627	0.000	98	250497	25.0	27.5	
93 m-Xylene & p-Xylene	106	7.743	7.743	0.000	0	306399	25.0	24.0	
94 o-Xylene	106	8.103	8.107	-0.004	97	299189	25.0	23.9	
95 Styrene	104	8.122	8.122	0.000	94	531417	25.0	26.6	
96 Bromoform	173	8.302	8.298	0.004	94	117045	25.0	22.9	
97 Isopropylbenzene	105	8.444	8.444	0.000	95	781143	25.0	25.3	
98 cis-1,4-Dichloro-2-butene	53		8.493					ND	
99 Cyclohexanone	55	8.541	8.542	-0.001	92	291953	1000.0	508.6	
100 1,1,2,2-Tetrachloroethane	83	8.733	8.729	0.004	95	237167	25.0	22.7	
101 Bromobenzene	156	8.759	8.763	-0.004	97	193522	25.0	26.1	
102 trans-1,4-Dichloro-2-butene	53	8.770	8.766	0.004	75	61750	25.0	20.6	
103 1,2,3-Trichloropropane	110	8.793	8.796	-0.003	84	76813	25.0	23.5	
104 N-Propylbenzene	120	8.845	8.845	0.000	99	210944	25.0	25.6	
105 2-Chlorotoluene	126	8.935	8.939	-0.004	96	178911	25.0	24.0	
106 1,3,5-Trimethylbenzene	105	9.014	9.014	0.000	94	656635	25.0	25.1	
107 4-Chlorotoluene	126	9.055	9.055	0.000	98	196362	25.0	25.8	
108 tert-Butylbenzene	119	9.321	9.325	-0.004	93	530799	25.0	24.8	
110 1,2,4-Trimethylbenzene	105	9.381	9.381	0.000	98	676931	25.0	25.2	
109 Pentachloroethane	167		9.392					ND	
111 sec-Butylbenzene	134	9.542	9.542	0.000	94	148856	25.0	24.1	
112 1,3-Dichlorobenzene	146	9.666	9.670	-0.004	97	358097	25.0	25.4	
113 4-Isopropyltoluene	119	9.692	9.689	0.003	97	652685	25.0	25.1	
114 1,4-Dichlorobenzene	146	9.767	9.767	0.000	95	386301	25.0	26.0	
115 1,2,3-Trimethylbenzene	105		9.786					ND	U
116 n-Butylbenzene	91	10.093	10.094	-0.001	98	587925	25.0	22.9	
117 1,2-Dichlorobenzene	146	10.123	10.120	0.003	97	371318	25.0	26.0	
118 1,2-Dibromo-3-Chloropropane	157	10.903	10.899	0.004	82	49876	25.0	21.9	
119 1,3,5-Trichlorobenzene	180		11.087					ND	
120 1,2,4-Trichlorobenzene	180	11.724	11.724	0.000	94	219562	25.0	22.8	
121 Hexachlorobutadiene	225	11.867	11.863	0.004	96	65059	25.0	21.4	
122 Naphthalene	128	11.990	11.994	-0.004	97	739057	25.0	23.1	
123 1,2,3-Trichlorobenzene	180	12.211	12.211	0.000	96	216504	25.0	24.2	
125 3-Ethylpentane	1		0.000					ND	
124 3-Methylhexane	1		0.000					ND	
132 3,3-Dimethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
126 Dimethyl disulfide	1		0.000					ND	
167 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
133 2-Methylhexane	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
166 Ethyl acrylate	55		0.000					ND	
131 2,3-Dimethylpentane	1		0.000					ND	
130 2,2-Dimethylpentane	1		0.000					ND	
127 n-Nonyl Aldehyde	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 2,2,3-Trimethylbutane	1		0.000					ND	
134 Propene oxide TIC	58	5.381	5.334	0.047	25	45620		NR	
S 135 1,2-Dichloroethene, Total (URS)	96				0		50.0	50.6	
S 139 Xylenes, Total (URS)	1				0		50.0	47.9	
S 138 Xylenes, Total	106				0		50.0	47.9	
S 140 Trihalomethanes, Total	1				0		100.0	95.6	
S 142 TAH	1				0			0	
S 136 1,3-Dichloropropene, Total	1				0		50.0	42.8	
S 141 1,2-Dichloroethene, Total	1				0		50.0	50.6	
S 137 Total BTEX	1				0			124.2	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- ND - Not Detected or Marked ND

Review Flags
- U - Marked Undetected

Reagents:

MV-Gas B_00064	Amount Added:	10.00	Units: uL	
MV-MegaMain B_00031	Amount Added:	25.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

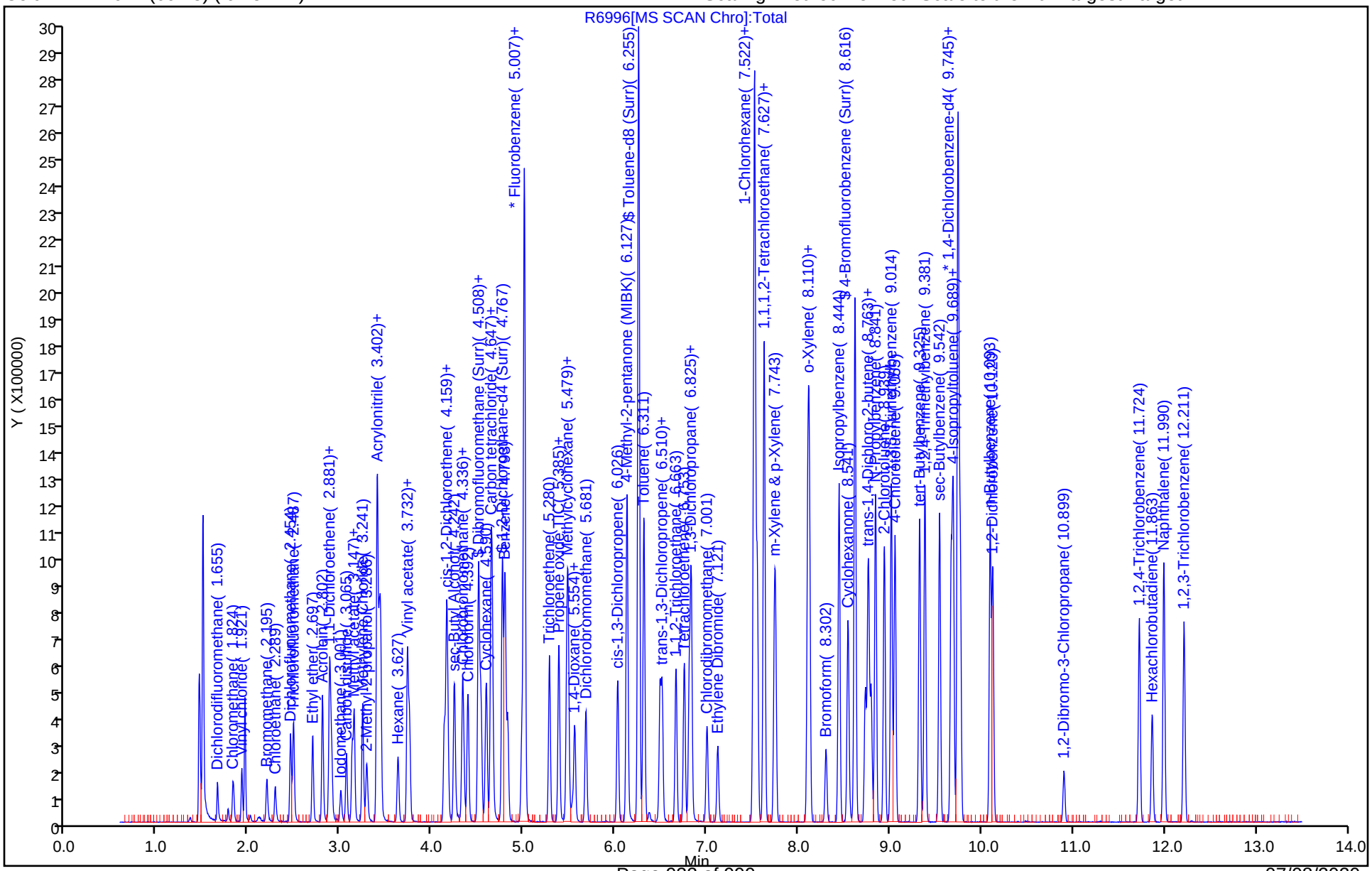
Report Date: 30-Jun-2020 20:31:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6996.D

Injection Date:	30-Jun-2020 07:19:30	Instrument ID:	VMS_R1	Operator ID:	PETUNINP
Lims ID:	280-138090-C-19 MSD			Worklist Smp#:	30
Client ID:	RW-7688P-20200623				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6996.D				
Lims ID:	280-138090-C-19 MSD				
Client ID:	RW-7688P-20200623				
Sample Type:	MSD				
Inject. Date:	30-Jun-2020 07:19:30	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138090-C-19 MSD pH				
Misc. Info.:	280-0092885-030				
Operator ID:	PETUNINP	Instrument ID:	VMS_R1		
Method:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\AQ_VMSR1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	30-Jun-2020 20:31:03	Calib Date:	04-Jun-2020 15:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_R1\20200604-92101.b\R5942.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1037				
First Level Reviewer: petuninp		Date:	30-Jun-2020 20:28:49		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.88
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.17
$ 6 Toluene-d8 (Surr)	50.0	49.9	99.89
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.6	97.29
$ 9 BFB	0	0	0.00

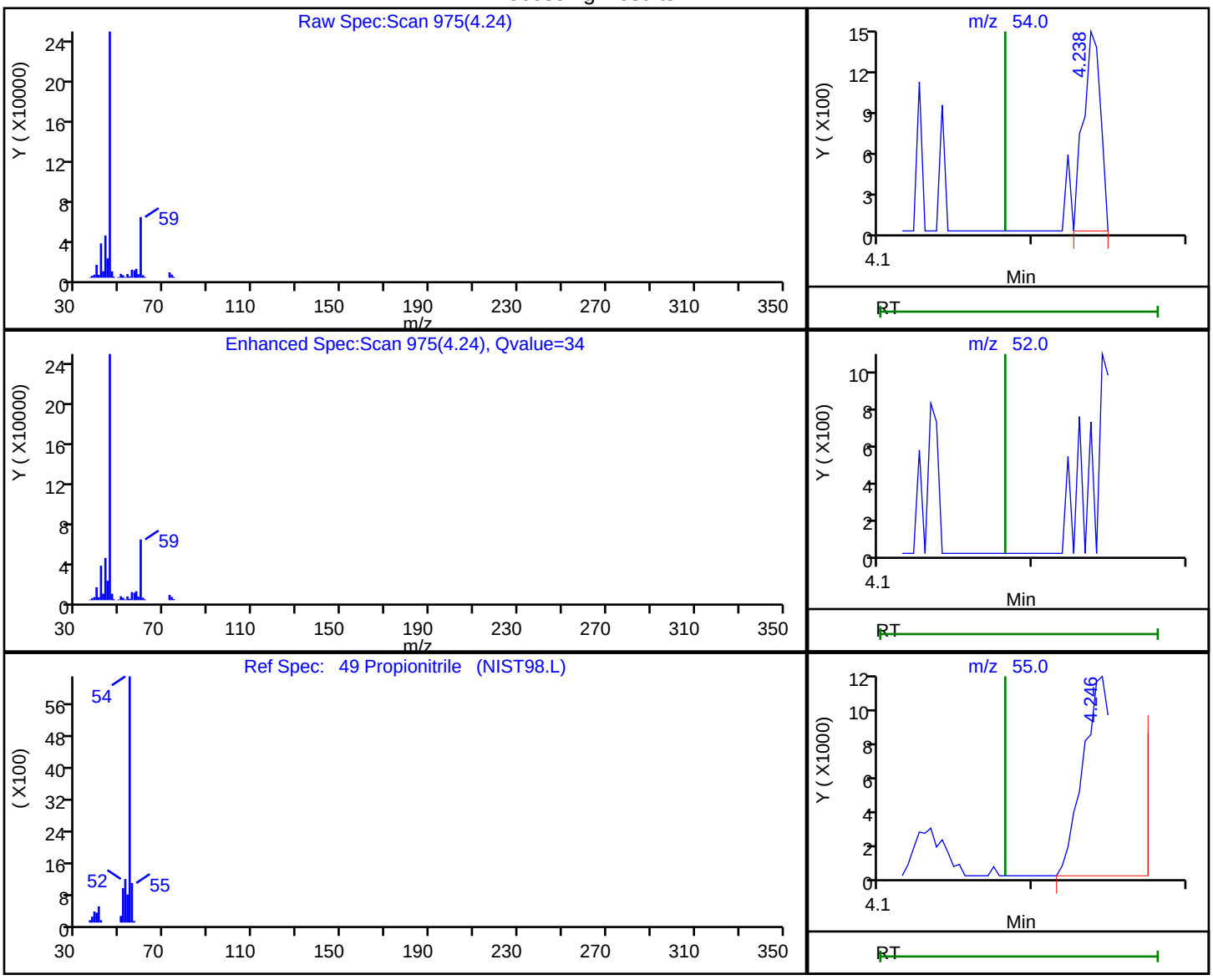
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b\R6996.D				
Injection Date:	30-Jun-2020 07:19:30	Instrument ID:	VMS_R1		
Lims ID:	280-138090-C-19 MSD				
Client ID:	RW-7688P-20200623				
Operator ID:	PETUNINP	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSR1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

49 Propionitrile, CAS: 107-12-0

Processing Results



RT	Mass	Response	Amount
4.24	54.00	1105	0.901298
4.18	52.00	0	
4.25	55.00	17434	

Reviewer: petuninp, 30-Jun-2020 20:28:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Start Date: 02/06/2020 10:25

Analysis Batch Number: 485097 End Date: 02/06/2020 19:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-485097/1		02/06/2020 10:25	1	P7804.D	DB-624 (60.25) 0.25(mm)
STD005 280-485097/12 IC		02/06/2020 11:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 11:04	1		DB-624 (60.25) 0.25(mm)
STD010 280-485097/13 IC		02/06/2020 11:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 11:25	1		DB-624 (60.25) 0.25(mm)
STD020 280-485097/14 IC		02/06/2020 11:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 11:46	1		DB-624 (60.25) 0.25(mm)
STD10 280-485097/15 IC		02/06/2020 12:11	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 12:11	1		DB-624 (60.25) 0.25(mm)
ICIS 280-485097/16		02/06/2020 12:33	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 12:33	1		DB-624 (60.25) 0.25(mm)
STD75 280-485097/17 IC		02/06/2020 12:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 12:54	1		DB-624 (60.25) 0.25(mm)
STD100 280-485097/18 IC		02/06/2020 13:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 13:15	1		DB-624 (60.25) 0.25(mm)
STD200 280-485097/19 IC		02/06/2020 13:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 13:37	1		DB-624 (60.25) 0.25(mm)
ICV 280-485097/20		02/06/2020 14:19	1		DB-624 (60.25) 0.25(mm)
STD005 280-485097/21 IC		02/06/2020 14:40	1	P7815.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 14:40	1		DB-624 (60.25) 0.25(mm)
STD010 280-485097/22 IC		02/06/2020 15:02	1	P7816.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 15:02	1		DB-624 (60.25) 0.25(mm)
STD020 280-485097/23 IC		02/06/2020 15:23	1	P7817.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 15:23	1		DB-624 (60.25) 0.25(mm)
STD10 280-485097/24 IC		02/06/2020 15:44	1	P7818.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 15:44	1		DB-624 (60.25) 0.25(mm)
STD50 280-485097/25 IC		02/06/2020 16:05	1	P7819.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 16:05	1		DB-624 (60.25) 0.25(mm)
STD75 280-485097/26 IC		02/06/2020 16:27	1	P7820.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 16:27	1		DB-624 (60.25) 0.25(mm)
STD100 280-485097/27 IC		02/06/2020 16:48	1	P7821.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 16:48	1		DB-624 (60.25) 0.25(mm)
STD200 280-485097/28 IC		02/06/2020 17:09	1	P7822.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 17:09	1		DB-624 (60.25) 0.25(mm)
ICV 280-485097/29		02/06/2020 17:52	1	P7824.D	DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 18:13	1		DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 18:34	1		DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 18:55	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Start Date: 02/06/2020 10:25

Analysis Batch Number: 485097 End Date: 02/06/2020 19:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-133008-A-2 MDLV		02/06/2020 19:17	1		DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 19:38	1		DB-624 (60.25) 0.25(mm)
ICV 280-485097/30		02/06/2020 19:59	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/01/2020 16:26

Analysis Batch Number: 496958 End Date: 06/02/2020 03:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-496958/1		06/01/2020 16:26	1	P1658A.D	DB-624 (60.25) 0.25(mm)
STD005 280-496958/12 IC		06/01/2020 16:26	1	P1658.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 16:26	1		DB-624 (60.25) 0.25(mm)
STD010 280-496958/13 IC		06/01/2020 16:47	1	P1659.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 16:47	1		DB-624 (60.25) 0.25(mm)
STD020 280-496958/14 IC		06/01/2020 17:09	1	P1660.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:09	1		DB-624 (60.25) 0.25(mm)
STD050 280-496958/15 IC		06/01/2020 17:30	1	P1661.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:30	1		DB-624 (60.25) 0.25(mm)
STD10 280-496958/16 IC		06/01/2020 17:51	1	P1662.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:51	1		DB-624 (60.25) 0.25(mm)
STD75 280-496958/18 IC		06/01/2020 18:33	1	P1664.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 18:33	1		DB-624 (60.25) 0.25(mm)
STD100 280-496958/19 IC		06/01/2020 18:55	1	P1665.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 18:55	1		DB-624 (60.25) 0.25(mm)
STD200 280-496958/20 IC		06/01/2020 19:16	1	P1666.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 19:16	1		DB-624 (60.25) 0.25(mm)
ICIS 280-496958/17		06/01/2020 20:33	1	P1669.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 20:33	1		DB-624 (60.25) 0.25(mm)
ICV 280-496958/21		06/01/2020 20:54	1	P1670.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 20:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 21:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 22:56	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 23:18	200		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:00	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:21	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:43	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:29	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:50	1		DB-624 (60.25) 0.25(mm)
CCVC 280-496958/38		06/02/2020 03:11	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Start Date: 06/03/2020 09:32

Analysis Batch Number: 497166 End Date: 06/03/2020 17:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-497166/1		06/03/2020 09:32	1	R5903.D	DB-624 (60.25) 0.25(mm)
STD05 280-497166/37 IC		06/03/2020 11:20	1		DB-624 (60.25) 0.25(mm)
STD10 280-497166/38 IC		06/03/2020 11:41	1		DB-624 (60.25) 0.25(mm)
ICIS 280-497166/39		06/03/2020 12:03	1	R5910.D	DB-624 (60.25) 0.25(mm)
STD75 280-497166/40 IC		06/03/2020 12:24	1		DB-624 (60.25) 0.25(mm)
STD100 280-497166/41 IC		06/03/2020 12:45	1		DB-624 (60.25) 0.25(mm)
STD200 280-497166/42 IC		06/03/2020 13:07	1		DB-624 (60.25) 0.25(mm)
STD010 280-497166/45 IC		06/03/2020 13:49	1	R5915.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 13:49	1		DB-624 (60.25) 0.25(mm)
STD005 280-497166/34 IC		06/03/2020 14:10	1		DB-624 (60.25) 0.25(mm)
STD010 280-497166/35 IC		06/03/2020 14:32	1		DB-624 (60.25) 0.25(mm)
STD020 280-497166/36 IC		06/03/2020 14:53	1		DB-624 (60.25) 0.25(mm)
STD020 280-497166/46 IC		06/03/2020 15:14	1	R5919.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 15:14	1		DB-624 (60.25) 0.25(mm)
STD10 280-497166/48 IC		06/03/2020 15:36	1	R5920.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 15:36	1		DB-624 (60.25) 0.25(mm)
STD50 280-497166/49 IC		06/03/2020 15:57	1	R5921.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 15:57	1		DB-624 (60.25) 0.25(mm)
STD75 280-497166/50 IC		06/03/2020 16:18	1	R5922.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 16:18	1		DB-624 (60.25) 0.25(mm)
STD100 280-497166/51 IC		06/03/2020 16:40	1	R5923.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 16:40	1		DB-624 (60.25) 0.25(mm)
STD200 280-497166/52 IC		06/03/2020 17:01	1	R5924.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/03/2020 17:01	1		DB-624 (60.25) 0.25(mm)
ICV 280-497166/53		06/03/2020 17:22	1	R5925.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Start Date: 06/04/2020 10:15

Analysis Batch Number: 497370 End Date: 06/04/2020 16:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-497370/1		06/04/2020 10:15	1	R5931.D	DB-624 (60.25) 0.25(mm)
STD005 280-497370/14 IC		06/04/2020 12:50	1	R5934.D	DB-624 (60.25) 0.25(mm)
STD010 280-497370/15 IC		06/04/2020 13:12	1	R5935.D	DB-624 (60.25) 0.25(mm)
STD020 280-497370/16 IC		06/04/2020 13:33	1	R5936.D	DB-624 (60.25) 0.25(mm)
STD050 280-497370/17 IC		06/04/2020 13:54	1	R5937.D	DB-624 (60.25) 0.25(mm)
STD10 280-497370/18 IC		06/04/2020 14:15	1	R5938.D	DB-624 (60.25) 0.25(mm)
ICIS 280-497370/19		06/04/2020 14:37	1	R5939.D	DB-624 (60.25) 0.25(mm)
STD75 280-497370/20 IC		06/04/2020 14:58	1	R5940.D	DB-624 (60.25) 0.25(mm)
STD100 280-497370/21 IC		06/04/2020 15:20	1	R5941.D	DB-624 (60.25) 0.25(mm)
STD200 280-497370/22 IC		06/04/2020 15:41	1	R5942.D	DB-624 (60.25) 0.25(mm)
ICV 280-497370/23		06/04/2020 16:02	1	R5943.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/29/2020 21:13

Analysis Batch Number: 500579 End Date: 06/30/2020 07:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-500579/1		06/29/2020 21:13	1	P2850.D	DB-624 (60.25) 0.25(mm)
CCV 280-500579/2		06/29/2020 21:41	1	P2851.D	DB-624 (60.25) 0.25(mm)
CCV 280-500579/3		06/29/2020 22:03	1	P2852.D	DB-624 (60.25) 0.25(mm)
LCS 280-500579/4		06/29/2020 22:24	1	P2853.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500579/5		06/29/2020 22:45	1	P2854.D	DB-624 (60.25) 0.25(mm)
LCS 280-500579/6		06/29/2020 23:07	1	P2855.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500579/7		06/29/2020 23:28	1	P2856.D	DB-624 (60.25) 0.25(mm)
MB 280-500579/9		06/30/2020 00:11	1	P2858.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 00:33	2		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 00:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 01:16	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 01:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 01:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 02:19	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 02:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 03:02	1		DB-624 (60.25) 0.25(mm)
280-138090-1		06/30/2020 03:23	1	P2867.D	DB-624 (60.25) 0.25(mm)
280-138090-2		06/30/2020 03:44	1	P2868.D	DB-624 (60.25) 0.25(mm)
280-138090-3		06/30/2020 04:06	1	P2869.D	DB-624 (60.25) 0.25(mm)
280-138090-12		06/30/2020 04:27	1	P2870.D	DB-624 (60.25) 0.25(mm)
280-138090-13		06/30/2020 04:48	1	P2871.D	DB-624 (60.25) 0.25(mm)
280-138090-14		06/30/2020 05:09	1	P2872.D	DB-624 (60.25) 0.25(mm)
280-138090-14 MS		06/30/2020 05:31	1	P2873.D	DB-624 (60.25) 0.25(mm)
280-138090-14 MSD		06/30/2020 05:52	1	P2874.D	DB-624 (60.25) 0.25(mm)
280-138090-15		06/30/2020 06:13	1	P2875.D	DB-624 (60.25) 0.25(mm)
280-138090-16		06/30/2020 06:34	1	P2876.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 06:55	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 07:17	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Start Date: 06/29/2020 21:12

Analysis Batch Number: 500580 End Date: 06/30/2020 08:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-500580/1		06/29/2020 21:12	1	R6969.D	DB-624 (60.25) 0.25(mm)
CCV 280-500580/3		06/29/2020 22:03	1	R6971.D	DB-624 (60.25) 0.25(mm)
CCV 280-500580/2		06/29/2020 22:25	1	R6972.D	DB-624 (60.25) 0.25(mm)
LCS 280-500580/4		06/29/2020 23:06	1	R6973.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500580/5		06/29/2020 23:28	1	R6974.D	DB-624 (60.25) 0.25(mm)
LCS 280-500580/6		06/29/2020 23:49	1	R6975.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500580/7		06/30/2020 00:10	1	R6976.D	DB-624 (60.25) 0.25(mm)
MB 280-500580/9		06/30/2020 00:53	1	R6978.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 01:16	40		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 01:37	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 01:59	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 02:21	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 02:42	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 03:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 03:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/30/2020 03:46	1		DB-624 (60.25) 0.25(mm)
280-138090-4		06/30/2020 04:07	1	R6987.D	DB-624 (60.25) 0.25(mm)
280-138090-5		06/30/2020 04:29	1	R6988.D	DB-624 (60.25) 0.25(mm)
280-138090-6		06/30/2020 04:50	1	R6989.D	DB-624 (60.25) 0.25(mm)
280-138090-7		06/30/2020 05:11	1	R6990.D	DB-624 (60.25) 0.25(mm)
280-138090-8		06/30/2020 05:33	1	R6991.D	DB-624 (60.25) 0.25(mm)
280-138090-17		06/30/2020 05:54	1	R6992.D	DB-624 (60.25) 0.25(mm)
280-138090-18		06/30/2020 06:15	1	R6993.D	DB-624 (60.25) 0.25(mm)
280-138090-19		06/30/2020 06:36	1	R6994.D	DB-624 (60.25) 0.25(mm)
280-138090-19 MS		06/30/2020 06:58	1	R6995.D	DB-624 (60.25) 0.25(mm)
280-138090-19 MSD		06/30/2020 07:19	1	R6996.D	DB-624 (60.25) 0.25(mm)
280-138090-20		06/30/2020 07:40	1	R6997.D	DB-624 (60.25) 0.25(mm)
280-138090-21		06/30/2020 08:02	1	R6998.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_P Start Date: 07/01/2020 22:01

Analysis Batch Number: 500875 End Date: 07/02/2020 08:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-500875/1		07/01/2020 22:01	1	P2970.D	DB-624 (60.25) 0.25(mm)
CCV 280-500875/2		07/01/2020 22:36	1	P2971.D	DB-624 (60.25) 0.25(mm)
CCV 280-500875/3		07/01/2020 22:57	1	P2972.D	DB-624 (60.25) 0.25(mm)
LCS 280-500875/4		07/01/2020 23:18	1	P2973.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500875/5		07/01/2020 23:40	1	P2974.D	DB-624 (60.25) 0.25(mm)
LCS 280-500875/6		07/02/2020 00:01	1	P2975.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500875/7		07/02/2020 00:22	1	P2976.D	DB-624 (60.25) 0.25(mm)
MB 280-500875/9		07/02/2020 01:05	1	P2978.D	DB-624 (60.25) 0.25(mm)
280-138090-9		07/02/2020 01:26	1	P2979.D	DB-624 (60.25) 0.25(mm)
280-138090-10		07/02/2020 01:47	1	P2980.D	DB-624 (60.25) 0.25(mm)
280-138090-11		07/02/2020 02:09	1	P2981.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 02:30	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 02:51	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 03:12	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 03:33	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 03:55	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 04:16	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 04:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 04:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 05:20	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 05:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 06:02	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 06:23	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 06:44	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 07:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 07:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 07:48	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 08:09	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Instrument ID: VMS_R1 Start Date: 07/06/2020 07:55

Analysis Batch Number: 501117 End Date: 07/06/2020 19:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-501117/1		07/06/2020 07:55	1	R7172.D	DB-624 (60.25) 0.25(mm)
CCV 280-501117/2		07/06/2020 08:31	1	R7173.D	DB-624 (60.25) 0.25(mm)
CCV 280-501117/3		07/06/2020 08:52	1	R7174.D	DB-624 (60.25) 0.25(mm)
CCV 280-501117/13		07/06/2020 09:50	1	R7176.D	DB-624 (60.25) 0.25(mm)
LCS 280-501117/4		07/06/2020 10:47	1	R7177.D	DB-624 (60.25) 0.25(mm)
MB 280-501117/9		07/06/2020 11:30	1	R7179.D	DB-624 (60.25) 0.25(mm)
LCSD 280-501117/5		07/06/2020 11:51	1	R7180.D	DB-624 (60.25) 0.25(mm)
LCS 280-501117/6		07/06/2020 12:13	1	R7181.D	DB-624 (60.25) 0.25(mm)
LCSD 280-501117/7		07/06/2020 12:34	1	R7182.D	DB-624 (60.25) 0.25(mm)
280-138090-22		07/06/2020 12:56	1	R7183.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 13:17	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 13:39	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 14:00	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 14:22	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 14:44	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 15:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 15:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 15:49	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 16:10	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 16:32	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 16:53	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 17:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 17:36	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 17:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 18:19	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 18:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 19:02	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/06/2020 19:24	10		DB-624 (60.25) 0.25(mm)

Sequence Name: C:\HPCHEM\1\SEQUENCE\062920PM.S
Comment:
Operator: PETUNINP
Data Path: C:\HPCHEM\1\DATA\062920PM\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
( ) Reprocessing Only ( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 25
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 2113-0717
TALs Batch: 506579

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P2850	BFB	BFB
2	Sample	1	P2851	8260	CCV
3	Sample	2	P2852	8260	CCV S
4	Sample	3	P2853	8260	LCS
5	Sample	4	P2854	8260	LCSD
6	Sample	5	P2855	8260	LCS S
7	Sample	6	P2856	8260	LCSD S
8	Sample	7	P2857	8260	RINSE
9	Sample	8	P2858	8260	MB
10	Sample	9	P2859	8260	280-137878-K-1 2X pH<2
11	Sample	10	P2860	8260	280-137878-J-2 pH=7*
12	Sample	11	P2861	8260	280-137878-J-3 HS! pH=7*
13	Sample	12	P2862	8260	280-137878-I-4 pH<2
14	Sample	13	P2863	8260	280-137878-I-5 pH=7*
15	Sample	14	P2864	8260	280-137878-B-6 pH<2
16	Sample	15	P2865	8260	280-137891-A-1 pH<2
17	Sample	16	P2866	8260	280-137891-O-2 pH=7*
18	Sample	17	P2867	8260	280-138090-A-1 pH<2
19	Sample	18	P2868	8260	280-138090-B-2 pH<2
20	Sample	19	P2869	8260	280-138090-C-3 pH<2
21	Sample	20	P2870	8260	280-138090-A-12 pH<2
22	Sample	21	P2871	8260	280-138090-C-13 pH<2
23	Sample	22	P2872	8260	280-138090-B-14 pH<2
24	Sample	23	P2873	8260	280-138090-A-14 MS pH<2
25	Sample	24	P2874	8260	280-138090-C-14 MSD pH<2
26	Sample	25	P2875	8260	280-138090-A-15 pH<2
27	Sample	26	P2876	8260	280-138090-C-16 pH<2
28	Sample	27	P2877	8260	280-138095-P-1 pH=7
29	Sample	28	P2878	8260	280-138095-N-2 pH=7

DLV'd
6/30/20

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062920PM
Worklist Number: 92884
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00060		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-137878-K-1	Client	2.000	voaWater	5.000	mL			
14	#14 280-137878-J-2	Client	1.000	voaWater	5.000	mL			
15	#15 280-137878-J-3	Client	1.000	voaWater	5.000	mL			
16	#16 280-137878-I-4	Client	1.000	voaWater	5.000	mL			
17	#17 280-137878-I-5	Client	1.000	voaWater	5.000	mL			
18	#18 280-137878-B-6	Client	1.000	voaWater	5.000	mL			
19	#19 280-137891-A-1	Client	1.000	voaWater	5.000	mL			
20	#20 280-137891-O-2	Client	1.000	voaWater	5.000	mL			
21	#21 280-138090-A-1	Client	1.000	voaWater	5.000	mL			
22	#22 280-138090-B-2	Client	1.000	voaWater	5.000	mL			
23	#23 280-138090-C-3	Client	1.000	voaWater	5.000	mL			
24	#24 280-138090-A-12	Client	1.000	voaWater	5.000	mL			
25	#25 280-138090-C-13	Client	1.000	voaWater	5.000	mL			
26	#26 280-138090-B-14	Client	1.000	voaWater	5.000	mL			
27	#27 280-138090-A-14 MS	MS	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
28	#28 280-138090-C-14 MSD	MSD	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
29	#29 280-138090-A-15	Client	1.000	voaWater	5.000	mL			
30	#30 280-138090-C-16	Client	1.000	voaWater	5.000	mL			
31	#31 280-138095-P-1	Client	1.000	voaWater	5.000	mL			
32	#32 280-138095-N-2	Client	1.000	voaWater	5.000	mL			

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062920PM
Worklist Number: 92884
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200629-92884.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL
Batch #s: 500579

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092884-001	# 1 BFB	mv-Cent BFB_00002	BFB	voaWater	2.000	uL	1.000
280-0092884-002	# 2 CCV	MV-MegaMainA_00034 MV-Gas A_00060	CCV	voaWater	5.000	mL	1.000
280-0092884-003	# 3 CCV	MV-Supp A_00044 mv-Cent IS_00006	CCV	voaWater	5.000	mL	1.000
280-0092884-004	# 4 LCS	MV-Gas B_00064 MV-MegaMain B_00031	LCS	voaWater	5.000	mL	1.000
280-0092884-005	# 5 LCSD	MV-Gas B_00064 MV-MegaMain B_00031	LCSD	voaWater	5.000	mL	1.000
280-0092884-006	# 6 LCS	MV-Supp B_00027	LCS	voaWater	5.000	mL	1.000
280-0092884-007	# 7 LCSD	MV-Supp B_00027	LCSD	voaWater	5.000	mL	1.000
280-0092884-008	# 8 RINSE		Client	voaWater	5.000	mL	1.000
280-0092884-009	# 9 MB		MB	voaWater	5.000	mL	1.000
280-0092884-010	#10 280-121232-A-1		Client	voaWater	5.000	mL	1.000
280-0092884-011	#11 280-121232-A-2		Client	voaWater	5.000	mL	1.000
280-0092884-012	#12 280-121232-A-3		Client	voaWater	5.000	mL	1.000
280-0092884-013	#13 280-137878-K-1		Client	voaWater	5.000	mL	2.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092884-014	#14 280-137878-J-2		Client	voaWater	5.000	mL	1.000
280-0092884-015	#15 280-137878-J-3		Client	voaWater	5.000	mL	1.000
280-0092884-016	#16 280-137878-I-4		Client	voaWater	5.000	mL	1.000
280-0092884-017	#17 280-137878-I-5		Client	voaWater	5.000	mL	1.000
280-0092884-018	#18 280-137878-B-6		Client	voaWater	5.000	mL	1.000
280-0092884-019	#19 280-137891-A-1		Client	voaWater	5.000	mL	1.000
280-0092884-020	#20 280-137891-O-2		Client	voaWater	5.000	mL	1.000
280-0092884-021	#21 280-138090-A-1		Client	voaWater	5.000	mL	1.000
280-0092884-022	#22 280-138090-B-2		Client	voaWater	5.000	mL	1.000
280-0092884-023	#23 280-138090-C-3		Client	voaWater	5.000	mL	1.000
280-0092884-024	#24 280-138090-A-12		Client	voaWater	5.000	mL	1.000
280-0092884-025	#25 280-138090-C-13		Client	voaWater	5.000	mL	1.000
280-0092884-026	#26 280-138090-B-14		Client	voaWater	5.000	mL	1.000
280-0092884-027	#27 280-138090-A-14 MS	MV-MegaMain B_00031 MV-Gas B_00064	MS	voaWater	5.000	mL	1.000
280-0092884-028	#28 280-138090-C-14 MSD	MV-MegaMain B_00031 MV-Gas B_00064	MSD	voaWater	5.000	mL	1.000
280-0092884-029	#29 280-138090-A-15		Client	voaWater	5.000	mL	1.000
280-0092884-030	#30 280-138090-C-16		Client	voaWater	5.000	mL	1.000
280-0092884-031	#31 280-138095-P-1		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092884-032	#32 280-138095-N-2		Client	voaWater	5.000	mL	1.000

Sample Request Form: 62855

den_msvoa_totalbacklog Gabe 6/29/2020 11:34:37 PM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-137878-1	ASHSMP	2x	8260B	8260B	07/02 23:59	07/08/20	BAS	HI	Marked as Disposed & Mtls-Use & 193 & VS-9	Unconfirmed
280-137878-2	4BSMP	1x	8260B	8260B	07/02 23:59	07/08/20	BAS	HI	193 & Marked as Disposed & Mtls-Use & VS-9	Unconfirmed
280-137878-3	MSWE1	1x	8260B	8260B	07/02 23:59	07/08/20	BAS	HI	193 & Marked as Disposed & VS-9 & Mtls-Use	Unconfirmed
S For sample 3-C 1L (UP) plastic, 250mL was split off for sub analysis to Buffalo										
280-137878-4	ASHE8	1x	8260B	8260B	07/02 23:59	07/08/20	BAS	HI	VS-9 & Mtls-Use & Marked as Disposed & 193	Unconfirmed
280-137878-5	MSWE6	1x	8260B	8260B	07/02 23:59	07/08/20	BAS	HI	VS-9 & Mtls-Use & Marked as Disposed & 193	Unconfirmed
280-137878-6	TRIP BLANK	1x	8260B	8260B	07/02 23:59	07/08/20	BAS	HI	VS-9	Unconfirmed
280-137891-1	QCTB	1x	8260B	8260B	07/02 23:59	07/09/20	BAS	CA	VS-9	Unconfirmed
M ethanol needed. Supp spike required.										
280-137891-2	LSI-1	1x	8260B	8260B	07/02 23:59	07/09/20	BAS	CA	Mtls-Strge & ARC-1 & VS-9 & 197 & GC-Use & Marked as Disposed	Unconfirmed
M ethanol needed. Supp spike required.										
280-138090-1	RW-8105PS-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-2	RW-5898B1-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-3	RW-8048P-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-12	RW-2172F-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed

Sample Request Form: 62855

den_msvoa_totalbacklog Gabe 6/29/2020 11:34:37 PM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
M 8260 Supp Spk DIL2										
280-138090-13	RW-7773P-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-14	RW-7677P-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-14MS	RW-7677P-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-14MSD	RW-7677P-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-15	RW-7677PQ-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-16	RW-7070B-20200622	1x	8260B	8260B	07/06 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138095-1	MW-8	1x	8260B	8260B	07/03 23:59	07/15/20	DMH	CO	211 & Mtls-Strge & AA-2 & OP Dpt	Unconfirmed
280-138095-2	MW-3	1x	8260B	8260B	07/03 23:59	07/15/20	DMH	CO	AA-2 & Mtls-Strge & 211 & OP Dpt	Unconfirmed

Sequence Name: C:¥msdchem¥1¥sequence¥062920PM.s
Comment:
Operator: PETUNINP
Data Path: C:¥MSDCHEM¥1¥DATA¥062920PM¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Eurofins TestAmerica Denve
Instrument ID: R1
SOP: DV-MS-0010 Rev 25
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste
Tune Time: 2112-0802
TALs Batch: 500586

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
( ) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
(X) Barcode Disabled

Line					Sample Name/Misc Info
1)	Sample	100	R6969	BFB	BFB
2)	Sample	1	R6970	8260	CCV
3)	Sample	2	R6971	8260	CCV S
4)	Sample	3	R6972	8260	CCV RR
5)	Sample	4	R6973	8260	LCS
6)	Sample	5	R6974	8260	LCSD
7)	Sample	6	R6975	8260	LCS S
8)	Sample	7	R6976	8260	LCSD S
9)	Sample	8	R6977	8260	RINSE
10)	Sample	9	R6978	8260	MB
11)	Sample	10	R6979	8260	240-131985-B-3 40X pH
12)	Sample	11	R6980	8260	240-131985-A-7 10X pH
13)	Sample	12	R6981	8260	240-131985-A-8 10X pH
14)	Sample	13	R6982	8260	280-137845-B-1 pH
15)	Sample	14	R6983	8260	280-137845-B-2 pH
16)	Sample	15	R6984	8260	280-137845-D-3 pH
17)	Sample	16	R6985	8260	280-137845-B-4 pH
18)	Sample	17	R6986	8260	280-137995-A-6 pH
19)	Sample	18	R6987	8260	280-138090-A-4 pH
20)	Sample	19	R6988	8260	280-138090-A-5 pH
21)	Sample	20	R6989	8260	280-138090-B-6 pH
22)	Sample	21	R6990	8260	280-138090-A-7 pH
23)	Sample	22	R6991	8260	280-138090-C-8 pH
24)	Sample	23	R6992	8260	280-138090-B-17 pH
25)	Sample	24	R6993	8260	280-138090-C-18 pH
26)	Sample	25	R6994	8260	280-138090-C-19 pH
27)	Sample	26	R6995	8260	280-138090-C-19 MS pH
28)	Sample	27	R6996	8260	280-138090-C-19 MSD pH
29)	Sample	28	R6997	8260	280-138090-A-20 pH
30)	Sample	29	R6998	8260	280-138090-A-21 pH

Dilution check
AP 6/30/20

Last Modified: Tue Jun 30 01:46:49 2020

Page: 1

07/08/2020

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062920PM
Worklist Number: 92885
Instrument Name: VMS_R1
Chrom Method: AQ_VMSR1_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_R1

Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00060		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 240-131985-B-3	Client	40.00	voaWater	5.000	mL			
14	#14 240-131985-A-7	Client	10.00	voaWater	5.000	mL			
15	#15 240-131985-A-8	Client	10.00	voaWater	5.000	mL			
16	#16 280-137845-B-1	Client	1.000	voaWater	5.000	mL			
17	#17 280-137845-B-2	Client	1.000	voaWater	5.000	mL			
18	#18 280-137845-D-3	Client	1.000	voaWater	5.000	mL			
19	#19 280-137845-B-4	Client	1.000	voaWater	5.000	mL			
20	#20 280-137995-A-6	Client	1.000	voaWater	5.000	mL			
21	#21 280-138090-A-4	Client	1.000	voaWater	5.000	mL			
22	#22 280-138090-A-5	Client	1.000	voaWater	5.000	mL			
23	#23 280-138090-B-6	Client	1.000	voaWater	5.000	mL			
24	#24 280-138090-A-7	Client	1.000	voaWater	5.000	mL			
25	#25 280-138090-C-8	Client	1.000	voaWater	5.000	mL			
26	#26 280-138090-B-17	Client	1.000	voaWater	5.000	mL			
27	#27 280-138090-C-18	Client	1.000	voaWater	5.000	mL			
28	#28 280-138090-C-19	Client	1.000	voaWater	5.000	mL			
29	#29 280-138090-C-19 MS	MS	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
30	#30 280-138090-C-19 MSD	MSD	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
31	#31 280-138090-A-20	Client	1.000	voaWater	5.000	mL			
32	#32 280-138090-A-21	Client	1.000	voaWater	5.000	mL			

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062920PM
Worklist Number: 92885
Instrument Name: VMS_R1
Chrom Method: AQ_VMSR1_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_R1\20200629-92885.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_R1
Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL
Batch #s: 500580

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092885-001	# 1 BFB	mv-Cent BFB_00002	BFB	voaWater	2.000	uL	1.000
280-0092885-002	# 2 CCV	MV-MegaMainA_00034 MV-Gas A_00060	CCV	voaWater	5.000	mL	1.000
280-0092885-003	# 3 CCV	MV-Supp A_00044 mv-Cent IS_00006	CCV	voaWater	5.000	mL	1.000
280-0092885-004	# 4 LCS	MV-MegaMain B_00031 MV-Gas B_00064	LCS	voaWater	5.000	mL	1.000
280-0092885-005	# 5 LCSD	MV-MegaMain B_00031 MV-Gas B_00064	LCSD	voaWater	5.000	mL	1.000
280-0092885-006	# 6 LCS	MV-Supp B_00027	LCS	voaWater	5.000	mL	1.000
280-0092885-007	# 7 LCSD	MV-Supp B_00027	LCSD	voaWater	5.000	mL	1.000
280-0092885-008	# 8 RINSE		Client	voaWater	5.000	mL	1.000
280-0092885-009	# 9 MB		MB	voaWater	5.000	mL	1.000
280-0092885-010	#10 280-121232-A-1		Client	voaWater	5.000	mL	1.000
280-0092885-011	#11 280-121232-A-2		Client	voaWater	5.000	mL	1.000
280-0092885-012	#12 280-121232-A-3		Client	voaWater	5.000	mL	1.000
280-0092885-013	#13 240-131985-B-3		Client	voaWater	5.000	mL	40.00

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092885-014	#14 240-131985-A-7		Client	voaWater	5.000	mL	10.00
280-0092885-015	#15 240-131985-A-8		Client	voaWater	5.000	mL	10.00
280-0092885-016	#16 280-137845-B-1		Client	voaWater	5.000	mL	1.000
280-0092885-017	#17 280-137845-B-2		Client	voaWater	5.000	mL	1.000
280-0092885-018	#18 280-137845-D-3		Client	voaWater	5.000	mL	1.000
280-0092885-019	#19 280-137845-B-4		Client	voaWater	5.000	mL	1.000
280-0092885-020	#20 280-137995-A-6		Client	voaWater	5.000	mL	1.000
280-0092885-021	#21 280-138090-A-4		Client	voaWater	5.000	mL	1.000
280-0092885-022	#22 280-138090-A-5		Client	voaWater	5.000	mL	1.000
280-0092885-023	#23 280-138090-B-6		Client	voaWater	5.000	mL	1.000
280-0092885-024	#24 280-138090-A-7		Client	voaWater	5.000	mL	1.000
280-0092885-025	#25 280-138090-C-8		Client	voaWater	5.000	mL	1.000
280-0092885-026	#26 280-138090-B-17		Client	voaWater	5.000	mL	1.000
280-0092885-027	#27 280-138090-C-18		Client	voaWater	5.000	mL	1.000
280-0092885-028	#28 280-138090-C-19		Client	voaWater	5.000	mL	1.000
280-0092885-029	#29 280-138090-C-19 MS	MV-MegaMain B_00031 MV-Gas B_00064	MS	voaWater	5.000	mL	1.000
280-0092885-030	#30 280-138090-C-19 MSD	MV-Gas B_00064 MV-MegaMain B_00031	MSD	voaWater	5.000	mL	1.000
280-0092885-031	#31 280-138090-A-20		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092885-032	#32 280-138090-A-21		Client	voaWater	5.000	mL	1.000

Sample Request Form: 62856

den_msvoa_totalbacklog Gabe 6/30/2020 12:59:56 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-137845-1	WATER WELL	1x	8260B	8260B	07/02 23:59	07/02/20	DMH	TX	VS-9 & Mtls-Strge	Unconfirmed
M TX QAS										
280-137845-2	FIELD BLANK		8260B	8260B	07/02 23:59	07/02/20	DMH	TX	Mtls-Strge & VS-9	Unconfirmed
M TX QAS										
280-137845-3	FIELD DUPLICATE		8260B	8260B	07/02 23:59	07/02/20	DMH	TX	VS-9 & Mtls-Strge	Unconfirmed
M TX QAS										
280-137845-4	TRIP BLANK		8260B	8260B	07/02 23:59	07/02/20	DMH	TX	VS-9	Unconfirmed
M TX QAS										
280-137995-6	QCTB	1x	8260B	8260B	07/07 23:59	07/14/20	BAS	CA	VS-11	Unconfirmed
M ethanol needed. Supp spike required.										
280-138090-4	RW-7244P-20200623	1x	8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-5	RW-7350P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-6	RW-8035P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-7	RW-2237H-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-8	RW-8012P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed

07/08/2020

Sample Request Form: 62856

den_msvoa_totalbacklog Gabe 6/30/2020 12:59:56 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
M 8260 Supp Spk DIL2										
280-138090-17	RW-8249P-20200623	1x	8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-18	RW-2151H-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-19	RW-7688P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-19MS	RW-7688P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-19MSD	RW-7688P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-20	RW-7688PQ-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-21	RW-8284P-20200623		8260B	8260B	07/07 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										

Sequence Name: C:\HPCHEM\1\SEQUENCE\070120PM.S
Comment:
Operator: PETUNINP
Data Path: C:\HPCHEM\1\DATA\070120PM\
Pre-Seq Cmd:
Post-Seq Cmd:

Eurofins TestAmerica Denver
Instrument ID: 1
SOP: DV-MS-0010 Rev: 25
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 1201-0809
TALs Batch: 500875

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P2970	BFB	BFB
2	Sample	1	P2971	8260	CCV
3	Sample	2	P2972	8260	CCV S
4	Sample	3	P2973	8260	LCS
5	Sample	4	P2974	8260	LCSD
6	Sample	5	P2975	8260	LCS S
7	Sample	6	P2976	8260	LCSD S
8	Sample	7	P2977	8260	RINSE
9	Sample	8	P2978	8260	MB
10	Sample	9	P2979	8260	280-138090-C-9 pH<2
11	Sample	10	P2980	8260	280-138090-C-10 pH<2
12	Sample	11	P2981	8260	280-138090-C-11 pH<2
13	Sample	12	P2982	8260	280-138098-C-1 pH<2
14	Sample	13	P2983	8260	280-138098-B-2 pH<2
15	Sample	14	P2984	8260	280-138098-B-3 pH<2
16	Sample	15	P2985	8260	280-138098-A-4 pH<2
17	Sample	16	P2986	8260	280-138098-B-5 pH<2
18	Sample	17	P2987	8260	280-138098-B-6 pH<2
19	Sample	18	P2988	8260	280-138098-A-7 pH<2
20	Sample	19	P2989	8260	280-138098-A-8 pH<2
21	Sample	20	P2990	8260	280-138098-A-9 pH<2
22	Sample	21	P2991	8260	280-138098-A-10 pH<2
23	Sample	22	P2992	8260	280-138098-A-11 pH<2
24	Sample	23	P2993	8260	280-138098-A-12 pH<2
25	Sample	24	P2994	8260	280-138098-B-13 pH<2
26	Sample	25	P2995	8260	280-138098-B-14 pH<2
27	Sample	26	P2996	8260	280-138098-B-15 pH<2
28	Sample	27	P2997	8260	280-138098-B-16 pH<2
29	Sample	28	P2998	8260	280-138098-A-17 pH<2

DLVd
7/2/20

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070120PM
Worklist Number: 92961
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	#1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	#2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00060		
3	#3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	#4 LCS	LCS	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
5	#5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
6	#6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	#7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	#8 RINSE	Client	1.000	voaWater	5.000	mL			
9	#9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-138090-C-9	Client	1.000	voaWater	5.000	mL			
14	#14 280-138090-C-10	Client	1.000	voaWater	5.000	mL			
15	#15 280-138090-C-11	Client	1.000	voaWater	5.000	mL			
16	#16 280-138098-C-1	Client	1.000	voaWater	5.000	mL			
17	#17 280-138098-B-2	Client	1.000	voaWater	5.000	mL			
18	#18 280-138098-B-3	Client	1.000	voaWater	5.000	mL			
19	#19 280-138098-A-4	Client	1.000	voaWater	5.000	mL			
20	#20 280-138098-B-5	Client	1.000	voaWater	5.000	mL			
21	#21 280-138098-B-6	Client	1.000	voaWater	5.000	mL			
22	#22 280-138098-A-7	Client	1.000	voaWater	5.000	mL			
23	#23 280-138098-A-8	Client	1.000	voaWater	5.000	mL			
24	#24 280-138098-A-9	Client	1.000	voaWater	5.000	mL			
25	#25 280-138098-A-10	Client	1.000	voaWater	5.000	mL			
26	#26 280-138098-A-11	Client	1.000	voaWater	5.000	mL			
27	#27 280-138098-A-12	Client	1.000	voaWater	5.000	mL			
28	#28 280-138098-B-13	Client	1.000	voaWater	5.000	mL			
29	#29 280-138098-B-14	Client	1.000	voaWater	5.000	mL			
30	#30 280-138098-B-15	Client	1.000	voaWater	5.000	mL			
31	#31 280-138098-B-16	Client	1.000	voaWater	5.000	mL			
32	#32 280-138098-A-17	Client	1.000	voaWater	5.000	mL			

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070120PM
Worklist Number: 92961
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL
Batch #s: 500875

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092961-001	# 1 BFB	mv-Cent BFB_00002	BFB	voaWater	2.000	uL	1.000
280-0092961-002	# 2 CCV	MV-MegaMainA_00034 MV-Gas A_00060	CCV	voaWater	5.000	mL	1.000
280-0092961-003	# 3 CCV	MV-Supp A_00044 mv-Cent IS_00006	CCV	voaWater	5.000	mL	1.000
280-0092961-004	# 4 LCS	MV-Gas B_00064 MV-MegaMain B_00031	LCS	voaWater	5.000	mL	1.000
280-0092961-005	# 5 LCSD	MV-Gas B_00064 MV-MegaMain B_00031	LCSD	voaWater	5.000	mL	1.000
280-0092961-006	# 6 LCS	MV-Supp B_00027	LCS	voaWater	5.000	mL	1.000
280-0092961-007	# 7 LCSD	MV-Supp B_00027	LCSD	voaWater	5.000	mL	1.000
280-0092961-008	# 8 RINSE		Client	voaWater	5.000	mL	1.000
280-0092961-009	# 9 MB		MB	voaWater	5.000	mL	1.000
280-0092961-010	#10 280-121232-A-1		Client	voaWater	5.000	mL	1.000
280-0092961-011	#11 280-121232-A-2		Client	voaWater	5.000	mL	1.000
280-0092961-012	#12 280-121232-A-3		Client	voaWater	5.000	mL	1.000
280-0092961-013	#13 280-138090-C-9		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092961-014	#14 280-138090-C-10		Client	voaWater	5.000	mL	1.000
280-0092961-015	#15 280-138090-C-11		Client	voaWater	5.000	mL	1.000
280-0092961-016	#16 280-138098-C-1		Client	voaWater	5.000	mL	1.000
280-0092961-017	#17 280-138098-B-2		Client	voaWater	5.000	mL	1.000
280-0092961-018	#18 280-138098-B-3		Client	voaWater	5.000	mL	1.000
280-0092961-019	#19 280-138098-A-4		Client	voaWater	5.000	mL	1.000
280-0092961-020	#20 280-138098-B-5		Client	voaWater	5.000	mL	1.000
280-0092961-021	#21 280-138098-B-6		Client	voaWater	5.000	mL	1.000
280-0092961-022	#22 280-138098-A-7		Client	voaWater	5.000	mL	1.000
280-0092961-023	#23 280-138098-A-8		Client	voaWater	5.000	mL	1.000
280-0092961-024	#24 280-138098-A-9		Client	voaWater	5.000	mL	1.000
280-0092961-025	#25 280-138098-A-10		Client	voaWater	5.000	mL	1.000
280-0092961-026	#26 280-138098-A-11		Client	voaWater	5.000	mL	1.000
280-0092961-027	#27 280-138098-A-12		Client	voaWater	5.000	mL	1.000
280-0092961-028	#28 280-138098-B-13		Client	voaWater	5.000	mL	1.000
280-0092961-029	#29 280-138098-B-14		Client	voaWater	5.000	mL	1.000
280-0092961-030	#30 280-138098-B-15		Client	voaWater	5.000	mL	1.000
280-0092961-031	#31 280-138098-B-16		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092961-032	#32 280-138098-A-17		Client	voaWater	5.000	mL	1.000

Sample Request Form: 62898

den_msvoa_totalbacklog Gabe 7/2/2020 12:01:38 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-138098-1	MUNI-WELL-14-20200624	1x	8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-2	MUNI-WELL-33-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-3	RW-2172H-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-4	RW-2203H-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-5	RW-2213F-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-6	RW-2613M-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-7	RW-7091R-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-8	RW-7505P-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-9	RW-7549P-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-10	RW-7588P-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed

Sample Request Form: 62898

den_msvoa_totalbacklog Gabe 7/2/2020 12:01:38 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
M 8260 Supp Spk DIL2										
280-138098-11	RW-8209P-20200625	1 x	8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-12	EB-00-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-13	EB-01-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-14	TB-02-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-15	RW-2140H-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-16	MW-116S-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-17	EB-02-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										

Sample Request Form: 62899

den_msvoa_totalbacklog Gabe 7/2/2020 12:02:54 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-138090-9	RW-2879M-20200624	1x	8260B	8260B	07/08 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-10	RW-7586P-20200624		8260B	8260B	07/08 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-11	RW-8030P-20200624		8260B	8260B	07/08 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										

Sequence Name: C:¥msdchem¥1¥sequence¥070620.s
Comment:
Operator: PEPPINGA
Data Path: C:¥MSDCHEM¥1¥DATA¥070620¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Eurofins TestAmerica Denver
Instrument ID: R1
SOP: DV-MS-0010 Rev. 26
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 7:55 - 19 24
TALs Batch: 50117

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
( ) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
(X) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	R7172	BFB	BFB
2)	Sample	1	R7173	8260	CCV
3)	Sample	2	R7174	8260	CCV S
4)	Sample	3	R7175	8260	CCV G
5)	Sample	4	R7176	8260	CCV G RR
6)	Sample	5	R7177	8260	LCS
7)	Sample	6	R7178	8260	RINSE
8)	Sample	7	R7179	8260	MB
9)	Sample	8	R7180	8260	LCSD
10)	Sample	9	R7181	8260	LCS S
11)	Sample	10	R7182	8260	LCSD S
12)	Sample	11	R7183	8260	280-138090-b-22 pH<2
13)	Sample	12	R7184	8260	280-138097-a-1 pH<2
14)	Sample	13	R7185	8260	280-138181-e-1 pH<2
15)	Sample	14	R7186	8260	280-138181-e-2 pH<2
16)	Sample	15	R7187	8260	280-138181-e-3 pH<2
17)	Sample	16	R7188	8260	280-138181-e-4 4X pH<2
18)	Sample	17	R7189	8260	280-138181-a-5 pH<2
19)	Sample	18	R7190	8260	280-138181-e-6 pH<2
20)	Sample	19	R7191	8260	280-138181-e-7 pH<2
21)	Sample	20	R7192	8260	280-138181-e-8 pH<2
22)	Sample	21	R7193	8260	280-138181-e-9 pH<2
23)	Sample	22	R7194	8260	280-138181-e-12 pH<2
24)	Sample	23	R7195	8260	280-138181-e-13 pH<2
25)	Sample	24	R7196	8260	280-138181-a-14 pH<2
26)	Sample	25	R7197	8260	280-138193-m-1 pH<2
27)	Sample	26	R7198	8260	280-138193-m-2 pH<2
28)	Sample	27	R7199	8260	280-138193-m-3 pH<2
29)	Sample	28	R7200	8260	280-138193-a-4 pH<2
30)	Sample	29	R7201	8260	280-138181-f-4 10X pH<2

DIL Vd
PW
07/06/20

Last Modified: Mon Jul 06 19:58:44 2020 Page: 1

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070620 Worklist Number: 93029
Instrument Name: VMS_R1 Chrom Method: AQ_VMSR1_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_R1\20200706-93029.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_R1

Run Reagent: mv-IS_SS_00006 Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00034		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
13	#13 CCV	CCV	1.000	voaWater	5.000	mL	MV-Gas A_00061		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00064		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client	1.000	voaWater	5.000	mL			
14	#14 280-138090-B-22	Client	1.000	voaWater	5.000	mL			
15	#15 280-138097-A-1	Client	1.000	voaWater	5.000	mL			
16	#16 280-138181-E-1	Client	1.000	voaWater	5.000	mL			
17	#17 280-138181-E-2	Client	1.000	voaWater	5.000	mL			
18	#18 280-138181-E-3	Client	1.000	voaWater	5.000	mL			
19	#19 280-138181-E-4	Client	1.000	voaWater	5.000	mL			
20	#20 280-138181-A-5	Client	1.000	voaWater	5.000	mL			
21	#21 280-138181-E-6	Client	1.000	voaWater	5.000	mL			
22	#22 280-138181-E-7	Client	1.000	voaWater	5.000	mL			
23	#23 280-138181-E-8	Client	1.000	voaWater	5.000	mL			
24	#24 280-138181-E-9	Client	1.000	voaWater	5.000	mL			
25	#25 280-138181-E-12	Client	1.000	voaWater	5.000	mL			
26	#26 280-138181-E-13	Client	1.000	voaWater	5.000	mL			
27	#27 280-138181-A-14	Client	1.000	voaWater	5.000	mL			
28	#28 280-138193-M-1	Client	1.000	voaWater	5.000	mL			
29	#29 280-138193-M-2	Client	1.000	voaWater	5.000	mL			
30	#30 280-138193-M-3	Client	1.000	voaWater	5.000	mL			
31	#31 280-138193-A-4	Client	1.000	voaWater	5.000	mL			
32	#32 Samp 32	Client	1.000	voaWater	5.000	mL			

Sample Request Form: 62936

den_msvoa_totalbacklog Gabe 7/6/2020 11:11:04 AM Assigned to:Pepping, Andrew J

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-138090-22	TB-01-20200625	1x	8260B	8260B	07/09 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138097-1	PW02(20200626)	1x	8260B	8260B	07/10 23:59	07/09/20	DRR	MO	AA-2	Unconfirmed
M DIL3										
280-138181-1	A02	1x	8260B	8260B	07/11 23:59	07/20/20	BAS	CA	WC Dpt & 216 & AA-2 & Mtls-Strge	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-2	E01	1x	8260B	8260B	07/11 23:59	07/20/20	BAS	CA	Mtls-Strge & 216 & AA-2 & WC Dpt	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-3	K37	1x	8260B	8260B	07/11 23:59	07/20/20	BAS	CA	Mtls-Strge & AA-2 & WC Dpt & 216	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-4	E02	4x	8260B	8260B	07/12 23:59	07/20/20	BAS	CA	WC Dpt & AA-2 & 216 & Mtls-Strge	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-5	TRIP BLANK	1x	8260B	8260B	07/11 23:59	07/20/20	BAS	CA	AA-2	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-6	K60	1x	8260B	8260B	07/12 23:59	07/20/20	BAS	CA	Mtls-Strge & 216 & AA-2 & WC Dpt	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-7	K63	1x	8260B	8260B	07/12 23:59	07/20/20	BAS	CA	WC Dpt & AA-2 & 216 & Mtls-Strge	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-8	K18	1x	8260B	8260B	07/12 23:59	07/20/20	BAS	CA	Mtls-Strge & 216 & WC Dpt & AA-2	Unconfirmed

Sample Request Form: 62936

den_msvoa_totalbacklog Gabe 7/6/2020 11:11:04 AM Assigned to:Pepping, Andrew J

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
M 2-CLEVE. DIL3.										
280-138181-9	05FB	1x	8260B	8260B	07/12 23:59	07/20/20	BAS	CA	216 & AA-2 & Mtls-Strge & WC Dpt	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-12	K04R	1x	8260B	8260B	07/11 23:59	07/20/20	BAS	CA	AA-2 & Mtls-Strge & WC Dpt & 216	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-13	K07	1x	8260B	8260B	07/11 23:59	07/20/20	BAS	CA	AA-2 & WC Dpt & Mtls-Strge & 216	Unconfirmed
M 2-CLEVE. DIL3.										
280-138181-14	TRIP BLANK	1x	8260B	8260B	07/12 23:59	07/20/20	BAS	CA	AA-2	Unconfirmed
M 2-CLEVE. DIL3.										
280-138193-1	7D-1	1x	8260B	8260B	07/13 23:59	07/20/20	BAS	OR	AA-2 & WC Dpt & OP Dpt & 215 & 213 & Mtls-Strge & Shared Samples In-Transi	Unconfirmed
280-138193-2	DUP2	1x	8260B	8260B	07/13 23:59	07/20/20	BAS	OR	Shared Samples In-Transi & 213 & WC Dpt & Mtls-Strge & AA-2 & 215 & OP Dpt	Unconfirmed
280-138193-3	FB2	1x	8260B	8260B	07/13 23:59	07/20/20	BAS	OR	WC Dpt & 215 & AA-2 & OP Dpt & Mtls-Strge & Shared Samples In-Transi & 213	Unconfirmed
280-138193-4	TRIP BLANK	1x	8260B	8260B	07/13 23:59	07/20/20	BAS	OR	AA-2 & Shared Samples In-Transi	Unconfirmed

Sequence Name: C:\HPCHEM\1\SEQUENCE\020620I.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\020620\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 25
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 20:25-19:38
TALs Batch: 485097

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P7804	BFB	BFB
2	Sample	1	P7805	8260	STD005
3	Sample	2	P7806	8260	STD010
4	Sample	3	P7807	8260	STD020
5	Sample	4	P7808	8260	STD10
6	Sample	5	P7809	8260	ICIS
7	Sample	6	P7810	8260	STD75
8	Sample	7	P7811	8260	STD100
9	Sample	8	P7812	8260	STD200
10	Sample	9	P7813	8260	BLK
11	Sample	10	P7814	8260	ICV
12	Sample	11	P7815	8260	STD005
13	Sample	12	P7816	8260	STD010
14	Sample	13	P7817	8260	STD020
15	Sample	14	P7818	8260	STD10
16	Sample	15	P7819	8260	STD50
17	Sample	16	P7820	8260	STD75
18	Sample	17	P7821	8260	STD100
19	Sample	18	P7822	8260	STD200
20	Sample	19	P7823	8260	BLK
21	Sample	20	P7824	8260	ICV
22	Sample	21	P7825	8260	MDLV .25
23	Sample	22	P7826	8260	MDLV .5
24	Sample	23	P7827	8260	MDLV 1
25	Sample	24	P7828	8260	MDLV 2
26	Sample	25	P7829	8260	MDLV 5
27	Sample	26	P7830	8260	ICV G RR

Main/Gas/SS
Calib ID: 41893 ✓
ICIS L66
ICV M L20
ICV G L30
±20% for all analytes
Iodo methane high Pt 75 and Quad Fit

Supp
Calib I: 41894
ICV L29
±20% for all analytes
except tetrahydrothiophene
-81.2%
Cis-1,4-Dichloro-2-butene
-23.5%
not Calibrated for ethylene oxide

1st JZ 2/6/20

2nd [signature] 2/7/20

Sequence Name: C:\HPCHEM\1\SEQUENCE\060120I.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\060120I\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 26
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time:
TALs Batch: 496958 8260
496959 624
496960 524

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	P1657	BFB	BFB
2 Sample	1	P1658	8260	STD005
3 Sample	2	P1659	8260	STD010
4 Sample	3	P1660	8260	STD020
5 Sample	4	P1661	8260	STD050
6 Sample	5	P1662	8260	STD10
7 Sample	6	P1663	8260	ICIS
8 Sample	7	P1664	8260	STD75
9 Sample	8	P1665	8260	STD100
10 Sample	9	P1666	8260	STD200
11 Sample	10	P1667	8260	BLK
12 Sample	11	P1668	8260	ICV
13 Sample	12	P1669	8260	ICIS RR
14 Sample	13	P1670	8260	ICV

Calib
44775
44776
44777

ICIS. 17
ICV: 21

All < 20% For DoD

1st JC 6/2/20

2nd: Tam 6-2-20

Preliminary Report

TestAmerica Laboratories
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b

Worklist Name:	060120I	Worklist Num:	92011
Instrument:	VMS_P	Method:	AQ_VMSP_8260
Analysis Type:	VOA	Creator:	Seifert, Judy L
Inj Volume:	5	Inj Vol Units:	mL

QC Batching: Disabled Limit Group Batching: Disabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 496958	MSV - 624 Raw Batch: 496959	MSV - 524 Raw Batch: 496960
# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV	# 2 CCV	
# 3 CCV	# 3 CCV	# 3 CCV	
# 4 LCS	# 4 LCS	# 4 LCS	
# 5 LCSD	# 5 LCSD	# 5 LCSD	
# 6 LCS	# 6 LCS	# 6 LCS	
# 7 LCSD	# 7 LCSD	# 7 LCSD	
# 8 MB	# 8 MB	# 8 MB	
# 9 280-121232-A-1	# 9 280-121232-A-1		
# 10 280-121232-A-2	# 10 280-121232-A-2		
# 11 280-121232-A-3	# 11 280-121232-A-3		
# 12 STD005	# 12 STD005	# 12 STD005	# 12 STD005
# 13 STD010	# 13 STD010	# 13 STD010	# 13 STD010
# 14 STD020	# 14 STD020	# 14 STD020	# 14 STD020
# 15 STD050	# 15 STD050	# 15 STD050	# 15 STD050
# 16 STD10	# 16 STD10	# 16 STD10	# 16 STD10
# 17 ICIS	# 17 ICIS	# 17 ICIS	# 17 ICIS
# 18 STD75	# 18 STD75	# 18 STD75	# 18 STD75
# 19 STD100	# 19 STD100	# 19 STD100	# 19 STD100
# 20 STD200	# 20 STD200	# 20 STD200	# 20 STD200
# 21 ICV	# 21 ICV	# 21 ICV	# 21 ICV
# 22 LCS	# 22 LCS	# 22 LCS	# 22 LCS
# 23 LCSD	# 23 LCSD	# 23 LCSD	# 23 LCSD
# 24 MB	# 24 MB	# 24 MB	# 24 MB
# 25 280-136811-R-3	# 25 280-136811-R-3		
# 26 280-136811-M-7	# 26 280-136811-M-7		
# 27 280-136816-C-5	# 27 280-136816-C-5		
# 28 280-136816-A-6	# 28 280-136816-A-6		
# 29 280-136816-C-7	# 29 280-136816-C-7		
# 30 280-136827-B-10	# 30 280-136827-B-10		
# 31 280-136734-J-1	# 31 280-136734-J-1		
# 32 280-136734-A-8	# 32 280-136734-A-8		
# 33 280-136758-F-3	# 33 280-136758-F-3		
# 34 280-136758-F-4	# 34 280-136758-F-4		
# 35 280-136758-A-5	# 35 280-136758-A-5		
# 36 280-136853-L-7	# 36 280-136853-L-7		
# 37 280-136853-G-8	# 37 280-136853-G-8		
# 38 CCVC	# 38 CCVC		

TestAmerica Laboratories
Worklist Report

Worklist Name: 060120I
Worklist Number: 92011
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00001
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00058		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	MV-Gas B_00060 MV-MegaMain B_00031		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00060 MV-MegaMain B_00031		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	# 8 MB	MB		1.000	voaWater	5.000	mL			
9	# 9 280-121232-A-1	Client		1.000	voaWater	5.000	mL			
10	#10 280-121232-A-2	Client		1.000	voaWater	5.000	mL			
11	#11 280-121232-A-3	Client		1.000	voaWater	5.000	mL			
12	#12 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
13	#13 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
14	#14 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
15	#15 STD050	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
16	#16 STD10	IC	5	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
17	#17 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
18	#18 STD75	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
19	#19 STD100	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
20	#20 STD200	IC	9	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
21	#21 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
22	#22 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
23	#23 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
24	#24 MB	MB		1.000	voaWater	5.000	mL			
25	#25 280-136811-R-3	Client		1.000	voaWater	5.000	mL			
26	#26 280-136811-M-7	Client		1.000	voaWater	5.000	mL			
27	#27 280-136816-C-5	Client		200.0	voaWater	5.000	mL			
28	#28 280-136816-A-6	Client		100.0	voaWater	5.000	mL			
29	#29 280-136816-C-7	Client		5.000	voaWater	5.000	mL			
30	#30 280-136827-B-10	Client		4.000	voaWater	5.000	mL			
31	#31 280-136734-J-1	Client		1.000	voaWater	5.000	mL			
32	#32 280-136734-A-8	Client		1.000	voaWater	5.000	mL			
33	#33 280-136758-F-3	Client		1.000	voaWater	5.000	mL			
34	#34 280-136758-F-4	Client		1.000	voaWater	5.000	mL			
35	#35 280-136758-A-5	Client		1.000	voaWater	5.000	mL			
36	#36 280-136853-L-7	Client		1.000	voaWater	5.000	mL			
37	#37 280-136853-G-8	Client		1.000	voaWater	5.000	mL			
38	#38 CCVC	CCVC		1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00058		

Sequence Name: C:¥msdchem¥1¥sequence¥060320.s
Comment:
Operator: PEPPINGA
Data Path: C:¥MSDCHEM¥1¥DATA¥060320¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Eurofins TestAmerica Denver
Instrument ID: 01
SOP: DV-MS-0010 Rev. 26
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 9:32 - 17:22
TALs Batch: 477166
477170
477171

AL 6/4/20

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
( ) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
(X) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	1	R5900	8260	BLANK
2)	Sample	100	R5901	BFB	BFB
3)	Sample	100	R5903	BFB	BFB
4)	Sample	1	R5904	8260	CCV S
5)	Sample	2	R5905	8260	STD005
6)	Sample	3	R5906	8260	STD010
7)	Sample	4	R5907	8260	STD020
8)	Sample	5	R5908	8260	STD05
9)	Sample	6	R5909	8260	STD10
10)	Sample	7	R5910	8260	ICIS
11)	Sample	8	R5911	8260	STD75
12)	Sample	9	R5912	8260	STD100
13)	Sample	10	R5913	8260	STD200
14)	Sample	11	R5914	8260	ICV
15)	Sample	12	R5915	8260	STD010 SUPP
16)	Sample	13	R5916	8260	STD005 RR
17)	Sample	14	R5917	8260	STD010RR
18)	Sample	15	R5918	8260	STD020 RR
19)	Sample	16	R5919	8260	STD020 SUPP
20)	Sample	17	R5920	8260	STD10SUPP
21)	Sample	18	R5921	8260	STD50
22)	Sample	19	R5922	8260	STD75
23)	Sample	20	R5923	8260	STD100
24)	Sample	21	R5924	8260	STD200
25)	Sample	22	R5925	8260	ICV SUPP
26)	Sample	23	R5926	8260	ICV RR
27)	Sample	24	R5927	8260	280-136770-b-3 DQR 40X pH
28)	Sample	25	R5928	8260	280-136770-c-4 DQR 100X pH
29)	Sample	26	R5929	8260	280-136377-d-2 DQR

SUM ICAL

Do Not report on Main

Cal ID 44868

ICV → 53

2nd Level Review JK 6/4/20

DL AL JVP 6/04/20

Last Modified: Wed Jun 03 15:09:37 2020 Page: 1

TestAmerica Laboratories
Worklist Report

Worklist Name: 060320ICAL
Worklist Number: 92056
Instrument Name: VMS_R1
Chrom Method: AQ_VMSR1_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_R1

Run Reagent: mv-IS_SS_00001
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
33	#33 Blank	Client		1.000	voaWater	2.000	uL			
1	#1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	#2 CCV	CCV		1.000	voaWater	5.000	mL	MV-Gas A_00057 MV-MegaMainA_00034		
3	#3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	#4 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
5	#5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
6	#6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	#7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	#8 RINSE	Client		1.000	voaWater	5.000	mL			
9	#9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client		1.000	voaWater	5.000	mL			
34	#34 STD005	IC	1	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
35	#35 STD010	IC	2	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
36	#36 STD020	IC	3	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
37	#37 STD05	IC	4	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
38	#38 STD10	IC	5	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
39	#39 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
40	#40 STD75	IC	7	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
41	#41 STD100	IC	8	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
42	#42 STD200	IC	9	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
43	#43 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
45	#45 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
46	#46 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
48	#48 STD10	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
49	#49 std50	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
50	#50 STD75	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
51	#51 STD100	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
52	#52 STD200	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
53	#53 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00027 mv-Cent IS_00006		
54	#54 280-136770-B-3	Client		40.00	voaWater	5.000	mL			
55	#55 280-136770-C-4	Client		100.0	voaWater	5.000	mL			
56	#56 280-136377-D-2	Client		1.000	voaWater	5.000	mL			

477166
170
171

TestAmerica Laboratories
Worklist Report

Worklist Name: 060320ICAL
Worklist Number: 92056
Instrument Name: VMS_R1
Chrom Method: AQ_VMSR1_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_R1\20200603-92056.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_R1

Run Reagent: mv-IS_SS_00001
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
33	#33 Blank	Client		1.000	voaWater	2.000	uL			
1	#1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	#2 CCV	CCV		1.000	voaWater	5.000	mL	MV-Gas A_00057 MV-MegaMainA_00034		
3	#3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	#4 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
5	#5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
6	#6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	#7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	#8 RINSE	Client		1.000	voaWater	5.000	mL			
9	#9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client		1.000	voaWater	5.000	mL			
34	#34 STD005	IC	1	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
35	#35 STD010	IC	2	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
36	#36 STD020	IC	3	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
37	#37 STD05	IC	4	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
38	#38 STD10	IC	5	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
39	#39 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
40	#40 STD75	IC	7	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
41	#41 STD100	IC	8	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
42	#42 STD200	IC	9	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00057		
43	#43 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
45	#45 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
46	#46 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
48	#48 STD10	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
49	#49 std50	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
50	#50 STD75	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
51	#51 STD100	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
52	#52 STD200	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
53	#53 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00027 mv-Cent IS_00006		
54	#54 280-136770-B-3	Client		40.00	voaWater	5.000	mL			
55	#55 280-136770-C-4	Client		100.0	voaWater	5.000	mL			

Sequence Name: C:¥msdchem¥1¥sequence¥060420.s
Comment:
Operator: PEPPINGA
Data Path: C:¥MSDCHEM¥1¥DATA¥060420¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Eurofins TestAmerica Denver
Instrument ID: R1
SOP: DV-MS-0010 Rev. 25
Method: (524) / (624) / (8260B) / 8260C)
Purge Volume (20mL / (5mL))
Matrix: ((Water) / Soil / Waste)
Tune Time: 12:50 - 16:02
TALs Batch: 8260 - 497370
524 - 497434
624 - 497435

Ap 15+ Level
6/5/20

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
( ) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
(X) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Blank	1	R5930	8260	BLANK
2)	Sample	100	R5931	BFB	BFB
3)	Sample	1	R5932	8260	CCV
4)	Sample	2	R5933	8260	CCV S
5)	Sample	3	R5934	8260	STD005
6)	Sample	4	R5935	8260	STD010
7)	Sample	5	R5936	8260	STD020
8)	Sample	6	R5937	8260	STD050
9)	Sample	7	R5938	8260	STD10
10)	Sample	8	R5939	8260	ICIS
11)	Sample	9	R5940	8260	STD75
12)	Sample	10	R5941	8260	STD100
13)	Sample	11	R5942	8260	STD200
14)	Sample	12	R5943	8260	ICV

All compound +/- 20% except:
- Hexane +34.6%
↳ Cannot run Hexane for 624+524

main/Gas/surr ICal
44716 -> 8260
44917 -> 524
44718 -> 624

ICIS - 19
ICV - 23

Due to Iodomethane
CCV main must be spiked @ 12.5 µL

6/5/20 2nd review

suggestion: Avoid 624s with 1,1,2,2-tetrachloroethane as one point exceeded the 60% range

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 485097 Batch Start Date: 02/06/20 10:25 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00001	mv-IS 00001	MV-Supp A 00041	MV-Supp B 00026
BFB 280-485097/1		8260B		2 uL	2 uL	2 uL			
STD005 280-485097/21 IC		8260B		5 mL	5 mL		5 uL	0.5 uL	
STD010 280-485097/22 IC		8260B		5 mL	5 mL		5 uL	1 uL	
STD020 280-485097/23 IC		8260B		5 mL	5 mL		5 uL	2 uL	
STD10 280-485097/24 IC		8260B		5 mL	5 mL		5 uL	10 uL	
STD50 280-485097/25 IC		8260B		5 mL	5 mL		5 uL	50 uL	
STD75 280-485097/26 IC		8260B		5 mL	5 mL		5 uL	75 uL	
STD100 280-485097/27 IC		8260B		5 mL	5 mL		5 uL	100 uL	
STD200 280-485097/28 IC		8260B		5 mL	5 mL		5 uL	200 uL	
ICV 280-485097/29		8260B		5 mL	5 mL		5 uL		50 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 496958 Batch Start Date: 06/01/20 16:26 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	MV-Gas A 00058	MV-Gas B 00060	mv-IS_SS 00001
BFB 280-496958/1		8260B		2 uL	2 uL	2 uL			
STD005 280-496958/12 IC		8260B		5 mL	5 mL		0.1 uL		5 uL
STD010 280-496958/13 IC		8260B		5 mL	5 mL		0.2 uL		5 uL
STD020 280-496958/14 IC		8260B		5 mL	5 mL		0.4 uL		5 uL
STD050 280-496958/15 IC		8260B		5 mL	5 mL		1 uL		5 uL
STD10 280-496958/16 IC		8260B		5 mL	5 mL		2 uL		5 uL
ICIS 280-496958/17		8260B		5 mL	5 mL		10 uL		5 uL
STD75 280-496958/18 IC		8260B		5 mL	5 mL		15 uL		5 uL
STD100 280-496958/19 IC		8260B		5 mL	5 mL		20 uL		5 uL
STD200 280-496958/20 IC		8260B		5 mL	5 mL		40 uL		5 uL
ICV 280-496958/21		8260B		5 mL	5 mL			10 uL	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
BFB 280-496958/1		8260B							
STD005 280-496958/12 IC		8260B			0.25 uL				
STD010 280-496958/13 IC		8260B			0.5 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 496958 Batch Start Date: 06/01/20 16:26 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
STD020 280-496958/14 IC		8260B			1 uL				
STD050 280-496958/15 IC		8260B			2.5 uL				
STD10 280-496958/16 IC		8260B			5 uL				
ICIS 280-496958/17		8260B			25 uL				
STD75 280-496958/18 IC		8260B			37.5 uL				
STD100 280-496958/19 IC		8260B			50 uL				
STD200 280-496958/20 IC		8260B			100 uL				
ICV 280-496958/21		8260B		25 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 497166 Batch Start Date: 06/03/20 09:32 Batch Analyst: Pepping, Andrew J

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00057	mv-IS_SS 00001
BFB 280-497166/1		8260B		2 uL	2 uL	2 uL			
ICIS 280-497166/39		8260B		5 mL	5 mL			10 uL	5 uL
STD010 280-497166/45 IC		8260B		5 mL	5 mL		5 uL		
STD020 280-497166/46 IC		8260B		5 mL	5 mL		5 uL		
STD10 280-497166/48 IC		8260B		5 mL	5 mL		5 uL		
STD50 280-497166/49 IC		8260B		5 mL	5 mL		5 uL		
STD75 280-497166/50 IC		8260B		5 mL	5 mL		5 uL		
STD100 280-497166/51 IC		8260B		5 mL	5 mL		5 uL		
STD200 280-497166/52 IC		8260B		5 mL	5 mL		5 uL		
ICV 280-497166/53		8260B		5 mL	5 mL		5 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027			
BFB 280-497166/1		8260B							
ICIS 280-497166/39		8260B		25 uL					
STD010 280-497166/45 IC		8260B			1 uL				
STD020 280-497166/46 IC		8260B			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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 497166 Batch Start Date: 06/03/20 09:32 Batch Analyst: Pepping, Andrew J

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027			
STD10 280-497166/48 IC		8260B			10 uL				
STD50 280-497166/49 IC		8260B			50 uL				
STD75 280-497166/50 IC		8260B			75 uL				
STD100 280-497166/51 IC		8260B			100 uL				
STD200 280-497166/52 IC		8260B			200 uL				
ICV 280-497166/53		8260B				50 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 497370 Batch Start Date: 06/04/20 10:15 Batch Analyst: Pepping, Andrew J

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	MV-Gas A 00057	MV-Gas B 00060	mv-IS_SS 00001
BFB 280-497370/1		8260B		2 uL	2 uL	2 uL			
STD005 280-497370/14 IC		8260B		5 mL	5 mL		0.1 uL		5 uL
STD010 280-497370/15 IC		8260B		5 mL	5 mL		0.2 uL		5 uL
STD020 280-497370/16 IC		8260B		5 mL	5 mL		0.4 uL		5 uL
STD050 280-497370/17 IC		8260B		5 mL	5 mL		1 uL		5 uL
STD10 280-497370/18 IC		8260B		5 mL	5 mL		2 uL		5 uL
ICIS 280-497370/19		8260B		5 mL	5 mL		10 uL		5 uL
STD75 280-497370/20 IC		8260B		5 mL	5 mL		15 uL		5 uL
STD100 280-497370/21 IC		8260B		5 mL	5 mL		20 uL		5 uL
STD200 280-497370/22 IC		8260B		5 mL	5 mL		40 uL		5 uL
ICV 280-497370/23		8260B		5 mL	5 mL			10 uL	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
BFB 280-497370/1		8260B							
STD005 280-497370/14 IC		8260B			0.25 uL				
STD010 280-497370/15 IC		8260B			0.5 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 497370 Batch Start Date: 06/04/20 10:15 Batch Analyst: Pepping, Andrew J

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
STD020 280-497370/16 IC		8260B			1 uL				
STD050 280-497370/17 IC		8260B			2.5 uL				
STD10 280-497370/18 IC		8260B			5 uL				
ICIS 280-497370/19		8260B			25 uL				
STD75 280-497370/20 IC		8260B			37.5 uL				
STD100 280-497370/21 IC		8260B			50 uL				
STD200 280-497370/22 IC		8260B			100 uL				
ICV 280-497370/23		8260B		25 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500579 Batch Start Date: 06/29/20 21:13 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00060	MV-Gas B 00064
BFB 280-500579/1		8260B		2 uL	2 uL	2 uL			
CCV 280-500579/2		8260B		5 mL	5 mL			10 uL	
CCV 280-500579/3		8260B		5 mL	5 mL		5 uL		
LCS 280-500579/4		8260B		5 mL	5 mL				5 uL
LCSD 280-500579/5		8260B		5 mL	5 mL				5 uL
LCS 280-500579/6		8260B		5 mL	5 mL				
LCSD 280-500579/7		8260B		5 mL	5 mL				
MB 280-500579/9		8260B		5 mL	5 mL				
280-138090-A-1	RW-8105PS-20200622	8260B	T	5 mL	5 mL				
280-138090-B-2	RW-5898B1-20200622	8260B	T	5 mL	5 mL				
280-138090-C-3	RW-8048P-20200622	8260B	T	5 mL	5 mL				
280-138090-A-12	RW-2172F-20200622	8260B	T	5 mL	5 mL				
280-138090-C-13	RW-7773P-20200622	8260B	T	5 mL	5 mL				
280-138090-B-14	RW-7677P-20200622	8260B	T	5 mL	5 mL				
280-138090-A-14 MS	RW-7677P-20200622	8260B	T	5 mL	5 mL				10 uL
280-138090-C-14 MSD	RW-7677P-20200622	8260B	T	5 mL	5 mL				10 uL
280-138090-A-15	RW-7677PQ-20200622	8260B	T	5 mL	5 mL				
280-138090-C-16	RW-7070B-20200622	8260B	T	5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
BFB 280-500579/1		8260B							

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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500579 Batch Start Date: 06/29/20 21:13 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
CCV 280-500579/2		8260B		5 uL		25 uL			
CCV 280-500579/3		8260B					50 uL		
LCS 280-500579/4		8260B		5 uL	12.5 uL				
LCSD 280-500579/5		8260B		5 uL	12.5 uL				
LCS 280-500579/6		8260B		5 uL				25 uL	
LCSD 280-500579/7		8260B		5 uL				25 uL	
MB 280-500579/9		8260B		5 uL					
280-138090-A-1	RW-8105PS-20200622	8260B	T	5 uL					
280-138090-B-2	RW-5898B1-20200622	8260B	T	5 uL					
280-138090-C-3	RW-8048P-20200622	8260B	T	5 uL					
280-138090-A-12	RW-2172F-20200622	8260B	T	5 uL					
280-138090-C-13	RW-7773P-20200622	8260B	T	5 uL					
280-138090-B-14	RW-7677P-20200622	8260B	T	5 uL					
280-138090-A-14 MS	RW-7677P-20200622	8260B	T	5 uL	25 uL				
280-138090-C-14 MSD	RW-7677P-20200622	8260B	T	5 uL	25 uL				
280-138090-A-15	RW-7677PQ-20200622	8260B	T	5 uL					
280-138090-C-16	RW-7070B-20200622	8260B	T	5 uL					

Batch Notes	

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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500580 Batch Start Date: 06/29/20 21:12 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00060	MV-Gas B 00064
BFB 280-500580/1		8260B		2 uL	2 uL	2 uL			
CCV 280-500580/2		8260B		5 mL	5 mL			10 uL	
CCV 280-500580/3		8260B		5 mL	5 mL		5 uL		
LCS 280-500580/4		8260B		5 mL	5 mL				5 uL
LCSD 280-500580/5		8260B		5 mL	5 mL				5 uL
LCS 280-500580/6		8260B		5 mL	5 mL				
LCSD 280-500580/7		8260B		5 mL	5 mL				
MB 280-500580/9		8260B		5 mL	5 mL				
280-138090-A-4	RW-7244P-20200623	8260B	T	5 mL	5 mL				
280-138090-A-5	RW-7350P-20200623	8260B	T	5 mL	5 mL				
280-138090-B-6	RW-8035P-20200623	8260B	T	5 mL	5 mL				
280-138090-A-7	RW-2237H-20200623	8260B	T	5 mL	5 mL				
280-138090-C-8	RW-8012P-20200623	8260B	T	5 mL	5 mL				
280-138090-B-17	RW-8249P-20200623	8260B	T	5 mL	5 mL				
280-138090-C-18	RW-2151H-20200623	8260B	T	5 mL	5 mL				
280-138090-C-19	RW-7688P-20200623	8260B	T	5 mL	5 mL				
280-138090-C-19 MS	RW-7688P-20200623	8260B	T	5 mL	5 mL				10 uL
280-138090-C-19 MSD	RW-7688P-20200623	8260B	T	5 mL	5 mL				10 uL
280-138090-A-20	RW-7688PQ-20200623	8260B	T	5 mL	5 mL				
280-138090-A-21	RW-8284P-20200623	8260B	T	5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	

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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500580 Batch Start Date: 06/29/20 21:12 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
BFB 280-500580/1		8260B							
CCV 280-500580/2		8260B		5 uL		12.5 uL			
CCV 280-500580/3		8260B					50 uL		
LCS 280-500580/4		8260B		5 uL	12.5 uL				
LCSD 280-500580/5		8260B		5 uL	12.5 uL				
LCS 280-500580/6		8260B		5 uL				25 uL	
LCSD 280-500580/7		8260B		5 uL				25 uL	
MB 280-500580/9		8260B		5 uL					
280-138090-A-4	RW-7244P-20200623	8260B	T	5 uL					
280-138090-A-5	RW-7350P-20200623	8260B	T	5 uL					
280-138090-B-6	RW-8035P-20200623	8260B	T	5 uL					
280-138090-A-7	RW-2237H-20200623	8260B	T	5 uL					
280-138090-C-8	RW-8012P-20200623	8260B	T	5 uL					
280-138090-B-17	RW-8249P-20200623	8260B	T	5 uL					
280-138090-C-18	RW-2151H-20200623	8260B	T	5 uL					
280-138090-C-19	RW-7688P-20200623	8260B	T	5 uL					
280-138090-C-19 MS	RW-7688P-20200623	8260B	T	5 uL	25 uL				
280-138090-C-19 MSD	RW-7688P-20200623	8260B	T	5 uL	25 uL				
280-138090-A-20	RW-7688PQ-20200623	8260B	T	5 uL					
280-138090-A-21	RW-8284P-20200623	8260B	T	5 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500580 Batch Start Date: 06/29/20 21:12 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Batch Notes	

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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500875 Batch Start Date: 07/01/20 22:01 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00060	MV-Gas B 00064
BFB 280-500875/1		8260B		2 uL	2 uL	2 uL			
CCV 280-500875/2		8260B		5 mL	5 mL			10 uL	
CCV 280-500875/3		8260B		5 mL	5 mL		5 uL		
LCS 280-500875/4		8260B		5 mL	5 mL				5 uL
LCSD 280-500875/5		8260B		5 mL	5 mL				5 uL
LCS 280-500875/6		8260B		5 mL	5 mL				
LCSD 280-500875/7		8260B		5 mL	5 mL				
MB 280-500875/9		8260B		5 mL	5 mL				
280-138090-C-9	RW-2879M-20200624	8260B	T	5 mL	5 mL				
280-138090-C-10	RW-7586P-20200624	8260B	T	5 mL	5 mL				
280-138090-C-11	RW-8030P-20200624	8260B	T	5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
BFB 280-500875/1		8260B							
CCV 280-500875/2		8260B		5 uL		25 uL			
CCV 280-500875/3		8260B					50 uL		
LCS 280-500875/4		8260B		5 uL	12.5 uL				
LCSD 280-500875/5		8260B		5 uL	12.5 uL				
LCS 280-500875/6		8260B		5 uL				25 uL	
LCSD 280-500875/7		8260B		5 uL				25 uL	
MB 280-500875/9		8260B		5 uL					
280-138090-C-9	RW-2879M-20200624	8260B	T	5 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 500875 Batch Start Date: 07/01/20 22:01 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
280-138090-C-10	RW-7586P-20200624	8260B	T	5 uL					
280-138090-C-11	RW-8030P-20200624	8260B	T	5 uL					

Batch Notes	

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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 501117 Batch Start Date: 07/06/20 07:55 Batch Analyst: Pepping, Andrew J

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00061	MV-Gas B 00064
BFB 280-501117/1		8260B		2 uL	2 uL	2 uL			
CCV 280-501117/2		8260B		5 mL	5 mL				
CCV 280-501117/3		8260B		5 mL	5 mL		5 uL		
LCS 280-501117/4		8260B		5 mL	5 mL				5 uL
LCSD 280-501117/5		8260B		5 mL	5 mL				5 uL
LCS 280-501117/6		8260B		5 mL	5 mL				
LCSD 280-501117/7		8260B		5 mL	5 mL				
MB 280-501117/9		8260B		5 mL	5 mL				
CCV 280-501117/13		8260B		5 mL	5 mL			10 uL	
280-138090-B-22	TB-01-20200625	8260B	T	5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
BFB 280-501117/1		8260B							
CCV 280-501117/2		8260B		5 uL		12.5 uL			
CCV 280-501117/3		8260B					50 uL		
LCS 280-501117/4		8260B		5 uL	12.5 uL				
LCSD 280-501117/5		8260B		5 uL	12.5 uL				
LCS 280-501117/6		8260B		5 uL				25 uL	
LCSD 280-501117/7		8260B		5 uL				25 uL	
MB 280-501117/9		8260B		5 uL					
CCV 280-501117/13		8260B		5 uL					
280-138090-B-22	TB-01-20200625	8260B	T	5 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, Denver Job No.: 280-138090-1

SDG No.:

Batch Number: 501117 Batch Start Date: 07/06/20 07:55 Batch Analyst: Pepping, Andrew J

Batch Method: 8260B Batch End Date:

Batch Notes	

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

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Emma Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 1 of 3
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	9011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (EPA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Sp
Preservation Code:					X	X	A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N	X	
~~RW-8105B~~ 6/24 RW-8105PS-20200622	6/22/20	12:20	G	W	N	N	X																	3	
RW-5898BI-20200622	6/22/20	15:15	G	W	N	N	X																	3	
RW-8048P-20200622	6/22/20	16:58	G	W	N	N	X																	3	
RW-7244P-20200623	6/23/20	09:00	G	W	N	N	X																	3	
RW-7350P-20200623	6/23/20	10:25	G	W	N	N	X																	3	
RW-8035P-20200623	6/23/20	12:55	G	W	N	N	X																	3	
RW-2237H-20200623	6/23/20	15:06	G	W	N	N	X																	3	
RW-8012P-20200623	6/23/20	16:10	G	W	N	N	X																	3	
RW-2879M-20200624	6/24/20	10:10	G	W	N	N	X																	3	
RW-7586P-20200624	6/24/20	11:35	G	W	N	N	X																	3	
RW-8030P-20200624	6/24/20	13:40	G	W	N	N	X																	3	

280-138090 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ☐ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	6/24/2020 11:00			6/26/20 0925	ETA-Rlm
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: 1426108/109

Cooler Temperature(s) °C and Other Remarks: 2-6 IR#10 -0.1 Transfer RP 6/26/20

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Emma Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 2 of 3
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
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Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N		
~~RW-7588P-20200624~~	6/24/20	14:20	G	W	N	N	X																	3	
RW-2172F-20200622	6/22/20	11:54	G	W	N	N	X																	3	
RW-7773P-20200622	6/22/20	13:42	G	W	N	N	X																	3	
RW-7677P-20200622	6/22/20	15:04	G	W	N	Y	X																	9	
RW-7677PQ-20200622	6/22/20	15:09	G	W	N	N	X																	3	
RW-7070B-20200622	6/22/20	16:48	G	W	N	N	X																	3	
RW-8249P-20200623	6/23/20	10:22	G	W	N	N	X																	3	
RW-2151H-20200623	6/23/20	13:03	G	W	N	N	X																	3	
RW-7688P-20200623	6/23/20	14:21	G	W	N	Y	X																	9	
RW-7688PQ-20200623	6/23/20	14:26	G	W	N	N	X																	3	
RW-8284P-20200623	6/23/20	16:12	G	W	N	N	X																	3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: 6/25/2020 Time: Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	6/25/20 11:00		Received by:	6/26/20 0925	ETA-Pen
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

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City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site:	SSOW#:			

Analysis Requested

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A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
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Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N	X	
RW-758 Muni-Well-33-20200624	6/24/20	10:20	G	W	N	N	X																	3	
Muni-Well-14-20200624	6/24/20	10:41	G	W	N	N	X																	3	
RW-7519P-20200624	6/24/20	13:01	G	W	N	N	X																	3	
RW-7091R-20200624	6/24/20	15:33	G	W	N	N	X																	3	
RW-7505P-20200624	6/24/20	8:50	G	W	N	N	X																	3	
RW-7588P-20200624	6/24/20	15:00	G	W	N	N	X																	3	
TB-01-20200625	6/25/20	10:30	G	W	N	N	X																	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ☐ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6/25/20 11:00			6/26/20 0925	ETA-Run
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 280-138090-1

Login Number: 138090
List Number: 1
Creator: Bentley, Beau J

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

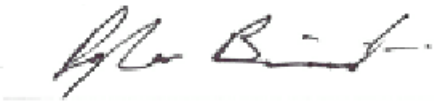
ANALYTICAL REPORT

Job Number: 280-138098-1

Job Description: Bannock Ft. Hall Mine LF, Idaho

For:
CDM Smith, Inc.
14432 S.E. Eastgate Way
Suite 100
Bellevue, WA 98007-6493

Attention: Mary Lou Fox



Approved for release.
Dylan T Bieniulis
Project Manager I
7/6/2020 8:50 AM

Dylan T Bieniulis, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0138
dylan.bieniulis@testamericainc.com
07/06/2020

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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.

Eurofins TestAmerica, Denver
4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

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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.

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: CDM Smith, Inc.

Project: Bannock Ft. Hall Mine LF, Idaho

Report Number: 280-138098-1

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.

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.

RECEIPT

The samples were received on 06/27/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MUNI-WELL-14-20200624 (280-138098-1), MUNI-WELL-33-20200624 (280-138098-2), RW-2172H-20200625 (280-138098-3), RW-2203H-20200625 (280-138098-4), RW-2213F-20200625 (280-138098-5), RW-2613M-20200625 (280-138098-6), RW-7091R-20200624 (280-138098-7), RW-7505P-20200624 (280-138098-8), RW-7549P-20200624 (280-138098-9), RW-7588P-20200624 (280-138098-10), RW-8209P-20200625 (280-138098-11), EB-00-20200625 (280-138098-12), EB-01-20200625 (280-138098-13), TB-02-20200626 (280-138098-14), RW-2140H-20200626 (280-138098-15), MW-116S-20200626 (280-138098-16) and EB-02-20200626 (280-138098-17) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/02/2020.

Dichlorodifluoromethane failed the recovery criteria high for LCS 280-500875/4. Dichlorodifluoromethane failed the recovery criteria high for LCSD 280-500875/5. The analyte was biased high and was not detected in the associated samples; therefore, the data have been reported. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-138098-1

Client Sample ID: MUNI-WELL-14-20200624 — Lab Sample ID: 280-138098-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.25	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	1.2		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MUNI-WELL-33-20200624 — Lab Sample ID: 280-138098-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.37	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	2.1		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2172H-20200625 — Lab Sample ID: 280-138098-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.20	J	1.0	0.16	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.5		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	4.9		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	28		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2203H-20200625 — Lab Sample ID: 280-138098-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.22	J	1.0	0.16	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.25	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	5.2		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	33		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2213F-20200625 — Lab Sample ID: 280-138098-5

No Detections.

Client Sample ID: RW-2613M-20200625 — Lab Sample ID: 280-138098-6

No Detections.

Client Sample ID: RW-7091R-20200624 — Lab Sample ID: 280-138098-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.24	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	1.4		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7505P-20200624 — Lab Sample ID: 280-138098-8

No Detections.

Client Sample ID: RW-7549P-20200624 — Lab Sample ID: 280-138098-9

No Detections.

Client Sample ID: RW-7588P-20200624 — Lab Sample ID: 280-138098-10

No Detections.

Client Sample ID: RW-8209P-20200625 — Lab Sample ID: 280-138098-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-138098-1

Client Sample ID: EB-00-20200625 — Lab Sample ID: 280-138098-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16		10	1.9	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	3.9	J	6.0	2.0	ug/L	1		8260B	Total/NA

Client Sample ID: EB-01-20200625 — Lab Sample ID: 280-138098-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15		10	1.9	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	3.8	J	6.0	2.0	ug/L	1		8260B	Total/NA

Client Sample ID: TB-02-20200626 — Lab Sample ID: 280-138098-14

No Detections.

Client Sample ID: RW-2140H-20200626 — Lab Sample ID: 280-138098-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.25	J	1.0	0.16	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.23	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.0		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	6.1		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	34		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-116S-20200626 — Lab Sample ID: 280-138098-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.20	J	1.0	0.16	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	3.7		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	26		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: EB-02-20200626 — Lab Sample ID: 280-138098-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	19		10	1.9	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	4.3	J	6.0	2.0	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MUNI-WELL-14-20200624 Lab Sample ID: 280-138098-1

Date Collected: 06/24/20 10:41 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 02:30	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 02:30	1
Acrolein	ND		20	2.8	ug/L			07/02/20 02:30	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 02:30	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 02:30	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 02:30	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 02:30	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 02:30	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 02:30	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 02:30	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 02:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 02:30	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 02:30	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 02:30	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 02:30	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 02:30	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 02:30	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 02:30	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 02:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 02:30	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 02:30	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 02:30	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 02:30	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 02:30	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 02:30	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 02:30	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 02:30	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 02:30	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 02:30	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 02:30	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 02:30	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 02:30	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 02:30	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 02:30	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 02:30	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 02:30	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 02:30	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 02:30	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 02:30	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 02:30	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 02:30	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 02:30	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 02:30	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 02:30	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 02:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 02:30	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 02:30	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 02:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 02:30	1

Client Sample ID: MUNI-WELL-14-20200624 Lab Sample ID: 280-138098-1

Date Collected: 06/24/20 10:41 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 02:30	1
Tetrachloroethene	**0.25**	**J**	1.0	0.20	ug/L			07/02/20 02:30	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 02:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 02:30	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 02:30	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 02:30	1
Trichloroethene	**1.2**		1.0	0.16	ug/L			07/02/20 02:30	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 02:30	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 02:30	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 02:30	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 02:30	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 02:30	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 02:30	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 02:30	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*07/02/20 02:30*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/02/20 02:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*07/02/20 02:30*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 02:30*	*1*

Client Sample ID: MUNI-WELL-33-20200624 Lab Sample ID: 280-138098-2

Date Collected: 06/24/20 10:20 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 02:51	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 02:51	1
Acrolein	ND		20	2.8	ug/L			07/02/20 02:51	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 02:51	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 02:51	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 02:51	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 02:51	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 02:51	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 02:51	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 02:51	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 02:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 02:51	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 02:51	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 02:51	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 02:51	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 02:51	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 02:51	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 02:51	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 02:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 02:51	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 02:51	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 02:51	1

Client Sample ID: MUNI-WELL-33-20200624 Lab Sample ID: 280-138098-2

Date Collected: 06/24/20 10:20 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 02:51	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 02:51	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 02:51	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 02:51	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 02:51	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 02:51	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 02:51	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 02:51	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 02:51	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 02:51	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 02:51	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 02:51	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 02:51	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 02:51	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 02:51	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 02:51	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 02:51	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 02:51	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 02:51	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 02:51	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 02:51	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 02:51	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 02:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 02:51	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 02:51	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 02:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 02:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 02:51	1
Tetrachloroethene	**0.37**	**J**	1.0	0.20	ug/L			07/02/20 02:51	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 02:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 02:51	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 02:51	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 02:51	1
Trichloroethene	**2.1**		1.0	0.16	ug/L			07/02/20 02:51	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 02:51	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 02:51	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 02:51	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 02:51	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 02:51	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 02:51	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 02:51	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*07/02/20 02:51*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/02/20 02:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 02:51*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 02:51*	*1*

Client Sample ID: RW-2172H-20200625 Lab Sample ID: 280-138098-3

Date Collected: 06/25/20 12:40 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 03:12	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 03:12	1
Acrolein	ND		20	2.8	ug/L			07/02/20 03:12	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 03:12	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 03:12	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 03:12	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 03:12	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 03:12	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 03:12	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 03:12	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 03:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 03:12	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 03:12	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 03:12	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 03:12	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 03:12	1
Chloroform	**0.20**	**J**	1.0	0.16	ug/L			07/02/20 03:12	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 03:12	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 03:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 03:12	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 03:12	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 03:12	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 03:12	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 03:12	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 03:12	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 03:12	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 03:12	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 03:12	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.15	ug/L			07/02/20 03:12	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 03:12	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 03:12	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 03:12	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 03:12	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 03:12	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 03:12	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 03:12	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 03:12	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 03:12	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 03:12	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 03:12	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 03:12	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 03:12	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 03:12	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 03:12	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 03:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 03:12	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 03:12	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 03:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 03:12	1

Client Sample ID: RW-2172H-20200625 — Lab Sample ID: 280-138098-3

Date Collected: 06/25/20 12:40 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 03:12	1
Tetrachloroethene	**4.9**		1.0	0.20	ug/L			07/02/20 03:12	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 03:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 03:12	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 03:12	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 03:12	1
Trichloroethene	**28**		1.0	0.16	ug/L			07/02/20 03:12	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 03:12	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 03:12	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 03:12	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 03:12	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 03:12	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 03:12	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 03:12	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 03:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 03:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 03:12*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*07/02/20 03:12*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*07/02/20 03:12*	*1*

Client Sample ID: RW-2203H-20200625 — Lab Sample ID: 280-138098-4

Date Collected: 06/25/20 14:15 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 03:33	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 03:33	1
Acrolein	ND		20	2.8	ug/L			07/02/20 03:33	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 03:33	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 03:33	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 03:33	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 03:33	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 03:33	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 03:33	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 03:33	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 03:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 03:33	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 03:33	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 03:33	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 03:33	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 03:33	1
Chloroform	**0.22**	**J**	1.0	0.16	ug/L			07/02/20 03:33	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 03:33	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 03:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 03:33	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 03:33	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 03:33	1

Client Sample ID: RW-2203H-20200625 Lab Sample ID: 280-138098-4

Date Collected: 06/25/20 14:15 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 03:33	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 03:33	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 03:33	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 03:33	1
1,1-Dichloroethane	**0.25**	**J**	1.0	0.22	ug/L			07/02/20 03:33	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 03:33	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.15	ug/L			07/02/20 03:33	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 03:33	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 03:33	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 03:33	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 03:33	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 03:33	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 03:33	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 03:33	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 03:33	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 03:33	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 03:33	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 03:33	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 03:33	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 03:33	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 03:33	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 03:33	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 03:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 03:33	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 03:33	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 03:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 03:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 03:33	1
Tetrachloroethene	**5.2**		1.0	0.20	ug/L			07/02/20 03:33	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 03:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 03:33	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 03:33	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 03:33	1
Trichloroethene	**33**		1.0	0.16	ug/L			07/02/20 03:33	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 03:33	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 03:33	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 03:33	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 03:33	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 03:33	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 03:33	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 03:33	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 03:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*07/02/20 03:33*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 03:33*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*07/02/20 03:33*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 03:33*	*1*

Client Sample ID: RW-2213F-20200625 Lab Sample ID: 280-138098-5

Date Collected: 06/25/20 17:15 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 03:55	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 03:55	1
Acrolein	ND		20	2.8	ug/L			07/02/20 03:55	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 03:55	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 03:55	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 03:55	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 03:55	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 03:55	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 03:55	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 03:55	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 03:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 03:55	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 03:55	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 03:55	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 03:55	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 03:55	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 03:55	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 03:55	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 03:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 03:55	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 03:55	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 03:55	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 03:55	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 03:55	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 03:55	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 03:55	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 03:55	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 03:55	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 03:55	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 03:55	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 03:55	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 03:55	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 03:55	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 03:55	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 03:55	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 03:55	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 03:55	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 03:55	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 03:55	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 03:55	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 03:55	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 03:55	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 03:55	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 03:55	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 03:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 03:55	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 03:55	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 03:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 03:55	1

Client Sample ID: RW-2213F-20200625 Lab Sample ID: 280-138098-5

Date Collected: 06/25/20 17:15 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 03:55	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 03:55	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 03:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 03:55	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 03:55	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 03:55	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 03:55	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 03:55	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 03:55	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 03:55	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 03:55	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 03:55	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 03:55	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 03:55	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 03:55*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 03:55*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*07/02/20 03:55*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 03:55*	*1*

Client Sample ID: RW-2613M-20200625 Lab Sample ID: 280-138098-6

Date Collected: 06/25/20 15:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 04:16	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 04:16	1
Acrolein	ND		20	2.8	ug/L			07/02/20 04:16	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 04:16	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 04:16	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 04:16	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 04:16	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 04:16	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 04:16	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 04:16	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 04:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 04:16	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 04:16	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 04:16	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 04:16	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 04:16	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 04:16	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 04:16	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 04:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 04:16	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 04:16	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 04:16	1

Client Sample ID: RW-2613M-20200625 Lab Sample ID: 280-138098-6

Date Collected: 06/25/20 15:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 04:16	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 04:16	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 04:16	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 04:16	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 04:16	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 04:16	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 04:16	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 04:16	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 04:16	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 04:16	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 04:16	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 04:16	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 04:16	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 04:16	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 04:16	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 04:16	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 04:16	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 04:16	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 04:16	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 04:16	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 04:16	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 04:16	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 04:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 04:16	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 04:16	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 04:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 04:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 04:16	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 04:16	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 04:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 04:16	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 04:16	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 04:16	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 04:16	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 04:16	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 04:16	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 04:16	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 04:16	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 04:16	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 04:16	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 04:16	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 04:16*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/02/20 04:16*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*07/02/20 04:16*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 04:16*	*1*

Client Sample ID: RW-7091R-20200624 Lab Sample ID: 280-138098-7

Date Collected: 06/24/20 15:33 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 04:37	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 04:37	1
Acrolein	ND		20	2.8	ug/L			07/02/20 04:37	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 04:37	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 04:37	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 04:37	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 04:37	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 04:37	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 04:37	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 04:37	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 04:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 04:37	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 04:37	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 04:37	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 04:37	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 04:37	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 04:37	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 04:37	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 04:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 04:37	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 04:37	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 04:37	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 04:37	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 04:37	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 04:37	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 04:37	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 04:37	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 04:37	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 04:37	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 04:37	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 04:37	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 04:37	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 04:37	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 04:37	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 04:37	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 04:37	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 04:37	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 04:37	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 04:37	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 04:37	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 04:37	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 04:37	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 04:37	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 04:37	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 04:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 04:37	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 04:37	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 04:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 04:37	1

Client Sample ID: RW-7091R-20200624 Lab Sample ID: 280-138098-7

Date Collected: 06/24/20 15:33 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 04:37	1
Tetrachloroethene	**0.24**	**J**	1.0	0.20	ug/L			07/02/20 04:37	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 04:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 04:37	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 04:37	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 04:37	1
Trichloroethene	**1.4**		1.0	0.16	ug/L			07/02/20 04:37	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 04:37	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 04:37	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 04:37	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 04:37	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 04:37	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 04:37	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 04:37	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 04:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 04:37*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*07/02/20 04:37*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*07/02/20 04:37*	*1*

Client Sample ID: RW-7505P-20200624 Lab Sample ID: 280-138098-8

Date Collected: 06/24/20 08:50 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 04:58	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 04:58	1
Acrolein	ND		20	2.8	ug/L			07/02/20 04:58	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 04:58	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 04:58	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 04:58	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 04:58	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 04:58	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 04:58	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 04:58	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 04:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 04:58	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 04:58	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 04:58	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 04:58	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 04:58	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 04:58	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 04:58	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 04:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 04:58	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 04:58	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 04:58	1

Client Sample ID: RW-7505P-20200624 Lab Sample ID: 280-138098-8

Date Collected: 06/24/20 08:50 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 04:58	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 04:58	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 04:58	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 04:58	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 04:58	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 04:58	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 04:58	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 04:58	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 04:58	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 04:58	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 04:58	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 04:58	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 04:58	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 04:58	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 04:58	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 04:58	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 04:58	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 04:58	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 04:58	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 04:58	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 04:58	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 04:58	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 04:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 04:58	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 04:58	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 04:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 04:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 04:58	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 04:58	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 04:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 04:58	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 04:58	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 04:58	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 04:58	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 04:58	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 04:58	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 04:58	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 04:58	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 04:58	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 04:58	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 04:58	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 04:58*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 04:58*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 04:58*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 04:58*	*1*

Client Sample ID: RW-7549P-20200624 Lab Sample ID: 280-138098-9

Date Collected: 06/24/20 13:04 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 05:20	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 05:20	1
Acrolein	ND		20	2.8	ug/L			07/02/20 05:20	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 05:20	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 05:20	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 05:20	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 05:20	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 05:20	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 05:20	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 05:20	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 05:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 05:20	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 05:20	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 05:20	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 05:20	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 05:20	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 05:20	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 05:20	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 05:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 05:20	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 05:20	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 05:20	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 05:20	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 05:20	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 05:20	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 05:20	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 05:20	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 05:20	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 05:20	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 05:20	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 05:20	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 05:20	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 05:20	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 05:20	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 05:20	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 05:20	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 05:20	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 05:20	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 05:20	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 05:20	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 05:20	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 05:20	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 05:20	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 05:20	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 05:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 05:20	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 05:20	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 05:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 05:20	1

Client Sample ID: RW-7549P-20200624 — Lab Sample ID: 280-138098-9

Date Collected: 06/24/20 13:04 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 05:20	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 05:20	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 05:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 05:20	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 05:20	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 05:20	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 05:20	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 05:20	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 05:20	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 05:20	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 05:20	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 05:20	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 05:20	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 05:20	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 05:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 05:20*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 05:20*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 05:20*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 05:20*	*1*

Client Sample ID: RW-7588P-20200624 — Lab Sample ID: 280-138098-10

Date Collected: 06/24/20 15:00 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 05:41	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 05:41	1
Acrolein	ND		20	2.8	ug/L			07/02/20 05:41	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 05:41	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 05:41	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 05:41	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 05:41	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 05:41	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 05:41	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 05:41	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 05:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 05:41	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 05:41	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 05:41	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 05:41	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 05:41	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 05:41	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 05:41	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 05:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 05:41	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 05:41	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 05:41	1

Client Sample ID: RW-7588P-20200624 Lab Sample ID: 280-138098-10

Date Collected: 06/24/20 15:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 05:41	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 05:41	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 05:41	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 05:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 05:41	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 05:41	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 05:41	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 05:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 05:41	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 05:41	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 05:41	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 05:41	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 05:41	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 05:41	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 05:41	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 05:41	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 05:41	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 05:41	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 05:41	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 05:41	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 05:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 05:41	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 05:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 05:41	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 05:41	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 05:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 05:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 05:41	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 05:41	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 05:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 05:41	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 05:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 05:41	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 05:41	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 05:41	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 05:41	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 05:41	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 05:41	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 05:41	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 05:41	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 05:41	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 05:41*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 05:41*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 05:41*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 05:41*	*1*

Client Sample ID: RW-8209P-20200625 Lab Sample ID: 280-138098-11

Date Collected: 06/25/20 15:40 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 06:02	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 06:02	1
Acrolein	ND		20	2.8	ug/L			07/02/20 06:02	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 06:02	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 06:02	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 06:02	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 06:02	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 06:02	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 06:02	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 06:02	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 06:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 06:02	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 06:02	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 06:02	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 06:02	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 06:02	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 06:02	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 06:02	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 06:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 06:02	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 06:02	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 06:02	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 06:02	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 06:02	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 06:02	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 06:02	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 06:02	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 06:02	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 06:02	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 06:02	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 06:02	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 06:02	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 06:02	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 06:02	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 06:02	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 06:02	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 06:02	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 06:02	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 06:02	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 06:02	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 06:02	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 06:02	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 06:02	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 06:02	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 06:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 06:02	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 06:02	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 06:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 06:02	1

Client Sample ID: RW-8209P-20200625 — Lab Sample ID: 280-138098-11

Date Collected: 06/25/20 15:40 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 06:02	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 06:02	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 06:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 06:02	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 06:02	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 06:02	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 06:02	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 06:02	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 06:02	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 06:02	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 06:02	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 06:02	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 06:02	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 06:02	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*07/02/20 06:02*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 06:02*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 06:02*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 06:02*	*1*

Client Sample ID: EB-00-20200625 — Lab Sample ID: 280-138098-12

Date Collected: 06/25/20 15:00 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**16**		10	1.9	ug/L			07/02/20 06:23	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 06:23	1
Acrolein	ND		20	2.8	ug/L			07/02/20 06:23	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 06:23	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 06:23	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 06:23	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 06:23	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 06:23	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 06:23	1
2-Butanone (MEK)	**3.9**	**J**	6.0	2.0	ug/L			07/02/20 06:23	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 06:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 06:23	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 06:23	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 06:23	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 06:23	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 06:23	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 06:23	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 06:23	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 06:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 06:23	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 06:23	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 06:23	1

Client Sample ID: EB-00-20200625 Lab Sample ID: 280-138098-12

Date Collected: 06/25/20 15:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 06:23	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 06:23	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 06:23	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 06:23	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 06:23	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 06:23	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 06:23	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 06:23	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 06:23	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 06:23	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 06:23	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 06:23	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 06:23	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 06:23	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 06:23	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 06:23	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 06:23	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 06:23	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 06:23	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 06:23	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 06:23	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 06:23	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 06:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 06:23	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 06:23	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 06:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 06:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 06:23	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 06:23	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 06:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 06:23	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 06:23	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 06:23	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 06:23	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 06:23	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 06:23	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 06:23	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 06:23	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 06:23	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 06:23	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 06:23	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 06:23*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*07/02/20 06:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 06:23*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 06:23*	*1*

Client Sample ID: EB-01-20200625 Lab Sample ID: 280-138098-13

Date Collected: 06/25/20 15:05 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**		10	1.9	ug/L			07/02/20 06:44	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 06:44	1
Acrolein	ND		20	2.8	ug/L			07/02/20 06:44	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 06:44	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 06:44	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 06:44	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 06:44	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 06:44	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 06:44	1
2-Butanone (MEK)	**3.8**	**J**	6.0	2.0	ug/L			07/02/20 06:44	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 06:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 06:44	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 06:44	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 06:44	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 06:44	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 06:44	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 06:44	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 06:44	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 06:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 06:44	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 06:44	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 06:44	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 06:44	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 06:44	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 06:44	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 06:44	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 06:44	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 06:44	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 06:44	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 06:44	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 06:44	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 06:44	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 06:44	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 06:44	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 06:44	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 06:44	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 06:44	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 06:44	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 06:44	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 06:44	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 06:44	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 06:44	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 06:44	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 06:44	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 06:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 06:44	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 06:44	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 06:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 06:44	1

Client Sample ID: EB-01-20200625 — Lab Sample ID: 280-138098-13

Date Collected: 06/25/20 15:05 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 06:44	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 06:44	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 06:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 06:44	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 06:44	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 06:44	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 06:44	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 06:44	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 06:44	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 06:44	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 06:44	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 06:44	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 06:44	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 06:44	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 06:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*07/02/20 06:44*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 06:44*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 06:44*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*07/02/20 06:44*	*1*

Client Sample ID: TB-02-20200626 — Lab Sample ID: 280-138098-14

Date Collected: 06/26/20 10:00 — **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 07:05	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 07:05	1
Acrolein	ND		20	2.8	ug/L			07/02/20 07:05	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 07:05	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 07:05	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 07:05	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 07:05	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 07:05	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 07:05	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 07:05	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 07:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 07:05	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 07:05	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 07:05	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 07:05	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 07:05	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 07:05	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 07:05	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 07:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 07:05	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 07:05	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 07:05	1

Client Sample ID: TB-02-20200626 Lab Sample ID: 280-138098-14

Date Collected: 06/26/20 10:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 07:05	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 07:05	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 07:05	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 07:05	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 07:05	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 07:05	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 07:05	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 07:05	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 07:05	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 07:05	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 07:05	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 07:05	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 07:05	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 07:05	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 07:05	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 07:05	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 07:05	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 07:05	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 07:05	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 07:05	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 07:05	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 07:05	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 07:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 07:05	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 07:05	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 07:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 07:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 07:05	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 07:05	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 07:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 07:05	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 07:05	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 07:05	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 07:05	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 07:05	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 07:05	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 07:05	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 07:05	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 07:05	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 07:05	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 07:05	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 07:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*07/02/20 07:05*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*07/02/20 07:05*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 07:05*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 07:05*	*1*

Client Sample ID: RW-2140H-20200626 Lab Sample ID: 280-138098-15

Date Collected: 06/26/20 13:35 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 07:27	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 07:27	1
Acrolein	ND		20	2.8	ug/L			07/02/20 07:27	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 07:27	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 07:27	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 07:27	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 07:27	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 07:27	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 07:27	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 07:27	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 07:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 07:27	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 07:27	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 07:27	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 07:27	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 07:27	1
Chloroform	**0.25**	**J**	1.0	0.16	ug/L			07/02/20 07:27	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 07:27	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 07:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 07:27	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 07:27	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 07:27	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 07:27	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 07:27	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 07:27	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 07:27	1
1,1-Dichloroethane	**0.23**	**J**	1.0	0.22	ug/L			07/02/20 07:27	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 07:27	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.15	ug/L			07/02/20 07:27	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 07:27	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 07:27	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 07:27	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 07:27	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 07:27	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 07:27	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 07:27	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 07:27	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 07:27	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 07:27	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 07:27	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 07:27	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 07:27	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 07:27	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 07:27	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 07:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 07:27	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 07:27	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 07:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 07:27	1

Client Sample ID: RW-2140H-20200626 Lab Sample ID: 280-138098-15

Date Collected: 06/26/20 13:35 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 07:27	1
Tetrachloroethene	**6.1**		1.0	0.20	ug/L			07/02/20 07:27	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 07:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 07:27	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 07:27	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 07:27	1
Trichloroethene	**34**		1.0	0.16	ug/L			07/02/20 07:27	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 07:27	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 07:27	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 07:27	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 07:27	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 07:27	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 07:27	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 07:27	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 07:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*07/02/20 07:27*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 07:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 07:27*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*07/02/20 07:27*	*1*

Client Sample ID: MW-116S-20200626 Lab Sample ID: 280-138098-16

Date Collected: 06/26/20 13:30 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 07:48	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 07:48	1
Acrolein	ND		20	2.8	ug/L			07/02/20 07:48	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 07:48	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 07:48	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 07:48	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 07:48	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 07:48	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 07:48	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 07:48	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 07:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 07:48	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 07:48	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 07:48	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 07:48	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 07:48	1
Chloroform	**0.20**	**J**	1.0	0.16	ug/L			07/02/20 07:48	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 07:48	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 07:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 07:48	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 07:48	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 07:48	1

Client Sample ID: MW-116S-20200626 Lab Sample ID: 280-138098-16

Date Collected: 06/26/20 13:30 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 07:48	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 07:48	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 07:48	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 07:48	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 07:48	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 07:48	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.15	ug/L			07/02/20 07:48	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 07:48	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 07:48	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 07:48	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 07:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 07:48	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 07:48	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 07:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 07:48	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 07:48	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 07:48	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 07:48	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 07:48	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 07:48	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 07:48	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 07:48	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 07:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 07:48	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 07:48	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 07:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 07:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 07:48	1
Tetrachloroethene	**3.7**		1.0	0.20	ug/L			07/02/20 07:48	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 07:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 07:48	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 07:48	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 07:48	1
Trichloroethene	**26**		1.0	0.16	ug/L			07/02/20 07:48	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 07:48	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 07:48	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 07:48	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 07:48	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 07:48	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 07:48	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 07:48	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 07:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*07/02/20 07:48*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*07/02/20 07:48*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*07/02/20 07:48*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 07:48*	*1*

Client Sample ID: EB-02-20200626 Lab Sample ID: 280-138098-17

Date Collected: 06/26/20 15:10 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**19**		10	1.9	ug/L			07/02/20 08:09	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 08:09	1
Acrolein	ND		20	2.8	ug/L			07/02/20 08:09	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 08:09	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 08:09	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 08:09	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 08:09	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 08:09	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 08:09	1
2-Butanone (MEK)	**4.3**	**J**	6.0	2.0	ug/L			07/02/20 08:09	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 08:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 08:09	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 08:09	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 08:09	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 08:09	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 08:09	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 08:09	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 08:09	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 08:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 08:09	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 08:09	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 08:09	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 08:09	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 08:09	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 08:09	1
Dichlorodifluoromethane	ND	*	2.0	0.31	ug/L			07/02/20 08:09	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 08:09	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 08:09	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 08:09	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 08:09	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 08:09	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 08:09	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 08:09	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 08:09	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 08:09	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 08:09	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 08:09	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 08:09	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 08:09	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 08:09	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 08:09	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 08:09	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 08:09	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 08:09	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 08:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 08:09	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 08:09	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 08:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 08:09	1

Client Sample ID: EB-02-20200626 Lab Sample ID: 280-138098-17

Date Collected: 06/26/20 15:10 **Matrix: Water**
Date Received: 06/27/20 09:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 08:09	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 08:09	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 08:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 08:09	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 08:09	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 08:09	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 08:09	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 08:09	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 08:09	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 08:09	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 08:09	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 08:09	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 08:09	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 08:09	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 08:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 08:09*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 08:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 08:09*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 08:09*	*1*

Default Detection Limits

Client: CDM Smith, Inc. Job ID: 280-138098-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	1.0	0.21	ug/L
1,1,1-Trichloroethane	1.0	0.16	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.21	ug/L
1,1,2-Trichloroethane	1.0	0.27	ug/L
1,1-Dichloroethane	1.0	0.22	ug/L
1,1-Dichloroethene	1.0	0.23	ug/L
1,1-Dichloropropene	1.0	0.19	ug/L
1,2,3-Trichloropropane	2.5	0.33	ug/L
1,2,4-Trichlorobenzene	1.0	0.21	ug/L
1,2-Dibromo-3-Chloropropane	5.0	0.47	ug/L
1,2-Dibromoethane	1.0	0.18	ug/L
1,2-Dichlorobenzene	1.0	0.15	ug/L
1,2-Dichloroethane	1.0	0.13	ug/L
1,2-Dichloropropane	1.0	0.18	ug/L
1,3-Dichlorobenzene	1.0	0.13	ug/L
1,3-Dichloropropane	1.0	0.090	ug/L
1,4-Dichlorobenzene	1.0	0.16	ug/L
2,2-Dichloropropane	1.0	0.38	ug/L
2-Butanone (MEK)	6.0	2.0	ug/L
2-Hexanone	5.0	1.7	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	0.98	ug/L
Acetone	10	1.9	ug/L
Acetonitrile	30	9.6	ug/L
Acrolein	20	2.8	ug/L
Acrylonitrile	20	1.4	ug/L
Allyl chloride	2.0	0.17	ug/L
Benzene	1.0	0.16	ug/L
Bromoform	1.0	0.46	ug/L
Bromomethane	2.0	0.21	ug/L
Carbon disulfide	2.0	0.17	ug/L
Carbon tetrachloride	1.0	0.19	ug/L
Chlorobenzene	1.0	0.17	ug/L
Chlorobromomethane	1.0	0.10	ug/L
Chlorodibromomethane	1.0	0.17	ug/L
Chloroethane	2.0	0.41	ug/L
Chloroform	1.0	0.16	ug/L
Chloromethane	2.0	0.30	ug/L
Chloroprene	1.0	0.21	ug/L
cis-1,2-Dichloroethene	1.0	0.15	ug/L
cis-1,3-Dichloropropene	1.0	0.16	ug/L
Dibromomethane	1.0	0.17	ug/L
Dichlorobromomethane	1.0	0.17	ug/L
Dichlorodifluoromethane	2.0	0.31	ug/L
Ethyl methacrylate	3.0	0.86	ug/L
Ethylbenzene	1.0	0.16	ug/L
Iodomethane	1.0	0.23	ug/L
Isobutyl alcohol	110	37	ug/L
Methacrylonitrile	10	1.6	ug/L
Methyl methacrylate	4.0	1.1	ug/L
Methylene Chloride	2.0	0.94	ug/L
m-Xylene & p-Xylene	2.0	0.15	ug/L
o-Xylene	1.0	0.19	ug/L
Propionitrile	20	3.7	ug/L

Default Detection Limits

Client: CDM Smith, Inc.
Job ID: 280-138098-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	RL	MDL	Units
Styrene	1.0	0.36	ug/L
Tetrachloroethene	1.0	0.20	ug/L
Toluene	1.0	0.17	ug/L
trans-1,2-Dichloroethene	1.0	0.15	ug/L
trans-1,3-Dichloropropene	3.0	0.19	ug/L
trans-1,4-Dichloro-2-butene	3.0	0.80	ug/L
Trichloroethene	1.0	0.16	ug/L
Trichlorofluoromethane	2.0	0.29	ug/L
Vinyl acetate	3.0	0.94	ug/L
Vinyl chloride	1.0	0.10	ug/L
Xylenes, Total	2.0	0.19	ug/L

Surrogate Summary

Client: CDM Smith, Inc. Job ID: 280-138098-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(70-127)	(80-125)	(78-120)	(77-120)
280-138098-1	MUNI-WELL-14-20200624	96	97	96	100
280-138098-2	MUNI-WELL-33-20200624	94	97	98	100
280-138098-3	RW-2172H-20200625	95	98	95	99
280-138098-4	RW-2203H-20200625	96	99	93	100
280-138098-5	RW-2213F-20200625	95	98	96	100
280-138098-6	RW-2613M-20200625	95	97	96	101
280-138098-7	RW-7091R-20200624	95	99	99	99
280-138098-8	RW-7505P-20200624	95	99	97	100
280-138098-9	RW-7549P-20200624	95	99	98	100
280-138098-10	RW-7588P-20200624	95	99	97	101
280-138098-11	RW-8209P-20200625	96	98	97	101
280-138098-12	EB-00-20200625	95	100	97	101
280-138098-13	EB-01-20200625	94	99	98	99
280-138098-14	TB-02-20200626	96	97	97	101
280-138098-15	RW-2140H-20200626	98	98	98	101
280-138098-16	MW-116S-20200626	96	99	97	100
280-138098-17	EB-02-20200626	95	98	98	100
LCS 280-500875/4	Lab Control Sample	93	97	97	100
LCS 280-500875/6	Lab Control Sample	94	96	97	100
LCSD 280-500875/5	Lab Control Sample Dup	94	97	97	100
LCSD 280-500875/7	Lab Control Sample Dup	96	97	96	101
MB 280-500875/9	Method Blank	95	98	98	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-500875/9
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	1.9	ug/L			07/02/20 01:05	1
Acetonitrile	ND		30	9.6	ug/L			07/02/20 01:05	1
Acrolein	ND		20	2.8	ug/L			07/02/20 01:05	1
Acrylonitrile	ND		20	1.4	ug/L			07/02/20 01:05	1
Benzene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/02/20 01:05	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/02/20 01:05	1
Bromoform	ND		1.0	0.46	ug/L			07/02/20 01:05	1
Bromomethane	ND		2.0	0.21	ug/L			07/02/20 01:05	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/02/20 01:05	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/02/20 01:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/02/20 01:05	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/02/20 01:05	1
Chloroprene	ND		1.0	0.21	ug/L			07/02/20 01:05	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:05	1
Chloroethane	ND		2.0	0.41	ug/L			07/02/20 01:05	1
Chloroform	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Chloromethane	ND		2.0	0.30	ug/L			07/02/20 01:05	1
Allyl chloride	ND		2.0	0.17	ug/L			07/02/20 01:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/02/20 01:05	1
Dibromomethane	ND		1.0	0.17	ug/L			07/02/20 01:05	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/02/20 01:05	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/02/20 01:05	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/02/20 01:05	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/02/20 01:05	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/02/20 01:05	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/02/20 01:05	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:05	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/02/20 01:05	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/02/20 01:05	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/02/20 01:05	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/02/20 01:05	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/02/20 01:05	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/02/20 01:05	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/02/20 01:05	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/02/20 01:05	1
2-Hexanone	ND		5.0	1.7	ug/L			07/02/20 01:05	1
Iodomethane	ND		1.0	0.23	ug/L			07/02/20 01:05	1
Isobutyl alcohol	ND		110	37	ug/L			07/02/20 01:05	1
Methacrylonitrile	ND		10	1.6	ug/L			07/02/20 01:05	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/02/20 01:05	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/02/20 01:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/02/20 01:05	1
Propionitrile	ND		20	3.7	ug/L			07/02/20 01:05	1
Styrene	ND		1.0	0.36	ug/L			07/02/20 01:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-500875/9
Matrix: Water
Analysis Batch: 500875

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	ND		1.0	0.21	ug/L			07/02/20 01:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/02/20 01:05	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/02/20 01:05	1
Toluene	ND		1.0	0.17	ug/L			07/02/20 01:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/02/20 01:05	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/02/20 01:05	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/02/20 01:05	1
Trichloroethene	ND		1.0	0.16	ug/L			07/02/20 01:05	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/02/20 01:05	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/02/20 01:05	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/02/20 01:05	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/02/20 01:05	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/02/20 01:05	1
o-Xylene	ND		1.0	0.19	ug/L			07/02/20 01:05	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/02/20 01:05	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/02/20 01:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*07/02/20 01:05*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*07/02/20 01:05*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*07/02/20 01:05*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*07/02/20 01:05*	*1*

Lab Sample ID: LCS 280-500875/4
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	96.5		ug/L		97	39 - 156
Acrolein	247	236		ug/L		96	36 - 147
Acrylonitrile	250	246		ug/L		98	56 - 135
Benzene	25.0	24.3		ug/L		97	65 - 135
Chlorobromomethane	25.0	24.9		ug/L		100	65 - 135
Dichlorobromomethane	25.0	24.9		ug/L		100	65 - 135
Bromoform	25.0	26.8		ug/L		107	62 - 135
Bromomethane	25.0	30.9		ug/L		124	45 - 135
2-Butanone (MEK)	100	99.1		ug/L		99	44 - 177
Carbon disulfide	25.0	27.9		ug/L		112	55 - 143
Carbon tetrachloride	25.0	25.8		ug/L		103	65 - 135
Chlorobenzene	25.0	24.2		ug/L		97	65 - 135
Chlorodibromomethane	25.0	26.1		ug/L		104	65 - 135
Chloroethane	25.0	28.5		ug/L		114	46 - 136
Chloroform	25.0	23.9		ug/L		95	65 - 135
Chloromethane	25.0	29.2		ug/L		117	34 - 145
Allyl chloride	25.0	25.6		ug/L		102	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L		108	57 - 135
Dibromomethane	25.0	24.4		ug/L		98	65 - 135
1,2-Dichlorobenzene	25.0	23.6		ug/L		94	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500875/4
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	65 - 135
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135
trans-1,4-Dichloro-2-butene	25.0	24.0		ug/L		96	53 - 135
Dichlorodifluoromethane	25.0	36.9	*	ug/L		148	43 - 142
1,1-Dichloroethane	25.0	24.7		ug/L		99	65 - 135
1,2-Dichloroethane	25.0	23.8		ug/L		95	65 - 135
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	65 - 135
trans-1,2-Dichloroethene	25.0	24.9		ug/L		100	65 - 135
1,1-Dichloroethene	25.0	26.9		ug/L		108	65 - 136
1,2-Dichloropropane	25.0	24.9		ug/L		99	64 - 135
1,3-Dichloropropane	25.0	23.6		ug/L		95	64 - 135
2,2-Dichloropropane	25.0	27.0		ug/L		108	65 - 135
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	65 - 135
trans-1,3-Dichloropropene	25.0	24.1		ug/L		97	65 - 135
1,1-Dichloropropene	25.0	24.6		ug/L		98	65 - 135
Ethylbenzene	25.0	24.5		ug/L		98	65 - 135
Ethyl methacrylate	25.0	25.7		ug/L		103	50 - 135
2-Hexanone	100	105		ug/L		105	57 - 139
Iodomethane	25.0	20.5		ug/L		82	65 - 142
Isobutyl alcohol	625	656		ug/L		105	55 - 135
Methylene Chloride	25.0	26.1		ug/L		104	54 - 141
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	60 - 150
Styrene	25.0	25.4		ug/L		102	65 - 135
1,1,1,2-Tetrachloroethane	25.0	25.4		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	58 - 135
Tetrachloroethene	25.0	25.5		ug/L		102	65 - 135
Toluene	25.0	24.3		ug/L		97	65 - 135
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	58 - 135
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	65 - 135
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	64 - 135
Trichloroethene	25.0	23.7		ug/L		95	65 - 135
Trichlorofluoromethane	25.0	25.8		ug/L		103	53 - 137
1,2,3-Trichloropropane	25.0	24.1		ug/L		96	65 - 135
Vinyl acetate	50.0	52.0		ug/L		104	11 - 187
Vinyl chloride	25.0	29.3		ug/L		117	40 - 137
m-Xylene & p-Xylene	25.0	24.3		ug/L		97	65 - 135
o-Xylene	25.0	24.8		ug/L		99	65 - 135
Xylenes, Total	50.0	49.1		ug/L		98	65 - 135
1,2-Dibromoethane	25.0	24.4		ug/L		98	65 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-500875/6
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetonitrile			250	206		ug/L		82	50 - 150		
Chloroprene			25.0	22.1		ug/L		88	50 - 150		
Methacrylonitrile			250	210		ug/L		84	50 - 150		
Methyl methacrylate			50.0	49.6		ug/L		99	50 - 150		
Propionitrile			250	225		ug/L		90	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*
Toluene-d8 (Surr)	*96*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCSD 280-500875/5
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	94.6		ug/L		95	39 - 156	2	23
Acrolein			247	236		ug/L		96	36 - 147	0	30
Acrylonitrile			250	247		ug/L		99	56 - 135	1	30
Benzene			25.0	23.8		ug/L		95	65 - 135	2	20
Chlorobromomethane			25.0	25.2		ug/L		101	65 - 135	1	29
Dichlorobromomethane			25.0	24.8		ug/L		99	65 - 135	0	20
Bromoform			25.0	26.2		ug/L		105	62 - 135	2	27
Bromomethane			25.0	28.2		ug/L		113	45 - 135	9	33
2-Butanone (MEK)			100	99.0		ug/L		99	44 - 177	0	32
Carbon disulfide			25.0	27.4		ug/L		110	55 - 143	2	20
Carbon tetrachloride			25.0	25.4		ug/L		102	65 - 135	2	21
Chlorobenzene			25.0	23.6		ug/L		94	65 - 135	2	20
Chlorodibromomethane			25.0	25.5		ug/L		102	65 - 135	2	20
Chloroethane			25.0	27.5		ug/L		110	46 - 136	4	25
Chloroform			25.0	23.6		ug/L		94	65 - 135	1	20
Chloromethane			25.0	27.6		ug/L		111	34 - 145	5	24
Allyl chloride			25.0	25.5		ug/L		102	50 - 135	0	30
1,2-Dibromo-3-Chloropropane			25.0	27.1		ug/L		109	57 - 135	0	22
Dibromomethane			25.0	24.7		ug/L		99	65 - 135	1	26
1,2-Dichlorobenzene			25.0	23.5		ug/L		94	65 - 135	0	20
1,3-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	3	20
1,4-Dichlorobenzene			25.0	24.0		ug/L		96	65 - 135	3	23
trans-1,4-Dichloro-2-butene			25.0	23.8		ug/L		95	53 - 135	1	25
Dichlorodifluoromethane			25.0	35.7	*	ug/L		143	43 - 142	3	30
1,1-Dichloroethane			25.0	24.4		ug/L		97	65 - 135	1	21
1,2-Dichloroethane			25.0	24.1		ug/L		96	65 - 135	1	20
cis-1,2-Dichloroethene			25.0	24.7		ug/L		99	65 - 135	1	20
trans-1,2-Dichloroethene			25.0	24.7		ug/L		99	65 - 135	1	24
1,1-Dichloroethene			25.0	26.6		ug/L		107	65 - 136	1	20
1,2-Dichloropropane			25.0	24.6		ug/L		99	64 - 135	1	20
1,3-Dichloropropane			25.0	23.6		ug/L		95	64 - 135	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500875/5
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane			25.0	26.4		ug/L		106	65 - 135	2	20
cis-1,3-Dichloropropene			25.0	25.1		ug/L		100	65 - 135	2	26
trans-1,3-Dichloropropene			25.0	24.2		ug/L		97	65 - 135	0	26
1,1-Dichloropropene			25.0	23.9		ug/L		95	65 - 135	3	21
Ethylbenzene			25.0	23.7		ug/L		95	65 - 135	3	20
Ethyl methacrylate			25.0	25.5		ug/L		102	50 - 135	0	30
2-Hexanone			100	103		ug/L		103	57 - 139	2	25
Iodomethane			25.0	22.2		ug/L		89	65 - 142	8	25
Isobutyl alcohol			625	646		ug/L		103	55 - 135	1	30
Methylene Chloride			25.0	25.5		ug/L		102	54 - 141	2	26
4-Methyl-2-pentanone (MIBK)			100	102		ug/L		102	60 - 150	1	22
Styrene			25.0	24.6		ug/L		98	65 - 135	3	26
1,1,1,2-Tetrachloroethane			25.0	24.0		ug/L		96	65 - 135	5	20
1,1,2,2-Tetrachloroethane			25.0	24.8		ug/L		99	58 - 135	1	20
Tetrachloroethene			25.0	24.2		ug/L		97	65 - 135	5	20
Toluene			25.0	24.1		ug/L		96	65 - 135	1	20
1,2,4-Trichlorobenzene			25.0	24.0		ug/L		96	58 - 135	2	25
1,1,1-Trichloroethane			25.0	24.8		ug/L		99	65 - 135	2	20
1,1,2-Trichloroethane			25.0	25.3		ug/L		101	64 - 135	1	27
Trichloroethene			25.0	23.9		ug/L		96	65 - 135	1	20
Trichlorofluoromethane			25.0	26.5		ug/L		106	53 - 137	2	27
1,2,3-Trichloropropane			25.0	24.3		ug/L		97	65 - 135	1	23
Vinyl acetate			50.0	51.2		ug/L		102	11 - 187	1	24
Vinyl chloride			25.0	28.2		ug/L		113	40 - 137	4	24
m-Xylene & p-Xylene			25.0	23.8		ug/L		95	65 - 135	2	20
o-Xylene			25.0	24.1		ug/L		96	65 - 135	3	20
Xylenes, Total			50.0	47.9		ug/L		96	65 - 135	2	20
1,2-Dibromoethane			25.0	24.1		ug/L		96	65 - 135	1	27

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*
Toluene-d8 (Surr)	*97*		*80 - 125*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*

Lab Sample ID: LCSD 280-500875/7
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile			250	230		ug/L		92	50 - 150	11	30
Chloroprene			25.0	22.6		ug/L		90	50 - 150	2	30
Methacrylonitrile			250	221		ug/L		88	50 - 150	5	30
Methyl methacrylate			50.0	48.2		ug/L		96	50 - 150	3	30
Propionitrile			250	243		ug/L		97	50 - 150	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-500875/7
Matrix: Water
Analysis Batch: 500875

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

GC/MS VOA

Analysis Batch: 500875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-138098-1	MUNI-WELL-14-20200624	Total/NA	Water	8260B	
280-138098-2	MUNI-WELL-33-20200624	Total/NA	Water	8260B	
280-138098-3	RW-2172H-20200625	Total/NA	Water	8260B	
280-138098-4	RW-2203H-20200625	Total/NA	Water	8260B	
280-138098-5	RW-2213F-20200625	Total/NA	Water	8260B	
280-138098-6	RW-2613M-20200625	Total/NA	Water	8260B	
280-138098-7	RW-7091R-20200624	Total/NA	Water	8260B	
280-138098-8	RW-7505P-20200624	Total/NA	Water	8260B	
280-138098-9	RW-7549P-20200624	Total/NA	Water	8260B	
280-138098-10	RW-7588P-20200624	Total/NA	Water	8260B	
280-138098-11	RW-8209P-20200625	Total/NA	Water	8260B	
280-138098-12	EB-00-20200625	Total/NA	Water	8260B	
280-138098-13	EB-01-20200625	Total/NA	Water	8260B	
280-138098-14	TB-02-20200626	Total/NA	Water	8260B	
280-138098-15	RW-2140H-20200626	Total/NA	Water	8260B	
280-138098-16	MW-116S-20200626	Total/NA	Water	8260B	
280-138098-17	EB-02-20200626	Total/NA	Water	8260B	
MB 280-500875/9	Method Blank	Total/NA	Water	8260B	
LCS 280-500875/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-500875/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-500875/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-500875/7	Lab Control Sample Dup	Total/NA	Water	8260B	

Client Sample ID: MUNI-WELL-14-20200624 — Lab Sample ID: 280-138098-1

Date Collected: 06/24/20 10:41 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 02:30	PP	TAL DEN

Client Sample ID: MUNI-WELL-33-20200624 — Lab Sample ID: 280-138098-2

Date Collected: 06/24/20 10:20 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 02:51	PP	TAL DEN

Client Sample ID: RW-2172H-20200625 — Lab Sample ID: 280-138098-3

Date Collected: 06/25/20 12:40 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 03:12	PP	TAL DEN

Client Sample ID: RW-2203H-20200625 — Lab Sample ID: 280-138098-4

Date Collected: 06/25/20 14:15 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 03:33	PP	TAL DEN

Client Sample ID: RW-2213F-20200625 — Lab Sample ID: 280-138098-5

Date Collected: 06/25/20 17:15 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 03:55	PP	TAL DEN

Client Sample ID: RW-2613M-20200625 — Lab Sample ID: 280-138098-6

Date Collected: 06/25/20 15:00 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 04:16	PP	TAL DEN

Client Sample ID: RW-7091R-20200624 — Lab Sample ID: 280-138098-7

Date Collected: 06/24/20 15:33 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 04:37	PP	TAL DEN

Client Sample ID: RW-7505P-20200624 — Lab Sample ID: 280-138098-8

Date Collected: 06/24/20 08:50 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 04:58	PP	TAL DEN

Client Sample ID: RW-7549P-20200624 — Lab Sample ID: 280-138098-9

Date Collected: 06/24/20 13:04 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 05:20	PP	TAL DEN

Client Sample ID: RW-7588P-20200624 — Lab Sample ID: 280-138098-10

Date Collected: 06/24/20 15:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 05:41	PP	TAL DEN

Client Sample ID: RW-8209P-20200625 — Lab Sample ID: 280-138098-11

Date Collected: 06/25/20 15:40 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 06:02	PP	TAL DEN

Client Sample ID: EB-00-20200625 — Lab Sample ID: 280-138098-12

Date Collected: 06/25/20 15:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 06:23	PP	TAL DEN

Client Sample ID: EB-01-20200625 — Lab Sample ID: 280-138098-13

Date Collected: 06/25/20 15:05 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 06:44	PP	TAL DEN

Client Sample ID: TB-02-20200626 — Lab Sample ID: 280-138098-14

Date Collected: 06/26/20 10:00 **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 07:05	PP	TAL DEN

Client Sample ID: RW-2140H-20200626 — Lab Sample ID: 280-138098-15

Date Collected: 06/26/20 13:35 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 07:27	PP	TAL DEN

Client Sample ID: MW-116S-20200626 — Lab Sample ID: 280-138098-16

Date Collected: 06/26/20 13:30 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 07:48	PP	TAL DEN

Client Sample ID: EB-02-20200626 — Lab Sample ID: 280-138098-17

Date Collected: 06/26/20 15:10 — **Matrix: Water**
Date Received: 06/27/20 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500875	07/02/20 08:09	PP	TAL DEN

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: CDM Smith, Inc. Job ID: 280-138098-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Laboratory: Eurofins TestAmerica, Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025-011	01-08-21

Method Summary

Client: CDM Smith, Inc. Job ID: 280-138098-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: CDM Smith, Inc. Job ID: 280-138098-1
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-138098-1	MUNI-WELL-14-20200624	Water	06/24/20 10:41	06/27/20 09:30	
280-138098-2	MUNI-WELL-33-20200624	Water	06/24/20 10:20	06/27/20 09:30	
280-138098-3	RW-2172H-20200625	Water	06/25/20 12:40	06/27/20 09:30	
280-138098-4	RW-2203H-20200625	Water	06/25/20 14:15	06/27/20 09:30	
280-138098-5	RW-2213F-20200625	Water	06/25/20 17:15	06/27/20 09:30	
280-138098-6	RW-2613M-20200625	Water	06/25/20 15:00	06/27/20 09:30	
280-138098-7	RW-7091R-20200624	Water	06/24/20 15:33	06/27/20 09:30	
280-138098-8	RW-7505P-20200624	Water	06/24/20 08:50	06/27/20 09:30	
280-138098-9	RW-7549P-20200624	Water	06/24/20 13:04	06/27/20 09:30	
280-138098-10	RW-7588P-20200624	Water	06/24/20 15:00	06/27/20 09:30	
280-138098-11	RW-8209P-20200625	Water	06/25/20 15:40	06/27/20 09:30	
280-138098-12	EB-00-20200625	Water	06/25/20 15:00	06/27/20 09:30	
280-138098-13	EB-01-20200625	Water	06/25/20 15:05	06/27/20 09:30	
280-138098-14	TB-02-20200626	Water	06/26/20 10:00	06/27/20 09:30	
280-138098-15	RW-2140H-20200626	Water	06/26/20 13:35	06/27/20 09:30	
280-138098-16	MW-116S-20200626	Water	06/26/20 13:30	06/27/20 09:30	
280-138098-17	EB-02-20200626	Water	06/26/20 15:10	06/27/20 09:30	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 485097

Lab Sample ID: STD005 280-485097/21 IC Client Sample ID:

Date Analyzed: 02/06/20 14:40 Lab File ID: P7815.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Propanol	3.13	Peak assignment corrected	zhangji	02/06/20 21:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 496958

Lab Sample ID: STD005 280-496958/12 IC Client Sample ID:

Date Analyzed: 06/01/20 16:26 Lab File ID: P1658.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.67	Assign Peak	seifertj	06/02/20 08:03
Chloromethane	1.84	Assign Peak	seifertj	06/02/20 08:03
Bromomethane	2.24	Assign Peak	seifertj	06/02/20 08:03
Acetone	2.96	Assign Peak	seifertj	06/02/20 08:04
Iodomethane	3.08	Assign Peak	seifertj	06/02/20 08:04
Carbon disulfide	3.13	Assign Peak	seifertj	06/02/20 08:04
Methylene Chloride	3.31	Assign Peak	seifertj	06/02/20 08:04
trans-1,2-Dichloroethene	3.52	Invalid Compound ID	ornelasg	06/01/20 21:43
Chlorobromomethane	4.43	Invalid Compound ID	ornelasg	06/01/20 21:43
1,2-Dichloroethane	4.92	Invalid Compound ID	ornelasg	06/01/20 21:53
Trichloroethene	5.39	Invalid Compound ID	ornelasg	06/01/20 21:43
Methylcyclohexane	5.59	Invalid Compound ID	ornelasg	06/01/20 21:43
Dibromomethane	5.67	Invalid Compound ID	ornelasg	06/01/20 21:43
1,2-Dibromoethane	7.24	Invalid Compound ID	ornelasg	06/01/20 21:43
1-Chlorohexane	7.63	Invalid Compound ID	ornelasg	06/01/20 21:54
Chlorobenzene	7.68	Invalid Compound ID	ornelasg	06/01/20 21:43
Ethylbenzene	7.75	Invalid Compound ID	ornelasg	06/01/20 21:43
Bromobenzene	8.89	Invalid Compound ID	ornelasg	06/01/20 21:44
4-Chlorotoluene	9.19	Invalid Compound ID	ornelasg	06/01/20 21:44
1,3-Dichlorobenzene	9.80	Invalid Compound ID	ornelasg	06/01/20 21:44
1,4-Dichlorobenzene	9.90	Invalid Compound ID	ornelasg	06/01/20 21:44
1,2,4-Trichlorobenzene	11.87	Invalid Compound ID	ornelasg	06/01/20 21:44
Hexachlorobutadiene	12.00	Invalid Compound ID	ornelasg	06/01/20 21:44
1,2,3-Trichlorobenzene	12.35	Invalid Compound ID	ornelasg	06/01/20 21:44

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 496958

Lab Sample ID: STD010 280-496958/13 IC Client Sample ID:

Date Analyzed: 06/01/20 16:47 Lab File ID: P1659.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.84	Invalid Compound ID	ornelasg	06/01/20 21:04
Acetone	2.96	Invalid Compound ID	ornelasg	06/01/20 21:52

Lab Sample ID: STD020 280-496958/14 IC Client Sample ID:

Date Analyzed: 06/01/20 17:09 Lab File ID: P1660.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Iodomethane	3.07	Peak Tail	seifertj	06/02/20 09:06

Lab Sample ID: STD100 280-496958/19 IC Client Sample ID:

Date Analyzed: 06/01/20 18:55 Lab File ID: P1665.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.22	Invalid Compound ID	ornelasg	06/01/20 21:04

Lab Sample ID: STD200 280-496958/20 IC Client Sample ID:

Date Analyzed: 06/01/20 19:16 Lab File ID: P1666.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.21	Invalid Compound ID	ornelasg	06/01/20 21:04

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
mv-Cent BFB_00001							1,2-Dichloroethene, Total	
							1,2-Dichloroethene, Total (URS)	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
							Xylenes, Total (URS)	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		BFB	250 ug/mL
mv-Cent BFB_00002							1,2-Dichloroethene, Total	
							1,2-Dichloroethene, Total (URS)	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
							Xylenes, Total (URS)	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		BFB	250 ug/mL
mv-Cent IS_00006	07/31/23	02/24/20	P&T Methanol, Lot 1996628	5 mL	MV-568718-D_00016	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.MV-568718-D_00016	07/31/23		RESTEK, Lot A0139459		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
MV-Gas A_00058	06/12/20	05/26/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00005	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00010	11/30/21		RESTEK, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	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		
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00005	10/31/21		RESTEK, Lot A0142584		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00060	07/03/20	06/20/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00012	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722_00012	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
MV-Gas B_00060	06/05/20	05/18/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(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
MV-Gas B_00064	07/10/20	06/25/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(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
mv-IS_00001	06/13/20	12/15/19	P&T Methanol, Lot 198123	50 mL	mv-30241_00008	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	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		
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
mv-IS_SS_00001	06/13/20	12/13/19	P&T Methanol, Lot 198123	50 mL	mv-30241_00008	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
					MV-567650_00028	1000 uL	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
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.MV-567650_00028	11/30/22		Restek, Lot A0132615		(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
mv-IS_SS_00006	11/07/20	05/07/20	P&T Methanol, Lot 198123	100 mL	mv-30241_00008	2000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
mv-IS_SS_00006	11/07/20	05/07/20	P&T Methanol, Lot 198123	100 mL	MV-567650_00028	2000 uL	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
.MV-567650_00028	11/30/22		Restek, Lot A0132615		(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
MV-MegaMain B_00031	10/24/20	04/24/20	P&T Methanol, Lot 181124	25 mL	MV-568720.sec_00031	1250 uL	Acrolein	987.5 ug/mL
					MV-569721.sec_00006	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724.sec_00027	1000 uL	Vinyl acetate	200 ug/mL
					MV-571992.sec_00005	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 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		
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,2-Dichloropropane	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Allyl chloride	100 ug/mL
							Benzene	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chlorodibromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Dibromomethane	100 ug/mL
							Dichlorobromomethane	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	100 ug/mL
							o-Xylene	100 ug/mL
							Styrene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
							Xylenes, Total	200 ug/mL
.MV-568720.sec_00031	04/30/21		RESTEK, Lot A0154553		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721.sec_00006	08/31/21		RESTEK, Lot A0140519		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724.sec_00027	09/30/21		RESTEK, Lot A0158728		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-571992.sec_00005	06/30/21		RESTEK, Lot A0144202		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	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		
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	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
							Acrylonitrile	25000 ug/mL
							Allyl chloride	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	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
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
MV-MegaMainA_00034	10/31/20	04/28/20	P&T Methanol, Lot 181124	25 mL	MV-568720_00033	1250 uL	Acrolein	987.5 ug/mL
					MV-569721_00008	800 uL	2-Butanone (MEK)	400 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		
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724_00025	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00010	4000 uL	Cyclohexanone	4000 ug/mL
					MV-571992_00004	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Allyl chloride	100 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chlorodibromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromomethane	100 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		
							Dichlorobromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					MV-CUS17739_00005	2500 uL	1-Chlorohexane	100 ug/mL
							2-Pentanone	400 ug/mL
							sec-Butyl Alcohol	3000 ug/mL
.MV-568720_00033	04/30/21		RESTEK, Lot A0154578		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721_00008	10/31/21		RESTEK, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00025	07/31/21		RESTEK, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00010	03/31/22		RESTEK, Lot A0146650		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00004	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-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	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		
							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
							2-Methyl-2-propanol	25000 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Allyl chloride	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	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
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	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

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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
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 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
.MV-CUS17739_00005	12/31/21		Agilent, Lot 6503344		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00034	10/31/20	04/28/20	P&T Methanol, Lot 181124	25 mL	MV-571992_00004	1000 uL	Xylenes, Total	200 ug/mL
.MV-571992_00004	06/30/21		RESTEK, Lot A0143774		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
MV-Supp A_00041	05/31/20	12/28/19	P&T Methanol, Lot 199628	20 mL	mv-570808_00006	400 uL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Chloroprene	50 ug/mL
							Isopropyl alcohol	500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					mv-570809_00006	400 uL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					mv-571993_00004	400 uL	Acetonitrile	500 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					mv-571994_00003	600 uL	Ethanol	3000 ug/mL
					mv-VO-TAOH-5_00009	2000 uL	cis-1,4-Dichloro-2-butene	100 ug/mL
							Propene oxide	5000 ug/mL
							Tetrahydrothiophene	100 ug/mL
.mv-570808_00006	07/31/20		Restek, Lot A0145375		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Chloroprene	2500 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00006	05/31/20		Restek, Lot A0143198		(Purchased Reagent)		Ethyl acetate	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	5000 ug/mL
.mv-571993_00004	01/31/21		RESTEK, Lot A0144915		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-571994_00003	11/30/21		RESTEK, Lot A0143139		(Purchased Reagent)		Ethanol	100000 ug/mL
.mv-VO-TAOH-5_00009	06/15/20		SPEX, Lot EN191217018		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
							Propene oxide	50000 ug/mL
							Tetrahydrothiophene	1000 ug/mL
MV-Supp A_00044	11/01/20	05/27/20	P&T Methanol, Lot 199628	20 mL	mv-570808_00007	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809_00007	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993_00004	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808_00007	05/31/21		Restek, Lot A0154734		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809_00007	05/31/21		Restek, Lot A0156071		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993_00004	01/31/21		RESTEK, Lot A0144915		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL
MV-Supp B_00026	05/07/20	11/07/19	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00004	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00004	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00003	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808.sec_00004	05/31/20		Restek, Lot A0143097		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809.sec_00004	04/30/20		Restek, Lot A0142413		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993.sec_00003	06/30/20		RESTEK, Lot A0139245		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL
MV-Supp B_00027	08/07/20	02/07/20	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00004	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00004	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00003	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808.sec_00004	05/31/20		Restek, Lot A0143097		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809.sec_00004	04/30/20		Restek, Lot A0142413		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993.sec_00003	06/30/20		RESTEK, Lot A0139245		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL

Reagent

mv-30241_00008

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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. : 30241 **Lot No.:** A0131578

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 : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene	2,522.1 µg/mL	+/- 14.6637 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBK8171V)		+/- 141.4116 µg/mL	Unstressed
	Purity 99%		+/- 144.7205 µg/mL	Stressed
2	Chlorobenzene-d5	2,518.6 µg/mL	+/- 14.6434 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 141.2154 µg/mL	Unstressed
	Purity 99%		+/- 144.5197 µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,520.5 µg/mL	+/- 14.6544 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 141.3219 µg/mL	Unstressed
	Purity 99%		+/- 144.6287 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

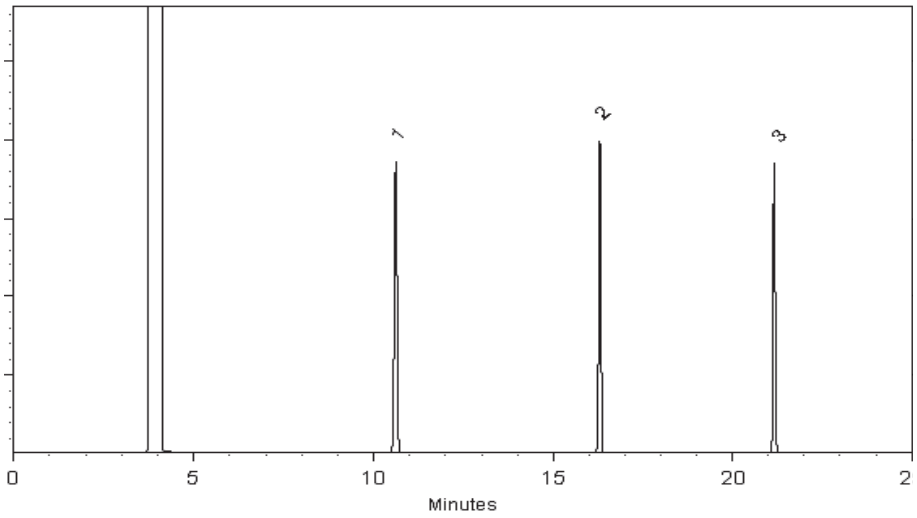
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 11-Oct-2017 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-567650_00028

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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. : 567650 **Lot No.:** A0132615

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

Rec'd 11/1/19

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 140.1837 µg/mL		Unstressed
	Purity 99.8%			+/- 143.4639 µg/mL		Stressed
2	1,2-Dichloroethane-d4		2,500.2 µg/mL	+/- 14.5361 µg/mL		Gravimetric
	CAS # 17060-07-0	(Lot PR-26748)		+/- 140.1809 µg/mL		Unstressed
	Purity 99%			+/- 143.4610 µg/mL		Stressed
3	Toluene-d8		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 2037-26-5	(Lot PR-26623)		+/- 140.1837 µg/mL		Unstressed
	Purity 99%			+/- 143.4639 µg/mL		Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,500.3 µg/mL	+/- 14.5370 µg/mL		Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 140.1893 µg/mL		Unstressed
	Purity 99%			+/- 143.4696 µg/mL		Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

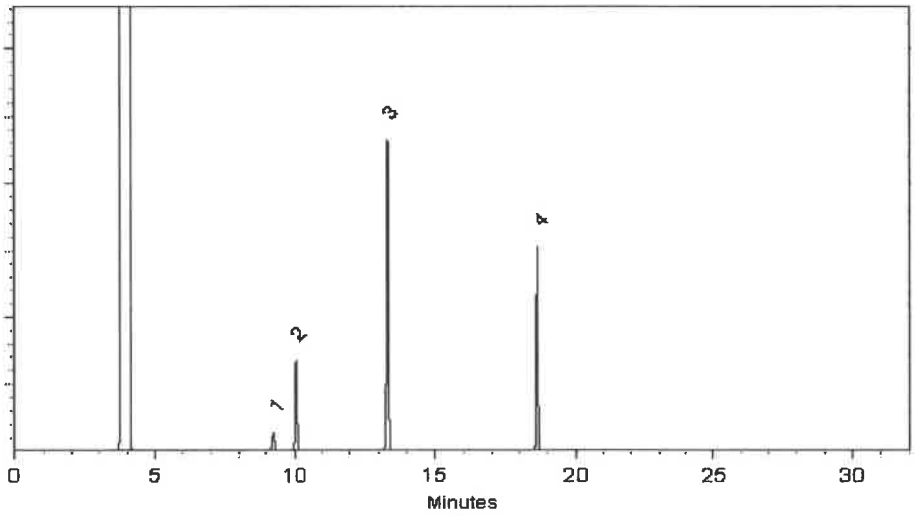
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Michael J Maye

Date Mixed: 21-Nov-2017 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 22-Nov-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

MV-568718-D_00016

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Reference Material Producer
Certificate #3222.01

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. : 568718 **Lot No.:** A0139459

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,018.0 µg/mL	+/- 29.1735 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.4354 µg/mL	Unstressed
	Purity 98%			+/- 110.5588 µg/mL	Stressed
2	2-Butanone-d5		1,253.8 µg/mL	+/- 7.2897 µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.8440 µg/mL	Unstressed
	Purity 99%			+/- 27.6244 µg/mL	Stressed
3	Fluorobenzene		250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%			+/- 5.5112 µg/mL	Stressed
4	1,4-Dioxane-d8		5,004.8 µg/mL	+/- 29.0965 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.1519 µg/mL	Unstressed
	Purity 99%			+/- 110.2670 µg/mL	Stressed
5	Chlorobenzene-d5		250.4 µg/mL	+/- 1.4589 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3609 µg/mL	Unstressed
	Purity 99%			+/- 5.5167 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.6 µg/mL	+/- 1.4604 µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.3663 µg/mL	Unstressed
	Purity 99%			+/- 5.5222 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

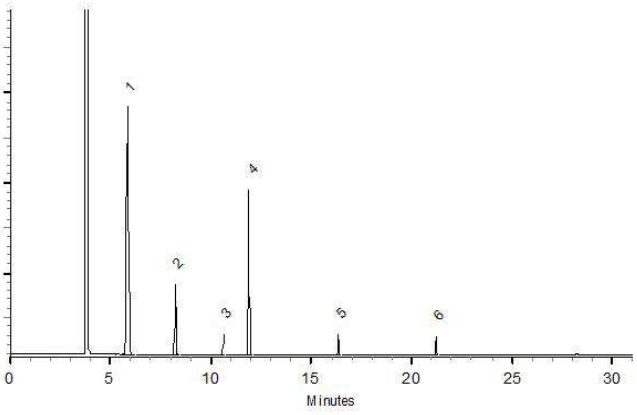
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 09-Jul-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 10-Aug-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-568720.sec_00031

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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. : 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.

Rec'd 4/24/20 GM

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%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

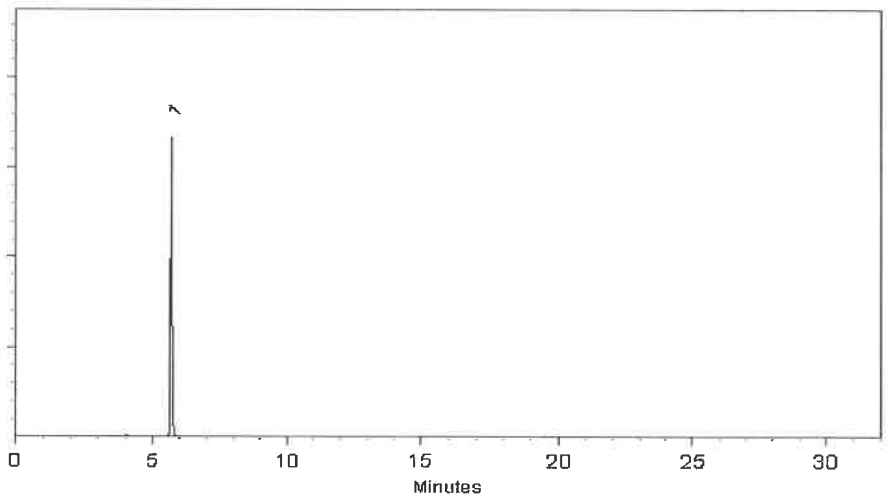
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 30-Oct-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-568720_00033

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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.

Rec'd 4/28/20

GM

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%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

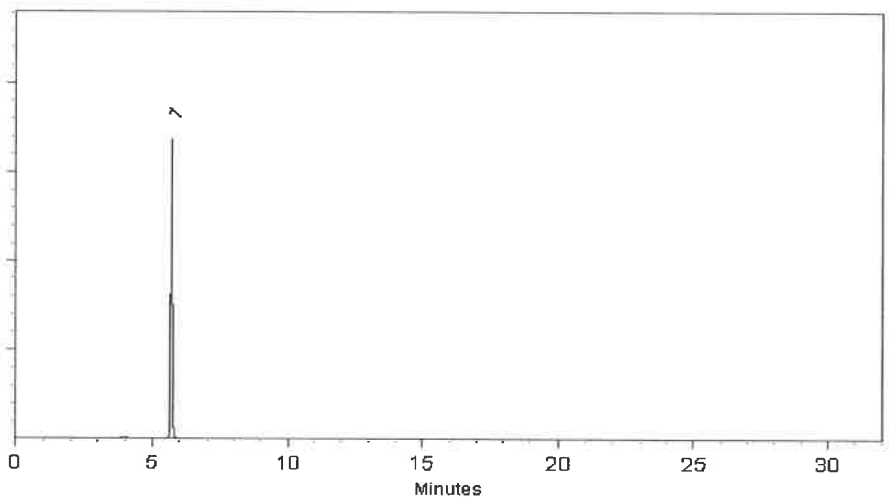
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 31-Oct-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-569721.sec_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. : 569721.SEC **Lot No.:** A0140519

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 : August 31, 2021 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,509.0 µg/mL	+/- 73.2429 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot U13B039)		+/- 754.7732 µg/mL	Unstressed
	Purity 99%		+/- 756.5649 µg/mL	Stressed
2	2-Butanone (MEK)	12,558.0 µg/mL	+/- 73.5299 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 757.7297 µg/mL	Unstressed
	Purity 99%		+/- 759.5285 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,547.0 µg/mL	+/- 73.4654 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 757.0660 µg/mL	Unstressed
	Purity 99%		+/- 758.8632 µg/mL	Stressed
4	2-Hexanone	12,561.0 µg/mL	+/- 73.5474 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 757.9108 µg/mL	Unstressed
	Purity 99%		+/- 759.7099 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

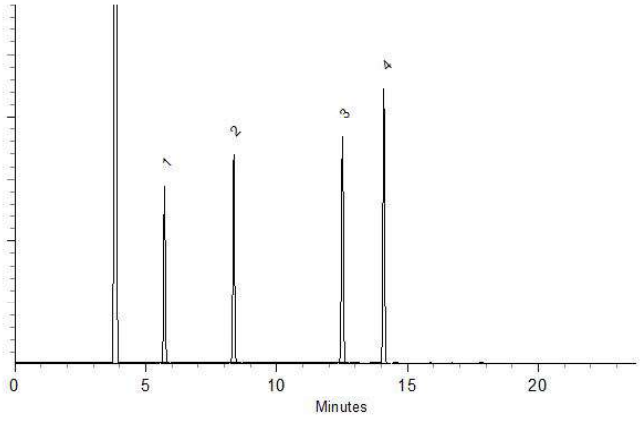
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 09-Aug-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Aug-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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. : 569721 **Lot No.:** A0143988

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, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone		12,500.5 µg/mL	+/- 72.6790 µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBJ7699)		+/- 754.2106 µg/mL	Unstressed
	Purity 99%			+/- 756.0012 µg/mL	Stressed
2	2-Butanone (MEK)		12,501.0 µg/mL	+/- 72.6819 µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 754.2407 µg/mL	Unstressed
	Purity 99%			+/- 756.0314 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,501.5 µg/mL	+/- 72.6848 µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBH8930)		+/- 754.2709 µg/mL	Unstressed
	Purity 99%			+/- 756.0617 µg/mL	Stressed
4	2-Hexanone		12,501.8 µg/mL	+/- 72.6863 µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKCD9048)		+/- 754.2860 µg/mL	Unstressed
	Purity 99%			+/- 756.0768 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

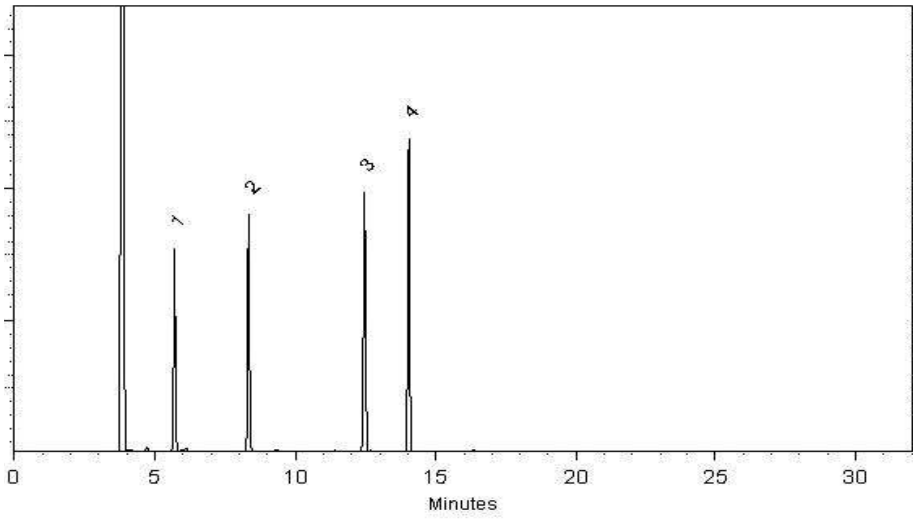
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

F. Joseph Fallon - Mix Technician

Date Mixed: 11-Dec-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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. : 569722.SEC **Lot No.:** A0142594

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)	2,499.3 µg/mL	+/- 25.7724 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24847)		+/- 141.7384 µg/mL	Unstressed
	Purity 99%		+/- 144.9810 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,506.0 µg/mL	+/- 21.8612 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.4482 µg/mL	Unstressed
	Purity 99%		+/- 144.7145 µg/mL	Stressed
3	Vinyl chloride	2,505.4 µg/mL	+/- 25.4396 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 142.0168 µg/mL	Unstressed
	Purity 99%		+/- 145.2689 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 22.0034 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 22331)		+/- 141.1491 µg/mL	Unstressed
	Purity 99%		+/- 144.4071 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,511.9 µg/mL	+/- 23.0453 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 141.9646 µg/mL	Unstressed
	Purity 99%		+/- 145.2346 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,498.5 µg/mL	+/- 23.5866 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 141.3133 µg/mL	Unstressed
	Purity 99%		+/- 144.5633 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,450.0 µg/mL	+/- 14.3780 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7766400)		+/- 137.3830 µg/mL	Unstressed
	Purity 97%		+/- 140.5969 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,502.5	µg/mL	+/-	22.2947	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)			+/-	141.3276	µg/mL	Unstressed
	Purity 99%				+/-	144.5877	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)

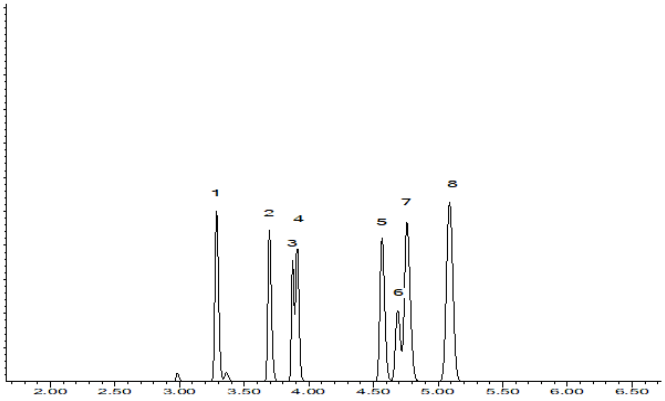
Carrier Gas:
helium-constant pressure 30 psi

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.

Brandon Reish - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 05-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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.:** 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)	2,500.9 µg/mL	+/- 17.2023 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5234 µg/mL	Unstressed
	Purity 99%		+/- 143.7976 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.4 µg/mL	+/- 17.0791 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBJ6334)		+/- 140.4796 µg/mL	Unstressed
	Purity 99%		+/- 143.7534 µg/mL	Stressed
3	Vinyl chloride	2,500.4 µg/mL	+/- 16.5693 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00012557)		+/- 140.4224 µg/mL	Unstressed
	Purity 99%		+/- 143.6977 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 17.0785 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.4623 µg/mL	Unstressed
	Purity 99%		+/- 143.7357 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.9 µg/mL	+/- 16.5511 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4457 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,502.0 µg/mL	+/- 16.0409 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.4480 µg/mL	Unstressed
	Purity 99%		+/- 143.7268 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 7766400)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	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)

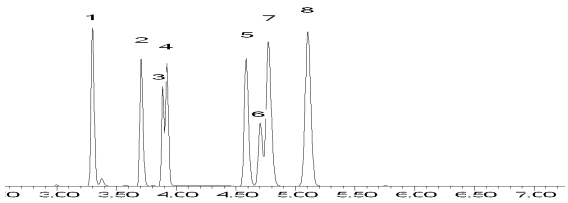
Carrier Gas:
helium-constant pressure 30 psi

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-569722_00012

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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

Rec'd 6/2/20 Gm

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 µg/mL +/- 140.5076 µg/mL +/- 143.7858 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 µg/mL +/- 140.4038 µg/mL +/- 143.6799 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 µg/mL +/- 140.4890 µg/mL +/- 143.7623 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 µg/mL +/- 140.5681 µg/mL +/- 143.8406 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 µg/mL +/- 140.4450 µg/mL +/- 143.7217 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 µg/mL +/- 140.5555 µg/mL +/- 143.8274 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **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)		2,501.4	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)

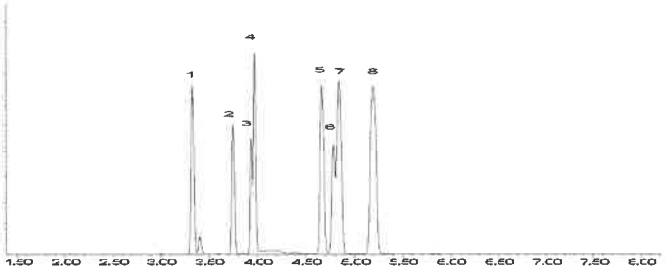
Carrier Gas:
helium-constant pressure 30 psi

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

MV-569723_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. : 569723 **Lot No.:** A0142584

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 : October 31, 2021 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,506.0 µg/mL	+/- 14.7066 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.6910 µg/mL	Unstressed
	Purity 99%		+/- 55.2497 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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

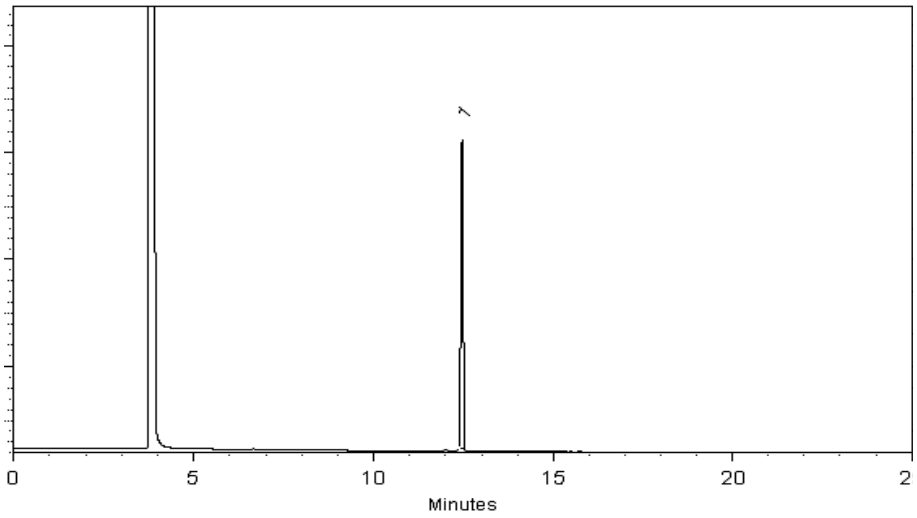
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 24-Oct-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Oct-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-569724.sec_00027

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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. : 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

Rec'd 4/24/20

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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

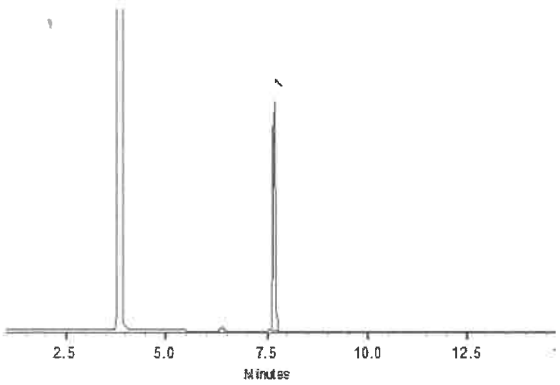
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Lane Kibe - Mix Technician

Date Mixed: 11-Mar-2020 **Balance:** 1128342314

Feng-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015 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. : 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

Rec'd 4/24/20 GM

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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

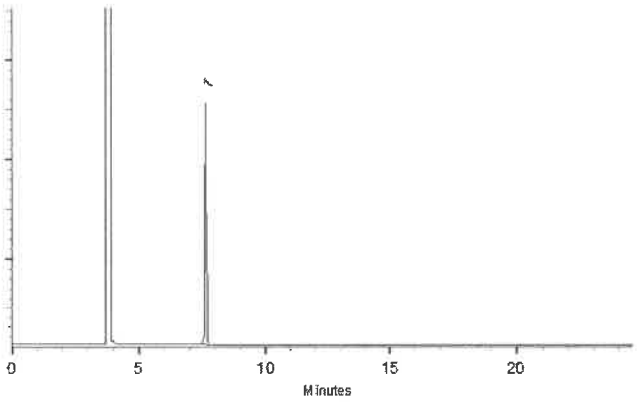
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 10-Jan-2020 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Jan-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-569727_00010

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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. : 569727 **Lot No.:** A0146650

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Rec'd 4/28/20

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2022 **Storage:** 10°C or colder

GM

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 MKCD4357)		+/- 1,508.8223	µg/mL	Unstressed
	Purity 99%			+/- 1,512.4040	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

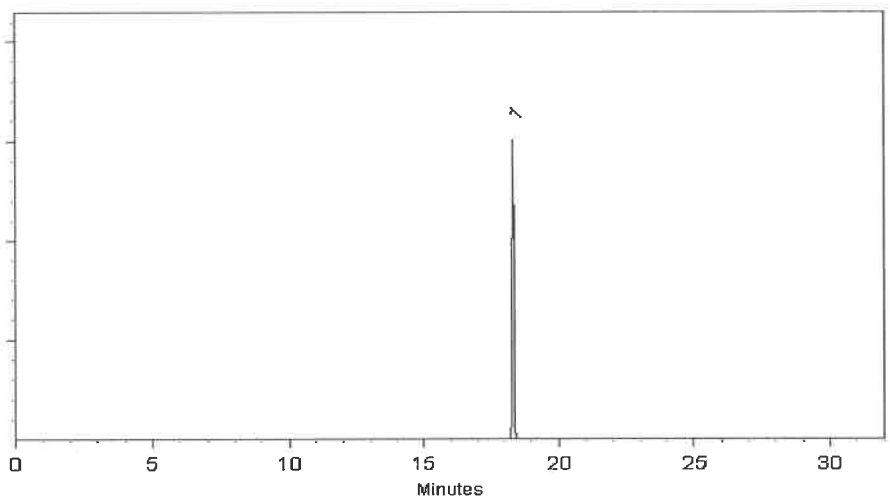
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 05-Mar-2019 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 07-Mar-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

mv-570808.sec_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. : 570808.SEC **Lot No.:** A0143097

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, 2020 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol)	25,047.5 µg/mL	+/- 146.6586 µg/mL	Gravimetric
	CAS # 67-63-0.SEC (Lot NWVYK)		+/- 1,239.1674 µg/mL	Unstressed
	Purity 99%		+/- 1,269.9744 µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene)	2,509.0 µg/mL	+/- 14.7242 µg/mL	Gravimetric
	CAS # 126-99-8 * (Lot 180921JLM)		+/- 124.1310 µg/mL	Unstressed
	Purity 99%		+/- 127.2168 µg/mL	Stressed
3	Methacrylonitrile	25,031.0 µg/mL	+/- 146.5620 µg/mL	Gravimetric
	CAS # 126-98-7 * (Lot 1012014)		+/- 1,238.3511 µg/mL	Unstressed
	Purity 99%		+/- 1,269.1379 µg/mL	Stressed
4	2,2,4-Trimethylpentane (Isooctane)	2,513.5 µg/mL	+/- 14.7506 µg/mL	Gravimetric
	CAS # 540-84-1.SEC (Lot 4597900)		+/- 124.3536 µg/mL	Unstressed
	Purity 99%		+/- 127.4450 µg/mL	Stressed
5	1-Butanol	62,799.0 µg/mL	+/- 367.6830 µg/mL	Gravimetric
	CAS # 71-36-3.SEC (Lot TOY3I)		+/- 3,106.8338 µg/mL	Unstressed
	Purity 99%		+/- 3,184.0731 µg/mL	Stressed
6	2-Nitropropane	5,003.9 µg/mL	+/- 29.2988 µg/mL	Gravimetric
	CAS # 79-46-9.SEC (Lot 6M3NJ)		+/- 247.5555 µg/mL	Unstressed
	Purity 98%		+/- 253.7099 µg/mL	Stressed
7	1-Chlorohexane	2,501.9 µg/mL	+/- 14.6828 µg/mL	Gravimetric
	CAS # 544-10-5.SEC (Lot 3890000)		+/- 123.7817 µg/mL	Unstressed
	Purity 98%		+/- 126.8588 µg/mL	Stressed

8	1,2,3-Trimethylbenzene		2,512.3	µg/mL	+/-	14.7436	µg/mL	Gravimetric
	CAS # 526-73-8.SEC	(Lot 7754800)			+/-	124.2942	µg/mL	Unstressed
	Purity 97%				+/-	127.3841	µg/mL	Stressed
9	Benzyl chloride		2,501.0	µg/mL	+/-	14.6773	µg/mL	Gravimetric
	CAS # 100-44-7.SEC	(Lot H29N03)			+/-	123.7352	µg/mL	Unstressed
	Purity 99%				+/-	126.8112	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,506.5	µg/mL	+/-	14.7095	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	124.0073	µg/mL	Unstressed
	Purity 99%				+/-	127.0900	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.**

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

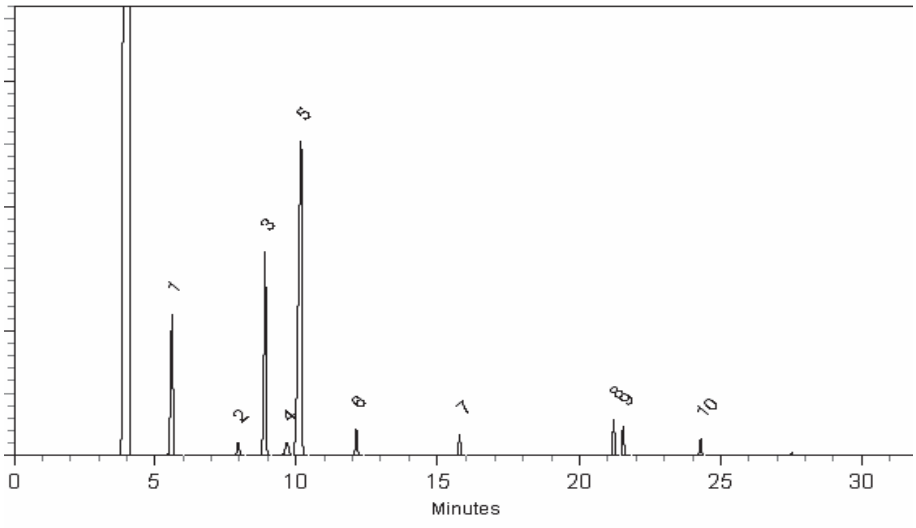
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 08-Nov-2018 **Balance:** 1128342314

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 13-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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. : 570808 **Lot No.:** A0145375

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 : 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	2-Propanol (isopropanol)	25,151.3 µg/mL	+/- 147.2666 µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBH7211)		+/- 1,244.3044 µg/mL	Unstressed
	Purity 99%		+/- 1,275.2391 µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene)	2,508.0 µg/mL	+/- 14.7183 µg/mL	Gravimetric
	CAS # 126-99-8 (Lot 180921JLM)		+/- 124.0815 µg/mL	Unstressed
	Purity 99%		+/- 127.1661 µg/mL	Stressed
3	Methacrylonitrile	25,161.0 µg/mL	+/- 147.3232 µg/mL	Gravimetric
	CAS # 126-98-7 (Lot 1012014)		+/- 1,244.7826 µg/mL	Unstressed
	Purity 99%		+/- 1,275.7292 µg/mL	Stressed
4	2,2,4-Trimethylpentane (isooctane)	2,510.3 µg/mL	+/- 14.7320 µg/mL	Gravimetric
	CAS # 540-84-1 (Lot SHBF8066V)		+/- 124.1969 µg/mL	Unstressed
	Purity 99%		+/- 127.2844 µg/mL	Stressed
5	1-Butanol	62,638.0 µg/mL	+/- 366.7403 µg/mL	Gravimetric
	CAS # 71-36-3 (Lot SHBK1866)		+/- 3,098.8687 µg/mL	Unstressed
	Purity 99%		+/- 3,175.9100 µg/mL	Stressed
6	2-Nitropropane	5,032.0 µg/mL	+/- 29.4633 µg/mL	Gravimetric
	CAS # 79-46-9 (Lot BCBL0537V)		+/- 248.9453 µg/mL	Unstressed
	Purity 98%		+/- 255.1343 µg/mL	Stressed
7	1-Chlorohexane	2,510.4 µg/mL	+/- 14.7326 µg/mL	Gravimetric
	CAS # 544-10-5 (Lot 05107LK)		+/- 124.2019 µg/mL	Unstressed
	Purity 98%		+/- 127.2895 µg/mL	Stressed

8	1,2,3-Trimethylbenzene		2,514.7	µg/mL	+/-	14.7576	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-12)			+/-	124.4120	µg/mL	Unstressed
	Purity 98%				+/-	127.5048	µg/mL	Stressed
9	Benzyl chloride		2,516.7	µg/mL	+/-	14.7692	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBB7346V)			+/-	124.5103	µg/mL	Unstressed
	Purity 99%				+/-	127.6055	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,513.3	µg/mL	+/-	14.7496	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	124.3454	µg/mL	Unstressed
	Purity 99%				+/-	127.4365	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

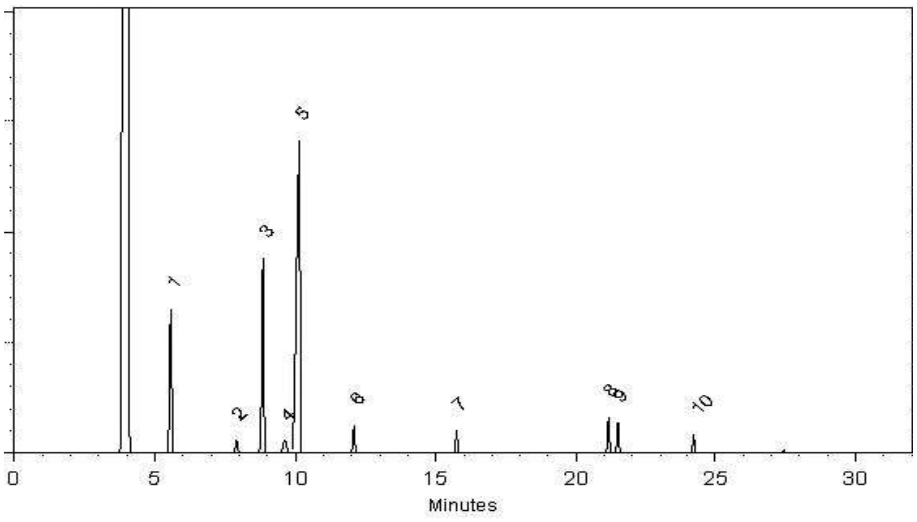
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Cheryl Graham - Mix Technician

Date Mixed: 27-Jan-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 29-Jan-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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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. : 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

Rec'd 4/23/20

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 +/- 1,243.4963 +/- 1,274.4109	µg/mL µg/mL 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 +/- 124.8483 +/- 127.9520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 (Lot 1012019) **Purity** 99%	25,164.0 µg/mL	+/- 147.3408 +/- 1,244.9310 +/- 1,275.8813	µg/mL µg/mL 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 +/- 124.2794 +/- 127.3689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3 (Lot SHBK4786) **Purity** 99%	63,024.5 µg/mL	+/- 369.0033 +/- 3,117.9899 +/- 3,195.5065	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9 (Lot BCBL0537V) **Purity** 98%	5,009.8 µg/mL	+/- 29.3332 +/- 247.8464 +/- 254.0081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5 (Lot BCBS3368V) **Purity** 98%	2,516.6 µg/mL	+/- 14.7691 +/- 124.5090 +/- 127.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene		2,510.3	µg/mL	+/-	14.7317	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-12)			+/-	124.1938	µg/mL	Unstressed
	Purity 98%				+/-	127.2812	µg/mL	Stressed
9	Benzyl chloride		2,516.0	µg/mL	+/-	14.7653	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBH2102V)			+/-	124.4773	µg/mL	Unstressed
	Purity 99%				+/-	127.5717	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,523.0	µg/mL	+/-	14.8064	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	124.8236	µg/mL	Unstressed
	Purity 99%				+/-	127.9267	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

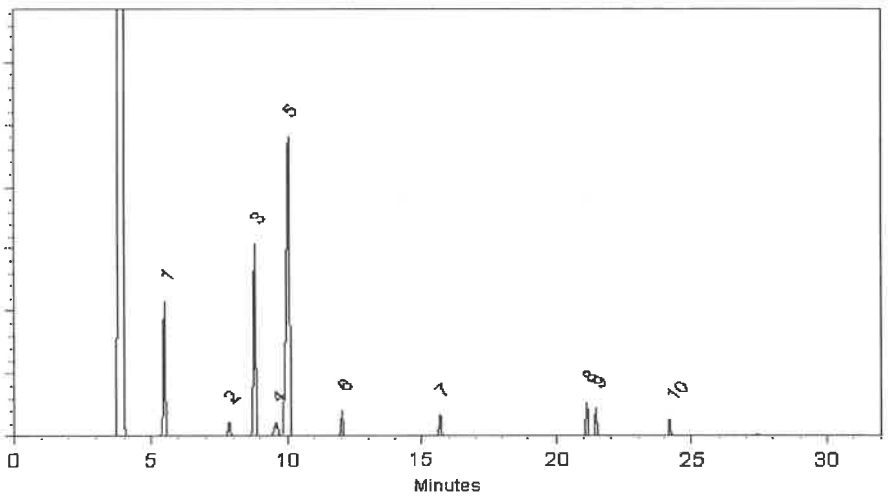
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 Lo - QC Analyst

Date Passed: 07-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

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mv-570809.sec_00004

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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.SEC **Lot No.:** A0142413

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, 2020 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethyl acetate	5,017.5 µg/mL	+/- 29.3786 µg/mL	Gravimetric
	CAS # 141-78-6.SEC (Lot C386A-GG)		+/- 302.7480 µg/mL	Unstressed
	Purity 99%		+/- 303.4666 µg/mL	Stressed
2	Ethyl acrylate	2,501.5 µg/mL	+/- 14.6802 µg/mL	Gravimetric
	CAS # 140-88-5.SEC (Lot YIFAM-TG)		+/- 150.9398 µg/mL	Unstressed
	Purity 99%		+/- 151.2981 µg/mL	Stressed
3	Methyl methacrylate	5,014.5 µg/mL	+/- 29.3610 µg/mL	Gravimetric
	CAS # 80-62-6.SEC (Lot G01X021)		+/- 302.5670 µg/mL	Unstressed
	Purity 99%		+/- 303.2852 µg/mL	Stressed
4	Butyl acetate	2,502.5 µg/mL	+/- 14.6861 µg/mL	Gravimetric
	CAS # 123-86-4.SEC (Lot V2L2G-GT)		+/- 151.0001 µg/mL	Unstressed
	Purity 99%		+/- 151.3585 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

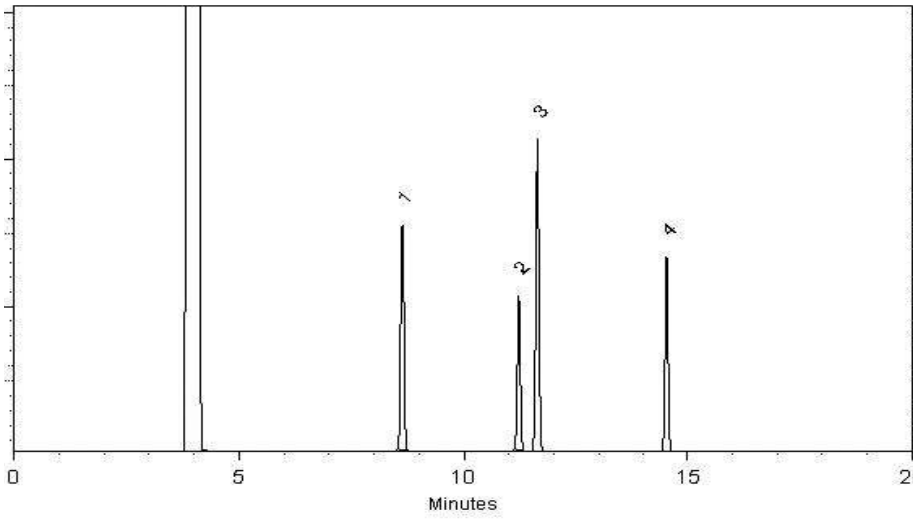
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Matt Fragassi - Mix Technician

Date Mixed: 17-Oct-2018 **Balance:** 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Oct-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Reference Material Producer
Certificate #3222.01

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. : 570809 **Lot No.:** A0143198

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 : May 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate		5,022.5 µg/mL	+/- 29.4078 µg/mL		Gravimetric
	CAS # 141-78-6	(Lot SHBJ7347)		+/- 303.0497 µg/mL		Unstressed
	Purity 99%			+/- 303.7691 µg/mL		Stressed
2	Ethyl acrylate		2,514.0 µg/mL	+/- 14.7536 µg/mL		Gravimetric
	CAS # 140-88-5	(Lot 10129902)		+/- 151.6940 µg/mL		Unstressed
	Purity 99%			+/- 152.0541 µg/mL		Stressed
3	Methyl methacrylate		5,019.5 µg/mL	+/- 29.3903 µg/mL		Gravimetric
	CAS # 80-62-6	(Lot MKBH4379V)		+/- 302.8686 µg/mL		Unstressed
	Purity 99%			+/- 303.5876 µg/mL		Stressed
4	Butyl acetate		2,507.0 µg/mL	+/- 14.7125 µg/mL		Gravimetric
	CAS # 123-86-4	(Lot SHBJ2076)		+/- 151.2716 µg/mL		Unstressed
	Purity 99%			+/- 151.6307 µg/mL		Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

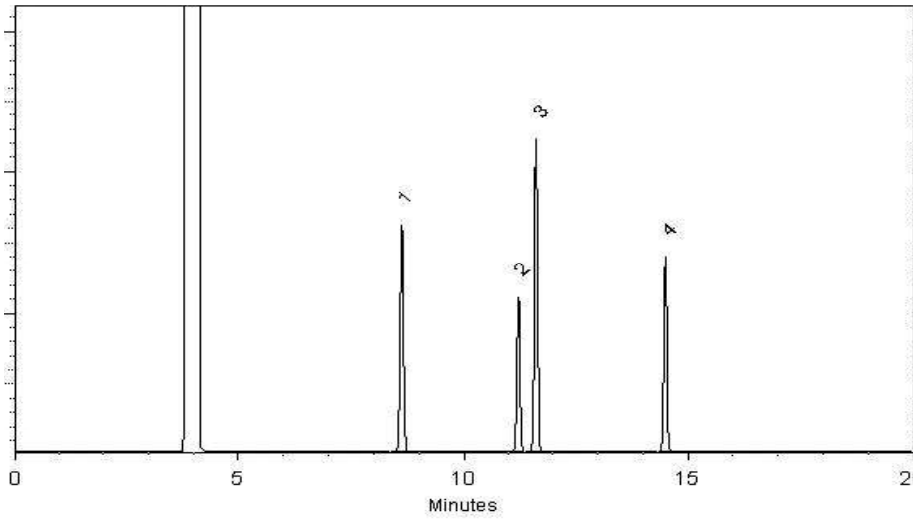
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Rebecca Sawyer

Tyler Brown - Operations Tech-ARM QC

Date Mixed: 13-Nov-2018 **Balance:** B707717271

Date Passed: 15-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

mv-570809_00007

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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.

Rec'd 4/23/20

GM

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%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

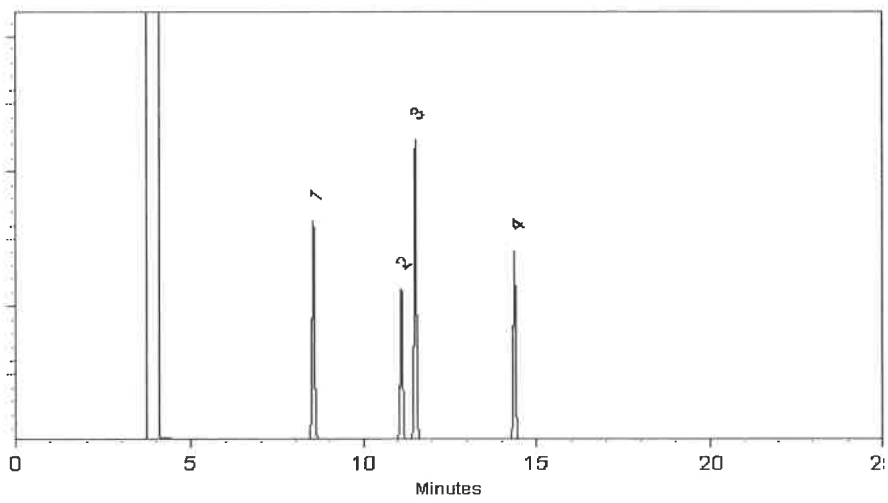
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 - Mix Technician

Date Mixed: 22-Dec-2019 **Balance:** B442140311

Tyler Brown - Operations Tech-ARM QC

Date Passed: 26-Dec-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-571992.sec_00005

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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.:** 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

Rec'd 4/24/20

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

GM

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)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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)

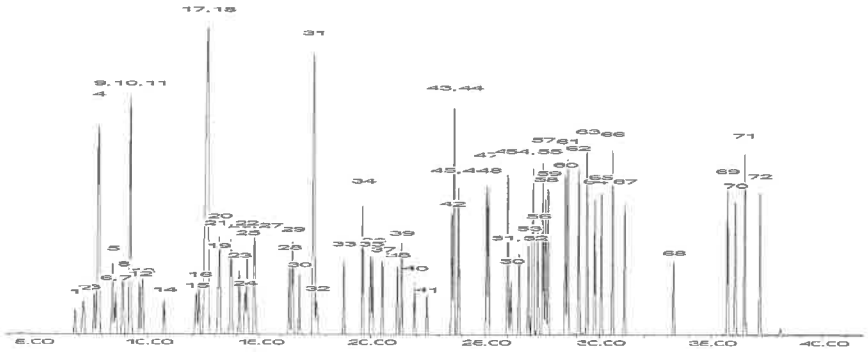
Carrier Gas:
helium-constant pressure 30 psi

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

MV-571992_00004

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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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 **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

Received 8/30/19 GM

4x/mL

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBJ5713)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.6 µg/mL	+/- 14.5447 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/- 150.9341 µg/mL	Unstressed
	Purity 99%		+/- 151.2925 µg/mL	Stressed
3	1,1-dichloroethene	2,501.9 µg/mL	+/- 14.5461 µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/- 150.9492 µg/mL	Unstressed
	Purity 99%		+/- 151.3076 µg/mL	Stressed
4	tert-Butanol (TBA)	25,008.1 µg/mL	+/- 145.3918 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBJ9404)		+/- 1,508.8503 µg/mL	Unstressed
	Purity 99%		+/- 1,512.4325 µg/mL	Stressed
5	Methyl acetate	5,000.8 µg/mL	+/- 29.0748 µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/- 301.7174 µg/mL	Unstressed
	Purity 99%		+/- 302.4337 µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBH4362V)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,502.0 µg/mL	+/- 14.5468 µg/mL	Gravimetric
	CAS # 107-05-1 (Lot WXBB7852V)		+/- 150.9567 µg/mL	Unstressed
	Purity 99%		+/- 151.3151 µg/mL	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		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,499.9	µg/mL	+/-	14.5348	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBH5027V)			+/-	150.8320	µg/mL	Unstressed
	Purity 97%				+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBV3556V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	151.0095	µg/mL	Unstressed
	Purity 99%				+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
71	Naphthalene		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	151.0020	µg/mL	Unstressed
	Purity 99%				+/-	151.3605	µg/mL	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)

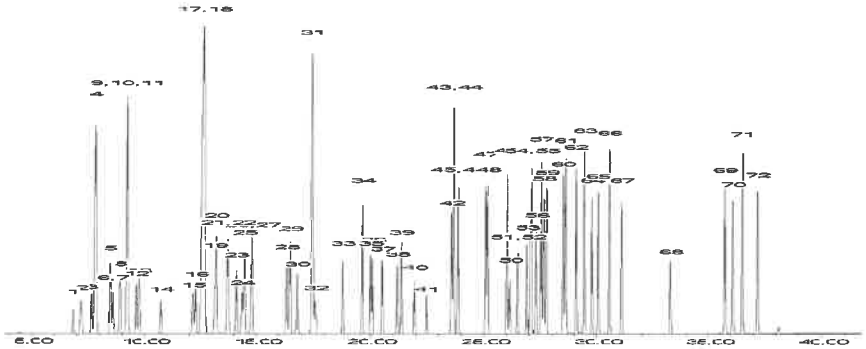
Carrier Gas:
helium-constant pressure 30 psi

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

mv-571993.sec_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. : 571993.SEC **Lot No.:** A0139245

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 : June 30, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile	25,059.0 µg/mL	+/- 146.7260 µg/mL	Gravimetric
	CAS # 75-05-8.SEC (Lot 7KGDA)		+/- 1,239.7364 µg/mL	Unstressed
	Purity 99%		+/- 1,270.5575 µg/mL	Stressed
2	Diisopropyl ether (DIPE)	2,518.6 µg/mL	+/- 14.7806 µg/mL	Gravimetric
	CAS # 108-20-3.SEC (Lot LL7TN-SH)		+/- 124.6059 µg/mL	Unstressed
	Purity 98%		+/- 127.7036 µg/mL	Stressed
3	Ethyl-tert-butyl ether (ETBE)	2,508.0 µg/mL	+/- 14.7183 µg/mL	Gravimetric
	CAS # 637-92-3.SEC (Lot MHBJG-QK)		+/- 124.0815 µg/mL	Unstressed
	Purity 99%		+/- 127.1661 µg/mL	Stressed
4	Propionitrile	25,069.0 µg/mL	+/- 146.7845 µg/mL	Gravimetric
	CAS # 107-12-0.SEC (Lot SASVN)		+/- 1,240.2311 µg/mL	Unstressed
	Purity 99%		+/- 1,271.0646 µg/mL	Stressed
5	tert-Amyl alcohol	25,008.0 µg/mL	+/- 146.4273 µg/mL	Gravimetric
	CAS # 75-85-4.SEC (Lot MMGO1)		+/- 1,237.2133 µg/mL	Unstressed
	Purity 99%		+/- 1,267.9717 µg/mL	Stressed
6	tert-Amyl methyl ether (TAME)	2,501.0 µg/mL	+/- 14.6770 µg/mL	Gravimetric
	CAS # 994-05-8.SEC (Lot 7375800)		+/- 123.7332 µg/mL	Unstressed
	Purity 98%		+/- 126.8091 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

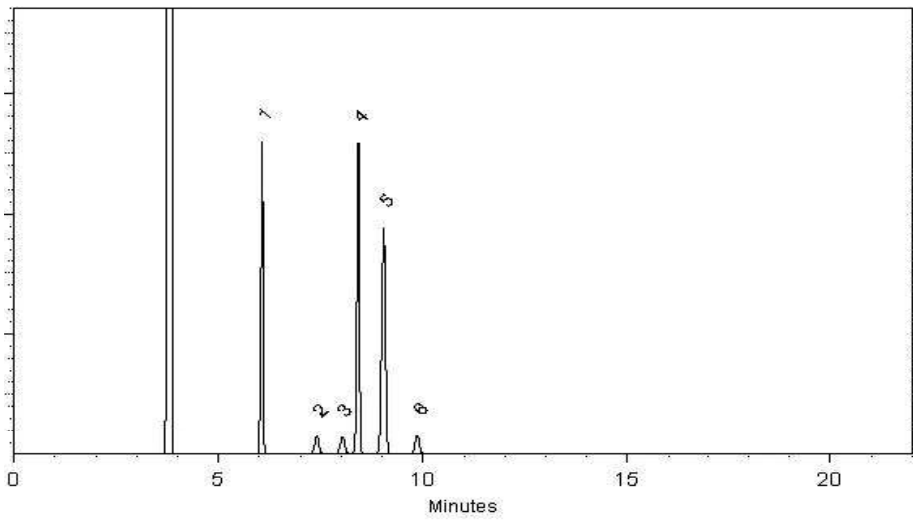
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 26-Jun-2018 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 29-Jun-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate #3222.01

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. : 571993 **Lot No.:** A0144915

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 : January 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile	25,249.0 µg/mL	+/- 147.8384 µg/mL	Gravimetric
	CAS # 75-05-8 (Lot SHBH6233)		+/- 1,249.1362 µg/mL	Unstressed
	Purity 99%		+/- 1,280.1910 µg/mL	Stressed
2	Diisopropyl ether (DIPE)	2,524.3 µg/mL	+/- 14.8142 µg/mL	Gravimetric
	CAS # 108-20-3 (Lot SHBH1927V)		+/- 124.8896 µg/mL	Unstressed
	Purity 99%		+/- 127.9943 µg/mL	Stressed
3	Ethyl-tert-butyl ether (ETBE)	2,524.3 µg/mL	+/- 14.8142 µg/mL	Gravimetric
	CAS # 637-92-3 (Lot MKCC2702)		+/- 124.8896 µg/mL	Unstressed
	Purity 99%		+/- 127.9943 µg/mL	Stressed
4	Propionitrile	25,249.7 µg/mL	+/- 147.8424 µg/mL	Gravimetric
	CAS # 107-12-0 (Lot BCBV8545)		+/- 1,249.1692 µg/mL	Unstressed
	Purity 99%		+/- 1,280.2248 µg/mL	Stressed
5	tert-Amyl alcohol	25,249.0 µg/mL	+/- 147.8384 µg/mL	Gravimetric
	CAS # 75-85-4 (Lot STBG1140V)		+/- 1,249.1362 µg/mL	Unstressed
	Purity 99%		+/- 1,280.1910 µg/mL	Stressed
6	tert-Amyl methyl ether (TAME)	2,523.7 µg/mL	+/- 14.8103 µg/mL	Gravimetric
	CAS # 994-05-8 (Lot HMBF8365V)		+/- 124.8566 µg/mL	Unstressed
	Purity 99%		+/- 127.9605 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

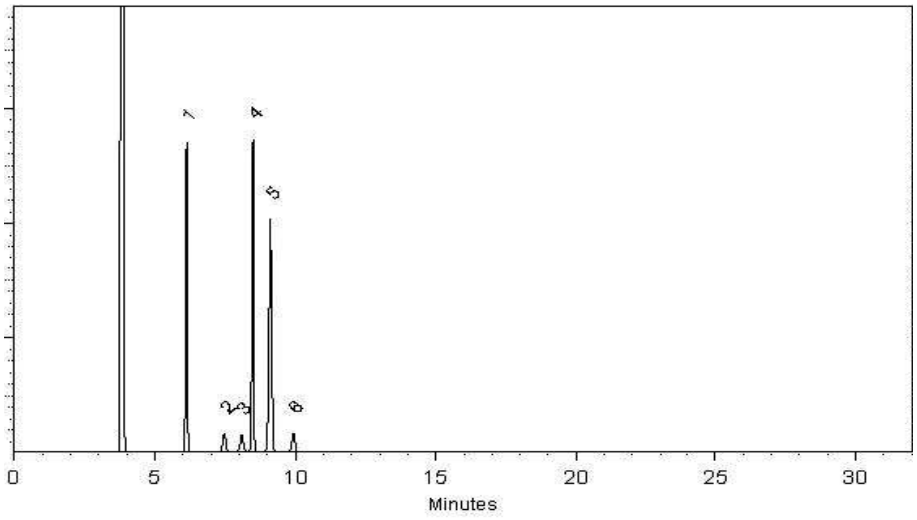
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 14-Jan-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jan-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

mv-571994_00003

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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. : 571994 **Lot No.:** A0143139

Description : 8260 Ethanol Standard

8260 Ethanol Standard 100,000µg/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	Ethanol	100,011.5 µg/mL	+/- 585.5591 µg/mL	Gravimetric
	CAS # 64-17-5 (Lot SHBJ0994)		+/- 2,142.3707 µg/mL	Unstressed
	Purity 99%		+/- 2,204.5894 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

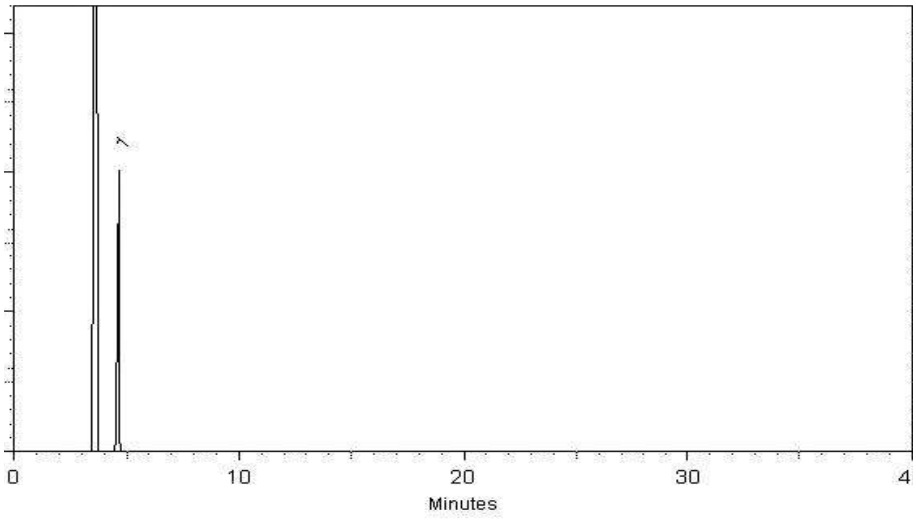
Carrier Gas:
hydrogen-constant pressure 11 psi.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/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.

F. Joseph Fallon - Mix Technician

Date Mixed: 12-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-CUS17739_00005

Agilent

Certificate of Analysis
ISO 17034

Custom Standard

Product Number: CUS-17739 **Page:** 1 of 1

Lot Number: 0006503344 **Lot Issue Date:** 12-Nov-2019 **Expiration Date:** 31-Dec-2021

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-chlorohexane	000544-10-5	RM12893	1001 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30126 ± 151 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

12/11/19

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ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

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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. : 570812 **Lot No.:** A0143593

Description : 8260 IS/Surrogate Mix (2016)

8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot CD-107) **Purity** 98%	5,000.1 µg/mL	+/- 29.0694 µg/mL +/- 107.0521 µg/mL +/- 110.1643 µg/mL	Gravimetric Unstressed Stressed
2	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012017) **Purity** 99%	250.2 µg/mL	+/- 1.4580 µg/mL +/- 5.3577 µg/mL +/- 5.5134 µg/mL	Gravimetric Unstressed Stressed
3	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	250.3 µg/mL	+/- 1.4584 µg/mL +/- 5.3592 µg/mL +/- 5.5149 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,000.5 µg/mL	+/- 29.0716 µg/mL +/- 107.0602 µg/mL +/- 110.1726 µg/mL	Gravimetric Unstressed Stressed
5	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	250.1 µg/mL	+/- 1.4573 µg/mL +/- 5.3549 µg/mL +/- 5.5105 µg/mL	Gravimetric Unstressed Stressed
6	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	250.1 µg/mL	+/- 1.4575 µg/mL +/- 5.3556 µg/mL +/- 5.5112 µg/mL	Gravimetric Unstressed Stressed
7	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.5 µg/mL	+/- 1.4600 µg/mL +/- 5.3649 µg/mL +/- 5.5208 µg/mL	Gravimetric Unstressed Stressed

8	1-Bromo-4-fluorobenzene (BFB)		250.1	µg/mL	+/-	1.4575	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)			+/-	5.3556	µg/mL	Unstressed
	Purity 99%				+/-	5.5112	µg/mL	Stressed
9	1,4-Dichlorobenzene-d4		250.2	µg/mL	+/-	1.4580	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/-	5.3577	µg/mL	Unstressed
	Purity 99%				+/-	5.5134	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

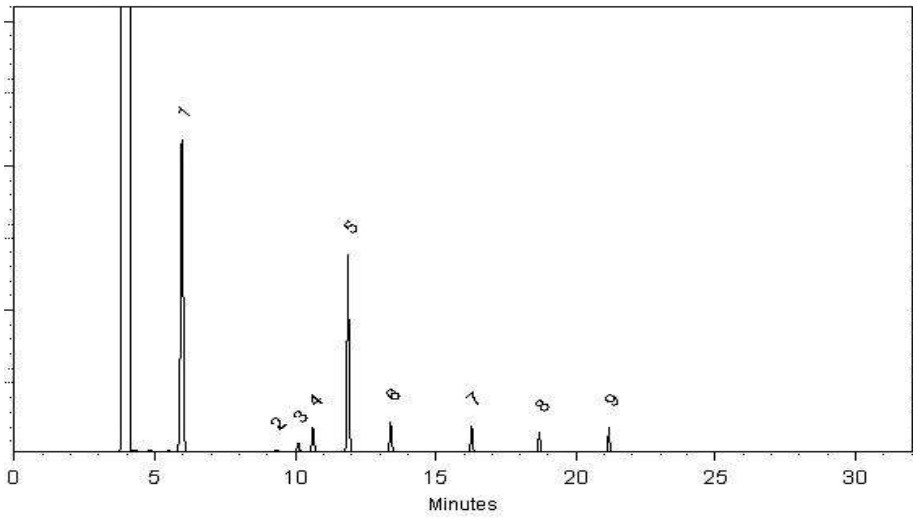
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 29-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

mv-VO-TAOH-5_00009

SPEXertificate®
Certificate of Reference Material

ACCREDITED
Reference Materials Producer
Cert #2495.01

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: VO-TAOH-5 **Lot No.** EN191217018

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 12-18-2019
Expiration Date: 6-15-2020

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	49973 µg/mL	± 1799 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	1013 µg/mL	± 36 µg/mL
Propylene oxide	75-56-9	50000 µg/mL	99%	49937 µg/mL	± 1798 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	990 µg/mL	± 36 µg/mL

Rec'd 1/15/20

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 12-18-2019

Certifying Officer: Shannon Mace
Shannon Macieira, Operations Manager

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Report of Certification

Catalog Number: VO-TAOH-5 **Lot No.** EN191217018

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 12-18-2019

Expiration Date: 6-15-2020

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS) and ISO 17025 (accredited by A2LA), and ISO 17034 (accredited by A2LA) quality system consistent with the following standards:

- ISO 9001: Quality management systems - Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials - Selected terms and definitions
- ISO Guide 31: Reference Materials - Contents of certificates and lables
- ISO Guide 35: Refernece Materials - General and Statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement - Third Edition
- NIST Technical Note 1297

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a freezer (-35°C to -10°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is stored under the laboratory specified conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking. prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Phone: 1-732-549-7144 • Fax 1-732-603-9647

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MUNI-WELL-14-20200624	280-138098-1	100	96	97	96
MUNI-WELL-33-20200624	280-138098-2	100	94	97	98
RW-2172H-20200625	280-138098-3	99	95	98	95
RW-2203H-20200625	280-138098-4	100	96	99	93
RW-2213F-20200625	280-138098-5	100	95	98	96
RW-2613M-20200625	280-138098-6	101	95	97	96
RW-7091R-20200624	280-138098-7	99	95	99	99
RW-7505P-20200624	280-138098-8	100	95	99	97
RW-7549P-20200624	280-138098-9	100	95	99	98
RW-7588P-20200624	280-138098-10	101	95	99	97
RW-8209P-20200625	280-138098-11	101	96	98	97
EB-00-20200625	280-138098-12	101	95	100	97
EB-01-20200625	280-138098-13	99	94	99	98
TB-02-20200626	280-138098-14	101	96	97	97
RW-2140H-20200626	280-138098-15	101	98	98	98
MW-116S-20200626	280-138098-16	100	96	99	97
EB-02-20200626	280-138098-17	100	95	98	98
	MB 280-500875/9	100	95	98	98
	LCS 280-500875/4	100	93	97	97
	LCS 280-500875/6	100	94	96	97
	LCSD 280-500875/5	100	94	97	97
	LCSD 280-500875/7	101	96	97	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2973.D

Lab ID: LCS 280-500875/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	96.5	97	39-156	
Acrolein	247	236	96	36-147	
Acrylonitrile	250	246	98	56-135	
Benzene	25.0	24.3	97	65-135	
Chlorobromomethane	25.0	24.9	100	65-135	
Dichlorobromomethane	25.0	24.9	100	65-135	
Bromoform	25.0	26.8	107	62-135	
Bromomethane	25.0	30.9	124	45-135	
2-Butanone (MEK)	100	99.1	99	44-177	
Carbon disulfide	25.0	27.9	112	55-143	
Carbon tetrachloride	25.0	25.8	103	65-135	
Chlorobenzene	25.0	24.2	97	65-135	
Chlorodibromomethane	25.0	26.1	104	65-135	
Chloroethane	25.0	28.5	114	46-136	
Chloroform	25.0	23.9	95	65-135	
Chloromethane	25.0	29.2	117	34-145	
Allyl chloride	25.0	25.6	102	50-135	
1,2-Dibromo-3-Chloropropane	25.0	27.1	108	57-135	
Dibromomethane	25.0	24.4	98	65-135	
1,2-Dichlorobenzene	25.0	23.6	94	65-135	
1,3-Dichlorobenzene	25.0	24.9	99	65-135	
1,4-Dichlorobenzene	25.0	24.8	99	65-135	
trans-1,4-Dichloro-2-butene	25.0	24.0	96	53-135	
Dichlorodifluoromethane	25.0	36.9	148	43-142	*
1,1-Dichloroethane	25.0	24.7	99	65-135	
1,2-Dichloroethane	25.0	23.8	95	65-135	
cis-1,2-Dichloroethene	25.0	25.0	100	65-135	
trans-1,2-Dichloroethene	25.0	24.9	100	65-135	
1,1-Dichloroethene	25.0	26.9	108	65-136	
1,2-Dichloropropane	25.0	24.9	99	64-135	
1,3-Dichloropropane	25.0	23.6	95	64-135	
2,2-Dichloropropane	25.0	27.0	108	65-135	
cis-1,3-Dichloropropene	25.0	25.5	102	65-135	
trans-1,3-Dichloropropene	25.0	24.1	97	65-135	
1,1-Dichloropropene	25.0	24.6	98	65-135	
Ethylbenzene	25.0	24.5	98	65-135	
Ethyl methacrylate	25.0	25.7	103	50-135	
2-Hexanone	100	105	105	57-139	
Iodomethane	25.0	20.5	82	65-142	
Isobutyl alcohol	625	656	105	55-135	
Methylene Chloride	25.0	26.1	104	54-141	
4-Methyl-2-pentanone (MIBK)	100	103	103	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2973.D

Lab ID: LCS 280-500875/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	25.4	102	65-135	
1,1,1,2-Tetrachloroethane	25.0	25.4	101	65-135	
1,1,2,2-Tetrachloroethane	25.0	25.0	100	58-135	
Tetrachloroethene	25.0	25.5	102	65-135	
Toluene	25.0	24.3	97	65-135	
1,2,4-Trichlorobenzene	25.0	24.5	98	58-135	
1,1,1-Trichloroethane	25.0	25.4	102	65-135	
1,1,2-Trichloroethane	25.0	25.1	100	64-135	
Trichloroethene	25.0	23.7	95	65-135	
Trichlorofluoromethane	25.0	25.8	103	53-137	
1,2,3-Trichloropropane	25.0	24.1	96	65-135	
Vinyl acetate	50.0	52.0	104	11-187	
Vinyl chloride	25.0	29.3	117	40-137	
m-Xylene & p-Xylene	25.0	24.3	97	65-135	
o-Xylene	25.0	24.8	99	65-135	
Xylenes, Total	50.0	49.1	98	65-135	
1,2-Dibromoethane	25.0	24.4	98	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2975.D

Lab ID: LCS 280-500875/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	206	82	50-150	
Chloroprene	25.0	22.1	88	50-150	
Methacrylonitrile	250	210	84	50-150	
Methyl methacrylate	50.0	49.6	99	50-150	
Propionitrile	250	225	90	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2974.D

Lab ID: LCSD 280-500875/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	100	94.6	95	2	23	39-156	
Acrolein	247	236	96	0	30	36-147	
Acrylonitrile	250	247	99	1	30	56-135	
Benzene	25.0	23.8	95	2	20	65-135	
Chlorobromomethane	25.0	25.2	101	1	29	65-135	
Dichlorobromomethane	25.0	24.8	99	0	20	65-135	
Bromoform	25.0	26.2	105	2	27	62-135	
Bromomethane	25.0	28.2	113	9	33	45-135	
2-Butanone (MEK)	100	99.0	99	0	32	44-177	
Carbon disulfide	25.0	27.4	110	2	20	55-143	
Carbon tetrachloride	25.0	25.4	102	2	21	65-135	
Chlorobenzene	25.0	23.6	94	2	20	65-135	
Chlorodibromomethane	25.0	25.5	102	2	20	65-135	
Chloroethane	25.0	27.5	110	4	25	46-136	
Chloroform	25.0	23.6	94	1	20	65-135	
Chloromethane	25.0	27.6	111	5	24	34-145	
Allyl chloride	25.0	25.5	102	0	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	27.1	109	0	22	57-135	
Dibromomethane	25.0	24.7	99	1	26	65-135	
1,2-Dichlorobenzene	25.0	23.5	94	0	20	65-135	
1,3-Dichlorobenzene	25.0	24.0	96	3	20	65-135	
1,4-Dichlorobenzene	25.0	24.0	96	3	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	23.8	95	1	25	53-135	
Dichlorodifluoromethane	25.0	35.7	143	3	30	43-142	*
1,1-Dichloroethane	25.0	24.4	97	1	21	65-135	
1,2-Dichloroethane	25.0	24.1	96	1	20	65-135	
cis-1,2-Dichloroethene	25.0	24.7	99	1	20	65-135	
trans-1,2-Dichloroethene	25.0	24.7	99	1	24	65-135	
1,1-Dichloroethene	25.0	26.6	107	1	20	65-136	
1,2-Dichloropropane	25.0	24.6	99	1	20	64-135	
1,3-Dichloropropane	25.0	23.6	95	0	20	64-135	
2,2-Dichloropropane	25.0	26.4	106	2	20	65-135	
cis-1,3-Dichloropropene	25.0	25.1	100	2	26	65-135	
trans-1,3-Dichloropropene	25.0	24.2	97	0	26	65-135	
1,1-Dichloropropene	25.0	23.9	95	3	21	65-135	
Ethylbenzene	25.0	23.7	95	3	20	65-135	
Ethyl methacrylate	25.0	25.5	102	0	30	50-135	
2-Hexanone	100	103	103	2	25	57-139	
Iodomethane	25.0	22.2	89	8	25	65-142	
Isobutyl alcohol	625	646	103	1	30	55-135	
Methylene Chloride	25.0	25.5	102	2	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	102	102	1	22	60-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2974.D

Lab ID: LCSD 280-500875/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	24.6	98	3	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	24.0	96	5	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	24.8	99	1	20	58-135	
Tetrachloroethene	25.0	24.2	97	5	20	65-135	
Toluene	25.0	24.1	96	1	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.0	96	2	25	58-135	
1,1,1-Trichloroethane	25.0	24.8	99	2	20	65-135	
1,1,2-Trichloroethane	25.0	25.3	101	1	27	64-135	
Trichloroethene	25.0	23.9	96	1	20	65-135	
Trichlorofluoromethane	25.0	26.5	106	2	27	53-137	
1,2,3-Trichloropropane	25.0	24.3	97	1	23	65-135	
Vinyl acetate	50.0	51.2	102	1	24	11-187	
Vinyl chloride	25.0	28.2	113	4	24	40-137	
m-Xylene & p-Xylene	25.0	23.8	95	2	20	65-135	
o-Xylene	25.0	24.1	96	3	20	65-135	
Xylenes, Total	50.0	47.9	96	2	20	65-135	
1,2-Dibromoethane	25.0	24.1	96	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2976.D

Lab ID: LCSD 280-500875/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetonitrile	250	230	92	11	30	50-150	
Chloroprene	25.0	22.6	90	2	30	50-150	
Methacrylonitrile	250	221	88	5	30	50-150	
Methyl methacrylate	50.0	48.2	96	3	30	50-150	
Propionitrile	250	243	97	8	30	50-150	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab File ID: P2978.D Lab Sample ID: MB 280-500875/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_P Date Analyzed: 07/02/2020 01:05

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-500875/4	P2973.D	07/01/2020 23:18
	LCSD 280-500875/5	P2974.D	07/01/2020 23:40
	LCS 280-500875/6	P2975.D	07/02/2020 00:01
	LCSD 280-500875/7	P2976.D	07/02/2020 00:22
MUNI-WELL-14-20200624	280-138098-1	P2982.D	07/02/2020 02:30
MUNI-WELL-33-20200624	280-138098-2	P2983.D	07/02/2020 02:51
RW-2172H-20200625	280-138098-3	P2984.D	07/02/2020 03:12
RW-2203H-20200625	280-138098-4	P2985.D	07/02/2020 03:33
RW-2213F-20200625	280-138098-5	P2986.D	07/02/2020 03:55
RW-2613M-20200625	280-138098-6	P2987.D	07/02/2020 04:16
RW-7091R-20200624	280-138098-7	P2988.D	07/02/2020 04:37
RW-7505P-20200624	280-138098-8	P2989.D	07/02/2020 04:58
RW-7549P-20200624	280-138098-9	P2990.D	07/02/2020 05:20
RW-7588P-20200624	280-138098-10	P2991.D	07/02/2020 05:41
RW-8209P-20200625	280-138098-11	P2992.D	07/02/2020 06:02
EB-00-20200625	280-138098-12	P2993.D	07/02/2020 06:23
EB-01-20200625	280-138098-13	P2994.D	07/02/2020 06:44
TB-02-20200626	280-138098-14	P2995.D	07/02/2020 07:05
RW-2140H-20200626	280-138098-15	P2996.D	07/02/2020 07:27
MW-116S-20200626	280-138098-16	P2997.D	07/02/2020 07:48
EB-02-20200626	280-138098-17	P2998.D	07/02/2020 08:09

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab File ID: P7804.D BFB Injection Date: 02/06/2020

Instrument ID: VMS_P BFB Injection Time: 10:25

Analysis Batch No.: 485097

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	71.2	
175	5.0 - 9.0 % of mass 174	5.8	(8.2) 1
176	95.0 - 101.0 % of mass 174	70.1	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.7	(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
	STD005 280-485097/21	P7815.D	02/06/2020	14:40
	STD010 280-485097/22	P7816.D	02/06/2020	15:02
	STD020 280-485097/23	P7817.D	02/06/2020	15:23
	STD10 280-485097/24	P7818.D	02/06/2020	15:44
	STD50 280-485097/25	P7819.D	02/06/2020	16:05
	STD75 280-485097/26	P7820.D	02/06/2020	16:27
	STD100 280-485097/27	P7821.D	02/06/2020	16:48
	STD200 280-485097/28	P7822.D	02/06/2020	17:09
	ICV 280-485097/29	P7824.D	02/06/2020	17:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab File ID: P1658A.D BFB Injection Date: 06/01/2020

Instrument ID: VMS_P BFB Injection Time: 16:26

Analysis Batch No.: 496958

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	50.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	64.2	
175	5.0 - 9.0 % of mass 174	5.3	(8.3) 1
176	95.0 - 101.0 % of mass 174	61.9	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.1	(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
	STD005 280-496958/12	P1658.D	06/01/2020	16:26
	STD010 280-496958/13	P1659.D	06/01/2020	16:47
	STD020 280-496958/14	P1660.D	06/01/2020	17:09
	STD050 280-496958/15	P1661.D	06/01/2020	17:30
	STD10 280-496958/16	P1662.D	06/01/2020	17:51
	STD75 280-496958/18	P1664.D	06/01/2020	18:33
	STD100 280-496958/19	P1665.D	06/01/2020	18:55
	STD200 280-496958/20	P1666.D	06/01/2020	19:16
	ICIS 280-496958/17	P1669.D	06/01/2020	20:33
	ICV 280-496958/21	P1670.D	06/01/2020	20:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab File ID: P2970.D BFB Injection Date: 07/01/2020

Instrument ID: VMS_P BFB Injection Time: 22:01

Analysis Batch No.: 500875

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.9	
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	50.0 - 120.00 % of mass 95	65.4	
175	5.0 - 9.0 % of mass 174	5.4	(8.3) 1
176	95.0 - 101.0 % of mass 174	63.1	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.1	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-500875/2	P2971.D	07/01/2020	22:36
	CCV 280-500875/3	P2972.D	07/01/2020	22:57
	LCS 280-500875/4	P2973.D	07/01/2020	23:18
	LCSD 280-500875/5	P2974.D	07/01/2020	23:40
	LCS 280-500875/6	P2975.D	07/02/2020	0:01
	LCSD 280-500875/7	P2976.D	07/02/2020	0:22
	MB 280-500875/9	P2978.D	07/02/2020	1:05
MUNI-WELL-14-20200624	280-138098-1	P2982.D	07/02/2020	2:30
MUNI-WELL-33-20200624	280-138098-2	P2983.D	07/02/2020	2:51
RW-2172H-20200625	280-138098-3	P2984.D	07/02/2020	3:12
RW-2203H-20200625	280-138098-4	P2985.D	07/02/2020	3:33
RW-2213F-20200625	280-138098-5	P2986.D	07/02/2020	3:55
RW-2613M-20200625	280-138098-6	P2987.D	07/02/2020	4:16
RW-7091R-20200624	280-138098-7	P2988.D	07/02/2020	4:37
RW-7505P-20200624	280-138098-8	P2989.D	07/02/2020	4:58
RW-7549P-20200624	280-138098-9	P2990.D	07/02/2020	5:20
RW-7588P-20200624	280-138098-10	P2991.D	07/02/2020	5:41
RW-8209P-20200625	280-138098-11	P2992.D	07/02/2020	6:02
EB-00-20200625	280-138098-12	P2993.D	07/02/2020	6:23
EB-01-20200625	280-138098-13	P2994.D	07/02/2020	6:44
TB-02-20200626	280-138098-14	P2995.D	07/02/2020	7:05
RW-2140H-20200626	280-138098-15	P2996.D	07/02/2020	7:27
MW-116S-20200626	280-138098-16	P2997.D	07/02/2020	7:48
EB-02-20200626	280-138098-17	P2998.D	07/02/2020	8:09

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Sample No.: ICIS 280-496958/17 Date Analyzed: 06/01/2020 20:33

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): P1669.D Heated Purge: (Y/N) N

Calibration ID: 44775

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2594633	5.11	589468	7.65	851368	9.87
UPPER LIMIT		5189266	5.61	1178936	8.15	1702736	10.37
LOWER LIMIT		1297317	4.61	294734	7.15	425684	9.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-496958/21		2590465	5.11	590999	7.65	849842	9.87
CCV 280-500875/2		2490498	5.11	575029	7.64	822908	9.87
CCV 280-500875/3		2379676	5.11	547834	7.64	787597	9.87
LCS 280-500875/4		2302917	5.11	526470	7.65	754608	9.87
LCSD 280-500875/5		2329191	5.11	540610	7.64	771461	9.87
LCS 280-500875/6		2306779	5.11	537361	7.64	763920	9.87
LCSD 280-500875/7		2330114	5.11	537012	7.65	777056	9.87
MB 280-500875/9		2296585	5.10	525168	7.65	751382	9.87
280-138098-1	MUNI-WELL-14-20200624	2250294	5.11	520356	7.64	746441	9.87
280-138098-2	MUNI-WELL-33-20200624	2271465	5.11	519317	7.65	746647	9.87
280-138098-3	RW-2172H-20200625	2236742	5.11	508915	7.65	744173	9.87
280-138098-4	RW-2203H-20200625	2202972	5.11	506307	7.65	762117	9.87
280-138098-5	RW-2213F-20200625	2226651	5.11	510560	7.64	741452	9.87
280-138098-6	RW-2613M-20200625	2206691	5.11	510881	7.64	731582	9.87
280-138098-7	RW-7091R-20200624	2516047	5.11	570207	7.64	808166	9.87
280-138098-8	RW-7505P-20200624	2441494	5.11	552749	7.64	794686	9.87
280-138098-9	RW-7549P-20200624	2275286	5.11	516353	7.64	746413	9.87
280-138098-10	RW-7588P-20200624	2346499	5.11	534331	7.64	763395	9.87
280-138098-11	RW-8209P-20200625	2380169	5.11	513283	7.64	747648	9.87
280-138098-12	EB-00-20200625	2206967	5.11	502317	7.64	727206	9.87
280-138098-13	EB-01-20200625	2417147	5.11	538954	7.65	770872	9.87
280-138098-14	TB-02-20200626	2198292	5.11	508768	7.64	735606	9.87
280-138098-15	RW-2140H-20200626	2194345	5.11	507721	7.64	732957	9.87
280-138098-16	MW-116S-20200626	2354981	5.11	534659	7.64	767744	9.87
280-138098-17	EB-02-20200626	2391052	5.11	548194	7.64	771677	9.87

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 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: MUNI-WELL-14-20200624 Lab Sample ID: 280-138098-1

Matrix: Water Lab File ID: P2982.D

Analysis Method: 8260B Date Collected: 06/24/2020 10:41

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 02:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: MUNI-WELL-14-20200624 Lab Sample ID: 280-138098-1

Matrix: Water Lab File ID: P2982.D

Analysis Method: 8260B Date Collected: 06/24/2020 10:41

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 02:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	0.25	J	1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	1.2		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2982.D
Lims ID: 280-138098-C-1
Client ID: MUNI-WELL-14-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 02:30:30 ALS Bottle#: 12 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-C-1 pH
Misc. Info.: 280-0092961-016
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:05:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2250294	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	520356	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	746441	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	541622	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	611950	48.0	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2210088	48.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	86	792877	48.1	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.384	5.385	-0.001	96	10765	1.18	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.872	6.873	-0.001	92	1588	0.2503	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

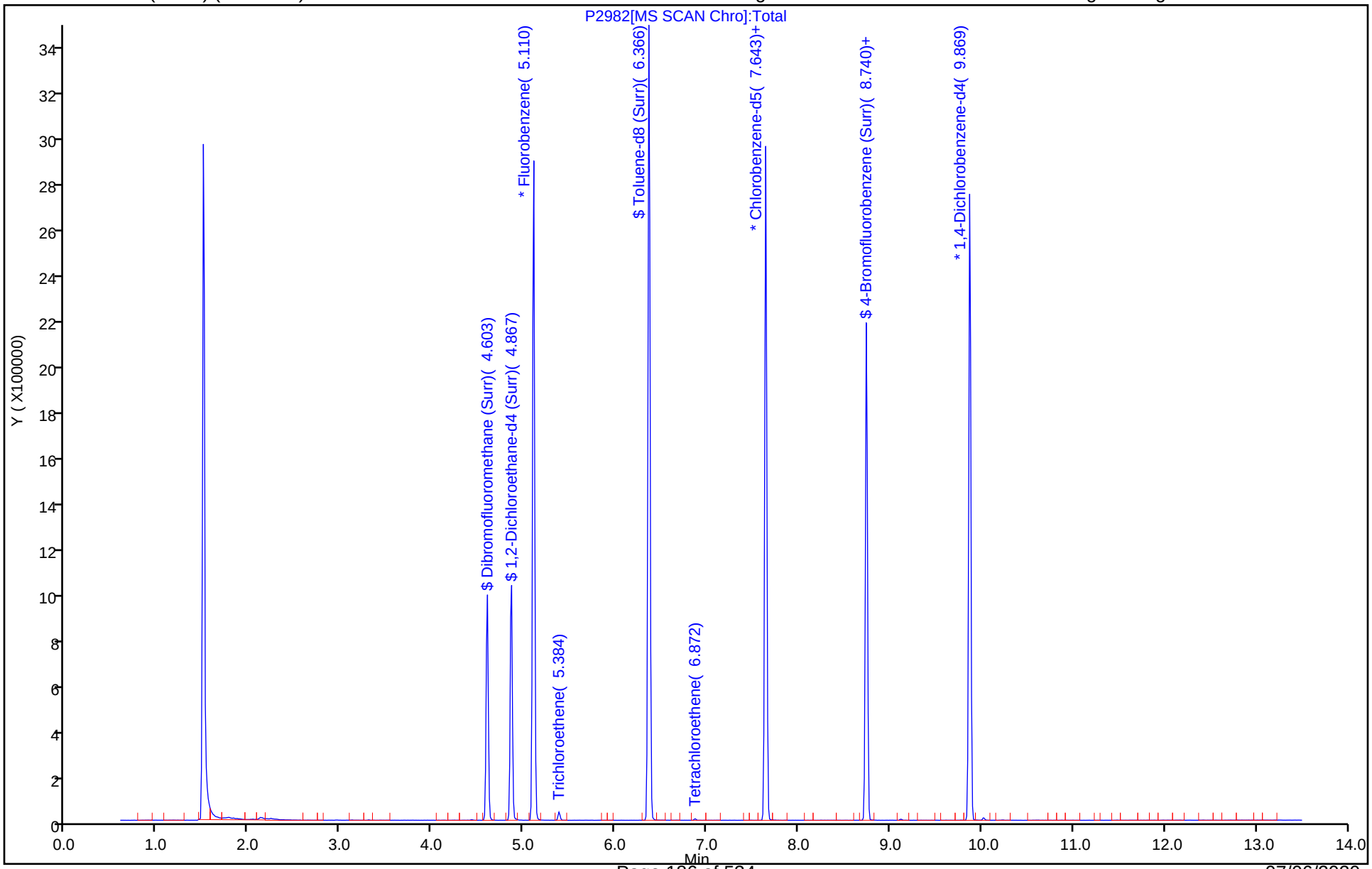
Report Date: 02-Jul-2020 22:13:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2982.D

Injection Date:	02-Jul-2020 02:30:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-C-1	Lab Sample ID:	280-138098-1	Worklist Smp#:	16
Client ID:	MUNI-WELL-14-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2982.D				
Lims ID:	280-138098-C-1				
Client ID:	MUNI-WELL-14-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 02:30:30	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-C-1 pH				
Misc. Info.:	280-0092961-016				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

First Level Reviewer: petuninp Date: 02-Jul-2020 22:05:19

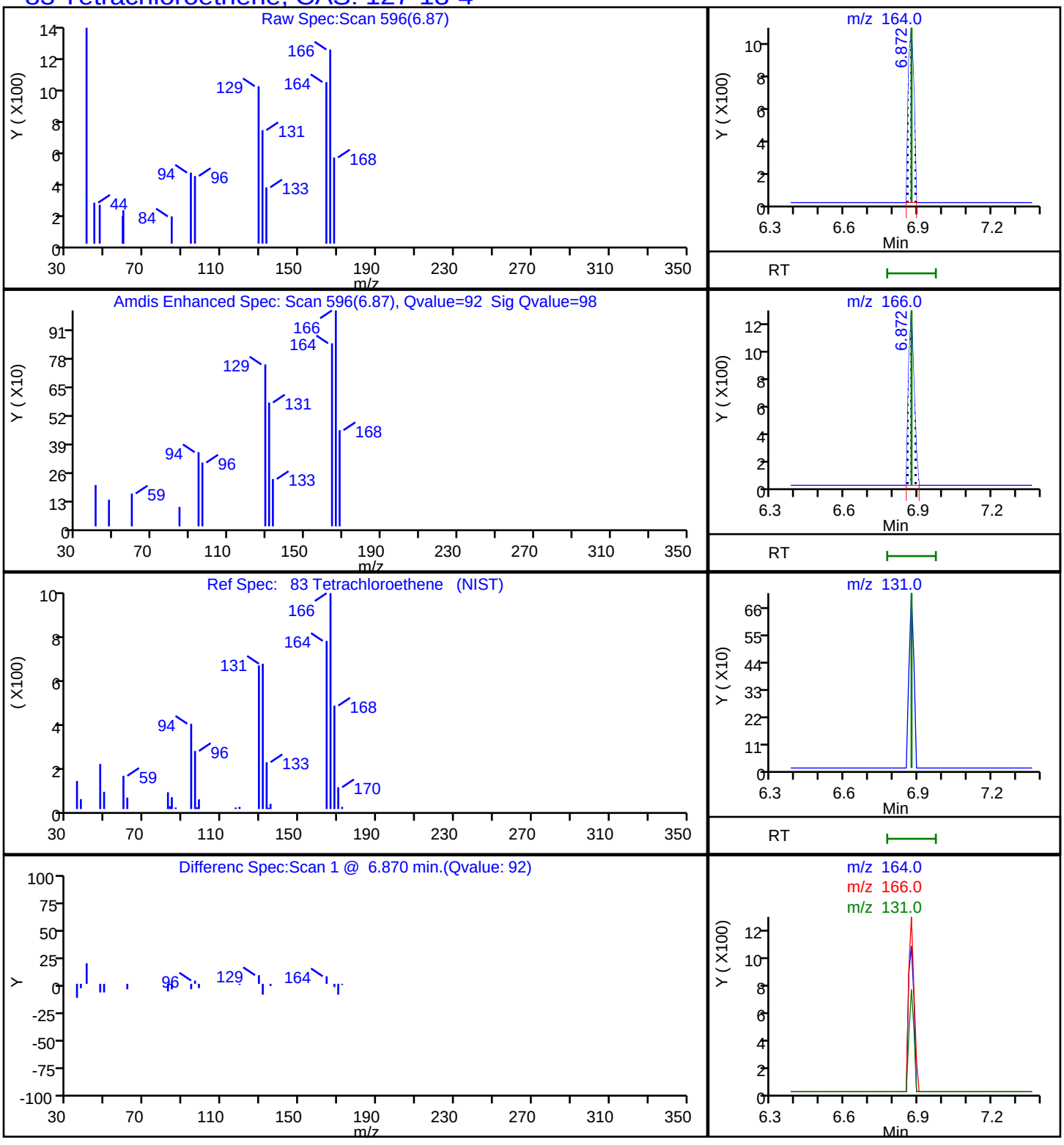
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.0	99.96
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	95.98
$ 6 Toluene-d8 (Surr)	50.0	48.3	96.54
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.1	96.25

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2982.D

Injection Date:	02-Jul-2020 02:30:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-C-1	Lab Sample ID:	280-138098-1		
Client ID:	MUNI-WELL-14-20200624				
Operator ID:	PETUNINP	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

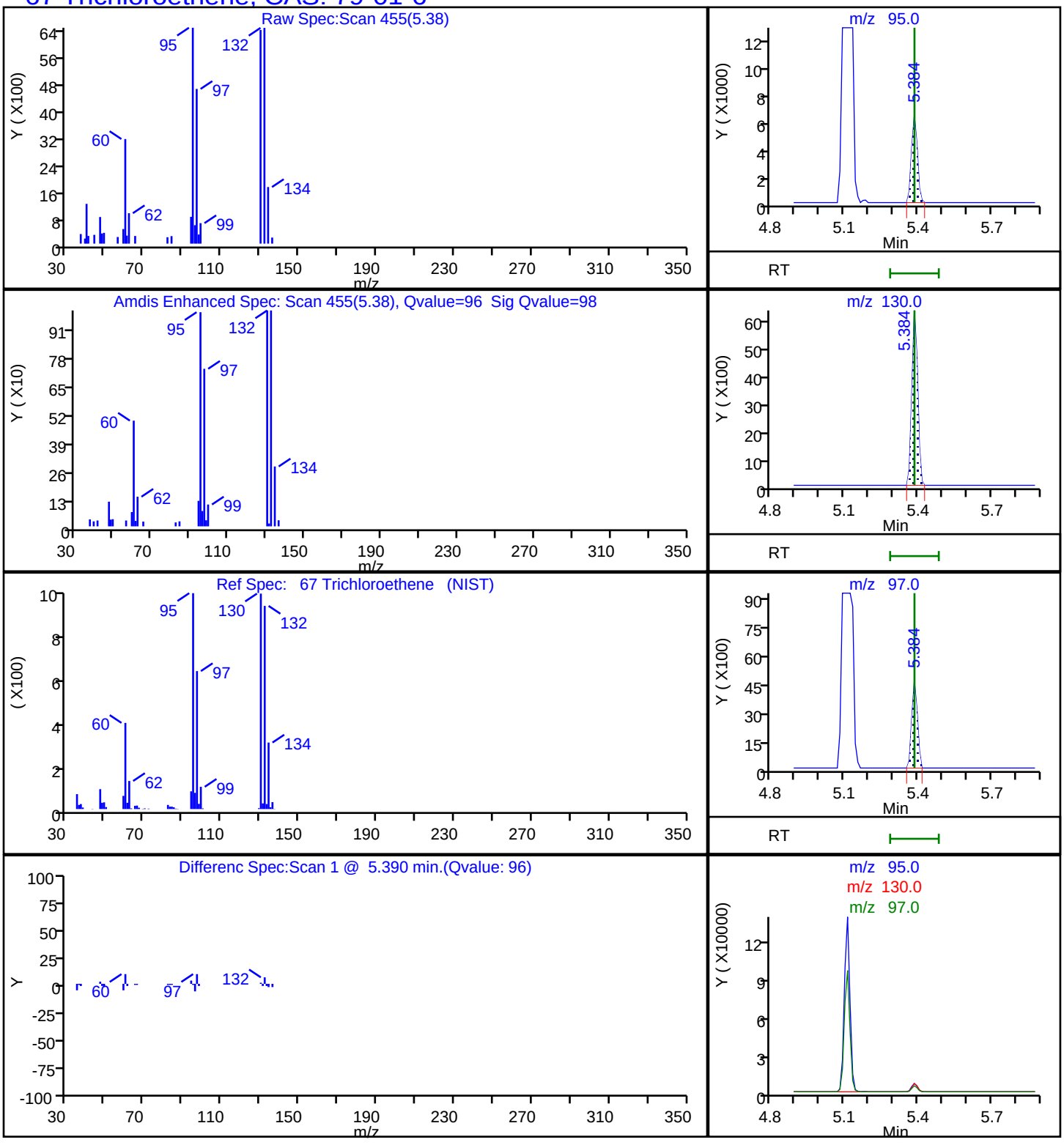
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2982.D		
Injection Date:	02-Jul-2020 02:30:30	Instrument ID:	VMS_P
Lims ID:	280-138098-C-1	Lab Sample ID:	280-138098-1
Client ID:	MUNI-WELL-14-20200624		
Operator ID:	PETUNINP	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: MUNI-WELL-33-20200624 Lab Sample ID: 280-138098-2

Matrix: Water Lab File ID: P2983.D

Analysis Method: 8260B Date Collected: 06/24/2020 10:20

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 02:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: MUNI-WELL-33-20200624 Lab Sample ID: 280-138098-2

Matrix: Water Lab File ID: P2983.D

Analysis Method: 8260B Date Collected: 06/24/2020 10:20

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 02:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	0.37	J	1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	2.1		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2983.D
Lims ID: 280-138098-B-2
Client ID: MUNI-WELL-33-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 02:51:30 ALS Bottle#: 13 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-2 pH
Misc. Info.: 280-0092961-017
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:06:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2271465	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	519317	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	96	746647	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.595	4.604	-0.009	93	549098	50.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	606161	47.1	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2222277	48.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	85	804188	48.8	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.387	5.385	0.002	98	19584	2.13	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.875	6.873	0.002	93	2347	0.3707	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

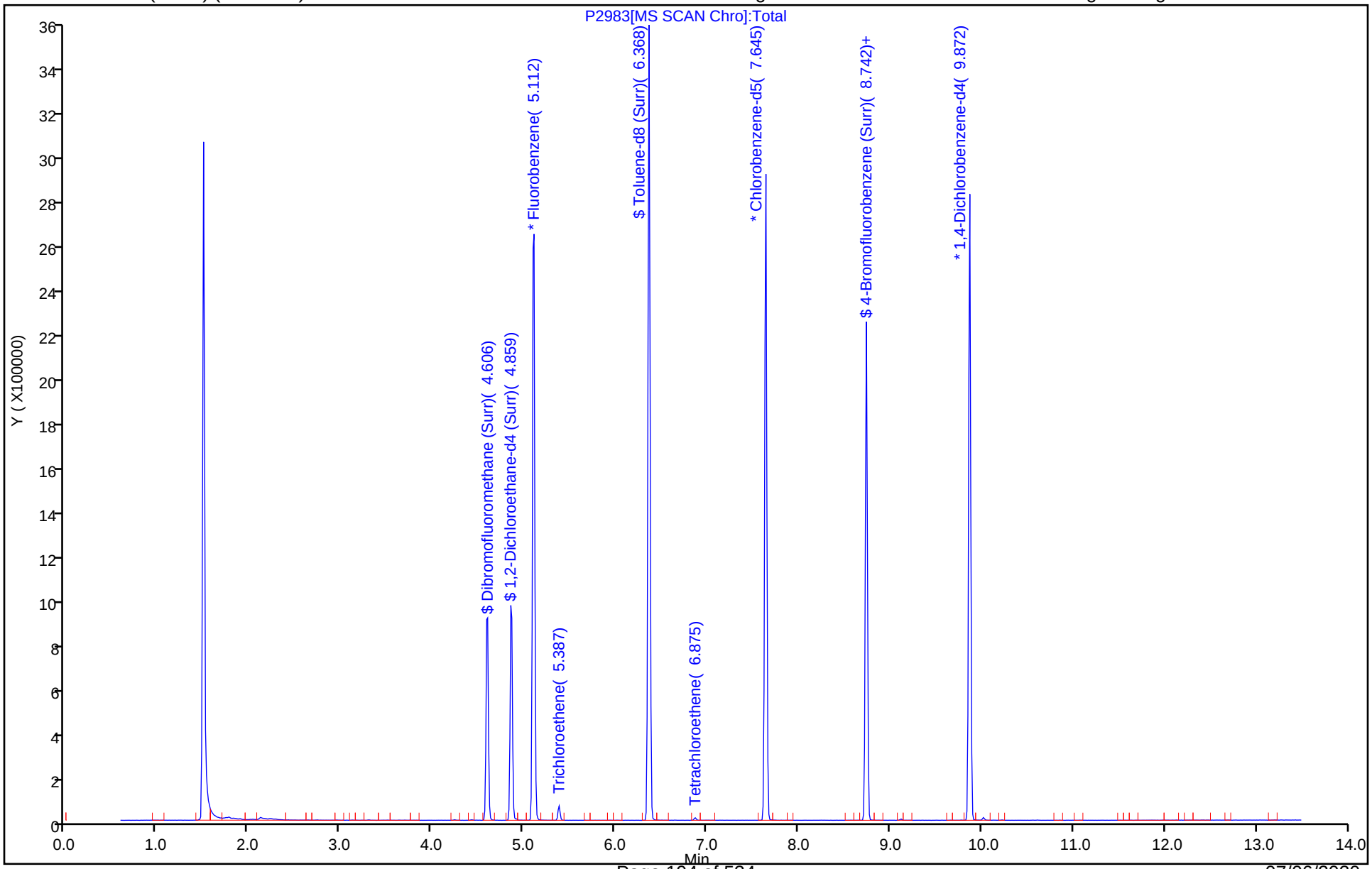
Report Date: 02-Jul-2020 22:13:21 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2983.D

Injection Date:	02-Jul-2020 02:51:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-2	Lab Sample ID:	280-138098-2	Worklist Smp#:	17
Client ID:	MUNI-WELL-33-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2983.D				
Lims ID:	280-138098-B-2				
Client ID:	MUNI-WELL-33-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 02:51:30	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-B-2 pH				
Misc. Info.:	280-0092961-017				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

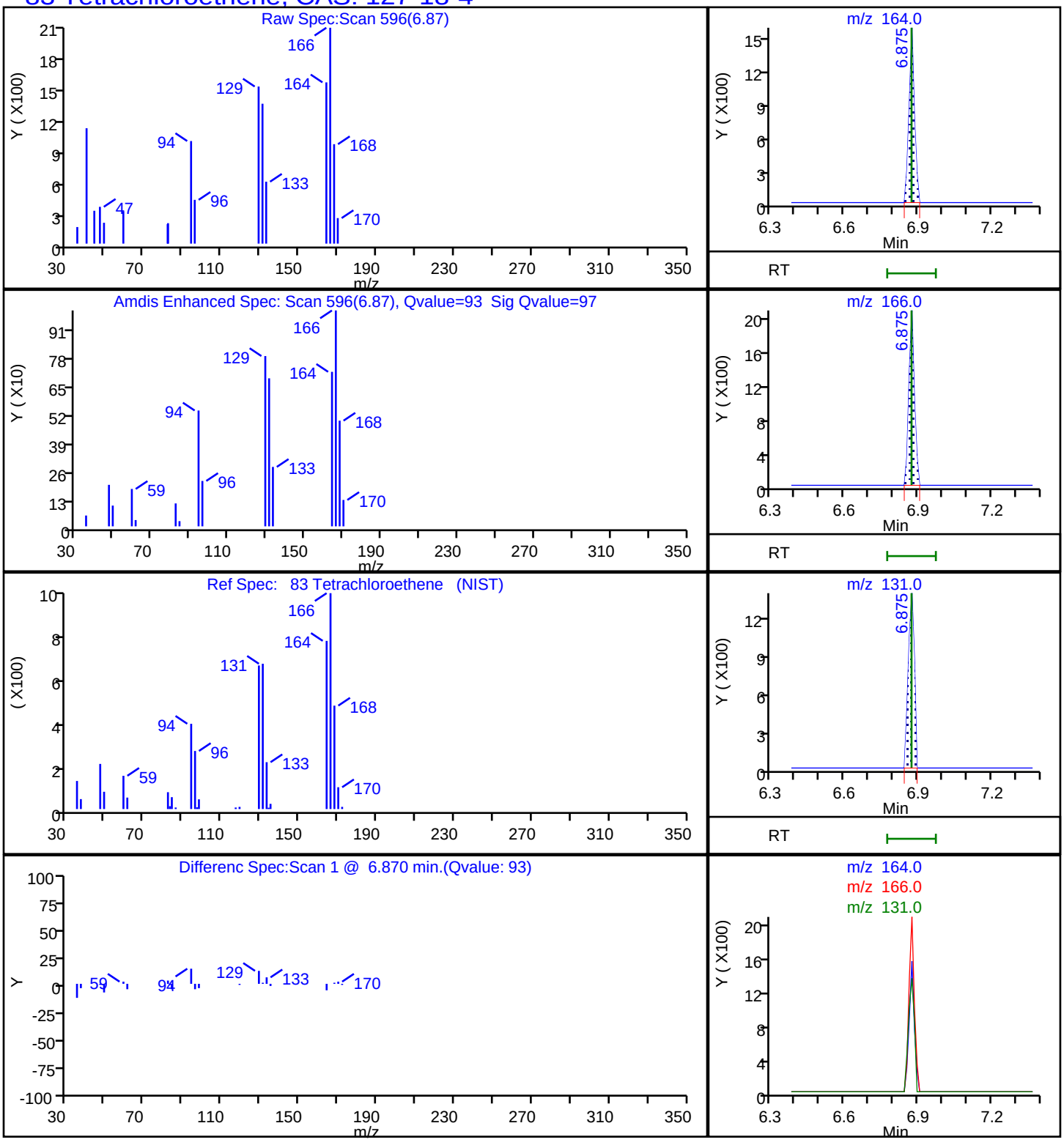
First Level Reviewer: petuninp Date: 02-Jul-2020 22:06:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.39
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.1	94.18
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.26
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.8	97.60

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2983.D				
Injection Date:	02-Jul-2020 02:51:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-2	Lab Sample ID:	280-138098-2		
Client ID:	MUNI-WELL-33-20200624				
Operator ID:	PETUNINP	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

83 Tetrachloroethene, CAS: 127-18-4



Report Date: 02-Jul-2020 22:13:21 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2983.D

Injection Date: 02-Jul-2020 02:51:30 Instrument ID: VMS_P

Lims ID: 280-138098-B-2 Lab Sample ID: 280-138098-2

Client ID: MUNI-WELL-33-20200624

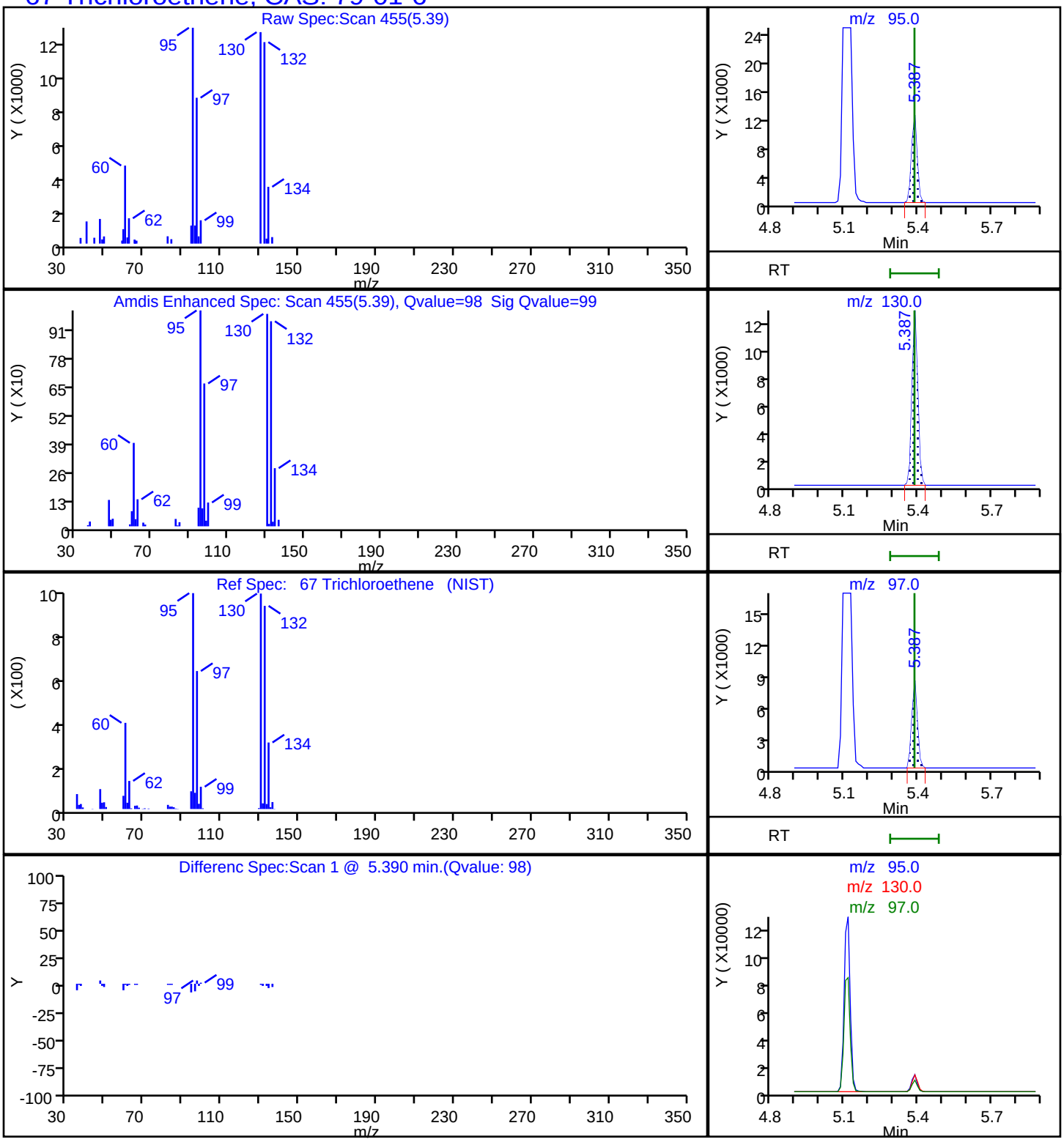
Operator ID: PETUNINP ALS Bottle#: 13 Worklist Smp#: 17

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2172H-20200625 Lab Sample ID: 280-138098-3

Matrix: Water Lab File ID: P2984.D

Analysis Method: 8260B Date Collected: 06/25/2020 12:40

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 03:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	0.20	J	1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.5		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2172H-20200625 Lab Sample ID: 280-138098-3

Matrix: Water Lab File ID: P2984.D

Analysis Method: 8260B Date Collected: 06/25/2020 12:40

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 03:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	4.9		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	28		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D
Lims ID: 280-138098-B-3
Client ID: RW-2172H-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 03:12:30 ALS Bottle#: 14 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-3 pH
Misc. Info.: 280-0092961-018
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:06:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2236742	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	508915	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.869	0.002	96	744173	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.604	0.001	93	534949	49.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	97	600217	47.4	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2193612	49.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	84	783995	47.7	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.247	4.245	0.002	82	14018	1.47	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83	4.479	4.477	0.002	91	2968	0.1976	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.386	5.385	0.001	99	255764	28.3	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.874	6.873	0.001	95	30169	4.86	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

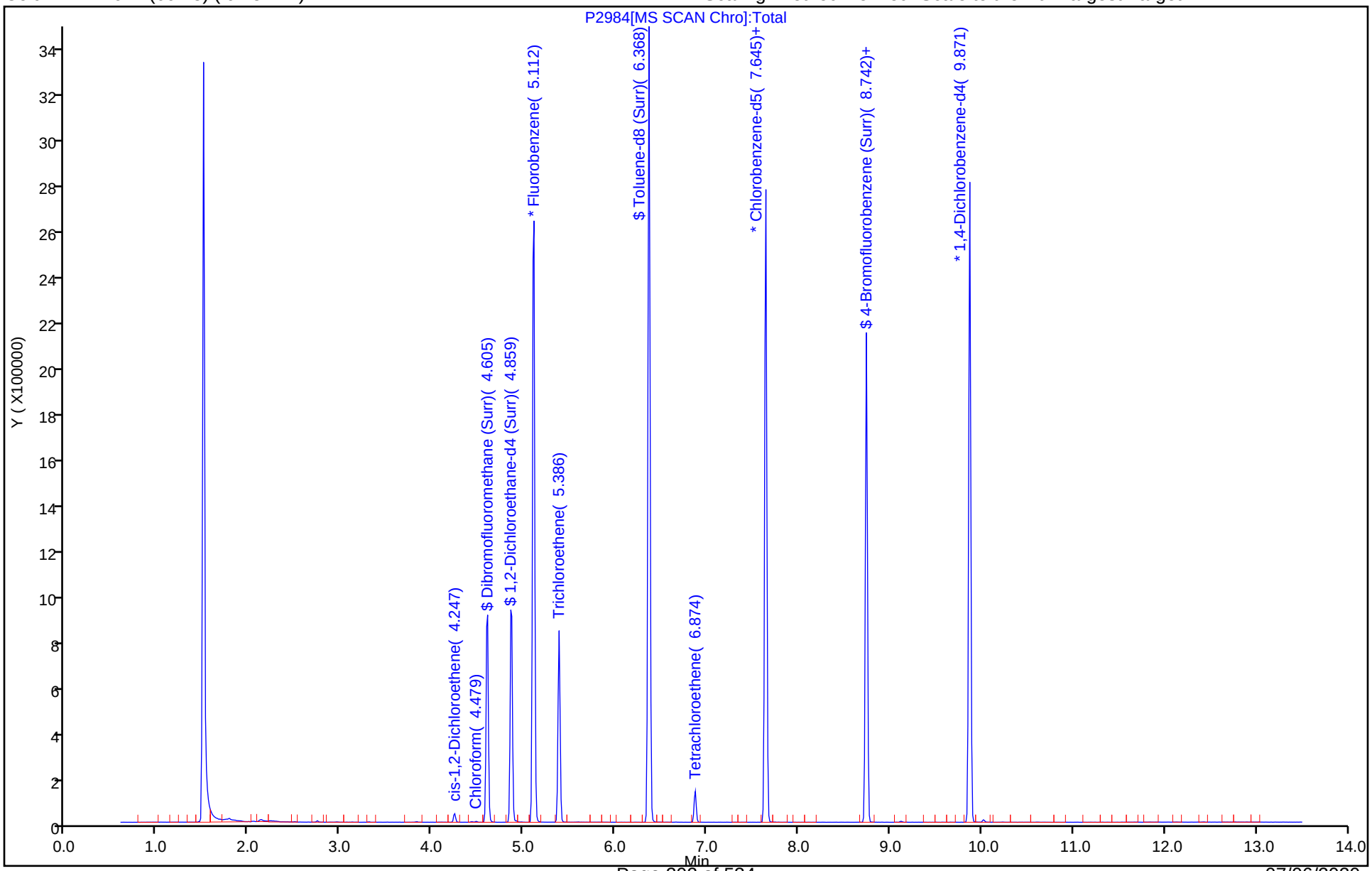
Report Date: 02-Jul-2020 22:13:21 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D

Injection Date:	02-Jul-2020 03:12:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-3	Lab Sample ID:	280-138098-3	Worklist Smp#:	18
Client ID:	RW-2172H-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D				
Lims ID:	280-138098-B-3				
Client ID:	RW-2172H-20200625				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 03:12:30	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-B-3 pH				
Misc. Info.:	280-0092961-018				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

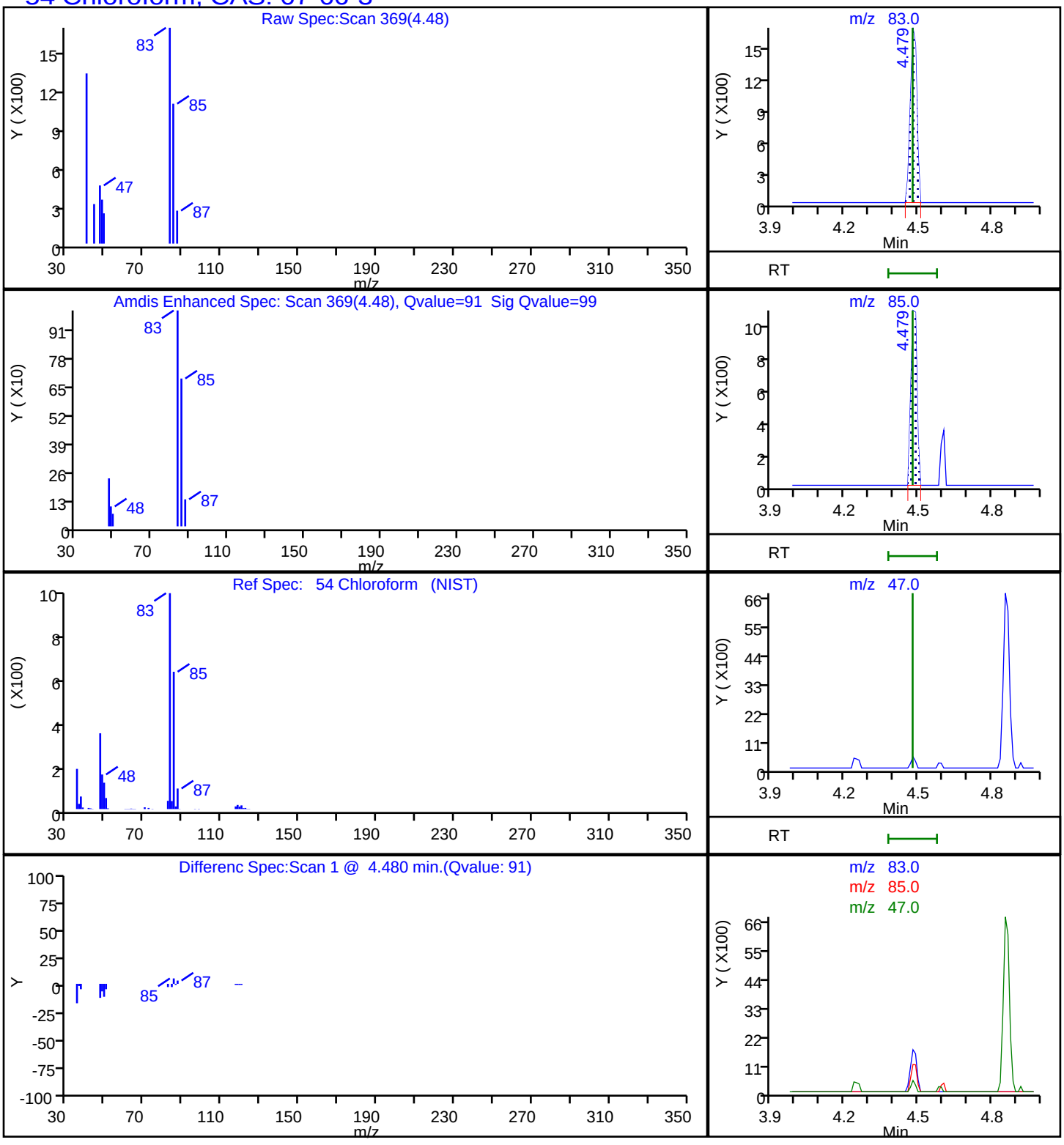
First Level Reviewer: petuninp Date: 02-Jul-2020 22:06:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.7	99.32
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.71
$ 6 Toluene-d8 (Surr)	50.0	49.0	97.97
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D		
Injection Date:	02-Jul-2020 03:12:30	Instrument ID:	VMS_P
Lims ID:	280-138098-B-3	Lab Sample ID:	280-138098-3
Client ID:	RW-2172H-20200625		
Operator ID:	PETUNINP	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

54 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D				
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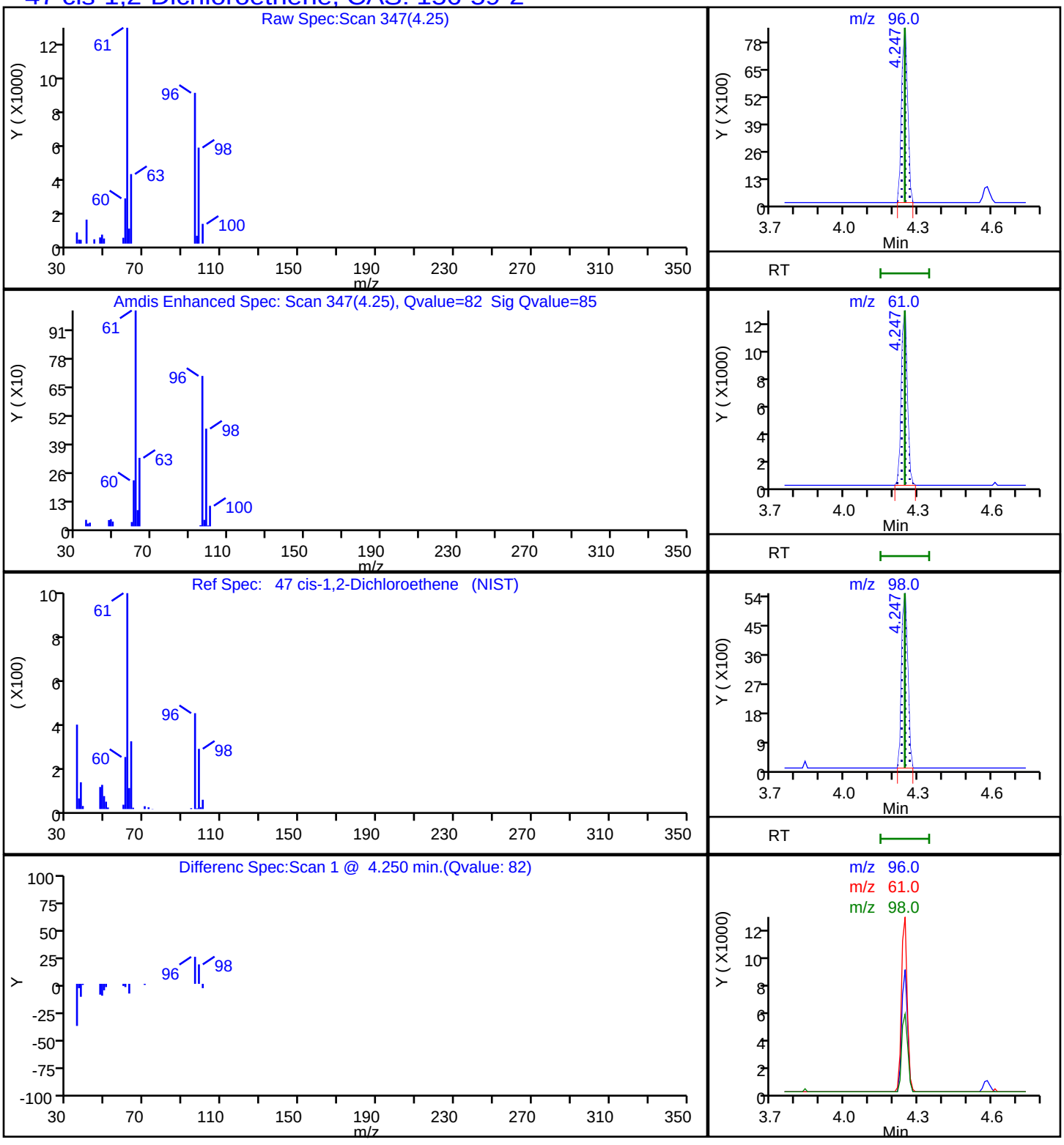
Lims ID:	280-138098-B-3	Lab Sample ID:	280-138098-3		
Client ID:	RW-2172H-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

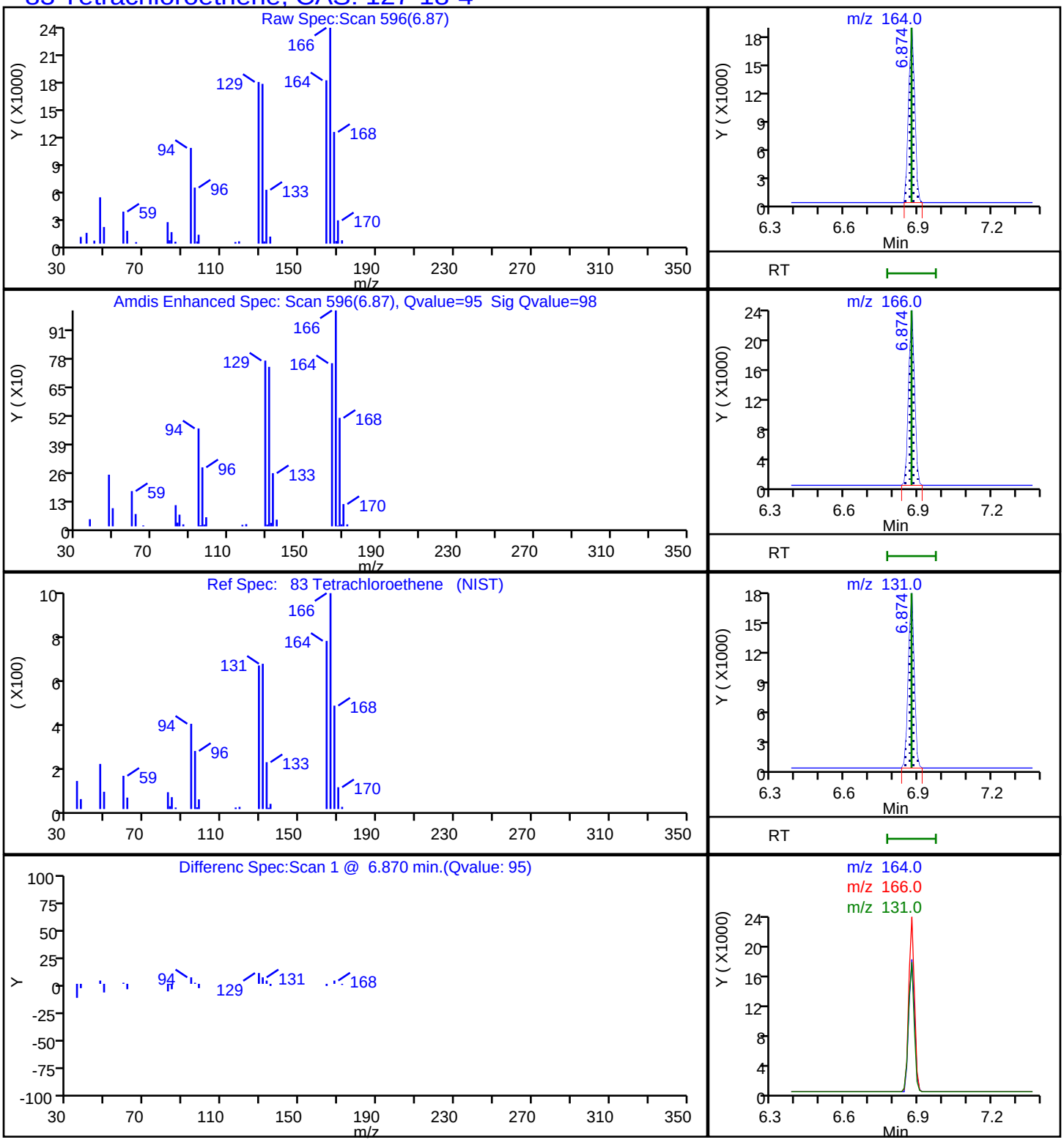
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D				
Injection Date:	02-Jul-2020 03:12:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-3	Lab Sample ID:	280-138098-3		
Client ID:	RW-2172H-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

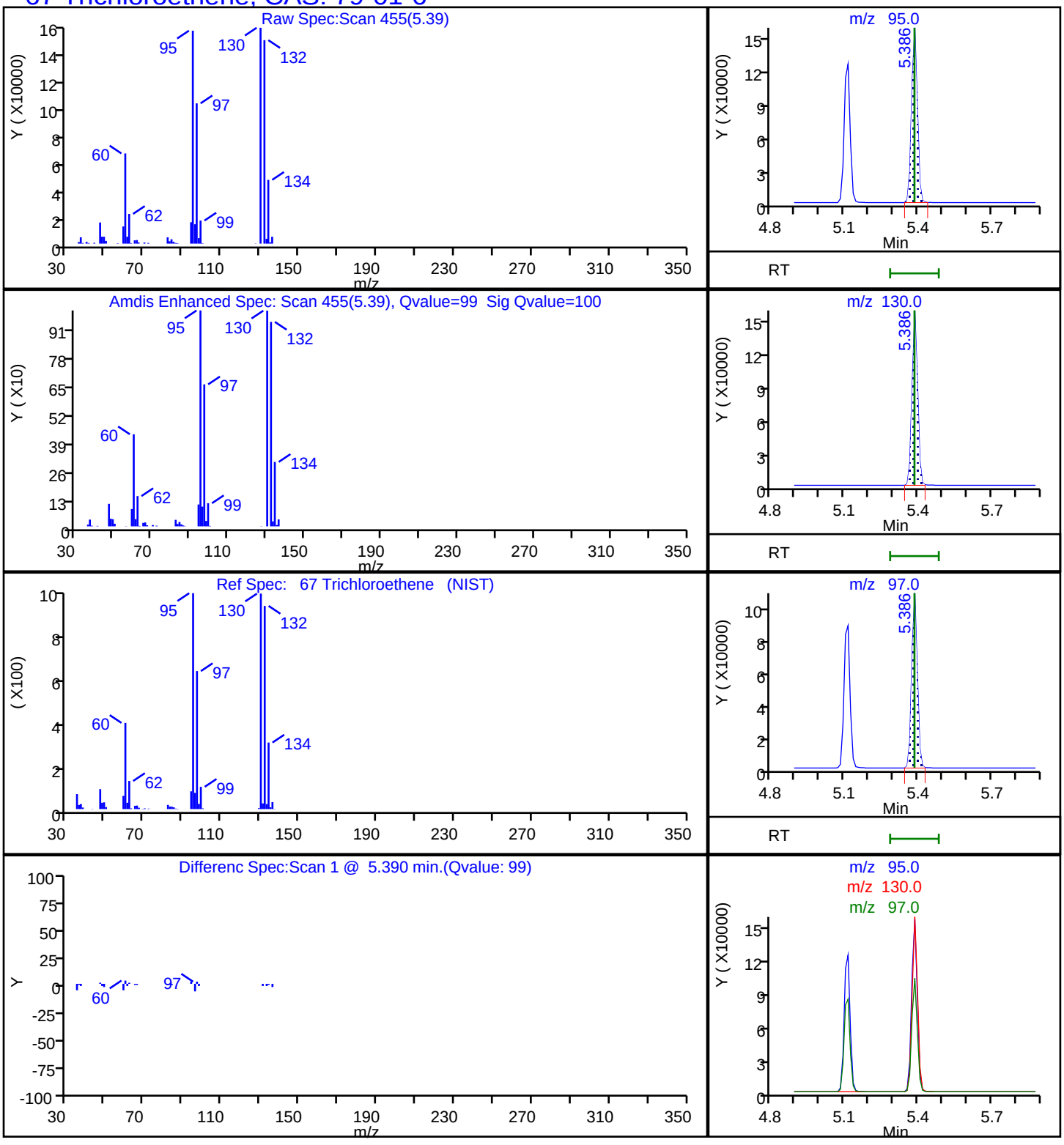
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2984.D		
Injection Date:	02-Jul-2020 03:12:30	Instrument ID:	VMS_P
Lims ID:	280-138098-B-3	Lab Sample ID:	280-138098-3
Client ID:	RW-2172H-20200625		
Operator ID:	PETUNINP	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2203H-20200625 Lab Sample ID: 280-138098-4

Matrix: Water Lab File ID: P2985.D

Analysis Method: 8260B Date Collected: 06/25/2020 14:15

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 03:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	0.22	J	1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	0.25	J	1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	2.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2203H-20200625 Lab Sample ID: 280-138098-4

Matrix: Water Lab File ID: P2985.D

Analysis Method: 8260B Date Collected: 06/25/2020 14:15

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 03:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	5.2		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	33		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D
Lims ID: 280-138098-A-4
Client ID: RW-2203H-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 03:33:30 ALS Bottle#: 15 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-4 pH
Misc. Info.: 280-0092961-019
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:06:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2202972	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	506307	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.869	0.002	96	762117	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.604	0.001	93	532812	50.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	599967	48.1	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2204499	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	84	780366	46.4	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63	3.824	3.834	-0.010	95	3810	0.2473	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.247	4.245	0.002	81	19192	2.05	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83	4.479	4.477	0.002	90	3235	0.2187	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.386	5.385	0.001	99	293950	33.0	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.874	6.873	0.001	96	32011	5.19	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

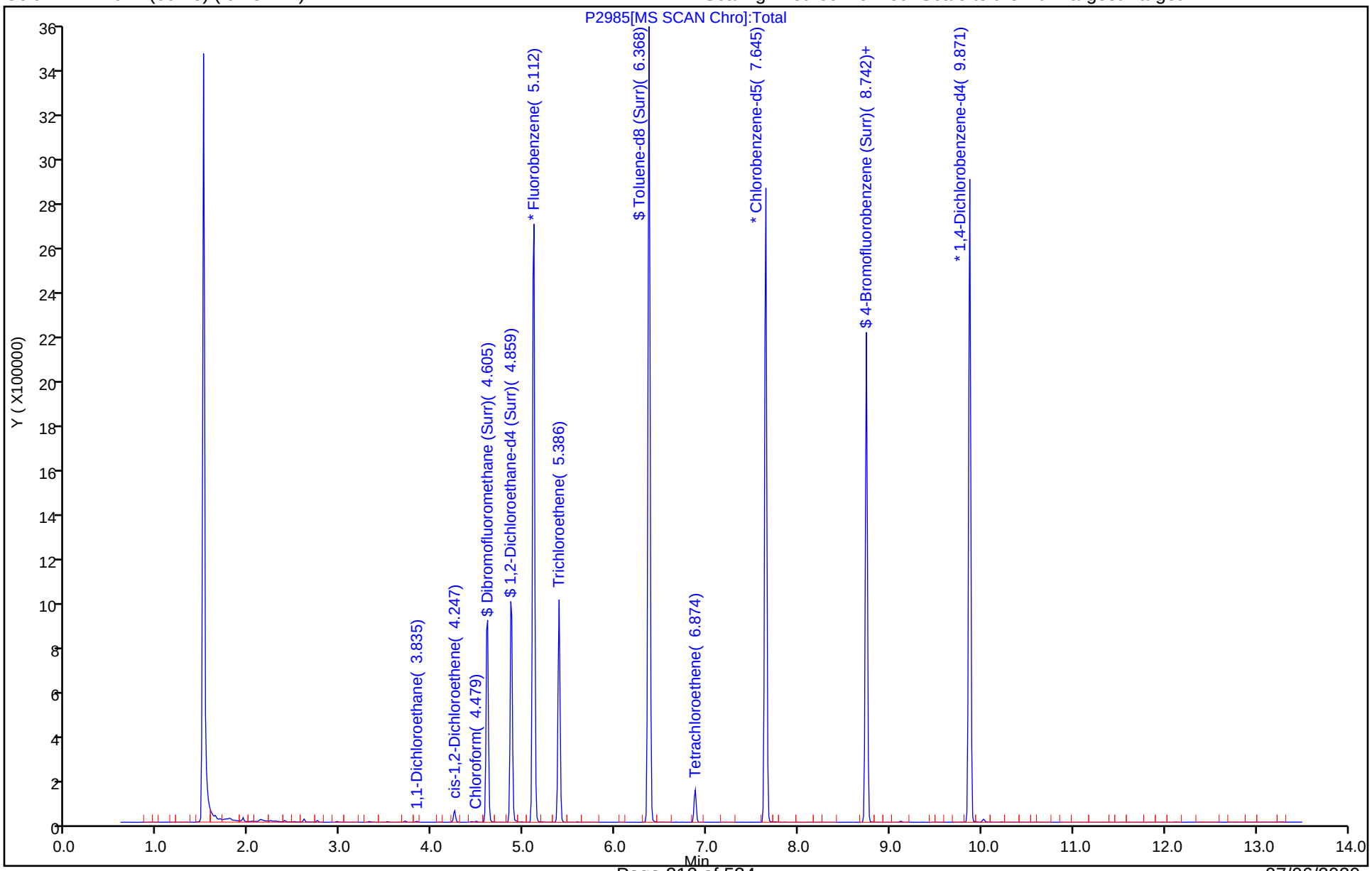
Report Date: 02-Jul-2020 22:13:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D

Injection Date:	02-Jul-2020 03:33:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-4	Lab Sample ID:	280-138098-4	Worklist Smp#:	19
Client ID:	RW-2203H-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D				
Lims ID:	280-138098-A-4				
Client ID:	RW-2203H-20200625				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 03:33:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-A-4 pH				
Misc. Info.:	280-0092961-019				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

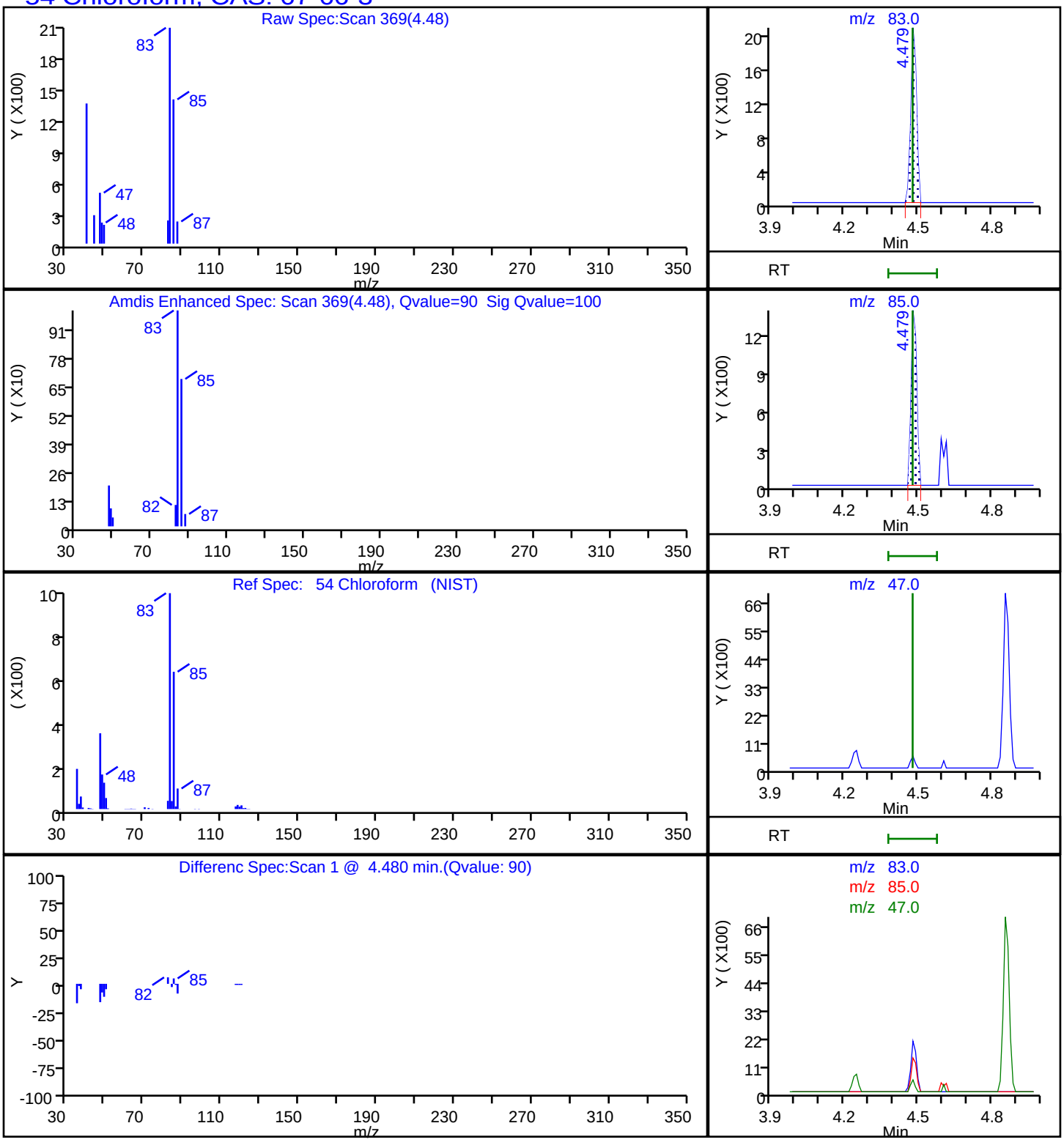
First Level Reviewer: petuninp Date: 02-Jul-2020 22:06:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.44
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.12
$ 6 Toluene-d8 (Surr)	50.0	49.5	98.96
$ 7 4-Bromofluorobenzene (Surr)	50.0	46.4	92.78

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D				
Injection Date:	02-Jul-2020 03:33:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-A-4	Lab Sample ID:	280-138098-4		
Client ID:	RW-2203H-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

54 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D

Injection Date: 02-Jul-2020 03:33:30 Instrument ID: VMS_P

Lims ID: 280-138098-A-4 Lab Sample ID: 280-138098-4

Client ID: RW-2203H-20200625

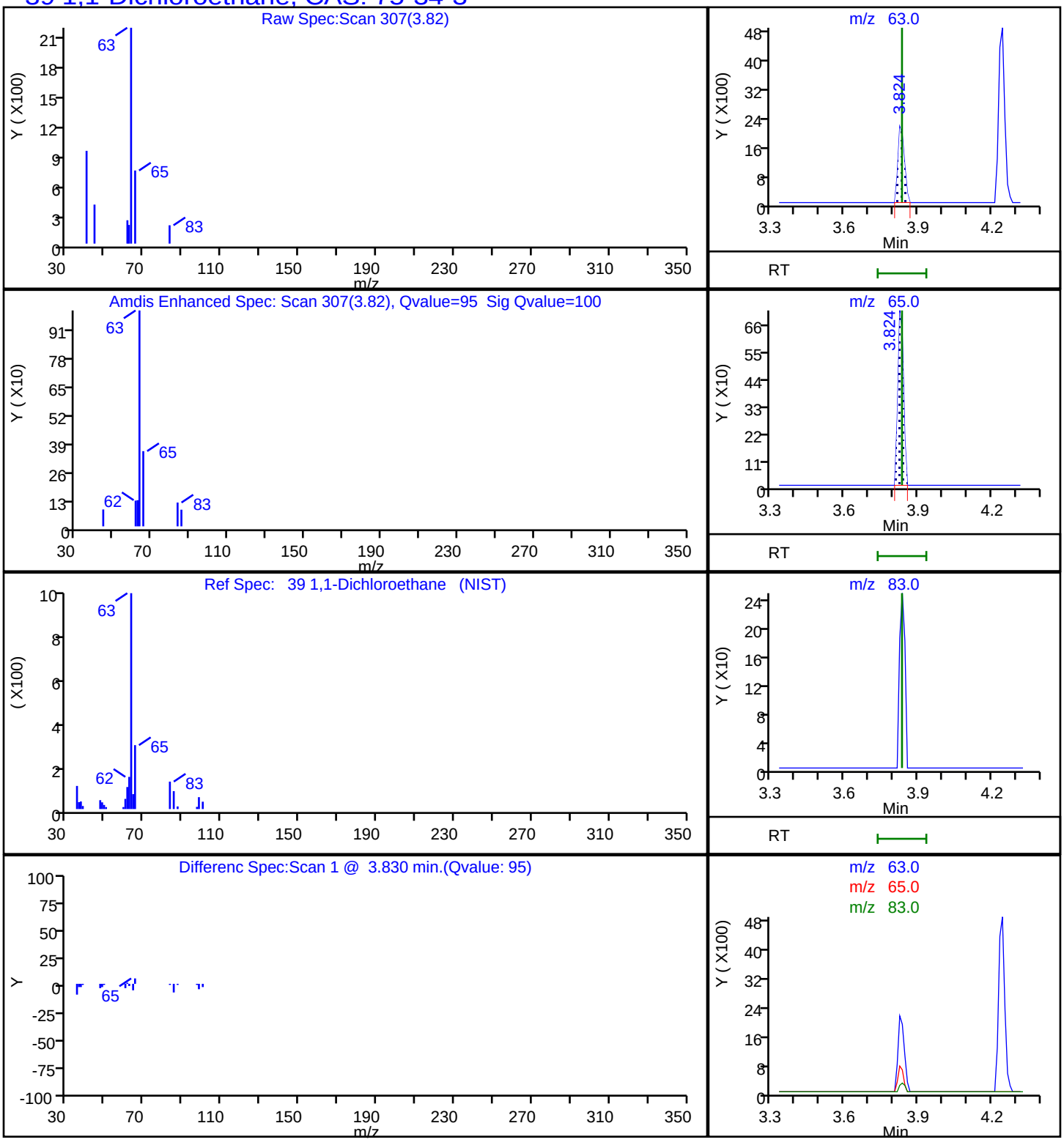
Operator ID: PETUNINP ALS Bottle#: 15 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

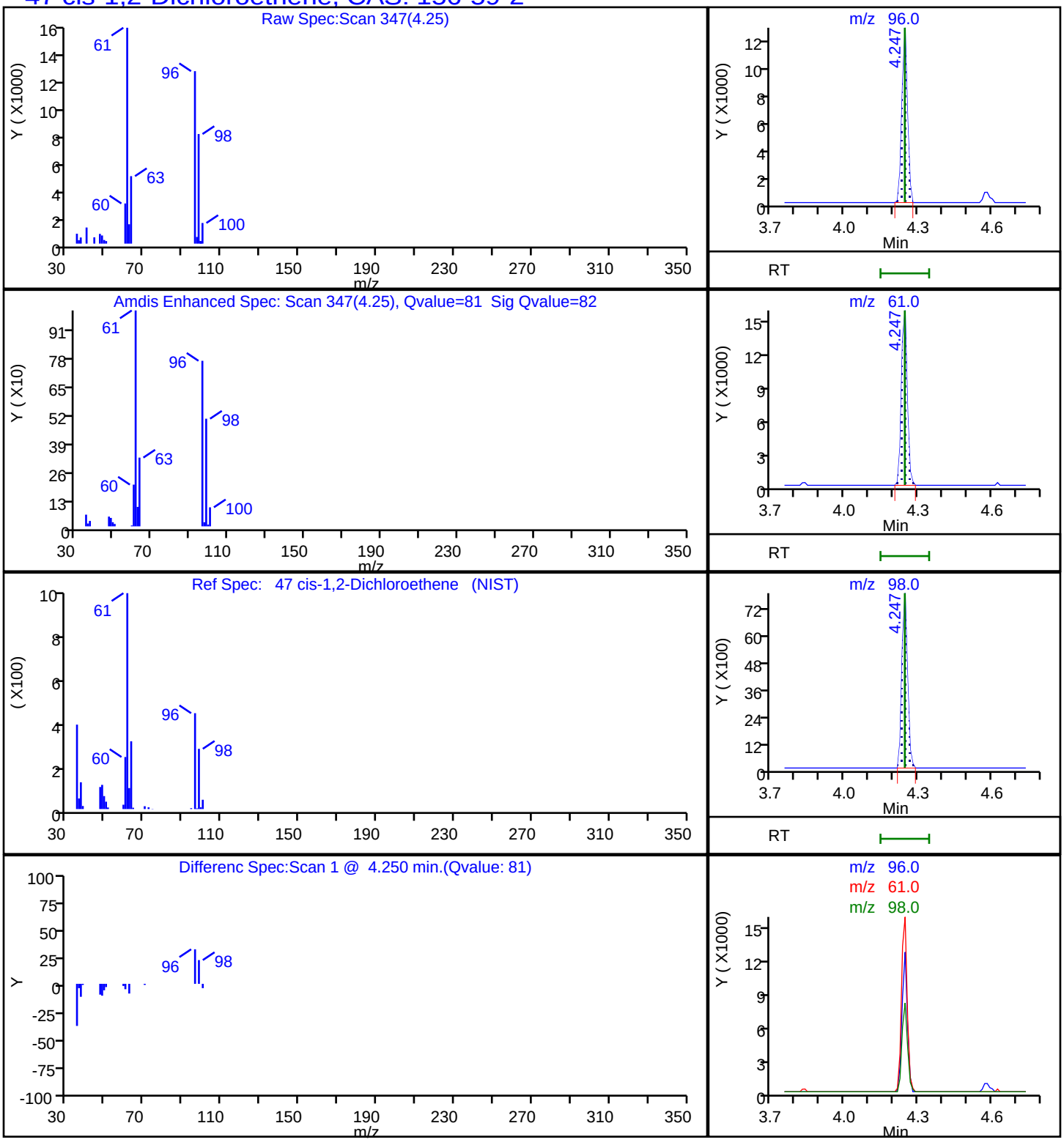
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D				
Injection Date:	02-Jul-2020 03:33:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-A-4	Lab Sample ID:	280-138098-4		
Client ID:	RW-2203H-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

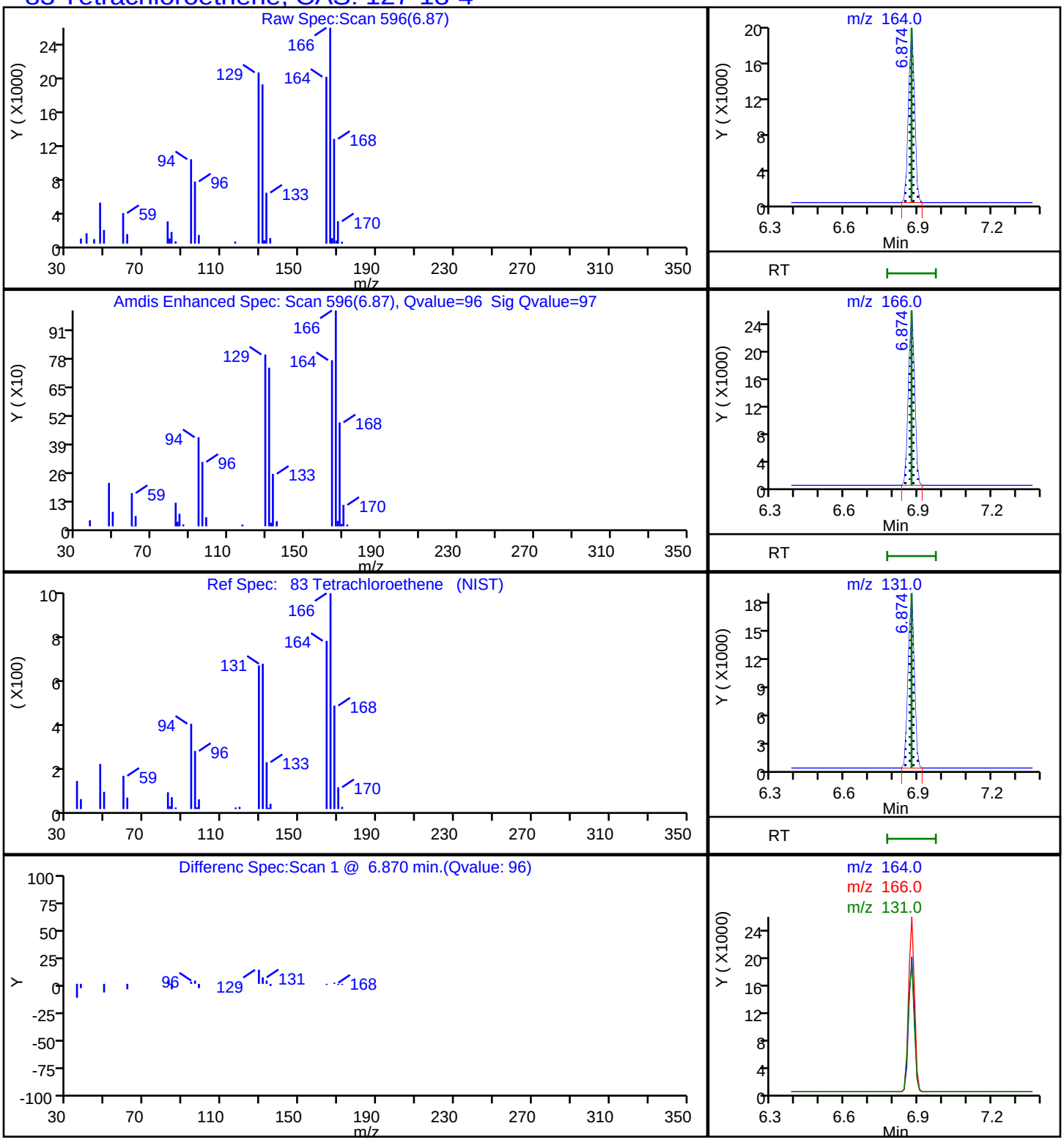
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D		
Injection Date:	02-Jul-2020 03:33:30	Instrument ID:	VMS_P
Lims ID:	280-138098-A-4	Lab Sample ID:	280-138098-4
Client ID:	RW-2203H-20200625		
Operator ID:	PETUNINP	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

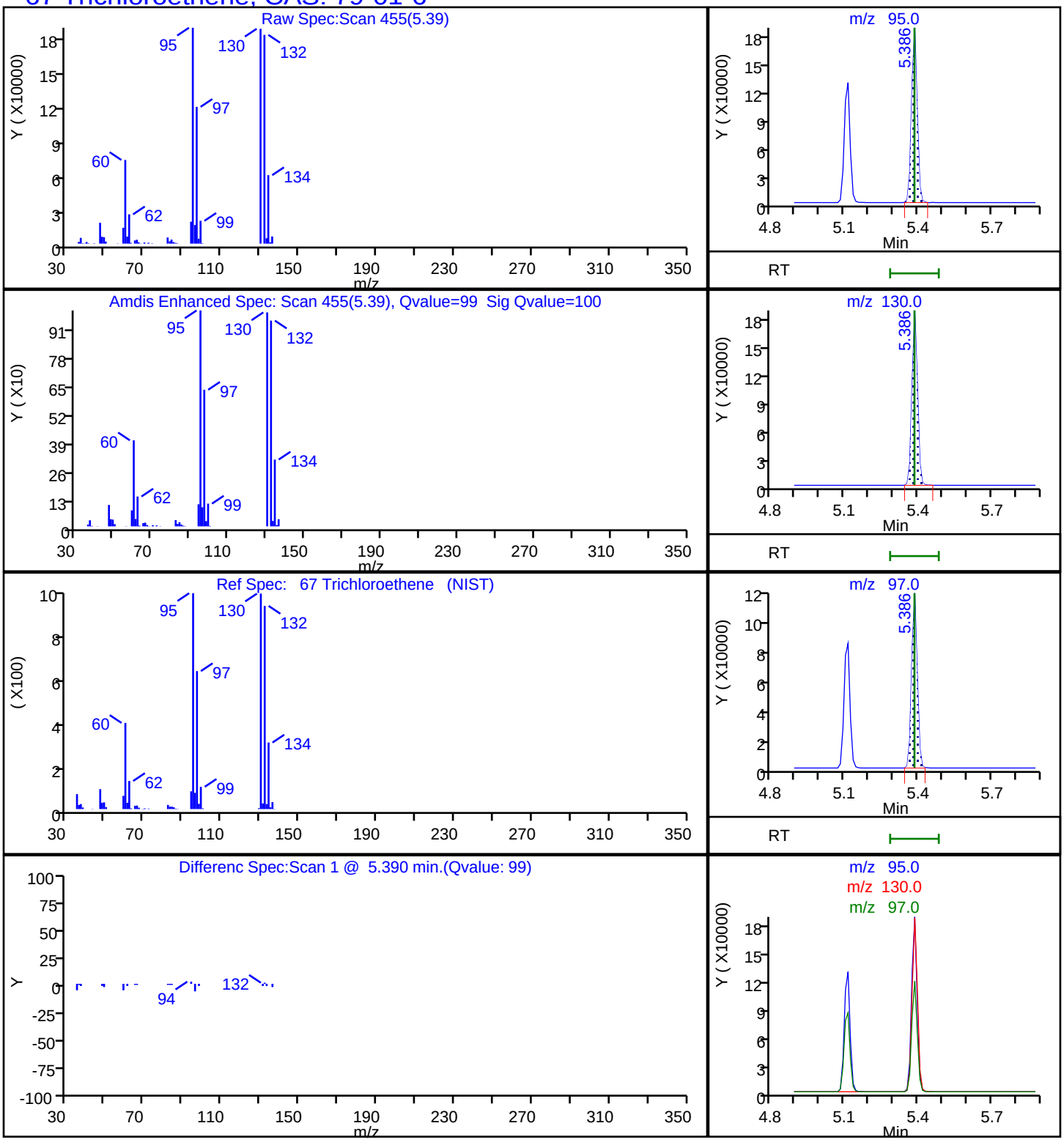
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2985.D		
Injection Date:	02-Jul-2020 03:33:30	Instrument ID:	VMS_P
Lims ID:	280-138098-A-4	Lab Sample ID:	280-138098-4
Client ID:	RW-2203H-20200625		
Operator ID:	PETUNINP	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2213F-20200625 Lab Sample ID: 280-138098-5

Matrix: Water Lab File ID: P2986.D

Analysis Method: 8260B Date Collected: 06/25/2020 17:15

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 03:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2213F-20200625 Lab Sample ID: 280-138098-5

Matrix: Water Lab File ID: P2986.D

Analysis Method: 8260B Date Collected: 06/25/2020 17:15

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 03:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2986.D
Lims ID: 280-138098-B-5
Client ID: RW-2213F-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 03:55:30 ALS Bottle#: 16 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-5 pH
Misc. Info.: 280-0092961-020
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:07:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2226651	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	510560	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	741452	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	534582	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	97	601143	47.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2198713	48.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	85	783798	47.9	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

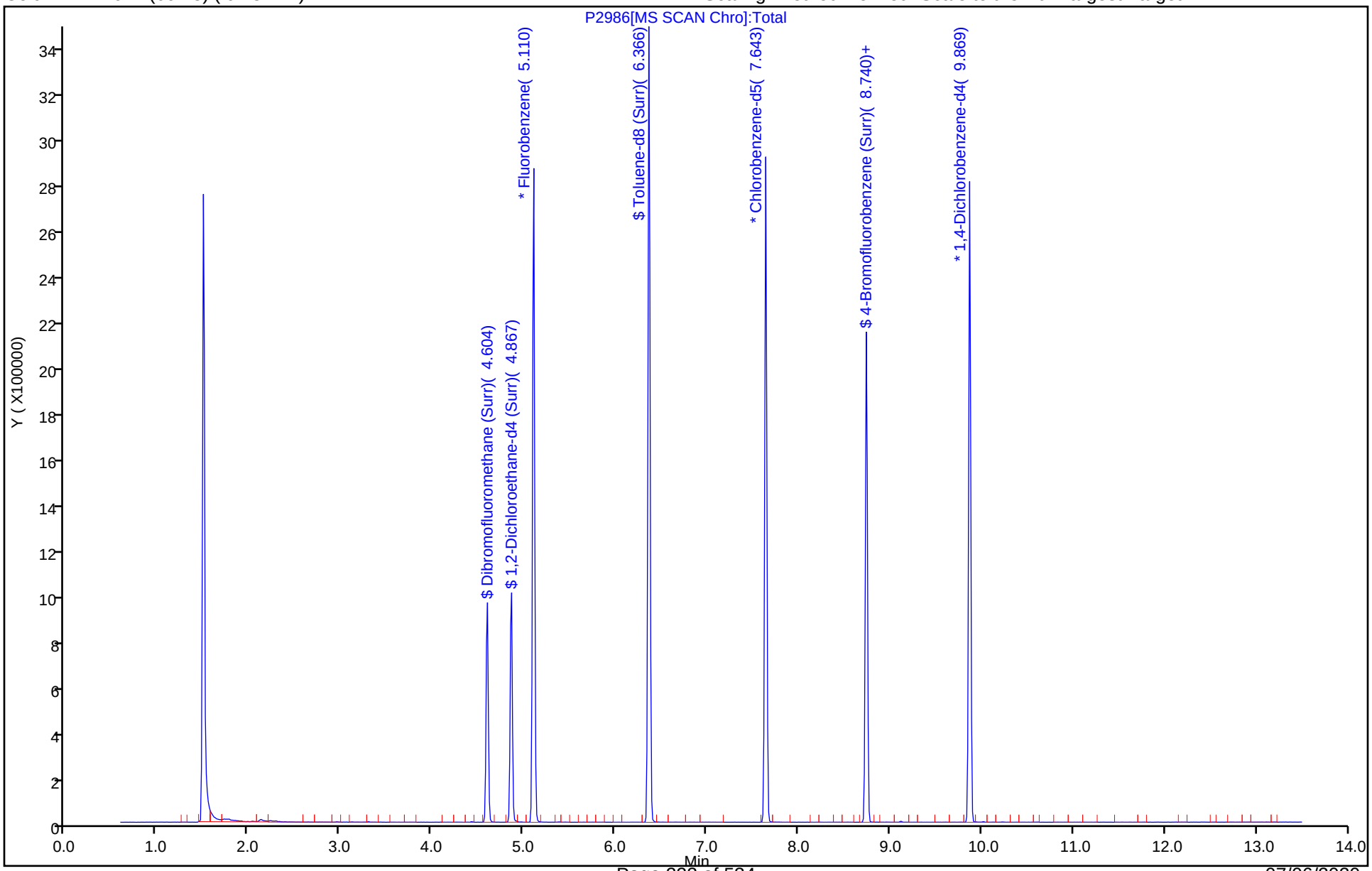
Report Date: 02-Jul-2020 22:13:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2986.D

Injection Date:	02-Jul-2020 03:55:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-5	Lab Sample ID:	280-138098-5	Worklist Smp#:	20
Client ID:	RW-2213F-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2986.D				
Lims ID:	280-138098-B-5				
Client ID:	RW-2213F-20200625				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 03:55:30	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-B-5 pH				
Misc. Info.:	280-0092961-020				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

First Level Reviewer: petuninp Date: 02-Jul-2020 22:07:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.70
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.28
$ 6 Toluene-d8 (Surr)	50.0	48.9	97.88
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.9	95.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2613M-20200625 Lab Sample ID: 280-138098-6

Matrix: Water Lab File ID: P2987.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 04:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2613M-20200625 Lab Sample ID: 280-138098-6

Matrix: Water Lab File ID: P2987.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 04:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2987.D
Lims ID: 280-138098-B-6
Client ID: RW-2613M-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 04:16:30 ALS Bottle#: 17 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-6 pH
Misc. Info.: 280-0092961-021
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.110	5.109	0.001	99	2206691	50.0	
*	2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	510881	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	731582	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	535257	50.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	596252	47.7	
$	6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	92	2182289	48.5	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	85	773699	47.9	
	10 Dichlorodifluoromethane	85		1.660				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.168				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.885				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.265				ND	
	51 Methacrylonitrile	41		4.381				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

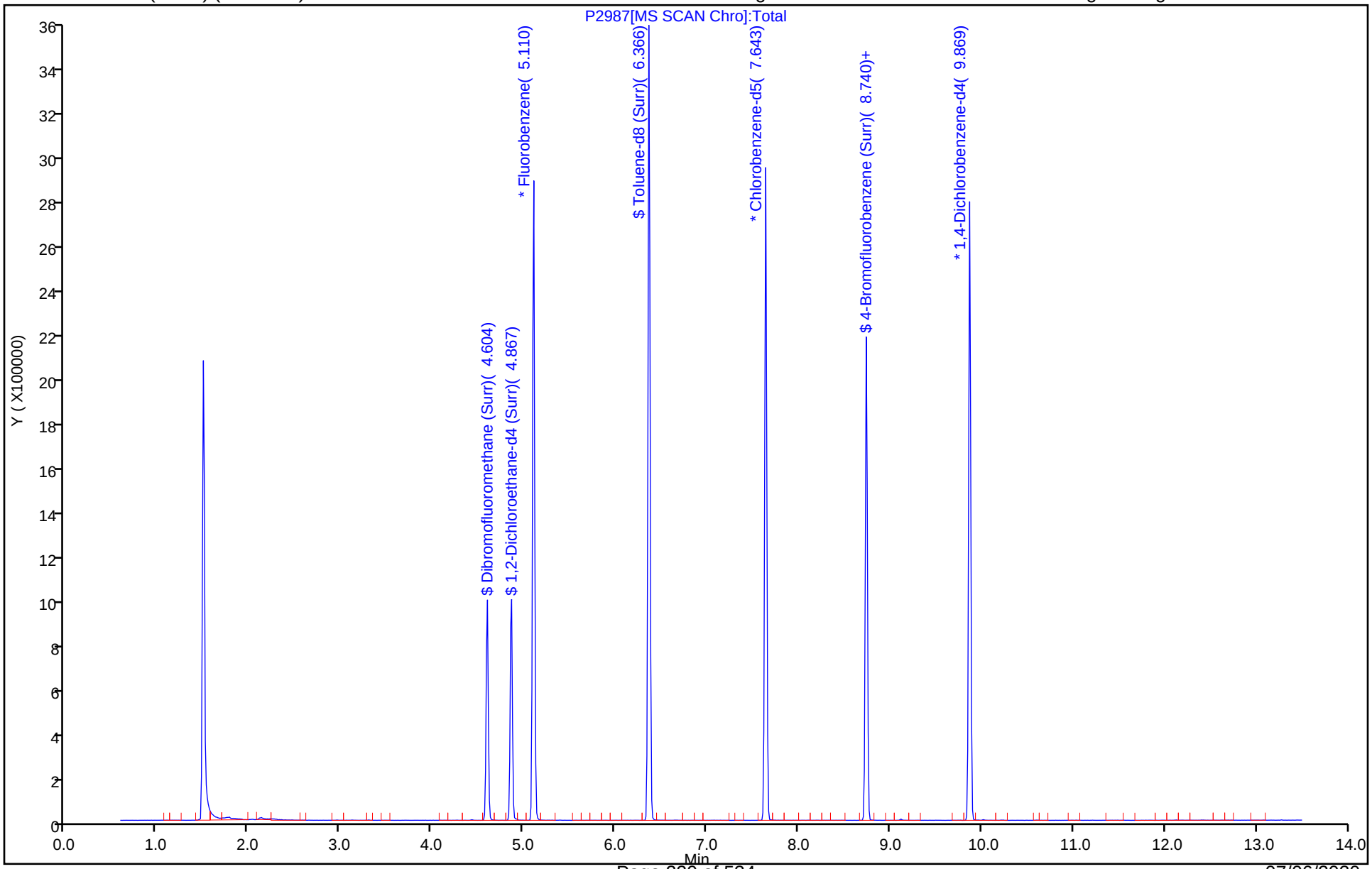
Report Date: 02-Jul-2020 22:13:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2987.D

Injection Date:	02-Jul-2020 04:16:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-6	Lab Sample ID:	280-138098-6	Worklist Smp#:	21
Client ID:	RW-2613M-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2987.D
Lims ID: 280-138098-B-6
Client ID: RW-2613M-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 04:16:30 ALS Bottle#: 17 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-6 pH
Misc. Info.: 280-0092961-021
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.73
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.36
$ 6 Toluene-d8 (Surr)	50.0	48.5	97.09
$ 7 4-Bromofluorobenzene (Surr)	50.0	47.9	95.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7091R-20200624 Lab Sample ID: 280-138098-7

Matrix: Water Lab File ID: P2988.D

Analysis Method: 8260B Date Collected: 06/24/2020 15:33

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 04:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7091R-20200624 Lab Sample ID: 280-138098-7

Matrix: Water Lab File ID: P2988.D

Analysis Method: 8260B Date Collected: 06/24/2020 15:33

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 04:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	0.24	J	1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	1.4		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2988.D
Lims ID: 280-138098-A-7
Client ID: RW-7091R-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 04:37:30 ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-7 pH
Misc. Info.: 280-0092961-022
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:07:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.109	0.002	99	2516047	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.642	0.002	87	570207	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	97	808166	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	602437	49.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	677129	47.5	
$ 6 Toluene-d8 (Surr)	98	6.367	6.366	0.001	93	2494001	49.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	83	886324	49.7	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41	4.752	4.752	0.000	12	479	1.23	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.385	5.385	0.000	99	14448	1.42	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.873	6.873	0.000	93	1634	0.2351	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

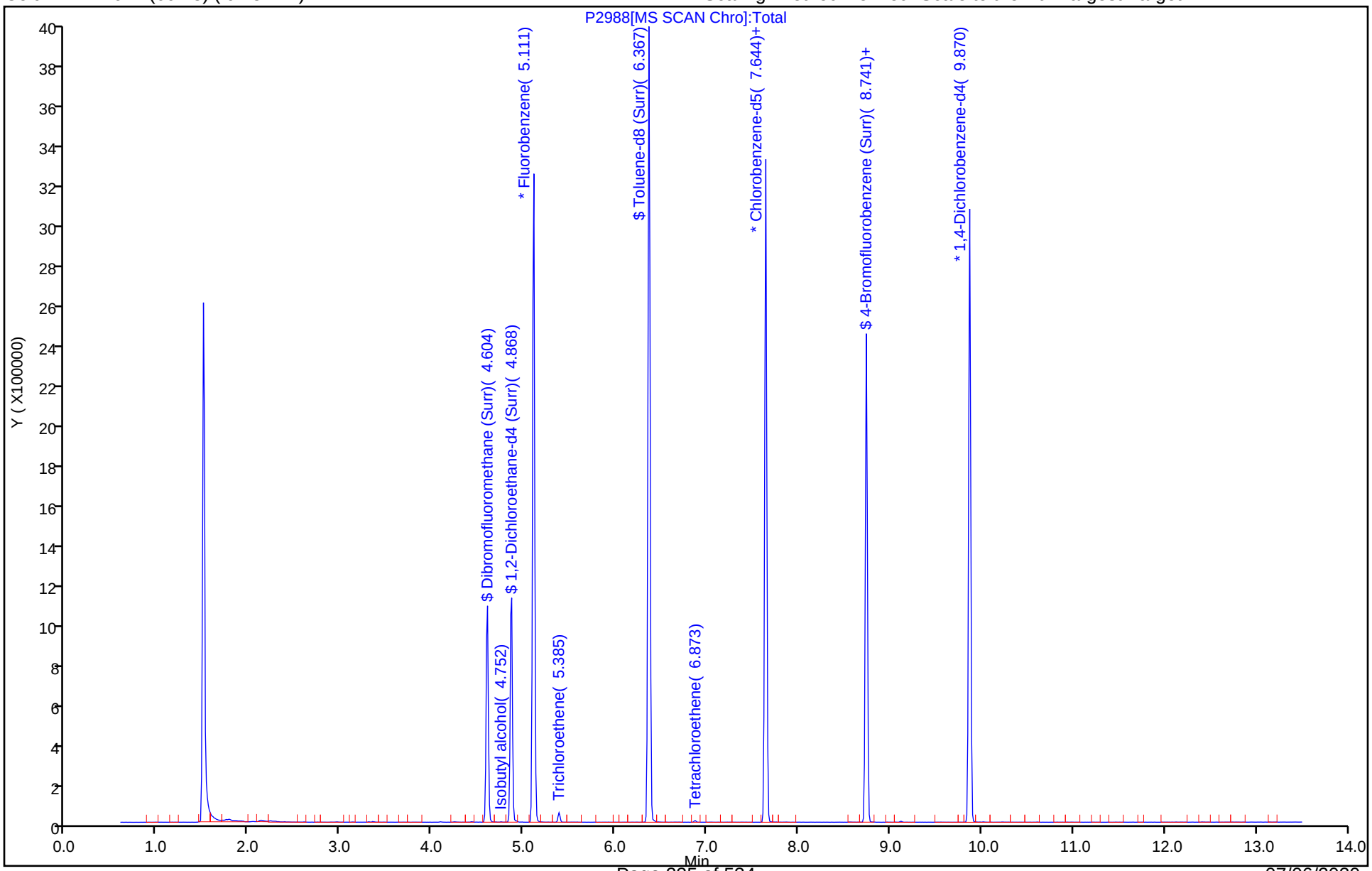
Report Date: 02-Jul-2020 22:13:24 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2988.D

Injection Date:	02-Jul-2020 04:37:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-7	Lab Sample ID:	280-138098-7	Worklist Smp#:	22
Client ID:	RW-7091R-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2988.D				
Lims ID:	280-138098-A-7				
Client ID:	RW-7091R-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 04:37:30	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-A-7 pH				
Misc. Info.:	280-0092961-022				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

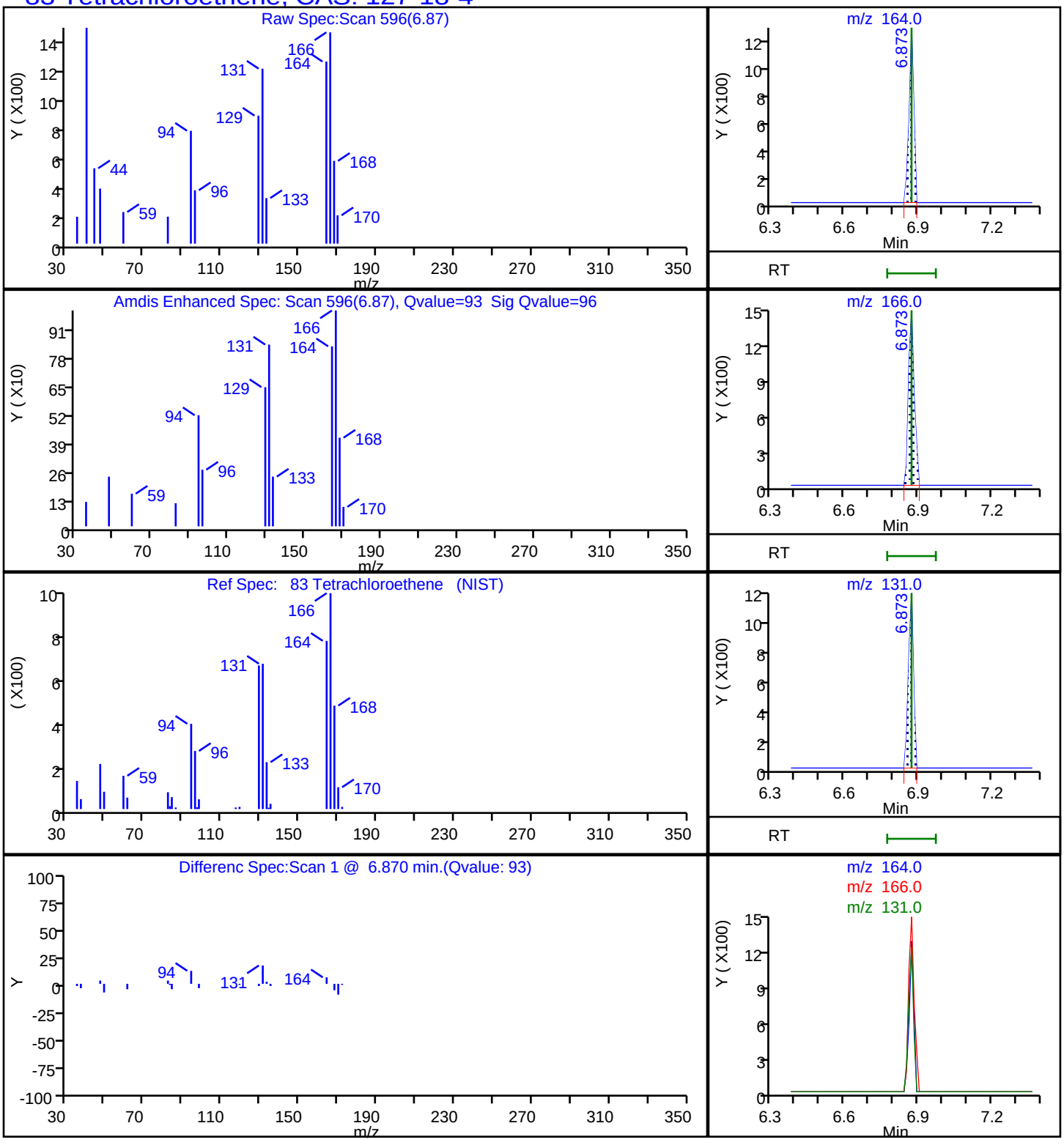
First Level Reviewer: petuninp Date: 02-Jul-2020 22:07:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.7	99.44
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	94.98
$ 6 Toluene-d8 (Surr)	50.0	49.7	99.41
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.7	99.38

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2988.D		
Injection Date:	02-Jul-2020 04:37:30	Instrument ID:	VMS_P
Lims ID:	280-138098-A-7	Lab Sample ID:	280-138098-7
Client ID:	RW-7091R-20200624		
Operator ID:	PETUNINP	ALS Bottle#:	18 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

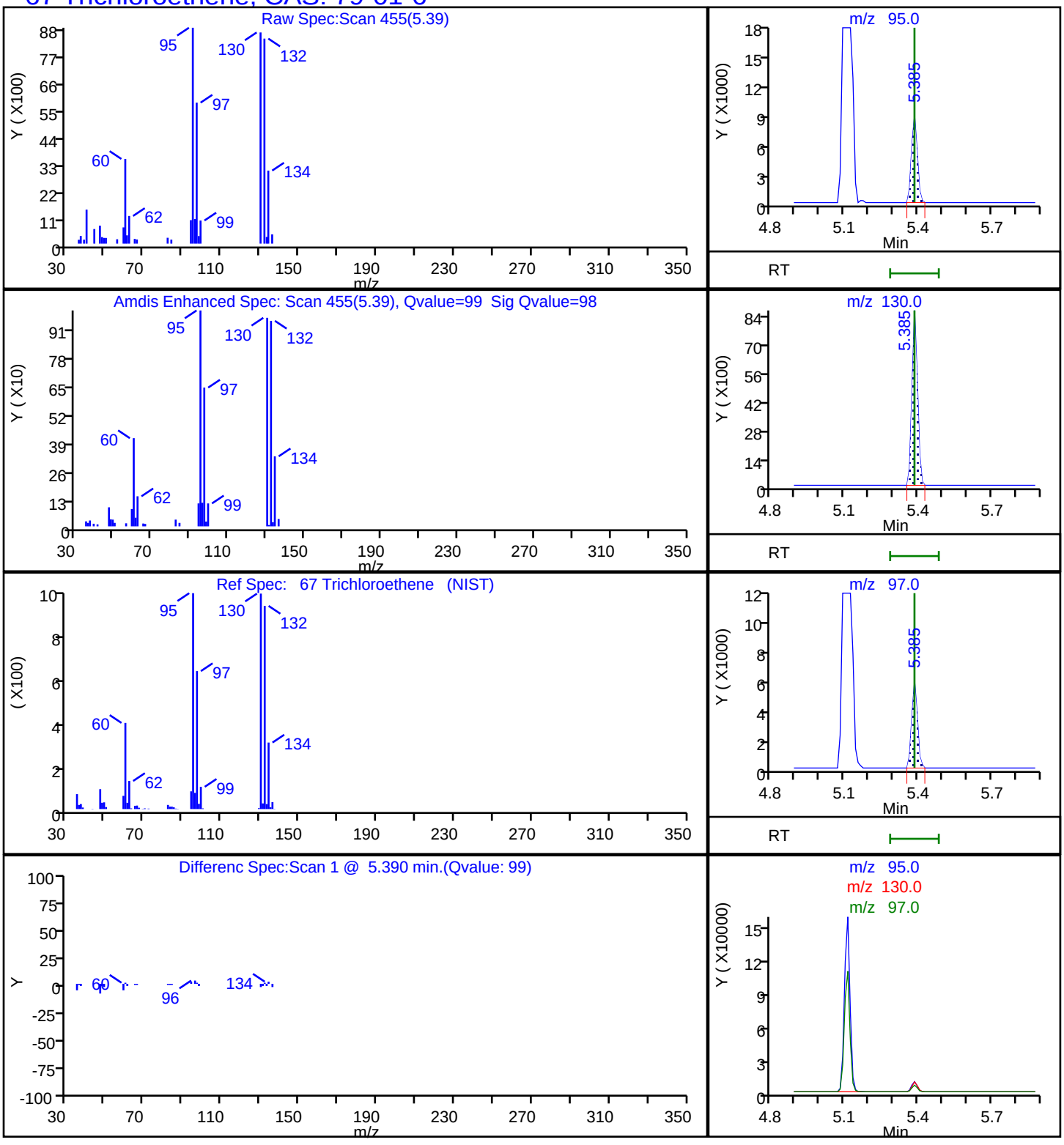
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2988.D		
Injection Date:	02-Jul-2020 04:37:30	Instrument ID:	VMS_P
Lims ID:	280-138098-A-7	Lab Sample ID:	280-138098-7
Client ID:	RW-7091R-20200624		
Operator ID:	PETUNINP	ALS Bottle#:	18 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7505P-20200624 Lab Sample ID: 280-138098-8

Matrix: Water Lab File ID: P2989.D

Analysis Method: 8260B Date Collected: 06/24/2020 08:50

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 04:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7505P-20200624 Lab Sample ID: 280-138098-8

Matrix: Water Lab File ID: P2989.D

Analysis Method: 8260B Date Collected: 06/24/2020 08:50

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 04:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2989.D
Lims ID: 280-138098-A-8
Client ID: RW-7505P-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 04:58:30 ALS Bottle#: 19 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-8 pH
Misc. Info.: 280-0092961-023
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.111	5.109	0.002	99	2441494	50.0	
*	2 Chlorobenzene-d5	119	7.644	7.642	0.002	86	552749	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	97	794686	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	587869	50.0	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	658396	47.6	
$	6 Toluene-d8 (Surr)	98	6.367	6.366	0.001	93	2401968	49.4	
$	7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	84	848908	48.4	
	10 Dichlorodifluoromethane	85		1.660				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.168				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.885				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.265				ND	
	51 Methacrylonitrile	41		4.381				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

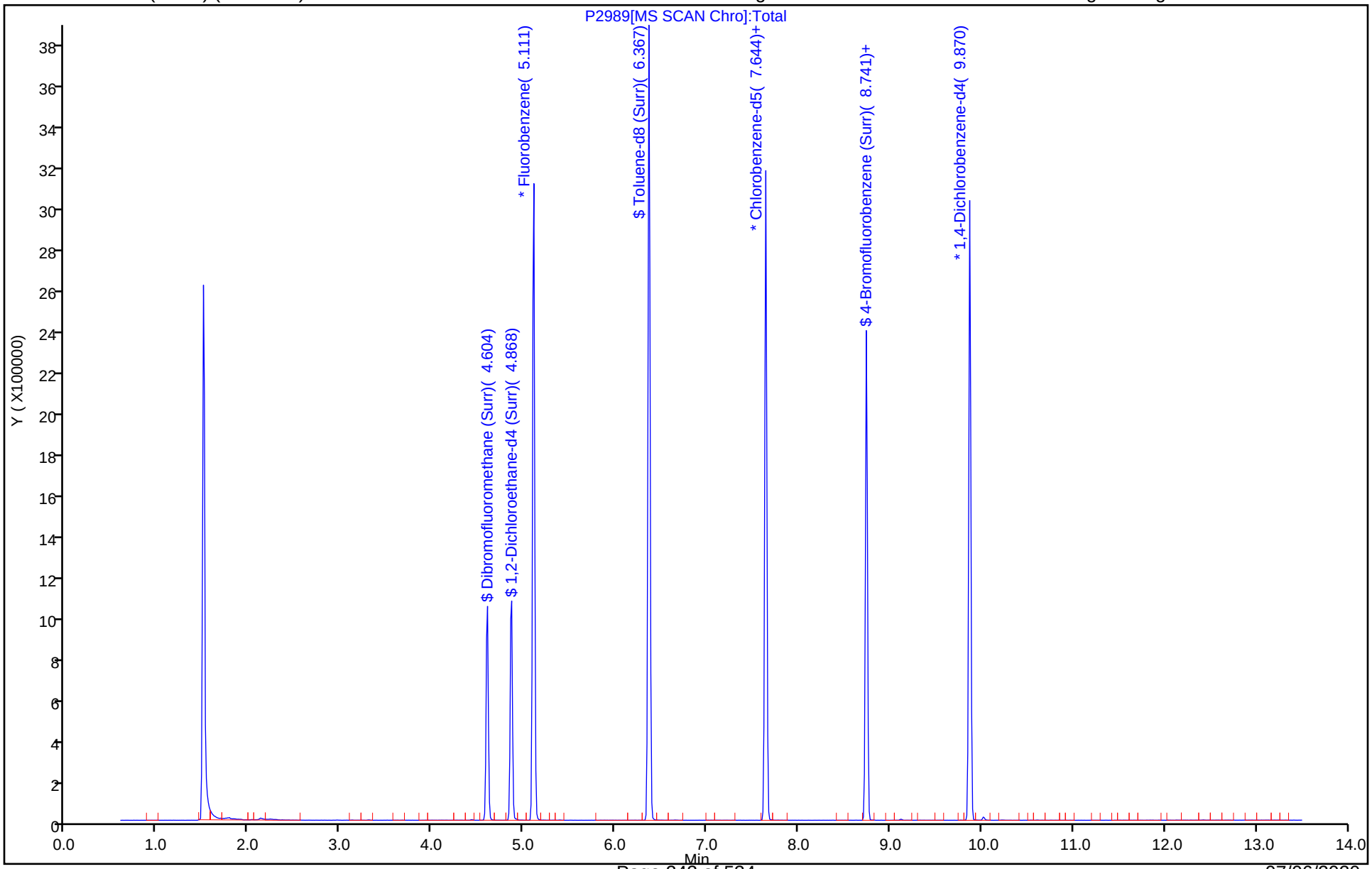
Report Date: 02-Jul-2020 22:13:24 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2989.D

Injection Date:	02-Jul-2020 04:58:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-8	Lab Sample ID:	280-138098-8	Worklist Smp#:	23
Client ID:	RW-7505P-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2989.D				
Lims ID:	280-138098-A-8				
Client ID:	RW-7505P-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 04:58:30	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-A-8 pH				
Misc. Info.:	280-0092961-023				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.0	99.99
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.17
$ 6 Toluene-d8 (Surr)	50.0	49.4	98.77
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.4	96.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7549P-20200624 Lab Sample ID: 280-138098-9

Matrix: Water Lab File ID: P2990.D

Analysis Method: 8260B Date Collected: 06/24/2020 13:04

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 05:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7549P-20200624 Lab Sample ID: 280-138098-9

Matrix: Water Lab File ID: P2990.D

Analysis Method: 8260B Date Collected: 06/24/2020 13:04

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 05:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2990.D
Lims ID: 280-138098-A-9
Client ID: RW-7549P-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 05:20:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-9 pH
Misc. Info.: 280-0092961-024
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.110	5.109	0.001	99	2275286	50.0	
*	2 Chlorobenzene-d5	119	7.642	7.642	0.000	86	516353	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	746413	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	549587	50.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	97	614413	47.7	
$	6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	92	2245129	49.4	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	86	803852	48.8	
	10 Dichlorodifluoromethane	85		1.660				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.168				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.885				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.265				ND	
	51 Methacrylonitrile	41		4.381				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

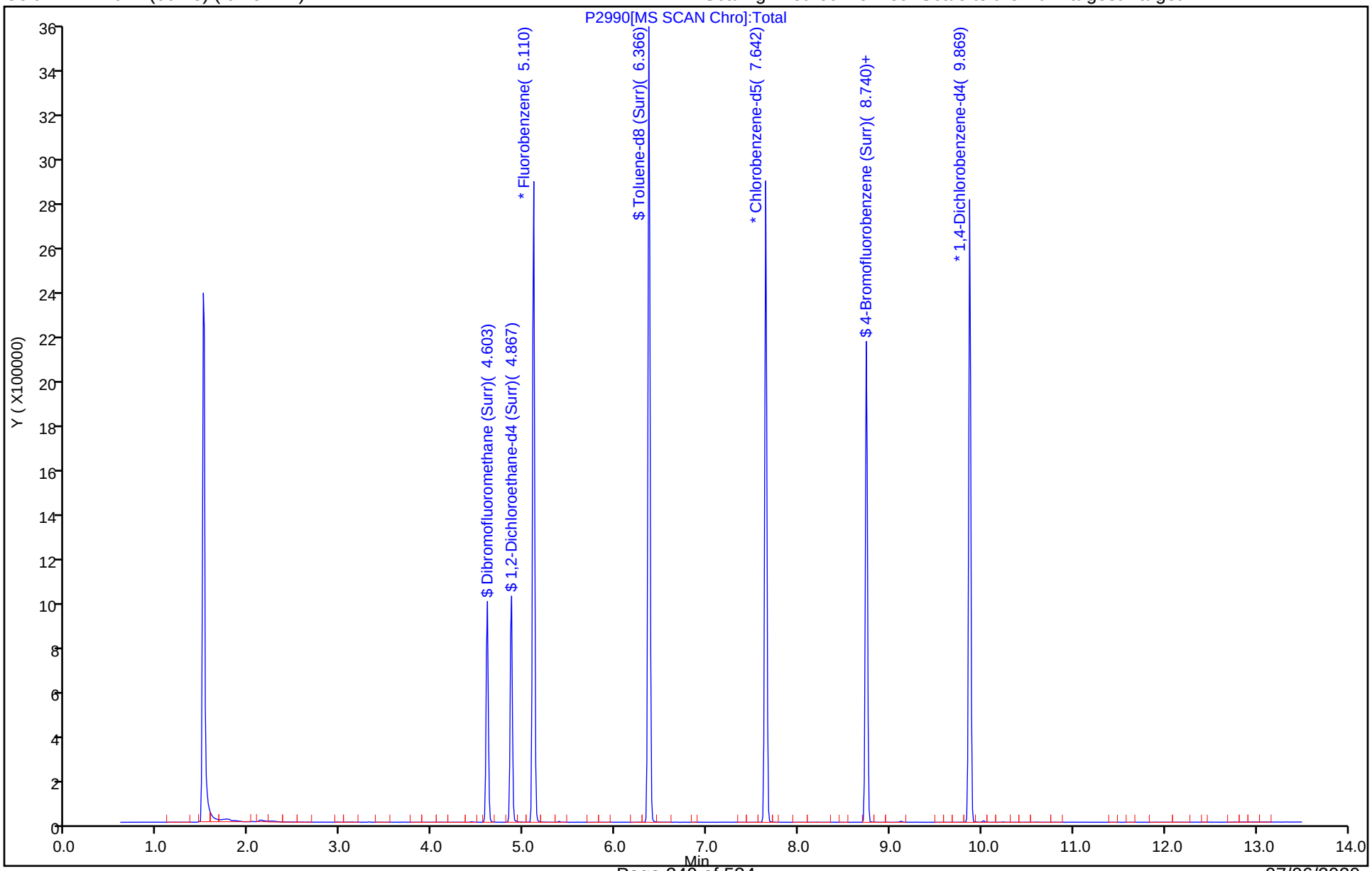
Report Date: 02-Jul-2020 22:13:25 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2990.D

Injection Date:	02-Jul-2020 05:20:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-9	Lab Sample ID:	280-138098-9	Worklist Smp#:	24
Client ID:	RW-7549P-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2990.D
Lims ID: 280-138098-A-9
Client ID: RW-7549P-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 05:20:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-9 pH
Misc. Info.: 280-0092961-024
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.31
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.30
$ 6 Toluene-d8 (Surr)	50.0	49.4	98.83
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.8	97.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7588P-20200624 Lab Sample ID: 280-138098-10

Matrix: Water Lab File ID: P2991.D

Analysis Method: 8260B Date Collected: 06/24/2020 15:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 05:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-7588P-20200624 Lab Sample ID: 280-138098-10

Matrix: Water Lab File ID: P2991.D

Analysis Method: 8260B Date Collected: 06/24/2020 15:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 05:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2991.D
Lims ID: 280-138098-A-10
Client ID: RW-7588P-20200624
Sample Type: Client
Inject. Date: 02-Jul-2020 05:41:30 ALS Bottle#: 21 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-10 pH
Misc. Info.: 280-0092961-025
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.110	5.109	0.001	99	2346499	50.0	
*	2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	534331	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	763395	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	92	569444	50.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	633280	47.6	
$	6 Toluene-d8 (Surr)	98	6.365	6.366	-0.001	93	2335540	49.7	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	84	819771	48.7	
	10 Dichlorodifluoromethane	85		1.660				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.168				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.885				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.265				ND	
	51 Methacrylonitrile	41		4.381				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

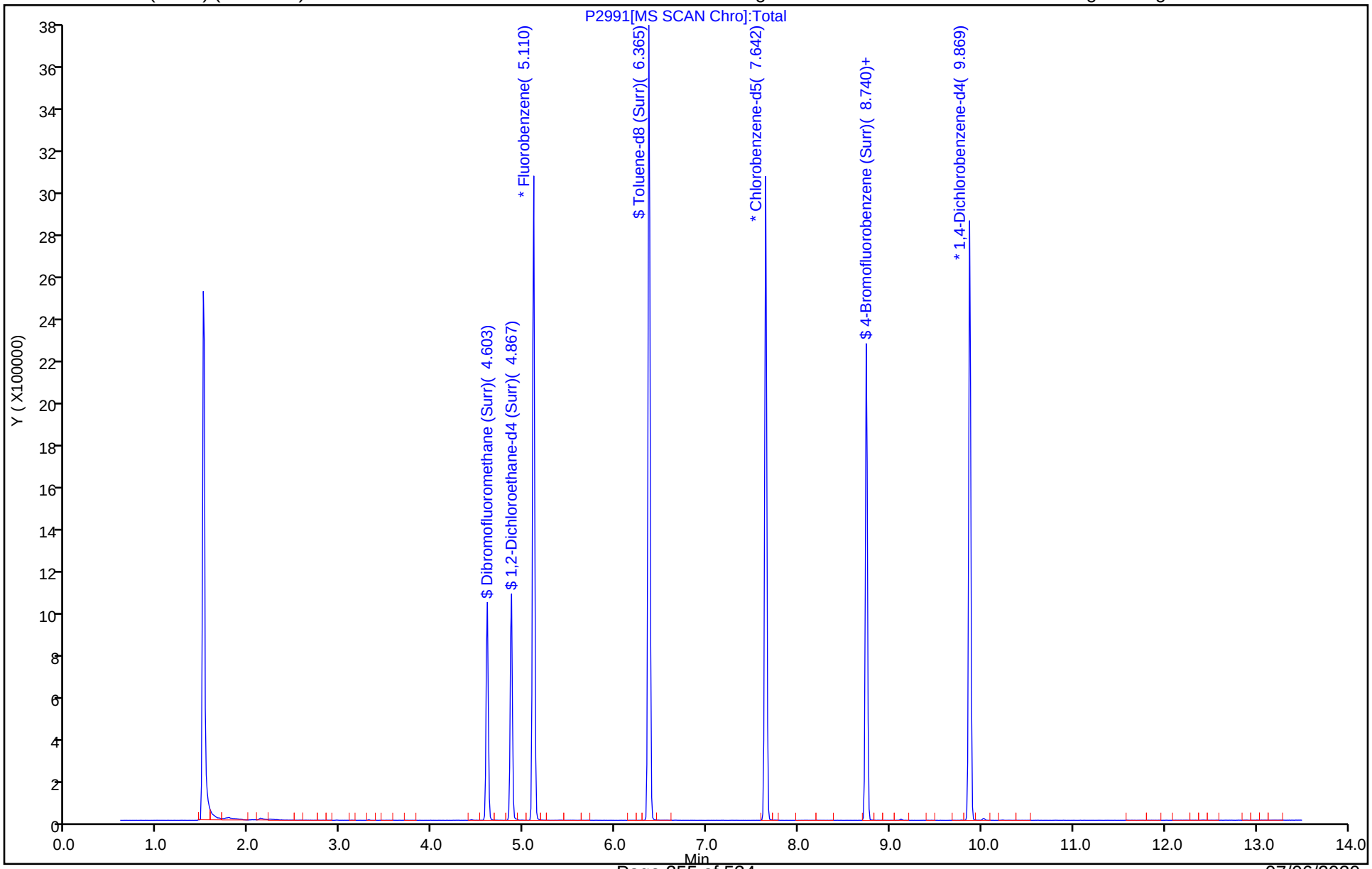
Report Date: 02-Jul-2020 22:13:26 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2991.D

Injection Date:	02-Jul-2020 05:41:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-10	Lab Sample ID:	280-138098-10	Worklist Smp#:	25
Client ID:	RW-7588P-20200624				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2991.D				
Lims ID:	280-138098-A-10				
Client ID:	RW-7588P-20200624				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 05:41:30	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-A-10 pH				
Misc. Info.:	280-0092961-025				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.78
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.25
$ 6 Toluene-d8 (Surr)	50.0	49.7	99.35
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.7	97.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-8209P-20200625 Lab Sample ID: 280-138098-11

Matrix: Water Lab File ID: P2992.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:40

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 06:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-8209P-20200625 Lab Sample ID: 280-138098-11

Matrix: Water Lab File ID: P2992.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:40

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 06:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2992.D
Lims ID: 280-138098-A-11
Client ID: RW-8209P-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 06:02:30 ALS Bottle#: 22 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-11 pH
Misc. Info.: 280-0092961-026
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.111	5.109	0.002	99	2380169	50.0	
*	2 Chlorobenzene-d5	119	7.644	7.642	0.002	86	513283	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	747648	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	577203	50.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	649070	48.1	
$	6 Toluene-d8 (Surr)	98	6.367	6.366	0.001	93	2210038	48.9	
$	7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	84	803419	48.7	
	10 Dichlorodifluoromethane	85		1.660				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	21 Acrolein	56		2.852				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	26 Iodomethane	142		3.063				ND	
	27 Carbon disulfide	76		3.127				ND	
	28 Acetonitrile	41		3.168				ND	
	30 3-Chloro-1-propene	41		3.211				ND	
	31 Methylene Chloride	84		3.306				ND	
	33 Acrylonitrile	53		3.464				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	38 Vinyl acetate	43		3.802				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	41 2-Chloro-1,3-butadiene	53		3.885				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.245				ND	
	48 2,2-Dichloropropane	77		4.256				ND	
	49 Propionitrile	54		4.265				ND	
	51 Methacrylonitrile	41		4.381				ND	
	53 Chlorobromomethane	128		4.425				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

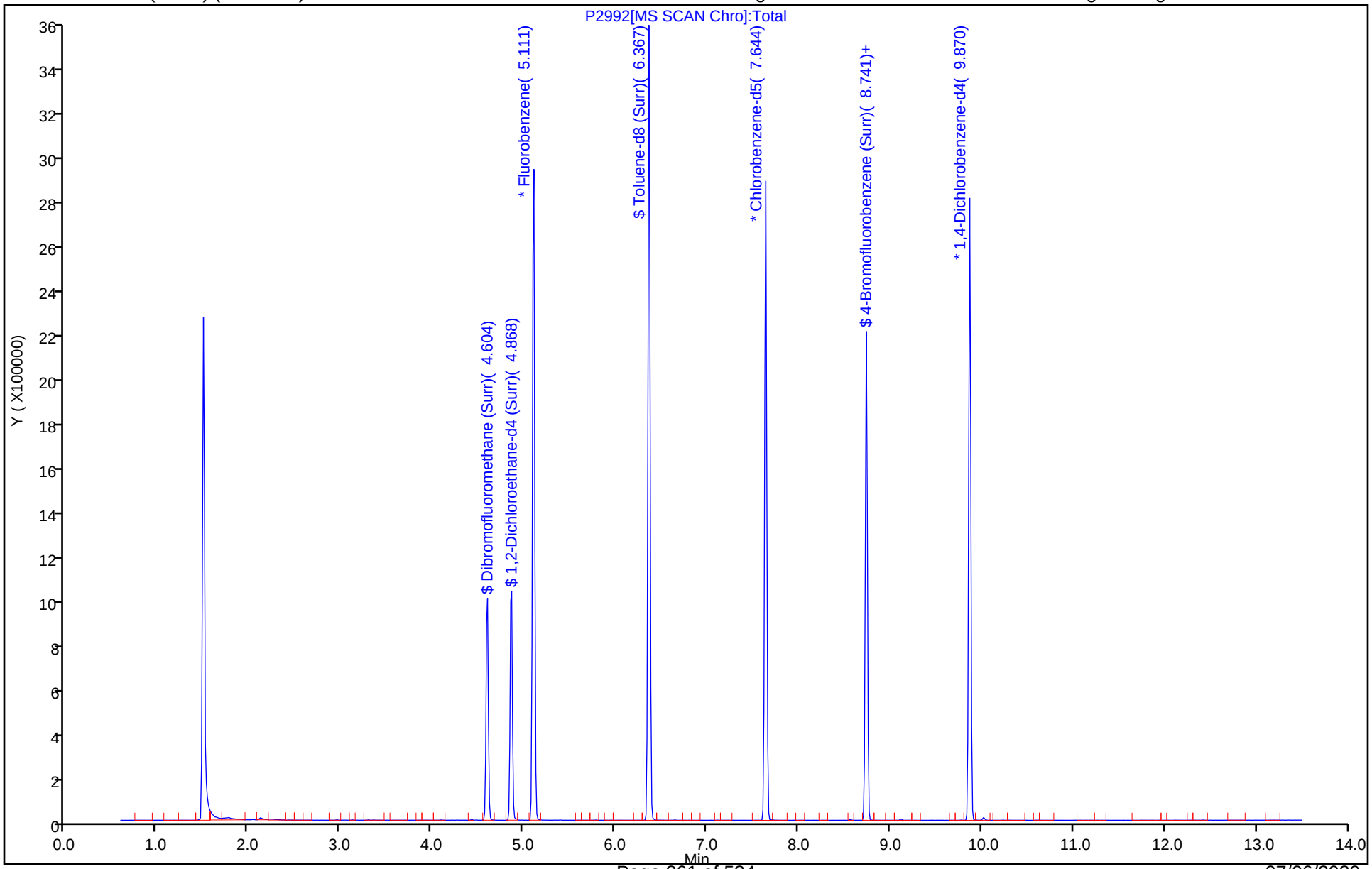
Report Date: 02-Jul-2020 22:13:26 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2992.D

Injection Date:	02-Jul-2020 06:02:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-11	Lab Sample ID:	280-138098-11	Worklist Smp#:	26
Client ID:	RW-8209P-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2992.D
Lims ID: 280-138098-A-11
Client ID: RW-8209P-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 06:02:30 ALS Bottle#: 22 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-11 pH
Misc. Info.: 280-0092961-026
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.71
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.24
$ 6 Toluene-d8 (Surr)	50.0	48.9	97.86
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.7	97.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: EB-00-20200625 Lab Sample ID: 280-138098-12

Matrix: Water Lab File ID: P2993.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	16		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	3.9	J	6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: EB-00-20200625 Lab Sample ID: 280-138098-12

Matrix: Water Lab File ID: P2993.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 06:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2993.D
Lims ID: 280-138098-A-12
Client ID: EB-00-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 06:23:30 ALS Bottle#: 23 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-12 pH
Misc. Info.: 280-0092961-027
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.109	0.002	99	2206967	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	502317	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	727206	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	534110	50.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	591876	47.3	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	92	2200839	49.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	85	775481	48.3	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43	2.958	2.958	0.000	99	49893	15.9	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43	4.214	4.214	0.000	99	19183	3.90	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

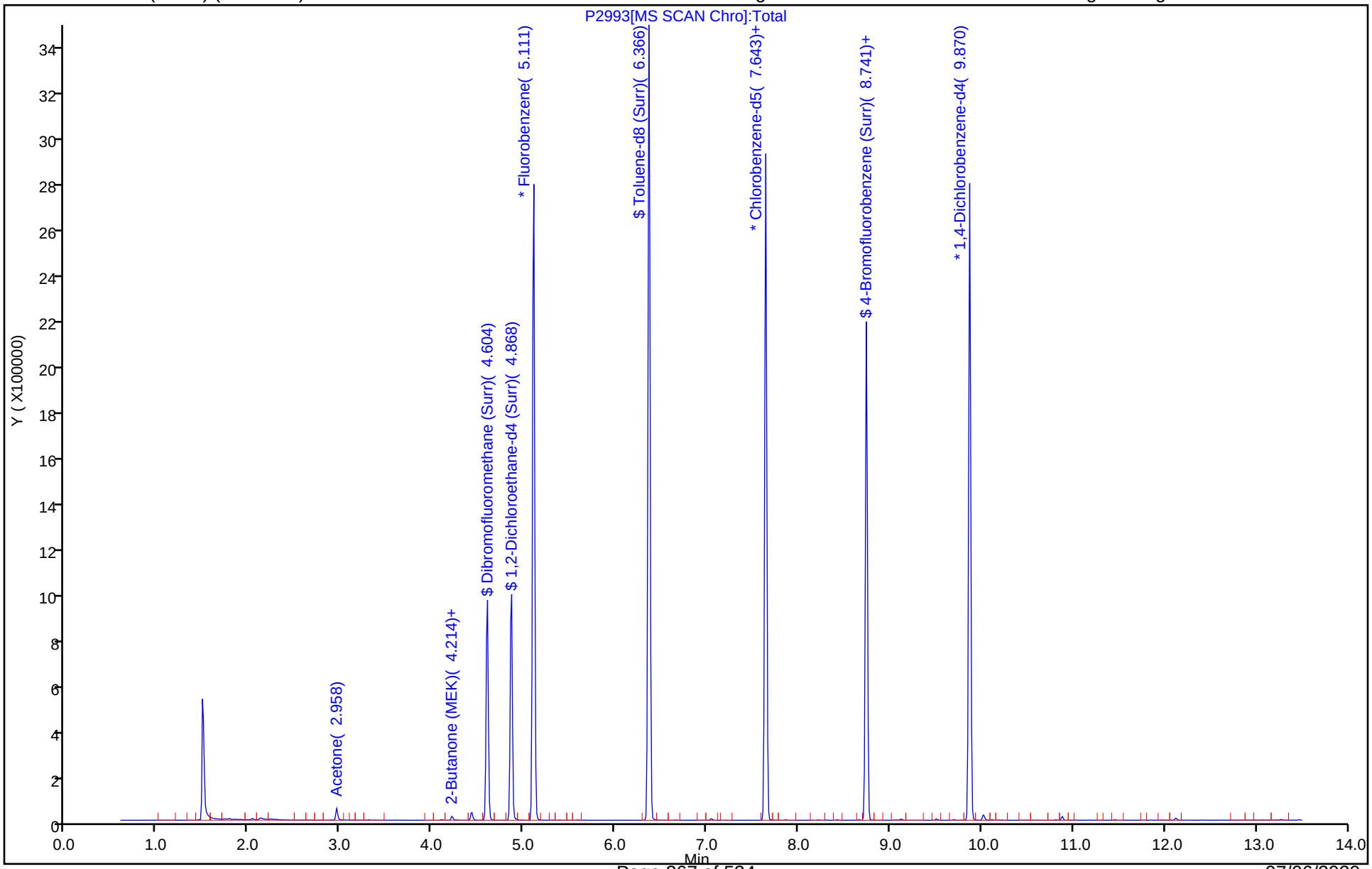
Report Date: 02-Jul-2020 22:13:27 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2993.D

Injection Date:	02-Jul-2020 06:23:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-12	Lab Sample ID:	280-138098-12	Worklist Smp#:	27
Client ID:	EB-00-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2993.D				
Lims ID:	280-138098-A-12				
Client ID:	EB-00-20200625				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 06:23:30	ALS Bottle#:	23	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-A-12 pH				
Misc. Info.:	280-0092961-027				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

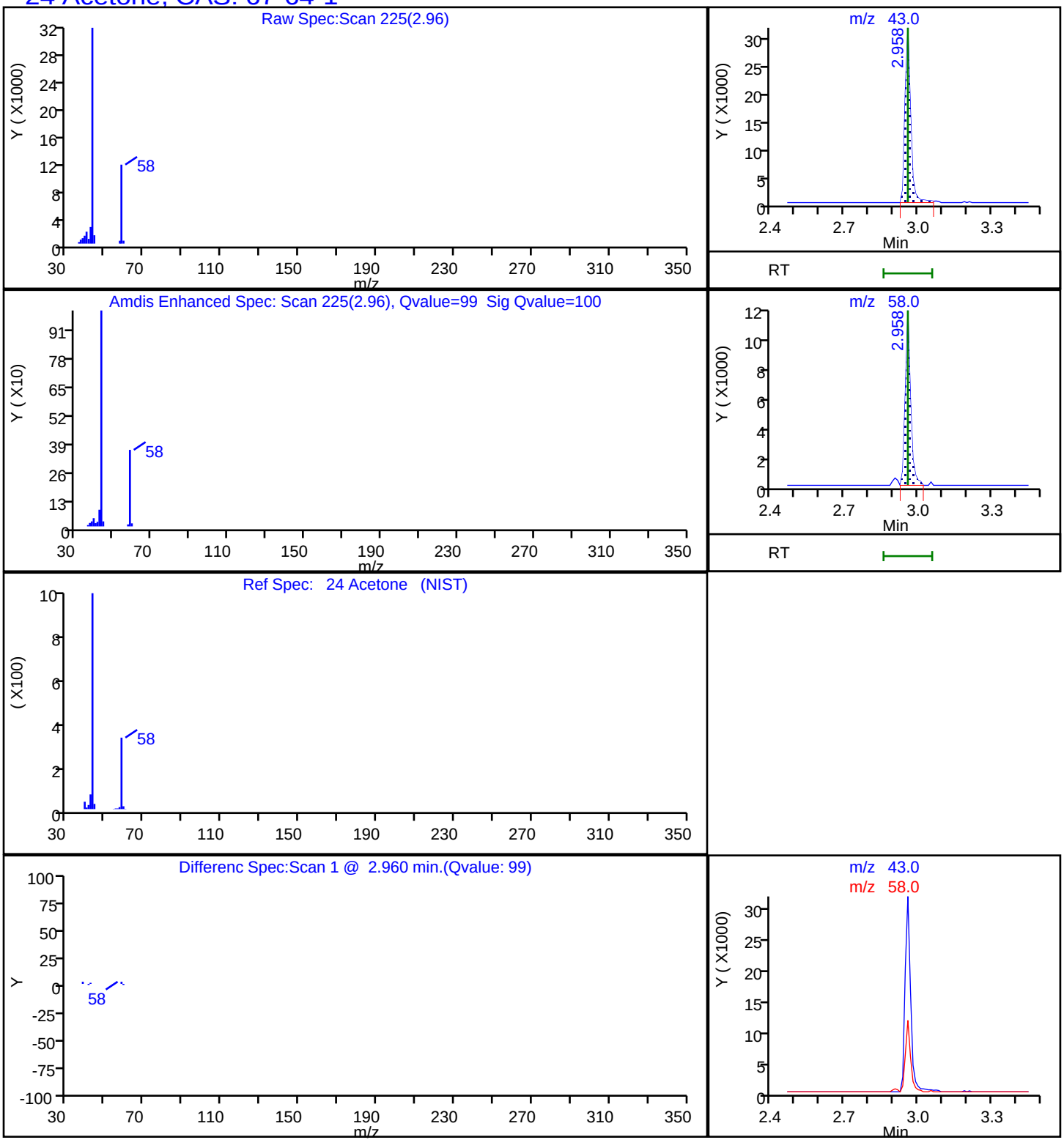
First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.3	100.50
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.3	94.65
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.59
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.3	96.63

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2993.D				
Injection Date:	02-Jul-2020 06:23:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-A-12	Lab Sample ID:	280-138098-12		
Client ID:	EB-00-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	23	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

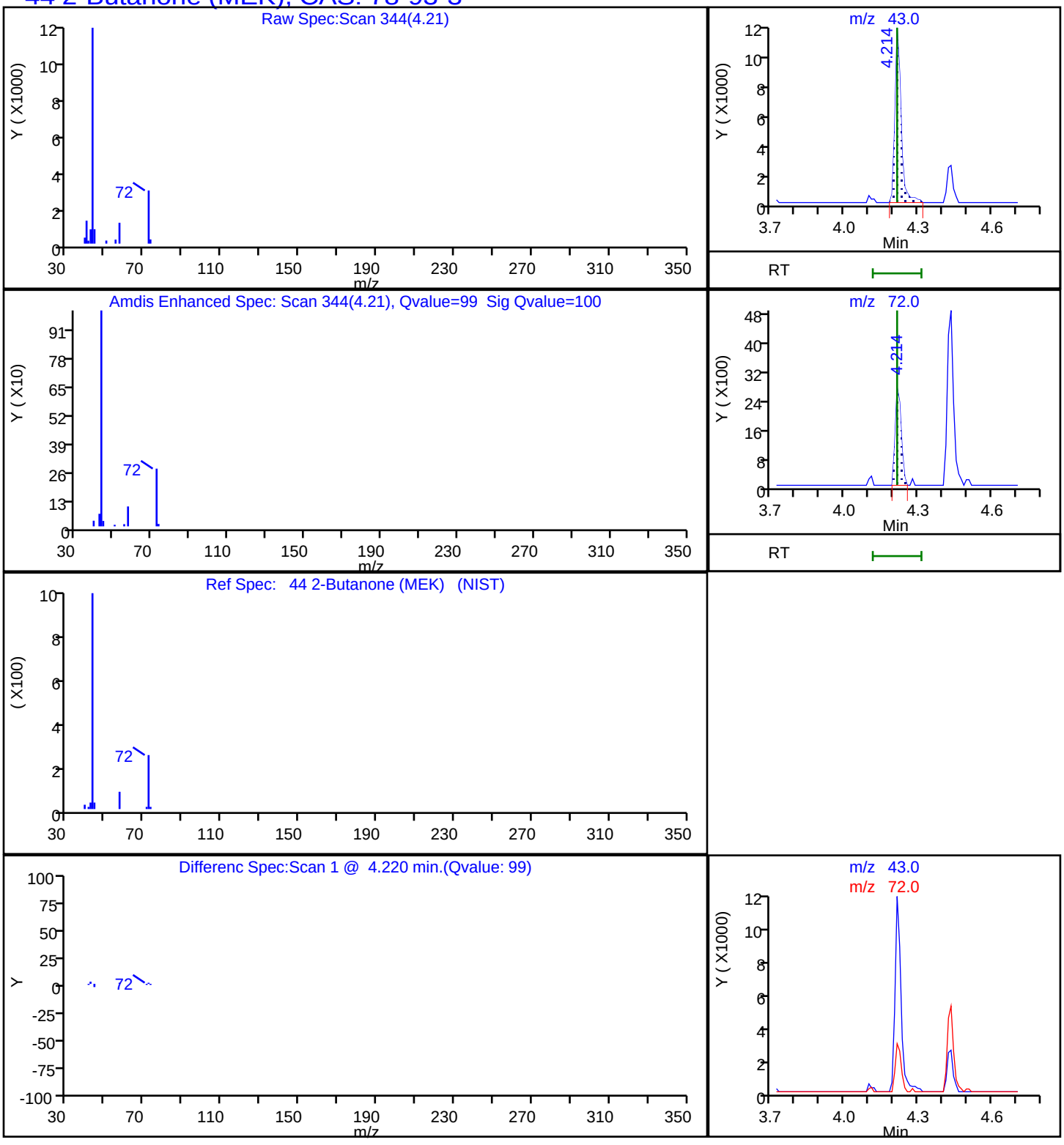
24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2993.D				
Injection Date:	02-Jul-2020 06:23:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-A-12	Lab Sample ID:	280-138098-12		
Client ID:	EB-00-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	23	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: EB-01-20200625 Lab Sample ID: 280-138098-13

Matrix: Water Lab File ID: P2994.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:05

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 06:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	15		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	3.8	J	6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: EB-01-20200625 Lab Sample ID: 280-138098-13

Matrix: Water Lab File ID: P2994.D

Analysis Method: 8260B Date Collected: 06/25/2020 15:05

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 06:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2994.D
Lims ID: 280-138098-B-13
Client ID: EB-01-20200625
Sample Type: Client
Inject. Date: 02-Jul-2020 06:44:30 ALS Bottle#: 24 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-13 pH
Misc. Info.: 280-0092961-028
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2417147	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	538954	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.869	0.002	96	770872	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.604	0.001	93	576805	49.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	97	643104	47.0	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2345971	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	83	831467	48.9	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43	2.959	2.958	0.001	99	50275	14.6	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43	4.215	4.214	0.001	100	20561	3.82	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

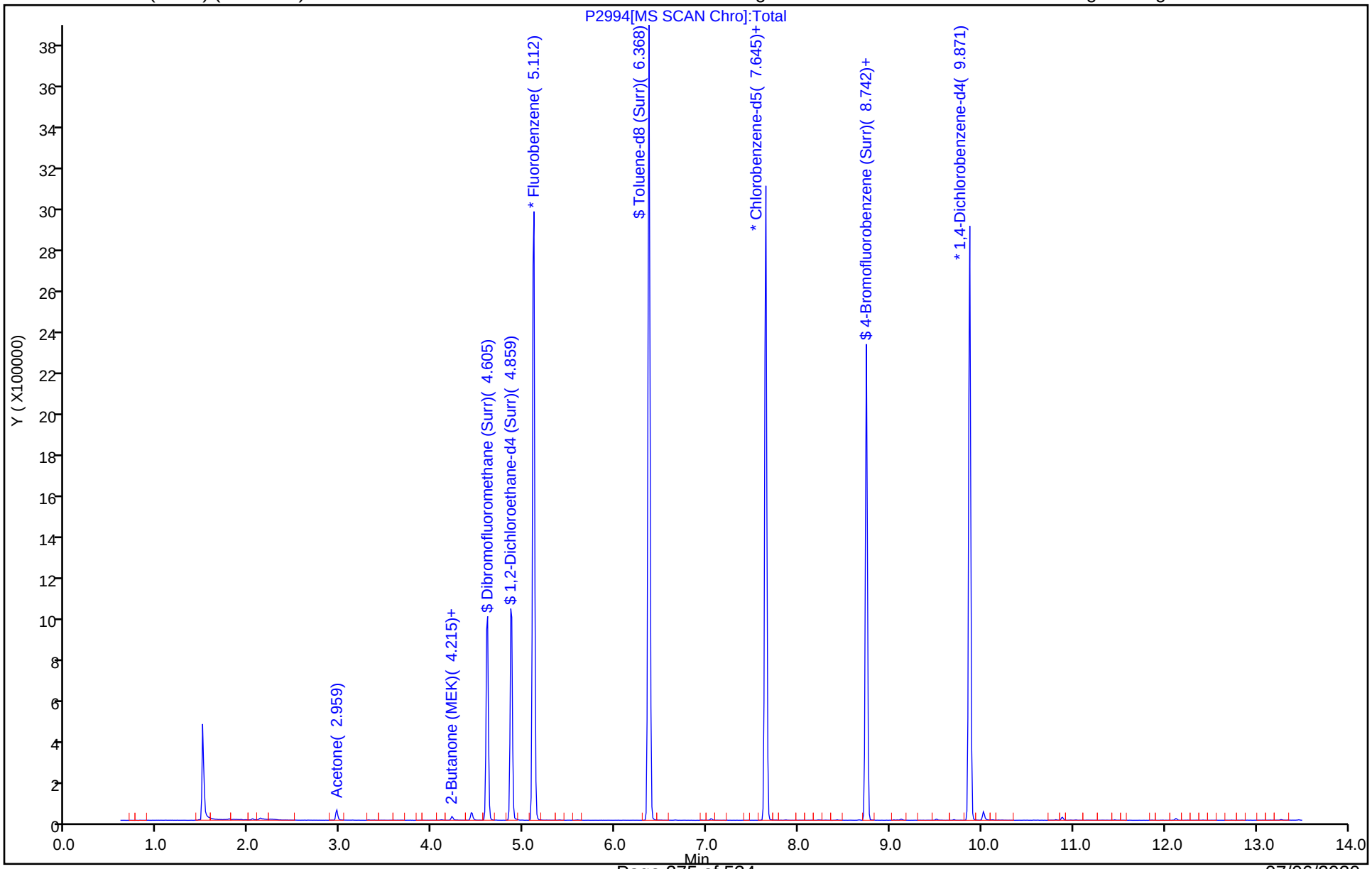
Report Date: 02-Jul-2020 22:13:27 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2994.D

Injection Date:	02-Jul-2020 06:44:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-13	Lab Sample ID:	280-138098-13	Worklist Smp#:	28
Client ID:	EB-01-20200625				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2994.D				
Lims ID:	280-138098-B-13				
Client ID:	EB-01-20200625				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 06:44:30	ALS Bottle#:	24	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-B-13 pH				
Misc. Info.:	280-0092961-028				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

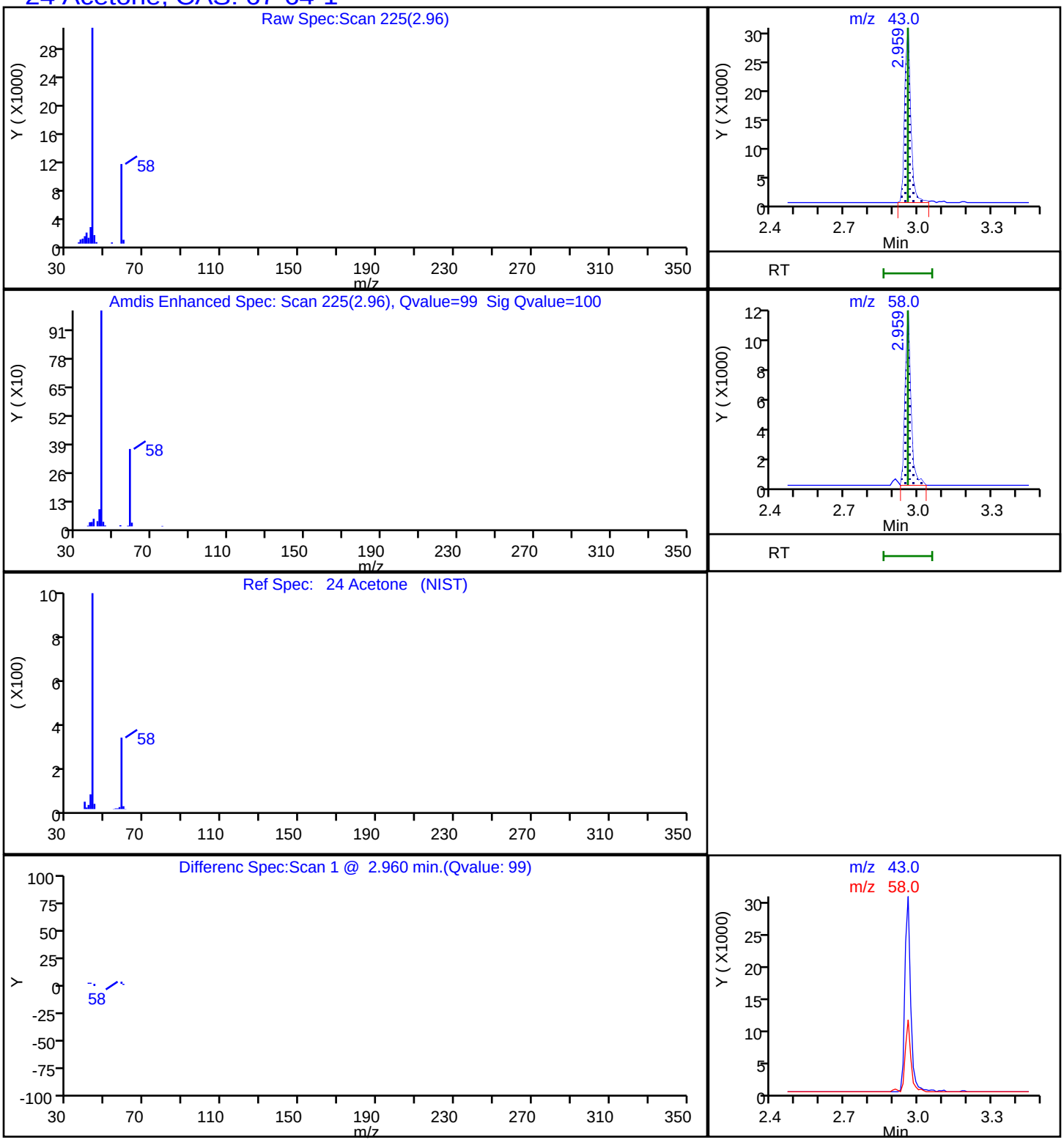
First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.6	99.10
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.0	93.90
$ 6 Toluene-d8 (Surr)	50.0	49.5	98.94
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.9	97.73

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2994.D				
Injection Date:	02-Jul-2020 06:44:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-13	Lab Sample ID:	280-138098-13		
Client ID:	EB-01-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

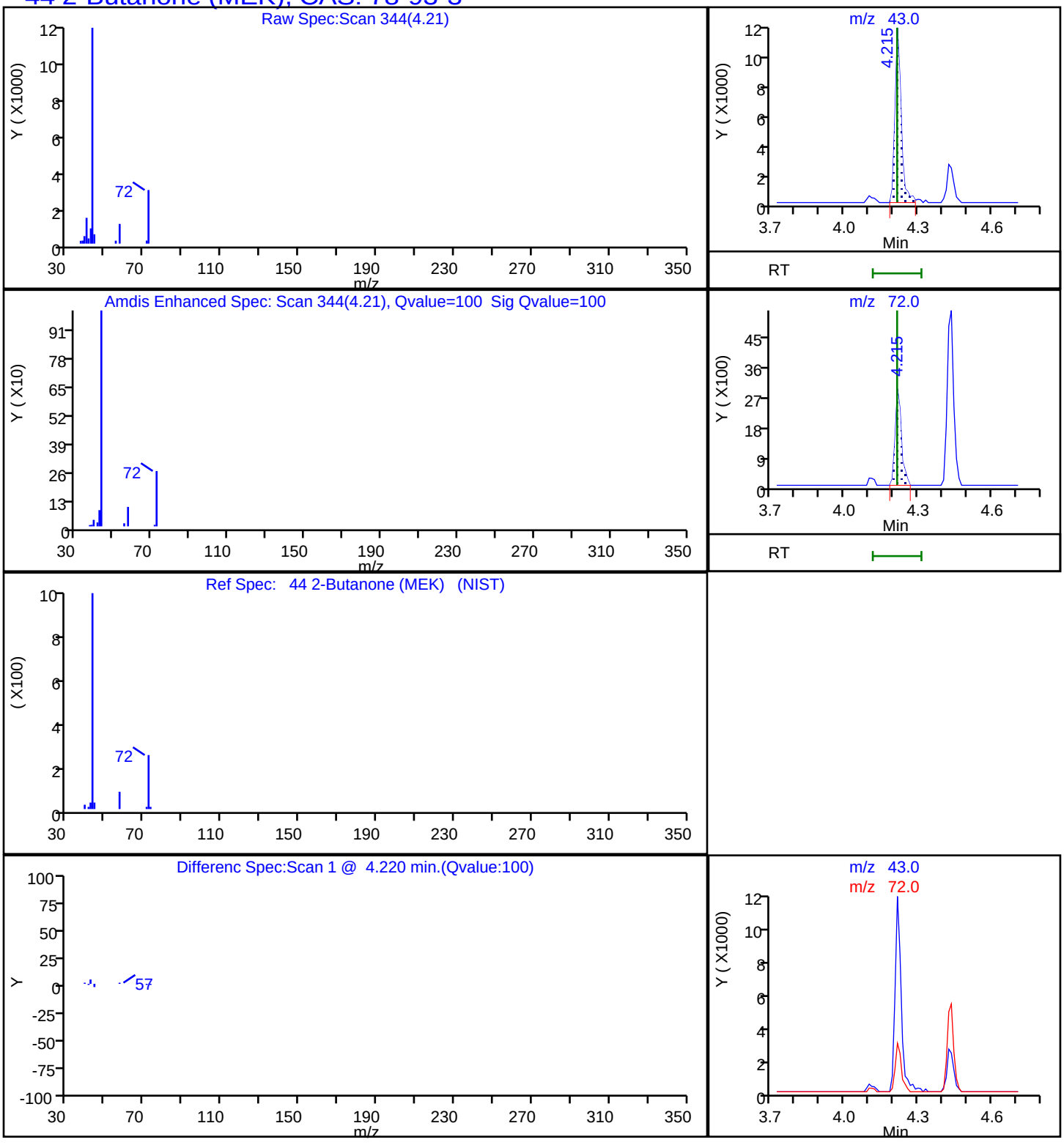
24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2994.D				
Injection Date:	02-Jul-2020 06:44:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-13	Lab Sample ID:	280-138098-13		
Client ID:	EB-01-20200625				
Operator ID:	PETUNINP	ALS Bottle#:	24	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: TB-02-20200626 Lab Sample ID: 280-138098-14

Matrix: Water Lab File ID: P2995.D

Analysis Method: 8260B Date Collected: 06/26/2020 10:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 07:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: TB-02-20200626 Lab Sample ID: 280-138098-14

Matrix: Water Lab File ID: P2995.D

Analysis Method: 8260B Date Collected: 06/26/2020 10:00

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 07:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2995.D
Lims ID: 280-138098-B-14
Client ID: TB-02-20200626
Sample Type: Client
Inject. Date: 02-Jul-2020 07:05:30 ALS Bottle#: 25 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-14 pH
Misc. Info.: 280-0092961-029
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2198292	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	508768	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	735606	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	534480	50.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	97	599347	48.1	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2178324	48.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	83	783792	48.3	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43	2.958	2.958	0.000	93	5169	0.5600	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

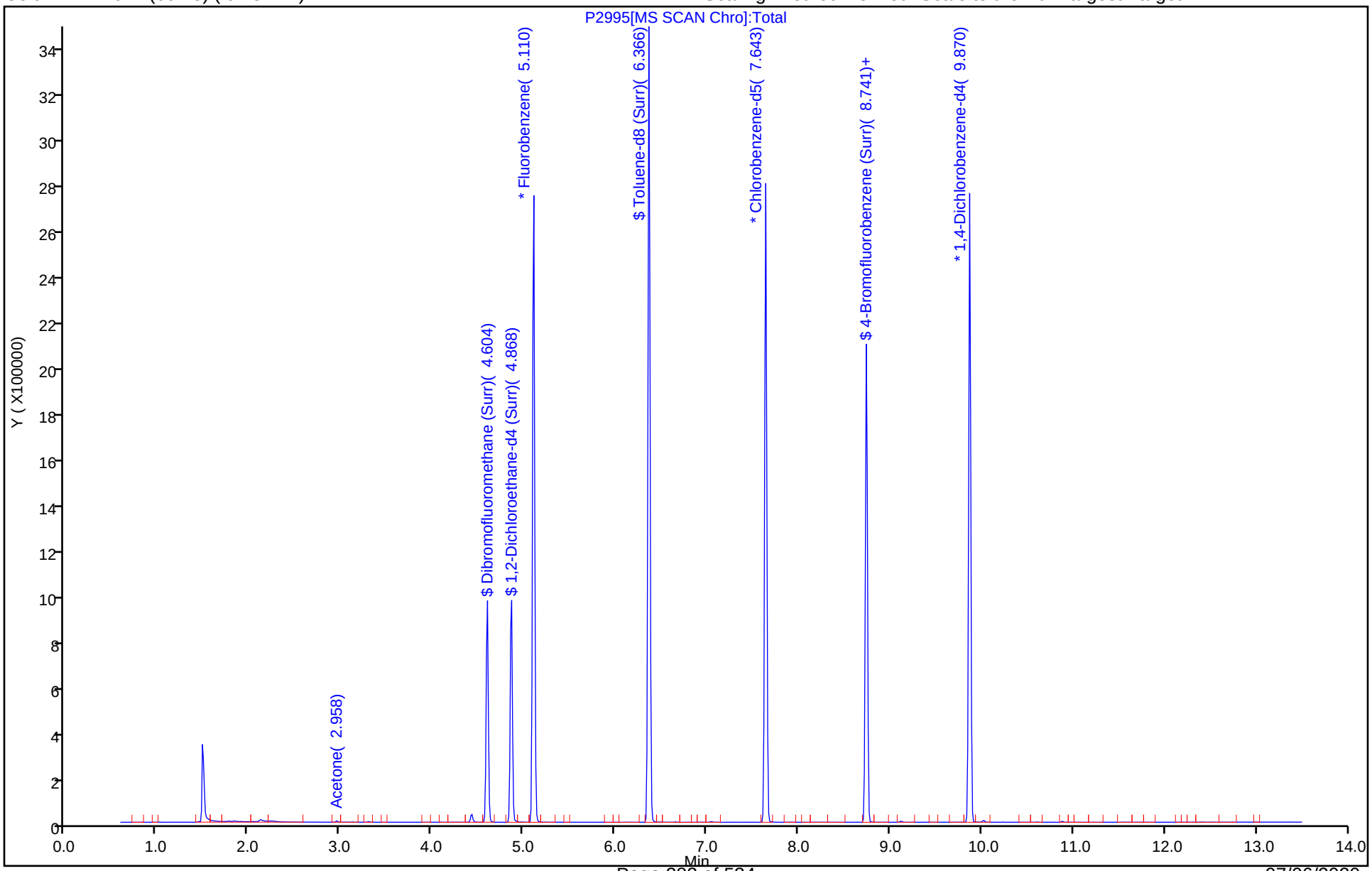
Report Date: 02-Jul-2020 22:13:28 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2995.D

Injection Date:	02-Jul-2020 07:05:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-14	Lab Sample ID:	280-138098-14	Worklist Smp#:	29
Client ID:	TB-02-20200626				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2995.D				
Lims ID:	280-138098-B-14				
Client ID:	TB-02-20200626				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 07:05:30	ALS Bottle#:	25	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-B-14 pH				
Misc. Info.:	280-0092961-029				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.5	100.97
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.22
$ 6 Toluene-d8 (Surr)	50.0	48.7	97.32
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.3	96.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2140H-20200626 Lab Sample ID: 280-138098-15

Matrix: Water Lab File ID: P2996.D

Analysis Method: 8260B Date Collected: 06/26/2020 13:35

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 07:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	0.25	J	1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	0.23	J	1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	2.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: RW-2140H-20200626 Lab Sample ID: 280-138098-15

Matrix: Water Lab File ID: P2996.D

Analysis Method: 8260B Date Collected: 06/26/2020 13:35

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 07:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	6.1		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	34		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D
Lims ID: 280-138098-B-15
Client ID: RW-2140H-20200626
Sample Type: Client
Inject. Date: 02-Jul-2020 07:27:30 ALS Bottle#: 26 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-15 pH
Misc. Info.: 280-0092961-030
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2194345	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.642	0.002	86	507721	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.869	0.002	96	732957	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.604	0.001	93	534141	50.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.858	4.868	-0.010	97	606677	48.8	
$ 6 Toluene-d8 (Surr)	98	6.367	6.366	0.001	93	2180193	48.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	84	789478	48.8	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63	3.835	3.834	0.001	94	3582	0.2334	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.246	4.245	0.001	80	18302	1.96	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83	4.478	4.477	0.001	91	3637	0.2468	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.386	5.385	0.001	99	301311	34.0	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.874	6.873	0.001	95	37449	6.05	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

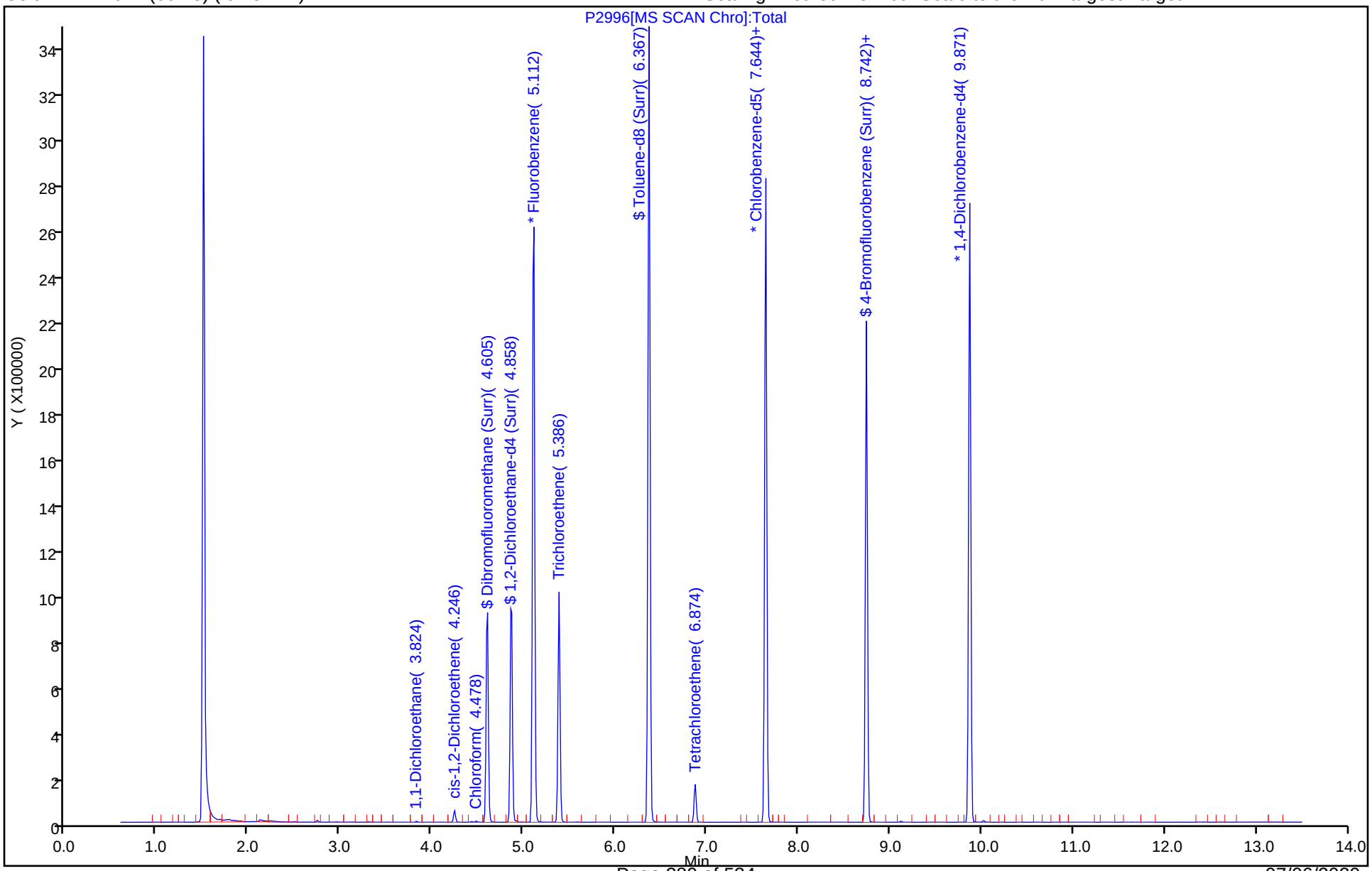
Report Date: 02-Jul-2020 22:13:28 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D

Injection Date:	02-Jul-2020 07:27:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-15	Lab Sample ID:	280-138098-15	Worklist Smp#:	30
Client ID:	RW-2140H-20200626				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D
Lims ID: 280-138098-B-15
Client ID: RW-2140H-20200626
Sample Type: Client
Inject. Date: 02-Jul-2020 07:27:30 ALS Bottle#: 26 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-15 pH
Misc. Info.: 280-0092961-030
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:08:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.5	101.09
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.8	97.58
$ 6 Toluene-d8 (Surr)	50.0	48.8	97.60
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.8	97.60

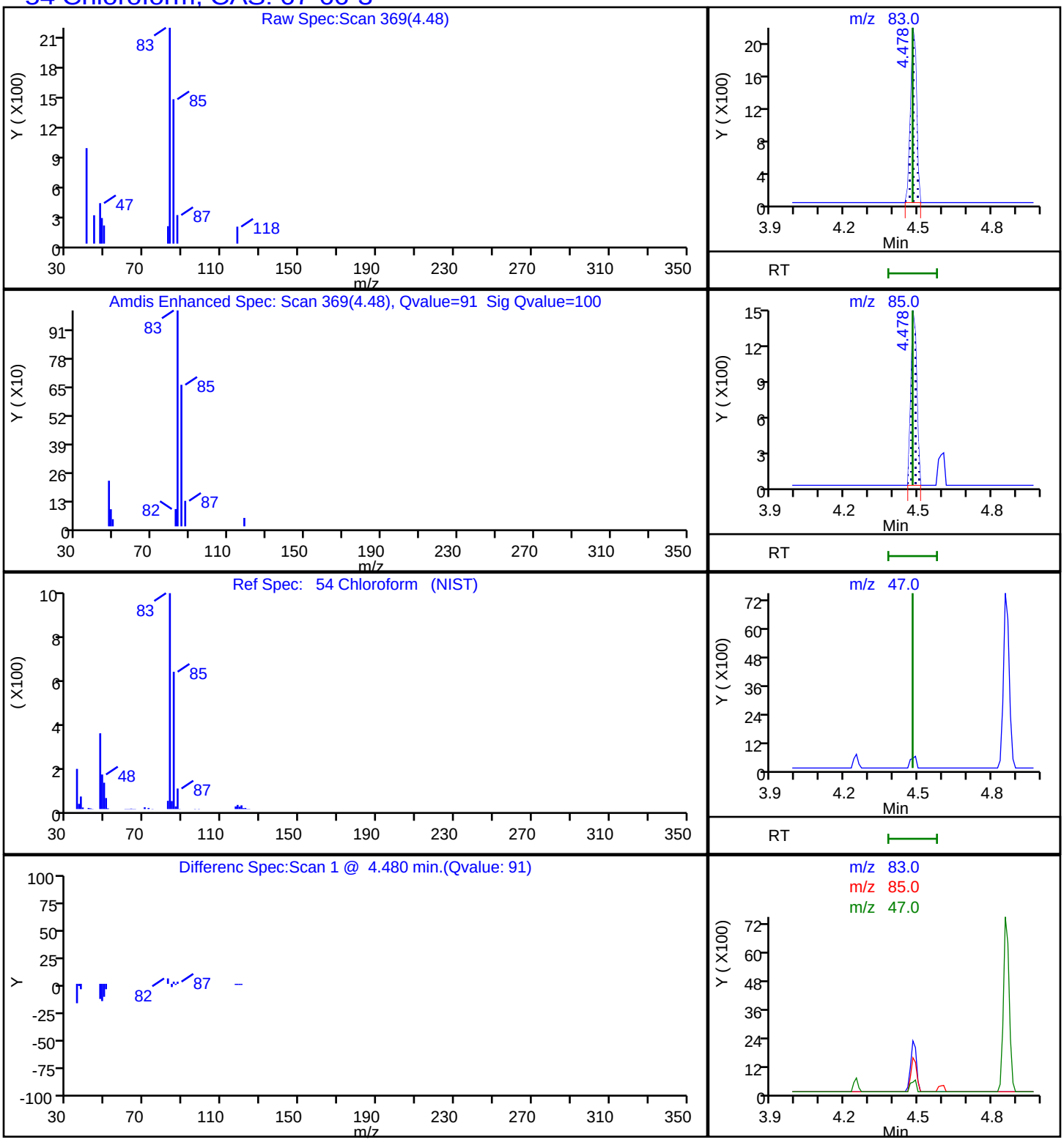
Report Date: 02-Jul-2020 22:13:29 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D

Injection Date:	02-Jul-2020 07:27:30	Instrument ID:	VMS_P
Lims ID:	280-138098-B-15	Lab Sample ID:	280-138098-15
Client ID:	RW-2140H-20200626		
Operator ID:	PETUNINP	ALS Bottle#:	26 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

54 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D

Injection Date: 02-Jul-2020 07:27:30 Instrument ID: VMS_P

Lims ID: 280-138098-B-15 Lab Sample ID: 280-138098-15

Client ID: RW-2140H-20200626

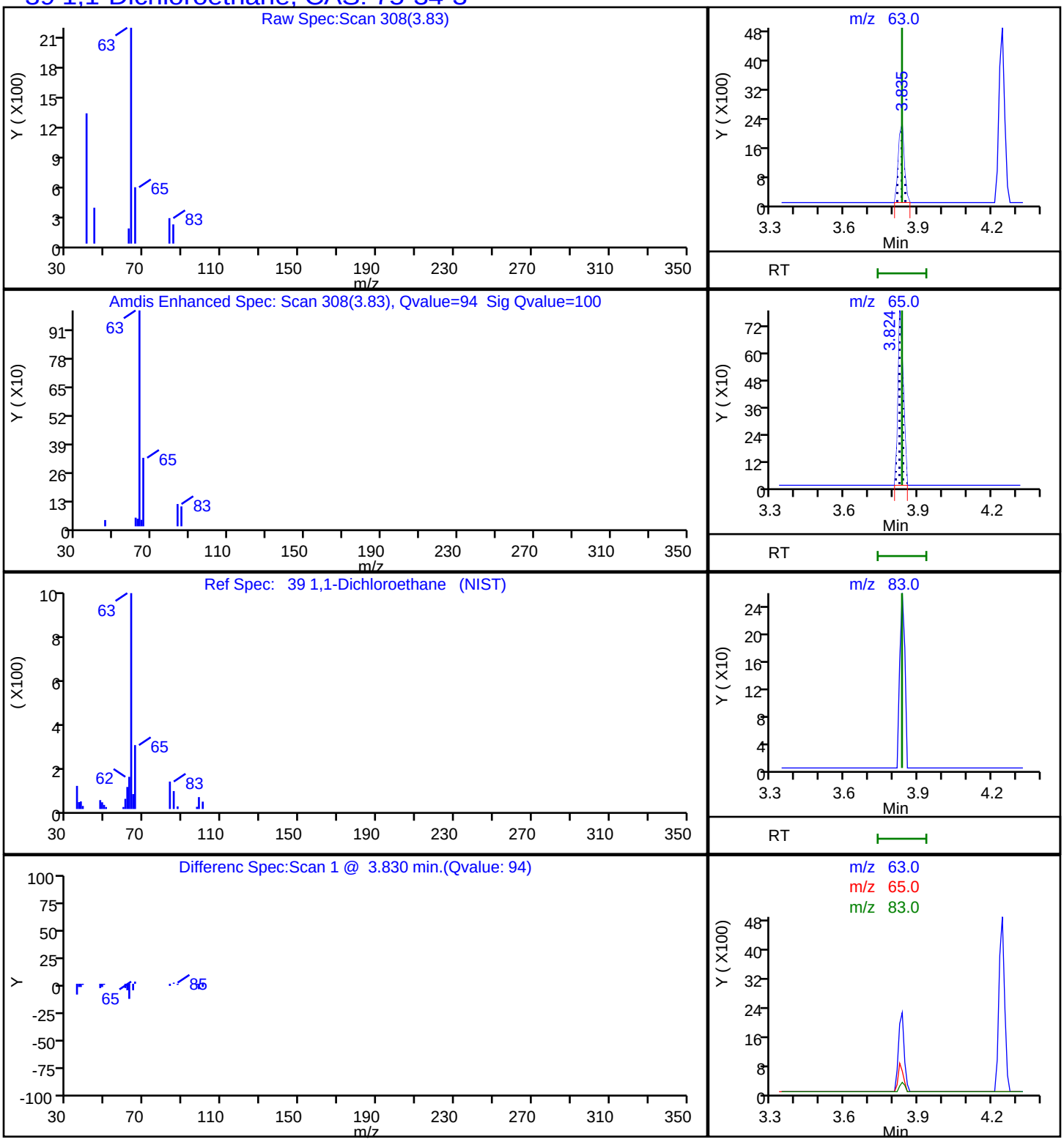
Operator ID: PETUNINP ALS Bottle#: 26 Worklist Smp#: 30

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

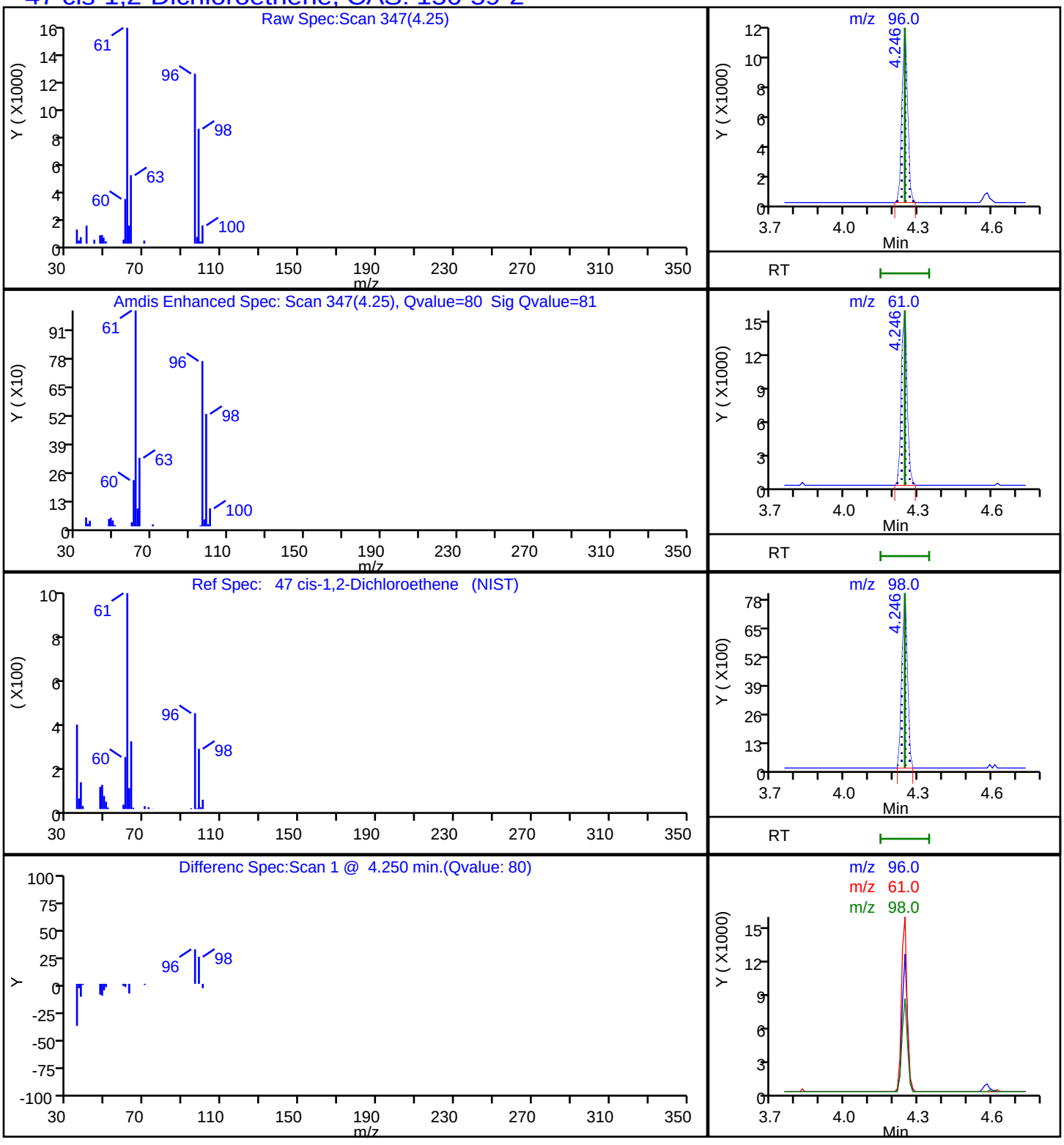
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D				
Injection Date:	02-Jul-2020 07:27:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-15	Lab Sample ID:	280-138098-15		
Client ID:	RW-2140H-20200626				
Operator ID:	PETUNINP	ALS Bottle#:	26	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2

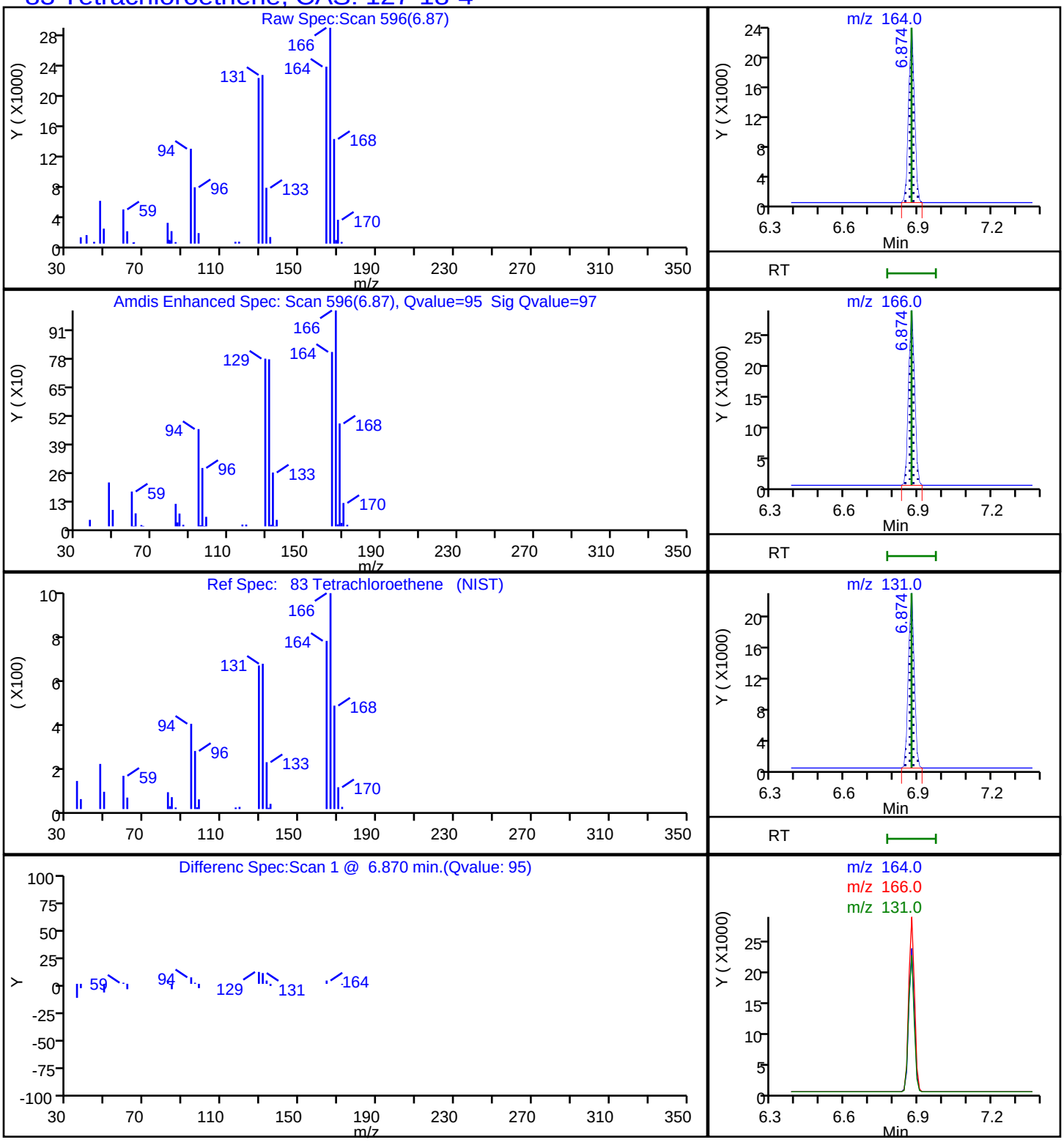


Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D

Injection Date:	02-Jul-2020 07:27:30	Instrument ID:	VMS_P
Lims ID:	280-138098-B-15	Lab Sample ID:	280-138098-15
Client ID:	RW-2140H-20200626		
Operator ID:	PETUNINP	ALS Bottle#:	26 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

83 Tetrachloroethene, CAS: 127-18-4



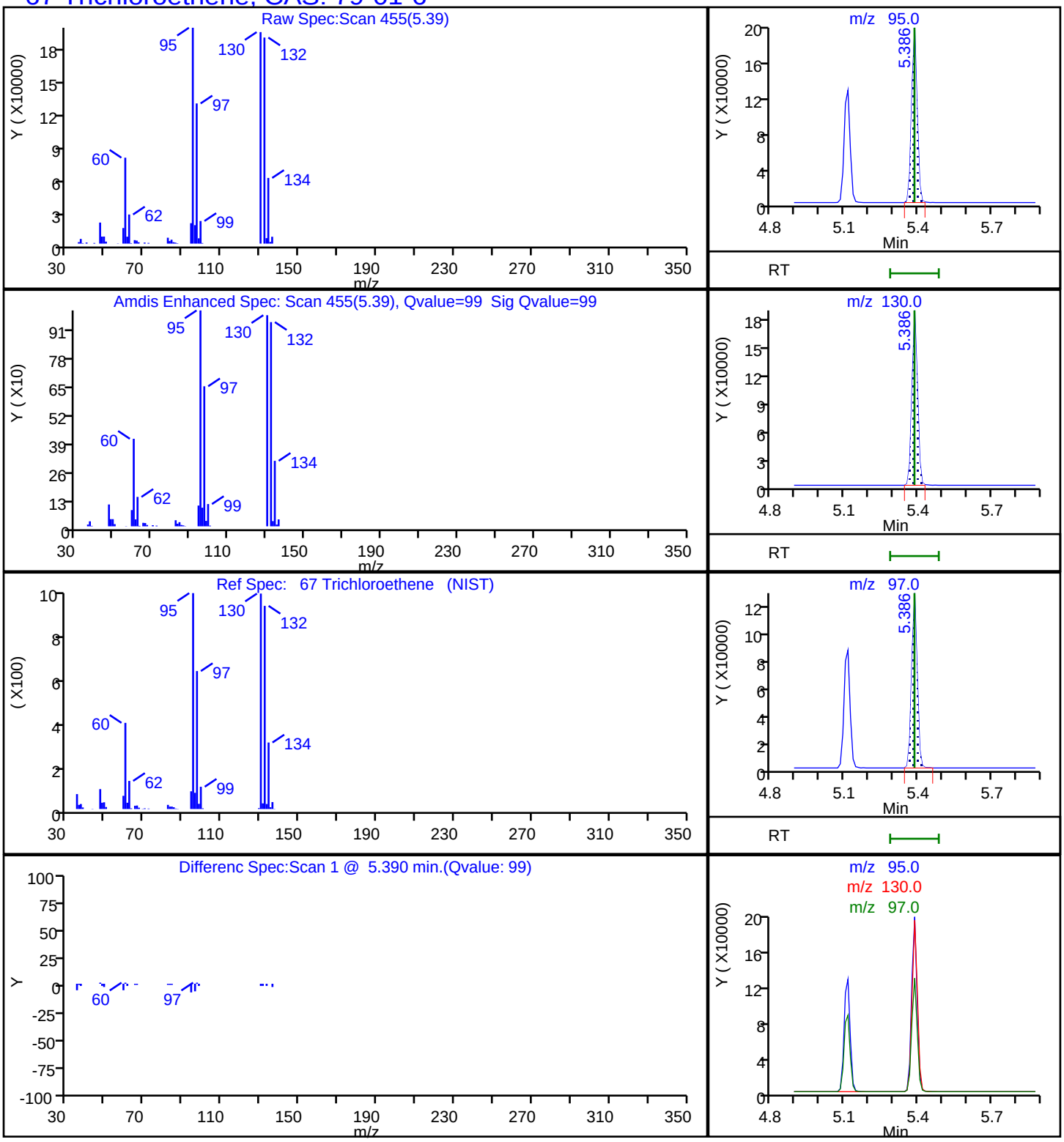
Report Date: 02-Jul-2020 22:13:29 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2996.D

Injection Date:	02-Jul-2020 07:27:30	Instrument ID:	VMS_P
Lims ID:	280-138098-B-15	Lab Sample ID:	280-138098-15
Client ID:	RW-2140H-20200626		
Operator ID:	PETUNINP	ALS Bottle#:	26 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: MW-116S-20200626 Lab Sample ID: 280-138098-16

Matrix: Water Lab File ID: P2997.D

Analysis Method: 8260B Date Collected: 06/26/2020 13:30

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 07:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	0.20	J	1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.6		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: MW-116S-20200626 Lab Sample ID: 280-138098-16

Matrix: Water Lab File ID: P2997.D

Analysis Method: 8260B Date Collected: 06/26/2020 13:30

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 07:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	3.7		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	26		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D
Lims ID: 280-138098-B-16
Client ID: MW-116S-20200626
Sample Type: Client
Inject. Date: 02-Jul-2020 07:48:30 ALS Bottle#: 27 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-B-16 pH
Misc. Info.: 280-0092961-031
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:12:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2354981	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	86	534659	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	767744	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	92	565724	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	97	639022	47.9	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2327563	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	84	818163	48.3	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63	3.833	3.834	-0.001	92	2882	0.1750	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96	4.244	4.245	-0.001	79	15682	1.57	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83	4.487	4.477	0.010	89	3218	0.2035	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95	5.384	5.385	-0.001	99	248928	26.2	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164	6.872	6.873	-0.001	94	24435	3.75	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

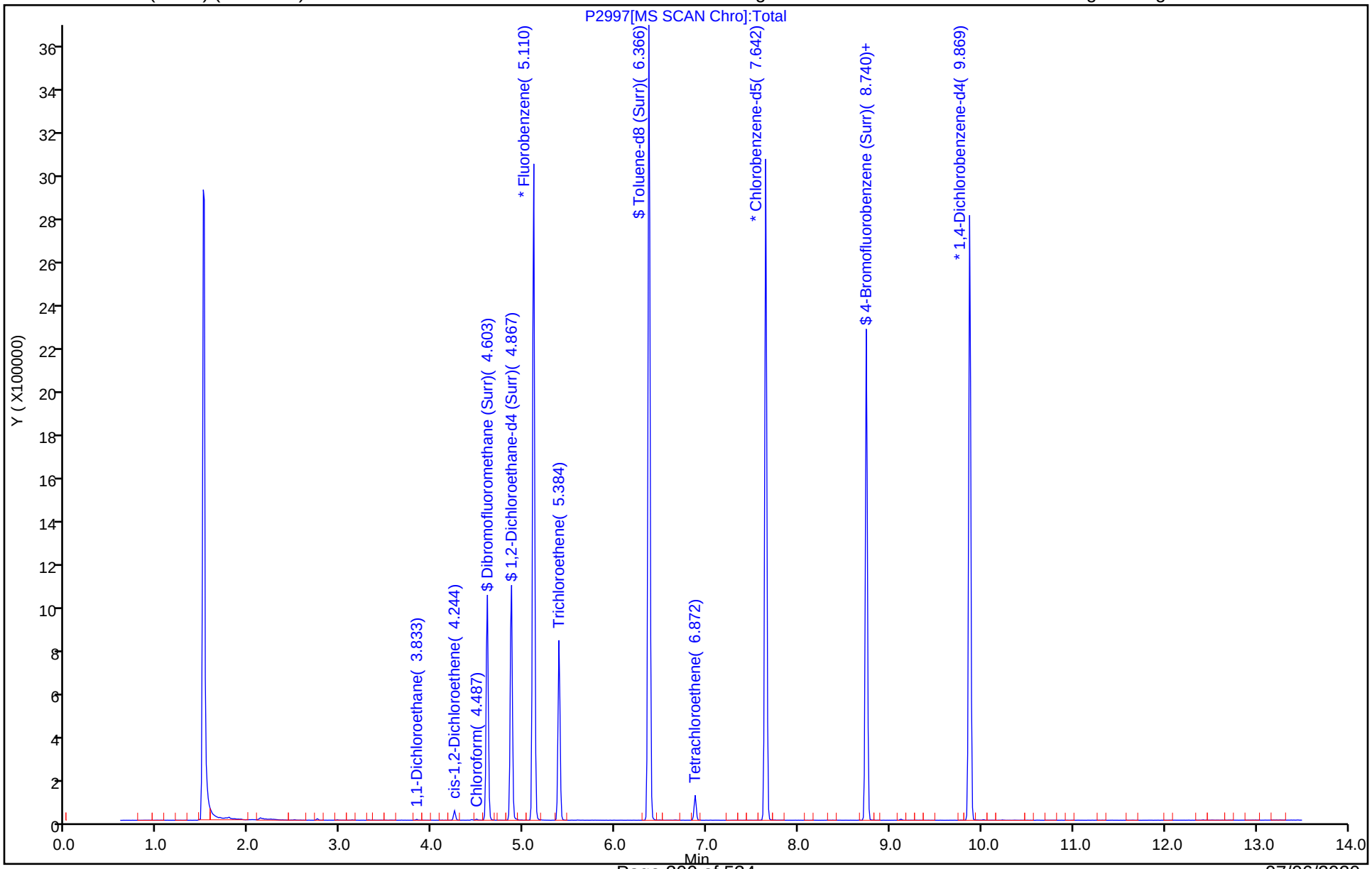
Report Date: 02-Jul-2020 22:13:29 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D

Injection Date:	02-Jul-2020 07:48:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-B-16	Lab Sample ID:	280-138098-16	Worklist Smp#:	31
Client ID:	MW-116S-20200626				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D				
Lims ID:	280-138098-B-16				
Client ID:	MW-116S-20200626				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 07:48:30	ALS Bottle#:	27	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-B-16 pH				
Misc. Info.:	280-0092961-031				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

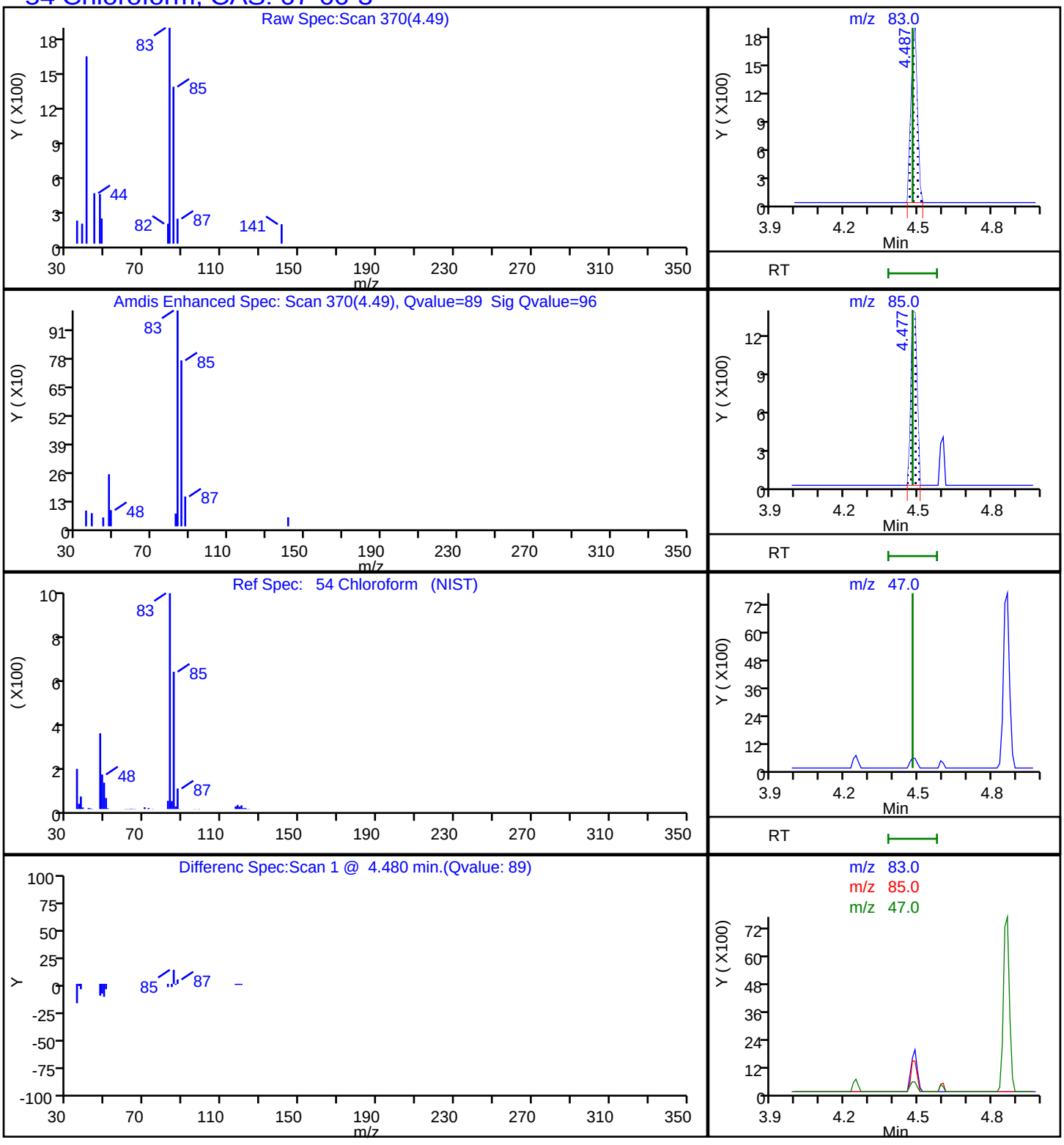
First Level Reviewer: petuninp Date: 02-Jul-2020 22:12:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.76
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.9	95.77
$ 6 Toluene-d8 (Surr)	50.0	49.5	98.95
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.3	96.56

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D				
Injection Date:	02-Jul-2020 07:48:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-16	Lab Sample ID:	280-138098-16		
Client ID:	MW-116S-20200626				
Operator ID:	PETUNINP	ALS Bottle#:	27	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

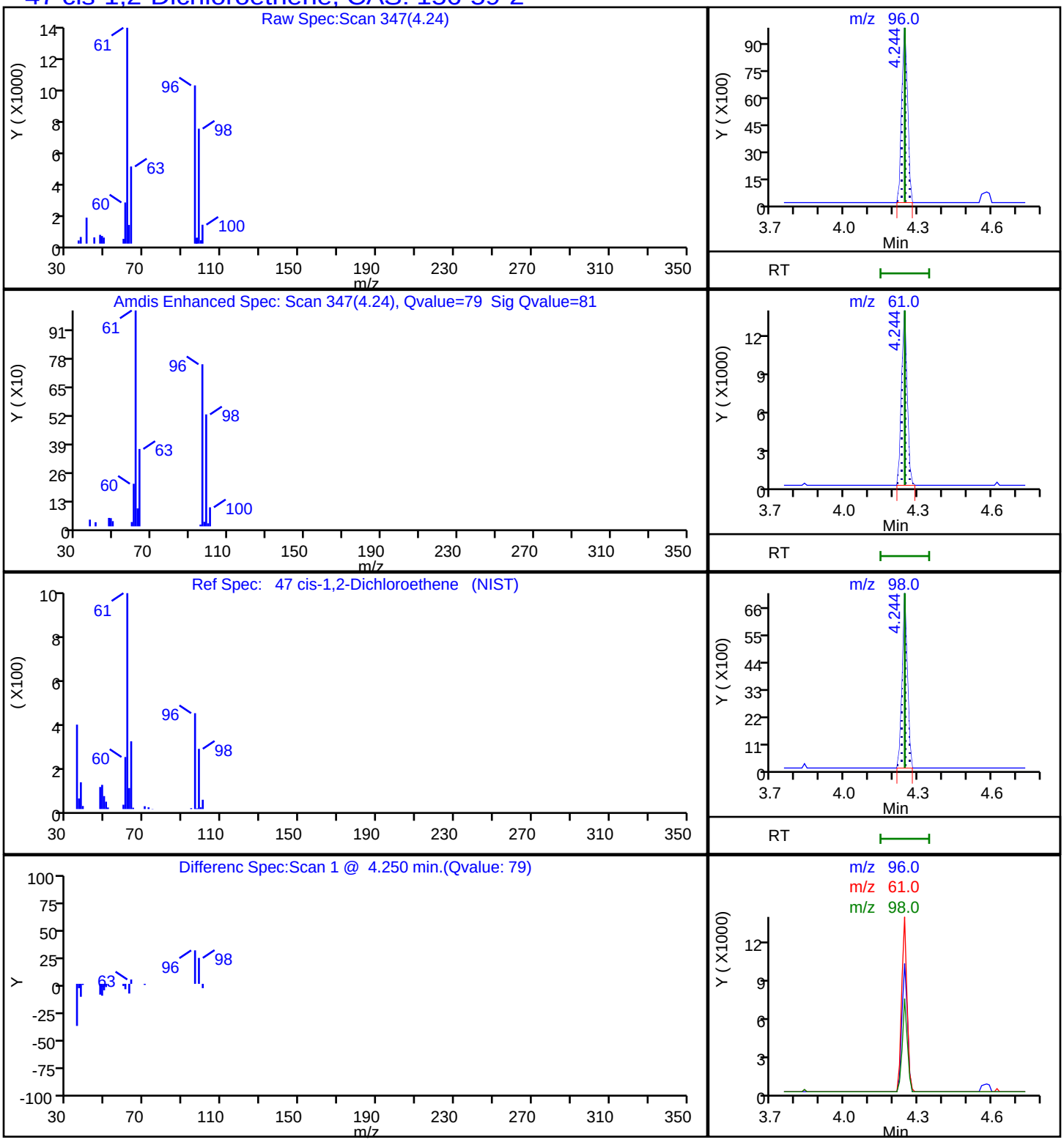
54 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D				
Injection Date:	02-Jul-2020 07:48:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-16	Lab Sample ID:	280-138098-16		
Client ID:	MW-116S-20200626				
Operator ID:	PETUNINP	ALS Bottle#:	27	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

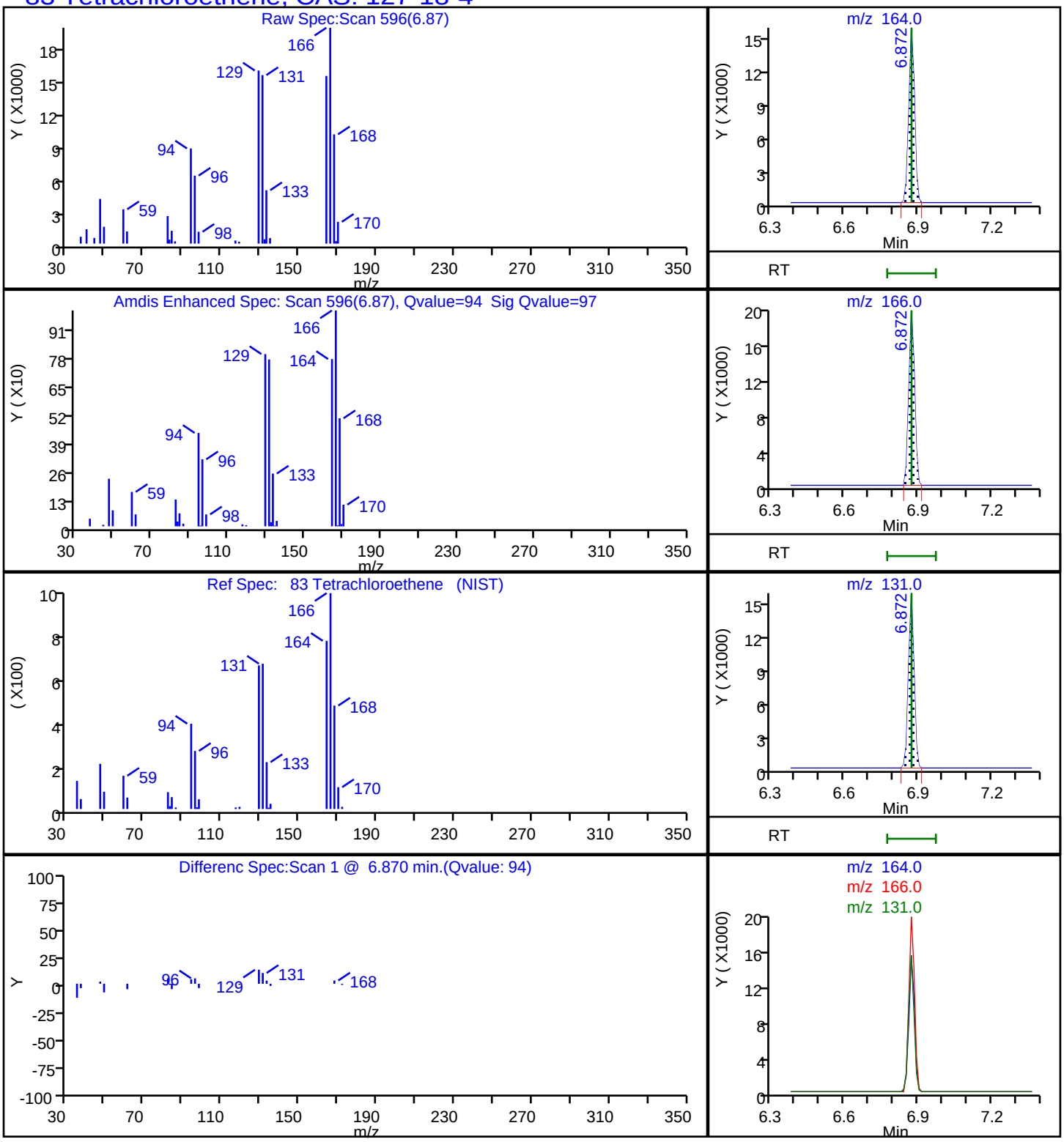
47 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D		
Injection Date:	02-Jul-2020 07:48:30	Instrument ID:	VMS_P
Lims ID:	280-138098-B-16	Lab Sample ID:	280-138098-16
Client ID:	MW-116S-20200626		
Operator ID:	PETUNINP	ALS Bottle#:	27 Worklist Smp#: 31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

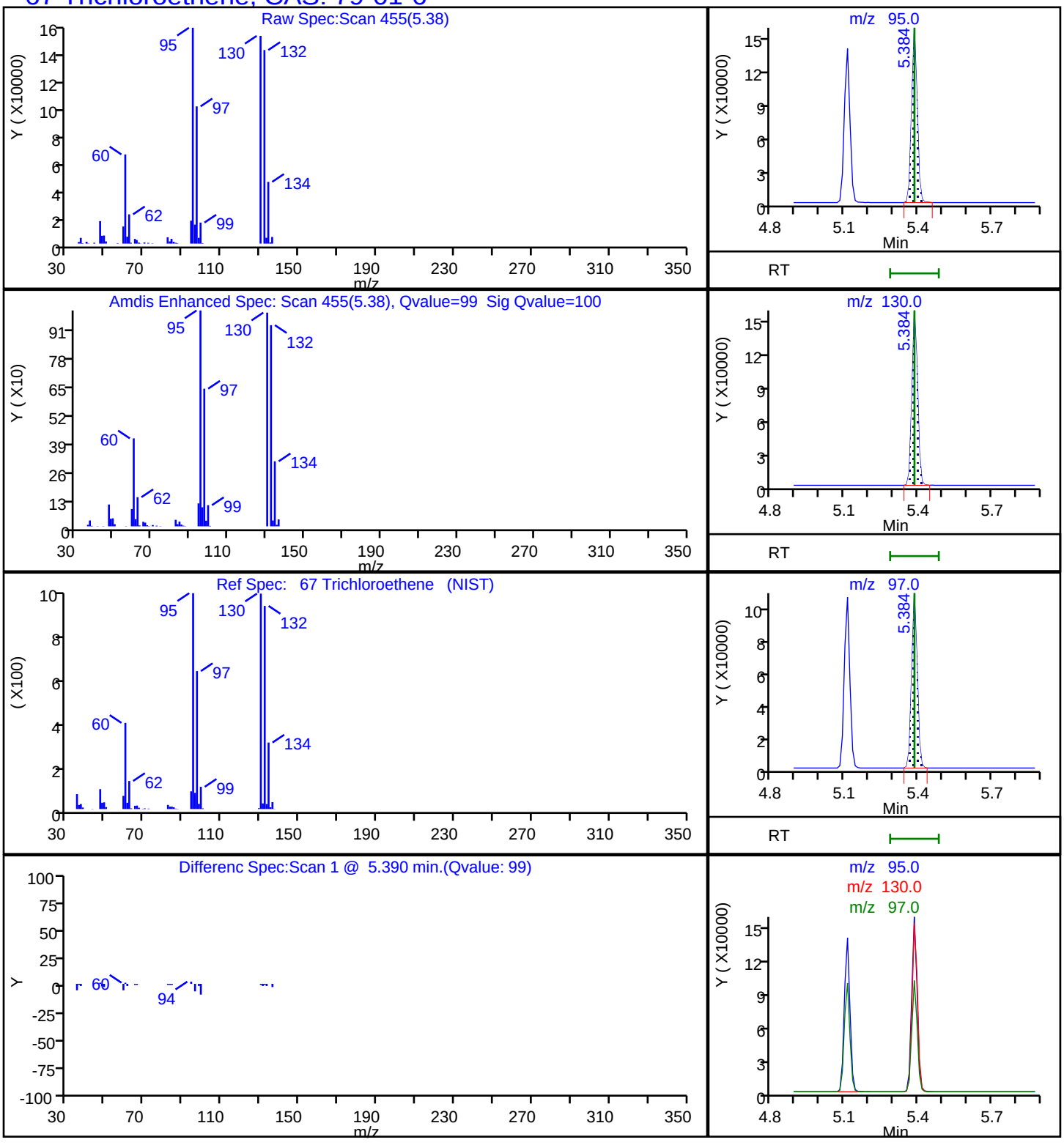
83 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2997.D				
Injection Date:	02-Jul-2020 07:48:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-B-16	Lab Sample ID:	280-138098-16		
Client ID:	MW-116S-20200626				
Operator ID:	PETUNINP	ALS Bottle#:	27	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: EB-02-20200626 Lab Sample ID: 280-138098-17

Matrix: Water Lab File ID: P2998.D

Analysis Method: 8260B Date Collected: 06/26/2020 15:10

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 08:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	19		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	4.3	J	6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND	*	2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: EB-02-20200626 Lab Sample ID: 280-138098-17

Matrix: Water Lab File ID: P2998.D

Analysis Method: 8260B Date Collected: 06/26/2020 15:10

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 08:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2998.D
Lims ID: 280-138098-A-17
Client ID: EB-02-20200626
Sample Type: Client
Inject. Date: 02-Jul-2020 08:09:30 ALS Bottle#: 28 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-138098-A-17 pH
Misc. Info.: 280-0092961-032
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 08:25:12 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

First Level Reviewer: petuninp Date: 02-Jul-2020 22:13:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2391052	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	87	548194	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	771677	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	576341	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	643486	47.5	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2370393	49.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	82	835914	49.1	
10 Dichlorodifluoromethane	85		1.660				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
21 Acrolein	56		2.852				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43	2.957	2.958	-0.001	100	63572	19.0	
26 Iodomethane	142		3.063				ND	
27 Carbon disulfide	76		3.127				ND	
28 Acetonitrile	41		3.168				ND	
30 3-Chloro-1-propene	41		3.211				ND	
31 Methylene Chloride	84		3.306				ND	
33 Acrylonitrile	53		3.464				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
38 Vinyl acetate	43		3.802				ND	
39 1,1-Dichloroethane	63		3.834				ND	
41 2-Chloro-1,3-butadiene	53		3.885				ND	
44 2-Butanone (MEK)	43	4.213	4.214	-0.001	99	22919	4.30	
47 cis-1,2-Dichloroethene	96		4.245				ND	
48 2,2-Dichloropropane	77		4.256				ND	
49 Propionitrile	54		4.265				ND	
51 Methacrylonitrile	41		4.381				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.477				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
57 1,1-Dichloropropene	75		4.741				ND	
59 Carbon tetrachloride	117		4.752				ND	
58 Isobutyl alcohol	41		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	
71 Methyl methacrylate	100		5.595				ND	
70 1,2-Dichloropropane	63		5.596				ND	
73 Dibromomethane	93		5.670				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.599				ND	
81 Ethyl methacrylate	69		6.620				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
84 1,3-Dichloropropane	76		6.926				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.242				ND	
90 Chlorobenzene	112		7.675				ND	
91 1,1,1,2-Tetrachloroethane	131		7.749				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
102 trans-1,4-Dichloro-2-butene	53		8.888				ND	
103 1,2,3-Trichloropropane	110		8.920				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.854				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

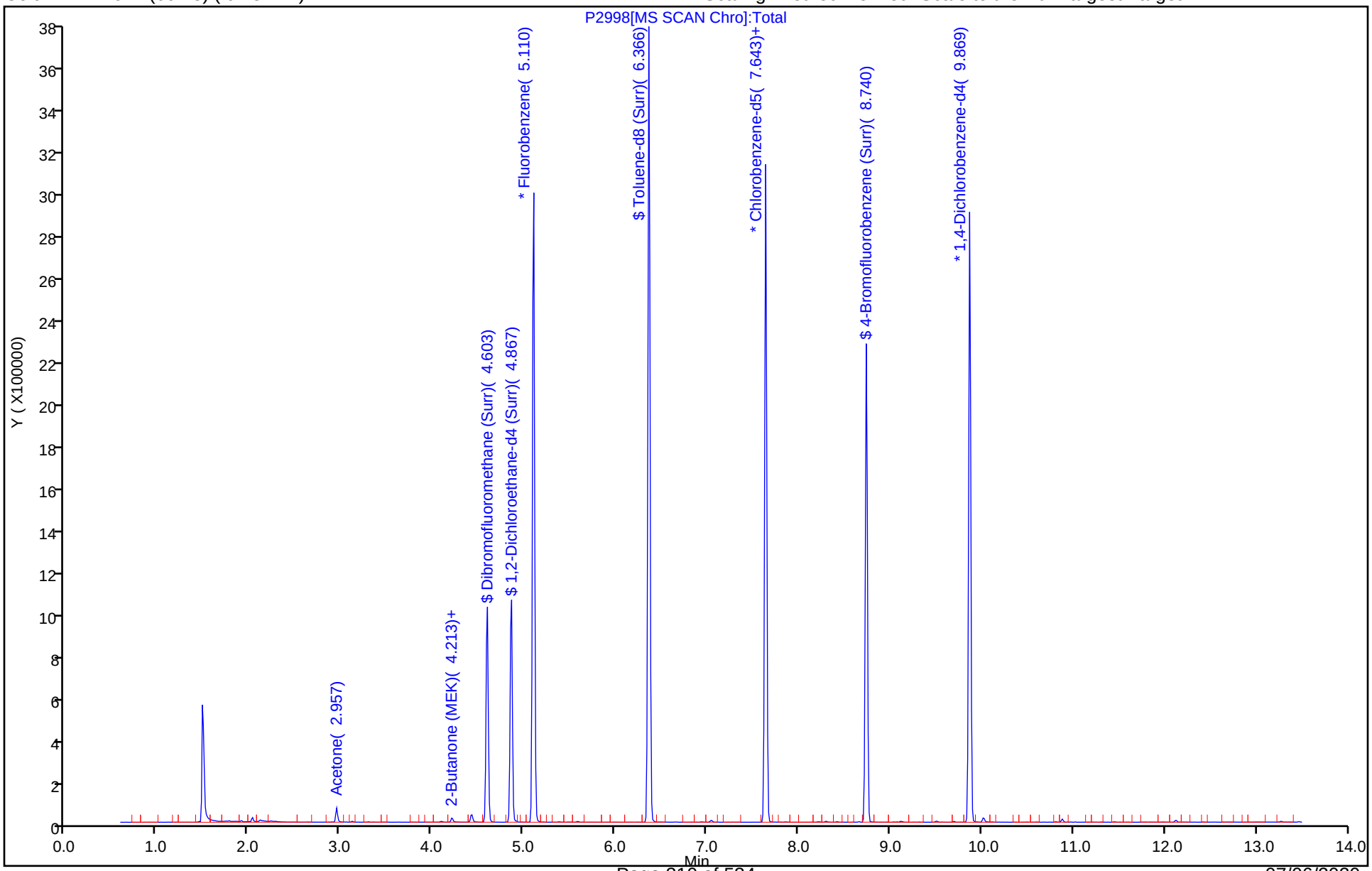
Report Date: 02-Jul-2020 22:13:30 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2998.D

Injection Date:	02-Jul-2020 08:09:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	280-138098-A-17	Lab Sample ID:	280-138098-17	Worklist Smp#:	32
Client ID:	EB-02-20200626				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2998.D				
Lims ID:	280-138098-A-17				
Client ID:	EB-02-20200626				
Sample Type:	Client				
Inject. Date:	02-Jul-2020 08:09:30	ALS Bottle#:	28	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-138098-A-17 pH				
Misc. Info.:	280-0092961-032				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 08:25:12	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

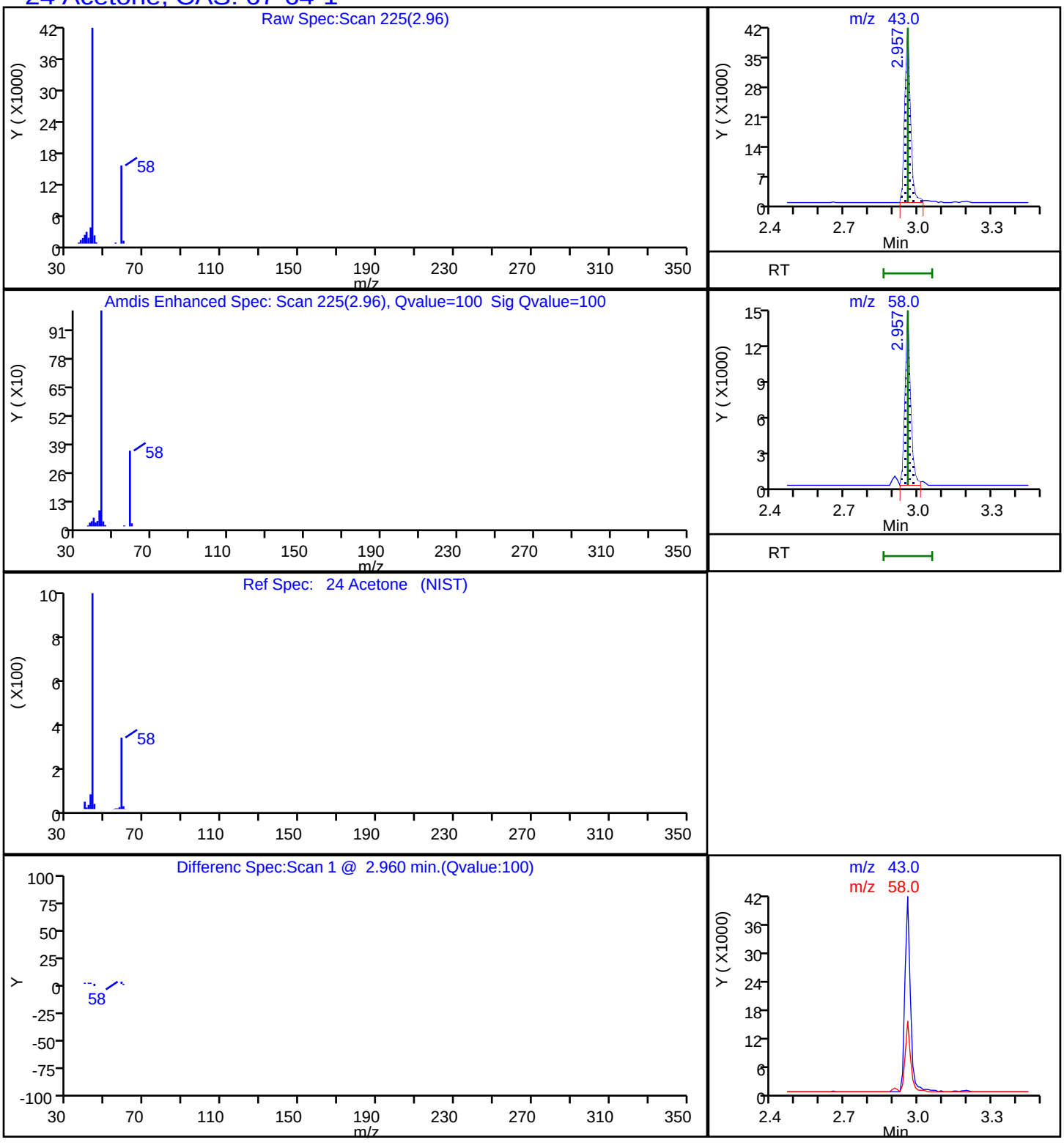
First Level Reviewer: petuninp Date: 02-Jul-2020 22:13:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.10
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	94.98
$ 6 Toluene-d8 (Surr)	50.0	49.1	98.28
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.1	98.16

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2998.D				
Injection Date:	02-Jul-2020 08:09:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-A-17	Lab Sample ID:	280-138098-17		
Client ID:	EB-02-20200626				
Operator ID:	PETUNINP	ALS Bottle#:	28	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

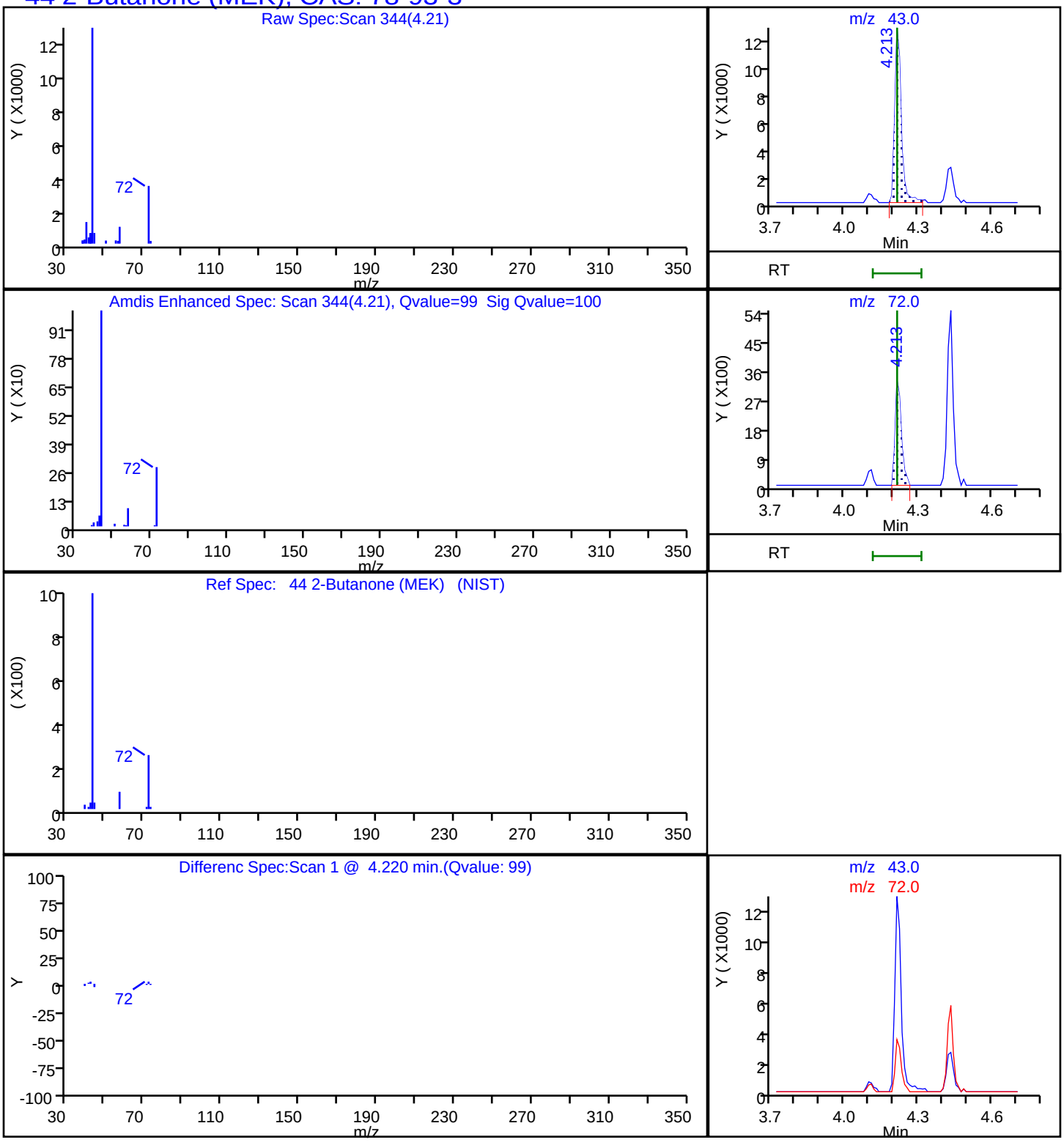
24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2998.D				
Injection Date:	02-Jul-2020 08:09:30	Instrument ID:	VMS_P		
Lims ID:	280-138098-A-17	Lab Sample ID:	280-138098-17		
Client ID:	EB-02-20200626				
Operator ID:	PETUNINP	ALS Bottle#:	28	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-485097/21	P7815.D
Level 2	STD010 280-485097/22	P7816.D
Level 3	STD020 280-485097/23	P7817.D
Level 4	STD10 280-485097/24	P7818.D
Level 5	STD50 280-485097/25	P7819.D
Level 6	STD75 280-485097/26	P7820.D
Level 7	STD100 280-485097/27	P7821.D
Level 8	STD200 280-485097/28	P7822.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								
Ethanol	0.0051 0.0034	0.0047 0.0034	0.0040 0.0038	0.0036	0.0035	Lin2	0.0502	0.0036							0.9970		0.9900
Propene oxide	0.0536 0.0484	0.0503 0.0459	0.0504 0.0402	0.0468	0.0487	Ave		0.0480				8.3		15.0			
2-Propanol	0.0290 0.0178	0.0229 0.0176	0.0213 0.0203	0.0184	0.0181	Lin2	0.0523	0.0183							0.9970		0.9900
Acetonitrile	0.0447 0.0335	0.0414 0.0331	0.0351 0.0370	0.0334	0.0343	Ave		0.0366				11.7		15.0			
Di-isopropyl ether (DIPE)	0.1931 0.1535	0.1727 0.1507	0.1763 0.1587	0.1586	0.1578	Ave		0.1652				8.7		15.0			
Chloroprene	0.3645 0.2744	0.3248 0.2726	0.3268 0.2897	0.2845	0.2827	Ave		0.3025				10.8		15.0			
Tert-butyl ethyl ether	0.6910 0.5744	0.6625 0.5512	0.6647 0.5890	0.5801	0.5843	Ave		0.6122				8.5		15.0			
Ethyl acetate	0.2629 0.1774	0.2259 0.1707	0.2199 0.1836	0.1834	0.1814	Lin2	0.0870	0.1808							0.9970		0.9900
Propionitrile	0.0464 0.0362	0.0421 0.0359	0.0407 0.0400	0.0371	0.0371	Ave		0.0394				9.1		15.0			
Methacrylonitrile	0.1731 0.1396	0.1631 0.1344	0.1676 0.1434	0.1464	0.1435	Ave		0.1514				9.5		15.0			
Tert-amyl methyl ether	0.6786 0.5545	0.6388 0.5355	0.6351 0.5693	0.5592	0.5750	Ave		0.5932				8.6		15.0			
n-Butanol	0.0119 0.0068	0.0089 0.0066	0.0079 0.0069	0.0071	0.0071	Lin2	0.0609	0.0068							0.9990		0.9900
Methyl methacrylate	0.0596 0.0598	0.0565 0.0578	0.0626 0.0636	0.0602	0.0621	Ave		0.0603				4.0		15.0			
2-Nitropropane	0.0702 0.0547	0.0629 0.0538	0.0529 0.0599	0.0527	0.0547	Ave		0.0577				10.8		15.0			

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, Denver Job No.: 280-138098-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

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								
Tetrahydrothiophene	0.3169 0.2385	0.2537 0.2311	0.2795 0.2461	0.2418	0.2402	Lin2	0.0718	0.2396							0.9960		0.9900
cis-1,4-Dichloro-2-butene	+++++ 0.2584	0.2505 0.2187	0.2091 0.2502	0.2151	0.2419	Ave		0.2348				8.5		15.0			
1,2,3-Trimethylbenzene	2.4094 1.9932	2.2179 1.9158	2.1349 2.0566	2.0022	2.0212	Ave		2.0939				7.5		15.0			
1,3,5-Trichlorobenzene	0.7968 0.6732	0.7164 0.6499	0.6899 0.7148	0.6410	0.6796	Ave		0.6952				7.1		15.0			

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, Denver Job No.: 280-138098-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-485097/21	P7815.D
Level 2	STD010 280-485097/22	P7816.D
Level 3	STD020 280-485097/23	P7817.D
Level 4	STD10 280-485097/24	P7818.D
Level 5	STD50 280-485097/25	P7819.D
Level 6	STD75 280-485097/26	P7820.D
Level 7	STD100 280-485097/27	P7821.D
Level 8	STD200 280-485097/28	P7822.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
Ethanol	FB	Lin2	3813 386767	7092 522577	11881 1121959	52902	263486	30.0 4500	60.0 6000	120 12000	600	3000
Propene oxide	FB	Ave	66917 9105013	127251 11652040	246604 19830208	1152842	6051020	50.0 7500	100 10000	200 20000	1000	5000
2-Propanol	FB	Lin2	3616 334122	5798 447418	10447 999643	45263	225483	5.00 750	10.0 1000	20.0 2000	100	500
Acetonitrile	FB	Ave	5578 630440	10465 839233	17199 1824759	82477	426465	5.00 750	10.0 1000	20.0 2000	100	500
Di-isopropyl ether (DIPE)	FB	Ave	2410 288623	4368 382091	8627 783010	39118	196097	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Chloroprene	FB	Ave	4549 515887	8213 691242	15993 1429550	70162	351403	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Tert-butyl ethyl ether	FB	Ave	8623 1079705	16753 1397782	32530 2905958	143048	726330	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl acetate	FB	Lin2	6561 666797	11426 865735	21526 1812179	90461	450989	1.00 150	2.00 200	4.00 400	20.0	100
Propionitrile	FB	Ave	5788 681378	10633 910532	19932 1975705	91476	461672	5.00 750	10.0 1000	20.0 2000	100	500
Methacrylonitrile	FB	Ave	21606 2623920	41242 3408887	82039 7076095	361071	1783664	5.00 750	10.0 1000	20.0 2000	100	500
Tert-amyl methyl ether	FB	Ave	8468 1042279	16153 1358095	31081 2808808	137903	714678	0.500 75.0	1.00 100	2.00 200	10.0	50.0
n-Butanol	FB	Lin2	3701 318735	5595 421393	9657 855999	43793	220595	12.5 1875	25.0 2500	50.0 5000	250	1250
Methyl methacrylate	FB	Ave	1488 224808	2858 292960	6131 627312	29672	154429	1.00 150	2.00 200	4.00 400	20.0	100
2-Nitropropane	FB	Ave	1752 205534	3183 273130	5174 590761	25974	135936	1.00 150	2.00 200	4.00 400	20.0	100
Tetrahydrothiophene	CBNZ d5	Lin2	1886 202908	2813 268588	5980 565994	26122	146877	1.00 150	2.00 200	4.00 400	20.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 485097

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2020 14:40 Calibration End Date: 02/06/2020 17:09 Calibration ID: 41894

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
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 350708	4563 420706	7996 948600	37767	220680	+++++ 150	2.00 200	4.00 400	20.0	100
1,2,3-Trimethylbenzene	DCBd 4	Ave	10871 1352748	20200 1842560	40822 3898885	175771	922141	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	3595 456876	6525 625016	13192 1355172	56276	310039	0.500 75.0	1.00 100	2.00 200	10.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7815.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Feb-2020 14:40:30 ALS Bottle#: 11 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:40 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:25:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.193	5.184	0.009	98	1247929	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.726	7.727	-0.001	90	297556	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.953	9.954	-0.001	98	451194	50.0	50.0	
13 Ethylene oxide	43	2.270	2.263	0.007	99	27024	50.0	0	
18 Ethanol	45	2.724	2.727	-0.003	97	3813	30.0	28.8	
20 Propene oxide	58	2.872	2.865	0.007	96	66917	50.0	55.8	
25 Isopropyl alcohol	45	3.125	3.118	0.007	98	3616	5.00	5.06	a
28 Acetonitrile	41	3.252	3.245	0.007	98	5578	5.00	6.11	
40 Isopropyl ether	87	3.906	3.909	-0.003	94	2410	0.5000	0.5846	
41 2-Chloro-1,3-butadiene	53	3.969	3.962	0.007	93	4549	0.5000	0.6025	
43 Tert-butyl ethyl ether	59	4.170	4.173	-0.003	98	8623	0.5000	0.5644	
46 Ethyl acetate	43	4.307	4.310	-0.003	97	6561	1.00	0.9725	
49 Propionitrile	54	4.349	4.342	0.007	97	5788	5.00	5.88	
51 Methacrylonitrile	41	4.465	4.458	0.007	92	21606	5.00	5.72	
62 Tert-amyl methyl ether	73	5.046	5.039	0.007	88	8468	0.5000	0.5719	
63 n-Butanol	56	5.046	5.039	0.007	52	3701	12.5	12.9	
71 Methyl methacrylate	100	5.679	5.672	0.007	91	1488	1.00	0.9891	
75 2-Nitropropane	41	6.038	6.031	0.008	97	1752	1.00	1.22	
87 Tetrahydrothiophene	60	7.198	7.202	-0.004	87	1886	1.00	1.02	
98 cis-1,4-Dichloro-2-butene	53	8.697	8.700	-0.003	85	3074	1.00	1.45	
114 1,2,3-Trimethylbenzene	105	9.995	9.998	-0.003	94	10871	0.5000	0.5753	
118 1,3,5-Trichlorobenzene	180	11.303	11.307	-0.004	94	3595	0.5000	0.5731	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

mv-IS_00001	Amount Added:	5.00	Units: uL
MV-Supp A_00041	Amount Added:	0.50	Units: uL

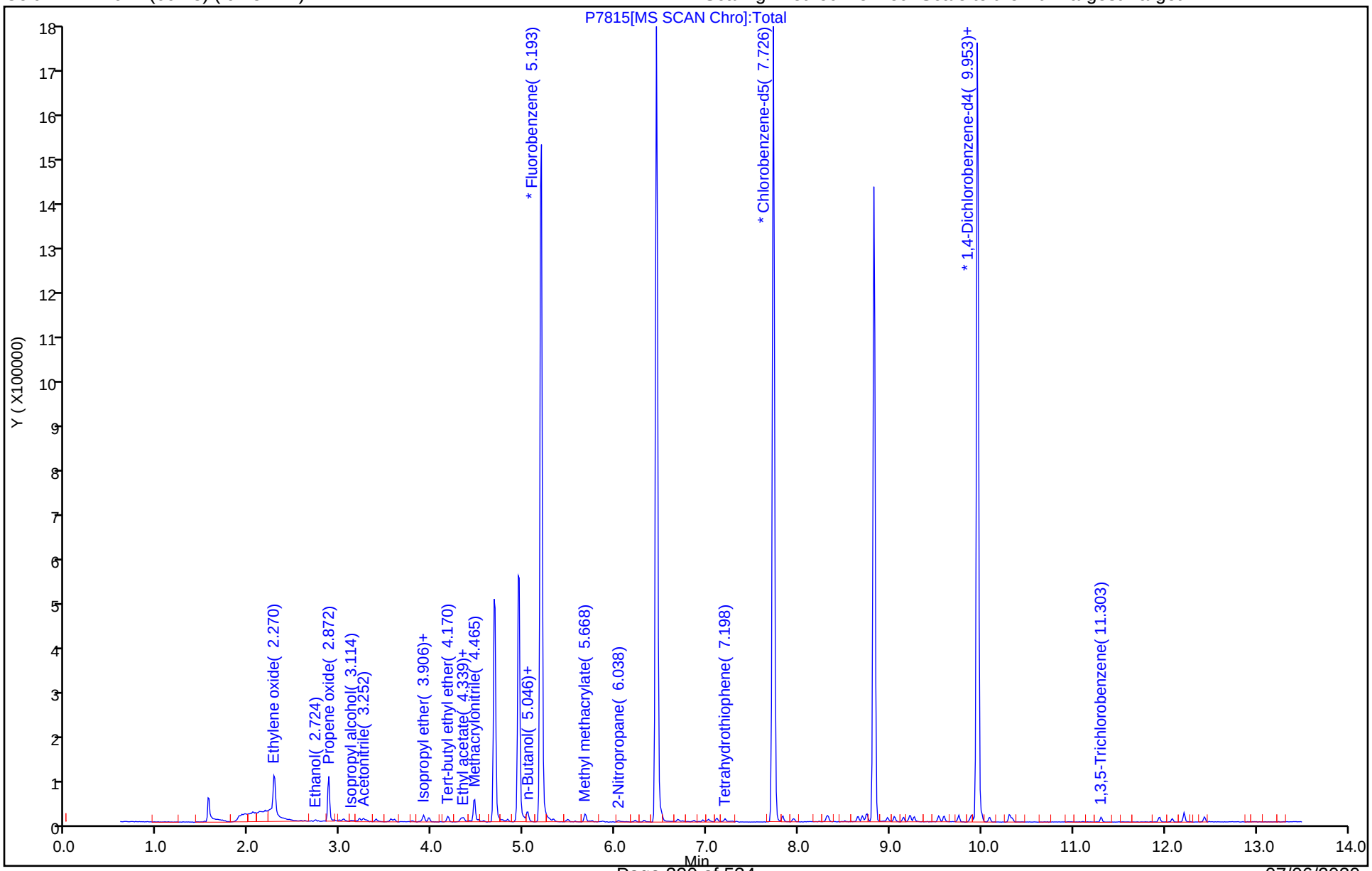
Report Date: 06-Feb-2020 21:41:40 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7815.D

Injection Date:	06-Feb-2020 14:40:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

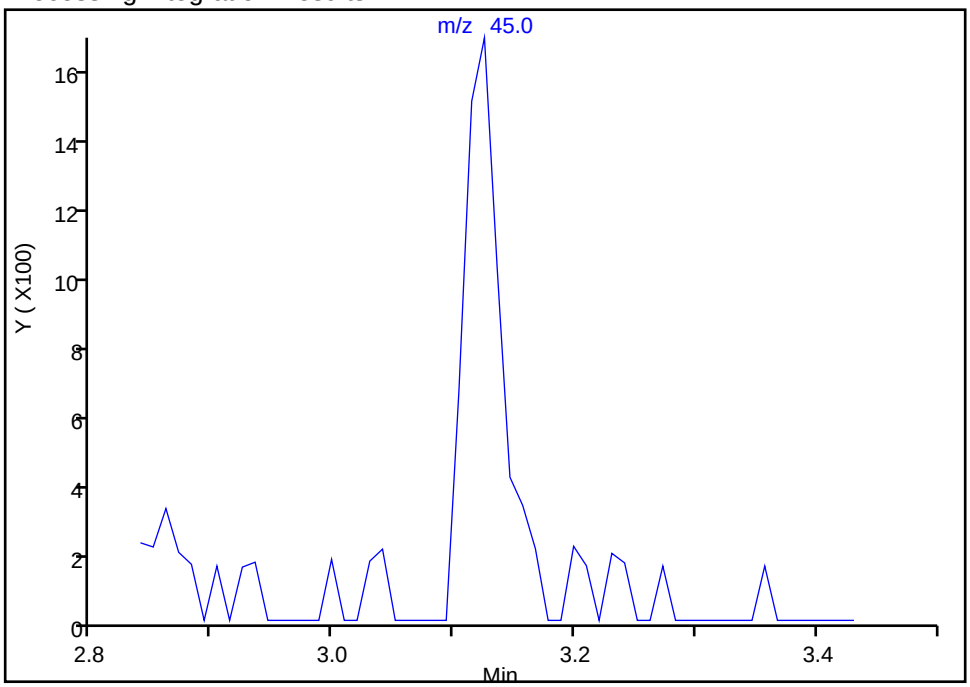
Data File:	\\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7815.D				
Injection Date:	06-Feb-2020 14:40:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

25 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

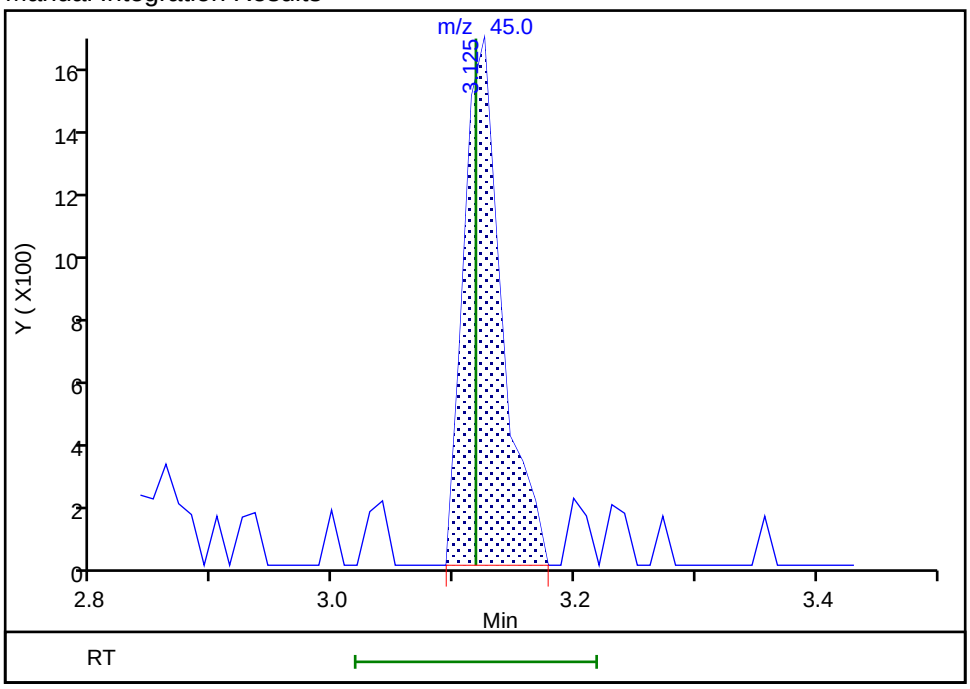
Not Detected
Expected RT: 3.12

Processing Integration Results



Manual Integration Results

RT: 3.13
Area: 3616
Amount: 5.059068
Amount Units: ug/l



Reviewer: zhangji, 06-Feb-2020 21:05:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7816.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Feb-2020 15:02:30 ALS Bottle#: 12 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:43 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.186	5.184	0.002	98	1264294	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.730	7.727	0.003	96	277191	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.956	9.954	0.002	97	455376	50.0	50.0	
13 Ethylene oxide	43	2.274	2.263	0.011	99	46634	100.0	0	
18 Ethanol	45	2.728	2.727	0.001	98	7092	60.0	64.6	
20 Propene oxide	58	2.865	2.865	0.000	96	127251	100.0	104.7	
25 Isopropyl alcohol	45	3.118	3.118	0.000	98	5798	10.0	9.67	
28 Acetonitrile	41	3.245	3.245	0.000	99	10465	10.0	11.3	
40 Isopropyl ether	87	3.910	3.909	0.001	92	4368	1.00	1.05	
41 2-Chloro-1,3-butadiene	53	3.962	3.962	0.000	93	8213	1.00	1.07	
43 Tert-butyl ethyl ether	59	4.173	4.173	0.000	96	16753	1.00	1.08	
46 Ethyl acetate	43	4.311	4.310	0.001	98	11426	2.00	2.02	
49 Propionitrile	54	4.342	4.342	0.000	97	10633	10.0	10.7	
51 Methacrylonitrile	41	4.458	4.458	0.000	92	41242	10.0	10.8	
62 Tert-amyl methyl ether	73	5.039	5.039	0.000	89	16153	1.00	1.08	
63 n-Butanol	56	5.039	5.039	0.000	51	5595	25.0	23.6	
71 Methyl methacrylate	100	5.672	5.672	0.000	88	2858	2.00	1.88	
75 2-Nitropropane	41	6.031	6.031	0.001	94	3183	2.00	2.18	
87 Tetrahydrothiophene	60	7.202	7.202	0.000	90	2813	2.00	1.82	
98 cis-1,4-Dichloro-2-butene	53	8.701	8.700	0.001	86	4563	2.00	2.13	
114 1,2,3-Trimethylbenzene	105	9.999	9.998	0.001	94	20200	1.00	1.06	
118 1,3,5-Trichlorobenzene	180	11.307	11.307	0.000	96	6525	1.00	1.03	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 1.00 Units: uL

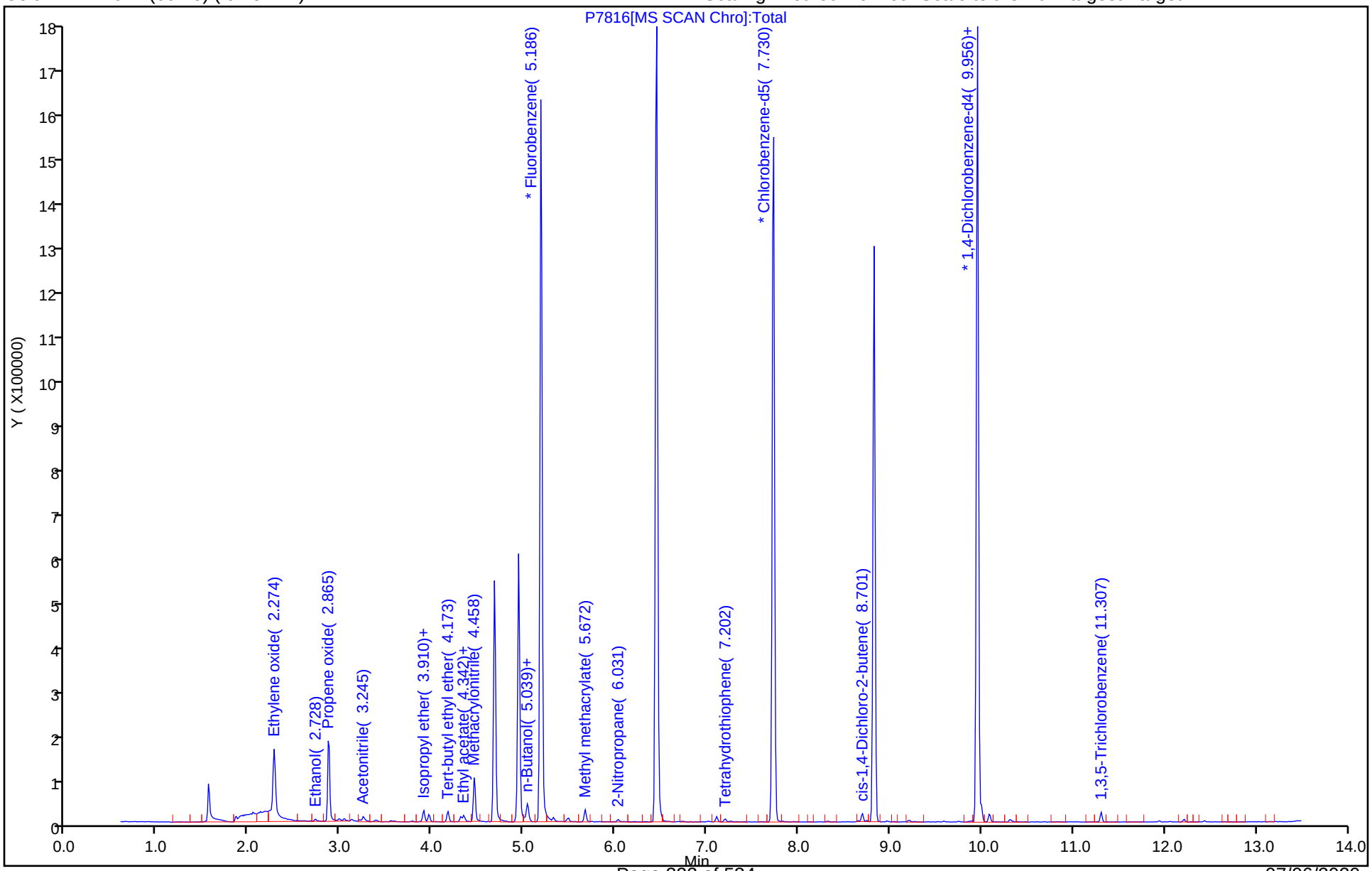
Report Date: 06-Feb-2020 21:41:43 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7816.D

Injection Date:	06-Feb-2020 15:02:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7817.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Feb-2020 15:23:30 ALS Bottle#: 13 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:45 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.195	5.184	0.011	99	1223412	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.728	7.727	0.001	89	267397	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.954	9.954	0.000	98	478042	50.0	50.0	
13 Ethylene oxide	43	2.272	2.263	0.009	99	91171	200.0	0	
18 Ethanol	45	2.725	2.727	-0.002	99	11881	120.0	122.1	
20 Propene oxide	58	2.873	2.865	0.008	96	246604	200.0	209.8	
25 Isopropyl alcohol	45	3.116	3.118	-0.002	98	10447	20.0	20.5	
28 Acetonitrile	41	3.243	3.245	-0.002	99	17199	20.0	19.2	
40 Isopropyl ether	87	3.907	3.909	-0.002	94	8627	2.00	2.13	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	15993	2.00	2.16	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	97	32530	2.00	2.17	
46 Ethyl acetate	43	4.308	4.310	-0.002	98	21526	4.00	4.38	
49 Propionitrile	54	4.340	4.342	-0.002	97	19932	20.0	20.6	
51 Methacrylonitrile	41	4.456	4.458	-0.002	94	82039	20.0	22.1	
62 Tert-amyl methyl ether	73	5.037	5.039	-0.002	89	31081	2.00	2.14	
63 n-Butanol	56	5.047	5.039	0.008	51	9657	50.0	49.2	
71 Methyl methacrylate	100	5.670	5.672	-0.002	91	6131	4.00	4.16	
75 2-Nitropropane	41	6.029	6.031	-0.002	98	5174	4.00	3.66	
87 Tetrahydrothiophene	60	7.200	7.202	-0.002	92	5980	4.00	4.37	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	86	7996	4.00	3.56	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	96	40822	2.00	2.04	
118 1,3,5-Trichlorobenzene	180	11.305	11.307	-0.002	94	13192	2.00	1.98	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 2.00 Units: uL

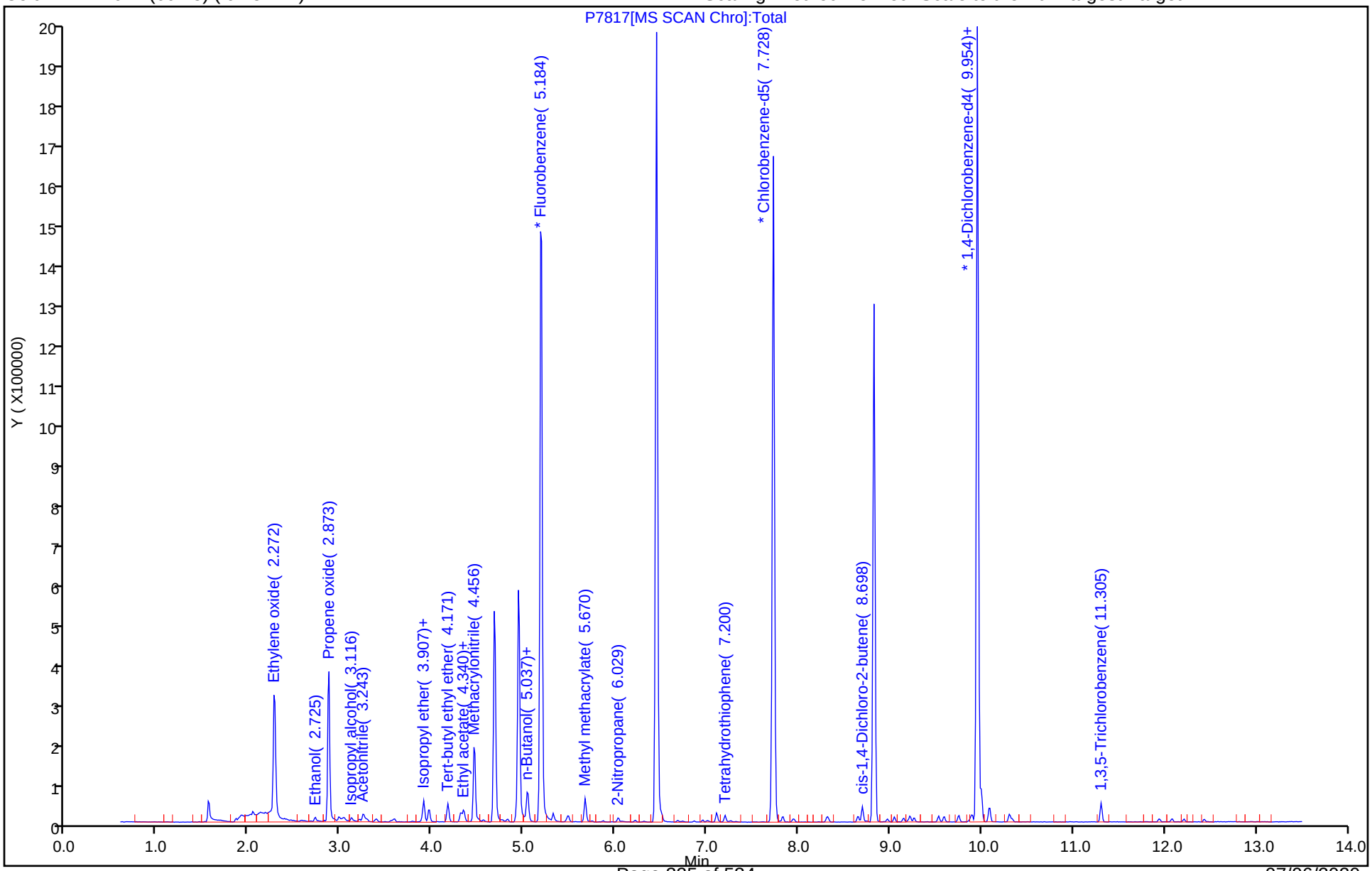
Report Date: 06-Feb-2020 21:41:45 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7817.D

Injection Date:	06-Feb-2020 15:23:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD020			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7818.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Feb-2020 15:44:30 ALS Bottle#: 14 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:47 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.194	5.184	0.010	99	1232949	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.727	7.727	0.000	90	270130	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.954	9.954	0.000	97	438951	50.0	50.0	
13 Ethylene oxide	43	2.271	2.263	0.008	99	398769	1000.0	0	
18 Ethanol	45	2.725	2.727	-0.002	99	52902	600.0	587.7	
20 Propene oxide	58	2.873	2.865	0.008	96	1152842	1000.0	973.1	
25 Isopropyl alcohol	45	3.115	3.118	-0.003	99	45263	100.0	97.5	
28 Acetonitrile	41	3.242	3.245	-0.003	99	82477	100.0	91.4	
40 Isopropyl ether	87	3.907	3.909	-0.002	93	39118	10.0	9.60	
41 2-Chloro-1,3-butadiene	53	3.970	3.962	0.008	93	70162	10.0	9.41	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	98	143048	10.0	9.48	
46 Ethyl acetate	43	4.308	4.310	-0.002	99	90461	20.0	19.8	
49 Propionitrile	54	4.350	4.342	0.008	99	91476	100.0	94.0	
51 Methacrylonitrile	41	4.456	4.458	-0.002	93	361071	100.0	96.7	
62 Tert-amyl methyl ether	73	5.036	5.039	-0.003	88	137903	10.0	9.43	
63 n-Butanol	56	5.046	5.039	0.007	52	43793	250.0	252.7	
71 Methyl methacrylate	100	5.669	5.672	-0.003	91	29672	20.0	20.0	
75 2-Nitropropane	41	6.028	6.031	-0.002	98	25974	20.0	18.2	
87 Tetrahydrothiophene	60	7.199	7.202	-0.003	93	26122	20.0	19.9	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	87	37767	20.0	18.3	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	99	175771	10.0	9.56	
118 1,3,5-Trichlorobenzene	180	11.304	11.307	-0.003	96	56276	10.0	9.22	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 10.00 Units: uL

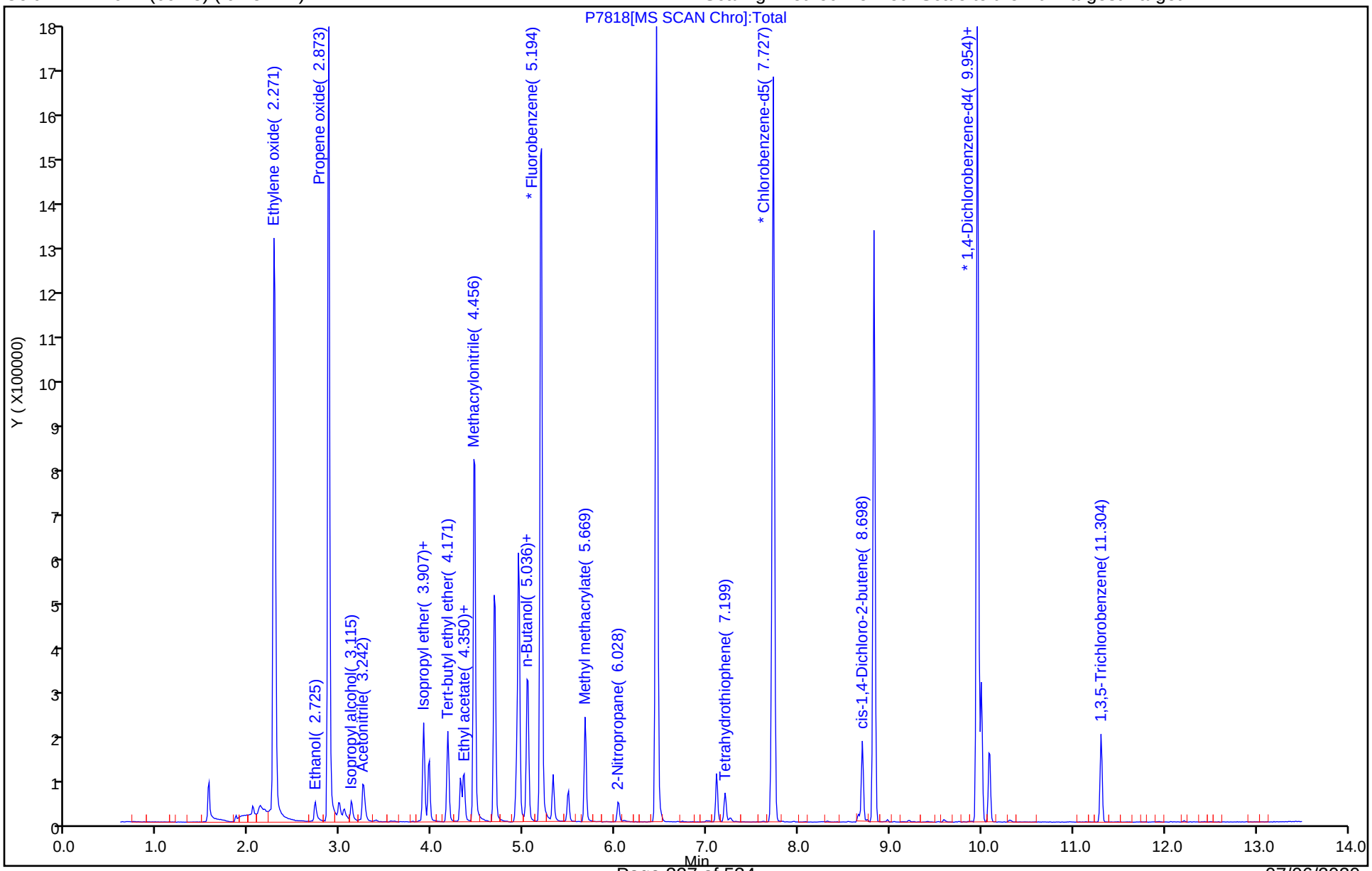
Report Date: 06-Feb-2020 21:41:48 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7818.D

Injection Date:	06-Feb-2020 15:44:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD10			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7819.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Feb-2020 16:05:30 ALS Bottle#: 15 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:50 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.186	5.186	0.000	98	1243008	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.730	7.730	0.000	90	305720	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.956	9.956	0.000	96	456226	50.0	50.0	
13 Ethylene oxide	43	2.263	2.263	0.000	100	1139191	5000.0	0	
18 Ethanol	45	2.727	2.727	0.000	99	263486	3000.0	2958.7	
20 Propene oxide	58	2.865	2.865	0.000	96	6051020	5000.0	5066.3	
25 Isopropyl alcohol	45	3.118	3.118	0.000	99	225483	500.0	493.0	
28 Acetonitrile	41	3.245	3.245	0.000	99	426465	500.0	469.0	
40 Isopropyl ether	87	3.909	3.909	0.000	93	196097	50.0	47.8	
41 2-Chloro-1,3-butadiene	53	3.962	3.962	0.000	96	351403	50.0	46.7	
43 Tert-butyl ethyl ether	59	4.173	4.173	0.000	98	726330	50.0	47.7	
46 Ethyl acetate	43	4.310	4.310	0.000	99	450989	100.0	99.8	
49 Propionitrile	54	4.342	4.342	0.000	98	461672	500.0	470.7	
51 Methacrylonitrile	41	4.458	4.458	0.000	92	1783664	500.0	473.9	
62 Tert-amyl methyl ether	73	5.039	5.039	0.000	88	714678	50.0	48.5	
63 n-Butanol	56	5.039	5.039	0.000	52	220595	1250.0	1298.4	
71 Methyl methacrylate	100	5.672	5.672	0.000	90	154429	100.0	103.1	
75 2-Nitropropane	41	6.031	6.031	0.000	99	135936	100.0	94.7	
87 Tetrahydrothiophene	60	7.202	7.202	0.000	93	146877	100.0	100.0	
98 cis-1,4-Dichloro-2-butene	53	8.700	8.700	0.000	84	220680	100.0	103.0	
114 1,2,3-Trimethylbenzene	105	9.998	9.998	0.000	99	922141	50.0	48.3	
118 1,3,5-Trichlorobenzene	180	11.307	11.307	0.000	96	310039	50.0	48.9	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 50.00 Units: uL

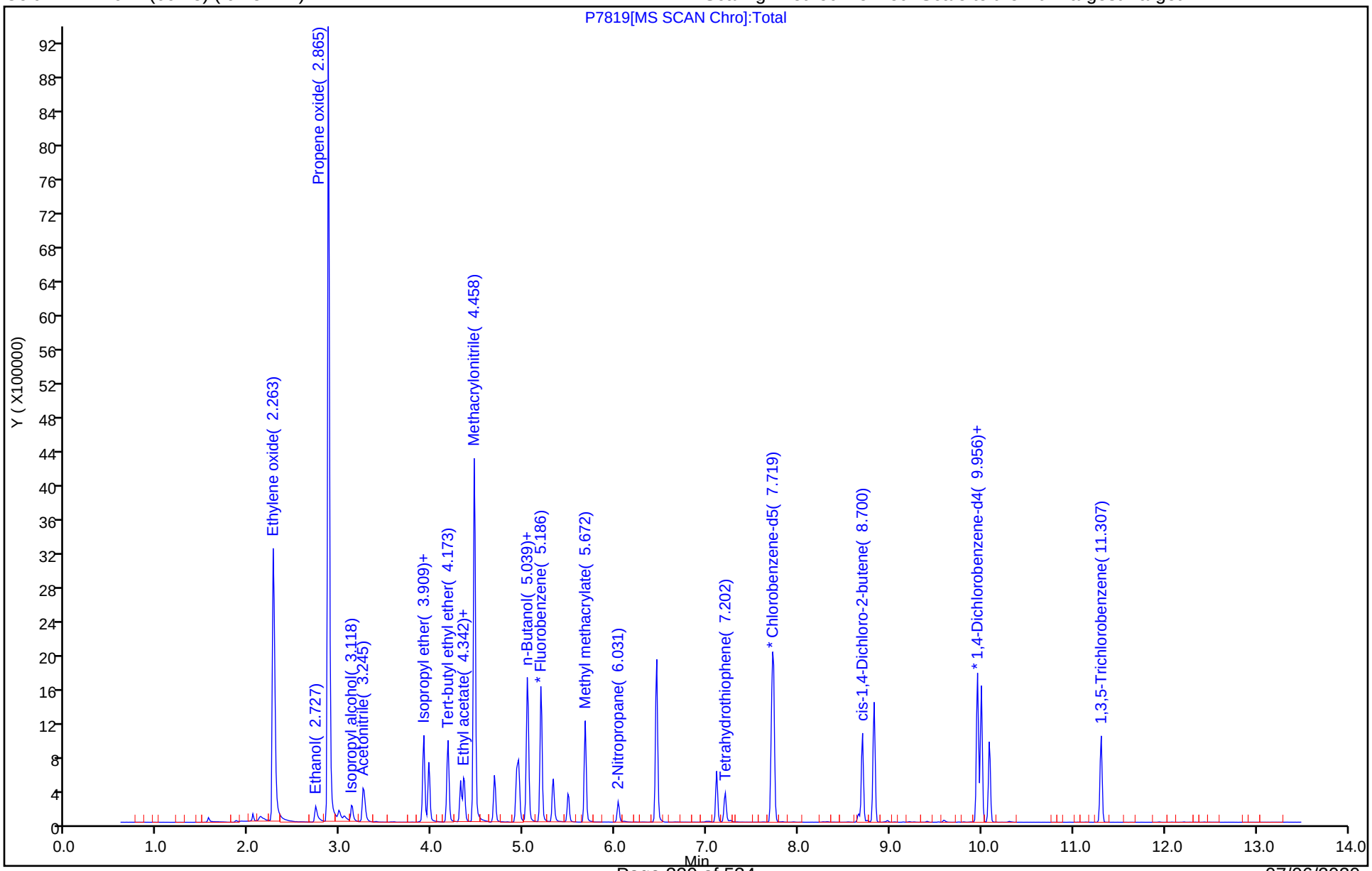
Report Date: 06-Feb-2020 21:41:50 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7819.D

Injection Date:	06-Feb-2020 16:05:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD50			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7820.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Feb-2020 16:27:30 ALS Bottle#: 16 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:52 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:26:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.185	5.186	-0.001	98	1253199	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.728	7.730	-0.002	94	283554	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.955	9.956	-0.001	97	452464	50.0	50.0	
13 Ethylene oxide	43	2.272	2.263	0.009	100	2351644	7500.0	0	
18 Ethanol	45	2.726	2.727	-0.001	99	386767	4500.0	4314.1	
20 Propene oxide	58	2.863	2.865	-0.002	96	9105013	7500.0	7561.3	
25 Isopropyl alcohol	45	3.117	3.118	-0.001	99	334122	750.0	725.9	
28 Acetonitrile	41	3.243	3.245	-0.002	99	630440	750.0	687.7	
40 Isopropyl ether	87	3.908	3.909	-0.001	93	288623	75.0	69.7	
41 2-Chloro-1,3-butadiene	53	3.961	3.962	-0.001	94	515887	75.0	68.0	
43 Tert-butyl ethyl ether	59	4.172	4.173	-0.001	98	1079705	75.0	70.4	
46 Ethyl acetate	43	4.309	4.310	-0.001	99	666797	150.0	146.7	
49 Propionitrile	54	4.341	4.342	-0.001	98	681378	750.0	689.1	
51 Methacrylonitrile	41	4.457	4.458	-0.001	92	2623920	750.0	691.5	
62 Tert-amyl methyl ether	73	5.037	5.039	-0.002	89	1042279	75.0	70.1	
63 n-Butanol	56	5.037	5.039	-0.002	51	318735	1875.0	1864.7	
71 Methyl methacrylate	100	5.670	5.672	-0.002	90	224808	150.0	148.8	
75 2-Nitropropane	41	6.029	6.031	-0.001	99	205534	150.0	142.1	
87 Tetrahydrothiophene	60	7.200	7.202	-0.002	93	202908	150.0	149.0	
98 cis-1,4-Dichloro-2-butene	53	8.699	8.700	-0.001	85	350708	150.0	165.0	
114 1,2,3-Trimethylbenzene	105	9.997	9.998	-0.001	98	1352748	75.0	71.4	
118 1,3,5-Trichlorobenzene	180	11.306	11.307	-0.001	96	456876	75.0	72.6	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 75.00 Units: uL

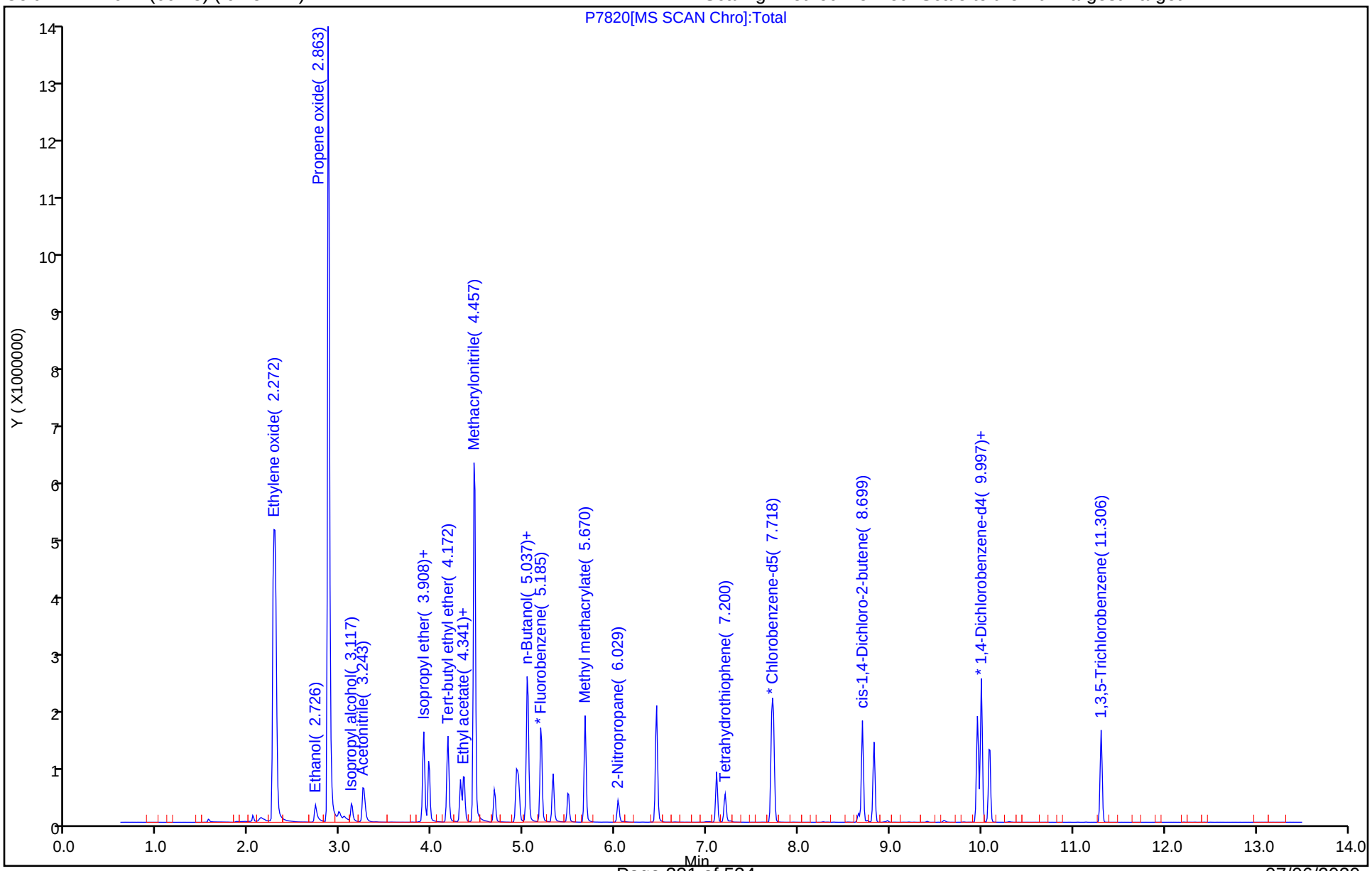
Report Date: 06-Feb-2020 21:41:53 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7820.D

Injection Date:	06-Feb-2020 16:27:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7821.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Feb-2020 16:48:30 ALS Bottle#: 17 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:55 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:27:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.186	5.186	0.000	98	1268036	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.729	7.730	-0.001	89	290596	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.956	9.956	0.000	96	480877	50.0	50.0	
13 Ethylene oxide	43	2.263	2.263	0.000	100	2331310	10000	0	
18 Ethanol	45	2.727	2.727	0.000	100	522577	6000.0	5765.5	
20 Propene oxide	58	2.865	2.865	0.000	97	11652040	10000	9563.3	
25 Isopropyl alcohol	45	3.118	3.118	0.000	98	447418	1000.0	961.6	
28 Acetonitrile	41	3.244	3.245	-0.001	99	839233	1000.0	904.8	
40 Isopropyl ether	87	3.909	3.909	0.000	93	382091	100.0	91.2	
41 2-Chloro-1,3-butadiene	53	3.962	3.962	0.000	93	691242	100.0	90.1	
43 Tert-butyl ethyl ether	59	4.173	4.173	0.000	97	1397782	100.0	90.0	
46 Ethyl acetate	43	4.310	4.310	0.000	99	865735	200.0	188.3	
49 Propionitrile	54	4.342	4.342	0.000	98	910532	1000.0	910.1	
51 Methacrylonitrile	41	4.458	4.458	0.000	92	3408887	1000.0	887.8	
62 Tert-amyl methyl ether	73	5.038	5.039	-0.001	88	1358095	100.0	90.3	
63 n-Butanol	56	5.038	5.039	-0.001	52	421393	2500.0	2439.2	
71 Methyl methacrylate	100	5.672	5.672	0.000	90	292960	200.0	191.7	
75 2-Nitropropane	41	6.030	6.031	0.000	99	273130	200.0	186.6	
87 Tetrahydrothiophene	60	7.202	7.202	0.000	93	268588	200.0	192.6	
98 cis-1,4-Dichloro-2-butene	53	8.700	8.700	0.000	84	420706	200.0	186.3	
114 1,2,3-Trimethylbenzene	105	9.998	9.998	0.000	99	1842560	100.0	91.5	
118 1,3,5-Trichlorobenzene	180	11.307	11.307	0.000	97	625016	100.0	93.5	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 100.00 Units: uL

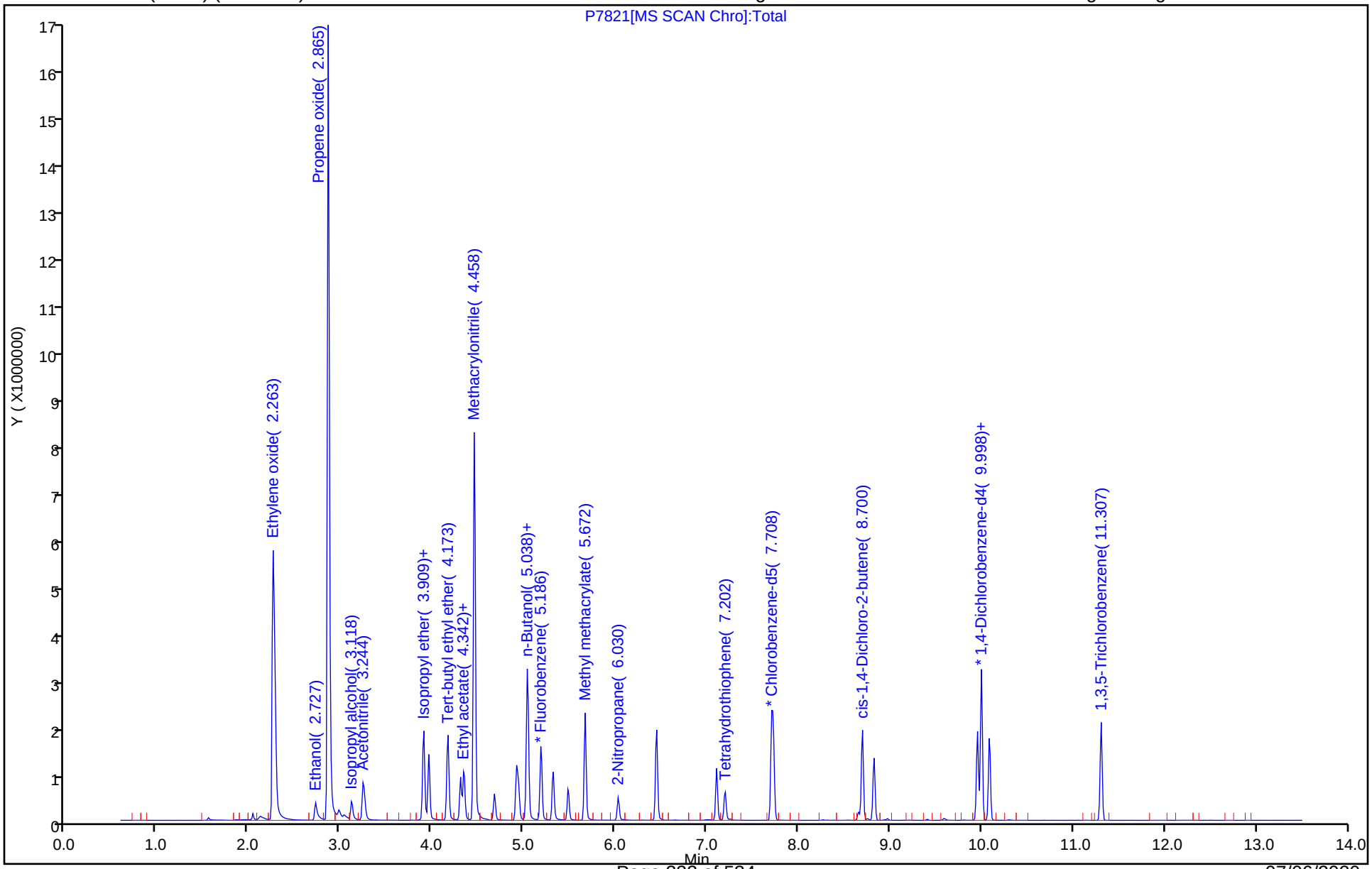
Report Date: 06-Feb-2020 21:41:55 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7821.D

Injection Date:	06-Feb-2020 16:48:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD100			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 06-Feb-2020 17:09:30 ALS Bottle#: 18 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub180

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:58 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:30:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.185	5.186	-0.001	98	1233461	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.728	7.730	-0.002	90	287435	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.954	9.956	-0.002	97	473957	50.0	50.0	
13 Ethylene oxide	43	2.251	2.263	-0.012	99	2022955	20000	0	
18 Ethanol	45	2.736	2.727	0.009	99	1121959	12000	12742	
20 Propene oxide	58	2.863	2.865	-0.002	99	19830208	20000	16732	
25 Isopropyl alcohol	45	3.127	3.118	0.009	99	999643	2000.0	2212.5	
28 Acetonitrile	41	3.253	3.245	0.008	99	1824759	2000.0	2022.4	
40 Isopropyl ether	87	3.908	3.909	-0.001	93	783010	200.0	192.2	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	1429550	200.0	191.6	
43 Tert-butyl ethyl ether	59	4.172	4.173	-0.001	97	2905958	200.0	192.4	
46 Ethyl acetate	43	4.309	4.310	-0.001	99	1812179	400.0	405.8	
49 Propionitrile	54	4.351	4.342	0.009	98	1975705	2000.0	2030.1	
51 Methacrylonitrile	41	4.467	4.458	0.009	90	7076095	2000.0	1894.5	
62 Tert-amyl methyl ether	73	5.037	5.039	-0.002	89	2808808	200.0	191.9	
63 n-Butanol	56	5.037	5.039	-0.002	51	855999	5000.0	5103.5	
71 Methyl methacrylate	100	5.670	5.672	-0.002	90	627312	400.0	421.9	
75 2-Nitropropane	41	6.029	6.031	-0.001	100	590761	400.0	414.9	
87 Tetrahydrothiophene	60	7.200	7.202	-0.002	92	565994	400.0	410.6	
98 cis-1,4-Dichloro-2-butene	53	8.699	8.700	-0.001	84	948600	400.0	426.1	
114 1,2,3-Trimethylbenzene	105	9.997	9.998	-0.001	99	3898885	200.0	196.4	
118 1,3,5-Trichlorobenzene	180	11.305	11.307	-0.002	96	1355172	200.0	205.6	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp A_00041 Amount Added: 200.00 Units: uL

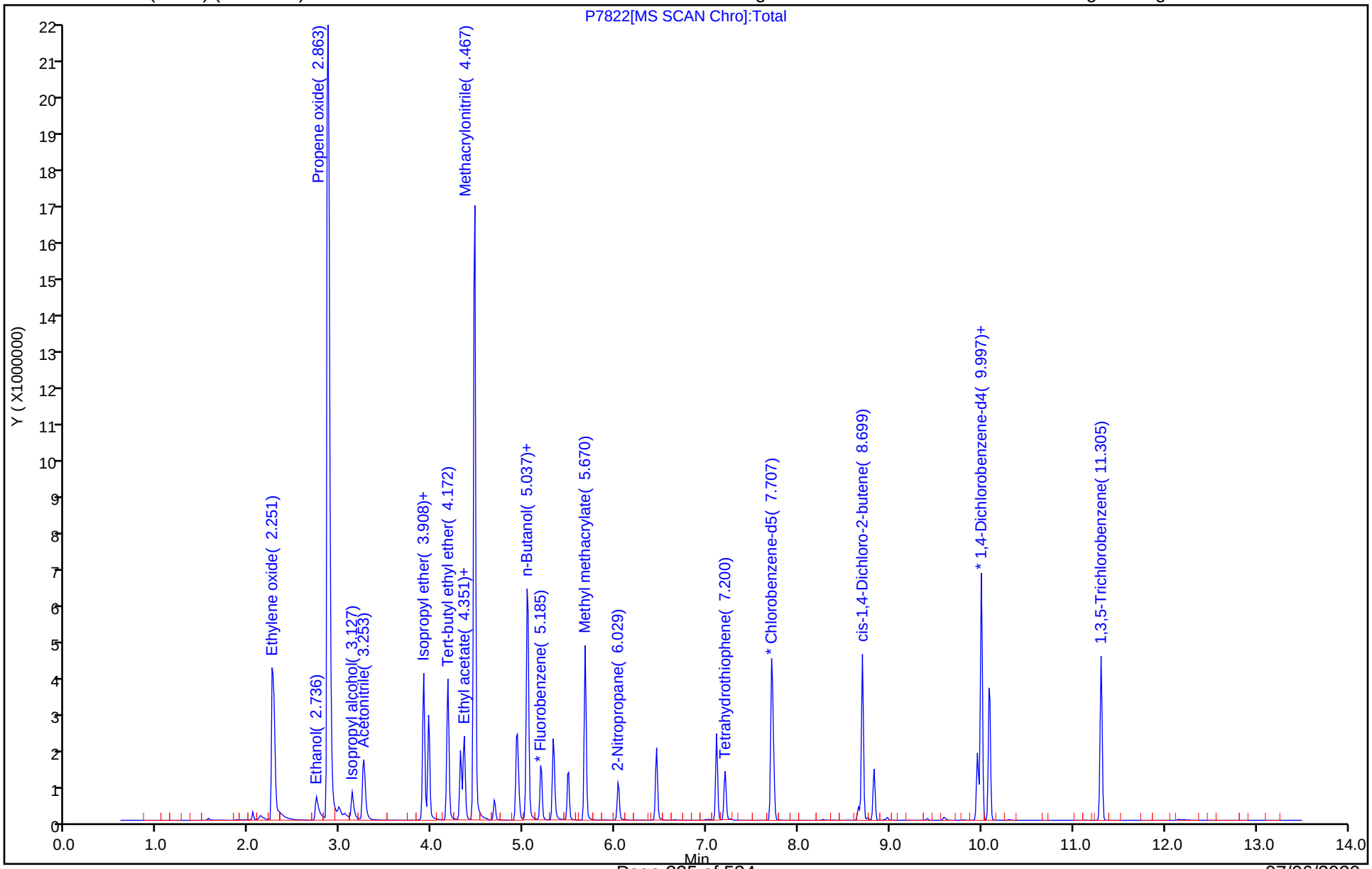
Report Date: 06-Feb-2020 21:41:58 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Injection Date:	06-Feb-2020 17:09:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD200			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-496958/12	P1658.D
Level 2	STD010 280-496958/13	P1659.D
Level 3	STD020 280-496958/14	P1660.D
Level 4	STD050 280-496958/15	P1661.D
Level 5	STD10 280-496958/16	P1662.D
Level 6	ICIS 280-496958/17	P1669.D
Level 7	STD75 280-496958/18	P1664.D
Level 8	STD100 280-496958/19	P1665.D
Level 9	STD200 280-496958/20	P1666.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 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1280 0.1501	0.1149 0.1496	0.1184 0.1413	0.1587 0.1427	0.1584	Ave		0.1402				11.6		15.0			
Chloromethane	0.3232 0.1998	0.2299 0.1994	0.1964 0.1852	0.2155 0.1824	0.2026	Lin2	0.0602	0.1892			0.1000				0.9930		0.9900
Vinyl chloride	0.2314 0.2184	0.2062 0.2201	0.2196 0.2055	0.2372 0.2023	0.2292	Ave		0.2189				5.6		30.0			
Bromomethane	+++++ 0.1030	0.2168 0.0763	0.1525 0.0850	0.0951 0.0778	0.0993	Lin1	0.1403	0.0808							0.9900		0.9900
Chloroethane	0.1523 0.1415	0.1337 0.1375	0.1415 0.1307	0.1471 0.1256	0.1447	Ave		0.1394				6.0		15.0			
Dichlorofluoromethane	0.3296 0.3281	0.3209 0.3327	0.3261 0.3139	0.3386 0.3130	0.3265	Ave		0.3255				2.6		15.0			
Trichlorofluoromethane	0.2742 0.2655	0.2673 0.2726	0.2651 0.2571	0.2943 0.2576	0.2782	Ave		0.2702				4.2		15.0			
Ethyl ether	0.1803 0.1669	0.1772 0.1686	0.1768 0.1674	0.1630 0.1640	0.1681	Ave		0.1703				3.7		15.0			
Acrolein	0.0464 0.0387	0.0442 0.0411	0.0442 0.0400	0.0422 0.0401	0.0417	Ave		0.0421				5.8		15.0			
1,1-Dichloroethene	0.1645 0.1668	0.1700 0.1626	0.1758 0.1551	0.1451 0.1545	0.1629	Ave		0.1619				5.7		30.0			
Freon 113	0.1331 0.1247	0.1318 0.1206	0.1304 0.1126	0.1084 0.1136	0.1213	Ave		0.1218				7.4		15.0			
Acetone	0.1008 0.0577	0.0916 0.0653	0.0854 0.0641	0.0735 0.0639	0.0682	Lin2	0.0807	0.0659							0.9910		0.9900
Iodomethane	+++++ 0.1499	0.1131 0.1719	0.0708 0.1647	0.0661 0.1537	0.0868	Lin	-0.110	0.1579							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
Carbon disulfide	0.8046 0.5572	0.5575 0.5272	0.5575 0.5112	0.4694 0.5023	0.5159	Lin2	0.1307	0.5000							0.9910		0.9900
Methyl acetate	0.1762 0.1493	0.1830 0.1684	0.1808 0.1658	0.1691 0.1676	0.1690	Ave		0.1699				5.8		15.0			
Allyl chloride	0.2966 0.2956	0.2886 0.2775	0.2992 0.2698	0.2475 0.2436	0.2799	Ave		0.2776				7.4		15.0			
Methylene Chloride	0.3943 0.1958	0.2548 0.1923	0.2351 0.1896	0.1969 0.1844	0.1984	Lin2	0.0975	0.1851							0.9950		0.9900
Tert-butyl alcohol (2-methyl-2-propanol)	0.0197 0.0184	0.0219 0.0224	0.0231 0.0224	0.0243 0.0232	0.0220	Ave		0.0219				8.4		15.0			
Acrylonitrile	0.0998 0.0828	0.0983 0.0906	0.0994 0.0885	0.0917 0.0865	0.0907	Ave		0.0920				6.5		15.0			
Methyl tert-butyl ether	0.5313 0.5438	0.5599 0.5554	0.5707 0.5501	0.5156 0.5436	0.5496	Ave		0.5467				2.9		15.0			
trans-1,2-Dichloroethene	0.2346 0.1914	0.1978 0.1852	0.1995 0.1799	0.1702 0.1777	0.1837	Ave		0.1911				9.9		15.0			
Hexane	1.2201 1.2204	1.2431 1.1594	1.2484 1.0737	1.0435 1.0817	1.2042	Ave		1.1661				6.8		15.0			
Vinyl acetate	0.4272 0.4424	0.4172 0.4249	0.4244 0.3910	0.3953 0.3763	0.4080	Ave		0.4119				5.1		15.0			
1,1-Dichloroethane	0.3531 0.3521	0.3670 0.3507	0.3738 0.3391	0.3257 0.3306	0.3553	Ave		0.3497			0.1000	4.5		15.0			
2-Butanone (MEK)	0.1132 0.0956	0.1174 0.1097	0.1212 0.1069	0.1179 0.1067	0.1144	Ave		0.1115				7.0		15.0			
cis-1,2-Dichloroethene	0.2455 0.2107	0.2225 0.2080	0.2256 0.2042	0.1901 0.2008	0.2057	Ave		0.2126				7.7		15.0			
2,2-Dichloropropane	0.2346 0.2600	0.2323 0.2427	0.2428 0.2372	0.2097 0.2386	0.2324	Ave		0.2367				5.6		15.0			
sec-Butyl Alcohol	+++++ 0.0156	0.0160 0.0191	0.0167 0.0191	0.0192 0.0194	0.0183	Ave		0.0179				8.8		15.0			
Chlorobromomethane	0.1103 0.0951	0.0986 0.0924	0.1046 0.0900	0.0866 0.0859	0.0935	Ave		0.0952				8.5		15.0			
Tetrahydrofuran	+++++ 0.0637	0.0813 0.0734	0.0776 0.0720	0.0751 0.0733	0.0747	Ave		0.0739				6.8		15.0			
Chloroform	0.3713 0.3304	0.3491 0.3268	0.3704 0.3197	0.3106 0.3113	0.3322	Ave		0.3358				6.9		30.0			
1,1,1-Trichloroethane	0.2799 0.2695	0.2716 0.2667	0.2885 0.2571	0.2408 0.2562	0.2622	Ave		0.2658				5.3		15.0			
Cyclohexane	0.3614 0.3471	0.3496 0.3429	0.3564 0.3206	0.3006 0.3220	0.3469	Ave		0.3386				5.9		15.0			

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, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3014 0.2783	0.2937 0.2786	0.2930 0.2674	0.2522 0.2646	0.2773	Ave		0.2785				5.6		15.0			
Carbon tetrachloride	0.2212 0.2289	0.2101 0.2239	0.2296 0.2168	0.1898 0.2187	0.2191	Ave		0.2176				5.5		15.0			
Isobutyl alcohol	0.0068 0.0067	0.0075 0.0081	0.0078 0.0080	0.0086 0.0081	0.0080	Ave		0.0077				8.2		15.0			
Benzene	0.8807 0.8178	0.8781 0.8113	0.8863 0.7917	0.7662 0.7598	0.8136	Ave		0.8229				5.9		15.0			
1,2-Dichloroethane	0.4331 0.2570	0.3464 0.2591	0.3180 0.2537	0.2691 0.2459	0.2705	Lin2	0.0904	0.2561							0.9990		0.9900
n-Heptane	0.2867 0.2516	0.2656 0.2374	0.2668 0.2208	0.2149 0.2277	0.2392	Ave		0.2456				9.7		15.0			
Trichloroethene	0.2440 0.2033	0.2019 0.1960	0.2175 0.1916	0.1770 0.1915	0.1954	Ave		0.2020				9.5		15.0			
2-Pentanone	0.1509 0.1490	0.1666 0.1703	0.1741 0.1669	0.1754 0.1662	0.1709	Ave		0.1656				5.7		15.0			
Methylcyclohexane	0.2890 0.2592	0.2645 0.2551	0.2720 0.2394	0.2292 0.2426	0.2580	Ave		0.2566				7.0		15.0			
1,2-Dichloropropane	0.2162 0.2134	0.2200 0.2148	0.2192 0.2098	0.1974 0.2099	0.2128	Ave		0.2126				3.2		30.0			
1,4-Dioxane	0.0030 0.0026	0.0031 0.0030	0.0029 0.0029	0.0032 0.0030	0.0030	Ave		0.0030				5.6		15.0			
Dibromomethane	+++++ 0.1195	0.1306 0.1219	0.1256 0.1200	0.1175 0.1187	0.1217	Ave		0.1219				3.5		15.0			
Dichlorobromomethane	0.2692 0.2494	0.2373 0.2498	0.2577 0.2450	0.2275 0.2439	0.2403	Ave		0.2467				4.9		15.0			
2-Chloroethyl vinyl ether	0.1569 0.1449	0.1343 0.1583	0.1369 0.1500	0.1445 0.1530	0.1449	Ave		0.1471				5.6		15.0			
cis-1,3-Dichloropropene	1.3517 1.4097	1.2827 1.4222	1.3118 1.3849	1.1948 1.3836	1.3273	Ave		1.3410				5.3		15.0			
4-Methyl-2-pentanone (MIBK)	0.1902 0.1945	0.2117 0.2207	0.2257 0.2146	0.2242 0.2085	0.2238	Ave		0.2126				6.1		15.0			
Toluene	0.9569 0.8515	0.9193 0.8435	0.9477 0.8155	0.7939 0.7860	0.8538	Ave		0.8631				7.4		30.0			
trans-1,3-Dichloropropene	0.3010 0.2849	0.2412 0.2870	0.2559 0.2884	0.2309 0.2899	0.2520	Ave		0.2701				9.3		15.0			
Ethyl methacrylate	1.1290 1.2396	1.1658 1.3132	1.2049 1.2925	1.1698 1.2821	1.2639	Ave		1.2290				5.3		15.0			
1,1,2-Trichloroethane	0.1726 0.1720	0.1814 0.1758	0.1781 0.1721	0.1706 0.1713	0.1728	Ave		0.1741				2.1		15.0			

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, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
Tetrachloroethene	0.6677 0.6145	0.6612 0.6056	0.6400 0.5746	0.5482 0.5751	0.5991	Ave		0.6096				6.7		15.0			
1,3-Dichloropropane	1.5992 1.4048	1.5251 1.4367	1.5542 1.3983	1.4090 1.3710	1.4762	Ave		1.4638				5.4		15.0			
2-Hexanone	0.5975 0.6030	0.6705 0.7005	0.7016 0.6807	0.7322 0.6547	0.7095	Ave		0.6723				6.9		15.0			
Chlorodibromomethane	0.7724 0.7764	0.6982 0.7967	0.7313 0.7836	0.6931 0.7792	0.7432	Ave		0.7527				5.1		15.0			
1,2-Dibromoethane	0.9651 0.7802	0.8162 0.8052	0.8192 0.7939	0.7446 0.7842	0.8129	Ave		0.8135				7.6		15.0			
1-Chlorohexane	1.8983 1.1687	1.4843 1.1328	1.3488 1.0878	1.0391 1.0718	1.1516	Lin2	0.4010	1.0933							0.9960		0.9900
Chlorobenzene	2.8431 2.2931	2.4882 2.2828	2.5613 2.2170	2.1276 2.1592	2.3153	Ave		2.3653			0.3000	9.7		15.0			
1,1,1,2-Tetrachloroethane	0.7470 0.7531	0.7135 0.7599	0.7208 0.7428	0.6719 0.7404	0.7068	Ave		0.7285				3.8		15.0			
Ethylbenzene	1.4916 1.2986	1.2985 1.3009	1.3772 1.2389	1.1724 1.2245	1.2833	Ave		1.2984				7.1		30.0			
m-Xylene & p-Xylene	1.7050 1.5716	1.6188 1.5634	1.6599 1.5211	1.3964 1.4782	1.5437	Ave		1.5620				6.0		15.0			
o-Xylene	1.6131 1.5082	1.4768 1.5167	1.6055 1.4652	1.3796 1.4336	1.5065	Ave		1.5006				5.0		15.0			
Styrene	2.6597 2.6050	2.4800 2.6021	2.6301 2.5303	2.2837 2.4262	2.5330	Ave		2.5278				4.7		15.0			
Bromoform	0.3772 0.4628	0.4078 0.4907	0.4224 0.4905	0.4134 0.4976	0.4420	Ave		0.4449			0.1000	9.6		15.0			
Isopropylbenzene	2.9207 2.6388	2.5972 2.6100	2.7993 2.4965	2.4207 2.4416	2.6282	Ave		2.6170				6.2		15.0			
Cyclohexanone	0.0425 0.0446	0.0481 0.0532	0.0526 0.0527	0.0587 0.0523	0.0561	Ave		0.0512				10.2		15.0			
1,1,2,2-Tetrachloroethane	0.8348 0.7118	0.8025 0.7375	0.7913 0.7239	0.8059 0.7211	0.7746	Ave		0.7670			0.3000	5.8		15.0			
Bromobenzene	0.7371 0.6049	0.6137 0.5992	0.6435 0.5917	0.5840 0.5870	0.5954	Ave		0.6174				7.8		15.0			
trans-1,4-Dichloro-2-butene	0.2012 0.1997	0.1801 0.2105	0.2016 0.2108	0.2070 0.2135	0.2092	Ave		0.2037				5.0		15.0			
1,2,3-Trichloropropane	0.2640 0.2073	0.2509 0.2189	0.2606 0.2148	0.2352 0.2141	0.2286	Ave		0.2327				9.1		15.0			
N-Propylbenzene	0.8025 0.7397	0.7405 0.7190	0.7765 0.7021	0.6300 0.6985	0.7180	Ave		0.7252				6.8		15.0			

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, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

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 9	LVL 5		B	M1	M2								
2-Chlorotoluene	0.6633 0.6172	0.6146 0.6083	0.6690 0.5897	0.5711 0.5913	0.6015	Ave		0.6140				5.3		15.0			
1,3,5-Trimethylbenzene	2.3551 2.1752	2.1731 2.1703	2.2493 2.0577	1.9914 2.0094	2.1530	Ave		2.1483				5.4		15.0			
4-Chlorotoluene	0.7545 0.6430	0.6464 0.6311	0.6551 0.6215	0.5833 0.6135	0.6400	Ave		0.6432				7.3		15.0			
tert-Butylbenzene	2.0608 1.8063	1.8002 1.7795	1.8966 1.7171	1.6183 1.6943	1.8020	Ave		1.7972				7.1		15.0			
1,2,4-Trimethylbenzene	2.4448 2.2016	2.1610 2.1649	2.2655 2.0984	2.0025 2.0249	2.1787	Ave		2.1714				6.1		15.0			
sec-Butylbenzene	0.5745 0.5380	0.5150 0.5254	0.5725 0.5014	0.4806 0.5092	0.5140	Ave		0.5256				6.0		15.0			
1,3-Dichlorobenzene	+++++ 1.1241	1.1551 1.1220	1.1918 1.0918	1.0646 1.0774	1.1141	Ave		1.1176				3.7		15.0			
4-Isopropyltoluene	2.4070 2.2834	2.1853 2.2155	2.2701 2.1420	1.9940 2.0784	2.2002	Ave		2.1973				5.5		15.0			
1,4-Dichlorobenzene	+++++ 1.1395	1.2920 1.1360	1.2862 1.0997	1.0905 1.0898	1.1263	Ave		1.1575				7.2		15.0			
n-Butylbenzene	2.3154 2.1037	2.1183 2.0423	2.1364 1.9557	1.8360 1.9070	2.0269	Ave		2.0491				6.9		15.0			
1,2-Dichlorobenzene	1.2828 1.0736	1.1374 1.0901	1.1690 1.0550	1.0580 1.0431	1.0822	Ave		1.1101				6.9		15.0			
1,2-Dibromo-3-Chloropropane	0.1158 0.1202	0.1217 0.1385	0.1267 0.1382	0.1354 0.1477	0.1274	Ave		0.1302				8.0		15.0			
1,2,4-Trichlorobenzene	+++++ 0.6191	0.6124 0.6199	0.6022 0.6100	0.5585 0.6283	0.5803	Ave		0.6038				3.9		15.0			
Hexachlorobutadiene	+++++ 0.2332	0.2237 0.2212	0.2383 0.2125	0.1939 0.2252	0.2098	Ave		0.2197				6.4		15.0			
Naphthalene	2.1471 1.8713	1.8463 2.0171	1.8364 1.9970	1.9310 2.0064	1.9153	Ave		1.9520				5.1		15.0			
1,2,3-Trichlorobenzene	+++++ 0.5563	0.5614 0.5723	0.5535 0.5616	0.5351 0.5738	0.5284	Ave		0.5553				2.9		15.0			
Dibromofluoromethane (Surr)	0.2407 0.2398	0.2411 0.2413	0.2405 0.2421	0.2404 0.2413	0.2400	Ave		0.2408				0.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2860 0.2733	0.2901 0.2807	0.2886 0.2795	0.2868 0.2766	0.2884	Ave		0.2833				2.1		15.0			
Toluene-d8 (Surr)	4.4266 4.3600	4.4563 4.3900	4.4525 4.3492	4.4175 4.3184	4.4261	Ave		4.3996				1.1		15.0			
4-Bromofluorobenzene (Surr)	1.1116 1.1011	1.1177 1.0955	1.1073 1.0784	1.1155 1.0882	1.1173	Ave		1.1036				1.3		15.0			

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, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-496958/12	P1658.D
Level 2	STD010 280-496958/13	P1659.D
Level 3	STD020 280-496958/14	P1660.D
Level 4	STD050 280-496958/15	P1661.D
Level 5	STD10 280-496958/16	P1662.D
Level 6	ICIS 280-496958/17	P1669.D
Level 7	STD75 280-496958/18	P1664.D
Level 8	STD100 280-496958/19	P1665.D
Level 9	STD200 280-496958/20	P1666.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 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	3150 389403	5476 565032	11244 732362	38285 1521181	76509	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Lin2	7957 518425	10961 753095	18647 960082	51981 1944451	97832	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	5697 566674	9829 831473	20856 1065051	57213 2156770	110707	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Lin1	+++++ 267351	10332 288045	14480 440495	22950 829108	47958	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloroethane	FB	Ave	3750 367238	6373 519320	13433 677138	35486 1338855	69871	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	8114 851263	15298 1256526	30965 1626866	81685 3337067	157676	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	6751 688909	12743 1029796	25172 1332462	70991 2746174	134330	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	4438 433032	8448 636933	16790 867417	39315 1748580	81198	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	11284 992240	20816 1531495	41406 2049494	100409 4216625	198934	4.94 494	9.88 741	19.8 988	49.4 1975	98.8
1,1-Dichloroethene	FB	Ave	4050 432834	8105 614318	16694 803768	35001 1646977	78660	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Freon 113	FB	Ave	3277 323522	6283 455666	12382 583334	26144 1210821	58580	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Lin2	9926 599119	17462 986514	32447 1328269	70934 2724330	131651	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Iodomethane	FB	Lin	+++++ 388838	5391 649402	6724 853782	15949 1638641	41908	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon disulfide	FB	Lin2	19807 1445817	26575 1991209	52942 2649300	113233 5354499	249116	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methyl acetate	FB	Ave	8673 774814	17449 1272496	34344 1718245	81580 3572489	163271	1.00 100	2.00 150	4.00 200	10.0 400	20.0
Allyl chloride	FB	Ave	7301 767084	13759 1048018	28409 1398353	59709 2597002	135183	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Lin2	9706 508123	12146 726350	22322 982723	47489 1965595	95819	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tert-butyl alcohol (2-methyl-2-propanol)	FB	Ave	4840 476237	10427 844878	21901 1163015	58678 2468347	106253	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	24558 2147902	46835 3422488	94418 4584473	221256 9225550	437925	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	13079 1410931	26688 2097701	54197 2851275	124365 5795702	265416	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	5776 496599	9430 699589	18947 932241	41058 1894659	88732	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Ave	6679 719384	13212 991684	26560 1270824	56864 2650185	130470	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	21034 2295944	39777 3210150	80611 4053327	190703 8022993	394091	1.00 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	8693 913640	17492 1324489	35499 1757478	78561 3524595	171592	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	11145 992035	22389 1657714	46020 2217162	113733 4551845	221028	2.00 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	6043 546752	10604 785590	21423 1058127	45860 2140264	99347	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Ave	5776 674576	11073 916619	23061 1229414	50592 2543532	112216	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	+++++ 1213494	22900 2164234	47471 2977506	138755 6200156	265274	+++++ 1500	30.0 2250	60.0 3000	150 6000	300
Chlorobromomethane	FB	Ave	2716 246645	4702 349155	9931 466481	20887 916158	45134	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	+++++ 330688	7747 554326	14739 746007	36254 1562767	72173	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
Chloroform	FB	Ave	9141 857391	16640 1234280	35178 1656789	74923 3319211	160425	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	6890 699182	12946 1007366	27396 1332750	58098 2730851	126621	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	8897 900566	16664 1295262	33843 1661826	72517 3432828	167527	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	7420 722099	14002 1052218	27826 1385678	60834 2820470	133932	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	5446 593951	10013 845679	21806 1123442	45792 2331188	105812	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Isobutyl alcohol	FB	Ave	4174 435234	8906 768829	18462 1036679	51802 2158330	96963	12.5 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	21681 2121944	41858 3064336	84162 4103192	184836 8100543	392915	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Lin2	10662 666788	16511 978504	30197 1314638	64913 2621872	130615	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Heptane	FB	Ave	7057 652907	12658 896848	25333 1144406	51836 2427879	115523	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	FB	Ave	6006 527518	9625 740389	20658 992812	42697 2041486	94360	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	14862 1546919	31765 2572976	66130 3459479	169279 7086221	330037	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Methylcyclohexane	FB	Ave	7113 672553	12607 963441	25828 1240952	55290 2586376	124604	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	5321 553580	10485 811193	20818 1087577	47629 2237217	102772	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	1456 134765	2933 224792	5492 304422	15477 629142	29303	10.0 1000	20.0 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	+++++ 310055	6224 460404	11931 622019	28351 1265341	58752	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorobromomethane	FB	Ave	6627 647111	11312 943348	24474 1269877	54885 2599633	116062	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	3862 375914	6403 598010	12997 777645	34848 1631027	69995	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	7399 830989	13633 1216450	27908 1639115	65109 3390099	143800	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	18727 2019078	40359 3333758	85733 4449408	216321 8889699	432244	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	23555 2209256	43821 3185871	89995 4226712	191514 8379887	412287	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Ave	7409 739208	11495 1084089	24304 1494637	55704 3090342	121709	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Ave	6180 730677	12391 1123161	25633 1529747	63746 3141319	136938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	4248 446203	8647 664027	16908 892221	41158 1826181	83459	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Ave	3655 362210	7028 517985	13615 680115	29875 1409071	64911	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Ave	8754 828087	16209 1228848	33064 1654933	76780 3359188	159930	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Ave	13083 1421906	28505 2396568	59708 3222482	159597 6416464	307466	2.00 200	4.00 300	8.00 400	20.0 800	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorodibromomethane	CBNZ d5	Ave	4228 457646	7421 681438	15559 927388	37770 1909184	80520	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromoethane	CBNZ d5	Ave	5283 459893	8675 688729	17428 939615	40577 1921283	88076	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Lin2	10391 688923	15776 968916	28696 1287435	56622 2625923	124764	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chlorobenzene	CBNZ d5	Ave	15563 1351697	26446 1952494	54491 2623954	115938 5290337	250839	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4089 443921	7583 649959	15334 879154	36611 1814145	76578	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylbenzene	CBNZ d5	Ave	8165 765475	13801 1112684	29300 1466328	63884 3000265	139031	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	9333 926436	17205 1337167	35314 1800340	76090 3621670	167252	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZ d5	Ave	8830 889019	15696 1297286	34157 1734182	75177 3512399	163211	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZ d5	Ave	14559 1535593	26358 2225643	55954 2994821	124441 5944526	274427	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZ d5	Ave	2065 272832	4334 419665	8987 580498	22527 1219200	47885	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isopropylbenzene	DCBd 4	Ave	22793 2246623	39516 3269113	85484 4297903	188253 8473631	412530	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZ d5	Ave	9304 1051966	20432 1820858	44758 2497231	127996 5123084	242913	20.0 2000	40.0 3000	80.0 4000	200 8000	400
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6515 606034	12209 923777	24163 1246192	62677 2502476	121592	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd 4	Ave	5752 514975	9337 750457	19650 1018637	45419 2037374	93464	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1570 169990	2740 263640	6156 362926	16098 740899	32840	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	2060 176525	3818 274122	7957 369781	18290 742902	35882	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd 4	Ave	6263 629799	11266 900621	23713 1208674	48994 2424282	112695	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chlorotoluene	DCBd 4	Ave	5176 525501	9351 761914	20430 1015287	44412 2052197	94413	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	18379 1851899	33063 2718338	68689 3542571	154872 6973832	337938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Chlorotoluene	DCBd 4	Ave	5888 547434	9835 790475	20005 1069992	45363 2129083	100456	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
tert-Butylbenzene	DCBd 4	Ave	16082 1537848	27390 2228828	57918 2956162	125850 5880094	282847	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2,4-Trimethylbenzene	DCBd 4	Ave	19079 1874413	32879 2711650	69183 3612602	155733 7027541	341971	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butylbenzene	DCBd 4	Ave	4483 458007	7836 658067	17482 863268	37379 1767152	80672	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 957029	17575 1405320	36396 1879660	82789 3739315	174866	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Isopropyltoluene	DCBd 4	Ave	18784 1944009	33248 2775007	69322 3687575	155069 7213150	345360	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 970134	19657 1422924	39277 1893150	84803 3782164	176794	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Butylbenzene	DCBd 4	Ave	18069 1790989	32229 2558085	65241 3366903	142782 6618361	318151	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	10011 914029	17305 1365427	35697 1816228	82278 3619991	169871	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	904 102294	1852 173521	3868 237845	10531 512443	19998	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 527062	9317 776485	18390 1050224	43433 2180721	91087	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 198550	3403 277038	7277 365804	15077 781505	32937	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd 4	Ave	16756 1593185	28091 2526472	56079 3438073	150170 6963268	300637	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 473636	8541 716876	16904 966833	41611 1991580	82932	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	592424 622098	574659 607631	571033 627480	579846 643049	579503	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	704070 709192	691353 706747	685163 724426	691950 737268	696272	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	2423114 2570054	2368182 2503188	2368091 2573814	2407178 2645158	2397674	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	867490 937409	850285 914750	845318 928259	867537 944124	876843	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jun-2020 16:26:30 ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:31 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 09:01:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.113	-0.001	98	2461662	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.646	-0.002	87	547396	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.873	-0.002	98	780394	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.607	-0.002	92	592424	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.869	4.871	-0.002	97	704070	50.0	50.5	
$ 6 Toluene-d8 (Surr)	98	6.367	6.369	-0.002	93	2423114	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.743	-0.001	85	867490	50.0	50.4	
10 Dichlorodifluoromethane	85	1.671	1.662	0.009	97	3150	0.5000	0.4563	a
11 Chloromethane	50	1.840	1.842	-0.002	99	7957	0.5000	0.5358	a
12 Vinyl chloride	62	1.946	1.937	0.009	97	5697	0.5000	0.5286	
14 Bromomethane	94	2.241	2.232	0.009	88	6640	0.5000	-0.0676	a
15 Chloroethane	64	2.326	2.327	-0.001	98	3750	0.5000	0.5464	
16 Dichlorofluoromethane	67	2.505	2.496	0.009	97	8114	0.5000	0.5063	
17 Trichlorofluoromethane	101	2.537	2.538	-0.001	97	6751	0.5000	0.5075	
19 Ethyl ether	59	2.748	2.749	-0.001	92	4438	0.5000	0.5294	
21 Acrolein	56	2.853	2.855	-0.002	99	11284	4.94	5.45	
22 1,1-Dichloroethene	96	2.948	2.939	0.009	95	4050	0.5000	0.5080	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.948	2.939	0.009	81	3277	0.5000	0.5463	
24 Acetone	43	2.959	2.960	-0.001	100	9926	2.00	1.84	a
26 Iodomethane	142	3.075	3.066	0.009	98	5837	0.5000	1.45	a
27 Carbon disulfide	76	3.128	3.129	-0.001	99	19807	0.5000	0.5433	a
29 Methyl acetate	43	3.191	3.193	-0.002	98	8673	1.00	1.04	
30 3-Chloro-1-propene	41	3.212	3.214	-0.002	90	7301	0.5000	0.5342	
31 Methylene Chloride	84	3.307	3.309	-0.002	92	9706	0.5000	0.5381	a
32 2-Methyl-2-propanol	59	3.349	3.351	-0.002	97	4840	5.00	4.49	
33 Acrylonitrile	53	3.476	3.467	0.009	97	24558	5.00	5.42	
34 Methyl tert-butyl ether	73	3.497	3.499	-0.002	96	13079	0.5000	0.4859	
35 trans-1,2-Dichloroethene	96	3.518	3.509	0.009	96	5776	0.5000	0.6138	
36 Hexane	57	3.708	3.710	-0.002	92	6679	0.5000	0.5232	
38 Vinyl acetate	43	3.814	3.805	0.009	95	21034	1.00	1.04	
39 1,1-Dichloroethane	63	3.835	3.836	-0.001	95	8693	0.5000	0.5049	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.225	4.216	0.009	99	11145	2.00	2.03	
47 cis-1,2-Dichloroethene	96	4.246	4.248	-0.002	83	6043	0.5000	0.5775	
48 2,2-Dichloropropane	77	4.257	4.258	-0.001	90	5776	0.5000	0.4956	
50 sec-Butyl Alcohol	45	4.331	4.322	0.009	96	9480	15.0	10.7	
52 Tetrahydrofuran	42	4.436	4.427	0.009	96	4387	1.00	1.21	
53 Chlorobromomethane	128	4.426	4.427	-0.001	96	2716	0.5000	0.5793	
54 Chloroform	83	4.489	4.480	0.009	92	9141	0.5000	0.5530	
55 1,1,1-Trichloroethane	97	4.626	4.628	-0.002	97	6890	0.5000	0.5264	
56 Cyclohexane	56	4.689	4.691	-0.002	91	8897	0.5000	0.5337	
57 1,1-Dichloropropene	75	4.742	4.744	-0.002	95	7420	0.5000	0.5411	
59 Carbon tetrachloride	117	4.753	4.754	-0.001	93	5446	0.5000	0.5084	
58 Isobutyl alcohol	41	4.753	4.754	-0.001	87	4174	12.5	11.0	
60 Benzene	78	4.901	4.902	-0.001	95	21681	0.5000	0.5352	
61 1,2-Dichloroethane	62	4.922	4.923	-0.001	95	10662	0.5000	0.4925	
66 n-Heptane	43	5.080	5.082	-0.002	73	7057	0.5000	0.5835	
67 Trichloroethene	95	5.386	5.388	-0.002	96	6006	0.5000	0.6038	
68 2-Pentanone	43	5.491	5.483	0.008	98	14862	2.00	1.82	
69 Methylcyclohexane	55	5.586	5.578	0.008	91	7113	0.5000	0.5631	
70 1,2-Dichloropropane	63	5.597	5.599	-0.002	96	5321	0.5000	0.5084	
72 1,4-Dioxane	88	5.639	5.630	0.009	77	1456	10.0	10.0	
73 Dibromomethane	93	5.671	5.662	0.009	91	4066	0.5000	0.6773	
74 Dichlorobromomethane	83	5.787	5.789	-0.002	98	6627	0.5000	0.5457	
76 2-Chloroethyl vinyl ether	63	5.998	5.989	0.009	89	3862	0.5000	0.5333	
77 cis-1,3-Dichloropropene	75	6.146	6.137	0.009	94	7399	0.5000	0.5040	
78 4-Methyl-2-pentanone (MIBK)	43	6.241	6.242	-0.001	96	18727	2.00	1.79	
79 Toluene	91	6.431	6.432	-0.001	98	23555	0.5000	0.5543	
80 trans-1,3-Dichloropropene	75	6.610	6.601	0.009	97	7409	0.5000	0.5571	
81 Ethyl methacrylate	69	6.631	6.622	0.009	88	6180	0.5000	0.4593	
82 1,1,2-Trichloroethane	97	6.779	6.781	-0.002	90	4248	0.5000	0.4957	
83 Tetrachloroethene	164	6.874	6.876	-0.002	87	3655	0.5000	0.5477	
84 1,3-Dichloropropane	76	6.927	6.928	-0.001	89	8754	0.5000	0.5462	
85 2-Hexanone	43	6.948	6.939	0.009	94	13083	2.00	1.78	
86 Chlorodibromomethane	129	7.127	7.118	0.009	89	4228	0.5000	0.5131	
88 Ethylene Dibromide	107	7.243	7.245	-0.002	98	5283	0.5000	0.5932	
89 1-Chlorohexane	91	7.634	7.635	-0.001	67	10391	0.5000	0.5014	
90 Chlorobenzene	112	7.676	7.678	-0.002	92	15563	0.5000	0.6010	
92 Ethylbenzene	106	7.750	7.751	-0.001	99	8165	0.5000	0.5744	
91 1,1,1,2-Tetrachloroethane	131	7.750	7.751	-0.001	91	4089	0.5000	0.5127	
93 m-Xylene & p-Xylene	106	7.866	7.868	-0.002	99	9333	0.5000	0.5458	
94 o-Xylene	106	8.235	8.226	0.009	95	8830	0.5000	0.5375	
95 Styrene	104	8.246	8.247	-0.001	94	14559	0.5000	0.5261	
96 Bromoform	173	8.436	8.427	0.009	91	2065	0.5000	0.4239	
97 Isopropylbenzene	105	8.573	8.575	-0.002	95	22793	0.5000	0.5580	
99 Cyclohexanone	55	8.668	8.670	-0.002	93	9304	20.0	16.6	
100 1,1,2,2-Tetrachloroethane	83	8.858	8.859	-0.001	93	6515	0.5000	0.5442	
101 Bromobenzene	156	8.889	8.891	-0.002	96	5752	0.5000	0.5969	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.891	-0.002	44	1570	0.5000	0.4938	
103 1,2,3-Trichloropropane	110	8.921	8.923	-0.002	83	2060	0.5000	0.5672	
104 N-Propylbenzene	120	8.974	8.965	0.009	99	6263	0.5000	0.5533	
105 2-Chlorotoluene	126	9.069	9.071	-0.002	95	5176	0.5000	0.5401	
106 1,3,5-Trimethylbenzene	105	9.143	9.144	-0.001	94	18379	0.5000	0.5481	
107 4-Chlorotoluene	126	9.185	9.187	-0.002	97	5888	0.5000	0.5866	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.449	9.450	-0.001	92	16082	0.5000	0.5733	
109 1,2,4-Trimethylbenzene	105	9.512	9.514	-0.002	97	19079	0.5000	0.5630	
110 sec-Butylbenzene	134	9.670	9.672	-0.002	94	4483	0.5000	0.5465	
111 1,3-Dichlorobenzene	146	9.797	9.799	-0.002	97	11444	0.5000	0.6561	
112 4-Isopropyltoluene	119	9.818	9.820	-0.002	96	18784	0.5000	0.5477	
113 1,4-Dichlorobenzene	146	9.903	9.904	-0.001	88	12135	0.5000	0.6717	
115 n-Butylbenzene	91	10.219	10.221	-0.002	98	18069	0.5000	0.5650	
116 1,2-Dichlorobenzene	146	10.261	10.252	0.009	96	10011	0.5000	0.5778	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.033	-0.001	74	904	0.5000	0.4449	
119 1,2,4-Trichlorobenzene	180	11.865	11.856	0.009	93	6414	0.5000	0.6805	
120 Hexachlorobutadiene	225	12.003	12.004	-0.001	94	2919	0.5000	0.8512	
121 Naphthalene	128	12.129	12.131	-0.002	97	16756	0.5000	0.5500	
122 1,2,3-Trichlorobenzene	180	12.351	12.352	-0.001	93	5564	0.5000	0.6420	
S 139 1,2-Dichloroethene, Total (URS)	96				0		1.00	1.19	
S 142 Xylenes, Total	106				0		1.00	1.08	
S 140 Trihalomethanes, Total	1				0		2.00	2.04	
S 143 Xylenes, Total (URS)	1				0		1.00	1.08	
S 146 Total BTEX	1				0			2.75	
S 145 1,3-Dichloropropene, Total	1				0		1.00	1.06	
S 144 1,2-Dichloroethene, Total	1				0		1.00	1.19	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-Gas A_00058	Amount Added:	0.10	Units: uL	
MV-MegaMainA_00034	Amount Added:	0.25	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:15:32 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D

Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

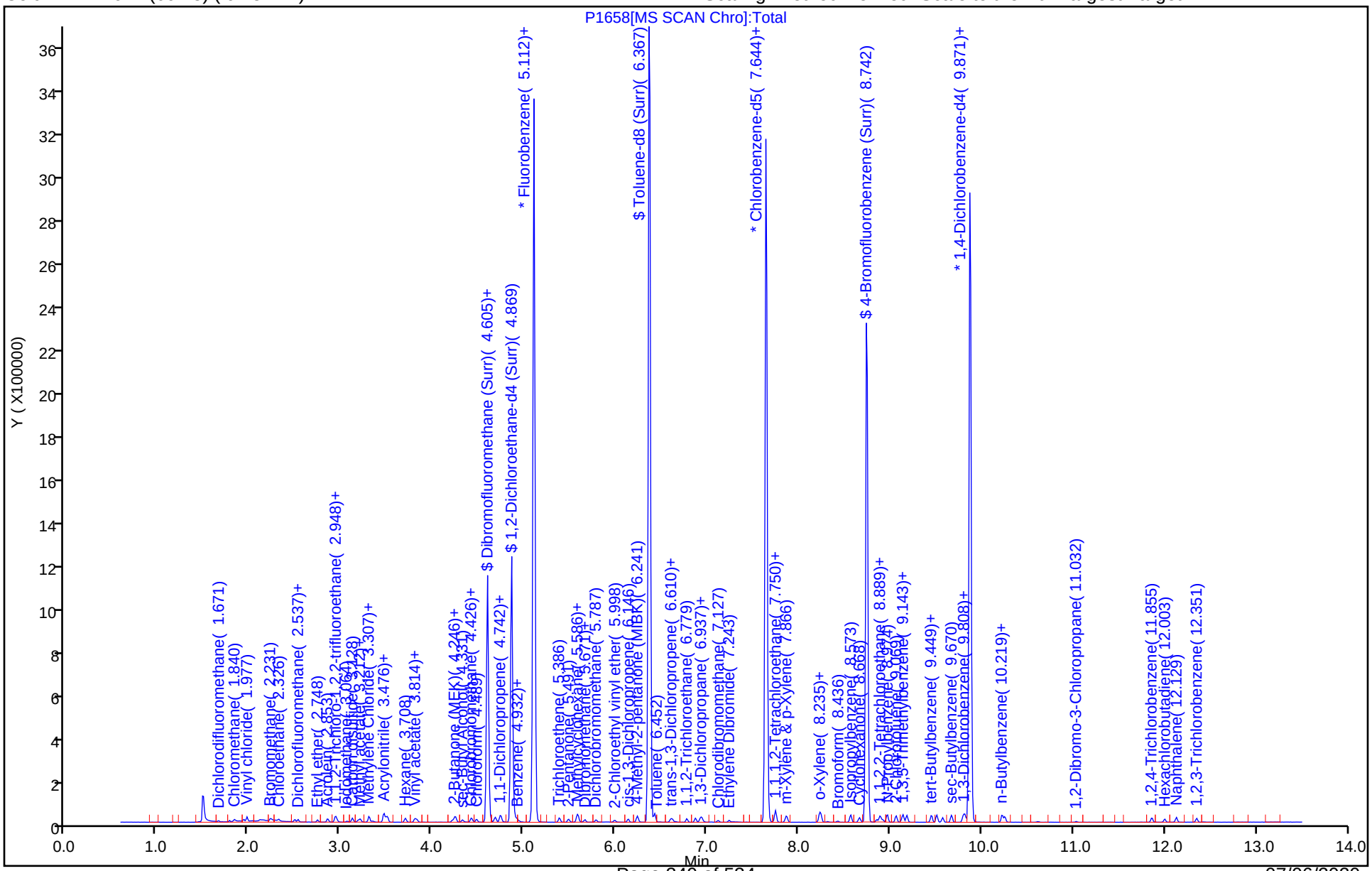
Lims ID: STD005 Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

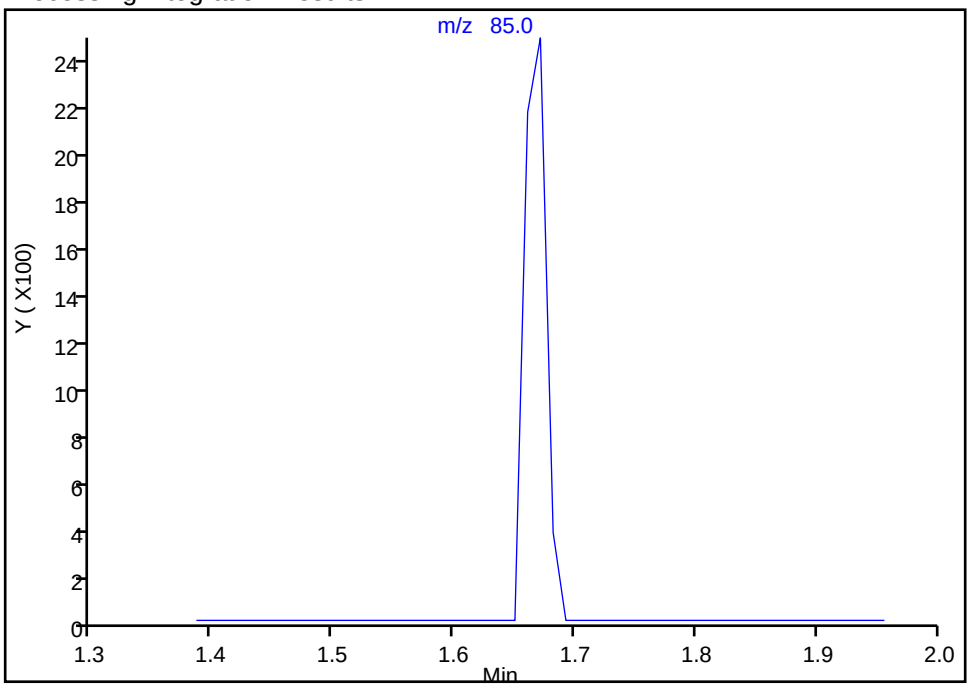
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

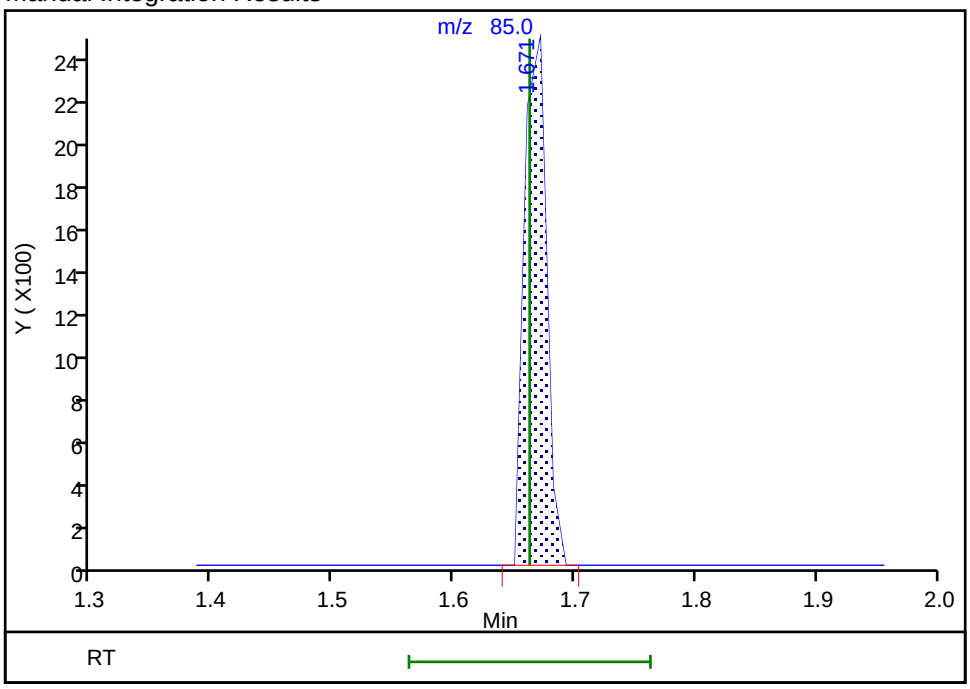
Not Detected
Expected RT: 1.66

Processing Integration Results



Manual Integration Results

RT: 1.67
Area: 3150
Amount: 0.456263
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:32
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

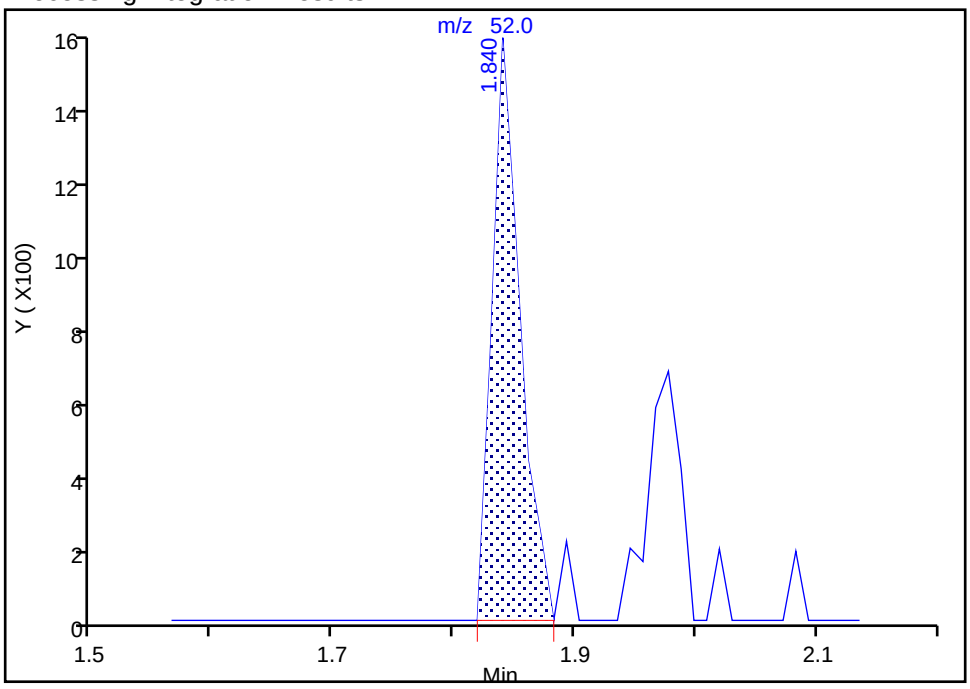
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 2

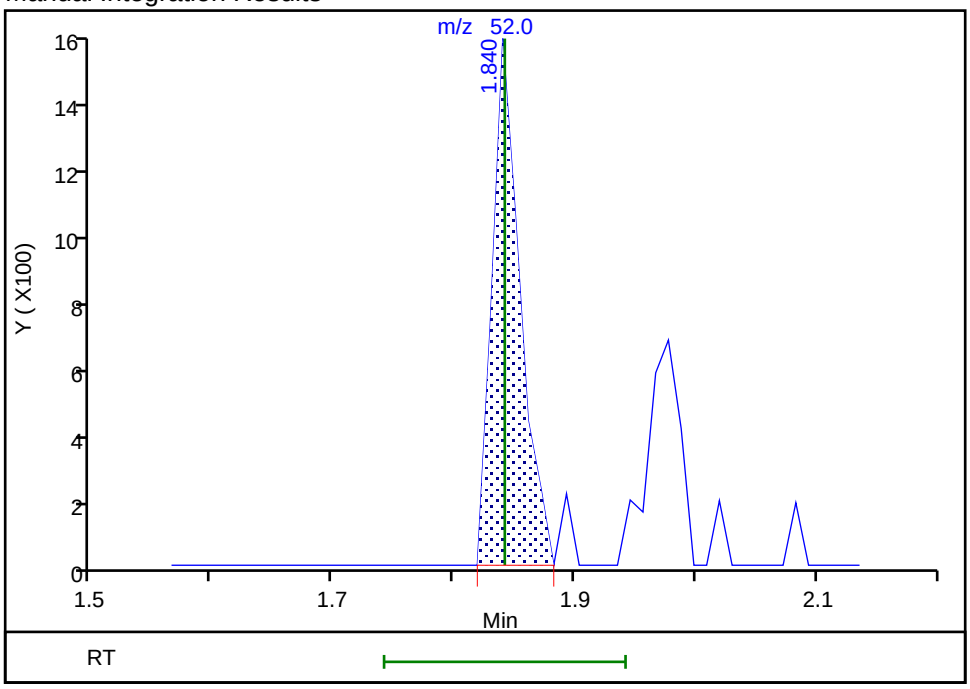
Processing Integration Results

RT: 1.84
Area: 2445
Amount: 0.535842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 2445
Amount: 0.535842
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

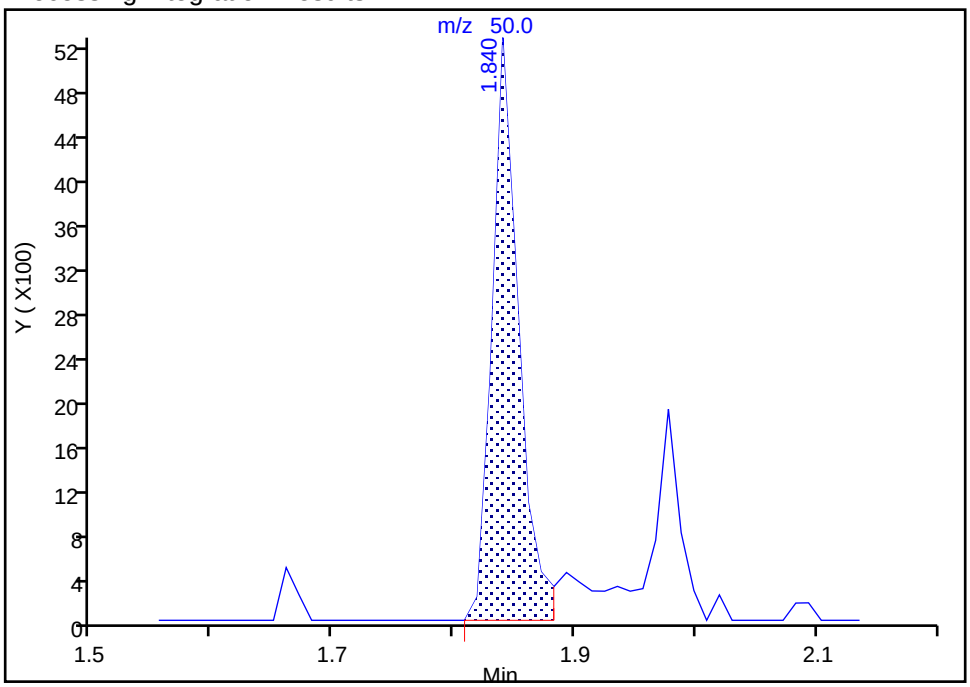
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

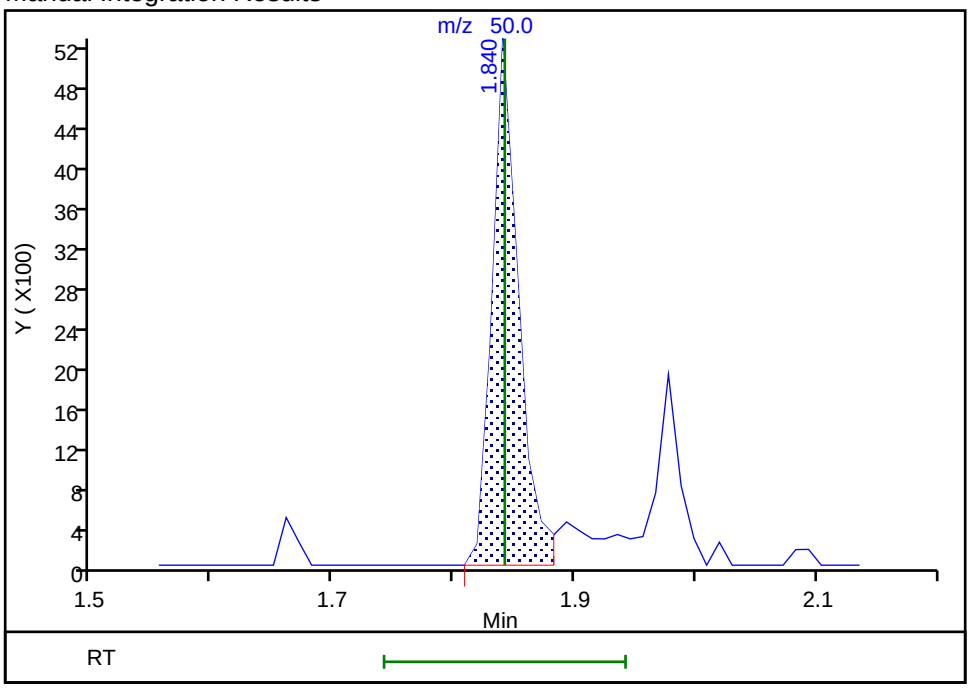
Processing Integration Results

RT: 1.84
Area: 7957
Amount: 0.535842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 7957
Amount: 0.535842
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:41
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

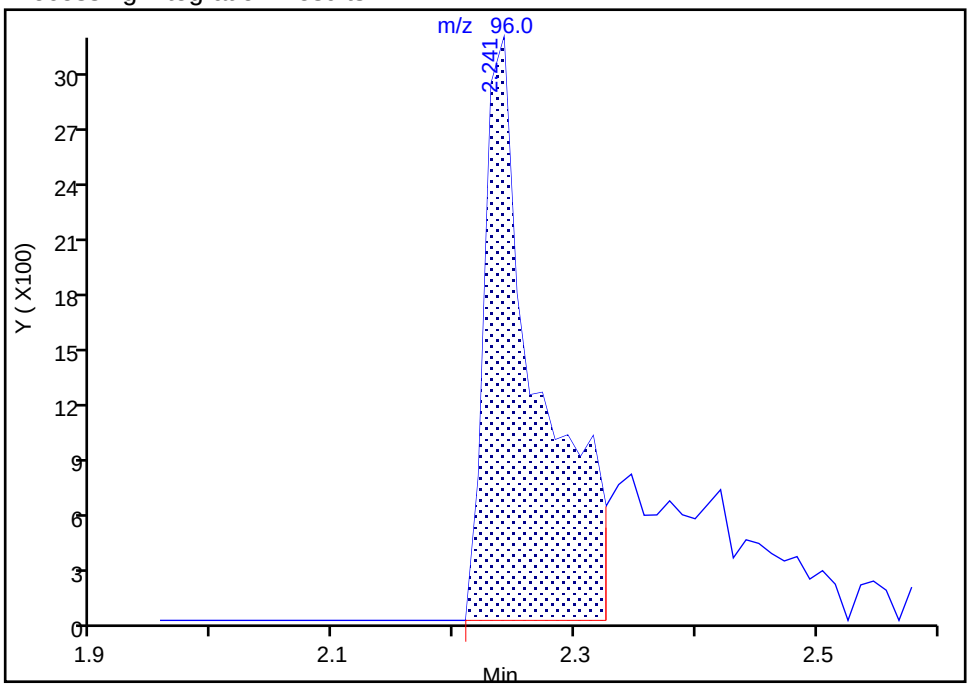
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

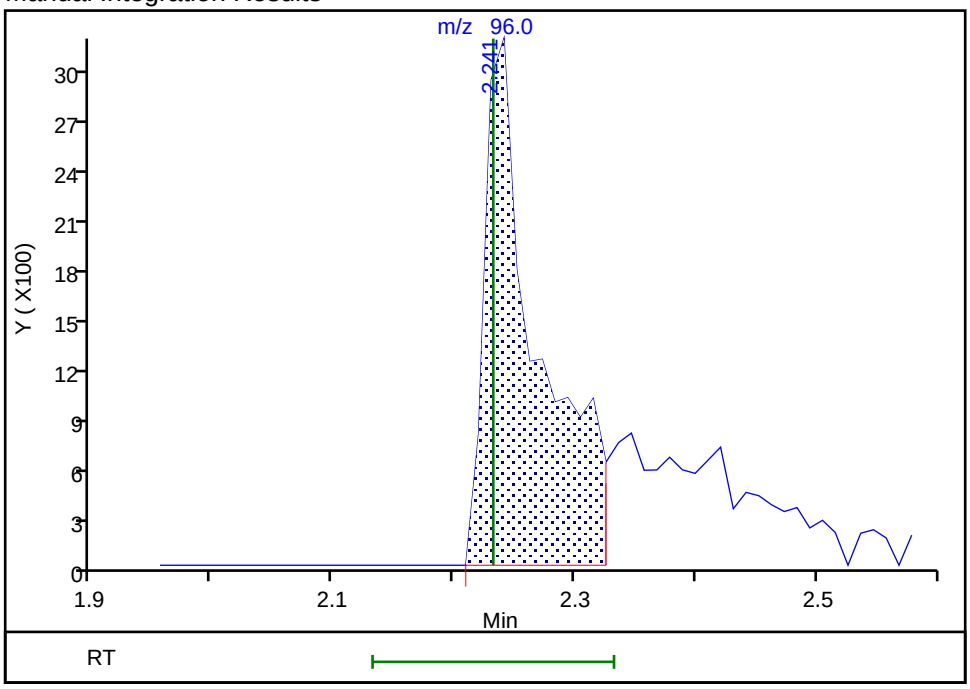
Processing Integration Results

RT: 2.24
Area: 9950
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.24
Area: 9950
Amount: -0.067594
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

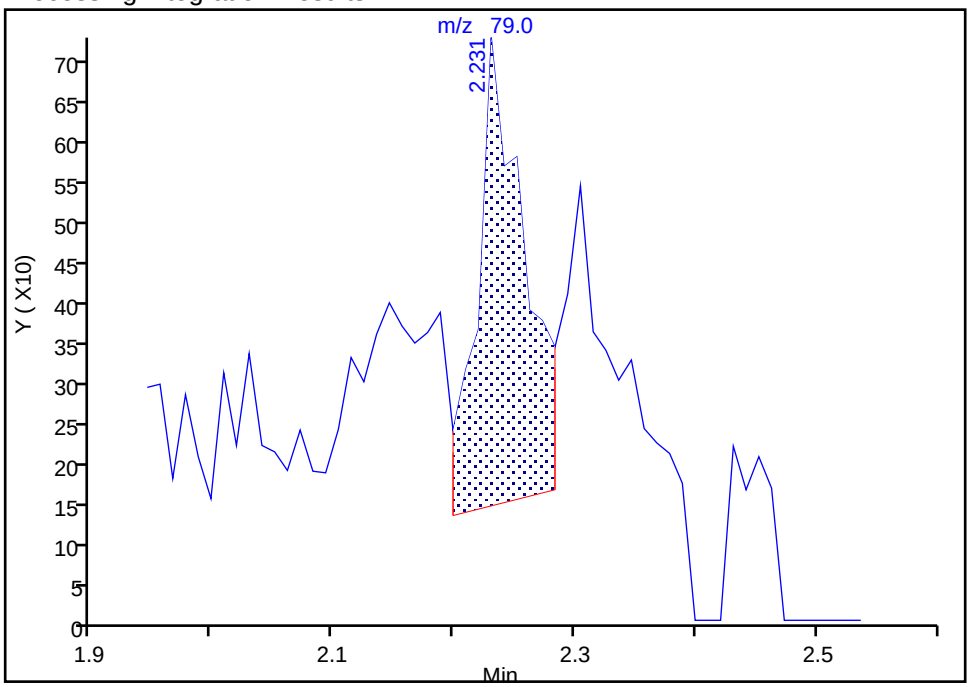
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

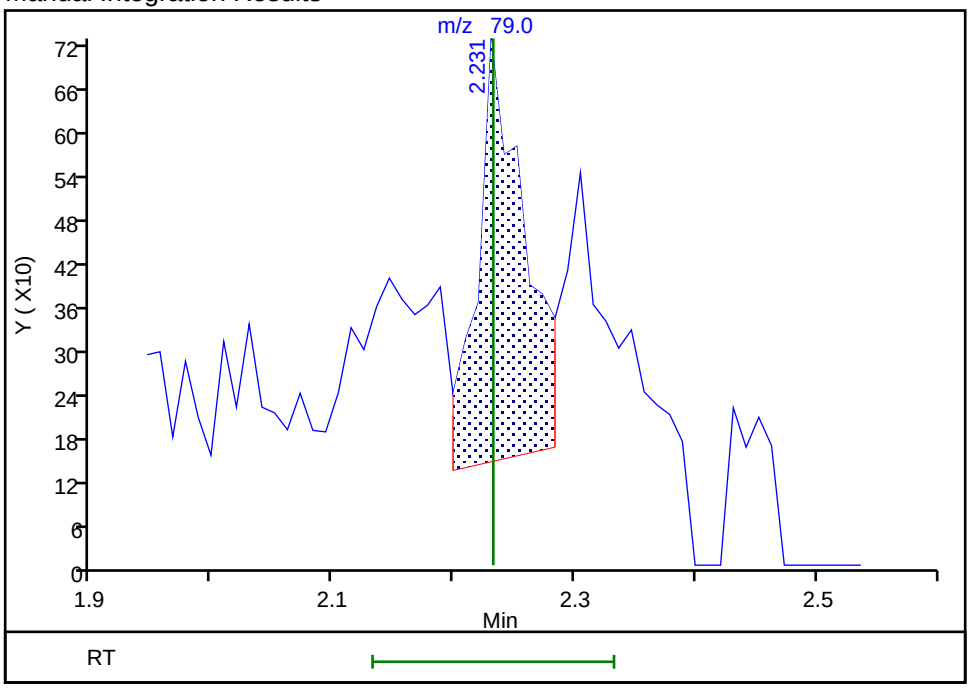
Processing Integration Results

RT: 2.23
Area: 1614
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.23
Area: 1614
Amount: -0.067594
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

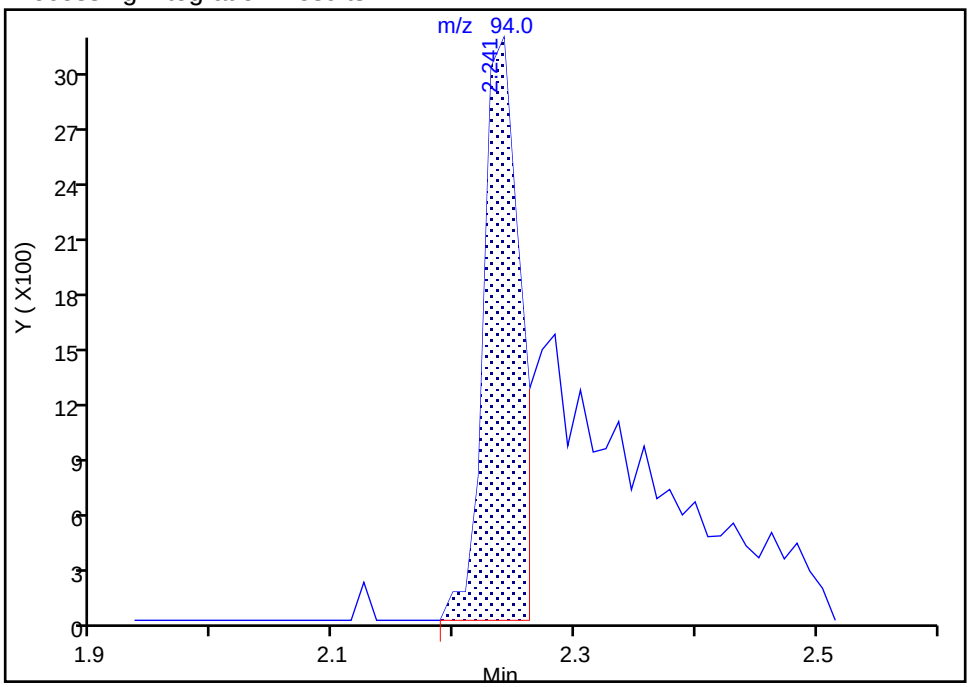
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

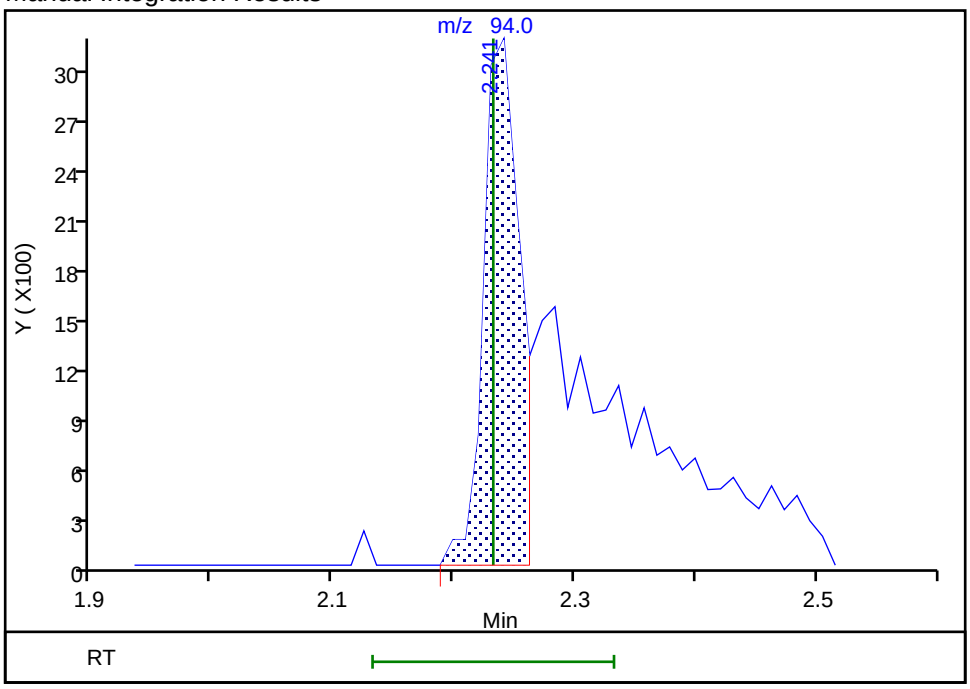
Processing Integration Results

RT: 2.24
Area: 6640
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.24
Area: 6640
Amount: -0.067594
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:49
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

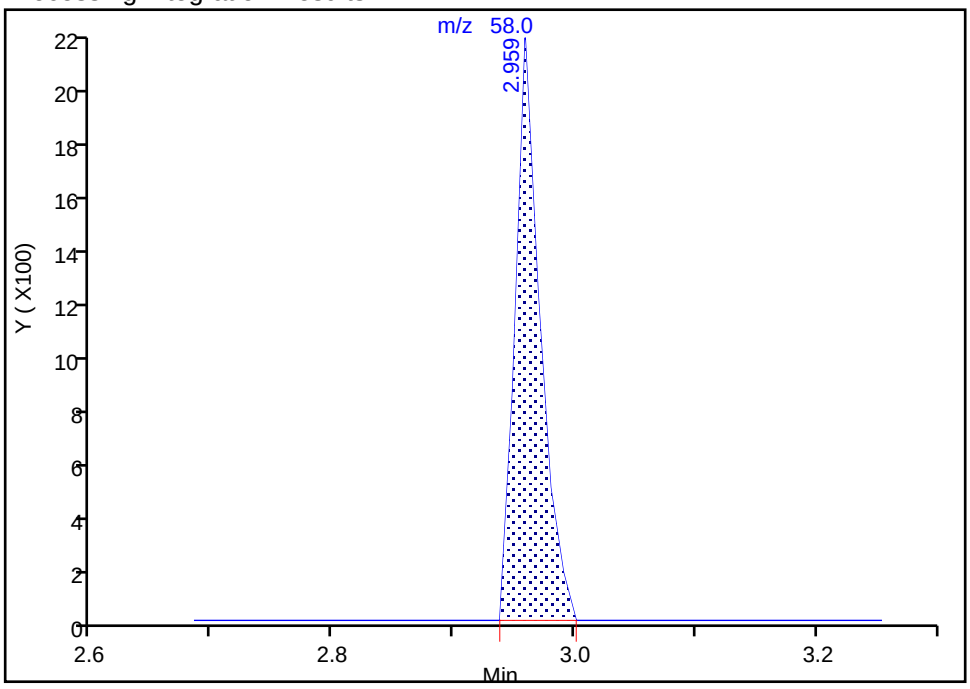
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

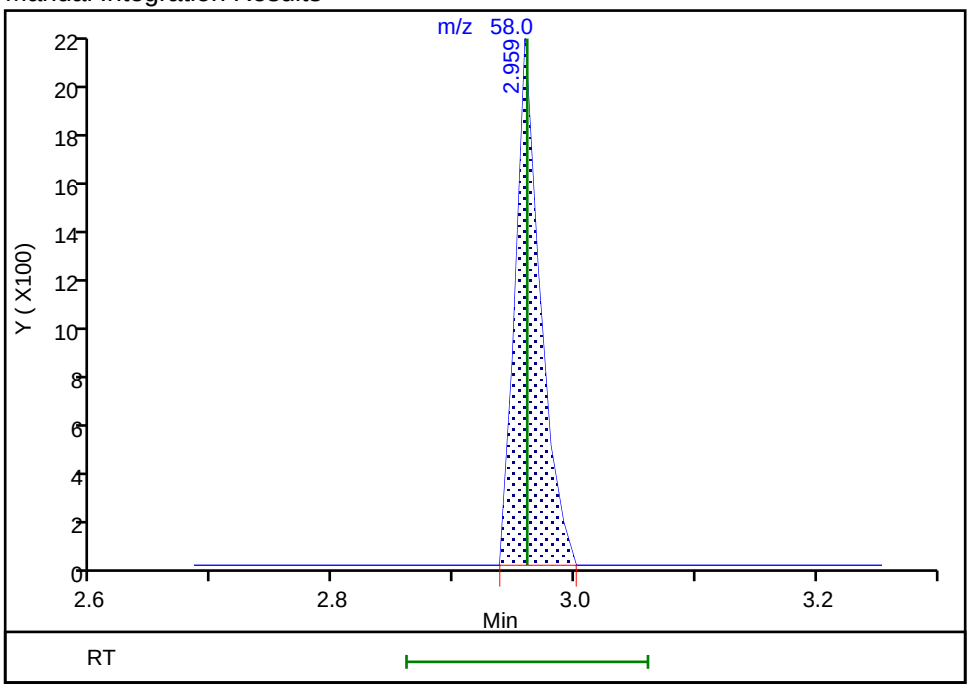
Processing Integration Results

RT: 2.96
Area: 3044
Amount: 1.910701
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 3044
Amount: 1.835879
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

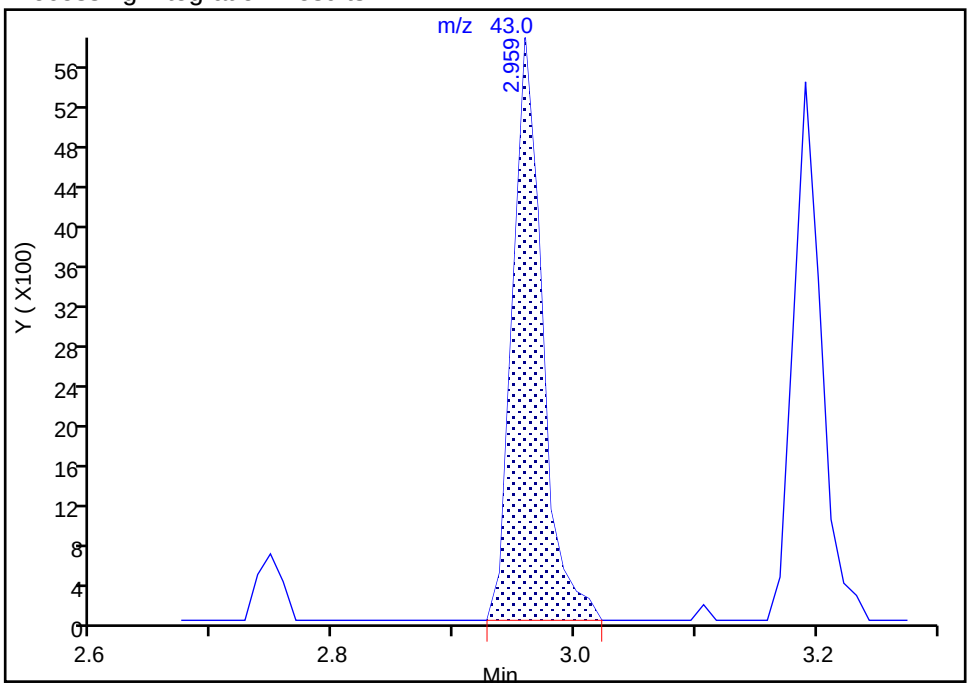
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 1

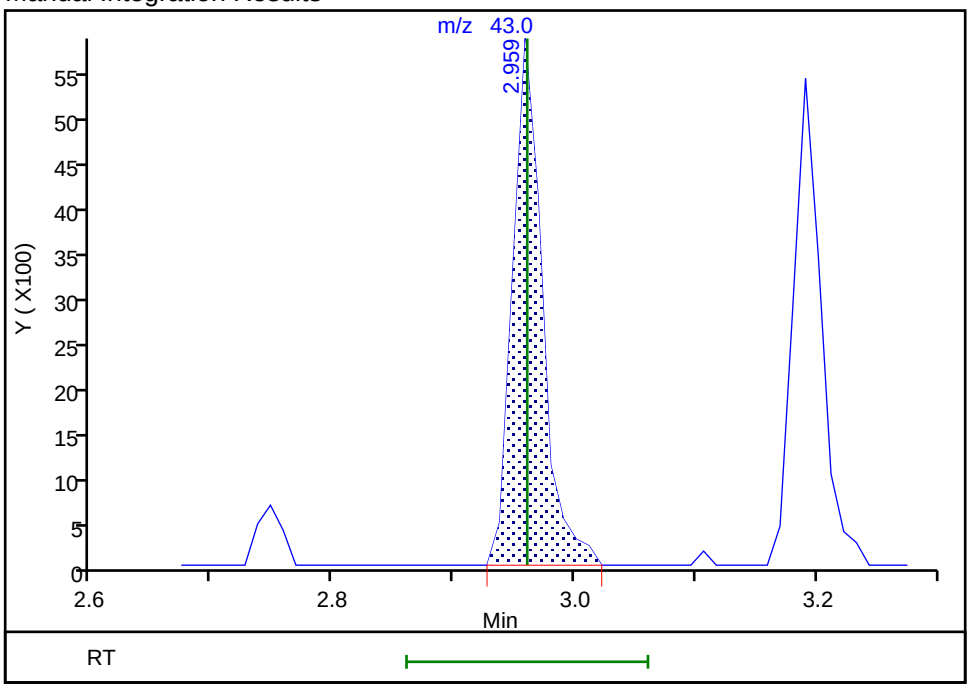
Processing Integration Results

RT: 2.96
Area: 9926
Amount: 1.910701
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 9926
Amount: 1.835879
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:00
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

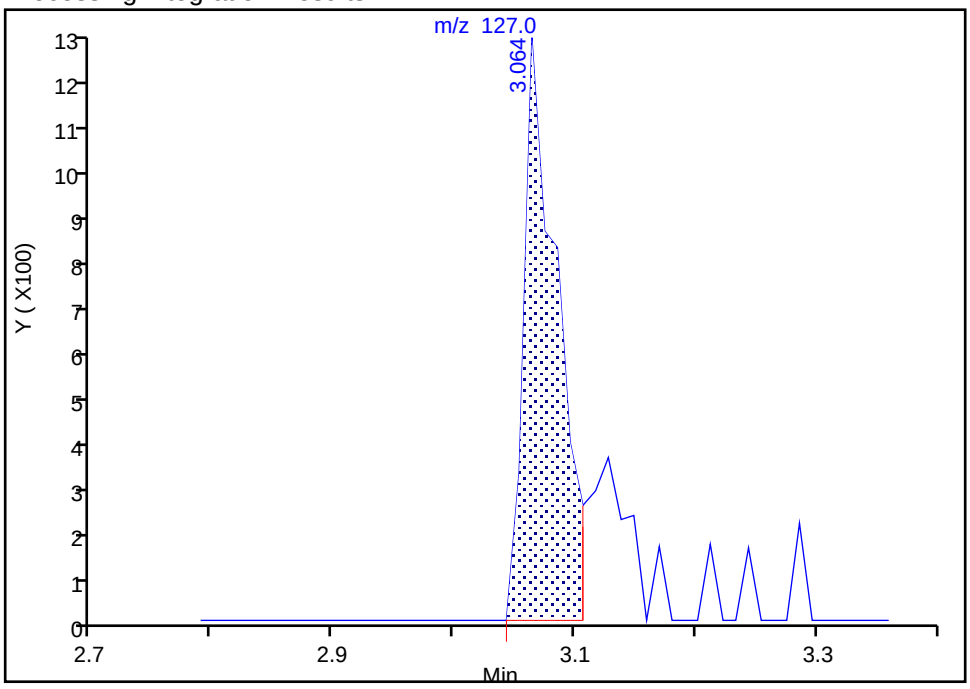
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 2

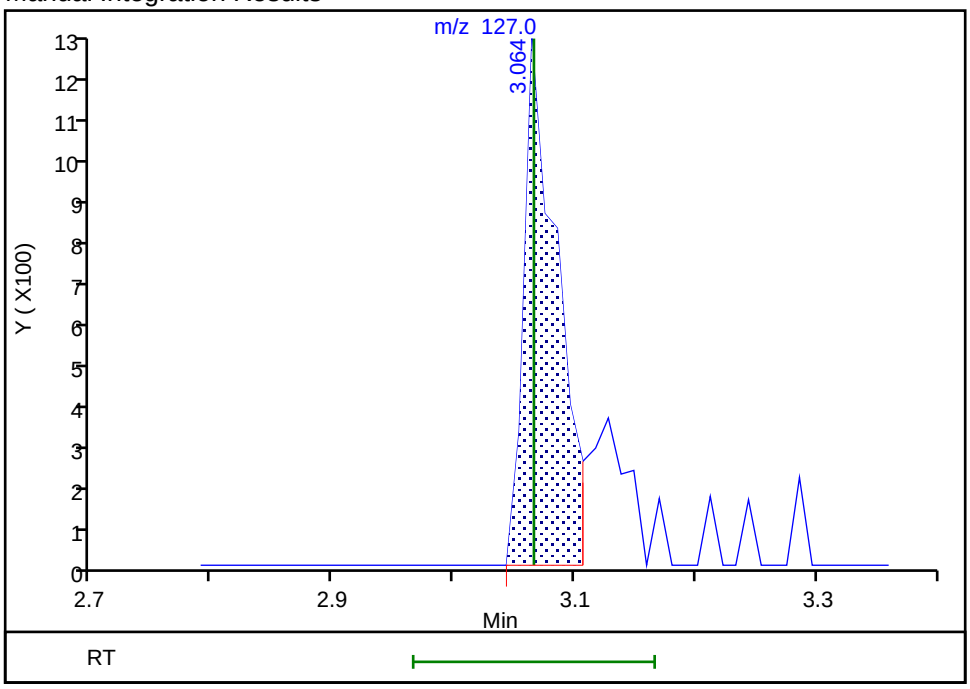
Processing Integration Results

RT: 3.06
Area: 2479
Amount: 0.870495
Amount Units: ug/l



Manual Integration Results

RT: 3.06
Area: 2479
Amount: 1.450023
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

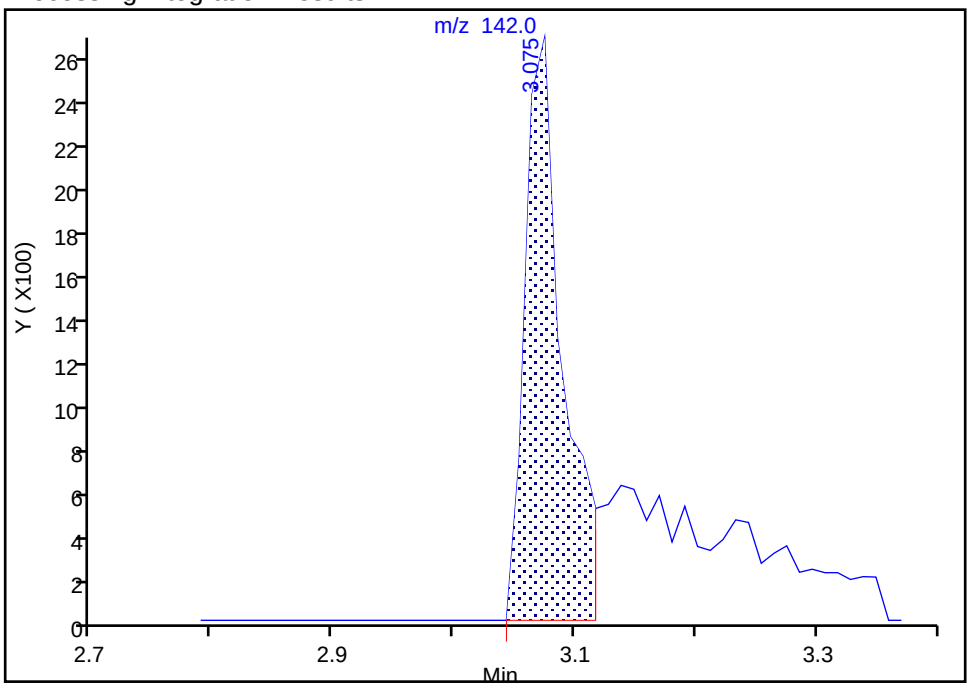
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

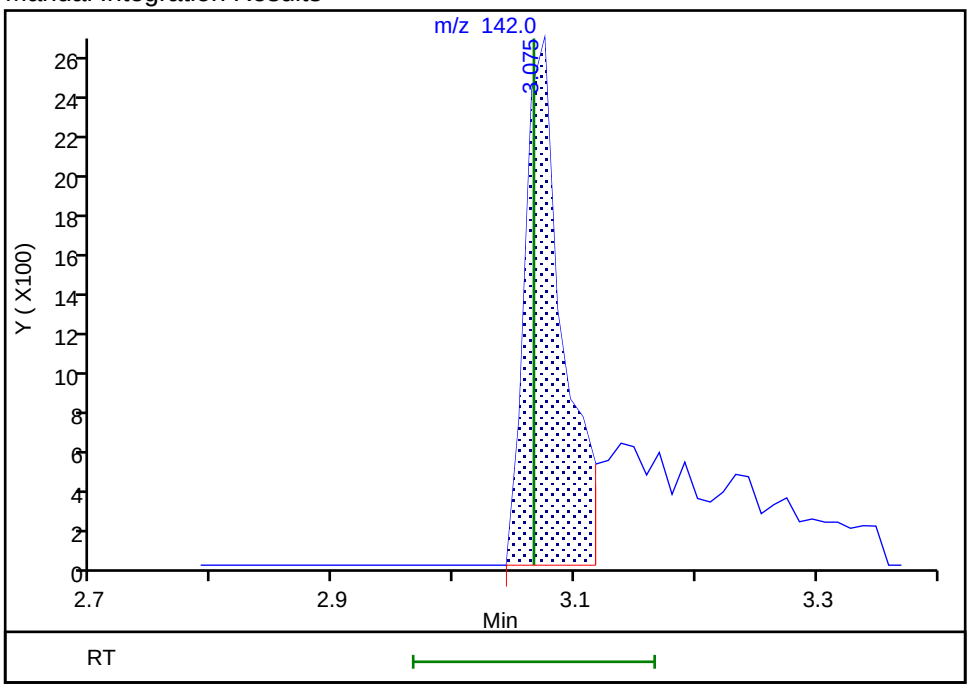
Processing Integration Results

RT: 3.07
Area: 5837
Amount: 0.870495
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 5837
Amount: 1.450023
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:06
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

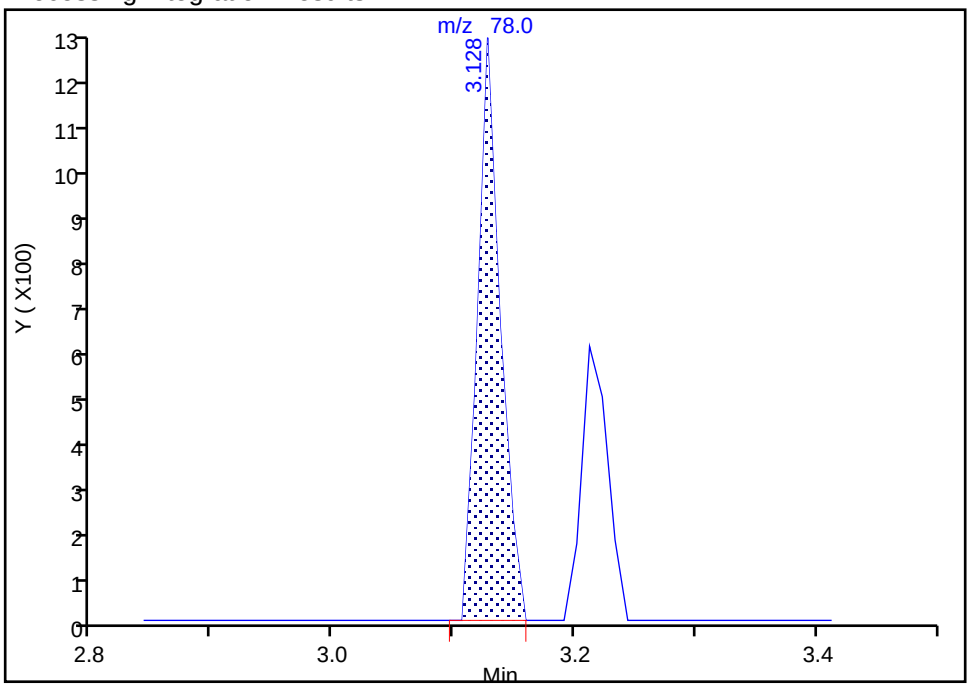
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 2

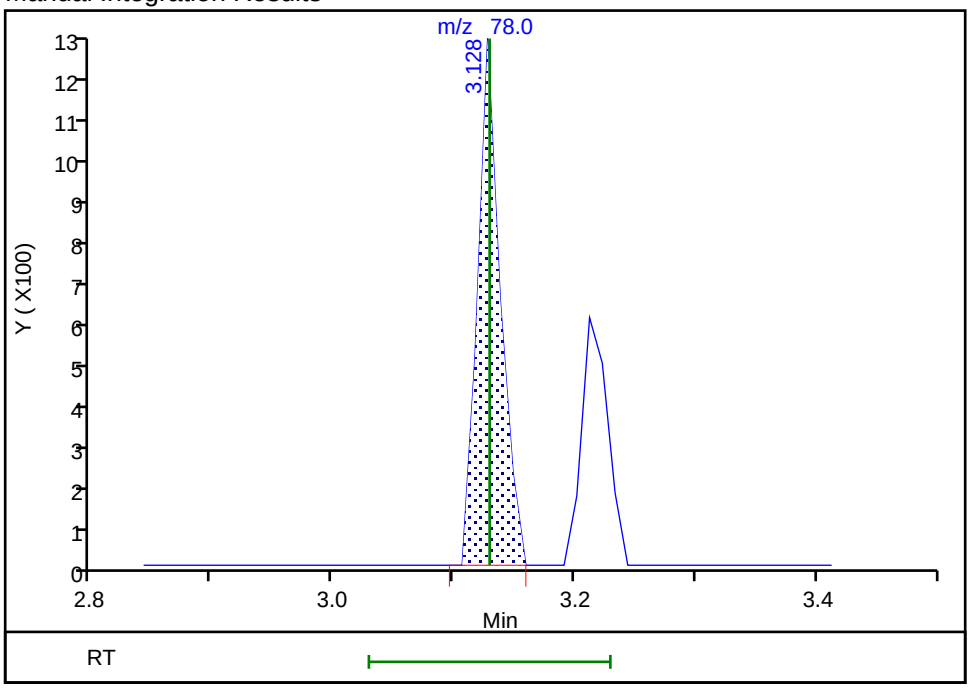
Processing Integration Results

RT: 3.13
Area: 1670
Amount: 0.543289
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 1670
Amount: 0.543289
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

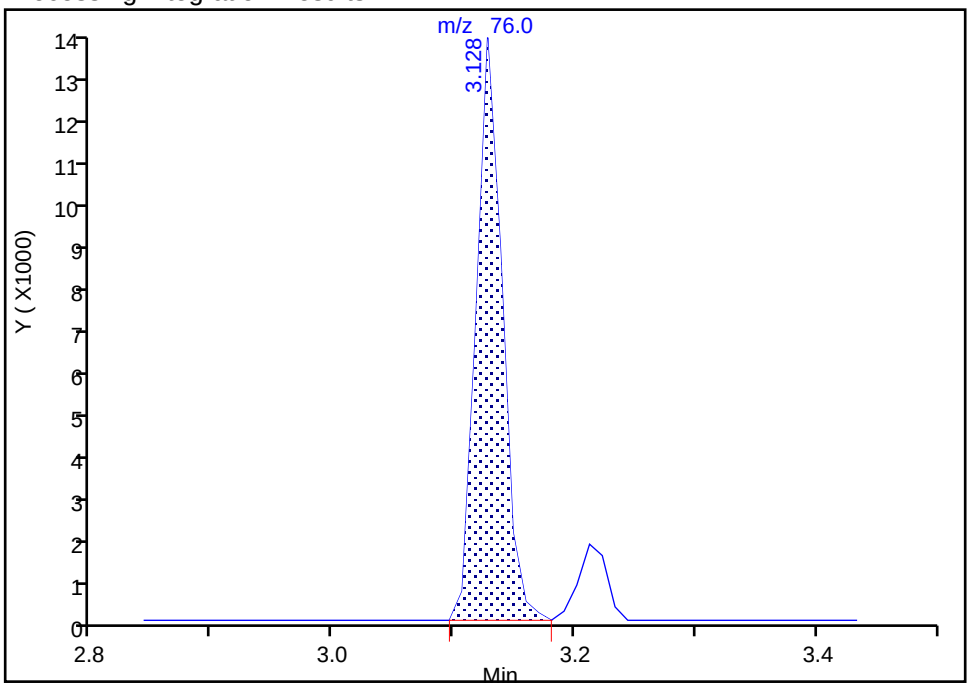
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 1

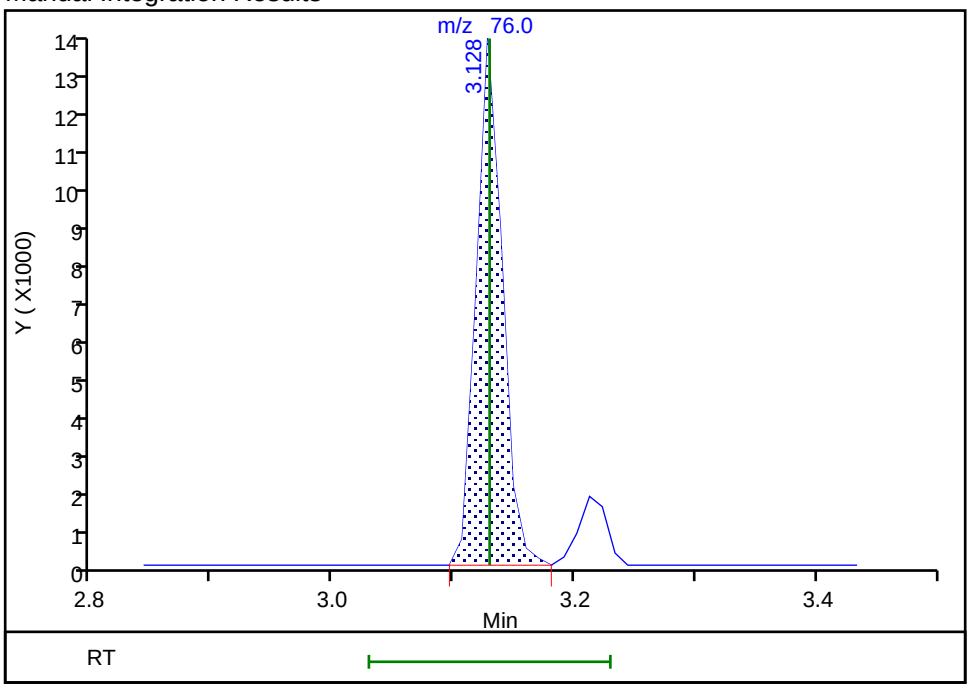
Processing Integration Results

RT: 3.13
Area: 19807
Amount: 0.543289
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 19807
Amount: 0.543289
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:14
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

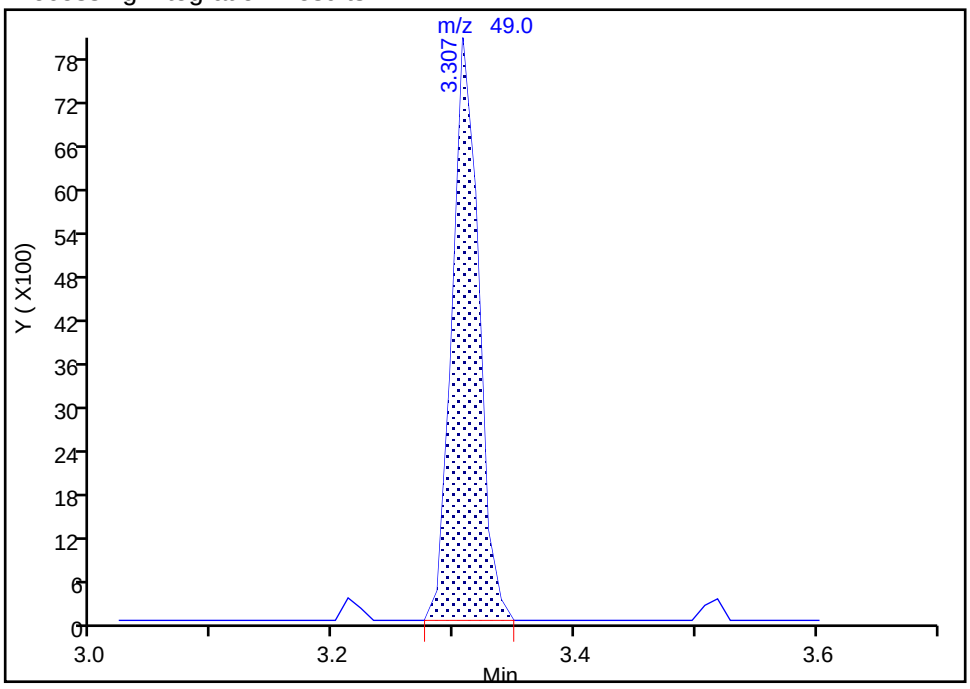
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 2

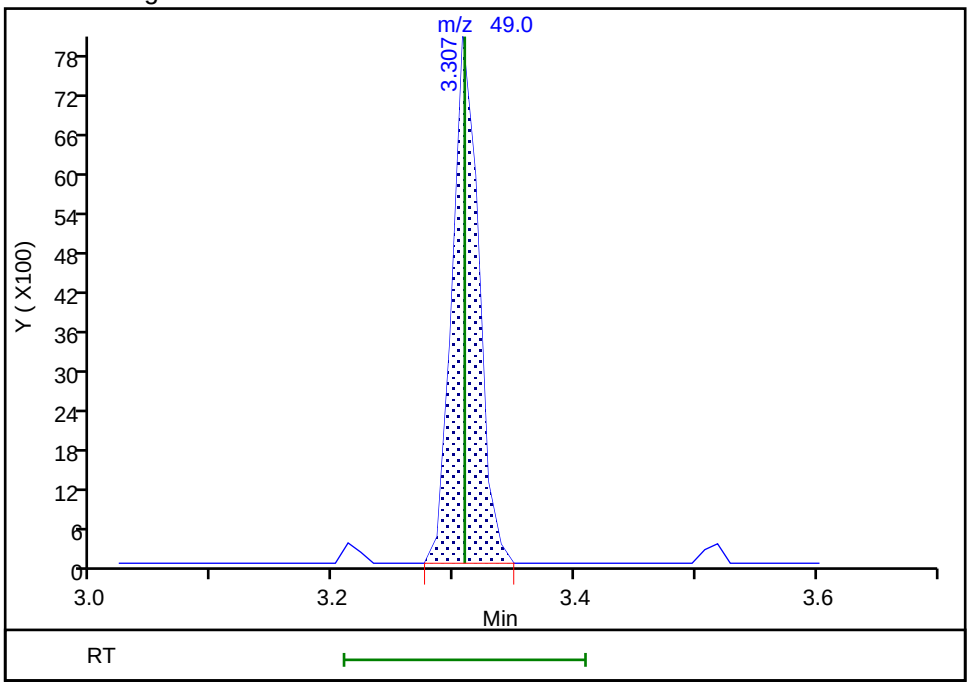
Processing Integration Results

RT: 3.31
Area: 12214
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 12214
Amount: 0.538075
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

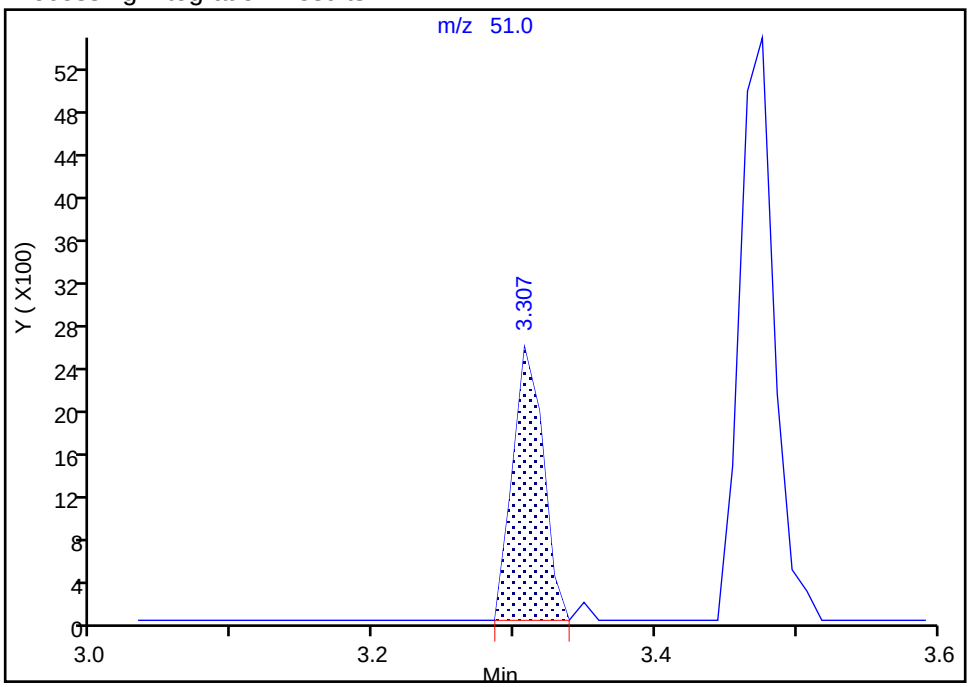
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 3

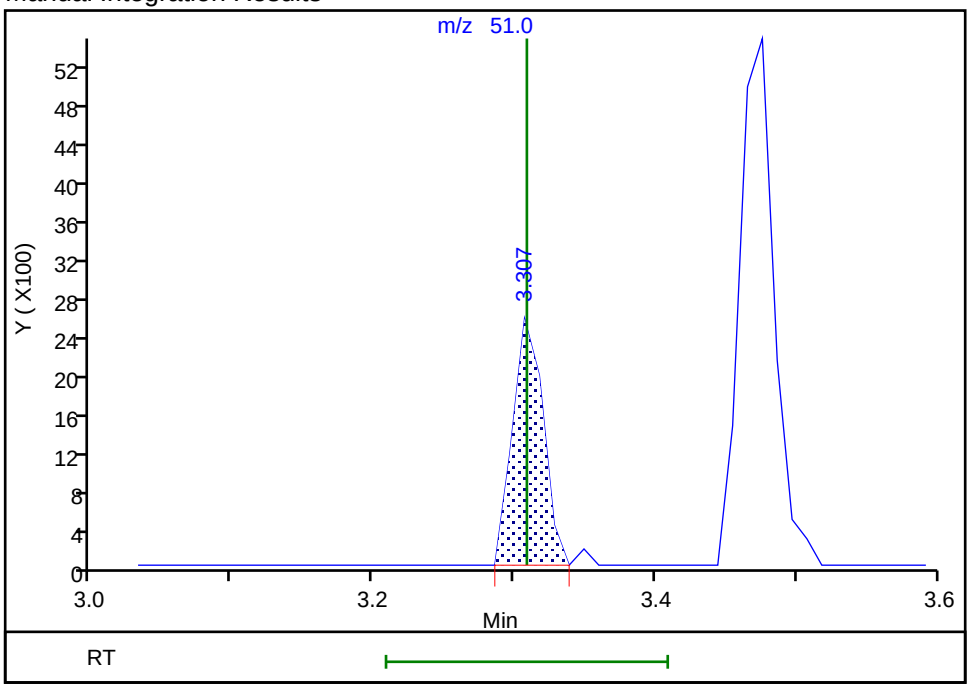
Processing Integration Results

RT: 3.31
Area: 3864
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 3864
Amount: 0.538075
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

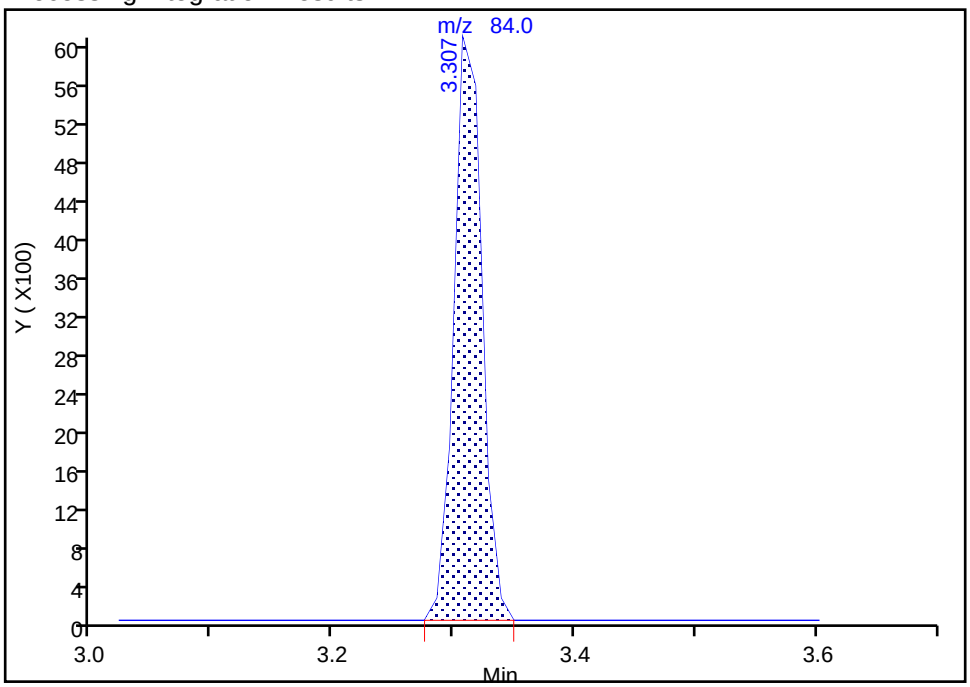
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 1

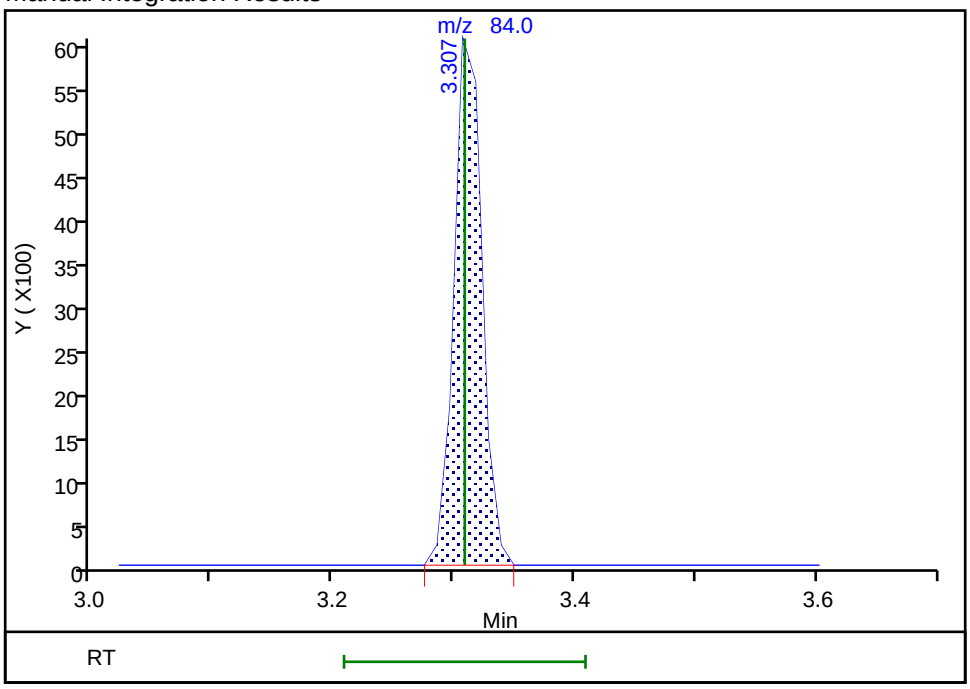
Processing Integration Results

RT: 3.31
Area: 9706
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 9706
Amount: 0.538075
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:20
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

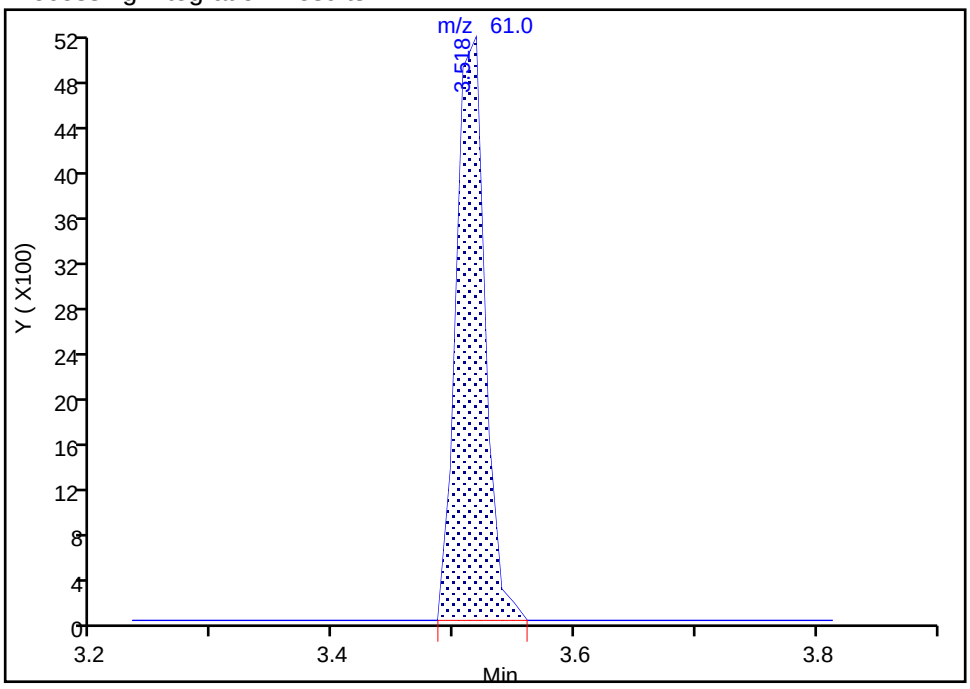
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 2

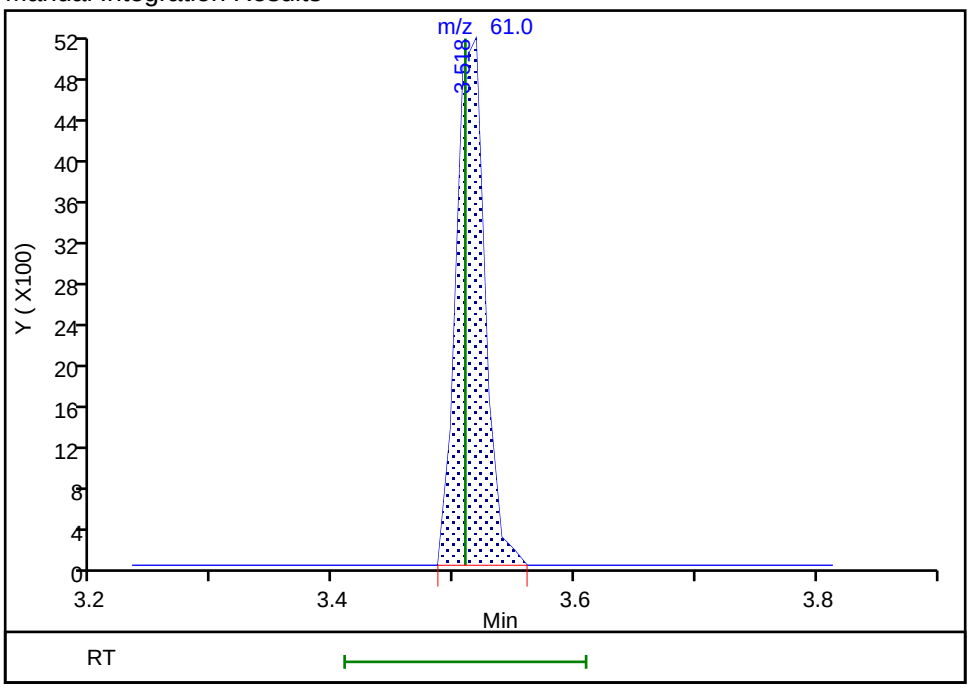
Processing Integration Results

RT: 3.52
Area: 8533
Amount: 0.613827
Amount Units: ug/l



Manual Integration Results

RT: 3.52
Area: 8533
Amount: 0.613827
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

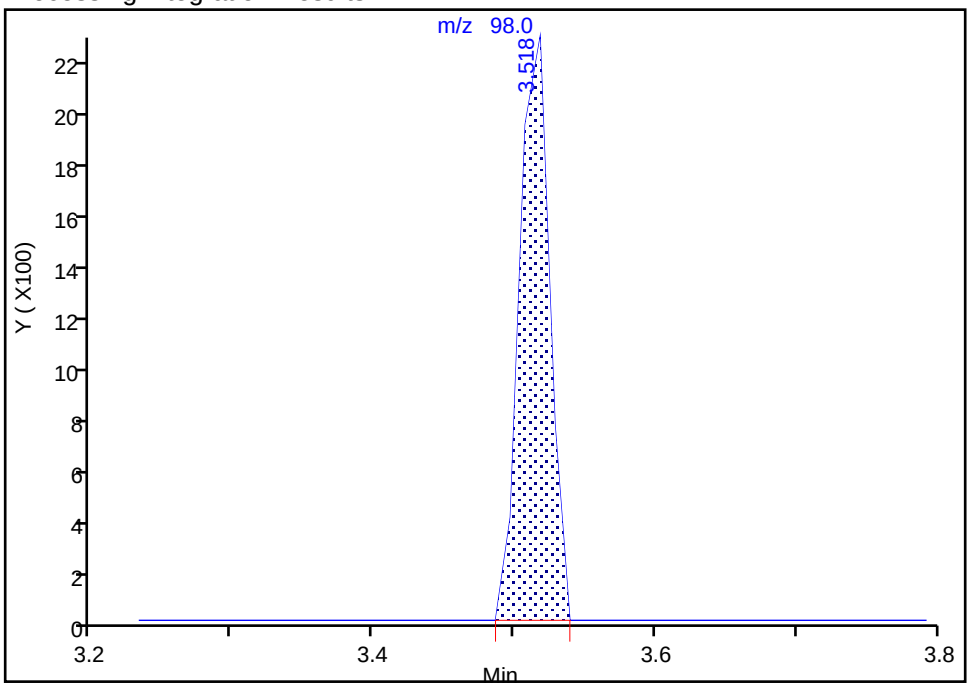
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 3

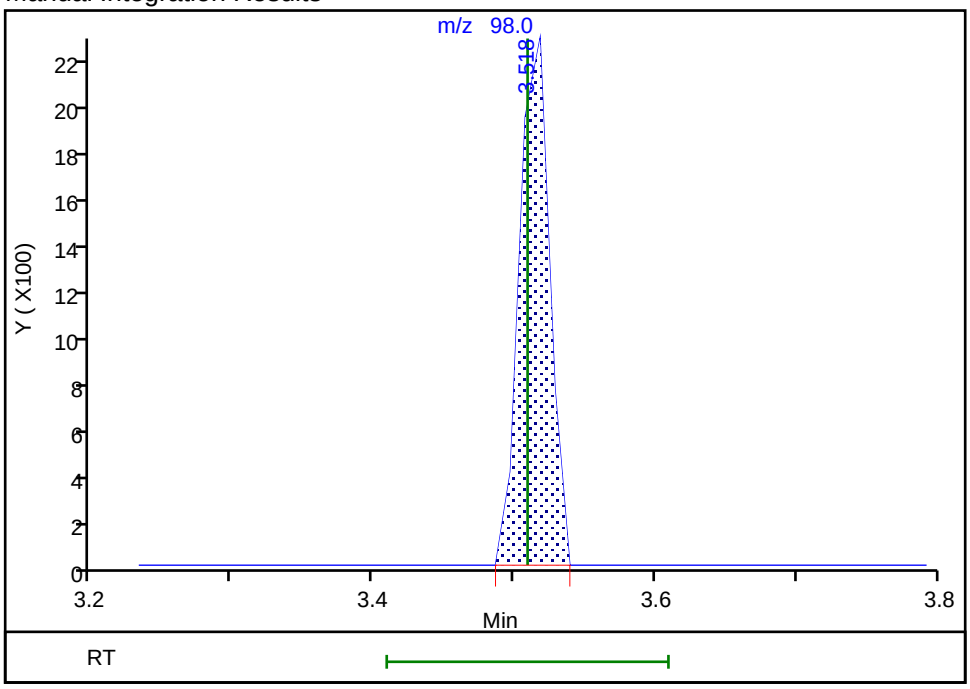
Processing Integration Results

RT: 3.52
Area: 3414
Amount: 0.613827
Amount Units: ug/l



Manual Integration Results

RT: 3.52
Area: 3414
Amount: 0.613827
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

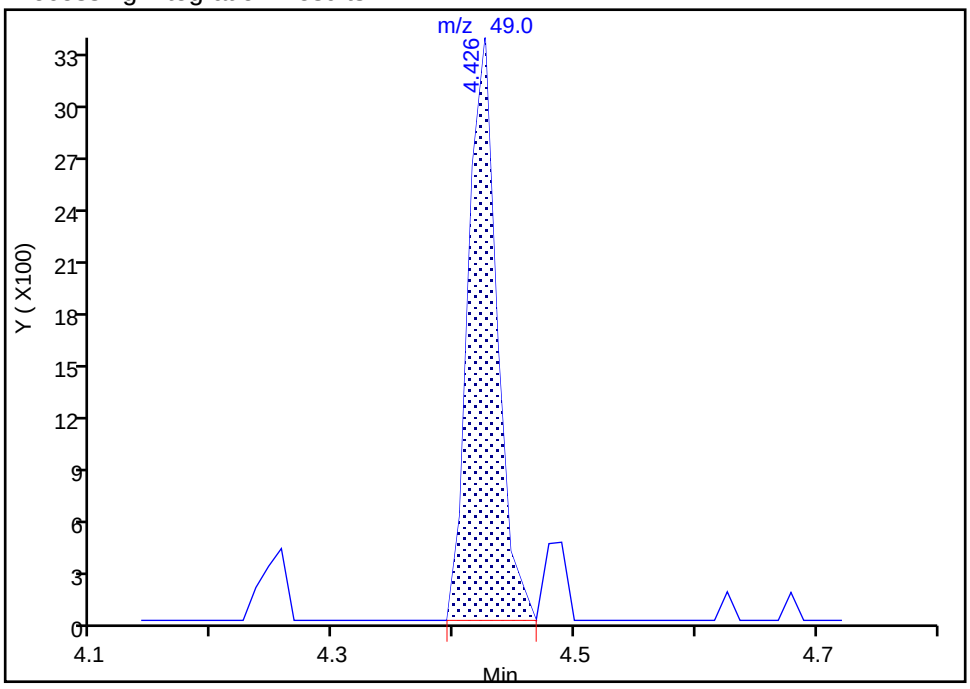
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

53 Chlorobromomethane, CAS: 74-97-5

Signal: 2

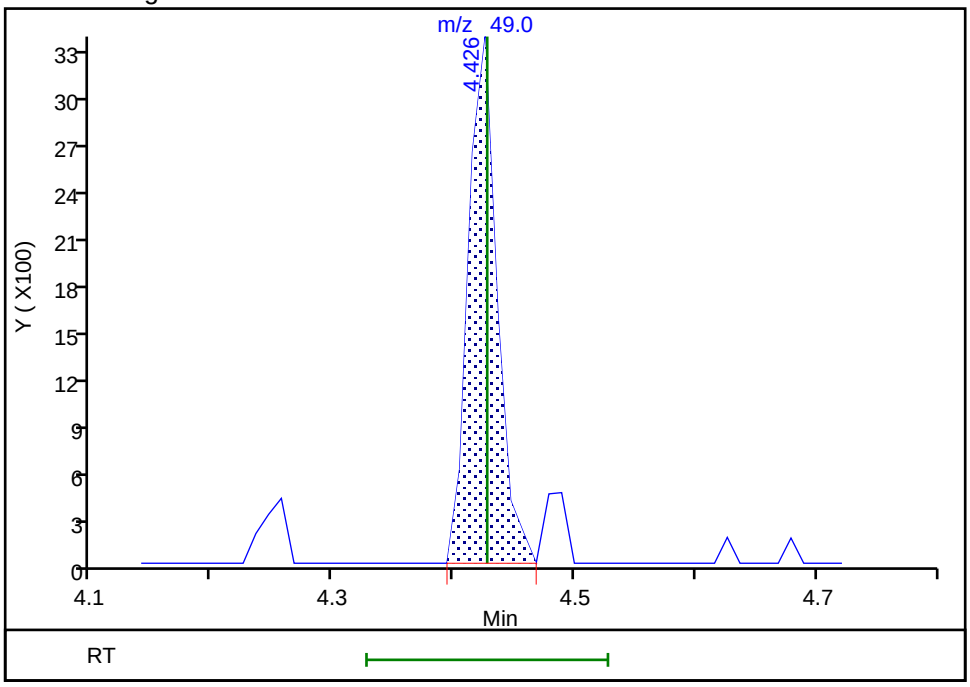
Processing Integration Results

RT: 4.43
Area: 5484
Amount: 0.579310
Amount Units: ug/l



Manual Integration Results

RT: 4.43
Area: 5484
Amount: 0.579310
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

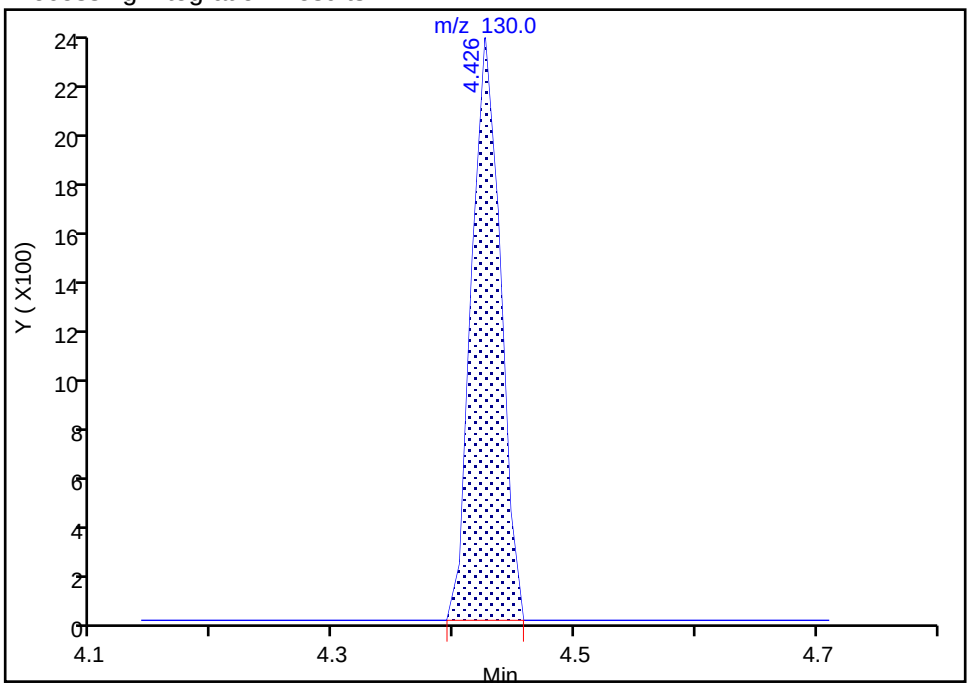
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

53 Chlorobromomethane, CAS: 74-97-5

Signal: 3

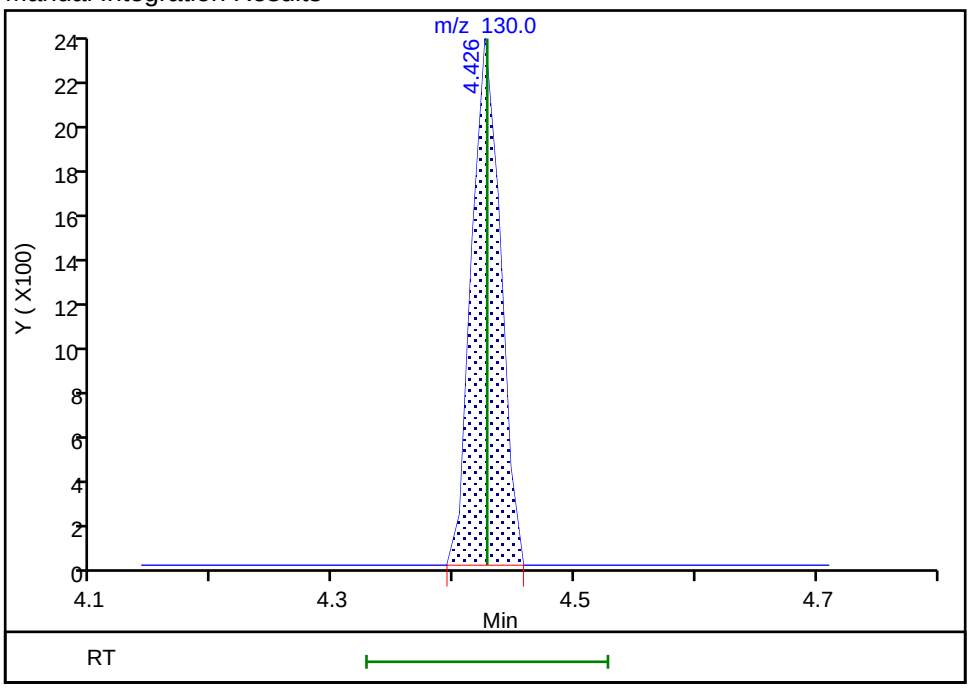
Processing Integration Results

RT: 4.43
Area: 3865
Amount: 0.579310
Amount Units: ug/l



Manual Integration Results

RT: 4.43
Area: 3865
Amount: 0.579310
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

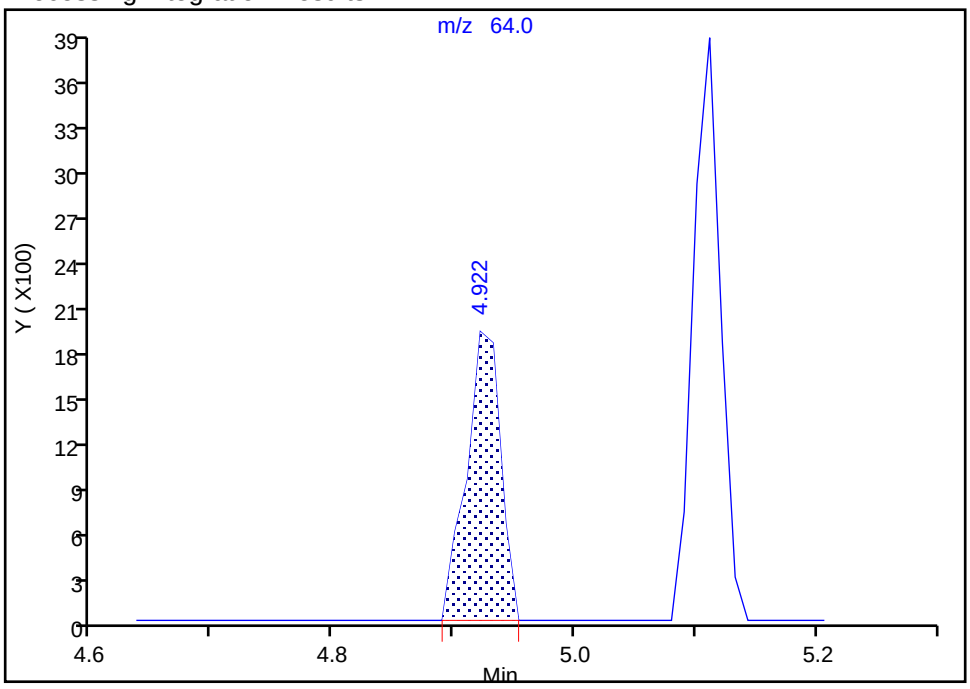
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 2

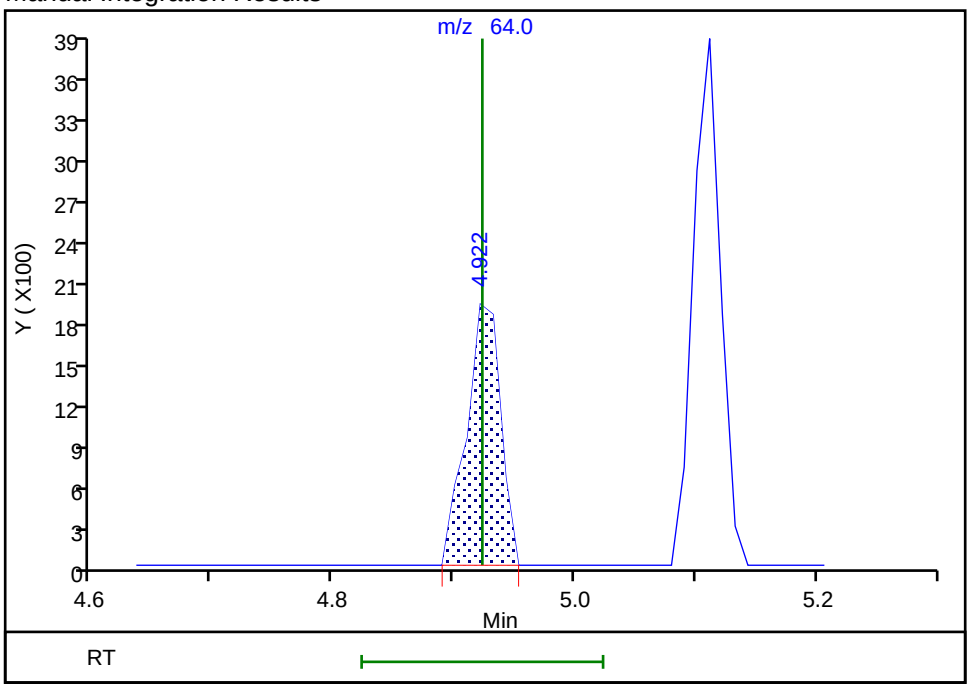
Processing Integration Results

RT: 4.92
Area: 3752
Amount: 0.492521
Amount Units: ug/l



Manual Integration Results

RT: 4.92
Area: 3752
Amount: 0.492521
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:53:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

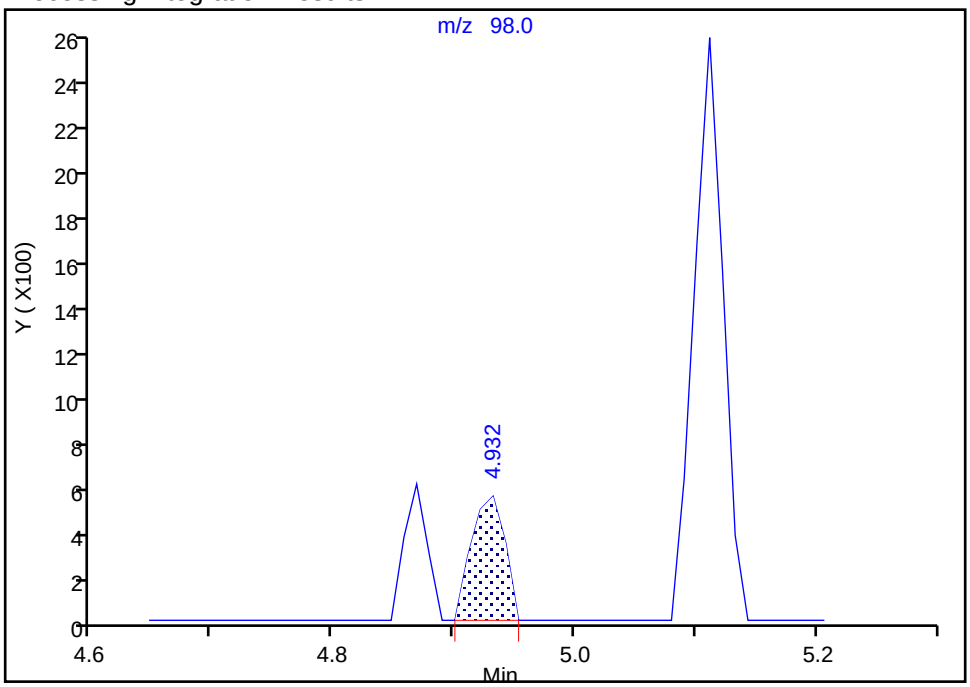
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 3

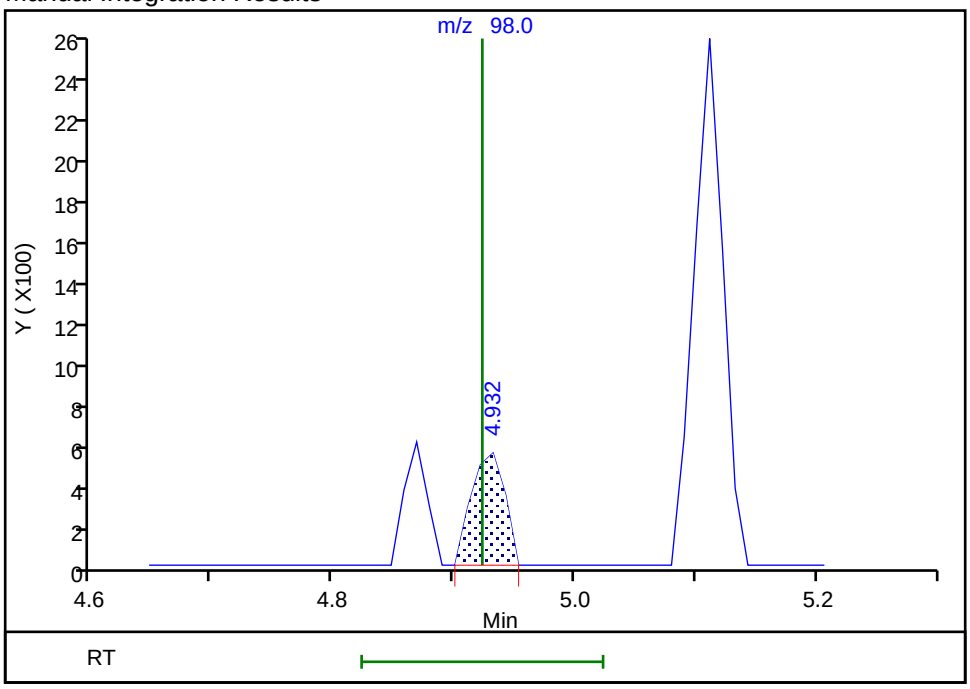
Processing Integration Results

RT: 4.93
Area: 1057
Amount: 0.492521
Amount Units: ug/l



Manual Integration Results

RT: 4.93
Area: 1057
Amount: 0.492521
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:53:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

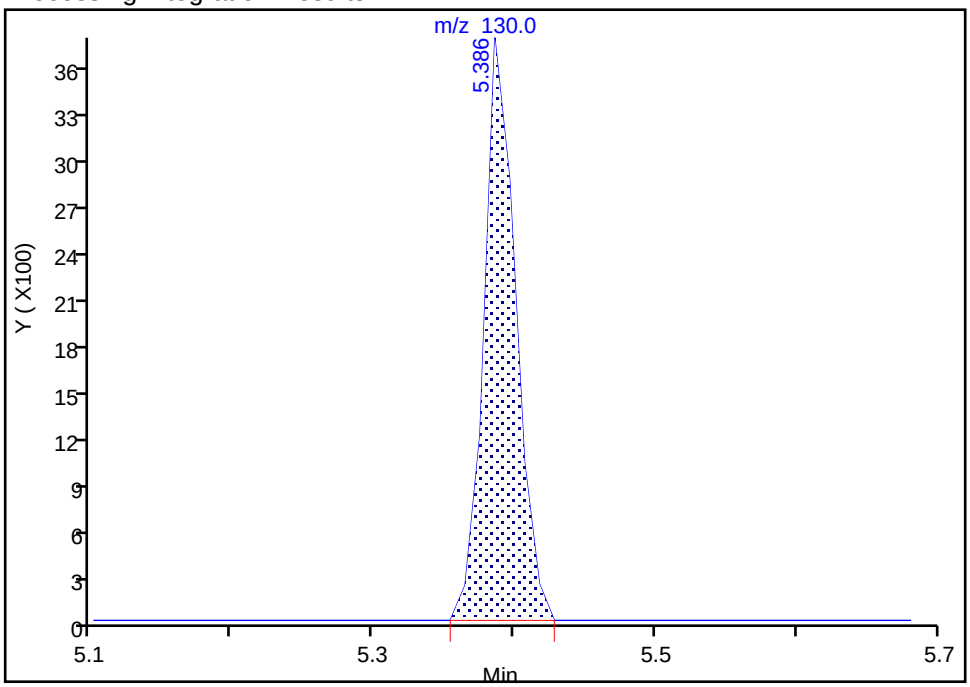
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6

Signal: 2

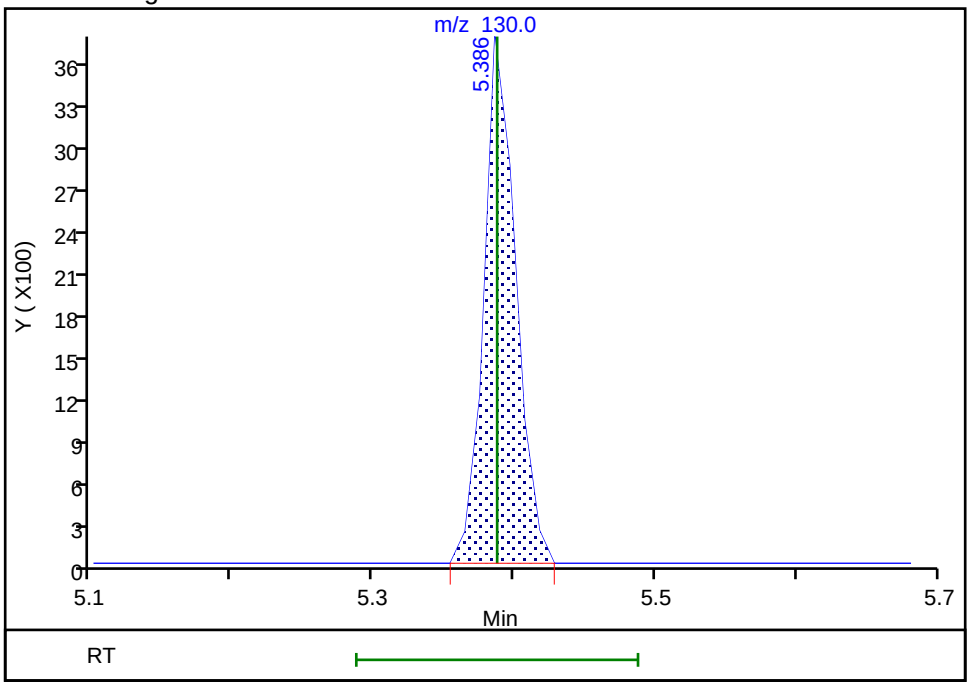
Processing Integration Results

RT: 5.39
Area: 5848
Amount: 0.603840
Amount Units: ug/l



Manual Integration Results

RT: 5.39
Area: 5848
Amount: 0.603840
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

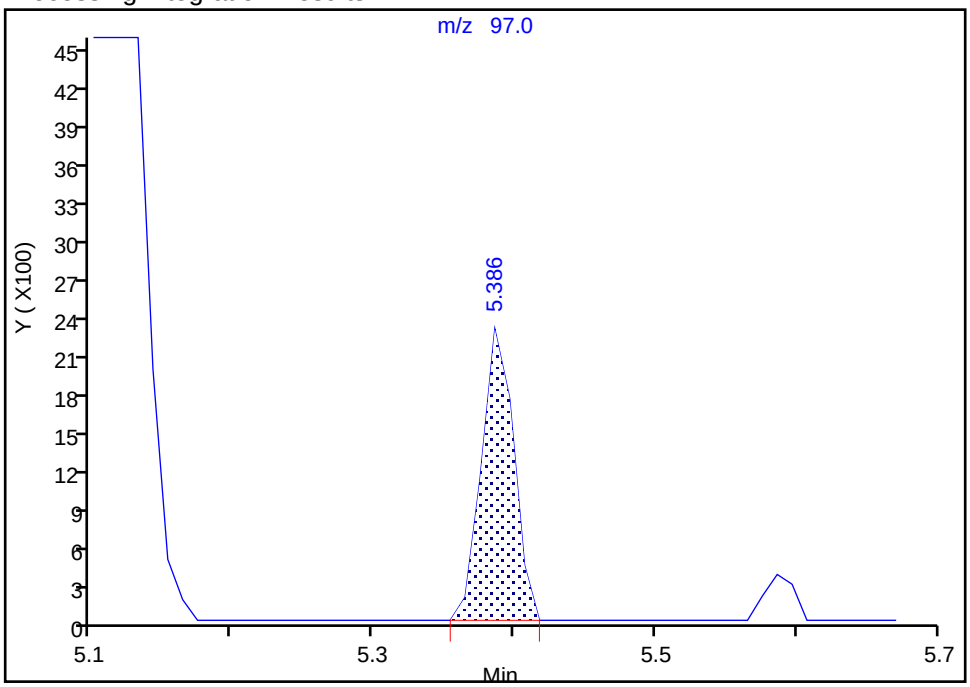
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6

Signal: 3

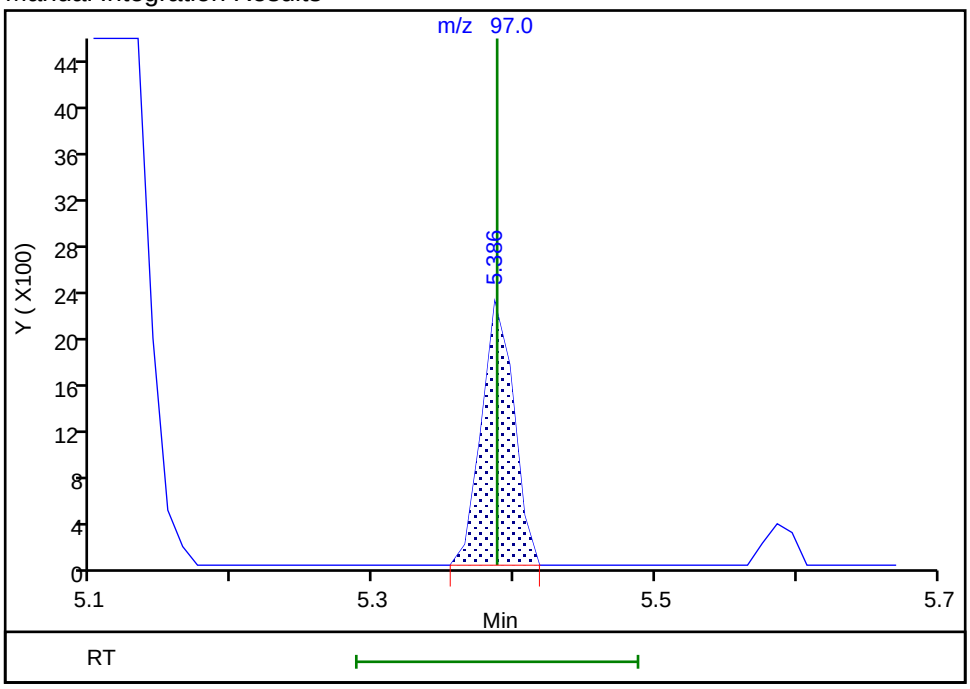
Processing Integration Results

RT: 5.39
Area: 3641
Amount: 0.603840
Amount Units: ug/l



Manual Integration Results

RT: 5.39
Area: 3641
Amount: 0.603840
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

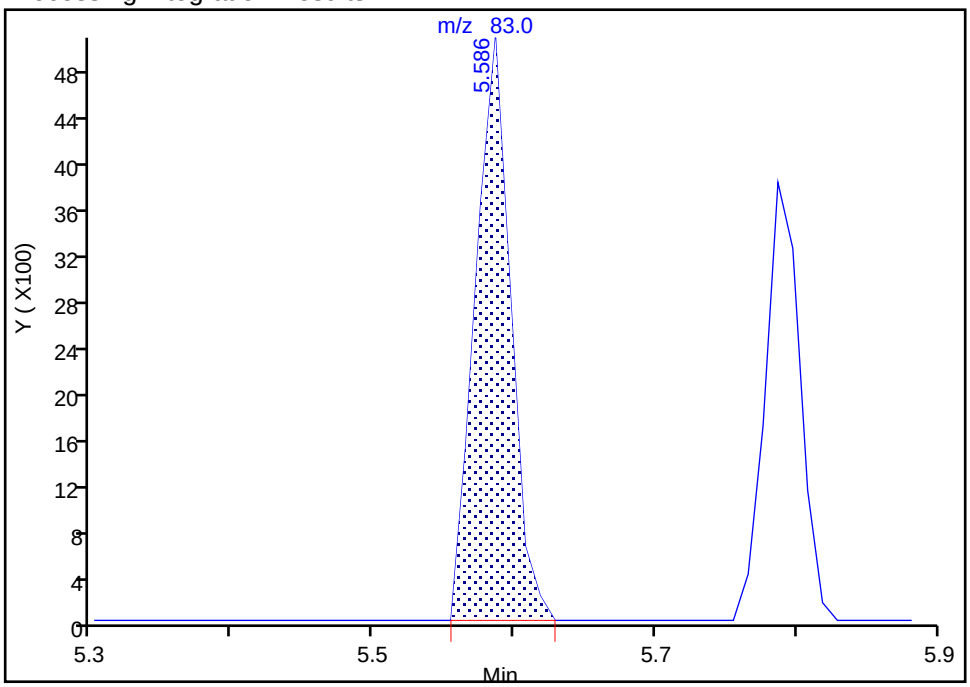
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

69 Methylcyclohexane, CAS: 108-87-2

Signal: 2

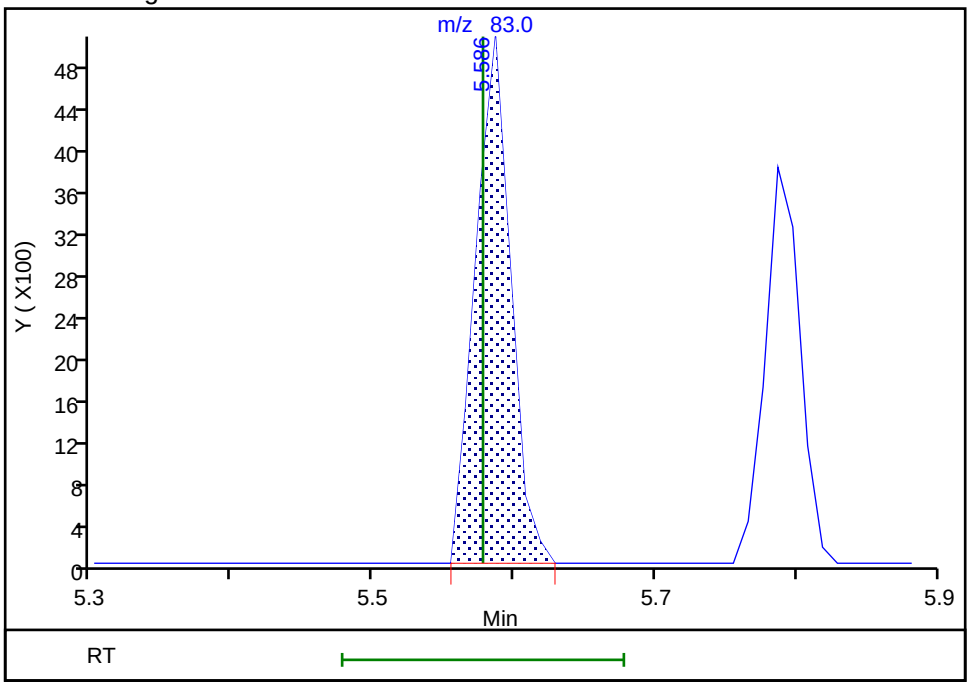
Processing Integration Results

RT: 5.59
Area: 8849
Amount: 0.563143
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 8849
Amount: 0.563143
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

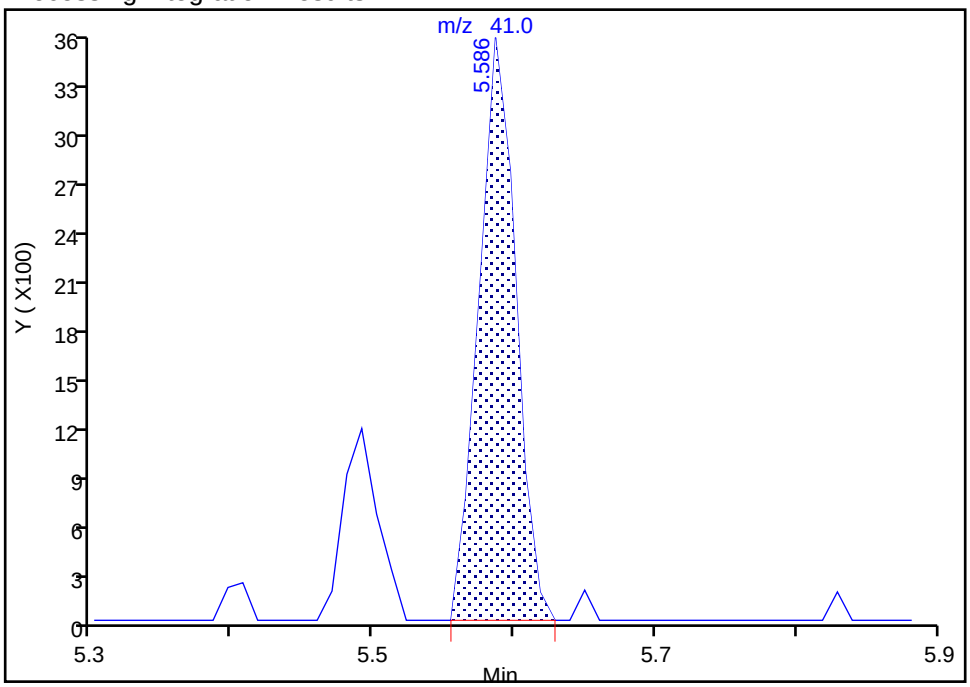
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

69 Methylcyclohexane, CAS: 108-87-2

Signal: 3

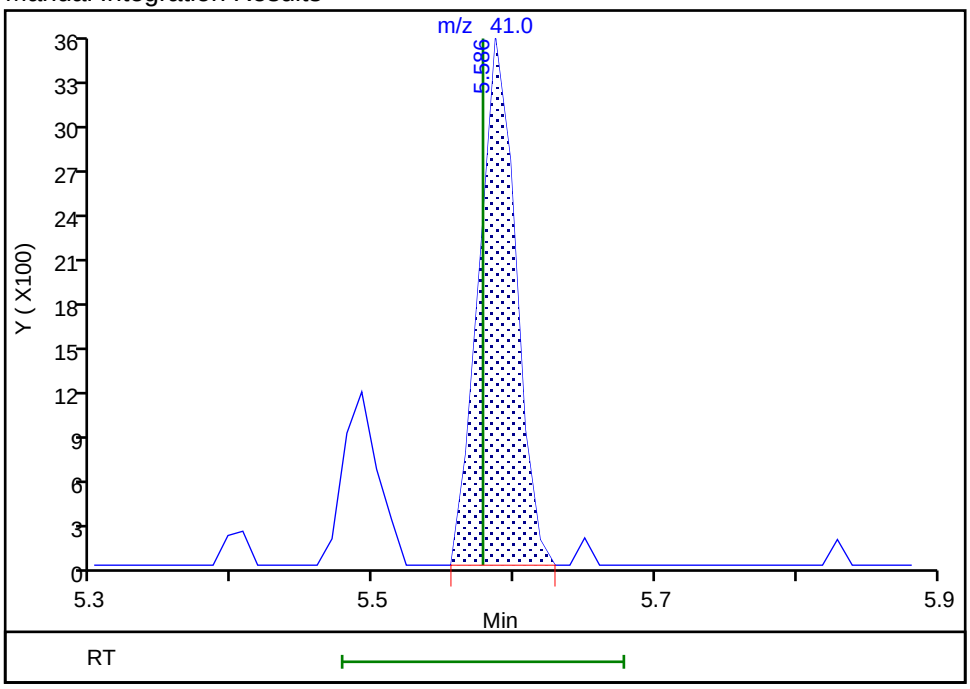
Processing Integration Results

RT: 5.59
Area: 6507
Amount: 0.563143
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 6507
Amount: 0.563143
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

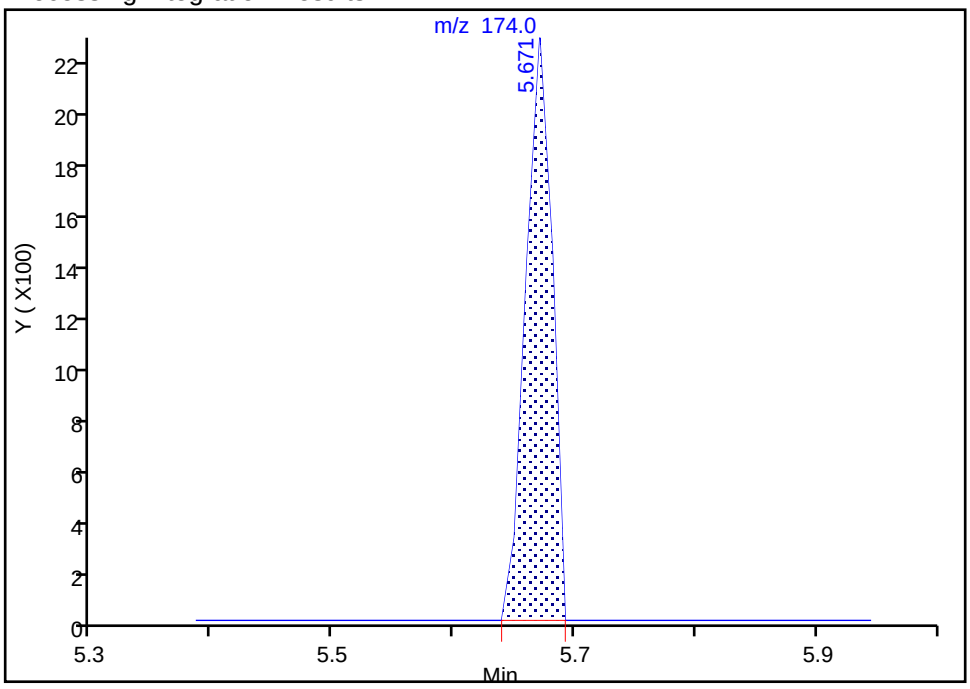
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

73 Dibromomethane, CAS: 74-95-3

Signal: 2

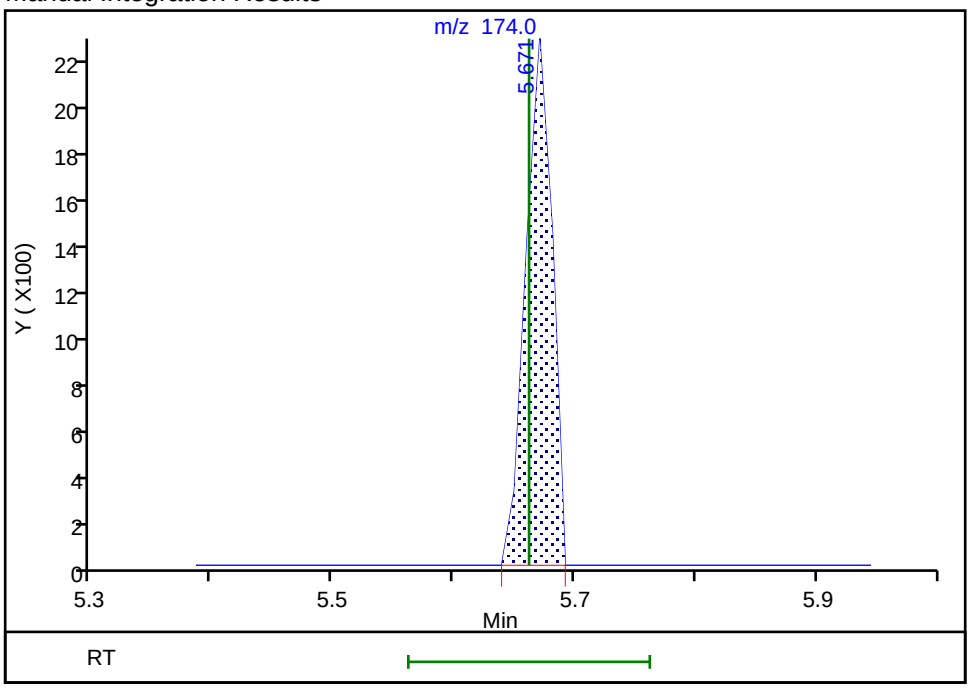
Processing Integration Results

RT: 5.67
Area: 3416
Amount: 0.651614
Amount Units: ug/l



Manual Integration Results

RT: 5.67
Area: 3416
Amount: 0.677285
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

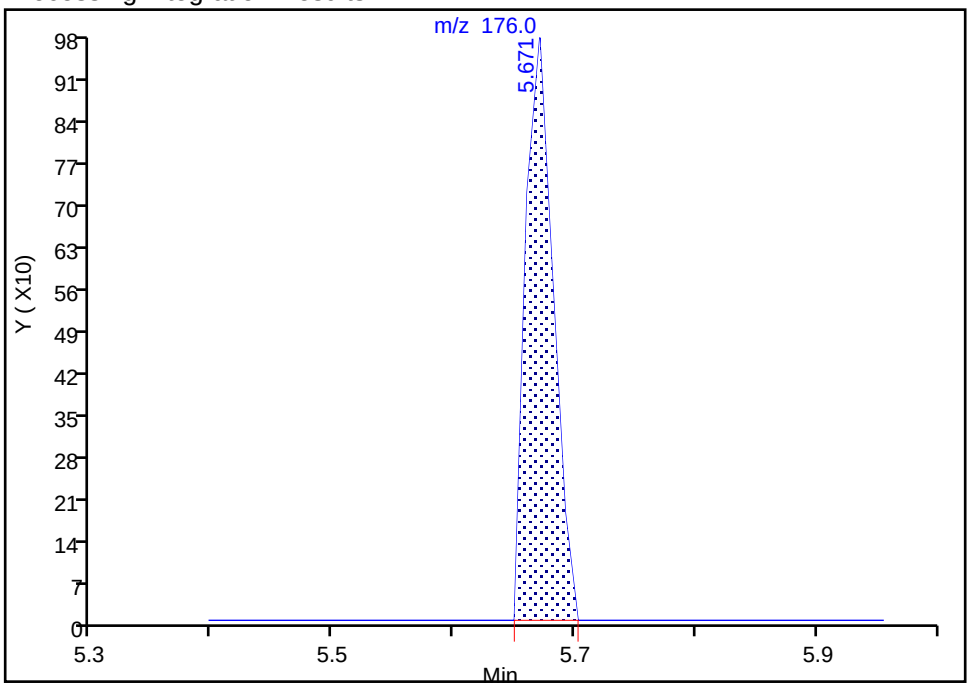
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

73 Dibromomethane, CAS: 74-95-3

Signal: 3

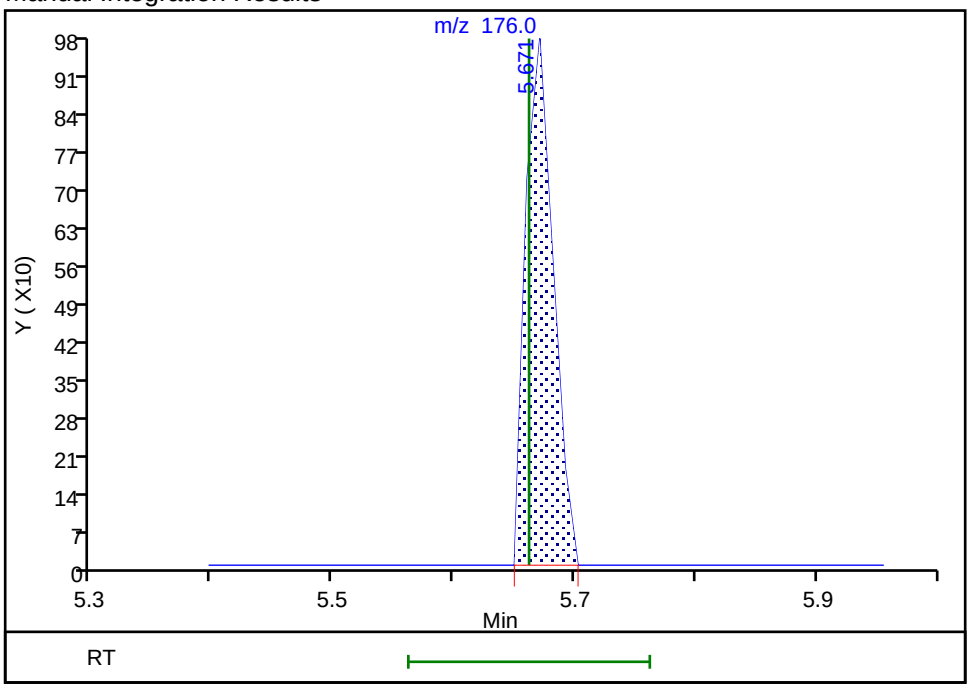
Processing Integration Results

RT: 5.67
Area: 1549
Amount: 0.651614
Amount Units: ug/l



Manual Integration Results

RT: 5.67
Area: 1549
Amount: 0.677285
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

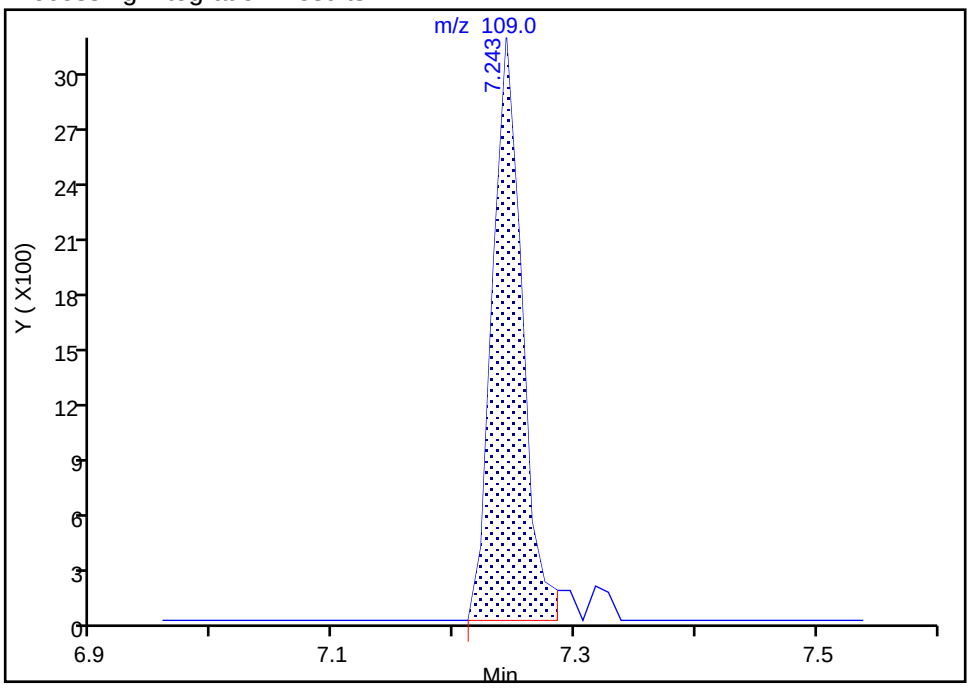
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

88 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

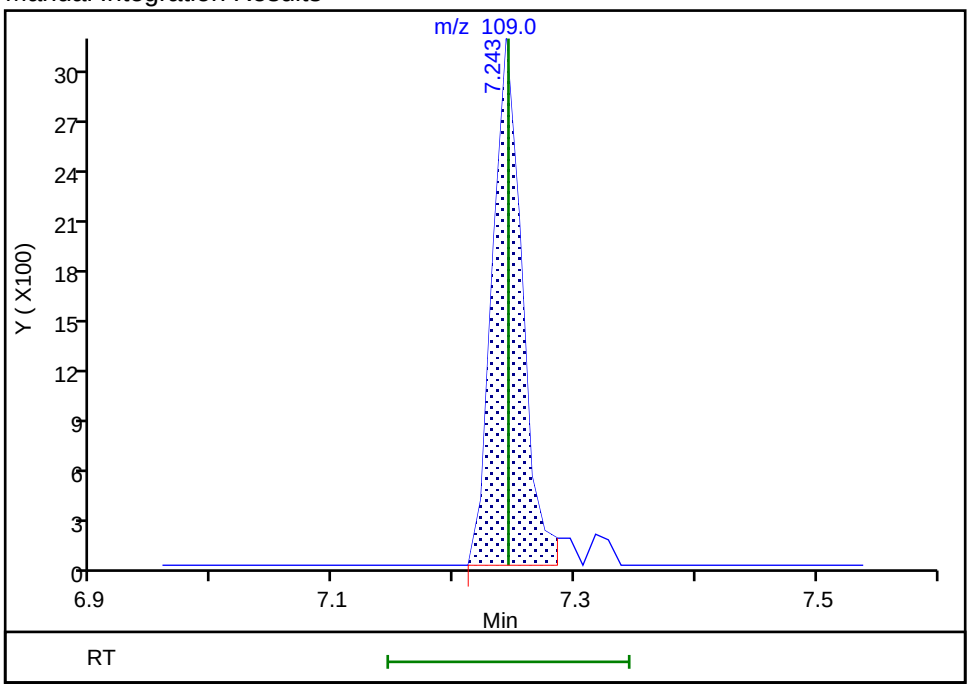
Processing Integration Results

RT: 7.24
Area: 5416
Amount: 0.593181
Amount Units: ug/l



Manual Integration Results

RT: 7.24
Area: 5416
Amount: 0.593181
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

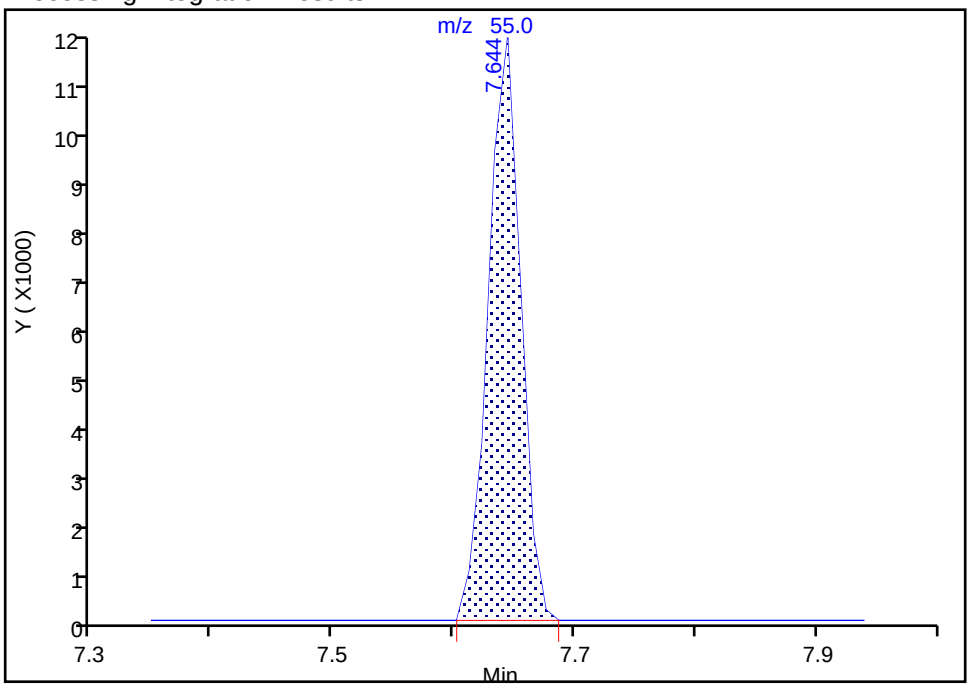
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

89 1-Chlorohexane, CAS: 544-10-5

Signal: 2

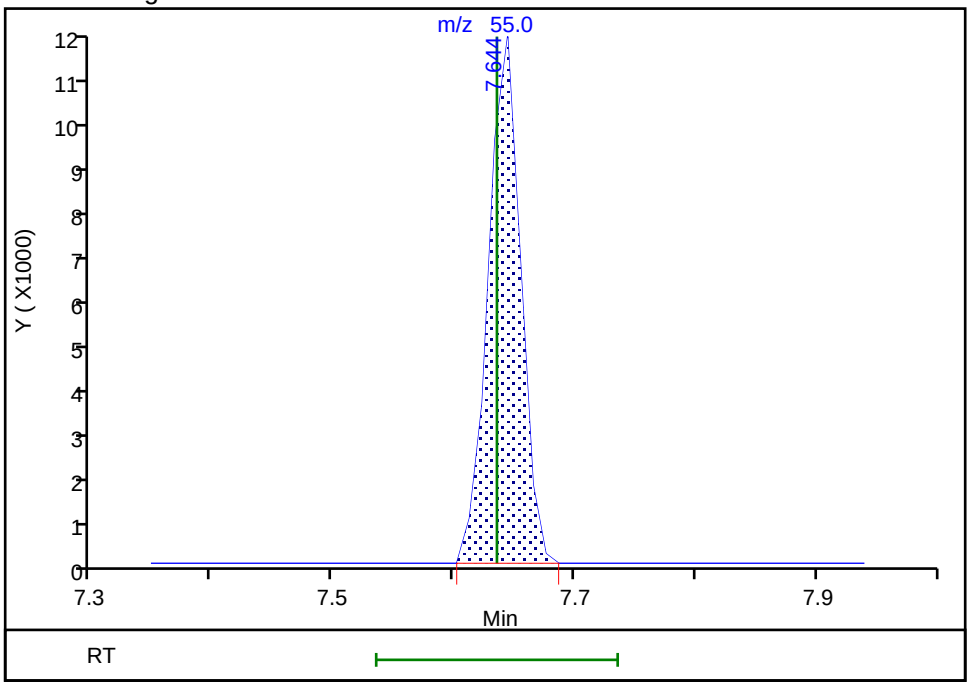
Processing Integration Results

RT: 7.64
Area: 22259
Amount: 0.501364
Amount Units: ug/l



Manual Integration Results

RT: 7.64
Area: 22259
Amount: 0.501364
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:54:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

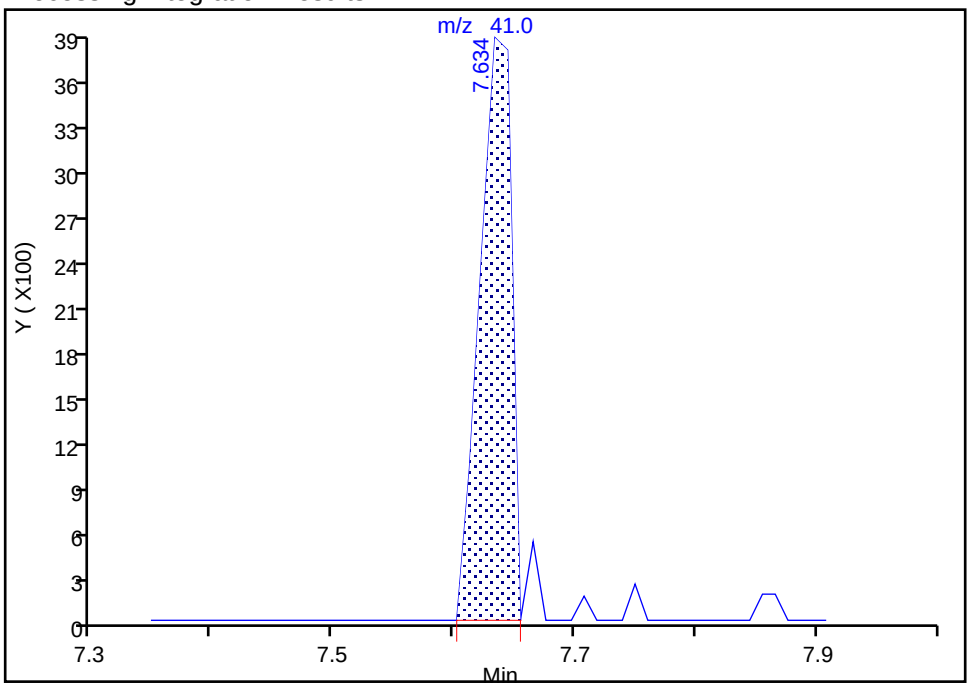
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

89 1-Chlorohexane, CAS: 544-10-5

Signal: 3

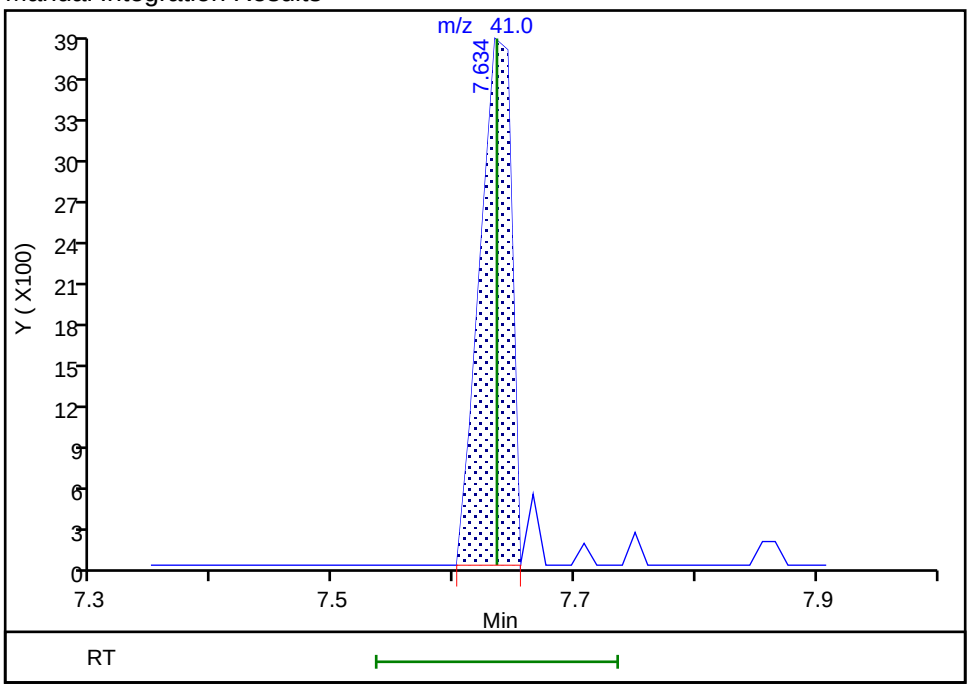
Processing Integration Results

RT: 7.63
Area: 6954
Amount: 0.501364
Amount Units: ug/l



Manual Integration Results

RT: 7.63
Area: 6954
Amount: 0.501364
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:54:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

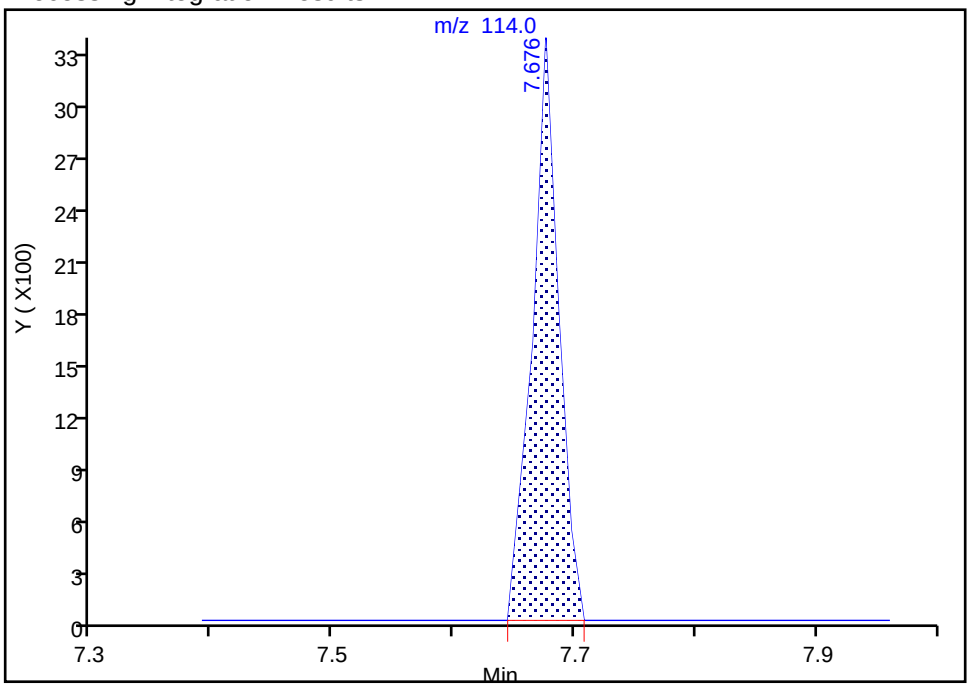
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

90 Chlorobenzene, CAS: 108-90-7

Signal: 2

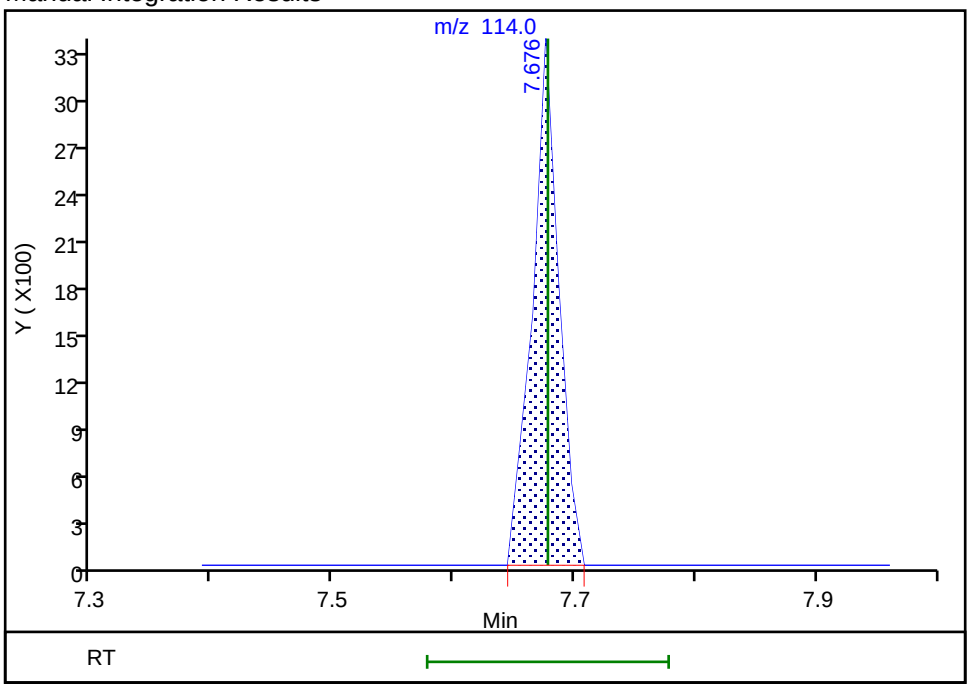
Processing Integration Results

RT: 7.68
Area: 5153
Amount: 0.601004
Amount Units: ug/l



Manual Integration Results

RT: 7.68
Area: 5153
Amount: 0.601004
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

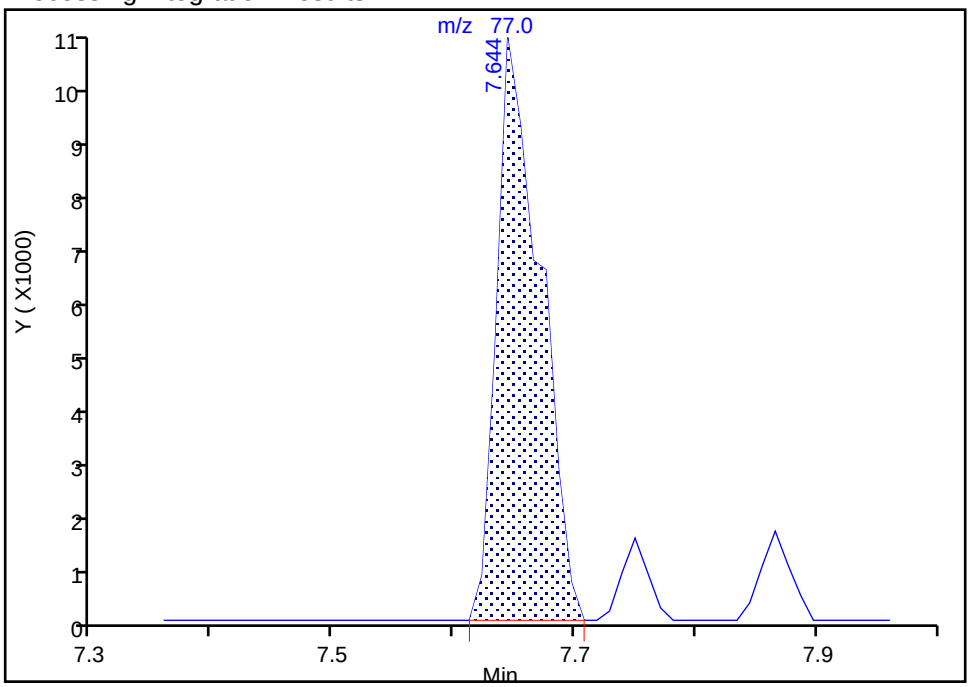
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

90 Chlorobenzene, CAS: 108-90-7

Signal: 3

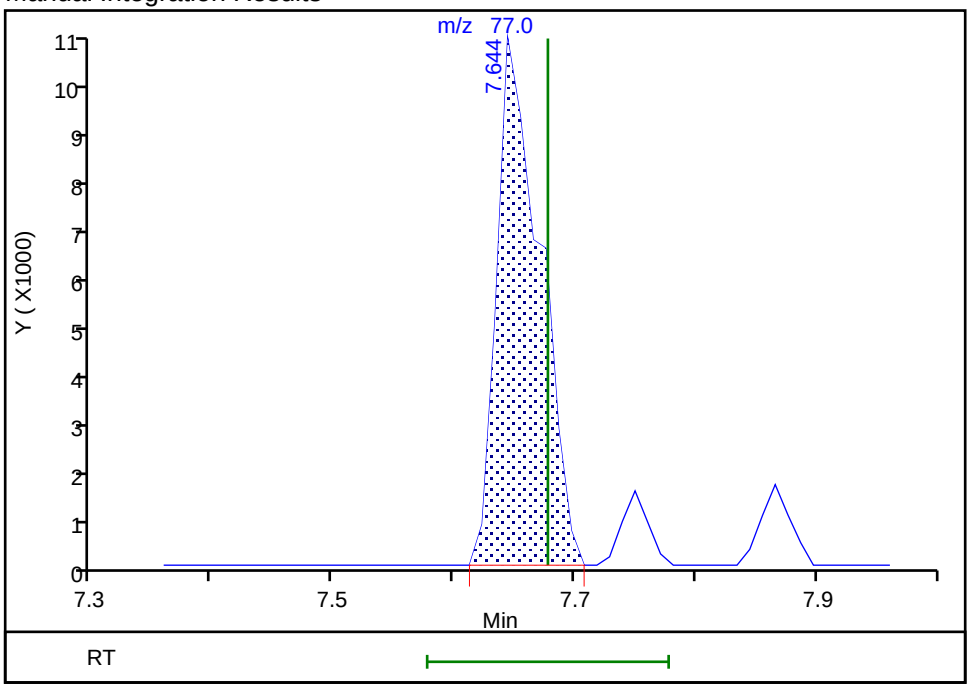
RT: 7.64
Area: 25302
Amount: 0.601004
Amount Units: ug/l

Processing Integration Results



RT: 7.64
Area: 25302
Amount: 0.601004
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 01-Jun-2020 21:43:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

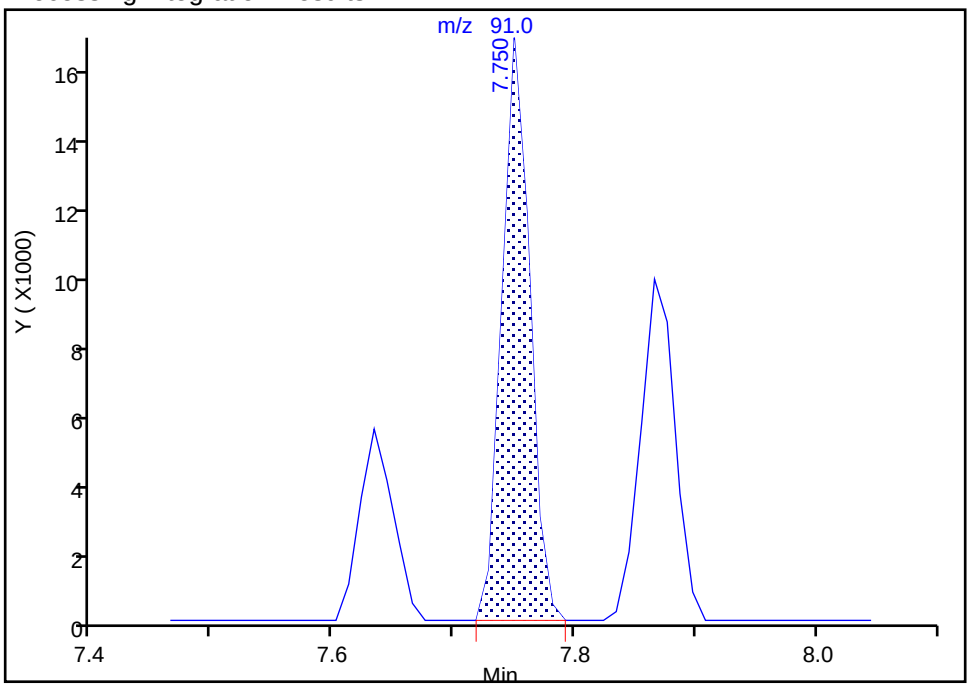
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

92 Ethylbenzene, CAS: 100-41-4

Signal: 2

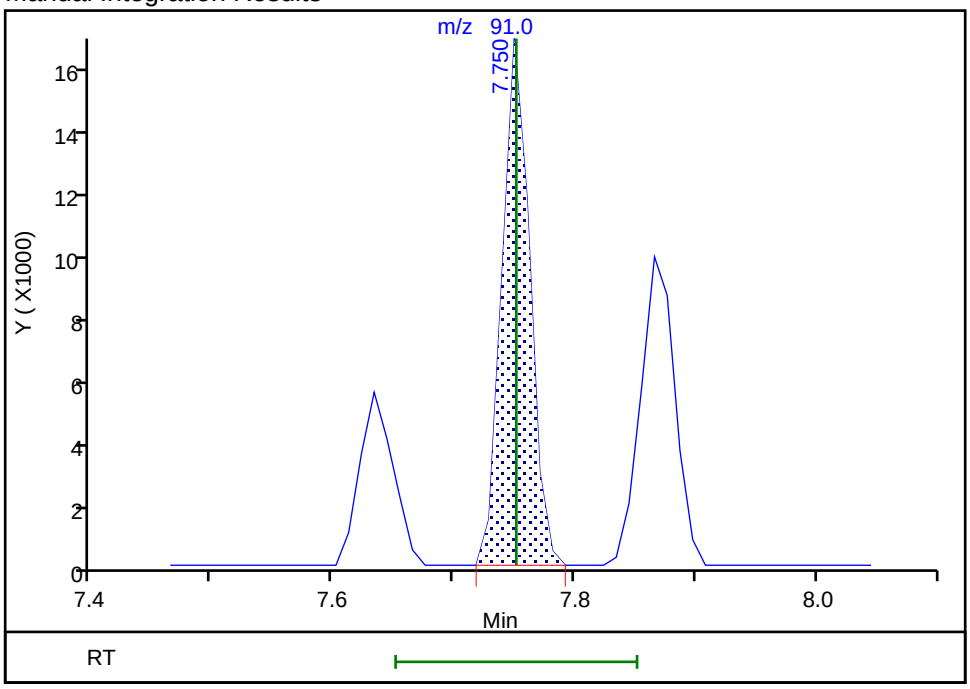
Processing Integration Results

RT: 7.75
Area: 26158
Amount: 0.574387
Amount Units: ug/l



Manual Integration Results

RT: 7.75
Area: 26158
Amount: 0.574387
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

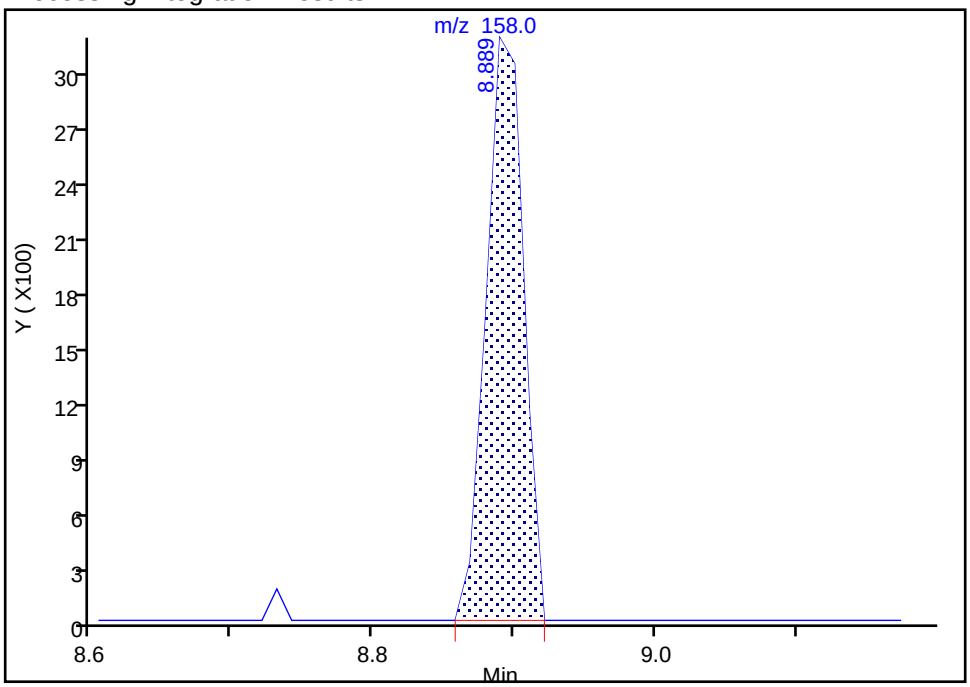
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

101 Bromobenzene, CAS: 108-86-1

Signal: 2

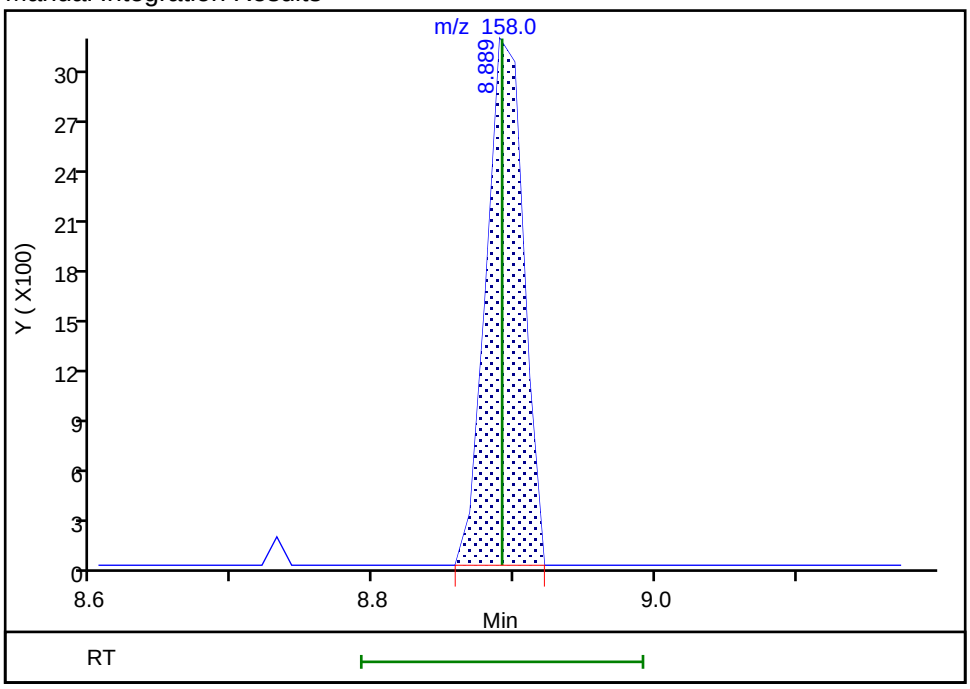
Processing Integration Results

RT: 8.89
Area: 5772
Amount: 0.596925
Amount Units: ug/l



Manual Integration Results

RT: 8.89
Area: 5772
Amount: 0.596925
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

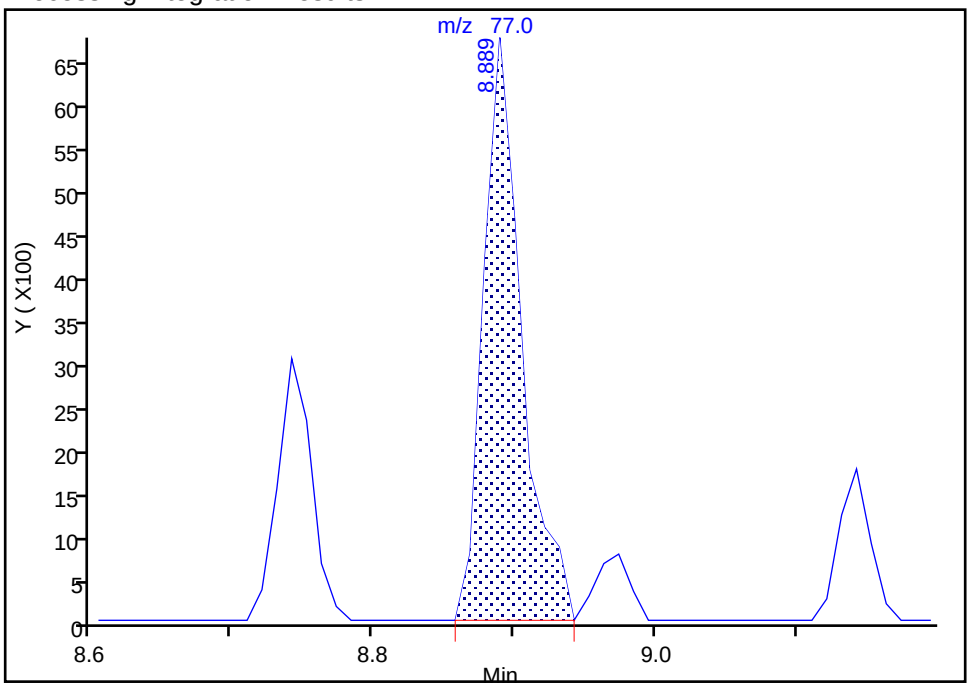
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

101 Bromobenzene, CAS: 108-86-1

Signal: 3

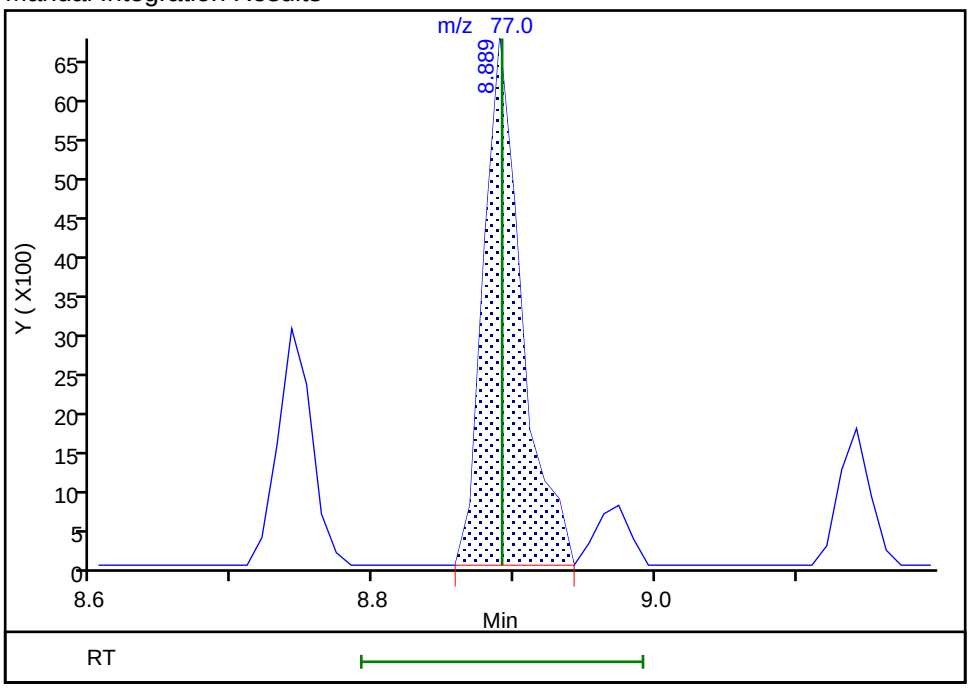
Processing Integration Results

RT: 8.89
Area: 12681
Amount: 0.596925
Amount Units: ug/l



Manual Integration Results

RT: 8.89
Area: 12681
Amount: 0.596925
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

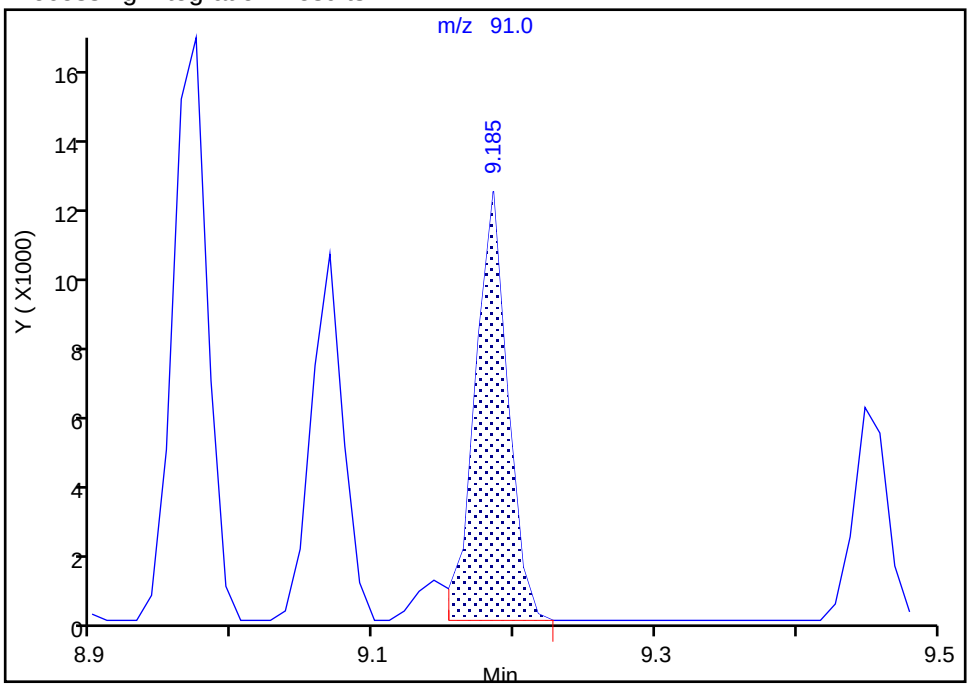
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 2

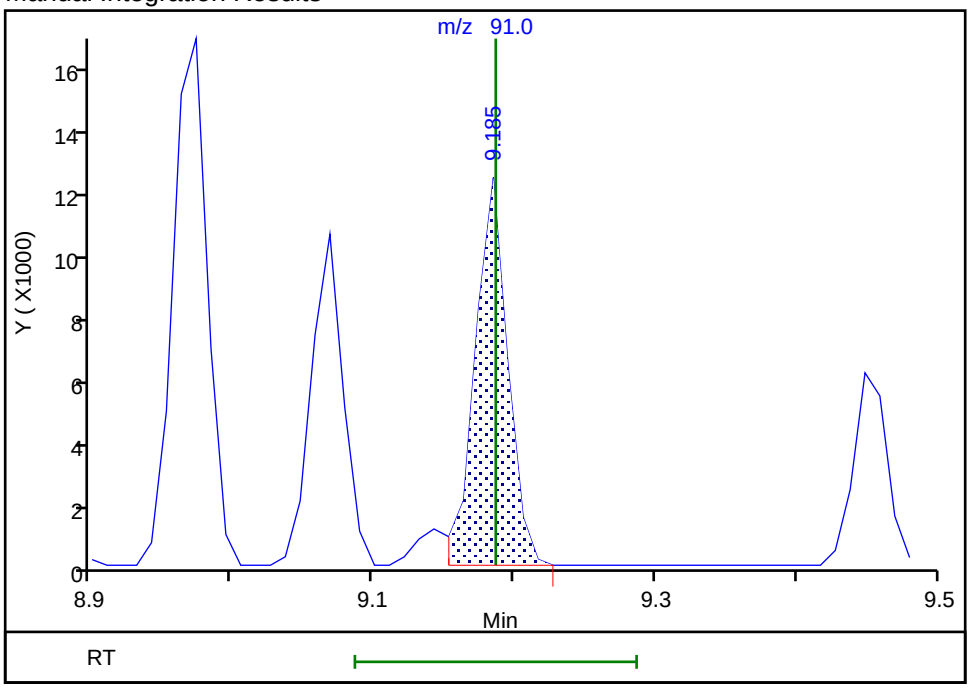
Processing Integration Results

RT: 9.18
Area: 20157
Amount: 0.586554
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 20157
Amount: 0.586554
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

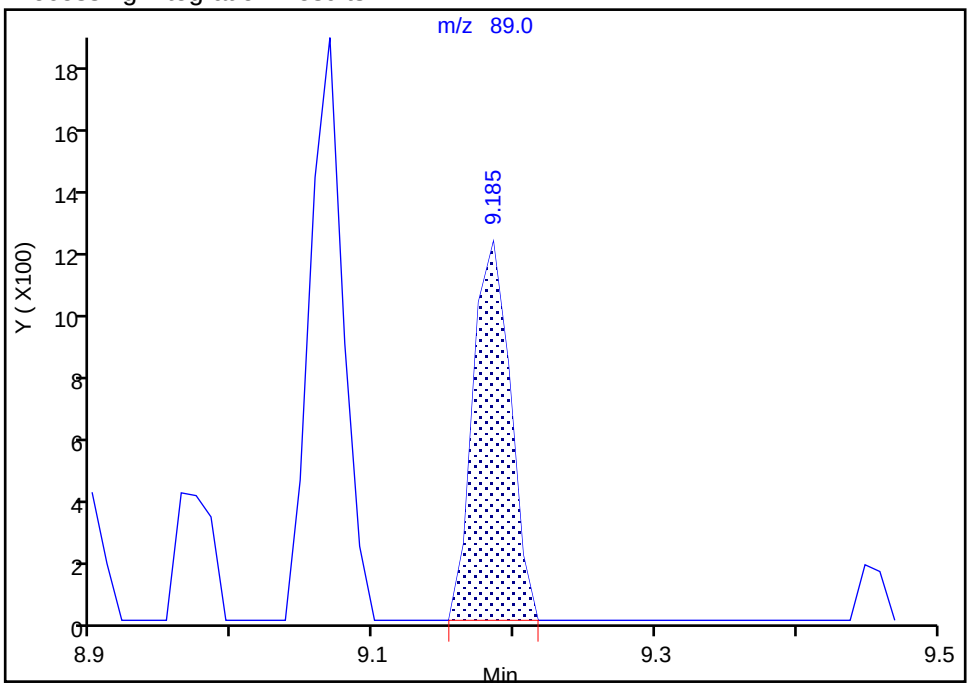
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 3

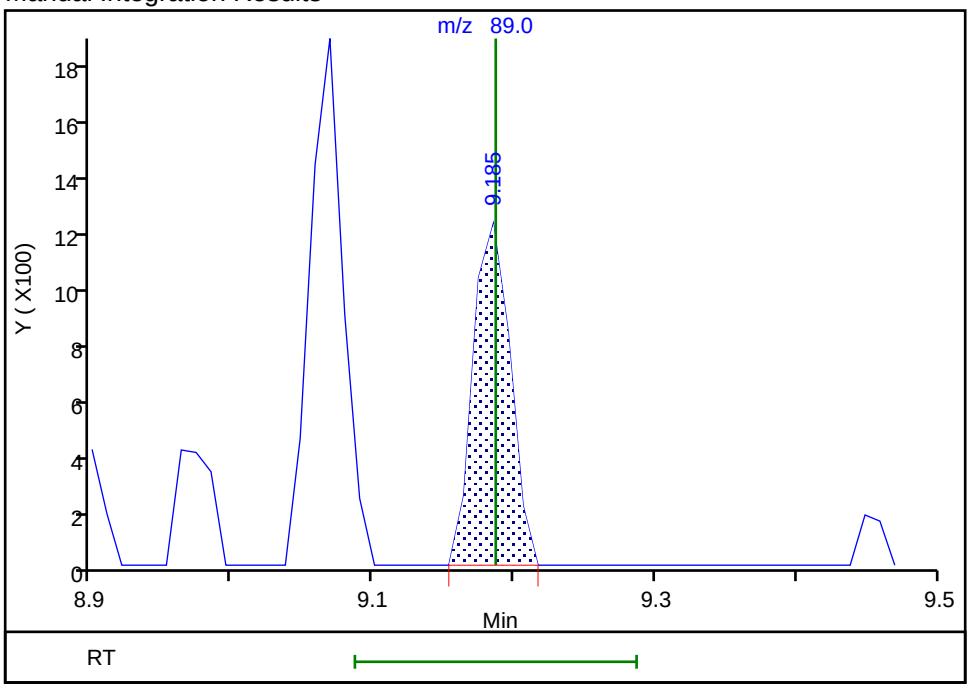
Processing Integration Results

RT: 9.18
Area: 2250
Amount: 0.586554
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 2250
Amount: 0.586554
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

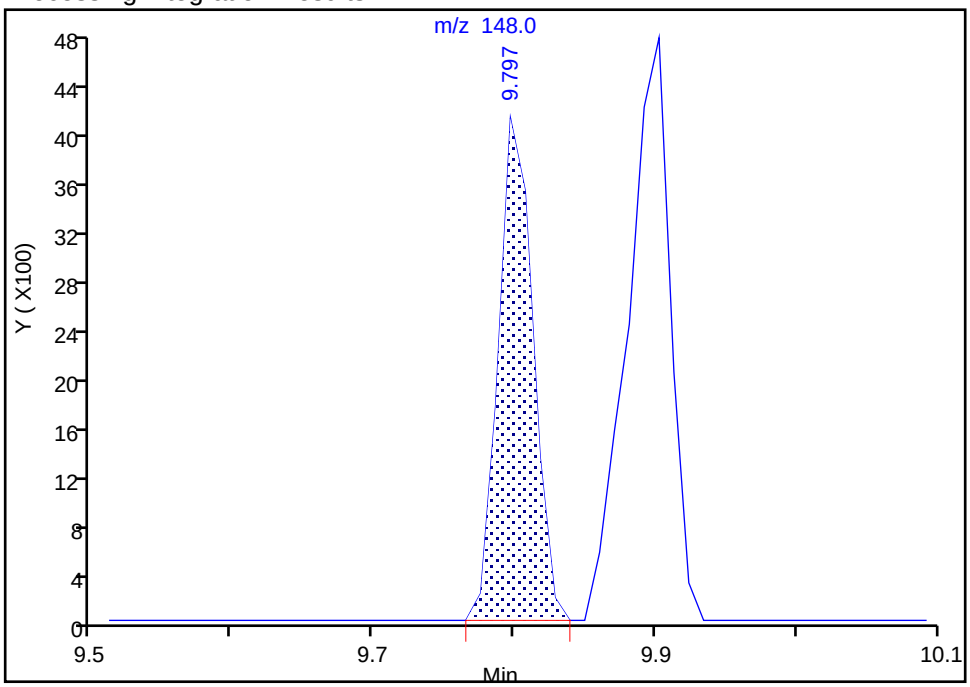
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

111 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 2

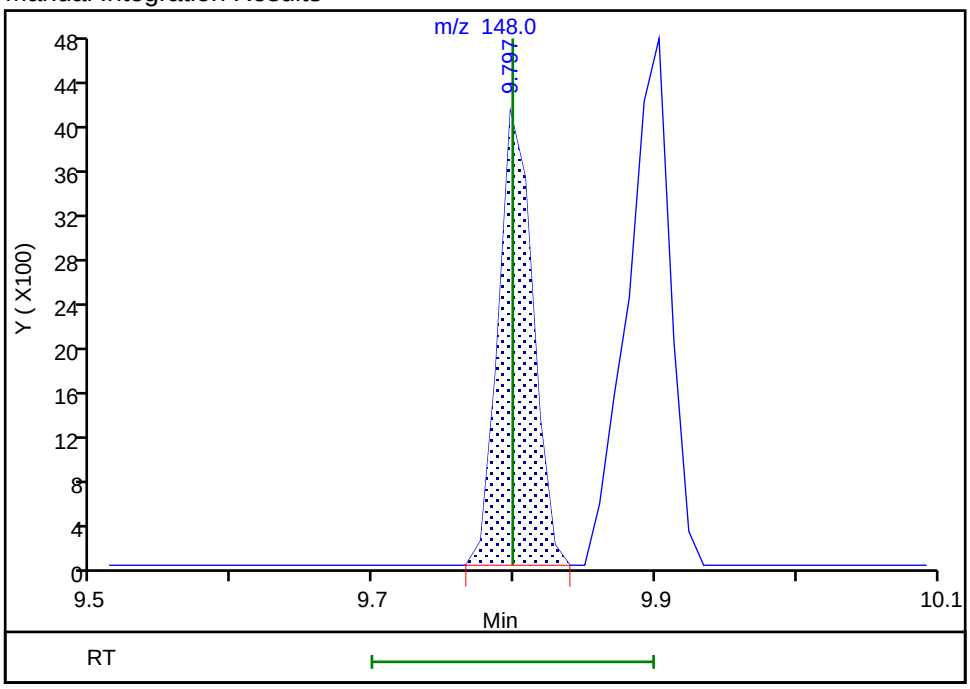
Processing Integration Results

RT: 9.80
Area: 7073
Amount: 0.634067
Amount Units: ug/l



Manual Integration Results

RT: 9.80
Area: 7073
Amount: 0.656056
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

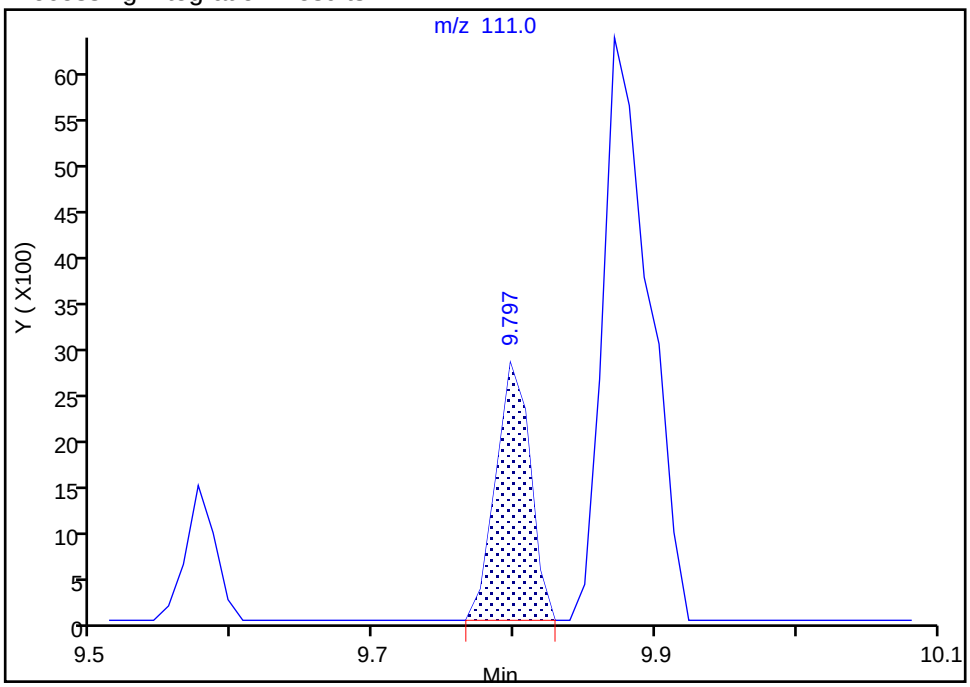
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

111 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 3

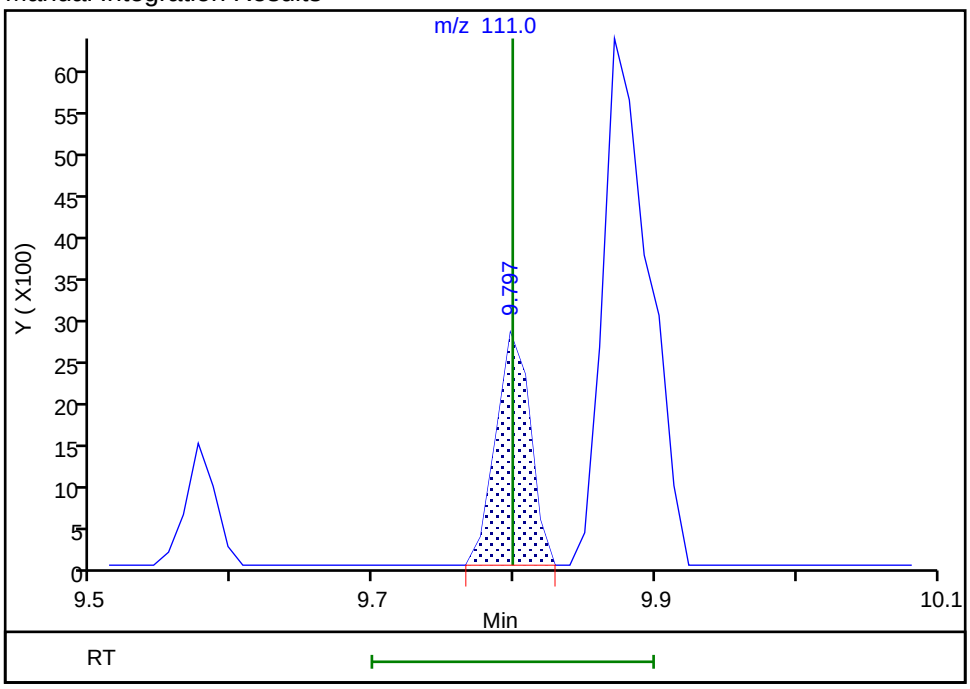
Processing Integration Results

RT: 9.80
Area: 4742
Amount: 0.634067
Amount Units: ug/l



Manual Integration Results

RT: 9.80
Area: 4742
Amount: 0.656056
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

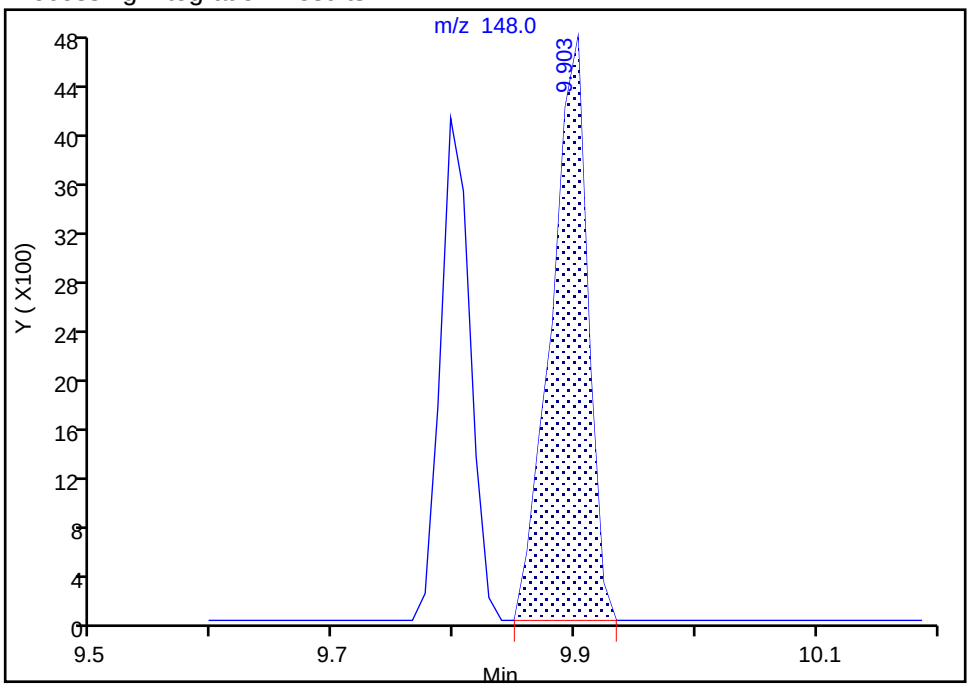
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 2

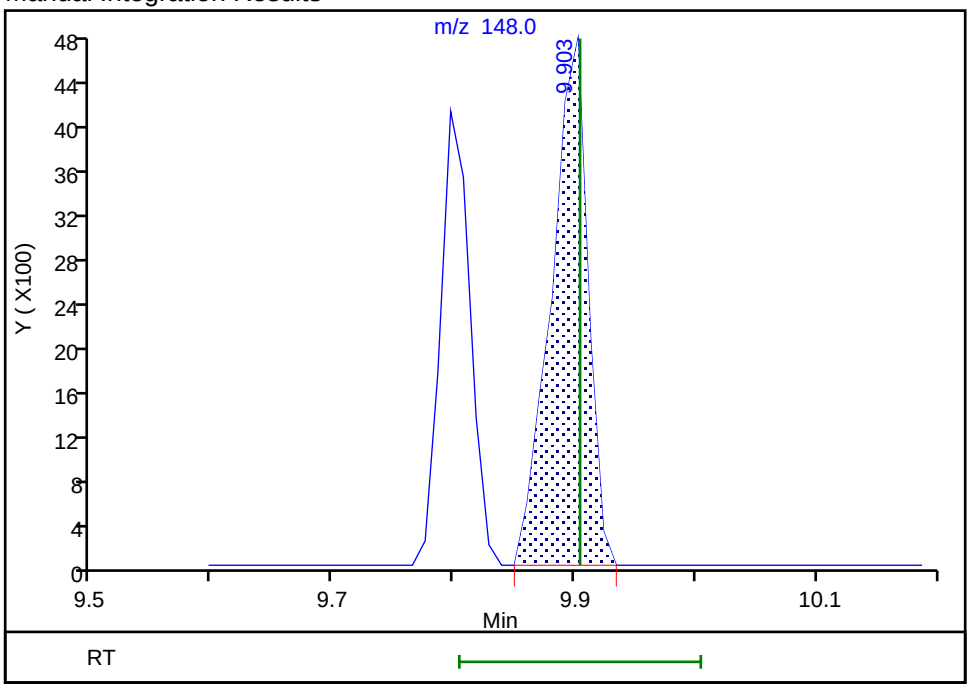
Processing Integration Results

RT: 9.90
Area: 10077
Amount: 0.647016
Amount Units: ug/l



Manual Integration Results

RT: 9.90
Area: 10077
Amount: 0.671704
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

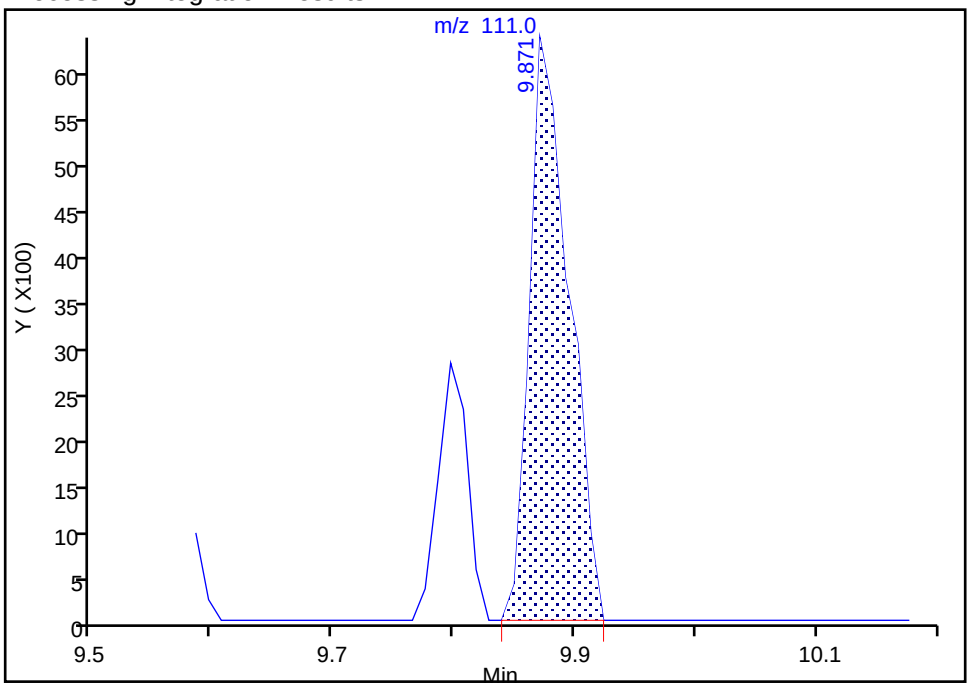
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 3

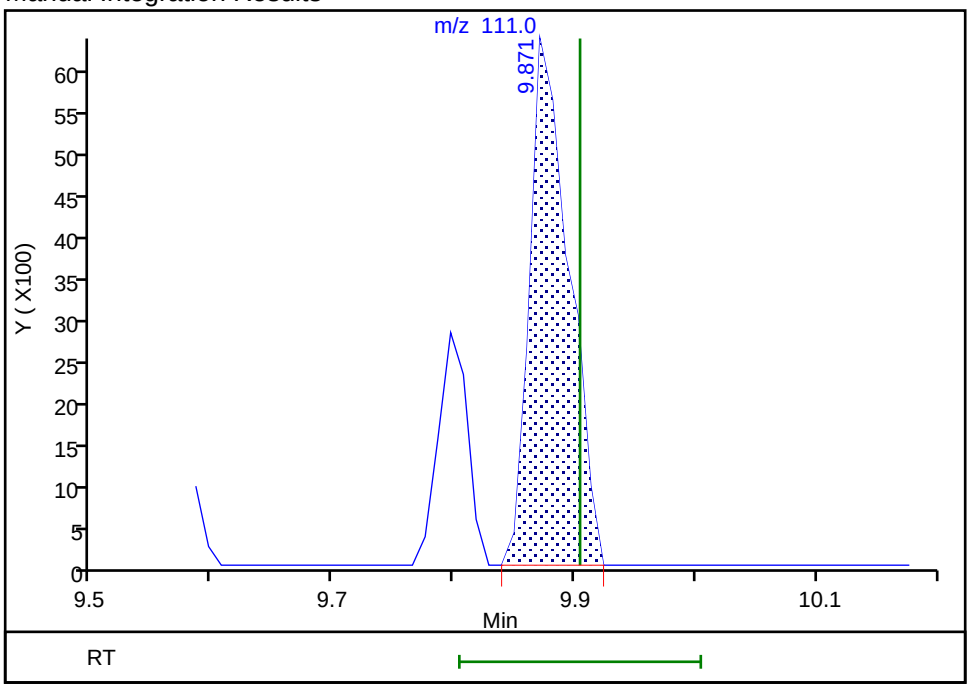
Processing Integration Results

RT: 9.87
Area: 14296
Amount: 0.647016
Amount Units: ug/l



Manual Integration Results

RT: 9.87
Area: 14296
Amount: 0.671704
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

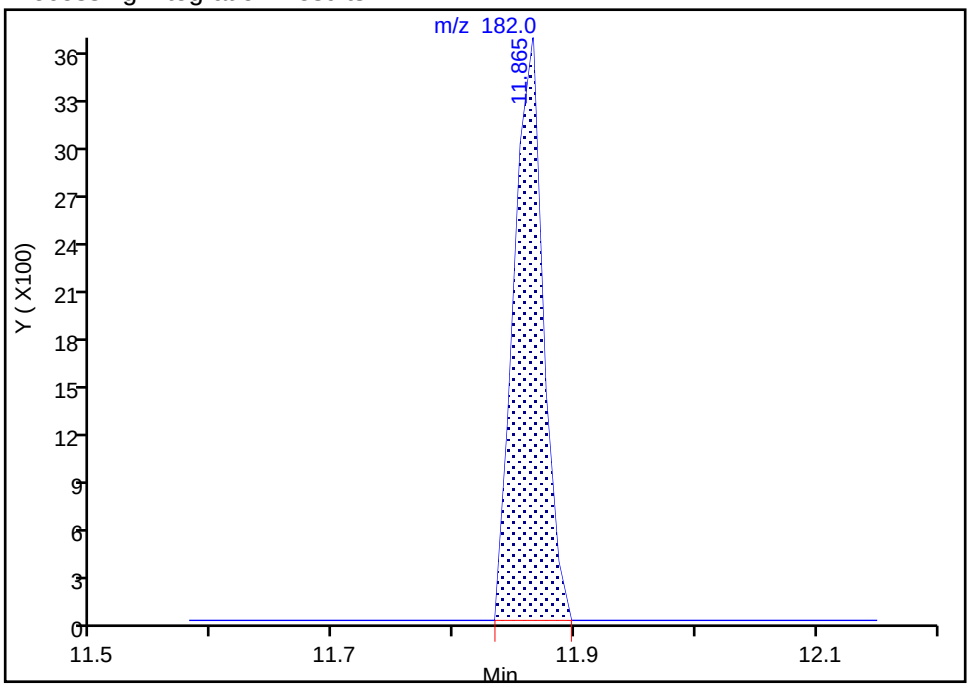
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

119 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 2

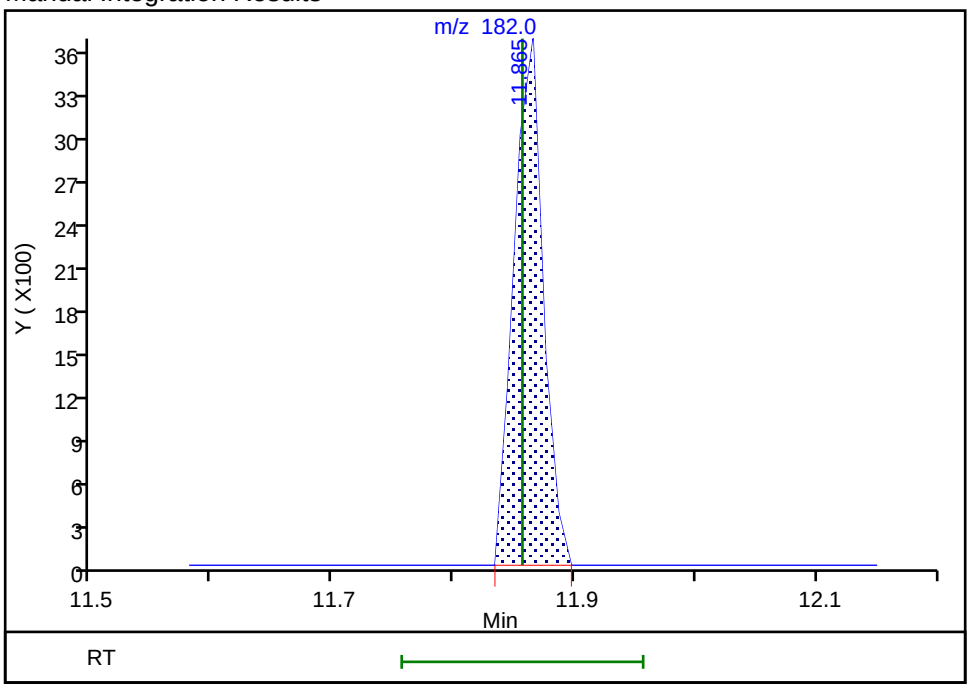
Processing Integration Results

RT: 11.87
Area: 6077
Amount: 0.654297
Amount Units: ug/l



Manual Integration Results

RT: 11.87
Area: 6077
Amount: 0.680549
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

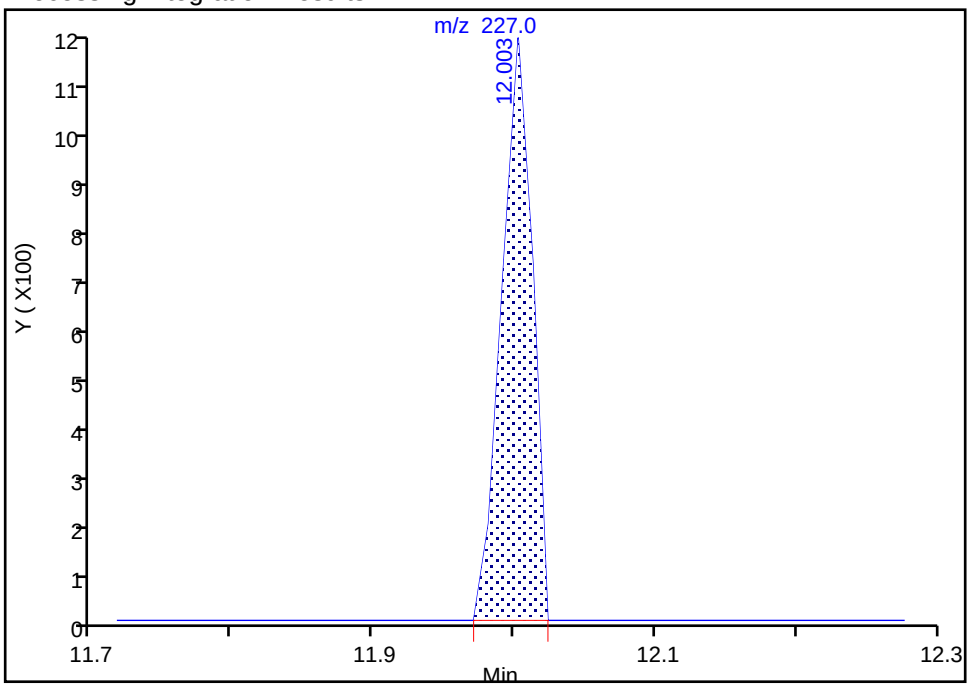
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 2

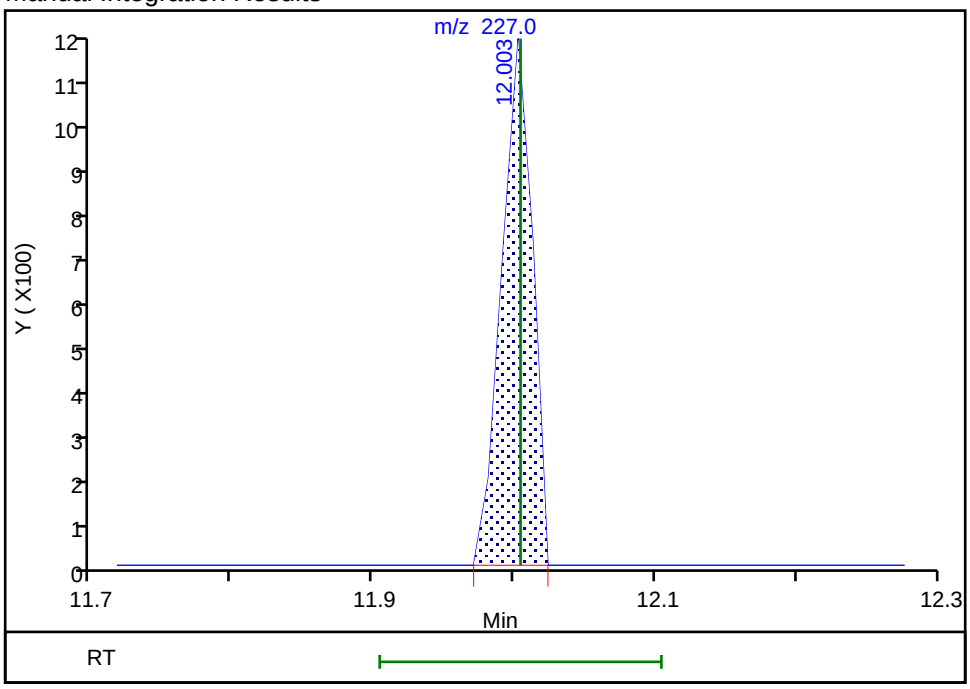
Processing Integration Results

RT: 12.00
Area: 1731
Amount: 0.680887
Amount Units: ug/l



Manual Integration Results

RT: 12.00
Area: 1731
Amount: 0.851194
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

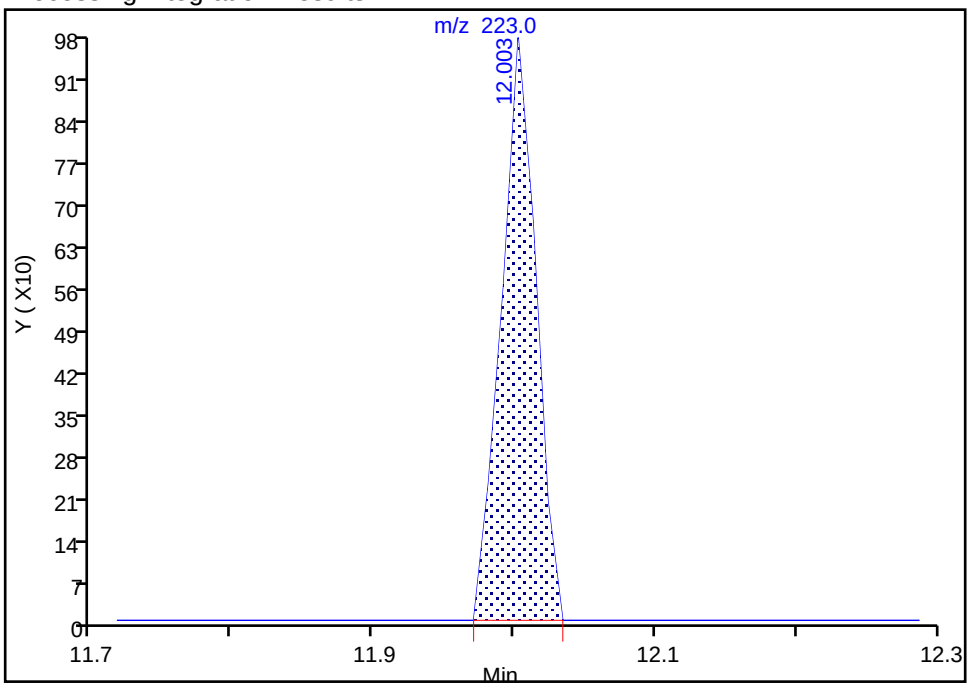
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 3

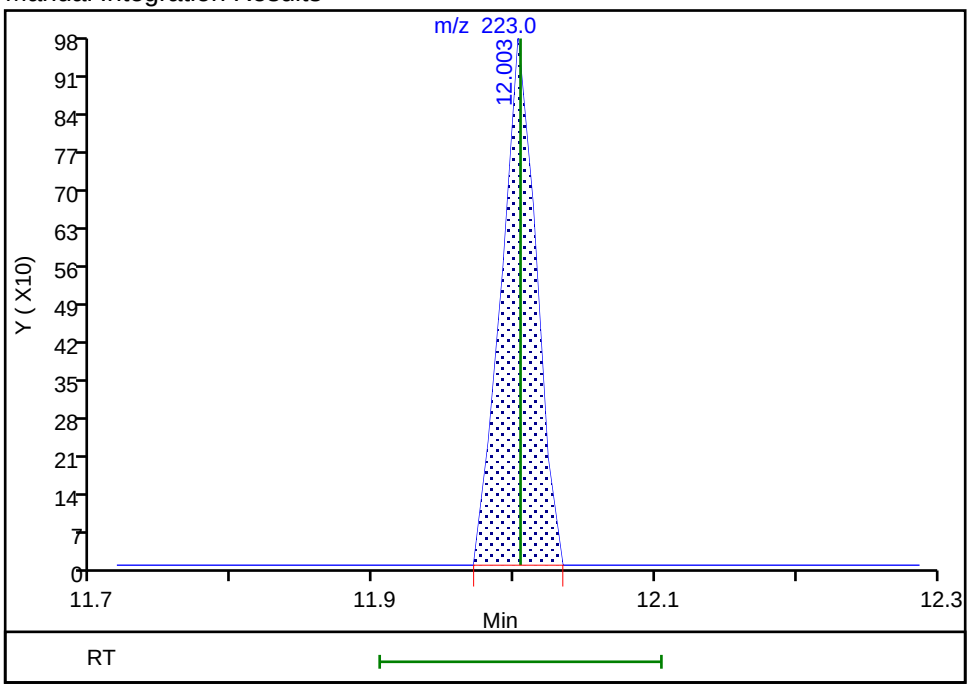
Processing Integration Results

RT: 12.00
Area: 1658
Amount: 0.680887
Amount Units: ug/l



Manual Integration Results

RT: 12.00
Area: 1658
Amount: 0.851194
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

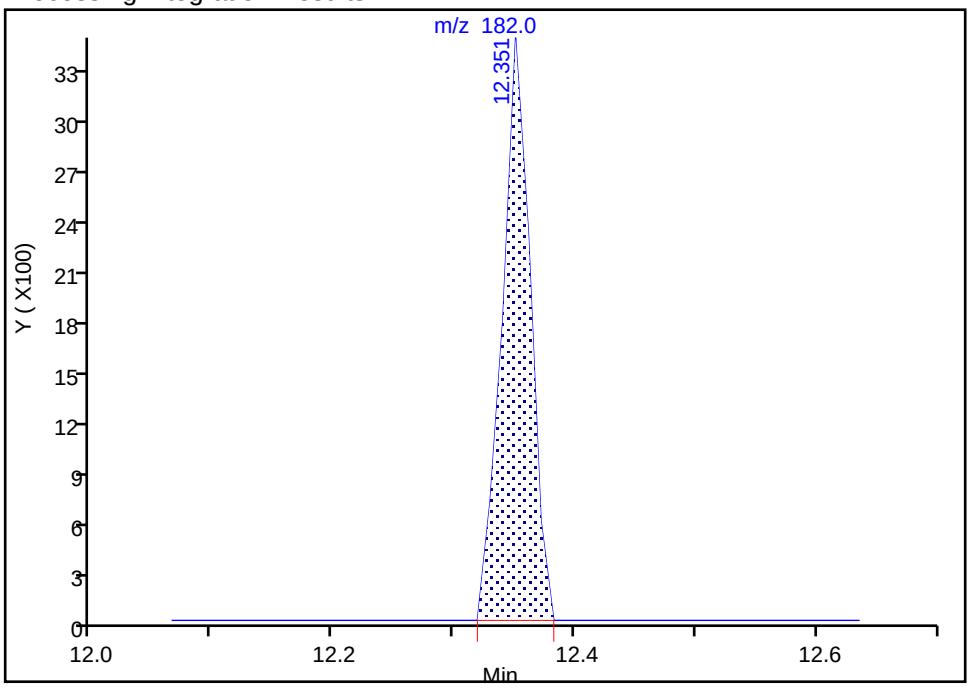
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

122 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 2

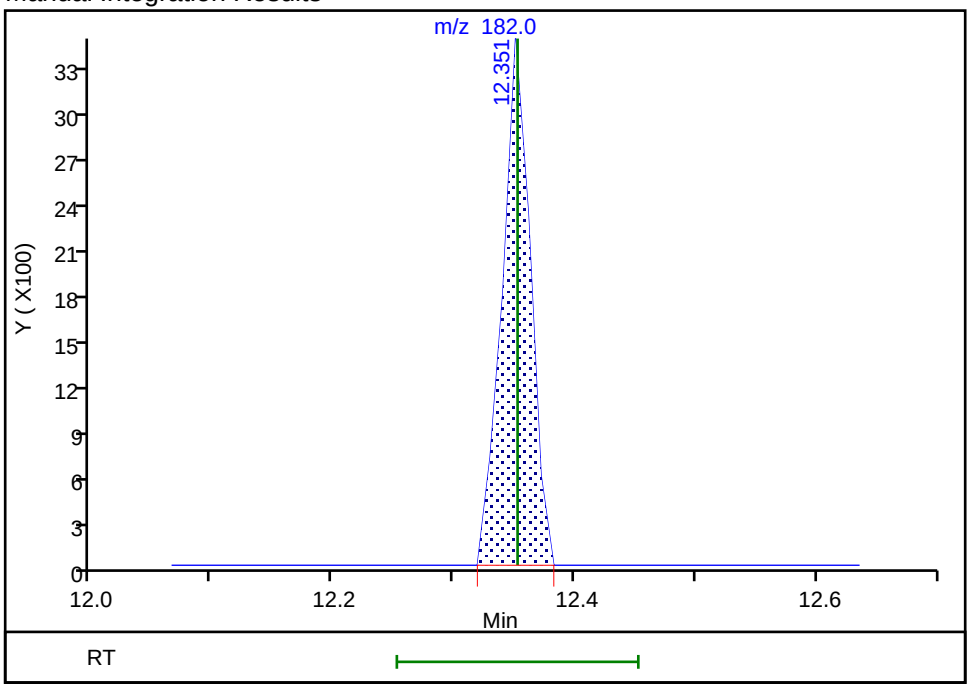
Processing Integration Results

RT: 12.35
Area: 5631
Amount: 0.622333
Amount Units: ug/l



Manual Integration Results

RT: 12.35
Area: 5631
Amount: 0.641966
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jun-2020 16:47:30 ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:43 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.114	5.113	0.001	99	2383354	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	87	531421	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	97	760731	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	574659	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.871	-0.011	97	691353	50.0	51.2	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2368182	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.743	0.001	83	850285	50.0	50.6	
10 Dichlorodifluoromethane	85	1.663	1.662	0.001	97	5476	1.00	0.8192	
11 Chloromethane	50	1.842	1.842	0.000	100	10961	1.00	0.8970	
12 Vinyl chloride	62	1.937	1.937	0.000	98	9829	1.00	0.9420	
14 Bromomethane	94	2.233	2.232	0.001	88	10332	1.00	0.9459	
15 Chloroethane	64	2.328	2.327	0.001	97	6373	1.00	0.9591	
16 Dichlorofluoromethane	67	2.497	2.496	0.001	96	15298	1.00	0.9860	
17 Trichlorofluoromethane	101	2.528	2.538	-0.010	98	12743	1.00	0.9893	
19 Ethyl ether	59	2.750	2.749	0.001	92	8448	1.00	1.04	
21 Acrolein	56	2.855	2.855	0.000	99	20816	9.88	10.4	
22 1,1-Dichloroethene	96	2.940	2.939	0.001	98	8105	1.00	1.05	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.940	2.939	0.001	75	6283	1.00	1.08	
24 Acetone	43	2.961	2.960	0.001	99	17462	4.00	4.34	
26 Iodomethane	142	3.066	3.066	0.000	98	5391	1.00	1.42	
27 Carbon disulfide	76	3.130	3.129	0.001	99	26575	1.00	0.8537	
29 Methyl acetate	43	3.193	3.193	0.000	98	17449	2.00	2.15	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	92	13759	1.00	1.04	
31 Methylene Chloride	84	3.309	3.309	0.000	93	12146	1.00	0.8495	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	97	10427	10.0	9.98	
33 Acrylonitrile	53	3.467	3.467	0.000	100	46835	10.0	10.7	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	94	26688	1.00	1.02	
35 trans-1,2-Dichloroethene	96	3.510	3.509	0.001	97	9430	1.00	1.04	
36 Hexane	57	3.710	3.710	0.000	92	13212	1.00	1.07	
38 Vinyl acetate	43	3.805	3.805	0.000	97	39777	2.00	2.03	
39 1,1-Dichloroethane	63	3.837	3.836	0.001	96	17492	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.217	4.216	0.001	98	22389	4.00	4.21	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	82	10604	1.00	1.05	
48 2,2-Dichloropropane	77	4.259	4.258	0.001	91	11073	1.00	0.9814	
50 sec-Butyl Alcohol	45	4.333	4.322	0.011	98	22900	30.0	26.8	
52 Tetrahydrofuran	42	4.428	4.427	0.001	87	7747	2.00	2.20	
53 Chlorobromomethane	128	4.428	4.427	0.001	97	4702	1.00	1.04	
54 Chloroform	83	4.480	4.480	0.000	93	16640	1.00	1.04	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	96	12946	1.00	1.02	
56 Cyclohexane	56	4.692	4.691	0.001	87	16664	1.00	1.03	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	95	14002	1.00	1.05	
59 Carbon tetrachloride	117	4.744	4.754	-0.010	92	10013	1.00	0.9655	
58 Isobutyl alcohol	41	4.755	4.754	0.001	90	8906	25.0	24.2	
60 Benzene	78	4.892	4.902	-0.010	96	41858	1.00	1.07	
61 1,2-Dichloroethane	62	4.924	4.923	0.001	97	16511	1.00	1.00	
66 n-Heptane	43	5.082	5.082	0.000	91	12658	1.00	1.08	
67 Trichloroethene	95	5.388	5.388	0.000	96	9625	1.00	1.00	
68 2-Pentanone	43	5.483	5.483	0.000	98	31765	4.00	4.02	
69 Methylcyclohexane	55	5.578	5.578	0.000	92	12607	1.00	1.03	
70 1,2-Dichloropropane	63	5.588	5.599	-0.011	96	10485	1.00	1.03	
72 1,4-Dioxane	88	5.631	5.630	0.001	87	2933	20.0	20.8	
73 Dibromomethane	93	5.662	5.662	0.000	93	6224	1.00	1.07	
74 Dichlorobromomethane	83	5.789	5.789	0.000	98	11312	1.00	0.9620	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	6403	1.00	0.9133	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	94	13633	1.00	0.9565	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.242	-0.010	96	40359	4.00	3.98	
79 Toluene	91	6.422	6.432	-0.010	98	43821	1.00	1.07	
80 trans-1,3-Dichloropropene	75	6.602	6.601	0.001	92	11495	1.00	0.8927	
81 Ethyl methacrylate	69	6.623	6.622	0.001	89	12391	1.00	0.9486	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	90	8647	1.00	1.04	
83 Tetrachloroethene	164	6.876	6.876	0.000	92	7028	1.00	1.08	
84 1,3-Dichloropropane	76	6.929	6.928	0.001	89	16209	1.00	1.04	
85 2-Hexanone	43	6.939	6.939	0.000	97	28505	4.00	3.99	
86 Chlorodibromomethane	129	7.119	7.118	0.001	87	7421	1.00	0.9276	
88 Ethylene Dibromide	107	7.235	7.245	-0.010	100	8675	1.00	1.00	
89 1-Chlorohexane	91	7.636	7.635	0.001	79	15776	1.00	0.99	
90 Chlorobenzene	112	7.667	7.678	-0.011	94	26446	1.00	1.05	
92 Ethylbenzene	106	7.752	7.751	0.001	99	13801	1.00	1.00	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.751	-0.010	79	7583	1.00	0.9794	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	17205	1.00	1.04	
94 o-Xylene	106	8.227	8.226	0.001	97	15696	1.00	0.9842	
95 Styrene	104	8.248	8.247	0.001	94	26358	1.00	0.9811	
96 Bromoform	173	8.427	8.427	0.000	91	4334	1.00	0.9165	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	39516	1.00	0.99	
99 Cyclohexanone	55	8.659	8.670	-0.011	93	20432	40.0	37.5	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.859	-0.010	94	12209	1.00	1.05	
101 Bromobenzene	156	8.892	8.891	0.001	95	9337	1.00	0.99	
102 trans-1,4-Dichloro-2-butene	53	8.892	8.891	0.001	51	2740	1.00	0.8840	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	86	3818	1.00	1.08	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	11266	1.00	1.02	
105 2-Chlorotoluene	126	9.060	9.071	-0.011	95	9351	1.00	1.00	
106 1,3,5-Trimethylbenzene	105	9.134	9.144	-0.010	94	33063	1.00	1.01	
107 4-Chlorotoluene	126	9.187	9.187	0.000	98	9835	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.451	9.450	0.001	93	27390	1.00	1.00	
109 1,2,4-Trimethylbenzene	105	9.504	9.514	-0.010	96	32879	1.00	1.00	
110 sec-Butylbenzene	134	9.672	9.672	0.000	95	7836	1.00	0.9799	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	96	17575	1.00	1.03	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	33248	1.00	0.99	
113 1,4-Dichlorobenzene	146	9.894	9.904	-0.010	89	19657	1.00	1.12	
115 n-Butylbenzene	91	10.221	10.221	0.000	97	32229	1.00	1.03	
116 1,2-Dichlorobenzene	146	10.253	10.252	0.001	97	17305	1.00	1.02	
117 1,2-Dibromo-3-Chloropropane	157	11.034	11.033	0.001	80	1852	1.00	0.9351	
119 1,2,4-Trichlorobenzene	180	11.857	11.856	0.001	94	9317	1.00	1.01	
120 Hexachlorobutadiene	225	11.994	12.004	-0.010	93	3403	1.00	1.02	
121 Naphthalene	128	12.121	12.131	-0.010	98	28091	1.00	0.9459	
122 1,2,3-Trichlorobenzene	180	12.353	12.352	0.001	94	8541	1.00	1.01	
S 139 1,2-Dichloroethene, Total (URS)	96				0		2.00	2.08	
S 142 Xylenes, Total	106				0		2.00	2.02	
S 140 Trihalomethanes, Total	1				0		4.00	3.85	
S 143 Xylenes, Total (URS)	1				0		2.00	2.02	
S 146 Total BTEX	1				0			5.15	
S 145 1,3-Dichloropropene, Total	1				0		2.00	1.85	
S 144 1,2-Dichloroethene, Total	1				0		2.00	2.08	

Reagents:

MV-Gas A_00058	Amount Added:	0.20	Units: uL	
MV-MegaMainA_00034	Amount Added:	0.50	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:15:44 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D

Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

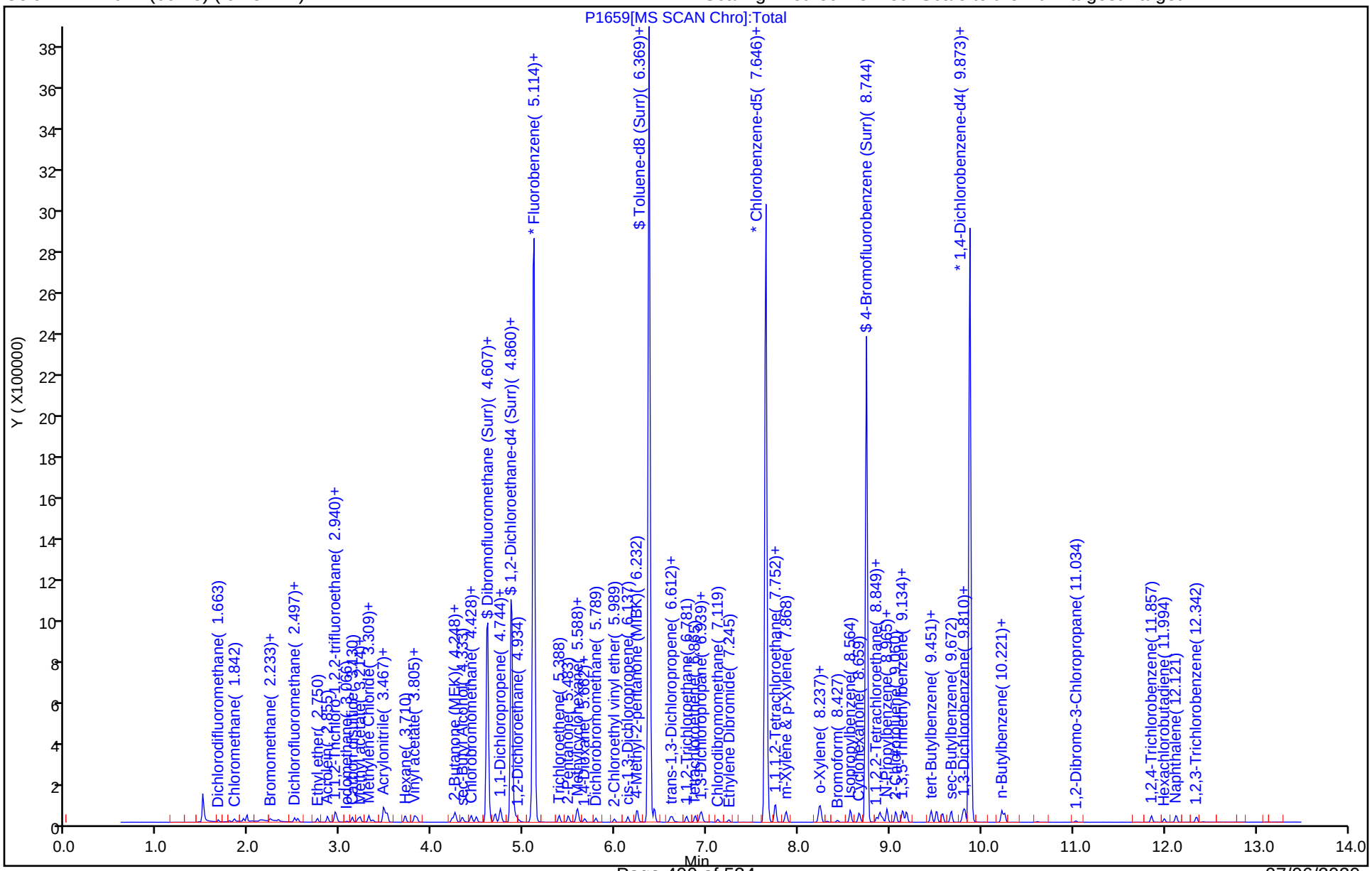
Lims ID: STD010 Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

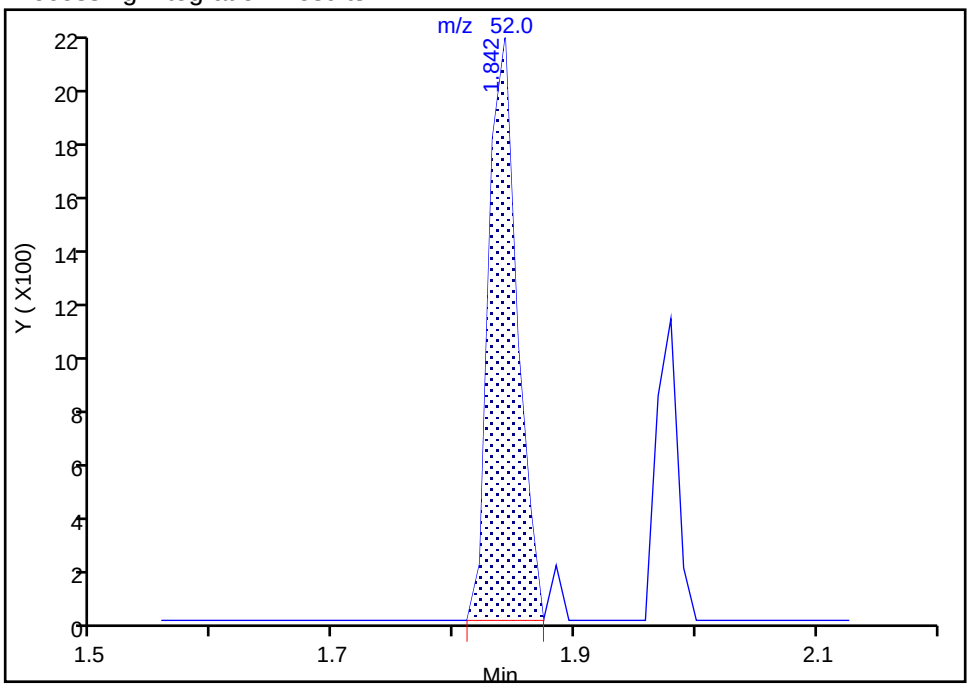
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 2

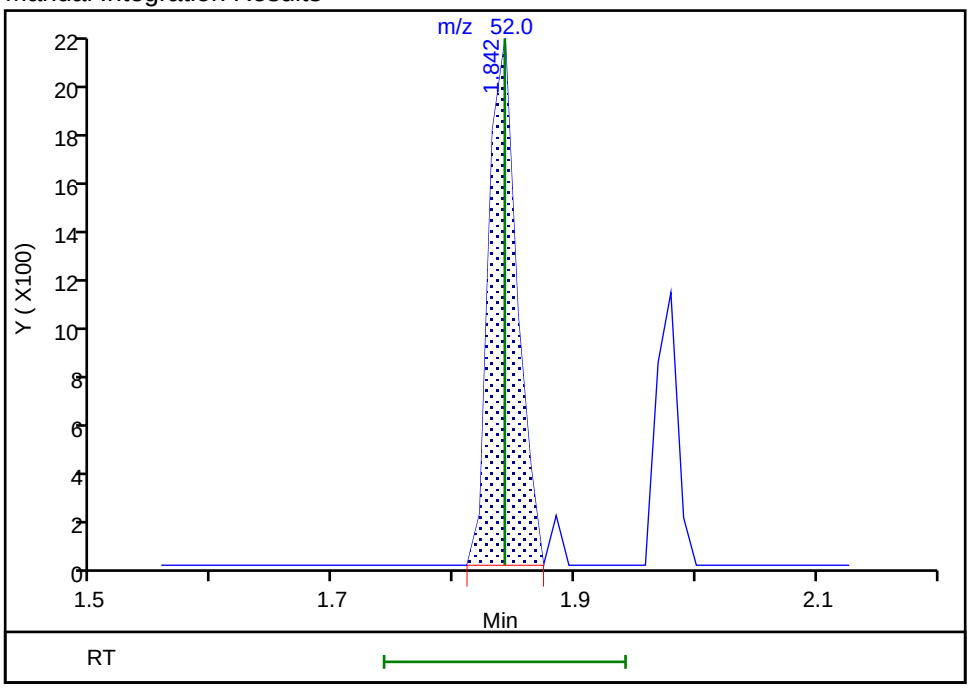
Processing Integration Results

RT: 1.84
Area: 3460
Amount: 1.141745
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 3460
Amount: 0.897043
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

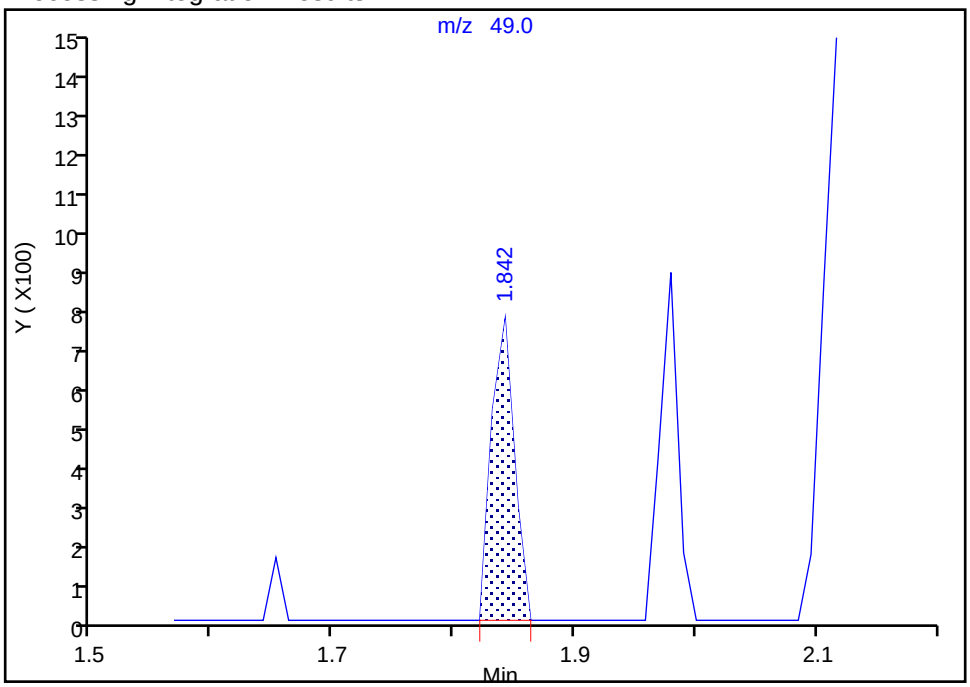
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 3

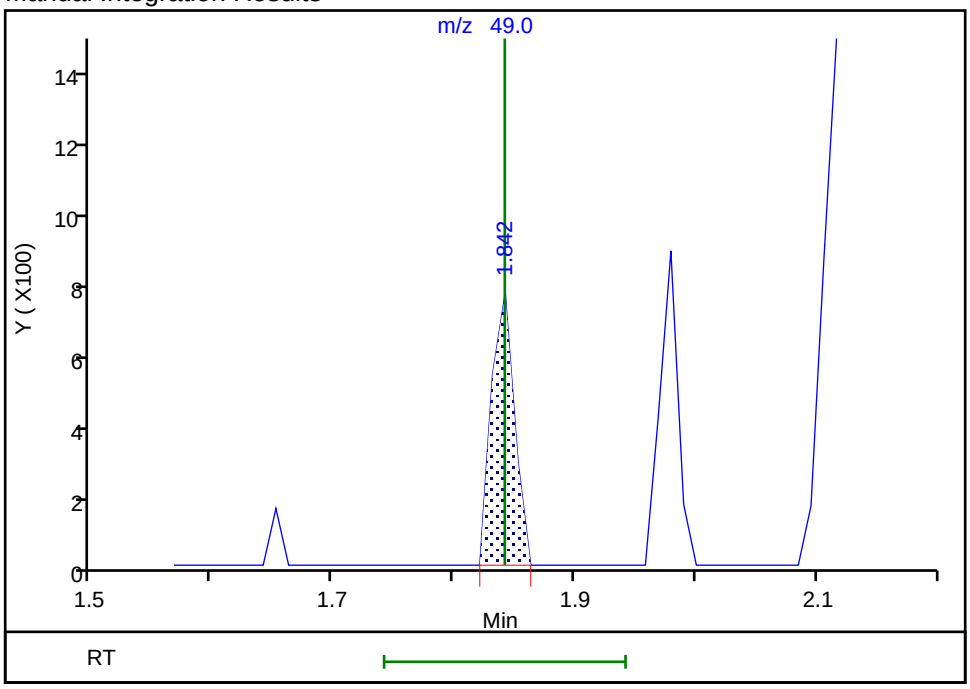
Processing Integration Results

RT: 1.84
Area: 1020
Amount: 1.141745
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 1020
Amount: 0.897043
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

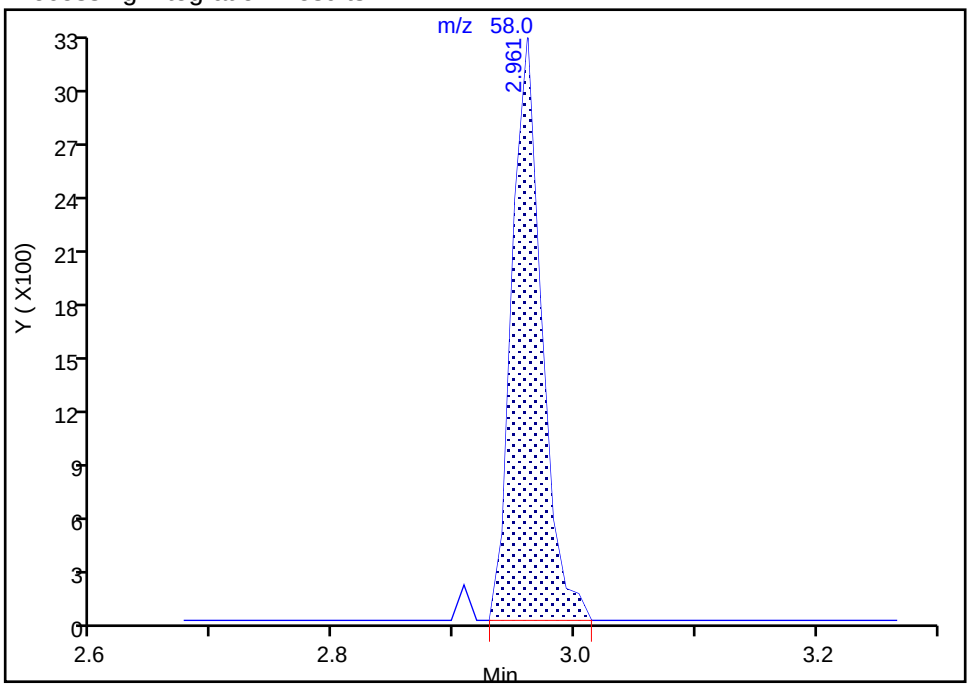
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

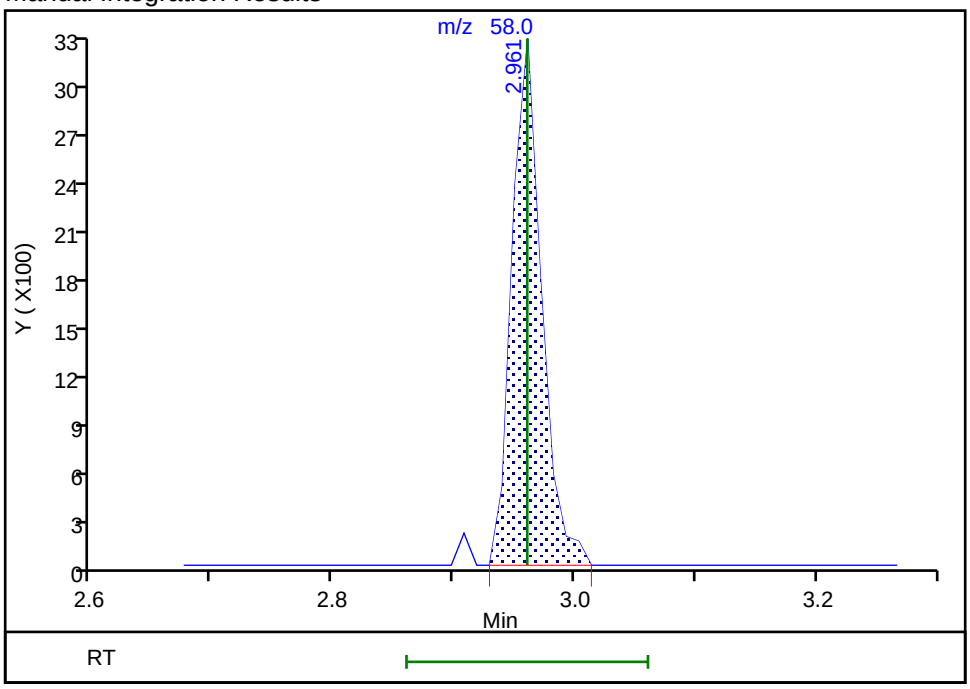
Processing Integration Results

RT: 2.96
Area: 5597
Amount: 4.336547
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 5597
Amount: 4.336547
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jun-2020 17:09:30 ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:54 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 08:07:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.113	0.000	99	2374045	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.646	-0.001	87	531862	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.873	-0.001	97	763439	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.607	-0.001	93	571033	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.870	4.871	-0.001	98	685163	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2368091	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.743	0.000	83	845318	50.0	50.2	
10 Dichlorodifluoromethane	85	1.662	1.662	0.000	98	11244	2.00	1.69	
11 Chloromethane	50	1.841	1.842	-0.001	99	18647	2.00	1.76	
12 Vinyl chloride	62	1.936	1.937	-0.001	97	20856	2.00	2.01	
14 Bromomethane	94	2.232	2.232	0.000	88	14480	2.00	2.04	
15 Chloroethane	64	2.327	2.327	0.000	98	13433	2.00	2.03	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	30965	2.00	2.00	
17 Trichlorofluoromethane	101	2.538	2.538	0.000	97	25172	2.00	1.96	
19 Ethyl ether	59	2.749	2.749	0.000	91	16790	2.00	2.08	
21 Acrolein	56	2.854	2.855	-0.001	99	41406	19.8	20.7	
22 1,1-Dichloroethene	96	2.939	2.939	0.000	97	16694	2.00	2.17	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.939	0.000	72	12382	2.00	2.14	
24 Acetone	43	2.960	2.960	0.000	99	32447	8.00	9.15	
26 Iodomethane	142	3.066	3.066	0.000	96	6724	2.00	1.60	M
27 Carbon disulfide	76	3.129	3.129	0.000	99	52942	2.00	1.97	
29 Methyl acetate	43	3.192	3.193	-0.001	98	34344	4.00	4.26	
30 3-Chloro-1-propene	41	3.213	3.214	-0.001	92	28409	2.00	2.16	
31 Methylene Chloride	84	3.308	3.309	-0.001	92	22322	2.00	2.01	
32 2-Methyl-2-propanol	59	3.350	3.351	-0.001	96	21901	20.0	21.0	
33 Acrylonitrile	53	3.467	3.467	0.000	99	94418	20.0	21.6	
34 Methyl tert-butyl ether	73	3.498	3.499	-0.001	96	54197	2.00	2.09	
35 trans-1,2-Dichloroethene	96	3.509	3.509	0.000	97	18947	2.00	2.09	
36 Hexane	57	3.709	3.710	-0.001	91	26560	2.00	2.14	
38 Vinyl acetate	43	3.804	3.805	-0.001	97	80611	4.00	4.12	
39 1,1-Dichloroethane	63	3.836	3.836	0.000	96	35499	2.00	2.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.216	4.216	0.000	99	46020	8.00	8.70	
47 cis-1,2-Dichloroethene	96	4.247	4.248	-0.001	84	21423	2.00	2.12	
48 2,2-Dichloropropane	77	4.258	4.258	0.000	92	23061	2.00	2.05	
50 sec-Butyl Alcohol	45	4.321	4.322	-0.001	97	47471	60.0	55.8	
52 Tetrahydrofuran	42	4.427	4.427	0.000	88	14739	4.00	4.20	
53 Chlorobromomethane	128	4.427	4.427	0.000	98	9931	2.00	2.20	
54 Chloroform	83	4.480	4.480	0.000	93	35178	2.00	2.21	
55 1,1,1-Trichloroethane	97	4.627	4.628	-0.001	98	27396	2.00	2.17	
56 Cyclohexane	56	4.691	4.691	0.000	89	33843	2.00	2.10	
57 1,1-Dichloropropene	75	4.743	4.744	-0.001	96	27826	2.00	2.10	
59 Carbon tetrachloride	117	4.743	4.754	-0.011	91	21806	2.00	2.11	
58 Isobutyl alcohol	41	4.743	4.754	-0.011	95	18462	50.0	50.3	
60 Benzene	78	4.891	4.902	-0.011	96	84162	2.00	2.15	
61 1,2-Dichloroethane	62	4.923	4.923	0.000	98	30197	2.00	2.13	
66 n-Heptane	43	5.081	5.082	-0.001	91	25333	2.00	2.17	
67 Trichloroethene	95	5.387	5.388	-0.001	97	20658	2.00	2.15	
68 2-Pentanone	43	5.482	5.483	-0.001	99	66130	8.00	8.41	
69 Methylcyclohexane	55	5.577	5.578	-0.001	93	25828	2.00	2.12	
70 1,2-Dichloropropane	63	5.598	5.599	-0.001	97	20818	2.00	2.06	
72 1,4-Dioxane	88	5.630	5.630	0.000	94	5492	40.0	39.1	
73 Dibromomethane	93	5.662	5.662	0.000	95	11931	2.00	2.06	
74 Dichlorobromomethane	83	5.788	5.789	-0.001	100	24474	2.00	2.09	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	12997	2.00	1.86	
77 cis-1,3-Dichloropropene	75	6.136	6.137	-0.001	96	27908	2.00	1.96	
78 4-Methyl-2-pentanone (MIBK)	43	6.242	6.242	0.000	95	85733	8.00	8.49	
79 Toluene	91	6.432	6.432	0.000	98	89995	2.00	2.20	
80 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	93	24304	2.00	1.89	
81 Ethyl methacrylate	69	6.622	6.622	0.000	90	25633	2.00	1.96	
82 1,1,2-Trichloroethane	97	6.780	6.781	-0.001	91	16908	2.00	2.05	
83 Tetrachloroethene	164	6.875	6.876	-0.001	96	13615	2.00	2.10	
84 1,3-Dichloropropane	76	6.928	6.928	0.000	90	33064	2.00	2.12	
85 2-Hexanone	43	6.938	6.939	-0.001	96	59708	8.00	8.35	
86 Chlorodibromomethane	129	7.118	7.118	0.000	91	15559	2.00	1.94	
88 Ethylene Dibromide	107	7.234	7.245	-0.011	99	17428	2.00	2.01	
89 1-Chlorohexane	91	7.624	7.635	-0.011	94	28696	2.00	2.10	
90 Chlorobenzene	112	7.677	7.678	-0.001	96	54491	2.00	2.17	
92 Ethylbenzene	106	7.751	7.751	0.000	99	29300	2.00	2.12	
91 1,1,1,2-Tetrachloroethane	131	7.740	7.751	-0.011	92	15334	2.00	1.98	
93 m-Xylene & p-Xylene	106	7.867	7.868	-0.001	99	35314	2.00	2.13	
94 o-Xylene	106	8.226	8.226	0.000	96	34157	2.00	2.14	
95 Styrene	104	8.247	8.247	0.000	95	55954	2.00	2.08	
96 Bromoform	173	8.426	8.427	-0.001	92	8987	2.00	1.90	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	85484	2.00	2.14	
99 Cyclohexanone	55	8.659	8.670	-0.011	92	44758	80.0	82.2	
100 1,1,2,2-Tetrachloroethane	83	8.848	8.859	-0.011	94	24163	2.00	2.06	
101 Bromobenzene	156	8.891	8.891	0.000	97	19650	2.00	2.08	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	51	6156	2.00	1.98	
103 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	83	7957	2.00	2.24	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	23713	2.00	2.14	
105 2-Chlorotoluene	126	9.070	9.071	-0.001	96	20430	2.00	2.18	
106 1,3,5-Trimethylbenzene	105	9.144	9.144	0.000	93	68689	2.00	2.09	
107 4-Chlorotoluene	126	9.186	9.187	-0.001	98	20005	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.450	9.450	0.000	93	57918	2.00	2.11	
109 1,2,4-Trimethylbenzene	105	9.503	9.514	-0.011	97	69183	2.00	2.09	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	17482	2.00	2.18	
111 1,3-Dichlorobenzene	146	9.798	9.799	-0.001	96	36396	2.00	2.13	
112 4-Isopropyltoluene	119	9.819	9.820	-0.001	96	69322	2.00	2.07	
113 1,4-Dichlorobenzene	146	9.893	9.904	-0.011	93	39277	2.00	2.22	
115 n-Butylbenzene	91	10.220	10.221	-0.001	98	65241	2.00	2.09	
116 1,2-Dichlorobenzene	146	10.252	10.252	0.000	95	35697	2.00	2.11	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.033	0.000	78	3868	2.00	1.95	
119 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	94	18390	2.00	1.99	
120 Hexachlorobutadiene	225	12.004	12.004	0.000	94	7277	2.00	2.17	
121 Naphthalene	128	12.130	12.131	-0.001	97	56079	2.00	1.88	
122 1,2,3-Trichlorobenzene	180	12.352	12.352	0.000	94	16904	2.00	1.99	
S 139 1,2-Dichloroethene, Total (URS)	96				0		4.00	4.21	
S 142 Xylenes, Total	106				0		4.00	4.27	
S 140 Trihalomethanes, Total	1				0		8.00	8.14	
S 143 Xylenes, Total (URS)	1				0		4.00	4.27	
S 146 Total BTEX	1				0			10.7	
S 145 1,3-Dichloropropene, Total	1				0		4.00	3.85	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.21	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Gas A_00058	Amount Added:	0.40	Units: uL	
MV-MegaMainA_00034	Amount Added:	1.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:15:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D

Injection Date: 01-Jun-2020 17:09:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

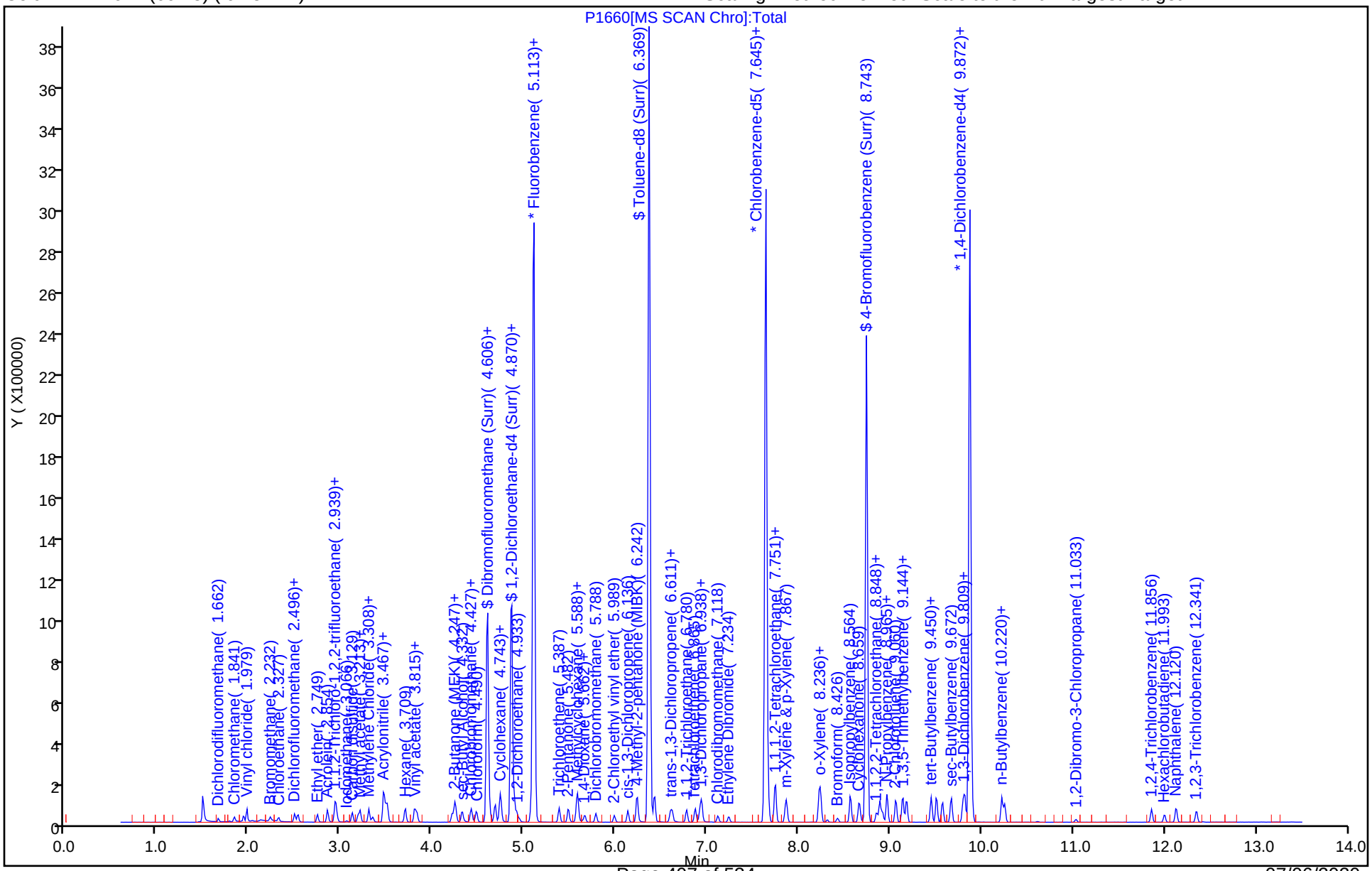
Lims ID: STD020 Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

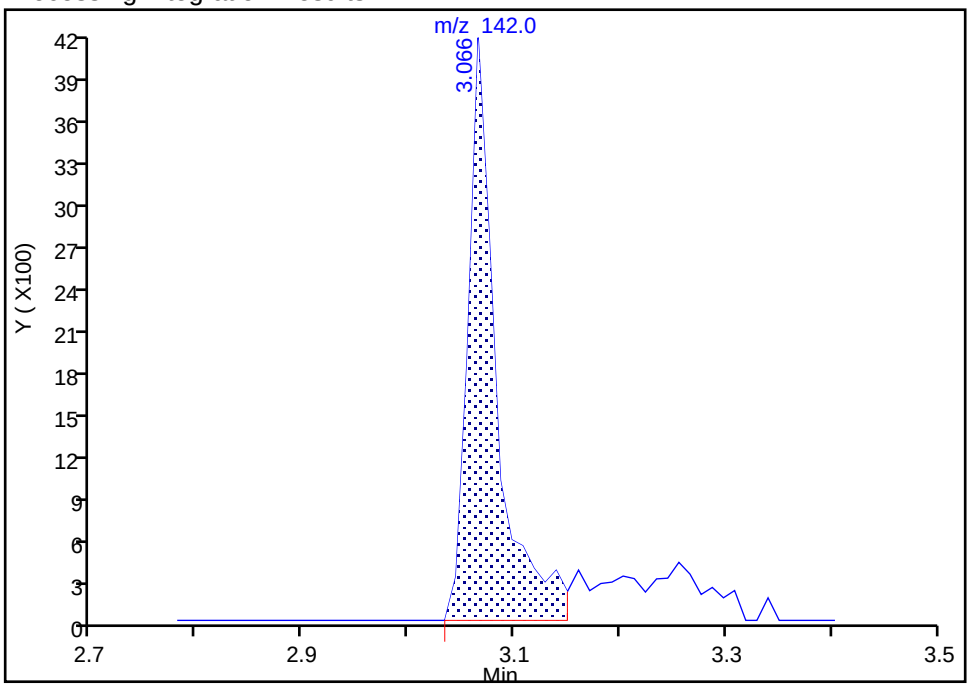
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D
Injection Date: 01-Jun-2020 17:09:30 Instrument ID: VMS_P
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

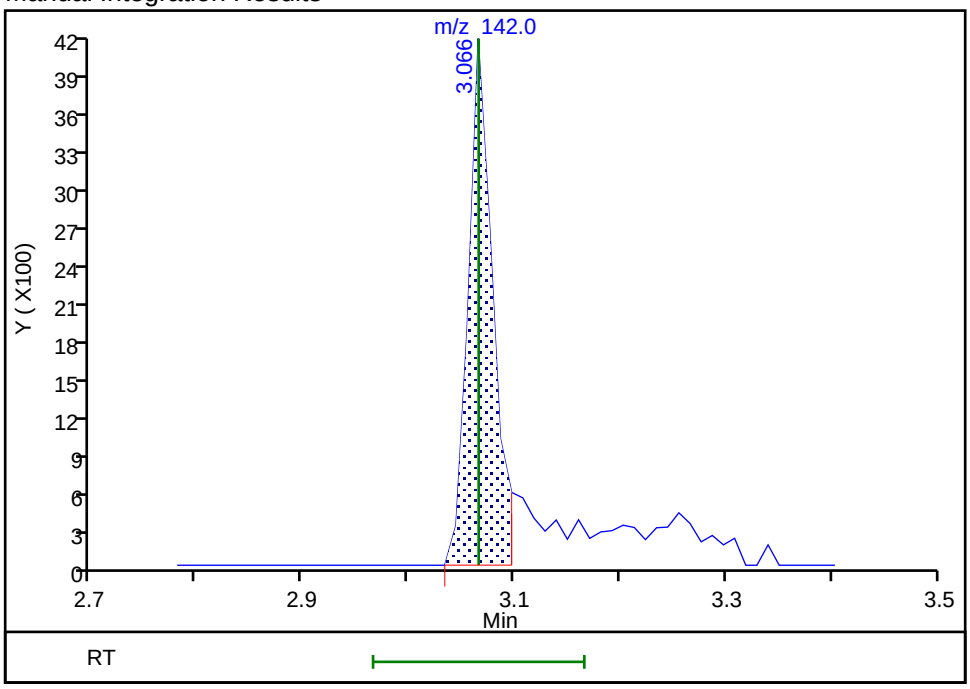
Processing Integration Results

RT: 3.07
Area: 7827
Amount: 3.551540
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 6724
Amount: 1.596067
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 09:06:25
Audit Action: Manually Integrated Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1661.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jun-2020 17:30:30 ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:06 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:00:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.113	-0.003	98	2412254	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	87	544917	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.873	-0.003	97	777688	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.607	-0.003	92	579846	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.871	-0.003	98	691950	50.0	50.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2407178	50.0	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.743	-0.003	82	867537	50.0	50.5	
10 Dichlorodifluoromethane	85	1.670	1.662	0.008	99	38285	5.00	5.66	
11 Chloromethane	50	1.839	1.842	-0.003	99	51981	5.00	5.38	
12 Vinyl chloride	62	1.944	1.937	0.007	98	57213	5.00	5.42	
14 Bromomethane	94	2.229	2.232	-0.003	89	22950	5.00	4.15	
15 Chloroethane	64	2.324	2.327	-0.003	100	35486	5.00	5.28	
16 Dichlorofluoromethane	67	2.493	2.496	-0.003	97	81685	5.00	5.20	
17 Trichlorofluoromethane	101	2.535	2.538	-0.003	98	70991	5.00	5.45	
19 Ethyl ether	59	2.747	2.749	-0.003	90	39315	5.00	4.79	
21 Acrolein	56	2.852	2.855	-0.003	99	100409	49.4	49.5	
22 1,1-Dichloroethene	96	2.947	2.939	0.008	98	35001	5.00	4.48	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.947	2.939	0.008	71	26144	5.00	4.45	
24 Acetone	43	2.958	2.960	-0.002	100	70934	20.0	21.1	
26 Iodomethane	142	3.063	3.066	-0.003	99	15949	5.00	2.79	
27 Carbon disulfide	76	3.126	3.129	-0.003	99	113233	5.00	4.43	
29 Methyl acetate	43	3.190	3.193	-0.003	98	81580	10.0	9.95	
30 3-Chloro-1-propene	41	3.211	3.214	-0.003	92	59709	5.00	4.46	
31 Methylene Chloride	84	3.306	3.309	-0.003	90	47489	5.00	4.79	
32 2-Methyl-2-propanol	59	3.348	3.351	-0.003	97	58678	50.0	55.5	
33 Acrylonitrile	53	3.475	3.467	0.008	98	221256	50.0	49.8	
34 Methyl tert-butyl ether	73	3.496	3.499	-0.003	96	124365	5.00	4.72	
35 trans-1,2-Dichloroethene	96	3.517	3.509	0.008	98	41058	5.00	4.45	
36 Hexane	57	3.707	3.710	-0.003	90	56864	5.00	4.47	
38 Vinyl acetate	43	3.812	3.805	0.007	97	190703	10.0	9.60	
39 1,1-Dichloroethane	63	3.833	3.836	-0.003	96	78561	5.00	4.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.216	-0.003	99	113733	20.0	21.2	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	83	45860	5.00	4.47	
48 2,2-Dichloropropane	77	4.256	4.258	-0.002	93	50592	5.00	4.43	
50 sec-Butyl Alcohol	45	4.329	4.322	0.007	98	138755	150.0	160.5	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	36254	10.0	10.2	
53 Chlorobromomethane	128	4.424	4.427	-0.003	98	20887	5.00	4.55	
54 Chloroform	83	4.488	4.480	0.008	93	74923	5.00	4.63	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	99	58098	5.00	4.53	
56 Cyclohexane	56	4.688	4.691	-0.003	89	72517	5.00	4.44	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	96	60834	5.00	4.53	
59 Carbon tetrachloride	117	4.752	4.754	-0.002	77	45792	5.00	4.36	
58 Isobutyl alcohol	41	4.752	4.754	-0.002	94	51802	125.0	138.8	
60 Benzene	78	4.899	4.902	-0.003	94	184836	5.00	4.66	
61 1,2-Dichloroethane	62	4.920	4.923	-0.003	97	64913	5.00	4.90	
66 n-Heptane	43	5.079	5.082	-0.003	88	51836	5.00	4.37	
67 Trichloroethene	95	5.385	5.388	-0.003	97	42697	5.00	4.38	
68 2-Pentanone	43	5.490	5.483	0.007	99	169279	20.0	21.2	
69 Methylcyclohexane	55	5.585	5.578	0.007	92	55290	5.00	4.47	
70 1,2-Dichloropropane	63	5.596	5.599	-0.003	97	47629	5.00	4.64	
72 1,4-Dioxane	88	5.627	5.630	-0.003	92	15477	100.0	108.4	
73 Dibromomethane	93	5.670	5.662	0.008	93	28351	5.00	4.82	
74 Dichlorobromomethane	83	5.786	5.789	-0.003	99	54885	5.00	4.61	
76 2-Chloroethyl vinyl ether	63	5.986	5.989	-0.003	92	34848	5.00	4.91	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	96	65109	5.00	4.46	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.242	-0.003	96	216321	20.0	21.1	
79 Toluene	91	6.429	6.432	-0.003	98	191514	5.00	4.60	
80 trans-1,3-Dichloropropene	75	6.598	6.601	-0.003	95	55704	5.00	4.27	
81 Ethyl methacrylate	69	6.619	6.622	-0.003	89	63746	5.00	4.76	
82 1,1,2-Trichloroethane	97	6.778	6.781	-0.003	90	41158	5.00	4.90	
83 Tetrachloroethene	164	6.873	6.876	-0.003	94	29875	5.00	4.50	
84 1,3-Dichloropropane	76	6.925	6.928	-0.003	97	76780	5.00	4.81	
85 2-Hexanone	43	6.936	6.939	-0.003	95	159597	20.0	21.8	
86 Chlorodibromomethane	129	7.126	7.118	0.008	89	37770	5.00	4.60	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	40577	5.00	4.58	
89 1-Chlorohexane	91	7.632	7.635	-0.003	95	56622	5.00	4.39	
90 Chlorobenzene	112	7.675	7.678	-0.003	93	115938	5.00	4.50	
92 Ethylbenzene	106	7.749	7.751	-0.002	99	63884	5.00	4.51	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.751	-0.002	43	36611	5.00	4.61	
93 m-Xylene & p-Xylene	106	7.865	7.868	-0.003	100	76090	5.00	4.47	
94 o-Xylene	106	8.223	8.226	-0.003	98	75177	5.00	4.60	
95 Styrene	104	8.245	8.247	-0.003	94	124441	5.00	4.52	
96 Bromoform	173	8.424	8.427	-0.003	93	22527	5.00	4.65	
97 Isopropylbenzene	105	8.572	8.575	-0.003	96	188253	5.00	4.62	
99 Cyclohexanone	55	8.667	8.670	-0.003	92	127996	200.0	229.4	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.859	-0.002	94	62677	5.00	5.25	
101 Bromobenzene	156	8.888	8.891	-0.003	96	45419	5.00	4.73	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.891	-0.003	76	16098	5.00	5.08	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	18290	5.00	5.05	
104 N-Propylbenzene	120	8.973	8.965	0.008	99	48994	5.00	4.34	
105 2-Chlorotoluene	126	9.068	9.071	-0.003	96	44412	5.00	4.65	
106 1,3,5-Trimethylbenzene	105	9.142	9.144	-0.002	93	154872	5.00	4.63	
107 4-Chlorotoluene	126	9.184	9.187	-0.003	98	45363	5.00	4.53	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.450	-0.002	93	125850	5.00	4.50	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	155733	5.00	4.61	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	94	37379	5.00	4.57	
111 1,3-Dichlorobenzene	146	9.796	9.799	-0.003	96	82789	5.00	4.76	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	97	155069	5.00	4.54	
113 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	84803	5.00	4.71	
115 n-Butylbenzene	91	10.218	10.221	-0.003	98	142782	5.00	4.48	
116 1,2-Dichlorobenzene	146	10.250	10.252	-0.002	97	82278	5.00	4.77	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.033	-0.003	88	10531	5.00	5.20	
119 1,2,4-Trichlorobenzene	180	11.854	11.856	-0.002	92	43433	5.00	4.62	
120 Hexachlorobutadiene	225	12.001	12.004	-0.003	96	15077	5.00	4.41	
121 Naphthalene	128	12.128	12.131	-0.003	97	150170	5.00	4.95	
122 1,2,3-Trichlorobenzene	180	12.350	12.352	-0.002	94	41611	5.00	4.82	
S 139 1,2-Dichloroethene, Total (URS)	96				0		10.0	8.92	
S 142 Xylenes, Total	106				0		10.0	9.07	
S 140 Trihalomethanes, Total	1				0		20.0	18.5	
S 143 Xylenes, Total (URS)	1				0		10.0	9.07	
S 146 Total BTEX	1				0			22.8	
S 145 1,3-Dichloropropene, Total	1				0		10.0	8.73	
S 144 1,2-Dichloroethene, Total	1				0		10.0	8.92	

Reagents:

MV-Gas A_00058	Amount Added:	1.00	Units: uL		
MV-MegaMainA_00034	Amount Added:	2.50	Units: uL		
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent	

Report Date: 02-Jun-2020 11:16:07 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1661.D

Injection Date: 01-Jun-2020 17:30:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

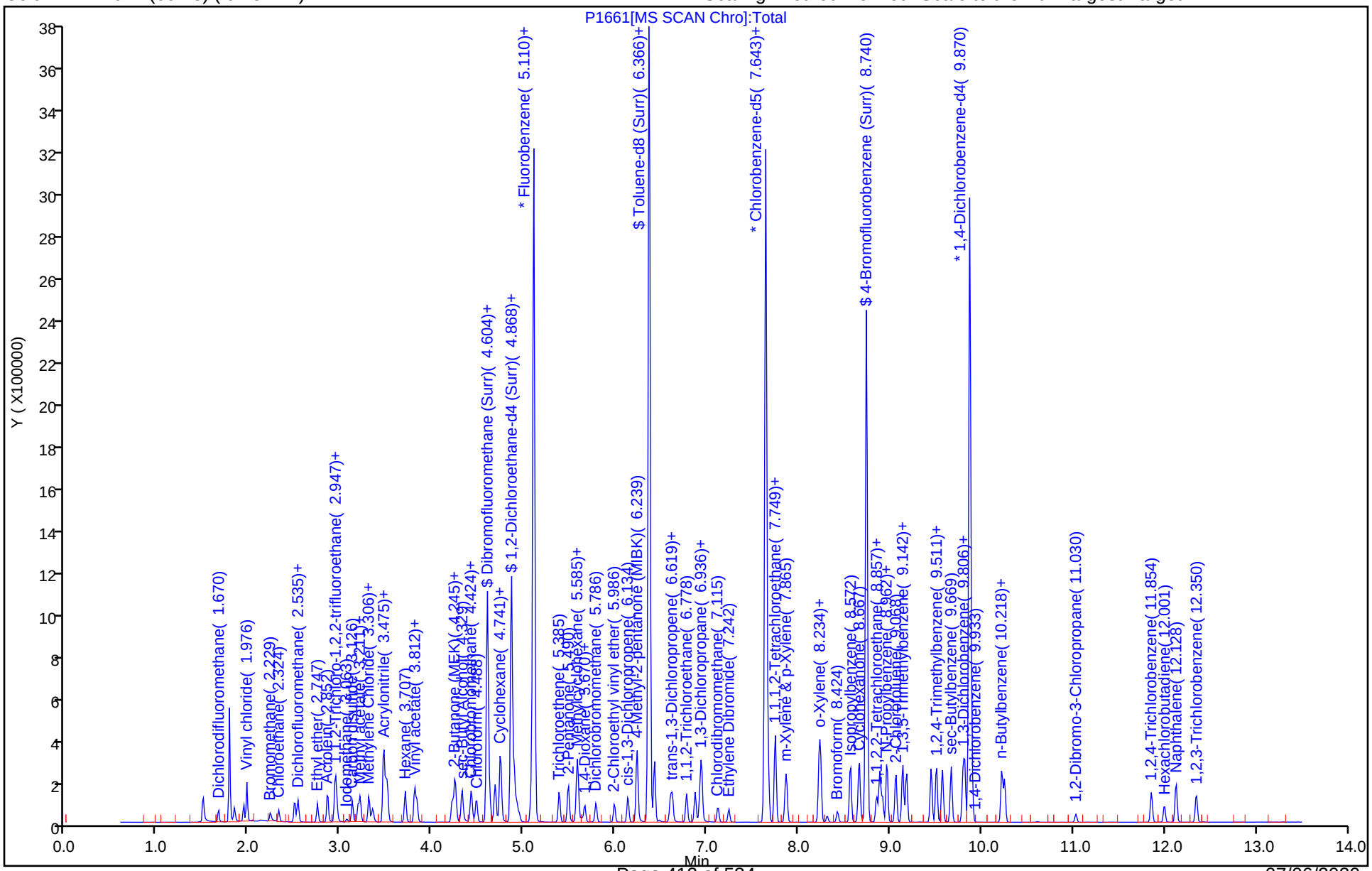
Lims ID: STD050 Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1662.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jun-2020 17:51:30 ALS Bottle#: 5 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:17 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:54:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.110	0.000	98	2414558	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	88	541707	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	784820	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.603	0.000	92	579503	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.867	0.000	98	696272	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2397674	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.740	0.000	83	876843	50.0	50.6	
10 Dichlorodifluoromethane	85	1.670	1.670	0.000	99	76509	10.0	11.3	
11 Chloromethane	50	1.838	1.838	0.000	99	97832	10.0	10.4	
12 Vinyl chloride	62	1.944	1.944	0.000	98	110707	10.0	10.5	
14 Bromomethane	94	2.229	2.229	0.000	90	47958	10.0	10.6	
15 Chloroethane	64	2.324	2.324	0.000	100	69871	10.0	10.4	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	157676	10.0	10.0	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	97	134330	10.0	10.3	
19 Ethyl ether	59	2.746	2.746	0.000	92	81198	10.0	9.88	
21 Acrolein	56	2.851	2.851	0.000	100	198934	98.8	97.9	
22 1,1-Dichloroethene	96	2.946	2.946	0.000	97	78660	10.0	10.1	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.946	2.946	0.000	71	58580	10.0	9.96	
24 Acetone	43	2.957	2.957	0.000	100	131651	40.0	40.2	
26 Iodomethane	142	3.062	3.062	0.000	99	41908	10.0	6.20	
27 Carbon disulfide	76	3.126	3.126	0.000	99	249116	10.0	10.1	
29 Methyl acetate	43	3.189	3.189	0.000	98	163271	20.0	19.9	
30 3-Chloro-1-propene	41	3.210	3.210	0.000	92	135183	10.0	10.1	
31 Methylene Chloride	84	3.305	3.305	0.000	92	95819	10.0	10.2	
32 2-Methyl-2-propanol	59	3.347	3.347	0.000	97	106253	100.0	100.4	
33 Acrylonitrile	53	3.474	3.474	0.000	98	437925	100.0	98.5	
34 Methyl tert-butyl ether	73	3.495	3.495	0.000	95	265416	10.0	10.1	
35 trans-1,2-Dichloroethene	96	3.516	3.516	0.000	98	88732	10.0	9.61	
36 Hexane	57	3.706	3.706	0.000	91	130470	10.0	10.3	
38 Vinyl acetate	43	3.812	3.812	0.000	97	394091	20.0	19.8	
39 1,1-Dichloroethane	63	3.833	3.833	0.000	96	171592	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
44 2-Butanone (MEK)	43	4.213	4.213	0.000	100	221028	40.0	41.1	
47 cis-1,2-Dichloroethene	96	4.244	4.244	0.000	83	99347	10.0	9.68	
48 2,2-Dichloropropane	77	4.255	4.255	0.000	91	112216	10.0	9.82	
50 sec-Butyl Alcohol	45	4.329	4.329	0.000	98	265274	300.0	306.5	
52 Tetrahydrofuran	42	4.434	4.434	0.000	88	72173	20.0	20.2	
53 Chlorobromomethane	128	4.424	4.424	0.000	98	45134	10.0	9.81	
54 Chloroform	83	4.487	4.487	0.000	93	160425	10.0	9.89	
55 1,1,1-Trichloroethane	97	4.624	4.624	0.000	98	126621	10.0	9.86	
56 Cyclohexane	56	4.688	4.688	0.000	89	167527	10.0	10.2	
57 1,1-Dichloropropene	75	4.740	4.740	0.000	96	133932	10.0	9.96	
59 Carbon tetrachloride	117	4.751	4.751	0.000	84	105812	10.0	10.1	
58 Isobutyl alcohol	41	4.751	4.751	0.000	94	96963	250.0	259.6	
60 Benzene	78	4.899	4.899	0.000	93	392915	10.0	9.89	
61 1,2-Dichloroethane	62	4.920	4.920	0.000	97	130615	10.0	10.2	
66 n-Heptane	43	5.078	5.078	0.000	92	115523	10.0	9.74	
67 Trichloroethene	95	5.384	5.384	0.000	97	94360	10.0	9.67	
68 2-Pentanone	43	5.490	5.490	0.000	99	330037	40.0	41.3	
69 Methylcyclohexane	55	5.585	5.585	0.000	92	124604	10.0	10.1	
70 1,2-Dichloropropane	63	5.595	5.595	0.000	96	102772	10.0	10.0	
72 1,4-Dioxane	88	5.637	5.637	0.000	93	29303	200.0	205.1	
73 Dibromomethane	93	5.669	5.669	0.000	94	58752	10.0	9.98	
74 Dichlorobromomethane	83	5.785	5.785	0.000	100	116062	10.0	9.74	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	92	69995	10.0	9.85	
77 cis-1,3-Dichloropropene	75	6.133	6.133	0.000	96	143800	10.0	9.90	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.239	0.000	96	432244	40.0	42.1	
79 Toluene	91	6.429	6.429	0.000	97	412287	10.0	9.89	
80 trans-1,3-Dichloropropene	75	6.598	6.598	0.000	96	121709	10.0	9.33	
81 Ethyl methacrylate	69	6.619	6.619	0.000	89	136938	10.0	10.3	
82 1,1,2-Trichloroethane	97	6.777	6.777	0.000	91	83459	10.0	9.93	
83 Tetrachloroethene	164	6.872	6.872	0.000	94	64911	10.0	9.83	
84 1,3-Dichloropropane	76	6.925	6.925	0.000	97	159930	10.0	10.1	
85 2-Hexanone	43	6.946	6.946	0.000	95	307466	40.0	42.2	
86 Chlorodibromomethane	129	7.125	7.125	0.000	91	80520	10.0	9.87	
88 Ethylene Dibromide	107	7.241	7.241	0.000	97	88076	10.0	10.0	
89 1-Chlorohexane	91	7.632	7.632	0.000	98	124764	10.0	10.2	
90 Chlorobenzene	112	7.674	7.674	0.000	95	250839	10.0	9.79	
92 Ethylbenzene	106	7.748	7.748	0.000	99	139031	10.0	9.88	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.748	0.000	94	76578	10.0	9.70	
93 m-Xylene & p-Xylene	106	7.864	7.864	0.000	100	167252	10.0	9.88	
94 o-Xylene	106	8.223	8.223	0.000	97	163211	10.0	10.0	
95 Styrene	104	8.244	8.244	0.000	94	274427	10.0	10.0	
96 Bromoform	173	8.423	8.423	0.000	94	47885	10.0	9.93	
97 Isopropylbenzene	105	8.571	8.571	0.000	96	412530	10.0	10.0	
99 Cyclohexanone	55	8.666	8.666	0.000	91	242913	400.0	437.9	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.856	0.000	94	121592	10.0	10.1	
101 Bromobenzene	156	8.888	8.888	0.000	96	93464	10.0	9.64	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	83	32840	10.0	10.3	
103 1,2,3-Trichloropropane	110	8.919	8.919	0.000	83	35882	10.0	9.82	
104 N-Propylbenzene	120	8.972	8.972	0.000	99	112695	10.0	9.90	
105 2-Chlorotoluene	126	9.067	9.067	0.000	96	94413	10.0	9.80	
106 1,3,5-Trimethylbenzene	105	9.141	9.141	0.000	94	337938	10.0	10.0	
107 4-Chlorotoluene	126	9.183	9.183	0.000	97	100456	10.0	9.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.447	9.447	0.000	93	282847	10.0	10.0	
109 1,2,4-Trimethylbenzene	105	9.510	9.510	0.000	97	341971	10.0	10.0	
110 sec-Butylbenzene	134	9.669	9.669	0.000	95	80672	10.0	9.78	
111 1,3-Dichlorobenzene	146	9.795	9.795	0.000	97	174866	10.0	9.97	
112 4-Isopropyltoluene	119	9.816	9.816	0.000	97	345360	10.0	10.0	
113 1,4-Dichlorobenzene	146	9.901	9.901	0.000	93	176794	10.0	9.73	
115 n-Butylbenzene	91	10.217	10.217	0.000	98	318151	10.0	9.89	
116 1,2-Dichlorobenzene	146	10.249	10.249	0.000	95	169871	10.0	9.75	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.030	0.000	81	19998	10.0	9.79	
119 1,2,4-Trichlorobenzene	180	11.853	11.853	0.000	94	91087	10.0	9.61	
120 Hexachlorobutadiene	225	12.001	12.001	0.000	97	32937	10.0	9.55	
121 Naphthalene	128	12.127	12.127	0.000	97	300637	10.0	9.81	
122 1,2,3-Trichlorobenzene	180	12.349	12.349	0.000	96	82932	10.0	9.51	
S 139 1,2-Dichloroethene, Total (URS)	96				0		20.0	19.3	
S 142 Xylenes, Total	106				0		20.0	19.9	
S 140 Trihalomethanes, Total	1				0		40.0	39.4	
S 143 Xylenes, Total (URS)	1				0		20.0	19.9	
S 146 Total BTEX	1				0			49.6	
S 145 1,3-Dichloropropene, Total	1				0		20.0	19.2	
S 144 1,2-Dichloroethene, Total	1				0		20.0	19.3	

Reagents:

MV-Gas A_00058	Amount Added:	2.00	Units: uL		
MV-MegaMainA_00034	Amount Added:	5.00	Units: uL		
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent	

Report Date: 02-Jun-2020 11:16:18 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1662.D

Injection Date: 01-Jun-2020 17:51:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

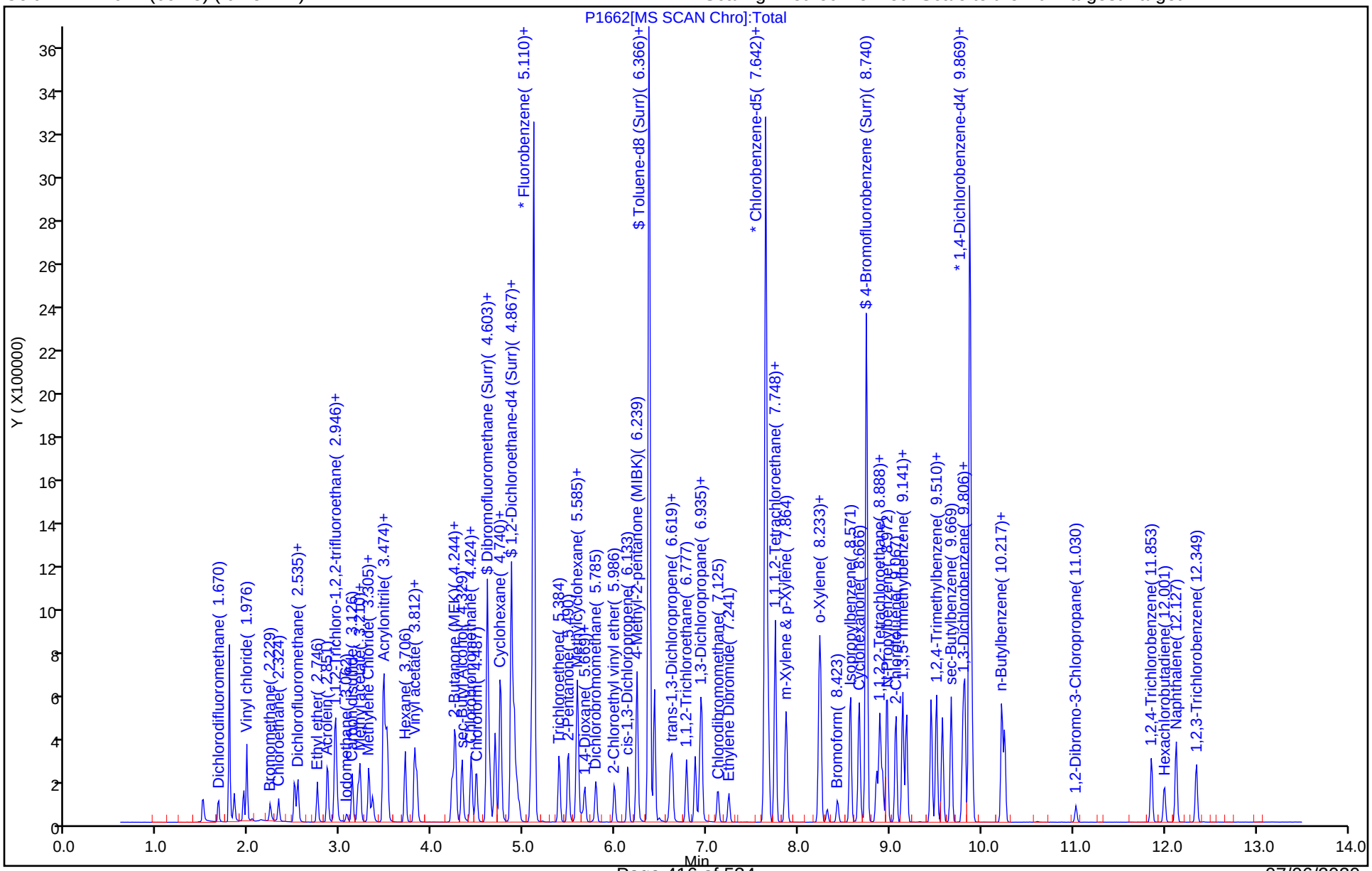
Lims ID: STD10 Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 01-Jun-2020 20:33:30 ALS Bottle#: 12 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:29 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 09:23:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.113	0.000	99	2594633	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	87	589468	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	96	851368	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	622098	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.871	4.871	0.000	97	709192	50.0	48.2	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2570054	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.743	0.000	84	937409	50.0	49.9	
10 Dichlorodifluoromethane	85	1.662	1.662	0.000	99	389403	50.0	53.5	
11 Chloromethane	50	1.842	1.842	0.000	99	518425	50.0	52.5	
12 Vinyl chloride	62	1.937	1.937	0.000	98	566674	50.0	49.9	
14 Bromomethane	94	2.232	2.232	0.000	90	267351	50.0	62.0	
15 Chloroethane	64	2.327	2.327	0.000	99	367238	50.0	50.8	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	851263	50.0	50.4	
17 Trichlorofluoromethane	101	2.538	2.538	0.000	98	688909	50.0	49.1	
19 Ethyl ether	59	2.749	2.749	0.000	90	433032	50.0	49.0	
21 Acrolein	56	2.855	2.855	0.000	100	992240	493.8	454.6	
22 1,1-Dichloroethene	96	2.939	2.939	0.000	98	432834	50.0	51.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.939	0.000	72	323522	50.0	51.2	
24 Acetone	43	2.960	2.960	0.000	100	599119	200.0	174.0	
26 Iodomethane	142	3.066	3.066	0.000	99	388838	50.0	48.2	
27 Carbon disulfide	76	3.129	3.129	0.000	99	1445817	50.0	55.5	
29 Methyl acetate	43	3.193	3.193	0.000	98	774814	100.0	87.9	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	94	767084	50.0	53.3	
31 Methylene Chloride	84	3.309	3.309	0.000	92	508123	50.0	52.4	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	98	476237	500.0	418.8	
33 Acrylonitrile	53	3.467	3.467	0.000	99	2147902	500.0	449.8	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	95	1410931	50.0	49.7	
35 trans-1,2-Dichloroethene	96	3.509	3.509	0.000	99	496599	50.0	50.1	
36 Hexane	57	3.710	3.710	0.000	91	719384	50.0	52.3	
38 Vinyl acetate	43	3.805	3.805	0.000	97	2295944	100.0	107.4	
39 1,1-Dichloroethane	63	3.836	3.836	0.000	96	913640	50.0	50.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.216	4.216	0.000	99	992035	200.0	171.5	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	83	546752	50.0	49.6	
48 2,2-Dichloropropane	77	4.258	4.258	0.000	88	674576	50.0	54.9	
50 sec-Butyl Alcohol	45	4.322	4.322	0.000	99	1213494	1500.0	1304.7	
53 Chlorobromomethane	128	4.427	4.427	0.000	98	246645	50.0	49.9	
52 Tetrahydrofuran	42	4.427	4.427	0.000	88	330688	100.0	86.2	
54 Chloroform	83	4.480	4.480	0.000	92	857391	50.0	49.2	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	99	699182	50.0	50.7	
56 Cyclohexane	56	4.691	4.691	0.000	89	900566	50.0	51.3	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	97	722099	50.0	50.0	
59 Carbon tetrachloride	117	4.754	4.754	0.000	93	593951	50.0	52.6	
58 Isobutyl alcohol	41	4.754	4.754	0.000	93	435234	1250.0	1084.5	
60 Benzene	78	4.902	4.902	0.000	95	2121944	50.0	49.7	
61 1,2-Dichloroethane	62	4.923	4.923	0.000	98	666788	50.0	49.8	
66 n-Heptane	43	5.082	5.082	0.000	91	652907	50.0	51.2	
67 Trichloroethene	95	5.388	5.388	0.000	98	527518	50.0	50.3	
68 2-Pentanone	43	5.483	5.483	0.000	99	1546919	200.0	180.0	
69 Methylcyclohexane	55	5.578	5.578	0.000	93	672553	50.0	50.5	
70 1,2-Dichloropropane	63	5.599	5.599	0.000	97	553580	50.0	50.2	
72 1,4-Dioxane	88	5.630	5.630	0.000	91	134765	1000.0	877.8	
73 Dibromomethane	93	5.662	5.662	0.000	93	310055	50.0	49.0	
74 Dichlorobromomethane	83	5.789	5.789	0.000	99	647111	50.0	50.6	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	375914	50.0	49.3	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	96	830989	50.0	52.6	
78 4-Methyl-2-pentanone (MIBK)	43	6.242	6.242	0.000	95	2019078	200.0	183.0	
79 Toluene	91	6.432	6.432	0.000	98	2209256	50.0	49.3	
80 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	97	739208	50.0	52.7	
81 Ethyl methacrylate	69	6.622	6.622	0.000	88	730677	50.0	50.4	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	91	446203	50.0	49.4	
83 Tetrachloroethene	164	6.876	6.876	0.000	94	362210	50.0	50.4	
84 1,3-Dichloropropane	76	6.928	6.928	0.000	97	828087	50.0	48.0	
85 2-Hexanone	43	6.939	6.939	0.000	95	1421906	200.0	179.4	
86 Chlorodibromomethane	129	7.118	7.118	0.000	90	457646	50.0	51.6	
88 Ethylene Dibromide	107	7.245	7.245	0.000	98	459893	50.0	48.0	
89 1-Chlorohexane	91	7.635	7.635	0.000	97	688923	50.0	53.1	
90 Chlorobenzene	112	7.678	7.678	0.000	93	1351697	50.0	48.5	
92 Ethylbenzene	106	7.751	7.751	0.000	99	765475	50.0	50.0	
91 1,1,1,2-Tetrachloroethane	131	7.751	7.751	0.000	94	443921	50.0	51.7	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	926436	50.0	50.3	
94 o-Xylene	106	8.226	8.226	0.000	96	889019	50.0	50.3	
95 Styrene	104	8.247	8.247	0.000	94	1535593	50.0	51.5	
96 Bromoform	173	8.427	8.427	0.000	95	272832	50.0	52.0	
97 Isopropylbenzene	105	8.575	8.575	0.000	96	2246623	50.0	50.4	
99 Cyclohexanone	55	8.670	8.670	0.000	91	1051966	2000.0	1742.8	
100 1,1,2,2-Tetrachloroethane	83	8.859	8.859	0.000	93	606034	50.0	46.4	
101 Bromobenzene	156	8.891	8.891	0.000	96	514975	50.0	49.0	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	88	169990	50.0	49.0	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	82	176525	50.0	44.6	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	629799	50.0	51.0	
105 2-Chlorotoluene	126	9.071	9.071	0.000	96	525501	50.0	50.3	
106 1,3,5-Trimethylbenzene	105	9.144	9.144	0.000	94	1851899	50.0	50.6	
107 4-Chlorotoluene	126	9.187	9.187	0.000	97	547434	50.0	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.450	9.450	0.000	93	1537848	50.0	50.3	
109 1,2,4-Trimethylbenzene	105	9.514	9.514	0.000	97	1874413	50.0	50.7	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	458007	50.0	51.2	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	98	957029	50.0	50.3	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	1944009	50.0	52.0	
113 1,4-Dichlorobenzene	146	9.904	9.904	0.000	95	970134	50.0	49.2	
115 n-Butylbenzene	91	10.221	10.221	0.000	98	1790989	50.0	51.3	
116 1,2-Dichlorobenzene	146	10.252	10.252	0.000	96	914029	50.0	48.4	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.033	0.000	83	102294	50.0	46.2	
119 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	94	527062	50.0	51.3	
120 Hexachlorobutadiene	225	12.004	12.004	0.000	98	198550	50.0	53.1	
121 Naphthalene	128	12.131	12.131	0.000	97	1593185	50.0	47.9	
122 1,2,3-Trichlorobenzene	180	12.352	12.352	0.000	95	473636	50.0	50.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	99.6	
S 142 Xylenes, Total	106				0		100.0	100.6	
S 140 Trihalomethanes, Total	1				0		200.0	203.3	
S 143 Xylenes, Total (URS)	1				0		100.0	100.6	
S 145 1,3-Dichloropropene, Total	1				0		100.0	105.3	
S 144 1,2-Dichloroethene, Total	1				0		100.0	99.6	

Reagents:

MV-Gas A_00058	Amount Added:	10.00	Units: uL	
MV-MegaMainA_00034	Amount Added:	25.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

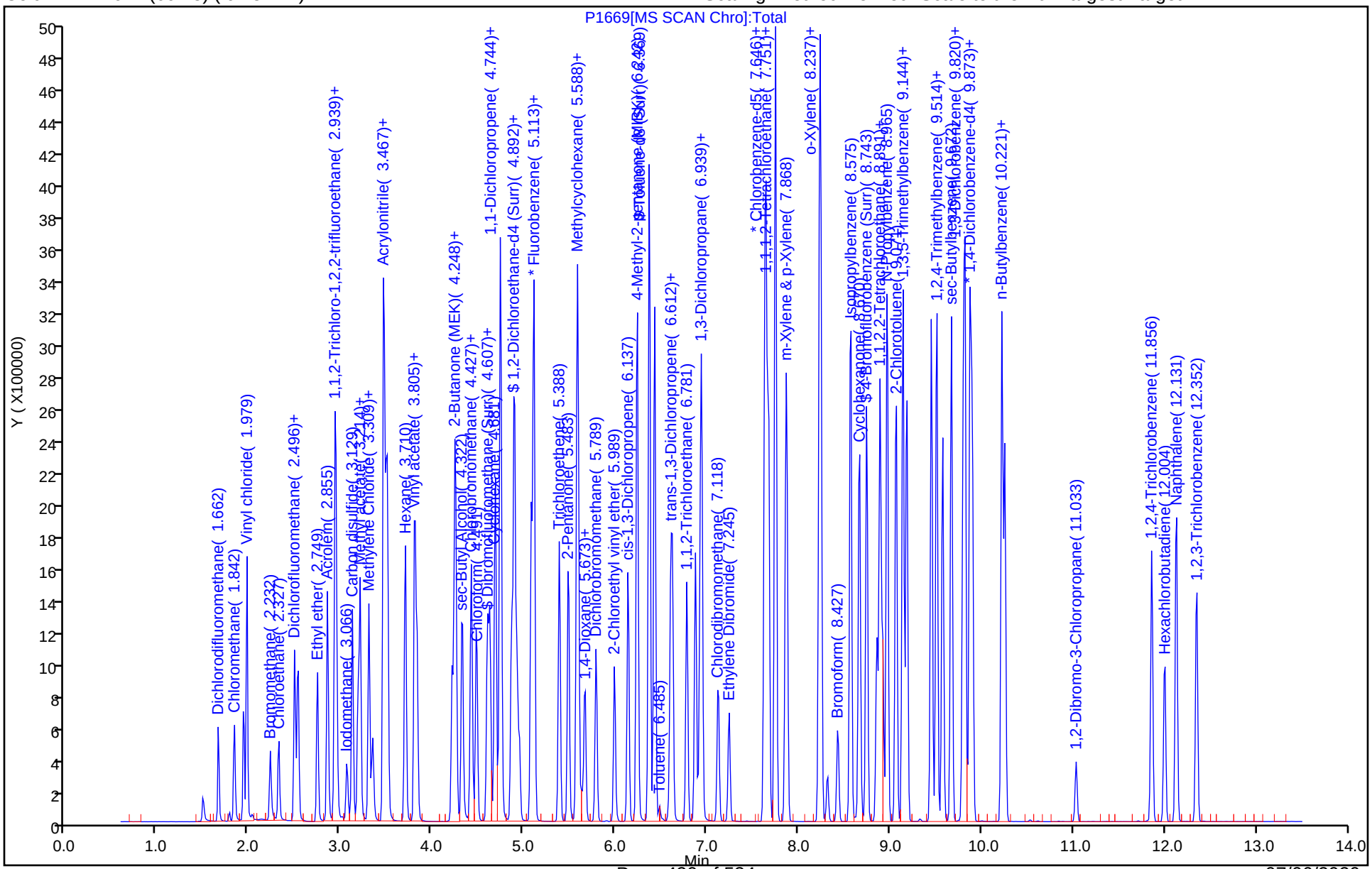
Report Date: 02-Jun-2020 11:16:30 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Injection Date:	01-Jun-2020 20:33:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICIS			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1664.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jun-2020 18:33:30 ALS Bottle#: 7 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:41 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:41:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.113	-0.002	98	2518102	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	86	570208	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.873	-0.003	96	835018	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.607	-0.003	95	607631	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.871	-0.003	97	706747	50.0	49.5	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2503188	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.743	-0.002	83	914750	50.0	49.6	
10 Dichlorodifluoromethane	85	1.660	1.662	-0.002	99	565032	75.0	80.0	
11 Chloromethane	50	1.839	1.842	-0.003	99	753095	75.0	78.7	
12 Vinyl chloride	62	1.945	1.937	0.008	98	831473	75.0	75.4	
14 Bromomethane	94	2.219	2.232	-0.013	90	288045	75.0	69.1	
15 Chloroethane	64	2.314	2.327	-0.013	99	519320	75.0	74.0	
16 Dichlorofluoromethane	67	2.494	2.496	-0.002	97	1256526	75.0	76.7	
17 Trichlorofluoromethane	101	2.525	2.538	-0.013	98	1029796	75.0	75.7	
19 Ethyl ether	59	2.747	2.749	-0.002	91	636933	75.0	74.3	
21 Acrolein	56	2.852	2.855	-0.003	100	1531495	740.6	723.0	
22 1,1-Dichloroethene	96	2.937	2.939	-0.002	97	614318	75.0	75.3	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.939	-0.002	72	455666	75.0	74.3	
24 Acetone	43	2.958	2.960	-0.002	99	986514	300.0	296.2	
26 Iodomethane	142	3.063	3.066	-0.003	99	649402	75.0	82.4	
27 Carbon disulfide	76	3.127	3.129	-0.002	99	1991209	75.0	78.8	
29 Methyl acetate	43	3.190	3.193	-0.003	98	1272496	150.0	148.7	
30 3-Chloro-1-propene	41	3.211	3.214	-0.003	93	1048018	75.0	75.0	
31 Methylene Chloride	84	3.306	3.309	-0.003	91	726350	75.0	77.4	
32 2-Methyl-2-propanol	59	3.348	3.351	-0.003	98	844878	750.0	765.5	
33 Acrylonitrile	53	3.464	3.467	-0.003	98	3422488	750.0	738.5	
34 Methyl tert-butyl ether	73	3.496	3.499	-0.003	95	2097701	75.0	76.2	
35 trans-1,2-Dichloroethene	96	3.507	3.509	-0.002	98	699589	75.0	72.7	
36 Hexane	57	3.707	3.710	-0.003	90	991684	75.0	74.6	
38 Vinyl acetate	43	3.802	3.805	-0.003	97	3210150	150.0	154.8	
39 1,1-Dichloroethane	63	3.834	3.836	-0.002	96	1324489	75.0	75.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.214	4.216	-0.002	99	1657714	300.0	295.3	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	83	785590	75.0	73.4	
48 2,2-Dichloropropane	77	4.256	4.258	-0.002	90	916619	75.0	76.9	
50 sec-Butyl Alcohol	45	4.330	4.322	0.008	99	2164234	2250.0	2397.6	
53 Chlorobromomethane	128	4.425	4.427	-0.002	98	349155	75.0	72.8	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	554326	150.0	149.0	
54 Chloroform	83	4.477	4.480	-0.003	92	1234280	75.0	73.0	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	98	1007366	75.0	75.2	
56 Cyclohexane	56	4.689	4.691	-0.002	89	1295262	75.0	76.0	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	98	1052218	75.0	75.0	
59 Carbon tetrachloride	117	4.752	4.754	-0.002	95	845679	75.0	77.2	
58 Isobutyl alcohol	41	4.752	4.754	-0.002	95	768829	1875.0	1973.9	
60 Benzene	78	4.900	4.902	-0.002	95	3064336	75.0	73.9	
61 1,2-Dichloroethane	62	4.921	4.923	-0.002	98	978504	75.0	75.5	
66 n-Heptane	43	5.079	5.082	-0.003	92	896848	75.0	72.5	
67 Trichloroethene	95	5.385	5.388	-0.003	98	740389	75.0	72.8	
68 2-Pentanone	43	5.480	5.483	-0.003	99	2572976	300.0	308.5	
69 Methylcyclohexane	55	5.586	5.578	0.008	92	963441	75.0	74.6	
70 1,2-Dichloropropane	63	5.596	5.599	-0.003	97	811193	75.0	75.8	
72 1,4-Dioxane	88	5.638	5.630	0.008	92	224792	1500.0	1508.6	
73 Dibromomethane	93	5.670	5.662	0.008	93	460404	75.0	75.0	
74 Dichlorobromomethane	83	5.786	5.789	-0.003	100	943348	75.0	75.9	
76 2-Chloroethyl vinyl ether	63	5.987	5.989	-0.002	91	598010	75.0	80.7	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	96	1216450	75.0	79.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.242	-0.002	95	3333758	300.0	311.3	
79 Toluene	91	6.430	6.432	-0.002	98	3185871	75.0	73.3	
80 trans-1,3-Dichloropropene	75	6.599	6.601	-0.002	97	1084089	75.0	79.7	
81 Ethyl methacrylate	69	6.620	6.622	-0.002	86	1123161	75.0	80.1	
82 1,1,2-Trichloroethane	97	6.778	6.781	-0.003	91	664027	75.0	75.7	
83 Tetrachloroethene	164	6.873	6.876	-0.003	94	517985	75.0	74.5	
84 1,3-Dichloropropane	76	6.926	6.928	-0.002	98	1228848	75.0	73.6	
85 2-Hexanone	43	6.936	6.939	-0.003	95	2396568	300.0	312.6	
86 Chlorodibromomethane	129	7.126	7.118	0.008	90	681438	75.0	79.4	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	688729	75.0	74.2	
89 1-Chlorohexane	91	7.633	7.635	-0.002	97	968916	75.0	77.3	
90 Chlorobenzene	112	7.675	7.678	-0.003	94	1952494	75.0	72.4	
92 Ethylbenzene	106	7.749	7.751	-0.002	98	1112684	75.0	75.1	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.751	-0.002	95	649959	75.0	78.2	
93 m-Xylene & p-Xylene	106	7.865	7.868	-0.003	99	1337167	75.0	75.1	
94 o-Xylene	106	8.224	8.226	-0.002	97	1297286	75.0	75.8	
95 Styrene	104	8.245	8.247	-0.002	94	2225643	75.0	77.2	
96 Bromoform	173	8.424	8.427	-0.003	95	419665	75.0	82.7	
97 Isopropylbenzene	105	8.572	8.575	-0.003	96	3269113	75.0	74.8	
99 Cyclohexanone	55	8.667	8.670	-0.003	91	1820858	3000.0	3118.6	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.859	-0.002	93	923777	75.0	72.1	
101 Bromobenzene	156	8.889	8.891	-0.002	95	750457	75.0	72.8	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.891	-0.002	87	263640	75.0	77.5	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	274122	75.0	70.5	
104 N-Propylbenzene	120	8.973	8.965	0.008	99	900621	75.0	74.4	
105 2-Chlorotoluene	126	9.068	9.071	-0.003	96	761914	75.0	74.3	
106 1,3,5-Trimethylbenzene	105	9.142	9.144	-0.002	94	2718338	75.0	75.8	
107 4-Chlorotoluene	126	9.184	9.187	-0.003	97	790475	75.0	73.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.450	-0.002	93	2228828	75.0	74.3	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	2711650	75.0	74.8	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	94	658067	75.0	75.0	
111 1,3-Dichlorobenzene	146	9.796	9.799	-0.003	97	1405320	75.0	75.3	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	97	2775007	75.0	75.6	
113 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	95	1422924	75.0	73.6	
115 n-Butylbenzene	91	10.218	10.221	-0.003	98	2558085	75.0	74.8	
116 1,2-Dichlorobenzene	146	10.250	10.252	-0.002	98	1365427	75.0	73.6	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.033	-0.002	83	173521	75.0	79.8	
119 1,2,4-Trichlorobenzene	180	11.854	11.856	-0.002	94	776485	75.0	77.0	
120 Hexachlorobutadiene	225	12.002	12.004	-0.002	97	277038	75.0	75.5	
121 Naphthalene	128	12.128	12.131	-0.003	98	2526472	75.0	77.5	
122 1,2,3-Trichlorobenzene	180	12.350	12.352	-0.002	95	716876	75.0	77.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		150.0	146.1	
S 142 Xylenes, Total	106				0		150.0	150.9	
S 140 Trihalomethanes, Total	1				0		300.0	311.0	
S 143 Xylenes, Total (URS)	1				0		150.0	150.9	
S 146 Total BTEX	1				0			373.3	
S 145 1,3-Dichloropropene, Total	1				0		150.0	159.2	
S 144 1,2-Dichloroethene, Total	1				0		150.0	146.1	

Reagents:

MV-Gas A_00058	Amount Added: 15.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 37.50	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

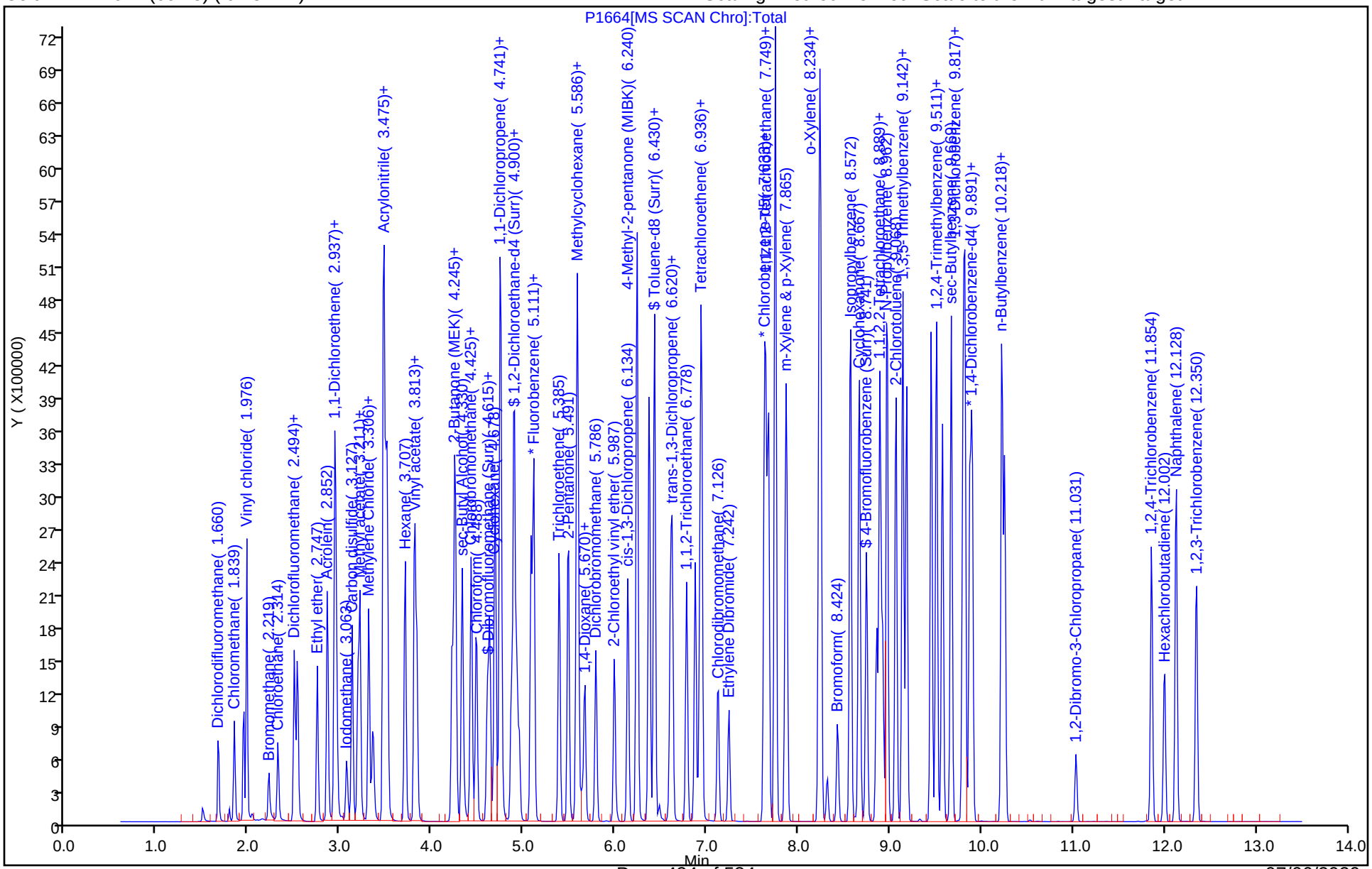
Report Date: 02-Jun-2020 11:16:42 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1664.D

Injection Date:	01-Jun-2020 18:33:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Jun-2020 18:55:30 ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:54 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:04:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.113	-0.001	98	2591417	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.646	-0.001	86	591785	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.873	-0.002	96	860796	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.607	-0.001	93	627480	50.0	50.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.869	4.871	-0.002	97	724426	50.0	49.3	
$ 6 Toluene-d8 (Surr)	98	6.368	6.369	-0.001	93	2573814	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.743	-0.001	84	928259	50.0	48.9	
10 Dichlorodifluoromethane	85	1.661	1.662	-0.001	99	732362	100.0	100.8	
11 Chloromethane	50	1.841	1.842	-0.001	99	960082	100.0	97.6	
12 Vinyl chloride	62	1.946	1.937	0.009	98	1065051	100.0	93.9	
14 Bromomethane	94	2.221	2.232	-0.011	90	440495	100.0	103.5	
15 Chloroethane	64	2.316	2.327	-0.011	99	677138	100.0	93.7	
16 Dichlorofluoromethane	67	2.495	2.496	-0.001	97	1626866	100.0	96.4	
17 Trichlorofluoromethane	101	2.527	2.538	-0.011	98	1332462	100.0	95.1	
19 Ethyl ether	59	2.748	2.749	-0.001	92	867417	100.0	98.3	
21 Acrolein	56	2.854	2.855	-0.001	100	2049494	987.5	940.2	
22 1,1-Dichloroethene	96	2.938	2.939	-0.001	97	803768	100.0	95.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.938	2.939	-0.001	71	583334	100.0	92.4	
24 Acetone	43	2.959	2.960	-0.001	100	1328269	400.0	387.8	
26 Iodomethane	142	3.065	3.066	-0.001	98	853782	100.0	105.0	
27 Carbon disulfide	76	3.128	3.129	-0.001	99	2649300	100.0	102.0	
29 Methyl acetate	43	3.192	3.193	-0.001	98	1718245	200.0	195.1	
30 3-Chloro-1-propene	41	3.213	3.214	-0.001	94	1398353	100.0	97.2	
31 Methylene Chloride	84	3.308	3.309	-0.001	92	982723	100.0	101.9	
32 2-Methyl-2-propanol	59	3.350	3.351	-0.001	98	1163015	1000.0	1023.9	
33 Acrylonitrile	53	3.466	3.467	-0.001	98	4584473	1000.0	961.2	
34 Methyl tert-butyl ether	73	3.498	3.499	-0.001	95	2851275	100.0	100.6	
35 trans-1,2-Dichloroethene	96	3.508	3.509	-0.001	98	932241	100.0	94.1	
36 Hexane	57	3.709	3.710	-0.001	90	1270824	100.0	92.1	
38 Vinyl acetate	43	3.804	3.805	-0.001	97	4053327	200.0	189.9	
39 1,1-Dichloroethane	63	3.835	3.836	-0.001	96	1757478	100.0	97.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.215	4.216	-0.001	99	2217162	400.0	383.8	
47 cis-1,2-Dichloroethene	96	4.247	4.248	-0.001	82	1058127	100.0	96.0	
48 2,2-Dichloropropane	77	4.257	4.258	-0.001	88	1229414	100.0	100.2	
50 sec-Butyl Alcohol	45	4.331	4.322	0.009	99	2977506	3000.0	3205.3	
53 Chlorobromomethane	128	4.426	4.427	-0.001	98	466481	100.0	94.5	
52 Tetrahydrofuran	42	4.426	4.427	-0.001	87	746007	200.0	194.8	
54 Chloroform	83	4.479	4.480	-0.001	92	1656789	100.0	95.2	
55 1,1,1-Trichloroethane	97	4.627	4.628	-0.001	98	1332750	100.0	96.7	
56 Cyclohexane	56	4.690	4.691	-0.001	89	1661826	100.0	94.7	
57 1,1-Dichloropropene	75	4.743	4.744	-0.001	98	1385678	100.0	96.0	
59 Carbon tetrachloride	117	4.753	4.754	-0.001	95	1123442	100.0	99.6	
58 Isobutyl alcohol	41	4.753	4.754	-0.001	95	1036679	2500.0	2586.3	
60 Benzene	78	4.891	4.902	-0.011	97	4103192	100.0	96.2	
61 1,2-Dichloroethane	62	4.922	4.923	-0.001	97	1314638	100.0	98.7	
66 n-Heptane	43	5.080	5.082	-0.002	92	1144406	100.0	89.9	
67 Trichloroethene	95	5.387	5.388	-0.001	98	992812	100.0	94.8	
68 2-Pentanone	43	5.482	5.483	-0.001	99	3459479	400.0	403.1	
69 Methylcyclohexane	55	5.576	5.578	-0.002	93	1240952	100.0	93.3	
70 1,2-Dichloropropane	63	5.598	5.599	-0.001	97	1087577	100.0	98.7	
72 1,4-Dioxane	88	5.629	5.630	-0.001	93	304422	2000.0	1985.3	
73 Dibromomethane	93	5.661	5.662	-0.001	94	622019	100.0	98.4	
74 Dichlorobromomethane	83	5.788	5.789	-0.001	100	1269877	100.0	99.3	
76 2-Chloroethyl vinyl ether	63	5.988	5.989	-0.001	91	777645	100.0	102.0	
77 cis-1,3-Dichloropropene	75	6.136	6.137	-0.001	98	1639115	100.0	103.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.241	6.242	-0.001	95	4449408	400.0	403.7	
79 Toluene	91	6.431	6.432	-0.001	98	4226712	100.0	94.5	
80 trans-1,3-Dichloropropene	75	6.600	6.601	-0.001	97	1494637	100.0	106.8	
81 Ethyl methacrylate	69	6.621	6.622	-0.001	88	1529747	100.0	105.2	
82 1,1,2-Trichloroethane	97	6.780	6.781	-0.001	91	892221	100.0	98.9	
83 Tetrachloroethene	164	6.874	6.876	-0.002	94	680115	100.0	94.3	
84 1,3-Dichloropropane	76	6.927	6.928	-0.001	98	1654933	100.0	95.5	
85 2-Hexanone	43	6.938	6.939	-0.001	95	3222482	400.0	405.0	
86 Chlorodibromomethane	129	7.117	7.118	-0.001	90	927388	100.0	104.1	
88 Ethylene Dibromide	107	7.244	7.245	-0.001	98	939615	100.0	97.6	
89 1-Chlorohexane	91	7.634	7.635	-0.001	96	1287435	100.0	99.1	
90 Chlorobenzene	112	7.676	7.678	-0.002	94	2623954	100.0	93.7	
92 Ethylbenzene	106	7.750	7.751	-0.001	98	1466328	100.0	95.4	
91 1,1,1,2-Tetrachloroethane	131	7.750	7.751	-0.001	95	879154	100.0	102.0	
93 m-Xylene & p-Xylene	106	7.866	7.868	-0.002	99	1800340	100.0	97.4	
94 o-Xylene	106	8.225	8.226	-0.001	97	1734182	100.0	97.6	
95 Styrene	104	8.246	8.247	-0.001	95	2994821	100.0	100.1	
96 Bromoform	173	8.426	8.427	-0.001	95	580498	100.0	110.2	
97 Isopropylbenzene	105	8.573	8.575	-0.002	96	4297903	100.0	95.4	
99 Cyclohexanone	55	8.668	8.670	-0.002	91	2497231	4000.0	4121.1	
100 1,1,2,2-Tetrachloroethane	83	8.858	8.859	-0.001	94	1246192	100.0	94.4	
101 Bromobenzene	156	8.890	8.891	-0.001	96	1018637	100.0	95.8	
102 trans-1,4-Dichloro-2-butene	53	8.890	8.891	-0.001	88	362926	100.0	103.5	
103 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	84	369781	100.0	92.3	
104 N-Propylbenzene	120	8.974	8.965	0.009	99	1208674	100.0	96.8	
105 2-Chlorotoluene	126	9.069	9.071	-0.002	96	1015287	100.0	96.0	
106 1,3,5-Trimethylbenzene	105	9.143	9.144	-0.001	94	3542571	100.0	95.8	
107 4-Chlorotoluene	126	9.186	9.187	-0.001	97	1069992	100.0	96.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.449	9.450	-0.001	93	2956162	100.0	95.5	
109 1,2,4-Trimethylbenzene	105	9.513	9.514	-0.001	97	3612602	100.0	96.6	
110 sec-Butylbenzene	134	9.671	9.672	-0.001	94	863268	100.0	95.4	
111 1,3-Dichlorobenzene	146	9.798	9.799	-0.001	97	1879660	100.0	97.7	
112 4-Isopropyltoluene	119	9.819	9.820	-0.001	97	3687575	100.0	97.5	
113 1,4-Dichlorobenzene	146	9.903	9.904	-0.001	94	1893150	100.0	95.0	
115 n-Butylbenzene	91	10.220	10.221	-0.001	98	3366903	100.0	95.4	
116 1,2-Dichlorobenzene	146	10.251	10.252	-0.001	98	1816228	100.0	95.0	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.033	-0.001	83	237845	100.0	106.1	
119 1,2,4-Trichlorobenzene	180	11.855	11.856	-0.001	94	1050224	100.0	101.0	
120 Hexachlorobutadiene	225	12.003	12.004	-0.001	98	365804	100.0	96.7	
121 Naphthalene	128	12.130	12.131	-0.001	97	3438073	100.0	102.3	
122 1,2,3-Trichlorobenzene	180	12.351	12.352	-0.001	95	966833	100.0	101.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		200.0	190.2	
S 142 Xylenes, Total	106				0		200.0	195.0	
S 140 Trihalomethanes, Total	1				0		400.0	408.9	
S 143 Xylenes, Total (URS)	1				0		200.0	195.0	
S 146 Total BTEX	1				0			481.1	
S 145 1,3-Dichloropropene, Total	1				0		200.0	210.0	
S 144 1,2-Dichloroethene, Total	1				0		200.0	190.2	

Reagents:

MV-Gas A_00058	Amount Added:	20.00	Units: uL	
MV-MegaMainA_00034	Amount Added:	50.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:16:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D

Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

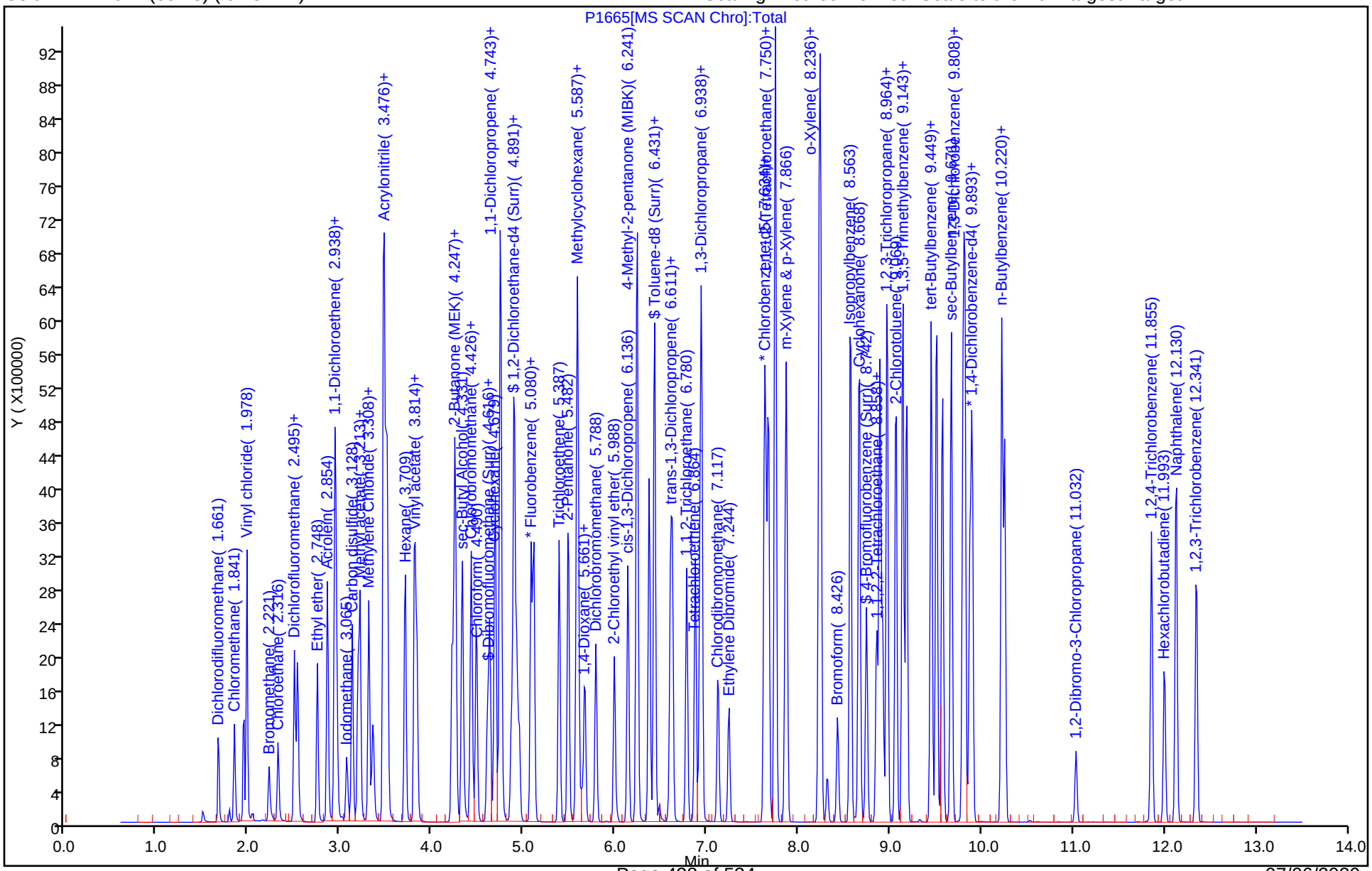
Lims ID: STD100 Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

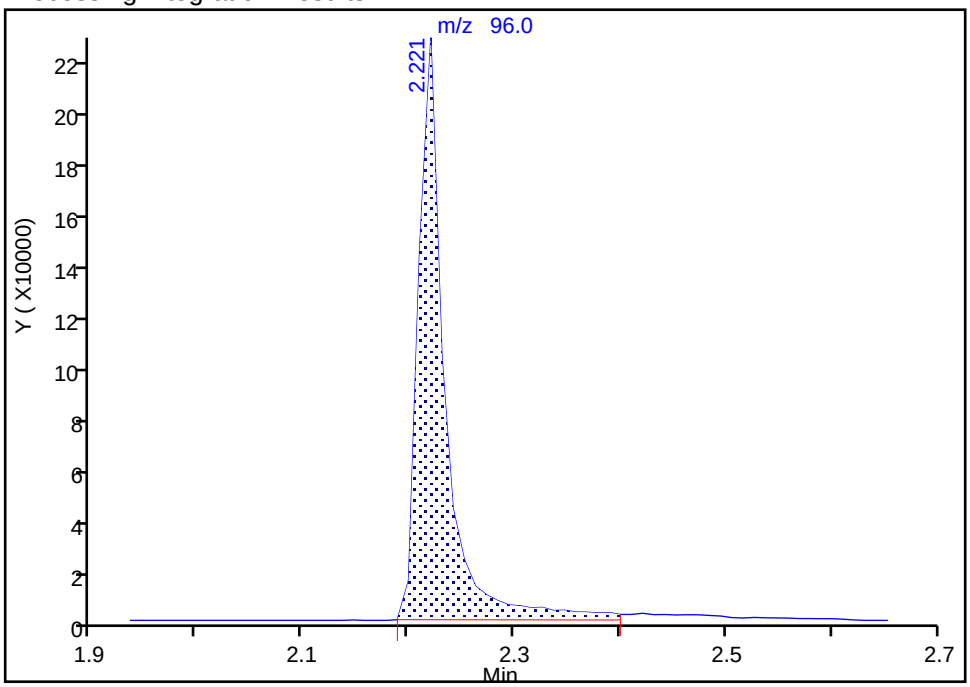
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P
Lims ID: STD100
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

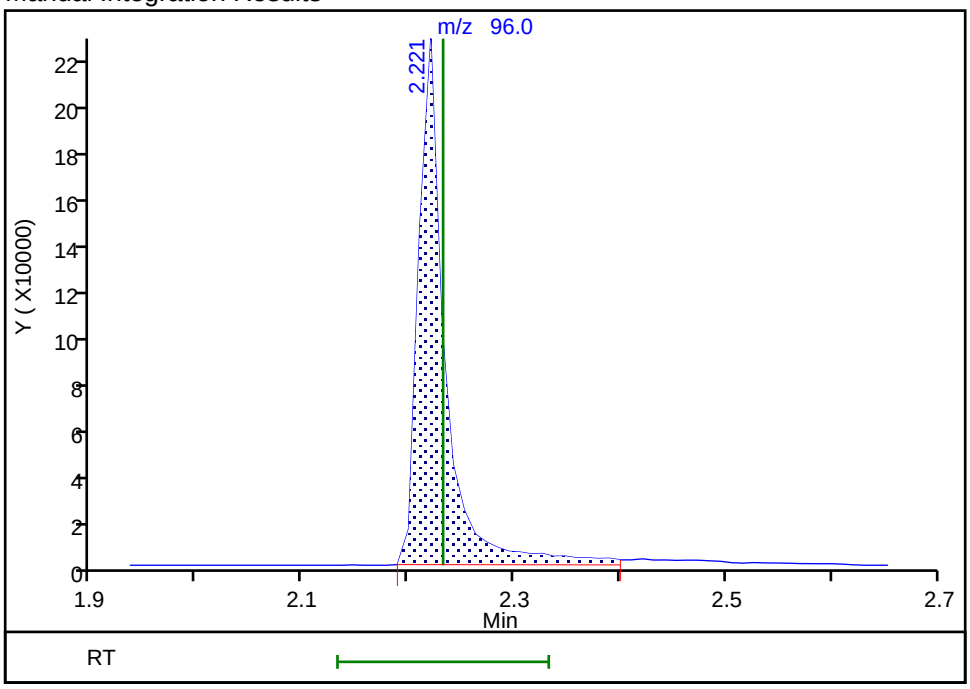
Processing Integration Results

RT: 2.22
Area: 398358
Amount: 71.854497
Amount Units: ug/l



Manual Integration Results

RT: 2.22
Area: 398358
Amount: 103.4548
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

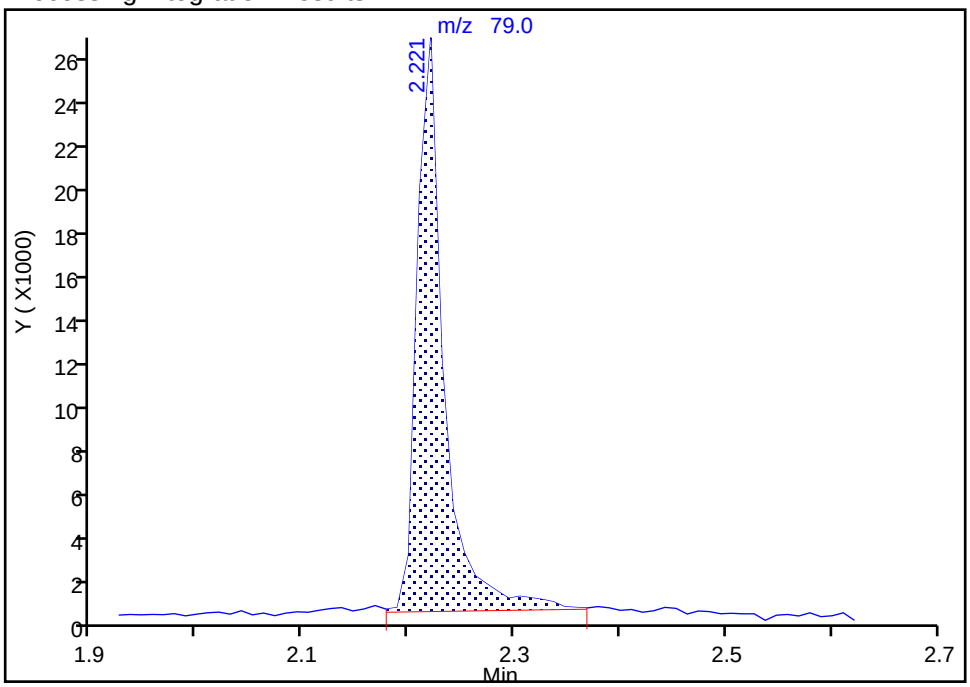
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P
Lims ID: STD100
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

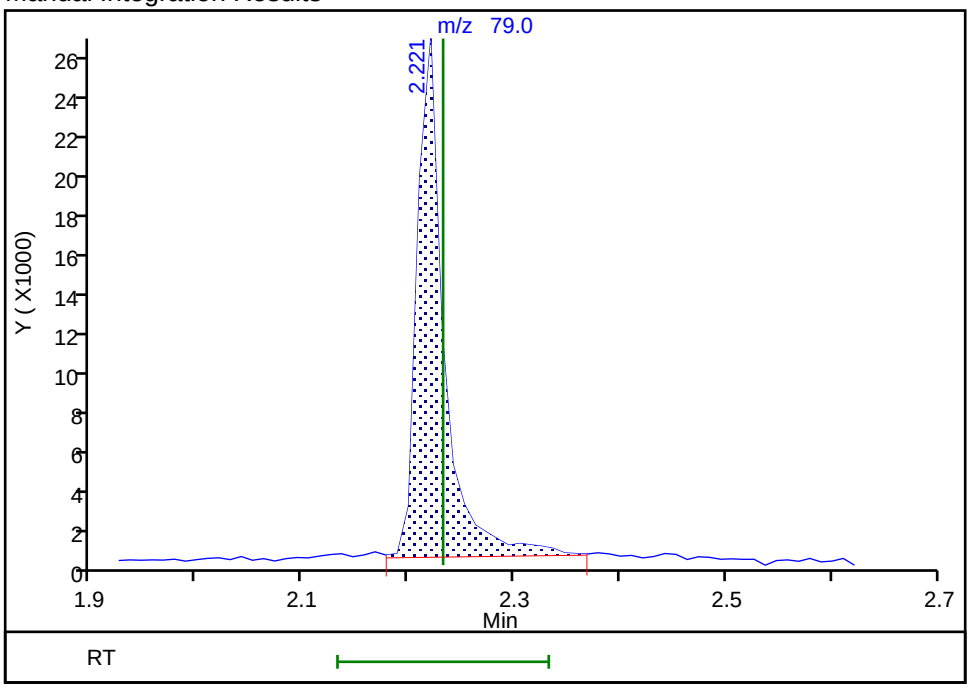
Processing Integration Results

RT: 2.22
Area: 45689
Amount: 71.854497
Amount Units: ug/l



Manual Integration Results

RT: 2.22
Area: 45689
Amount: 103.4548
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-Jun-2020 19:16:30 ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:17:08 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:22:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.113	-0.003	98	2665192	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	88	612530	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.873	-0.004	97	867641	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.607	-0.004	92	643049	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.871	-0.004	95	737268	50.0	48.8	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2645158	50.0	49.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.743	-0.003	85	944124	50.0	49.3	
10 Dichlorodifluoromethane	85	1.670	1.662	0.008	99	1521181	200.0	203.5	
11 Chloromethane	50	1.839	1.842	-0.003	99	1944451	200.0	192.5	
12 Vinyl chloride	62	1.944	1.937	0.007	98	2156770	200.0	184.8	
14 Bromomethane	94	2.208	2.232	-0.024	90	829108	200.0	190.8	
15 Chloroethane	64	2.314	2.327	-0.013	99	1338855	200.0	180.2	
16 Dichlorofluoromethane	67	2.493	2.496	-0.003	97	3337067	200.0	192.3	
17 Trichlorofluoromethane	101	2.525	2.538	-0.013	98	2746174	200.0	190.7	
19 Ethyl ether	59	2.746	2.749	-0.003	91	1748580	200.0	192.7	
21 Acrolein	56	2.852	2.855	-0.003	100	4216625	1975.0	1880.7	
22 1,1-Dichloroethene	96	2.936	2.939	-0.003	98	1646977	200.0	190.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.936	2.939	-0.003	72	1210821	200.0	186.5	
24 Acetone	43	2.957	2.960	-0.003	100	2724330	800.0	774.7	
26 Iodomethane	142	3.063	3.066	-0.003	99	1638641	200.0	195.4	
27 Carbon disulfide	76	3.126	3.129	-0.003	99	5354499	200.0	200.6	
29 Methyl acetate	43	3.189	3.193	-0.004	97	3572489	400.0	394.4	
30 3-Chloro-1-propene	41	3.210	3.214	-0.004	94	2597002	200.0	175.5	
31 Methylene Chloride	84	3.305	3.309	-0.004	91	1965595	200.0	198.6	
32 2-Methyl-2-propanol	59	3.358	3.351	0.007	98	2468347	2000.0	2112.9	
33 Acrylonitrile	53	3.474	3.467	0.007	98	9225550	2000.0	1880.7	
34 Methyl tert-butyl ether	73	3.495	3.499	-0.004	95	5795702	200.0	198.9	
35 trans-1,2-Dichloroethene	96	3.506	3.509	-0.003	98	1894659	200.0	186.0	
36 Hexane	57	3.706	3.710	-0.004	90	2650185	200.0	185.5	
38 Vinyl acetate	43	3.812	3.805	0.007	97	8022993	400.0	365.4	
39 1,1-Dichloroethane	63	3.833	3.836	-0.003	96	3524595	200.0	189.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.216	-0.003	99	4551845	800.0	766.2	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	82	2140264	200.0	188.9	
48 2,2-Dichloropropane	77	4.255	4.258	-0.003	89	2543532	200.0	201.6	
50 sec-Butyl Alcohol	45	4.329	4.322	0.007	99	6200156	6000.0	6489.7	
53 Chlorobromomethane	128	4.424	4.427	-0.003	98	916158	200.0	180.5	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	1562767	400.0	396.8	
54 Chloroform	83	4.487	4.480	0.007	93	3319211	200.0	185.5	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	99	2730851	200.0	192.7	
56 Cyclohexane	56	4.688	4.691	-0.003	89	3432828	200.0	190.2	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	97	2820470	200.0	190.0	
59 Carbon tetrachloride	117	4.751	4.754	-0.003	95	2331188	200.0	201.0	
58 Isobutyl alcohol	41	4.751	4.754	-0.003	95	2158330	5000.0	5235.6	
60 Benzene	78	4.899	4.902	-0.003	96	8100543	200.0	184.7	
61 1,2-Dichloroethane	62	4.920	4.923	-0.003	97	2621872	200.0	191.7	
66 n-Heptane	43	5.078	5.082	-0.004	92	2427879	200.0	185.4	
67 Trichloroethene	95	5.384	5.388	-0.004	98	2041486	200.0	189.6	
68 2-Pentanone	43	5.490	5.483	0.007	98	7086221	800.0	802.8	
69 Methylcyclohexane	55	5.585	5.578	0.007	92	2586376	200.0	189.1	
70 1,2-Dichloropropane	63	5.595	5.599	-0.004	97	2237217	200.0	197.4	
72 1,4-Dioxane	88	5.638	5.630	0.008	93	629142	4000.0	3989.3	
73 Dibromomethane	93	5.669	5.662	0.007	94	1265341	200.0	194.7	
74 Dichlorobromomethane	83	5.785	5.789	-0.004	100	2599633	200.0	197.7	
76 2-Chloroethyl vinyl ether	63	5.986	5.989	-0.003	91	1631027	200.0	208.0	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	97	3390099	200.0	206.4	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.242	-0.003	94	8889699	800.0	784.3	
79 Toluene	91	6.429	6.432	-0.003	99	8379887	200.0	182.1	
80 trans-1,3-Dichloropropene	75	6.609	6.601	0.007	97	3090342	200.0	214.6	
81 Ethyl methacrylate	69	6.619	6.622	-0.003	88	3141319	200.0	208.6	
82 1,1,2-Trichloroethane	97	6.777	6.781	-0.004	90	1826181	200.0	196.8	
83 Tetrachloroethene	164	6.872	6.876	-0.004	93	1409071	200.0	188.7	
84 1,3-Dichloropropane	76	6.925	6.928	-0.003	98	3359188	200.0	187.3	
85 2-Hexanone	43	6.946	6.939	0.007	94	6416464	800.0	779.1	
86 Chlorodibromomethane	129	7.126	7.118	0.008	90	1909184	200.0	207.1	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	1921283	200.0	192.8	
89 1-Chlorohexane	91	7.632	7.635	-0.003	98	2625923	200.0	195.7	
90 Chlorobenzene	112	7.674	7.678	-0.004	93	5290337	200.0	182.6	
92 Ethylbenzene	106	7.748	7.751	-0.003	98	3000265	200.0	188.6	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.751	-0.003	96	1814145	200.0	203.3	
93 m-Xylene & p-Xylene	106	7.864	7.868	-0.004	99	3621670	200.0	189.3	
94 o-Xylene	106	8.234	8.226	0.008	96	3512399	200.0	191.1	
95 Styrene	104	8.244	8.247	-0.003	94	5944526	200.0	192.0	
96 Bromoform	173	8.434	8.427	0.007	95	1219200	200.0	223.7	
97 Isopropylbenzene	105	8.571	8.575	-0.004	96	8473631	200.0	186.6	
99 Cyclohexanone	55	8.666	8.670	-0.004	90	5123084	8000.0	8168.1	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.859	-0.003	94	2502476	200.0	188.0	
101 Bromobenzene	156	8.888	8.891	-0.003	96	2037374	200.0	190.2	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.891	-0.003	79	740899	200.0	209.6	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	742902	200.0	184.0	
104 N-Propylbenzene	120	8.972	8.965	0.007	98	2424282	200.0	192.6	
105 2-Chlorotoluene	126	9.067	9.071	-0.004	98	2052197	200.0	192.6	
106 1,3,5-Trimethylbenzene	105	9.141	9.144	-0.003	95	6973832	200.0	187.1	
107 4-Chlorotoluene	126	9.183	9.187	-0.004	97	2129083	200.0	190.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.447	9.450	-0.003	93	5880094	200.0	188.5	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	7027541	200.0	186.5	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	95	1767152	200.0	193.7	
111 1,3-Dichlorobenzene	146	9.795	9.799	-0.004	98	3739315	200.0	192.8	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	96	7213150	200.0	189.2	
113 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	3782164	200.0	188.3	
115 n-Butylbenzene	91	10.218	10.221	-0.003	97	6618361	200.0	186.1	
116 1,2-Dichlorobenzene	146	10.249	10.252	-0.003	95	3619991	200.0	187.9	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.033	-0.003	84	512443	200.0	226.9	
119 1,2,4-Trichlorobenzene	180	11.853	11.856	-0.003	94	2180721	200.0	208.1	
120 Hexachlorobutadiene	225	12.001	12.004	-0.003	98	781505	200.0	205.0	
121 Naphthalene	128	12.128	12.131	-0.003	98	6963268	200.0	205.6	
122 1,2,3-Trichlorobenzene	180	12.349	12.352	-0.003	95	1991580	200.0	206.7	
S 139 1,2-Dichloroethene, Total (URS)	96				0		400.0	374.9	
S 142 Xylenes, Total	106				0		400.0	380.3	
S 140 Trihalomethanes, Total	1				0		800.0	813.9	
S 143 Xylenes, Total (URS)	1				0		400.0	380.3	
S 146 Total BTEX	1				0			935.8	
S 145 1,3-Dichloropropene, Total	1				0		400.0	421.0	
S 144 1,2-Dichloroethene, Total	1				0		400.0	374.9	

Reagents:

MV-Gas A_00058	Amount Added: 40.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 100.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

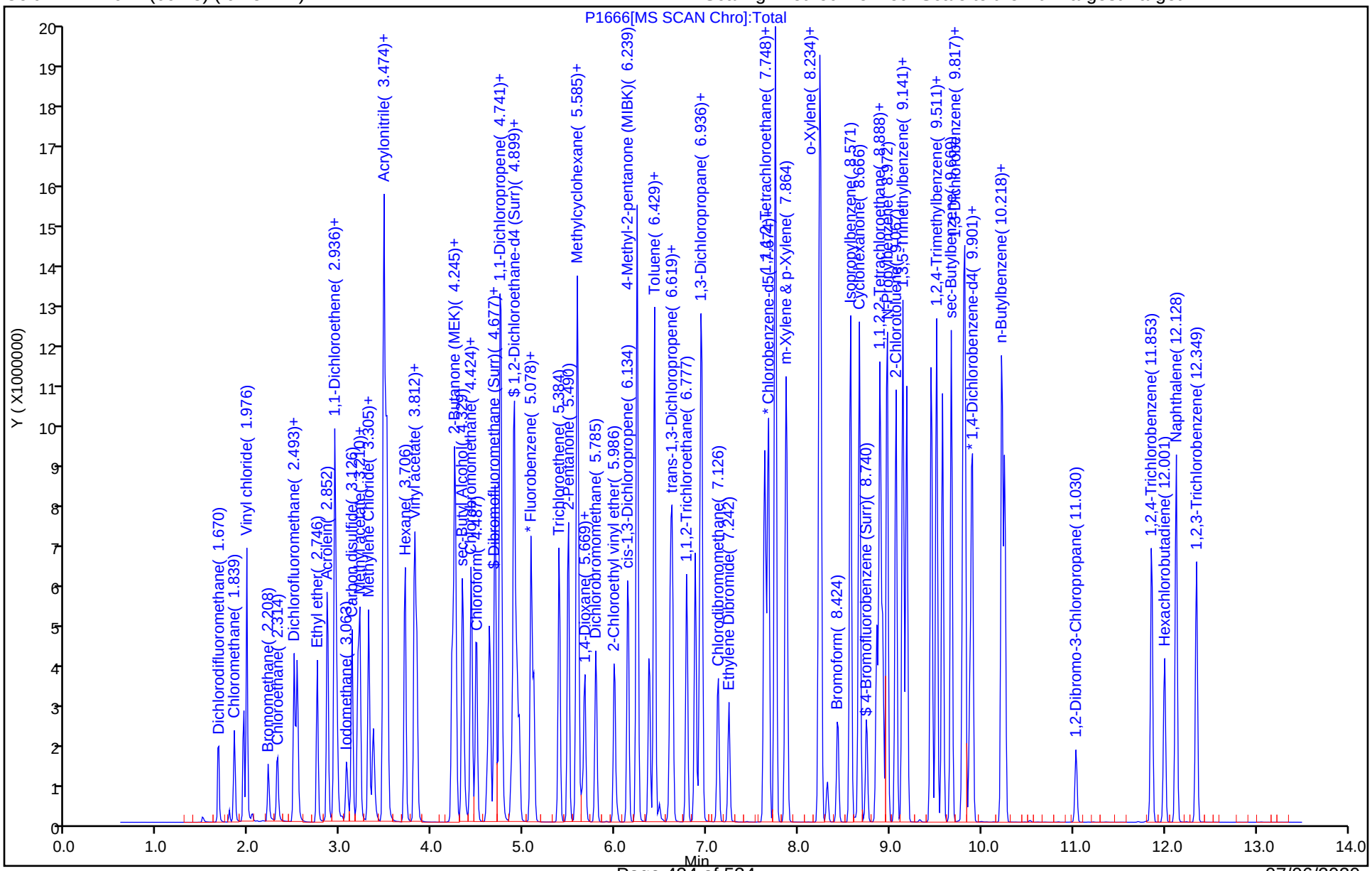
Report Date: 02-Jun-2020 11:17:09 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D

Injection Date:	01-Jun-2020 19:16:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD200			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

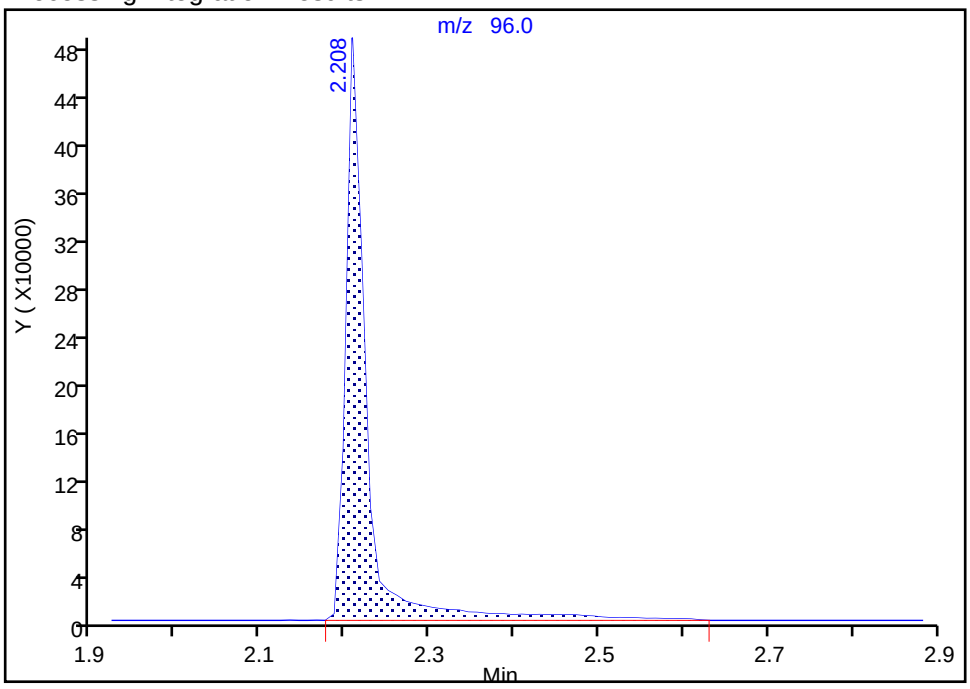
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Injection Date: 01-Jun-2020 19:16:30 Instrument ID: VMS_P
Lims ID: STD200
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

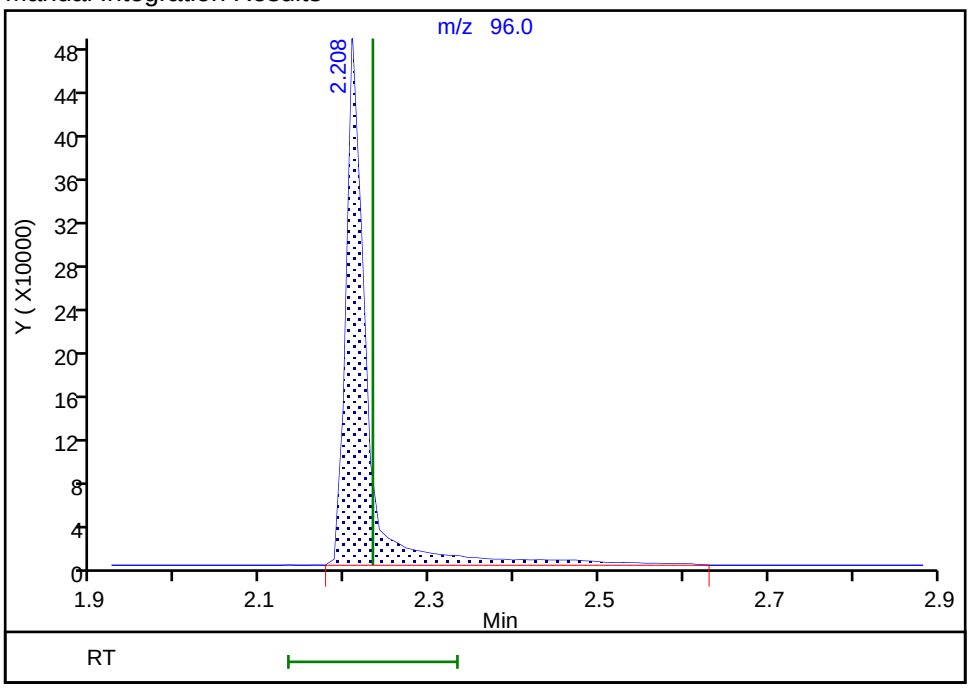
Processing Integration Results

RT: 2.21
Area: 807928
Amount: 190.7761
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 807928
Amount: 190.7761
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

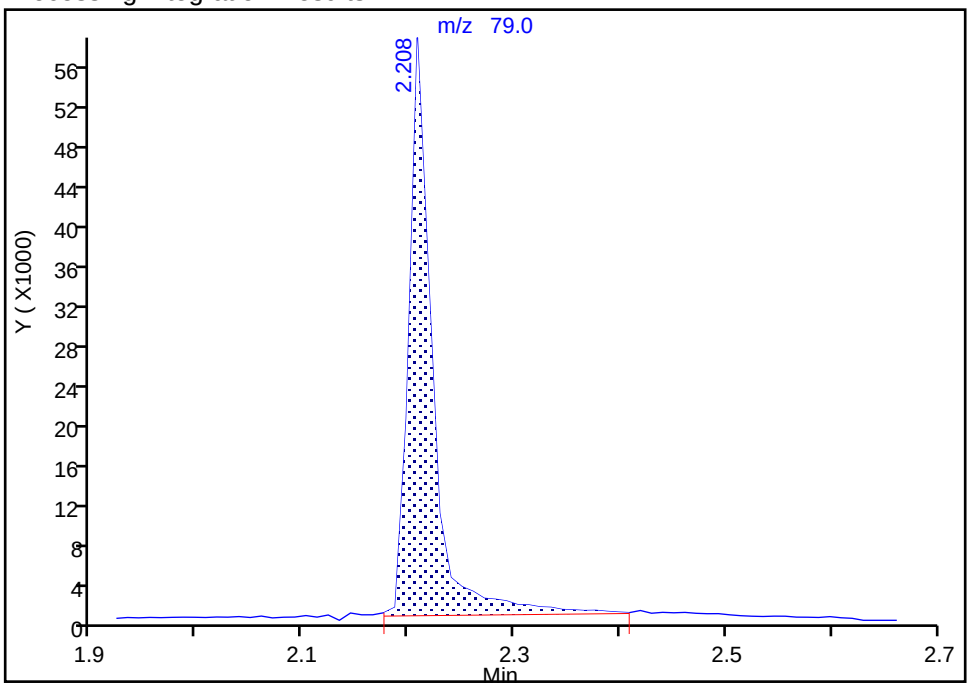
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Injection Date: 01-Jun-2020 19:16:30 Instrument ID: VMS_P
Lims ID: STD200
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

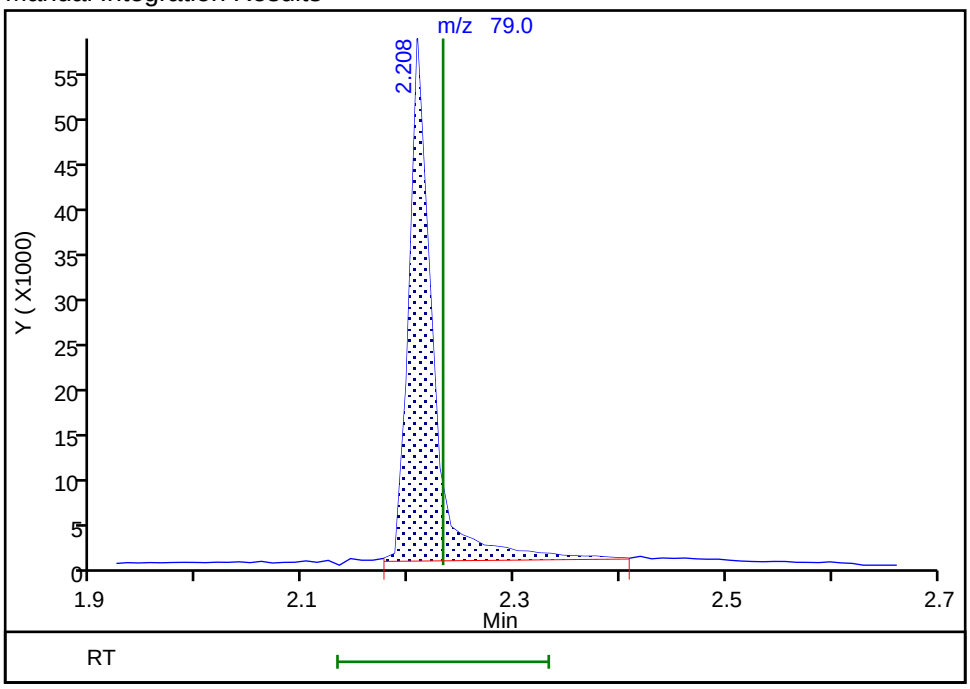
Processing Integration Results

RT: 2.21
Area: 90258
Amount: 190.7761
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 90258
Amount: 190.7761
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: ICV 280-485097/29 Calibration Date: 02/06/2020 17:52

Instrument ID: VMS_P Calib Start Date: 09/21/2019 22:00

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 09/22/2019 00:27

Lab File ID: P7824.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Qua					5000	-100.0*	55.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 06-Feb-2020 17:52:30 ALS Bottle#: 20 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:58 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:31:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.194	5.186	0.008	99	1256464	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.727	7.730	-0.003	91	281025	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.953	9.956	-0.003	96	467124	50.0	50.0	
13 Ethylene oxide	43		2.263				5000.0	ND	
18 Ethanol	45	2.725	2.727	-0.002	99	269102	3000.0	2989.5	
20 Propene oxide	58	2.873	2.865	0.008	96	4972828	5000.0	4119.0	
25 Isopropyl alcohol	45	3.115	3.118	-0.003	99	228970	500.0	495.3	
28 Acetonitrile	41	3.242	3.245	-0.003	99	426975	500.0	464.6	
40 Isopropyl ether	87	3.907	3.909	-0.002	93	197060	50.0	47.5	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	344910	50.0	45.4	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	98	708803	50.0	46.1	
46 Ethyl acetate	43	4.308	4.310	-0.002	99	539486	100.0	118.3	
49 Propionitrile	54	4.350	4.342	0.008	98	468527	500.0	472.6	
51 Methacrylonitrile	41	4.455	4.458	-0.003	93	1830338	500.0	481.1	
62 Tert-amyl methyl ether	73	5.036	5.039	-0.003	90	711330	50.0	47.7	
63 n-Butanol	56	5.046	5.039	0.007	50	200033	1250.0	1163.9	
71 Methyl methacrylate	100	5.669	5.672	-0.003	90	161027	100.0	106.3	
75 2-Nitropropane	41	6.028	6.031	-0.002	99	150683	100.0	103.9	
87 Tetrahydrothiophene	60	7.199	7.202	-0.003	91	25753	100.0	18.8	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	86	167756	100.0	76.5	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	98	929821	50.0	47.5	
118 1,3,5-Trichlorobenzene	180	11.304	11.307	-0.003	96	300818	50.0	46.3	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp B_00026 Amount Added: 50.00 Units: uL

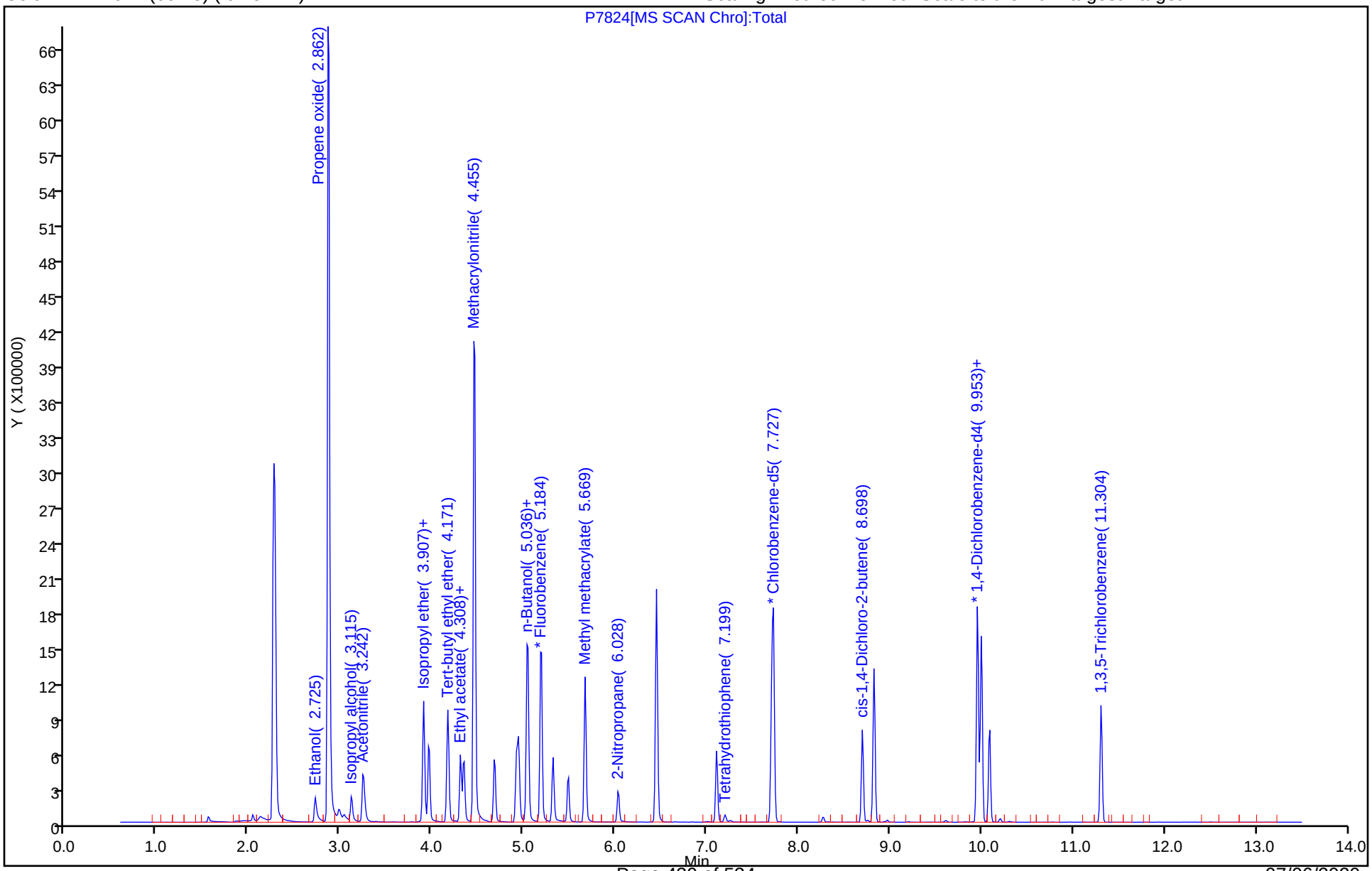
Report Date: 06-Feb-2020 21:42:00 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D

Injection Date:	06-Feb-2020 17:52:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: ICV 280-485097/29 Calibration Date: 02/06/2020 17:52

Instrument ID: VMS_P Calib Start Date: 02/06/2020 14:40

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 02/06/2020 17:09

Lab File ID: P7824.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0036		2990	3000	-0.3	55.0
Propene oxide	Ave	0.0480	0.0396		4120	5000	-17.6	
2-Propanol	Lin2		0.0182		495	500	-0.9	55.0
Acetonitrile	Ave	0.0366	0.0340		465	500	-7.1	55.0
Di-isopropyl ether (DIPE)	Ave	0.1652	0.1568		47.5	50.0	-5.1	35.0
Chloroprene	Ave	0.3025	0.2745		45.4	50.0	-9.3	35.0
Tert-butyl ethyl ether	Ave	0.6122	0.5641		46.1	50.0	-7.8	35.0
Ethyl acetate	Lin2		0.2147		118	100	18.3	55.0
Propionitrile	Ave	0.0394	0.0373		473	500	-5.5	55.0
Methacrylonitrile	Ave	0.1514	0.1457		481	500	-3.8	55.0
Tert-amyl methyl ether	Ave	0.5932	0.5661		47.7	50.0	-4.6	35.0
n-Butanol	Lin2		0.0064		1160	1250	-6.9	55.0
Methyl methacrylate	Ave	0.0603	0.0641		106	100	6.3	35.0
2-Nitropropane	Ave	0.0577	0.0600		104	100	3.9	55.0
Tetrahydrothiophene	Lin2		0.0458		18.8	100	-81.2*	55.0
cis-1,4-Dichloro-2-butene	Ave	0.2348	0.1796		76.5	100	-23.5	55.0
1,2,3-Trimethylbenzene	Ave	2.094	1.991		47.5	50.0	-4.9	35.0
1,3,5-Trichlorobenzene	Ave	0.6952	0.6440		46.3	50.0	-7.4	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 06-Feb-2020 17:52:30 ALS Bottle#: 20 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:41:58 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: zhangji Date: 06-Feb-2020 21:31:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.194	5.186	0.008	99	1256464	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.727	7.730	-0.003	91	281025	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.953	9.956	-0.003	96	467124	50.0	50.0	
13 Ethylene oxide	43		2.263				5000.0	ND	
18 Ethanol	45	2.725	2.727	-0.002	99	269102	3000.0	2989.5	
20 Propene oxide	58	2.873	2.865	0.008	96	4972828	5000.0	4119.0	
25 Isopropyl alcohol	45	3.115	3.118	-0.003	99	228970	500.0	495.3	
28 Acetonitrile	41	3.242	3.245	-0.003	99	426975	500.0	464.6	
40 Isopropyl ether	87	3.907	3.909	-0.002	93	197060	50.0	47.5	
41 2-Chloro-1,3-butadiene	53	3.960	3.962	-0.002	93	344910	50.0	45.4	
43 Tert-butyl ethyl ether	59	4.171	4.173	-0.002	98	708803	50.0	46.1	
46 Ethyl acetate	43	4.308	4.310	-0.002	99	539486	100.0	118.3	
49 Propionitrile	54	4.350	4.342	0.008	98	468527	500.0	472.6	
51 Methacrylonitrile	41	4.455	4.458	-0.003	93	1830338	500.0	481.1	
62 Tert-amyl methyl ether	73	5.036	5.039	-0.003	90	711330	50.0	47.7	
63 n-Butanol	56	5.046	5.039	0.007	50	200033	1250.0	1163.9	
71 Methyl methacrylate	100	5.669	5.672	-0.003	90	161027	100.0	106.3	
75 2-Nitropropane	41	6.028	6.031	-0.002	99	150683	100.0	103.9	
87 Tetrahydrothiophene	60	7.199	7.202	-0.003	91	25753	100.0	18.8	
98 cis-1,4-Dichloro-2-butene	53	8.698	8.700	-0.002	86	167756	100.0	76.5	
114 1,2,3-Trimethylbenzene	105	9.996	9.998	-0.002	98	929821	50.0	47.5	
118 1,3,5-Trichlorobenzene	180	11.304	11.307	-0.003	96	300818	50.0	46.3	

Reagents:

mv-IS_00001 Amount Added: 5.00 Units: uL
MV-Supp B_00026 Amount Added: 50.00 Units: uL

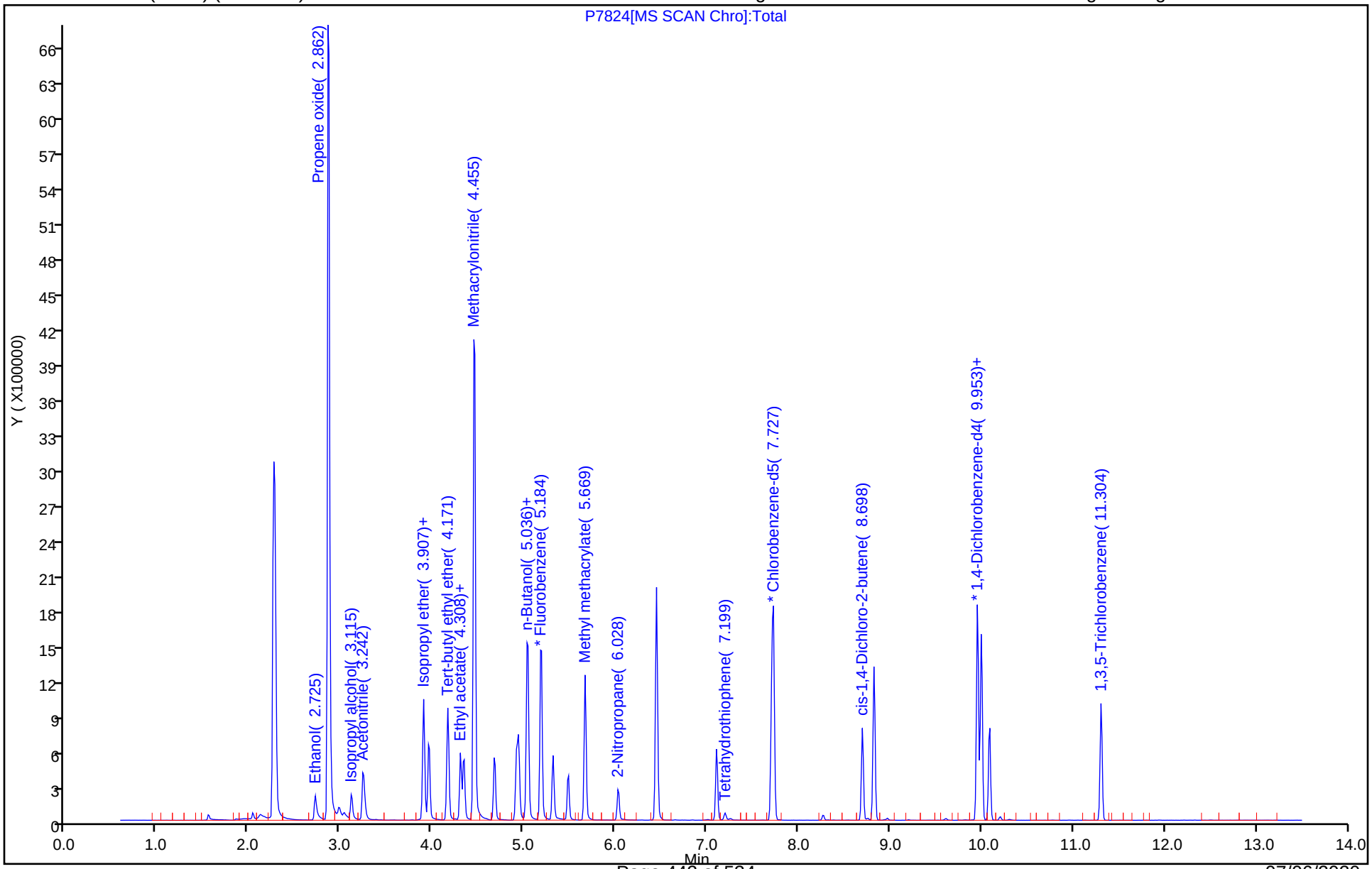
Report Date: 06-Feb-2020 21:42:00 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7824.D

Injection Date:	06-Feb-2020 17:52:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1453		51.8	50.0	3.6	55.0
Chloromethane	Lin2		0.1887	0.1000	49.6	50.0	-0.9	35.0
Vinyl chloride	Ave	0.2189	0.2085		47.6	50.0	-4.8	35.0
Bromomethane	Lin1		0.0986		59.3	50.0	18.6	35.0
Chloroethane	Ave	0.1394	0.1352		48.5	50.0	-3.0	35.0
Dichlorofluoromethane	Ave	0.3255	0.3170		48.7	50.0	-2.6	55.0
Trichlorofluoromethane	Ave	0.2702	0.2606		48.2	50.0	-3.5	50.0
Ethyl ether	Ave	0.1703	0.1694		49.7	50.0	-0.5	35.0
Acrolein	Ave	0.0421	0.0417		489	494	-0.9	55.0
1,1-Dichloroethene	Ave	0.1619	0.1671		51.6	50.0	3.2	35.0
Freon 113	Ave	0.1218	0.1268		52.1	50.0	4.1	55.0
Acetone	Lin2		0.0650		196	200	-1.9	55.0
Iodomethane	Lin		0.1623		52.1	50.0	4.2	35.0
Carbon disulfide	Lin2		0.5468		54.4	50.0	8.8	55.0
Methyl acetate	Ave	0.1699	0.1636		96.3	100	-3.7	55.0
Allyl chloride	Ave	0.2776	0.2915		52.5	50.0	5.0	35.0
Methylene Chloride	Lin2		0.1954		52.2	50.0	4.5	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0219	0.0225		513	500	2.5	55.0
Acrylonitrile	Ave	0.0920	0.0897		487	500	-2.5	55.0
Methyl tert-butyl ether	Ave	0.5467	0.5582		51.1	50.0	2.1	35.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1874		49.0	50.0	-1.9	35.0
Hexane	Ave	1.166	1.244		53.3	50.0	6.7	35.0
Vinyl acetate	Ave	0.4119	0.4582		111	100	11.2	55.0
1,1-Dichloroethane	Ave	0.3497	0.3524	0.1000	50.4	50.0	0.8	35.0
2-Butanone (MEK)	Ave	0.1115	0.1083		194	200	-2.8	55.0
cis-1,2-Dichloroethene	Ave	0.2126	0.2101		49.4	50.0	-1.2	35.0
2,2-Dichloropropane	Ave	0.2367	0.2614		55.2	50.0	10.4	35.0
sec-Butyl Alcohol	Ave	0.0179	0.0189		1580	1500	5.5	
Chlorobromomethane	Ave	0.0952	0.0954		50.1	50.0	0.2	35.0
Tetrahydrofuran	Ave	0.0739	0.0713		96.4	100	-3.6	55.0
Chloroform	Ave	0.3358	0.3273		48.7	50.0	-2.5	35.0
1,1,1-Trichloroethane	Ave	0.2658	0.2723		51.2	50.0	2.4	35.0
Cyclohexane	Ave	0.3386	0.3585		52.9	50.0	5.9	35.0
1,1-Dichloropropene	Ave	0.2785	0.2843		51.0	50.0	2.1	35.0
Carbon tetrachloride	Ave	0.2176	0.2292		52.7	50.0	5.3	35.0
Isobutyl alcohol	Ave	0.0077	0.0079		1270	1250	1.9	55.0
Benzene	Ave	0.8229	0.8202		49.8	50.0	-0.3	35.0
1,2-Dichloroethane	Lin2		0.2558		49.6	50.0	-0.8	35.0
n-Heptane	Ave	0.2456	0.2584		52.6	50.0	5.2	50.0
Trichloroethene	Ave	0.2020	0.2010		49.8	50.0	-0.5	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.1656	0.1691		204	200	2.1	55.0
Methylcyclohexane	Ave	0.2566	0.2686		52.4	50.0	4.7	35.0
1,2-Dichloropropane	Ave	0.2126	0.2140		50.3	50.0	0.6	35.0
1,4-Dioxane	Ave	0.0030	0.0030		1010	1000	0.6	55.0
Dibromomethane	Ave	0.1219	0.1204		49.4	50.0	-1.3	35.0
Dichlorobromomethane	Ave	0.2467	0.2486		50.4	50.0	0.8	35.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1503		51.1	50.0	2.2	55.0
cis-1,3-Dichloropropene	Ave	1.341	1.414		52.7	50.0	5.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.2193		206	200	3.1	55.0
Toluene	Ave	0.8631	0.8530		49.4	50.0	-1.2	35.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2886		53.4	50.0	6.8	35.0
Ethyl methacrylate	Ave	1.229	1.295		52.7	50.0	5.4	35.0
1,1,2-Trichloroethane	Ave	0.1741	0.1763		50.6	50.0	1.3	35.0
Tetrachloroethene	Ave	0.6096	0.6135		50.3	50.0	0.7	35.0
1,3-Dichloropropane	Ave	1.464	1.424		48.6	50.0	-2.7	35.0
2-Hexanone	Ave	0.6723	0.6895		205	200	2.6	55.0
Chlorodibromomethane	Ave	0.7527	0.7872		52.3	50.0	4.6	35.0
1,2-Dibromoethane	Ave	0.8135	0.8100		49.8	50.0	-0.4	35.0
1-Chlorohexane	Lin2		1.161		52.7	50.0	5.4	35.0
Chlorobenzene	Ave	2.365	2.298	0.3000	48.6	50.0	-2.8	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7514		51.6	50.0	3.1	35.0
Ethylbenzene	Ave	1.298	1.290		49.7	50.0	-0.7	35.0
m-Xylene & p-Xylene	Ave	1.562	1.584		50.7	50.0	1.4	35.0
o-Xylene	Ave	1.501	1.513		50.4	50.0	0.8	35.0
Styrene	Ave	2.528	2.615		51.7	50.0	3.4	35.0
Bromoform	Ave	0.4449	0.4897	0.1000	55.0	50.0	10.1	35.0
Isopropylbenzene	Ave	2.617	2.692		51.4	50.0	2.9	35.0
Cyclohexanone	Ave	0.0512	0.0546		2130	2000	6.7	35.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.7505	0.3000	48.9	50.0	-2.2	35.0
Bromobenzene	Ave	0.6174	0.6124		49.6	50.0	-0.8	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.2119		52.0	50.0	4.0	55.0
1,2,3-Trichloropropane	Ave	0.2327	0.2186		47.0	50.0	-6.0	35.0
N-Propylbenzene	Ave	0.7252	0.7431		51.2	50.0	2.5	35.0
2-Chlorotoluene	Ave	0.6140	0.6168		50.2	50.0	0.5	35.0
1,3,5-Trimethylbenzene	Ave	2.148	2.205		51.3	50.0	2.7	35.0
4-Chlorotoluene	Ave	0.6432	0.6402		49.8	50.0	-0.5	35.0
tert-Butylbenzene	Ave	1.797	1.838		51.1	50.0	2.3	35.0
1,2,4-Trimethylbenzene	Ave	2.171	2.206		50.8	50.0	1.6	35.0
sec-Butylbenzene	Ave	0.5256	0.5368		51.1	50.0	2.1	35.0
1,3-Dichlorobenzene	Ave	1.118	1.136		50.8	50.0	1.7	35.0
4-Isopropyltoluene	Ave	2.197	2.296		52.2	50.0	4.5	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.157	1.154		49.8	50.0	-0.3	35.0
n-Butylbenzene	Ave	2.049	2.105		51.4	50.0	2.7	35.0
1,2-Dichlorobenzene	Ave	1.110	1.097		49.4	50.0	-1.2	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1356		52.1	50.0	4.1	55.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.6273		51.9	50.0	3.9	35.0
Hexachlorobutadiene	Ave	0.2197	0.2319		52.8	50.0	5.5	35.0
Naphthalene	Ave	1.952	2.027		51.9	50.0	3.8	35.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5696		51.3	50.0	2.6	35.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2402		49.9	50.0	-0.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2725		48.1	50.0	-3.8	35.0
Toluene-d8 (Surr)	Ave	4.400	4.350		49.4	50.0	-1.1	35.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.092		49.5	50.0	-1.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1670.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 01-Jun-2020 20:54:30 ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:17:08 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: seifertj Date: 02-Jun-2020 08:01:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.114	5.113	0.001	99	2590465	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	86	590999	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	96	849842	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	622271	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.871	-0.011	97	705775	50.0	48.1	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2570994	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.743	0.001	84	928285	50.0	49.5	
10 Dichlorodifluoromethane	85	1.663	1.662	0.001	99	376358	50.0	51.8	
11 Chloromethane	50	1.842	1.842	0.000	99	488912	50.0	49.6	
12 Vinyl chloride	62	1.937	1.937	0.000	98	539997	50.0	47.6	
14 Bromomethane	94	2.233	2.232	0.001	90	255462	50.0	59.3	
15 Chloroethane	64	2.328	2.327	0.001	100	350208	50.0	48.5	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	821160	50.0	48.7	
17 Trichlorofluoromethane	101	2.539	2.538	0.001	98	675149	50.0	48.2	
19 Ethyl ether	59	2.750	2.749	0.001	91	438827	50.0	49.7	
21 Acrolein	56	2.855	2.855	0.000	100	1065819	493.8	489.1	
22 1,1-Dichloroethene	96	2.940	2.939	0.001	98	432725	50.0	51.6	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.940	2.939	0.001	73	328549	50.0	52.1	
24 Acetone	43	2.961	2.960	0.001	100	673920	200.0	196.2	
26 Iodomethane	142	3.066	3.066	0.000	98	420437	50.0	52.1	
27 Carbon disulfide	76	3.130	3.129	0.001	99	1416370	50.0	54.4	
29 Methyl acetate	43	3.193	3.193	0.000	97	847714	100.0	96.3	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	93	755062	50.0	52.5	
31 Methylene Chloride	84	3.309	3.309	0.000	92	506201	50.0	52.2	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	98	582058	500.0	512.6	
33 Acrylonitrile	53	3.467	3.467	0.000	98	2323499	500.0	487.3	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	95	1445927	50.0	51.1	
35 trans-1,2-Dichloroethene	96	3.510	3.509	0.001	98	485470	50.0	49.0	
36 Hexane	57	3.710	3.710	0.000	90	735288	50.0	53.3	
38 Vinyl acetate	43	3.805	3.805	0.000	97	2373910	100.0	111.2	
39 1,1-Dichloroethane	63	3.837	3.836	0.001	96	912856	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.217	4.216	0.001	99	1122134	200.0	194.3	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	82	544236	50.0	49.4	
48 2,2-Dichloropropane	77	4.259	4.258	0.001	88	677059	50.0	55.2	
50 sec-Butyl Alcohol	45	4.322	4.322	0.000	99	1469949	1500.0	1583.0	
53 Chlorobromomethane	128	4.428	4.427	0.001	98	247207	50.0	50.1	
52 Tetrahydrofuran	42	4.428	4.427	0.001	87	369171	100.0	96.4	
54 Chloroform	83	4.480	4.480	0.000	92	847798	50.0	48.7	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	98	705497	50.0	51.2	
56 Cyclohexane	56	4.691	4.691	0.000	89	928773	50.0	52.9	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	97	736563	50.0	51.0	
59 Carbon tetrachloride	117	4.744	4.754	-0.010	83	593714	50.0	52.7	
58 Isobutyl alcohol	41	4.744	4.754	-0.010	94	510443	1250.0	1273.9	
60 Benzene	78	4.892	4.902	-0.010	96	2124641	50.0	49.8	
61 1,2-Dichloroethane	62	4.924	4.923	0.001	97	662615	50.0	49.6	
66 n-Heptane	43	5.082	5.082	0.000	92	669267	50.0	52.6	
67 Trichloroethene	95	5.388	5.388	0.000	99	520749	50.0	49.8	
68 2-Pentanone	43	5.483	5.483	0.000	99	1751955	200.0	204.2	
69 Methylcyclohexane	55	5.578	5.578	0.000	93	695871	50.0	52.4	
70 1,2-Dichloropropane	63	5.588	5.599	-0.011	97	554297	50.0	50.3	
72 1,4-Dioxane	88	5.631	5.630	0.001	93	154164	1000.0	1005.7	
73 Dibromomethane	93	5.662	5.662	0.000	95	311781	50.0	49.4	
74 Dichlorobromomethane	83	5.789	5.789	0.000	99	643971	50.0	50.4	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	389335	50.0	51.1	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	96	835385	50.0	52.7	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.242	-0.010	96	2271889	200.0	206.2	
79 Toluene	91	6.433	6.432	0.001	98	2209611	50.0	49.4	
80 trans-1,3-Dichloropropene	75	6.602	6.601	0.001	97	747539	50.0	53.4	
81 Ethyl methacrylate	69	6.623	6.622	0.001	88	765502	50.0	52.7	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	90	456702	50.0	50.6	
83 Tetrachloroethene	164	6.876	6.876	0.000	94	362600	50.0	50.3	
84 1,3-Dichloropropane	76	6.929	6.928	0.001	96	841677	50.0	48.6	
85 2-Hexanone	43	6.939	6.939	0.000	95	1630059	200.0	205.1	
86 Chlorodibromomethane	129	7.119	7.118	0.001	90	465207	50.0	52.3	
88 Ethylene Dibromide	107	7.245	7.245	0.000	98	478705	50.0	49.8	
89 1-Chlorohexane	91	7.625	7.635	-0.010	98	685928	50.0	52.7	
90 Chlorobenzene	112	7.678	7.678	0.000	94	1358393	50.0	48.6	
92 Ethylbenzene	106	7.752	7.751	0.001	98	762280	50.0	49.7	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.751	-0.010	95	444052	50.0	51.6	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	936078	50.0	50.7	
94 o-Xylene	106	8.227	8.226	0.001	97	893993	50.0	50.4	
95 Styrene	104	8.248	8.247	0.001	94	1545341	50.0	51.7	
96 Bromoform	173	8.427	8.427	0.000	95	289434	50.0	55.0	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	2287684	50.0	51.4	
99 Cyclohexanone	55	8.659	8.670	-0.011	91	1291007	2000.0	2133.3	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.859	-0.010	93	637840	50.0	48.9	
101 Bromobenzene	156	8.891	8.891	0.000	96	520421	50.0	49.6	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	65	180098	50.0	52.0	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	85	185801	50.0	47.0	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	631481	50.0	51.2	
105 2-Chlorotoluene	126	9.071	9.071	0.000	96	524183	50.0	50.2	
106 1,3,5-Trimethylbenzene	105	9.145	9.144	0.001	94	1874231	50.0	51.3	
107 4-Chlorotoluene	126	9.187	9.187	0.000	97	544107	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.451	9.450	0.001	93	1561925	50.0	51.1	
109 1,2,4-Trimethylbenzene	105	9.504	9.514	-0.010	97	1874354	50.0	50.8	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	456208	50.0	51.1	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	98	965515	50.0	50.8	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	1950964	50.0	52.2	
113 1,4-Dichlorobenzene	146	9.894	9.904	-0.010	94	980422	50.0	49.8	
115 n-Butylbenzene	91	10.221	10.221	0.000	98	1788798	50.0	51.4	
116 1,2-Dichlorobenzene	146	10.253	10.252	0.001	98	932406	50.0	49.4	
117 1,2-Dibromo-3-Chloropropane	157	11.034	11.033	0.001	84	115195	50.0	52.1	
119 1,2,4-Trichlorobenzene	180	11.857	11.856	0.001	94	533137	50.0	51.9	
120 Hexachlorobutadiene	225	12.005	12.004	0.001	96	197049	50.0	52.8	
121 Naphthalene	128	12.121	12.131	-0.010	98	1722522	50.0	51.9	
122 1,2,3-Trichlorobenzene	180	12.353	12.352	0.001	95	484072	50.0	51.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	98.4	
S 142 Xylenes, Total	106				0		100.0	101.1	
S 140 Trihalomethanes, Total	1				0		200.0	206.4	
S 143 Xylenes, Total (URS)	1				0		100.0	101.1	
S 145 1,3-Dichloropropene, Total	1				0		100.0	106.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	98.4	

Reagents:

MV-MegaMain B_00031	Amount Added: 25.00	Units: uL	
MV-Gas B_00060	Amount Added: 10.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

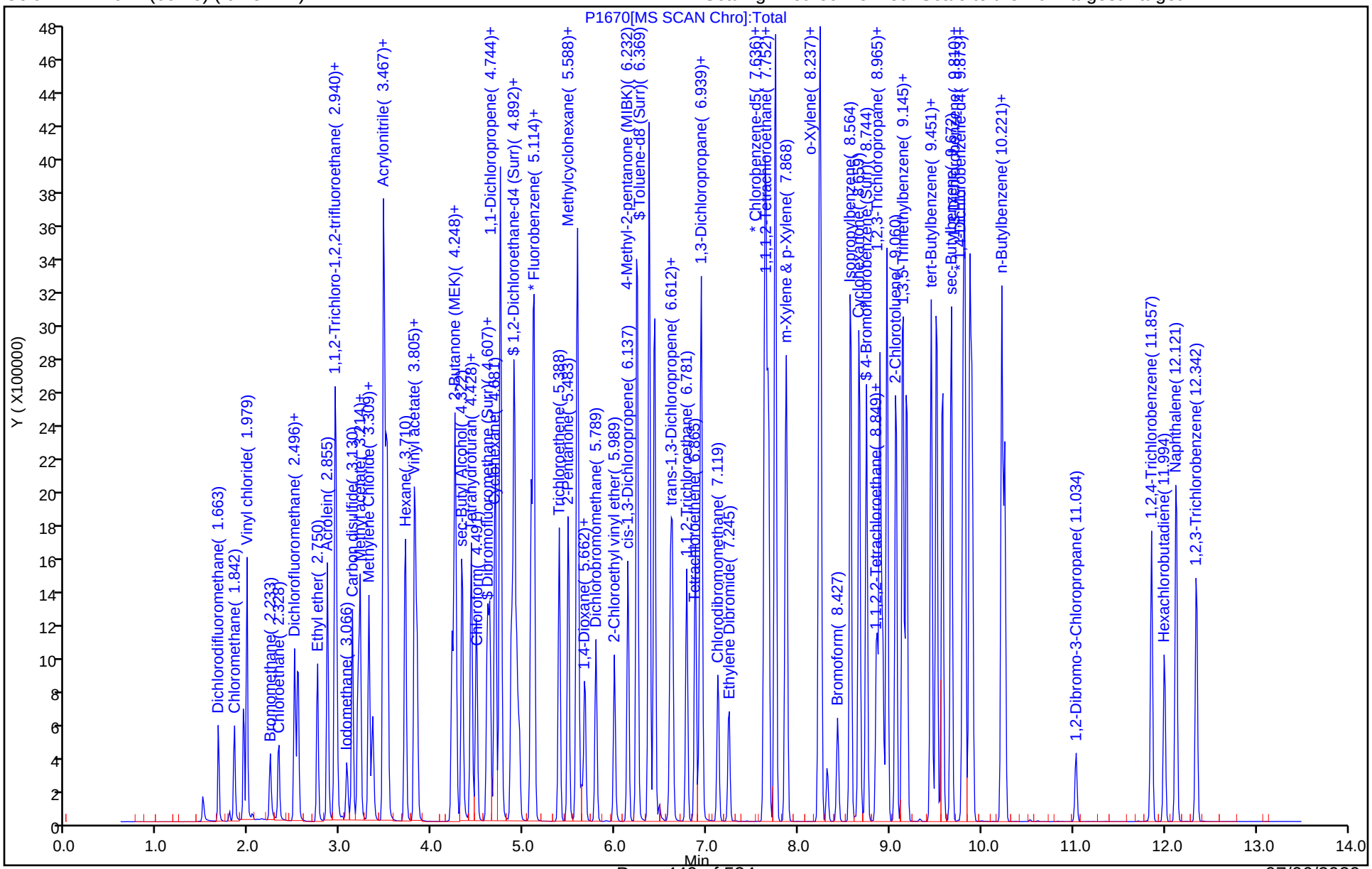
Report Date: 02-Jun-2020 12:20:29 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1670.D

Injection Date:	01-Jun-2020 20:54:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: CCV 280-500875/2 Calibration Date: 07/01/2020 22:36

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1627		58.0	50.0	16.0	50.0
Chloromethane	Lin2		0.1915	0.1000	50.3	50.0	0.6	35.0
Vinyl chloride	Ave	0.2189	0.2325		53.1	50.0	6.2	20.0
Bromomethane	Lin1		0.0742		44.2	50.0	-11.6	35.0
Chloroethane	Ave	0.1394	0.1440		51.7	50.0	3.3	35.0
Dichlorofluoromethane	Ave	0.3255	0.3357		51.6	50.0	3.1	50.0
Trichlorofluoromethane	Ave	0.2702	0.2796		51.7	50.0	3.5	50.0
Ethyl ether	Ave	0.1703	0.1606		47.2	50.0	-5.7	35.0
Acrolein	Ave	0.0421	0.0286		336	494	-32.0	50.0
1,1-Dichloroethene	Ave	0.1619	0.1401		43.3	50.0	-13.5	20.0
Freon 113	Ave	0.1218	0.1053		43.2	50.0	-13.6	50.0
Acetone	Lin2		0.0538		162	200	-19.0	50.0
Iodomethane	Lin		0.1332		42.9	50.0	-14.2	35.0
Carbon disulfide	Lin2		0.4388		43.6	50.0	-12.8	50.0
Methyl acetate	Ave	0.1699	0.1427		84.0	100	-16.0	50.0
Allyl chloride	Ave	0.2776	0.2533		45.6	50.0	-8.7	35.0
Methylene Chloride	Lin2		0.1810		48.4	50.0	-3.3	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0219	0.0177		404	500	-19.2	50.0
Acrylonitrile	Ave	0.0920	0.0791		430	500	-14.0	50.0
Methyl tert-butyl ether	Ave	0.5467	0.5085		46.5	50.0	-7.0	35.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1723		45.1	50.0	-9.9	35.0
Hexane	Ave	1.166	0.8746		37.5	50.0	-25.0	35.0
Vinyl acetate	Ave	0.4119	0.4095		99.4	100	-0.6	50.0
1,1-Dichloroethane	Ave	0.3497	0.3218	0.1000	46.0	50.0	-8.0	35.0
2-Butanone (MEK)	Ave	0.1115	0.0919		165	200	-17.6	50.0
cis-1,2-Dichloroethene	Ave	0.2126	0.1976		46.5	50.0	-7.0	35.0
2,2-Dichloropropane	Ave	0.2367	0.2341		49.5	50.0	-1.1	35.0
sec-Butyl Alcohol	Ave	0.0179	0.0150		1250	1500	-16.5	50.0
Chlorobromomethane	Ave	0.0952	0.0926		48.6	50.0	-2.8	35.0
Tetrahydrofuran	Ave	0.0739	0.0609		82.5	100	-17.5	50.0
Chloroform	Ave	0.3358	0.3093		46.1	50.0	-7.9	20.0
1,1,1-Trichloroethane	Ave	0.2658	0.2541		47.8	50.0	-4.4	35.0
Cyclohexane	Ave	0.3386	0.2966		43.8	50.0	-12.4	35.0
1,1-Dichloropropene	Ave	0.2785	0.2562		46.0	50.0	-8.0	35.0
Carbon tetrachloride	Ave	0.2176	0.2134		49.1	50.0	-1.9	35.0
Isobutyl alcohol	Ave	0.0077	0.0064		1030	1250	-17.7	50.0
Benzene	Ave	0.8229	0.7555		45.9	50.0	-8.2	35.0
1,2-Dichloroethane	Lin2		0.2402		46.6	50.0	-6.9	35.0
n-Heptane	Ave	0.2456	0.2064		42.0	50.0	-16.0	50.0
Trichloroethene	Ave	0.2020	0.1845		45.7	50.0	-8.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: CCV 280-500875/2 Calibration Date: 07/01/2020 22:36

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.1656	0.1417		171	200	-14.4	50.0
Methylcyclohexane	Ave	0.2566	0.2299		44.8	50.0	-10.4	35.0
1,2-Dichloropropane	Ave	0.2126	0.2012		47.3	50.0	-5.4	20.0
1,4-Dioxane	Ave	0.0030	0.0026		868	1000	-13.2	50.0
Dibromomethane	Ave	0.1219	0.1143		46.9	50.0	-6.2	35.0
Dichlorobromomethane	Ave	0.2467	0.2383		48.3	50.0	-3.4	35.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1505		51.2	50.0	2.3	50.0
cis-1,3-Dichloropropene	Ave	1.341	1.323		49.3	50.0	-1.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.1866		176	200	-12.2	50.0
Toluene	Ave	0.8631	0.7878		45.6	50.0	-8.7	20.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2726		50.5	50.0	0.9	35.0
Ethyl methacrylate	Ave	1.229	1.158		47.1	50.0	-5.8	35.0
1,1,2-Trichloroethane	Ave	0.1741	0.1681		48.3	50.0	-3.4	35.0
Tetrachloroethene	Ave	0.6096	0.5667		46.5	50.0	-7.0	35.0
1,3-Dichloropropane	Ave	1.464	1.324		45.2	50.0	-9.5	35.0
2-Hexanone	Ave	0.6723	0.5645		168	200	-16.0	50.0
Chlorodibromomethane	Ave	0.7527	0.7605		50.5	50.0	1.0	35.0
1,2-Dibromoethane	Ave	0.8135	0.7584		46.6	50.0	-6.8	35.0
1-Chlorohexane	Lin2		1.075		48.8	50.0	-2.4	35.0
Chlorobenzene	Ave	2.365	2.172	0.3000	45.9	50.0	-8.2	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7088		48.7	50.0	-2.7	35.0
Ethylbenzene	Ave	1.298	1.206		46.4	50.0	-7.1	20.0
m-Xylene & p-Xylene	Ave	1.562	1.460		46.7	50.0	-6.5	35.0
o-Xylene	Ave	1.501	1.409		46.9	50.0	-6.1	35.0
Styrene	Ave	2.528	2.425		48.0	50.0	-4.1	35.0
Bromoform	Ave	0.4449	0.4529	0.1000	50.9	50.0	1.8	35.0
Isopropylbenzene	Ave	2.617	2.518		48.1	50.0	-3.8	35.0
Cyclohexanone	Ave	0.0512	0.0455		1780	2000	-11.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.6875	0.3000	44.8	50.0	-10.4	35.0
Bromobenzene	Ave	0.6174	0.5741		46.5	50.0	-7.0	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.1766		43.3	50.0	-13.3	50.0
1,2,3-Trichloropropane	Ave	0.2327	0.1965		42.2	50.0	-15.5	35.0
N-Propylbenzene	Ave	0.7252	0.6954		47.9	50.0	-4.1	35.0
2-Chlorotoluene	Ave	0.6140	0.5836		47.5	50.0	-4.9	35.0
1,3,5-Trimethylbenzene	Ave	2.148	2.037		47.4	50.0	-5.2	35.0
4-Chlorotoluene	Ave	0.6432	0.6062		47.1	50.0	-5.7	35.0
tert-Butylbenzene	Ave	1.797	1.710		47.6	50.0	-4.8	35.0
1,2,4-Trimethylbenzene	Ave	2.171	2.065		47.6	50.0	-4.9	35.0
sec-Butylbenzene	Ave	0.5256	0.4973		47.3	50.0	-5.4	35.0
1,3-Dichlorobenzene	Ave	1.118	1.069		47.8	50.0	-4.4	35.0
4-Isopropyltoluene	Ave	2.197	2.088		47.5	50.0	-5.0	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: CCV 280-500875/2 Calibration Date: 07/01/2020 22:36

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2971.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.157	1.089		47.0	50.0	-5.9	35.0
n-Butylbenzene	Ave	2.049	1.912		46.6	50.0	-6.7	35.0
1,2-Dichlorobenzene	Ave	1.110	1.024		46.1	50.0	-7.7	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1180		45.3	50.0	-9.4	50.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.5788		47.9	50.0	-4.1	35.0
Hexachlorobutadiene	Ave	0.2197	0.1960		44.6	50.0	-10.8	35.0
Naphthalene	Ave	1.952	1.883		48.2	50.0	-3.5	35.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5336		48.0	50.0	-3.9	35.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2403		49.9	50.0	-0.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2641		46.6	50.0	-6.8	35.0
Toluene-d8 (Surr)	Ave	4.400	4.222		48.0	50.0	-4.0	35.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.071		48.5	50.0	-3.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2971.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jul-2020 22:36:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:31 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.111	0.000	99	2490498	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.643	0.000	86	575029	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.870	0.000	96	822908	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	598565	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	97	657620	50.0	46.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	92	2427760	50.0	48.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	86	881231	50.0	48.5	
10 Dichlorodifluoromethane	85	1.660	1.660	0.000	99	405195	50.0	58.0	
11 Chloromethane	50	1.839	1.839	0.000	99	477011	50.0	50.3	
12 Vinyl chloride	62	1.945	1.945	0.000	98	578972	50.0	53.1	
14 Bromomethane	94	2.230	2.230	0.000	90	184892	50.0	44.2	
15 Chloroethane	64	2.325	2.325	0.000	100	358678	50.0	51.7	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	836108	50.0	51.6	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	97	696242	50.0	51.7	
19 Ethyl ether	59	2.747	2.747	0.000	90	399919	50.0	47.2	
21 Acrolein	56	2.852	2.852	0.000	100	703559	493.8	335.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	72	262144	50.0	43.2	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	348885	50.0	43.3	
24 Acetone	43	2.958	2.958	0.000	100	535427	200.0	162.0	
26 Iodomethane	142	3.063	3.063	0.000	98	331670	50.0	42.9	
27 Carbon disulfide	76	3.127	3.127	0.000	98	1092911	50.0	43.6	
29 Methyl acetate	43	3.190	3.190	0.000	97	711007	100.0	84.0	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	630917	50.0	45.6	
31 Methylene Chloride	84	3.306	3.306	0.000	91	450778	50.0	48.4	
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	98	440956	500.0	403.9	
33 Acrylonitrile	53	3.464	3.464	0.000	99	1970843	500.0	430.0	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	1266344	50.0	46.5	
35 trans-1,2-Dichloroethene	96	3.517	3.517	0.000	99	429012	50.0	45.1	
36 Hexane	57	3.707	3.707	0.000	90	502903	50.0	37.5	
38 Vinyl acetate	43	3.802	3.802	0.000	97	2039872	100.0	99.4	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	801399	50.0	46.0	
44 2-Butanone (MEK)	43	4.214	4.214	0.000	100	914989	200.0	164.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	82	492227	50.0	46.5	
48 2,2-Dichloropropane	77	4.256	4.256	0.000	88	583128	50.0	49.5	
50 sec-Butyl Alcohol	45	4.330	4.330	0.000	99	1117984	1500.0	1252.3	
53 Chlorobromomethane	128	4.425	4.425	0.000	98	230528	50.0	48.6	
52 Tetrahydrofuran	42	4.435	4.435	0.000	88	303462	100.0	82.5	
54 Chloroform	83	4.477	4.477	0.000	92	770246	50.0	46.1	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	98	632749	50.0	47.8	
56 Cyclohexane	56	4.688	4.688	0.000	88	738670	50.0	43.8	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	638019	50.0	46.0	
59 Carbon tetrachloride	117	4.752	4.752	0.000	92	531580	50.0	49.1	
58 Isobutyl alcohol	41	4.752	4.752	0.000	93	396259	1250.0	1028.6	
60 Benzene	78	4.900	4.900	0.000	95	1881538	50.0	45.9	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	598254	50.0	46.6	
66 n-Heptane	43	5.079	5.079	0.000	91	513920	50.0	42.0	
67 Trichloroethene	95	5.385	5.385	0.000	99	459384	50.0	45.7	
68 2-Pentanone	43	5.480	5.480	0.000	99	1411842	200.0	171.2	
69 Methylcyclohexane	55	5.585	5.585	0.000	92	572645	50.0	44.8	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	97	500968	50.0	47.3	
72 1,4-Dioxane	88	5.638	5.638	0.000	92	127892	1000.0	867.8	
73 Dibromomethane	93	5.670	5.670	0.000	94	284775	50.0	46.9	
74 Dichlorobromomethane	83	5.786	5.786	0.000	100	593526	50.0	48.3	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	91	374881	50.0	51.2	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	760675	50.0	49.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	95	1858995	200.0	175.5	
79 Toluene	91	6.430	6.430	0.000	98	1961975	50.0	45.6	
80 trans-1,3-Dichloropropene	75	6.599	6.599	0.000	97	678891	50.0	50.5	
81 Ethyl methacrylate	69	6.620	6.620	0.000	88	665894	50.0	47.1	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	418586	50.0	48.3	
83 Tetrachloroethene	164	6.873	6.873	0.000	94	325875	50.0	46.5	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	96	761477	50.0	45.2	
85 2-Hexanone	43	6.947	6.947	0.000	95	1298330	200.0	167.9	
86 Chlorodibromomethane	129	7.126	7.126	0.000	90	437281	50.0	50.5	
88 Ethylene Dibromide	107	7.242	7.242	0.000	98	436117	50.0	46.6	
89 1-Chlorohexane	91	7.633	7.633	0.000	97	618322	50.0	48.8	
90 Chlorobenzene	112	7.675	7.675	0.000	95	1248684	50.0	45.9	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	96	407590	50.0	48.7	
92 Ethylbenzene	106	7.749	7.749	0.000	98	693597	50.0	46.4	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	839600	50.0	46.7	
94 o-Xylene	106	8.224	8.224	0.000	97	809987	50.0	46.9	
95 Styrene	104	8.245	8.245	0.000	94	1394309	50.0	48.0	
96 Bromoform	173	8.435	8.435	0.000	95	260400	50.0	50.9	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	2072219	50.0	48.1	
99 Cyclohexanone	55	8.667	8.667	0.000	90	1045879	2000.0	1776.3	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	565709	50.0	44.8	
101 Bromobenzene	156	8.888	8.888	0.000	96	472429	50.0	46.5	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	80	145303	50.0	43.3	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	84	161725	50.0	42.2	
104 N-Propylbenzene	120	8.973	8.973	0.000	99	572229	50.0	47.9	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	480265	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	94	1676366	50.0	47.4	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	498870	50.0	47.1	
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	1407288	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	1699500	50.0	47.6	
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	409256	50.0	47.3	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	879589	50.0	47.8	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	1718594	50.0	47.5	
113 1,4-Dichlorobenzene	146	9.902	9.902	0.000	95	895865	50.0	47.0	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	1573087	50.0	46.6	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	97	842928	50.0	46.1	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	83	97085	50.0	45.3	
119 1,2,4-Trichlorobenzene	180	11.854	11.854	0.000	94	476335	50.0	47.9	
120 Hexachlorobutadiene	225	12.002	12.002	0.000	97	161263	50.0	44.6	
121 Naphthalene	128	12.128	12.128	0.000	97	1549470	50.0	48.2	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	95	439140	50.0	48.0	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	91.6	
S 142 Xylenes, Total	106				0		100.0	93.7	
S 140 Trihalomethanes, Total	1				0		200.0	195.8	
S 143 Xylenes, Total (URS)	1				0		100.0	93.7	
S 145 1,3-Dichloropropene, Total	1				0		100.0	99.8	
S 144 1,2-Dichloroethene, Total	1				0		100.0	91.6	

Reagents:

MV-MegaMainA_00034	Amount Added:	25.00	Units: uL	
MV-Gas A_00060	Amount Added:	10.00	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jul-2020 22:13:32 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2971.D

Injection Date: 01-Jul-2020 22:36:30 Instrument ID: VMS_P Operator ID: PETUNINP

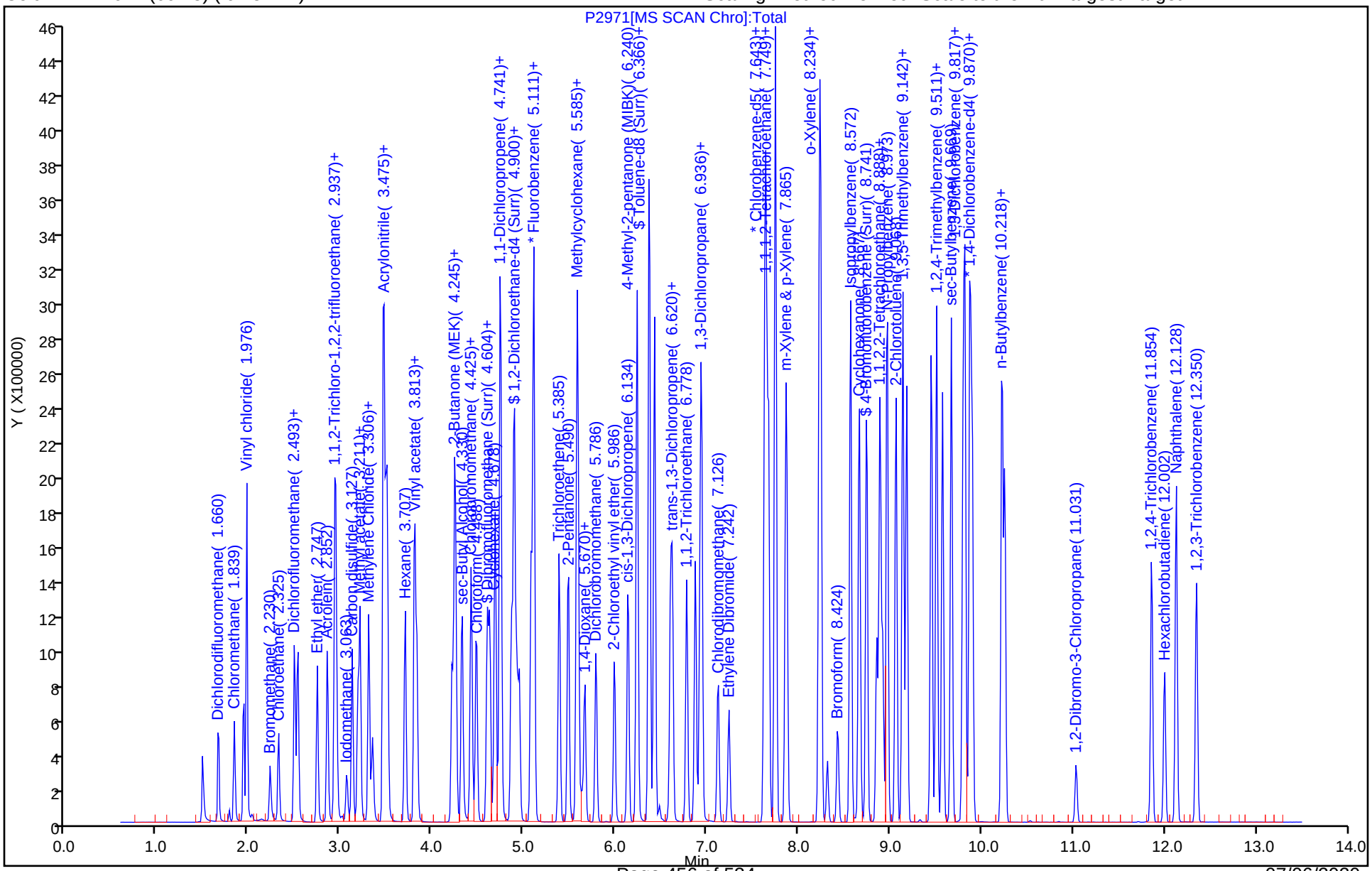
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: CCV 280-500875/3 Calibration Date: 07/01/2020 22:57

Instrument ID: VMS_P Calib Start Date: 09/21/2019 22:00

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 09/22/2019 00:27

Lab File ID: P2972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Qua		0.0125			5000		50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jul-2020 22:57:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub168

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2379676	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	547834	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	787597	50.0	50.0	
13 Ethylene oxide	43	2.197	2.197	0.000	100	2978817	NC	NC	
18 Ethanol	45	2.640	2.640	0.000	99	452443	3000.0	2652.3	
20 Propene oxide	58	2.788	2.788	0.000	97	10684211	5000.0	4672.6	
25 Isopropyl alcohol	45	3.041	3.041	0.000	99	358083	500.0	408.5	
28 Acetonitrile	41	3.168	3.168	0.000	99	721100	500.0	414.3	
40 Isopropyl ether	87	3.832	3.832	0.000	95	390605	50.0	49.7	
41 2-Chloro-1,3-butadiene	53	3.885	3.885	0.000	90	693022	50.0	48.1	
43 Tert-butyl ethyl ether	59	4.096	4.096	0.000	97	1298021	50.0	44.6	
46 Ethyl acetate	43	4.233	4.233	0.000	99	978218	100.0	113.2	
49 Propionitrile	54	4.265	4.265	0.000	99	857075	500.0	456.5	
51 Methacrylonitrile	41	4.381	4.381	0.000	90	3147526	500.0	436.8	
62 Tert-amyl methyl ether	73	4.962	4.962	0.000	84	1209069	50.0	42.8	
63 n-Butanol	56	4.962	4.962	0.000	49	484476	1250.0	1490.8	
71 Methyl methacrylate	100	5.595	5.595	0.000	90	289586	100.0	100.9	
75 2-Nitropropane	41	5.954	5.954	0.000	96	222867	100.0	81.1	
87 Tetrahydrothiophene	60	7.114	7.114	0.000	91	151685	100.0	54.1	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.613	0.000	87	285058	100.0	77.1	
114 1,2,3-Trimethylbenzene	105	9.911	9.911	0.000	98	1659025	50.0	50.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.219	0.000	97	496731	50.0	45.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp A_00044 Amount Added: 50.00 Units: uL
mv-Cent IS_00006 Amount Added: 5.00 Units: uL

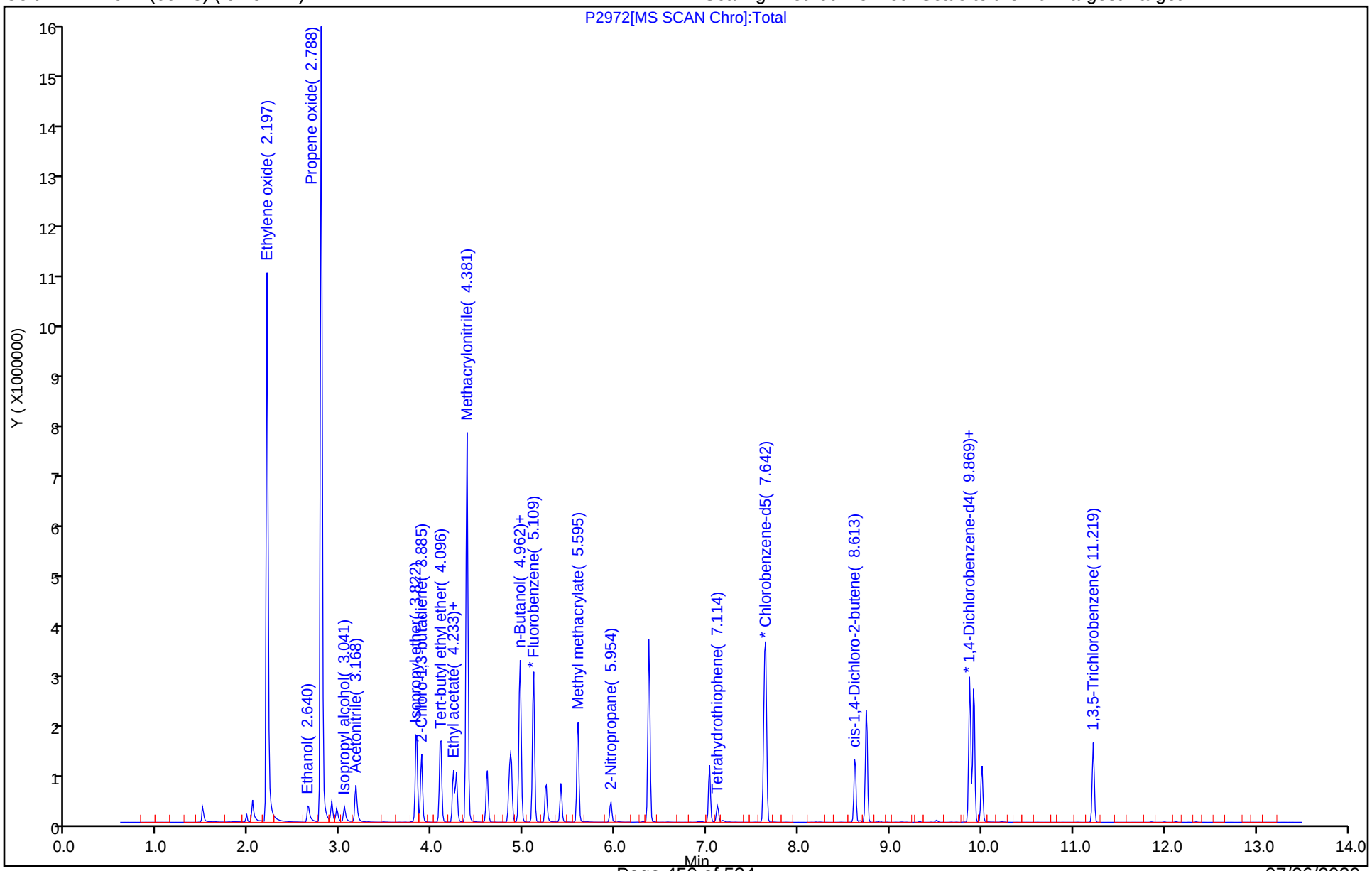
Report Date: 02-Jul-2020 22:13:34 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D

Injection Date:	01-Jul-2020 22:57:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Lab Sample ID: CCV 280-500875/3 Calibration Date: 07/01/2020 22:57

Instrument ID: VMS_P Calib Start Date: 02/06/2020 14:40

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 02/06/2020 17:09

Lab File ID: P2972.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0032		2650	3000	-11.6	50.0
Propene oxide	Ave	0.0480	0.0449		4670	5000	-6.5	50.0
2-Propanol	Lin2		0.0151		408	500	-18.3	50.0
Acetonitrile	Ave	0.0366	0.0303		414	500	-17.1	50.0
Di-isopropyl ether (DIPE)	Ave	0.1652	0.1641		49.7	50.0	-0.6	35.0
Chloroprene	Ave	0.3025	0.2912		48.1	50.0	-3.7	35.0
Tert-butyl ethyl ether	Ave	0.6122	0.5455		44.6	50.0	-10.9	35.0
Ethyl acetate	Lin2		0.2055		113	100	13.2	50.0
Propionitrile	Ave	0.0394	0.0360		456	500	-8.7	50.0
Methacrylonitrile	Ave	0.1514	0.1323		437	500	-12.6	50.0
n-Butanol	Lin2		0.0081		1490	1250	19.3	50.0
Tert-amyl methyl ether	Ave	0.5932	0.5081		42.8	50.0	-14.4	35.0
Methyl methacrylate	Ave	0.0603	0.0609		101	100	0.9	35.0
2-Nitropropane	Ave	0.0577	0.0468		81.1	100	-18.9	50.0
Tetrahydrothiophene	Lin2		0.1384		54.1	100	-45.9	50.0
cis-1,4-Dichloro-2-butene	Ave	0.2348	0.1810		77.1	100	-22.9	50.0
1,2,3-Trimethylbenzene	Ave	2.094	2.106		50.3	50.0	0.6	35.0
1,3,5-Trichlorobenzene	Ave	0.6952	0.6307		45.4	50.0	-9.3	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jul-2020 22:57:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV S
Operator ID: PETUNINP Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub168

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2379676	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	547834	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	787597	50.0	50.0	
13 Ethylene oxide	43	2.197	2.197	0.000	100	2978817	NC	NC	
18 Ethanol	45	2.640	2.640	0.000	99	452443	3000.0	2652.3	
20 Propene oxide	58	2.788	2.788	0.000	97	10684211	5000.0	4672.6	
25 Isopropyl alcohol	45	3.041	3.041	0.000	99	358083	500.0	408.5	
28 Acetonitrile	41	3.168	3.168	0.000	99	721100	500.0	414.3	
40 Isopropyl ether	87	3.832	3.832	0.000	95	390605	50.0	49.7	
41 2-Chloro-1,3-butadiene	53	3.885	3.885	0.000	90	693022	50.0	48.1	
43 Tert-butyl ethyl ether	59	4.096	4.096	0.000	97	1298021	50.0	44.6	
46 Ethyl acetate	43	4.233	4.233	0.000	99	978218	100.0	113.2	
49 Propionitrile	54	4.265	4.265	0.000	99	857075	500.0	456.5	
51 Methacrylonitrile	41	4.381	4.381	0.000	90	3147526	500.0	436.8	
62 Tert-amyl methyl ether	73	4.962	4.962	0.000	84	1209069	50.0	42.8	
63 n-Butanol	56	4.962	4.962	0.000	49	484476	1250.0	1490.8	
71 Methyl methacrylate	100	5.595	5.595	0.000	90	289586	100.0	100.9	
75 2-Nitropropane	41	5.954	5.954	0.000	96	222867	100.0	81.1	
87 Tetrahydrothiophene	60	7.114	7.114	0.000	91	151685	100.0	54.1	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.613	0.000	87	285058	100.0	77.1	
114 1,2,3-Trimethylbenzene	105	9.911	9.911	0.000	98	1659025	50.0	50.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.219	0.000	97	496731	50.0	45.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp A_00044 Amount Added: 50.00 Units: uL
mv-Cent IS_00006 Amount Added: 5.00 Units: uL

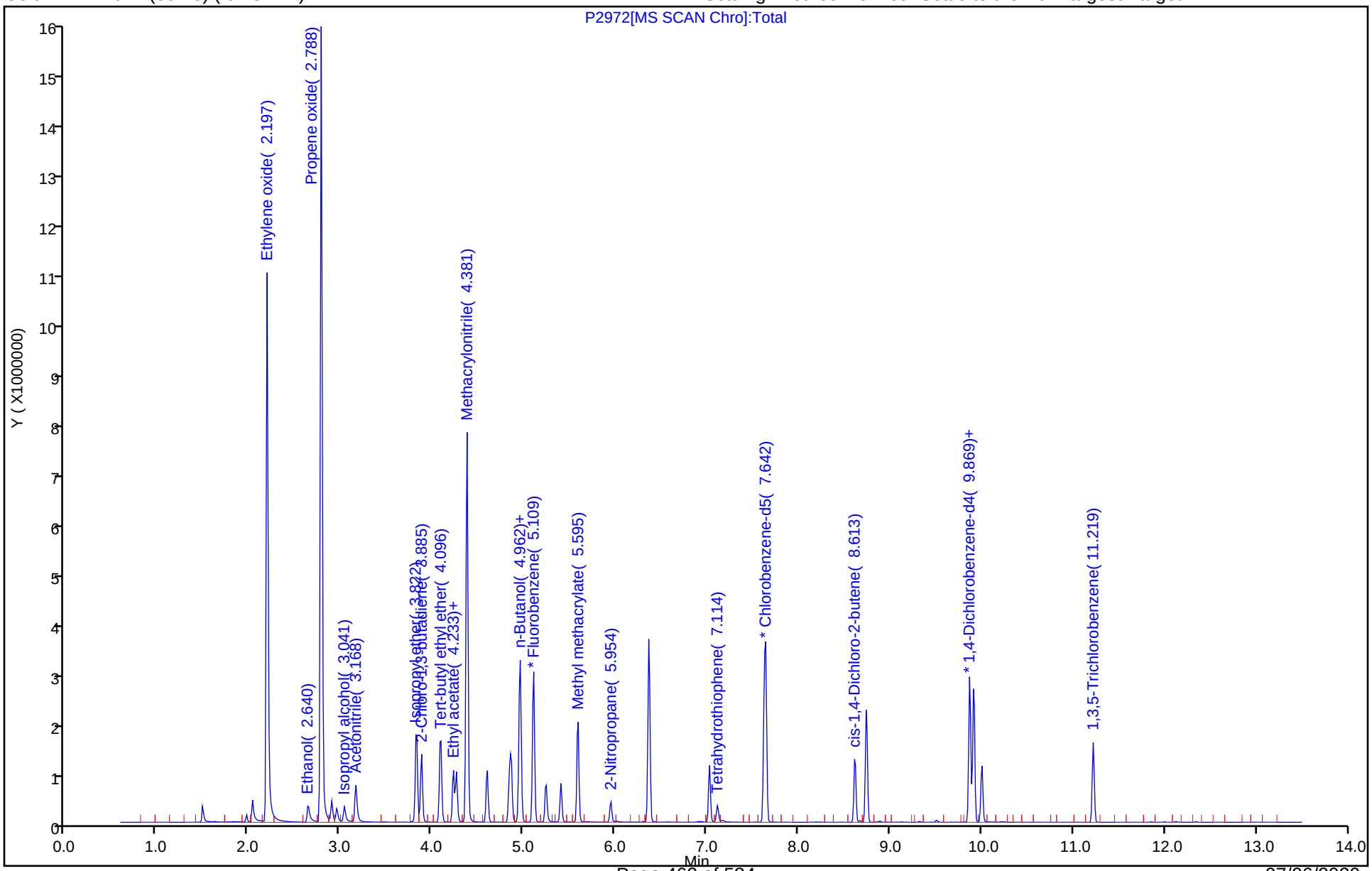
Report Date: 02-Jul-2020 22:13:34 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2972.D

Injection Date:	01-Jul-2020 22:57:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Feb-2020 10:25:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Feb-2020 21:42:02 Calib Date: 06-Feb-2020 17:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7822.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0322

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.643	3.643	0.000	0	67940	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

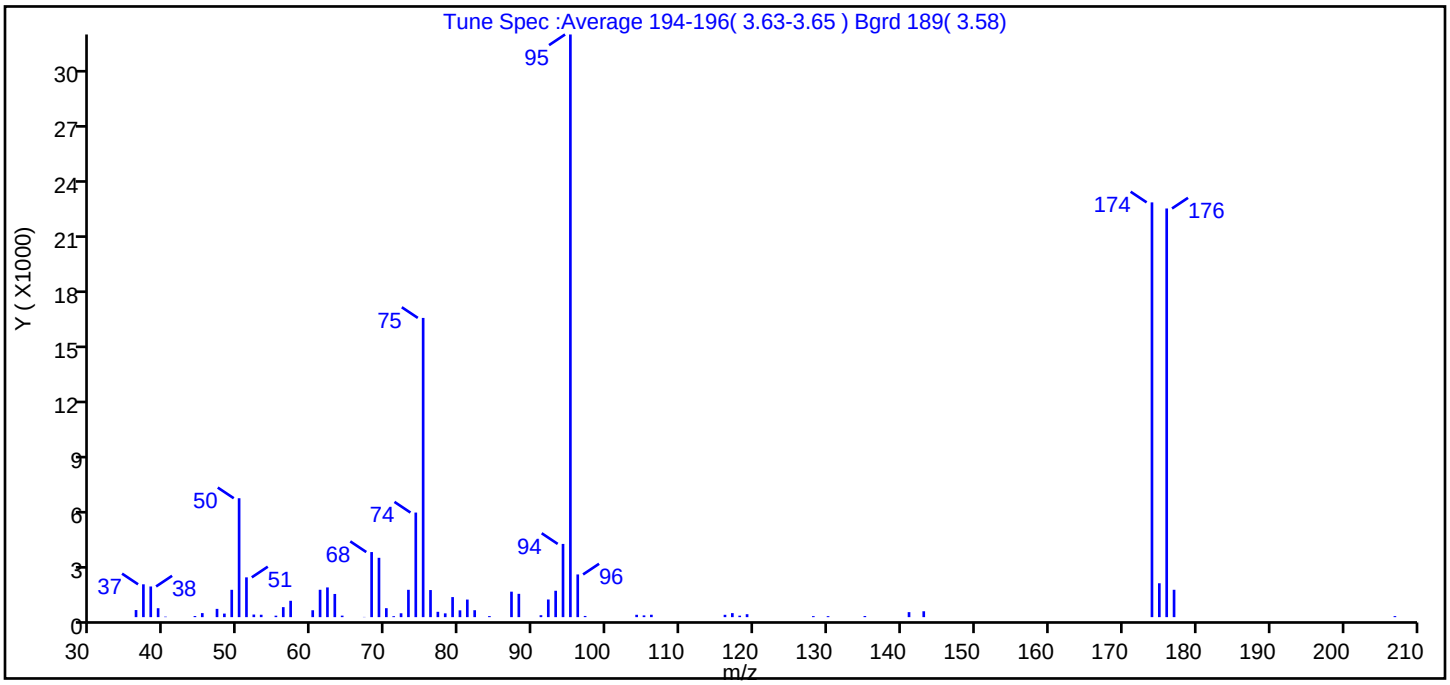
mv-Cent BFB_00001 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D
Injection Date: 06-Feb-2020 10:25:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	71.2
175	5 to 9% of m/z 174	5.8 (8.2)
176	Greater than 95% but less than 101% of m/z 174	70.1 (98.5)
177	5 to 9% of m/z 176	4.7 (6.7)

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 06-Feb-2020 10:25:30
Spectrum: Tune Spec :Average 194-196(3.63-3.65) Bgrd 189(3.58)
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	381	60.00	370	79.00	1077	116.00	126
37.00	1763	61.00	1470	80.00	366	117.00	216
38.00	1647	62.00	1596	81.00	944	118.00	80
39.00	480	63.00	1245	82.00	372	119.00	158
40.00	26	64.00	81	84.00	55	128.00	54
44.00	60	67.00	11	87.00	1368	130.00	53
45.00	217	68.00	3495	88.00	1252	135.00	60
47.00	444	69.00	3186	91.00	104	141.00	269
48.00	191	70.00	481	92.00	948	143.00	316
49.00	1468	71.00	51	93.00	1417	174.00	22272
50.00	6385	72.00	208	94.00	3932	175.00	1819
51.00	2137	73.00	1468	95.00	31288	176.00	21944
52.00	140	74.00	5616	96.00	2293	177.00	1470
53.00	129	75.00	16068	97.00	64	207.00	56
55.00	79	76.00	1455	104.00	127		
56.00	537	77.00	287	105.00	94		
57.00	878	78.00	203	106.00	129		

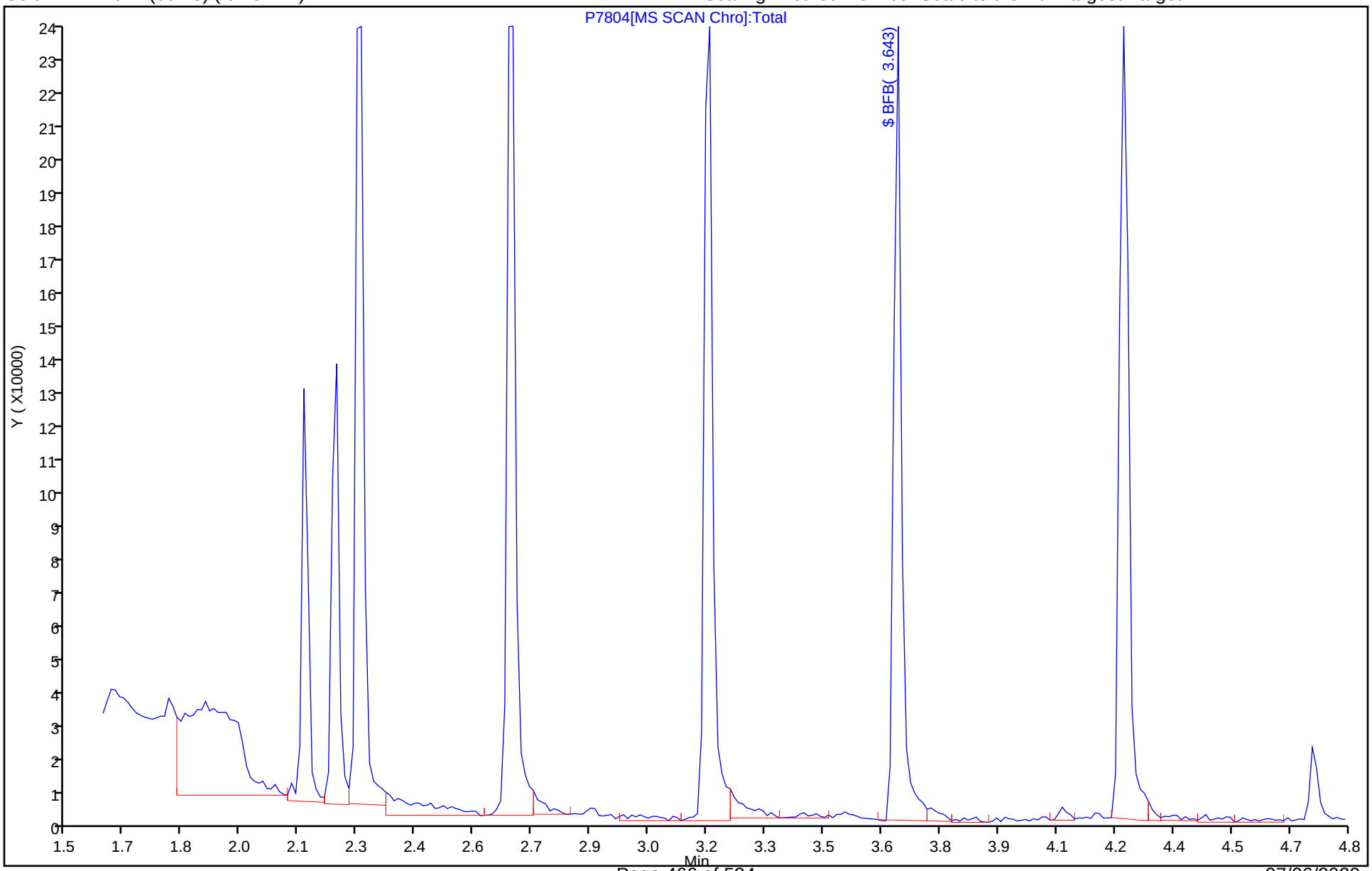
Report Date: 06-Feb-2020 21:42:03 Chrom Revision: 2.3 28-Jan-2020 08:24:26

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_P\20200206-89116.b\P7804.D

Injection Date:	06-Feb-2020 10:25:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Jun-2020 16:26:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	2.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	01-Jun-2020 22:08:33	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1050				
First Level Reviewer: ornelasg		Date:	01-Jun-2020 22:05:05		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	8.742	8.742	0.000	0	867490	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

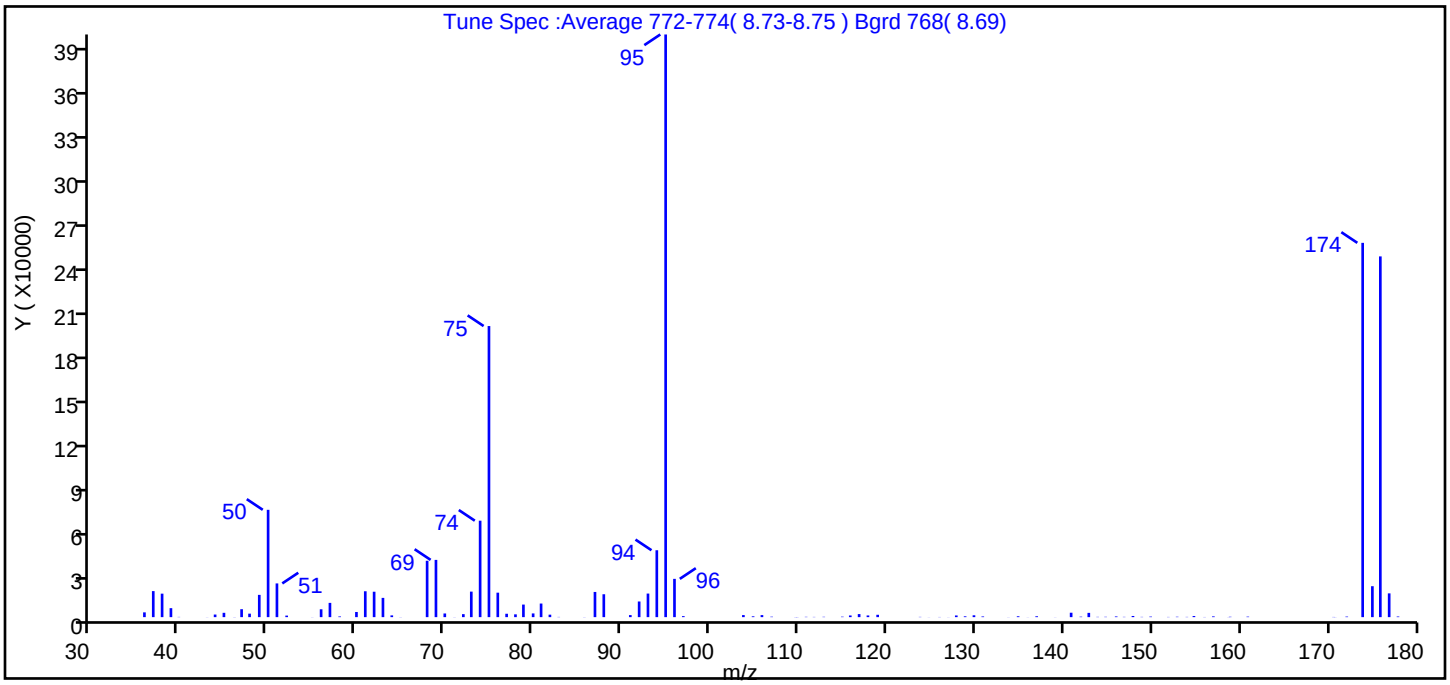
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.4
75	30 to 60% of m/z 95	50.0
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	64.2
175	5 to 9% of m/z 174	5.3 (8.3)
176	Greater than 95% but less than 101% of m/z 174	61.9 (96.4)
177	5 to 9% of m/z 176	4.1 (6.6)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 01-Jun-2020 16:26:30
Spectrum: Tune Spec :Average 772-774(8.73-8.75) Bgrd 768(8.69)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3230	70.00	2479	107.00	303	144.00	188
37.00	17584	71.00	77	110.00	86	145.00	230
38.00	15864	72.00	2025	110.00	99	146.00	470
39.00	6066	73.00	17240	111.00	215	147.00	187
40.00	154	74.00	65144	112.00	152	148.00	779
43.00	59	75.00	196608	113.00	226	149.00	174
44.00	1759	76.00	16528	115.00	319	150.00	371
45.00	2924	77.00	2291	116.00	1125	152.00	141
46.00	93	78.00	1894	117.00	2068	153.00	270
47.00	5367	79.00	8494	118.00	1141	154.00	164
48.00	2358	80.00	2509	119.00	1593	155.00	739
49.00	15041	81.00	9191	124.00	174	156.00	113
50.00	72488	82.00	1672	125.00	54	157.00	502
51.00	22776	83.00	142	126.00	121	159.00	56
52.00	1047	86.00	82	127.00	57	159.00	255
55.00	65	87.00	17016	128.00	1132	161.00	345
56.00	5313	88.00	15465	129.00	551	171.00	131
57.00	9635	91.00	1375	130.00	1251	171.00	70
58.00	459	92.00	10577	131.00	460	172.00	383
60.00	3483	93.00	15925	134.00	62	174.00	252800
61.00	17480	94.00	45184	135.00	583	175.00	20896
62.00	17168	95.00	393536	136.00	54	176.00	243648
63.00	13012	96.00	25856	137.00	591	177.00	16056
64.00	1189	97.00	668	139.00	58	178.00	431
65.00	79	104.00	1393	141.00	2986		
68.00	38072	105.00	552	142.00	313		
69.00	38664	106.00	1381	143.00	2887		

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

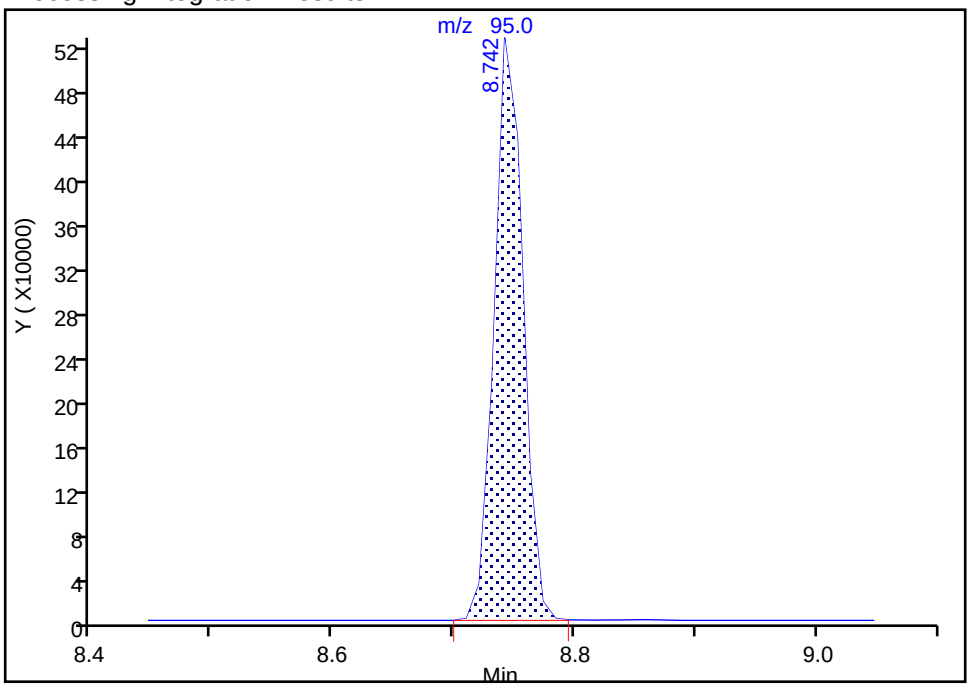
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

$ 9 BFB, CAS: 460-00-4

Signal: 1

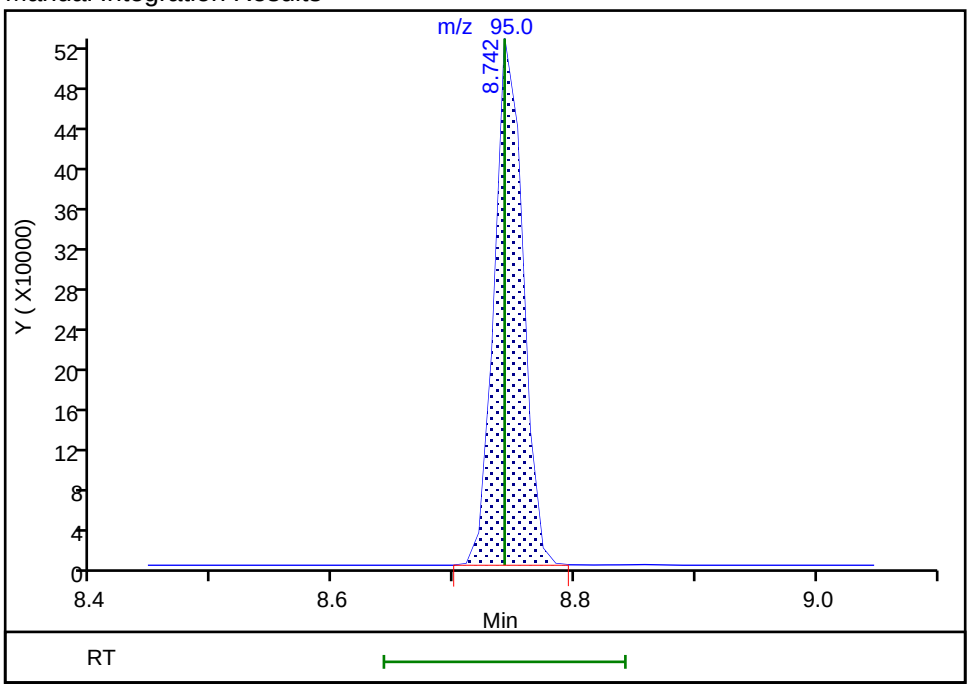
Processing Integration Results

RT: 8.74
Area: 867490
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 8.74
Area: 867490
Amount: 0
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 22:05:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

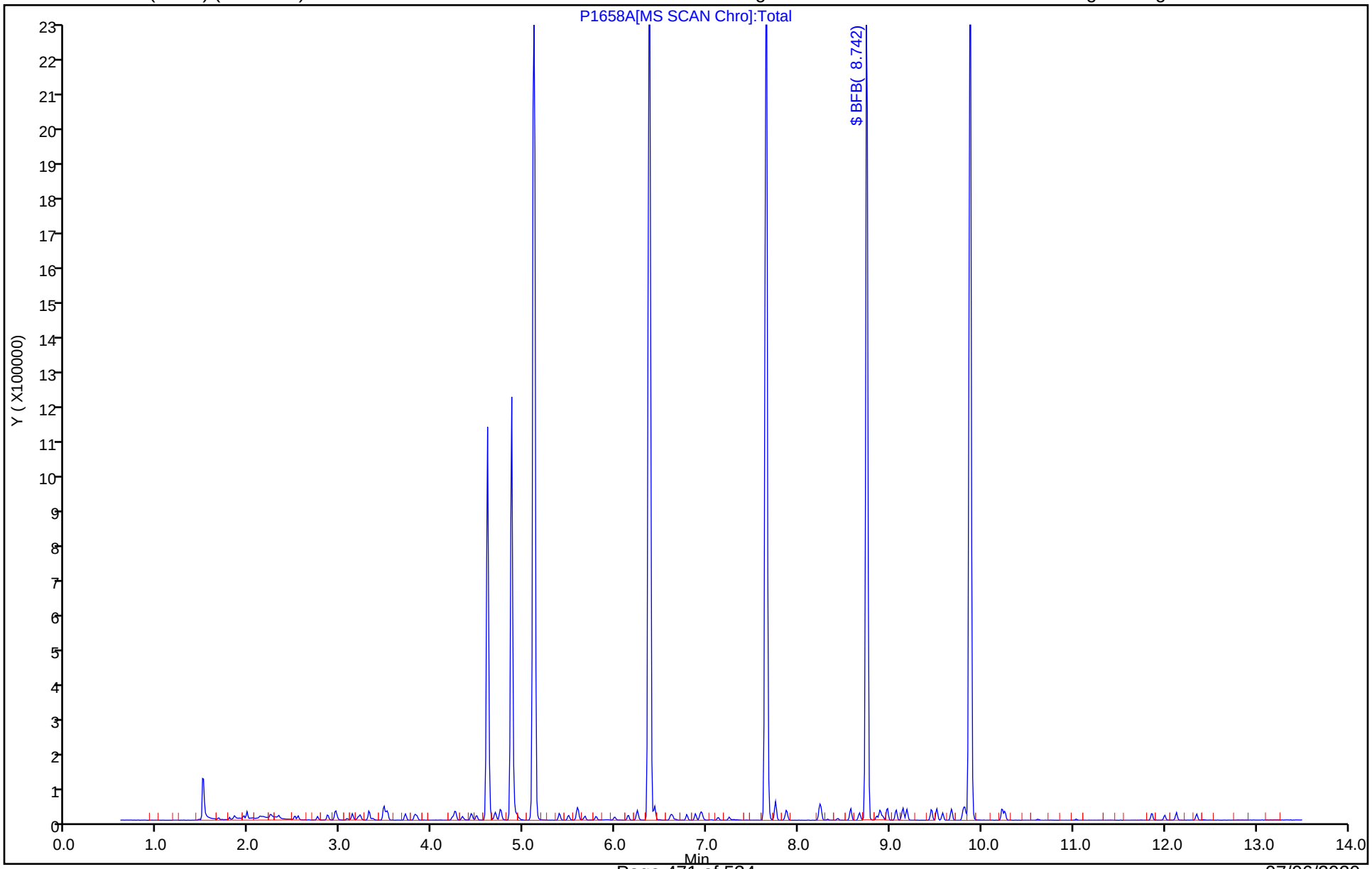
Report Date: 01-Jun-2020 22:08:34 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D

Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Jul-2020 22:01:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	2.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	PETUNINP	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	02-Jul-2020 22:13:30	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1058				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.569	3.569	0.000	75	754439	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

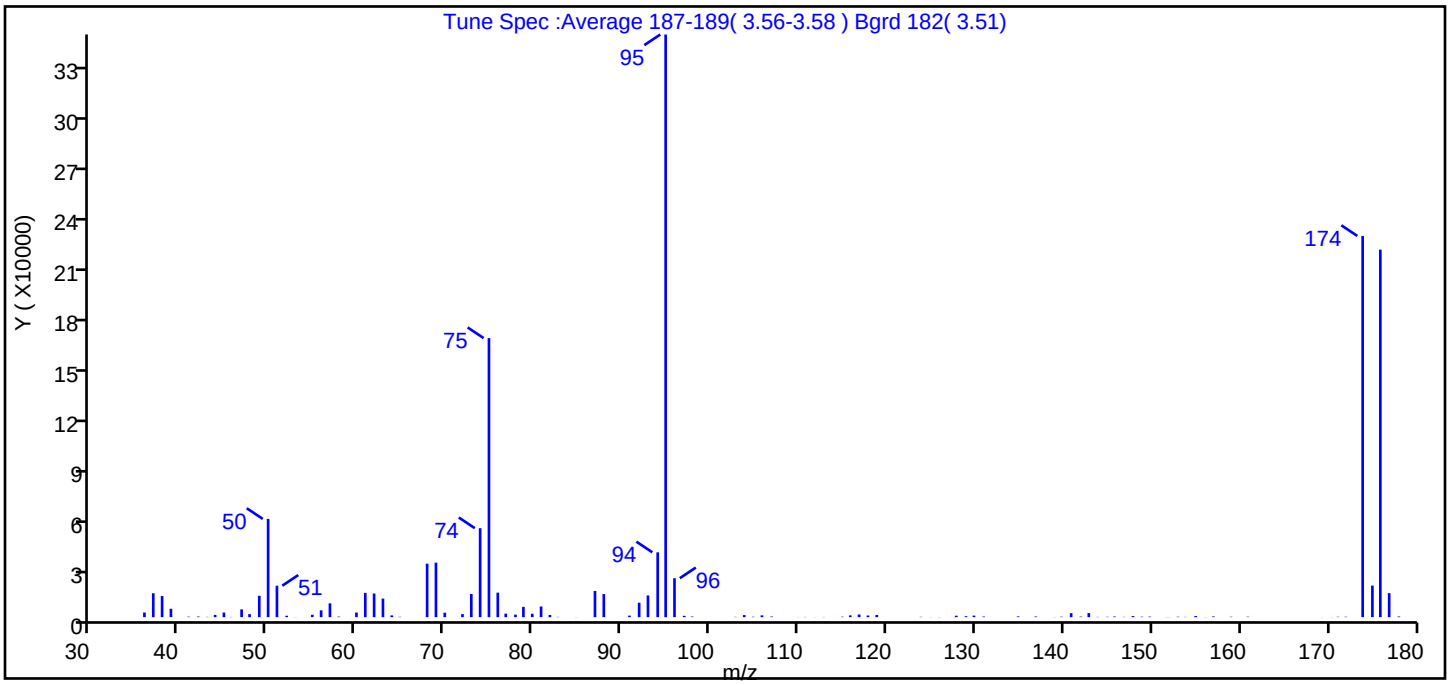
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D
Injection Date: 01-Jul-2020 22:01:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: PETUNINP ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.9
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	65.4
175	5 to 9% of m/z 174	5.4 (8.3)
176	Greater than 95% but less than 101% of m/z 174	63.1 (96.4)
177	5 to 9% of m/z 176	4.1 (6.5)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 01-Jul-2020 22:01:30
Spectrum: Tune Spec :Average 187-189(3.56-3.58) Bgrd 182(3.51)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2733	68.00	31456	104.00	1214	143.00	2369
37.00	14066	69.00	32056	105.00	243	144.00	135
38.00	12416	70.00	2601	106.00	1050	145.00	204
39.00	4936	72.00	1791	107.00	363	146.00	363
41.00	271	73.00	13636	110.00	59	147.00	164
42.00	363	74.00	52344	111.00	111	148.00	631
43.00	157	75.00	164160	112.00	57	149.00	257
44.00	1328	76.00	14408	113.00	98	150.00	318
45.00	2717	77.00	2054	115.00	266	152.00	75
46.00	132	78.00	1472	116.00	1035	152.00	60
47.00	4575	79.00	6046	117.00	1568	153.00	256
48.00	1776	80.00	2006	118.00	978	154.00	151
49.00	12579	81.00	6259	119.00	1270	155.00	646
50.00	57784	82.00	1278	124.00	183	156.00	79
51.00	18496	83.00	142	125.00	62	157.00	416
52.00	827	85.00	71	126.00	86	159.00	237
53.00	70	87.00	15420	128.00	110	161.00	259
55.00	1404	88.00	13586	128.00	847	169.00	55
56.00	4012	91.00	903	129.00	558	170.00	61
57.00	8111	92.00	8492	130.00	922	171.00	213
58.00	340	93.00	12773	131.00	365	172.00	243
60.00	2699	94.00	38136	135.00	447	174.00	224256
61.00	14282	95.00	342784	137.00	378	175.00	18568
62.00	13899	96.00	22912	139.00	81	176.00	216192
63.00	10920	97.00	761	140.00	261	177.00	14129
64.00	1027	98.00	345	141.00	2337	178.00	408
65.00	201	103.00	168	142.00	307		

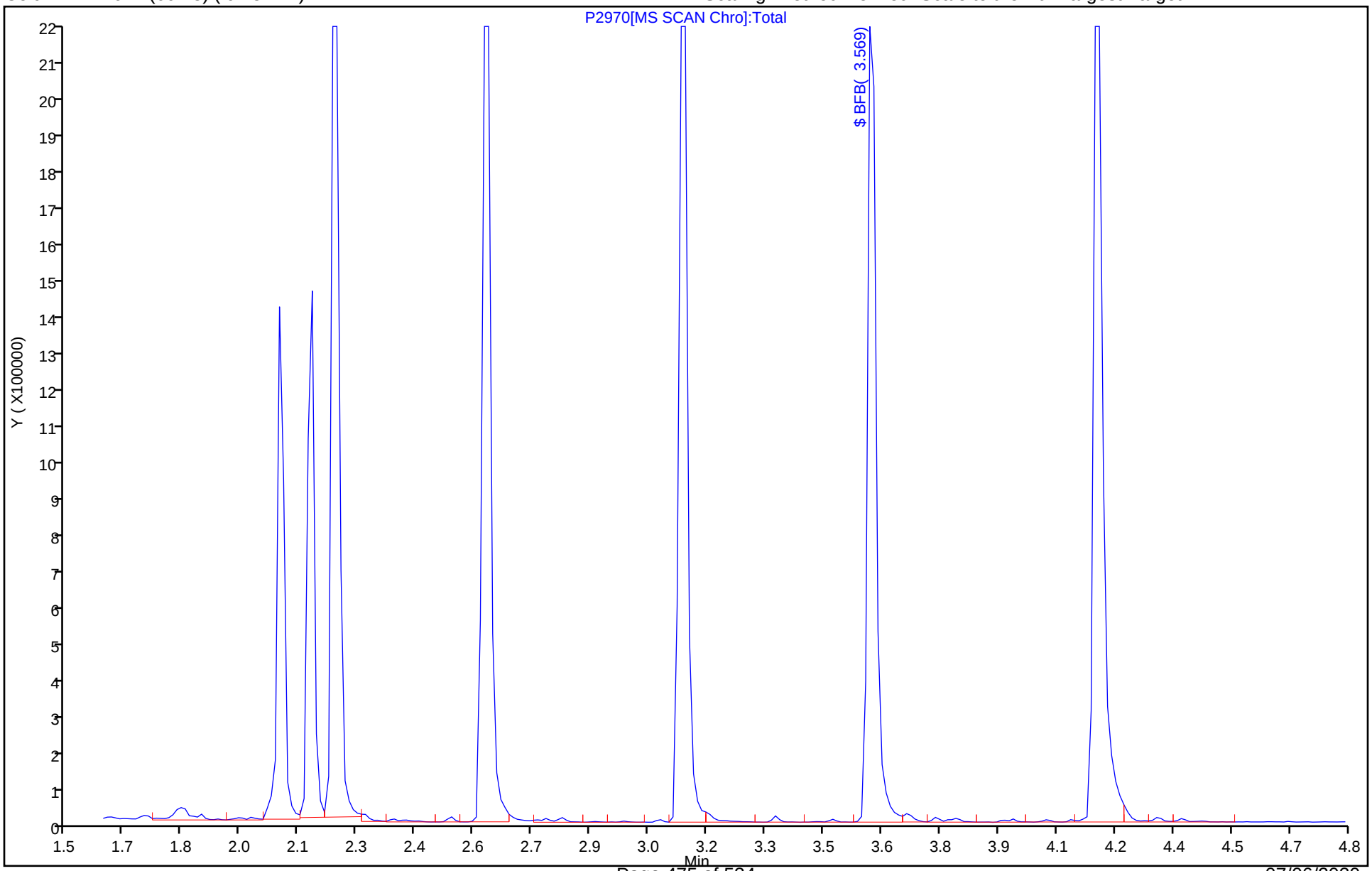
Report Date: 02-Jul-2020 22:13:30 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2970.D

Injection Date:	01-Jul-2020 22:01:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500875/9

Matrix: Water Lab File ID: P2978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	ND		20	2.8
107-13-1	Acrylonitrile	ND		20	1.4
71-43-2	Benzene	ND		1.0	0.16
74-97-5	Chlorobromomethane	ND		1.0	0.10
75-27-4	Dichlorobromomethane	ND		1.0	0.17
75-25-2	Bromoform	ND		1.0	0.46
74-83-9	Bromomethane	ND		2.0	0.21
78-93-3	2-Butanone (MEK)	ND		6.0	2.0
75-15-0	Carbon disulfide	ND		2.0	0.17
56-23-5	Carbon tetrachloride	ND		1.0	0.19
108-90-7	Chlorobenzene	ND		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	ND		1.0	0.17
75-00-3	Chloroethane	ND		2.0	0.41
67-66-3	Chloroform	ND		1.0	0.16
74-87-3	Chloromethane	ND		2.0	0.30
107-05-1	Allyl chloride	ND		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	0.47
74-95-3	Dibromomethane	ND		1.0	0.17
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.15
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.13
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	ND		3.0	0.80
75-71-8	Dichlorodifluoromethane	ND		2.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.22
107-06-2	1,2-Dichloroethane	ND		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.15
75-35-4	1,1-Dichloroethene	ND		1.0	0.23
78-87-5	1,2-Dichloropropane	ND		1.0	0.18
142-28-9	1,3-Dichloropropane	ND		1.0	0.090
594-20-7	2,2-Dichloropropane	ND		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	ND		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-500875/9

Matrix: Water Lab File ID: P2978.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 01:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	ND		1.0	0.19
100-41-4	Ethylbenzene	ND		1.0	0.16
97-63-2	Ethyl methacrylate	ND		3.0	0.86
591-78-6	2-Hexanone	ND		5.0	1.7
74-88-4	Iodomethane	ND		1.0	0.23
78-83-1	Isobutyl alcohol	ND		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	ND		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	ND		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
127-18-4	Tetrachloroethene	ND		1.0	0.20
108-88-3	Toluene	ND		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.21
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.16
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.27
79-01-6	Trichloroethene	ND		1.0	0.16
75-69-4	Trichlorofluoromethane	ND		2.0	0.29
96-18-4	1,2,3-Trichloropropane	ND		2.5	0.33
108-05-4	Vinyl acetate	ND		3.0	0.94
75-01-4	Vinyl chloride	ND		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	ND		2.0	0.15
95-47-6	o-Xylene	ND		1.0	0.19
1330-20-7	Xylenes, Total	ND		2.0	0.19
106-93-4	1,2-Dibromoethane	ND		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2978.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jul-2020 01:05:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.103	5.109	-0.006	99	2296585	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.646	7.642	0.004	86	525168	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.873	9.869	0.004	96	751382	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	550324	50.0	49.8	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	97	616572	50.0	47.4	
$	6 Toluene-d8 (Surr)	98	6.369	6.366	0.003	93	2267142	50.0	49.1	
$	7 4-Bromofluorobenzene (Surr)	95	8.744	8.741	0.003	85	810344	50.0	48.9	
$	8 Trifluorotoluene (Surr)	1		0.000					ND	
$	9 BFB	95		3.569					ND	
	10 Dichlorodifluoromethane	85		1.660					ND	
	11 Chloromethane	50		1.839					ND	
	12 Vinyl chloride	62		1.945					ND	
	13 Ethylene oxide	43		2.197					ND	
	14 Bromomethane	94		2.230					ND	
	15 Chloroethane	64		2.325					ND	
	16 Dichlorofluoromethane	67		2.493					ND	
	17 Trichlorofluoromethane	101		2.536					ND	
	18 Ethanol	45		2.640					ND	
	19 Ethyl ether	59		2.747					ND	
	20 Propene oxide	58	2.792	2.788	0.004	39	604		0.2737	
	21 Acrolein	56		2.852					ND	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937					ND	
	22 1,1-Dichloroethene	96		2.937					ND	
	24 Acetone	43		2.958					ND	
	25 Isopropyl alcohol	45		3.041					ND	
	26 Iodomethane	142		3.063					ND	
	27 Carbon disulfide	76		3.127					ND	
	28 Acetonitrile	41		3.168					ND	
	29 Methyl acetate	43		3.190					ND	
	30 3-Chloro-1-propene	41		3.211					ND	
	31 Methylene Chloride	84		3.306					ND	
	32 2-Methyl-2-propanol	59		3.348					ND	
	33 Acrylonitrile	53		3.464					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Methyl tert-butyl ether	73		3.496					ND	
35 trans-1,2-Dichloroethene	96		3.517					ND	
36 Hexane	57		3.707					ND	
38 Vinyl acetate	43		3.802					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
40 Isopropyl ether	87		3.832					ND	
39 1,1-Dichloroethane	63		3.834					ND	
41 2-Chloro-1,3-butadiene	53		3.885					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
43 Tert-butyl ethyl ether	59		4.096					ND	
44 2-Butanone (MEK)	43		4.214					ND	
46 Ethyl acetate	43		4.233					ND	
47 cis-1,2-Dichloroethene	96		4.245					ND	
48 2,2-Dichloropropane	77		4.256					ND	
49 Propionitrile	54		4.265					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
50 sec-Butyl Alcohol	45		4.330					ND	
51 Methacrylonitrile	41		4.381					ND	
53 Chlorobromomethane	128		4.425					ND	
52 Tetrahydrofuran	42		4.435					ND	
54 Chloroform	83		4.477					ND	
55 1,1,1-Trichloroethane	97		4.625					ND	
56 Cyclohexane	56		4.688					ND	
57 1,1-Dichloropropene	75		4.741					ND	
59 Carbon tetrachloride	117		4.752					ND	
58 Isobutyl alcohol	41		4.752					ND	
60 Benzene	78		4.900					ND	
61 1,2-Dichloroethane	62		4.921					ND	
62 Tert-amyl methyl ether	73		4.962					ND	
63 n-Butanol	56		4.962					ND	
66 n-Heptane	43		5.079					ND	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131					ND	
67 Trichloroethene	95		5.385					ND	
68 2-Pentanone	43		5.480					ND	
69 Methylcyclohexane	55		5.585					ND	
71 Methyl methacrylate	100		5.595					ND	
70 1,2-Dichloropropane	63		5.596					ND	
72 1,4-Dioxane	88		5.638					ND	
73 Dibromomethane	93		5.670					ND	
74 Dichlorobromomethane	83		5.786					ND	
75 2-Nitropropane	41		5.954					ND	
76 2-Chloroethyl vinyl ether	63		5.986					ND	
77 cis-1,3-Dichloropropene	75		6.134					ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240					ND	
79 Toluene	91		6.430					ND	
80 trans-1,3-Dichloropropene	75		6.599					ND	
81 Ethyl methacrylate	69		6.620					ND	
82 1,1,2-Trichloroethane	97		6.778					ND	
83 Tetrachloroethene	164		6.873					ND	
84 1,3-Dichloropropane	76		6.926					ND	
85 2-Hexanone	43		6.947					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Tetrahydrothiophene	60		7.114					ND	
86 Chlorodibromomethane	129		7.126					ND	
88 Ethylene Dibromide	107		7.242					ND	
89 1-Chlorohexane	91		7.633					ND	
90 Chlorobenzene	112		7.675					ND	
91 1,1,1,2-Tetrachloroethane	131		7.749					ND	
92 Ethylbenzene	106		7.749					ND	
93 m-Xylene & p-Xylene	106		7.865					ND	
94 o-Xylene	106		8.224					ND	
95 Styrene	104		8.245					ND	
96 Bromoform	173		8.435					ND	
97 Isopropylbenzene	105		8.572					ND	
98 cis-1,4-Dichloro-2-butene	53		8.613					ND	
99 Cyclohexanone	55	8.744	8.667	0.077	36	1924		3.58	
100 1,1,2,2-Tetrachloroethane	83		8.857					ND	
101 Bromobenzene	156		8.888					ND	
102 trans-1,4-Dichloro-2-butene	53		8.888					ND	
103 1,2,3-Trichloropropane	110		8.920					ND	
104 N-Propylbenzene	120		8.973					ND	
105 2-Chlorotoluene	126		9.068					ND	
106 1,3,5-Trimethylbenzene	105		9.142					ND	
107 4-Chlorotoluene	126		9.184					ND	
108 tert-Butylbenzene	119		9.448					ND	
109 1,2,4-Trimethylbenzene	105		9.511					ND	
110 sec-Butylbenzene	134		9.669					ND	
111 1,3-Dichlorobenzene	146		9.796					ND	
112 4-Isopropyltoluene	119		9.817					ND	
113 1,4-Dichlorobenzene	146		9.902					ND	
114 1,2,3-Trimethylbenzene	105		9.911					ND	
115 n-Butylbenzene	91		10.218					ND	
116 1,2-Dichlorobenzene	146		10.250					ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031					ND	
118 1,3,5-Trichlorobenzene	180		11.219					ND	
119 1,2,4-Trichlorobenzene	180		11.854					ND	
120 Hexachlorobutadiene	225		12.002					ND	
121 Naphthalene	128		12.128					ND	
122 1,2,3-Trichlorobenzene	180		12.350					ND	
131 Propene oxide TIC	58		0.000					ND	
125 2,2,3-Trimethylbutane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
136 1-Chlorohexane TIC	1		0.000					ND	
137 Cyclohexane TIC	1		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
133 Methyl cyclohexane TIC	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 Pentachloroethane	167		0.000				ND		
S 139 1,2-Dichloroethene, Total (URS)	96		2.000				ND		
S 142 Xylenes, Total	106		0.000				ND		
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000				ND		
S 143 Xylenes, Total (URS)	1		0.000				ND		
S 146 Total BTEX	1		0.000				ND		
S 145 1,3-Dichloropropene, Total	1		0.000				ND		
S 144 1,2-Dichloroethene, Total	1		0.000				ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

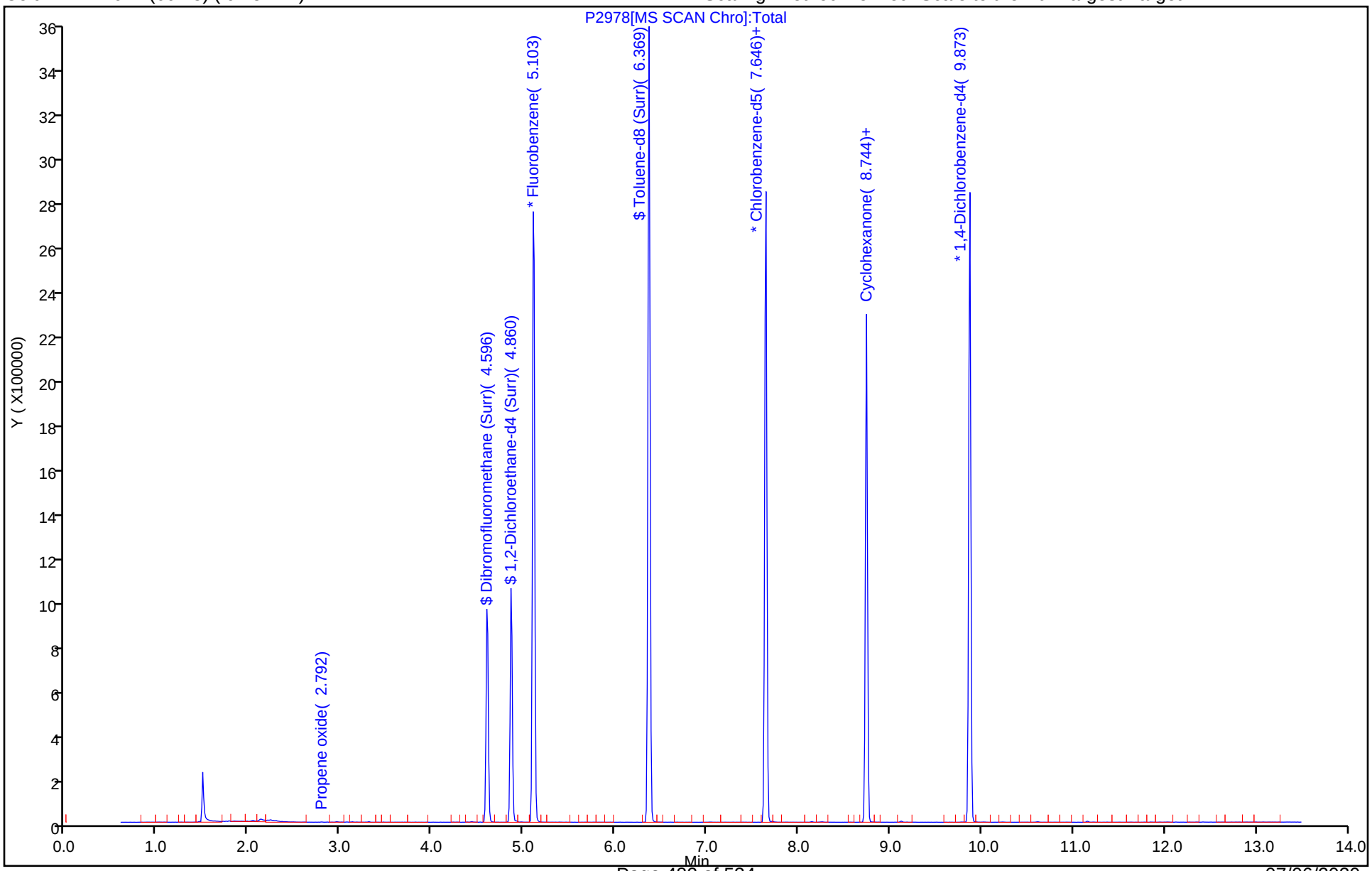
Report Date: 02-Jul-2020 22:13:42 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2978.D

Injection Date:	02-Jul-2020 01:05:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2978.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jul-2020 01:05:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.8	99.51
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.75
$ 6 Toluene-d8 (Surr)	50.0	49.1	98.12
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.9	97.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500875/4

Matrix: Water Lab File ID: P2973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	96.5		10	1.9
107-02-8	Acrolein	236		20	2.8
107-13-1	Acrylonitrile	246		20	1.4
71-43-2	Benzene	24.3		1.0	0.16
74-97-5	Chlorobromomethane	24.9		1.0	0.10
75-27-4	Dichlorobromomethane	24.9		1.0	0.17
75-25-2	Bromoform	26.8		1.0	0.46
74-83-9	Bromomethane	30.9		2.0	0.21
78-93-3	2-Butanone (MEK)	99.1		6.0	2.0
75-15-0	Carbon disulfide	27.9		2.0	0.17
56-23-5	Carbon tetrachloride	25.8		1.0	0.19
108-90-7	Chlorobenzene	24.2		1.0	0.17
124-48-1	Chlorodibromomethane	26.1		1.0	0.17
75-00-3	Chloroethane	28.5		2.0	0.41
67-66-3	Chloroform	23.9		1.0	0.16
74-87-3	Chloromethane	29.2		2.0	0.30
107-05-1	Allyl chloride	25.6		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	27.1		5.0	0.47
74-95-3	Dibromomethane	24.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.6		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.9		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.8		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	24.0		3.0	0.80
75-71-8	Dichlorodifluoromethane	36.9		2.0	0.31
75-34-3	1,1-Dichloroethane	24.7		1.0	0.22
107-06-2	1,2-Dichloroethane	23.8		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	25.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.9		1.0	0.15
75-35-4	1,1-Dichloroethene	26.9		1.0	0.23
78-87-5	1,2-Dichloropropane	24.9		1.0	0.18
142-28-9	1,3-Dichloropropane	23.6		1.0	0.090
594-20-7	2,2-Dichloropropane	27.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	25.5		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.1		3.0	0.19
563-58-6	1,1-Dichloropropene	24.6		1.0	0.19
100-41-4	Ethylbenzene	24.5		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500875/4

Matrix: Water Lab File ID: P2973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	25.7		3.0	0.86
591-78-6	2-Hexanone	105		5.0	1.7
74-88-4	Iodomethane	20.5		1.0	0.23
78-83-1	Isobutyl alcohol	656		110	37
75-09-2	Methylene Chloride	26.1		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	103		5.0	0.98
100-42-5	Styrene	25.4		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	25.4		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	25.0		1.0	0.21
127-18-4	Tetrachloroethene	25.5		1.0	0.20
108-88-3	Toluene	24.3		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.5		1.0	0.21
71-55-6	1,1,1-Trichloroethane	25.4		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.1		1.0	0.27
79-01-6	Trichloroethene	23.7		1.0	0.16
75-69-4	Trichlorofluoromethane	25.8		2.0	0.29
96-18-4	1,2,3-Trichloropropane	24.1		2.5	0.33
108-05-4	Vinyl acetate	52.0		3.0	0.94
75-01-4	Vinyl chloride	29.3		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.3		2.0	0.15
95-47-6	o-Xylene	24.8		1.0	0.19
1330-20-7	Xylenes, Total	49.1		2.0	0.19
106-93-4	1,2-Dibromoethane	24.4		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jul-2020 23:18:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.109	0.003	99	2302917	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	526470	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.869	0.002	96	754608	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.595	4.604	-0.009	93	552874	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.859	4.868	-0.009	96	607288	50.0	46.5	
$ 6 Toluene-d8 (Surr)	98	6.368	6.366	0.002	93	2253454	50.0	48.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.741	0.001	84	808198	50.0	48.5	
10 Dichlorodifluoromethane	85	1.661	1.660	0.001	99	238331	25.0	36.9	
11 Chloromethane	50	1.841	1.839	0.002	99	256917	25.0	29.2	
12 Vinyl chloride	62	1.936	1.945	-0.009	98	295007	25.0	29.3	
14 Bromomethane	94	2.231	2.230	0.001	90	121425	25.0	30.9	
15 Chloroethane	64	2.326	2.325	0.001	100	183109	25.0	28.5	
16 Dichlorofluoromethane	67	2.495	2.493	0.002	97	379163	25.0	25.3	
17 Trichlorofluoromethane	101	2.527	2.536	-0.009	98	321376	25.0	25.8	
19 Ethyl ether	59	2.748	2.747	0.001	91	194856	25.0	24.8	
21 Acrolein	56	2.854	2.852	0.002	100	457306	246.9	236.1	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.938	2.937	0.001	72	146707	25.0	26.1	
22 1,1-Dichloroethene	96	2.938	2.937	0.001	98	200771	25.0	26.9	
24 Acetone	43	2.959	2.958	0.001	100	296556	100.0	96.5	
26 Iodomethane	142	3.065	3.063	0.002	97	144150	25.0	20.5	
27 Carbon disulfide	76	3.128	3.127	0.001	99	649077	25.0	27.9	
29 Methyl acetate	43	3.191	3.190	0.001	98	382265	50.0	48.8	
30 3-Chloro-1-propene	41	3.213	3.211	0.002	94	327068	25.0	25.6	
31 Methylene Chloride	84	3.307	3.306	0.001	91	226645	25.0	26.1	
32 2-Methyl-2-propanol	59	3.350	3.348	0.002	98	270667	250.0	268.1	
33 Acrylonitrile	53	3.466	3.464	0.002	99	1042992	250.0	246.1	
34 Methyl tert-butyl ether	73	3.497	3.496	0.001	94	620736	25.0	24.7	
35 trans-1,2-Dichloroethene	96	3.508	3.517	-0.009	98	219109	25.0	24.9	
36 Hexane	57	3.709	3.707	0.001	90	331857	25.0	27.0	
38 Vinyl acetate	43	3.803	3.802	0.001	97	985594	50.0	52.0	
39 1,1-Dichloroethane	63	3.835	3.834	0.001	96	397945	25.0	24.7	
44 2-Butanone (MEK)	43	4.215	4.214	0.001	99	508784	100.0	99.1	
47 cis-1,2-Dichloroethene	96	4.247	4.245	0.002	82	244289	25.0	25.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.257	4.256	0.001	88	294566	25.0	27.0	
50 sec-Butyl Alcohol	45	4.321	4.330	-0.009	99	662144	750.0	802.1	
53 Chlorobromomethane	128	4.426	4.425	0.001	97	109304	25.0	24.9	
52 Tetrahydrofuran	42	4.426	4.435	-0.009	89	170838	50.0	50.2	
54 Chloroform	83	4.479	4.477	0.002	92	368987	25.0	23.9	
55 1,1,1-Trichloroethane	97	4.627	4.625	0.002	98	311503	25.0	25.4	
56 Cyclohexane	56	4.690	4.688	0.002	87	402522	25.0	25.8	
57 1,1-Dichloropropene	75	4.743	4.741	0.002	97	315726	25.0	24.6	
59 Carbon tetrachloride	117	4.743	4.752	-0.009	82	259036	25.0	25.8	
58 Isobutyl alcohol	41	4.743	4.752	-0.009	93	233701	625.0	656.1	
60 Benzene	78	4.890	4.900	-0.010	96	921847	25.0	24.3	
61 1,2-Dichloroethane	62	4.922	4.921	0.001	97	284835	25.0	23.8	
66 n-Heptane	43	5.080	5.079	0.001	91	282667	25.0	25.0	
67 Trichloroethene	95	5.386	5.385	0.001	99	220965	25.0	23.7	
68 2-Pentanone	43	5.481	5.480	0.001	99	811223	100.0	106.4	
69 Methylcyclohexane	55	5.576	5.585	-0.009	92	293678	25.0	24.9	
70 1,2-Dichloropropane	63	5.587	5.596	-0.009	97	243492	25.0	24.9	
72 1,4-Dioxane	88	5.629	5.638	-0.009	93	71260	500.0	522.9	
73 Dibromomethane	93	5.661	5.670	-0.009	95	137248	25.0	24.4	
74 Dichlorobromomethane	83	5.787	5.786	0.001	100	282783	25.0	24.9	
76 2-Chloroethyl vinyl ether	63	5.988	5.986	0.002	90	182251	25.0	26.9	
77 cis-1,3-Dichloropropene	75	6.136	6.134	0.002	97	360144	25.0	25.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.231	6.240	-0.009	95	1008805	100.0	103.0	
79 Toluene	91	6.431	6.430	0.001	98	966119	25.0	24.3	
80 trans-1,3-Dichloropropene	75	6.600	6.599	0.001	97	300257	25.0	24.1	
81 Ethyl methacrylate	69	6.621	6.620	0.001	87	332025	25.0	25.7	
82 1,1,2-Trichloroethane	97	6.779	6.778	0.001	90	201250	25.0	25.1	
83 Tetrachloroethene	164	6.874	6.873	0.001	95	163521	25.0	25.5	
84 1,3-Dichloropropane	76	6.927	6.926	0.001	96	364390	25.0	23.6	
85 2-Hexanone	43	6.938	6.947	-0.009	93	745379	100.0	105.3	
86 Chlorodibromomethane	129	7.117	7.126	-0.009	90	206563	25.0	26.1	
88 Ethylene Dibromide	107	7.233	7.242	-0.009	97	209326	25.0	24.4	
89 1-Chlorohexane	91	7.624	7.633	-0.009	98	310009	25.0	26.6	
90 Chlorobenzene	112	7.676	7.675	0.001	95	601595	25.0	24.2	
91 1,1,1,2-Tetrachloroethane	131	7.740	7.749	-0.009	95	194504	25.0	25.4	
92 Ethylbenzene	106	7.750	7.749	0.001	98	335424	25.0	24.5	
93 m-Xylene & p-Xylene	106	7.866	7.865	0.001	99	399431	25.0	24.3	
94 o-Xylene	106	8.225	8.224	0.001	96	392105	25.0	24.8	
95 Styrene	104	8.246	8.245	0.001	95	676775	25.0	25.4	
96 Bromoform	173	8.426	8.435	-0.009	95	125336	25.0	26.8	
97 Isopropylbenzene	105	8.563	8.572	-0.009	96	1003971	25.0	25.4	
99 Cyclohexanone	55	8.658	8.667	-0.009	91	438246	1000.0	812.9	
100 1,1,2,2-Tetrachloroethane	83	8.848	8.857	-0.009	93	288861	25.0	25.0	
101 Bromobenzene	156	8.890	8.888	0.002	96	228182	25.0	24.5	
102 trans-1,4-Dichloro-2-butene	53	8.890	8.888	0.002	47	73886	25.0	24.0	
103 1,2,3-Trichloropropane	110	8.922	8.920	0.002	82	84577	25.0	24.1	
104 N-Propylbenzene	120	8.964	8.973	-0.009	99	271396	25.0	24.8	
105 2-Chlorotoluene	126	9.069	9.068	0.001	97	228790	25.0	24.7	
106 1,3,5-Trimethylbenzene	105	9.143	9.142	0.001	93	807062	25.0	24.9	
107 4-Chlorotoluene	126	9.185	9.184	0.001	97	239037	25.0	24.6	
108 tert-Butylbenzene	119	9.449	9.448	0.001	93	666175	25.0	24.6	
109 1,2,4-Trimethylbenzene	105	9.502	9.511	-0.009	97	814176	25.0	24.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 sec-Butylbenzene	134	9.671	9.669	0.002	94	194511	25.0	24.5	
111 1,3-Dichlorobenzene	146	9.797	9.796	0.001	97	419251	25.0	24.9	
112 4-Isopropyltoluene	119	9.819	9.817	0.002	97	824036	25.0	24.8	
113 1,4-Dichlorobenzene	146	9.892	9.902	-0.010	95	433010	25.0	24.8	
115 n-Butylbenzene	91	10.220	10.218	0.002	98	751416	25.0	24.3	
116 1,2-Dichlorobenzene	146	10.251	10.250	0.001	98	394929	25.0	23.6	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.031	0.001	84	53226	25.0	27.1	
119 1,2,4-Trichlorobenzene	180	11.855	11.854	0.001	94	222909	25.0	24.5	
120 Hexachlorobutadiene	225	12.003	12.002	0.001	94	78650	25.0	23.7	
121 Naphthalene	128	12.130	12.128	0.002	97	810229	25.0	27.5	
122 1,2,3-Trichlorobenzene	180	12.351	12.350	0.001	95	209826	25.0	25.0	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	49.8	
S 142 Xylenes, Total	106				0		50.0	49.1	
S 140 Trihalomethanes, Total	1				0		100.0	101.6	
S 143 Xylenes, Total (URS)	1				0		50.0	49.1	
S 145 1,3-Dichloropropene, Total	1				0		50.0	49.6	
S 144 1,2-Dichloroethene, Total	1				0		50.0	49.8	

Reagents:

MV-Gas B_00064	Amount Added: 5.00	Units: uL	
MV-MegaMain B_00031	Amount Added: 12.50	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

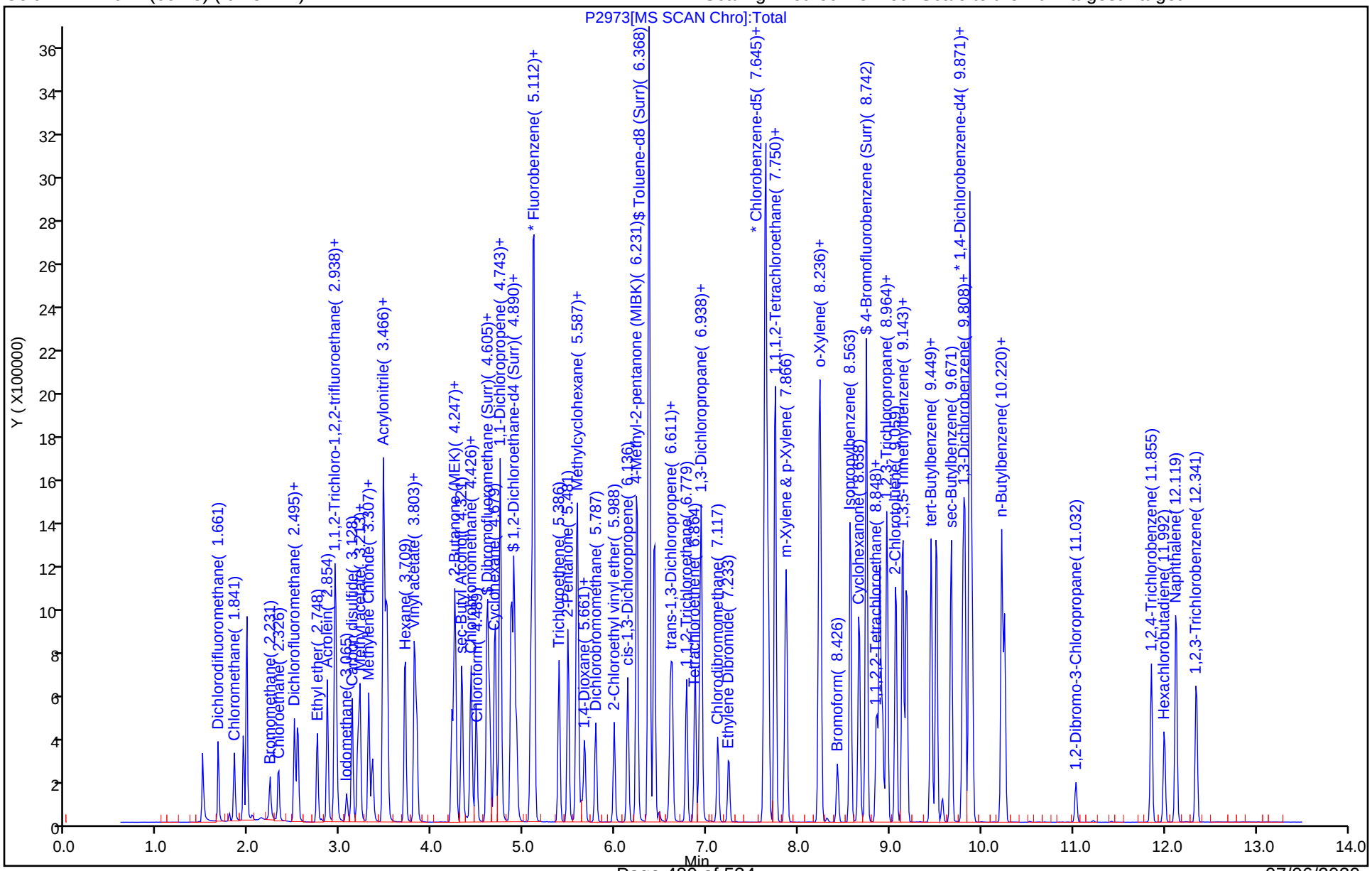
Report Date: 02-Jul-2020 22:13:36 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2973.D

Injection Date:	01-Jul-2020 23:18:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jul-2020 23:18:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.70
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	93.07
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.29
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.5	97.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-500875/6

Matrix: Water Lab File ID: P2975.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 00:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	206		30	9.6
126-99-8	Chloroprene	22.1		1.0	0.21
126-98-7	Methacrylonitrile	210		10	1.6
80-62-6	Methyl methacrylate	49.6		4.0	1.1
107-12-0	Propionitrile	225		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2975.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Jul-2020 00:01:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.109	0.000	99	2306779	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	86	537361	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	96	763920	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	556117	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	97	613203	50.0	46.9	
$ 6 Toluene-d8 (Surr)	98	6.365	6.366	-0.001	93	2270107	50.0	48.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.739	8.741	-0.002	83	814469	50.0	48.3	
13 Ethylene oxide	43	2.197	2.197	0.000	100	1415436	NC	NC	
18 Ethanol	45	2.650	2.640	0.010	99	195766	1500.0	1176.1	
20 Propene oxide	58	2.788	2.788	0.000	97	4912369	2500.0	2216.3	
25 Isopropyl alcohol	45	3.041	3.041	0.000	99	164743	250.0	192.4	
28 Acetonitrile	41	3.168	3.168	0.000	99	347000	250.0	205.6	
40 Isopropyl ether	87	3.832	3.832	0.000	95	182262	25.0	23.9	
41 2-Chloro-1,3-butadiene	53	3.885	3.885	0.000	89	308020	25.0	22.1	
43 Tert-butyl ethyl ether	59	4.096	4.096	0.000	97	585662	25.0	20.7	
46 Ethyl acetate	43	4.233	4.233	0.000	99	477185	50.0	56.7	
49 Propionitrile	54	4.265	4.265	0.000	99	409353	250.0	224.9	
51 Methacrylonitrile	41	4.381	4.381	0.000	90	1467340	250.0	210.1	
62 Tert-amyl methyl ether	73	4.962	4.962	0.000	87	569801	25.0	20.8	
63 n-Butanol	56	4.962	4.962	0.000	50	214778	625.0	676.9	
71 Methyl methacrylate	100	5.595	5.595	0.000	91	137852	50.0	49.6	
75 2-Nitropropane	41	5.954	5.954	0.000	96	100147	50.0	37.6	
87 Tetrahydrothiophene	60	7.114	7.114	0.000	91	71146	50.0	25.9	
98 cis-1,4-Dichloro-2-butene	53	8.613	8.613	0.000	88	142210	50.0	39.6	
114 1,2,3-Trimethylbenzene	105	9.911	9.911	0.000	98	778504	25.0	24.3	
118 1,3,5-Trichlorobenzene	180	11.219	11.219	0.000	96	239285	25.0	22.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

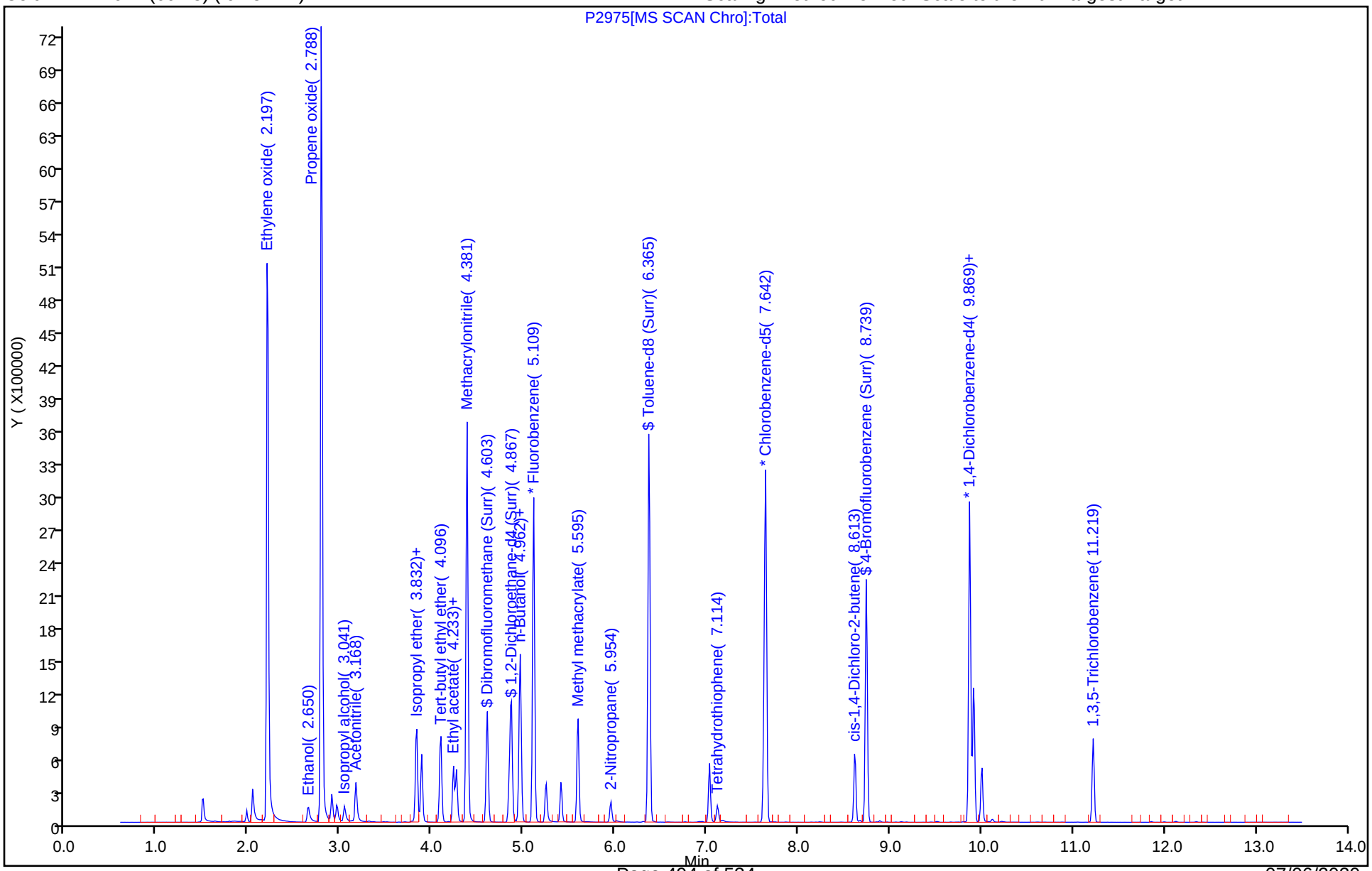
Report Date: 02-Jul-2020 22:13:41 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2975.D

Injection Date:	02-Jul-2020 00:01:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2975.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Jul-2020 00:01:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.12
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.9	93.82
$ 6 Toluene-d8 (Surr)	50.0	48.0	96.02
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.3	96.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500875/5

Matrix: Water Lab File ID: P2974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	94.6		10	1.9
107-02-8	Acrolein	236		20	2.8
107-13-1	Acrylonitrile	247		20	1.4
71-43-2	Benzene	23.8		1.0	0.16
74-97-5	Chlorobromomethane	25.2		1.0	0.10
75-27-4	Dichlorobromomethane	24.8		1.0	0.17
75-25-2	Bromoform	26.2		1.0	0.46
74-83-9	Bromomethane	28.2		2.0	0.21
78-93-3	2-Butanone (MEK)	99.0		6.0	2.0
75-15-0	Carbon disulfide	27.4		2.0	0.17
56-23-5	Carbon tetrachloride	25.4		1.0	0.19
108-90-7	Chlorobenzene	23.6		1.0	0.17
124-48-1	Chlorodibromomethane	25.5		1.0	0.17
75-00-3	Chloroethane	27.5		2.0	0.41
67-66-3	Chloroform	23.6		1.0	0.16
74-87-3	Chloromethane	27.6		2.0	0.30
107-05-1	Allyl chloride	25.5		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	27.1		5.0	0.47
74-95-3	Dibromomethane	24.7		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.5		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.0		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.0		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	23.8		3.0	0.80
75-71-8	Dichlorodifluoromethane	35.7		2.0	0.31
75-34-3	1,1-Dichloroethane	24.4		1.0	0.22
107-06-2	1,2-Dichloroethane	24.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.7		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.7		1.0	0.15
75-35-4	1,1-Dichloroethene	26.6		1.0	0.23
78-87-5	1,2-Dichloropropane	24.6		1.0	0.18
142-28-9	1,3-Dichloropropane	23.6		1.0	0.090
594-20-7	2,2-Dichloropropane	26.4		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	25.1		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.2		3.0	0.19
563-58-6	1,1-Dichloropropene	23.9		1.0	0.19
100-41-4	Ethylbenzene	23.7		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500875/5

Matrix: Water Lab File ID: P2974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/01/2020 23:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	25.5		3.0	0.86
591-78-6	2-Hexanone	103		5.0	1.7
74-88-4	Iodomethane	22.2		1.0	0.23
78-83-1	Isobutyl alcohol	646		110	37
75-09-2	Methylene Chloride	25.5		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	102		5.0	0.98
100-42-5	Styrene	24.6		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	24.0		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	24.8		1.0	0.21
127-18-4	Tetrachloroethene	24.2		1.0	0.20
108-88-3	Toluene	24.1		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.0		1.0	0.21
71-55-6	1,1,1-Trichloroethane	24.8		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.3		1.0	0.27
79-01-6	Trichloroethene	23.9		1.0	0.16
75-69-4	Trichlorofluoromethane	26.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	24.3		2.5	0.33
108-05-4	Vinyl acetate	51.2		3.0	0.94
75-01-4	Vinyl chloride	28.2		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	23.8		2.0	0.15
95-47-6	o-Xylene	24.1		1.0	0.19
1330-20-7	Xylenes, Total	47.9		2.0	0.19
106-93-4	1,2-Dibromoethane	24.1		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2974.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jul-2020 23:40:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.109	0.001	99	2329191	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	86	540610	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	771461	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	562284	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	623101	50.0	47.2	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2297194	50.0	48.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	84	829748	50.0	48.7	
10 Dichlorodifluoromethane	85	1.660	1.660	0.000	99	233081	25.0	35.7	
11 Chloromethane	50	1.839	1.839	0.000	99	246417	25.0	27.6	
12 Vinyl chloride	62	1.934	1.945	-0.011	98	287882	25.0	28.2	
14 Bromomethane	94	2.230	2.230	0.000	91	112697	25.0	28.2	
15 Chloroethane	64	2.325	2.325	0.000	100	178390	25.0	27.5	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	401576	25.0	26.5	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	98	333142	25.0	26.5	
19 Ethyl ether	59	2.747	2.747	0.000	90	195956	25.0	24.7	
21 Acrolein	56	2.852	2.852	0.000	100	463330	246.9	236.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	71	149177	25.0	26.3	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	200987	25.0	26.6	
24 Acetone	43	2.958	2.958	0.000	99	294094	100.0	94.6	
26 Iodomethane	142	3.063	3.063	0.000	97	158368	25.0	22.2	
27 Carbon disulfide	76	3.127	3.127	0.000	99	643977	25.0	27.4	
29 Methyl acetate	43	3.190	3.190	0.000	97	385427	50.0	48.7	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	329816	25.0	25.5	
31 Methylene Chloride	84	3.306	3.306	0.000	97	224772	25.0	25.5	
32 2-Methyl-2-propanol	59	3.348	3.348	0.000	98	271697	250.0	266.1	
33 Acrylonitrile	53	3.464	3.464	0.000	99	1060624	250.0	247.4	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	94	628785	25.0	24.7	
35 trans-1,2-Dichloroethene	96	3.506	3.517	-0.011	99	219532	25.0	24.7	
36 Hexane	57	3.707	3.707	0.000	89	330834	25.0	26.2	
38 Vinyl acetate	43	3.802	3.802	0.000	97	982756	50.0	51.2	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	396740	25.0	24.4	
44 2-Butanone (MEK)	43	4.213	4.214	-0.001	100	514021	100.0	99.0	
47 cis-1,2-Dichloroethene	96	4.245	4.245	0.000	82	244495	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 2,2-Dichloropropane	77	4.256	4.256	0.000	88	291106	25.0	26.4	
50 sec-Butyl Alcohol	45	4.319	4.330	-0.011	99	680674	750.0	815.2	
53 Chlorobromomethane	128	4.425	4.425	0.000	97	111900	25.0	25.2	
52 Tetrahydrofuran	42	4.425	4.435	-0.010	89	174028	50.0	50.6	
54 Chloroform	83	4.477	4.477	0.000	92	369179	25.0	23.6	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	98	307282	25.0	24.8	
56 Cyclohexane	56	4.688	4.688	0.000	88	405820	25.0	25.7	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	309723	25.0	23.9	
59 Carbon tetrachloride	117	4.741	4.752	-0.011	82	257356	25.0	25.4	
58 Isobutyl alcohol	41	4.741	4.752	-0.011	94	232858	625.0	646.3	
60 Benzene	78	4.889	4.900	-0.011	96	913011	25.0	23.8	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	291811	25.0	24.1	
66 n-Heptane	43	5.079	5.079	0.000	91	289327	25.0	25.3	
67 Trichloroethene	95	5.385	5.385	0.000	99	225246	25.0	23.9	
68 2-Pentanone	43	5.480	5.480	0.000	99	815708	100.0	105.7	
69 Methylcyclohexane	55	5.575	5.585	-0.010	92	296731	25.0	24.8	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	97	243965	25.0	24.6	
72 1,4-Dioxane	88	5.628	5.638	-0.010	91	73084	500.0	530.3	
73 Dibromomethane	93	5.659	5.670	-0.011	94	140115	25.0	24.7	
74 Dichlorobromomethane	83	5.786	5.786	0.000	100	284643	25.0	24.8	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	91	194791	25.0	28.4	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	363627	25.0	25.1	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	95	1013731	100.0	102.3	
79 Toluene	91	6.430	6.430	0.000	98	968877	25.0	24.1	
80 trans-1,3-Dichloropropene	75	6.598	6.599	-0.001	97	304557	25.0	24.2	
81 Ethyl methacrylate	69	6.620	6.620	0.000	86	339341	25.0	25.5	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	204844	25.0	25.3	
83 Tetrachloroethene	164	6.873	6.873	0.000	95	159194	25.0	24.2	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	98	374087	25.0	23.6	
85 2-Hexanone	43	6.936	6.947	-0.011	95	749812	100.0	103.2	
86 Chlorodibromomethane	129	7.116	7.126	-0.010	91	207901	25.0	25.5	
88 Ethylene Dibromide	107	7.242	7.242	0.000	99	212015	25.0	24.1	
89 1-Chlorohexane	91	7.633	7.633	0.000	96	305567	25.0	25.5	
90 Chlorobenzene	112	7.675	7.675	0.000	97	603699	25.0	23.6	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	95	189082	25.0	24.0	
92 Ethylbenzene	106	7.749	7.749	0.000	98	333254	25.0	23.7	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	401310	25.0	23.8	
94 o-Xylene	106	8.224	8.224	0.000	97	390329	25.0	24.1	
95 Styrene	104	8.245	8.245	0.000	95	671252	25.0	24.6	
96 Bromoform	173	8.424	8.435	-0.011	94	126012	25.0	26.2	
97 Isopropylbenzene	105	8.572	8.572	0.000	95	997485	25.0	24.7	
99 Cyclohexanone	55	8.667	8.667	0.000	90	436813	1000.0	789.1	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	293342	25.0	24.8	
101 Bromobenzene	156	8.888	8.888	0.000	95	227646	25.0	23.9	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	85	74849	25.0	23.8	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	82	87129	25.0	24.3	
104 N-Propylbenzene	120	8.962	8.973	-0.011	99	272548	25.0	24.4	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	227429	25.0	24.0	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	93	812180	25.0	24.5	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	238361	25.0	24.0	
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	673167	25.0	24.3	
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	821981	25.0	24.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 sec-Butylbenzene	134	9.669	9.669	0.000	94	195030	25.0	24.0	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	414556	25.0	24.0	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	829347	25.0	24.5	
113 1,4-Dichlorobenzene	146	9.901	9.902	-0.001	94	429419	25.0	24.0	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	752301	25.0	23.8	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	403198	25.0	23.5	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	85	54497	25.0	27.1	
119 1,2,4-Trichlorobenzene	180	11.854	11.854	0.000	94	223989	25.0	24.0	
120 Hexachlorobutadiene	225	12.001	12.002	-0.001	97	76077	25.0	22.4	
121 Naphthalene	128	12.128	12.128	0.000	97	761305	25.0	25.3	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	96	207203	25.0	24.2	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	49.3	
S 142 Xylenes, Total	106				0		50.0	47.8	
S 140 Trihalomethanes, Total	1				0		100.0	100.1	
S 143 Xylenes, Total (URS)	1				0		50.0	47.8	
S 145 1,3-Dichloropropene, Total	1				0		50.0	49.3	
S 144 1,2-Dichloroethene, Total	1				0		50.0	49.3	

Reagents:

MV-Gas B_00064	Amount Added: 5.00	Units: uL	
MV-MegaMain B_00031	Amount Added: 12.50	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 02-Jul-2020 22:13:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2974.D

Injection Date: 01-Jul-2020 23:40:30 Instrument ID: VMS_P Operator ID: PETUNINP

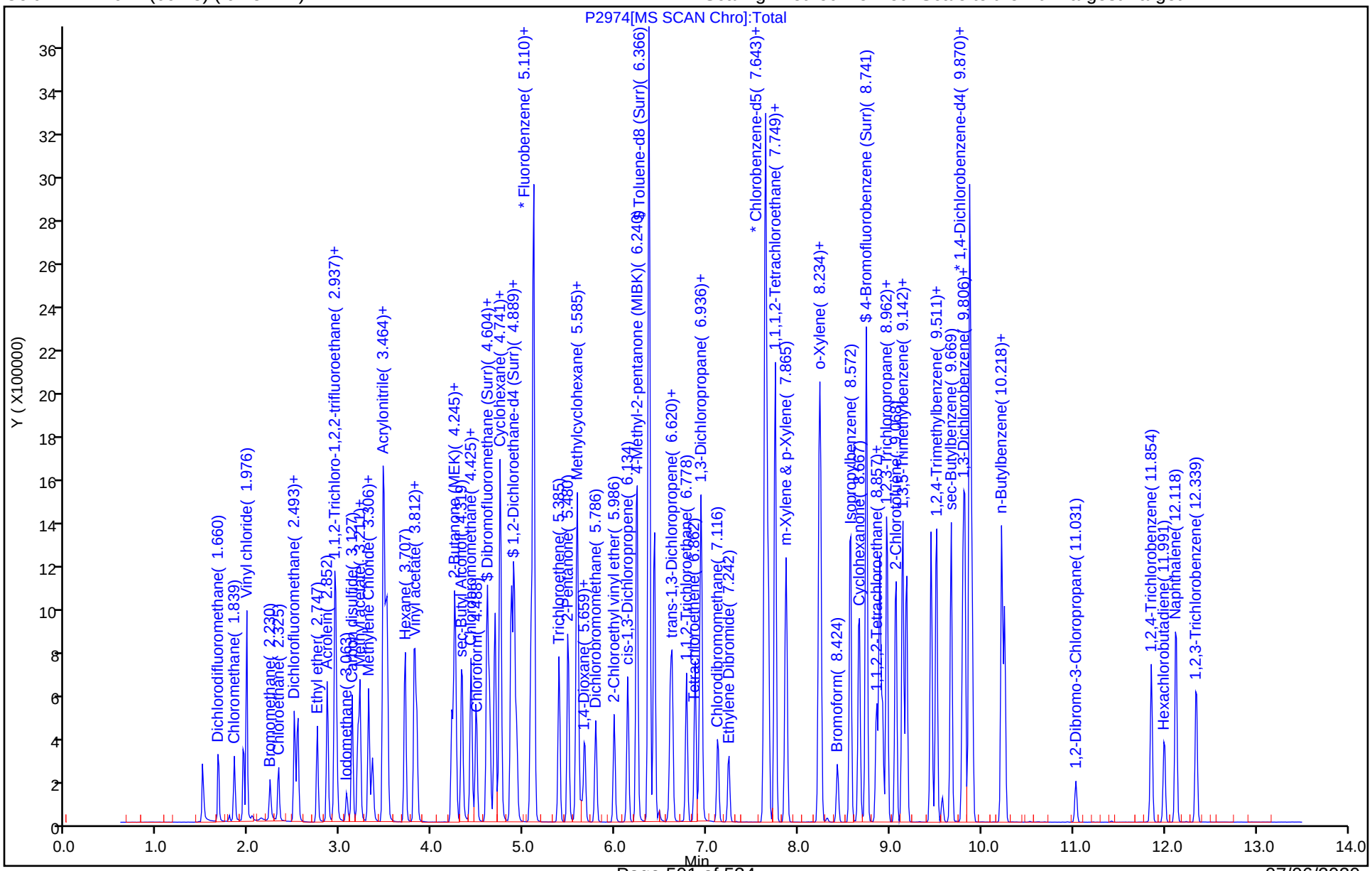
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2974.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jul-2020 23:40:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.25
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.2	94.42
$ 6 Toluene-d8 (Surr)	50.0	48.3	96.58
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.7	97.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-500875/7

Matrix: Water Lab File ID: P2976.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/02/2020 00:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 500875 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	230		30	9.6
126-99-8	Chloroprene	22.6		1.0	0.21
126-98-7	Methacrylonitrile	221		10	1.6
80-62-6	Methyl methacrylate	48.2		4.0	1.1
107-12-0	Propionitrile	243		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-127
2037-26-5	Toluene-d8 (Surr)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2976.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jul-2020 00:22:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.109	0.004	99	2330114	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.642	0.004	87	537012	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	96	777056	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	563910	50.0	50.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	97	631773	50.0	47.8	
$ 6 Toluene-d8 (Surr)	98	6.369	6.366	0.003	93	2294775	50.0	48.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	85	823824	50.0	48.0	
13 Ethylene oxide	43	2.200	2.197	0.003	100	1441573	NC	NC	
18 Ethanol	45	2.644	2.640	0.004	99	217687	1500.0	1296.1	
20 Propene oxide	58	2.791	2.788	0.003	97	5500680	2500.0	2456.8	
25 Isopropyl alcohol	45	3.045	3.041	0.004	99	181455	250.0	210.0	
28 Acetonitrile	41	3.171	3.168	0.003	99	391953	250.0	230.0	
40 Isopropyl ether	87	3.826	3.832	-0.006	95	196628	25.0	25.5	
41 2-Chloro-1,3-butadiene	53	3.889	3.885	0.004	90	318669	25.0	22.6	
43 Tert-butyl ethyl ether	59	4.089	4.096	-0.007	97	641396	25.0	22.5	
46 Ethyl acetate	43	4.227	4.233	-0.006	99	526783	50.0	62.0	
49 Propionitrile	54	4.269	4.265	0.004	99	447342	250.0	243.3	
51 Methacrylonitrile	41	4.374	4.381	-0.007	92	1558160	250.0	220.8	
62 Tert-amyl methyl ether	73	4.965	4.962	0.003	87	566683	25.0	20.5	
63 n-Butanol	56	4.965	4.962	0.003	50	205880	625.0	641.9	
71 Methyl methacrylate	100	5.598	5.595	0.003	90	135484	50.0	48.2	
75 2-Nitropropane	41	5.947	5.954	-0.007	97	98166	50.0	36.5	
87 Tetrahydrothiophene	60	7.118	7.114	0.004	92	67511	50.0	24.6	
98 cis-1,4-Dichloro-2-butene	53	8.617	8.613	0.004	87	139708	50.0	38.3	
114 1,2,3-Trimethylbenzene	105	9.915	9.911	0.004	97	759917	25.0	23.4	
118 1,3,5-Trichlorobenzene	180	11.223	11.219	0.004	97	226706	25.0	21.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

MV-Supp B_00027	Amount Added: 25.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

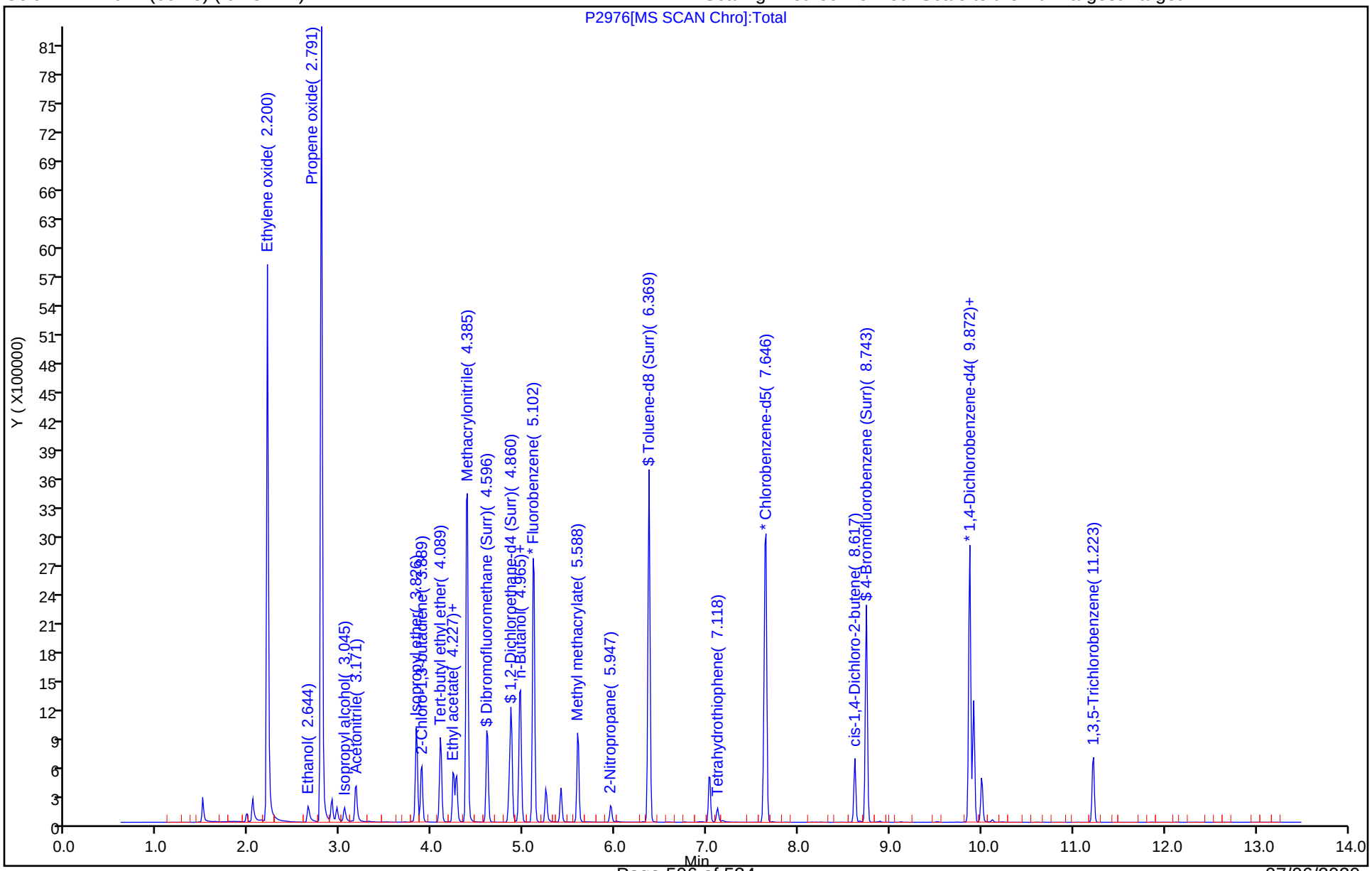
Report Date: 02-Jul-2020 22:13:41 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2976.D

Injection Date:	02-Jul-2020 00:22:30	Instrument ID:	VMS_P	Operator ID:	PETUNINP
Lims ID:	LCSD			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\P2976.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jul-2020 00:22:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD S
Operator ID: PETUNINP Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jul-2020 22:13:34 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1058

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.3	100.50
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.8	95.69
$ 6 Toluene-d8 (Surr)	50.0	48.6	97.13
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.0	96.07

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Start Date: 02/06/2020 10:25

Analysis Batch Number: 485097 End Date: 02/06/2020 19:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-485097/1		02/06/2020 10:25	1	P7804.D	DB-624 (60.25) 0.25(mm)
STD005 280-485097/12 IC		02/06/2020 11:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 11:04	1		DB-624 (60.25) 0.25(mm)
STD010 280-485097/13 IC		02/06/2020 11:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 11:25	1		DB-624 (60.25) 0.25(mm)
STD020 280-485097/14 IC		02/06/2020 11:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 11:46	1		DB-624 (60.25) 0.25(mm)
STD10 280-485097/15 IC		02/06/2020 12:11	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 12:11	1		DB-624 (60.25) 0.25(mm)
ICIS 280-485097/16		02/06/2020 12:33	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 12:33	1		DB-624 (60.25) 0.25(mm)
STD75 280-485097/17 IC		02/06/2020 12:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 12:54	1		DB-624 (60.25) 0.25(mm)
STD100 280-485097/18 IC		02/06/2020 13:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 13:15	1		DB-624 (60.25) 0.25(mm)
STD200 280-485097/19 IC		02/06/2020 13:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 13:37	1		DB-624 (60.25) 0.25(mm)
ICV 280-485097/20		02/06/2020 14:19	1		DB-624 (60.25) 0.25(mm)
STD005 280-485097/21 IC		02/06/2020 14:40	1	P7815.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 14:40	1		DB-624 (60.25) 0.25(mm)
STD010 280-485097/22 IC		02/06/2020 15:02	1	P7816.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 15:02	1		DB-624 (60.25) 0.25(mm)
STD020 280-485097/23 IC		02/06/2020 15:23	1	P7817.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 15:23	1		DB-624 (60.25) 0.25(mm)
STD10 280-485097/24 IC		02/06/2020 15:44	1	P7818.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 15:44	1		DB-624 (60.25) 0.25(mm)
STD50 280-485097/25 IC		02/06/2020 16:05	1	P7819.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 16:05	1		DB-624 (60.25) 0.25(mm)
STD75 280-485097/26 IC		02/06/2020 16:27	1	P7820.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 16:27	1		DB-624 (60.25) 0.25(mm)
STD100 280-485097/27 IC		02/06/2020 16:48	1	P7821.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 16:48	1		DB-624 (60.25) 0.25(mm)
STD200 280-485097/28 IC		02/06/2020 17:09	1	P7822.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		02/06/2020 17:09	1		DB-624 (60.25) 0.25(mm)
ICV 280-485097/29		02/06/2020 17:52	1	P7824.D	DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 18:13	1		DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 18:34	1		DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 18:55	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Start Date: 02/06/2020 10:25

Analysis Batch Number: 485097 End Date: 02/06/2020 19:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-133008-A-2 MDLV		02/06/2020 19:17	1		DB-624 (60.25) 0.25(mm)
280-133008-A-2 MDLV		02/06/2020 19:38	1		DB-624 (60.25) 0.25(mm)
ICV 280-485097/30		02/06/2020 19:59	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/01/2020 16:26

Analysis Batch Number: 496958 End Date: 06/02/2020 03:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-496958/1		06/01/2020 16:26	1	P1658A.D	DB-624 (60.25) 0.25(mm)
STD005 280-496958/12 IC		06/01/2020 16:26	1	P1658.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 16:26	1		DB-624 (60.25) 0.25(mm)
STD010 280-496958/13 IC		06/01/2020 16:47	1	P1659.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 16:47	1		DB-624 (60.25) 0.25(mm)
STD020 280-496958/14 IC		06/01/2020 17:09	1	P1660.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:09	1		DB-624 (60.25) 0.25(mm)
STD050 280-496958/15 IC		06/01/2020 17:30	1	P1661.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:30	1		DB-624 (60.25) 0.25(mm)
STD10 280-496958/16 IC		06/01/2020 17:51	1	P1662.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:51	1		DB-624 (60.25) 0.25(mm)
STD75 280-496958/18 IC		06/01/2020 18:33	1	P1664.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 18:33	1		DB-624 (60.25) 0.25(mm)
STD100 280-496958/19 IC		06/01/2020 18:55	1	P1665.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 18:55	1		DB-624 (60.25) 0.25(mm)
STD200 280-496958/20 IC		06/01/2020 19:16	1	P1666.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 19:16	1		DB-624 (60.25) 0.25(mm)
ICIS 280-496958/17		06/01/2020 20:33	1	P1669.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 20:33	1		DB-624 (60.25) 0.25(mm)
ICV 280-496958/21		06/01/2020 20:54	1	P1670.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 20:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 21:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 22:56	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 23:18	200		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:00	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:21	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:43	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:29	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:50	1		DB-624 (60.25) 0.25(mm)
CCVC 280-496958/38		06/02/2020 03:11	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Instrument ID: VMS_P Start Date: 07/01/2020 22:01

Analysis Batch Number: 500875 End Date: 07/02/2020 08:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-500875/1		07/01/2020 22:01	1	P2970.D	DB-624 (60.25) 0.25(mm)
CCV 280-500875/2		07/01/2020 22:36	1	P2971.D	DB-624 (60.25) 0.25(mm)
CCV 280-500875/3		07/01/2020 22:57	1	P2972.D	DB-624 (60.25) 0.25(mm)
LCS 280-500875/4		07/01/2020 23:18	1	P2973.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500875/5		07/01/2020 23:40	1	P2974.D	DB-624 (60.25) 0.25(mm)
LCS 280-500875/6		07/02/2020 00:01	1	P2975.D	DB-624 (60.25) 0.25(mm)
LCSD 280-500875/7		07/02/2020 00:22	1	P2976.D	DB-624 (60.25) 0.25(mm)
MB 280-500875/9		07/02/2020 01:05	1	P2978.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 01:26	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 01:47	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		07/02/2020 02:09	1		DB-624 (60.25) 0.25(mm)
280-138098-1		07/02/2020 02:30	1	P2982.D	DB-624 (60.25) 0.25(mm)
280-138098-2		07/02/2020 02:51	1	P2983.D	DB-624 (60.25) 0.25(mm)
280-138098-3		07/02/2020 03:12	1	P2984.D	DB-624 (60.25) 0.25(mm)
280-138098-4		07/02/2020 03:33	1	P2985.D	DB-624 (60.25) 0.25(mm)
280-138098-5		07/02/2020 03:55	1	P2986.D	DB-624 (60.25) 0.25(mm)
280-138098-6		07/02/2020 04:16	1	P2987.D	DB-624 (60.25) 0.25(mm)
280-138098-7		07/02/2020 04:37	1	P2988.D	DB-624 (60.25) 0.25(mm)
280-138098-8		07/02/2020 04:58	1	P2989.D	DB-624 (60.25) 0.25(mm)
280-138098-9		07/02/2020 05:20	1	P2990.D	DB-624 (60.25) 0.25(mm)
280-138098-10		07/02/2020 05:41	1	P2991.D	DB-624 (60.25) 0.25(mm)
280-138098-11		07/02/2020 06:02	1	P2992.D	DB-624 (60.25) 0.25(mm)
280-138098-12		07/02/2020 06:23	1	P2993.D	DB-624 (60.25) 0.25(mm)
280-138098-13		07/02/2020 06:44	1	P2994.D	DB-624 (60.25) 0.25(mm)
280-138098-14		07/02/2020 07:05	1	P2995.D	DB-624 (60.25) 0.25(mm)
280-138098-15		07/02/2020 07:27	1	P2996.D	DB-624 (60.25) 0.25(mm)
280-138098-16		07/02/2020 07:48	1	P2997.D	DB-624 (60.25) 0.25(mm)
280-138098-17		07/02/2020 08:09	1	P2998.D	DB-624 (60.25) 0.25(mm)

Sequence Name: C:\HPCHEM\1\SEQUENCE\070120PM.S
Comment:
Operator: PETUNINP
Data Path: C:\HPCHEM\1\DATA\070120PM\
Pre-Seq Cmd:
Post-Seq Cmd:

Eurofins TestAmerica Denver
Instrument ID: 1
SOP: DV-MS-0010 Rev: 25
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 1201-0809
TALs Batch: 500875

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P2970	BFB	BFB
2	Sample	1	P2971	8260	CCV
3	Sample	2	P2972	8260	CCV S
4	Sample	3	P2973	8260	LCS
5	Sample	4	P2974	8260	LCSD
6	Sample	5	P2975	8260	LCS S
7	Sample	6	P2976	8260	LCSD S
8	Sample	7	P2977	8260	RINSE
9	Sample	8	P2978	8260	MB
10	Sample	9	P2979	8260	280-138090-C-9 pH<2
11	Sample	10	P2980	8260	280-138090-C-10 pH<2
12	Sample	11	P2981	8260	280-138090-C-11 pH<2
13	Sample	12	P2982	8260	280-138098-C-1 pH<2
14	Sample	13	P2983	8260	280-138098-B-2 pH<2
15	Sample	14	P2984	8260	280-138098-B-3 pH<2
16	Sample	15	P2985	8260	280-138098-A-4 pH<2
17	Sample	16	P2986	8260	280-138098-B-5 pH<2
18	Sample	17	P2987	8260	280-138098-B-6 pH<2
19	Sample	18	P2988	8260	280-138098-A-7 pH<2
20	Sample	19	P2989	8260	280-138098-A-8 pH<2
21	Sample	20	P2990	8260	280-138098-A-9 pH<2
22	Sample	21	P2991	8260	280-138098-A-10 pH<2
23	Sample	22	P2992	8260	280-138098-A-11 pH<2
24	Sample	23	P2993	8260	280-138098-A-12 pH<2
25	Sample	24	P2994	8260	280-138098-B-13 pH<2
26	Sample	25	P2995	8260	280-138098-B-14 pH<2
27	Sample	26	P2996	8260	280-138098-B-15 pH<2
28	Sample	27	P2997	8260	280-138098-B-16 pH<2
29	Sample	28	P2998	8260	280-138098-A-17 pH<2

DLVd
7/2/20

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070120PM
Worklist Number: 92961
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	#1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	#2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00060		
3	#3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	#4 LCS	LCS	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
5	#5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Gas B_00064 MV-MegaMain B_00031		
6	#6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	#7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	#8 RINSE	Client	1.000	voaWater	5.000	mL			
9	#9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-138090-C-9	Client	1.000	voaWater	5.000	mL			
14	#14 280-138090-C-10	Client	1.000	voaWater	5.000	mL			
15	#15 280-138090-C-11	Client	1.000	voaWater	5.000	mL			
16	#16 280-138098-C-1	Client	1.000	voaWater	5.000	mL			
17	#17 280-138098-B-2	Client	1.000	voaWater	5.000	mL			
18	#18 280-138098-B-3	Client	1.000	voaWater	5.000	mL			
19	#19 280-138098-A-4	Client	1.000	voaWater	5.000	mL			
20	#20 280-138098-B-5	Client	1.000	voaWater	5.000	mL			
21	#21 280-138098-B-6	Client	1.000	voaWater	5.000	mL			
22	#22 280-138098-A-7	Client	1.000	voaWater	5.000	mL			
23	#23 280-138098-A-8	Client	1.000	voaWater	5.000	mL			
24	#24 280-138098-A-9	Client	1.000	voaWater	5.000	mL			
25	#25 280-138098-A-10	Client	1.000	voaWater	5.000	mL			
26	#26 280-138098-A-11	Client	1.000	voaWater	5.000	mL			
27	#27 280-138098-A-12	Client	1.000	voaWater	5.000	mL			
28	#28 280-138098-B-13	Client	1.000	voaWater	5.000	mL			
29	#29 280-138098-B-14	Client	1.000	voaWater	5.000	mL			
30	#30 280-138098-B-15	Client	1.000	voaWater	5.000	mL			
31	#31 280-138098-B-16	Client	1.000	voaWater	5.000	mL			
32	#32 280-138098-A-17	Client	1.000	voaWater	5.000	mL			

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070120PM
Worklist Number: 92961
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200701-92961.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: mv-IS_SS_00006
Amount Added: 5.000, Units: uL
Batch #s: 500875

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092961-001	# 1 BFB	mv-Cent BFB_00002	BFB	voaWater	2.000	uL	1.000
280-0092961-002	# 2 CCV	MV-MegaMainA_00034 MV-Gas A_00060	CCV	voaWater	5.000	mL	1.000
280-0092961-003	# 3 CCV	MV-Supp A_00044 mv-Cent IS_00006	CCV	voaWater	5.000	mL	1.000
280-0092961-004	# 4 LCS	MV-Gas B_00064 MV-MegaMain B_00031	LCS	voaWater	5.000	mL	1.000
280-0092961-005	# 5 LCSD	MV-Gas B_00064 MV-MegaMain B_00031	LCSD	voaWater	5.000	mL	1.000
280-0092961-006	# 6 LCS	MV-Supp B_00027	LCS	voaWater	5.000	mL	1.000
280-0092961-007	# 7 LCSD	MV-Supp B_00027	LCSD	voaWater	5.000	mL	1.000
280-0092961-008	# 8 RINSE		Client	voaWater	5.000	mL	1.000
280-0092961-009	# 9 MB		MB	voaWater	5.000	mL	1.000
280-0092961-010	#10 280-121232-A-1		Client	voaWater	5.000	mL	1.000
280-0092961-011	#11 280-121232-A-2		Client	voaWater	5.000	mL	1.000
280-0092961-012	#12 280-121232-A-3		Client	voaWater	5.000	mL	1.000
280-0092961-013	#13 280-138090-C-9		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092961-014	#14 280-138090-C-10		Client	voaWater	5.000	mL	1.000
280-0092961-015	#15 280-138090-C-11		Client	voaWater	5.000	mL	1.000
280-0092961-016	#16 280-138098-C-1		Client	voaWater	5.000	mL	1.000
280-0092961-017	#17 280-138098-B-2		Client	voaWater	5.000	mL	1.000
280-0092961-018	#18 280-138098-B-3		Client	voaWater	5.000	mL	1.000
280-0092961-019	#19 280-138098-A-4		Client	voaWater	5.000	mL	1.000
280-0092961-020	#20 280-138098-B-5		Client	voaWater	5.000	mL	1.000
280-0092961-021	#21 280-138098-B-6		Client	voaWater	5.000	mL	1.000
280-0092961-022	#22 280-138098-A-7		Client	voaWater	5.000	mL	1.000
280-0092961-023	#23 280-138098-A-8		Client	voaWater	5.000	mL	1.000
280-0092961-024	#24 280-138098-A-9		Client	voaWater	5.000	mL	1.000
280-0092961-025	#25 280-138098-A-10		Client	voaWater	5.000	mL	1.000
280-0092961-026	#26 280-138098-A-11		Client	voaWater	5.000	mL	1.000
280-0092961-027	#27 280-138098-A-12		Client	voaWater	5.000	mL	1.000
280-0092961-028	#28 280-138098-B-13		Client	voaWater	5.000	mL	1.000
280-0092961-029	#29 280-138098-B-14		Client	voaWater	5.000	mL	1.000
280-0092961-030	#30 280-138098-B-15		Client	voaWater	5.000	mL	1.000
280-0092961-031	#31 280-138098-B-16		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0092961-032	#32 280-138098-A-17		Client	voaWater	5.000	mL	1.000

Sample Request Form: 62898

den_msvoa_totalbacklog Gabe 7/2/2020 12:01:38 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-138098-1	MUNI-WELL-14-20200624	1x	8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-2	MUNI-WELL-33-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-3	RW-2172H-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-4	RW-2203H-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-5	RW-2213F-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-6	RW-2613M-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-7	RW-7091R-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-8	RW-7505P-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-9	RW-7549P-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-10	RW-7588P-20200624		8260B	8260B	07/08 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed

Sample Request Form: 62898

den_msvoa_totalbacklog Gabe 7/2/2020 12:01:38 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
M 8260 Supp Spk DIL2										
280-138098-11	RW-8209P-20200625	1 x	8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-12	EB-00-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-13	EB-01-20200625		8260B	8260B	07/09 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-14	TB-02-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-15	RW-2140H-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-16	MW-116S-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138098-17	EB-02-20200626		8260B	8260B	07/10 23:59	07/16/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										

Sample Request Form: 62899

den_msvoa_totalbacklog Gabe 7/2/2020 12:02:54 AM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-138090-9	RW-2879M-20200624	1x	8260B	8260B	07/08 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-10	RW-7586P-20200624		8260B	8260B	07/08 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										
280-138090-11	RW-8030P-20200624		8260B	8260B	07/08 23:59	07/15/20	DTB	ID	AA-2	Unconfirmed
M 8260 Supp Spk DIL2										

Sequence Name: C:\HPCHEM\1\SEQUENCE\020620I.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\020620\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 25
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 20:25-19:38
TALs Batch: 485097

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P7804	BFB	BFB
2	Sample	1	P7805	8260	STD005
3	Sample	2	P7806	8260	STD010
4	Sample	3	P7807	8260	STD020
5	Sample	4	P7808	8260	STD10
6	Sample	5	P7809	8260	ICIS
7	Sample	6	P7810	8260	STD75
8	Sample	7	P7811	8260	STD100
9	Sample	8	P7812	8260	STD200
10	Sample	9	P7813	8260	BLK
11	Sample	10	P7814	8260	ICV
12	Sample	11	P7815	8260	STD005
13	Sample	12	P7816	8260	STD010
14	Sample	13	P7817	8260	STD020
15	Sample	14	P7818	8260	STD10
16	Sample	15	P7819	8260	STD50
17	Sample	16	P7820	8260	STD75
18	Sample	17	P7821	8260	STD100
19	Sample	18	P7822	8260	STD200
20	Sample	19	P7823	8260	BLK
21	Sample	20	P7824	8260	ICV
22	Sample	21	P7825	8260	MDLV .25
23	Sample	22	P7826	8260	MDLV .5
24	Sample	23	P7827	8260	MDLV 1
25	Sample	24	P7828	8260	MDLV 2
26	Sample	25	P7829	8260	MDLV 5
27	Sample	26	P7830	8260	ICV G RR

Main/Gas/SS
Calib ID: 41893 ✓
ICIS L66
ICV M L20
ICV G L30
±20% for all analytes
Iodo methane high Pt 75 and Quad Fit

Supp
Calib I: 41894
ICV L29
±20% for all analytes
except tetrahydrothiophene
-81.2%
Cis-1,4-Dichloro-2-butene
-23.5%
not Calibrated for ethylene oxide

1st JZ 2/6/20

2nd [signature] 2/7/20

Sequence Name: C:\HPCHEM\1\SEQUENCE\060120I.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\060120I\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 26
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time:
TALs Batch: 496958 8260
496959 624
496960 524

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	P1657	BFB	BFB
2 Sample	1	P1658	8260	STD005
3 Sample	2	P1659	8260	STD010
4 Sample	3	P1660	8260	STD020
5 Sample	4	P1661	8260	STD050
6 Sample	5	P1662	8260	STD10
7 Sample	6	P1663	8260	ICIS
8 Sample	7	P1664	8260	STD75
9 Sample	8	P1665	8260	STD100
10 Sample	9	P1666	8260	STD200
11 Sample	10	P1667	8260	BLK
12 Sample	11	P1668	8260	ICV
13 Sample	12	P1669	8260	ICIS RR
14 Sample	13	P1670	8260	ICV

Calib
44775
44776
44777

ICIS. 17
ICV: 21

All < 20% For DoD

1st JC 6/2/20

2nd: Tam 6-2-20

Preliminary Report

TestAmerica Laboratories
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b

Worklist Name:	060120I	Worklist Num:	92011
Instrument:	VMS_P	Method:	AQ_VMSP_8260
Analysis Type:	VOA	Creator:	Seifert, Judy L
Inj Volume:	5	Inj Vol Units:	mL

QC Batching: Disabled Limit Group Batching: Disabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 496958	MSV - 624 Raw Batch: 496959	MSV - 524 Raw Batch: 496960
# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV	# 2 CCV	
# 3 CCV	# 3 CCV	# 3 CCV	
# 4 LCS	# 4 LCS	# 4 LCS	
# 5 LCSD	# 5 LCSD	# 5 LCSD	
# 6 LCS	# 6 LCS	# 6 LCS	
# 7 LCSD	# 7 LCSD	# 7 LCSD	
# 8 MB	# 8 MB	# 8 MB	
# 9 280-121232-A-1	# 9 280-121232-A-1		
# 10 280-121232-A-2	# 10 280-121232-A-2		
# 11 280-121232-A-3	# 11 280-121232-A-3		
# 12 STD005	# 12 STD005	# 12 STD005	# 12 STD005
# 13 STD010	# 13 STD010	# 13 STD010	# 13 STD010
# 14 STD020	# 14 STD020	# 14 STD020	# 14 STD020
# 15 STD050	# 15 STD050	# 15 STD050	# 15 STD050
# 16 STD10	# 16 STD10	# 16 STD10	# 16 STD10
# 17 ICIS	# 17 ICIS	# 17 ICIS	# 17 ICIS
# 18 STD75	# 18 STD75	# 18 STD75	# 18 STD75
# 19 STD100	# 19 STD100	# 19 STD100	# 19 STD100
# 20 STD200	# 20 STD200	# 20 STD200	# 20 STD200
# 21 ICV	# 21 ICV	# 21 ICV	# 21 ICV
# 22 LCS	# 22 LCS	# 22 LCS	# 22 LCS
# 23 LCSD	# 23 LCSD	# 23 LCSD	# 23 LCSD
# 24 MB	# 24 MB	# 24 MB	# 24 MB
# 25 280-136811-R-3	# 25 280-136811-R-3		
# 26 280-136811-M-7	# 26 280-136811-M-7		
# 27 280-136816-C-5	# 27 280-136816-C-5		
# 28 280-136816-A-6	# 28 280-136816-A-6		
# 29 280-136816-C-7	# 29 280-136816-C-7		
# 30 280-136827-B-10	# 30 280-136827-B-10		
# 31 280-136734-J-1	# 31 280-136734-J-1		
# 32 280-136734-A-8	# 32 280-136734-A-8		
# 33 280-136758-F-3	# 33 280-136758-F-3		
# 34 280-136758-F-4	# 34 280-136758-F-4		
# 35 280-136758-A-5	# 35 280-136758-A-5		
# 36 280-136853-L-7	# 36 280-136853-L-7		
# 37 280-136853-G-8	# 37 280-136853-G-8		
# 38 CCVC	# 38 CCVC		

TestAmerica Laboratories
Worklist Report

Worklist Name: 060120I
Worklist Number: 92011
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00001
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00058		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	MV-Gas B_00060 MV-MegaMain B_00031		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00060 MV-MegaMain B_00031		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	# 8 MB	MB		1.000	voaWater	5.000	mL			
9	# 9 280-121232-A-1	Client		1.000	voaWater	5.000	mL			
10	#10 280-121232-A-2	Client		1.000	voaWater	5.000	mL			
11	#11 280-121232-A-3	Client		1.000	voaWater	5.000	mL			
12	#12 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
13	#13 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
14	#14 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
15	#15 STD050	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
16	#16 STD10	IC	5	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
17	#17 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
18	#18 STD75	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
19	#19 STD100	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
20	#20 STD200	IC	9	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
21	#21 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
22	#22 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
23	#23 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
24	#24 MB	MB		1.000	voaWater	5.000	mL			
25	#25 280-136811-R-3	Client		1.000	voaWater	5.000	mL			
26	#26 280-136811-M-7	Client		1.000	voaWater	5.000	mL			
27	#27 280-136816-C-5	Client		200.0	voaWater	5.000	mL			
28	#28 280-136816-A-6	Client		100.0	voaWater	5.000	mL			
29	#29 280-136816-C-7	Client		5.000	voaWater	5.000	mL			
30	#30 280-136827-B-10	Client		4.000	voaWater	5.000	mL			
31	#31 280-136734-J-1	Client		1.000	voaWater	5.000	mL			
32	#32 280-136734-A-8	Client		1.000	voaWater	5.000	mL			
33	#33 280-136758-F-3	Client		1.000	voaWater	5.000	mL			
34	#34 280-136758-F-4	Client		1.000	voaWater	5.000	mL			
35	#35 280-136758-A-5	Client		1.000	voaWater	5.000	mL			
36	#36 280-136853-L-7	Client		1.000	voaWater	5.000	mL			
37	#37 280-136853-G-8	Client		1.000	voaWater	5.000	mL			
38	#38 CCVC	CCVC		1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00058		

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Batch Number: 485097 Batch Start Date: 02/06/20 10:25 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00001	mv-IS 00001	MV-Supp A 00041	MV-Supp B 00026
BFB 280-485097/1		8260B		2 uL	2 uL	2 uL			
STD005 280-485097/21 IC		8260B		5 mL	5 mL		5 uL	0.5 uL	
STD010 280-485097/22 IC		8260B		5 mL	5 mL		5 uL	1 uL	
STD020 280-485097/23 IC		8260B		5 mL	5 mL		5 uL	2 uL	
STD10 280-485097/24 IC		8260B		5 mL	5 mL		5 uL	10 uL	
STD50 280-485097/25 IC		8260B		5 mL	5 mL		5 uL	50 uL	
STD75 280-485097/26 IC		8260B		5 mL	5 mL		5 uL	75 uL	
STD100 280-485097/27 IC		8260B		5 mL	5 mL		5 uL	100 uL	
STD200 280-485097/28 IC		8260B		5 mL	5 mL		5 uL	200 uL	
ICV 280-485097/29		8260B		5 mL	5 mL		5 uL		50 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, Denver Job No.: 280-138098-1

SDG No.:

Batch Number: 496958 Batch Start Date: 06/01/20 16:26 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	MV-Gas A 00058	MV-Gas B 00060	mv-IS_SS 00001
BFB 280-496958/1		8260B		2 uL	2 uL	2 uL			
STD005 280-496958/12 IC		8260B		5 mL	5 mL		0.1 uL		5 uL
STD010 280-496958/13 IC		8260B		5 mL	5 mL		0.2 uL		5 uL
STD020 280-496958/14 IC		8260B		5 mL	5 mL		0.4 uL		5 uL
STD050 280-496958/15 IC		8260B		5 mL	5 mL		1 uL		5 uL
STD10 280-496958/16 IC		8260B		5 mL	5 mL		2 uL		5 uL
ICIS 280-496958/17		8260B		5 mL	5 mL		10 uL		5 uL
STD75 280-496958/18 IC		8260B		5 mL	5 mL		15 uL		5 uL
STD100 280-496958/19 IC		8260B		5 mL	5 mL		20 uL		5 uL
STD200 280-496958/20 IC		8260B		5 mL	5 mL		40 uL		5 uL
ICV 280-496958/21		8260B		5 mL	5 mL			10 uL	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
BFB 280-496958/1		8260B							
STD005 280-496958/12 IC		8260B			0.25 uL				
STD010 280-496958/13 IC		8260B			0.5 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, Denver Job No.: 280-138098-1

SDG No.:

Batch Number: 496958 Batch Start Date: 06/01/20 16:26 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
STD020 280-496958/14 IC		8260B			1 uL				
STD050 280-496958/15 IC		8260B			2.5 uL				
STD10 280-496958/16 IC		8260B			5 uL				
ICIS 280-496958/17		8260B			25 uL				
STD75 280-496958/18 IC		8260B			37.5 uL				
STD100 280-496958/19 IC		8260B			50 uL				
STD200 280-496958/20 IC		8260B			100 uL				
ICV 280-496958/21		8260B		25 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, Denver Job No.: 280-138098-1

SDG No.:

Batch Number: 500875 Batch Start Date: 07/01/20 22:01 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00060	MV-Gas B 00064
BFB 280-500875/1		8260B		2 uL	2 uL	2 uL			
CCV 280-500875/2		8260B		5 mL	5 mL			10 uL	
CCV 280-500875/3		8260B		5 mL	5 mL		5 uL		
LCS 280-500875/4		8260B		5 mL	5 mL				5 uL
LCSD 280-500875/5		8260B		5 mL	5 mL				5 uL
LCS 280-500875/6		8260B		5 mL	5 mL				
LCSD 280-500875/7		8260B		5 mL	5 mL				
MB 280-500875/9		8260B		5 mL	5 mL				
280-138098-C-1	MUNI-WELL-14-20200624	8260B	T	5 mL	5 mL				
280-138098-B-2	MUNI-WELL-33-20200624	8260B	T	5 mL	5 mL				
280-138098-B-3	RW-2172H-20200625	8260B	T	5 mL	5 mL				
280-138098-A-4	RW-2203H-20200625	8260B	T	5 mL	5 mL				
280-138098-B-5	RW-2213F-20200625	8260B	T	5 mL	5 mL				
280-138098-B-6	RW-2613M-20200625	8260B	T	5 mL	5 mL				
280-138098-A-7	RW-7091R-20200624	8260B	T	5 mL	5 mL				
280-138098-A-8	RW-7505P-20200624	8260B	T	5 mL	5 mL				
280-138098-A-9	RW-7549P-20200624	8260B	T	5 mL	5 mL				
280-138098-A-10	RW-7588P-20200624	8260B	T	5 mL	5 mL				
280-138098-A-11	RW-8209P-20200625	8260B	T	5 mL	5 mL				
280-138098-A-12	EB-00-20200625	8260B	T	5 mL	5 mL				
280-138098-B-13	EB-01-20200625	8260B	T	5 mL	5 mL				
280-138098-B-14	TB-02-20200626	8260B	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-138098-1

SDG No.:

Batch Number: 500875 Batch Start Date: 07/01/20 22:01 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	mv-Cent IS 00006	MV-Gas A 00060	MV-Gas B 00064
280-138098-B-15	RW-2140H-20200626	8260B	T	5 mL	5 mL				
280-138098-B-16	MW-116S-20200626	8260B	T	5 mL	5 mL				
280-138098-A-17	EB-02-20200626	8260B	T	5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
BFB 280-500875/1		8260B							
CCV 280-500875/2		8260B		5 uL		25 uL			
CCV 280-500875/3		8260B					50 uL		
LCS 280-500875/4		8260B		5 uL	12.5 uL				
LCSD 280-500875/5		8260B		5 uL	12.5 uL				
LCS 280-500875/6		8260B		5 uL				25 uL	
LCSD 280-500875/7		8260B		5 uL				25 uL	
MB 280-500875/9		8260B		5 uL					
280-138098-C-1	MUNI-WELL-14-20200624	8260B	T	5 uL					
280-138098-B-2	MUNI-WELL-33-20200624	8260B	T	5 uL					
280-138098-B-3	RW-2172H-20200625	8260B	T	5 uL					
280-138098-A-4	RW-2203H-20200625	8260B	T	5 uL					
280-138098-B-5	RW-2213F-20200625	8260B	T	5 uL					
280-138098-B-6	RW-2613M-20200625	8260B	T	5 uL					
280-138098-A-7	RW-7091R-20200624	8260B	T	5 uL					
280-138098-A-8	RW-7505P-20200624	8260B	T	5 uL					
280-138098-A-9	RW-7549P-20200624	8260B	T	5 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, Denver Job No.: 280-138098-1

SDG No.:

Batch Number: 500875 Batch Start Date: 07/01/20 22:01 Batch Analyst: Petunin, Peter

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00006	MV-MegaMain B 00031	MV-MegaMainA 00034	MV-Supp A 00044	MV-Supp B 00027	
280-138098-A-10	RW-7588P-20200624	8260B	T	5 uL					
280-138098-A-11	RW-8209P-20200625	8260B	T	5 uL					
280-138098-A-12	EB-00-20200625	8260B	T	5 uL					
280-138098-B-13	EB-01-20200625	8260B	T	5 uL					
280-138098-B-14	TB-02-20200626	8260B	T	5 uL					
280-138098-B-15	RW-2140H-20200626	8260B	T	5 uL					
280-138098-B-16	MW-116S-20200626	8260B	T	5 uL					
280-138098-A-17	EB-02-20200626	8260B	T	5 uL					

Batch Notes	

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

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

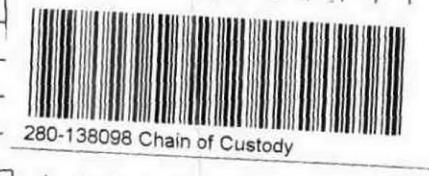
eurofins | Environment Testing TestAmerica

Client Information	Sampler: Emma Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 1 of 2
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8260 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	352.1 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N		
Muni-Well-14-20200624	06242020	1044	G	W	N	N	X																	3	
Muni-Well-33-20200624	06242020	1020	G	W	N	N	X																	3	
RW-2172H-20200625	06252020	1240	G	W	N	N	X																	3	
RW-2203H-20200625	06252020	1415	G	W	N	N	X																	3	
RW-2243F-20200625	06252020	1715	G	W	N	N	X																	3	
RW-2613M-20200625	06252020	1500	G	W	N	N	X																	3	
RW-7091R-20200624	06242020	1533	G	W	N	N	X																	3	
RW-7505P-20200624	06242020	0850	G	W	N	N	X																	3	
RW-7549P-20200624	06242020	1304	G	W	N	N	X																	3	
RW-7588P-20200624	06242020	1500	G	W	N	N	X																	3	
RW-8209P-20200625	06252020	1540	G	W	N	N	X																	3	



Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For ☐ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6/26/20 17:00			6-27-20 0930	ETAM
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.7°C IR 10-0.1 R 6-27-20

Denver
#280

Eurofins TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: EMMA Ehret	Lab PM: Bieniulis, Dylan T.	Carrier Tracking No(s):	COC No:
Client Contact: Mary Lou Fox	Phone: 208-310-0192	E-Mail: Dylan.Bieniulis@testamericainc.com		Page: 2 of 2
Company: CDM Smith, Inc.				Job #:
Address: 14432 S.E. Eastgate Way Suite 100	Due Date Requested:			
City: Bellvue	TAT Requested (days): 15 business days			
State, Zip: WA, 98007				
Phone: 425-519-8300	PO #: 85985			
Email: FoxML@cdmsmith.com	WO #:			
Project Name: Bannock Ft. Hall Mine LF, Idaho	Project #: 28018772			
Site: FHML	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	8011 - EDB, DBCP, and 1,2,3-TCP	6010/6020 - Total Metals	7470A - Total Mercury	8270C - SVOCs	8321A - Pentachlorophenol	8270C_SIM - Benzo[a]pyrene	8081A - OC Pesticides and 8082A - PCBs	8141A OP Pesticides	8151A - Herbicides	8290 - 2,3,7,8-TCDD (ETA SACRAMENTO)	4500_CN_E - Total Cyanide	SM4500_S2_D - Total Sulfide	9056A - Anions (Cl and SO4)	353.2 - Nitrate/Nitrite and 9060 - TOC	RSK-175 - Dissolved Gases (MEEA)	2320B - Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	D	D	N	N	N	N	N	N	N	B	C/B	N	S	A	N	X	
EB-00-20200625	06252020	1500	G	W	N	N	X																	3	
EB-01-20200625	06252020	1505	G	W	N	N	X																	3	
TB-02-20200626	06252020	10:00	G	W	N	N	X																	2	
RW-2140H-20200626	06/25/2020	13:35	G	W	N	N	X																	3	
MW-1165-20200626	06/25/2020	13:30	G	W	N	N	X																	3	
EB-02-20200626	6/26/2020	15:10	G	W	N	N	X																	3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ☐ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	6/26/20 17:00			6-27-20 0930	EHM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

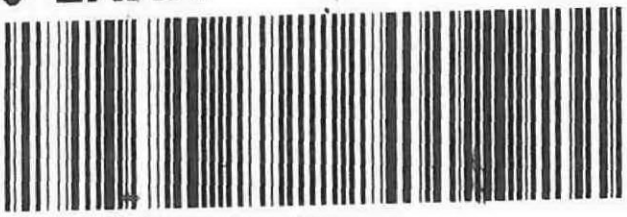
FedEx.

TRK# 0667 8156 5923 9112

SATURDAY 12:00P
PRIORITY OVERNIGHT

80002
CO-US
DEN

X0 LAAA



FID 3691723 26JUN20 PIHA 56BC1/C7DD/05A2

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 280-138098-1

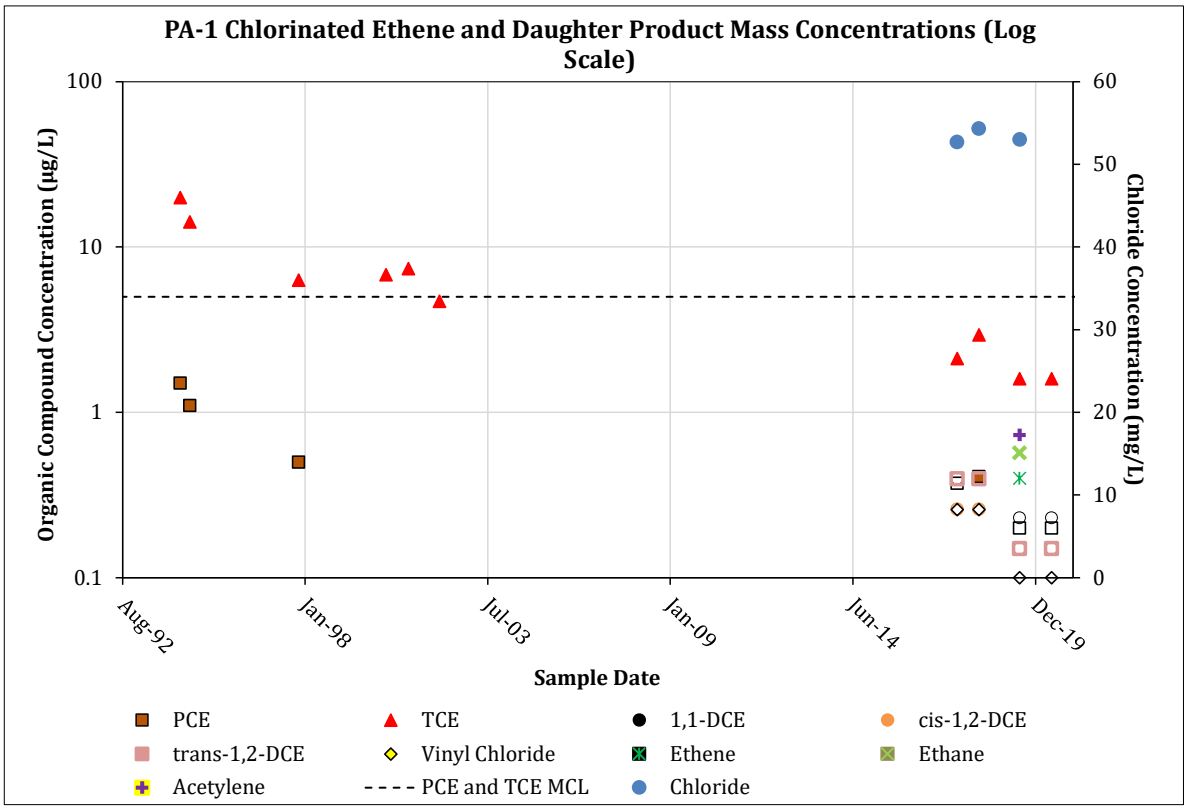
Login Number: 138098
List Number: 1
Creator: Lubin, Julius C

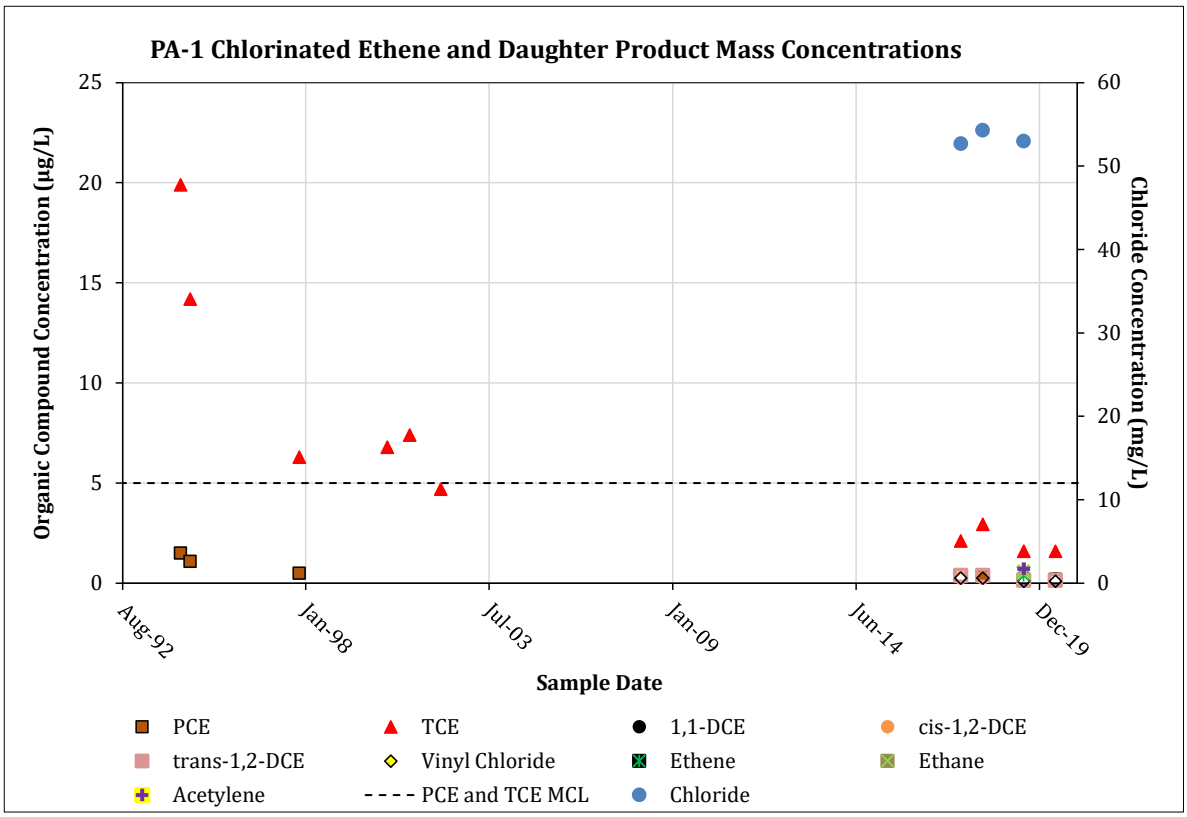
List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix F

Domestic and City Well Time Series Plots





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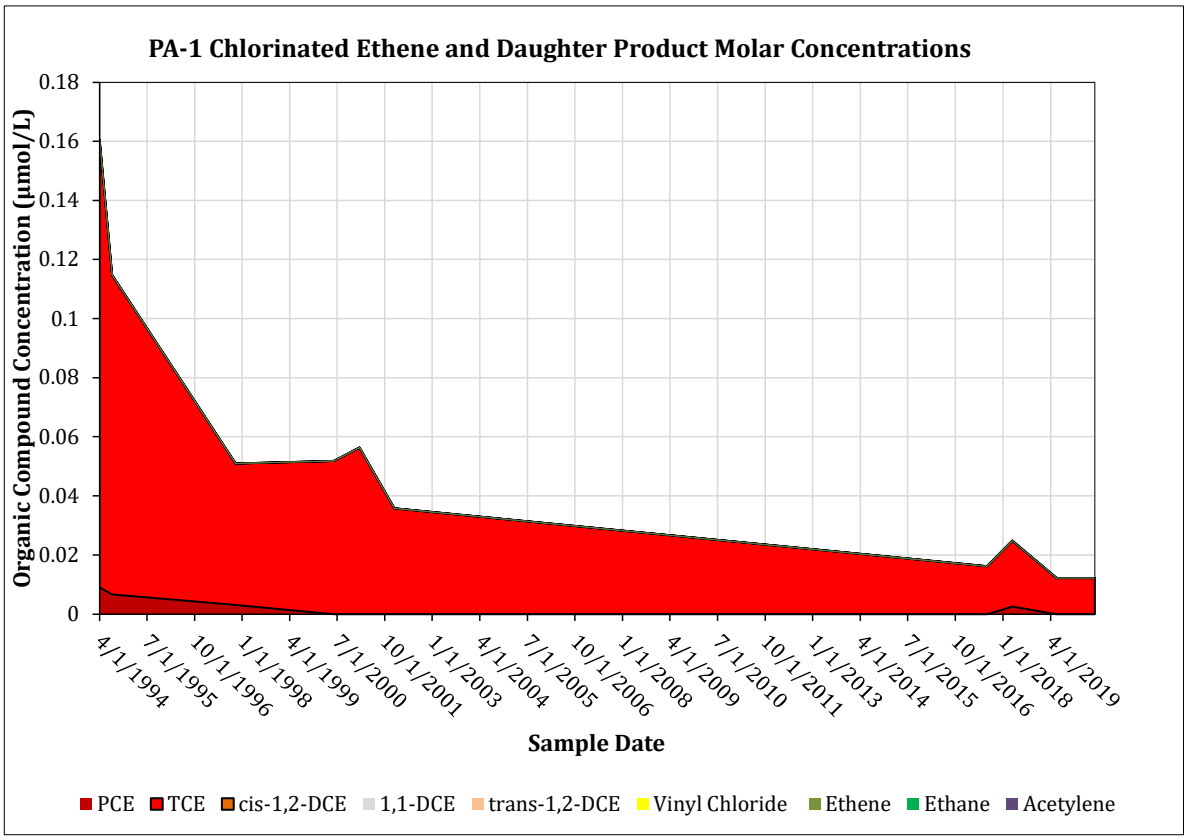
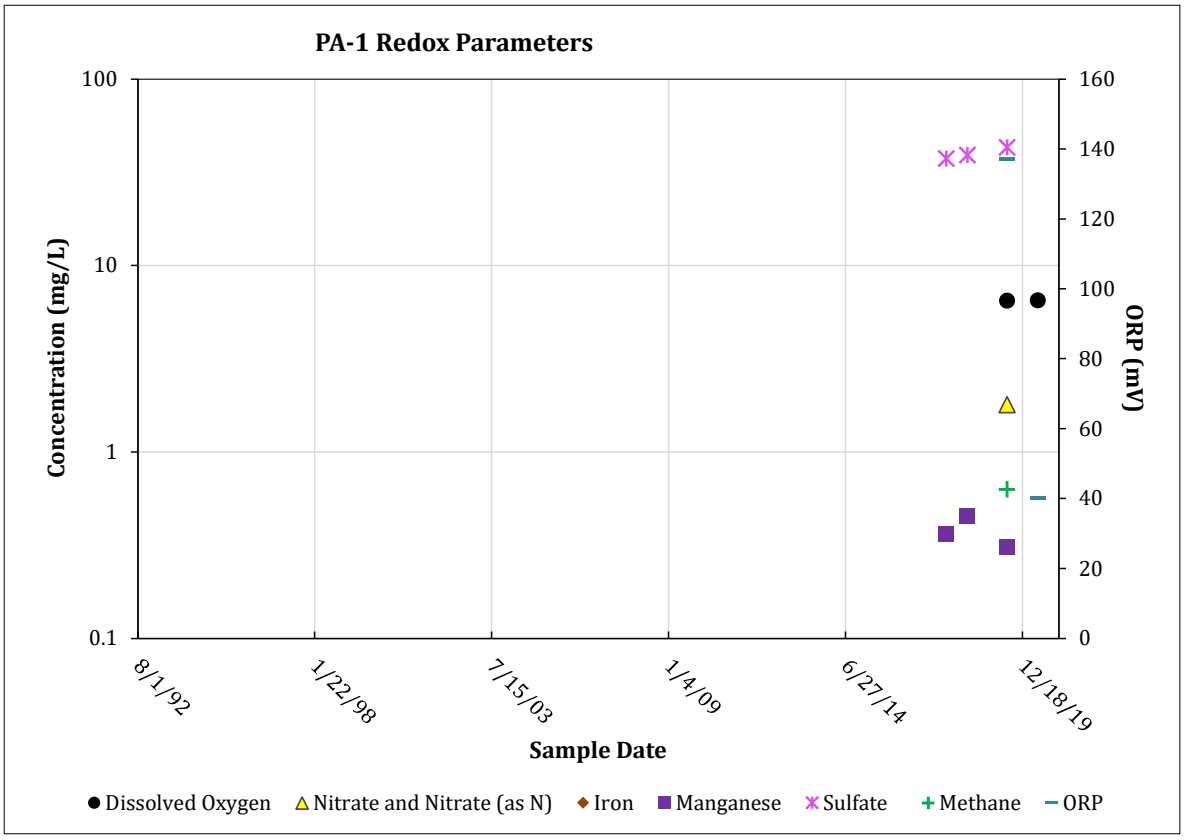
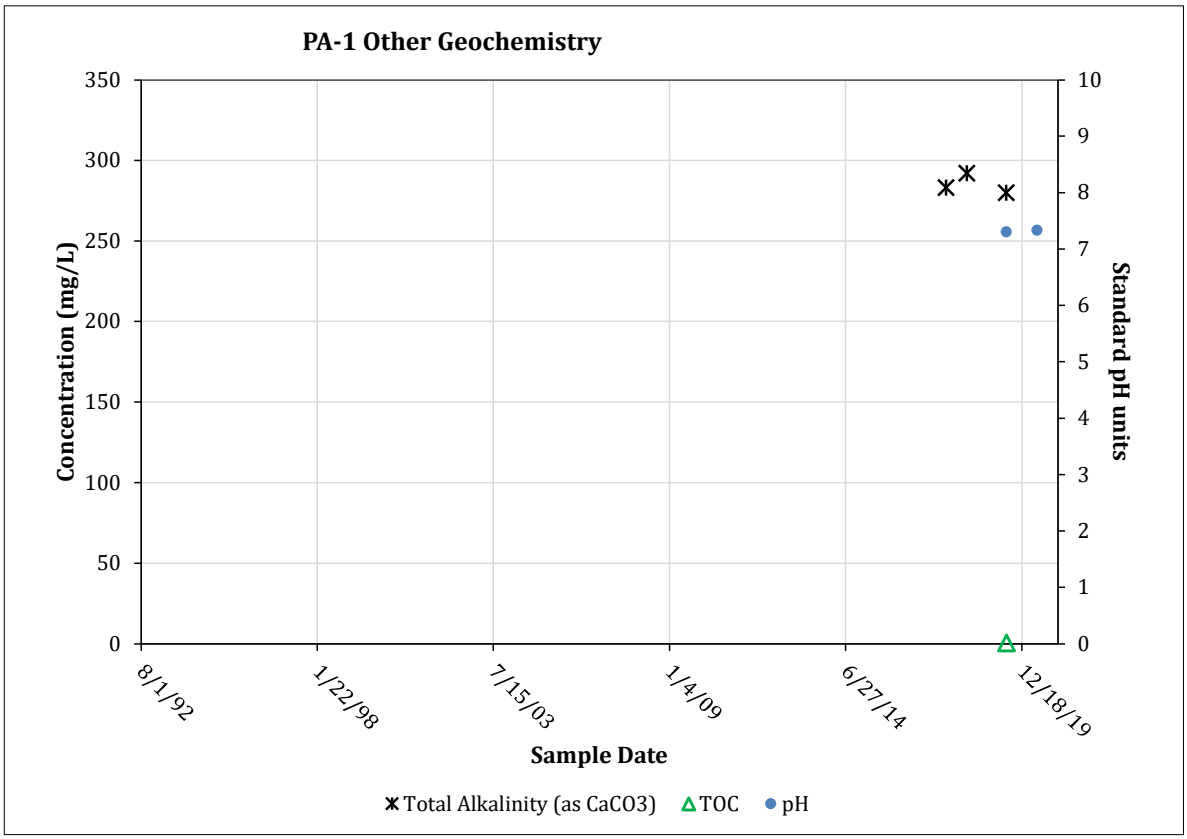
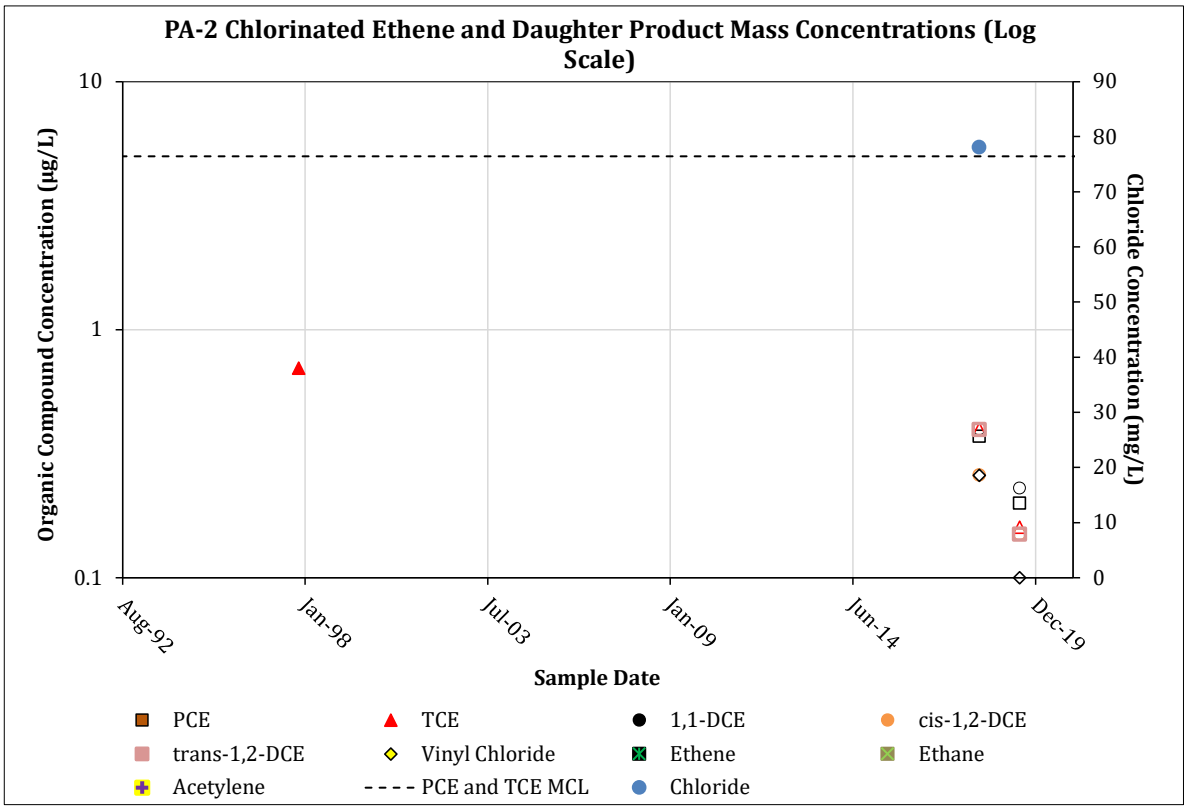
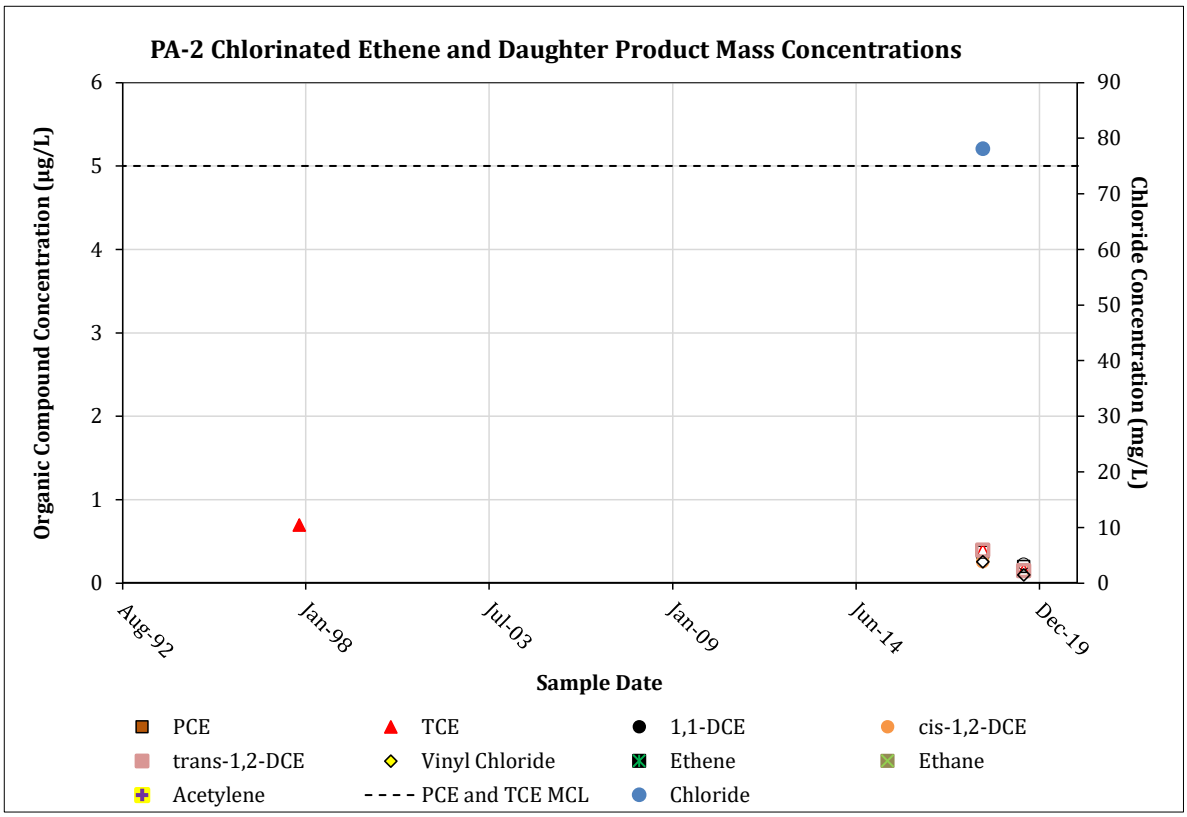

PA-1 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

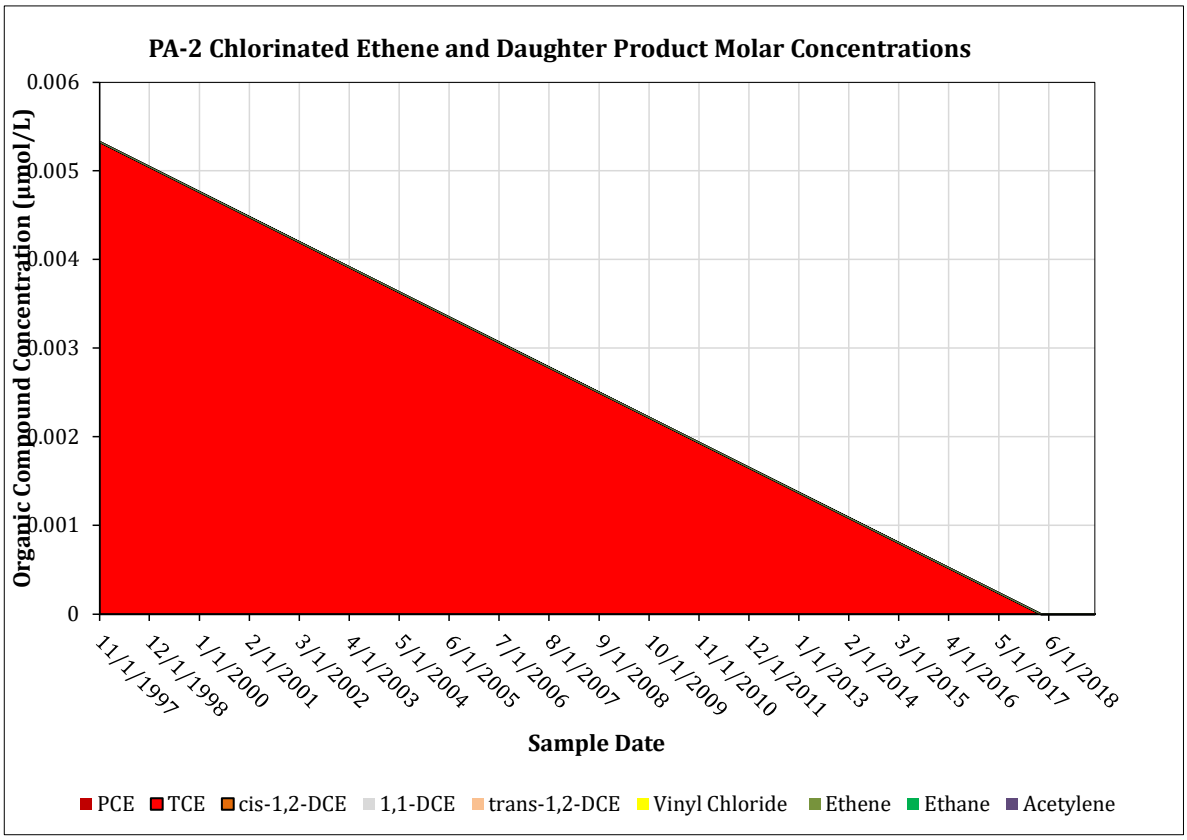

PA-1 Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

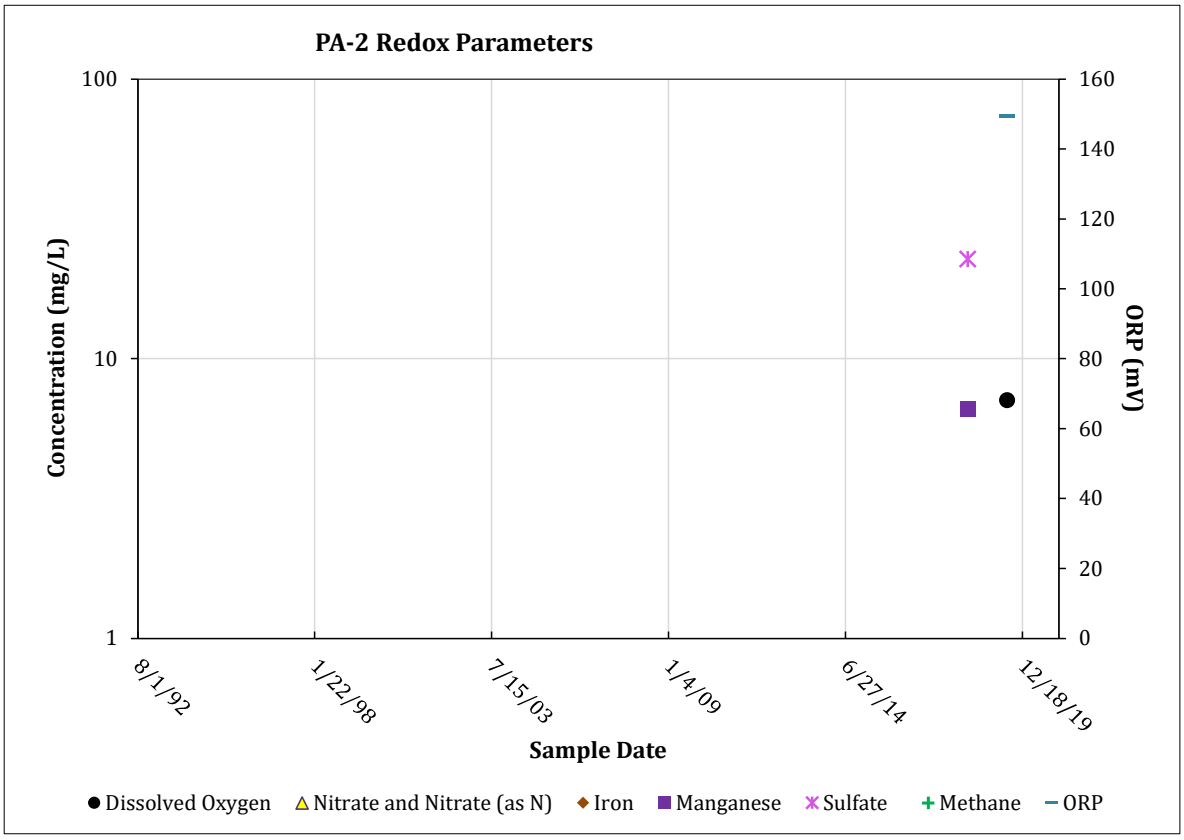

PA-1 Other Geochemistry
Concentration (mg/L)
350
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

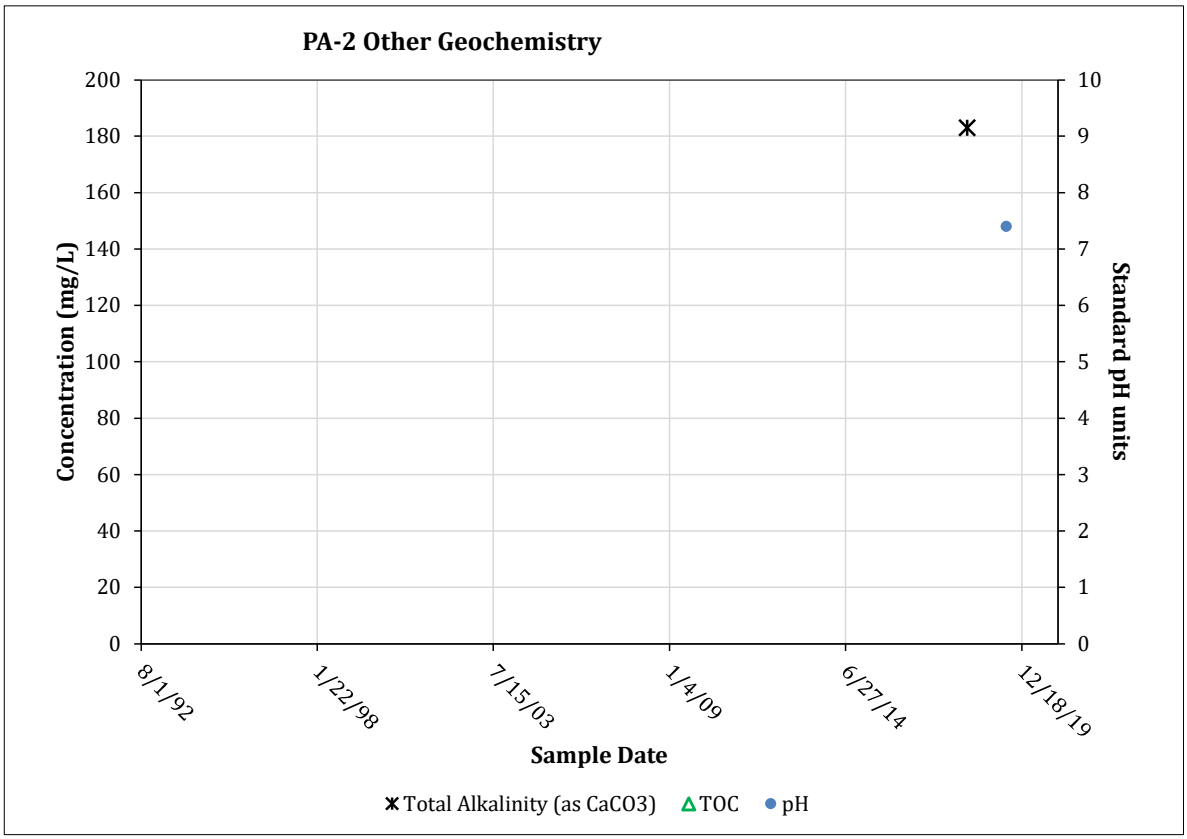


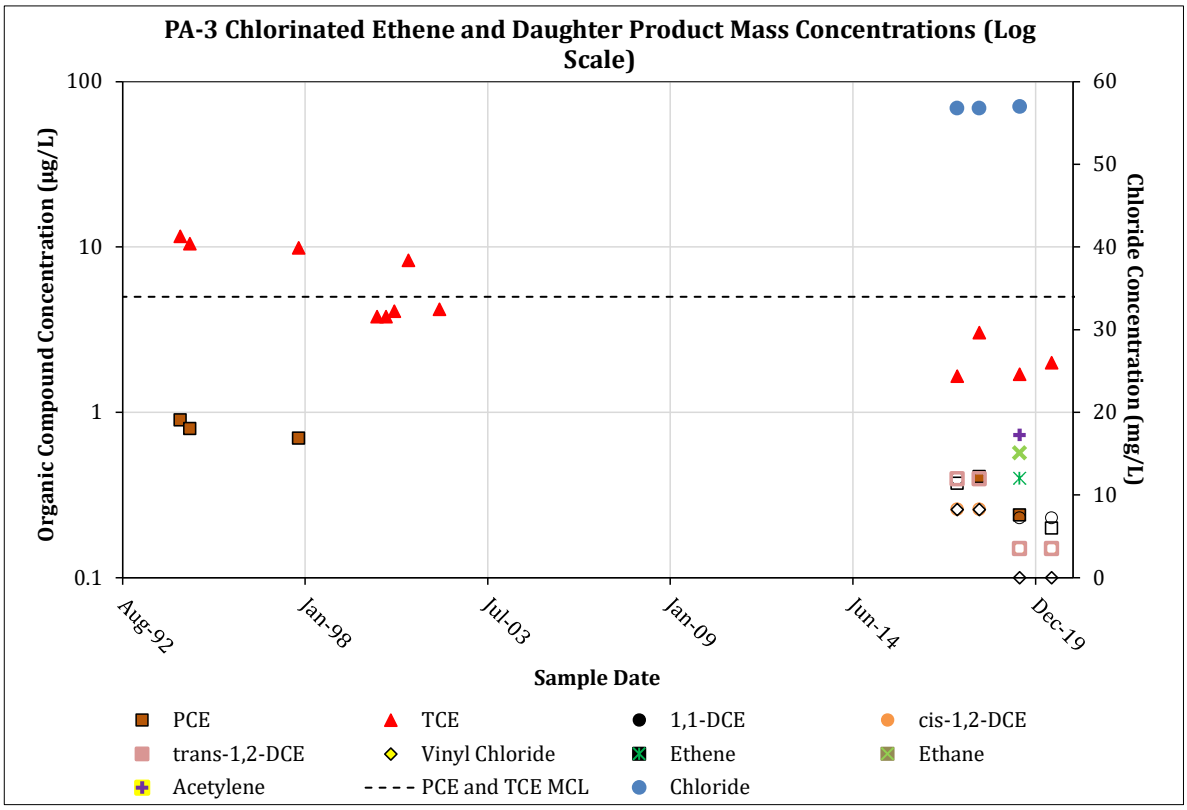


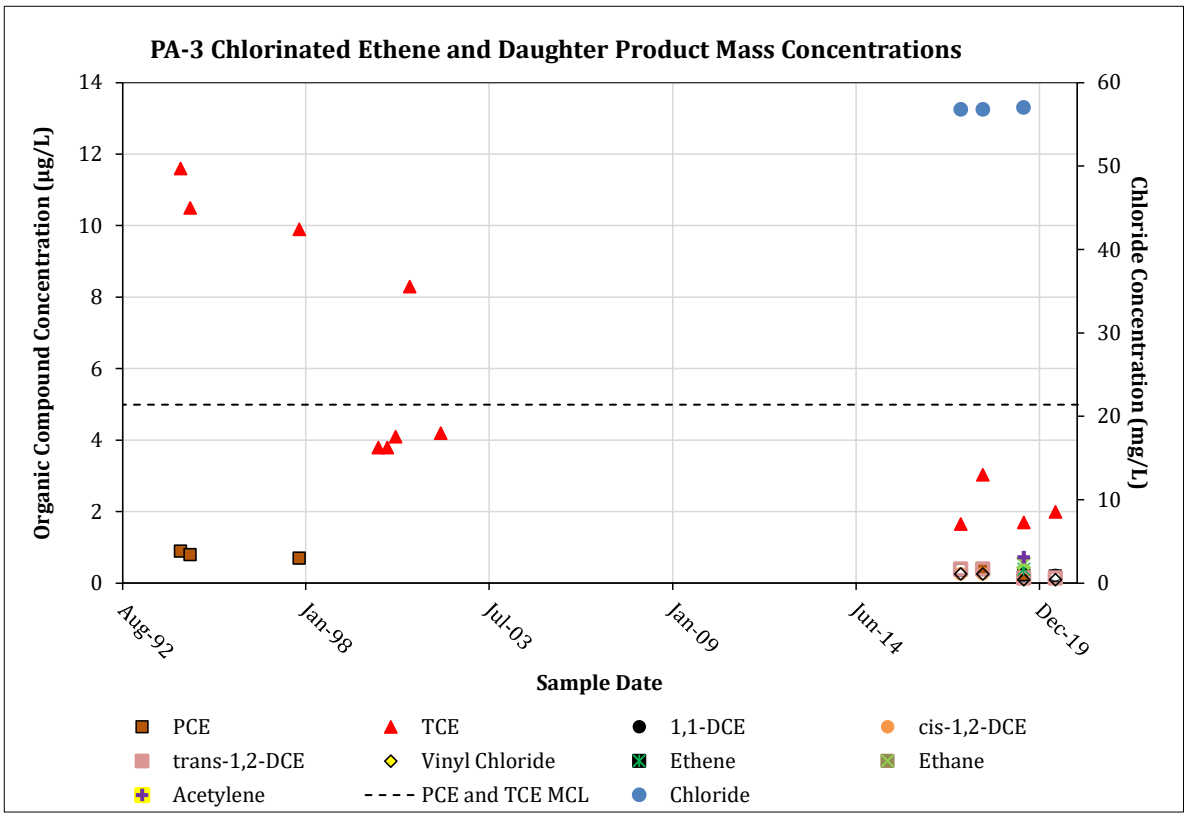
The symbol without fill designates a non-detect result.


PA-2 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.006
0.005
0.004
0.003
0.002
0.001
0
11/1/1997
12/1/1998
1/1/2000
2/1/2001
3/1/2002
4/1/2003
5/1/2004
6/1/2005
7/1/2006
8/1/2007
9/1/2008
10/1/2009
11/1/2010
12/1/2011
1/1/2013
2/1/2014
3/1/2015
4/1/2016
5/1/2017
6/1/2018
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

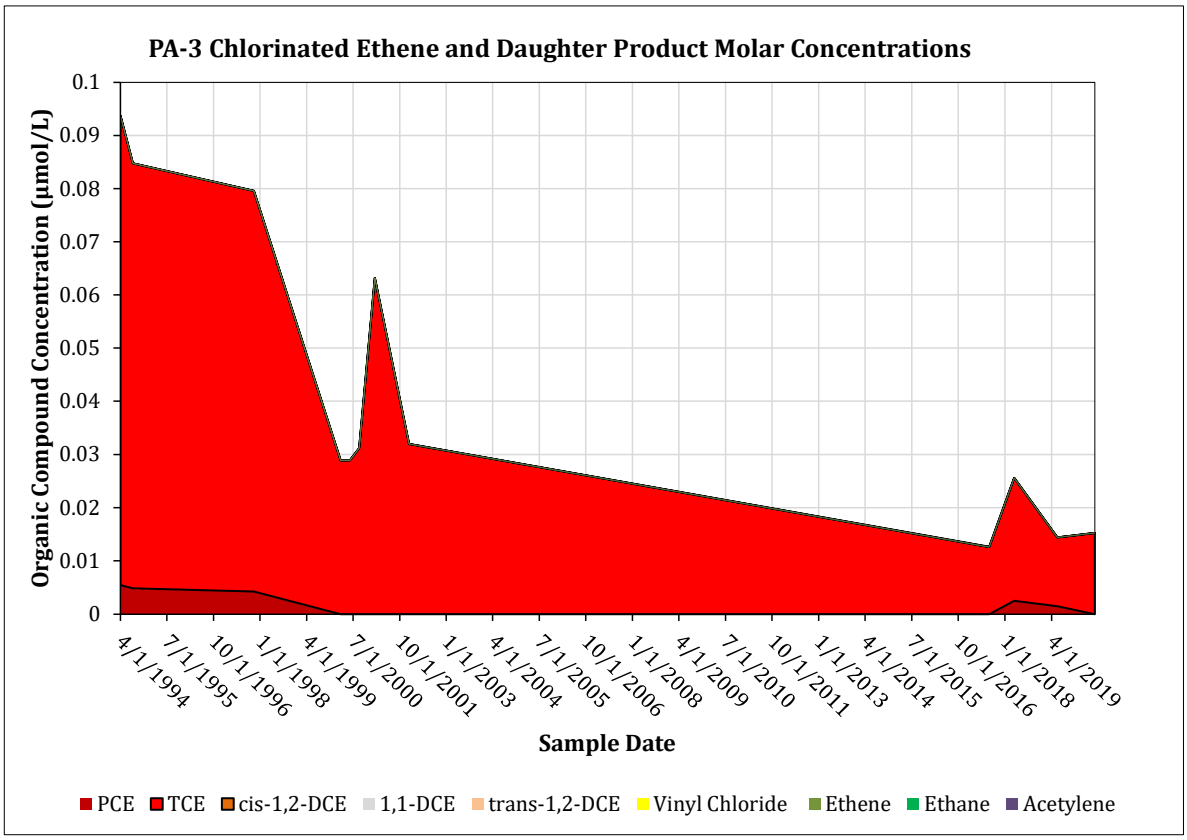

PA-2 Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

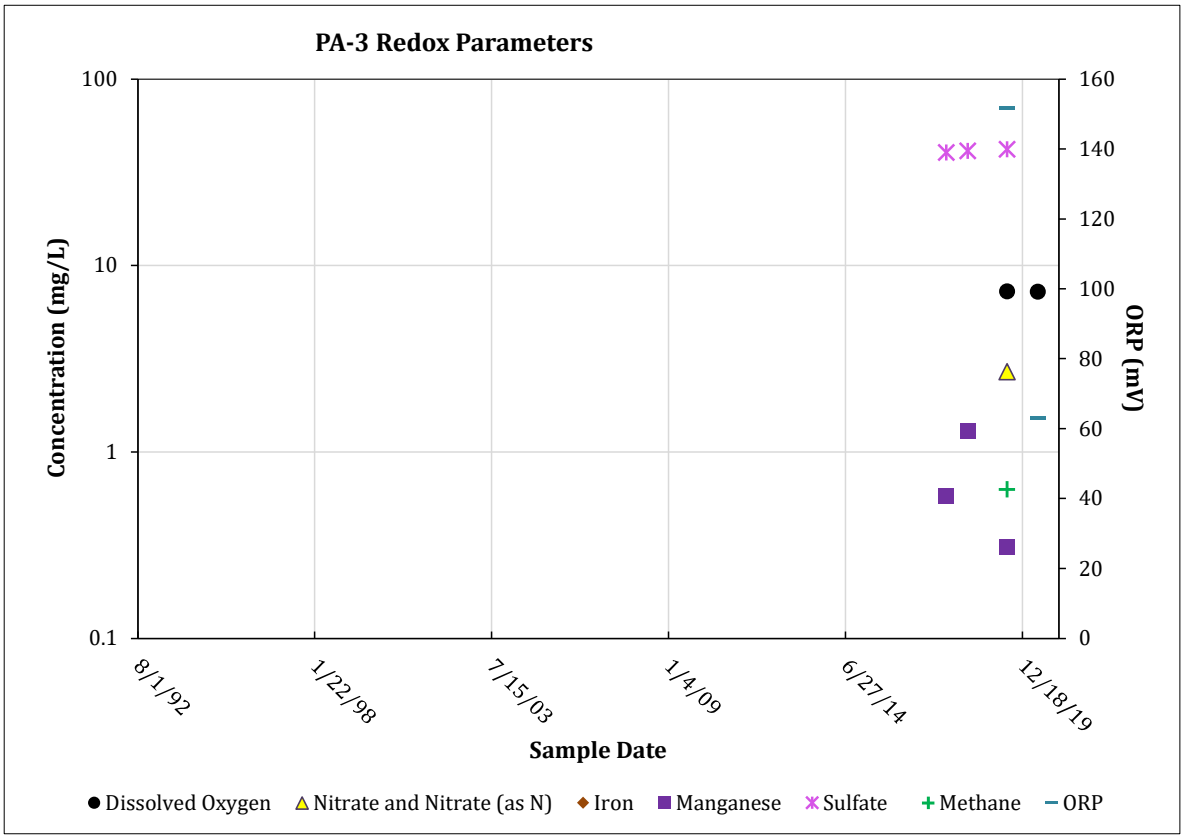

PA-2 Other Geochemistry
Concentration (mg/L)
Standard pH units
200
180
160
140
120
100
80
60
40
20
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

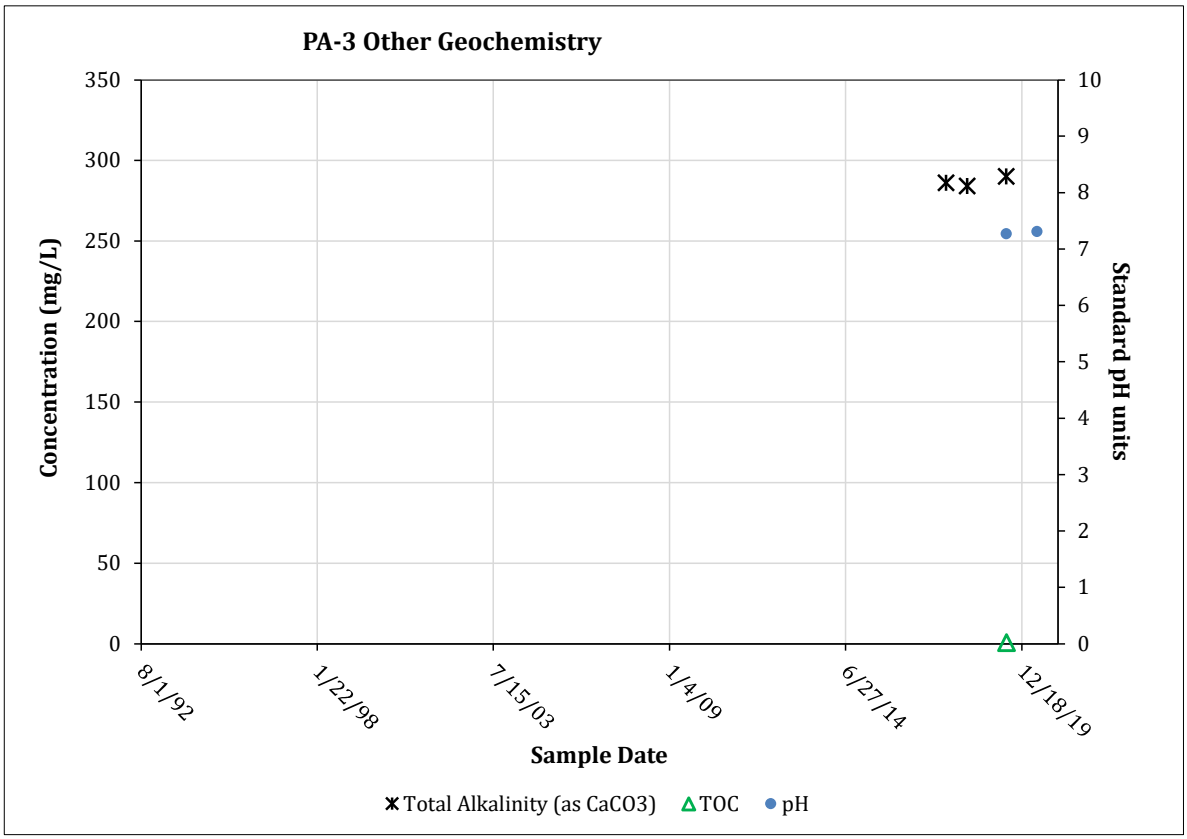


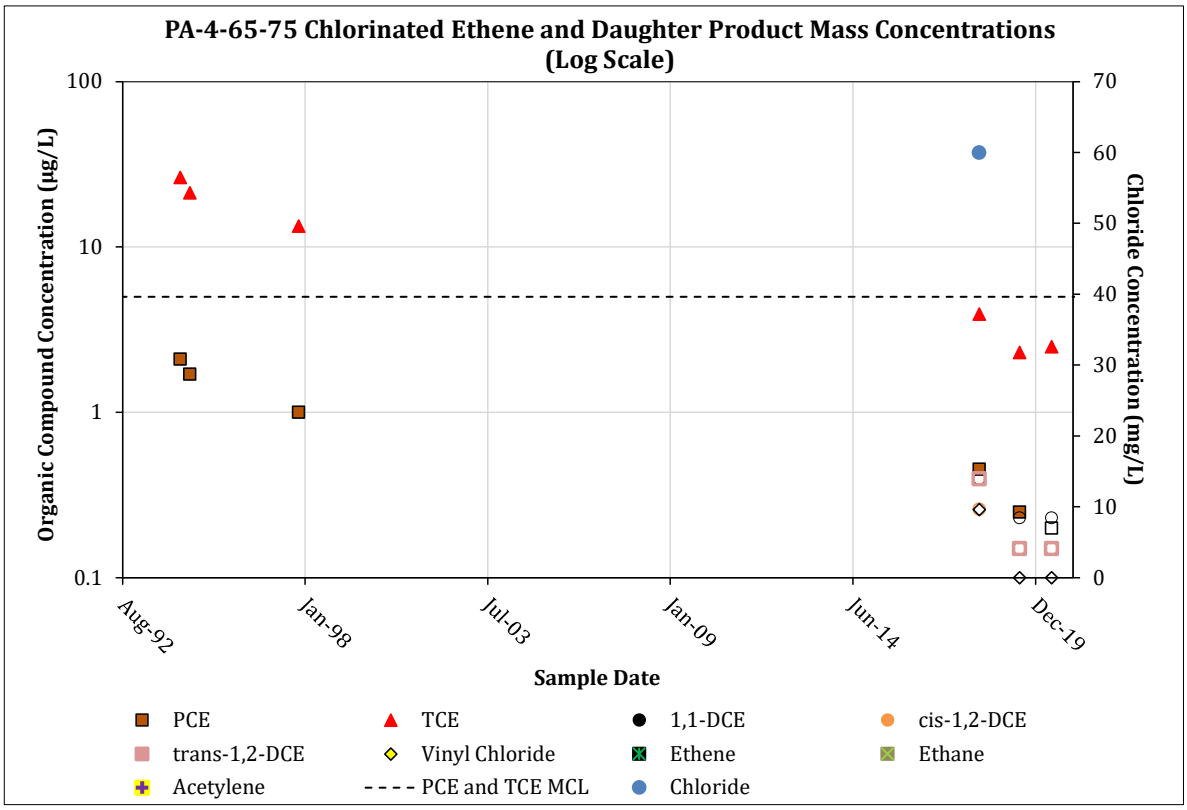


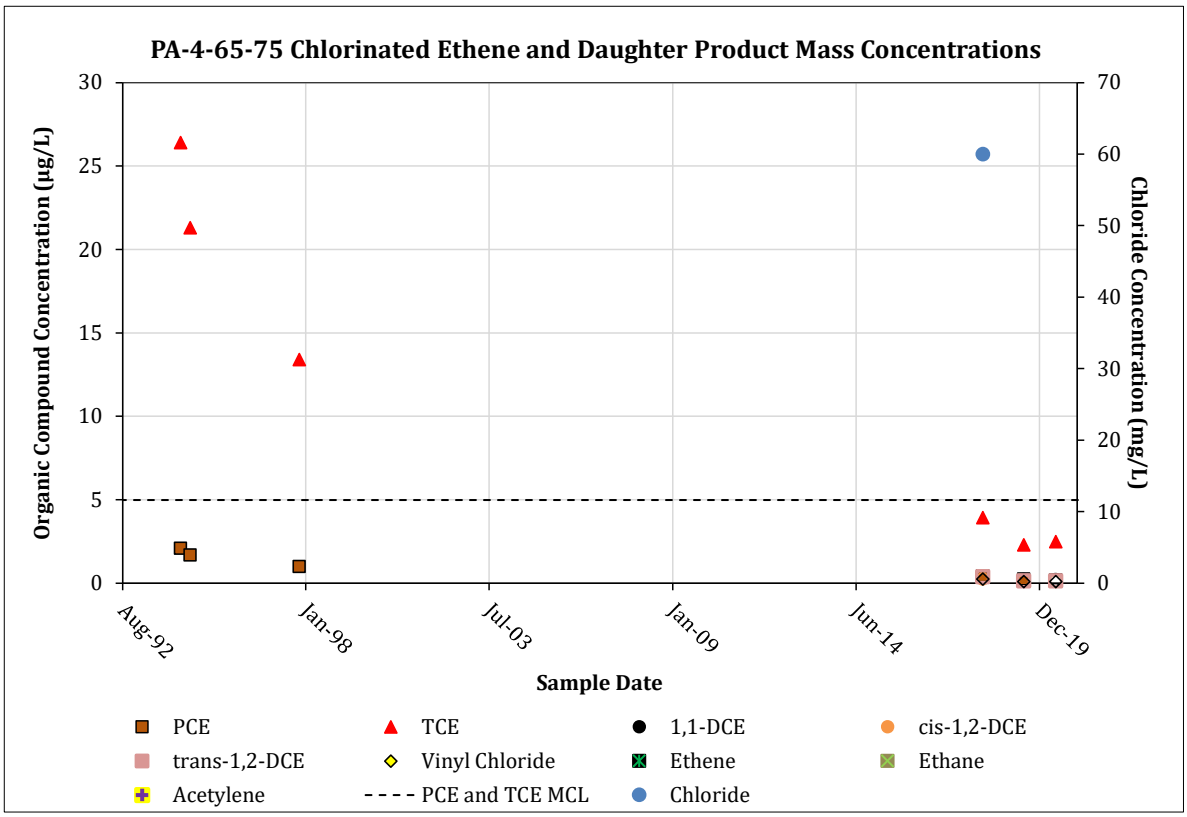
The symbol without fill designates a non-detect result.


PA-3 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

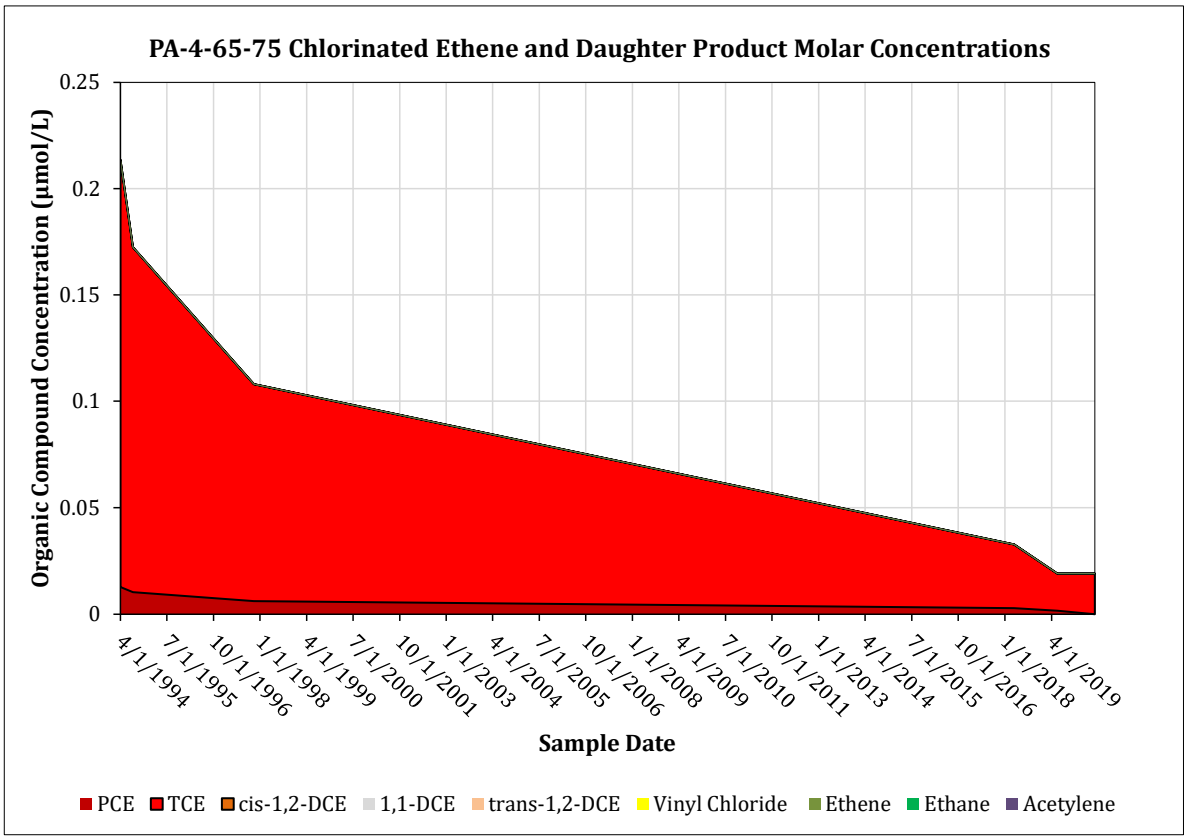

PA-3 Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

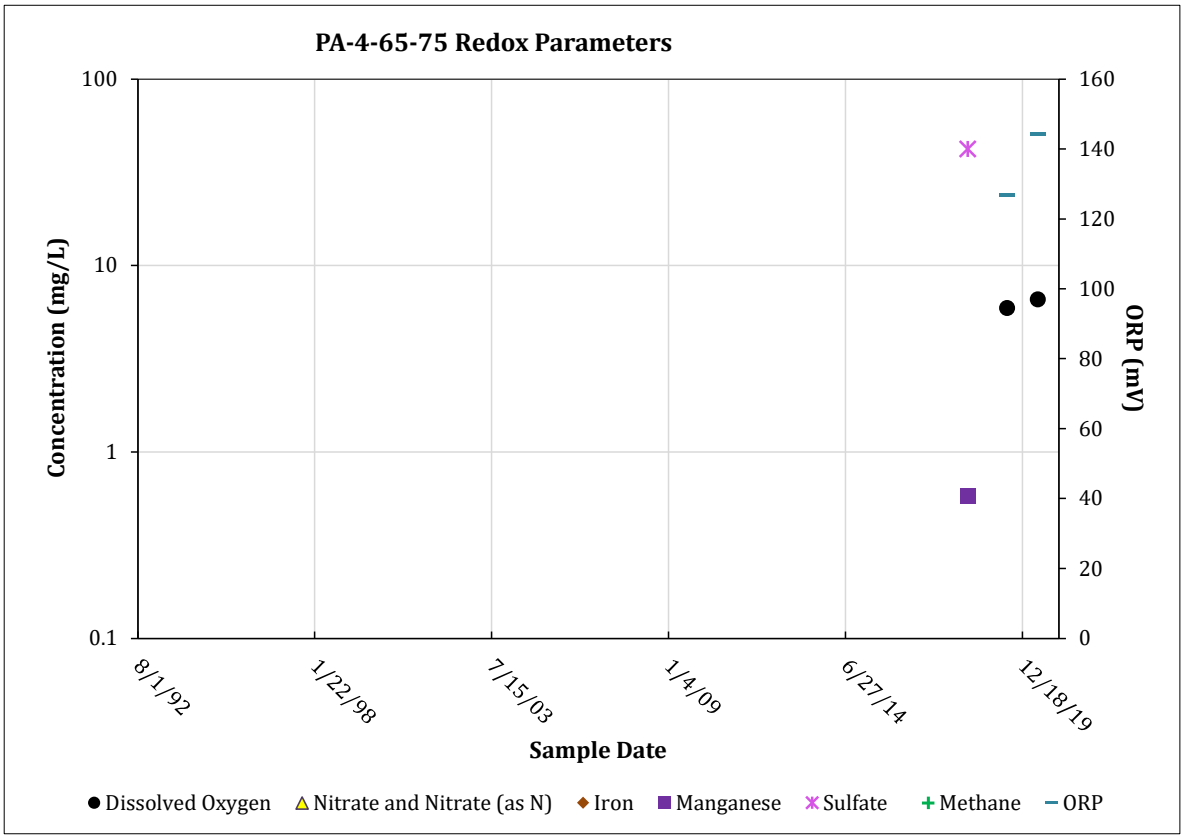

PA-3 Other Geochemistry
Concentration (mg/L)
350
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

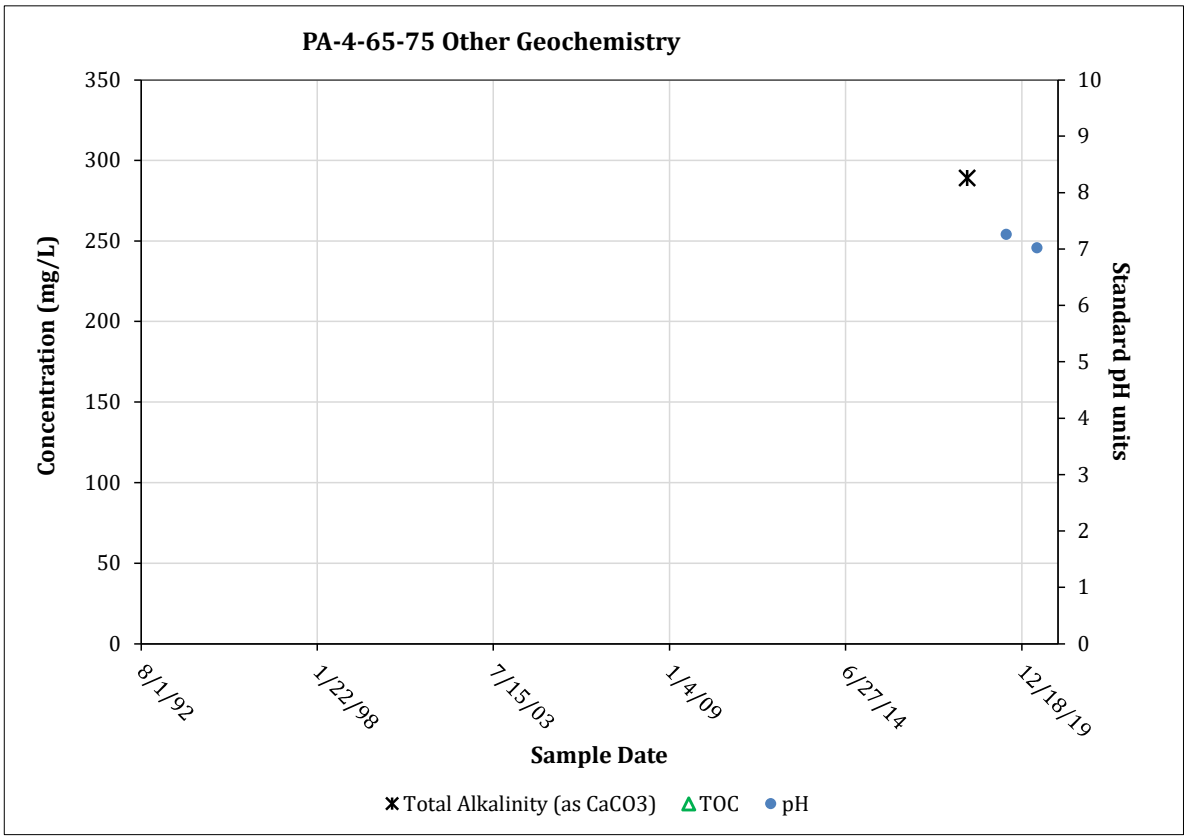


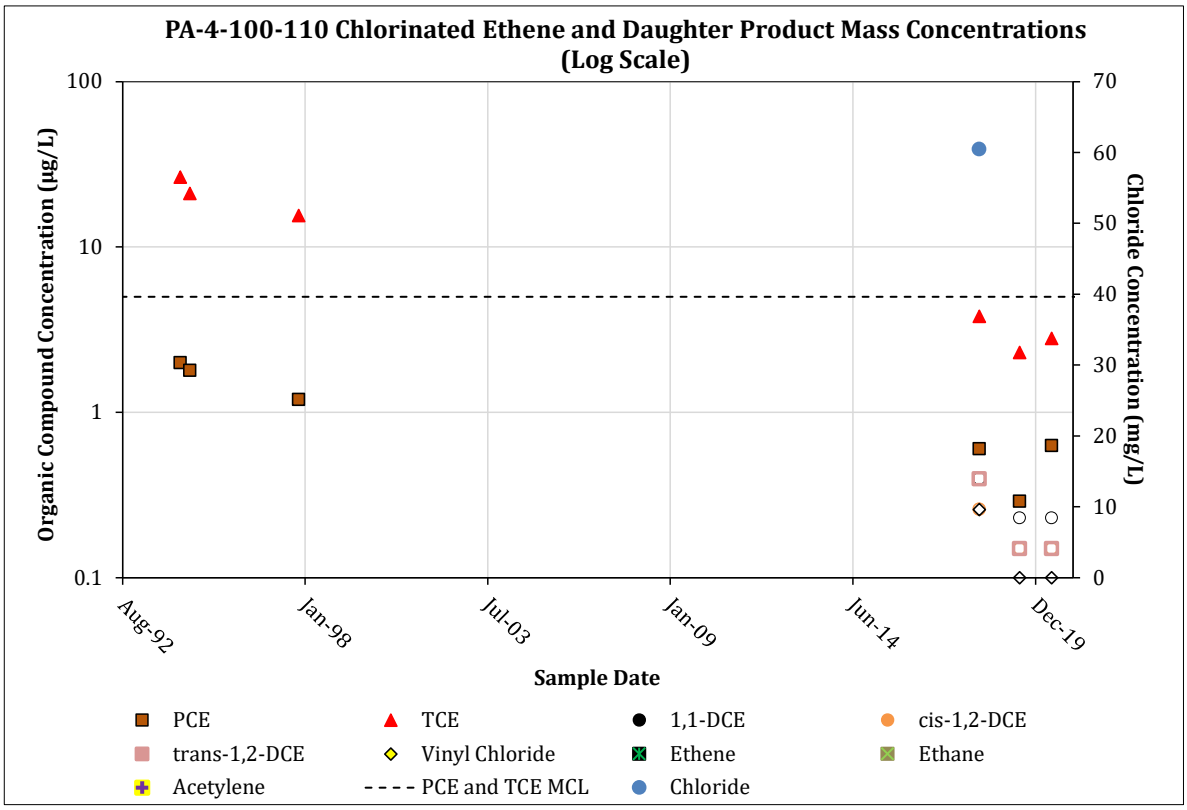


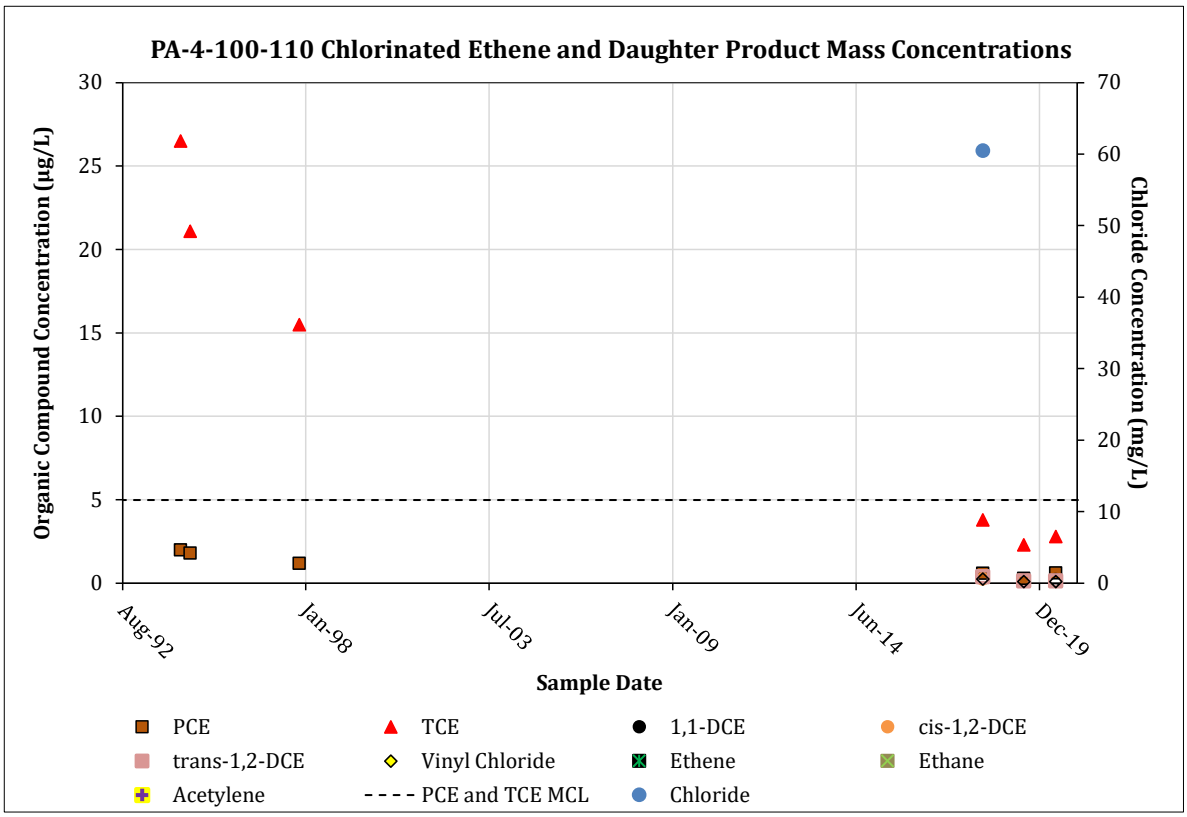
The symbol without fill designates a non-detect result.


PA-4-65-75 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.25
0.2
0.15
0.1
0.05
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

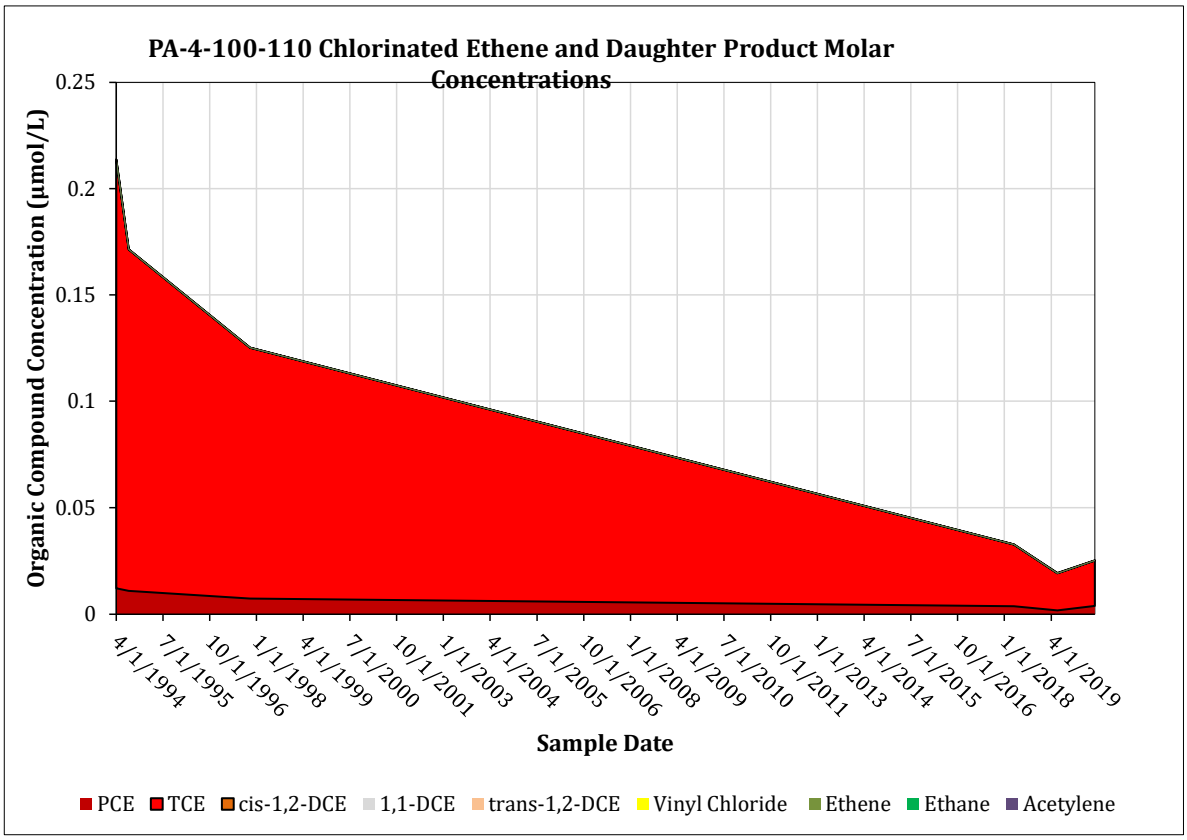

PA-4-65-75 Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

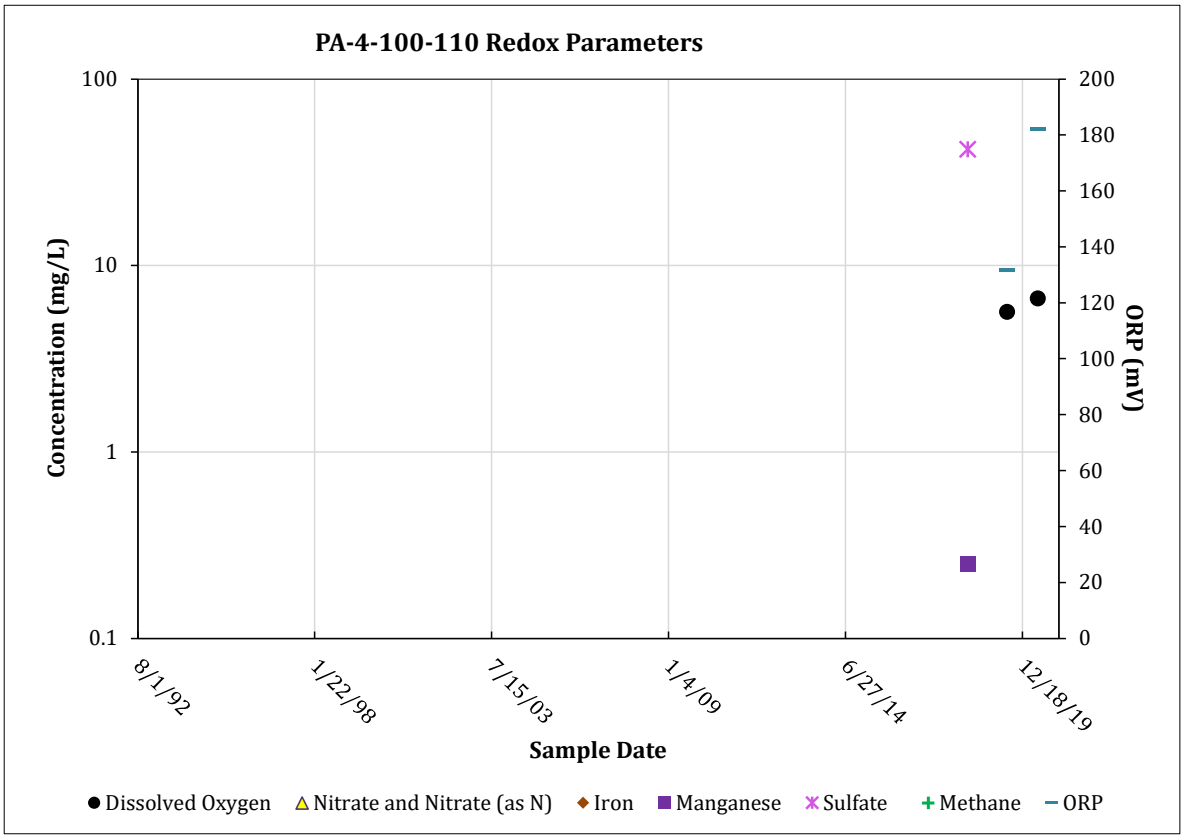

PA-4-65-75 Other Geochemistry
Concentration (mg/L)
350
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

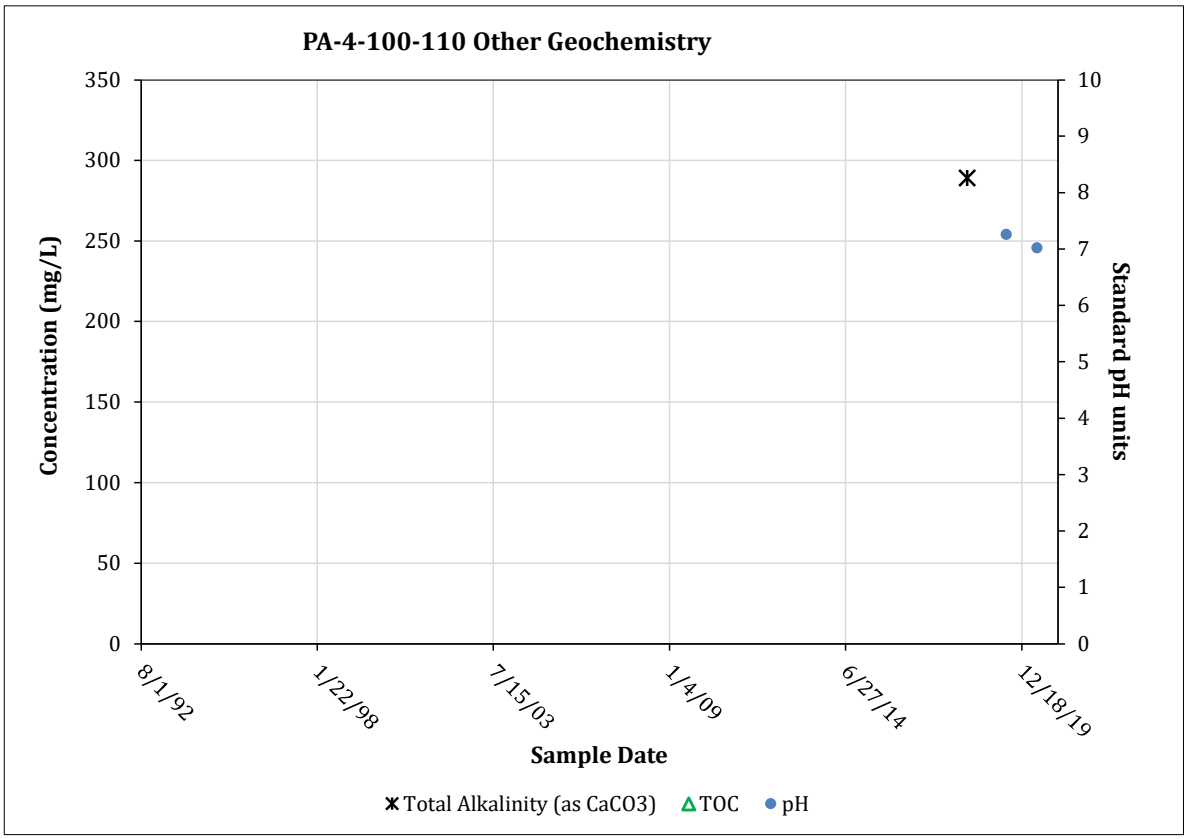


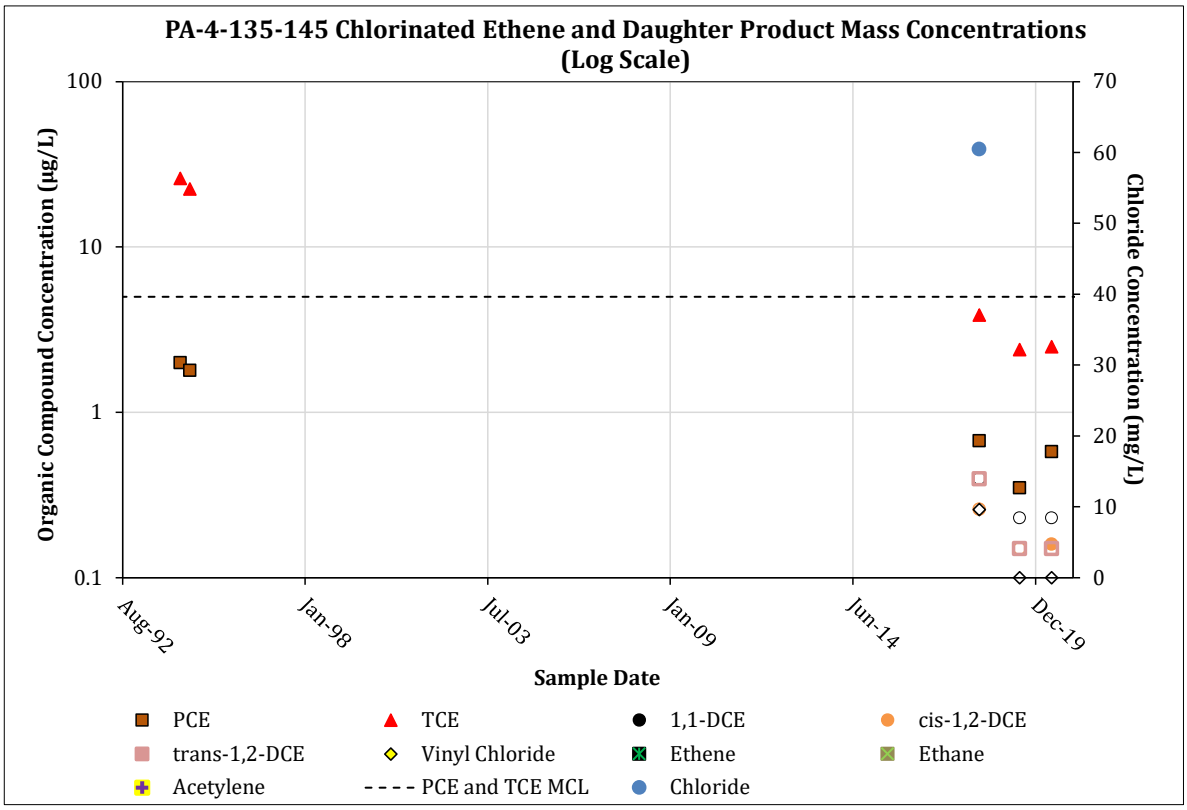


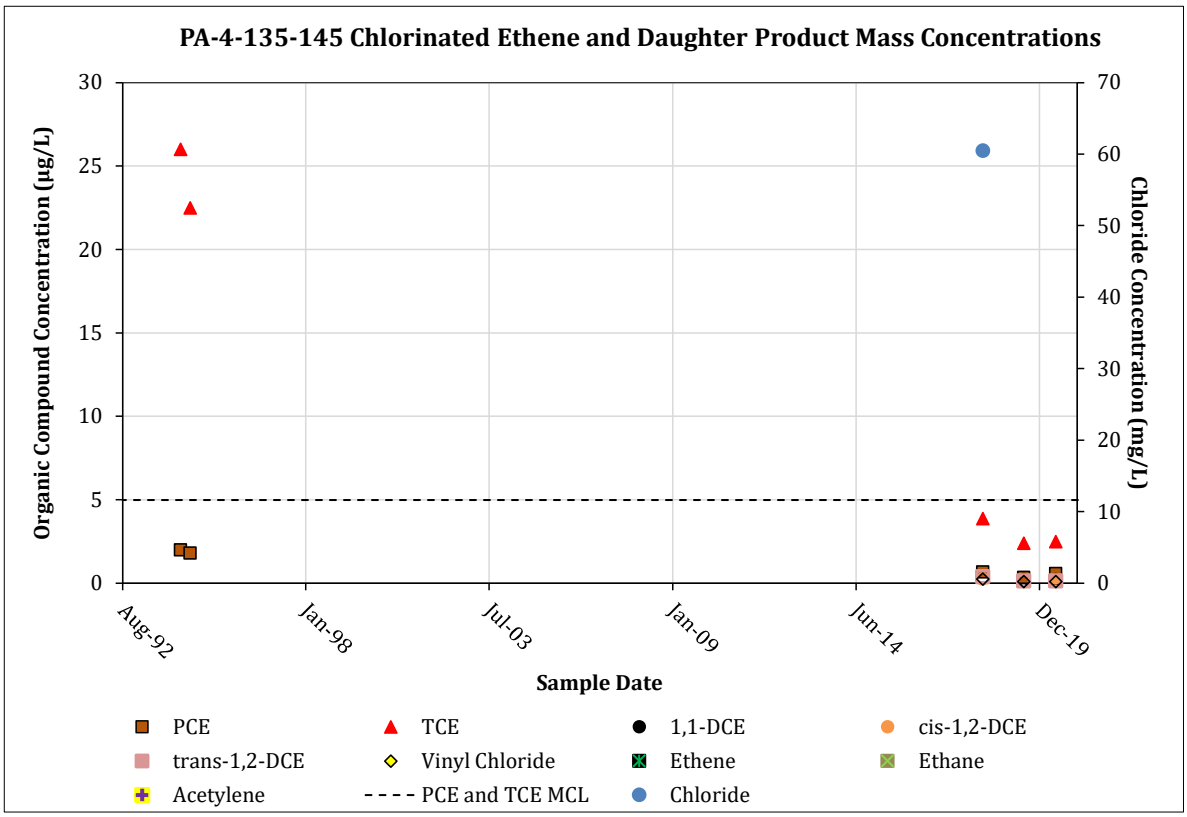
The symbol without fill designates a non-detect result.


PA-4-100-110 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.25
0.2
0.15
0.1
0.05
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

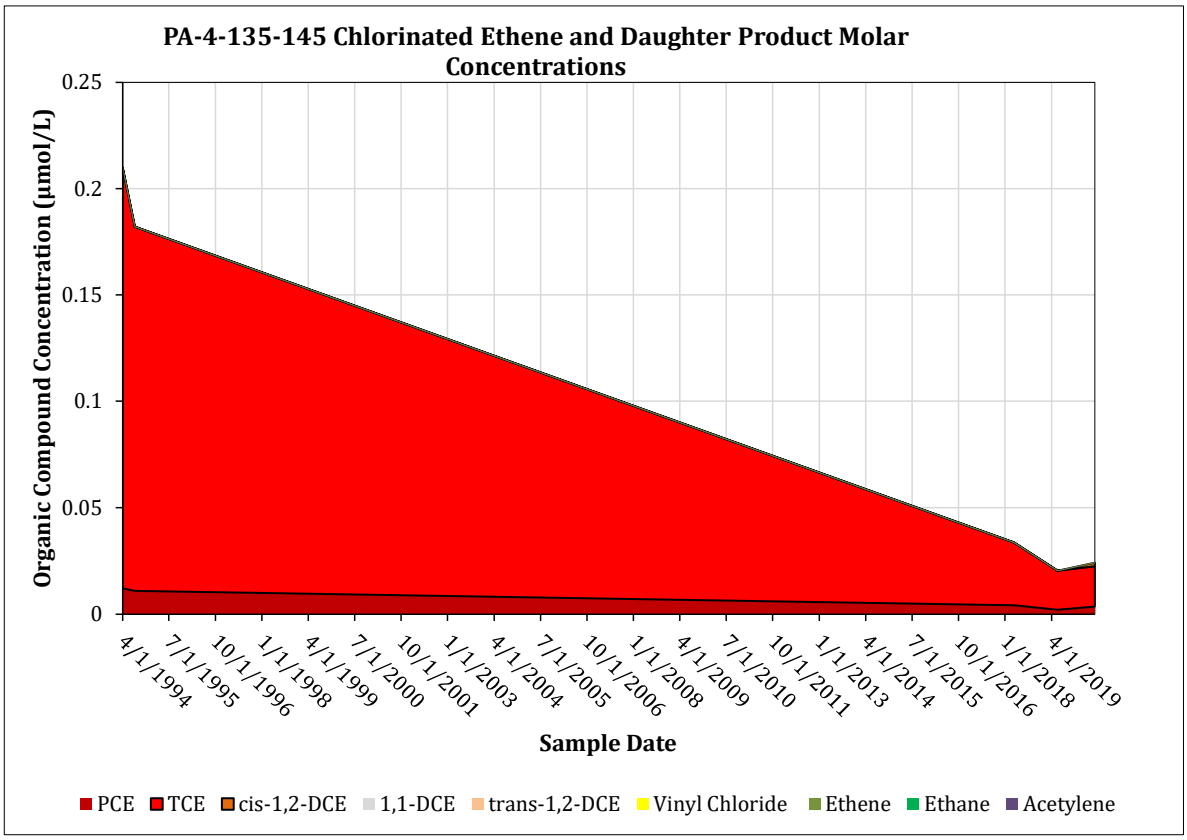

PA-4-100-110 Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

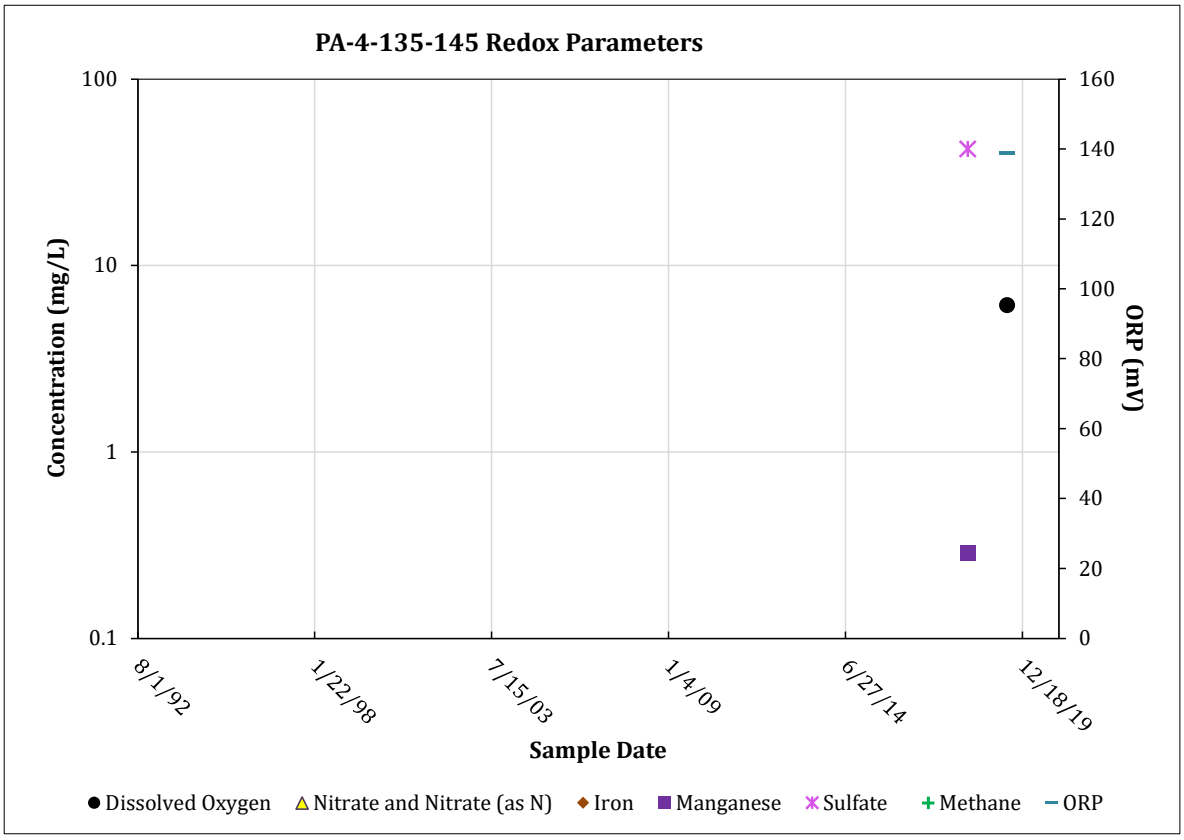

PA-4-100-110 Other Geochemistry
Concentration (mg/L)
350
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

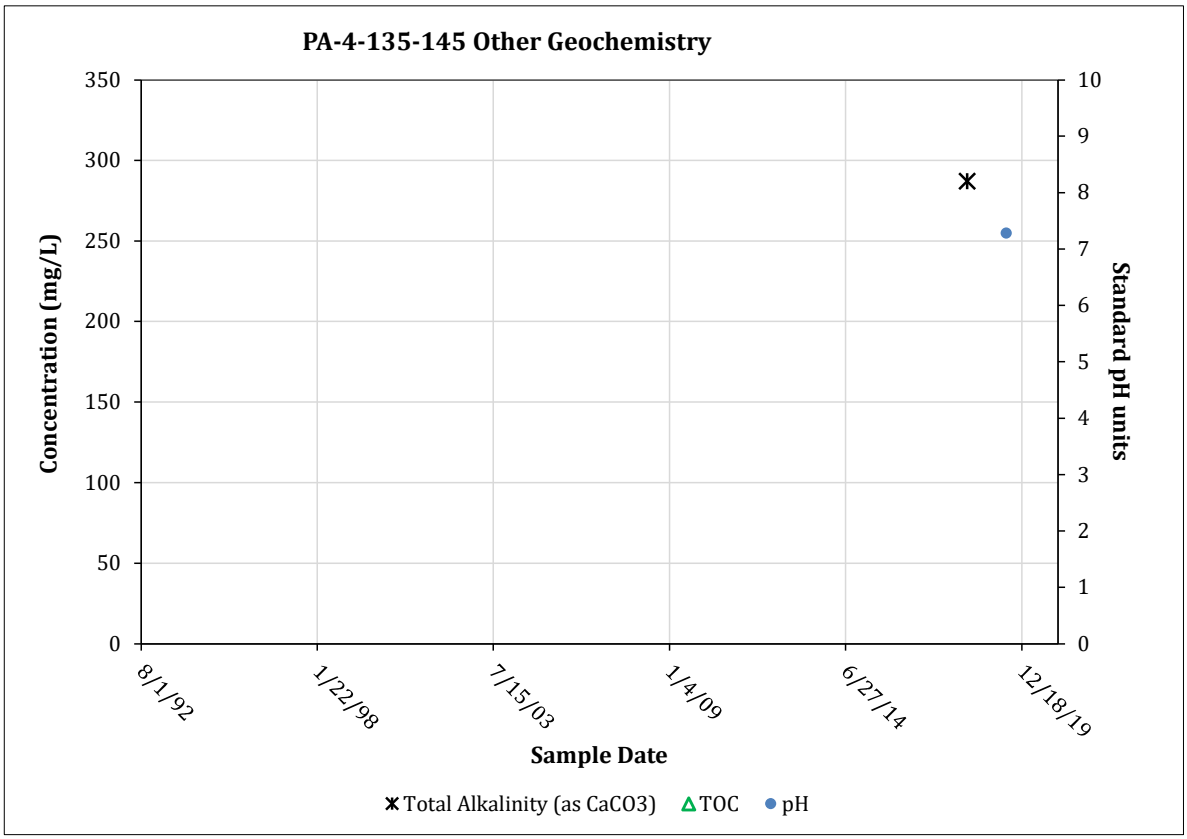


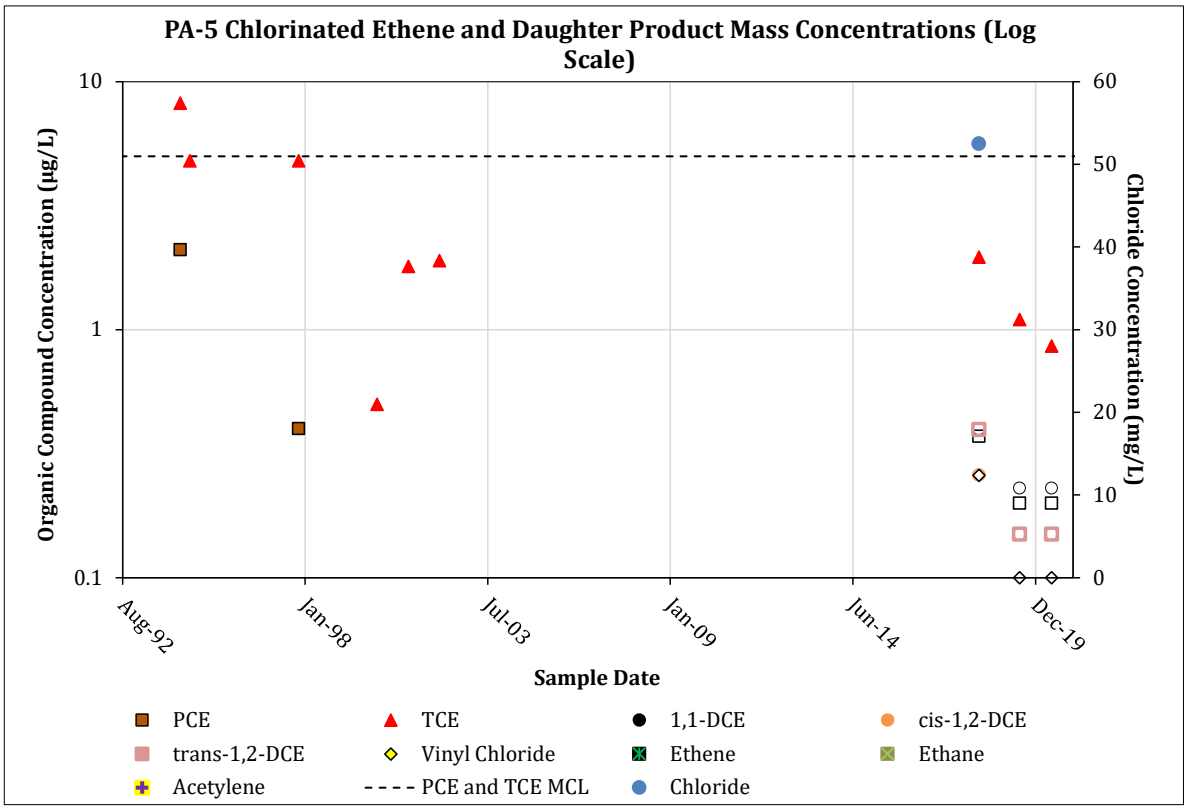


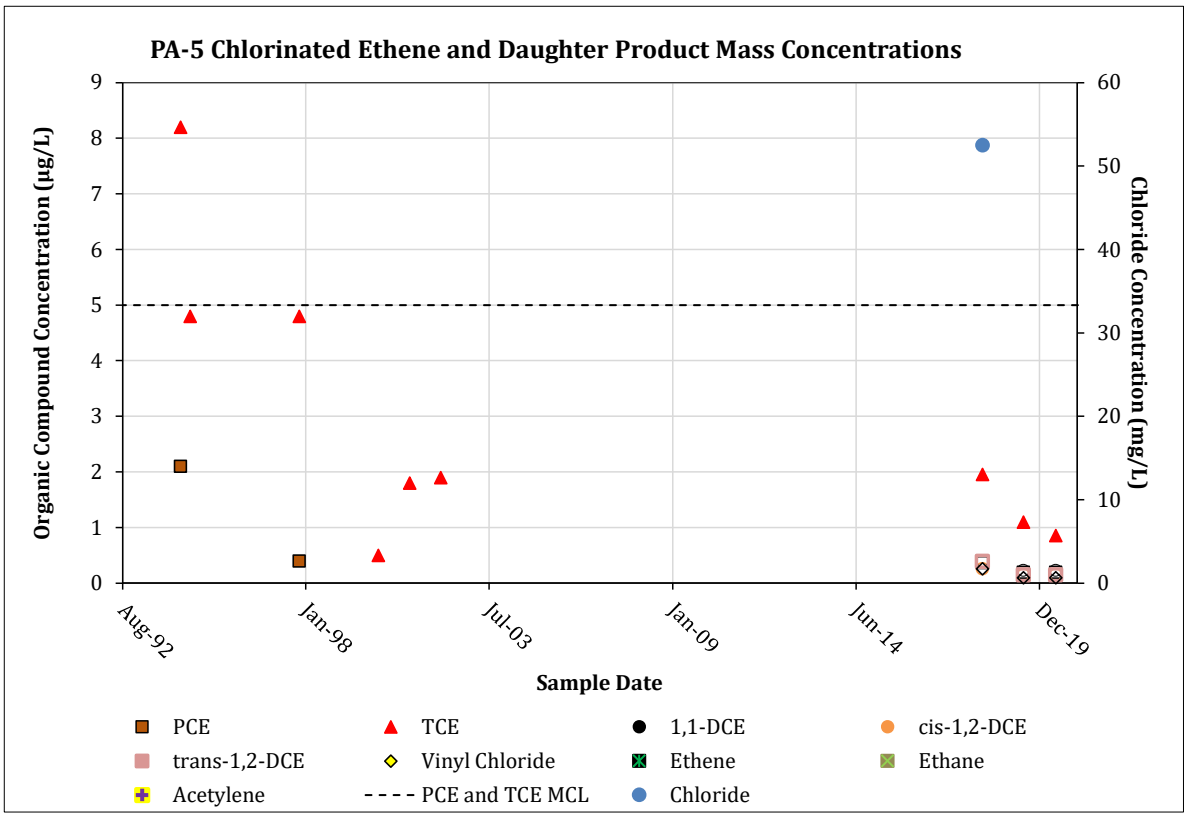
The symbol without fill designates a non-detect result.


PA-4-135-145 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.25
0.2
0.15
0.1
0.05
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

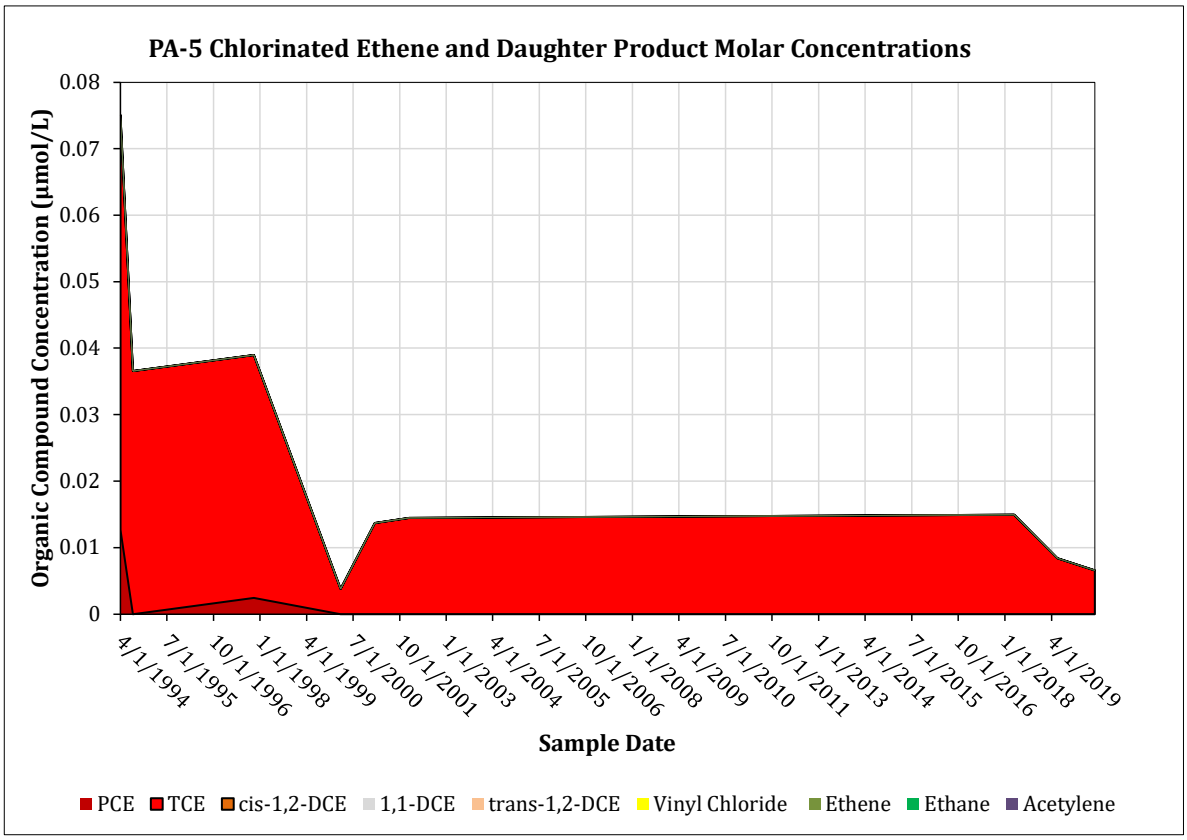

PA-4-135-145 Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

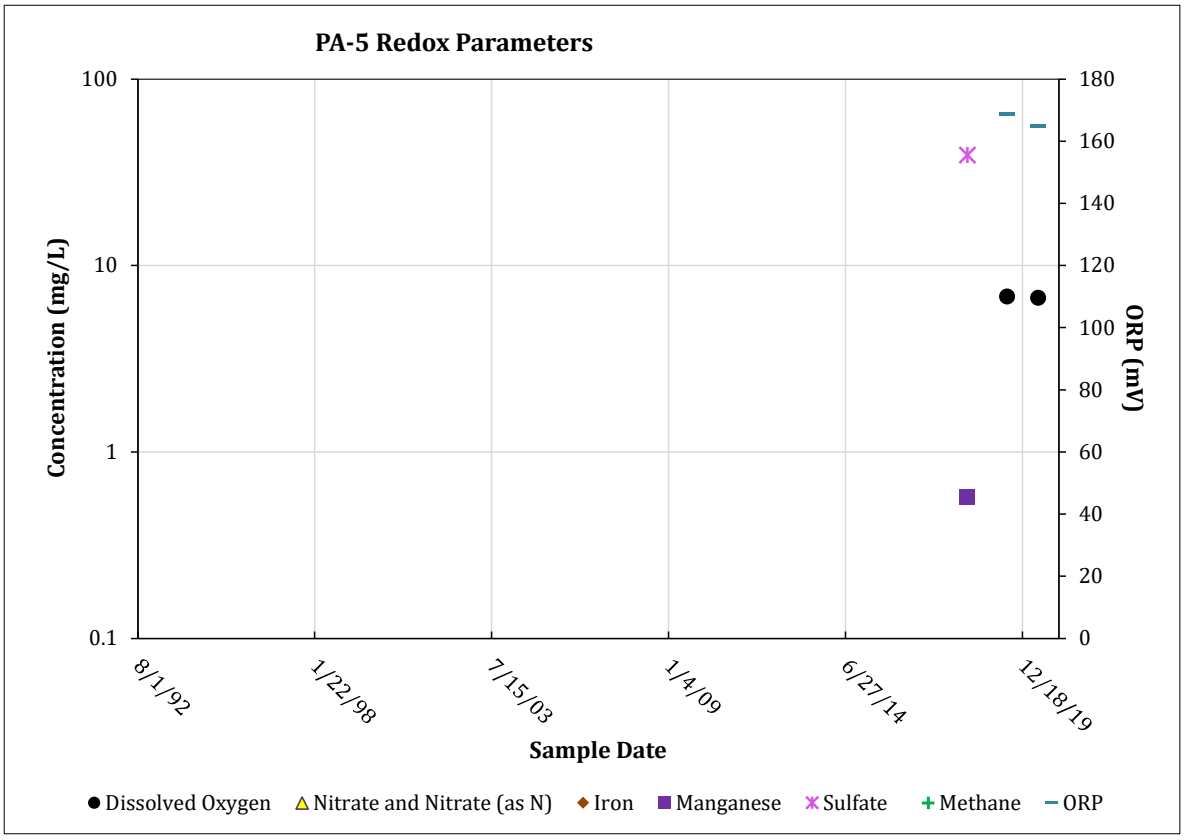

PA-4-135-145 Other Geochemistry
Concentration (mg/L)
350
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

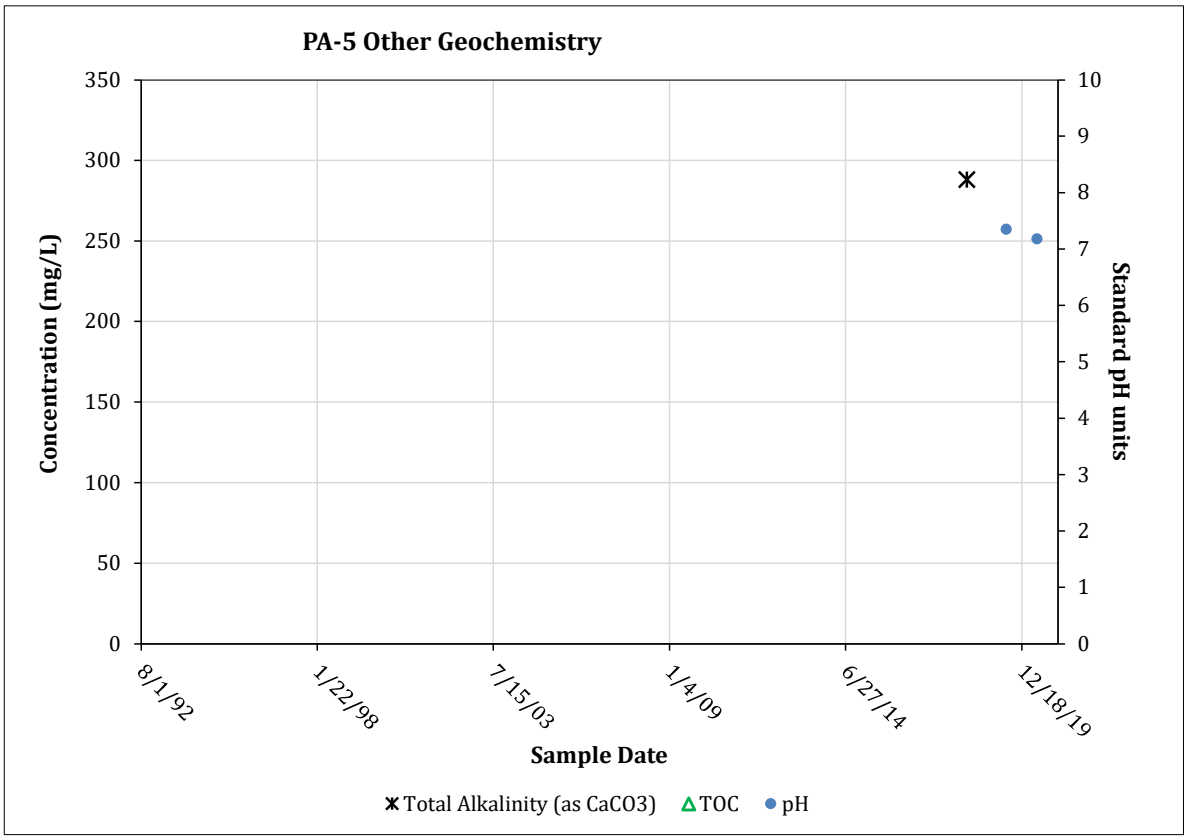


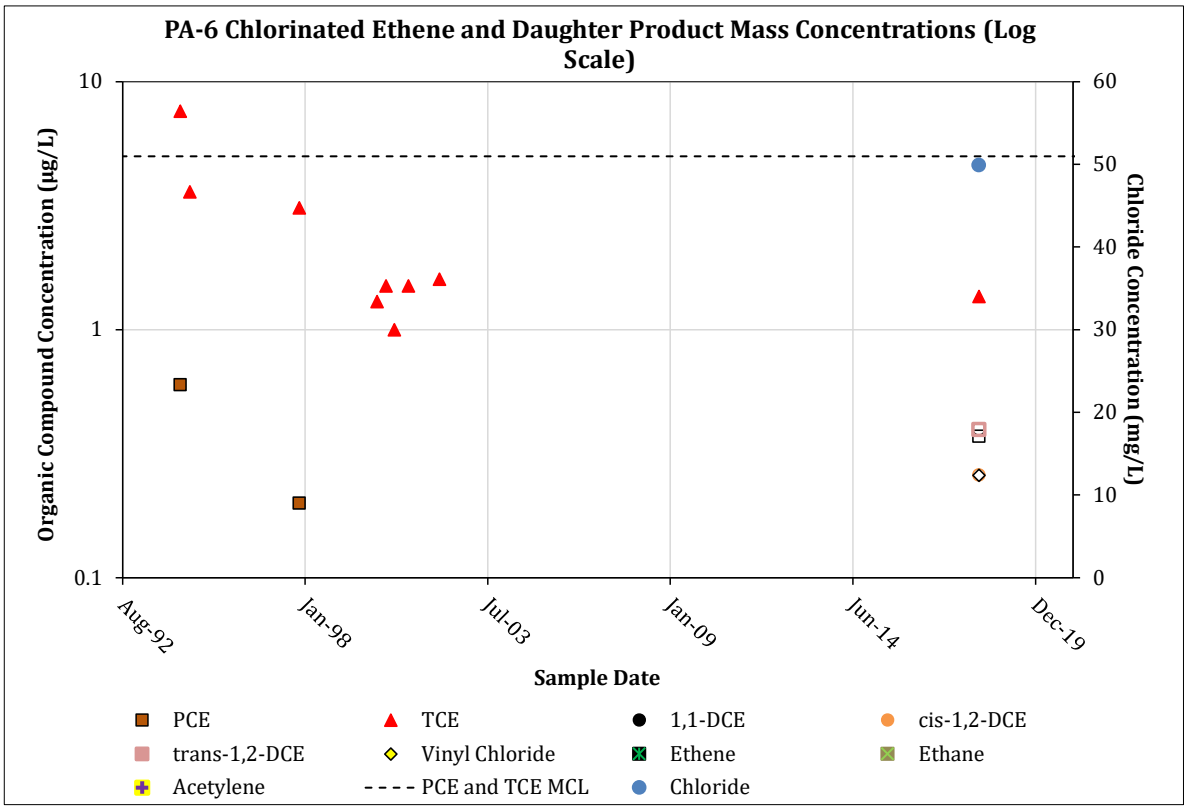


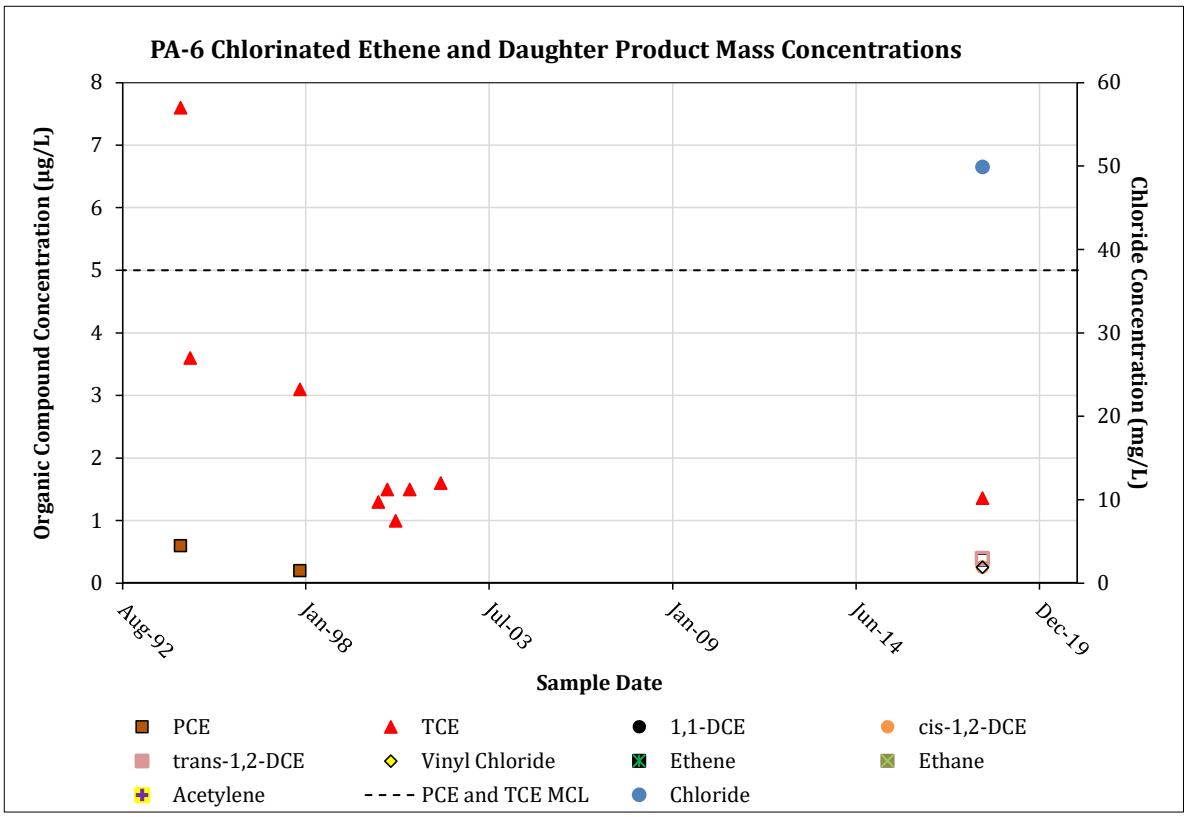
The symbol without fill designates a non-detect result.


PA-5 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

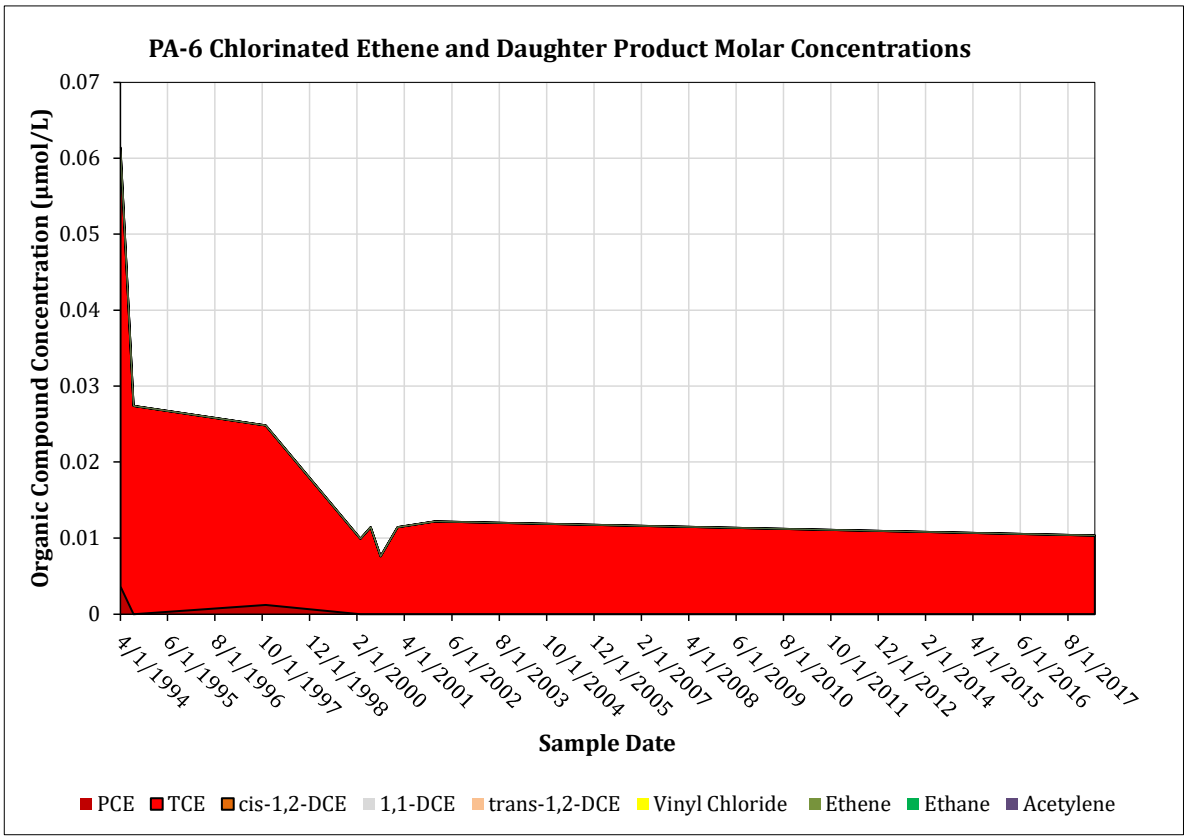

PA-5 Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

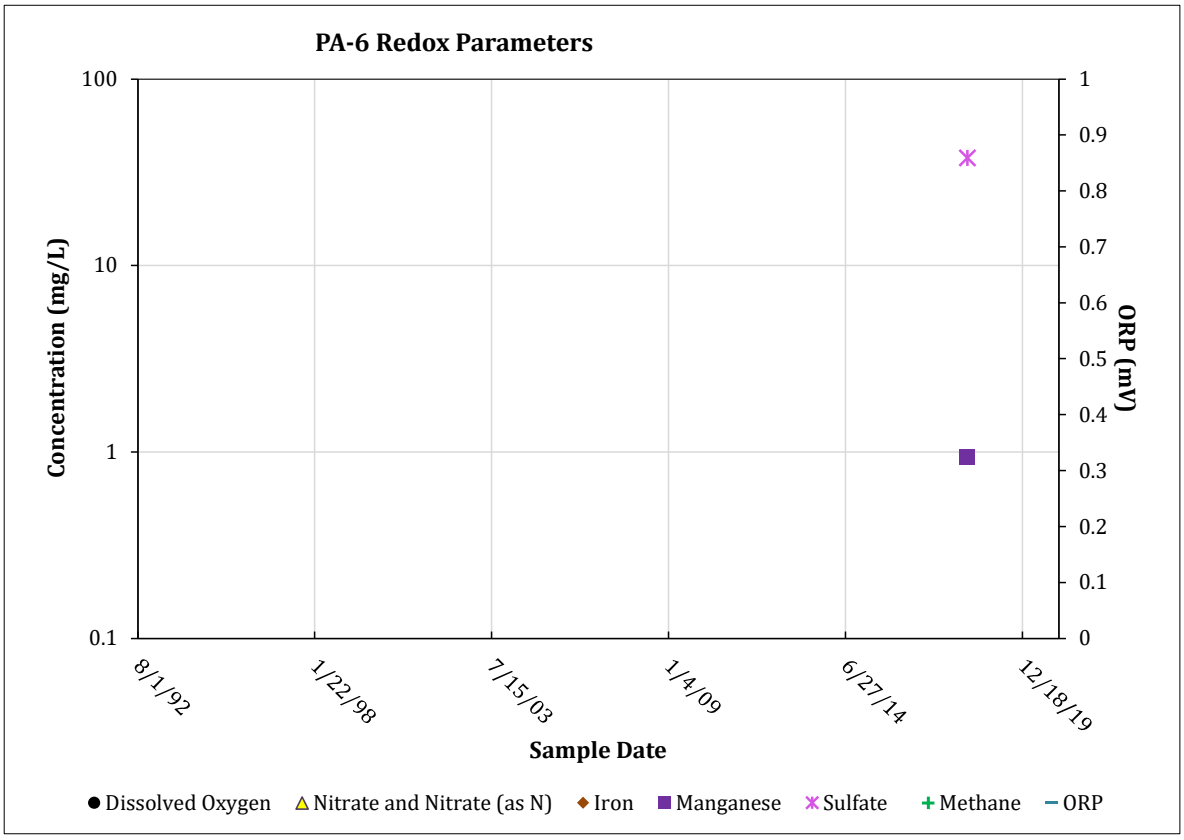

PA-5 Other Geochemistry
Concentration (mg/L)
Standard pH units
350
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

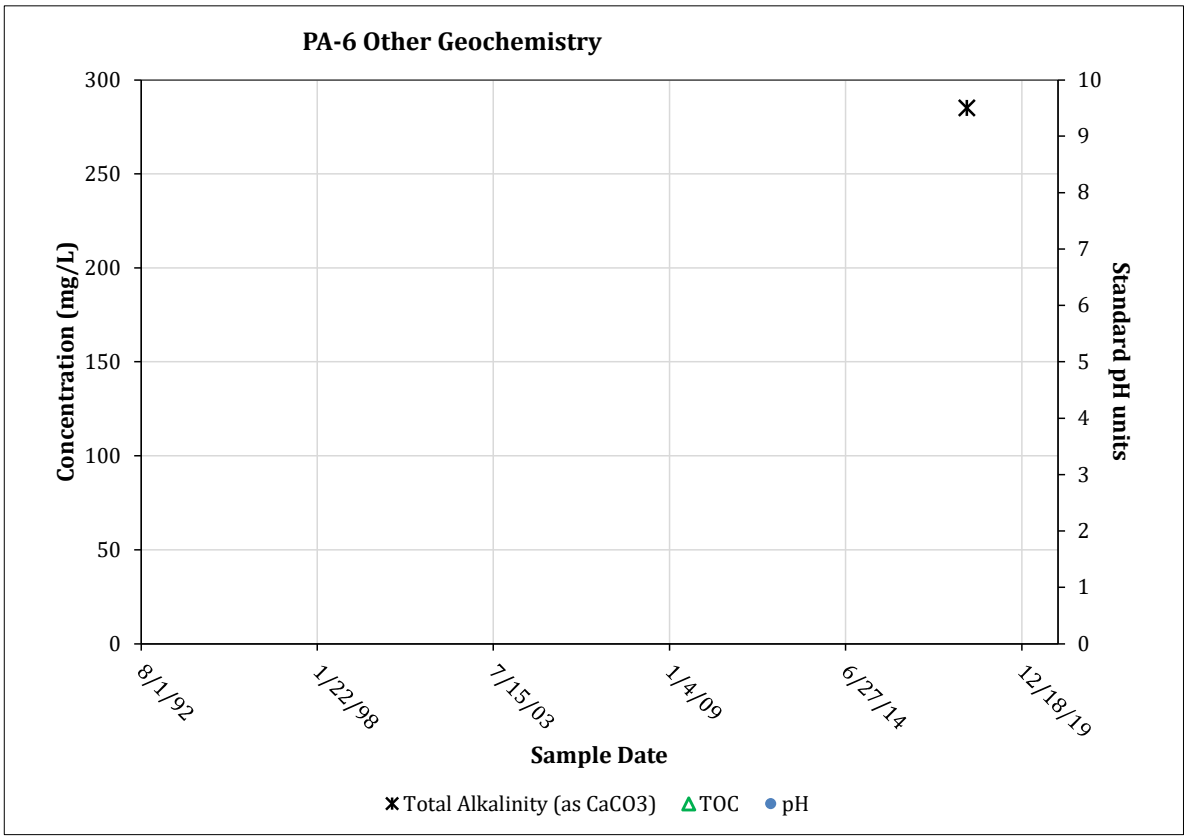


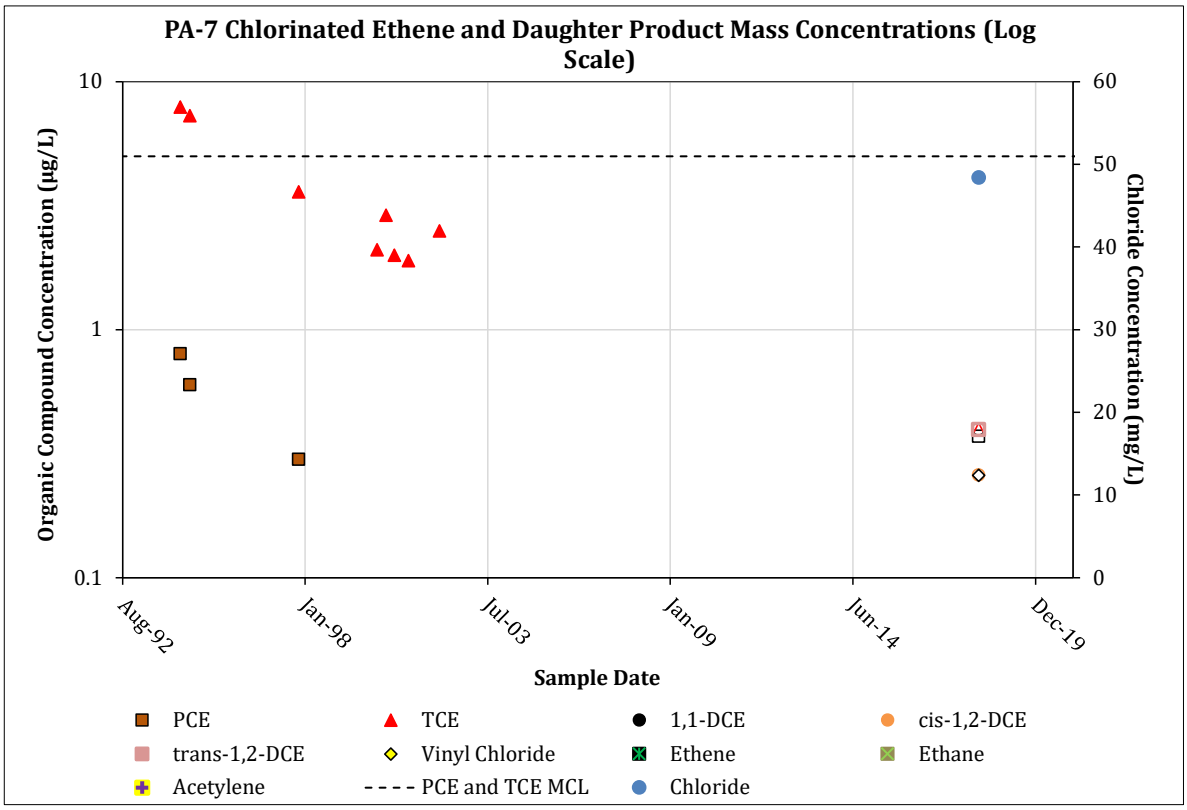


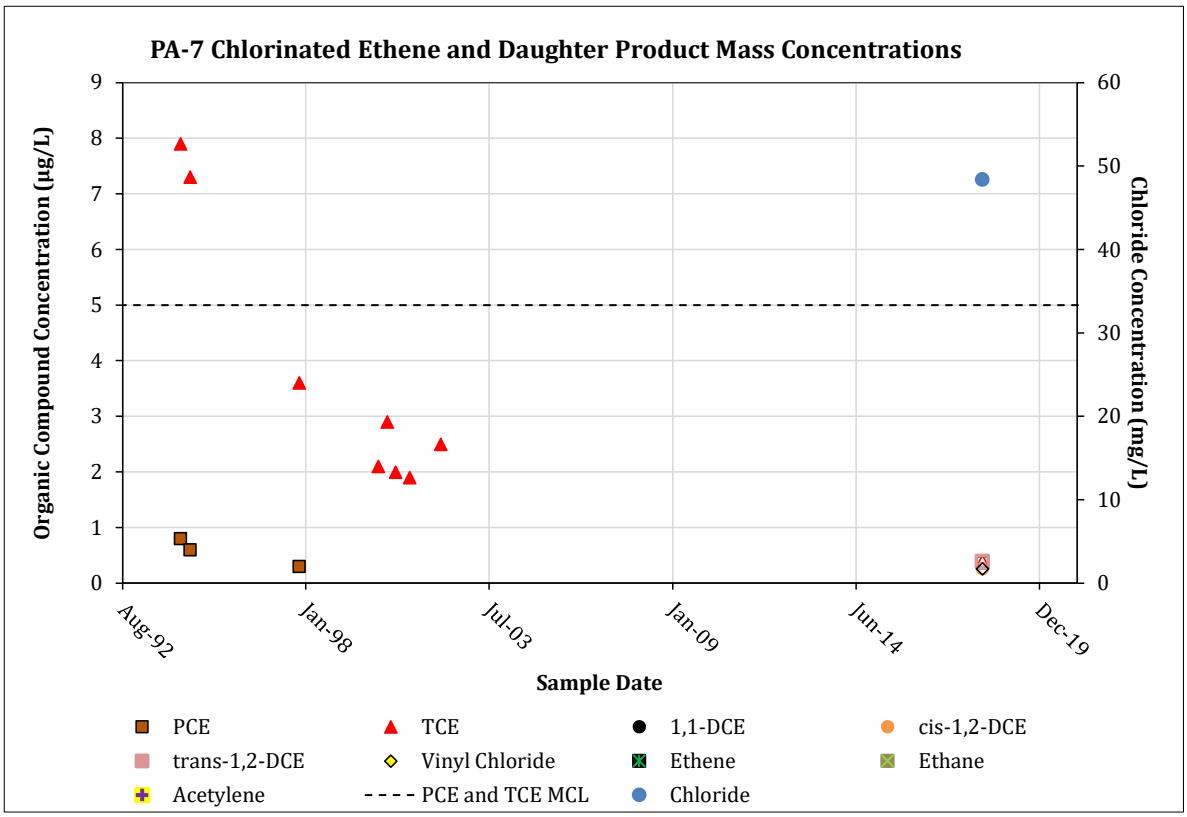
The symbol without fill designates a non-detect result.


PA-6 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
6/1/1995
8/1/1996
10/1/1997
12/1/1998
2/1/2000
4/1/2001
6/1/2002
8/1/2003
10/1/2004
12/1/2005
2/1/2007
4/1/2008
6/1/2009
8/1/2010
10/1/2011
12/1/2012
2/1/2014
4/1/2015
6/1/2016
8/1/2017
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

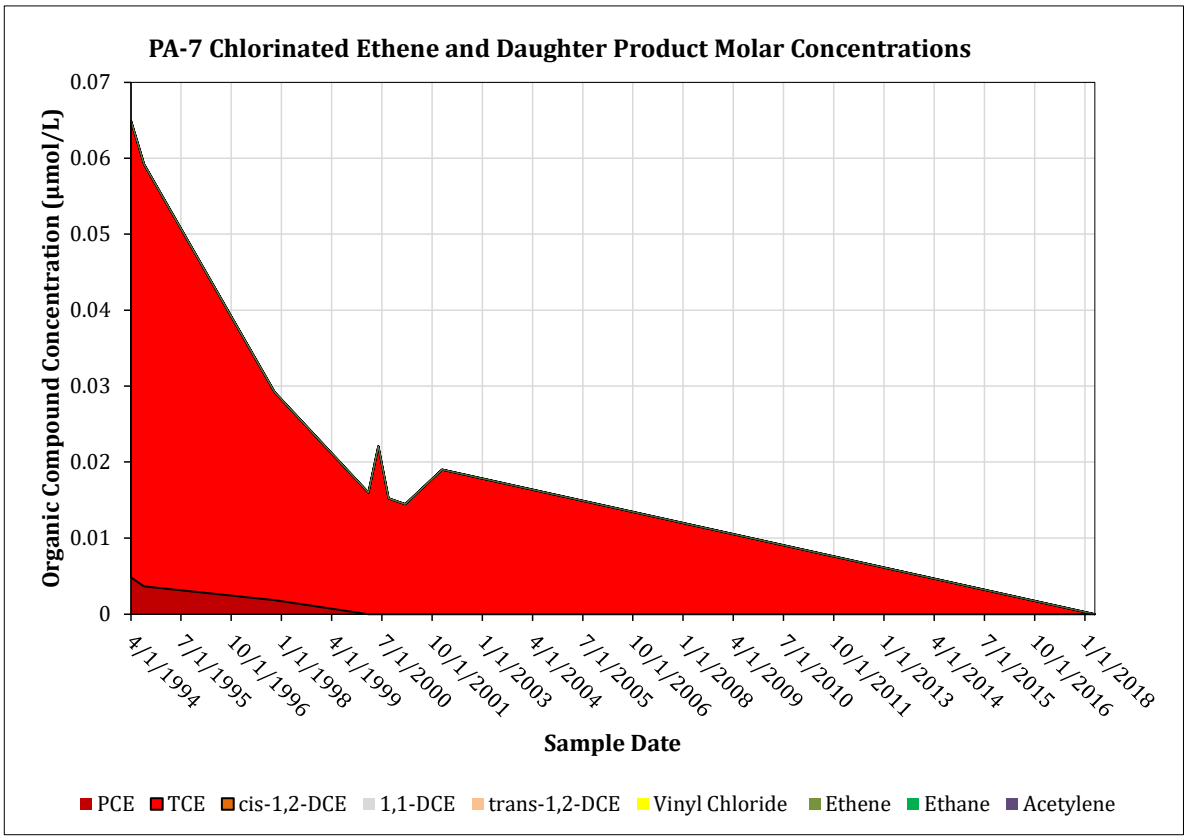

PA-6 Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

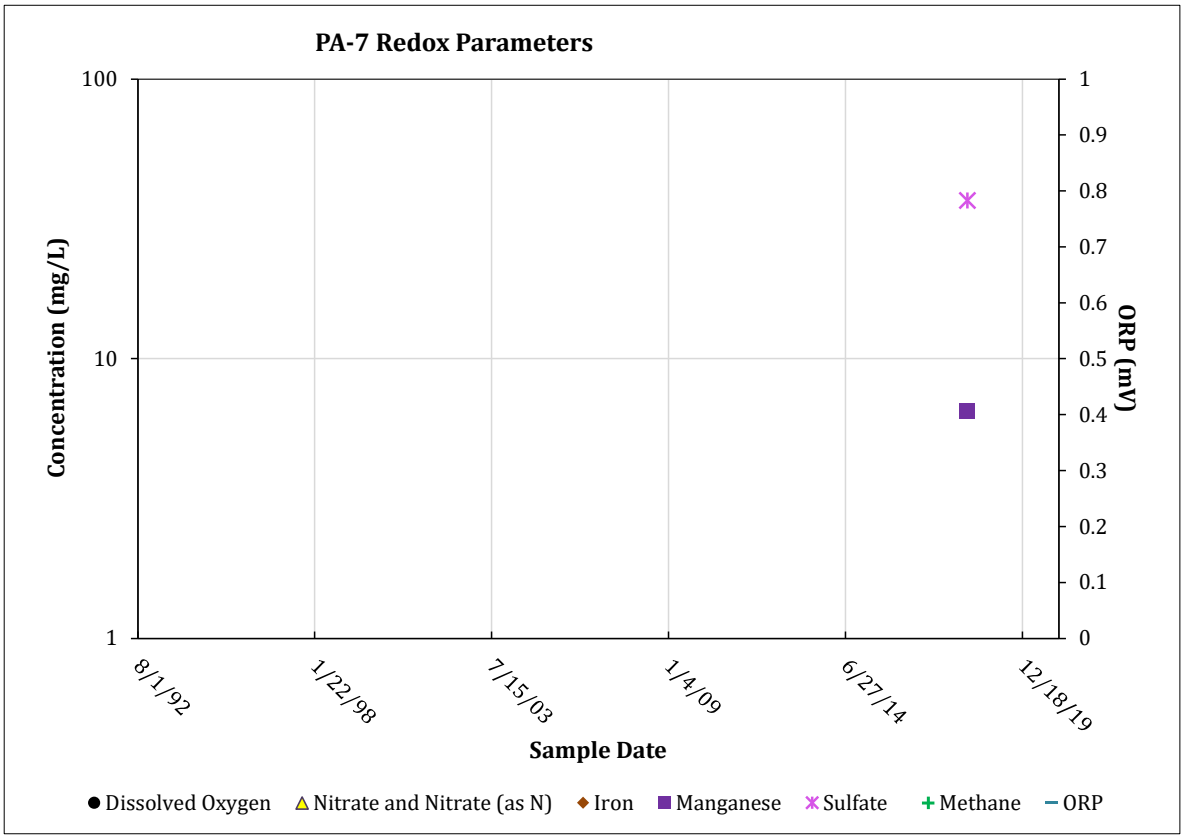

PA-6 Other Geochemistry
Concentration (mg/L)
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

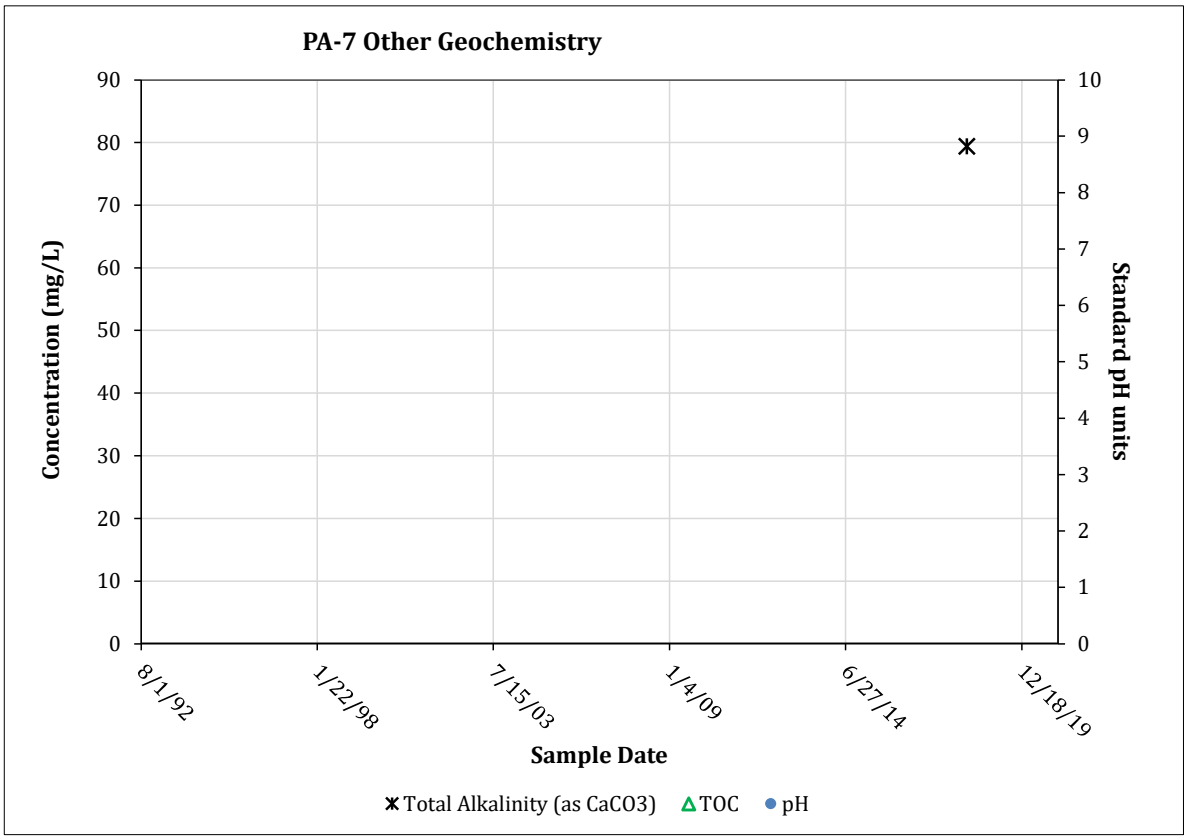


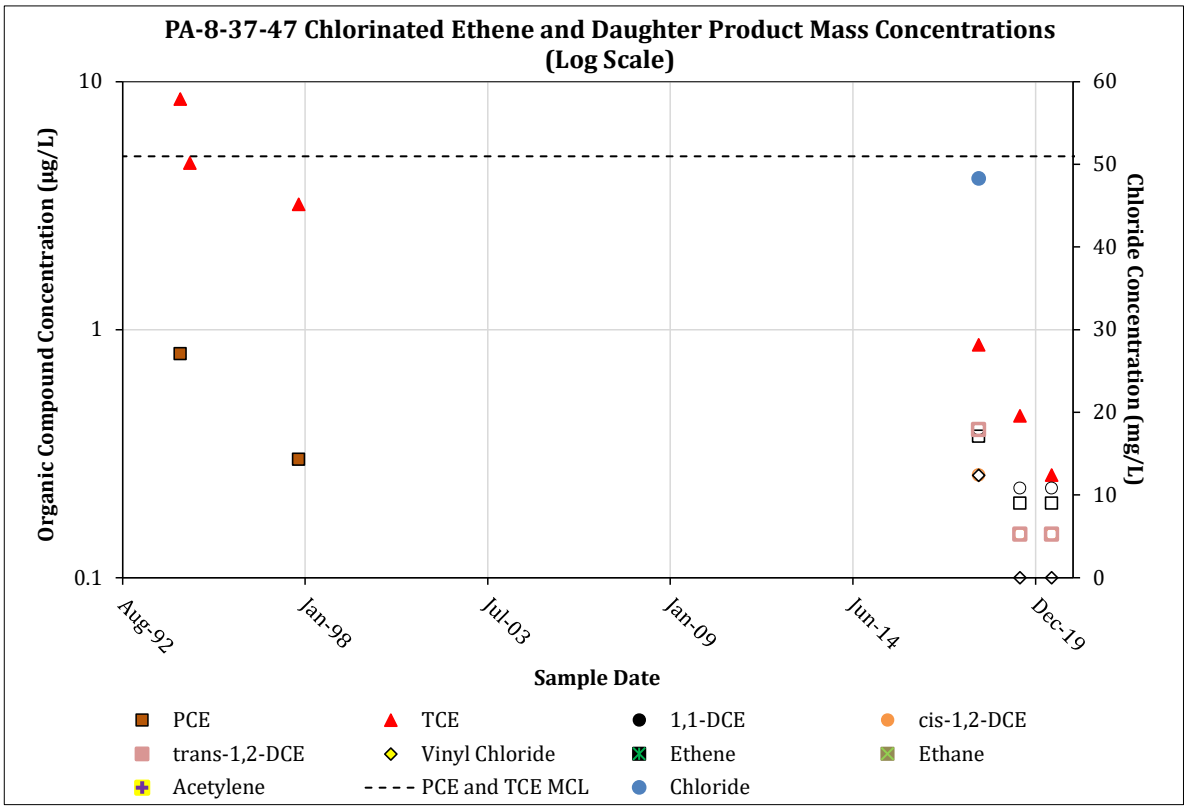


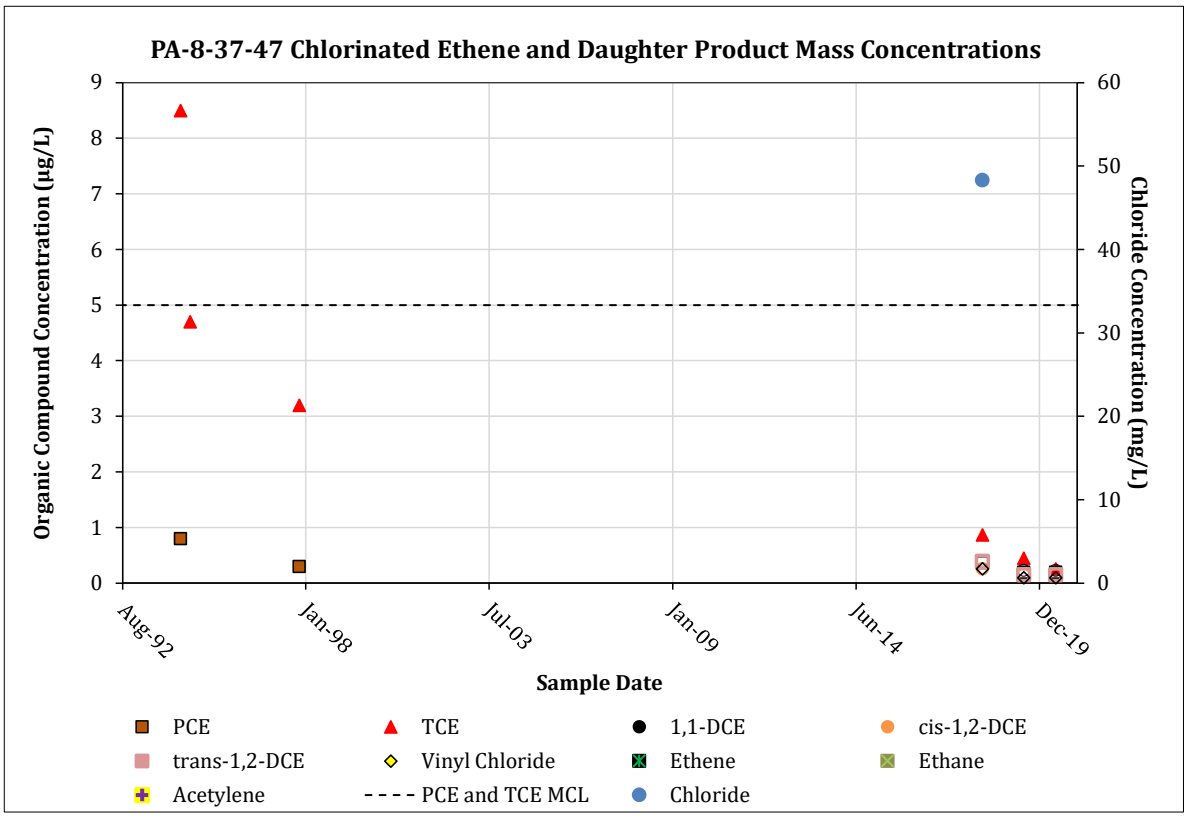
The symbol without fill designates a non-detect result.


PA-7 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

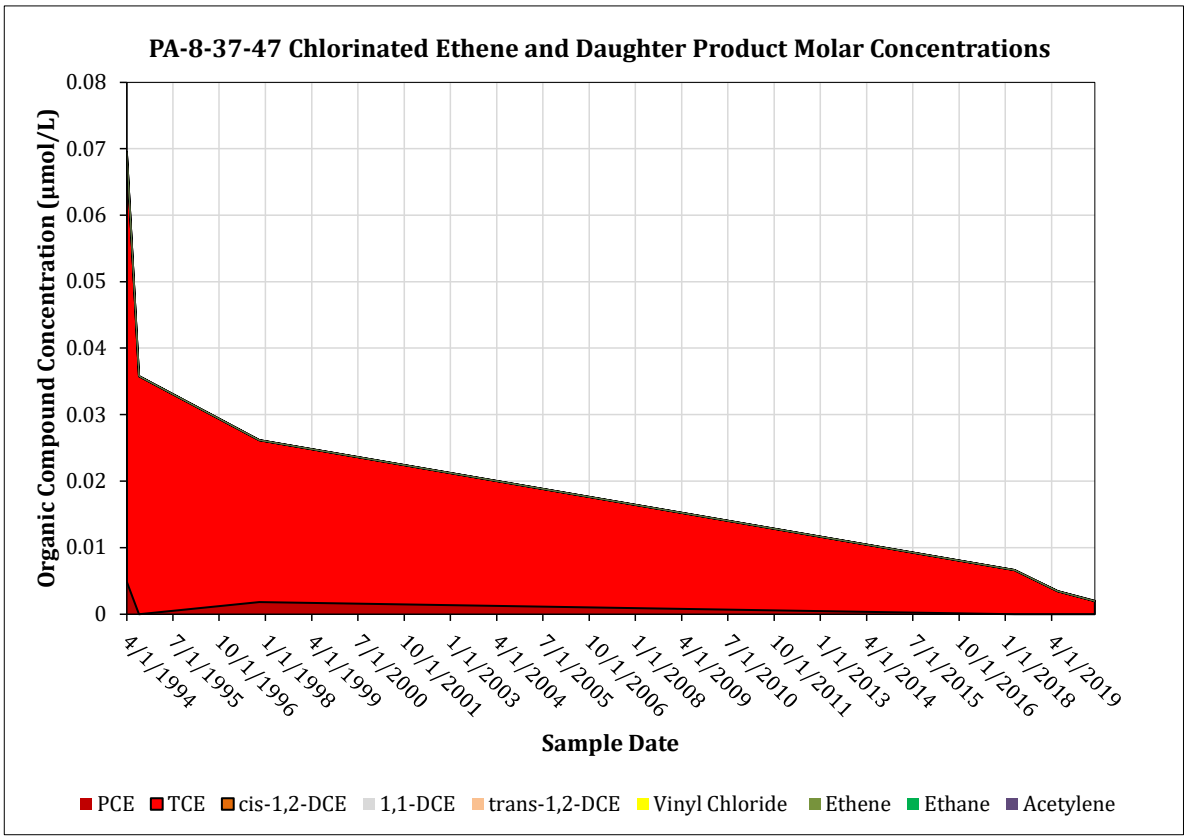

PA-7 Redox Parameters
Concentration (mg/L)
100
10
1
ORP (mV)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

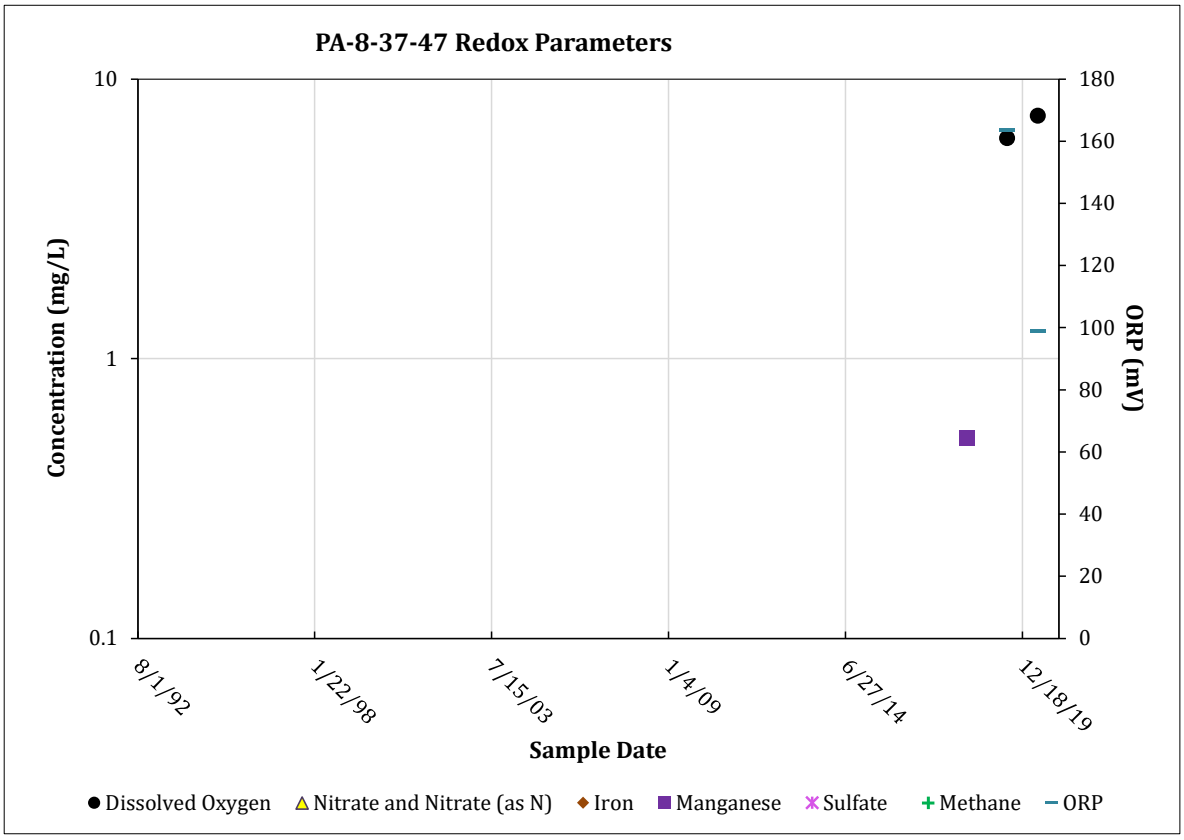

PA-7 Other Geochemistry
Concentration (mg/L)
90
80
70
60
50
40
30
20
10
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

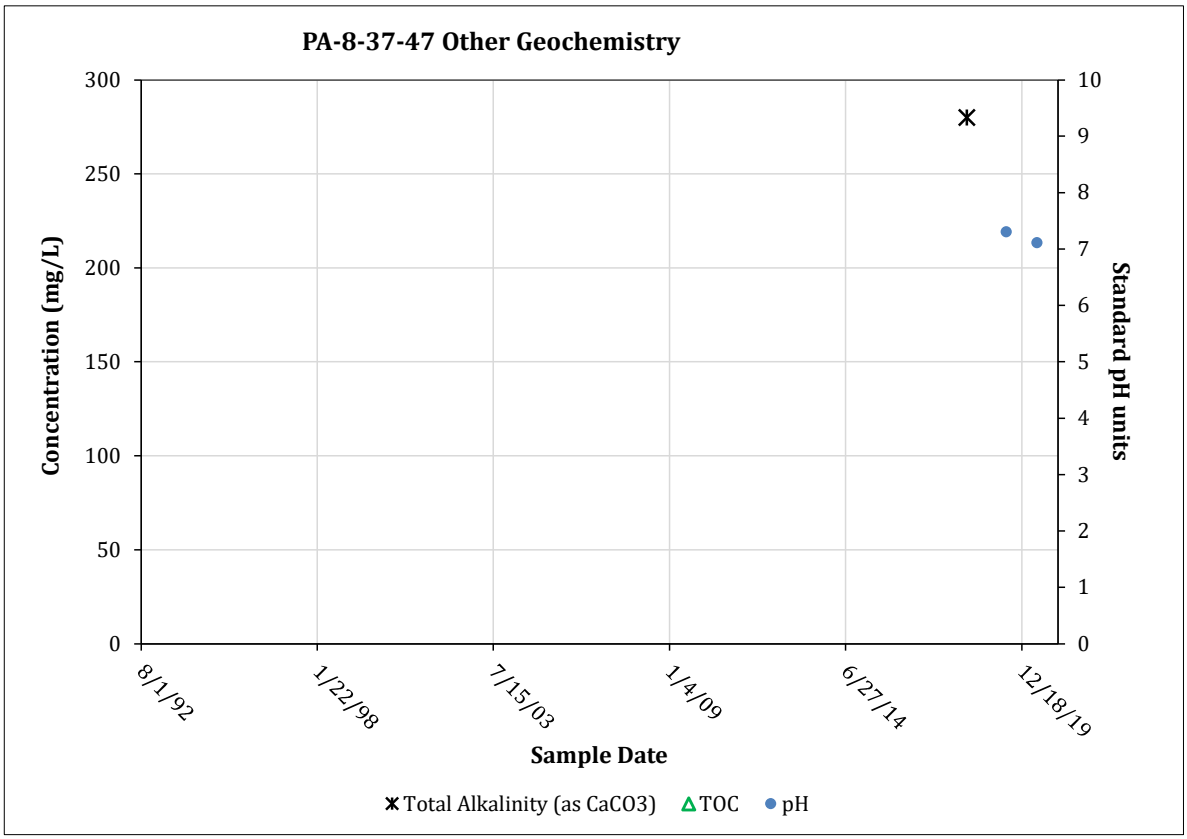


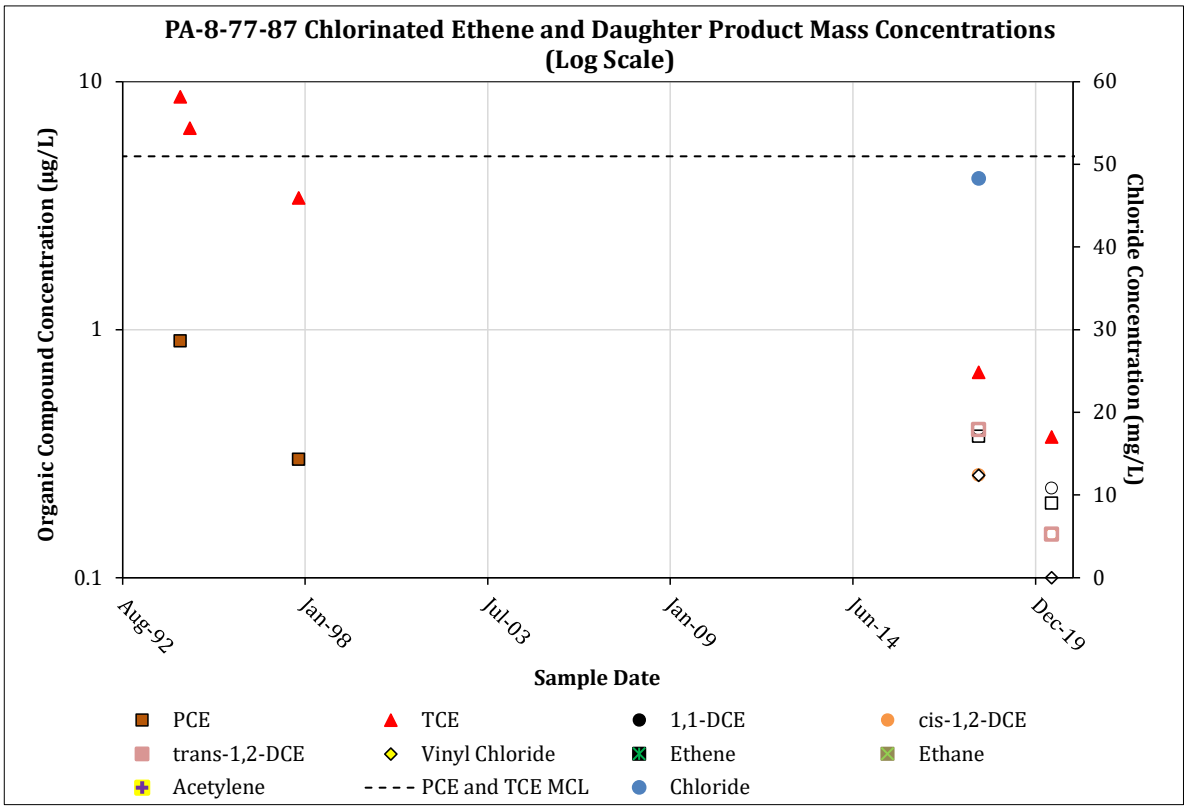


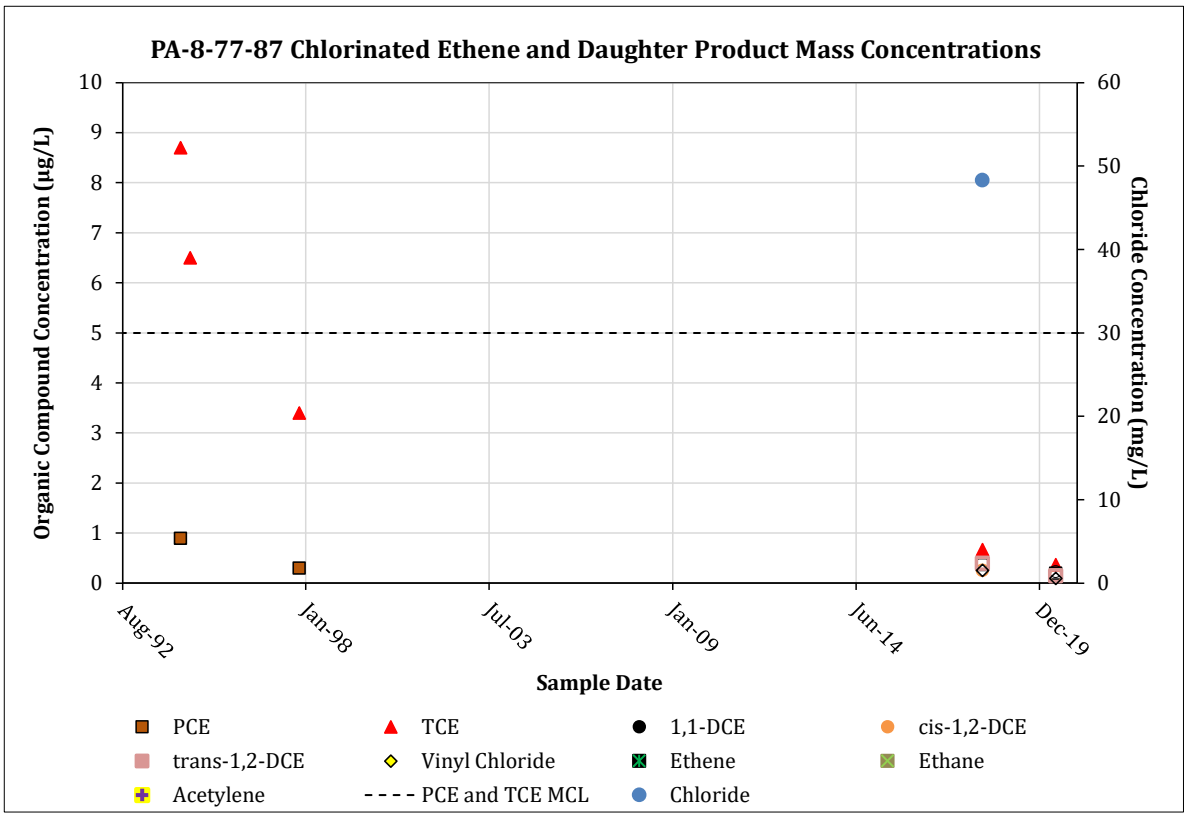
The symbol without fill designates a non-detect result.


PA-8-37-47 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

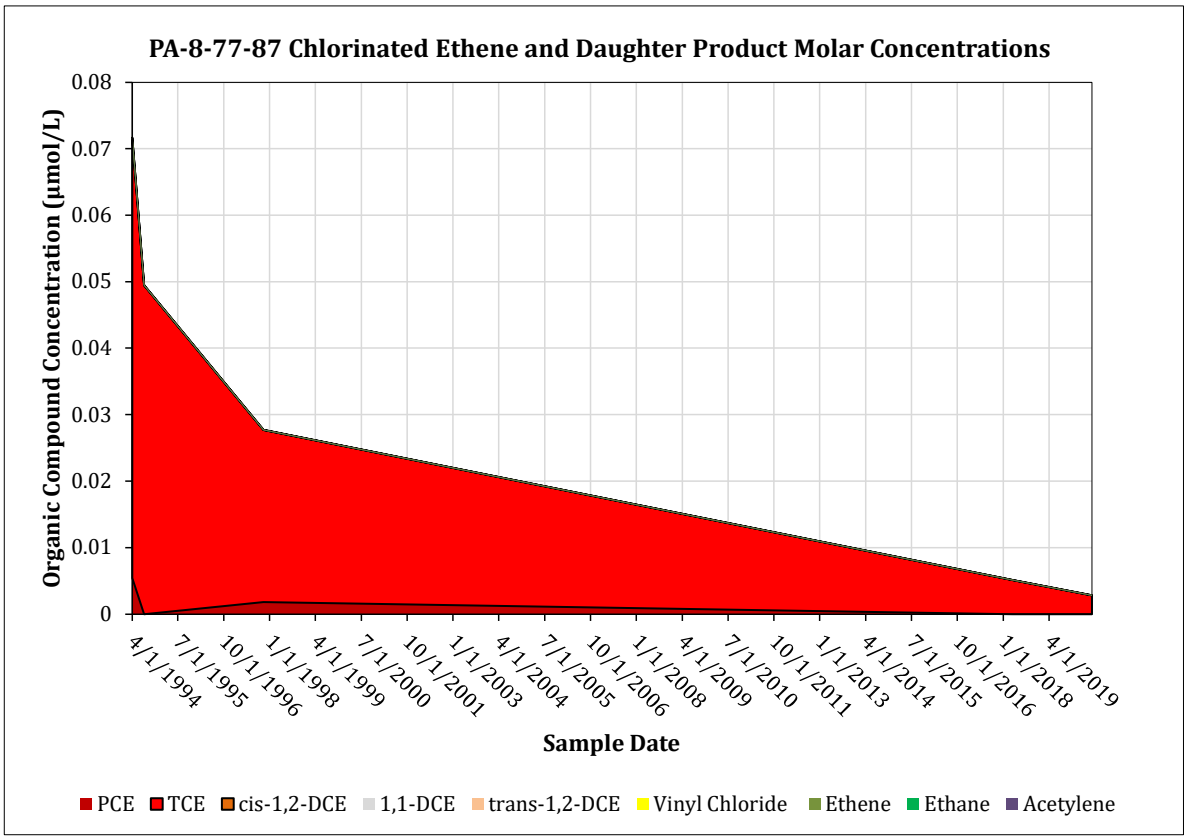

PA-8-37-47 Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
0.1
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

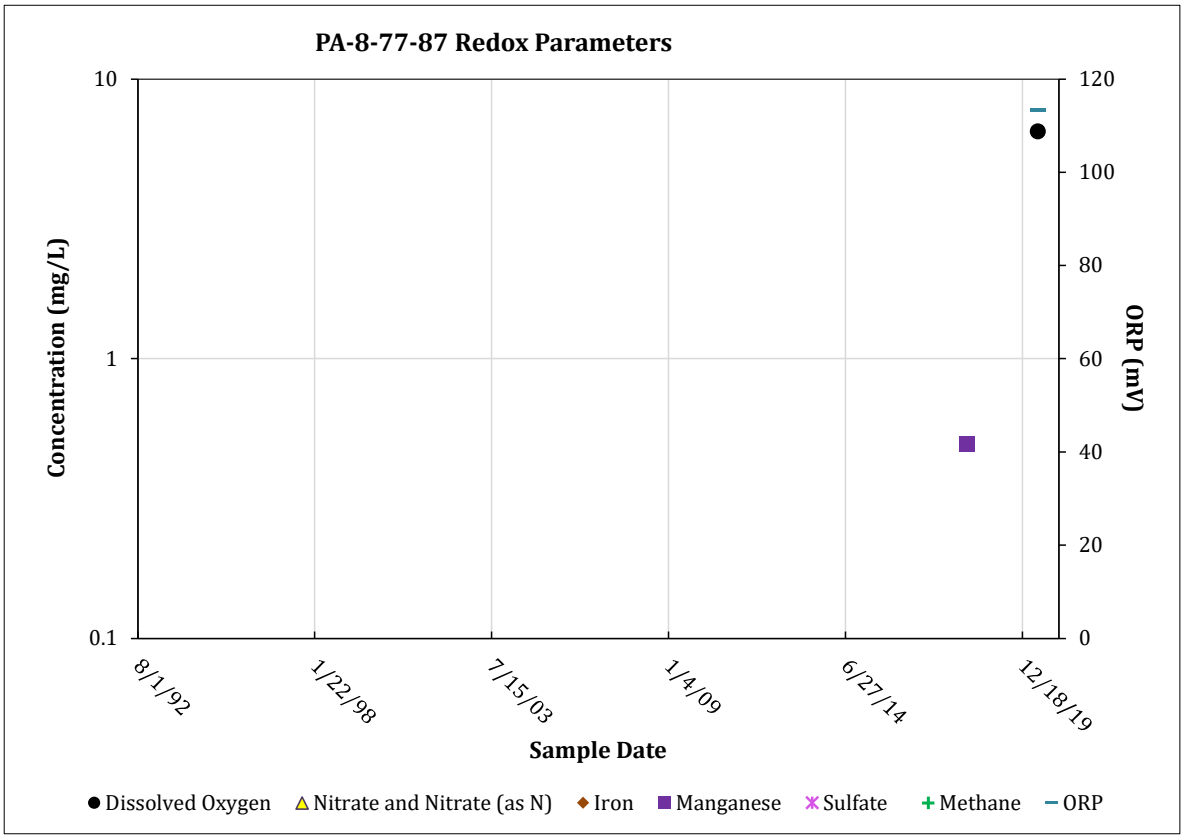

PA-8-37-47 Other Geochemistry
Concentration (mg/L)
Standard pH units
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

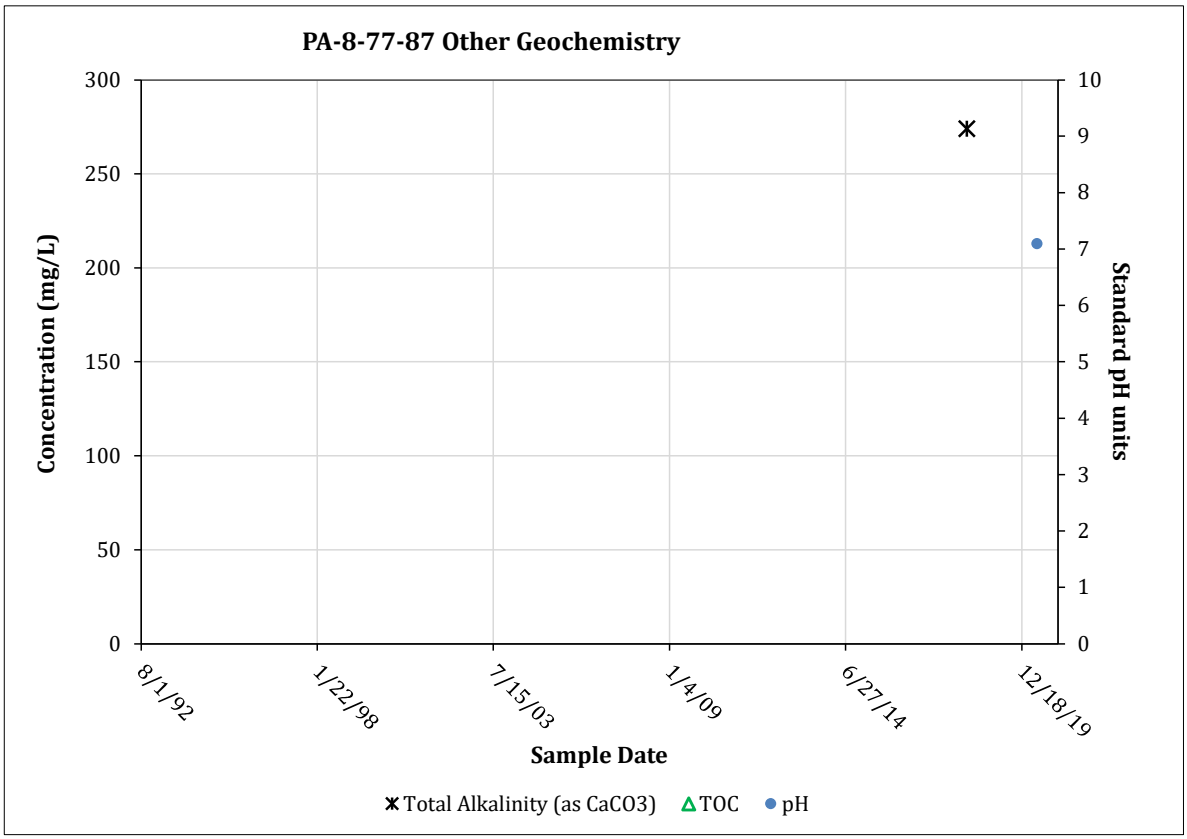


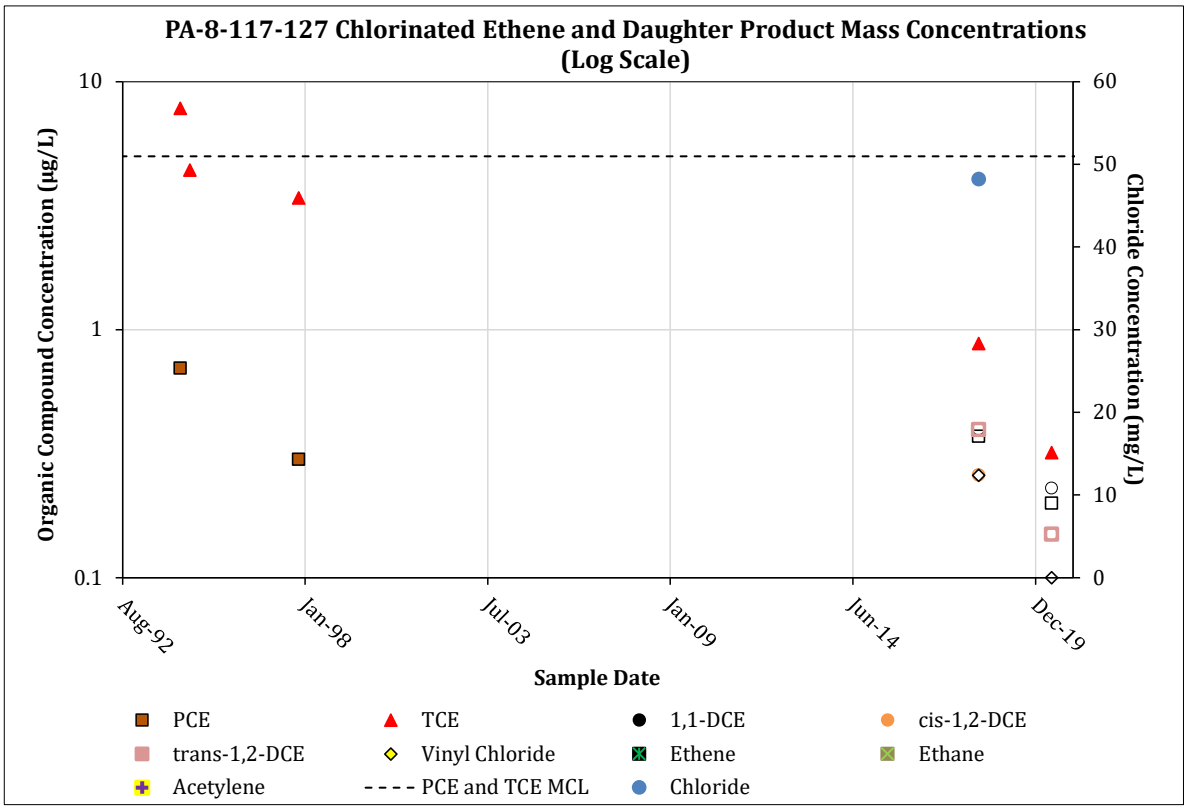


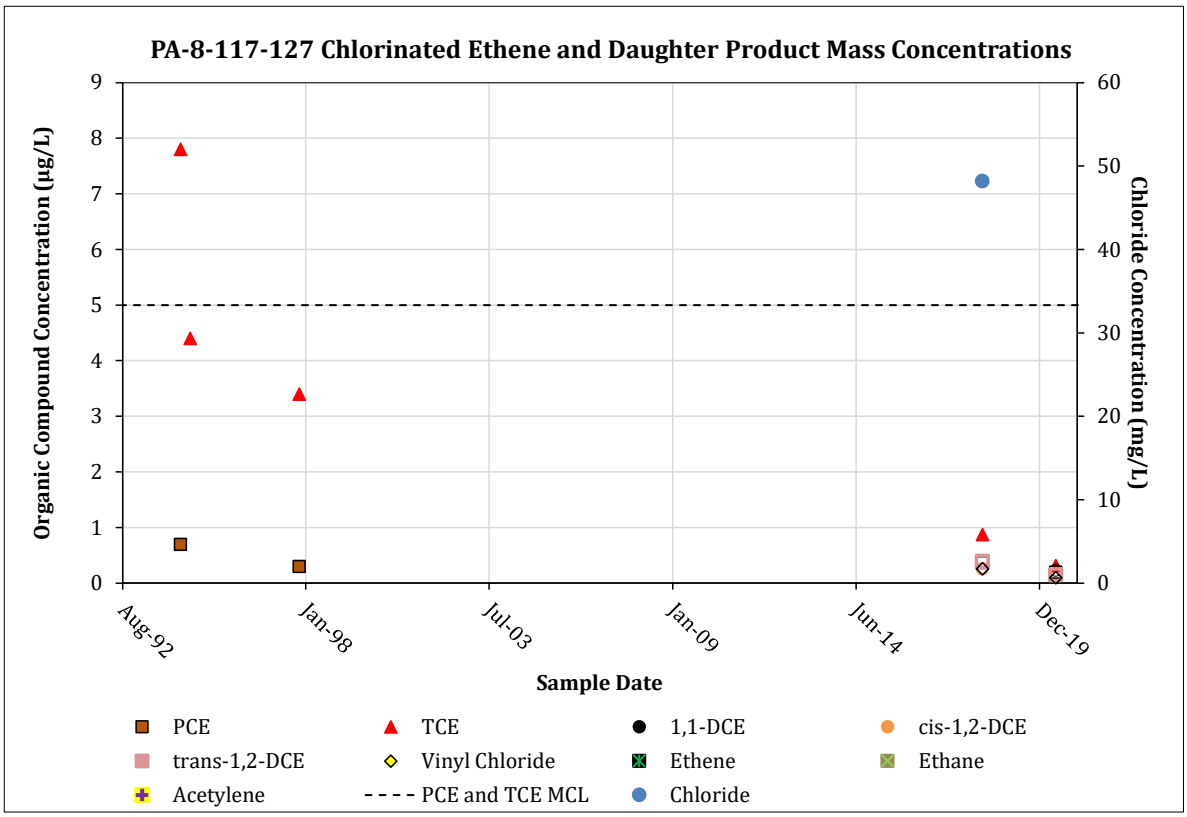
The symbol without fill designates a non-detect result.


PA-8-77-87 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

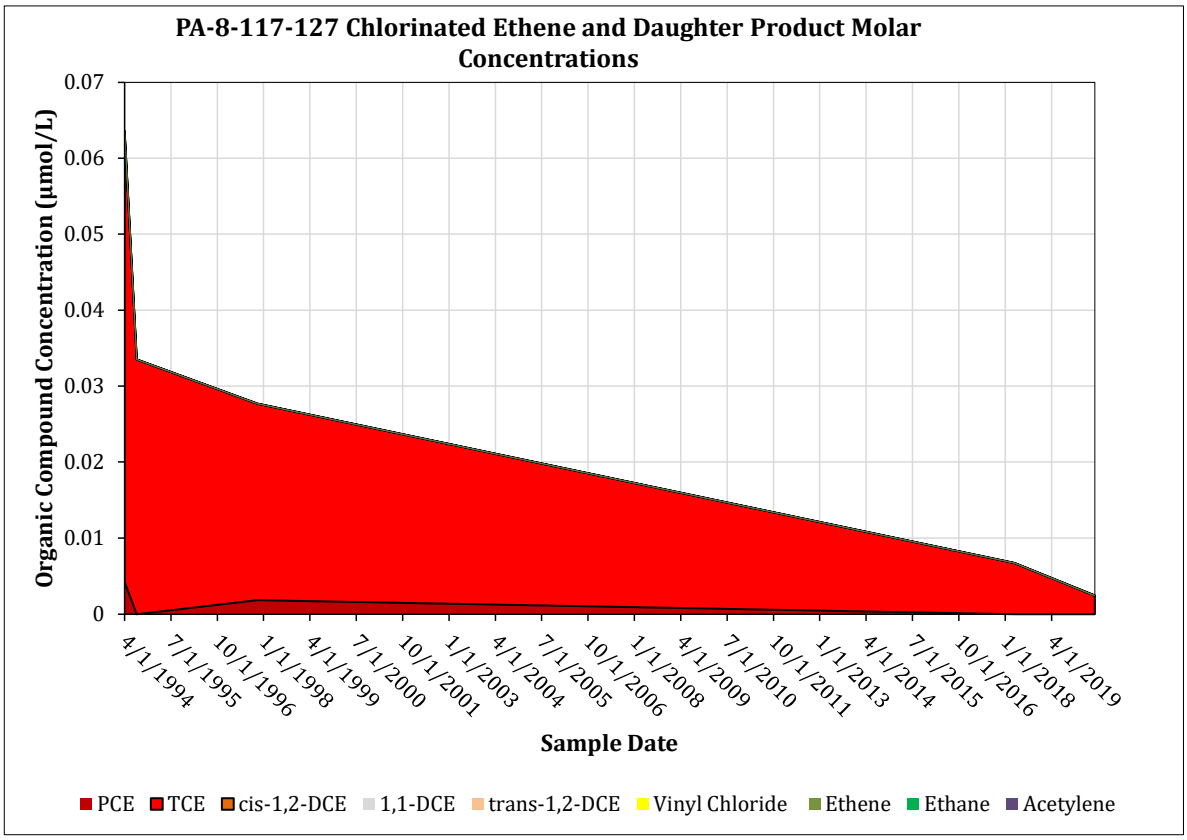

PA-8-77-87 Redox Parameters
Concentration (mg/L)
10
1
0.1
ORP (mV)
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

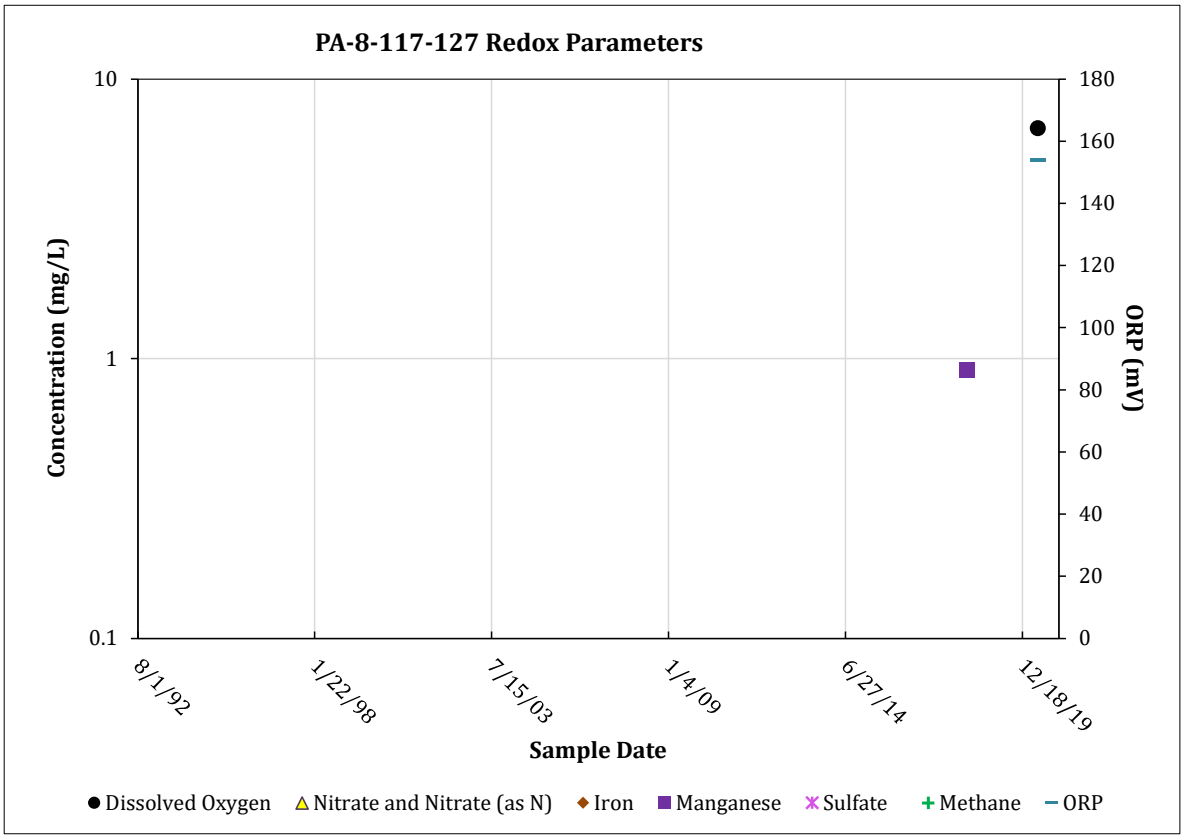

PA-8-77-87 Other Geochemistry
Concentration (mg/L)
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

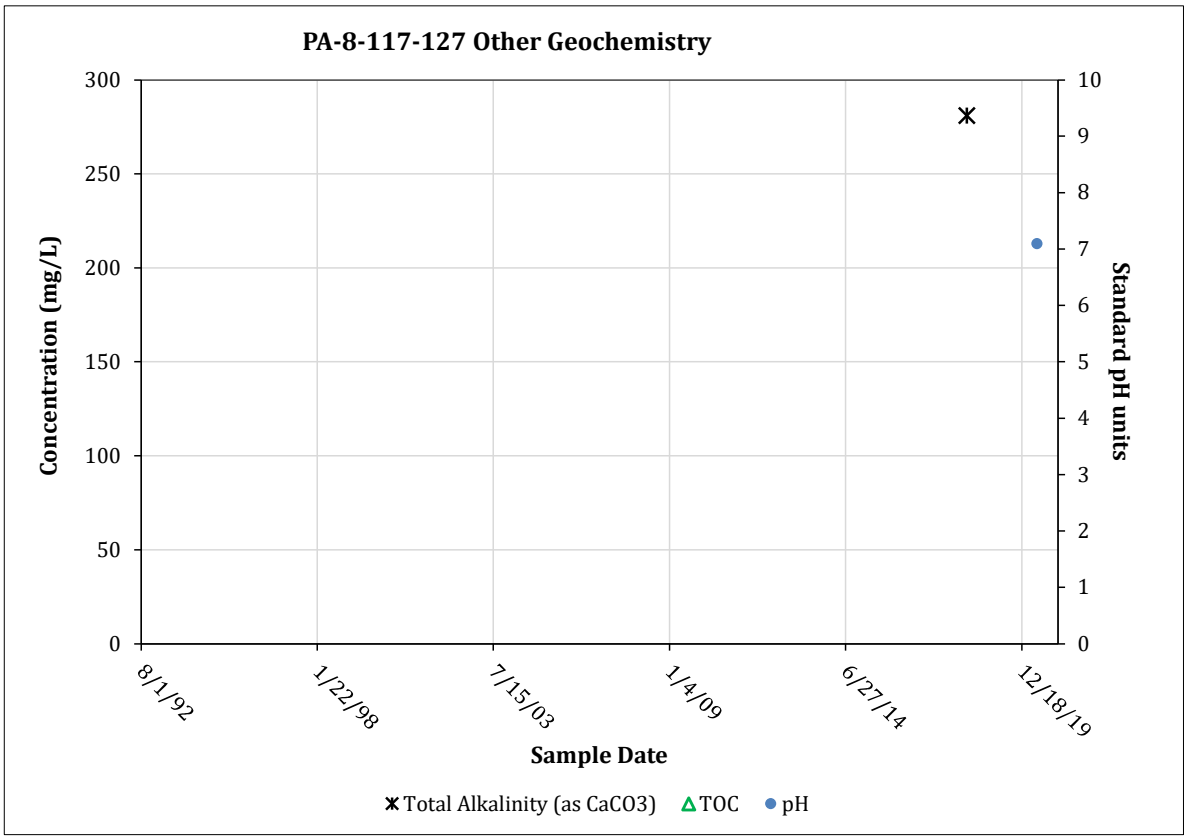


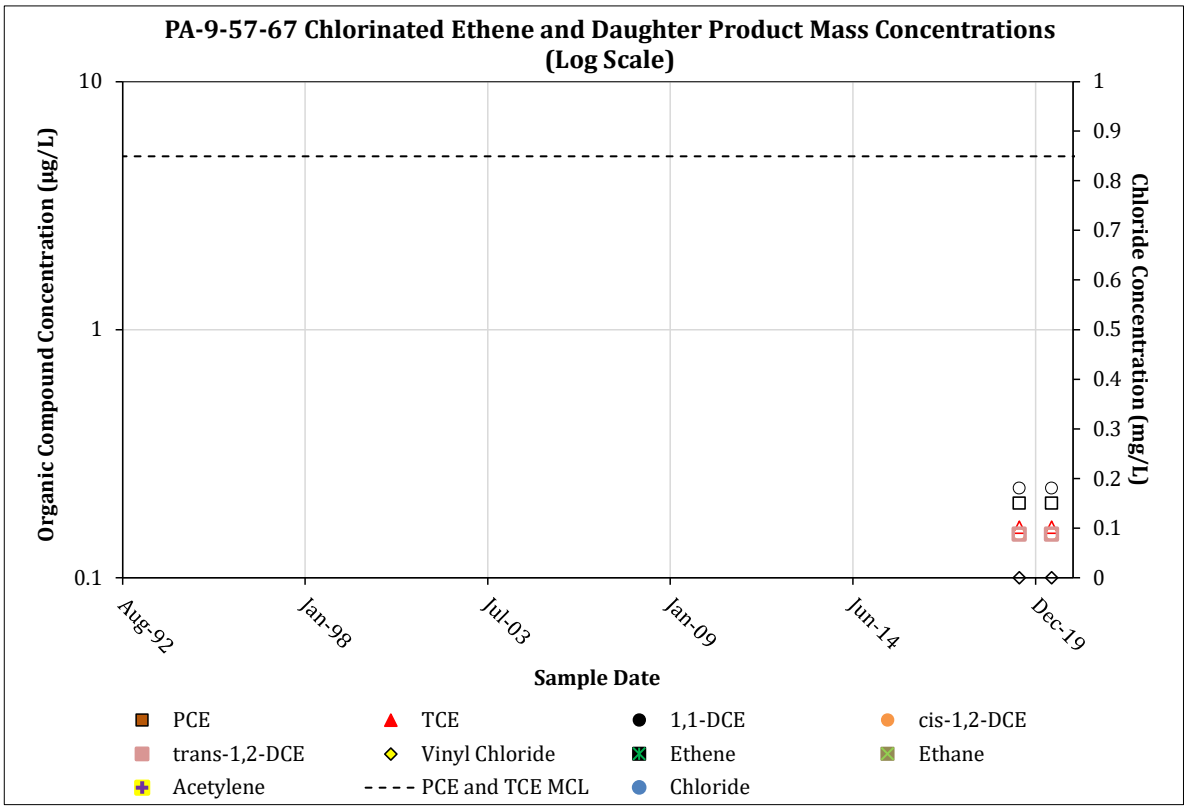


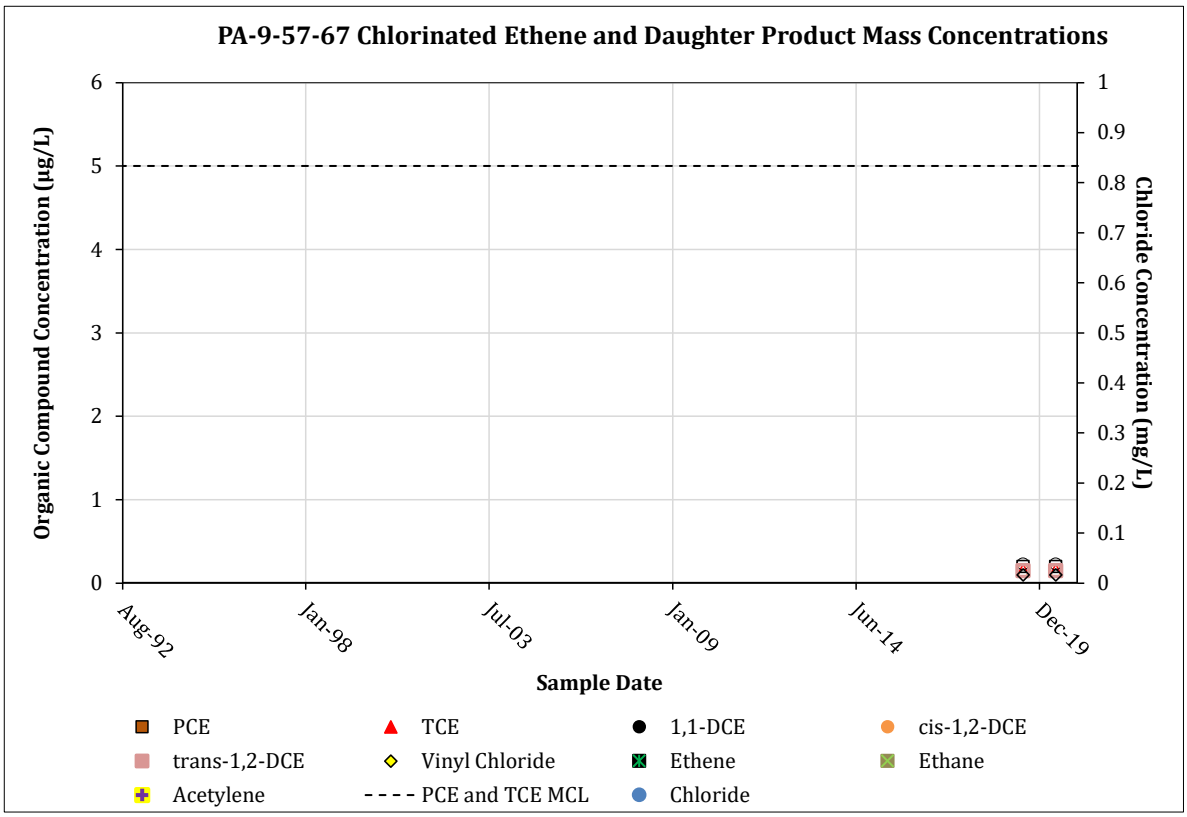
The symbol without fill designates a non-detect result.


PA-8-117-127 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
4/1/1994
7/1/1995
10/1/1996
1/1/1998
4/1/1999
7/1/2000
10/1/2001
1/1/2003
4/1/2004
7/1/2005
10/1/2006
1/1/2008
4/1/2009
7/1/2010
10/1/2011
1/1/2013
4/1/2014
7/1/2015
10/1/2016
1/1/2018
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

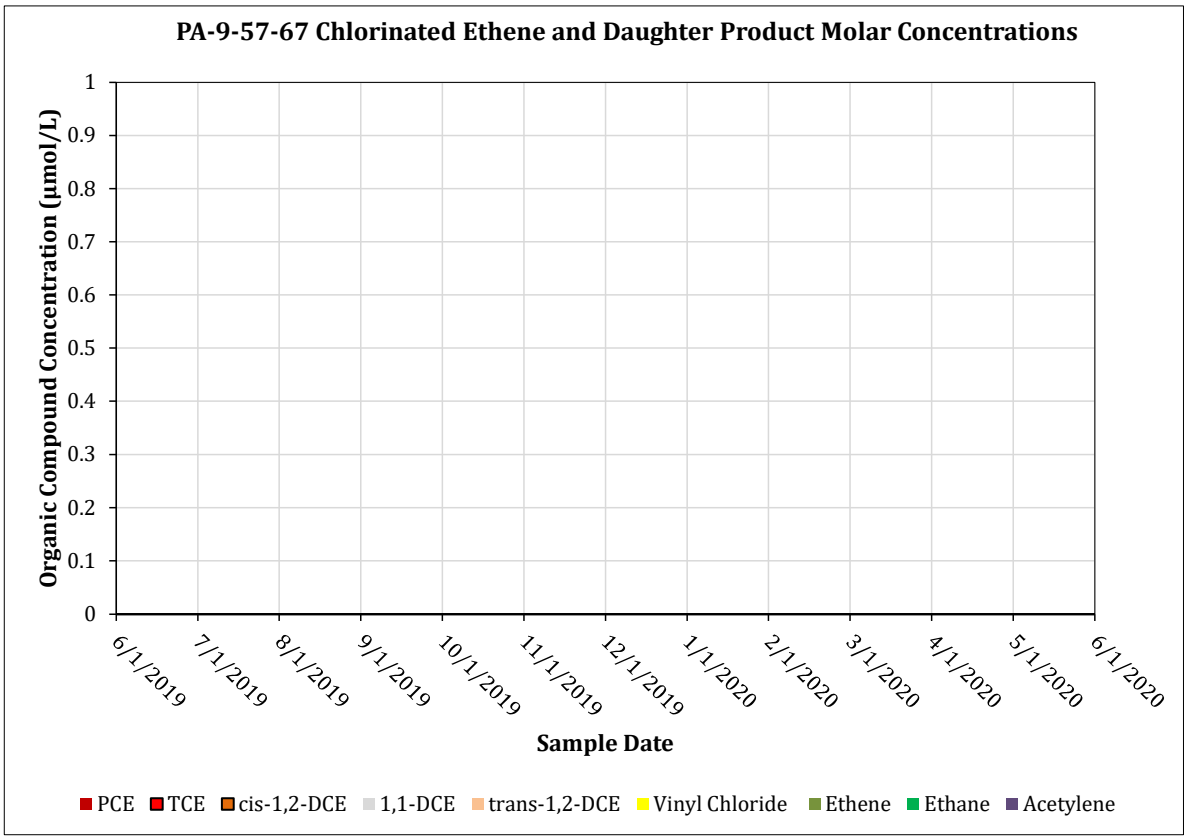

PA-8-117-127 Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
0.1
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

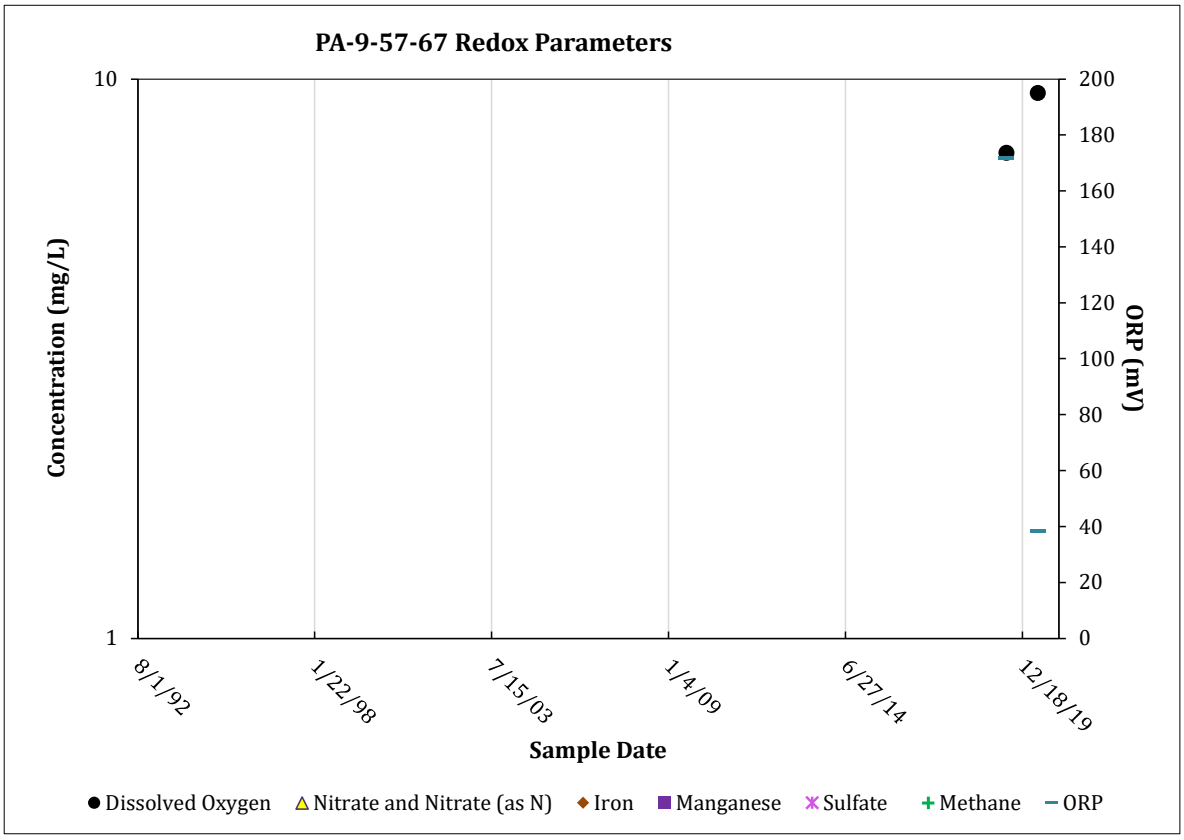

PA-8-117-127 Other Geochemistry
Concentration (mg/L)
Standard pH units
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

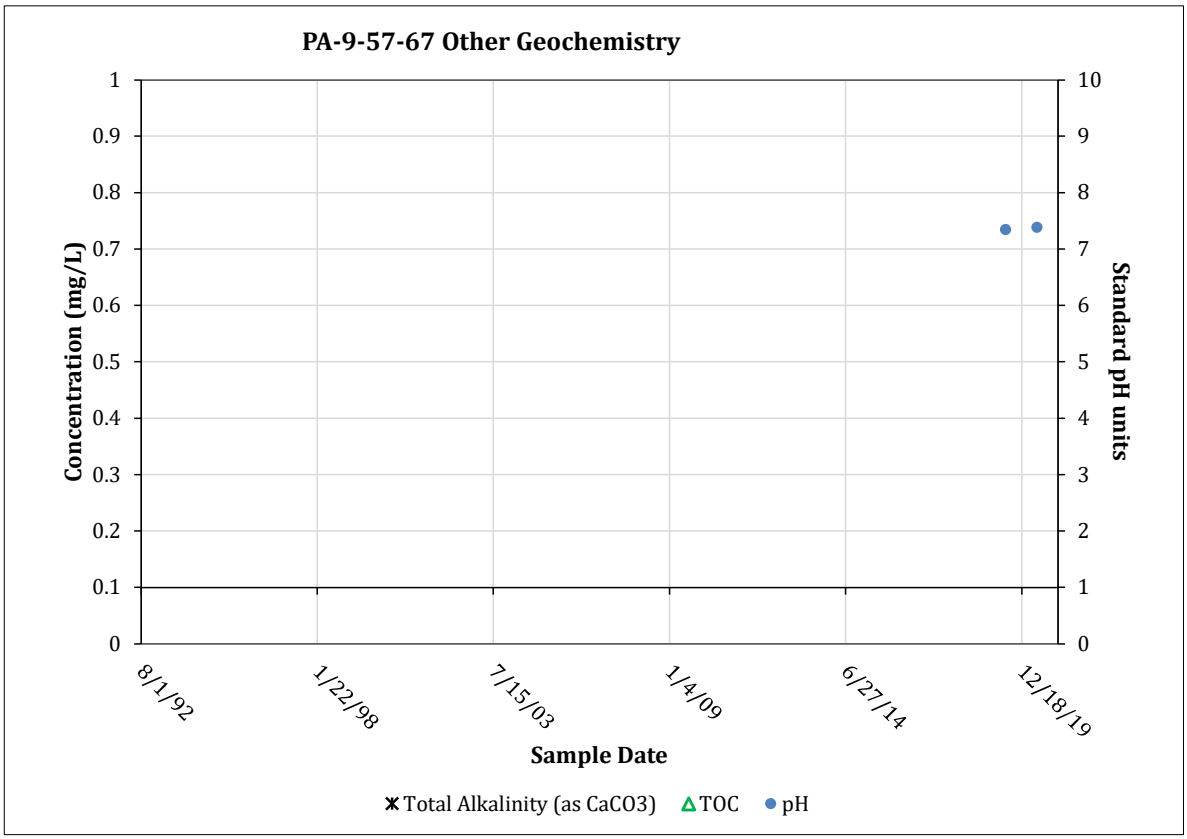


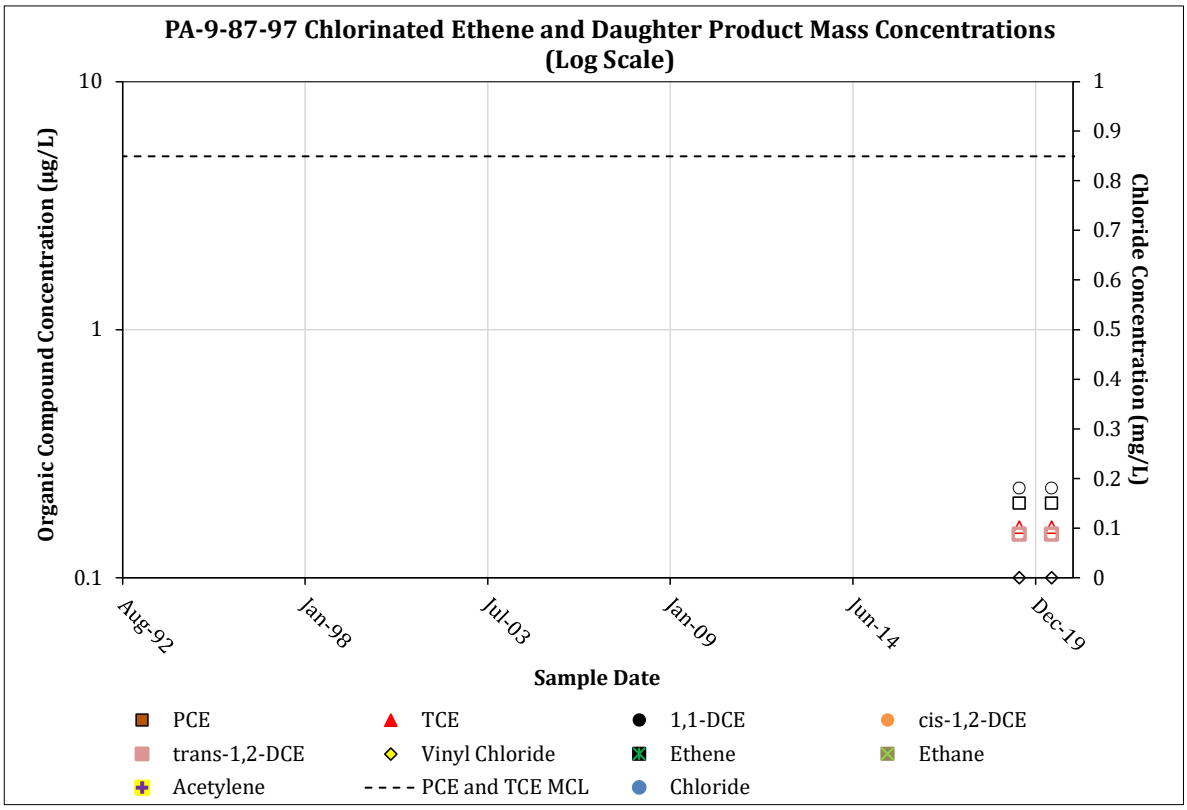


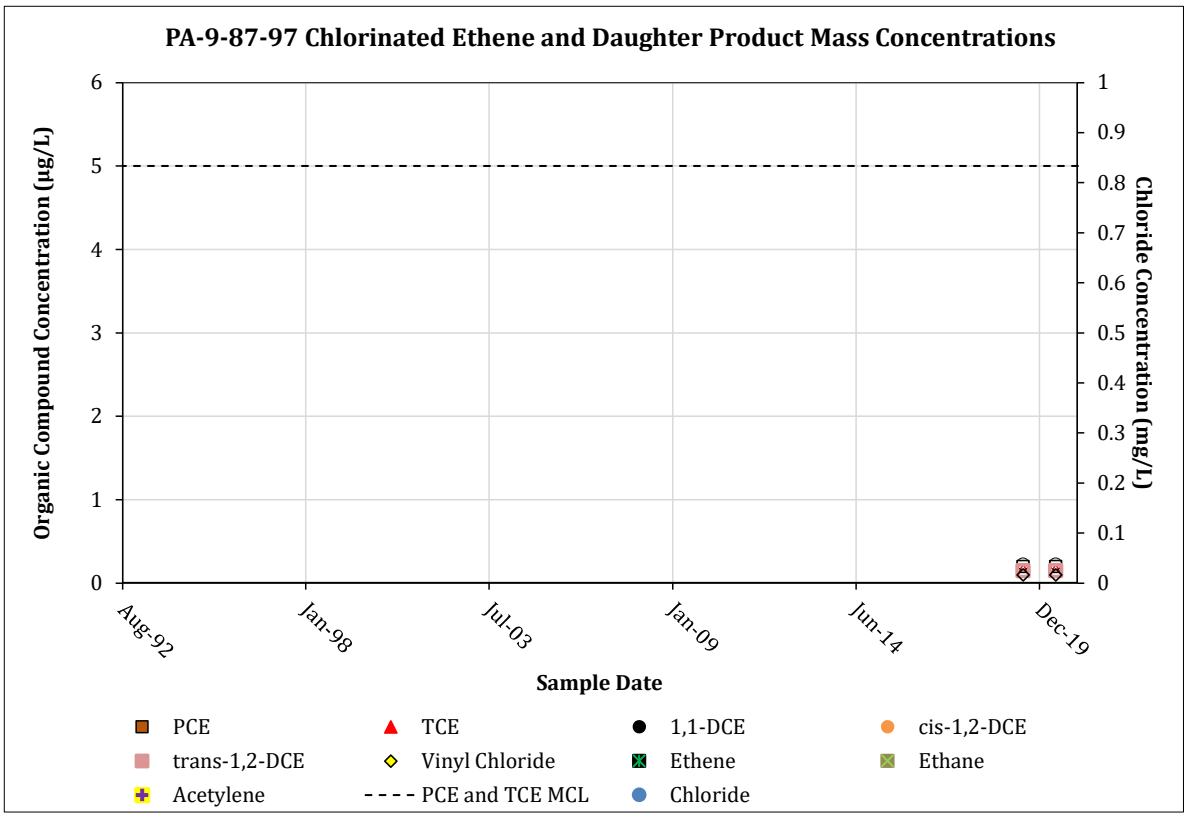
The symbol without fill designates a non-detect result.


PA-9-57-67 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/2019
7/1/2019
8/1/2019
9/1/2019
10/1/2019
11/1/2019
12/1/2019
1/1/2020
2/1/2020
3/1/2020
4/1/2020
5/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

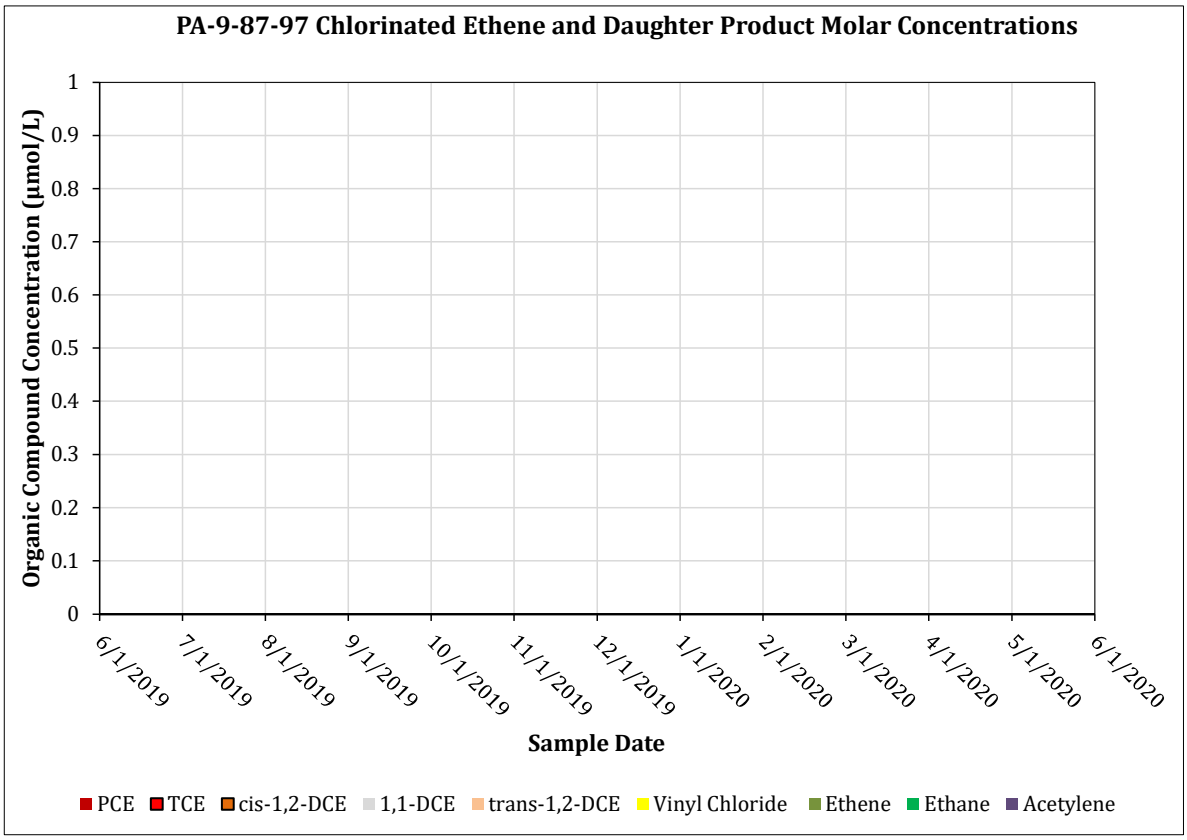

PA-9-57-67 Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

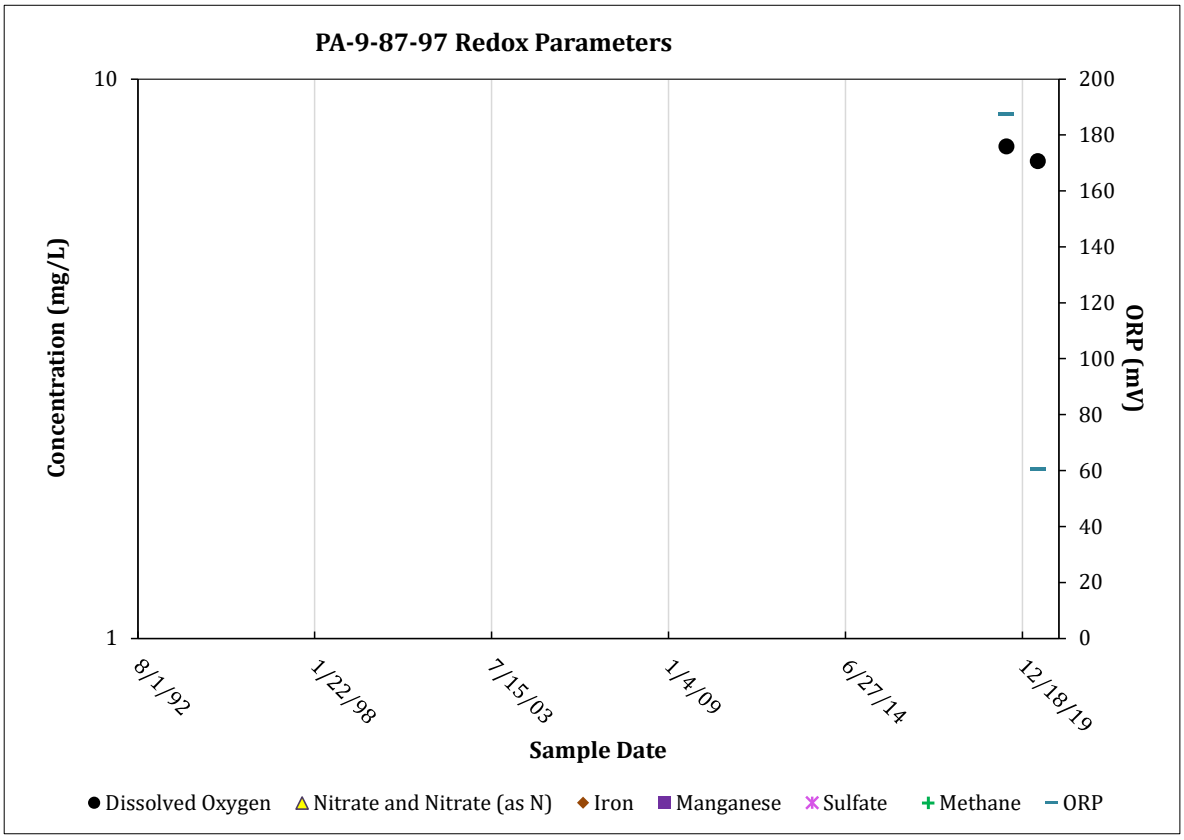

PA-9-57-67 Other Geochemistry
Concentration (mg/L)
Standard pH units
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

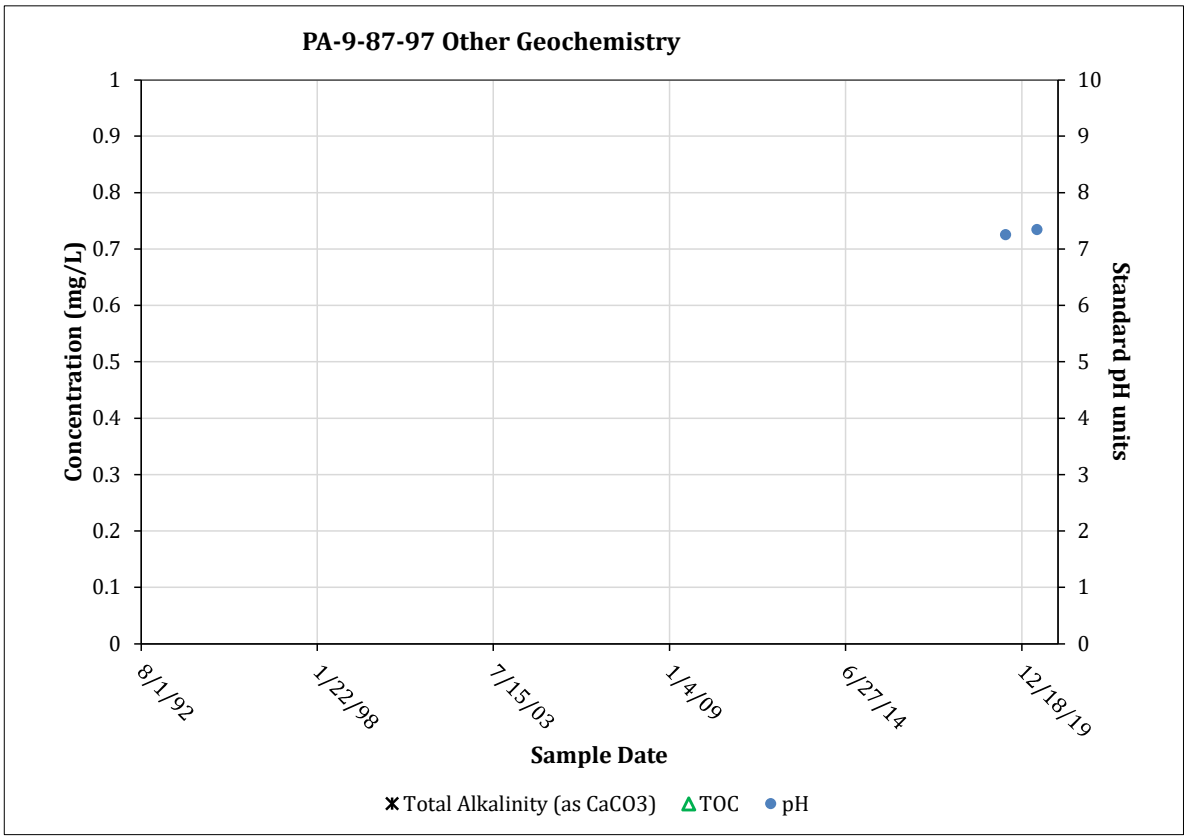


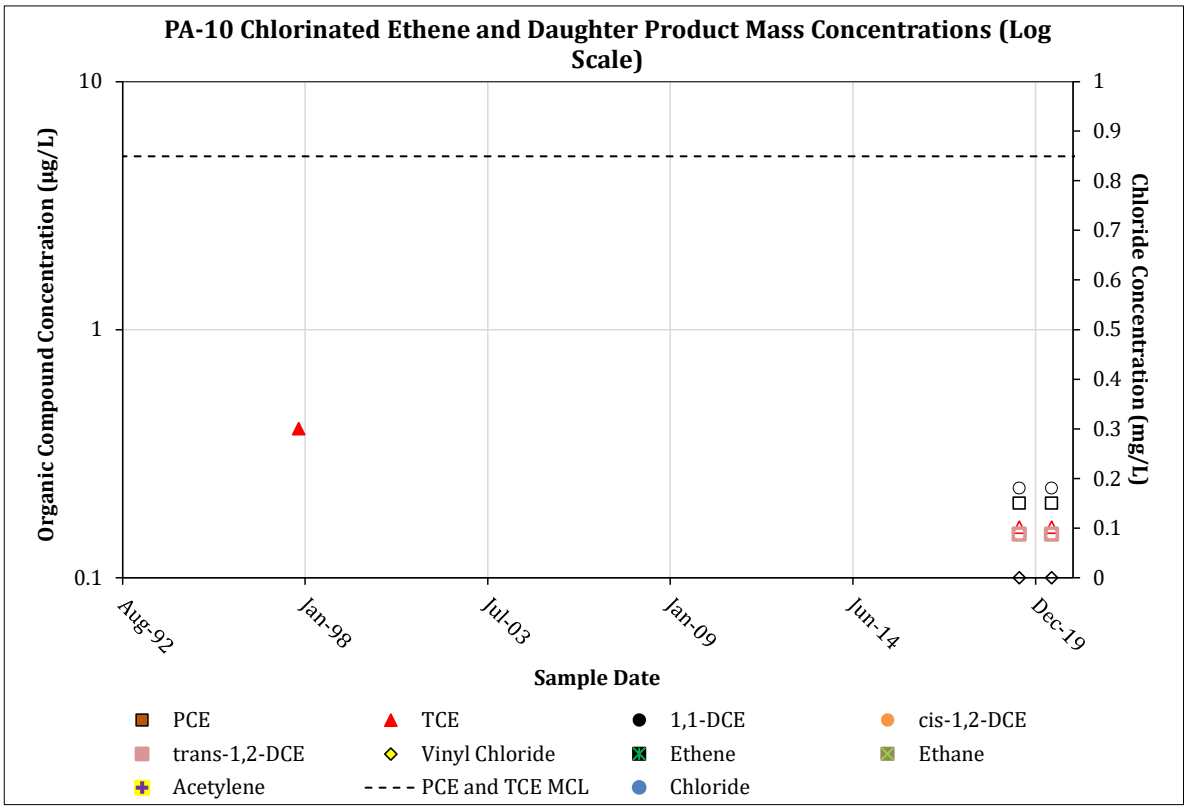


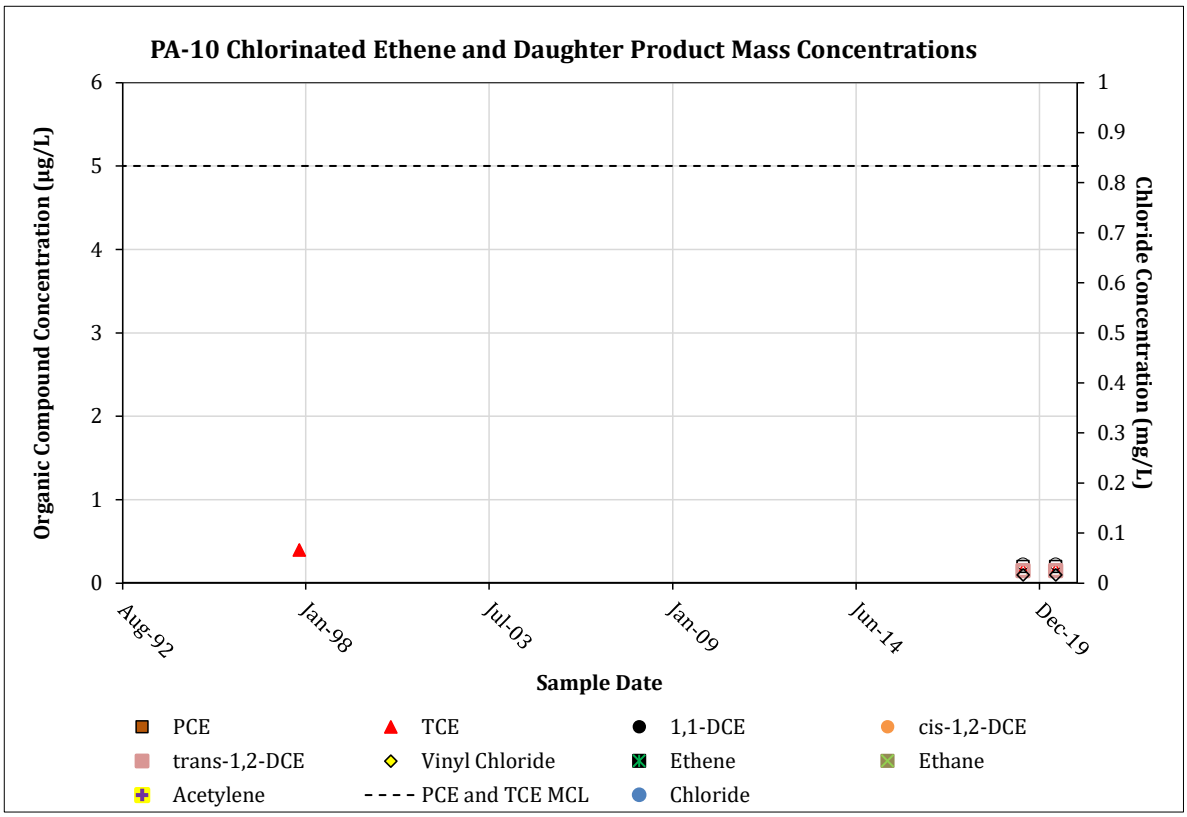
The symbol without fill designates a non-detect result.


PA-9-87-97 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/2019
7/1/2019
8/1/2019
9/1/2019
10/1/2019
11/1/2019
12/1/2019
1/1/2020
2/1/2020
3/1/2020
4/1/2020
5/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

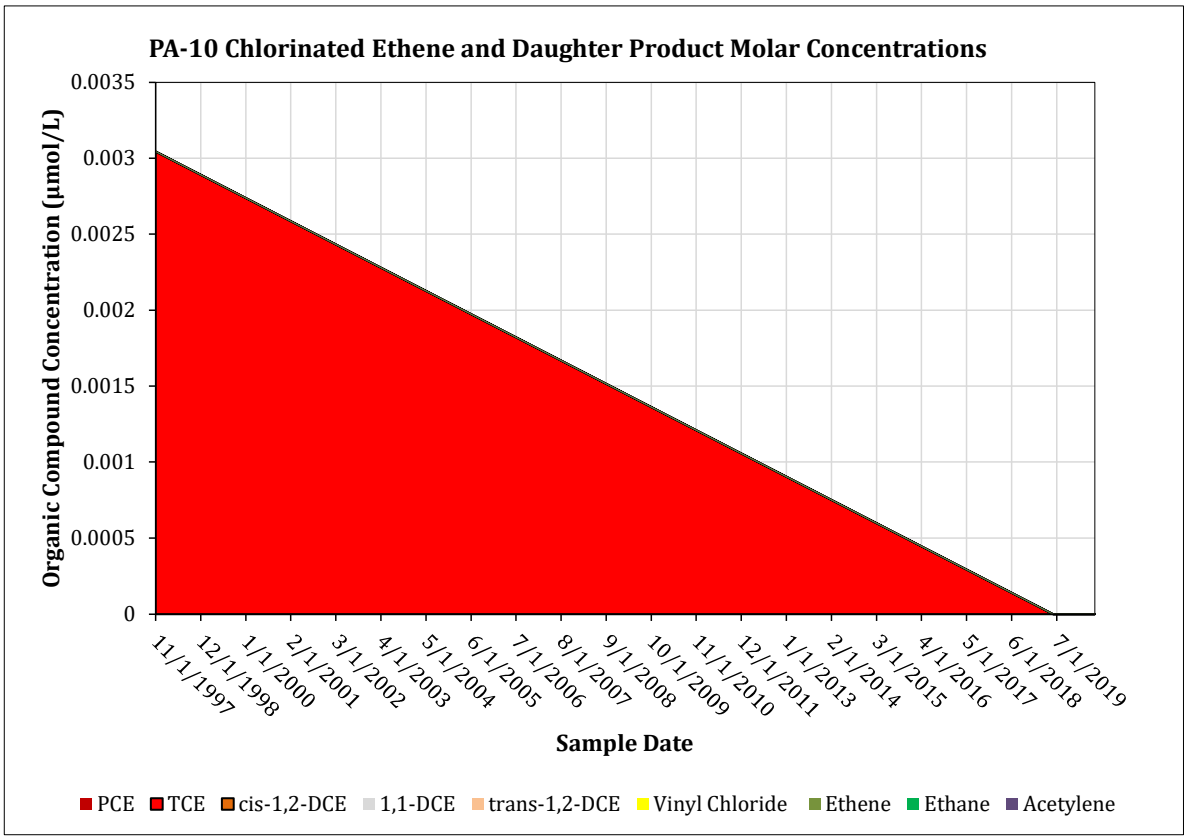

PA-9-87-97 Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

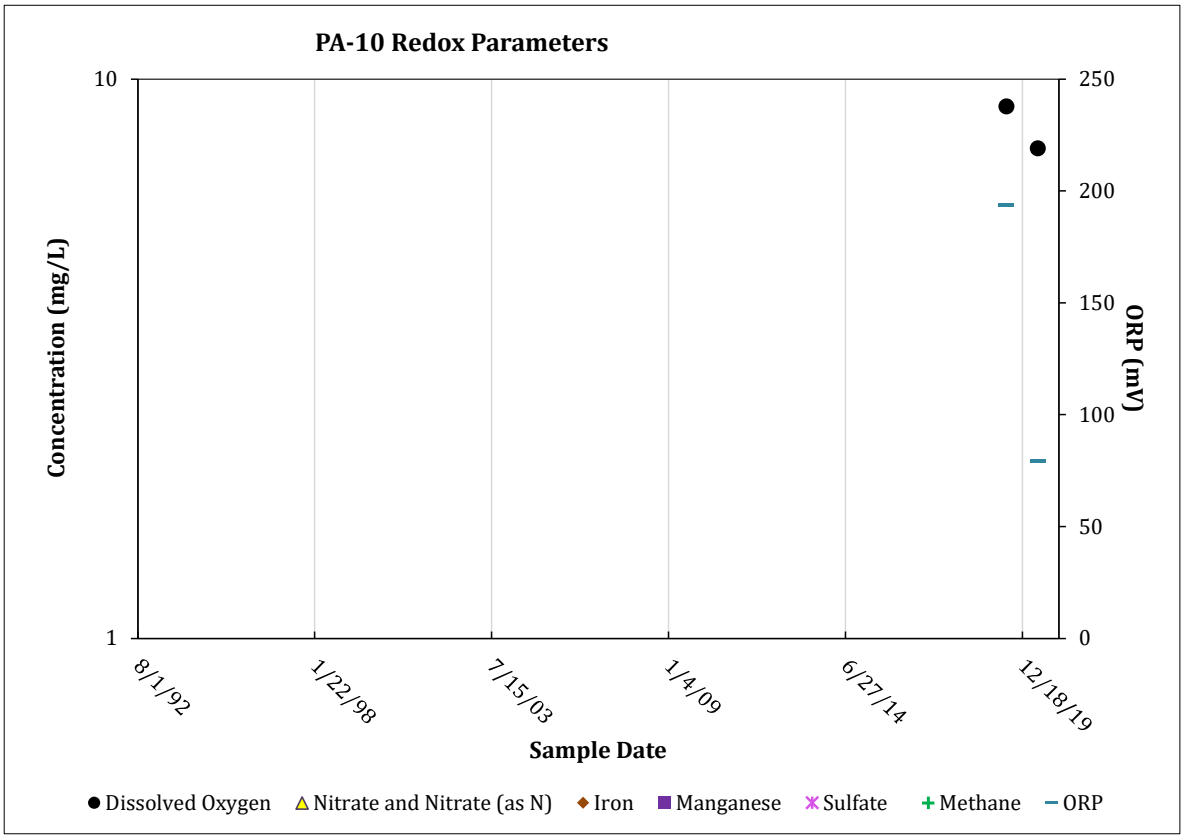

PA-9-87-97 Other Geochemistry
Concentration (mg/L)
Standard pH units
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

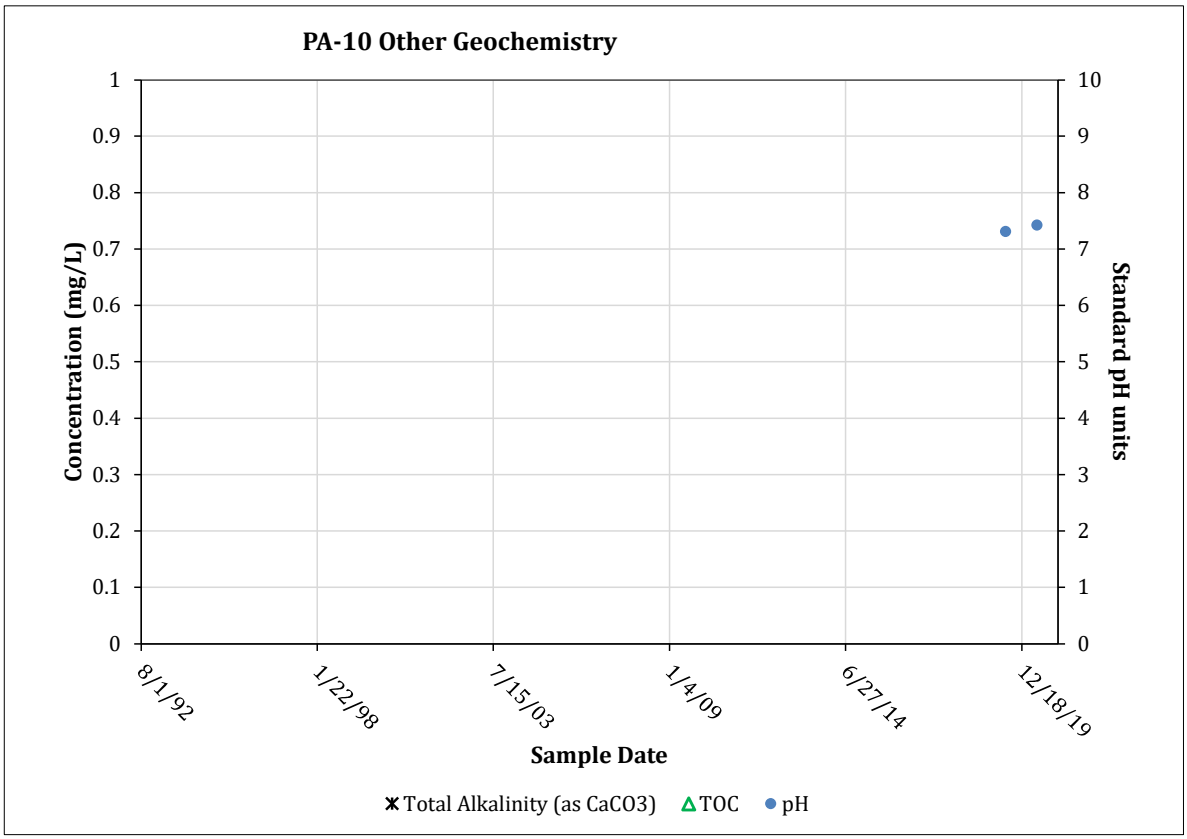


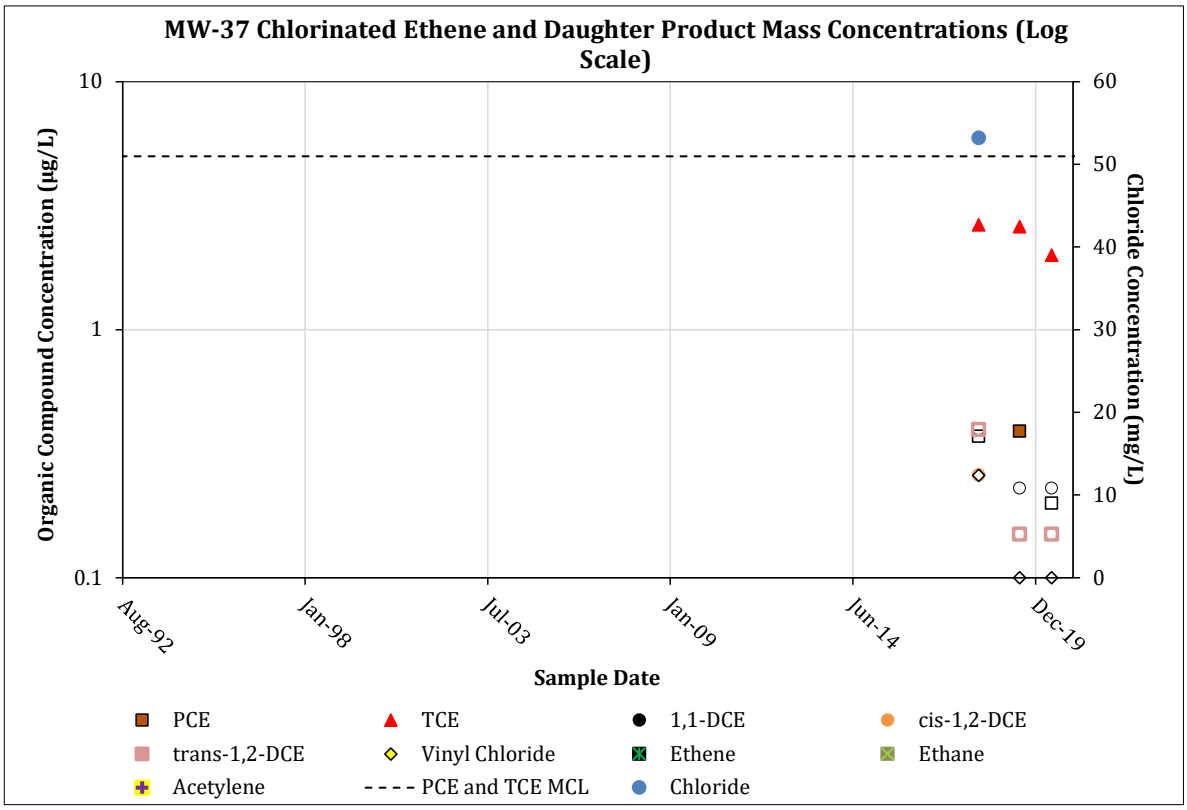


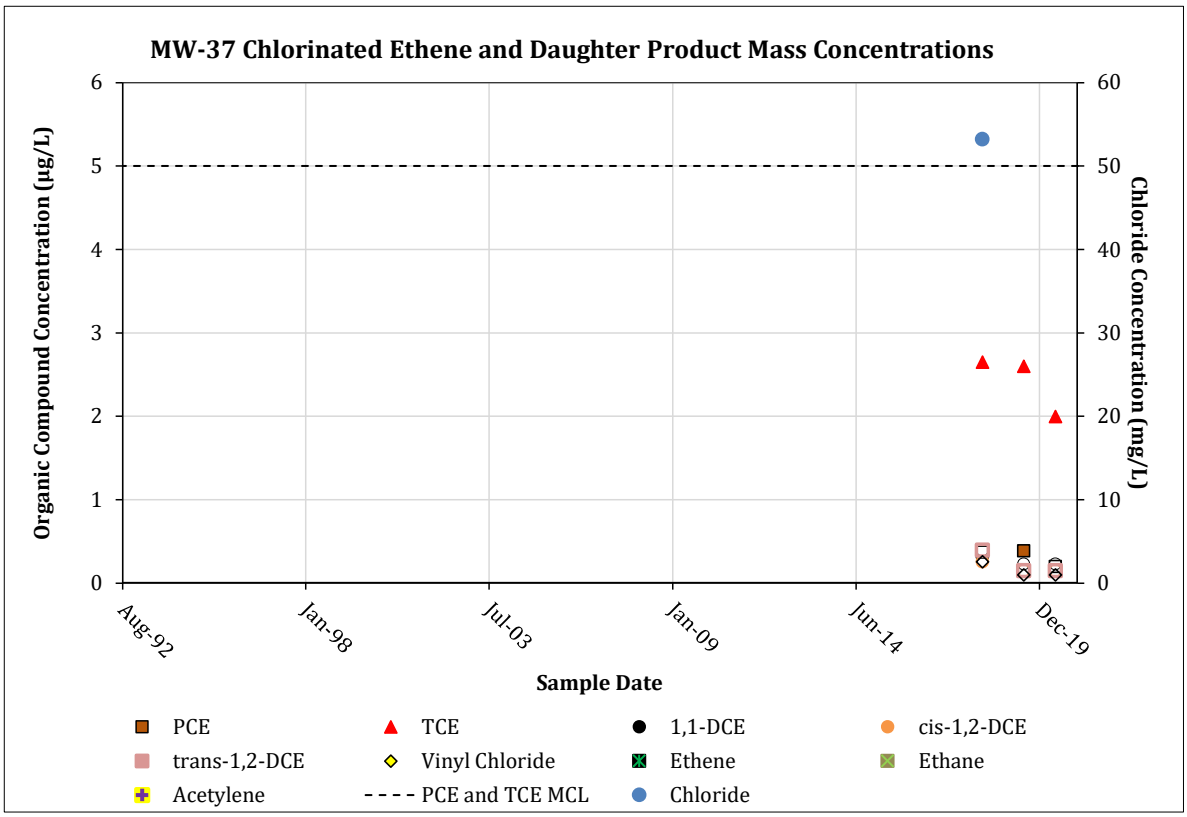
The symbol without fill designates a non-detect result.


PA-10 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
11/1/1997
12/1/1998
1/1/2000
2/1/2001
3/1/2002
4/1/2003
5/1/2004
6/1/2005
7/1/2006
8/1/2007
9/1/2008
10/1/2009
11/1/2010
12/1/2011
1/1/2013
2/1/2014
3/1/2015
4/1/2016
5/1/2017
6/1/2018
7/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

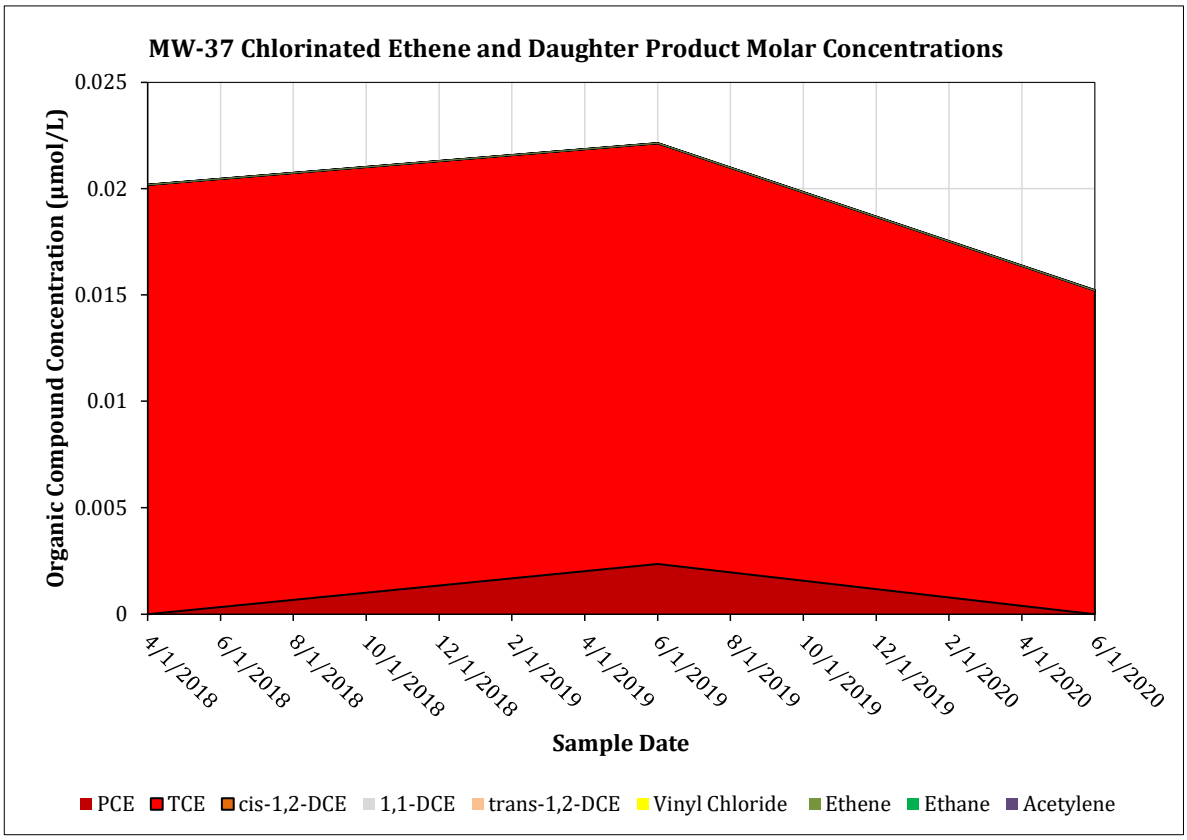

PA-10 Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
250
200
150
100
50
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

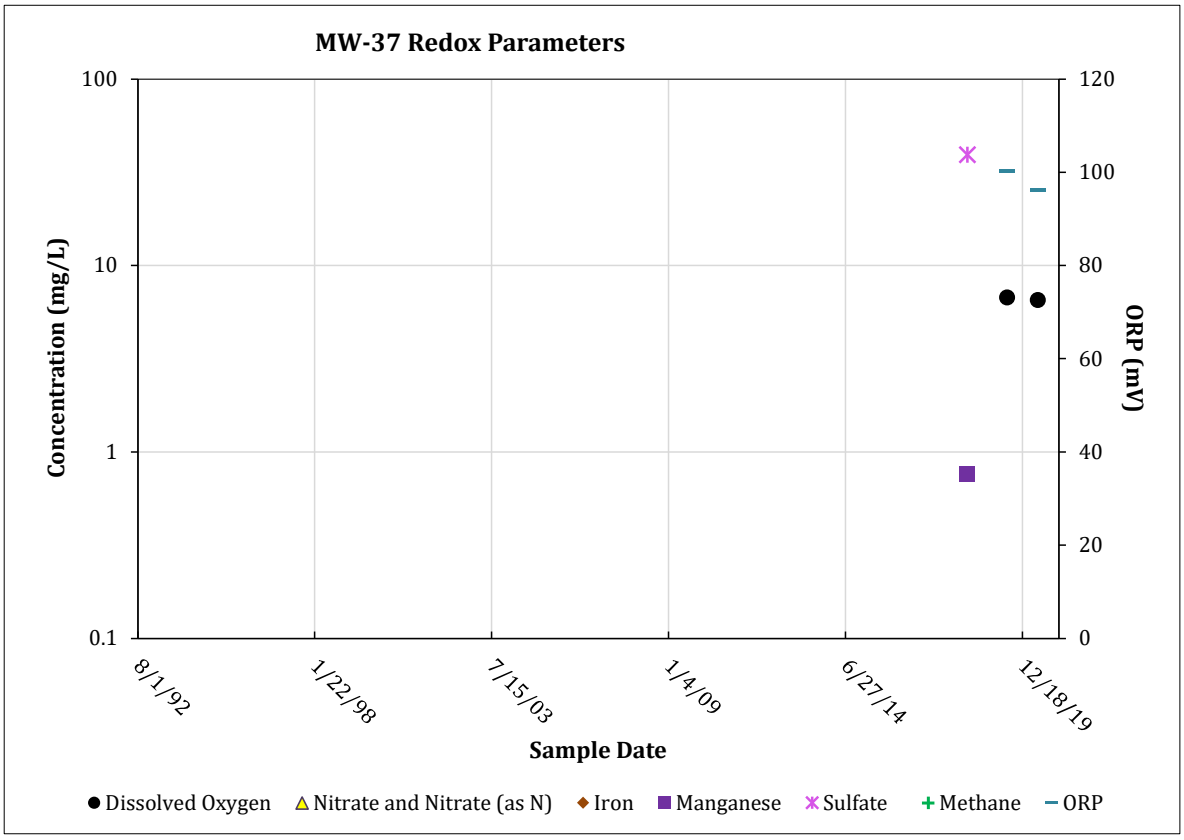

PA-10 Other Geochemistry
Concentration (mg/L)
Standard pH units
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

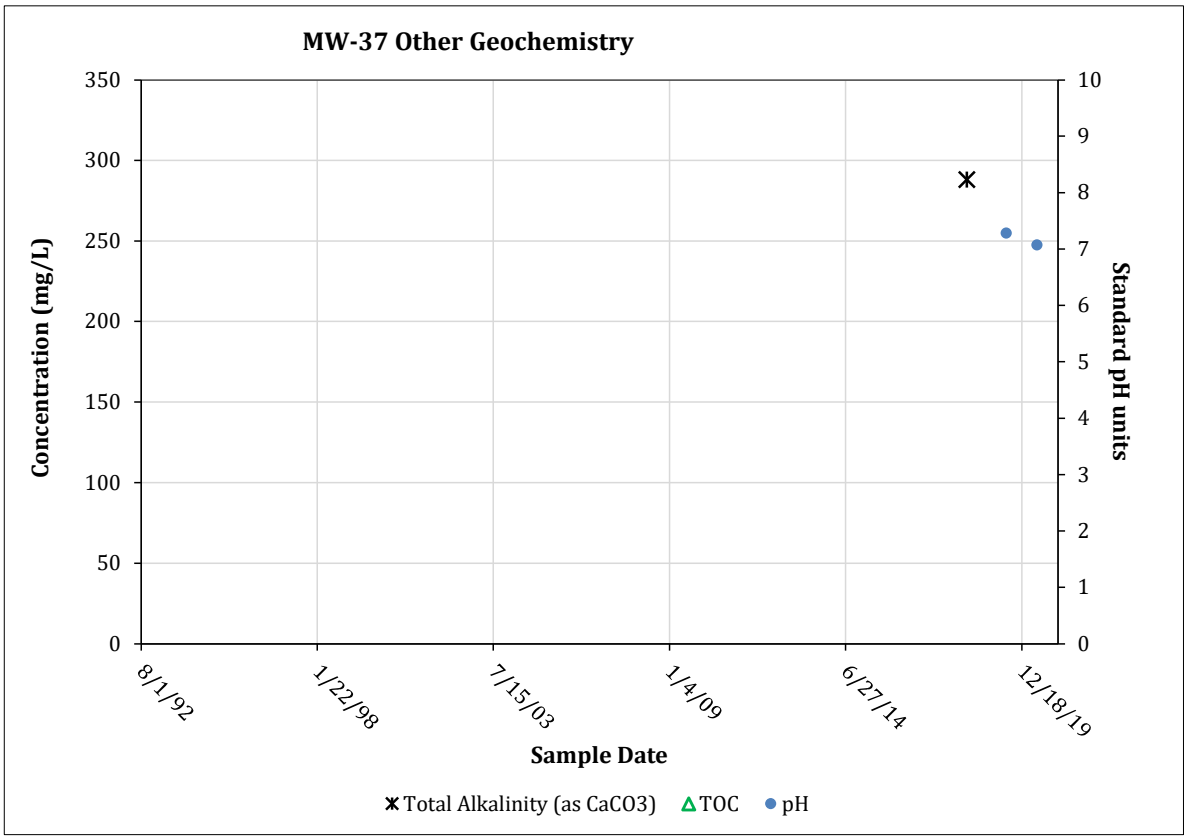


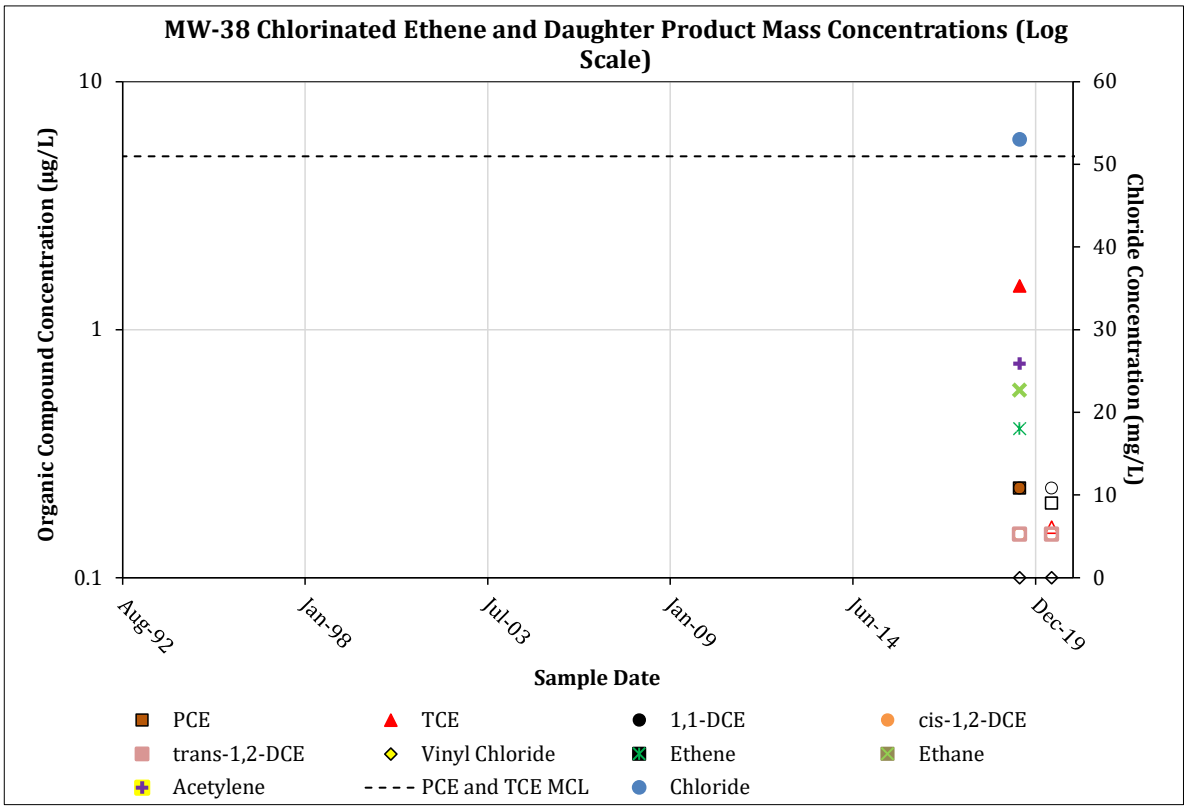


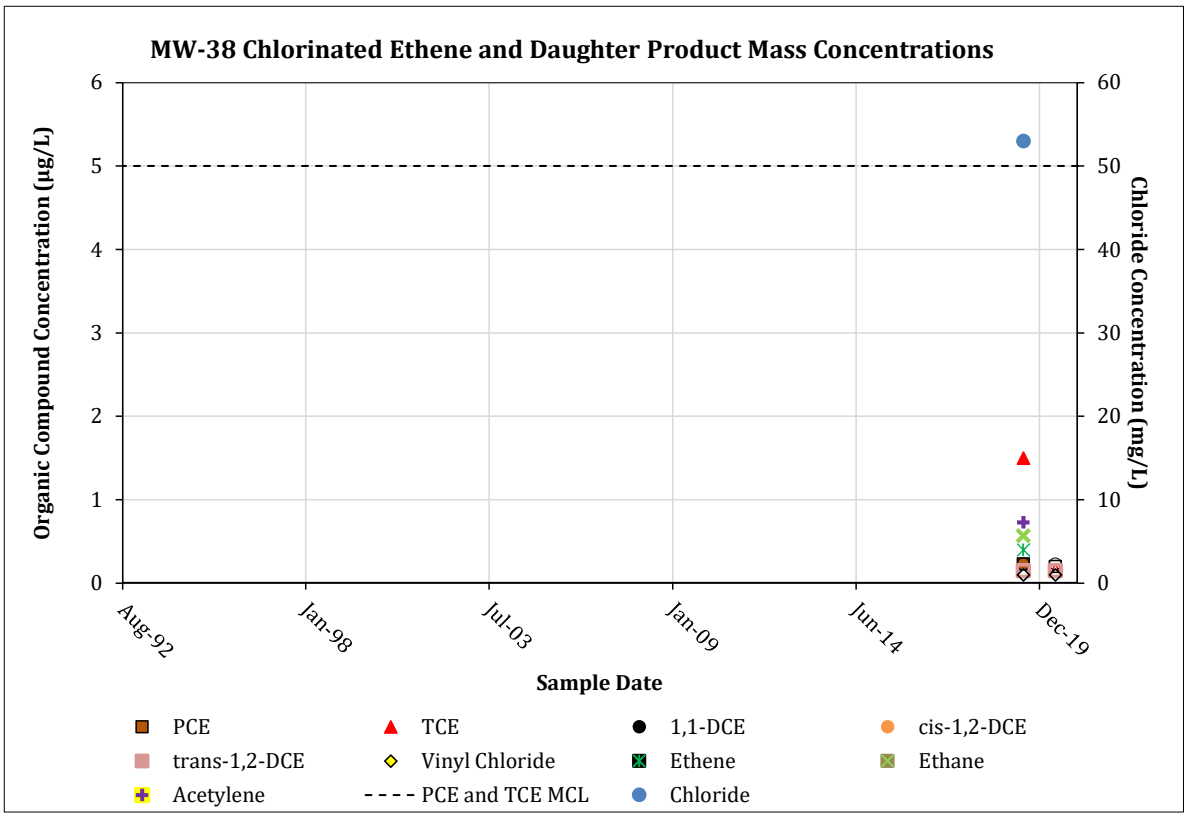
The symbol without fill designates a non-detect result.


MW-37 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.025
0.02
0.015
0.01
0.005
0
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

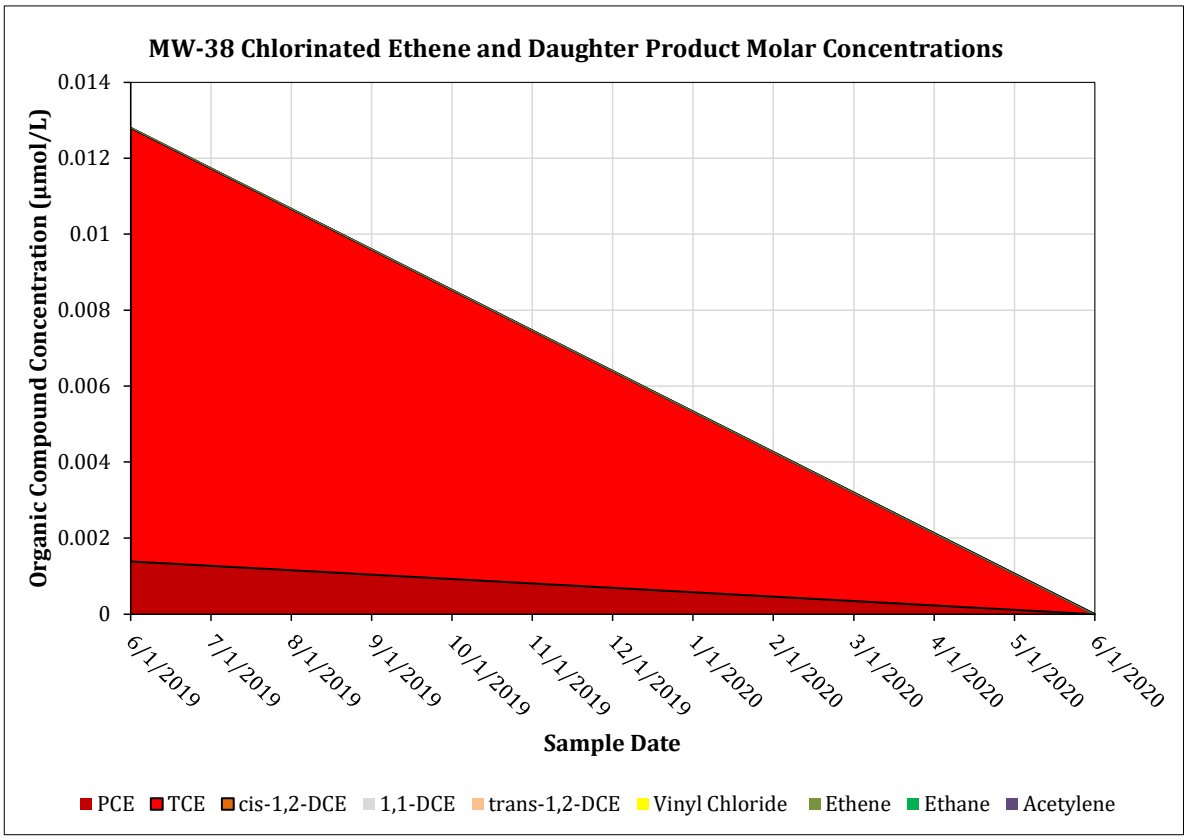

MW-37 Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

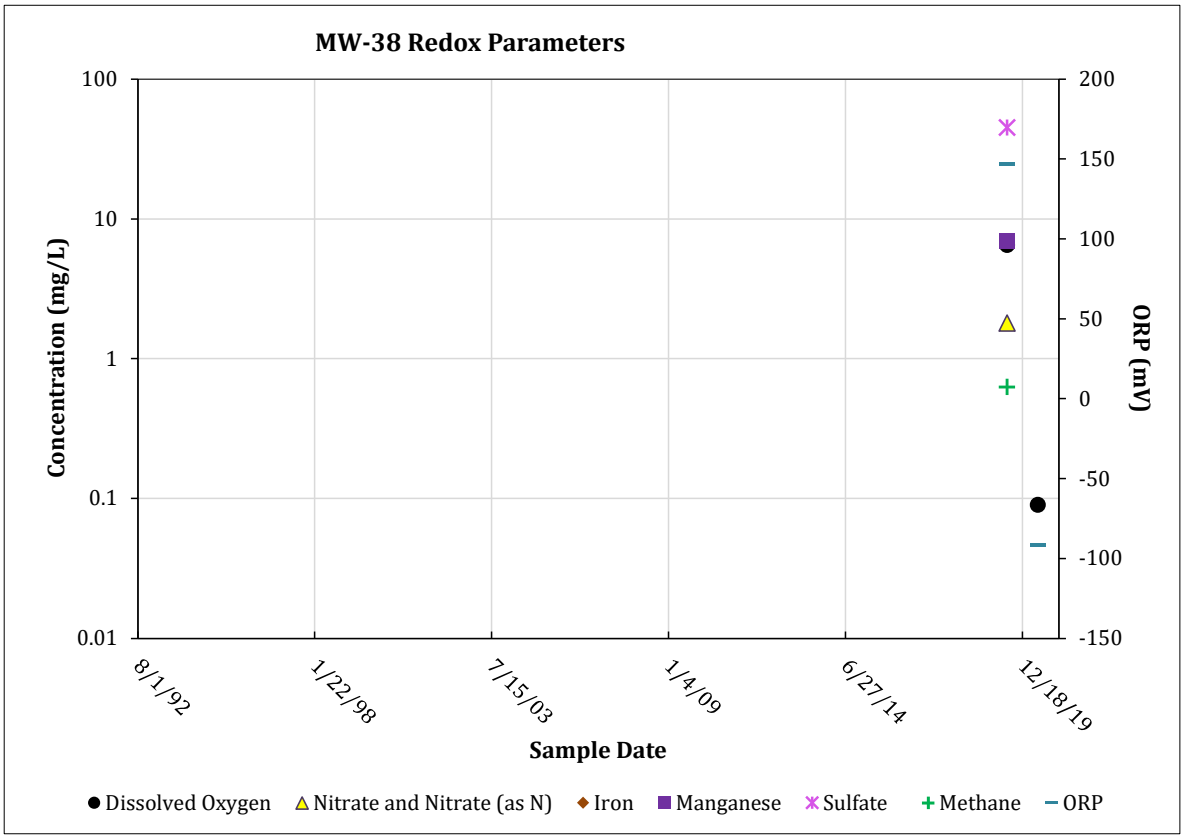

MW-37 Other Geochemistry
Concentration (mg/L)
Standard pH units
350
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

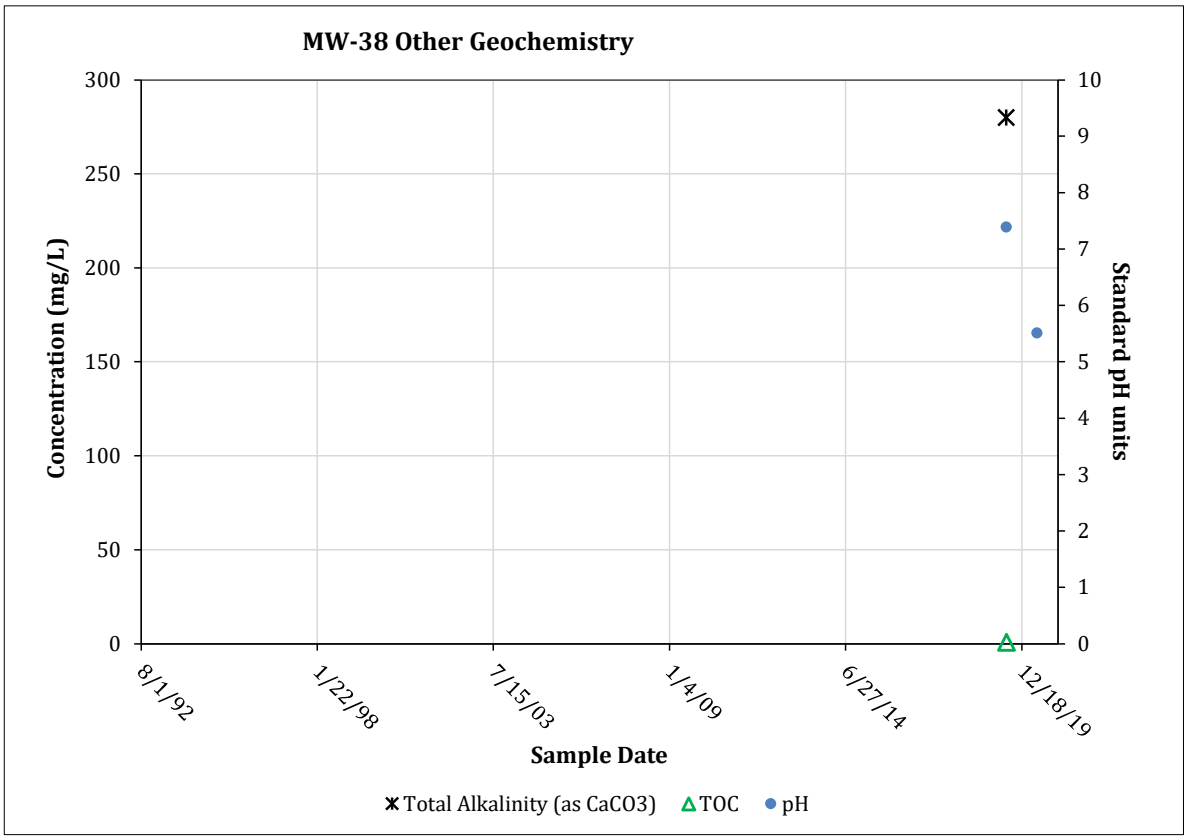


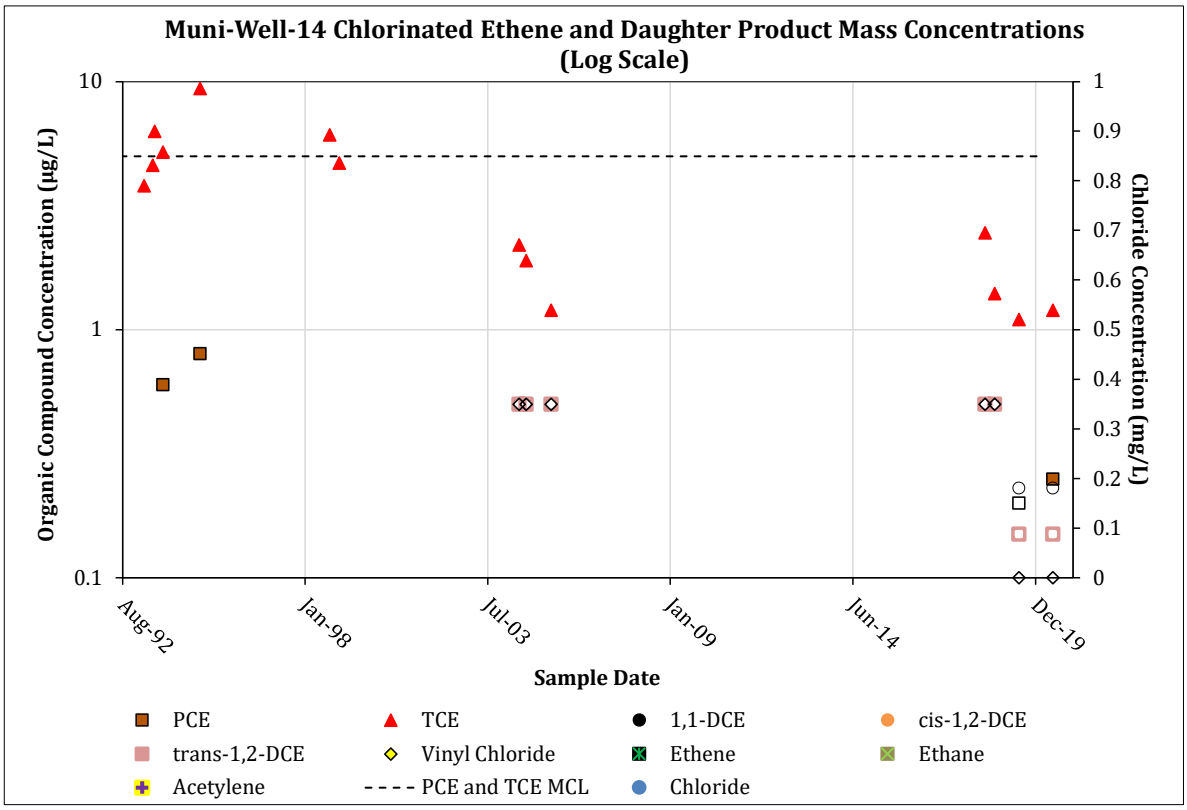


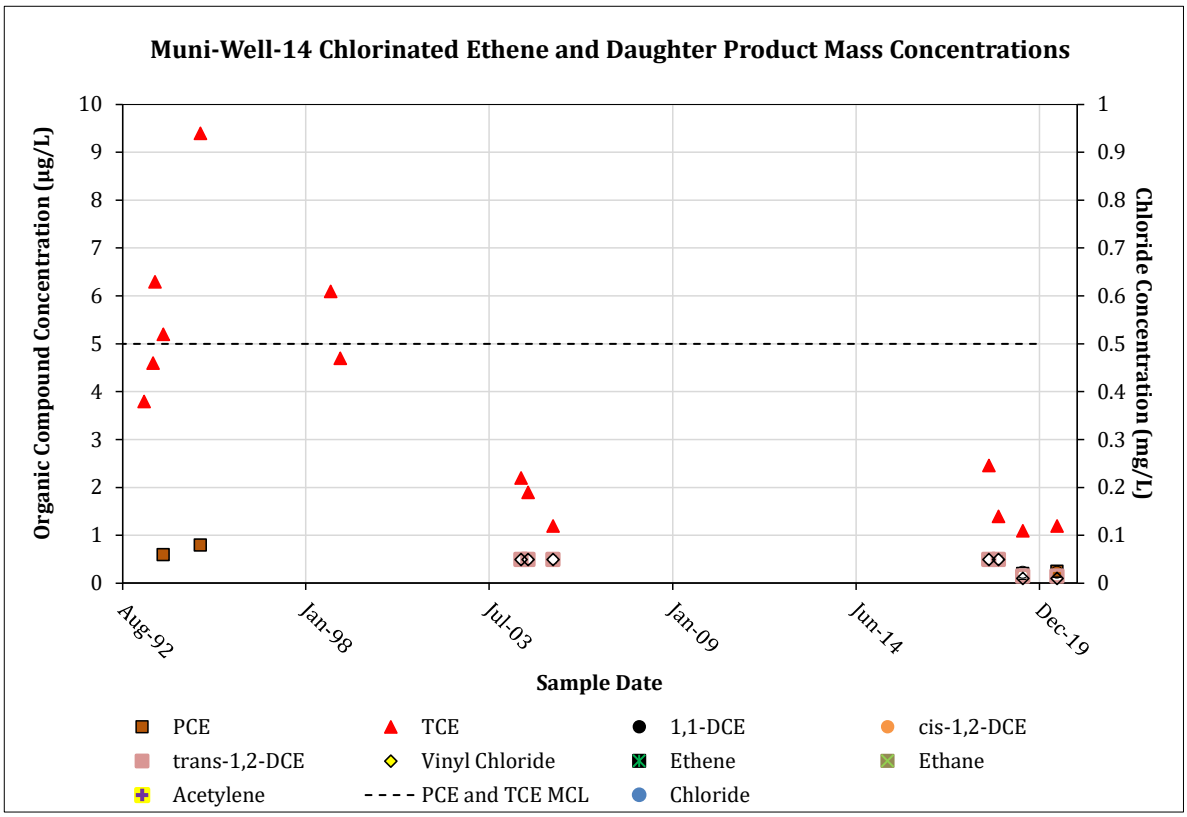
The symbol without fill designates a non-detect result.


MW-38 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
6/1/2019
7/1/2019
8/1/2019
9/1/2019
10/1/2019
11/1/2019
12/1/2019
1/1/2020
2/1/2020
3/1/2020
4/1/2020
5/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

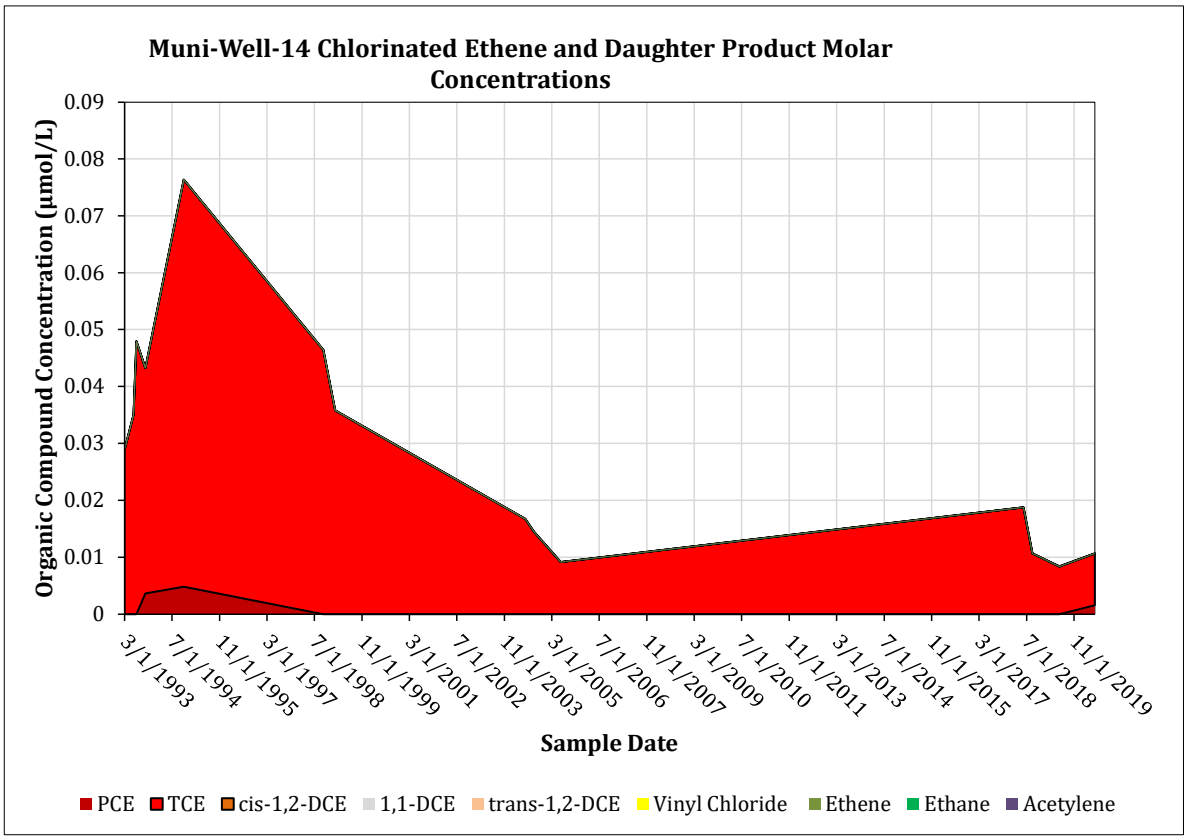

MW-38 Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
0.01
200
150
100
50
0
-50
-100
-150
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

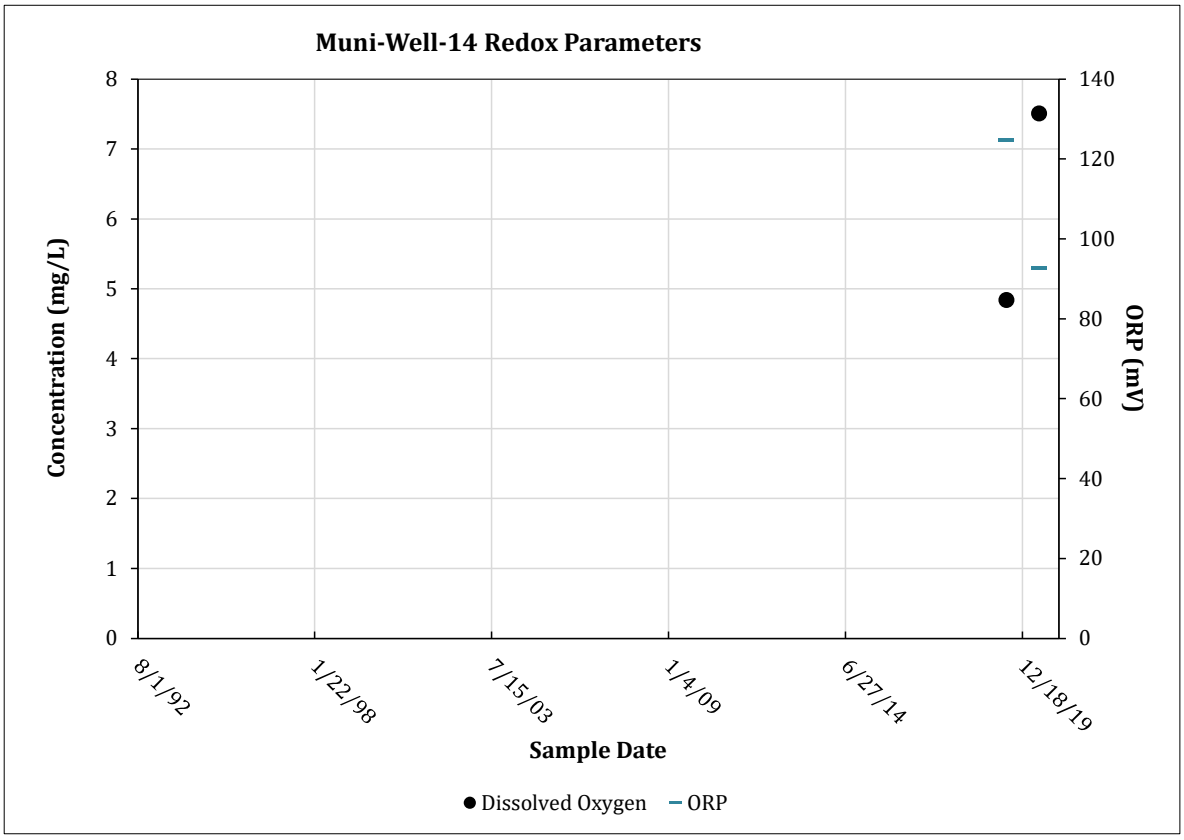

MW-38 Other Geochemistry
Concentration (mg/L)
Standard pH units
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

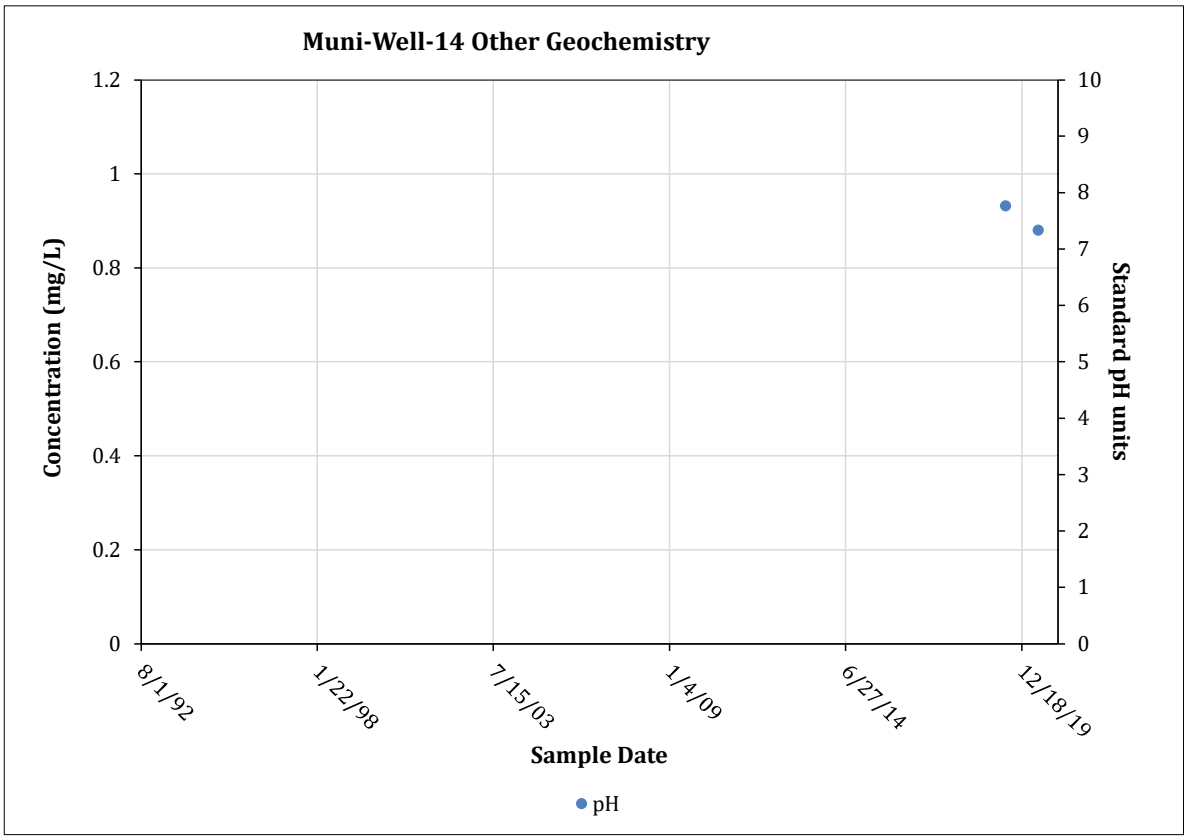


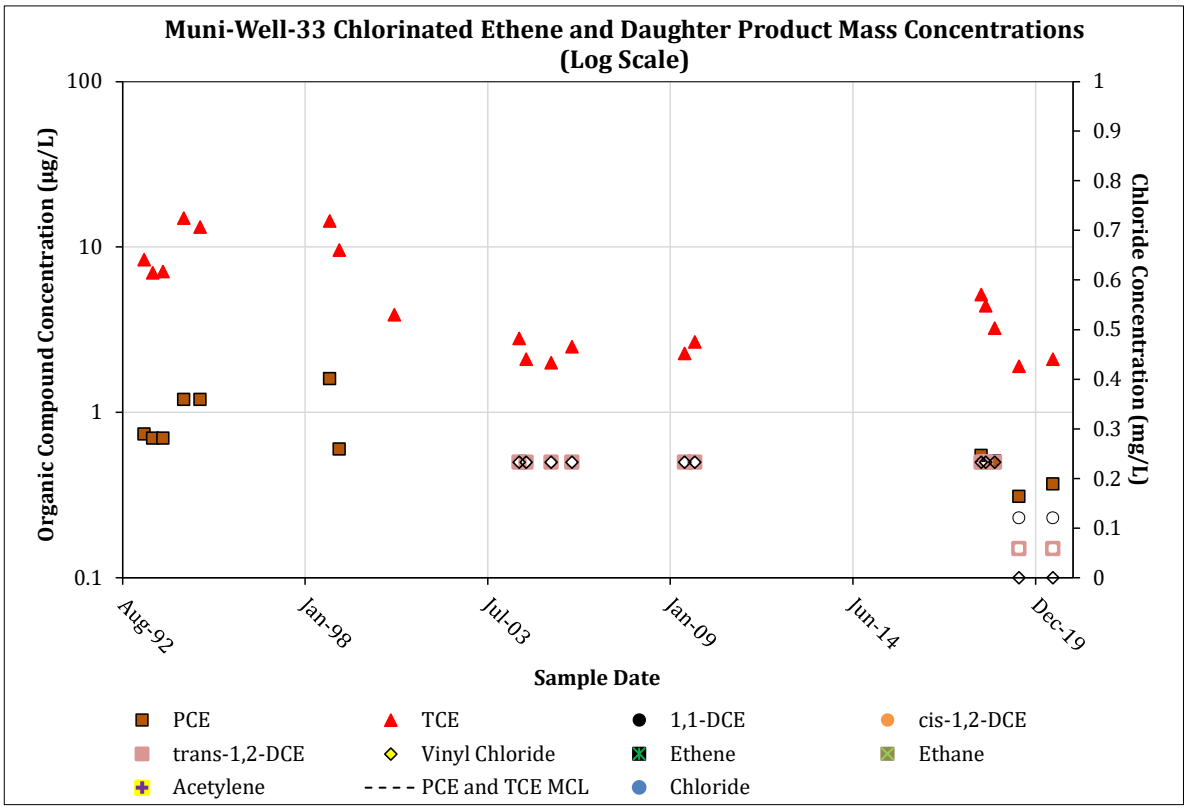


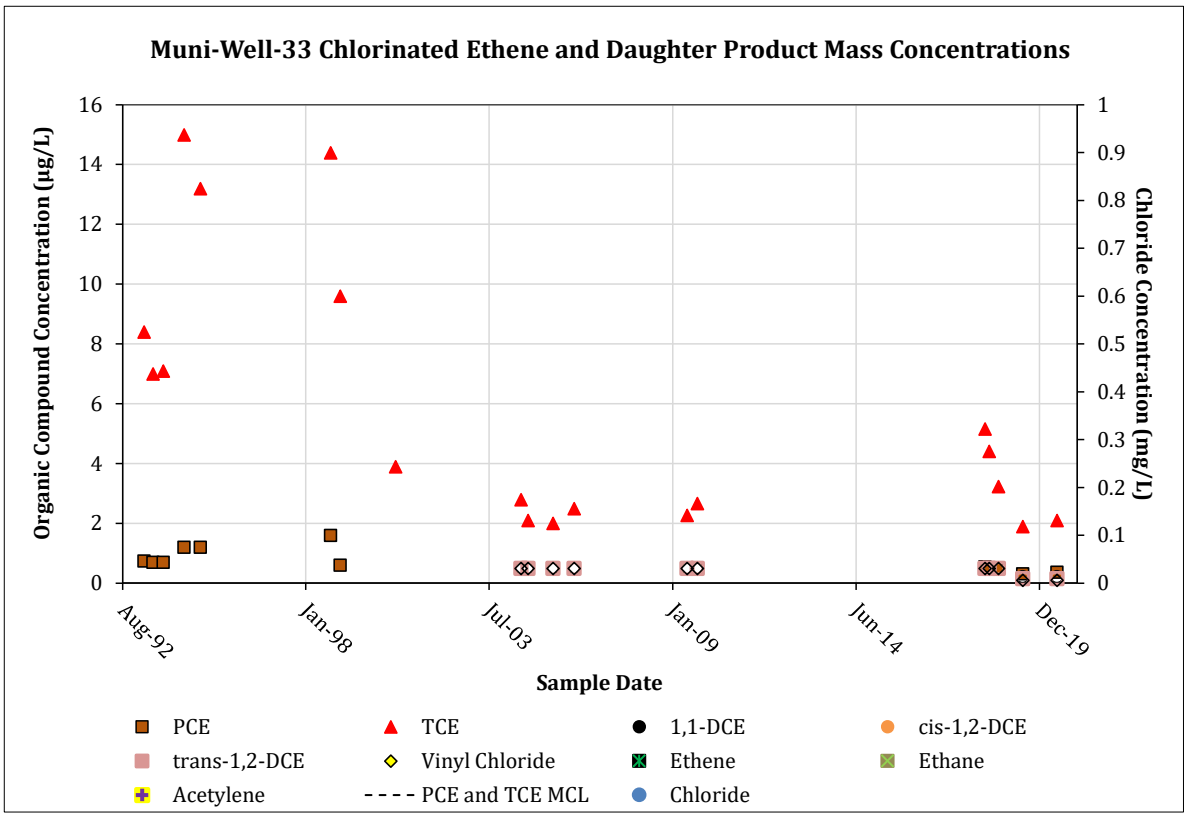
The symbol without fill designates a non-detect result.


Muni-Well-14 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
3/1/1993
7/1/1994
11/1/1995
3/1/1997
7/1/1998
11/1/1999
3/1/2001
7/1/2002
11/1/2003
3/1/2005
7/1/2006
11/1/2007
3/1/2009
7/1/2010
11/1/2011
3/1/2013
7/1/2014
11/1/2015
3/1/2017
7/1/2018
11/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

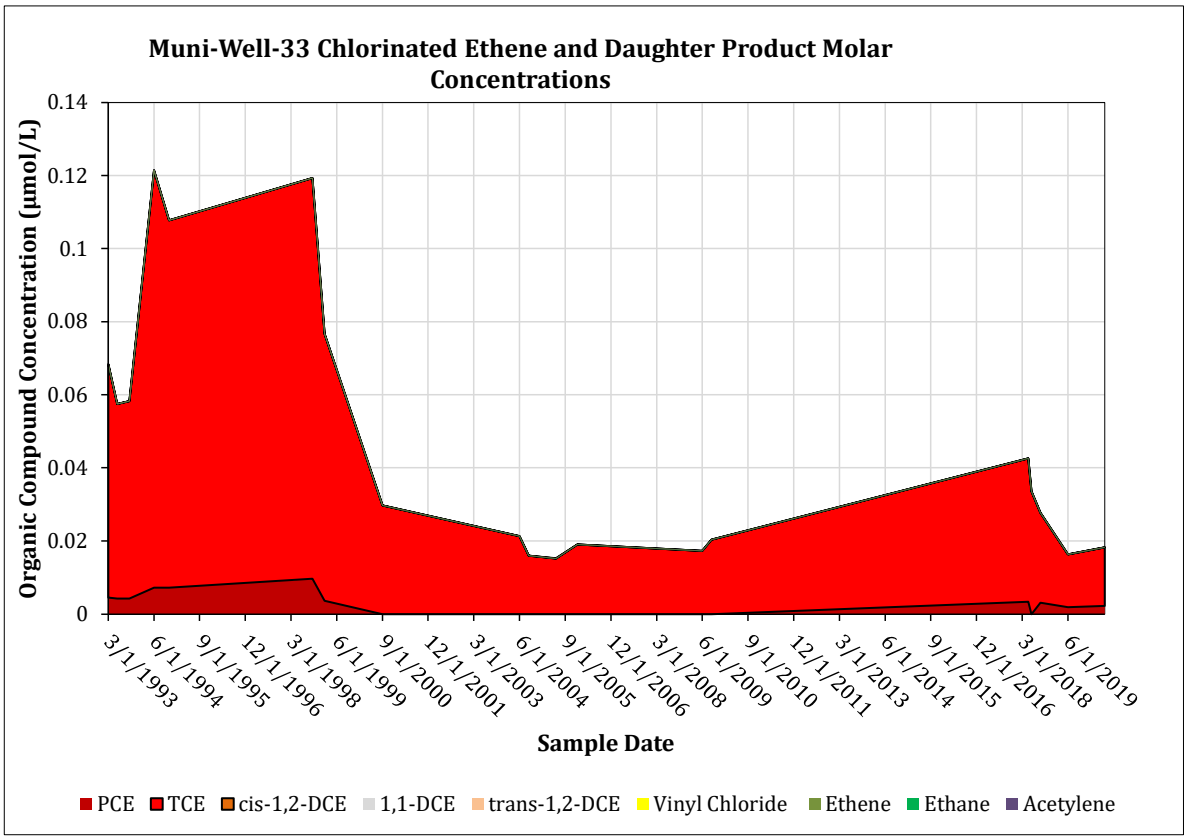

Muni-Well-14 Redox Parameters
Concentration (mg/L)
ORP (mV)
0
1
2
3
4
5
6
7
8
0
20
40
60
80
100
120
140
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
ORP

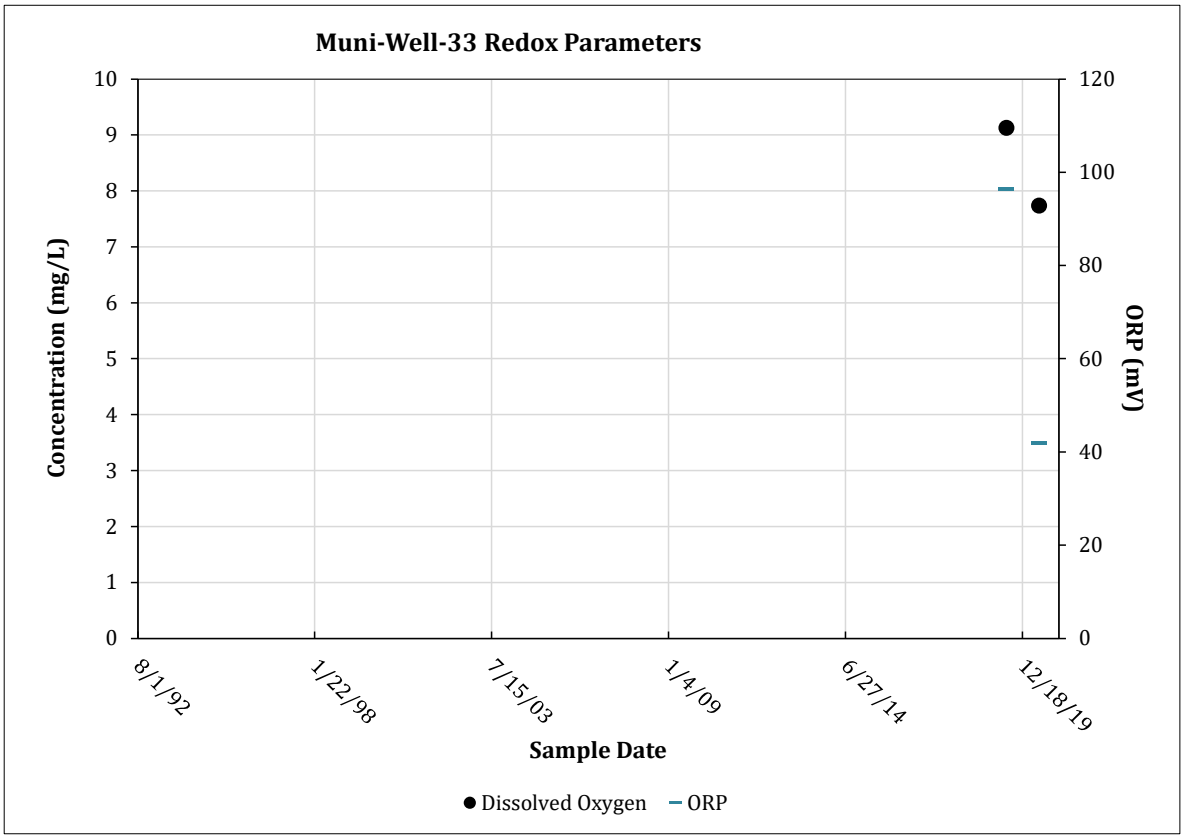

Muni-Well-14 Other Geochemistry
Concentration (mg/L)
Standard pH units
0
0.2
0.4
0.6
0.8
1
1.2
0
1
2
3
4
5
6
7
8
9
10
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
pH

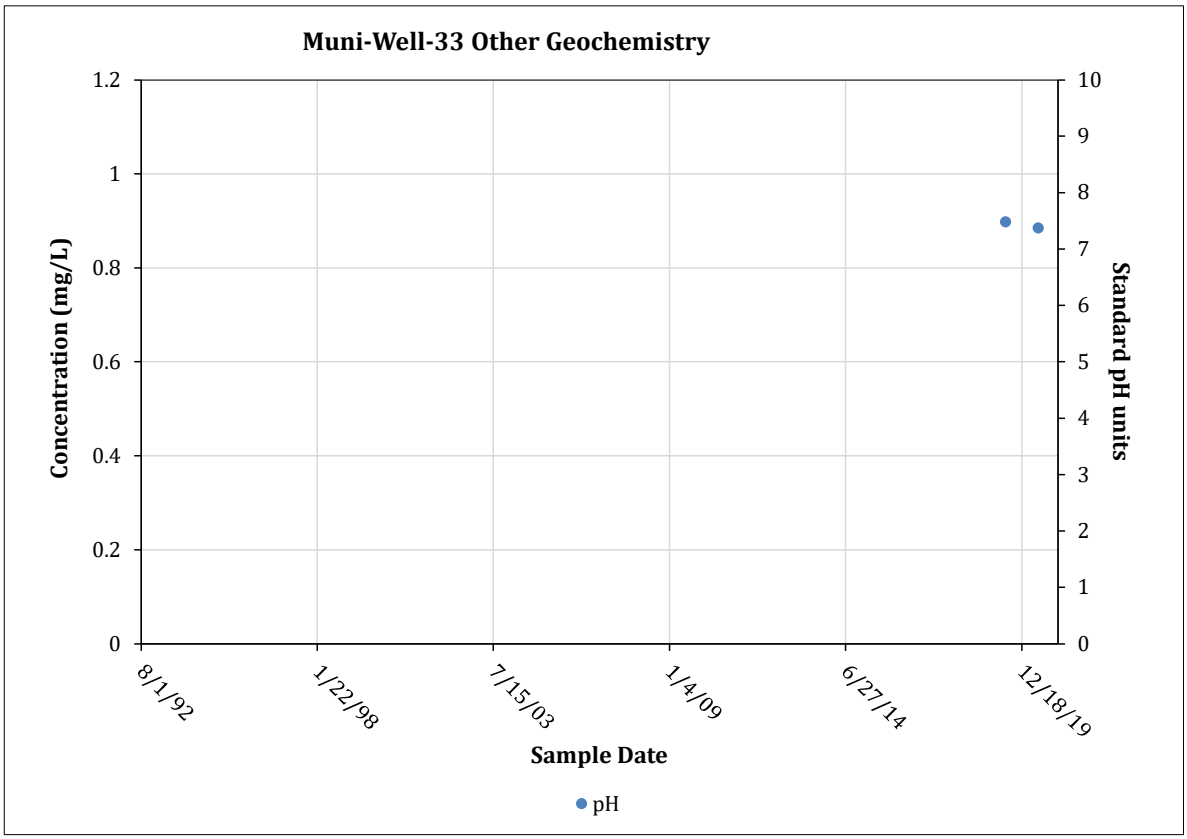


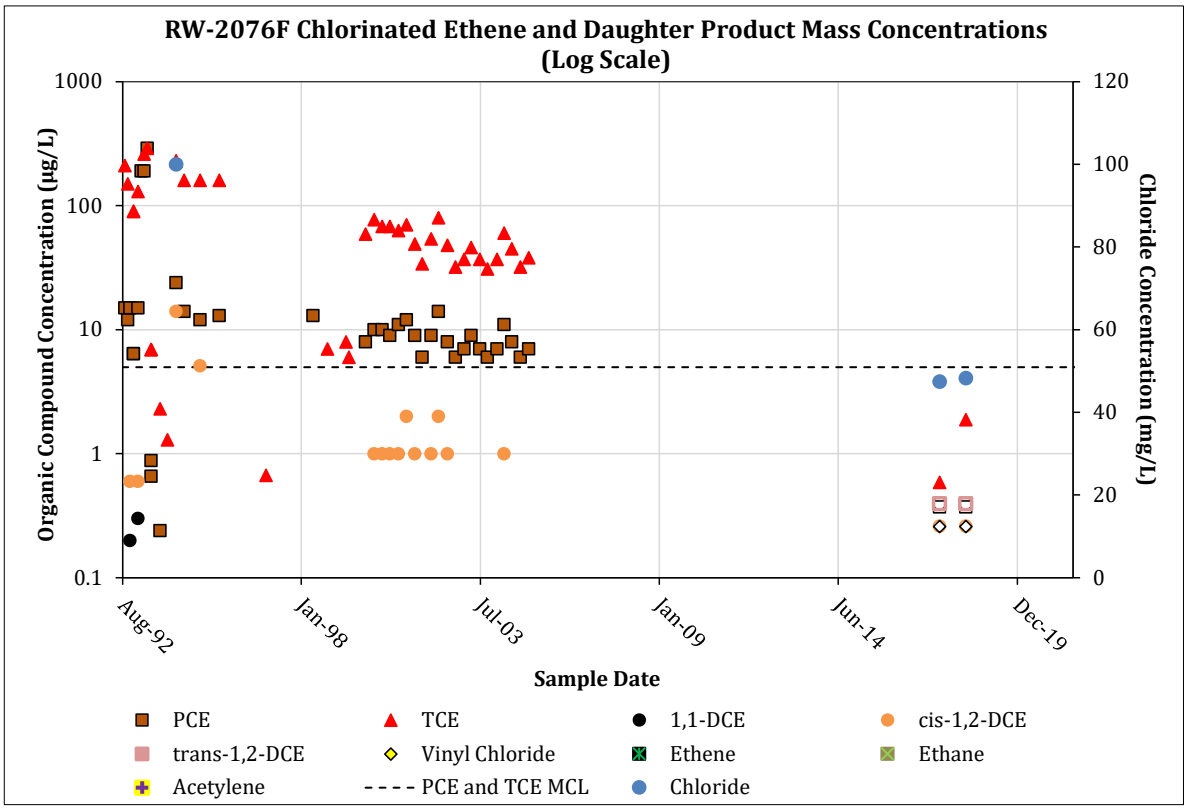


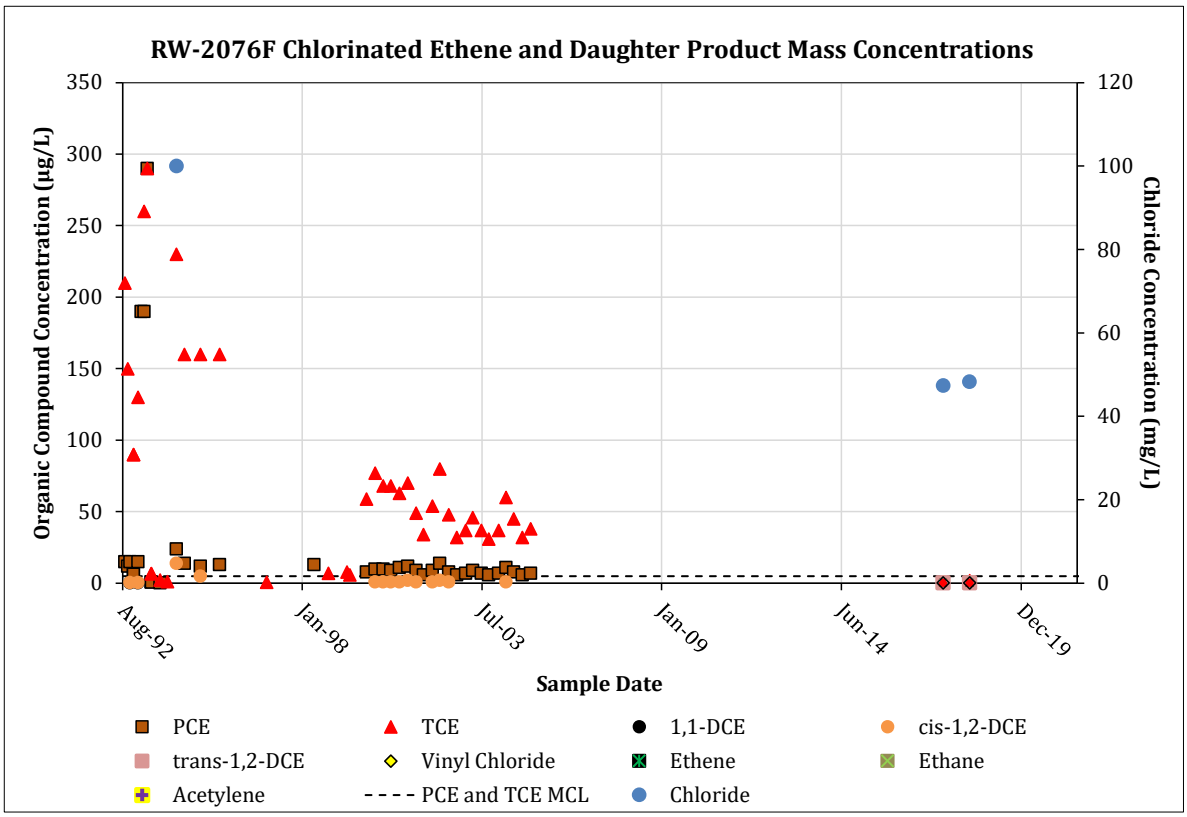
The symbol without fill designates a non-detect result.


Muni-Well-33 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
3/1/1993
6/1/1994
9/1/1995
12/1/1996
3/1/1998
6/1/1999
9/1/2000
12/1/2001
3/1/2003
6/1/2004
9/1/2005
12/1/2006
3/1/2008
6/1/2009
9/1/2010
12/1/2011
3/1/2013
6/1/2014
9/1/2015
12/1/2016
3/1/2018
6/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

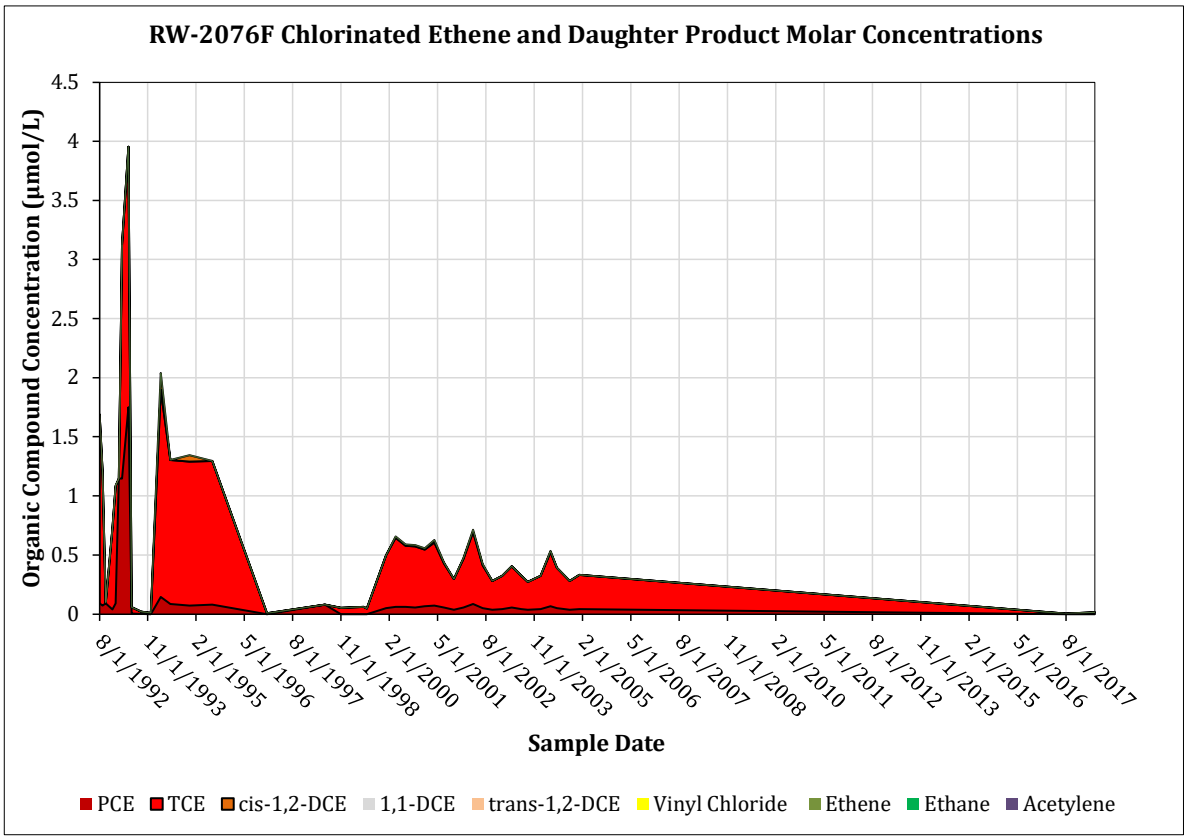

Muni-Well-33 Redox Parameters
Concentration (mg/L)
ORP (mV)
Sample Date
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Dissolved Oxygen
ORP

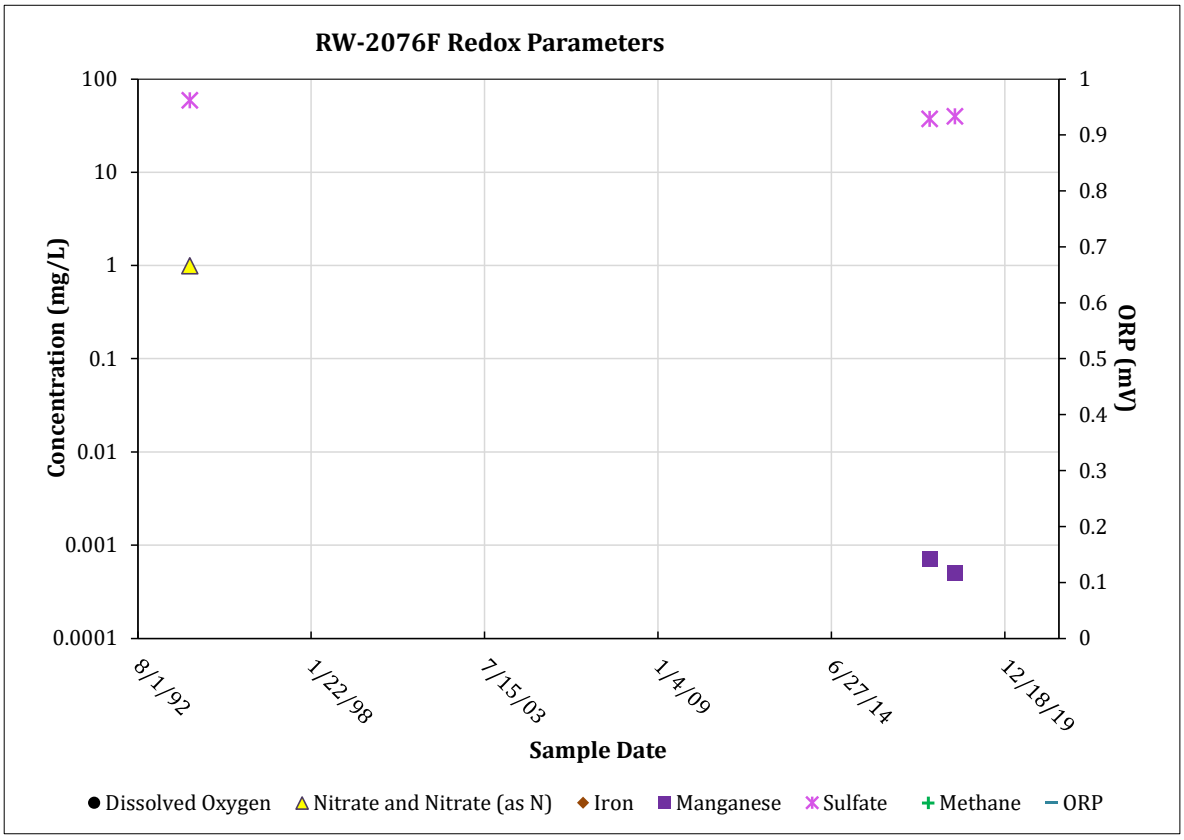

Muni-Well-33 Other Geochemistry
Concentration (mg/L)
Standard pH units
Sample Date
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
pH

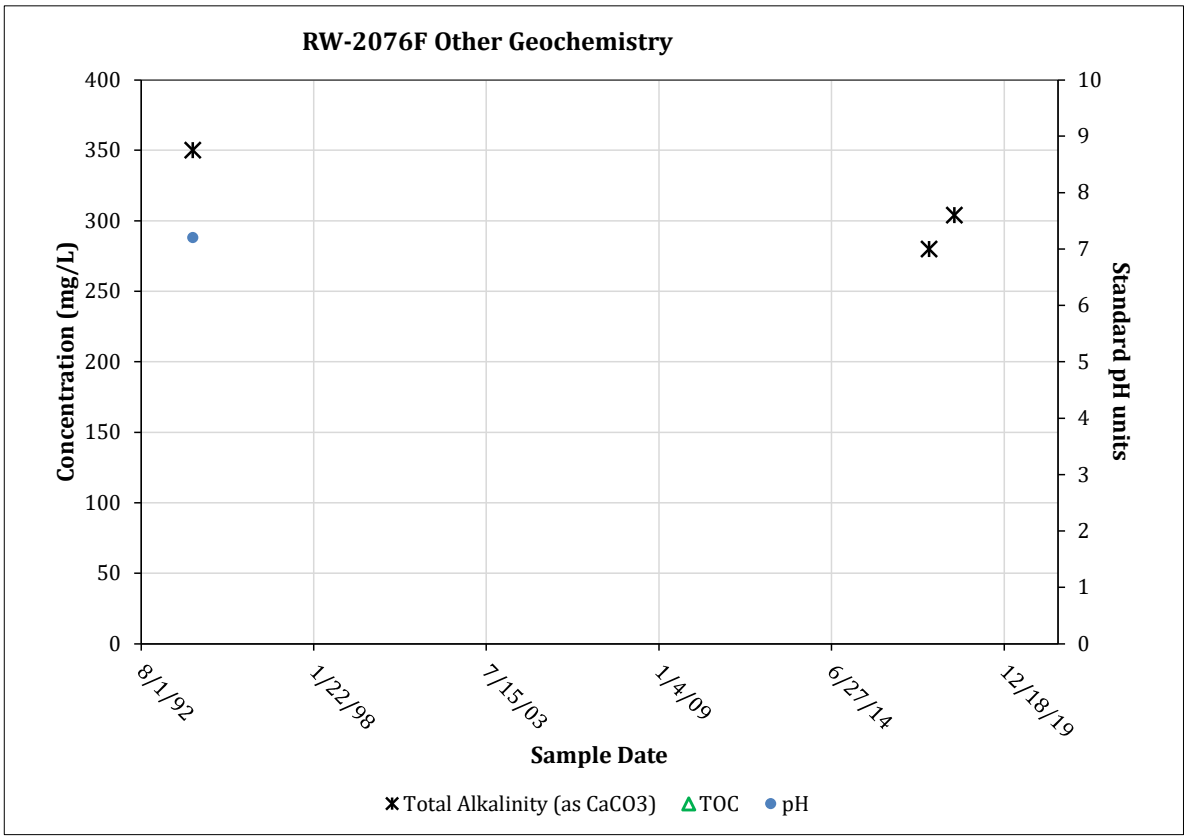


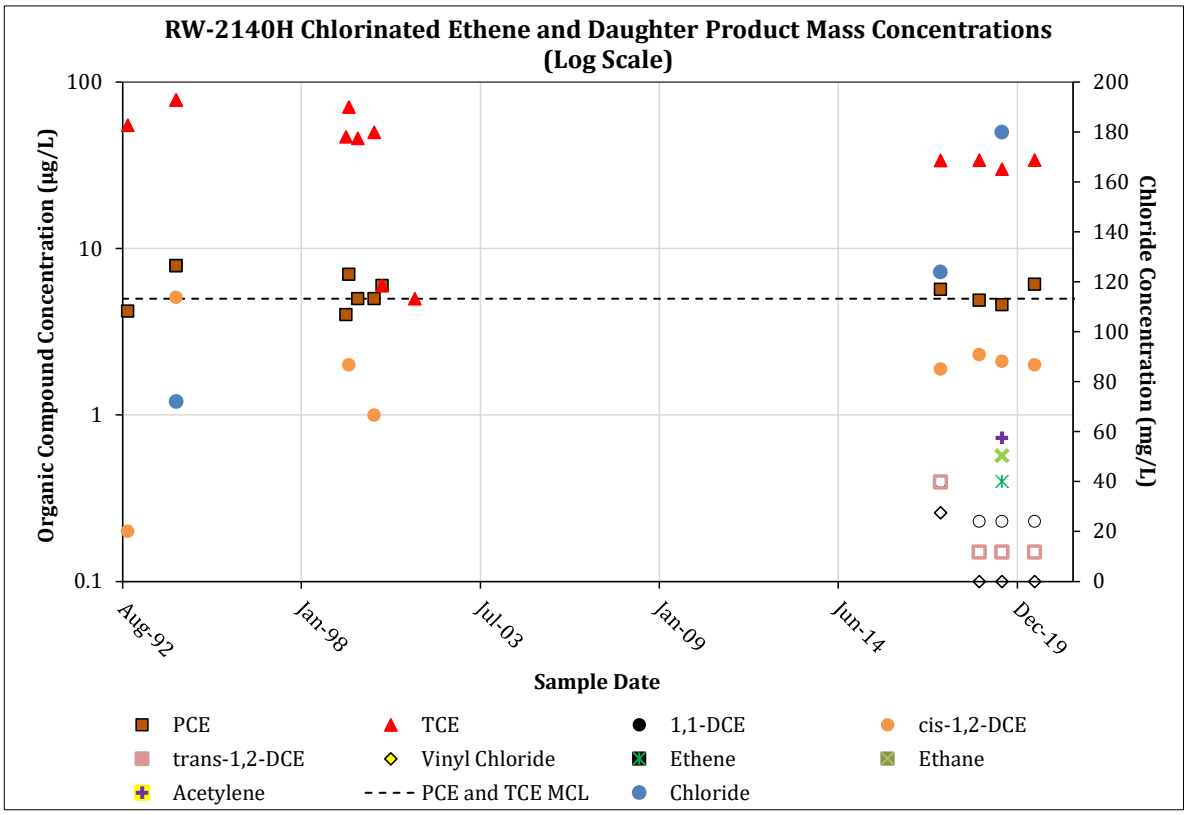


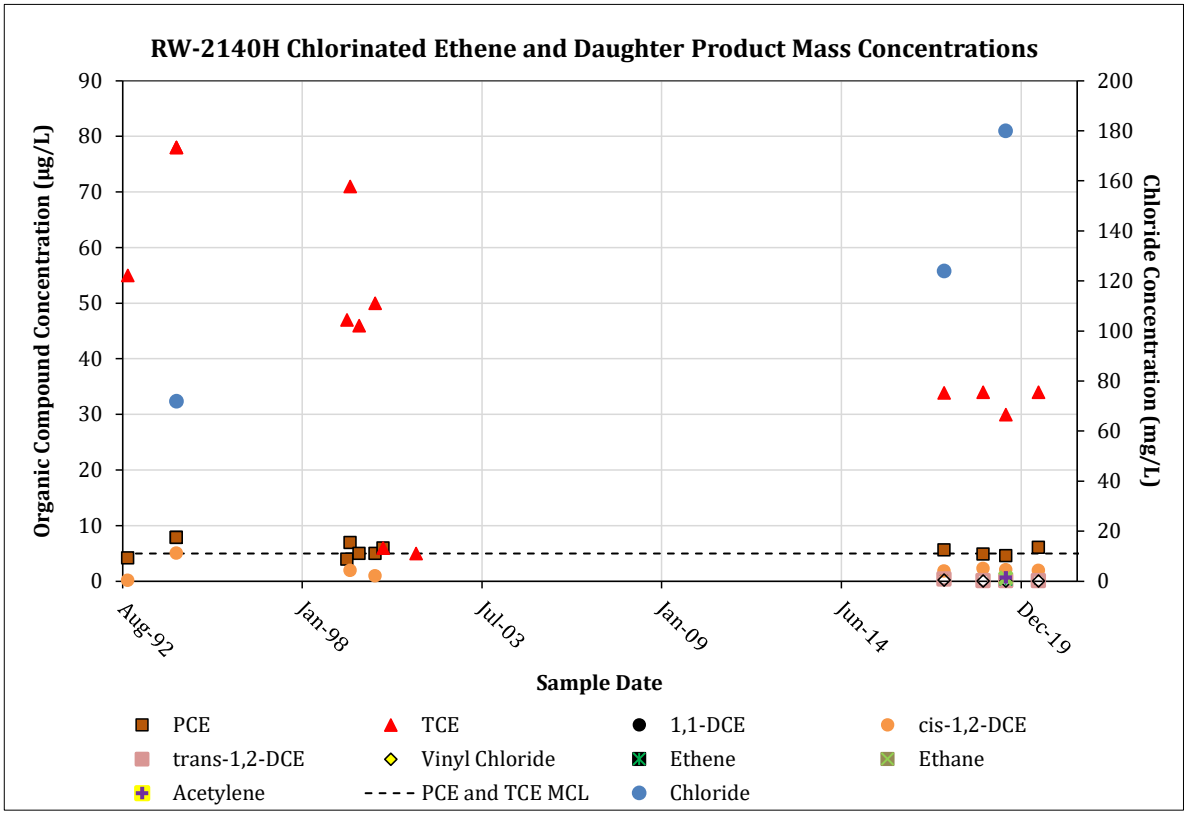
The symbol without fill designates a non-detect result.


RW-2076F Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
8/1/1992
11/1/1993
2/1/1995
5/1/1996
8/1/1997
11/1/1998
2/1/2000
5/1/2001
8/1/2002
11/1/2003
2/1/2005
5/1/2006
8/1/2007
11/1/2008
2/1/2010
5/1/2011
8/1/2012
11/1/2013
2/1/2015
5/1/2016
8/1/2017
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

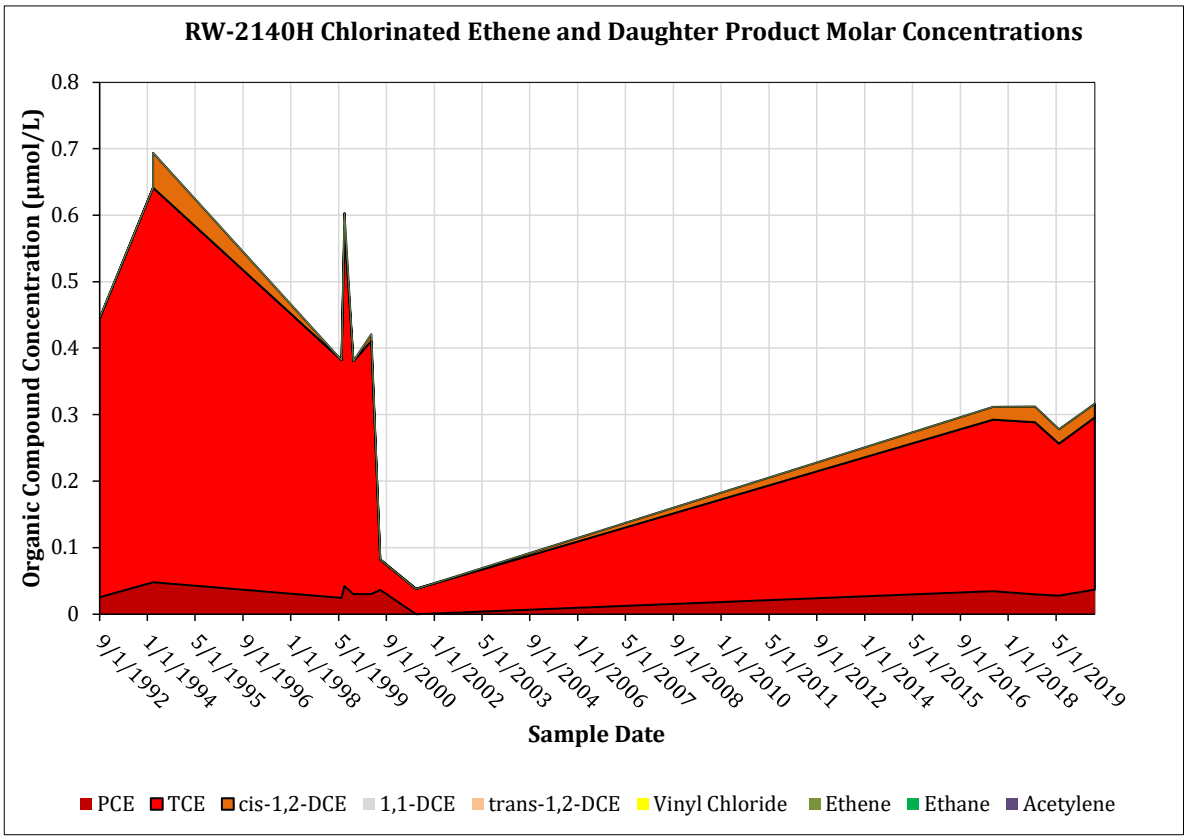

RW-2076F Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

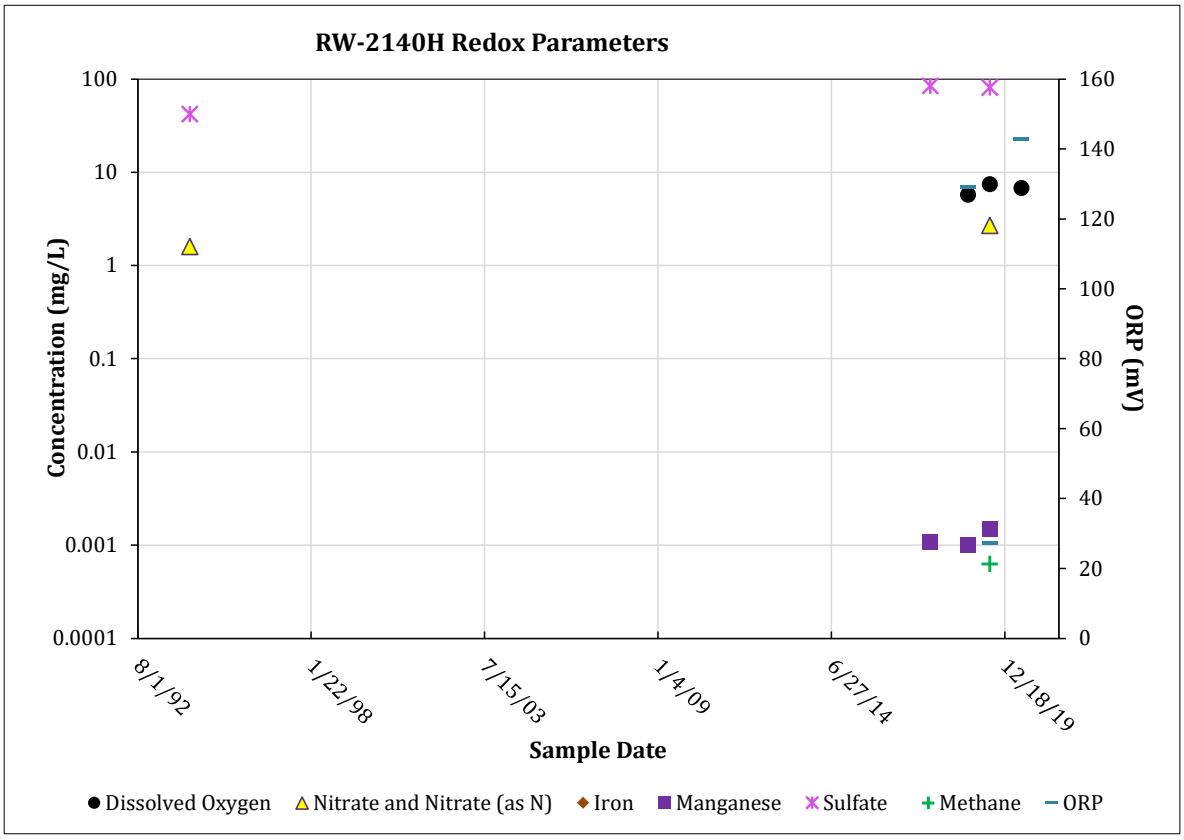

RW-2076F Other Geochemistry
Concentration (mg/L)
400
350
300
250
200
150
100
50
0
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

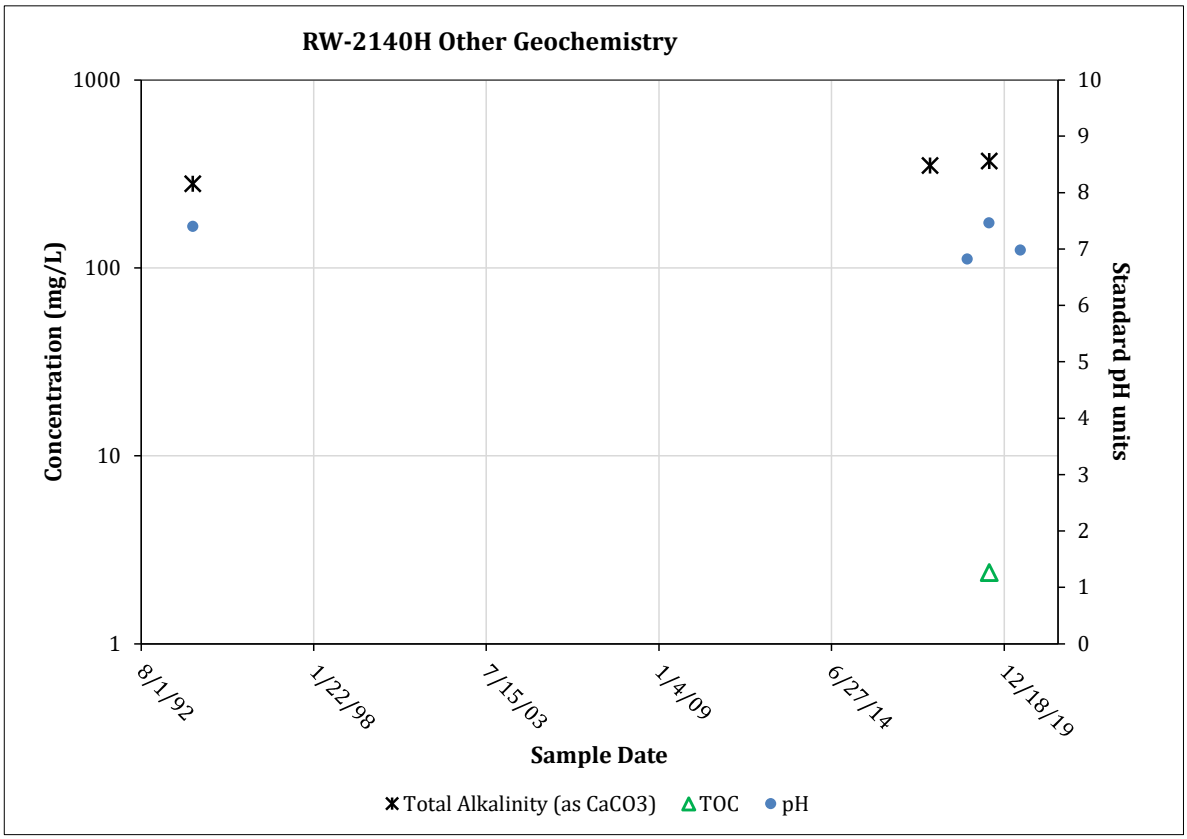


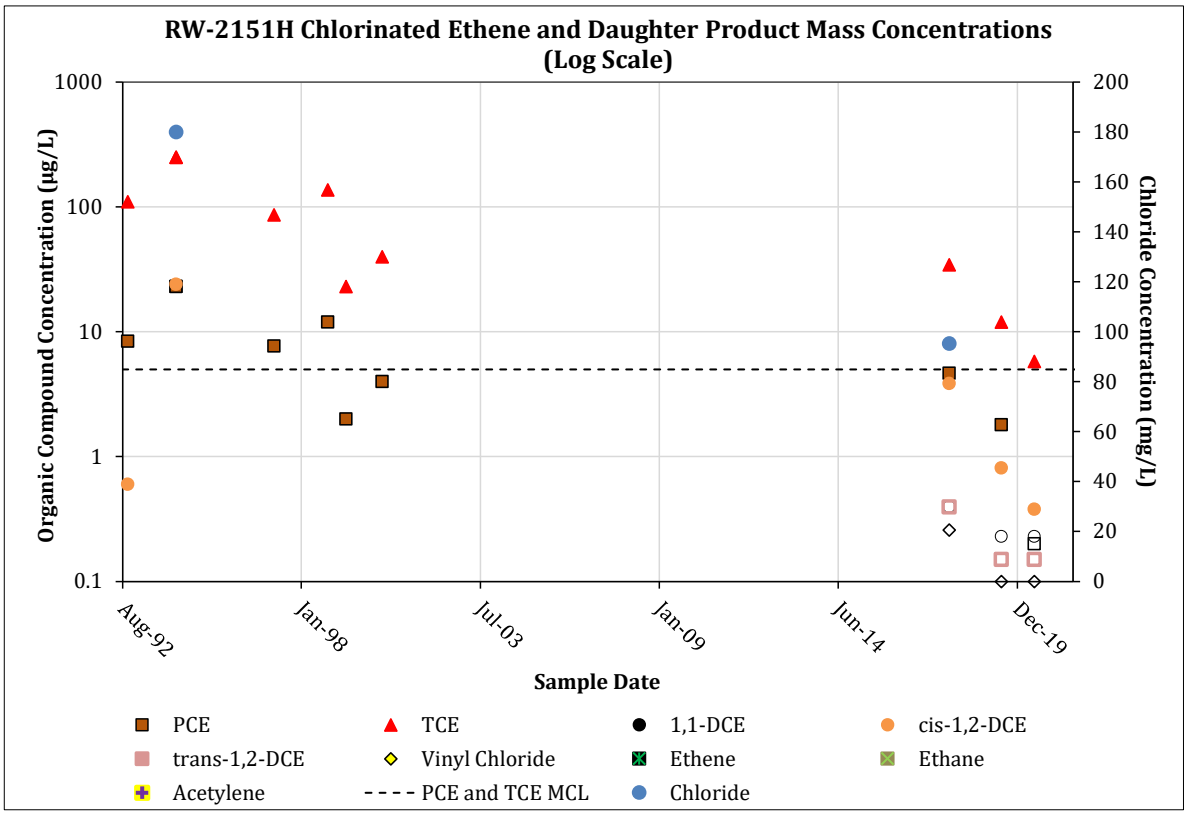


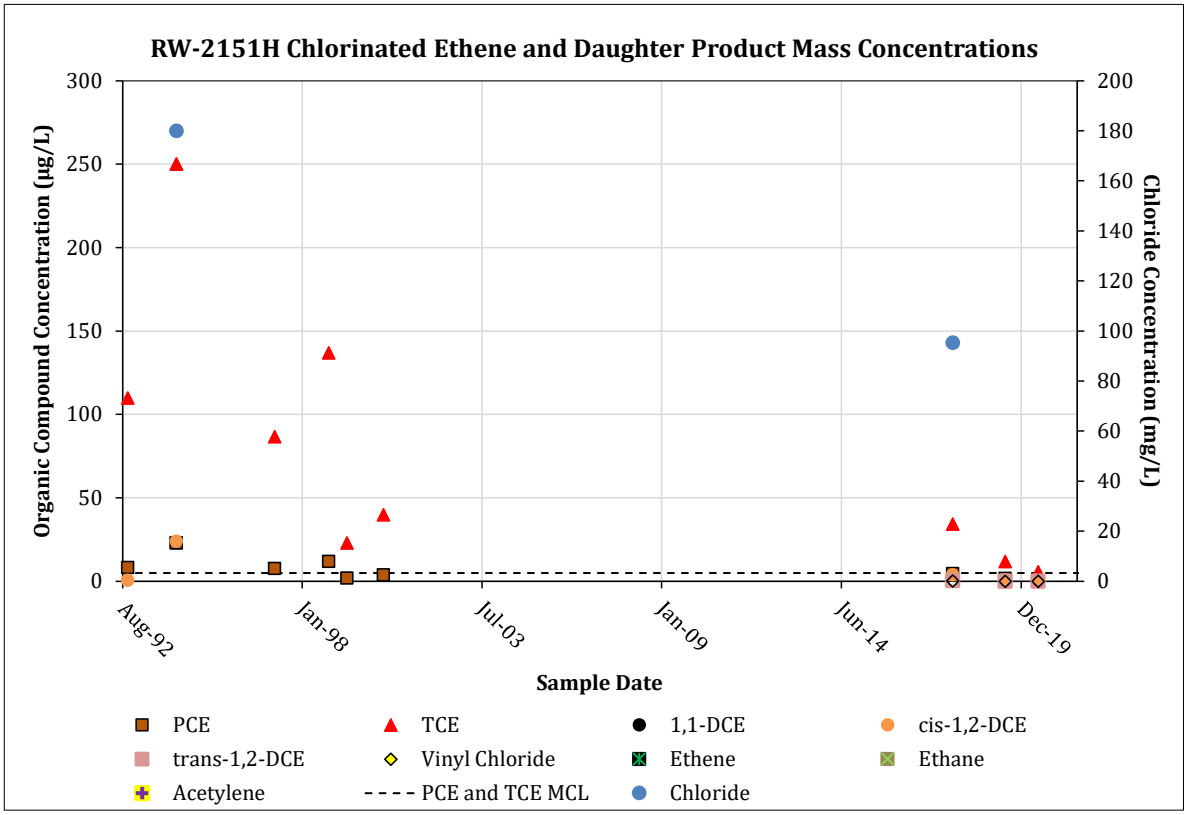
The symbol without fill designates a non-detect result.


RW-2140H Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
9/1/1992
1/1/1994
5/1/1995
9/1/1996
1/1/1998
5/1/1999
9/1/2000
1/1/2002
5/1/2003
9/1/2004
1/1/2006
5/1/2007
9/1/2008
1/1/2010
5/1/2011
9/1/2012
1/1/2014
5/1/2015
9/1/2016
1/1/2018
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

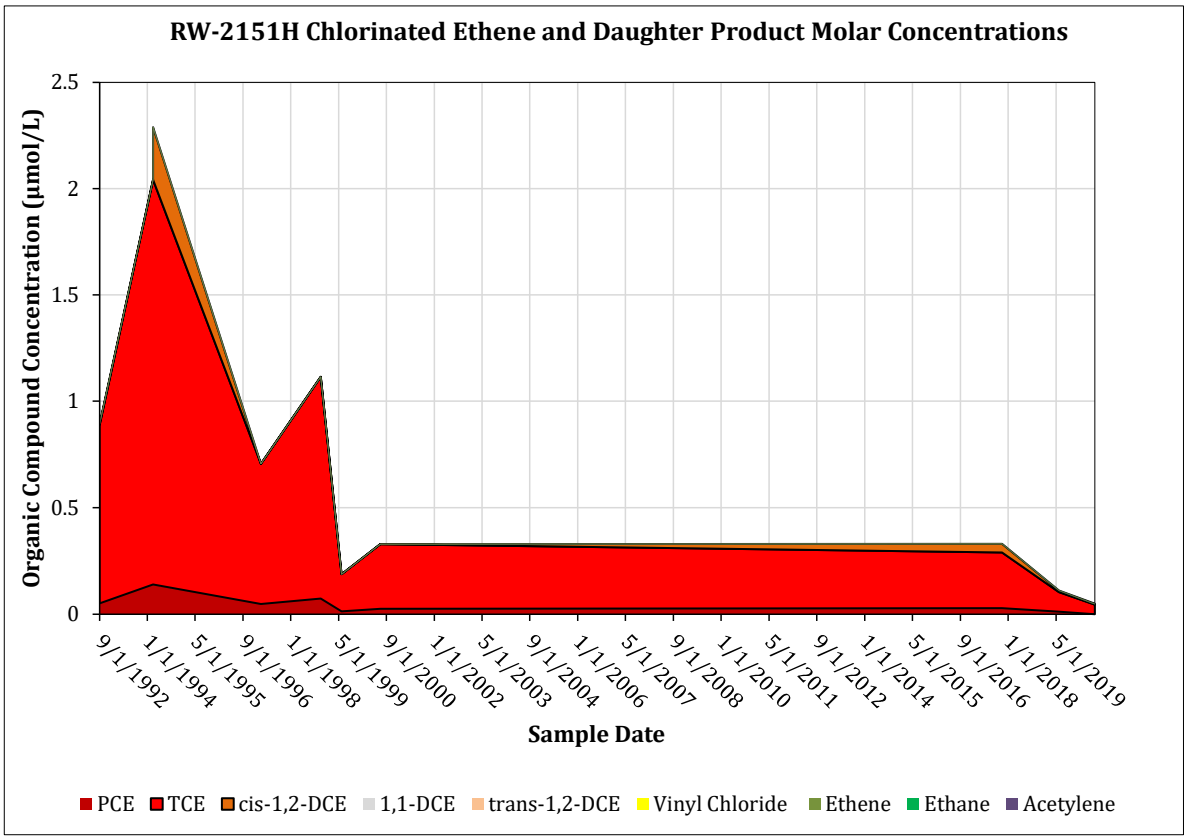

RW-2140H Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

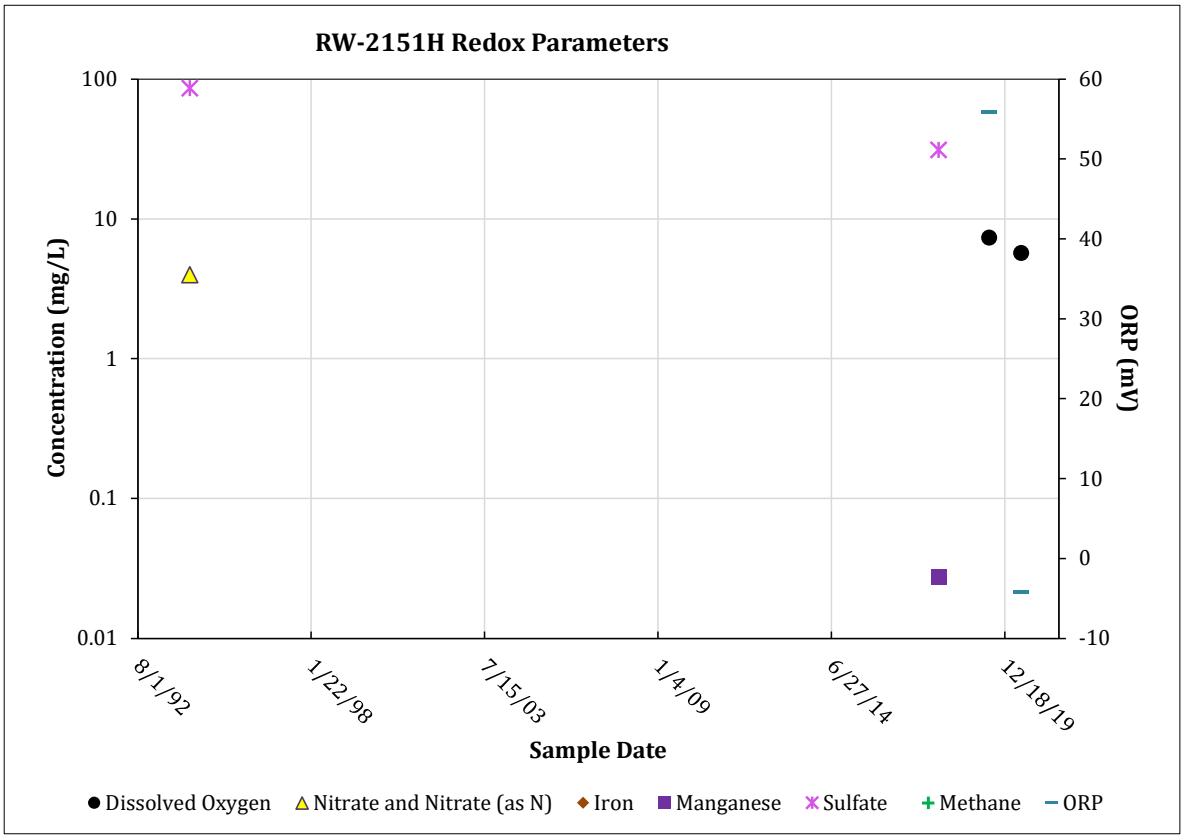

RW-2140H Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

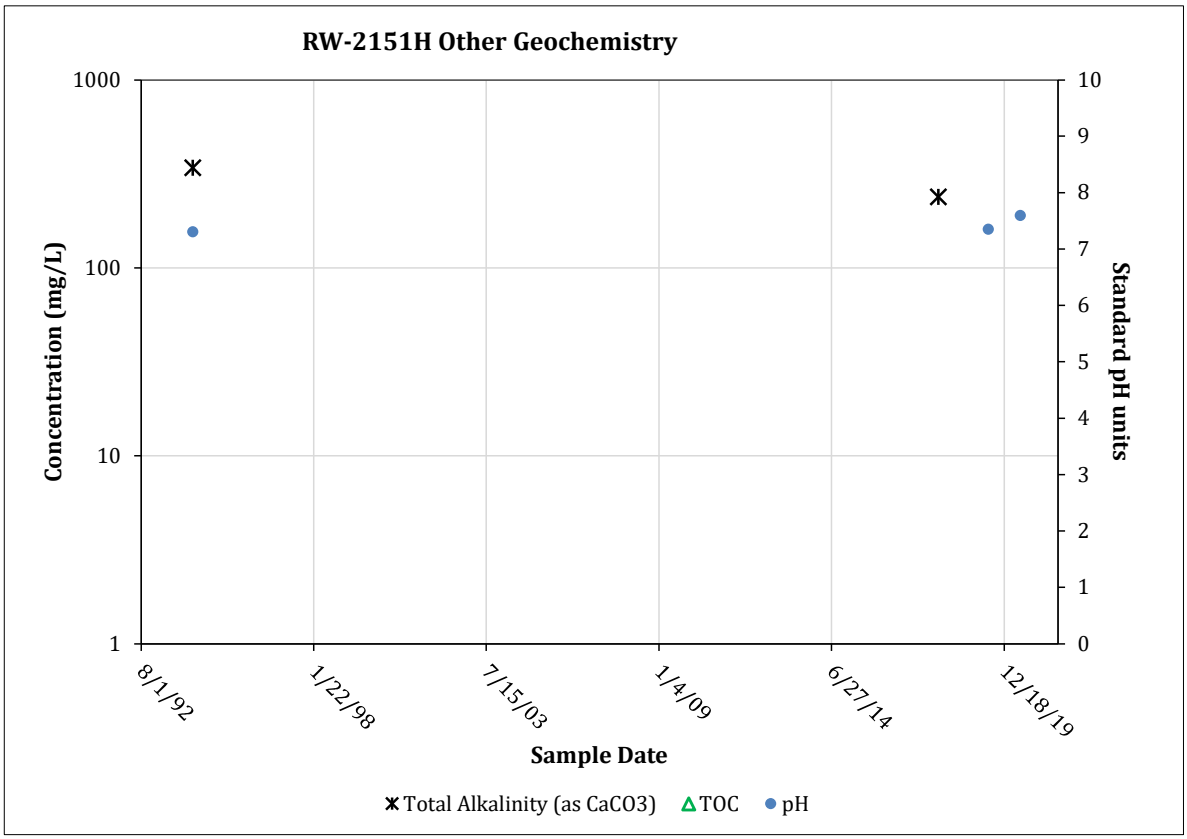


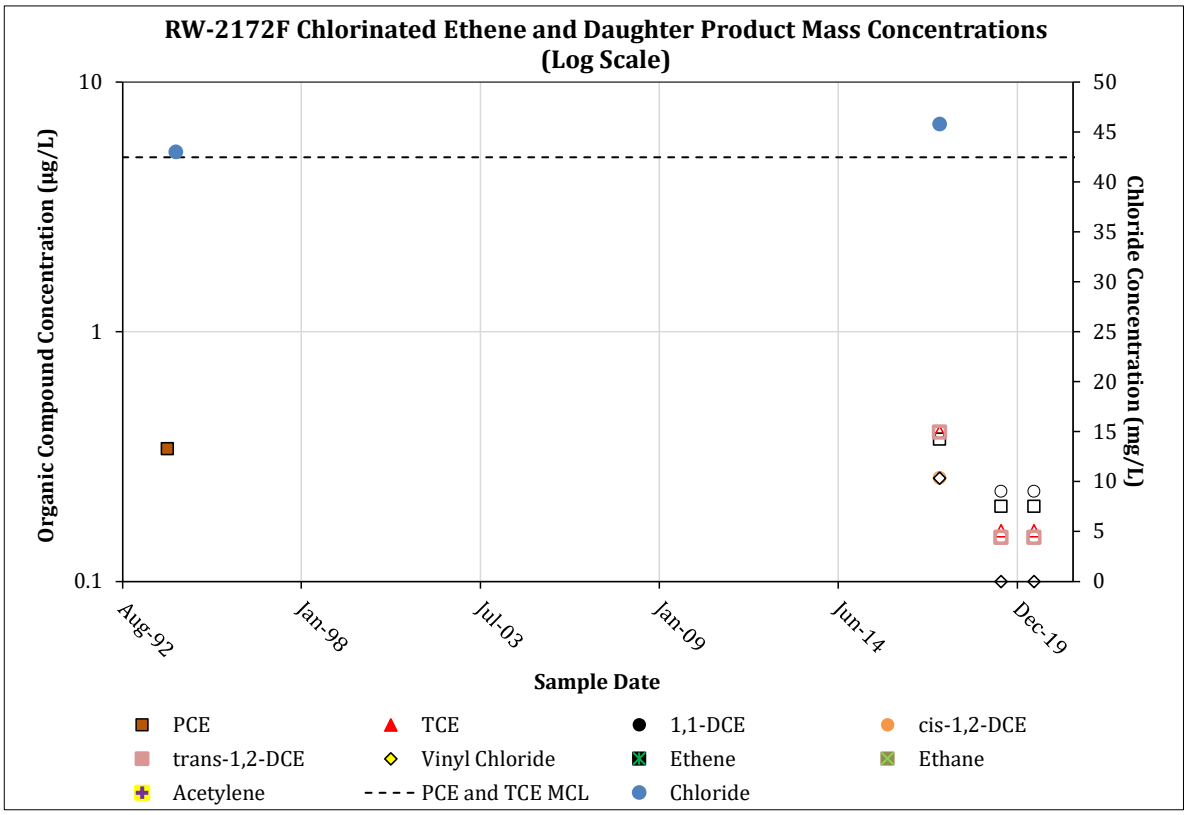


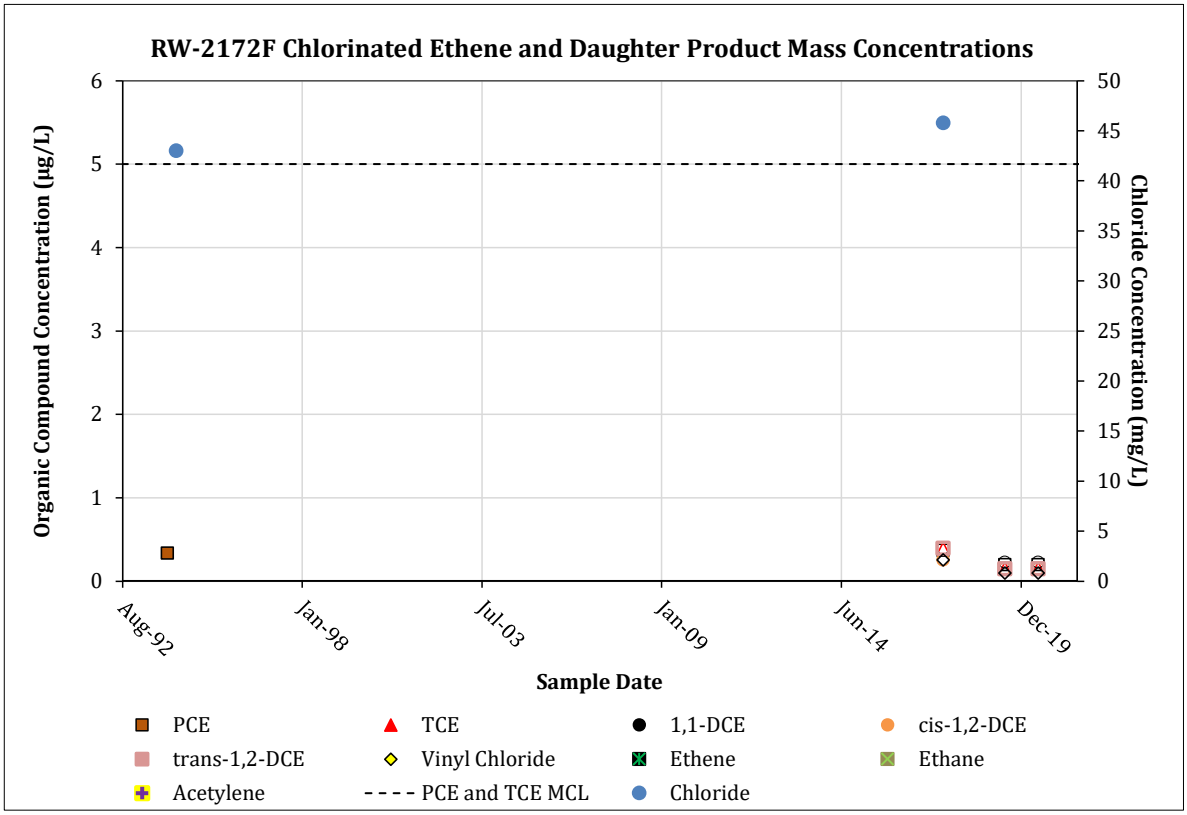
The symbol without fill designates a non-detect result.


RW-2151H Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
2.5
2
1.5
1
0.5
0
9/1/1992
1/1/1994
5/1/1995
9/1/1996
1/1/1998
5/1/1999
9/1/2000
1/1/2002
5/1/2003
9/1/2004
1/1/2006
5/1/2007
9/1/2008
1/1/2010
5/1/2011
9/1/2012
1/1/2014
5/1/2015
9/1/2016
1/1/2018
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

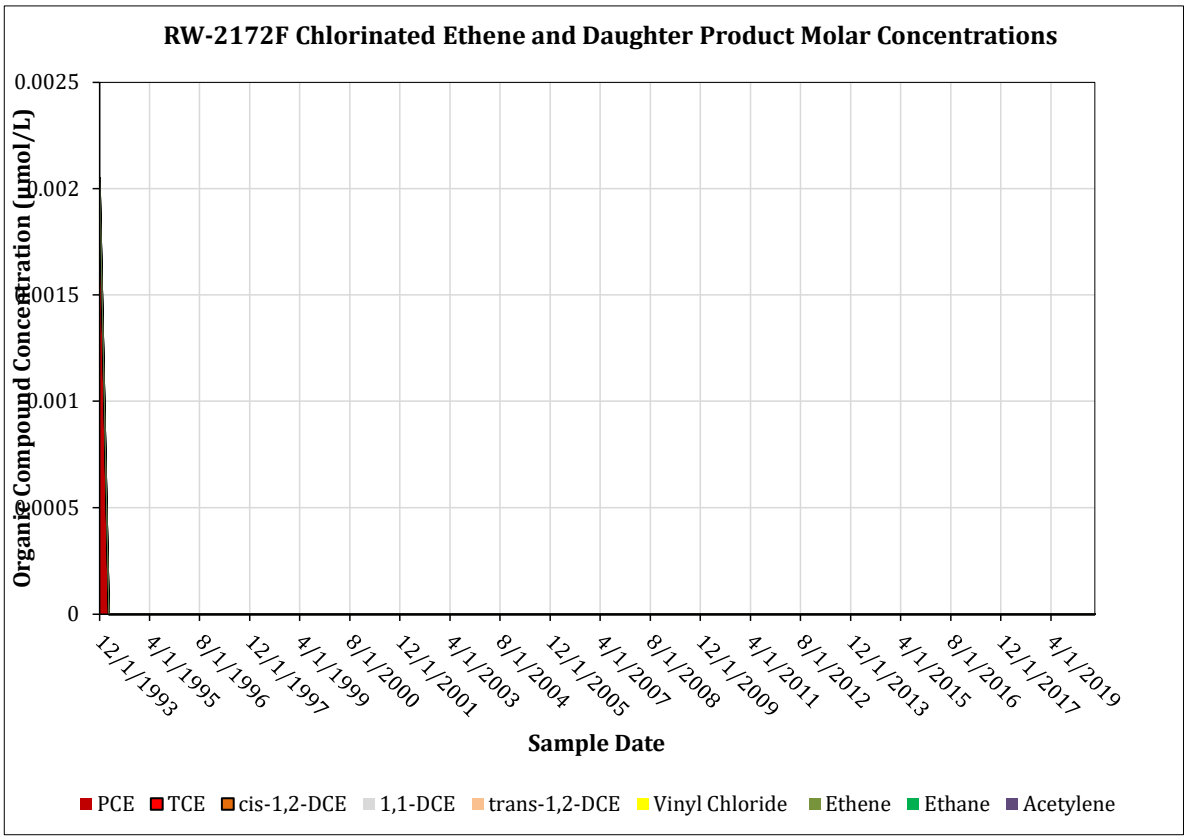

RW-2151H Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
0.01
60
50
40
30
20
10
0
-10
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

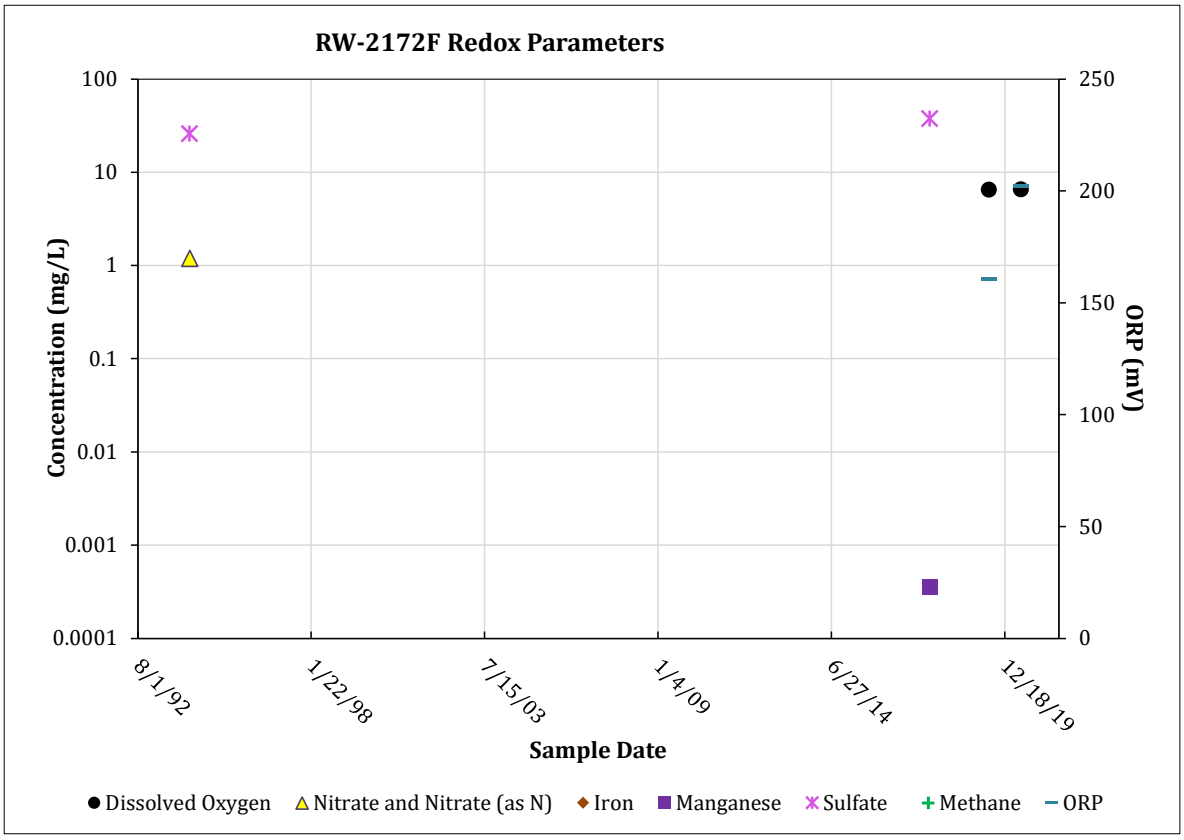

RW-2151H Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

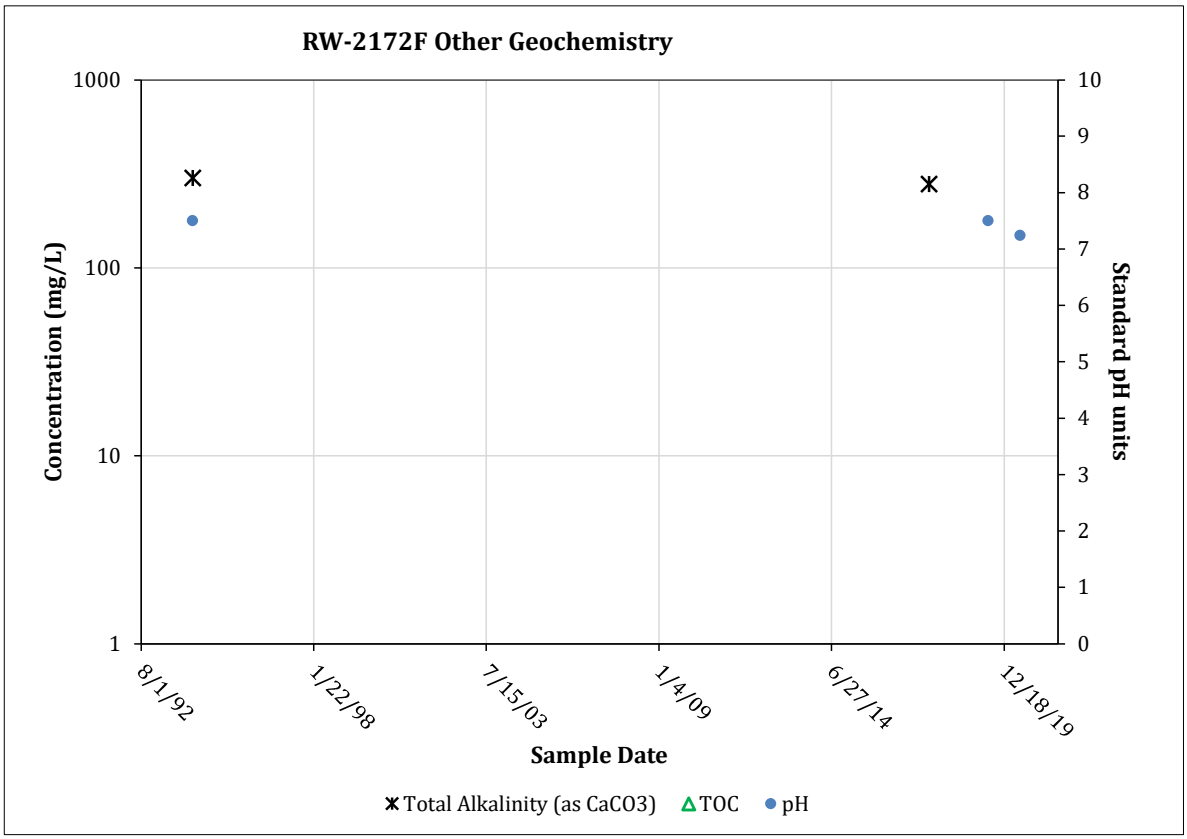


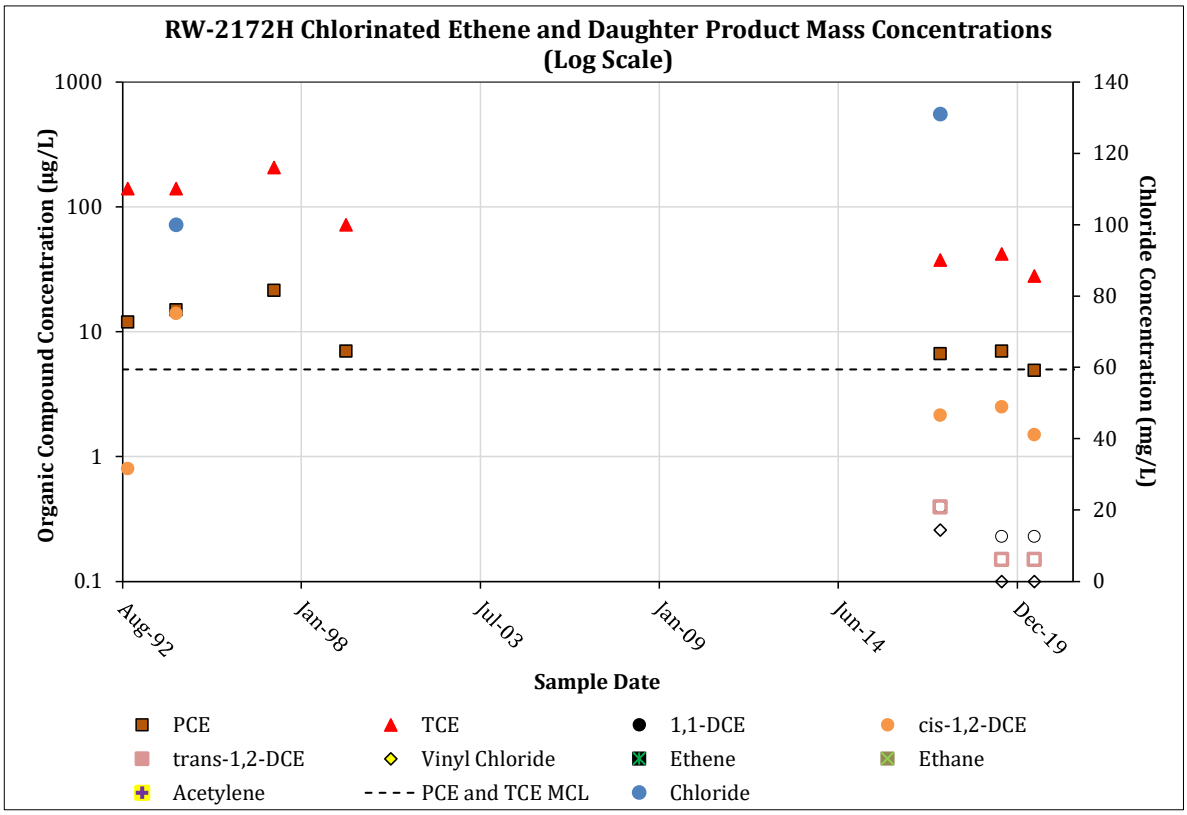


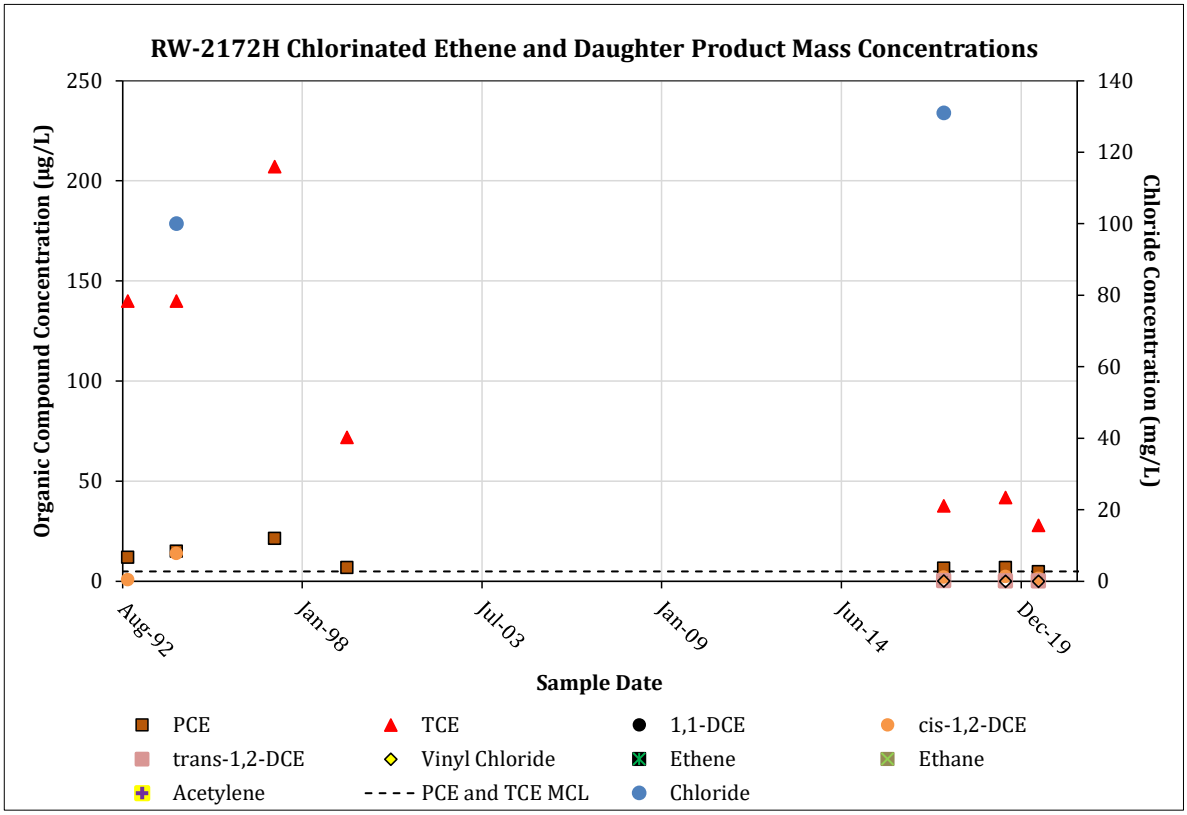
The symbol without fill designates a non-detect result.


RW-2172F Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.0025
0.002
0.0015
0.001
0.0005
0
12/1/1993
4/1/1995
8/1/1996
12/1/1997
4/1/1999
8/1/2000
12/1/2001
4/1/2003
8/1/2004
12/1/2005
4/1/2007
8/1/2008
12/1/2009
4/1/2011
8/1/2012
12/1/2013
4/1/2015
8/1/2016
12/1/2017
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

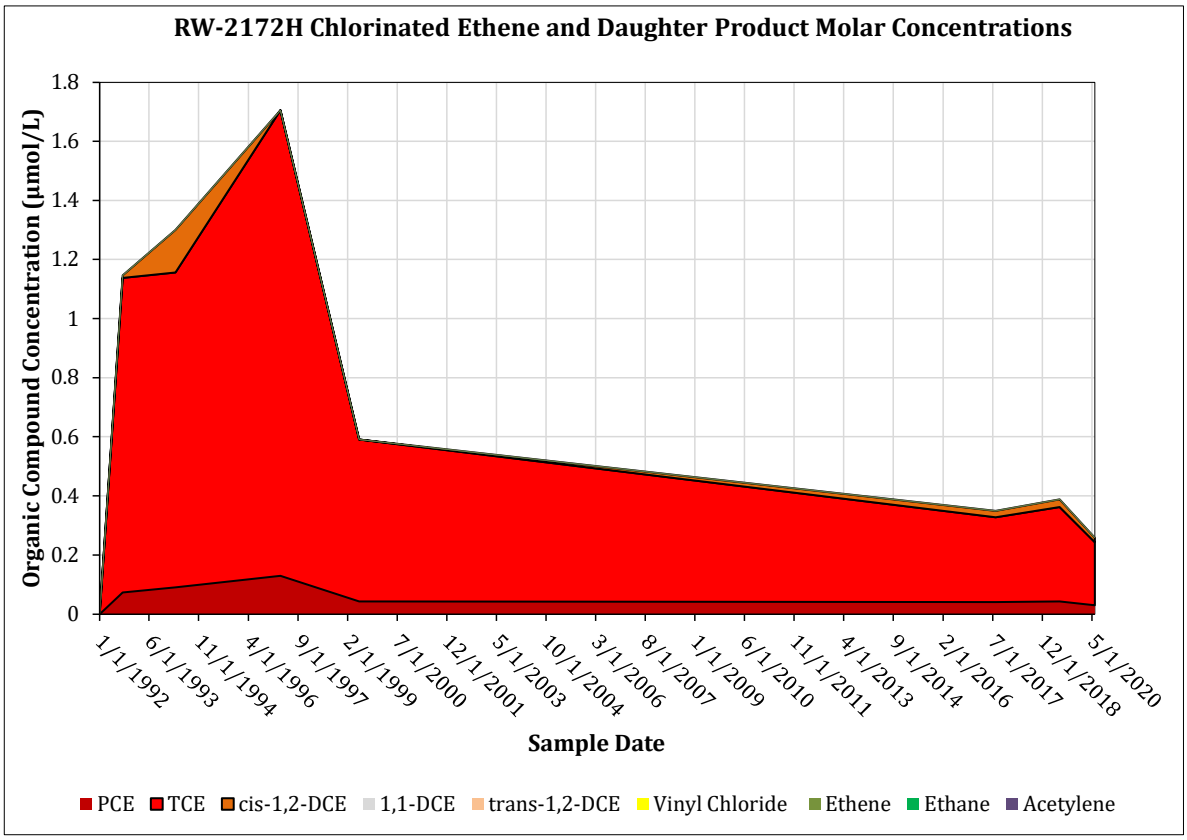

RW-2172F Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
250
200
150
100
50
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

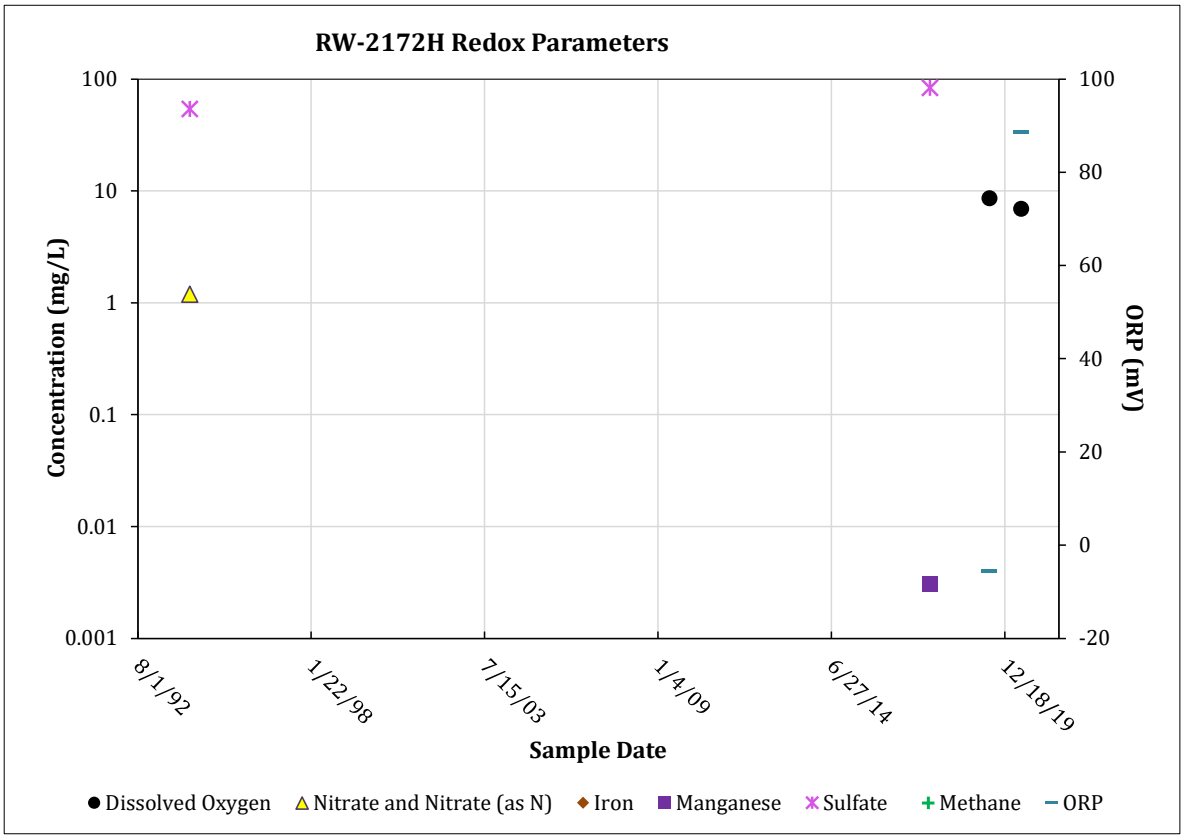

RW-2172F Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

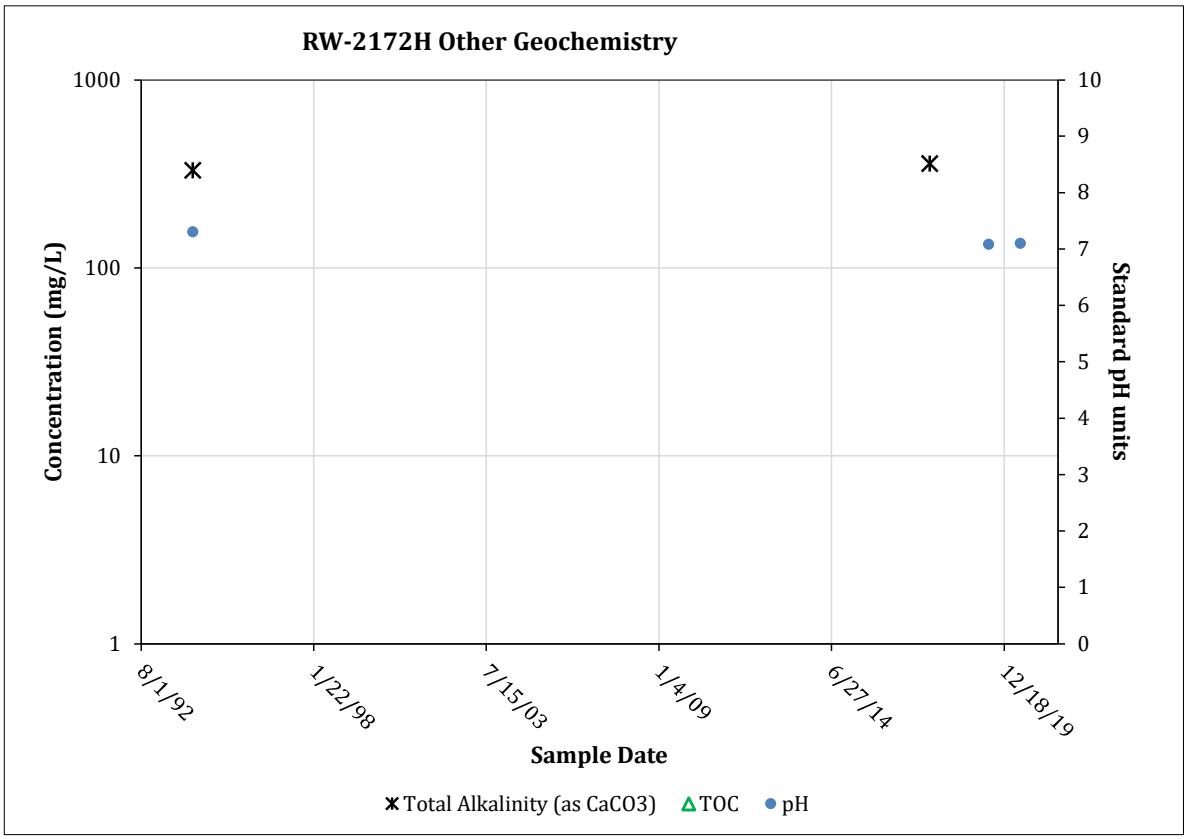


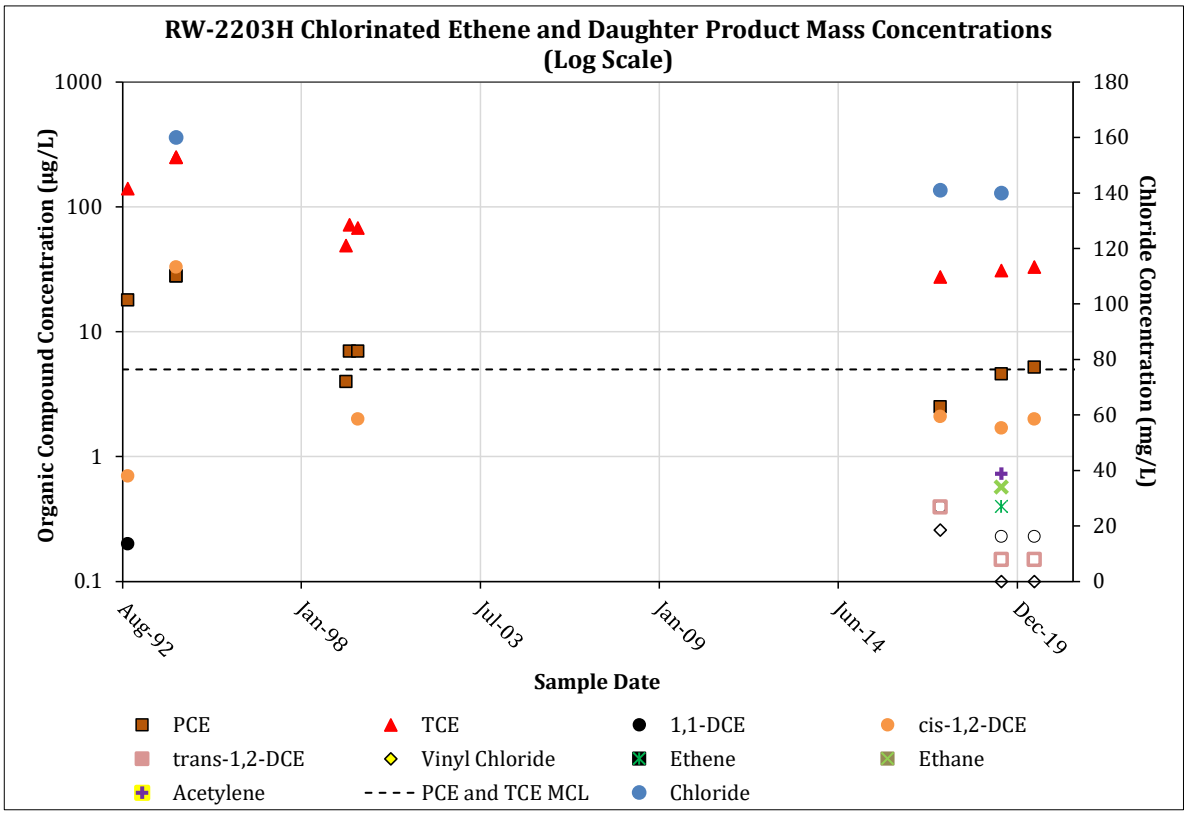


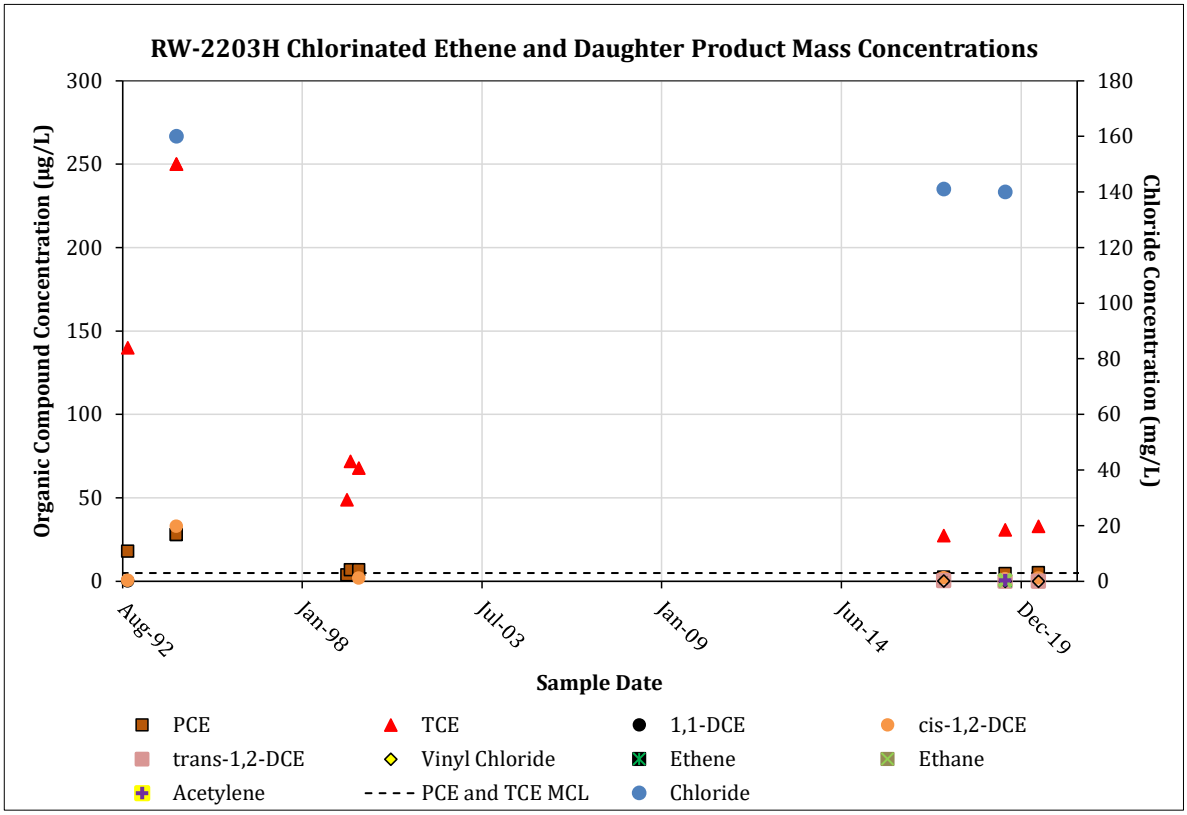
The symbol without fill designates a non-detect result.


RW-2172H Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1/1/1992
6/1/1993
11/1/1994
4/1/1996
9/1/1997
2/1/1999
7/1/2000
12/1/2001
5/1/2003
10/1/2004
3/1/2006
8/1/2007
1/1/2009
6/1/2010
11/1/2011
4/1/2013
9/1/2014
2/1/2016
7/1/2017
12/1/2018
5/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

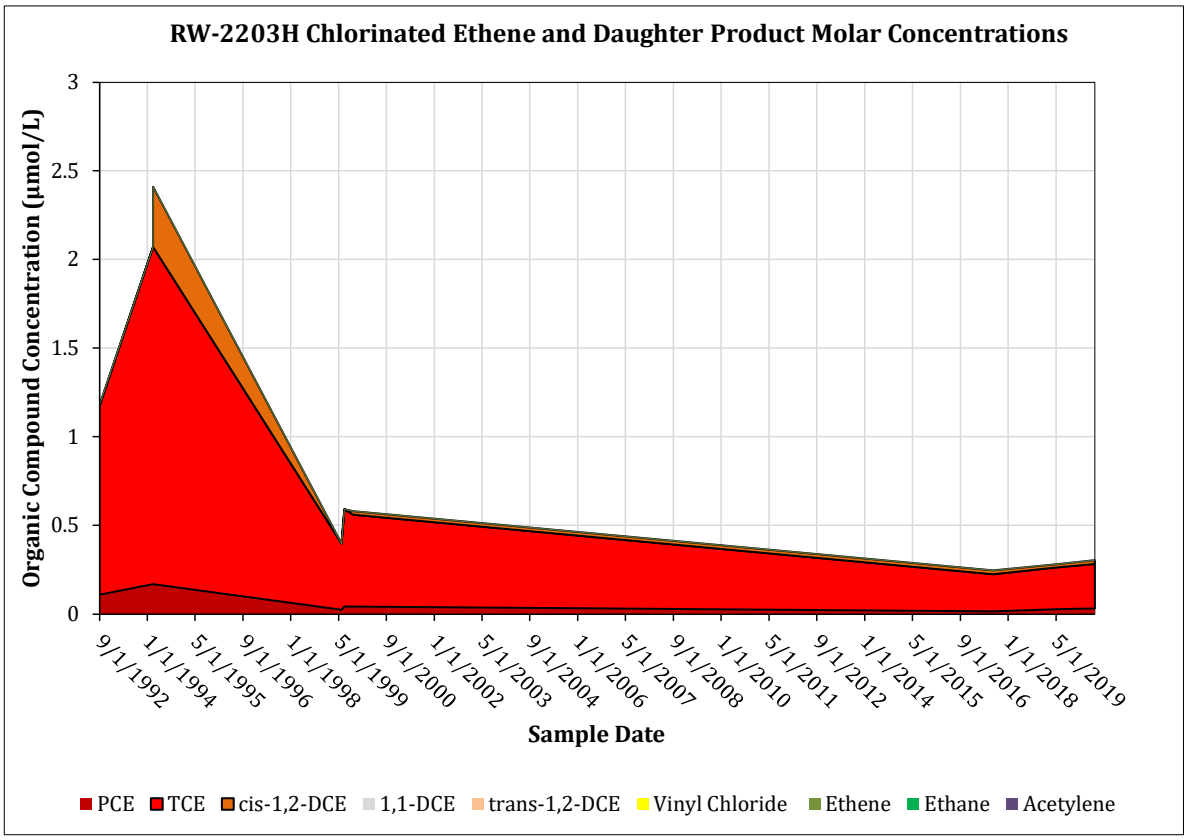

RW-2172H Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
0.01
0.001
100
80
60
40
20
0
-20
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

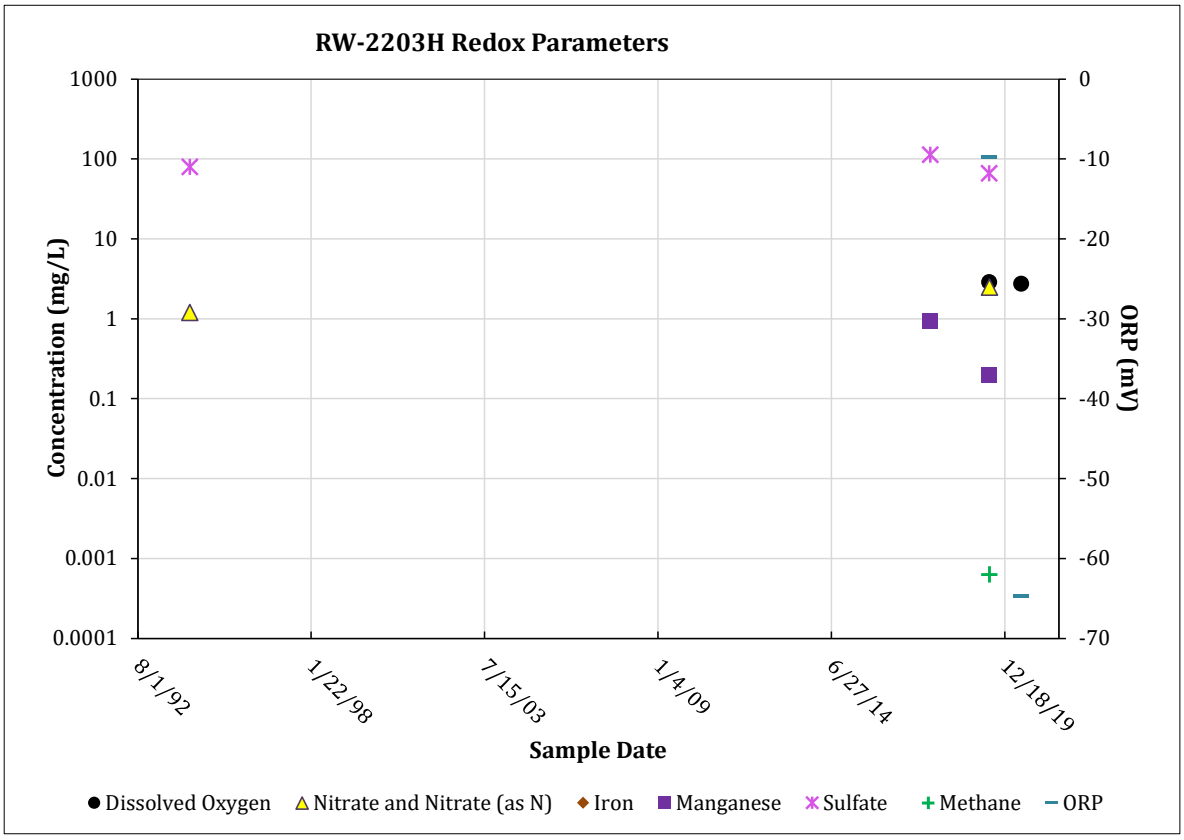

RW-2172H Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

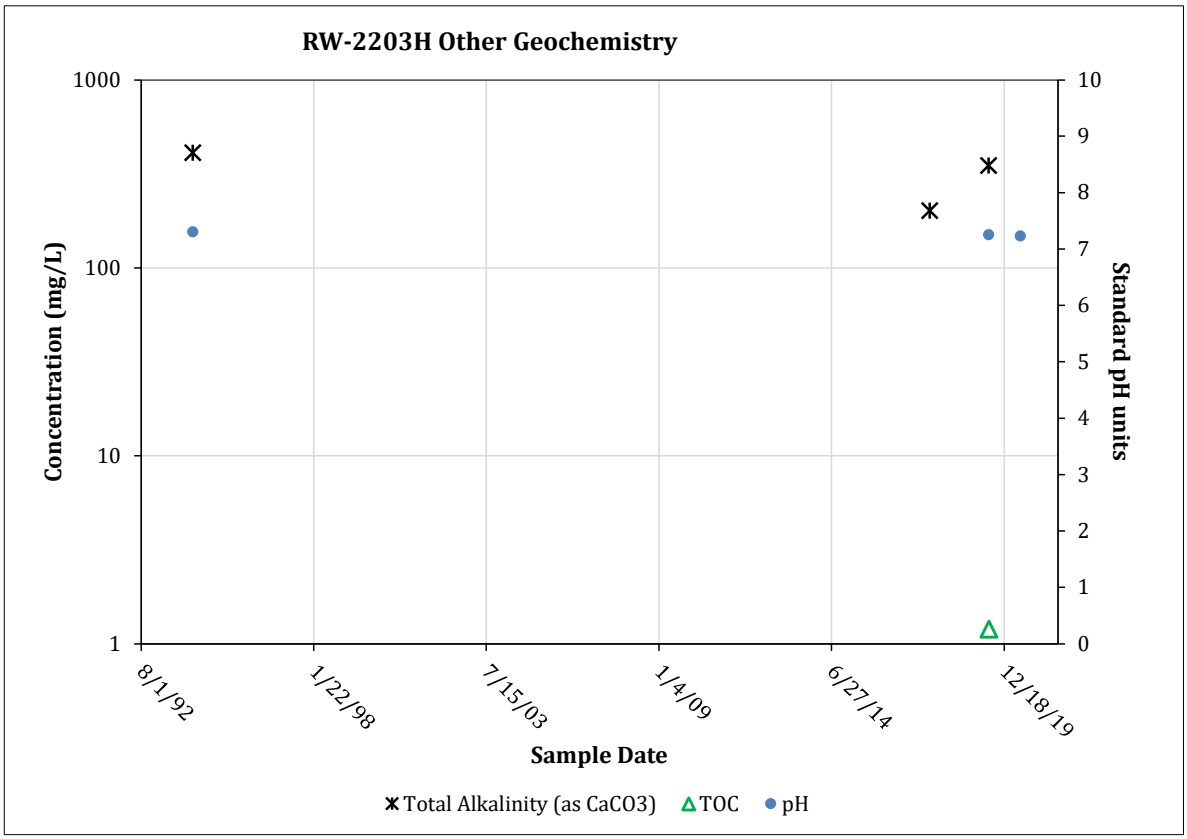


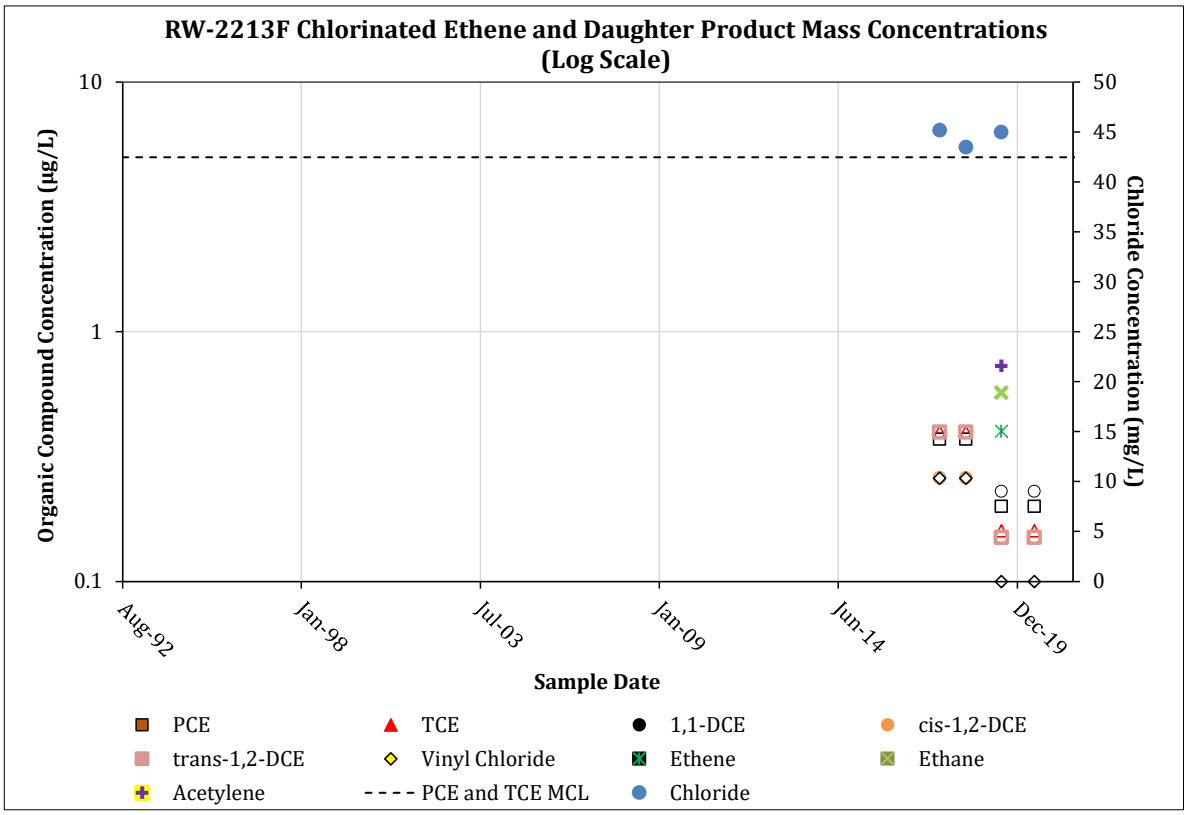


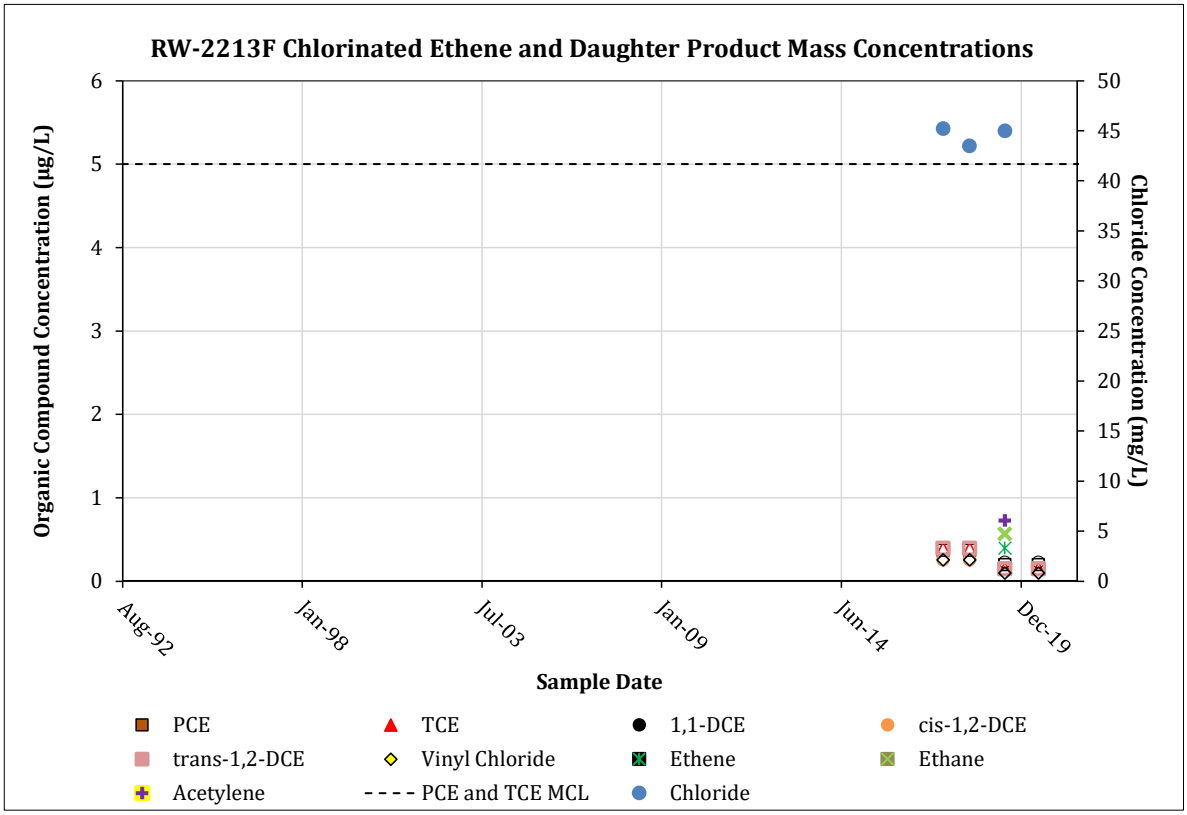
The symbol without fill designates a non-detect result.


RW-2203H Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
3
2.5
2
1.5
1
0.5
0
9/1/1992
1/1/1994
5/1/1995
9/1/1996
1/1/1998
5/1/1999
9/1/2000
1/1/2002
5/1/2003
9/1/2004
1/1/2006
5/1/2007
9/1/2008
1/1/2010
5/1/2011
9/1/2012
1/1/2014
5/1/2015
9/1/2016
1/1/2018
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

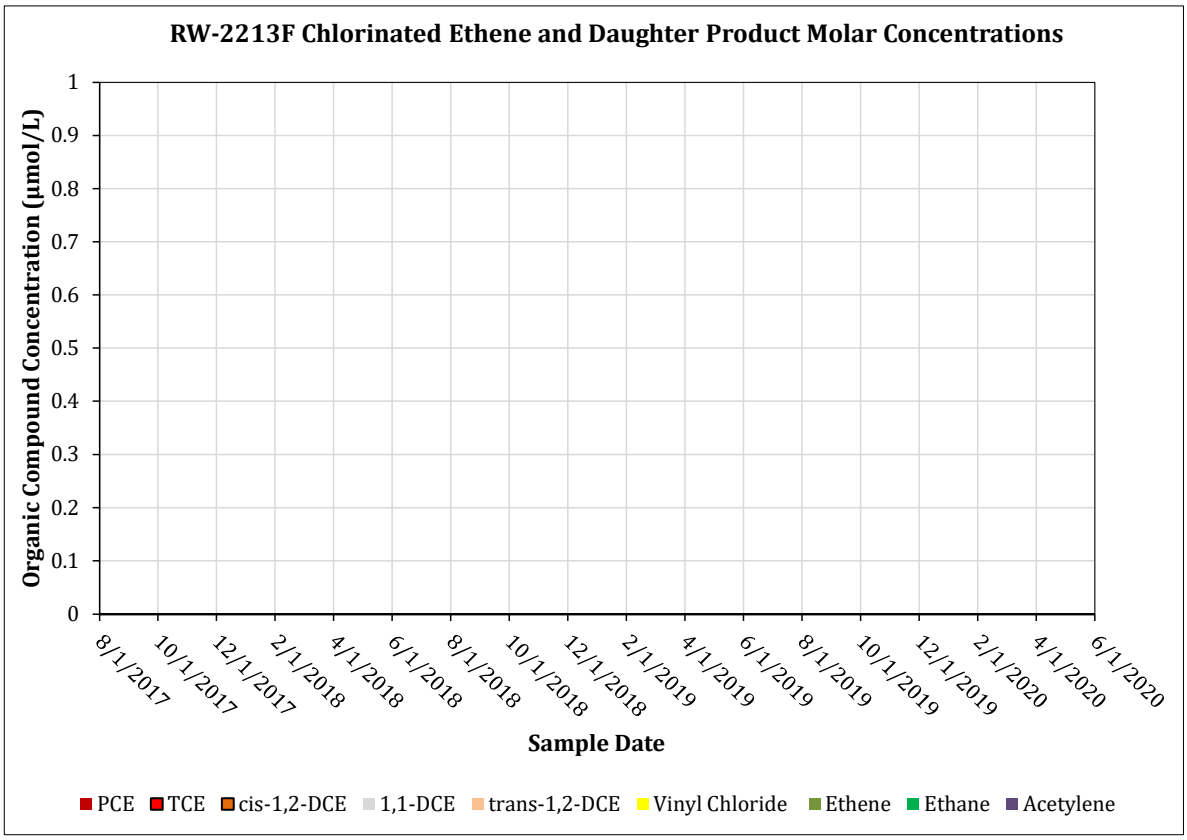

RW-2203H Redox Parameters
Concentration (mg/L)
ORP (mV)
1000
100
10
1
0.1
0.01
0.001
0.0001
0
-10
-20
-30
-40
-50
-60
-70
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

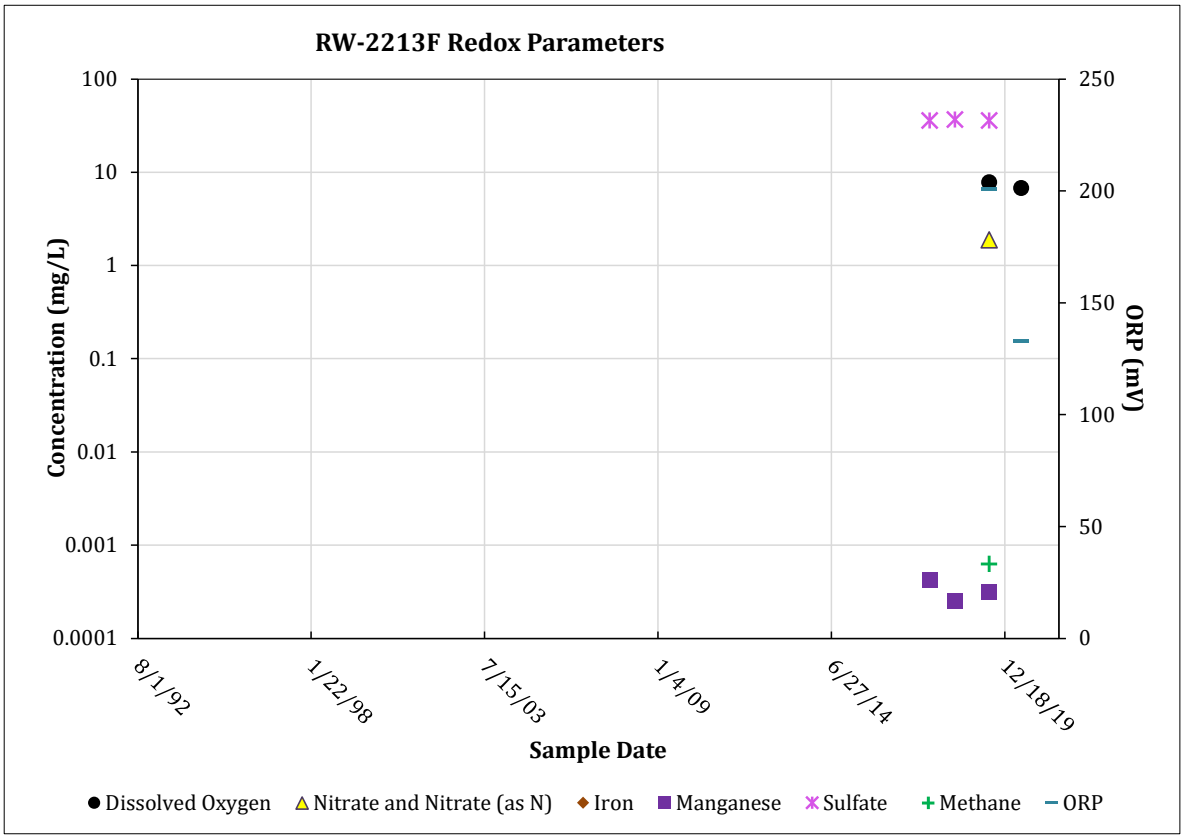

RW-2203H Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

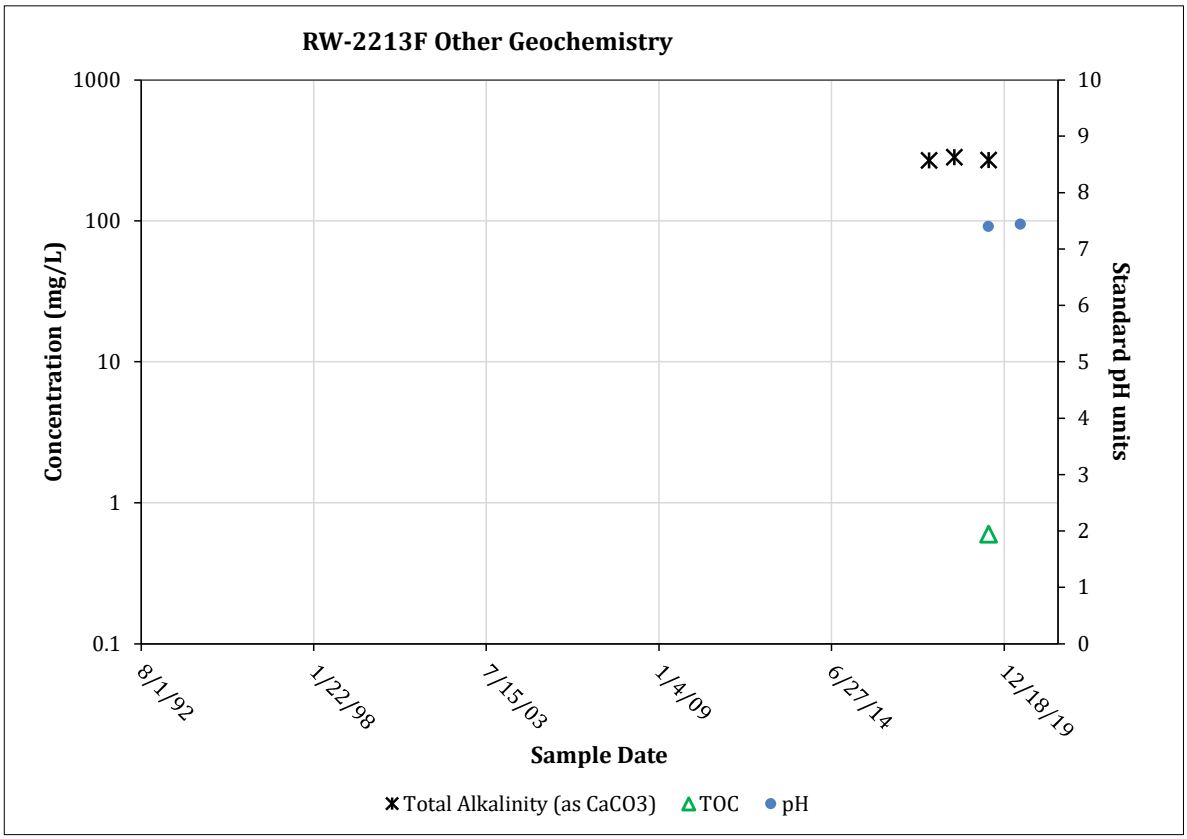


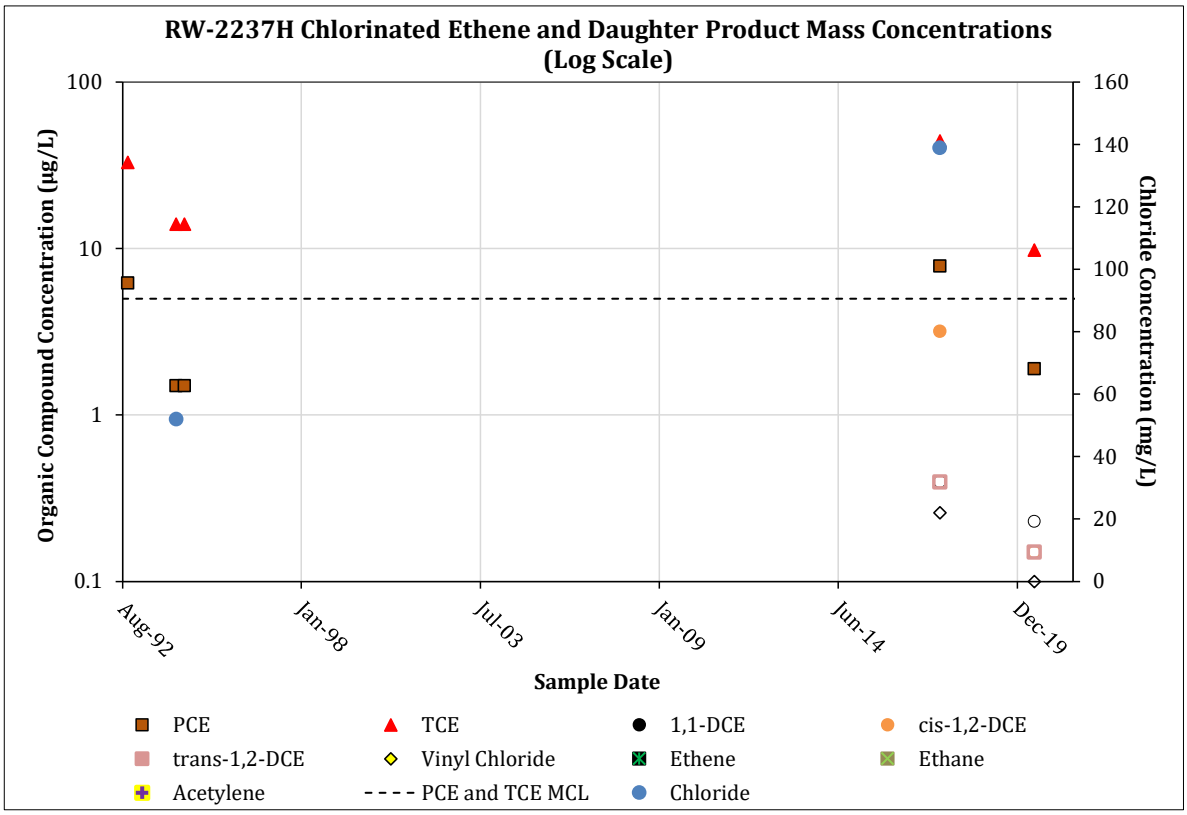


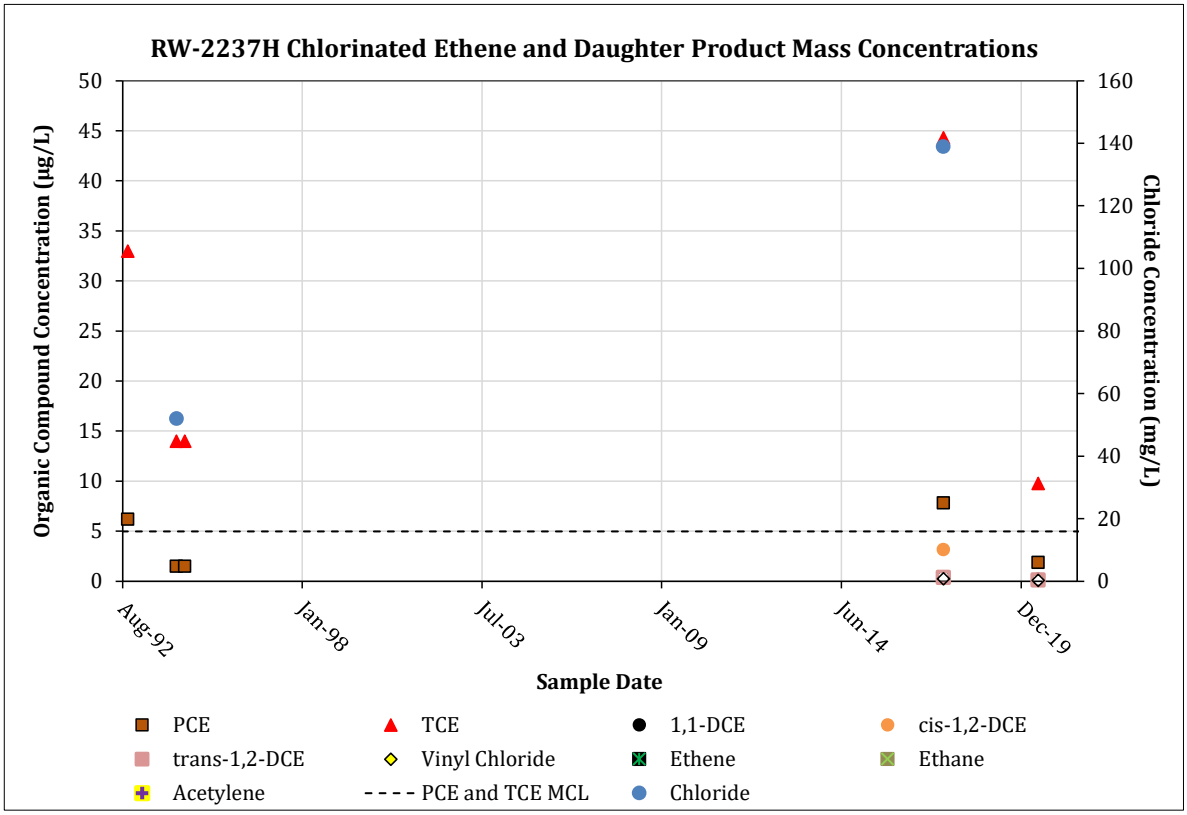
The symbol without fill designates a non-detect result.


RW-2213F Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

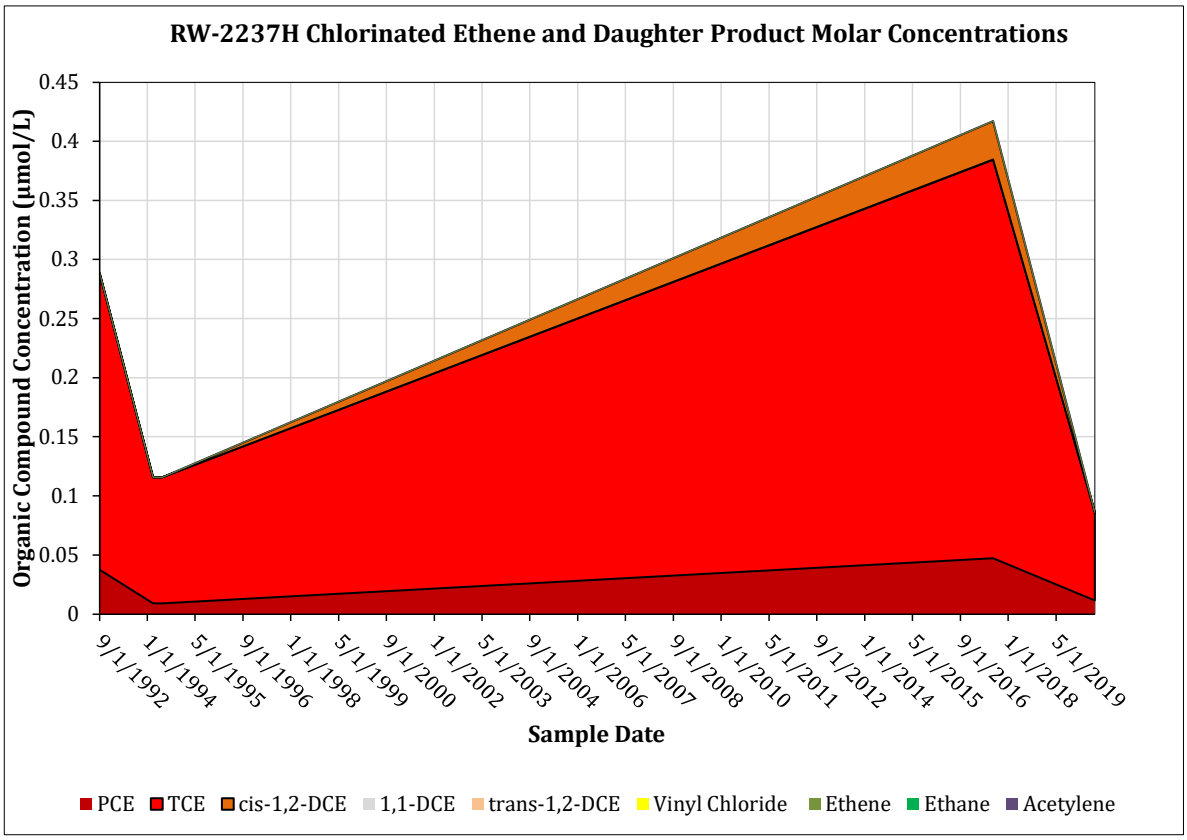

RW-2213F Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
250
200
150
100
50
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

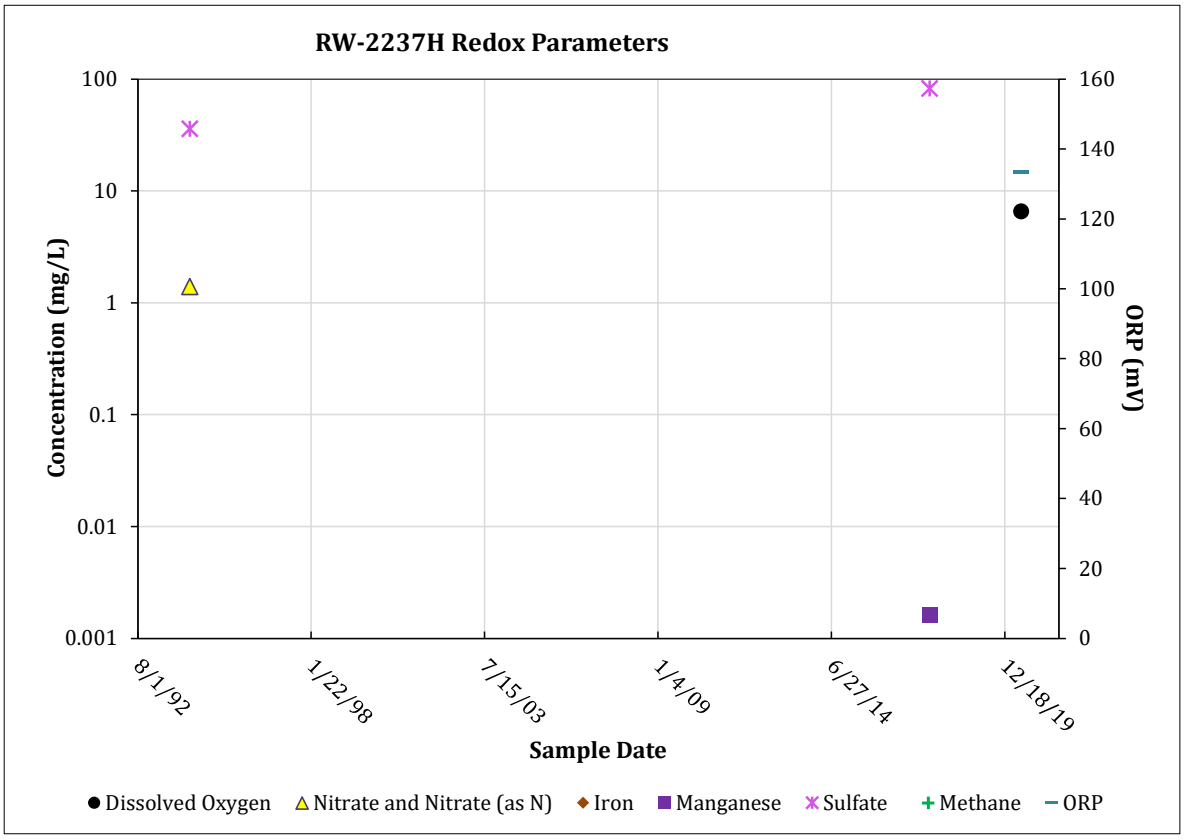

RW-2213F Other Geochemistry
Concentration (mg/L)
1000
100
10
1
0.1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

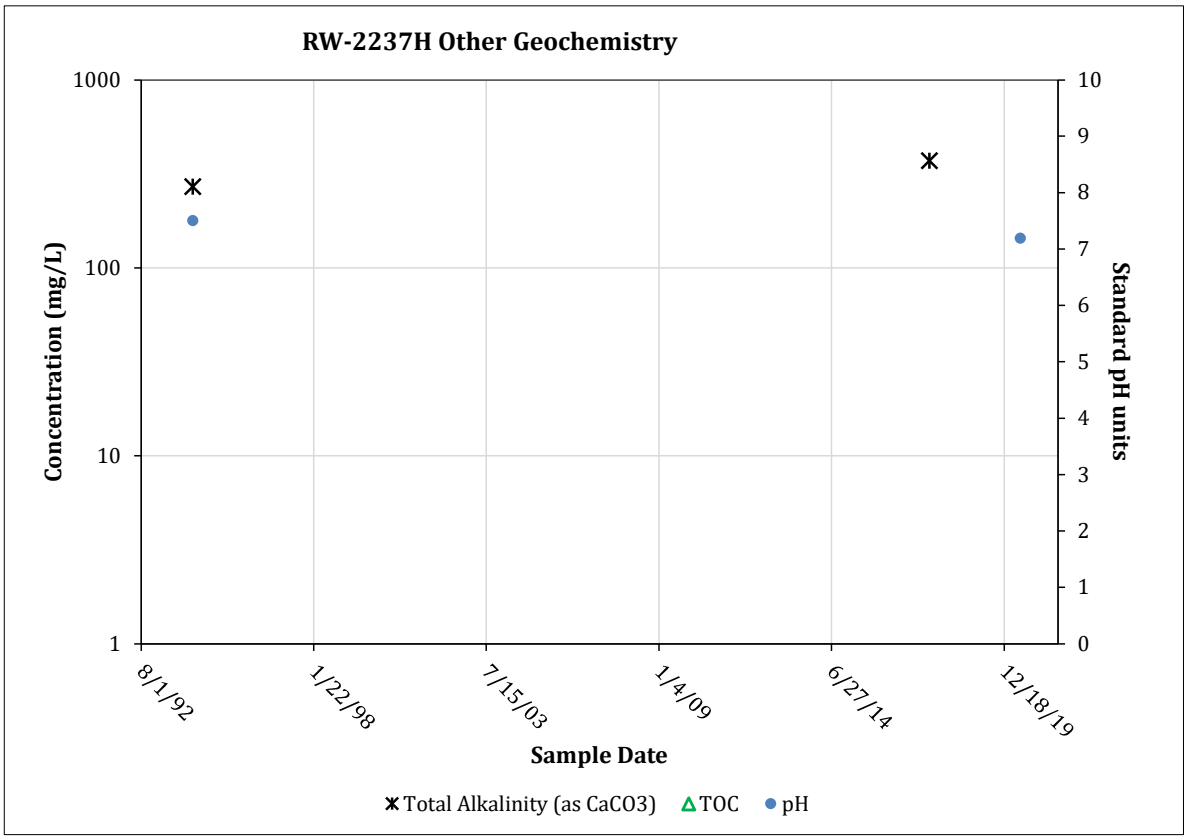


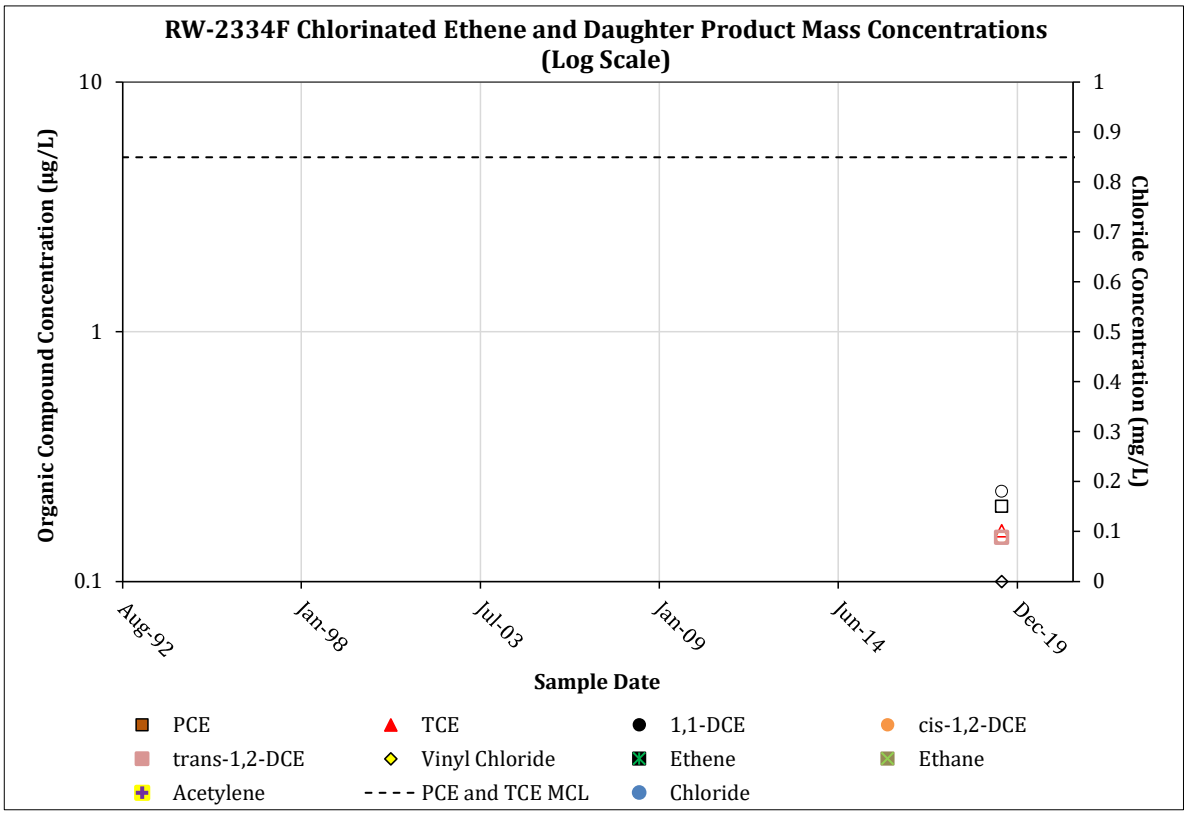


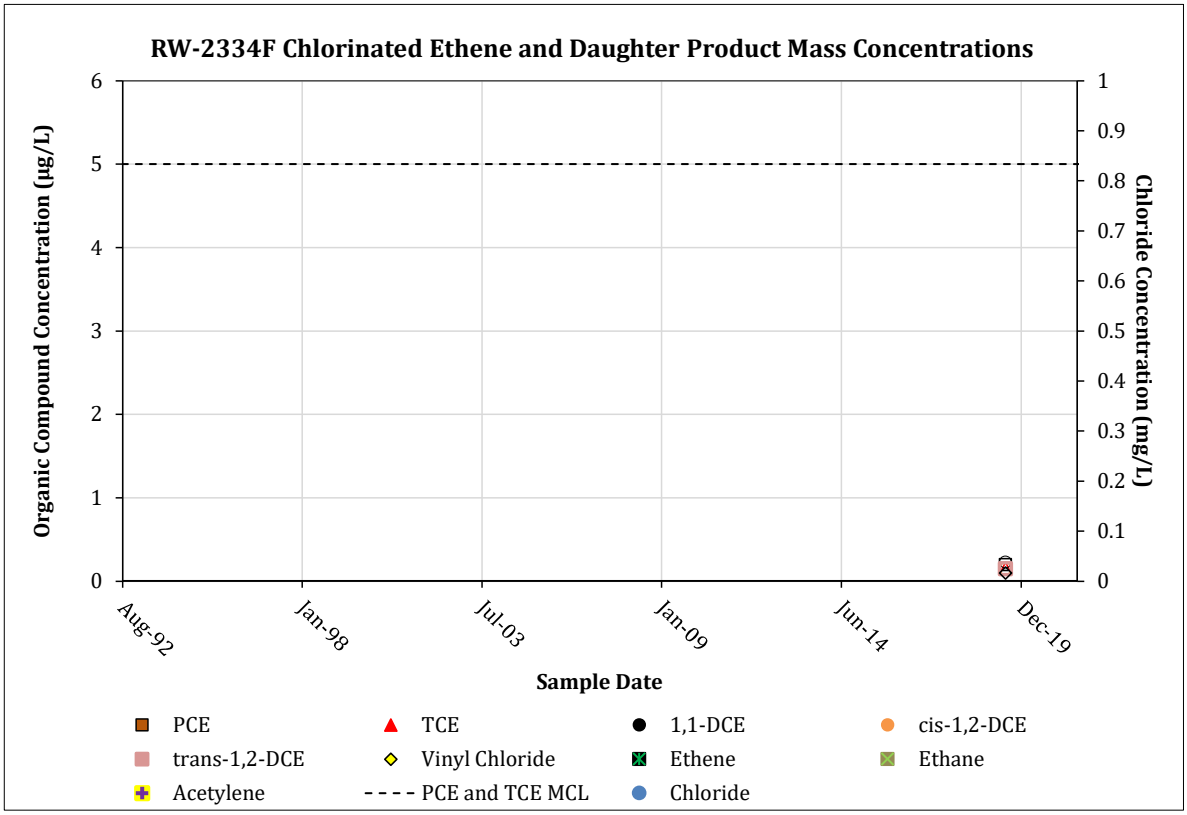
The symbol without fill designates a non-detect result.


RW-2237H Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
9/1/1992
1/1/1994
5/1/1995
9/1/1996
1/1/1998
5/1/1999
9/1/2000
1/1/2002
5/1/2003
9/1/2004
1/1/2006
5/1/2007
9/1/2008
1/1/2010
5/1/2011
9/1/2012
1/1/2014
5/1/2015
9/1/2016
1/1/2018
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

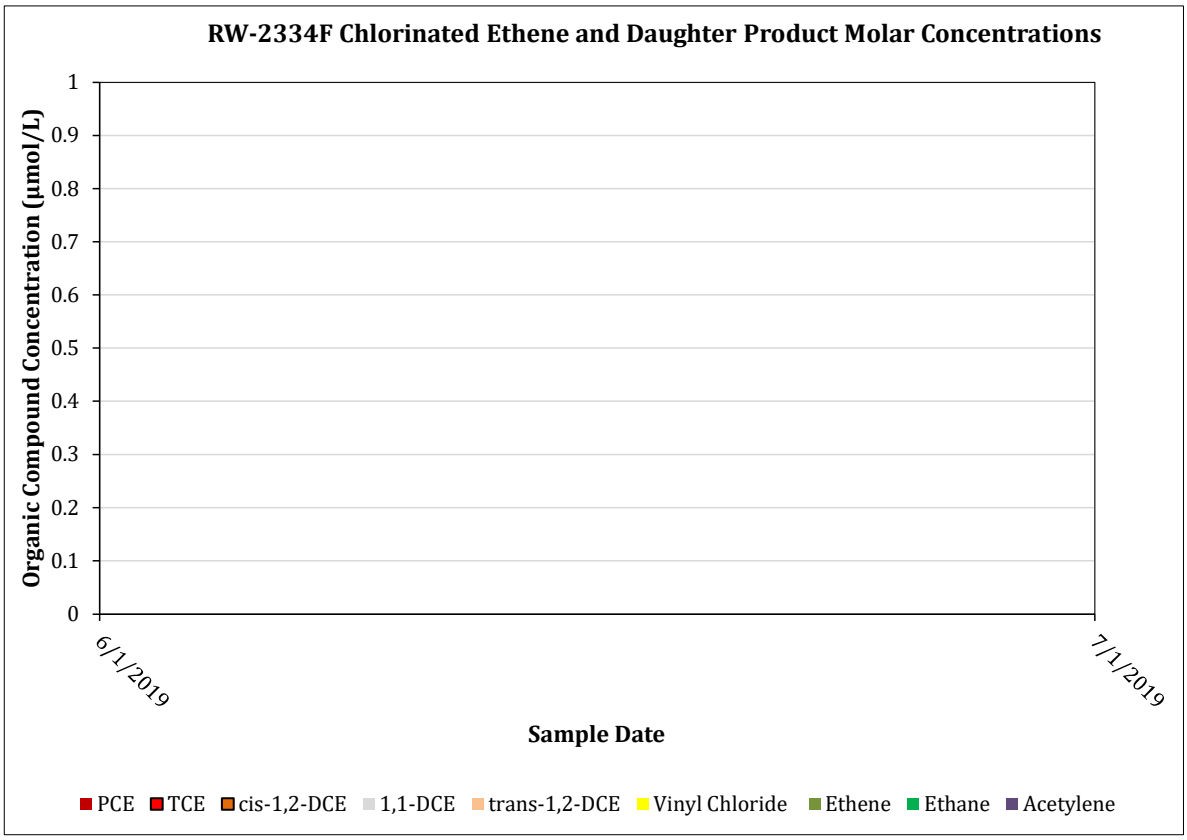

RW-2237H Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

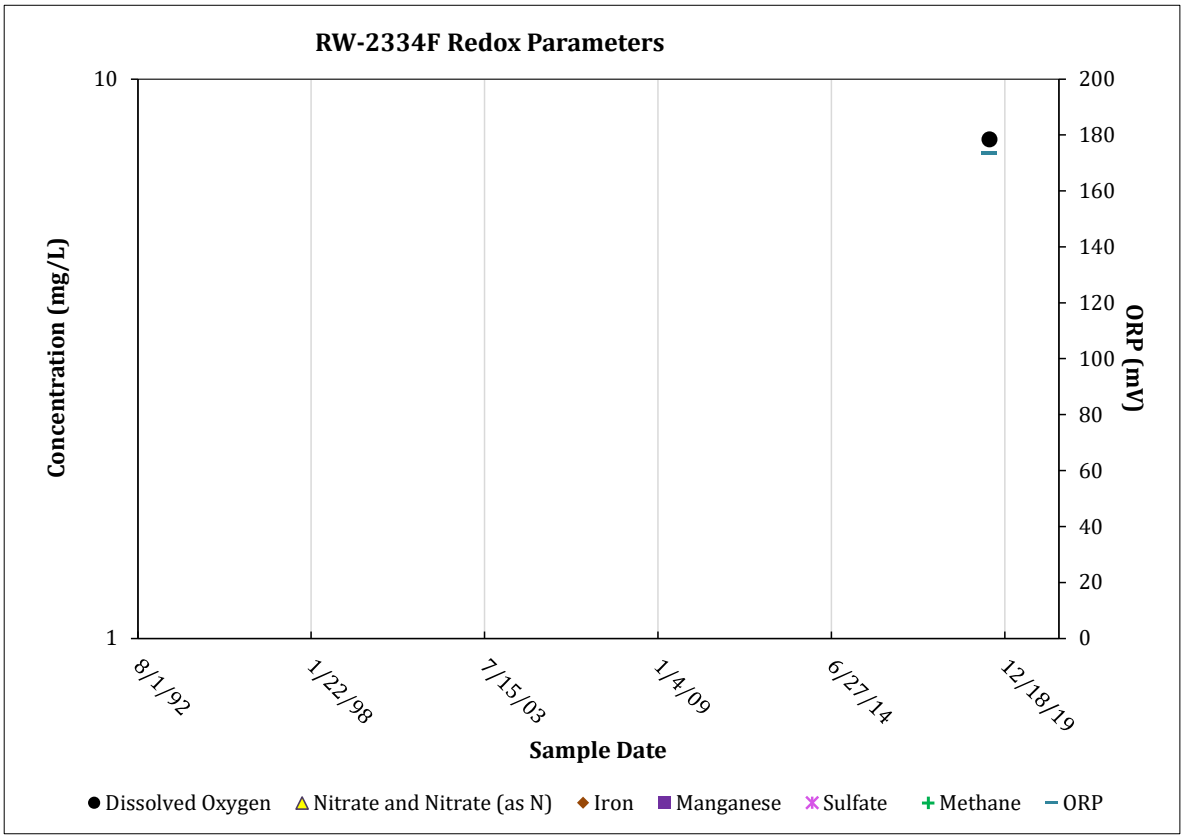

RW-2237H Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

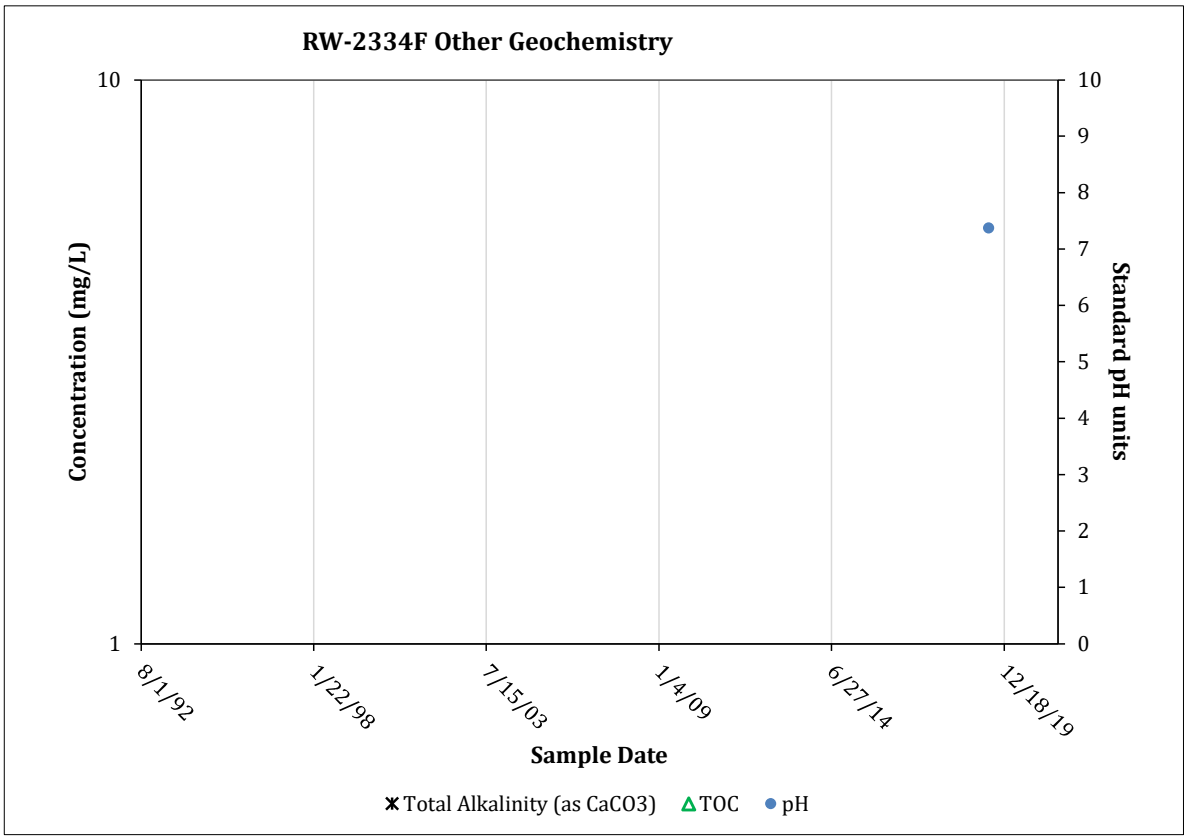


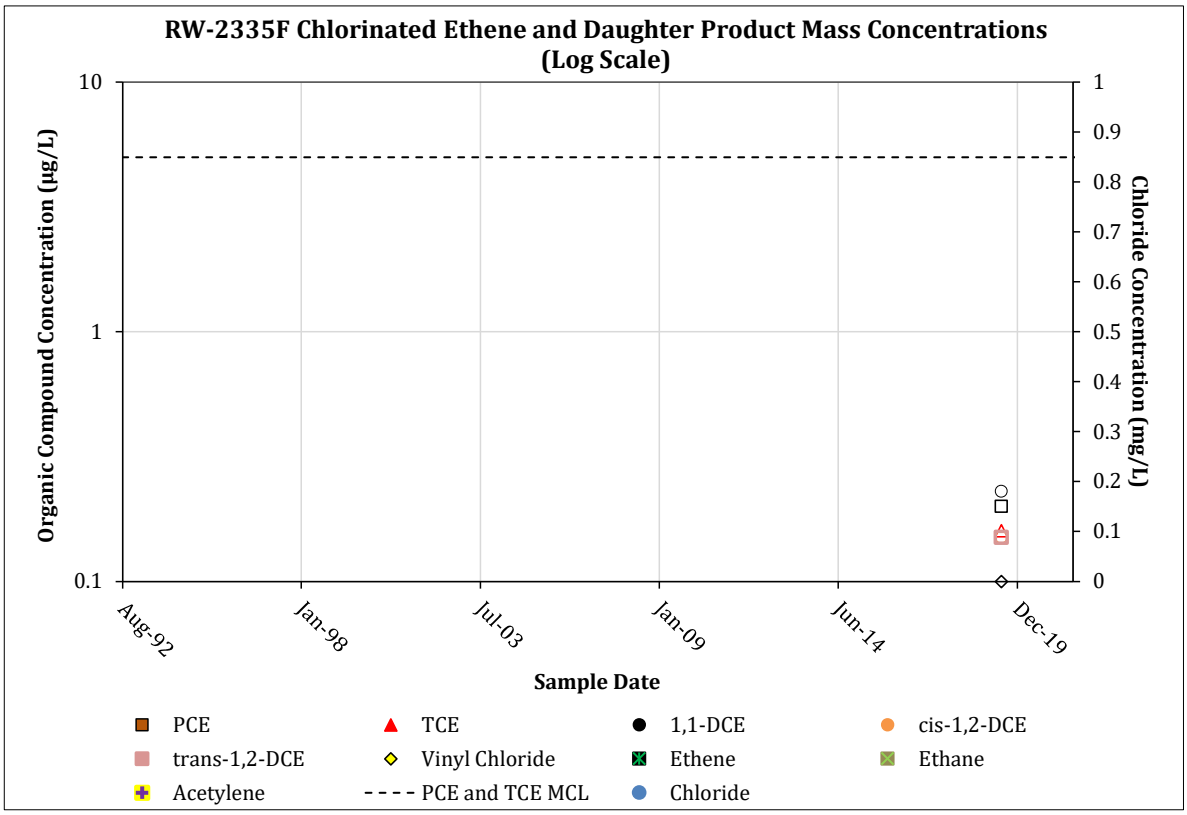


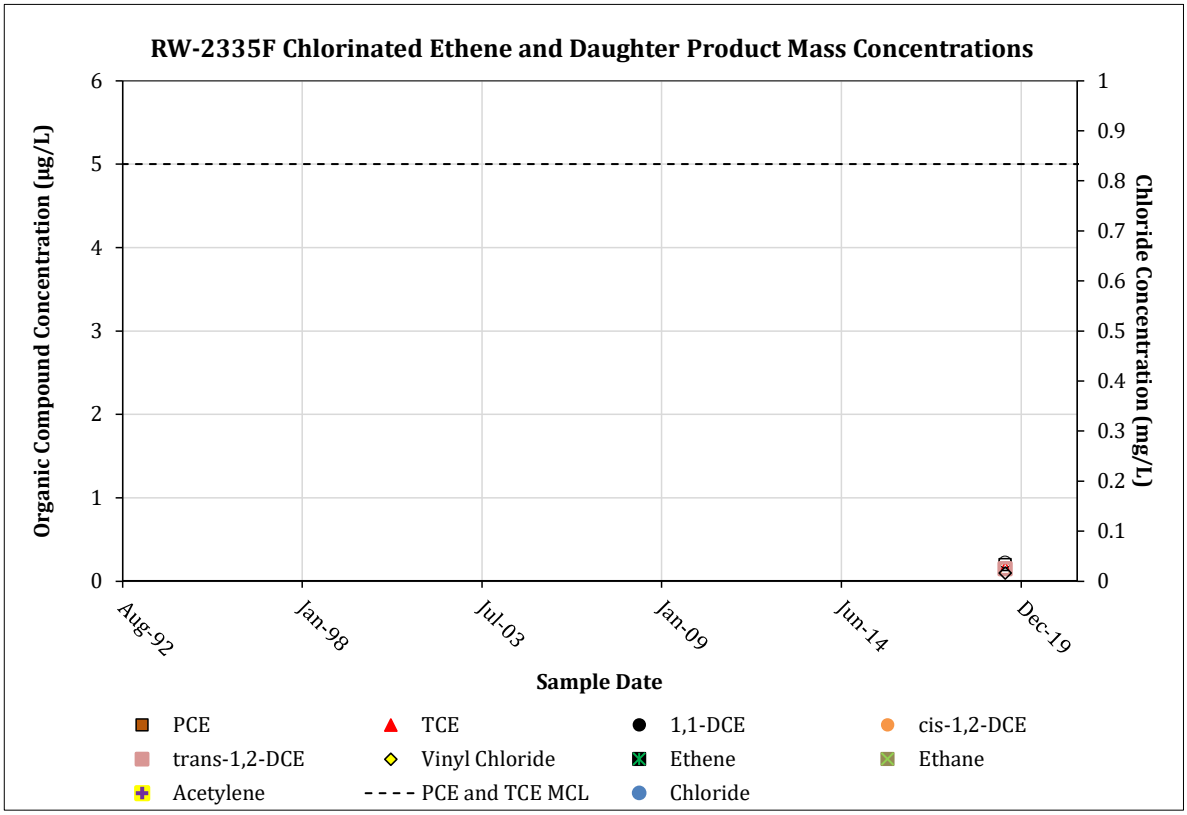
The symbol without fill designates a non-detect result.


RW-2334F Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/2019
7/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

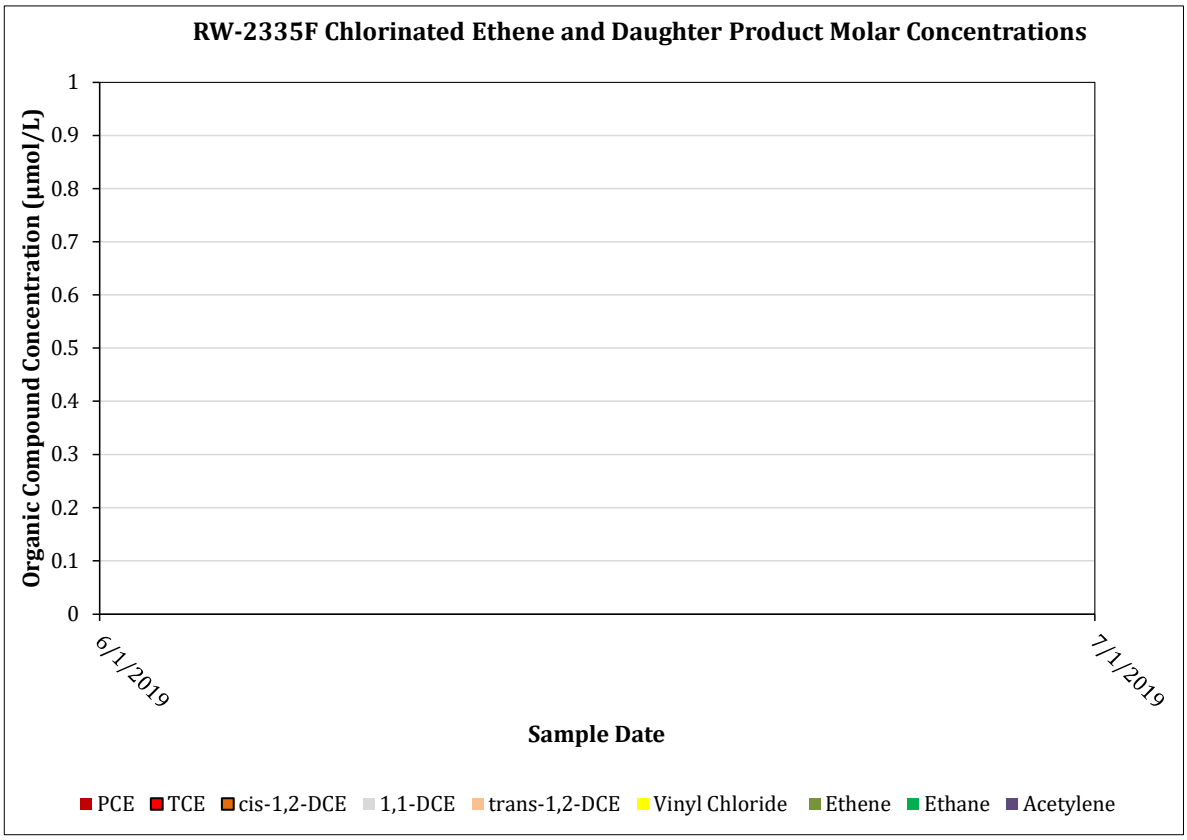

RW-2334F Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

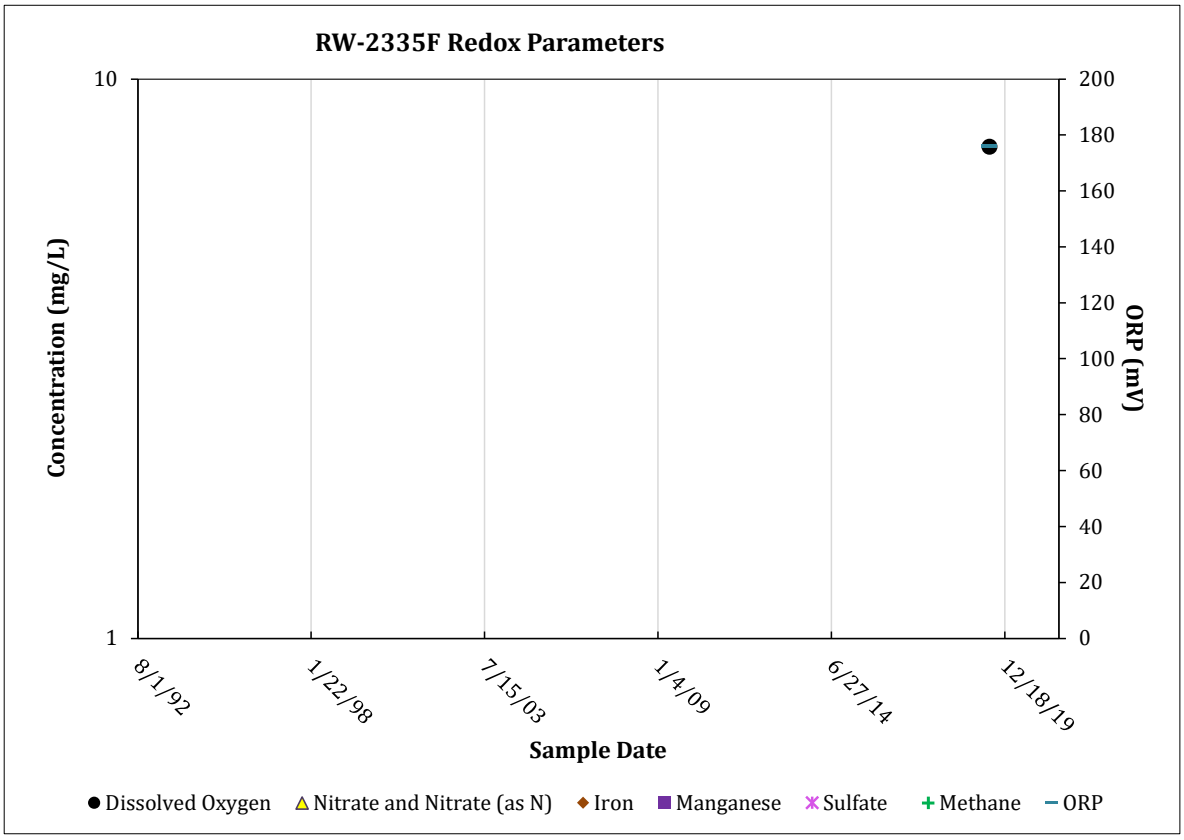

RW-2334F Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

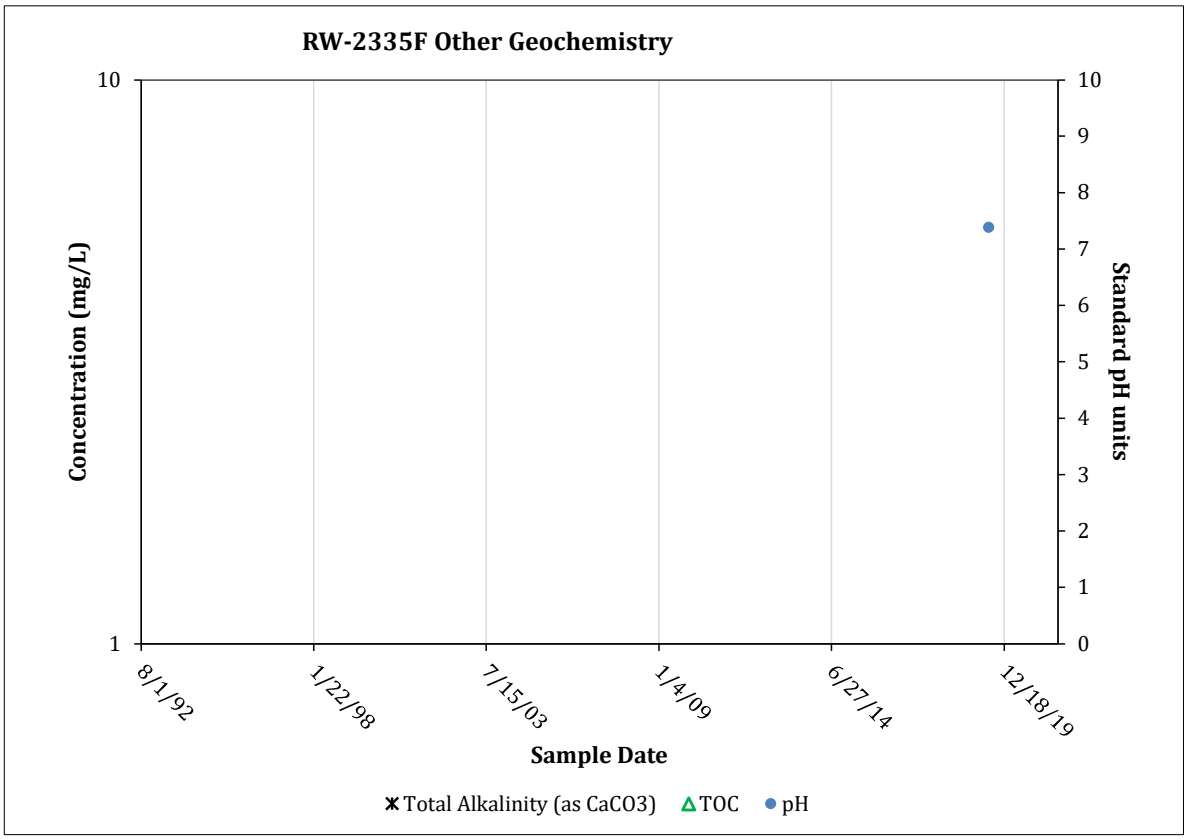


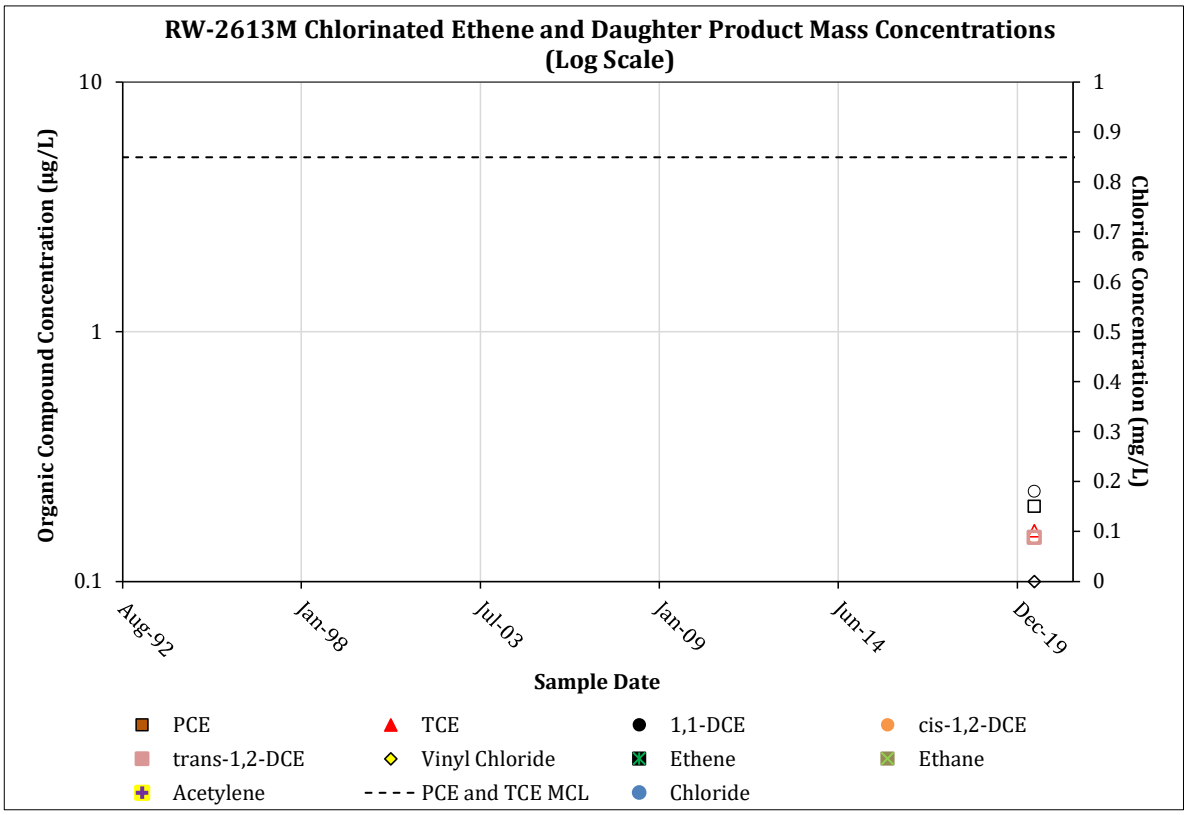


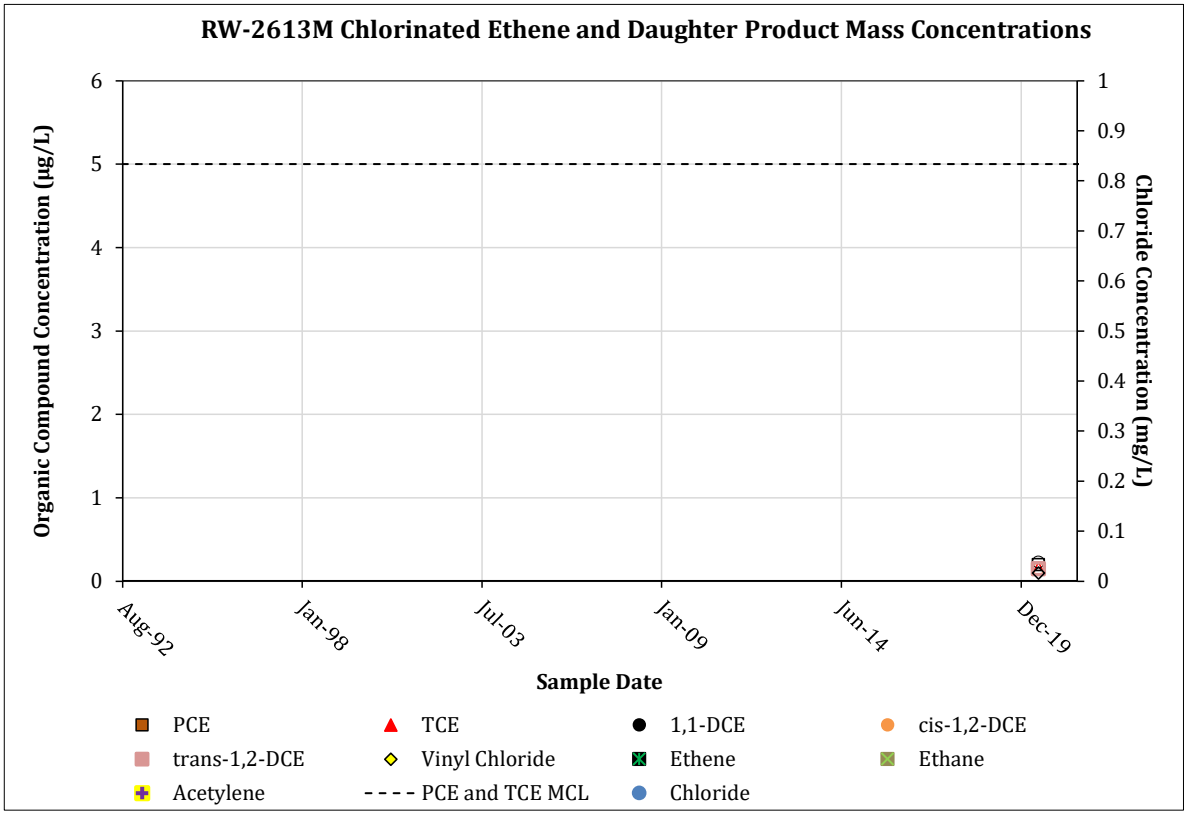
The symbol without fill designates a non-detect result.


RW-2335F Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/2019
7/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

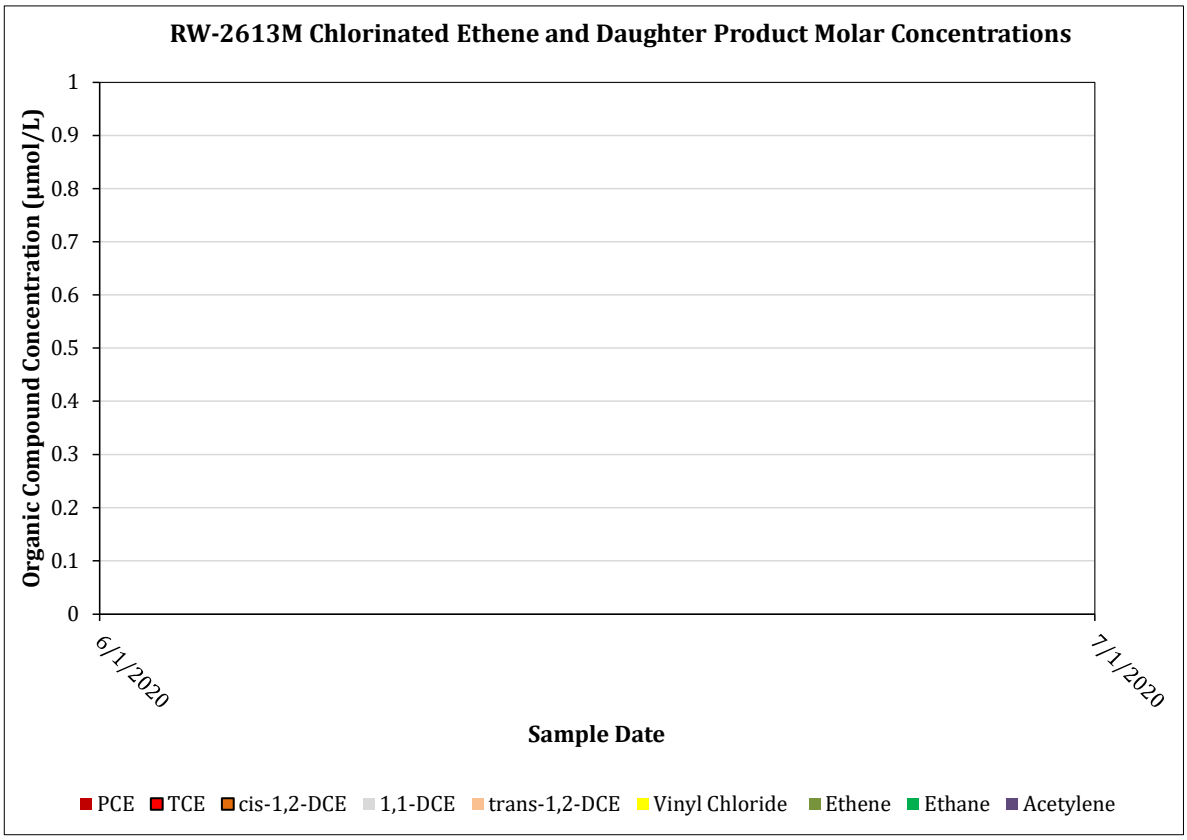

RW-2335F Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

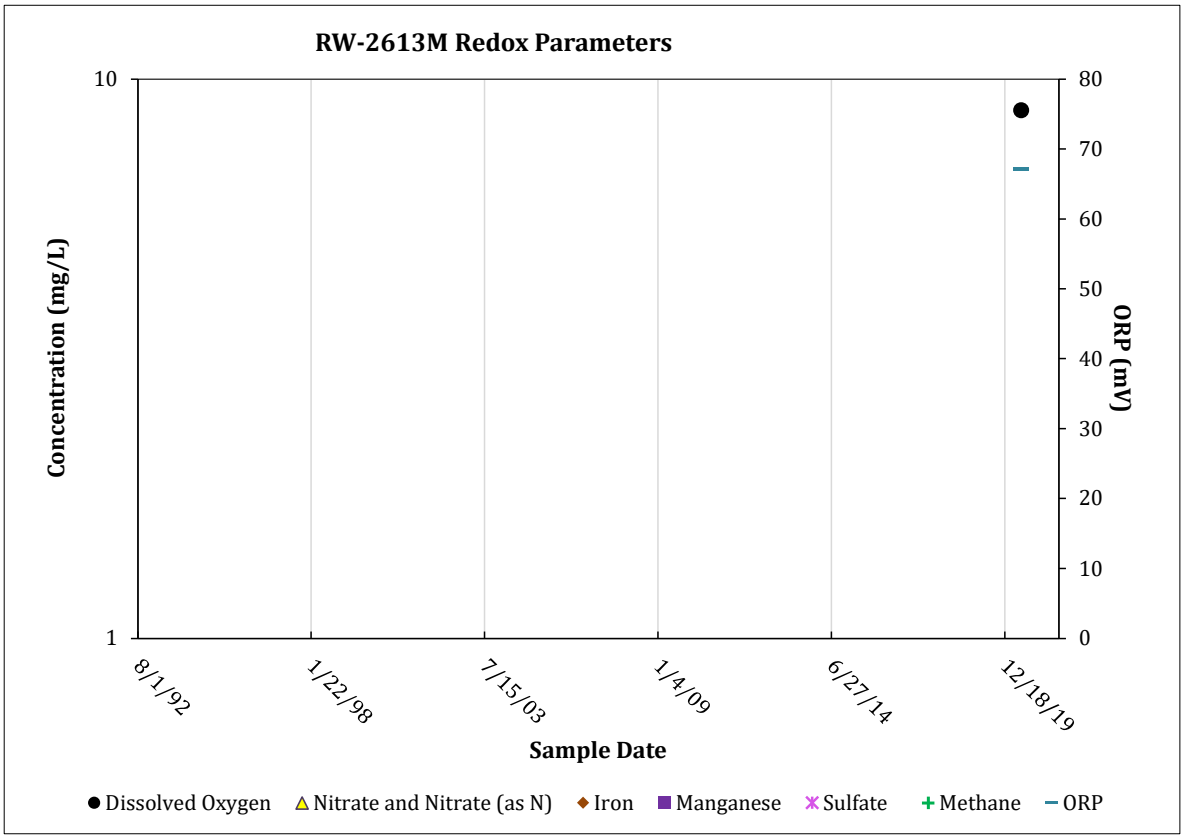

RW-2335F Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

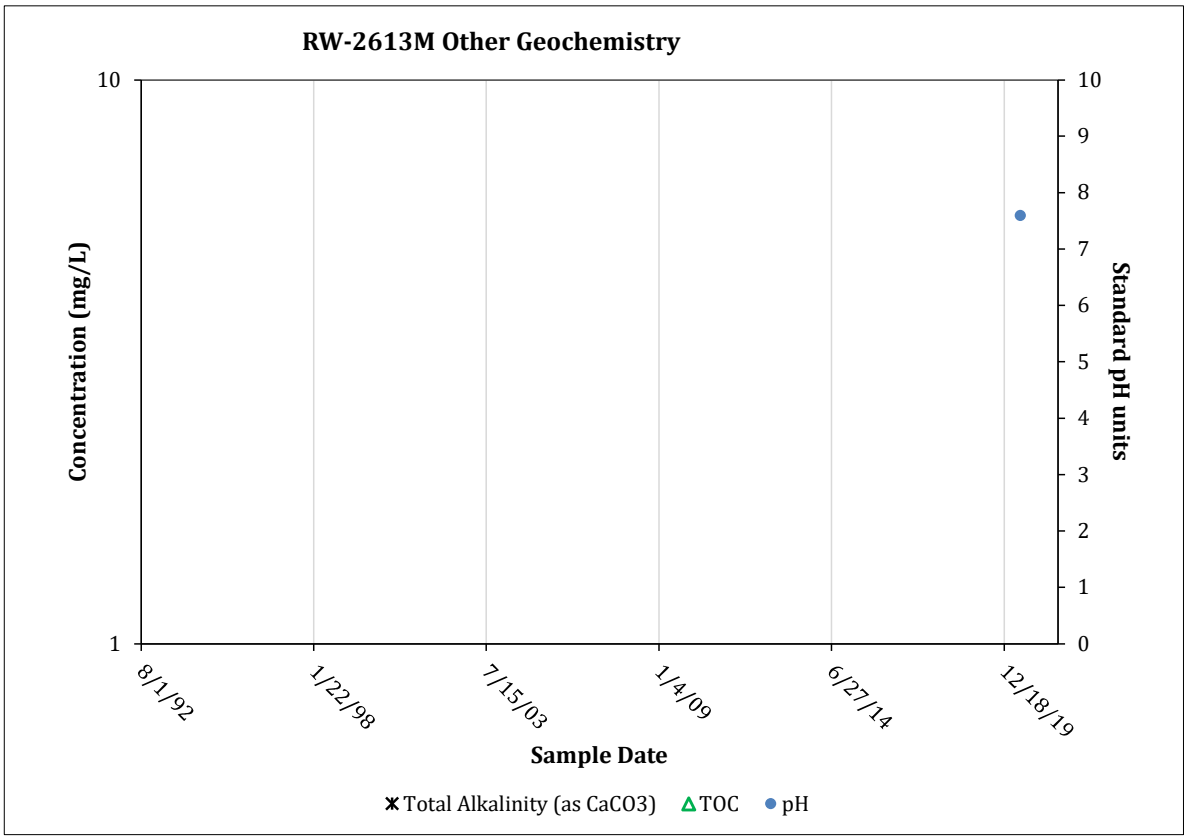


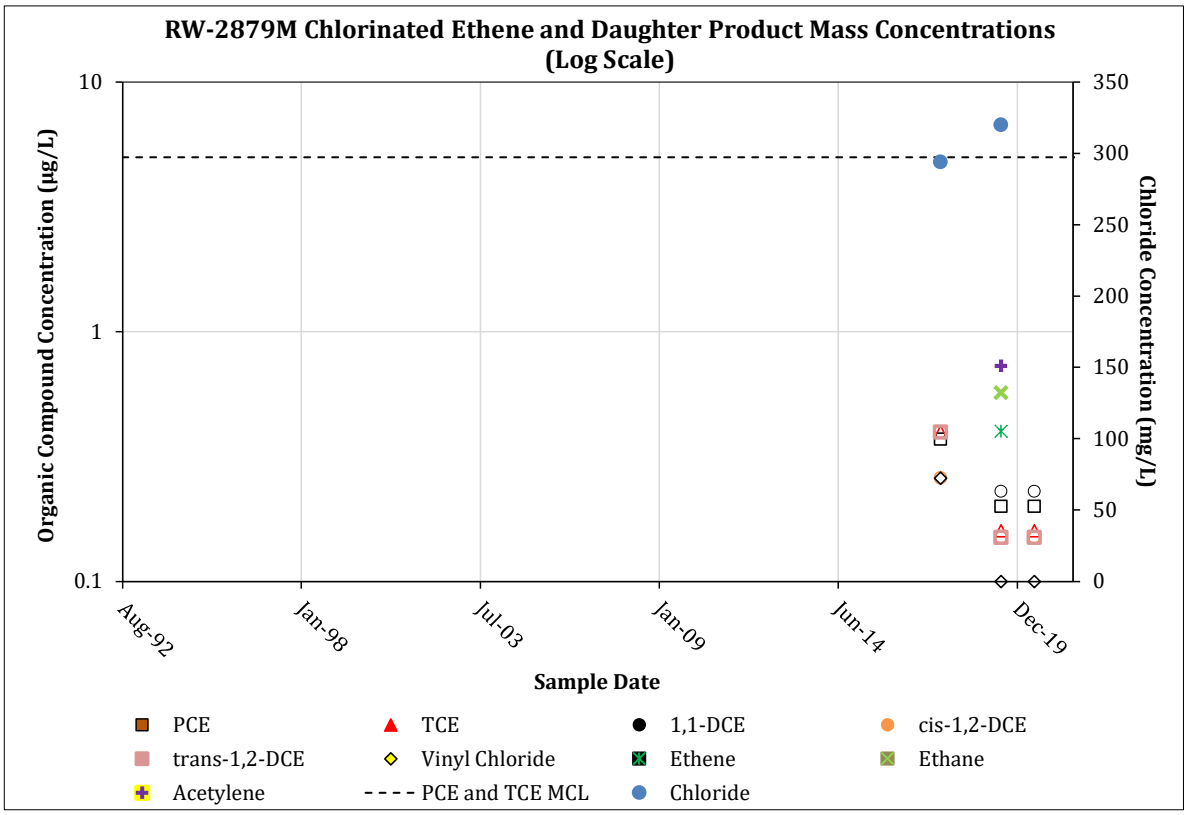


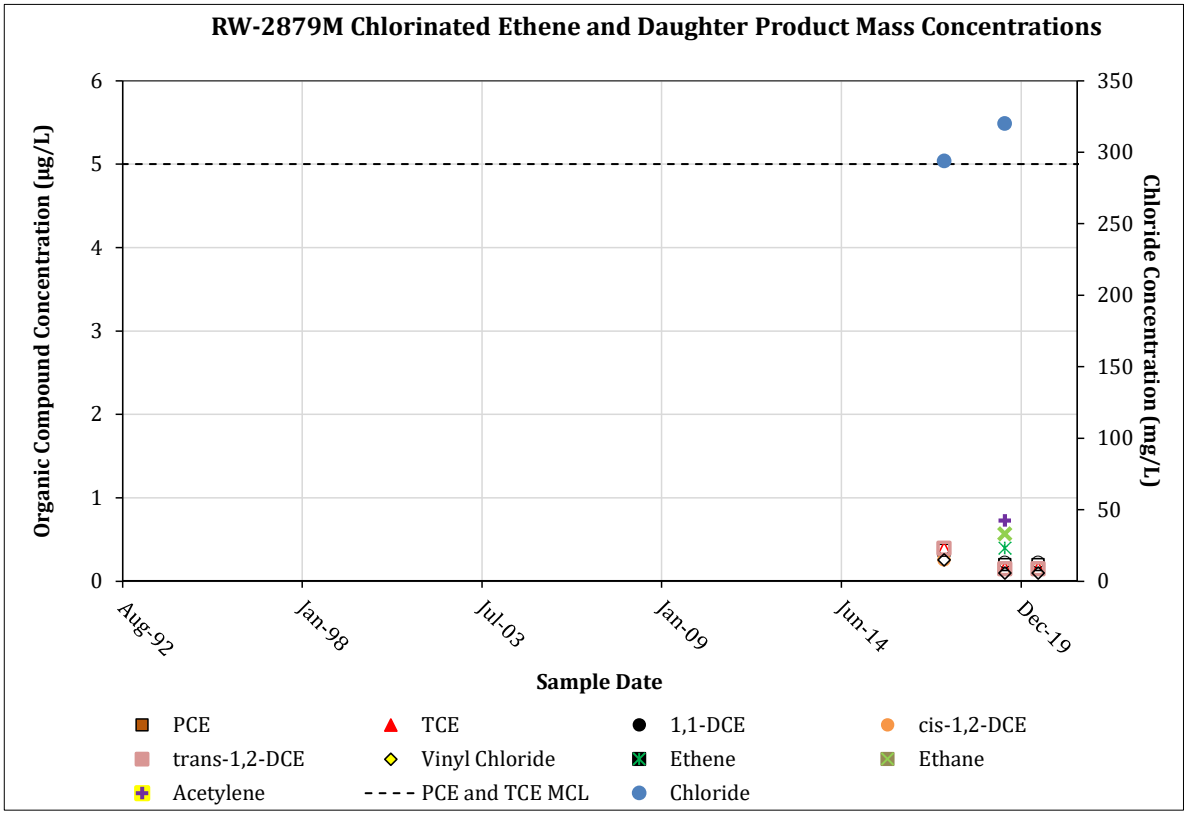
The symbol without fill designates a non-detect result.


RW-2613M Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/2020
7/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

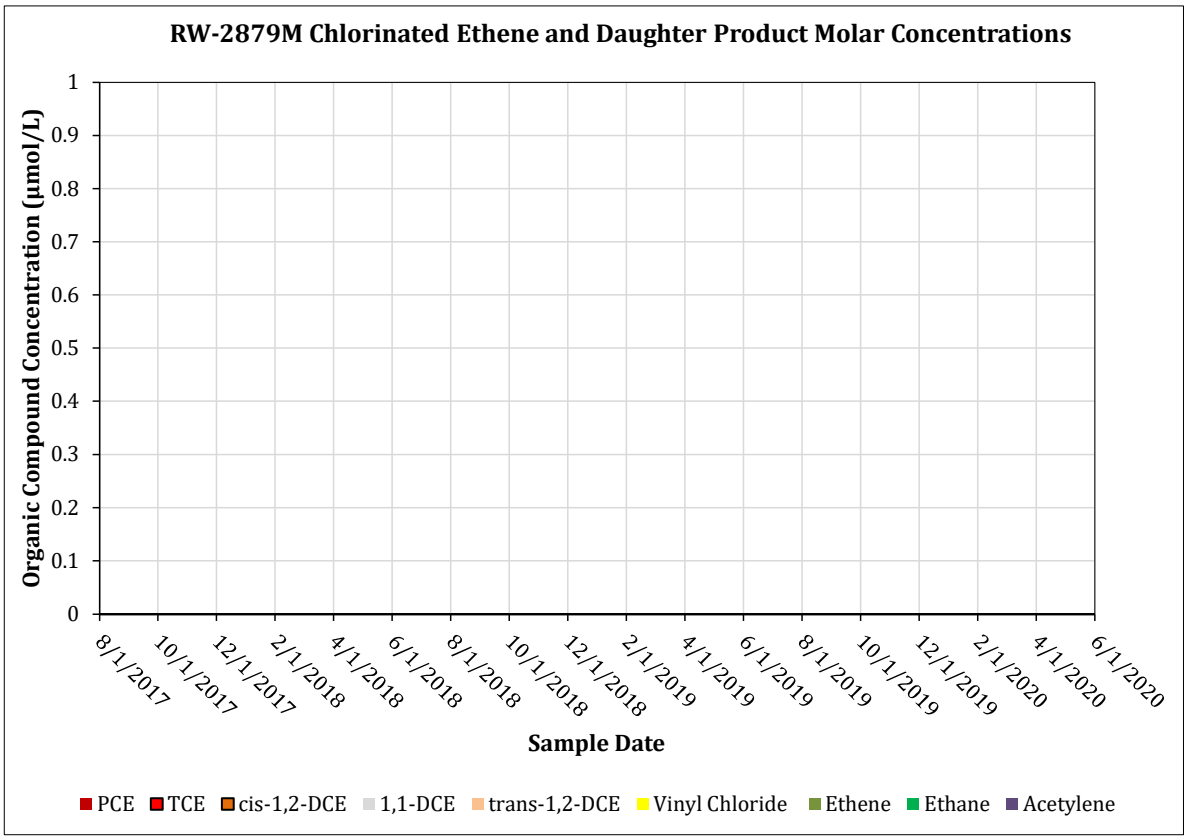

RW-2613M Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
80
70
60
50
40
30
20
10
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

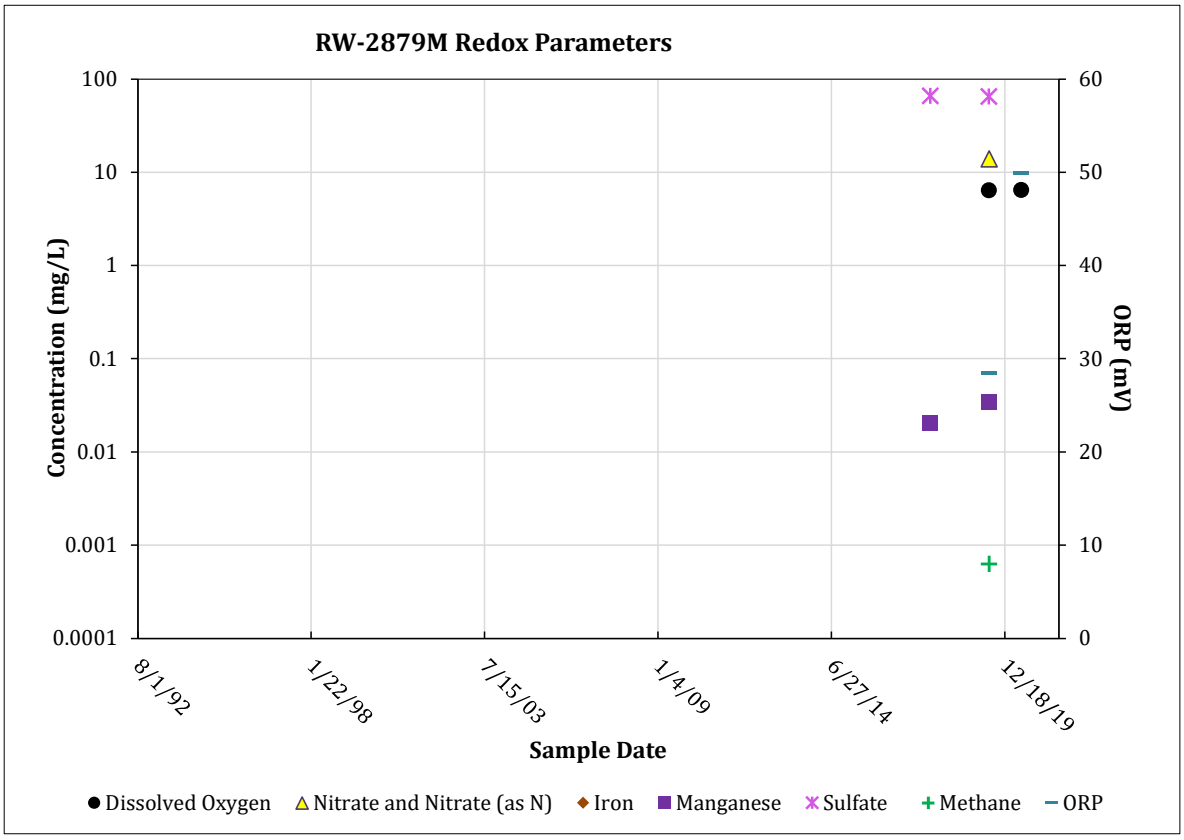

RW-2613M Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

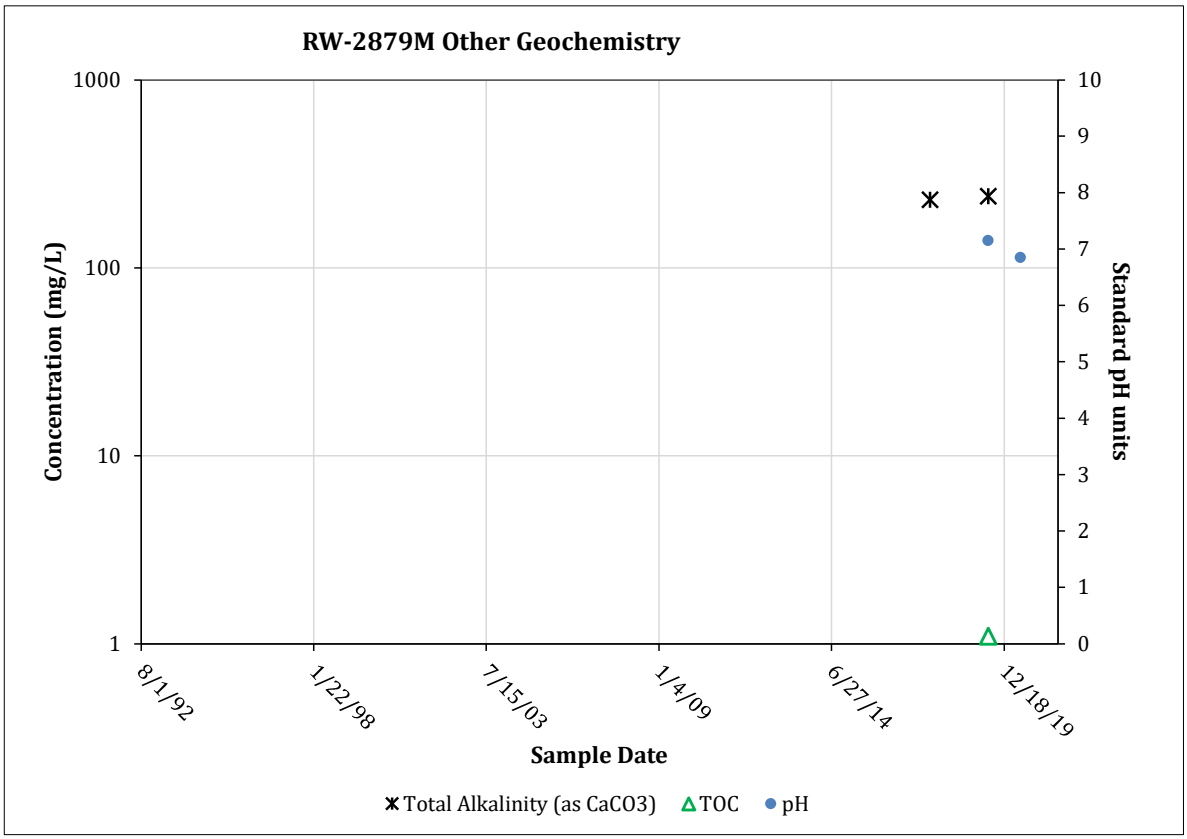


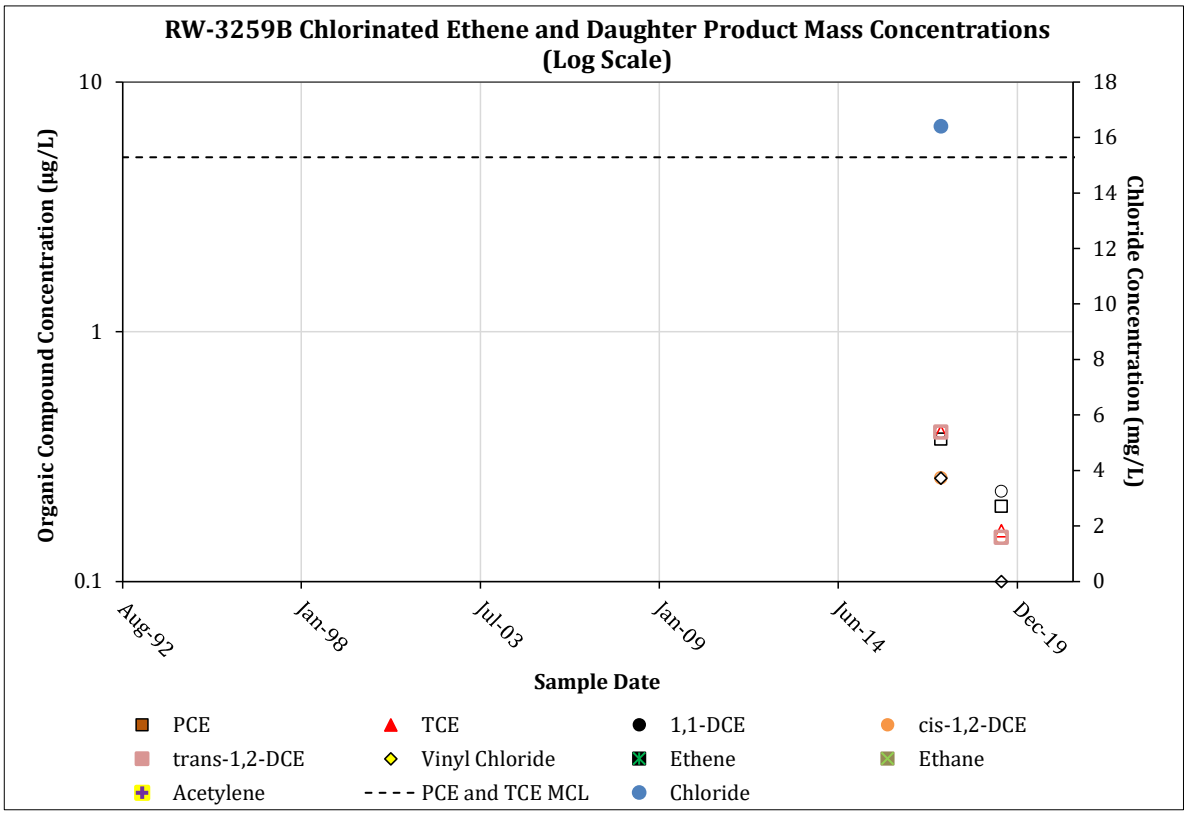


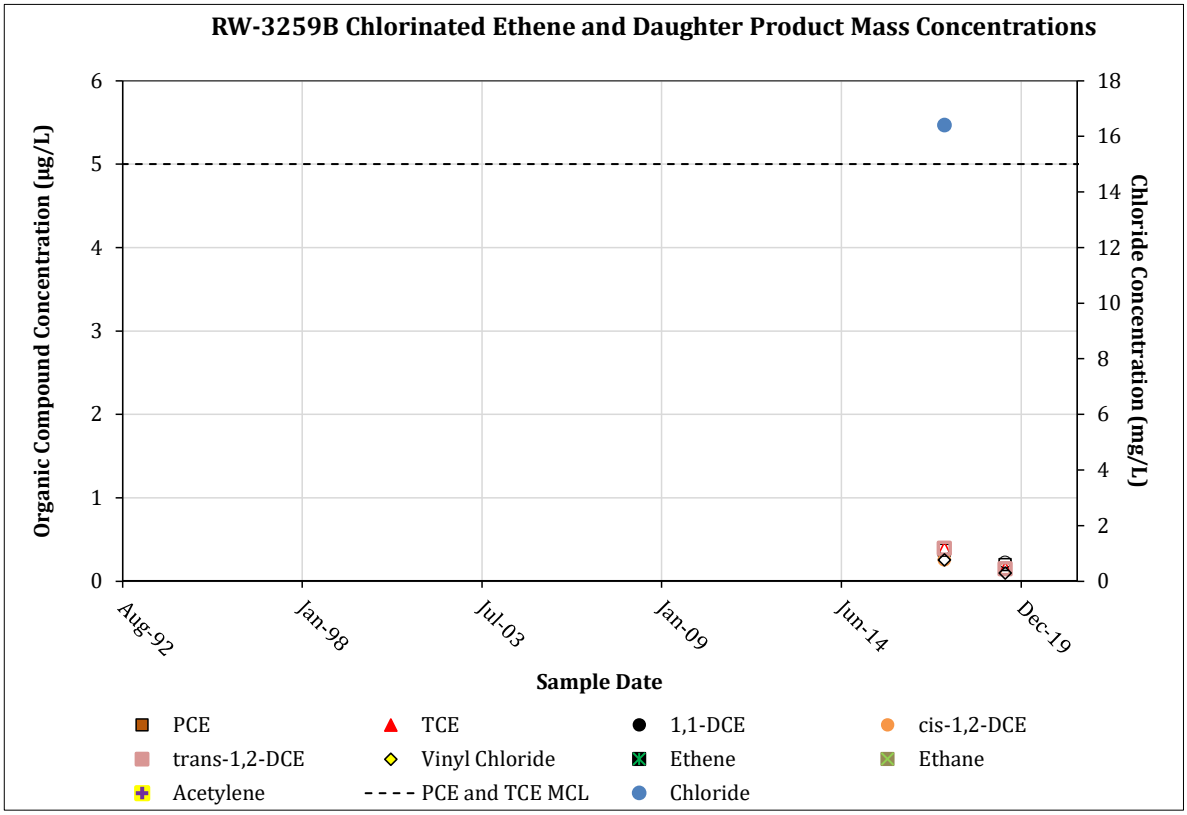
The symbol without fill designates a non-detect result.


RW-2879M Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

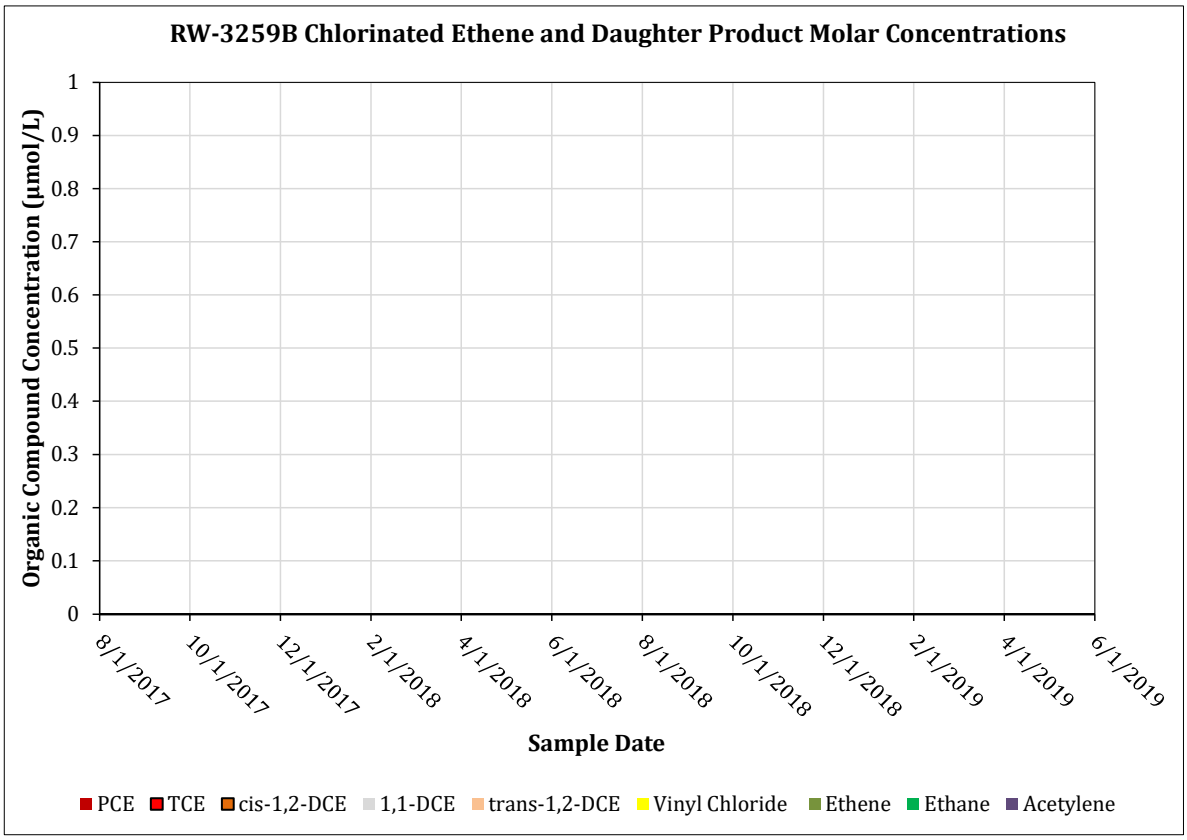

RW-2879M Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
0.01
0.001
0.0001
60
50
40
30
20
10
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

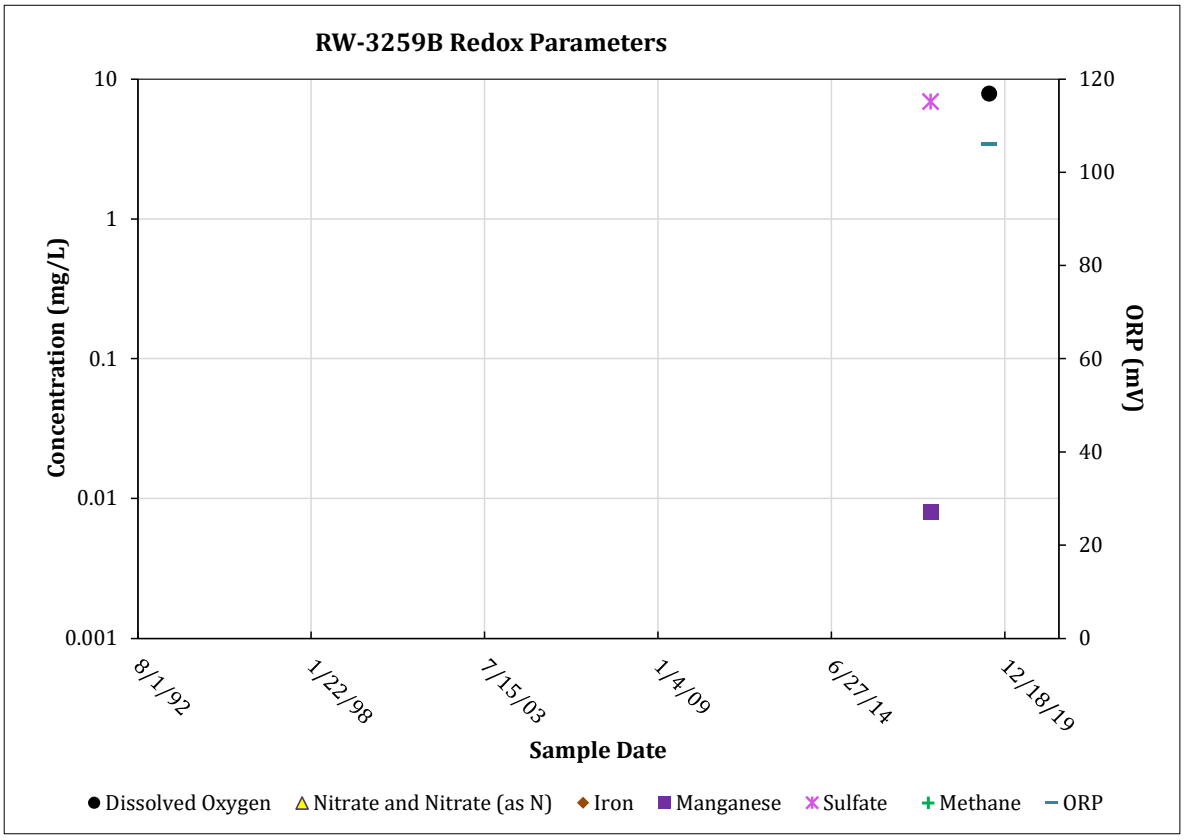

RW-2879M Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

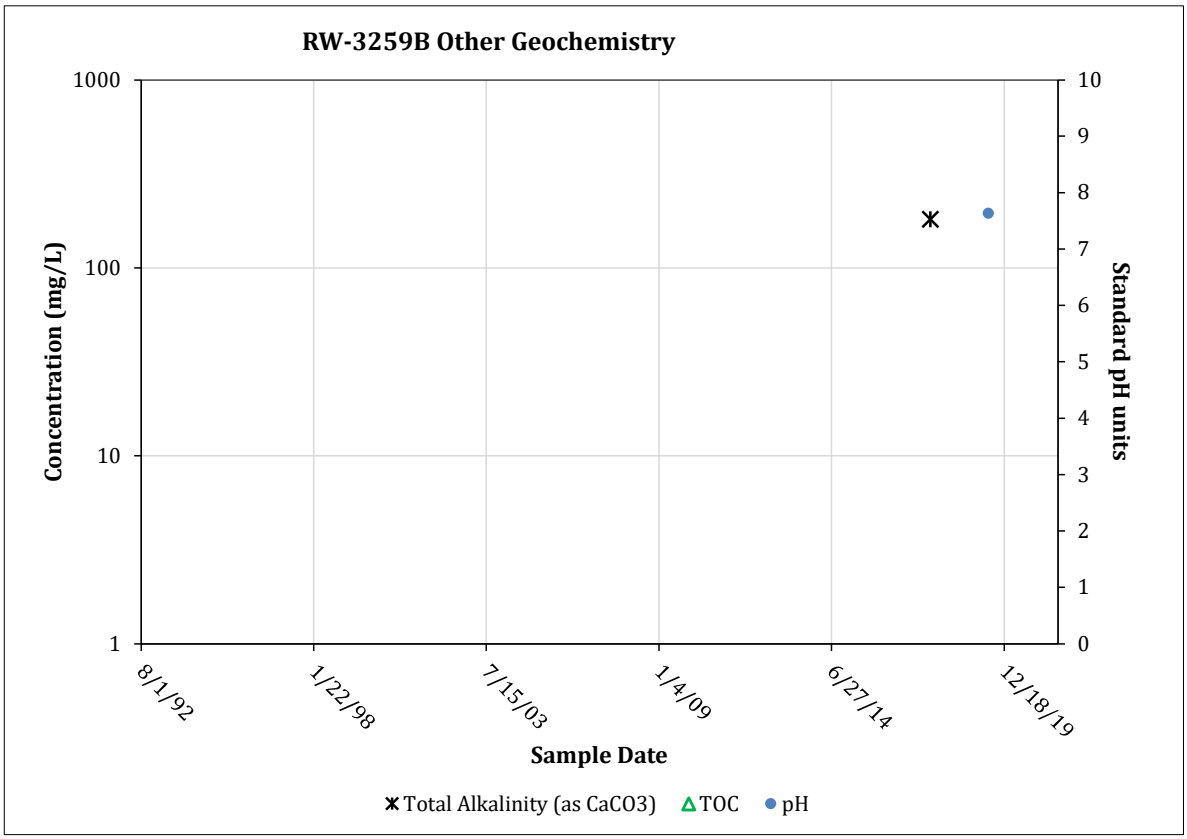


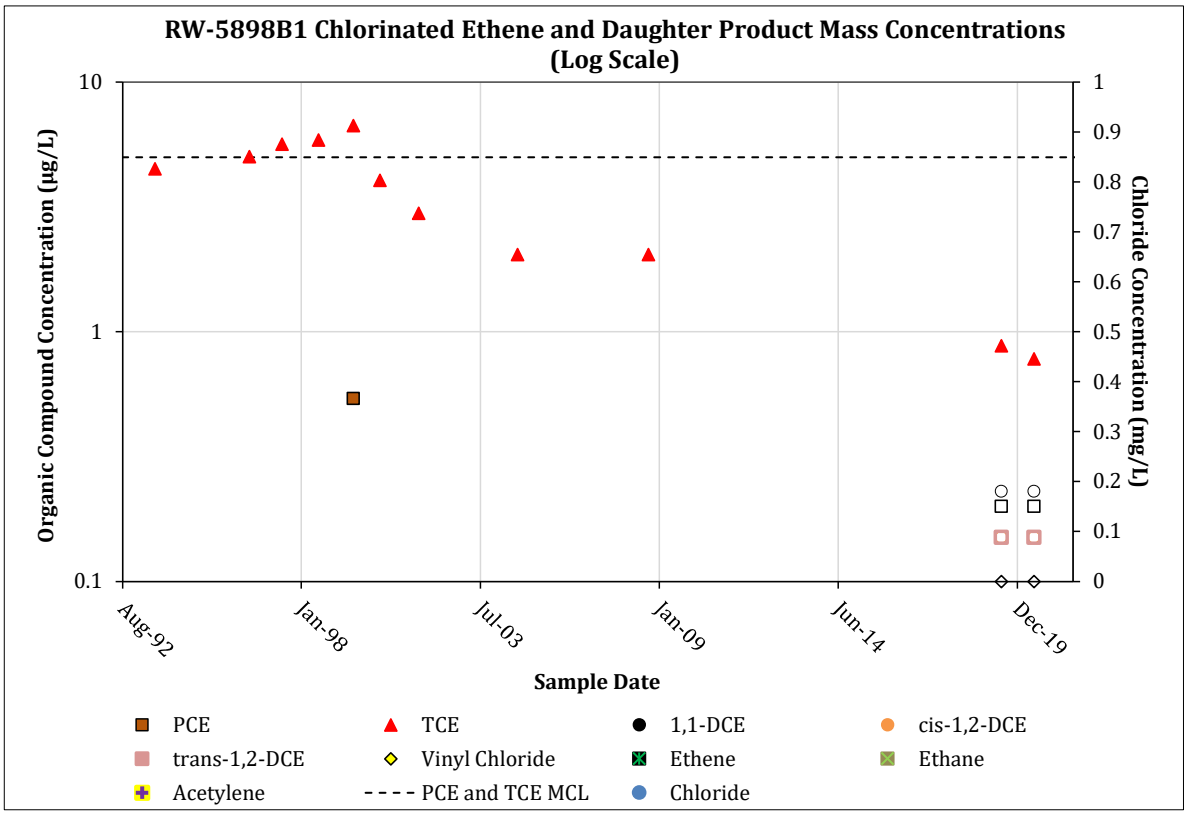


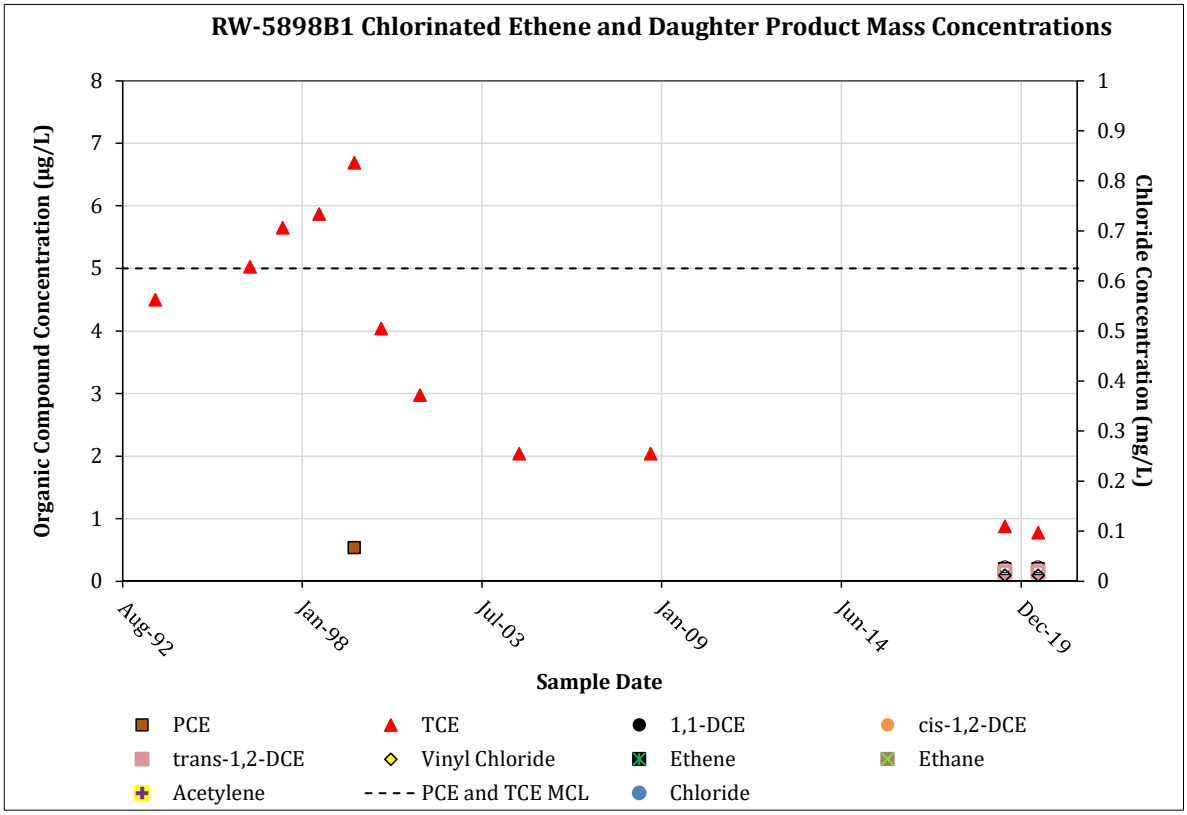
The symbol without fill designates a non-detect result.


RW-3259B Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

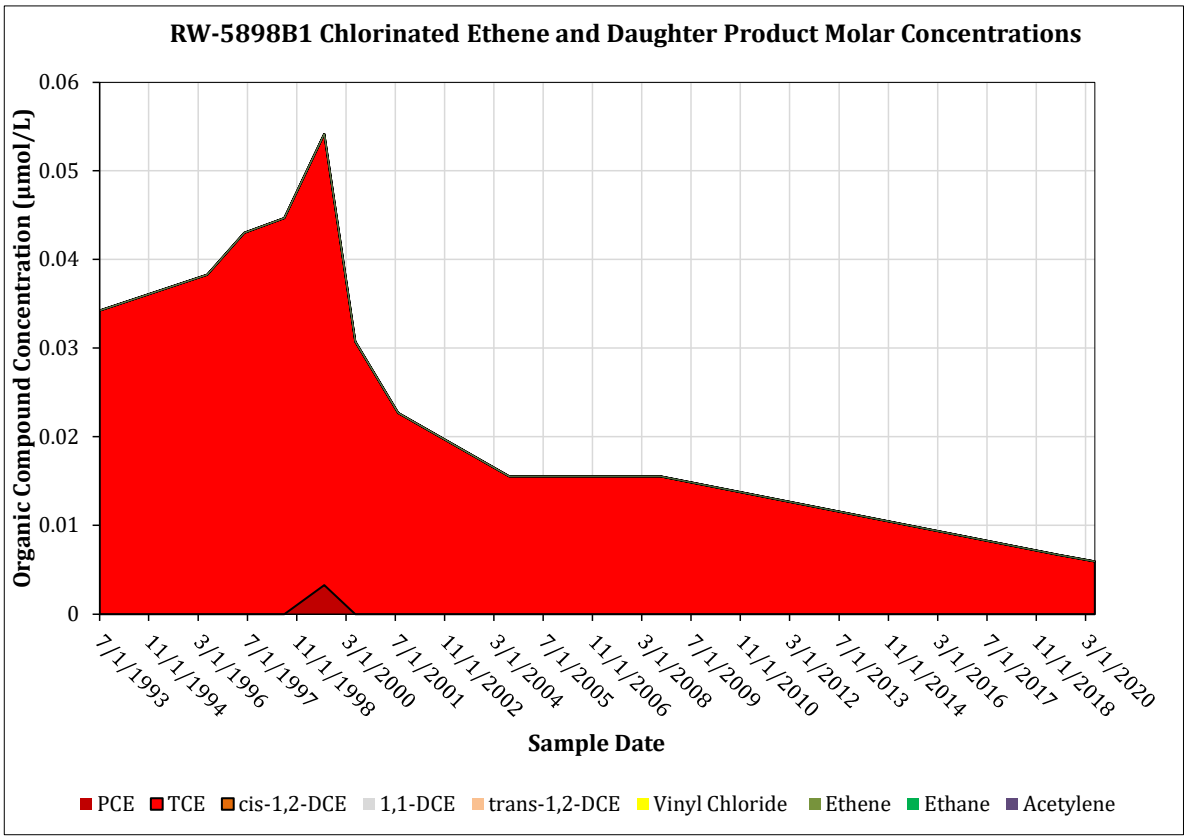

RW-3259B Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
0.1
0.01
0.001
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

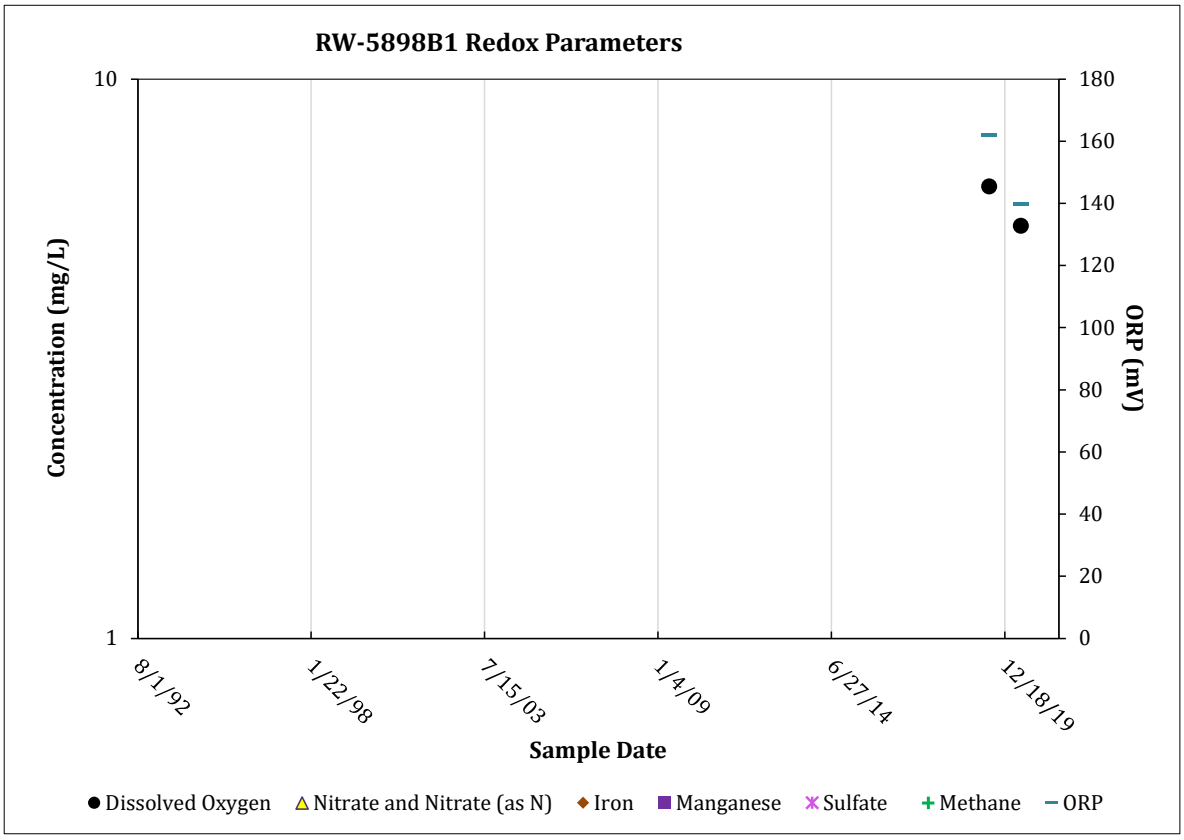

RW-3259B Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

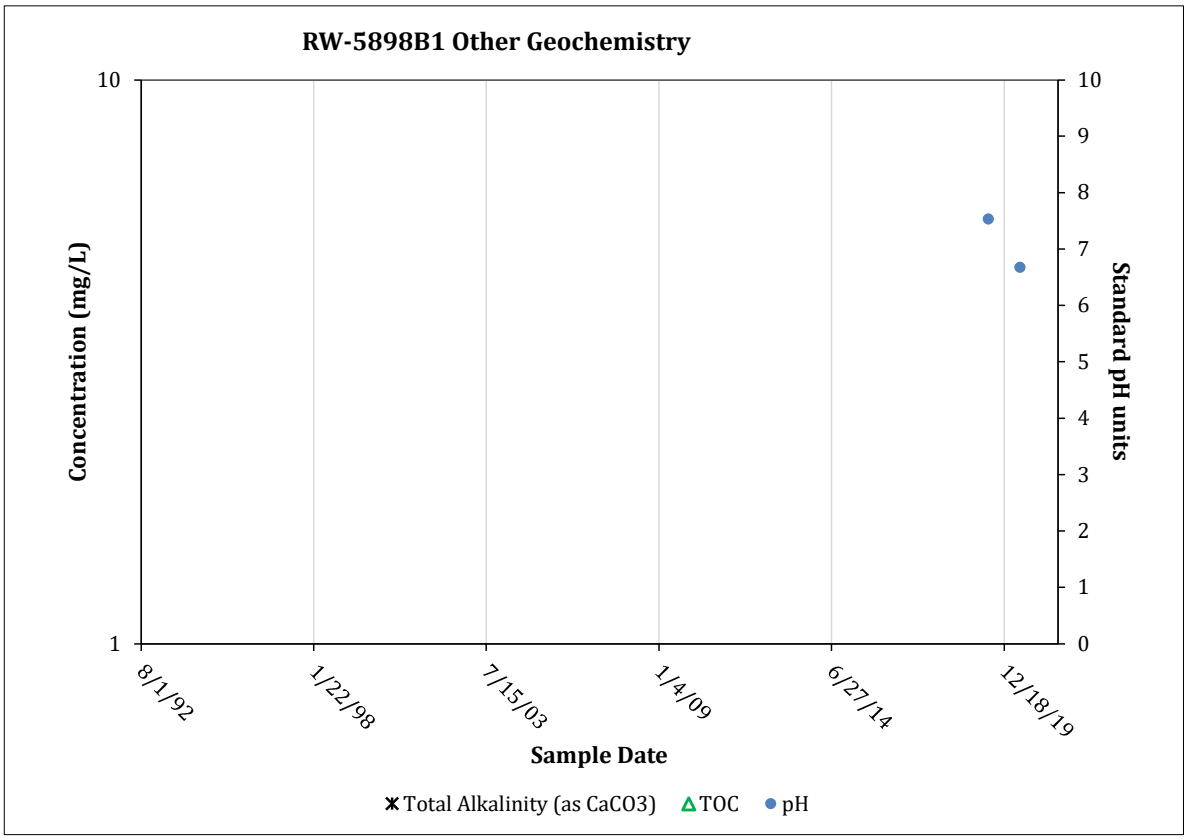


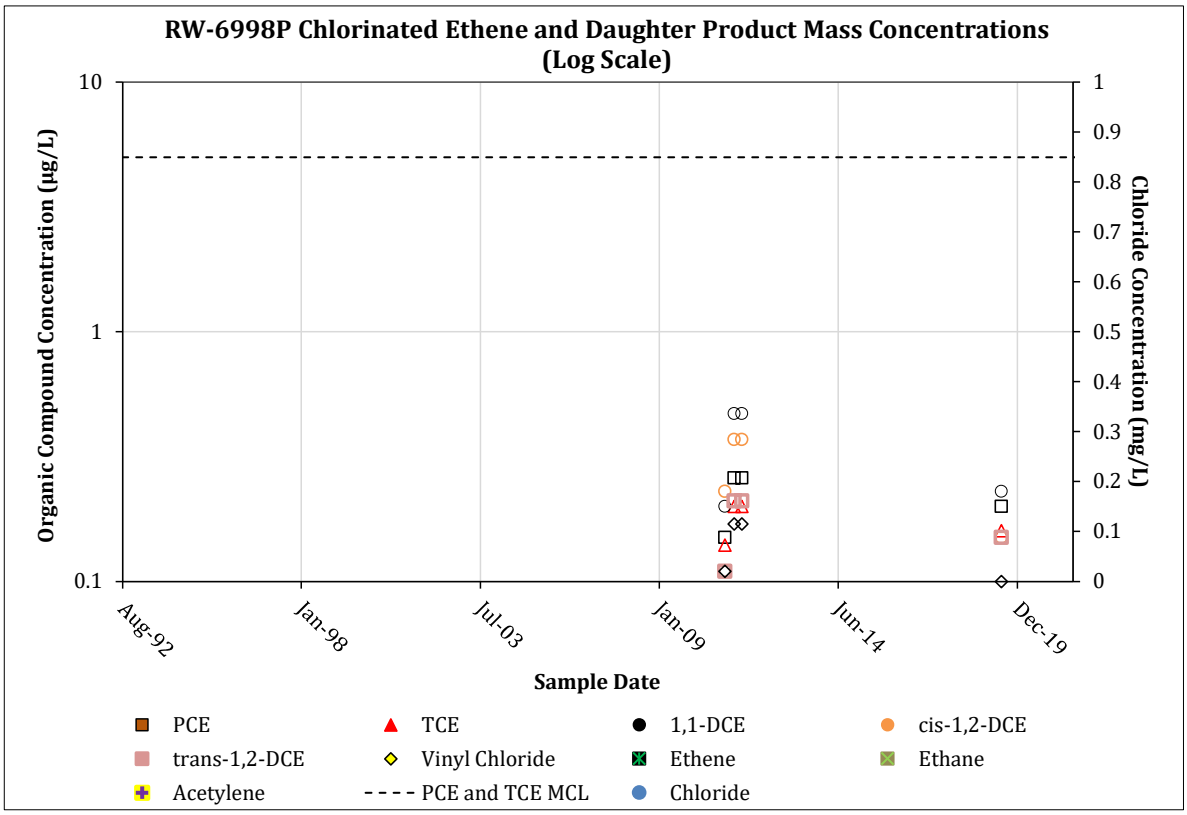


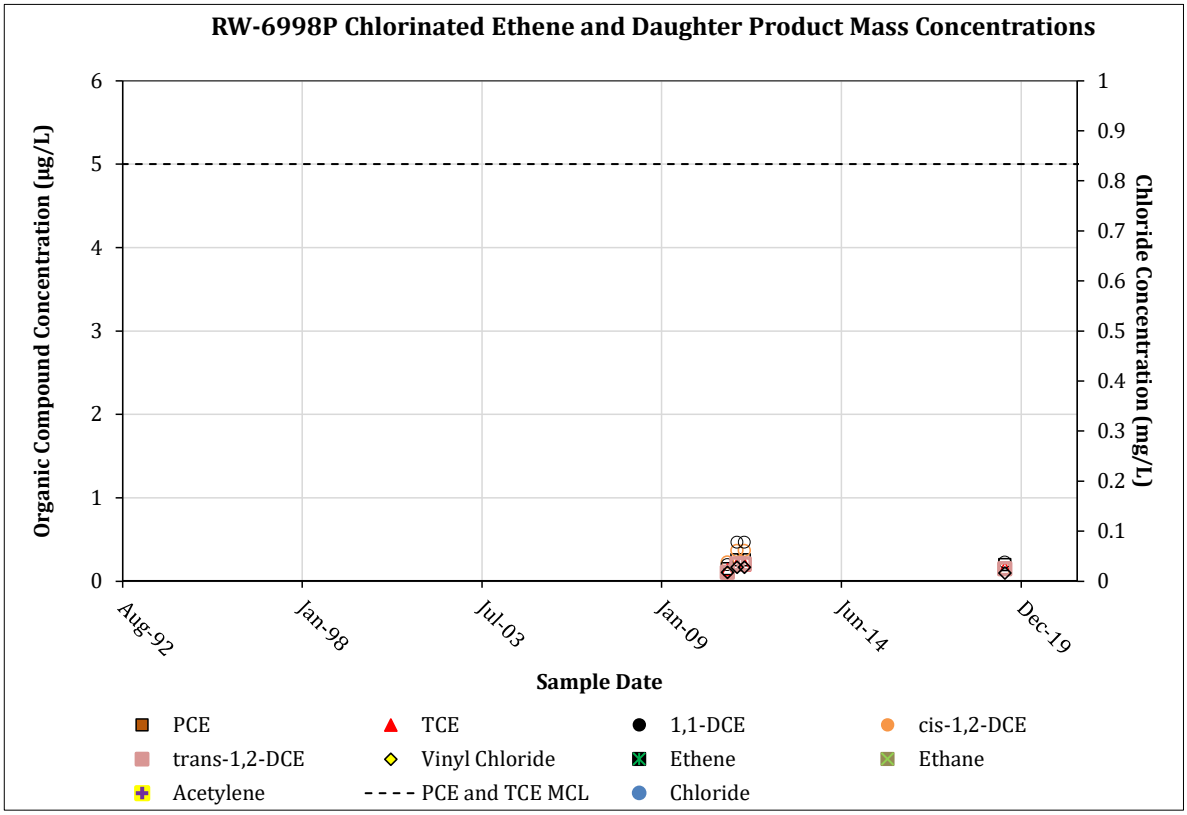
The symbol without fill designates a non-detect result.


RW-5898B1 Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.06
0.05
0.04
0.03
0.02
0.01
0
7/1/1993
11/1/1994
3/1/1996
7/1/1997
11/1/1998
3/1/2000
7/1/2001
11/1/2002
3/1/2004
7/1/2005
11/1/2006
3/1/2008
7/1/2009
11/1/2010
3/1/2012
7/1/2013
11/1/2014
3/1/2016
7/1/2017
11/1/2018
3/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

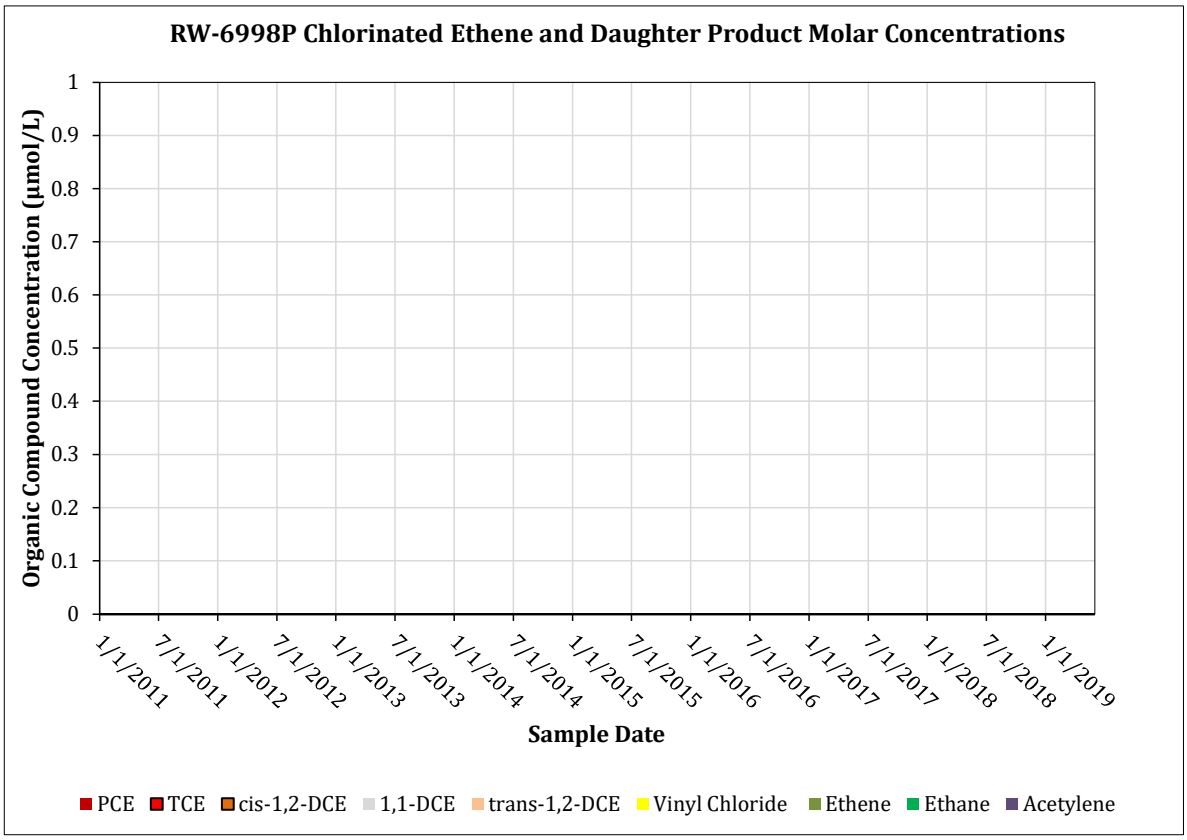

RW-5898B1 Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

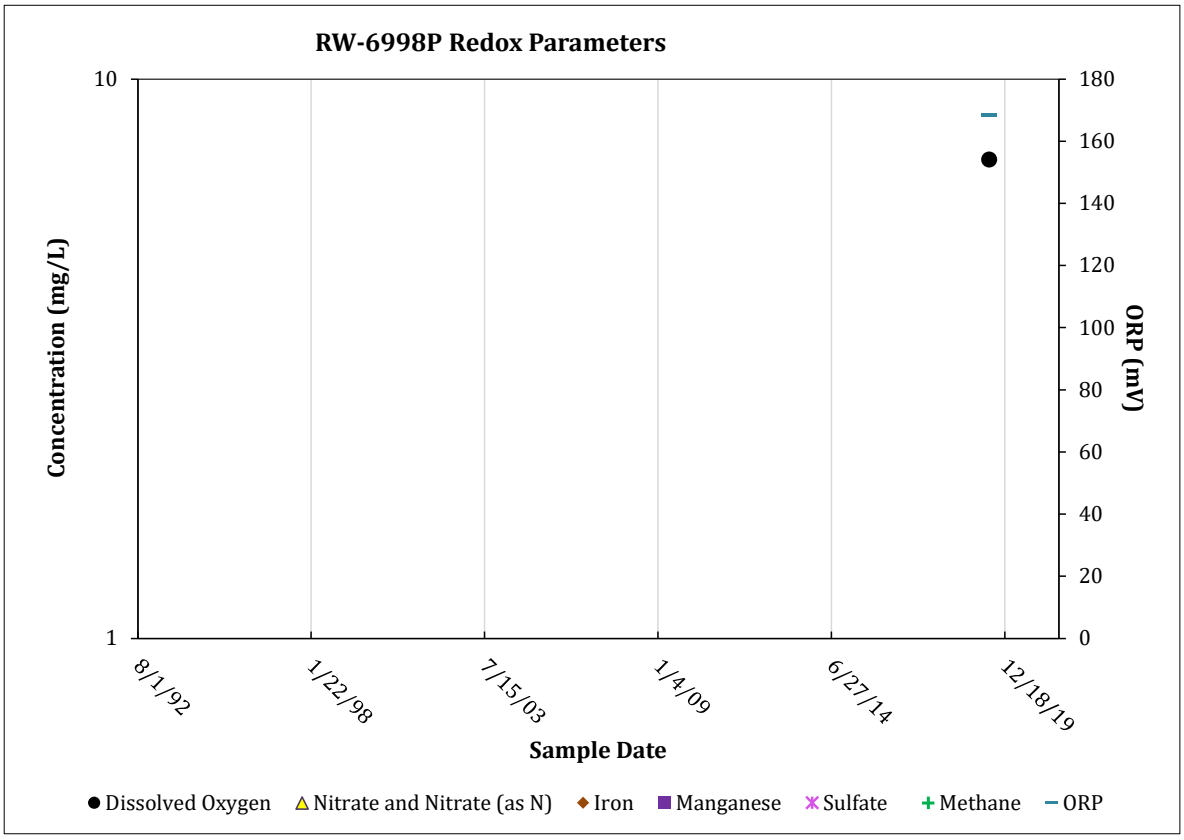

RW-5898B1 Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

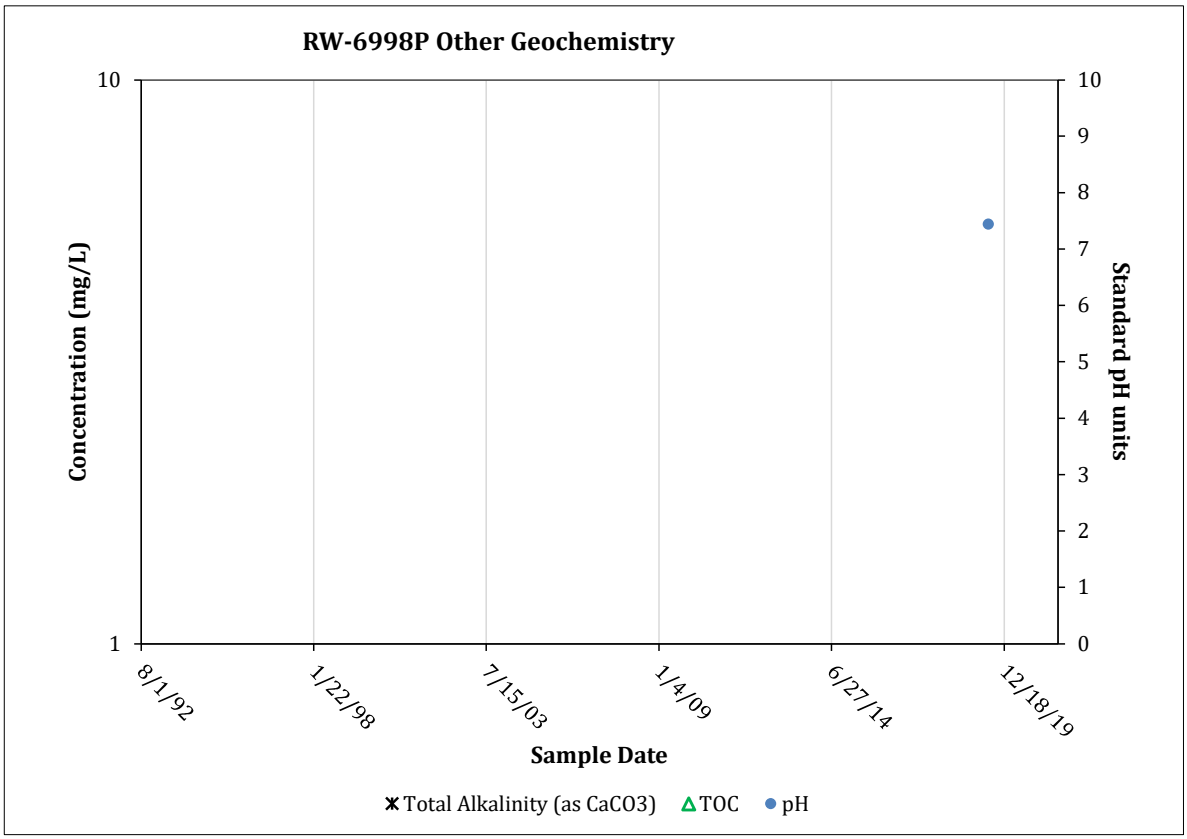


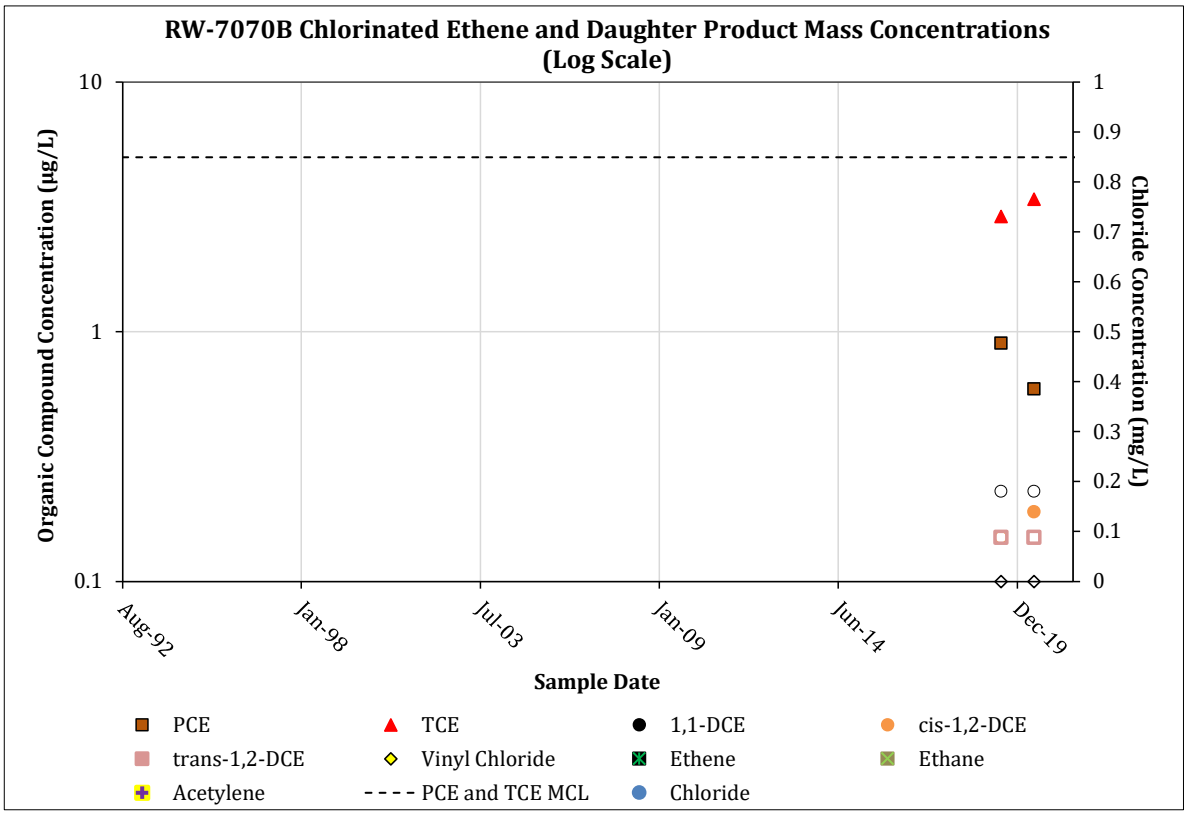


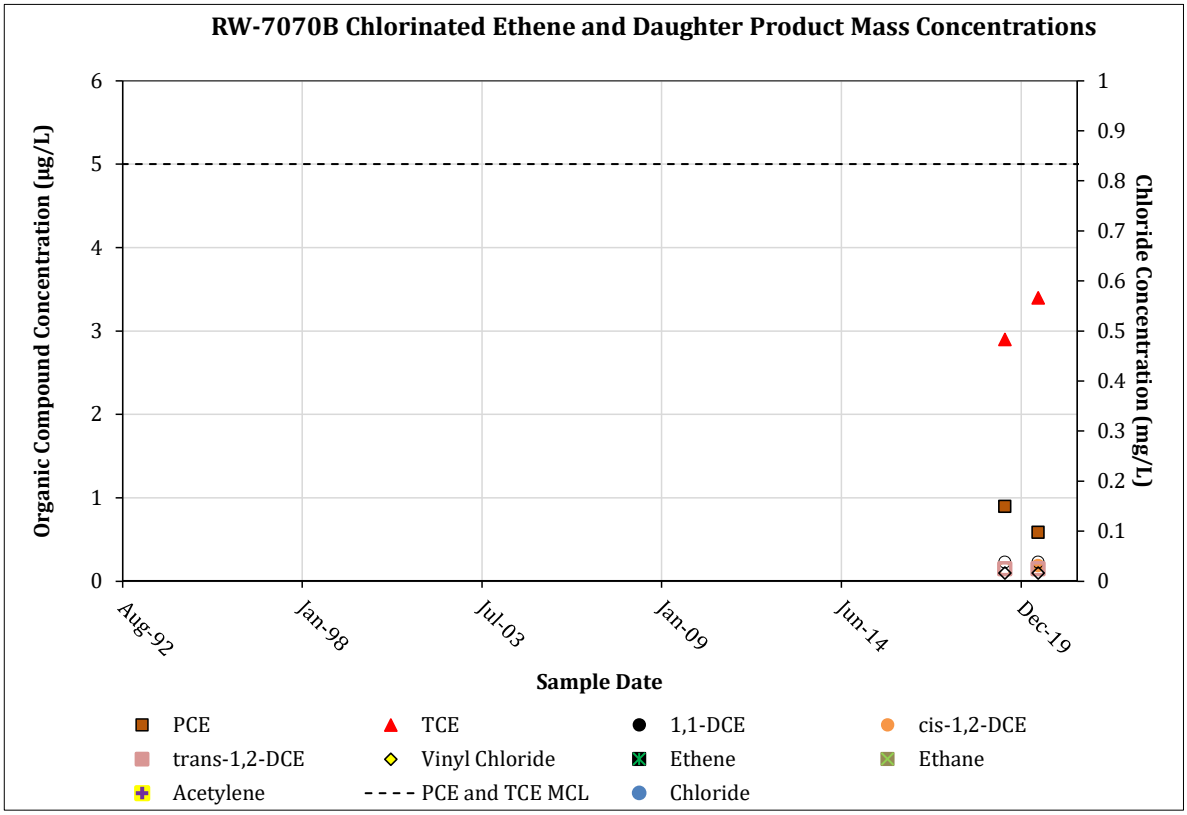
The symbol without fill designates a non-detect result.


RW-6998P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/1/2011
7/1/2011
1/1/2012
7/1/2012
1/1/2013
7/1/2013
1/1/2014
7/1/2014
1/1/2015
7/1/2015
1/1/2016
7/1/2016
1/1/2017
7/1/2017
1/1/2018
7/1/2018
1/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

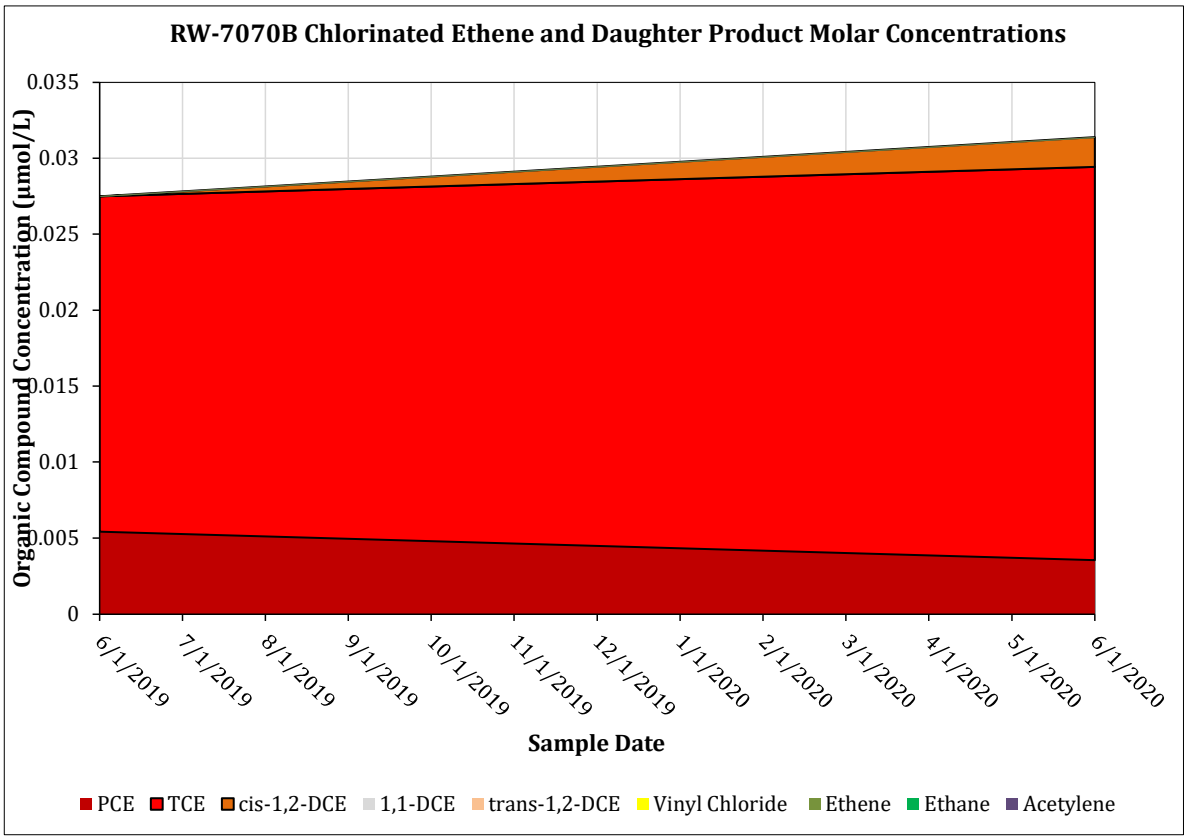

RW-6998P Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

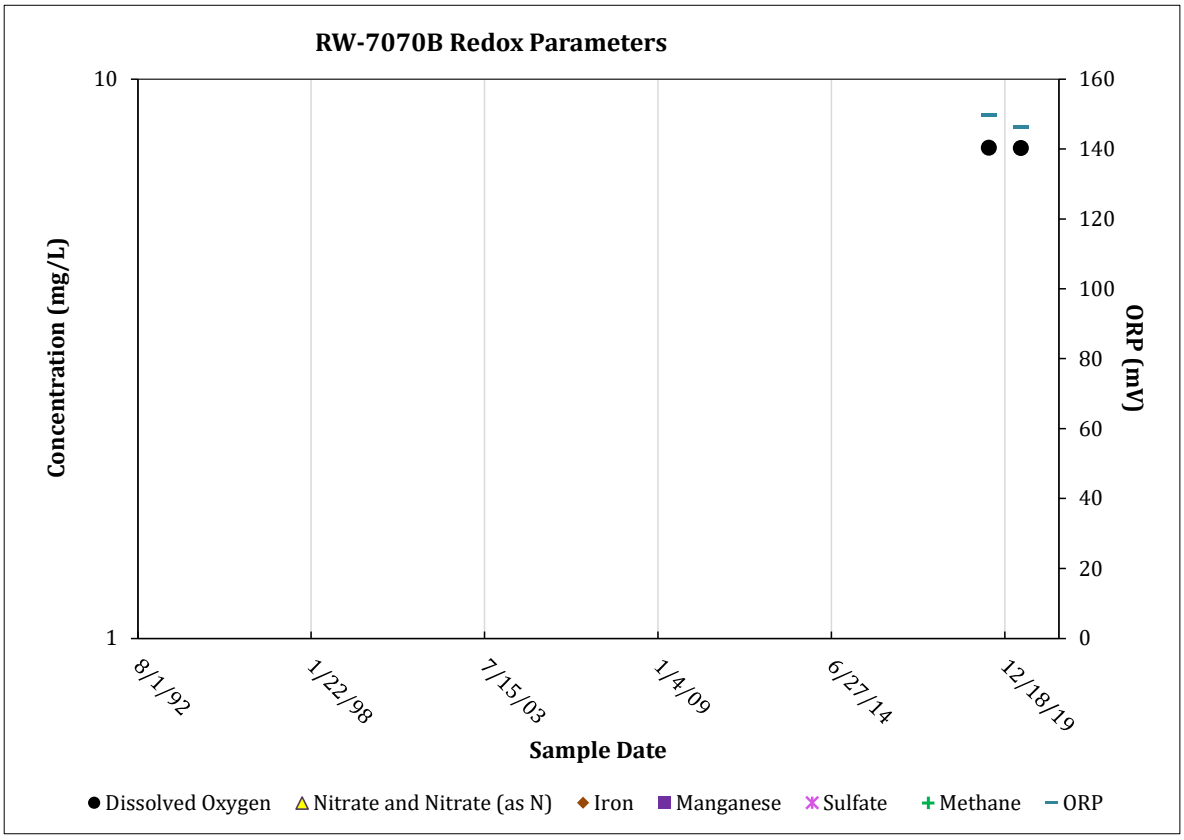

RW-6998P Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

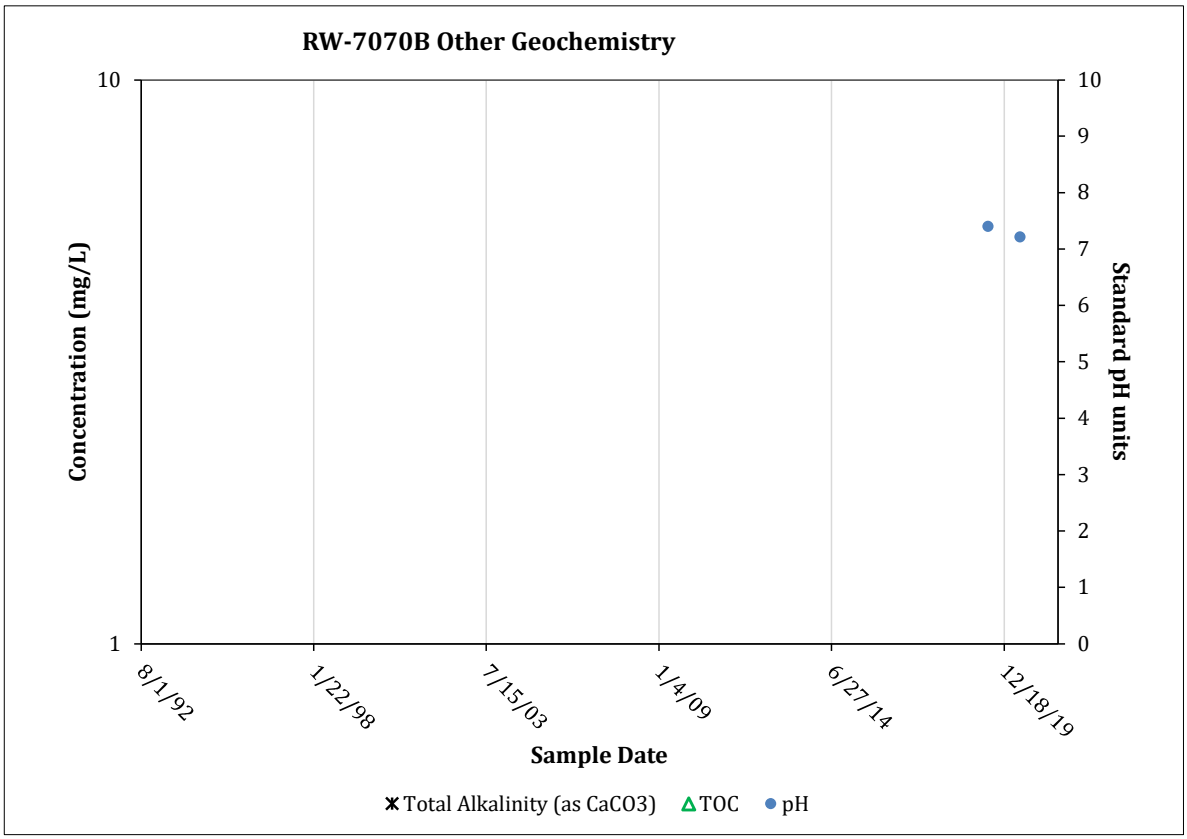


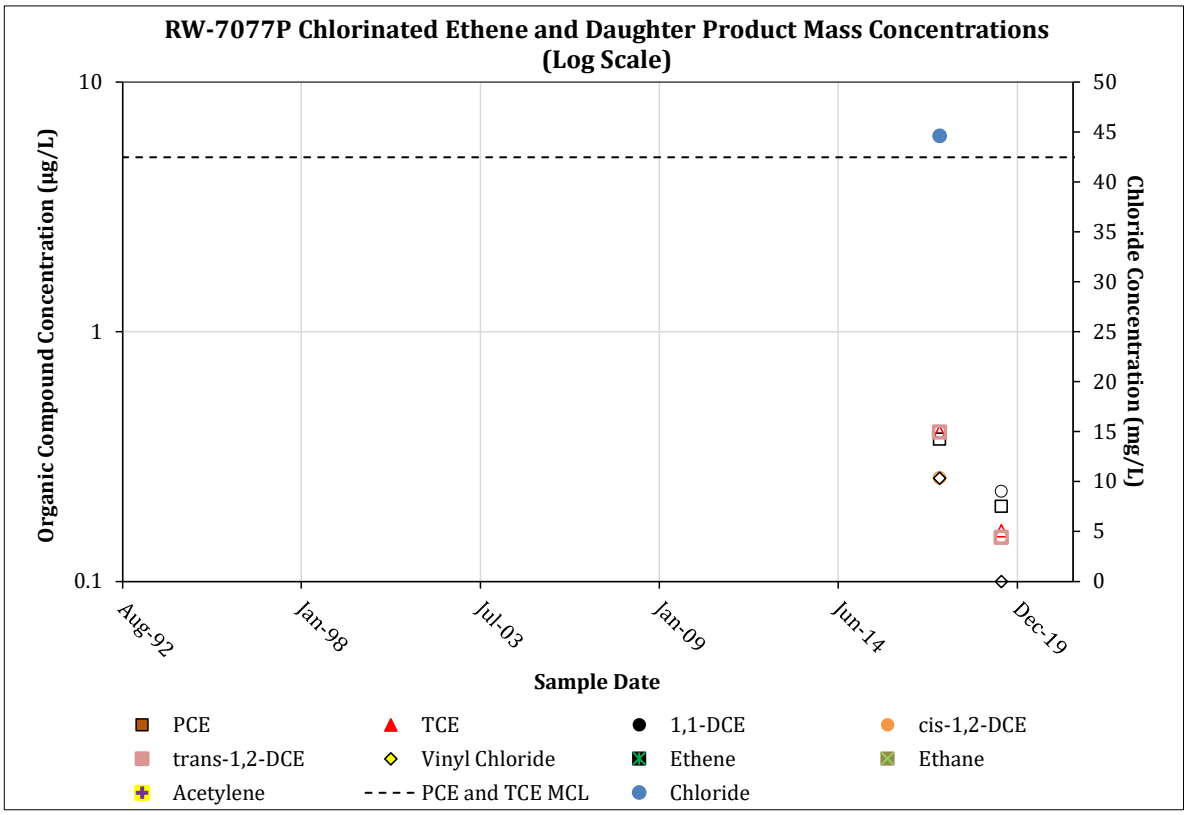


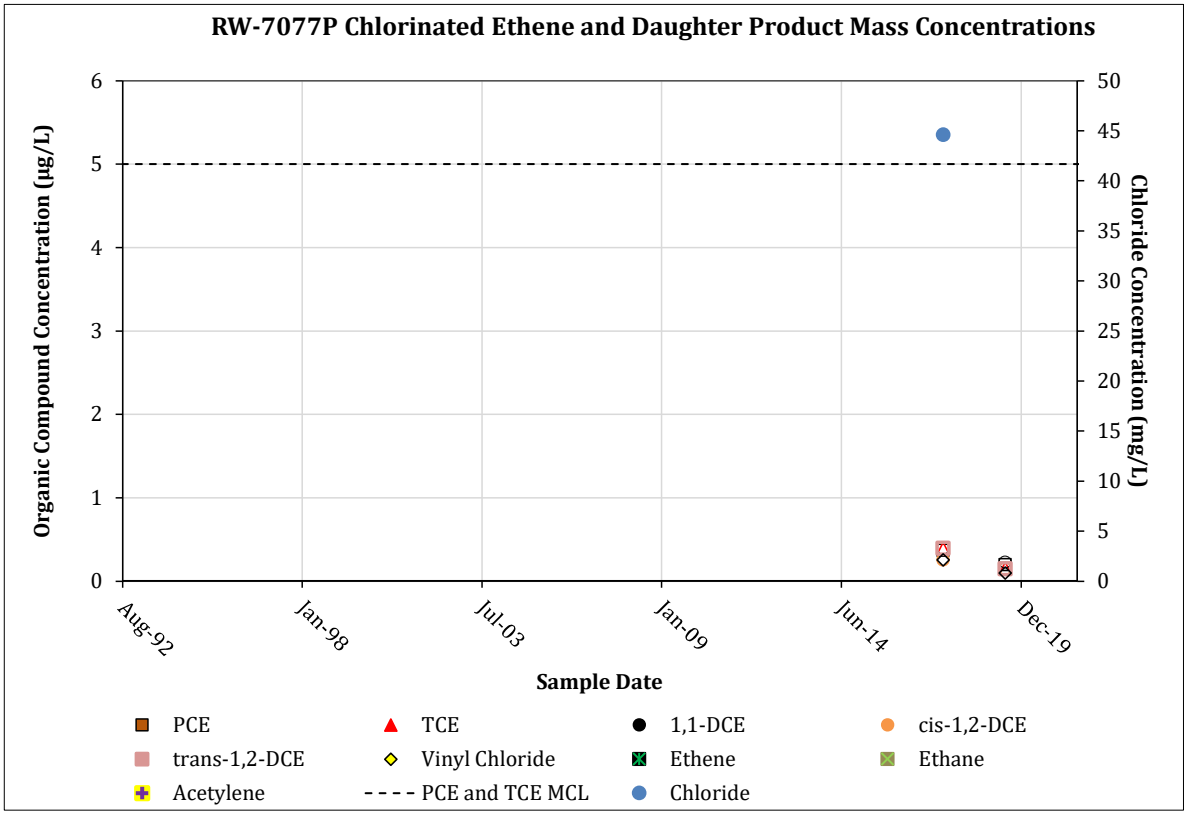
The symbol without fill designates a non-detect result.


RW-7070B Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
6/1/2019
7/1/2019
8/1/2019
9/1/2019
10/1/2019
11/1/2019
12/1/2019
1/1/2020
2/1/2020
3/1/2020
4/1/2020
5/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

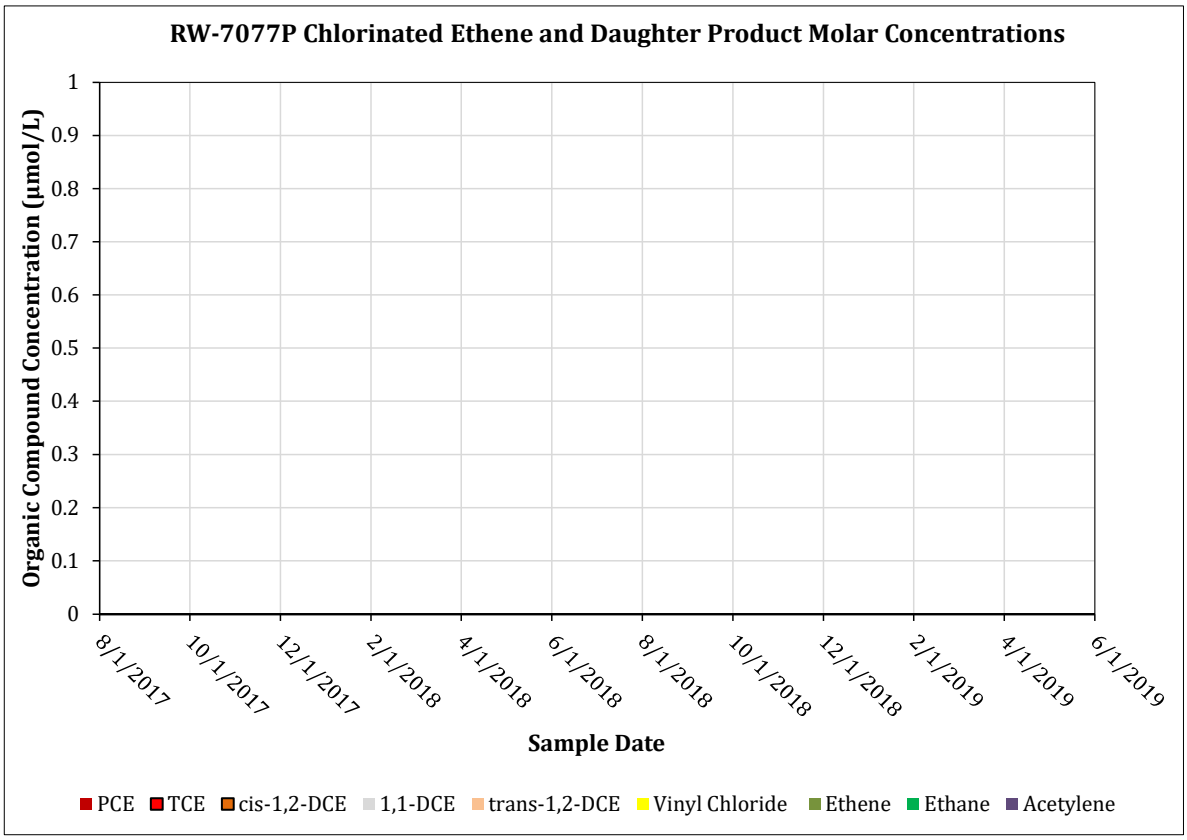

RW-7070B Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

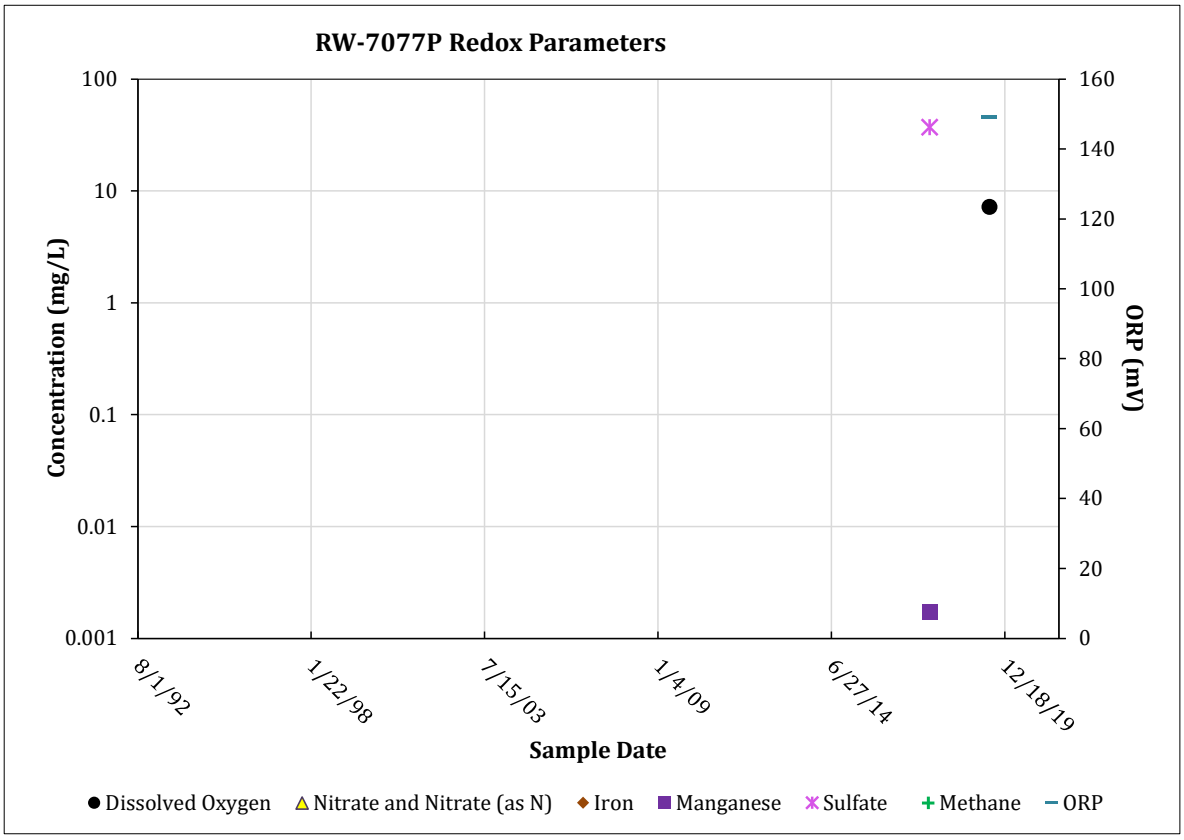

RW-7070B Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

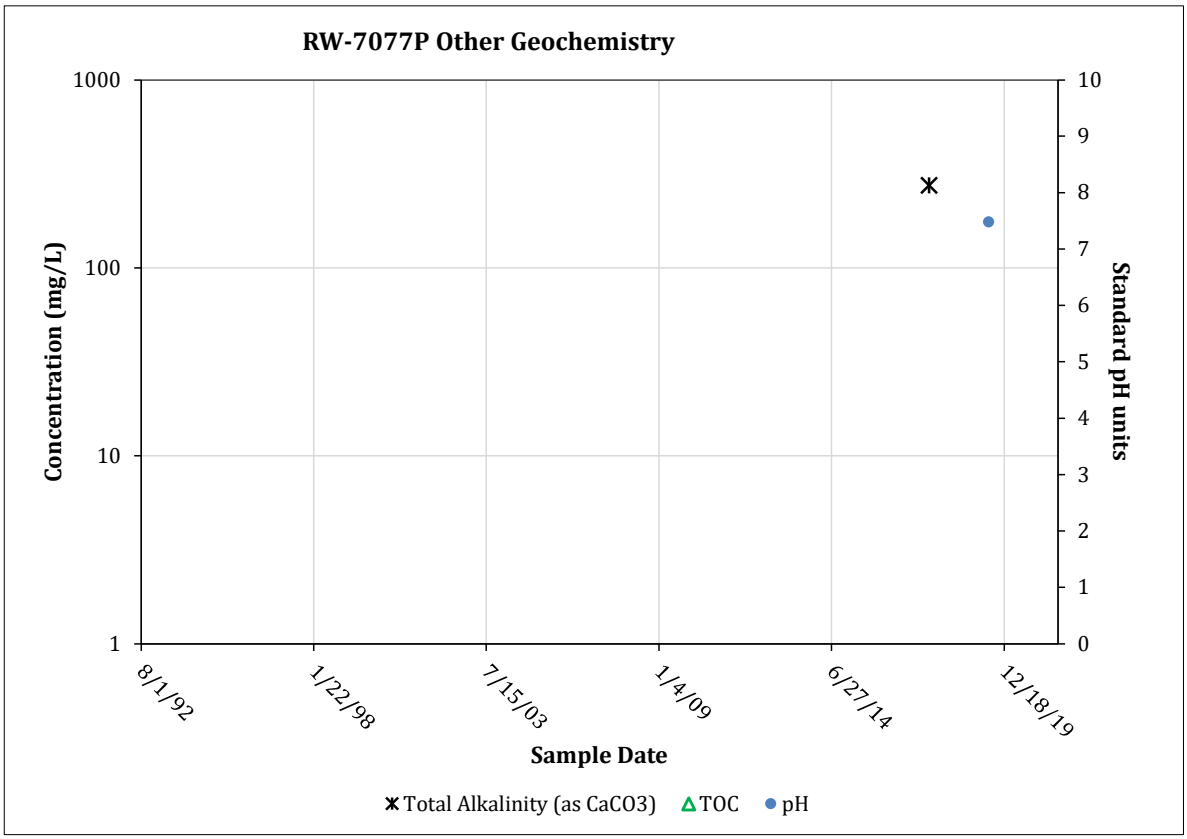


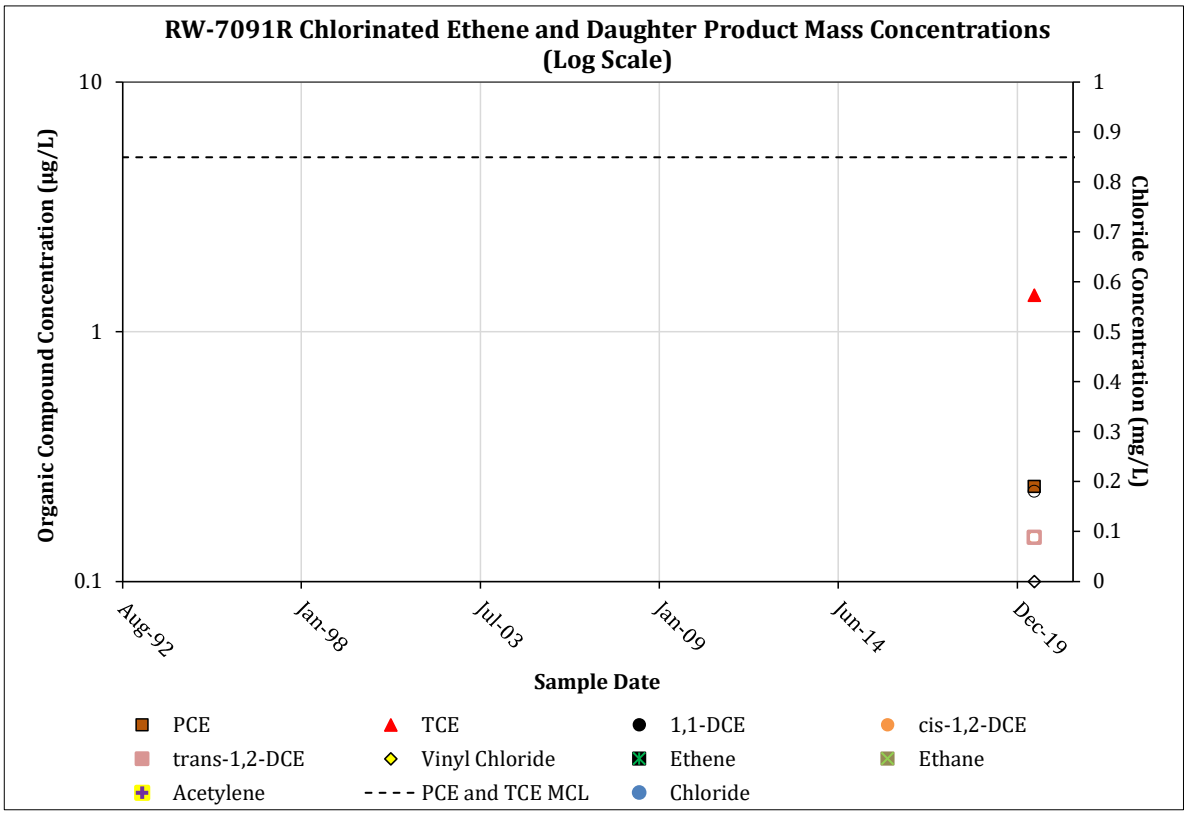


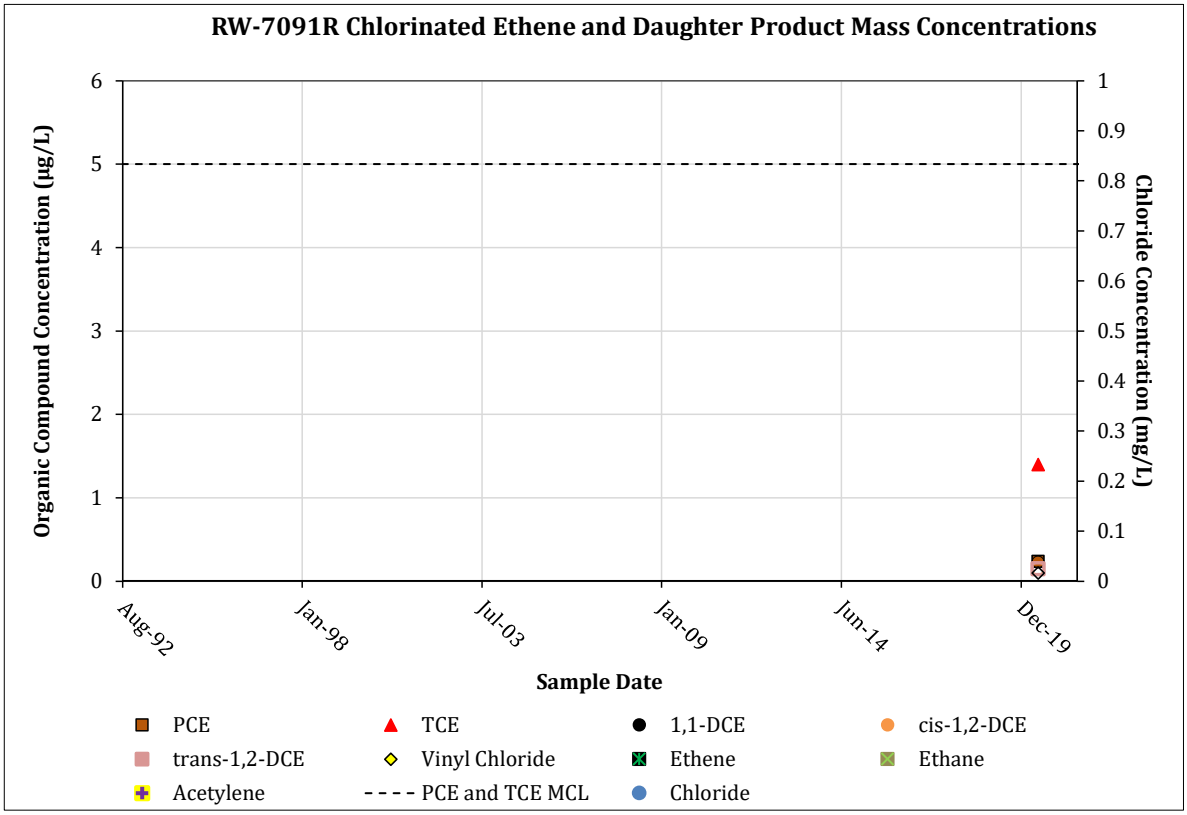
The symbol without fill designates a non-detect result.


RW-7077P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

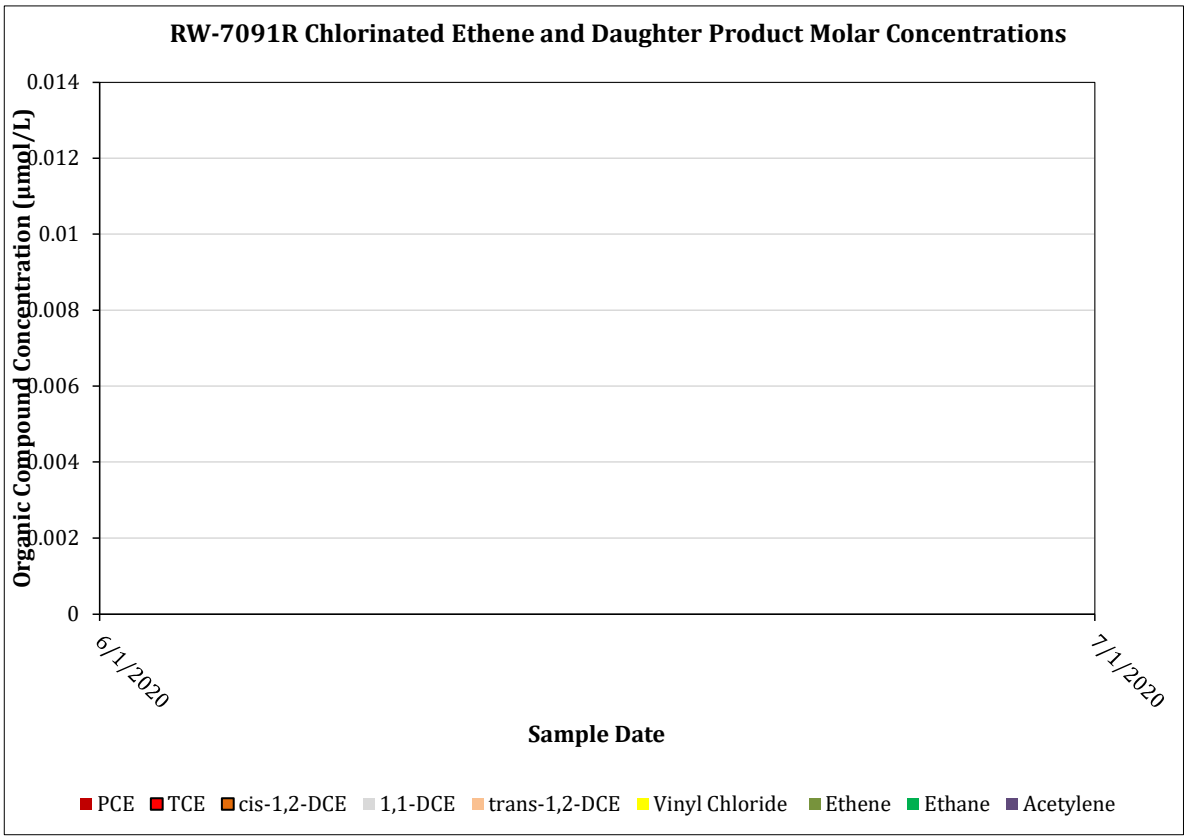

RW-7077P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

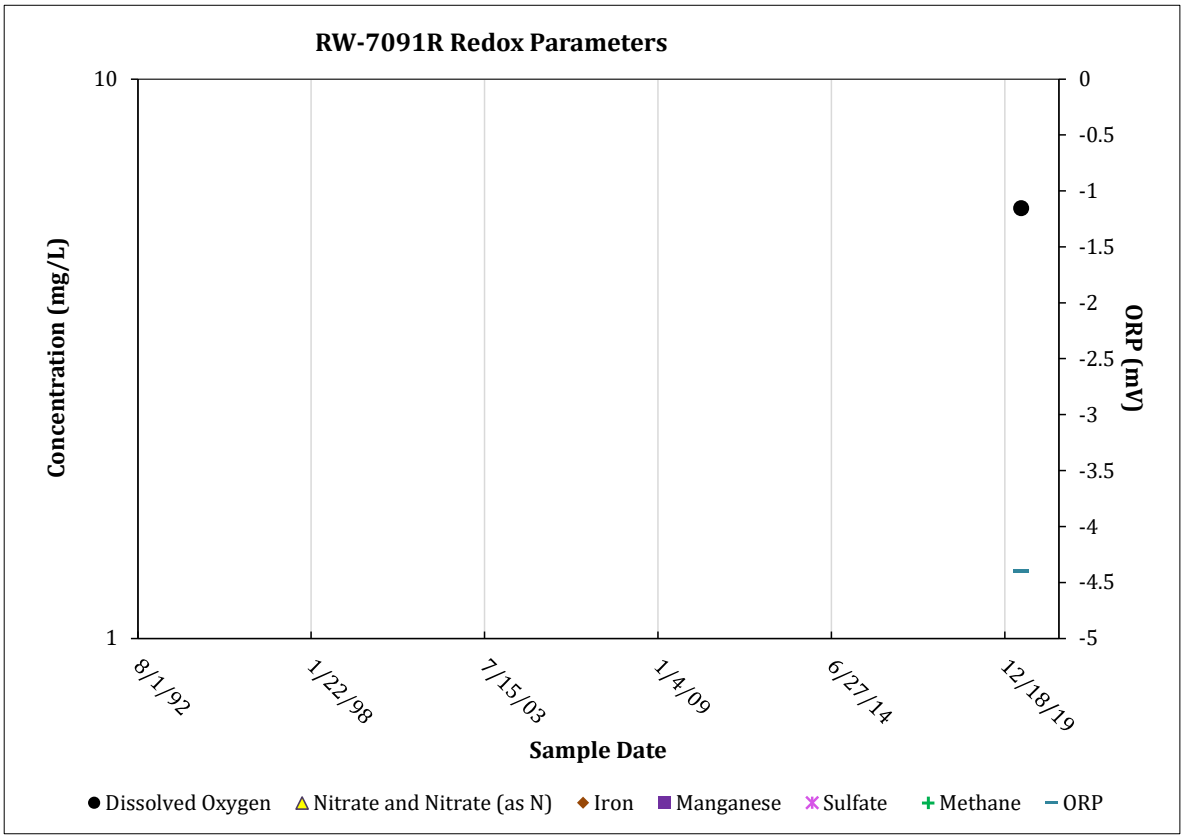

RW-7077P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

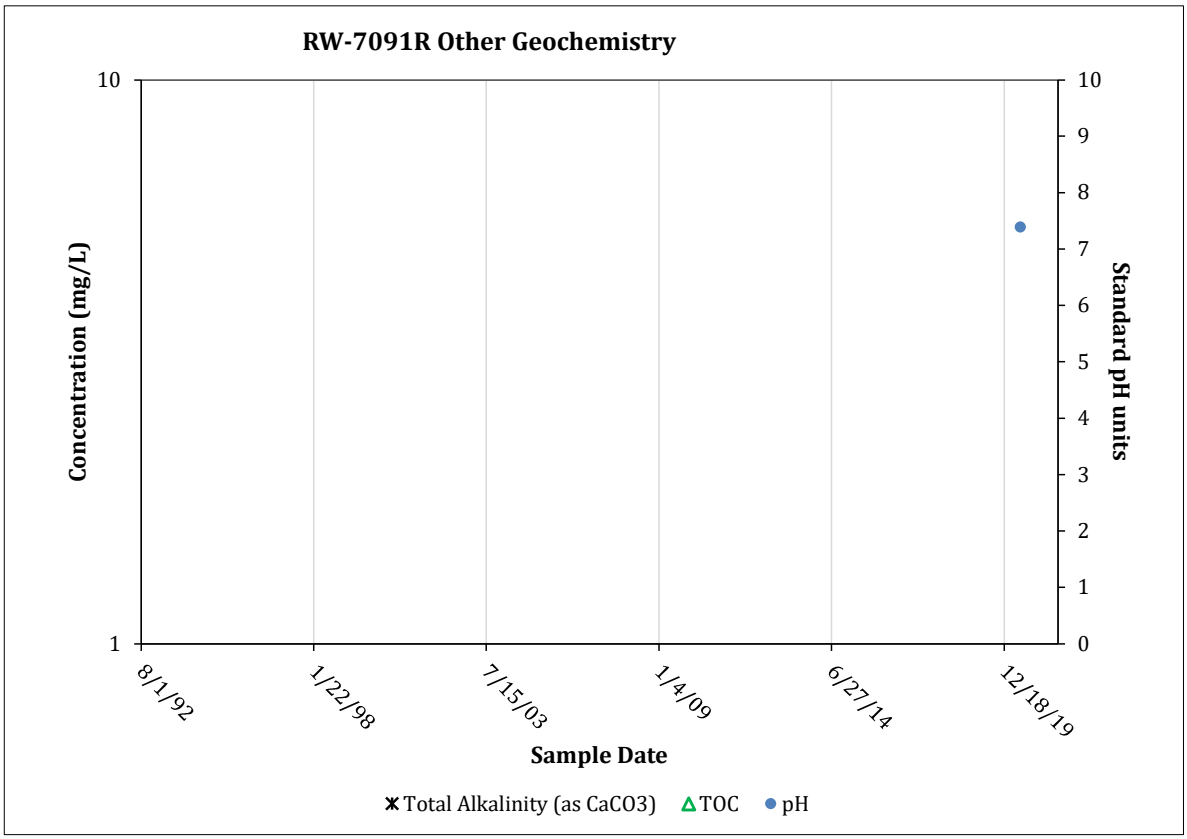


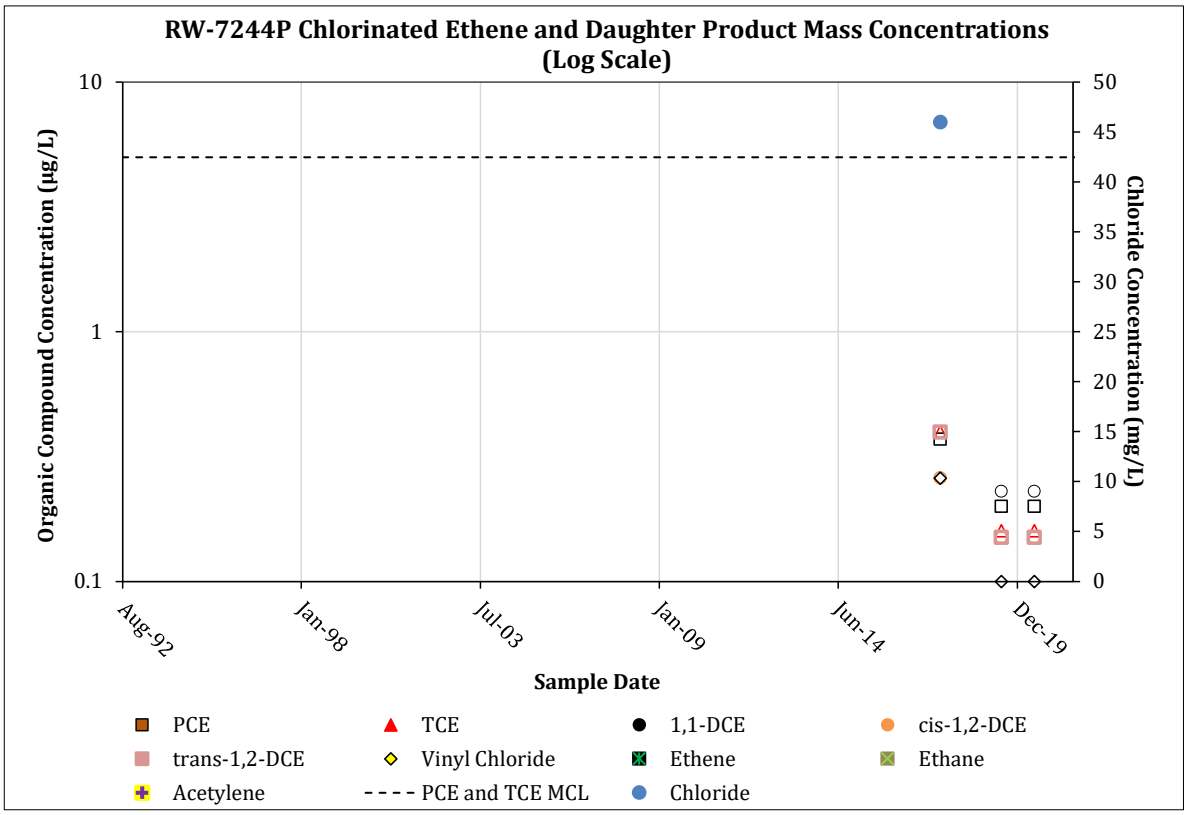


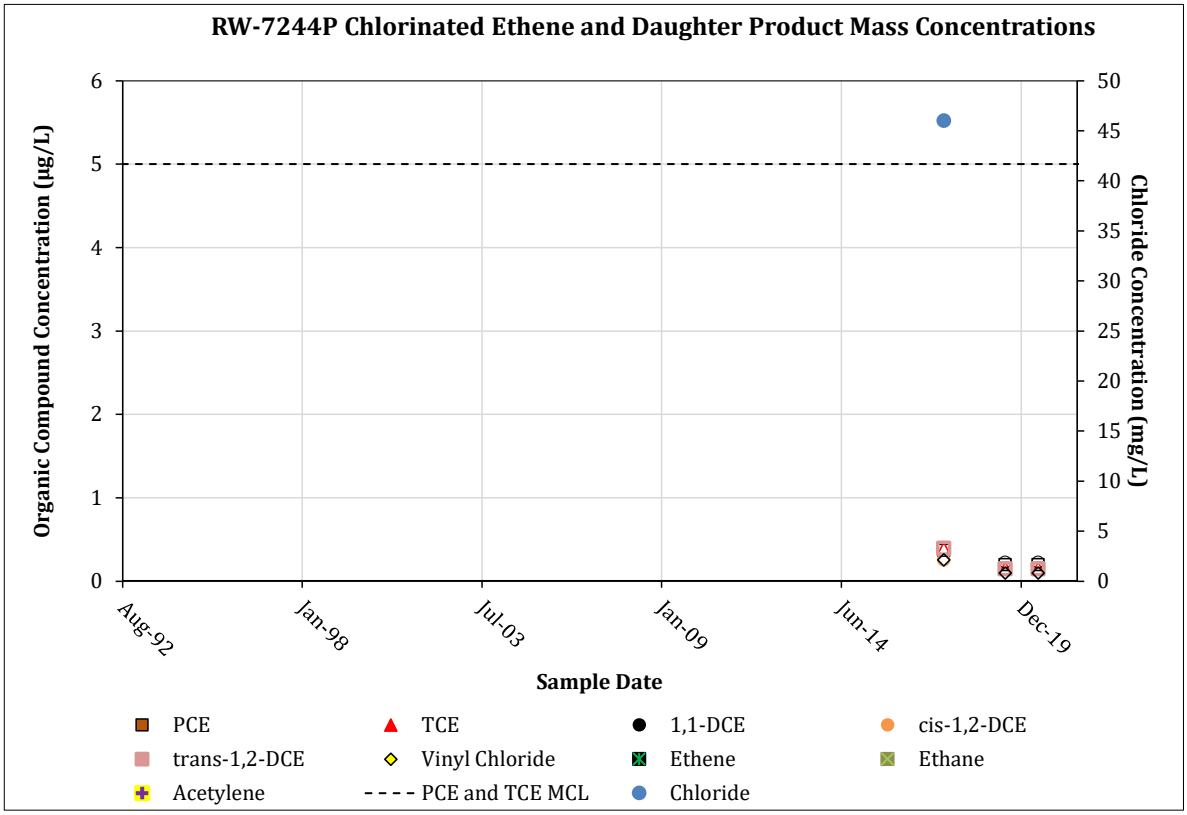
The symbol without fill designates a non-detect result.


RW-7091R Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
6/1/2020
7/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

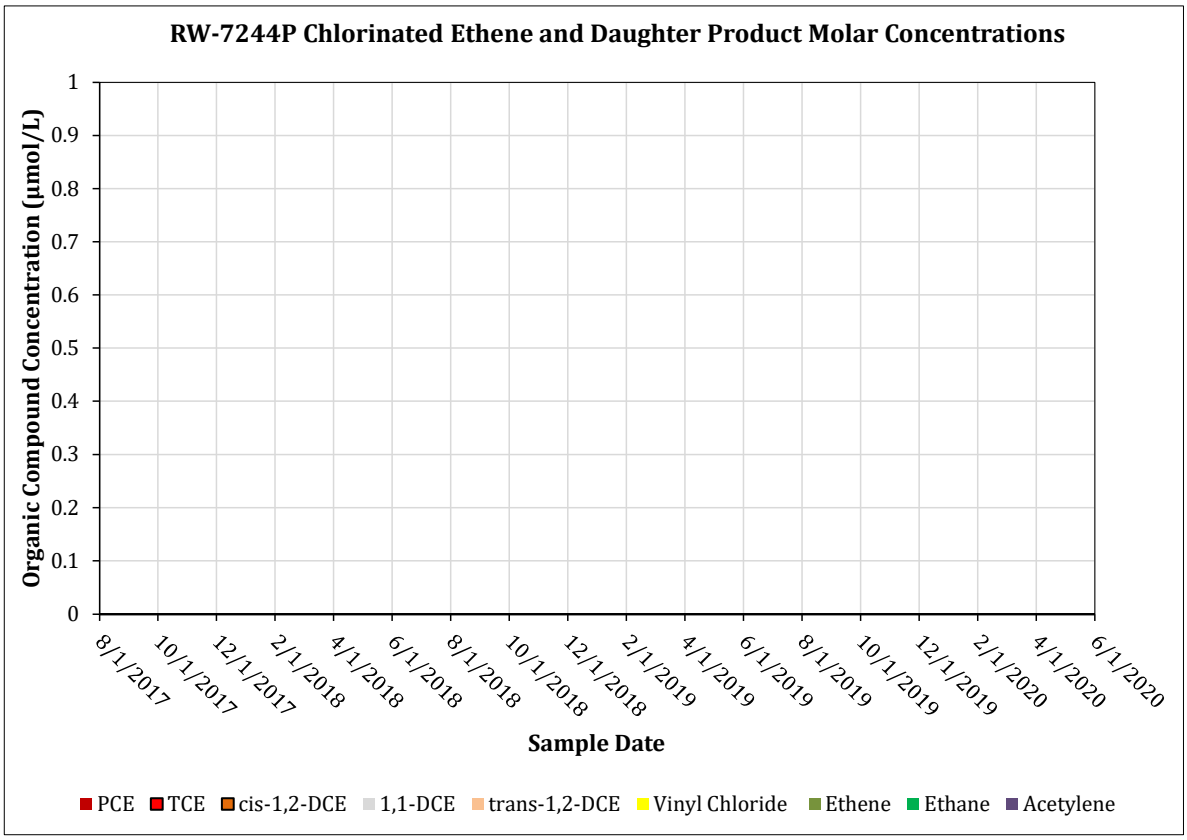

RW-7091R Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
0
-0.5
-1
-1.5
-2
-2.5
-3
-3.5
-4
-4.5
-5
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

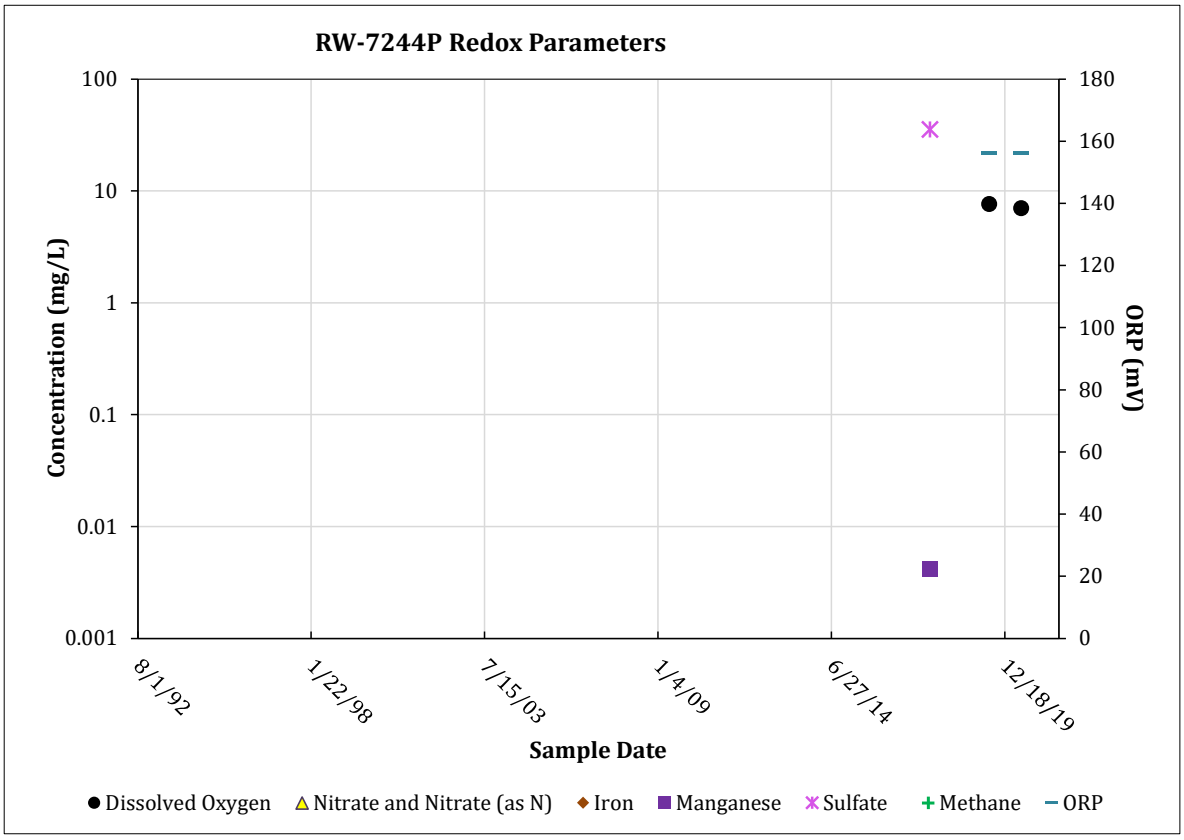

RW-7091R Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

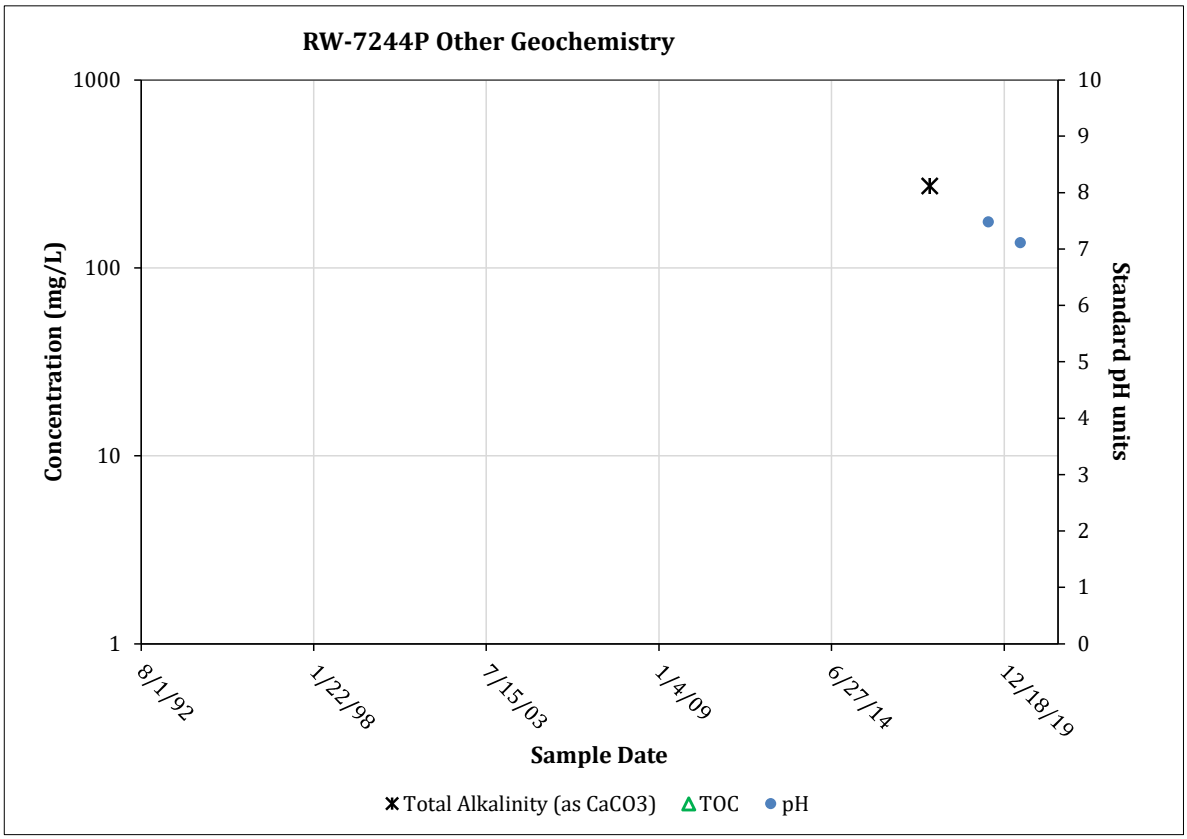


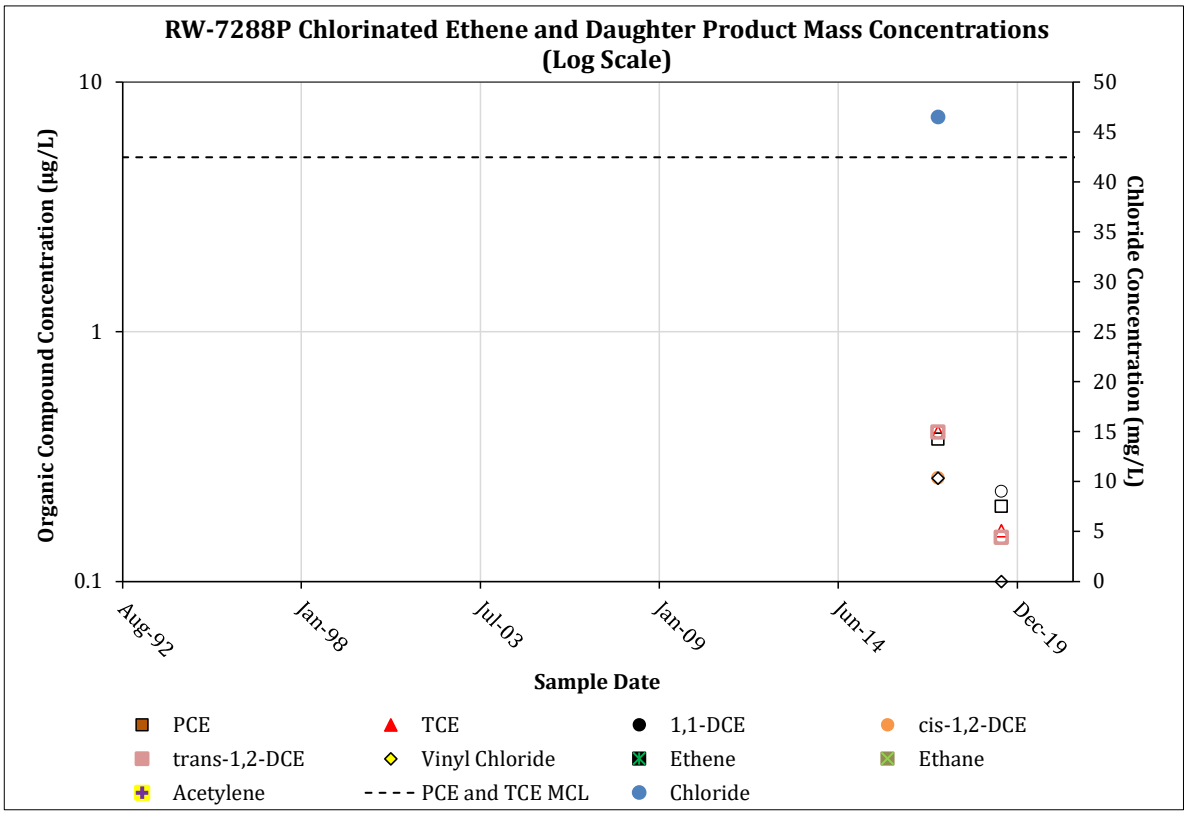


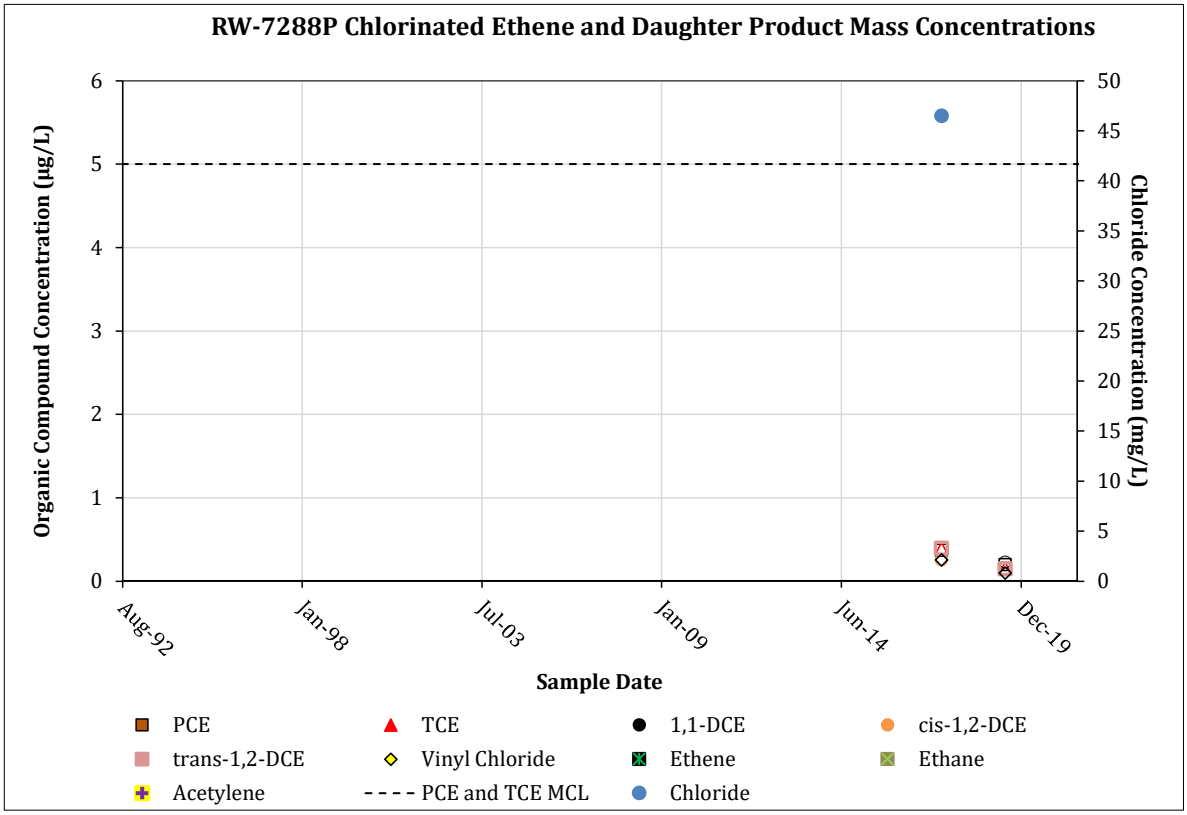
The symbol without fill designates a non-detect result.


RW-7244P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

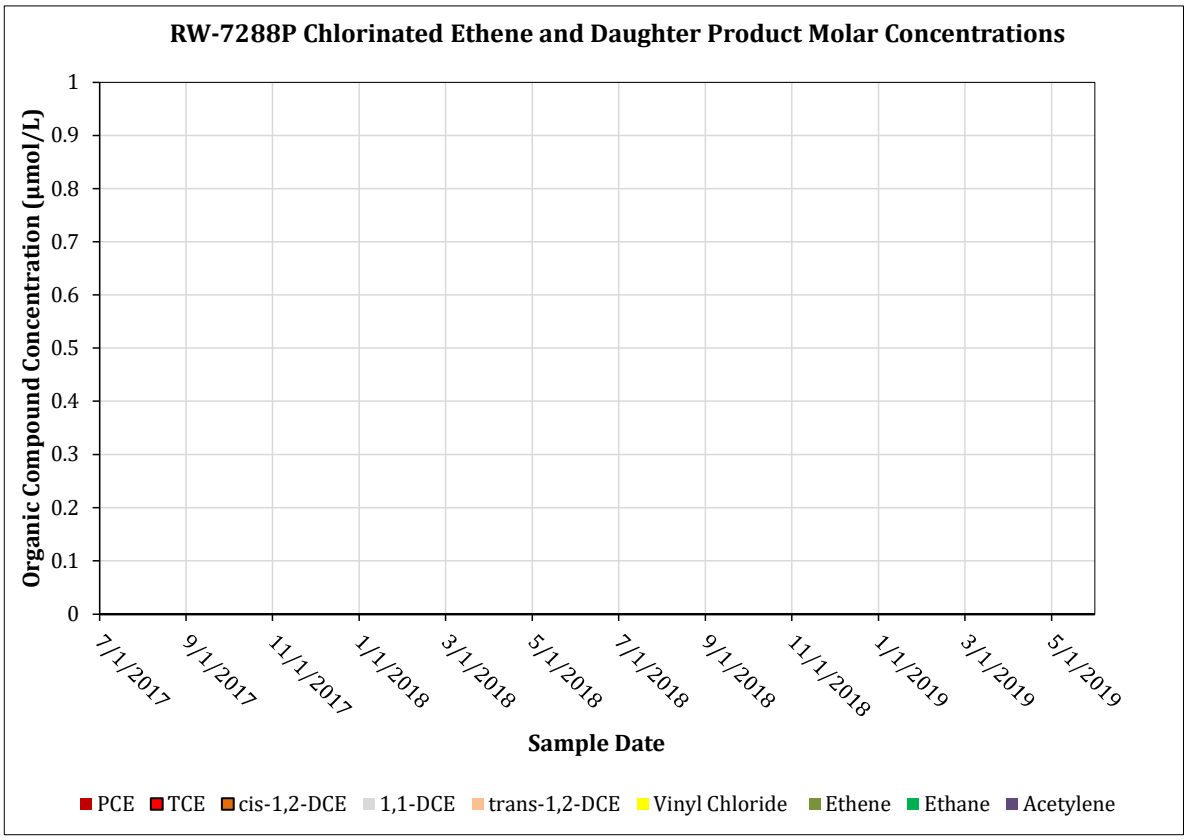

RW-7244P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

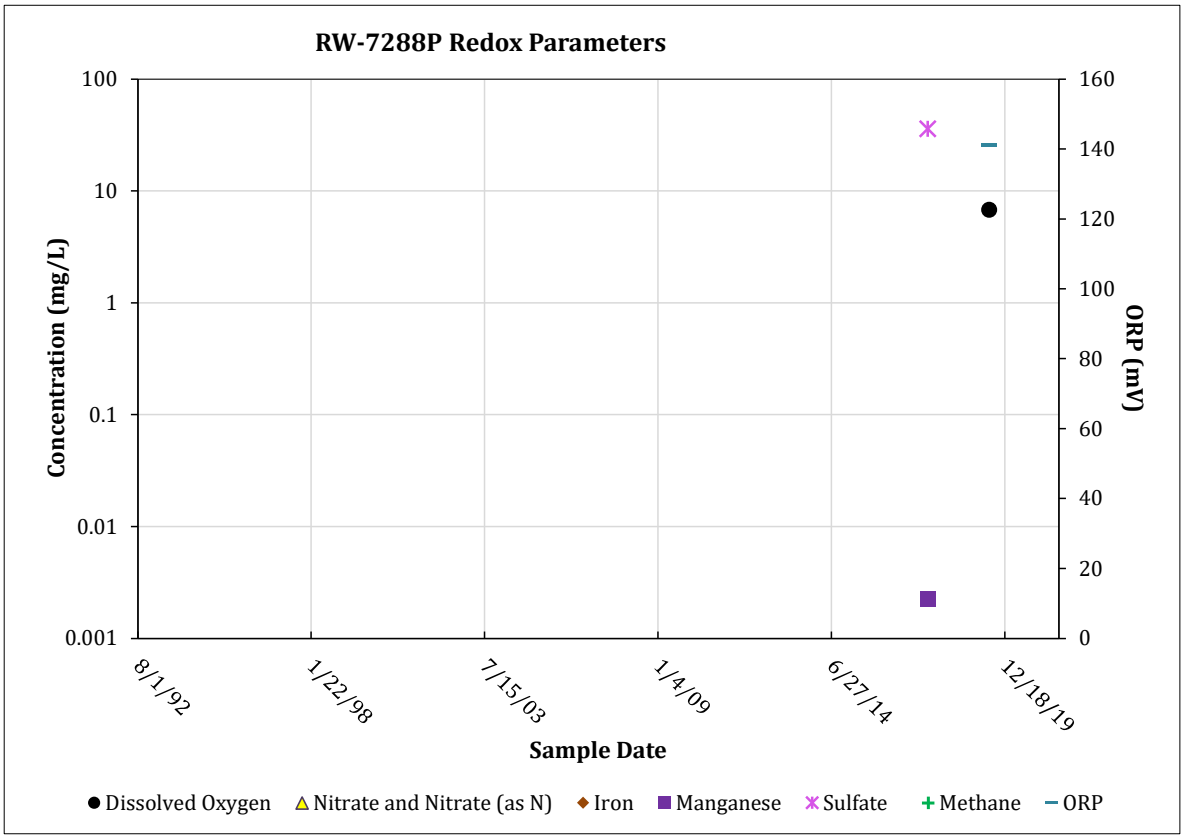

RW-7244P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

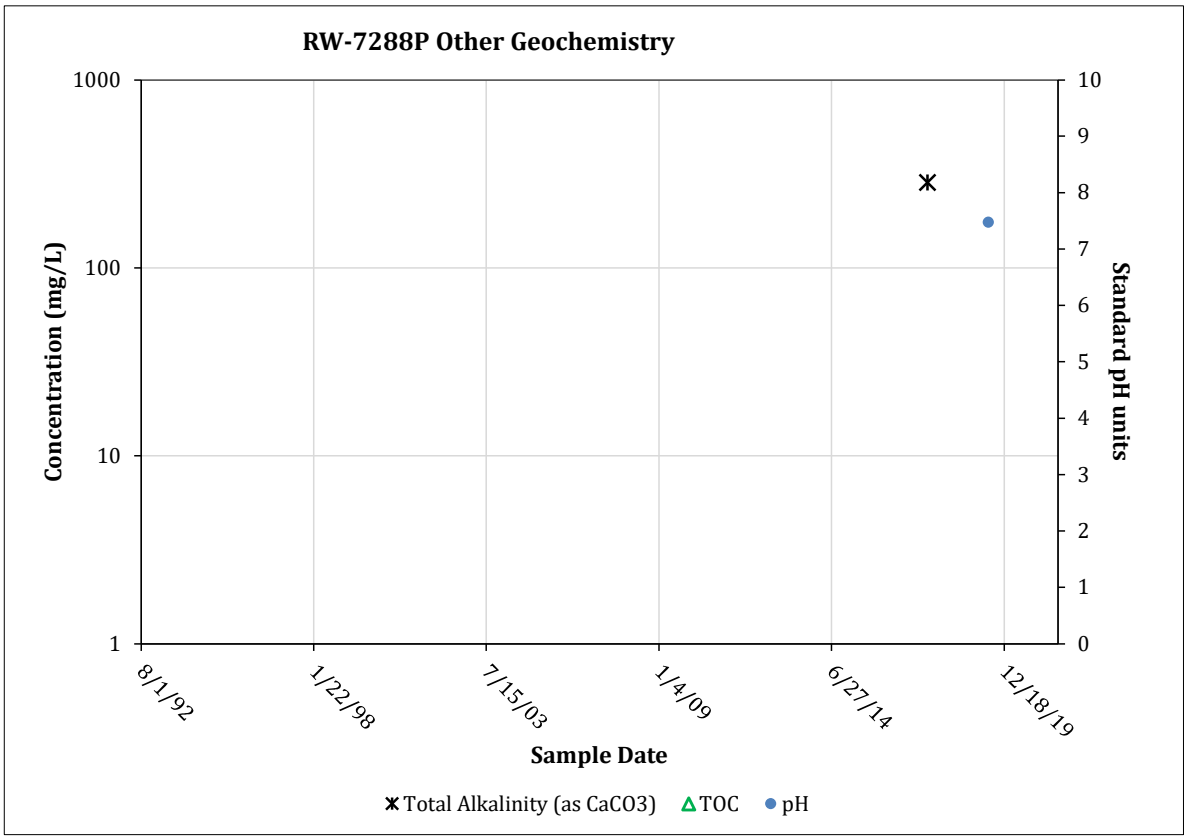


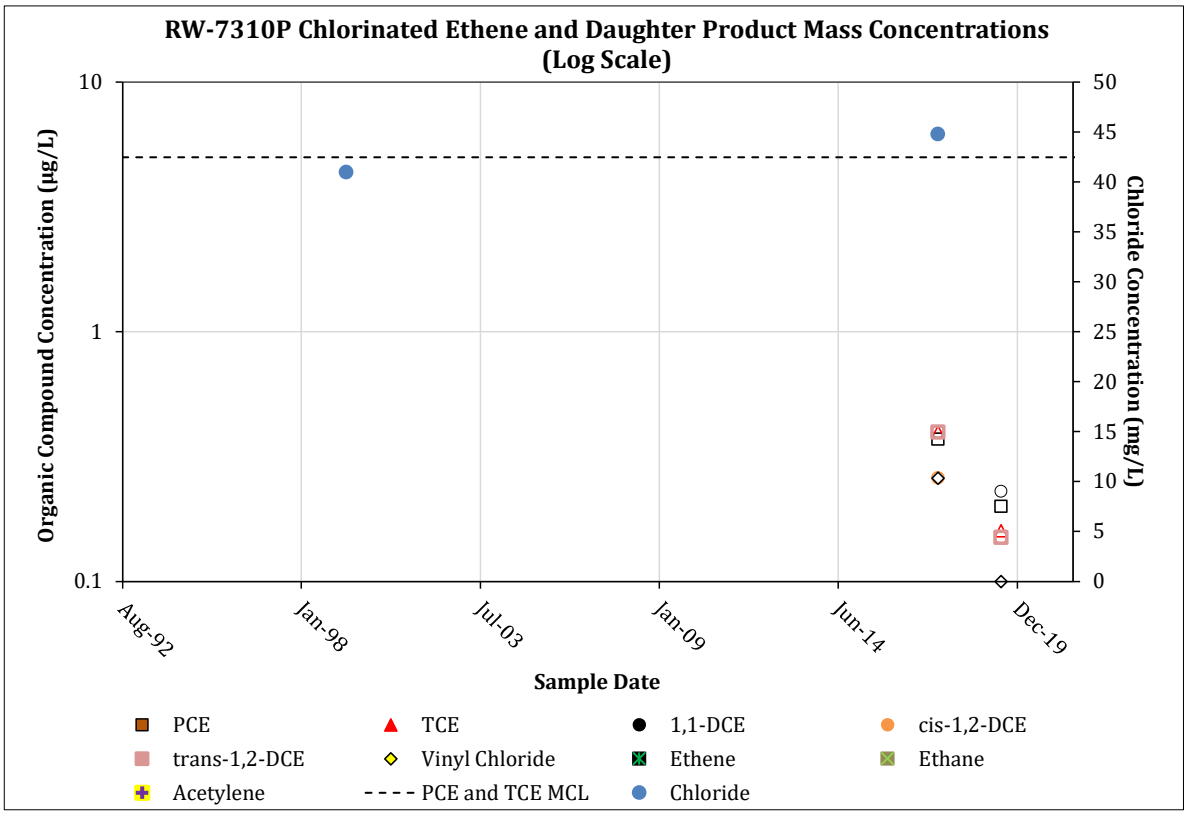


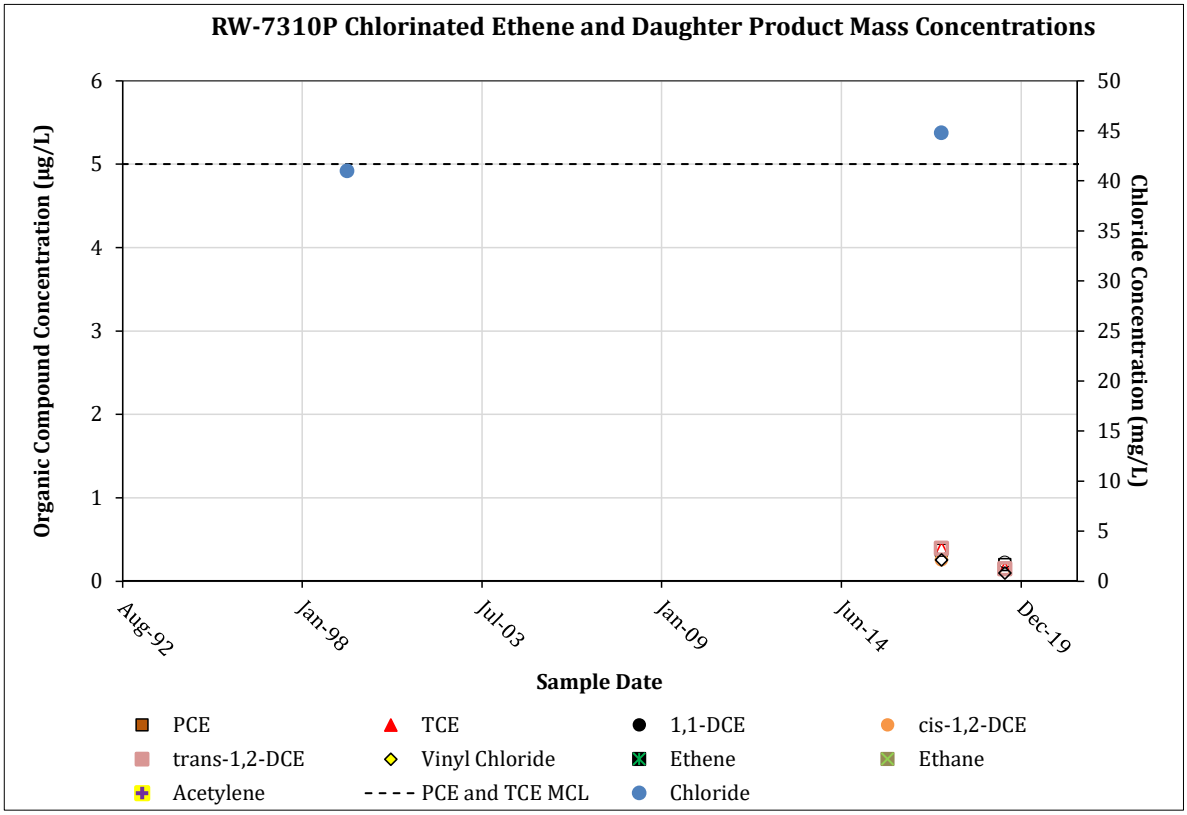
The symbol without fill designates a non-detect result.


RW-7288P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
7/1/2017
9/1/2017
11/1/2017
1/1/2018
3/1/2018
5/1/2018
7/1/2018
9/1/2018
11/1/2018
1/1/2019
3/1/2019
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

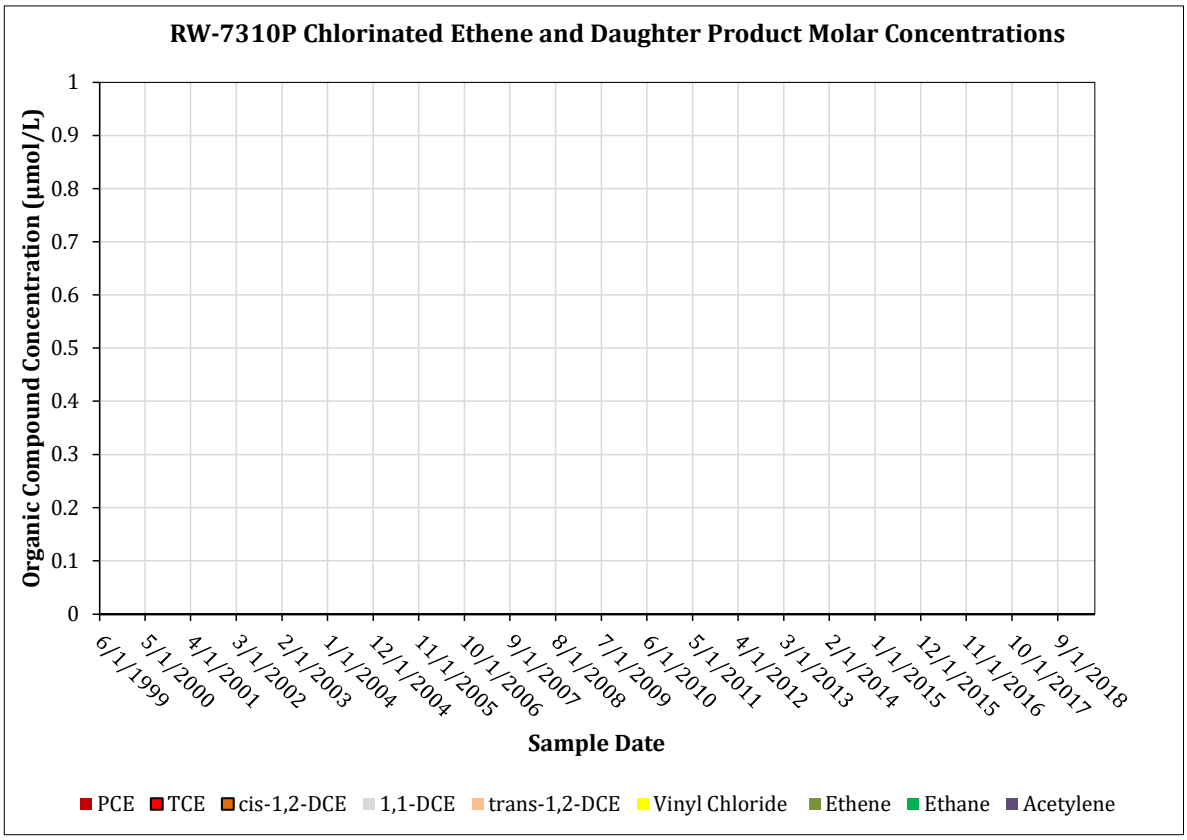

RW-7288P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

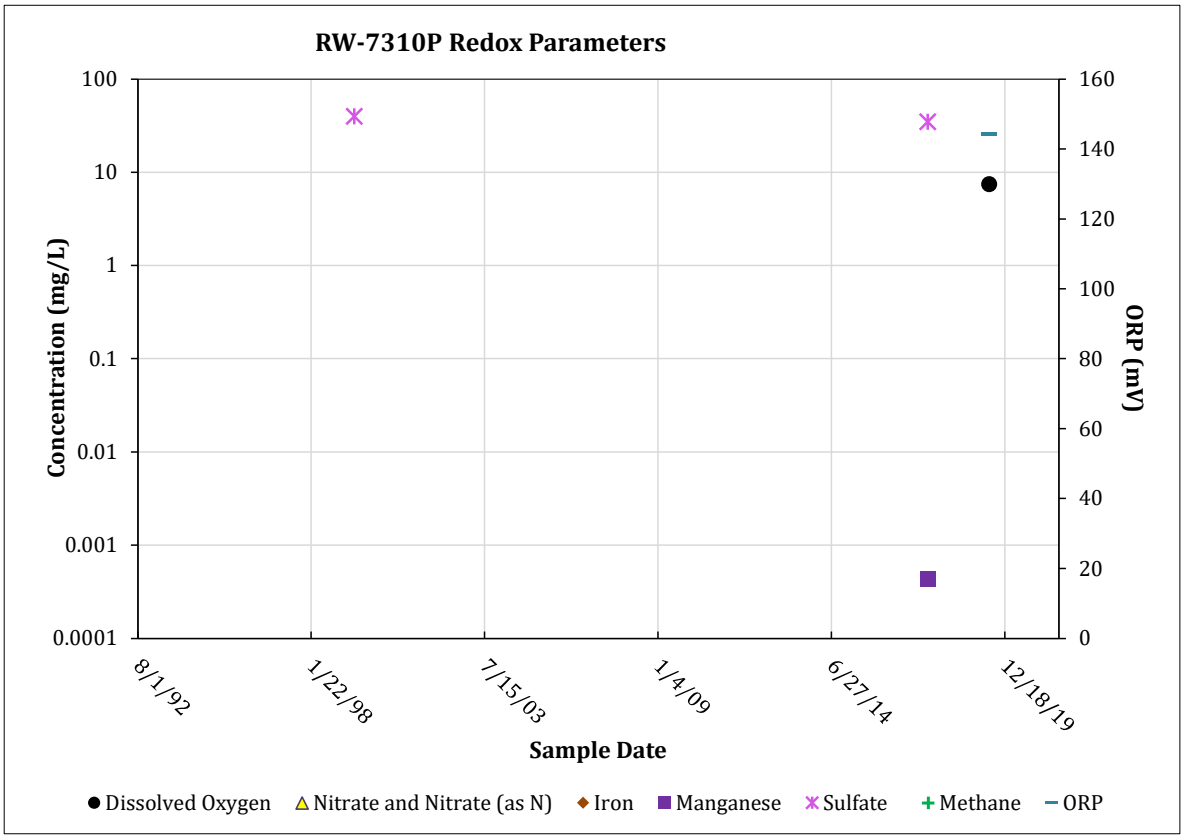

RW-7288P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

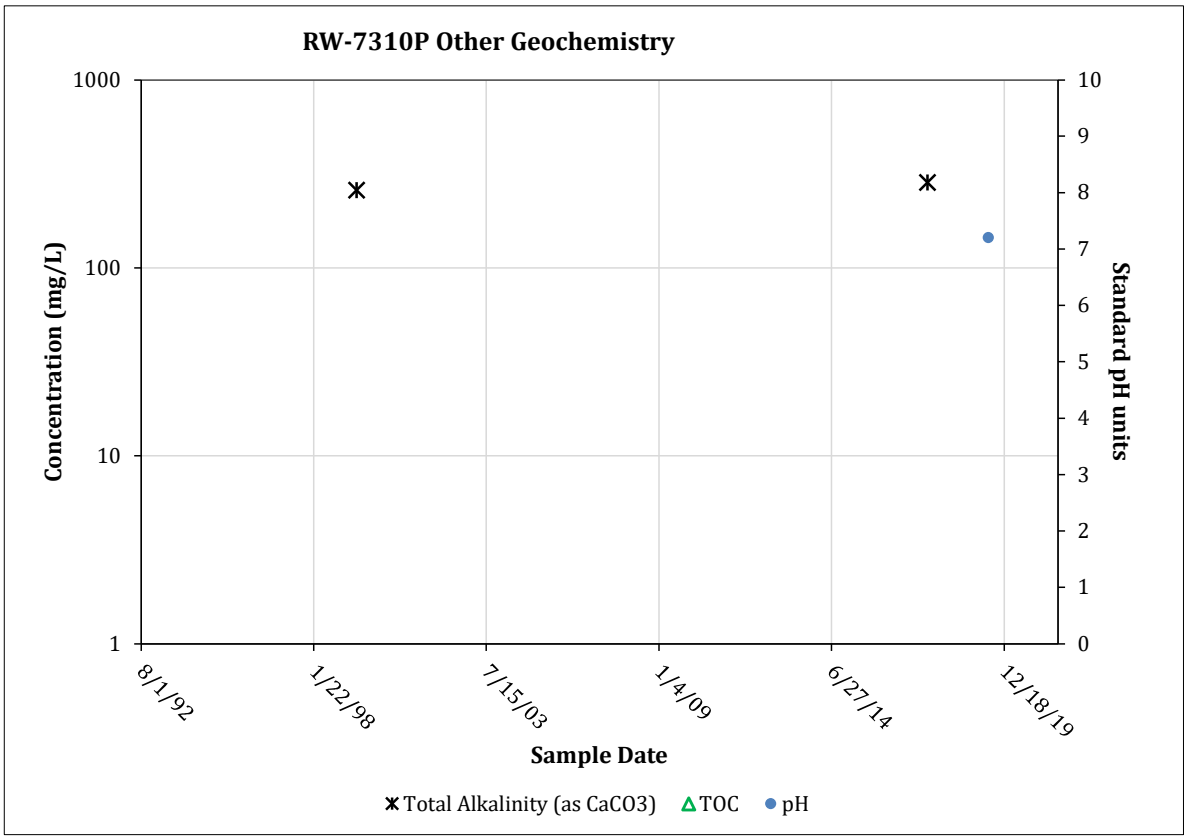


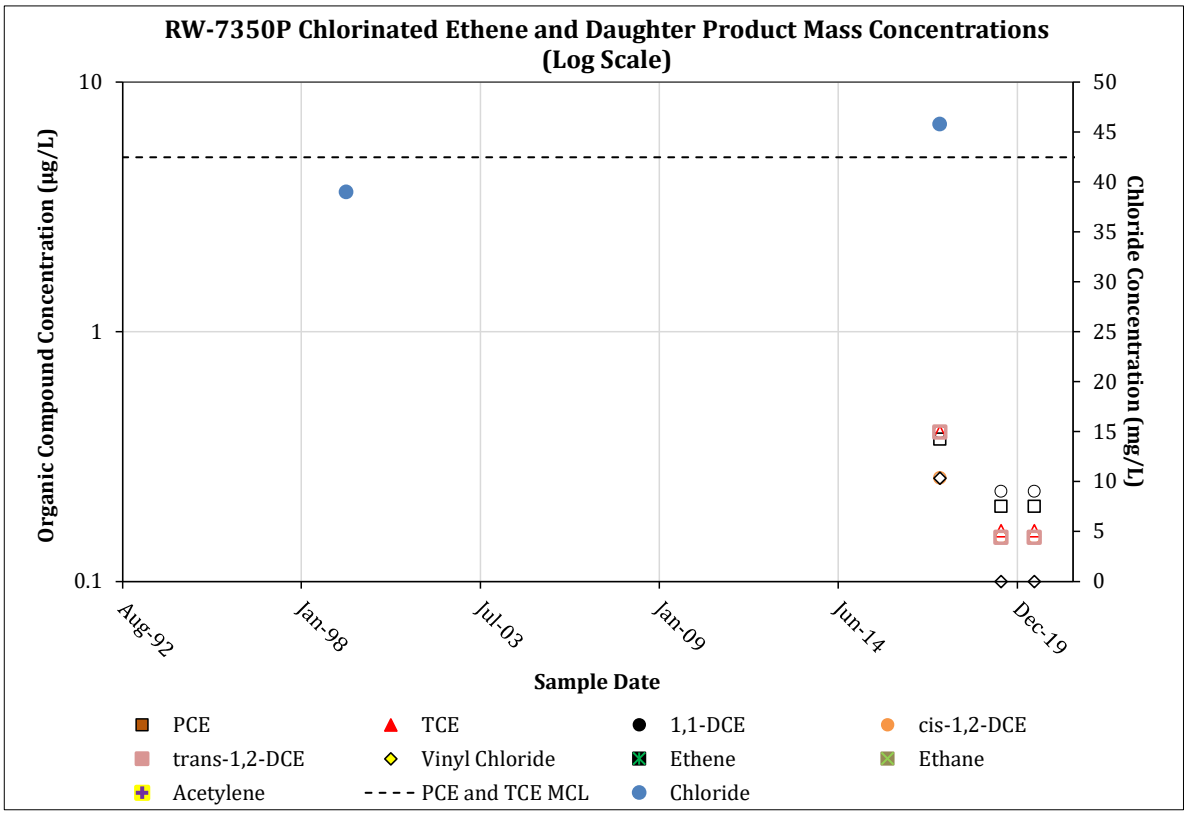


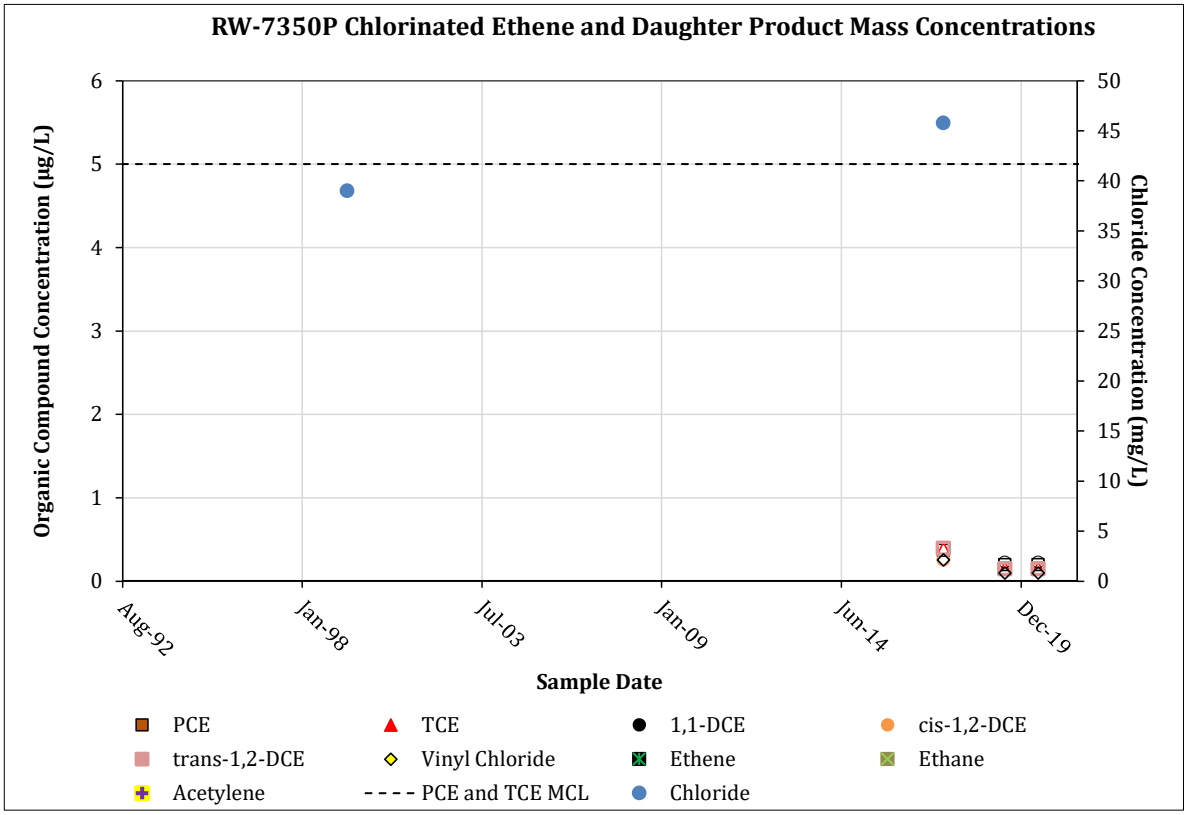
The symbol without fill designates a non-detect result.


RW-7310P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/1999
5/1/2000
4/1/2001
3/1/2002
2/1/2003
1/1/2004
12/1/2004
11/1/2005
10/1/2006
9/1/2007
8/1/2008
7/1/2009
6/1/2010
5/1/2011
4/1/2012
3/1/2013
2/1/2014
1/1/2015
12/1/2015
11/1/2016
10/1/2017
9/1/2018
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

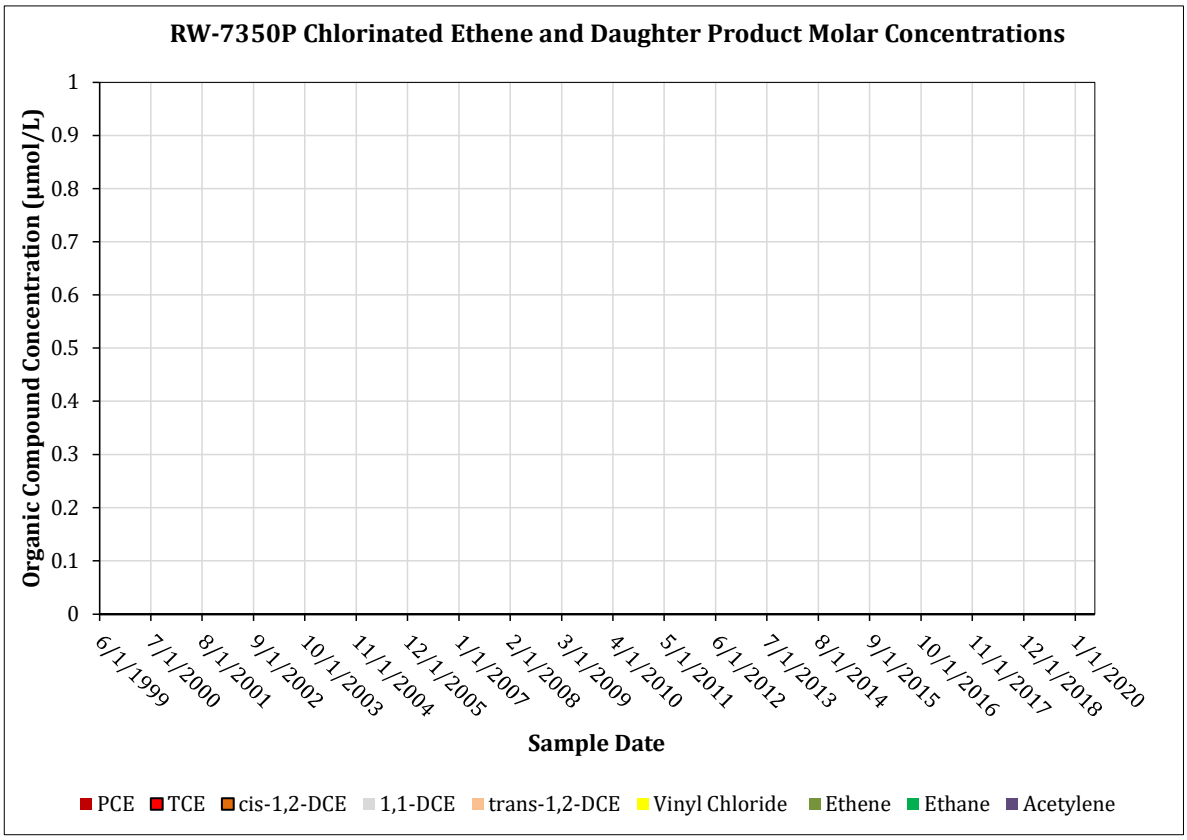

RW-7310P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

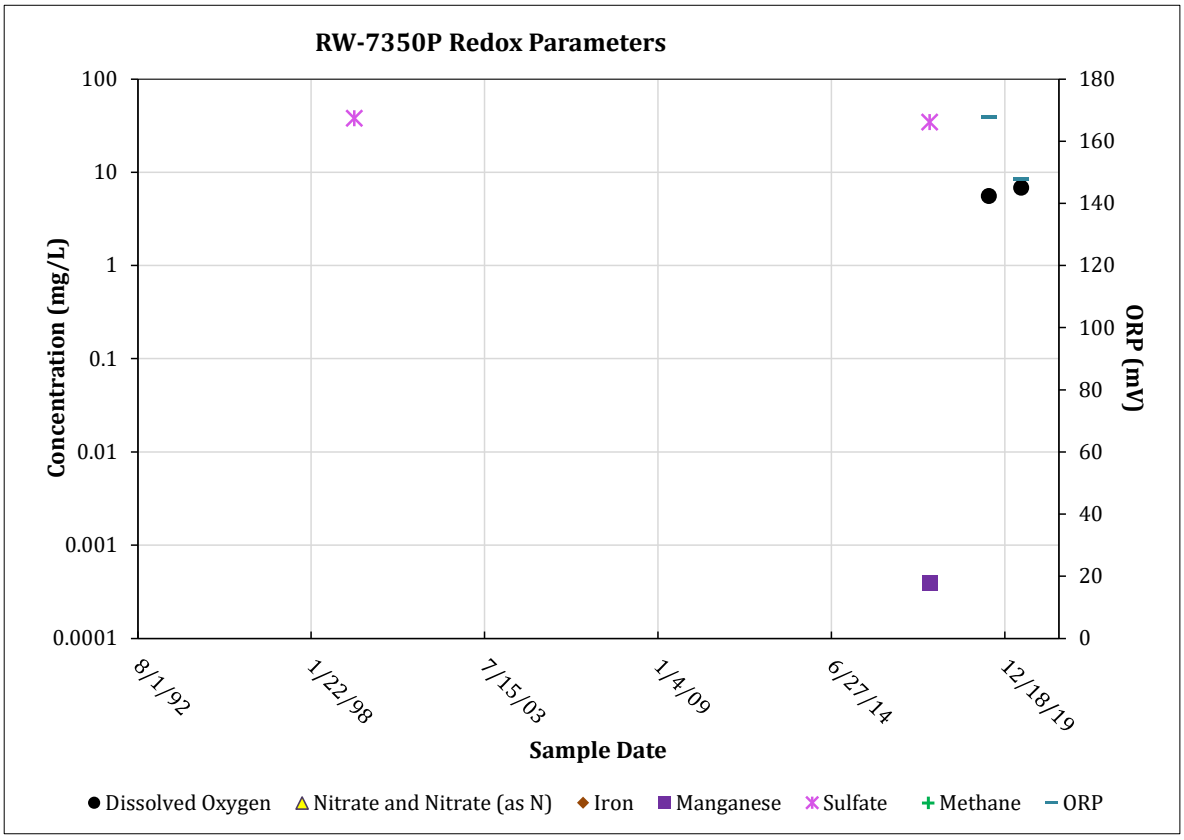

RW-7310P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

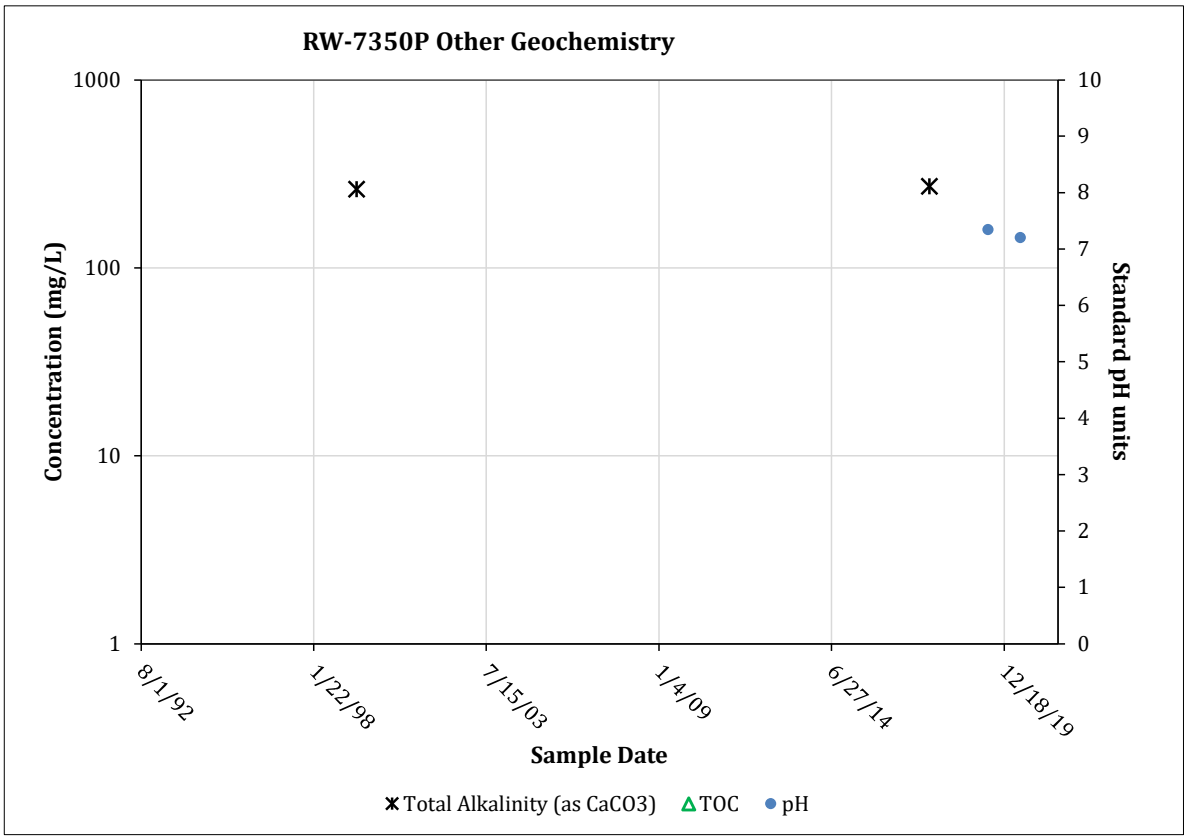


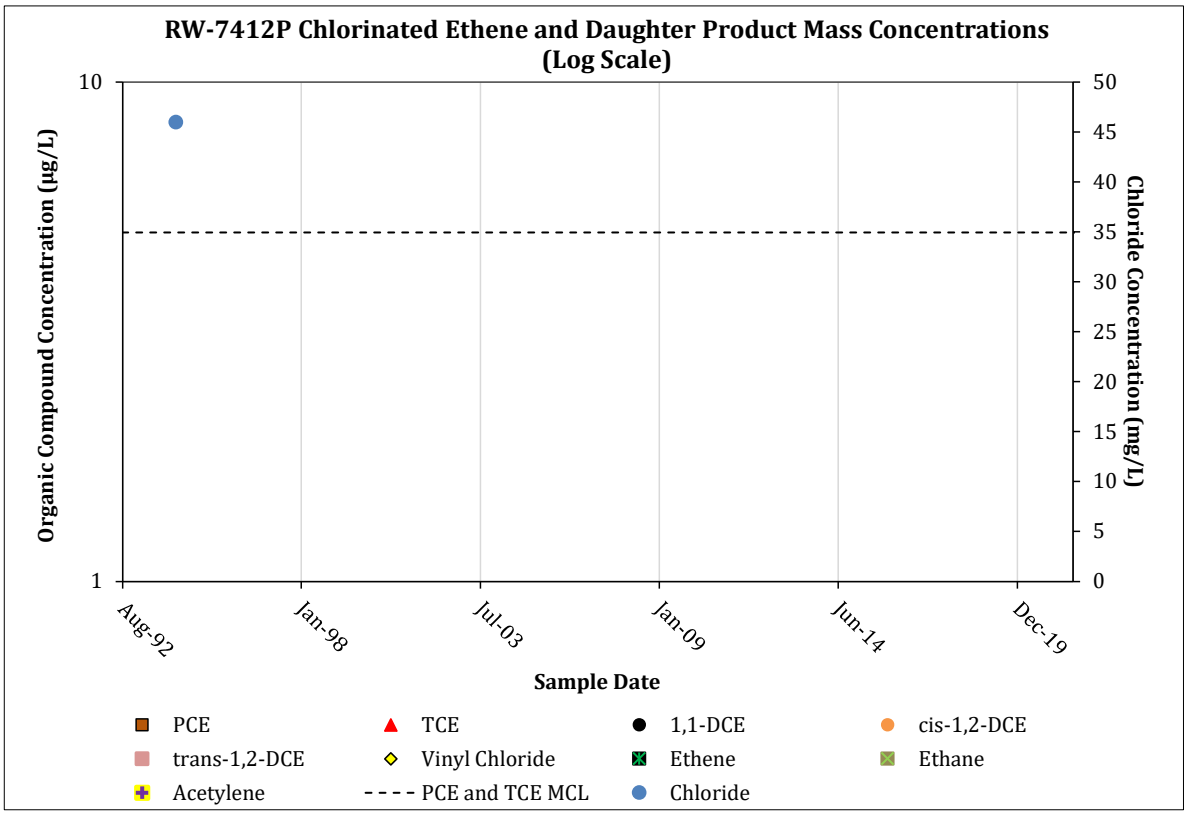


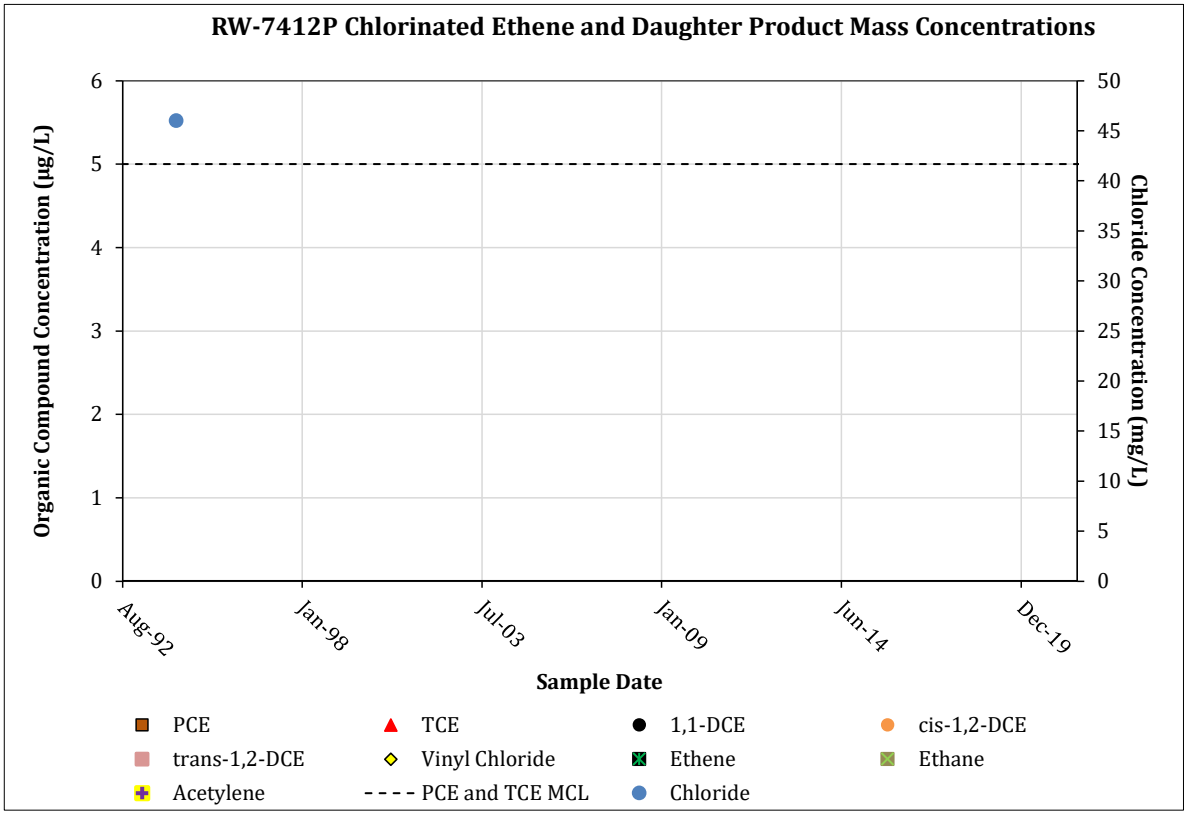
The symbol without fill designates a non-detect result.


RW-7350P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/1999
7/1/2000
8/1/2001
9/1/2002
10/1/2003
11/1/2004
12/1/2005
1/1/2007
2/1/2008
3/1/2009
4/1/2010
5/1/2011
6/1/2012
7/1/2013
8/1/2014
9/1/2015
10/1/2016
11/1/2017
12/1/2018
1/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

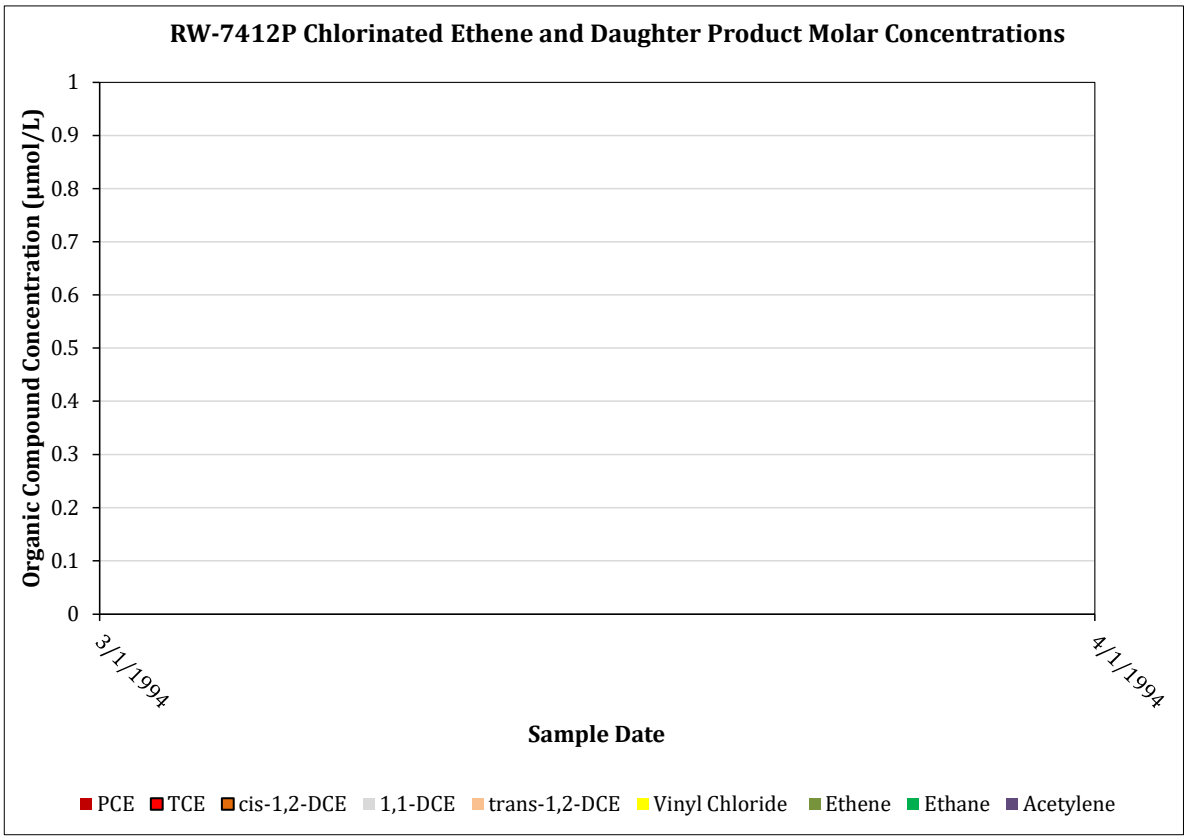

RW-7350P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

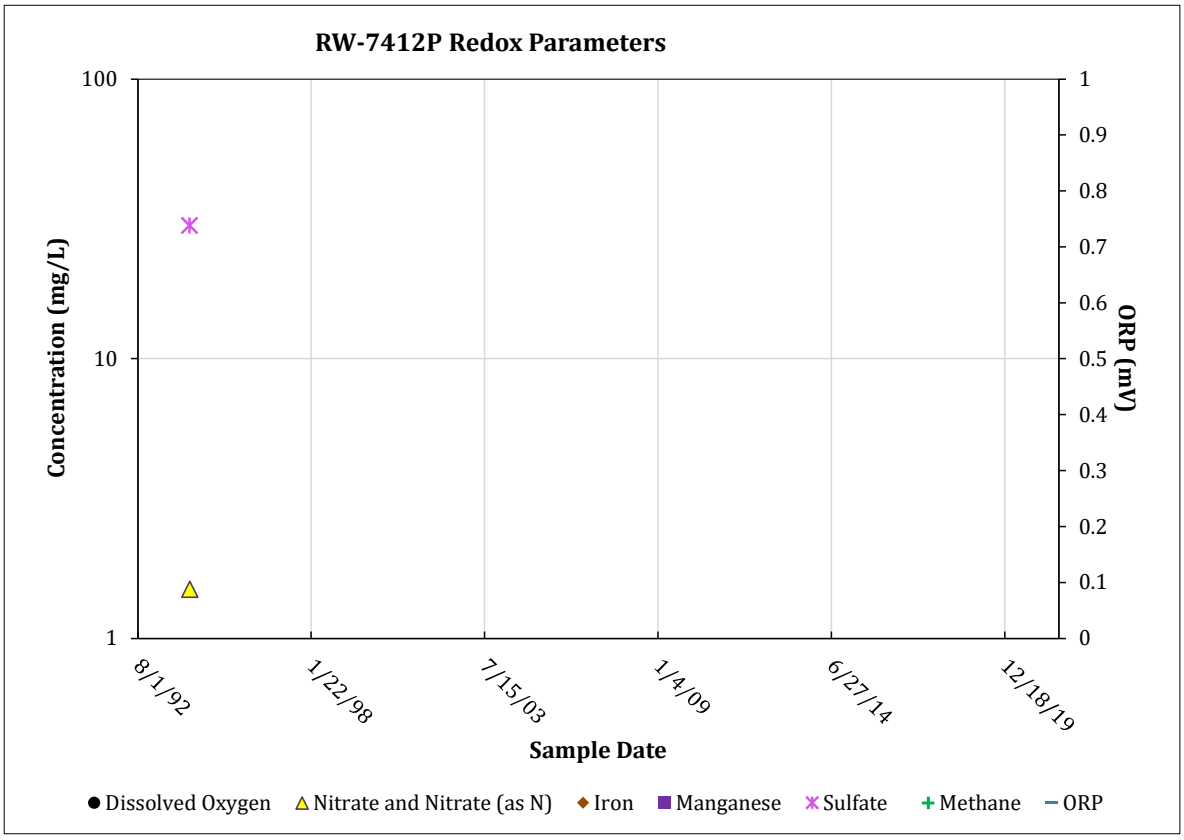

RW-7350P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

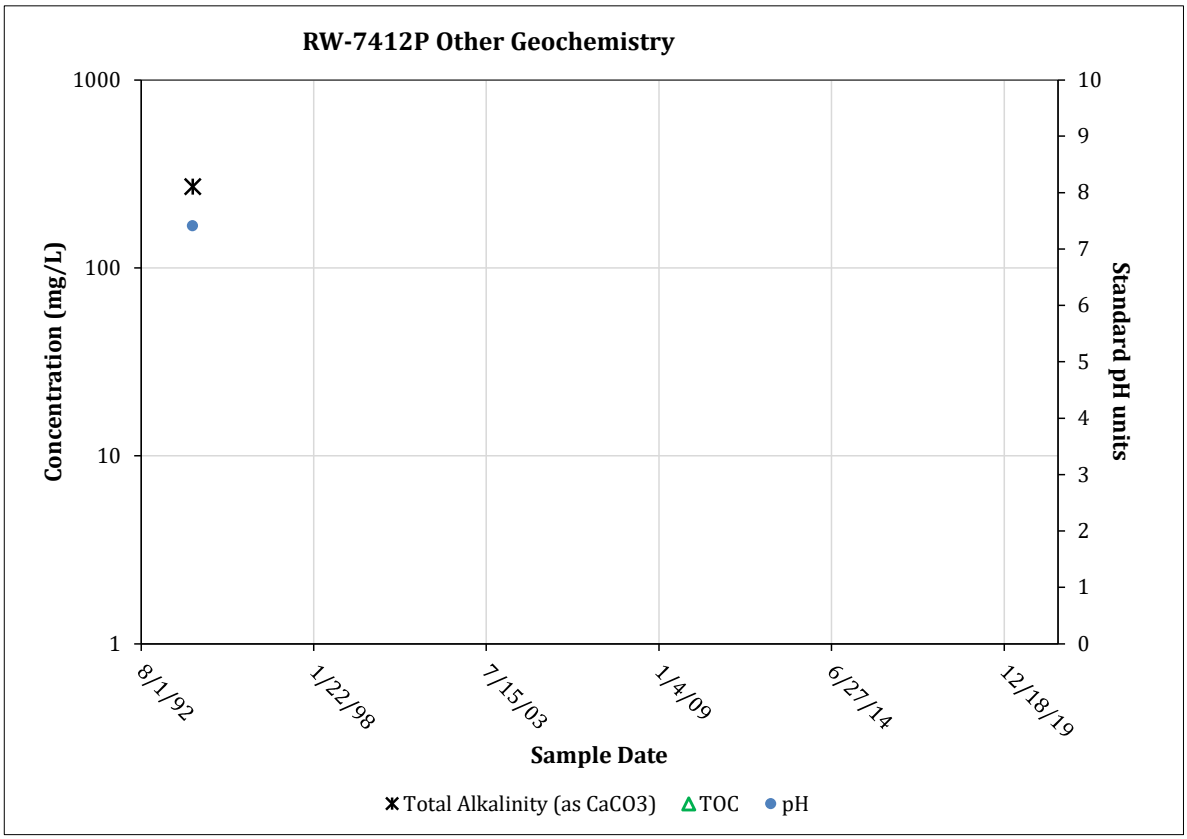


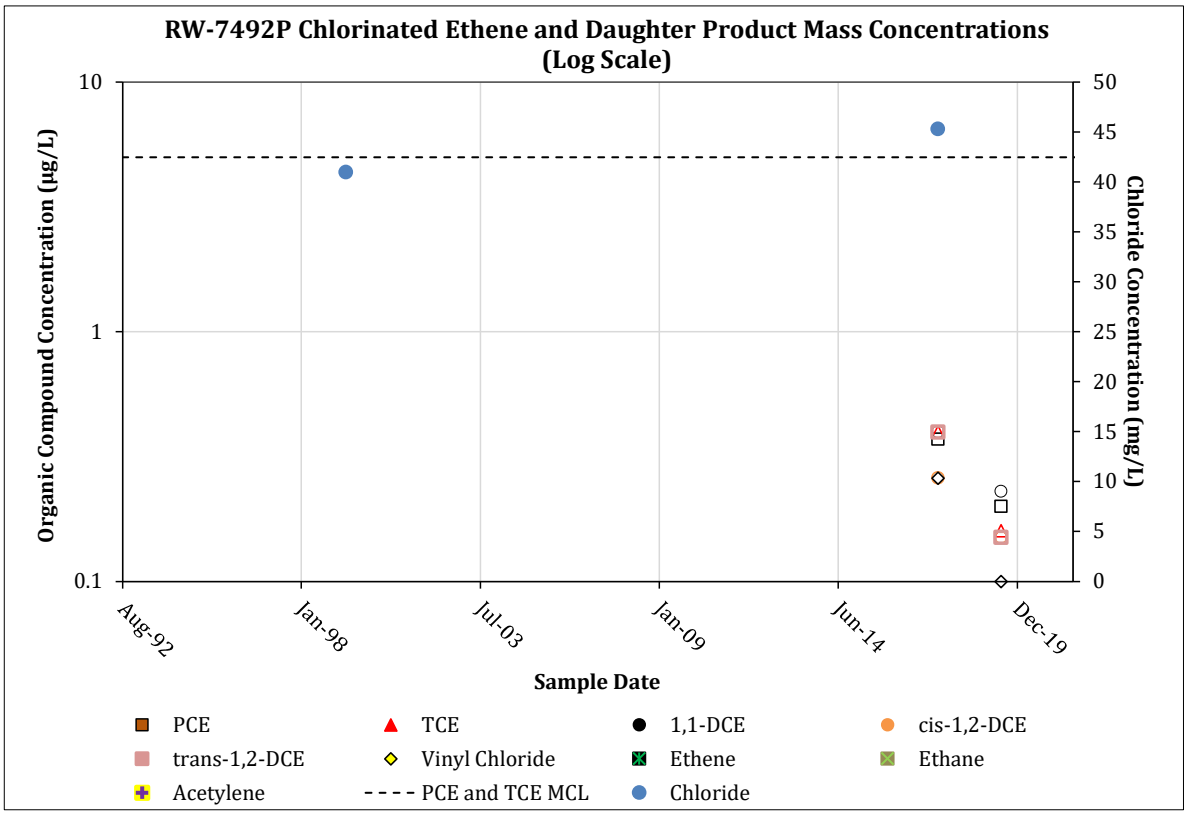


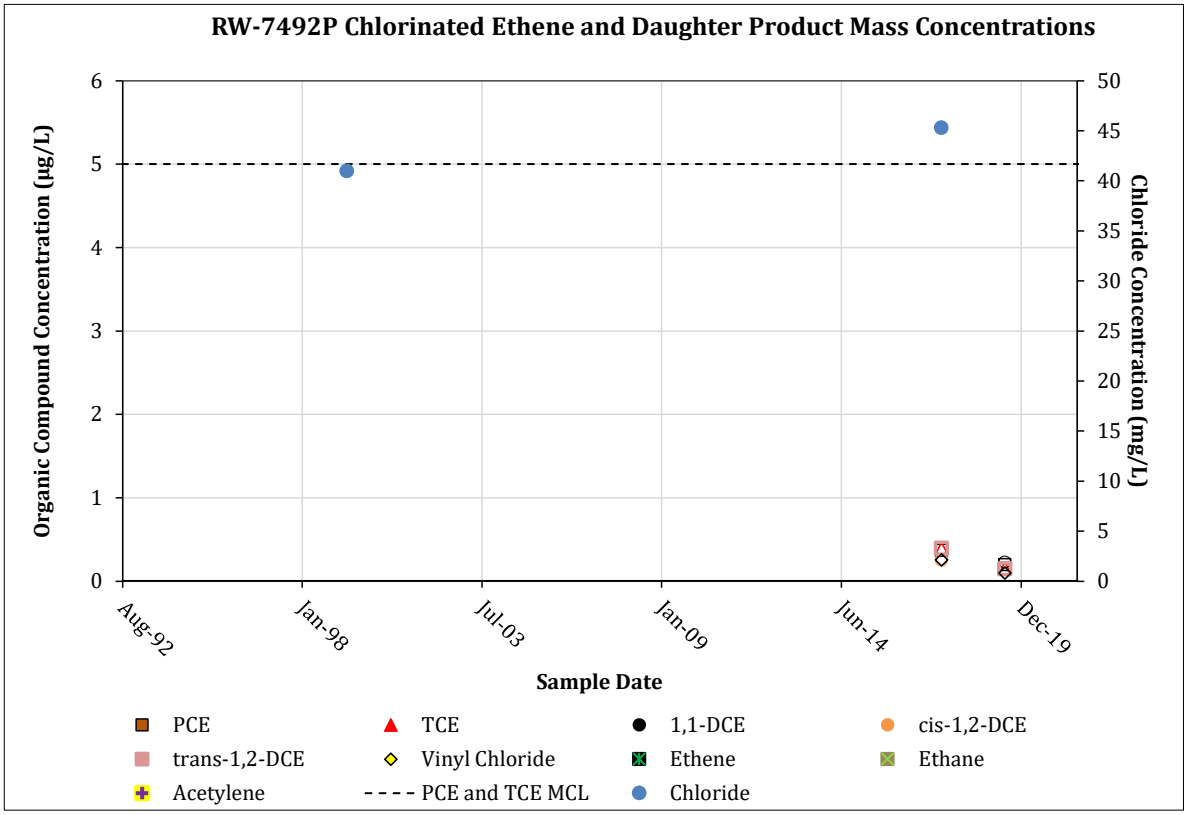
The symbol without fill designates a non-detect result.


RW-7412P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
3/1/1994
4/1/1994
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

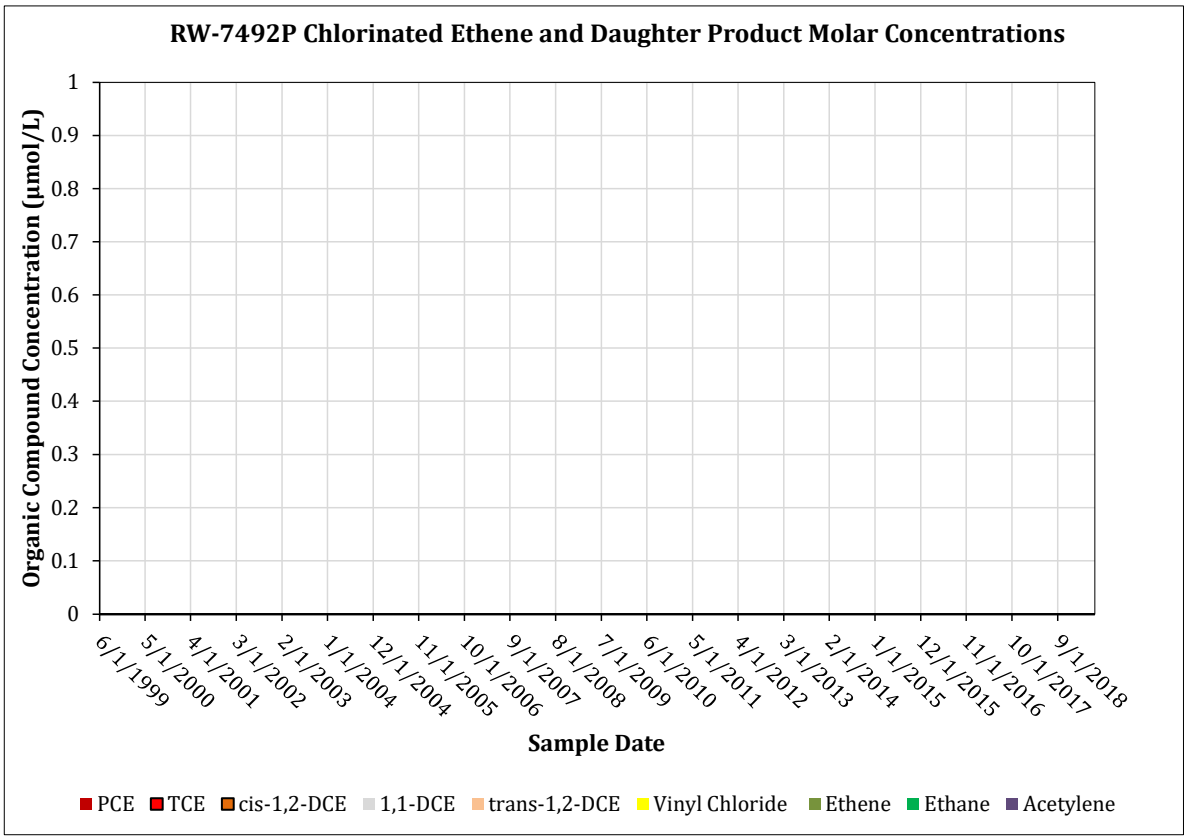

RW-7412P Redox Parameters
Concentration (mg/L)
100
10
1
ORP (mV)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

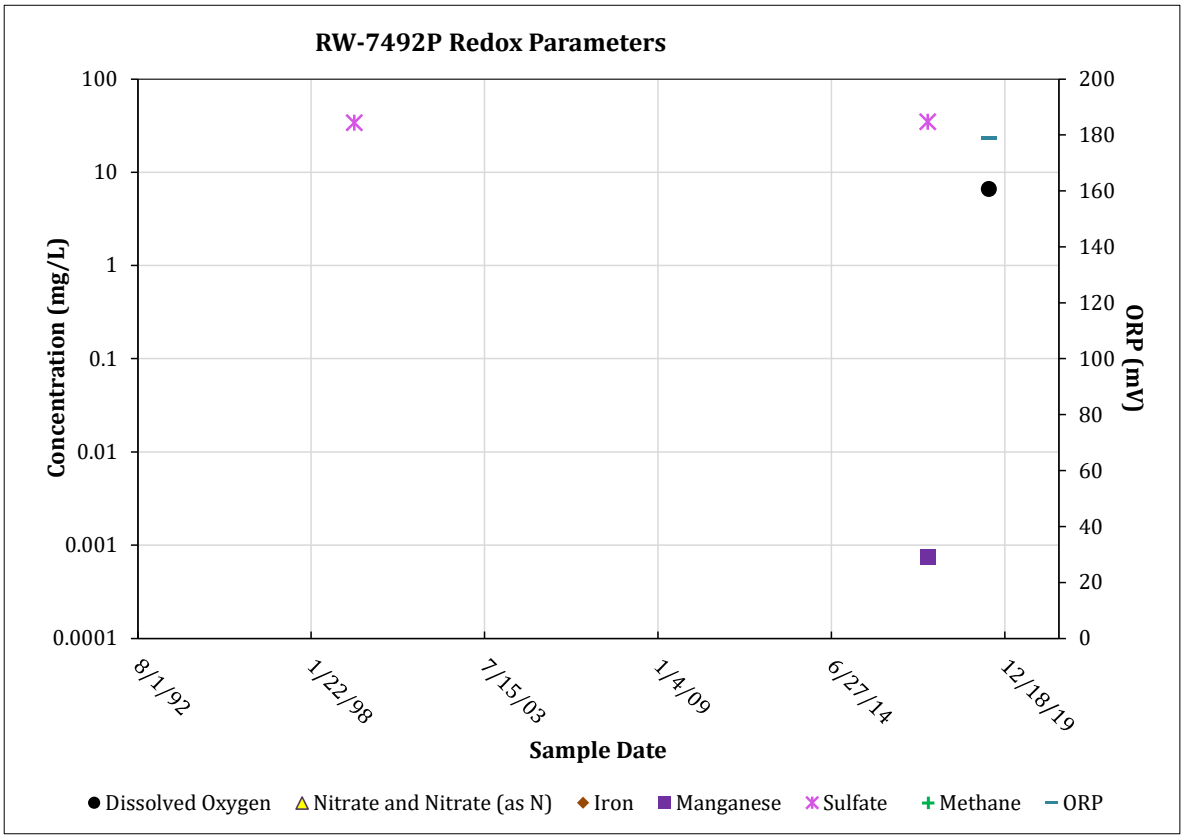

RW-7412P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

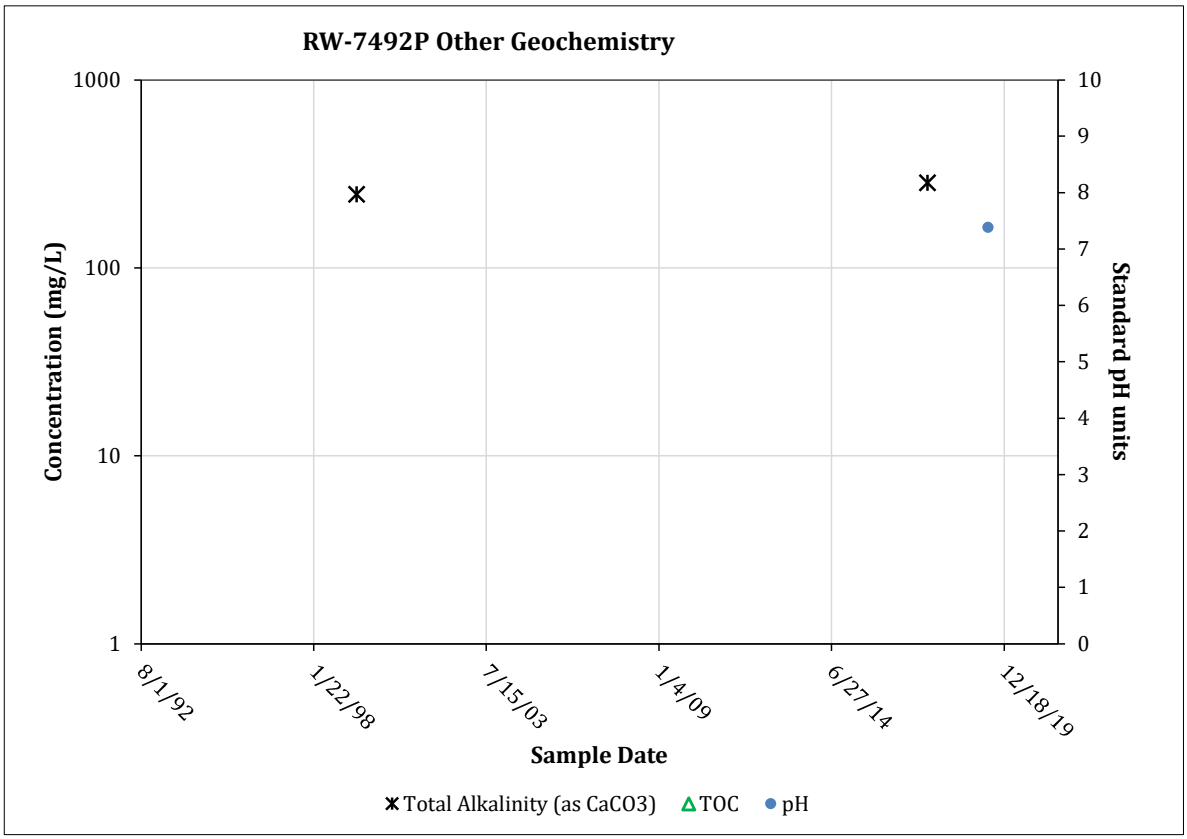


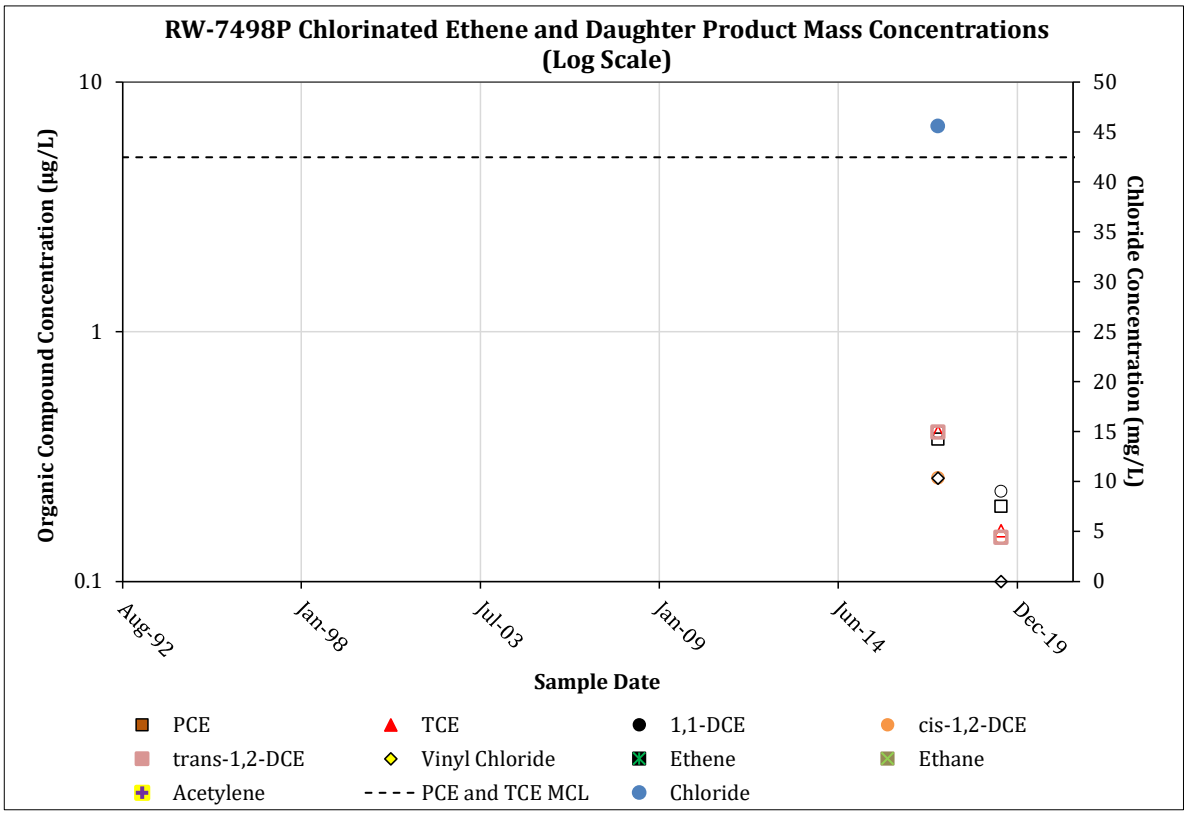


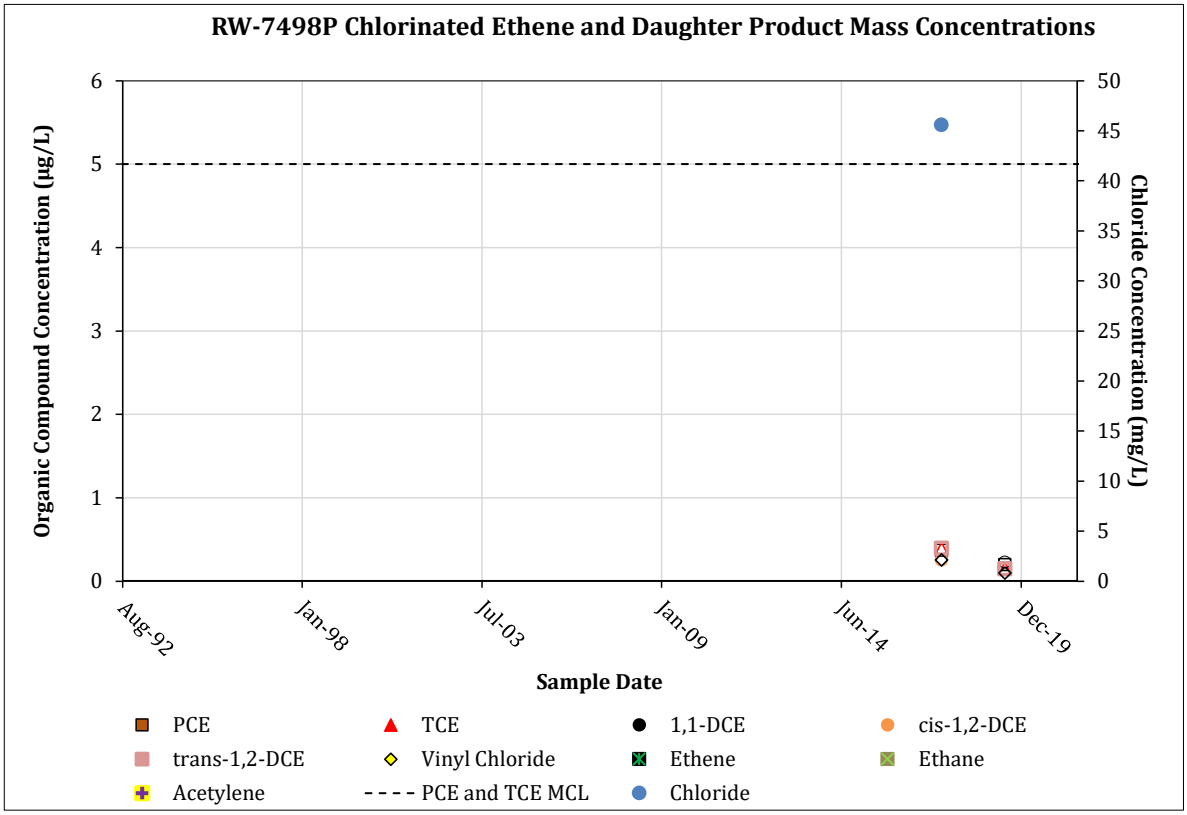
The symbol without fill designates a non-detect result.


RW-7492P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/1999
5/1/2000
4/1/2001
3/1/2002
2/1/2003
1/1/2004
12/1/2004
11/1/2005
10/1/2006
9/1/2007
8/1/2008
7/1/2009
6/1/2010
5/1/2011
4/1/2012
3/1/2013
2/1/2014
1/1/2015
12/1/2015
11/1/2016
10/1/2017
9/1/2018
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

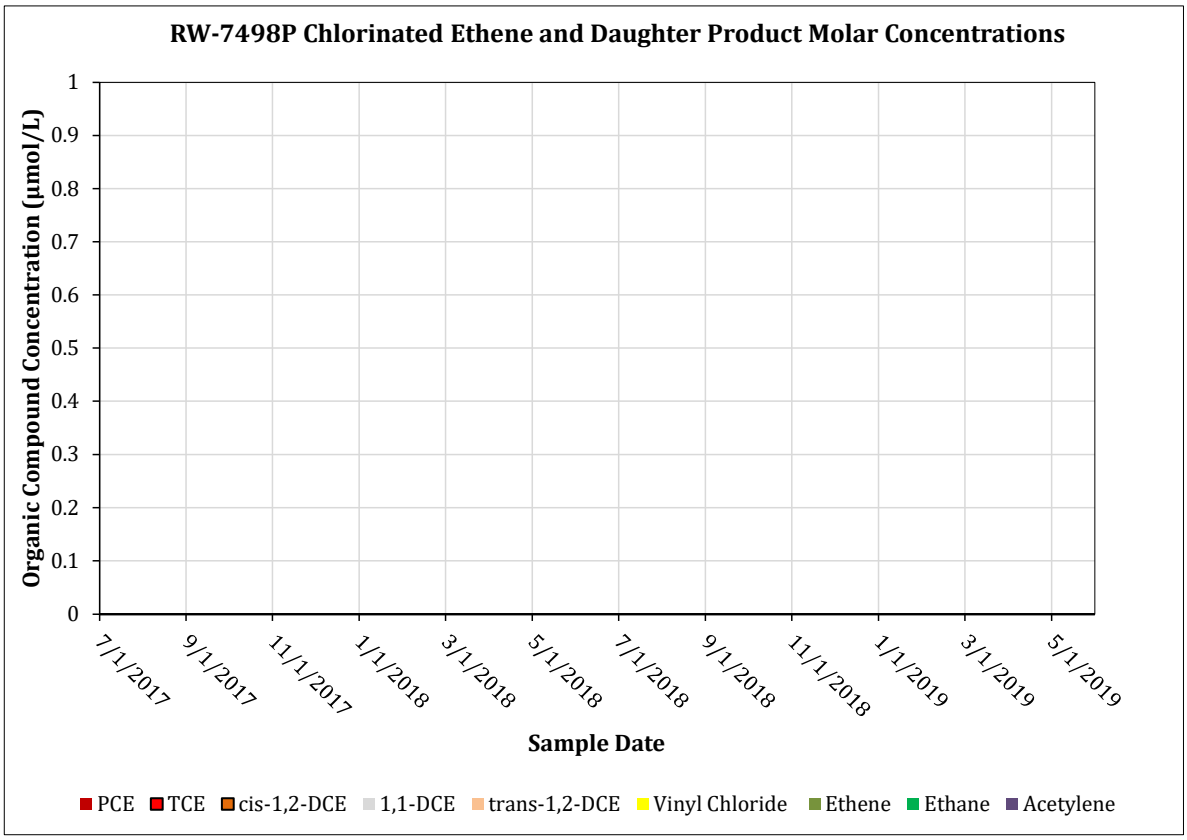

RW-7492P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

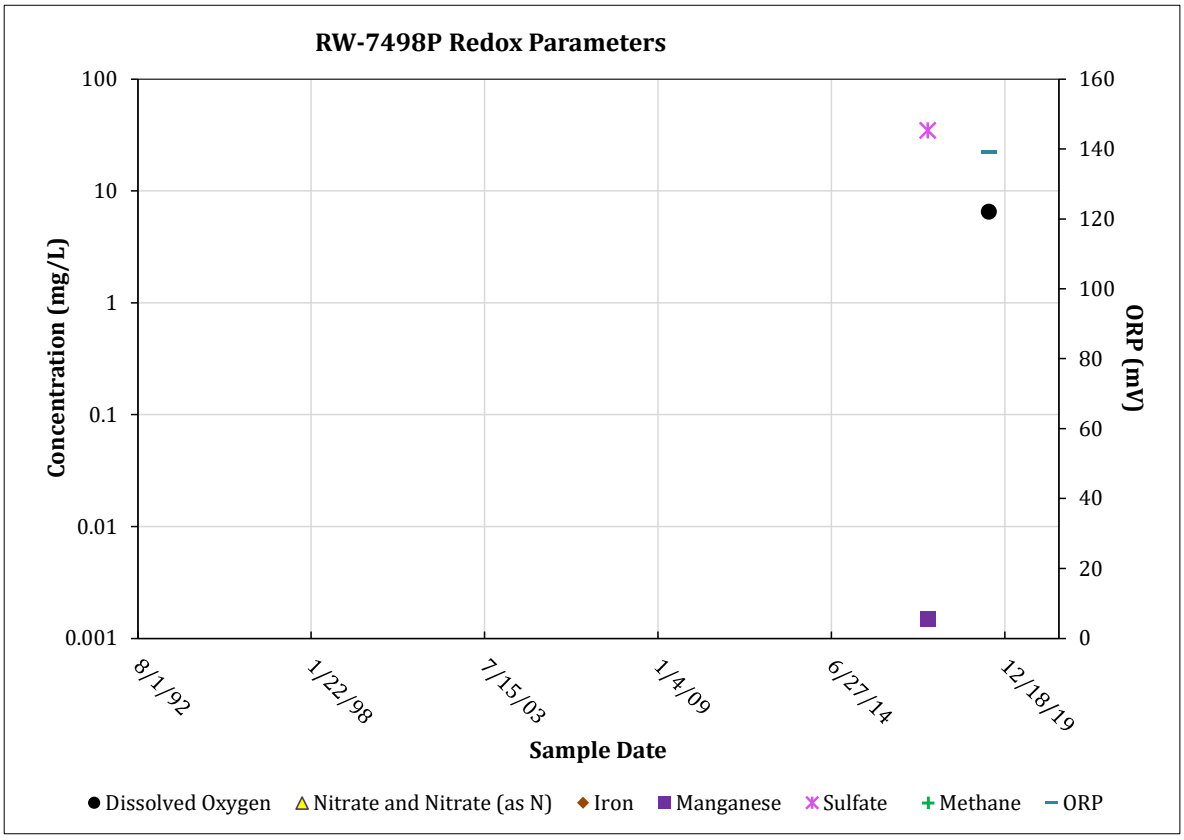

RW-7492P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

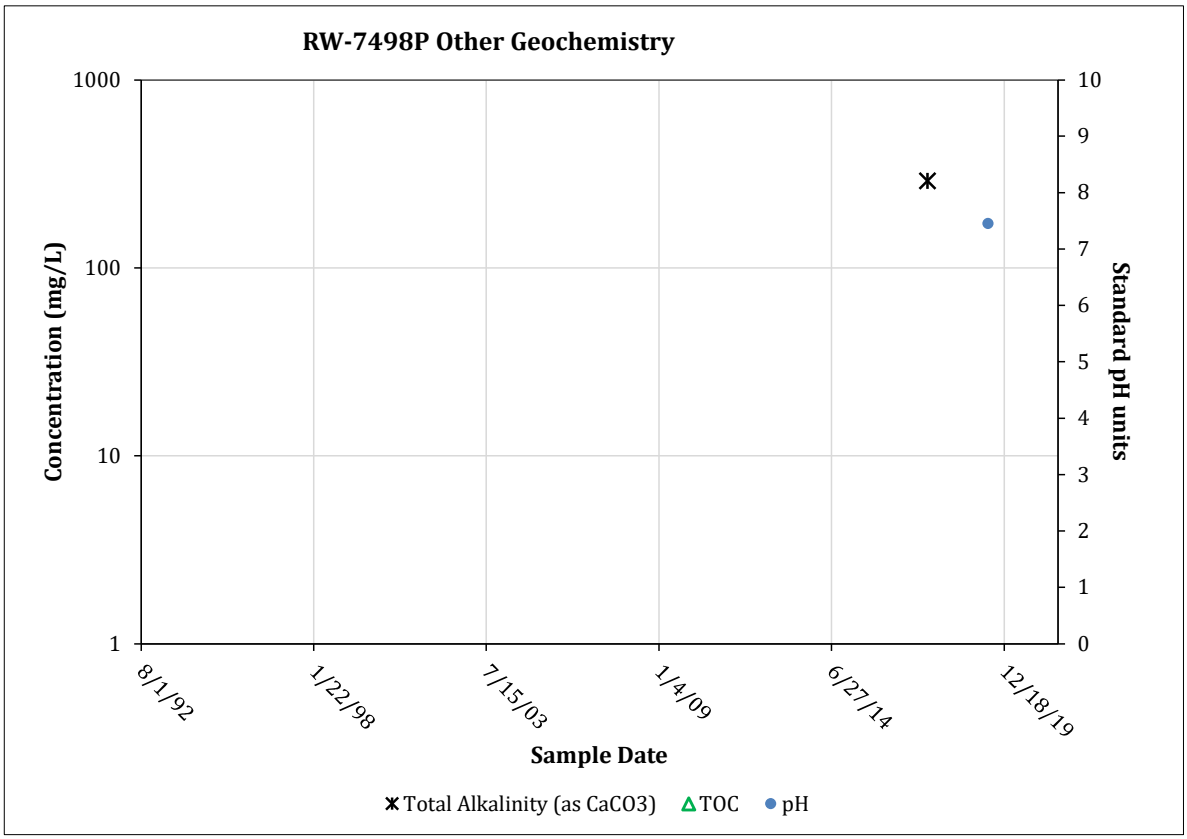


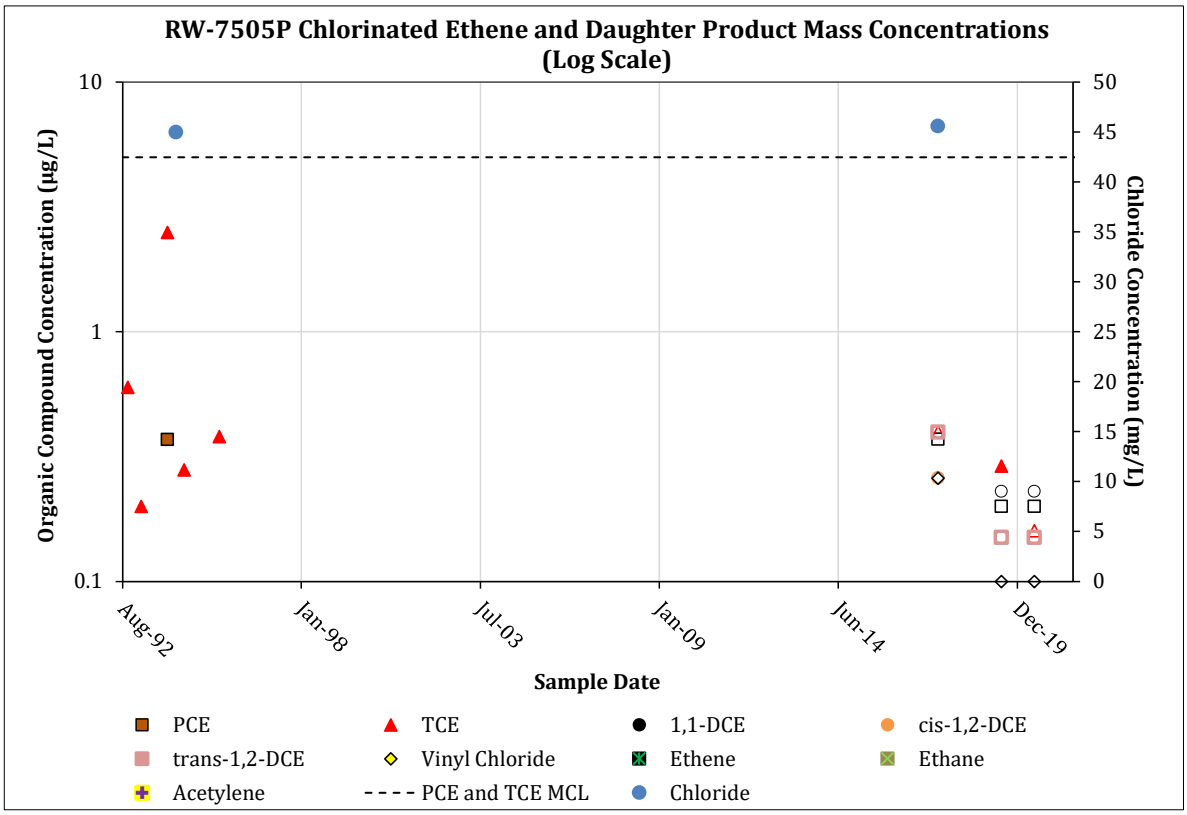


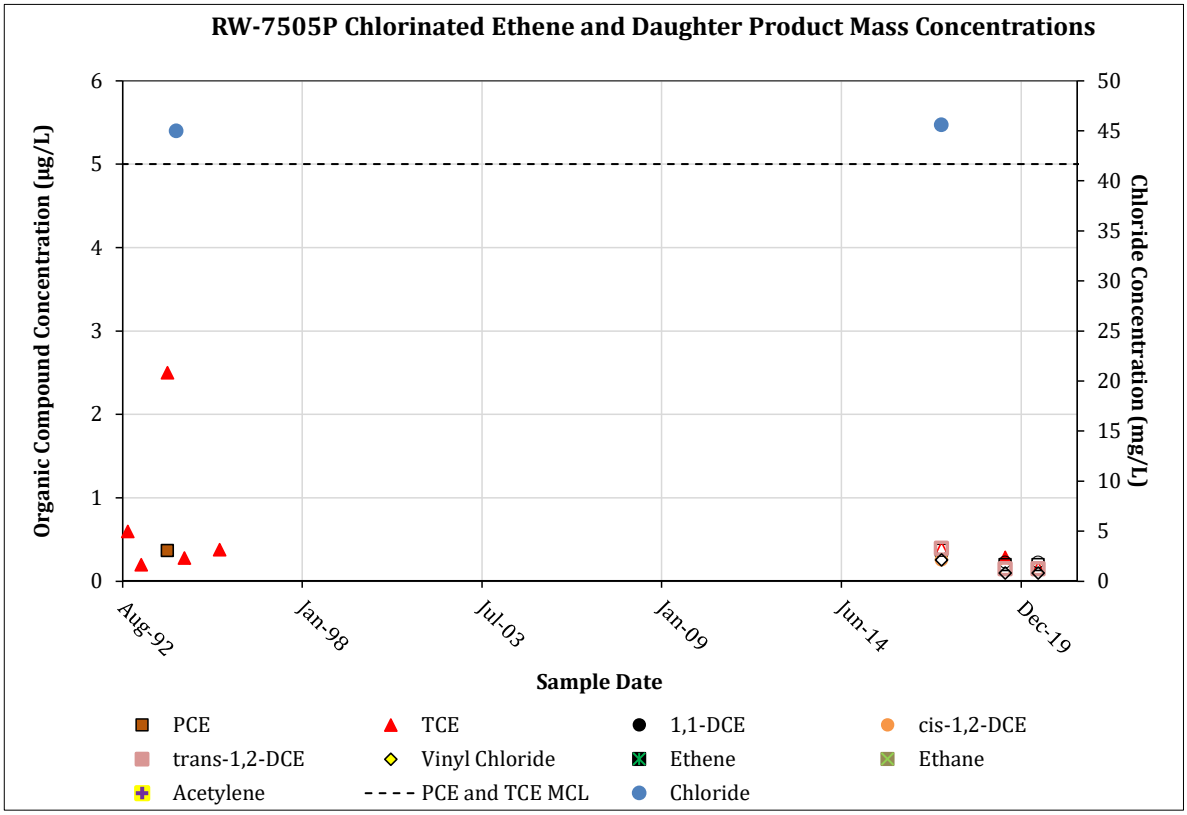
The symbol without fill designates a non-detect result.


RW-7498P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
7/1/2017
9/1/2017
11/1/2017
1/1/2018
3/1/2018
5/1/2018
7/1/2018
9/1/2018
11/1/2018
1/1/2019
3/1/2019
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

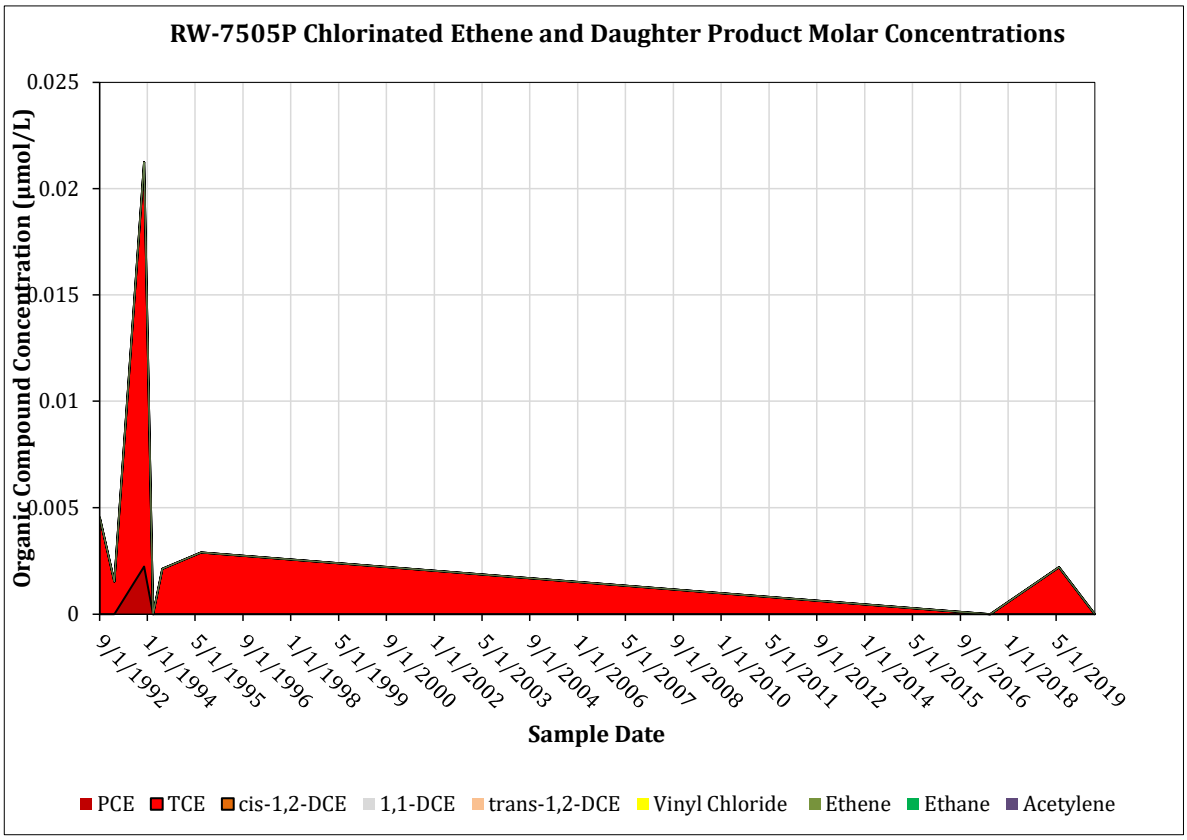

RW-7498P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

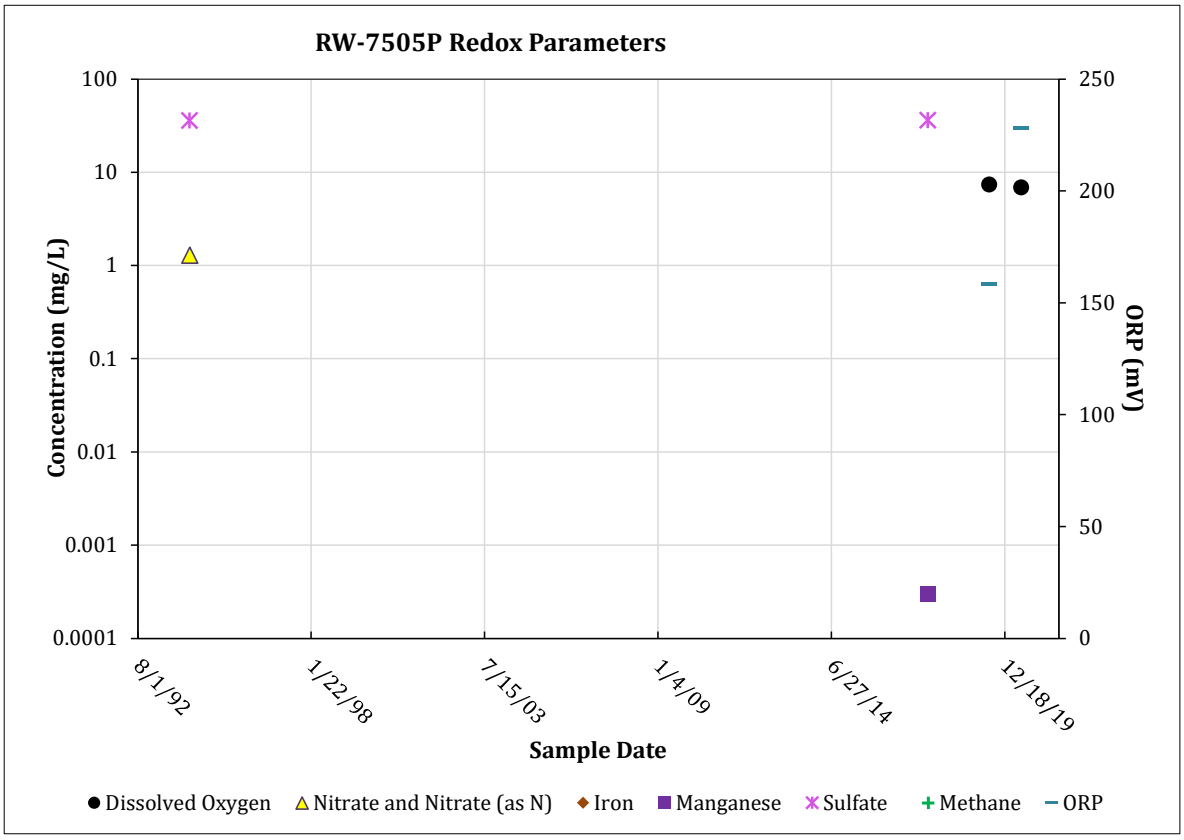

RW-7498P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

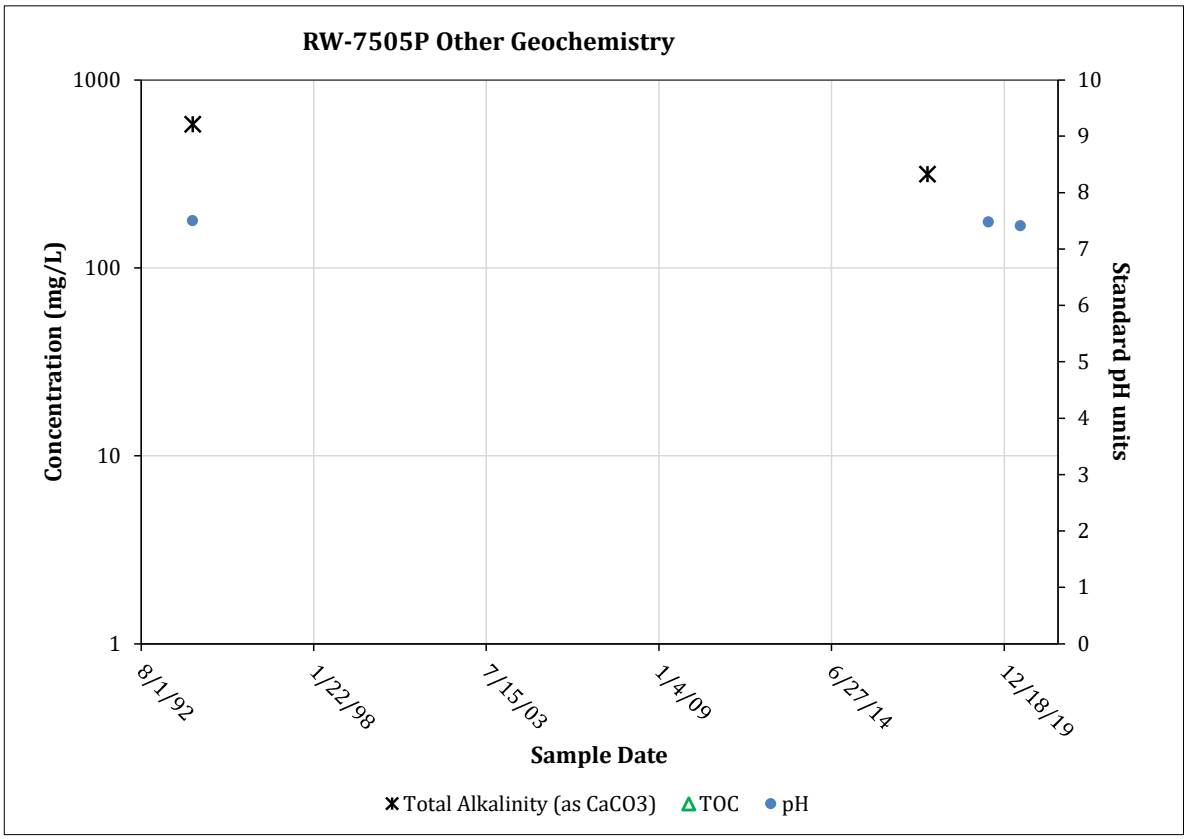


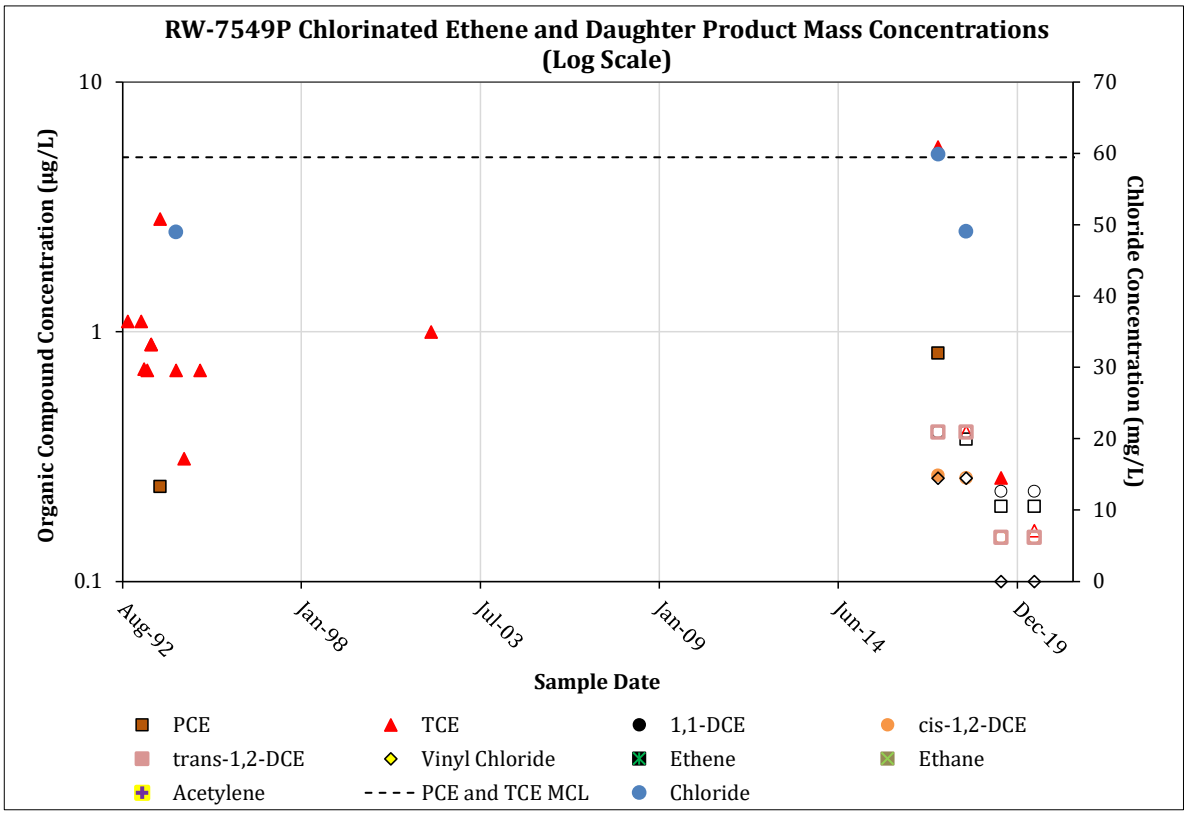


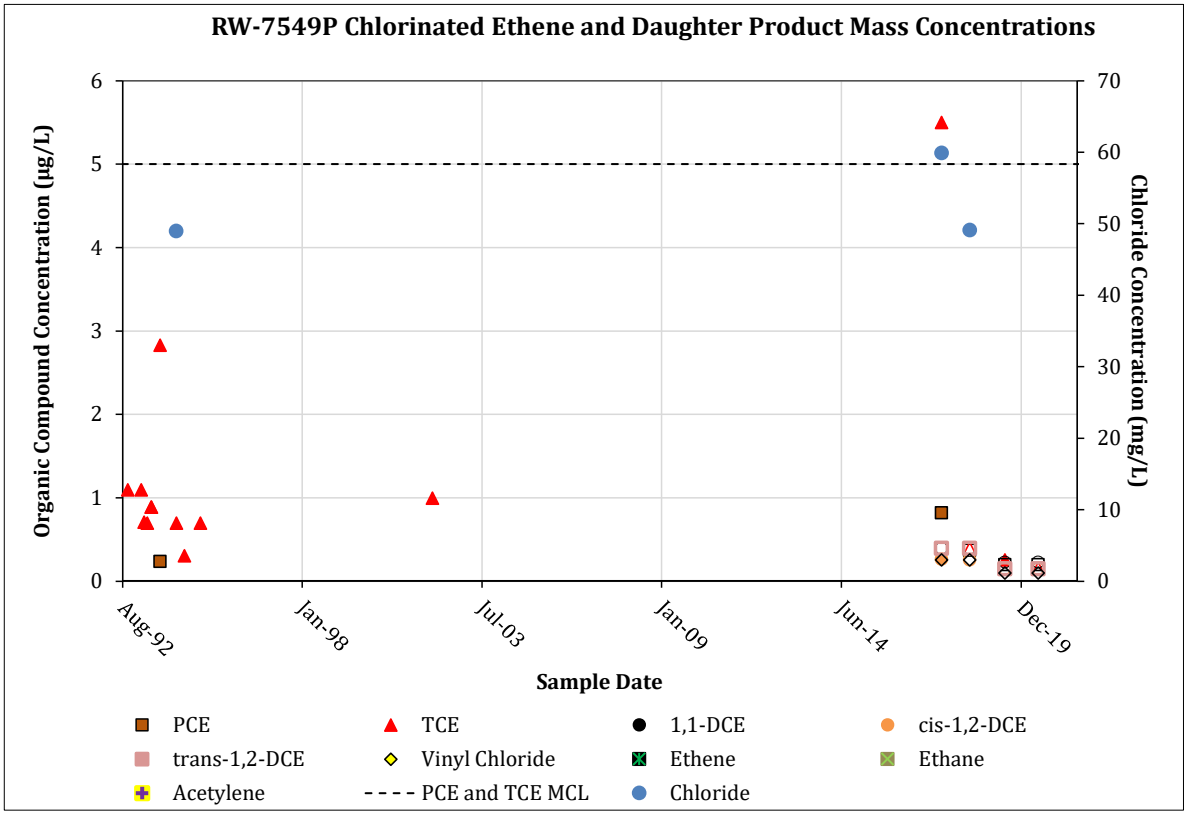
The symbol without fill designates a non-detect result.


RW-7505P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.025
0.02
0.015
0.01
0.005
0
9/1/1992
1/1/1994
5/1/1995
9/1/1996
1/1/1998
5/1/1999
9/1/2000
1/1/2002
5/1/2003
9/1/2004
1/1/2006
5/1/2007
9/1/2008
1/1/2010
5/1/2011
9/1/2012
1/1/2014
5/1/2015
9/1/2016
1/1/2018
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

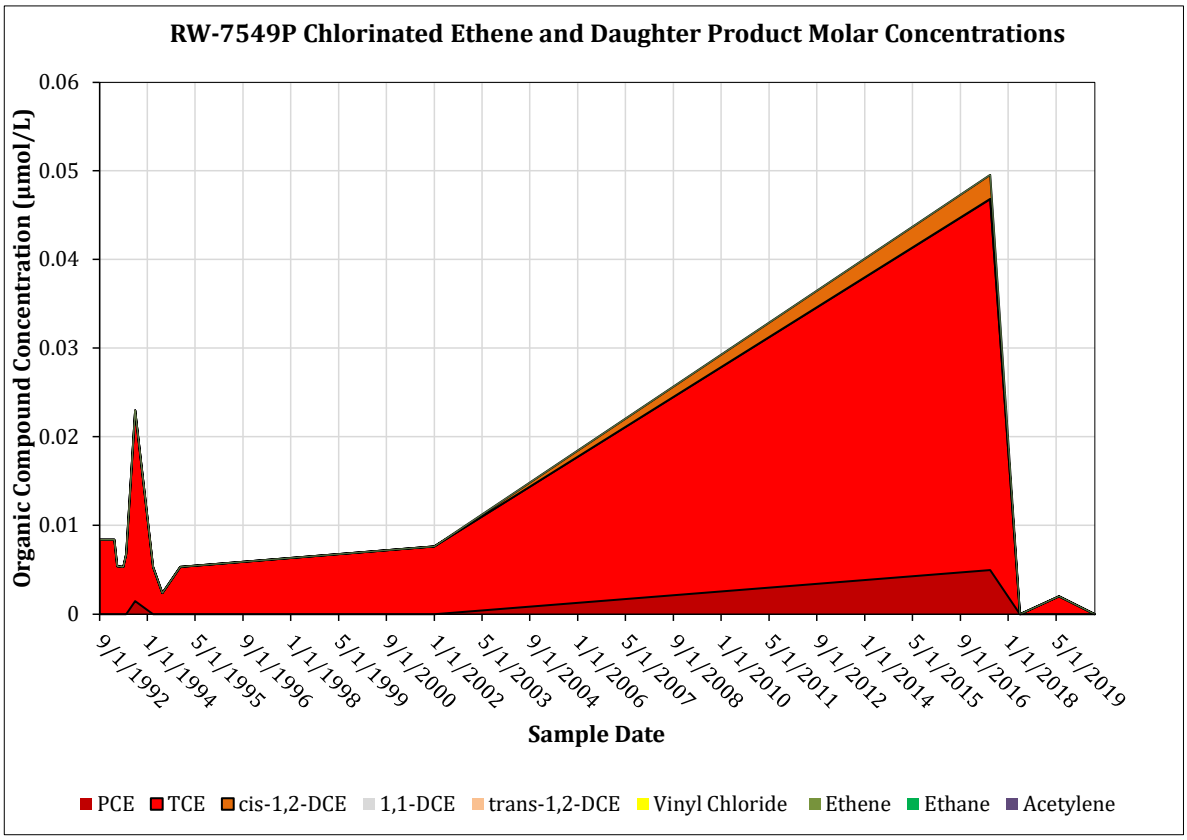

RW-7505P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
250
200
150
100
50
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

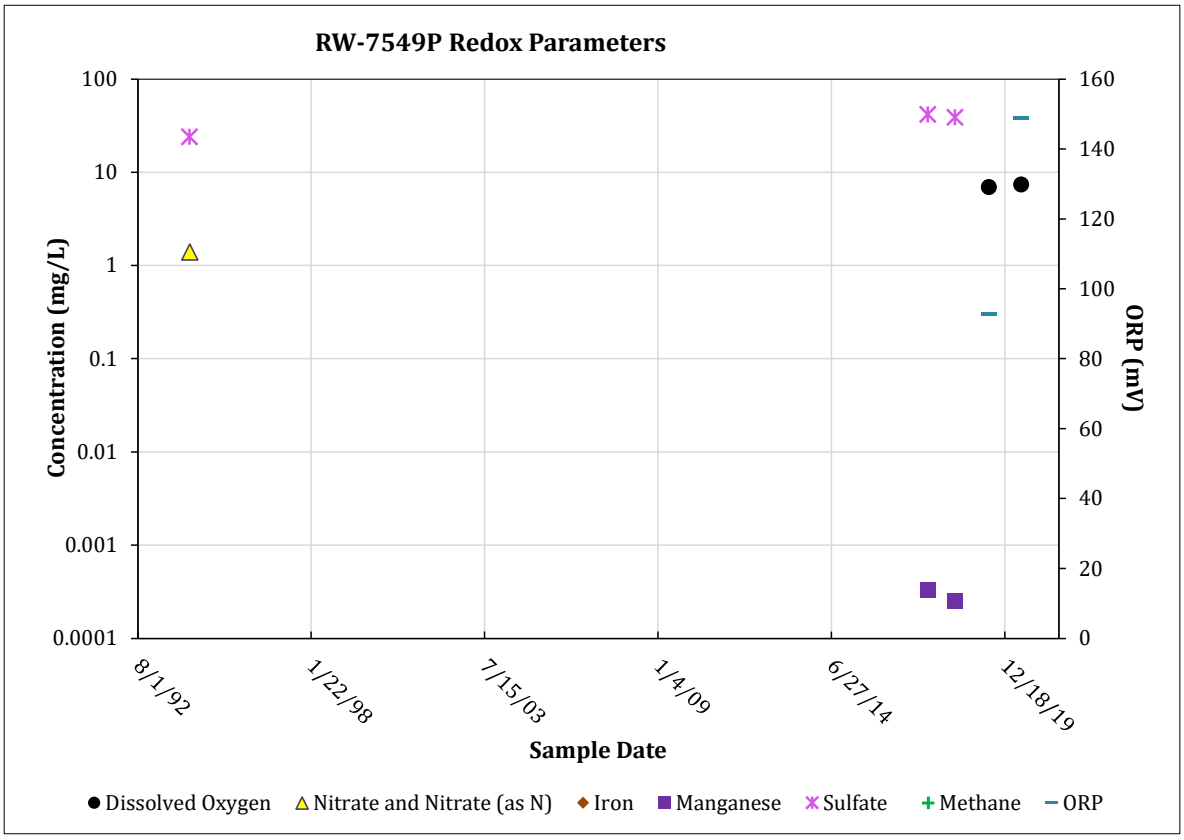

RW-7505P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

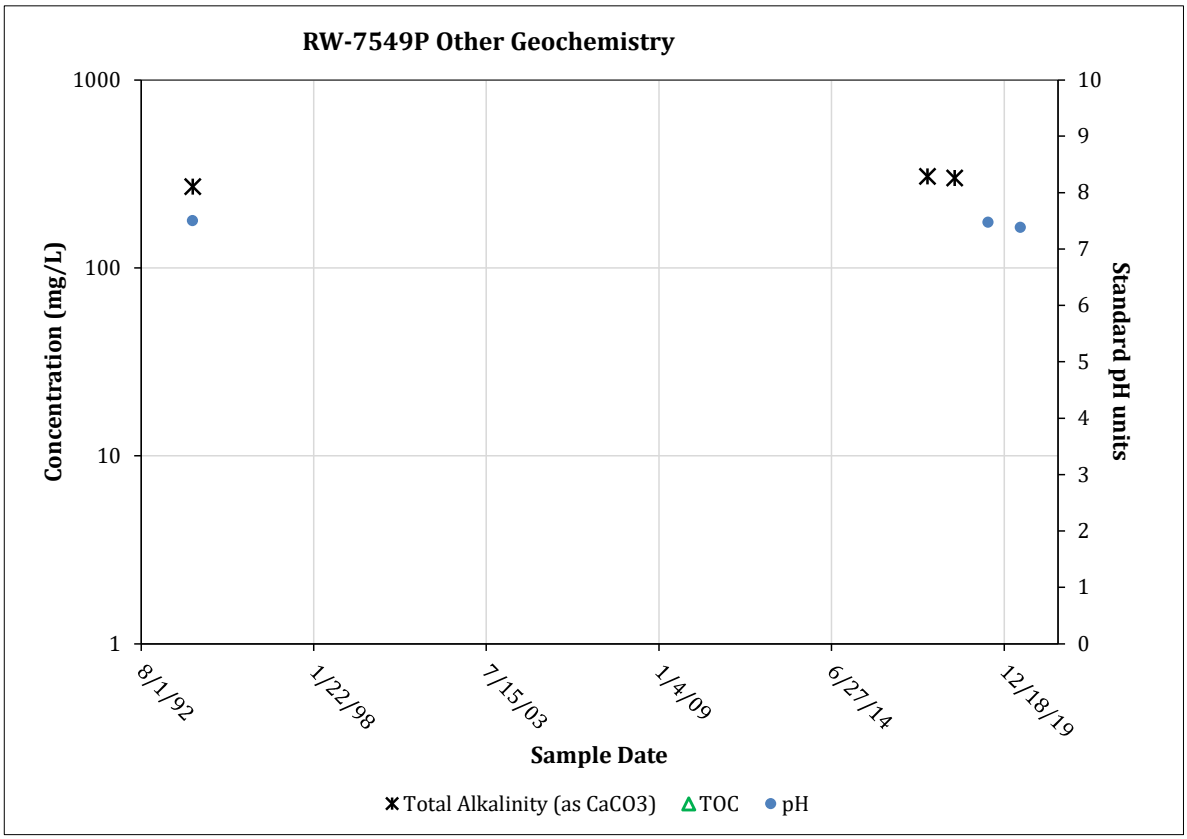


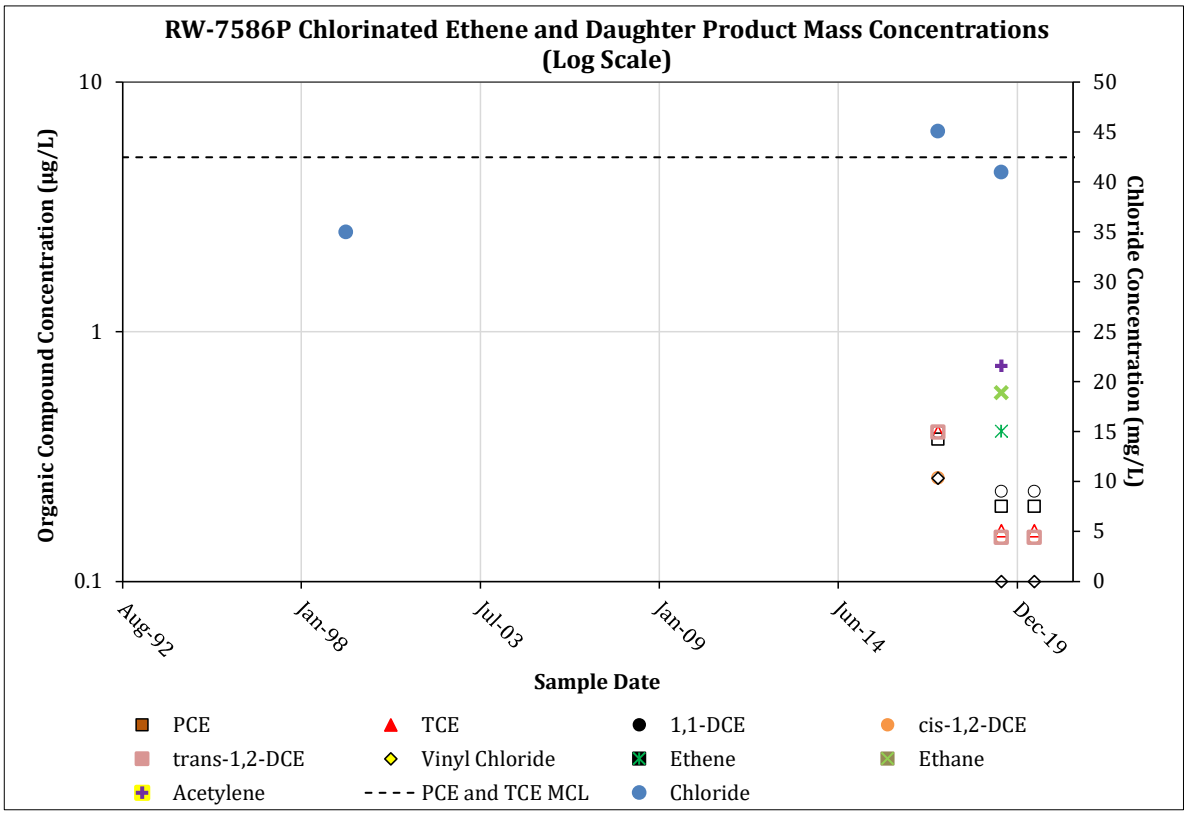


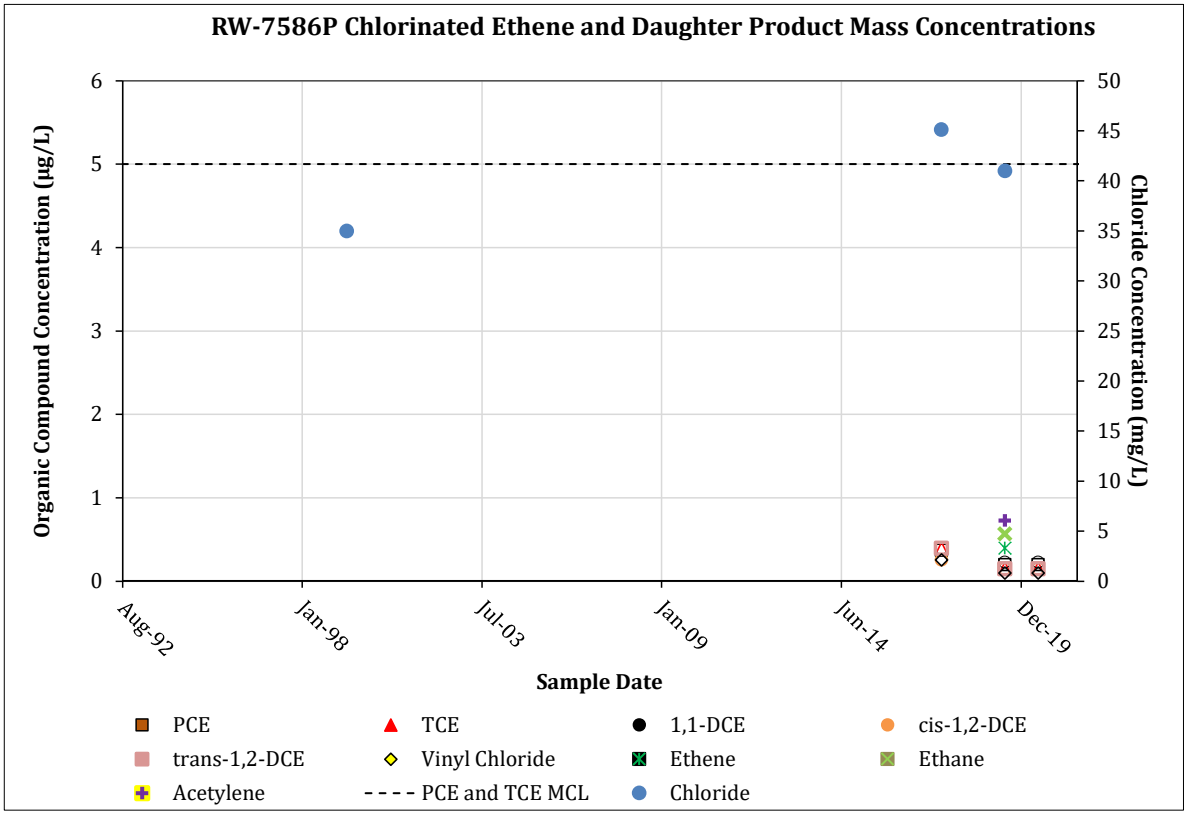
The symbol without fill designates a non-detect result.


RW-7549P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.06
0.05
0.04
0.03
0.02
0.01
0
9/1/1992
1/1/1994
5/1/1995
9/1/1996
1/1/1998
5/1/1999
9/1/2000
1/1/2002
5/1/2003
9/1/2004
1/1/2006
5/1/2007
9/1/2008
1/1/2010
5/1/2011
9/1/2012
1/1/2014
5/1/2015
9/1/2016
1/1/2018
5/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

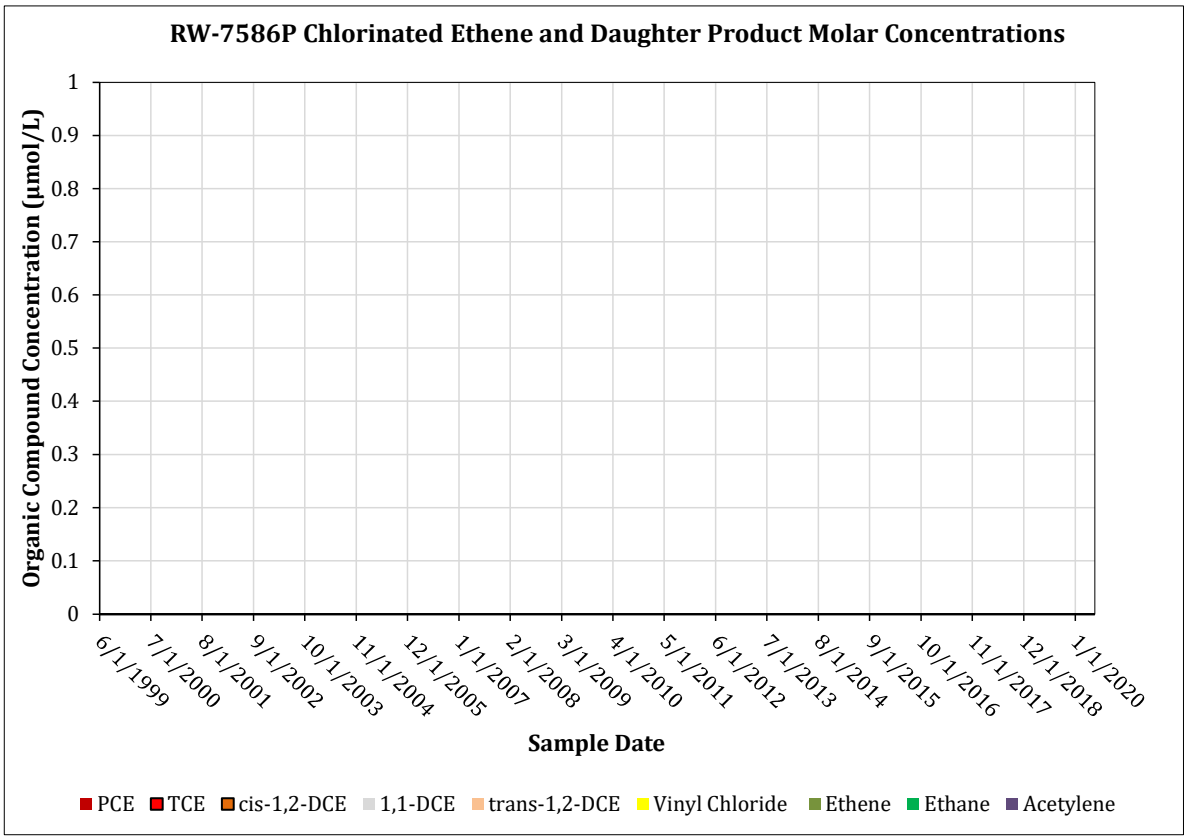

RW-7549P Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
0.01
0.001
0.0001
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

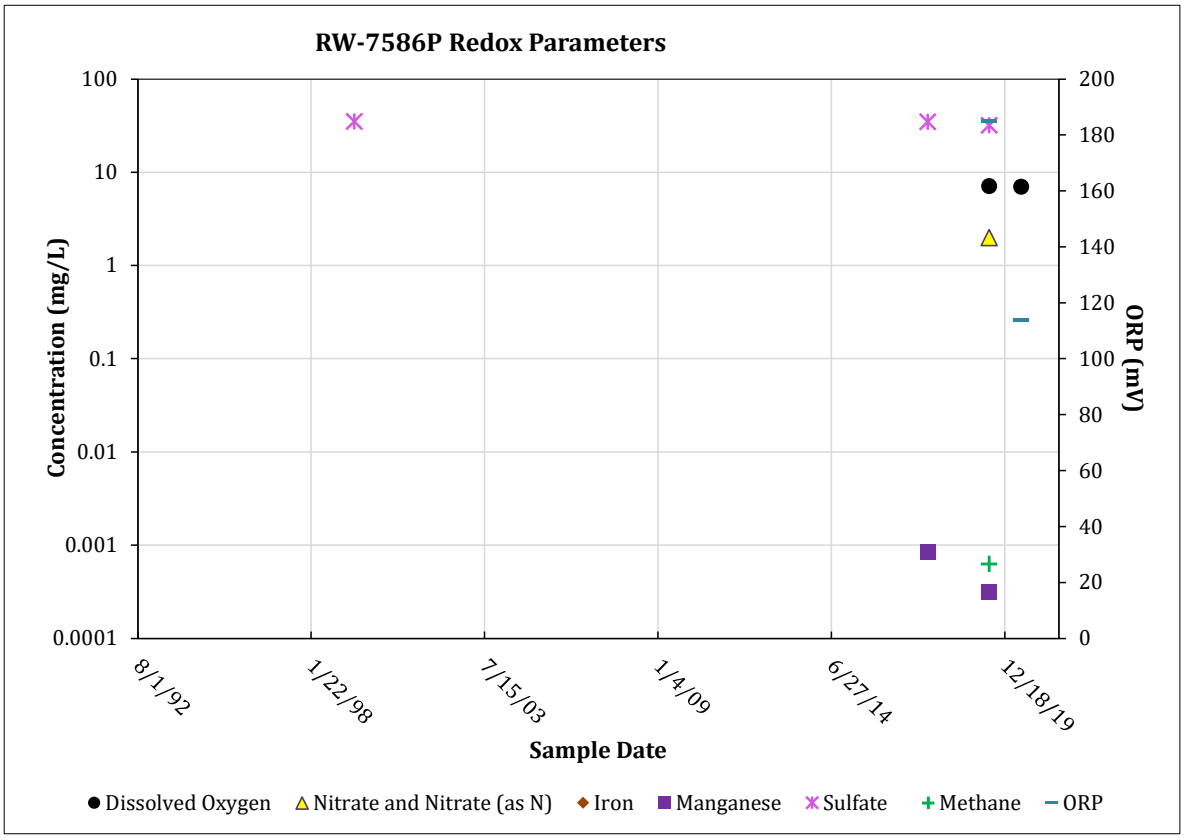

RW-7549P Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

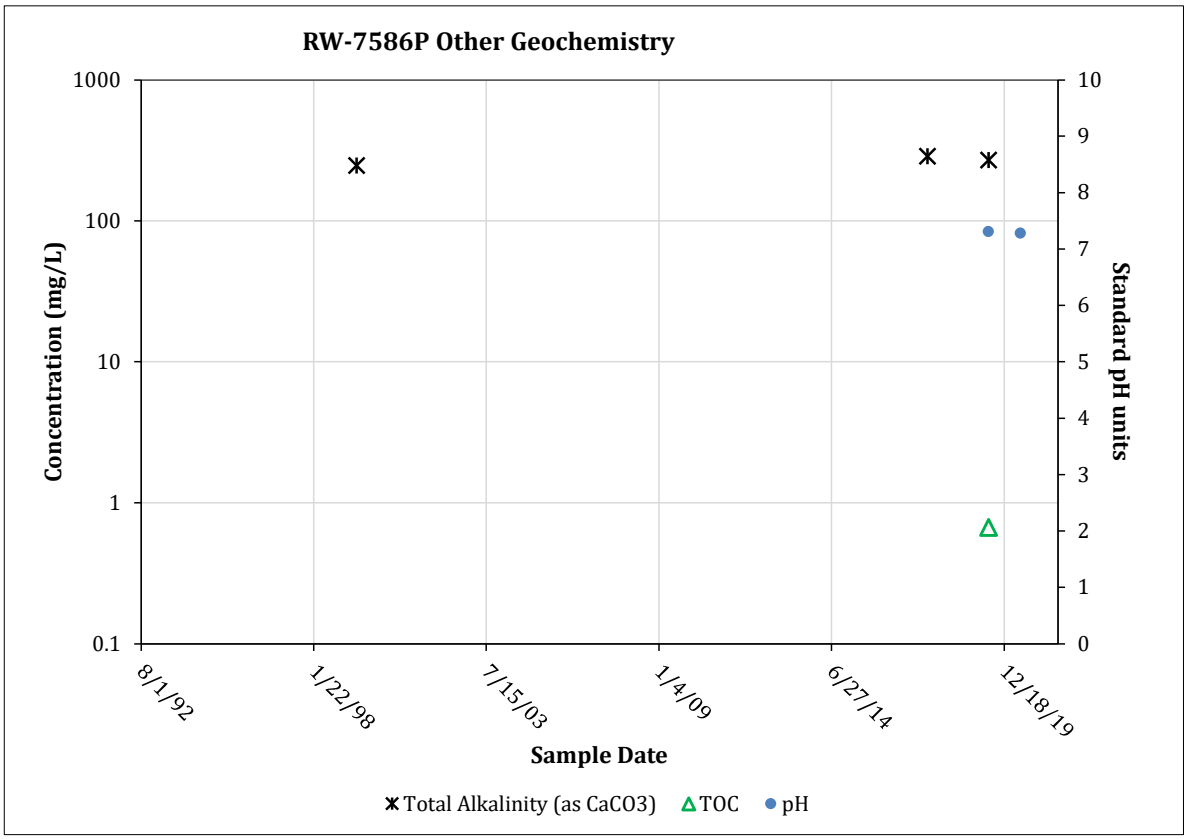


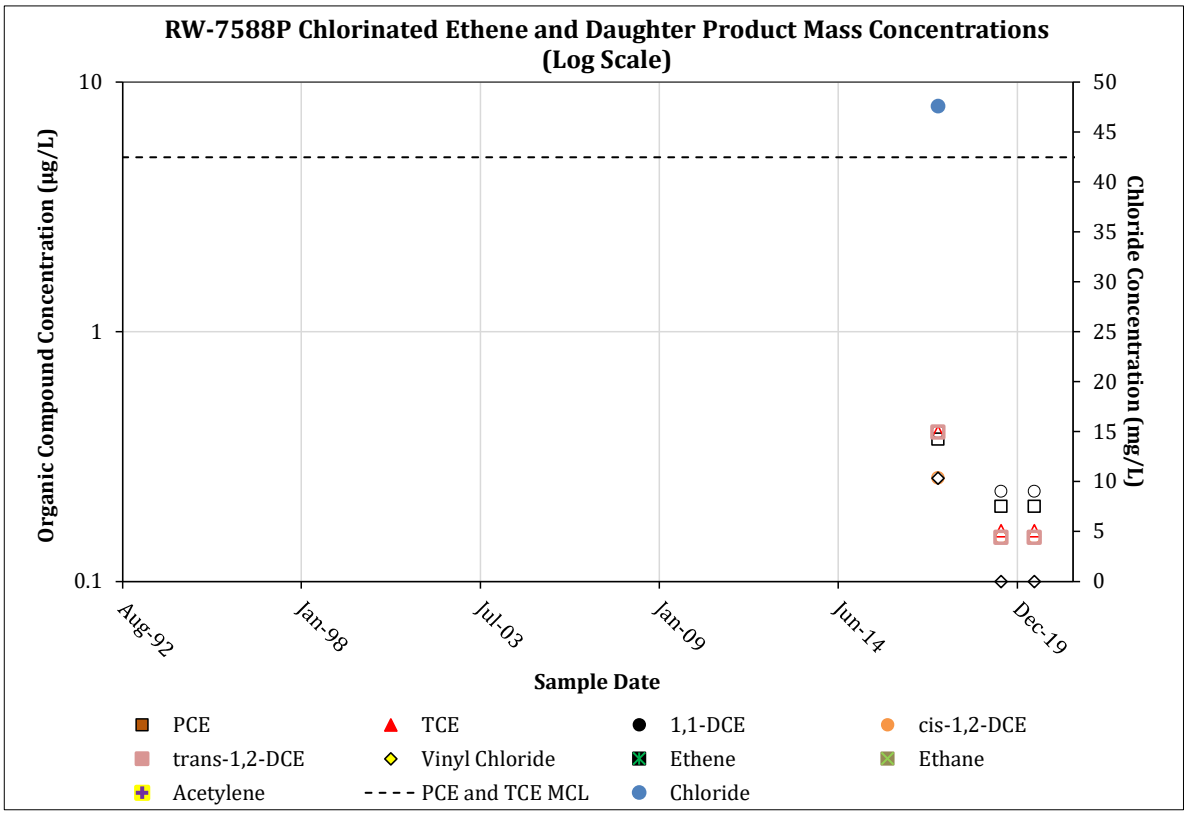


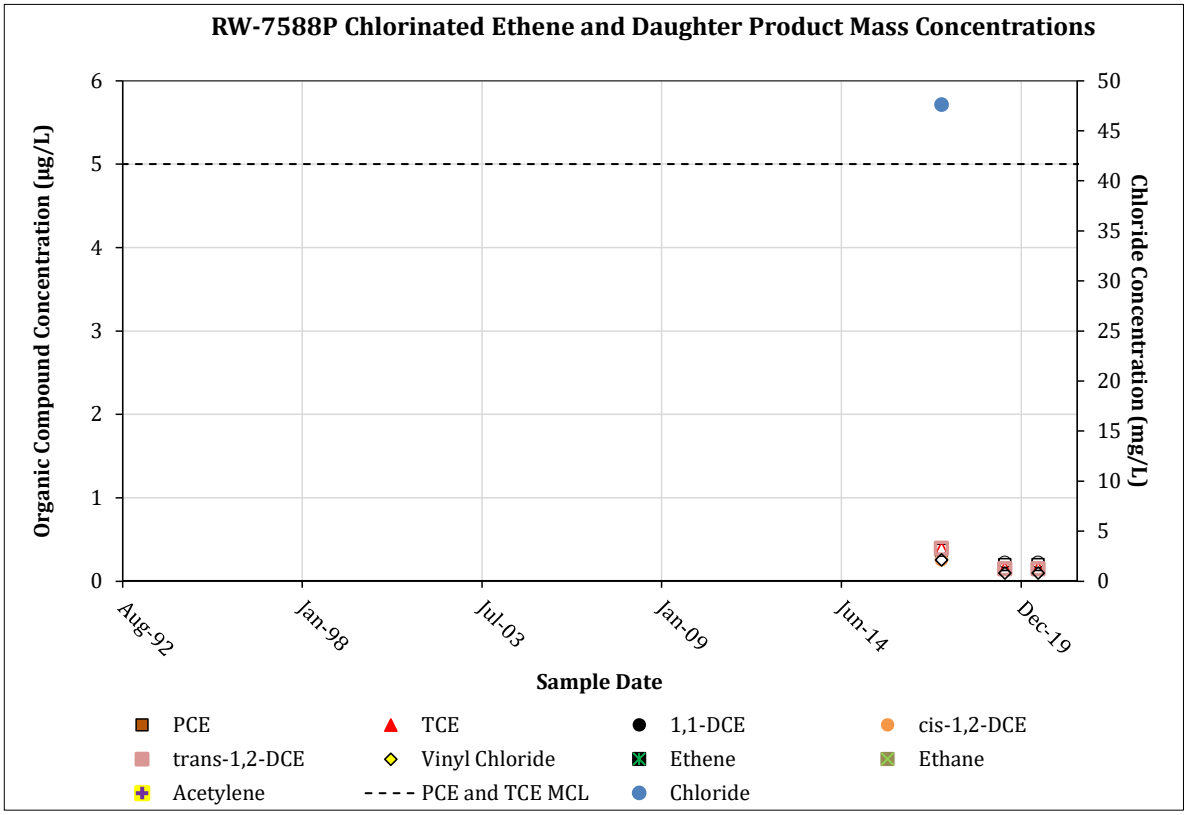
The symbol without fill designates a non-detect result.


RW-7586P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/1999
7/1/2000
8/1/2001
9/1/2002
10/1/2003
11/1/2004
12/1/2005
1/1/2007
2/1/2008
3/1/2009
4/1/2010
5/1/2011
6/1/2012
7/1/2013
8/1/2014
9/1/2015
10/1/2016
11/1/2017
12/1/2018
1/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

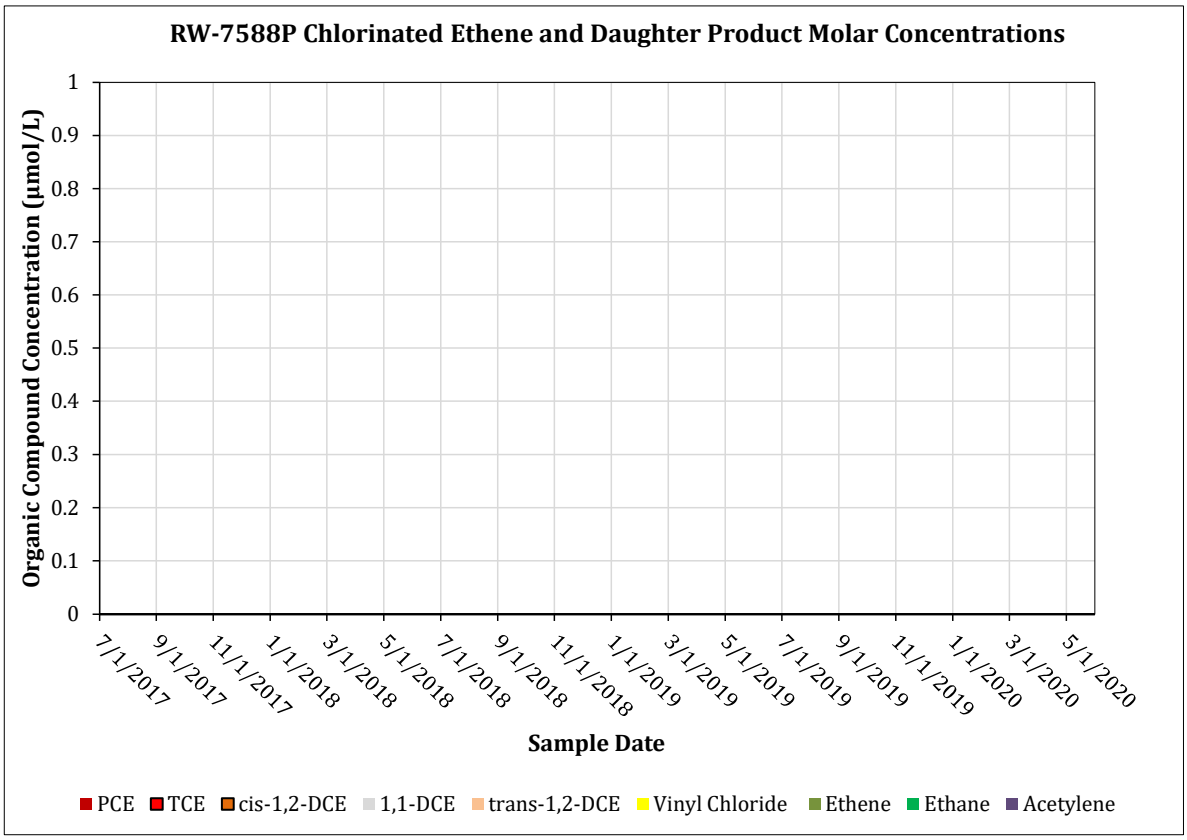

RW-7586P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

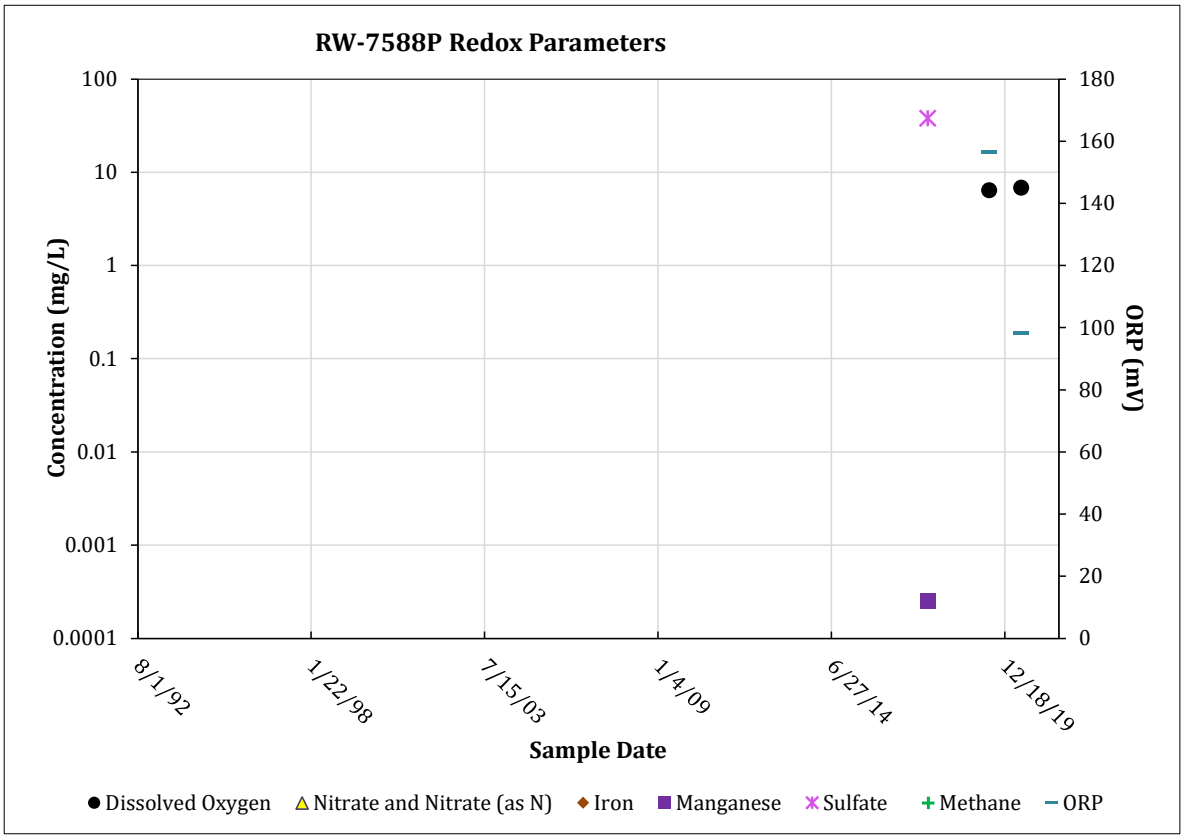

RW-7586P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
0.1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

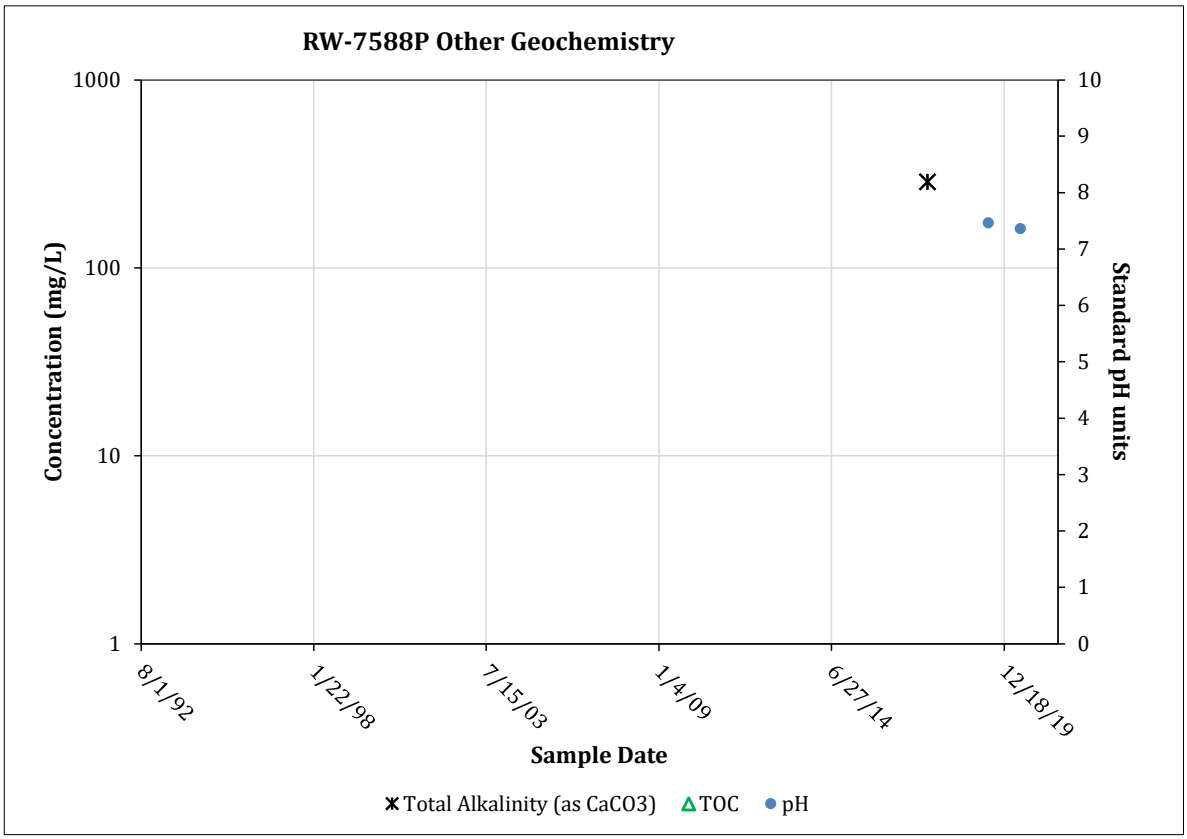


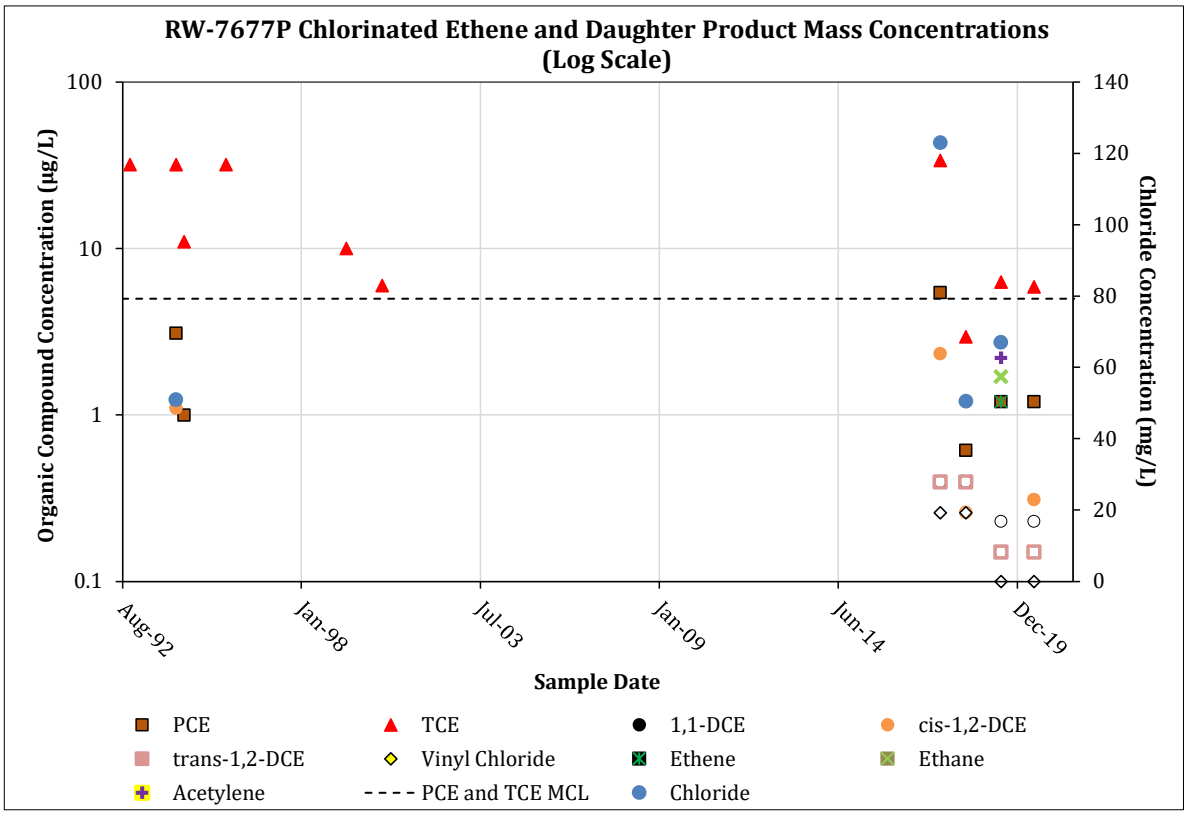


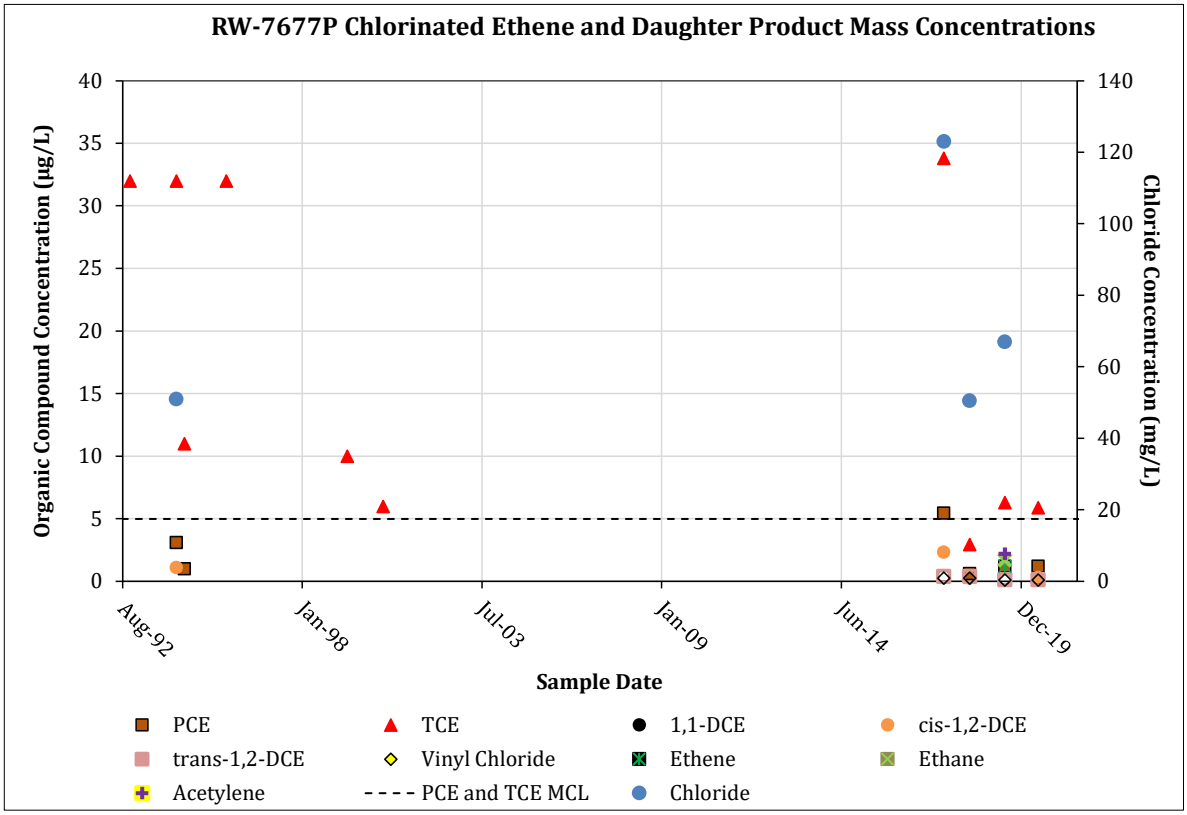
The symbol without fill designates a non-detect result.


RW-7588P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
7/1/2017
9/1/2017
11/1/2017
1/1/2018
3/1/2018
5/1/2018
7/1/2018
9/1/2018
11/1/2018
1/1/2019
3/1/2019
5/1/2019
7/1/2019
9/1/2019
11/1/2019
1/1/2020
3/1/2020
5/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

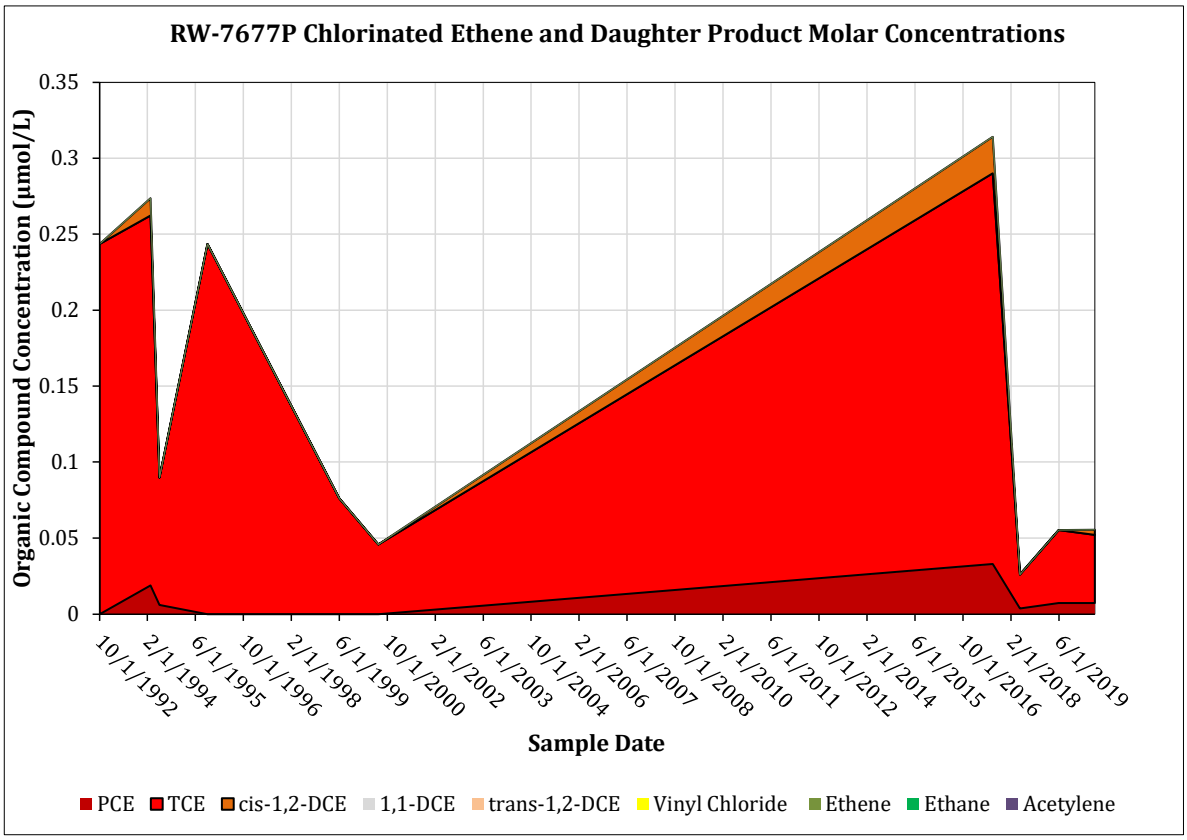

RW-7588P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

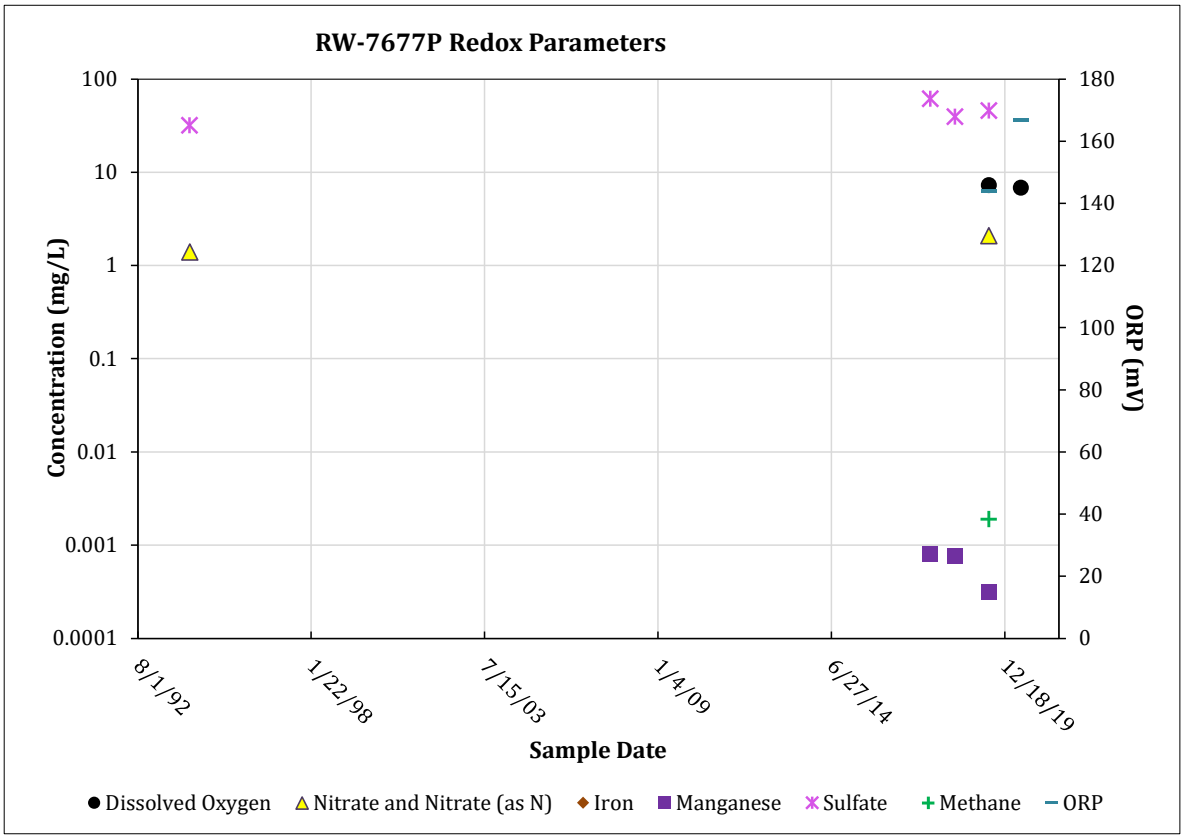

RW-7588P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

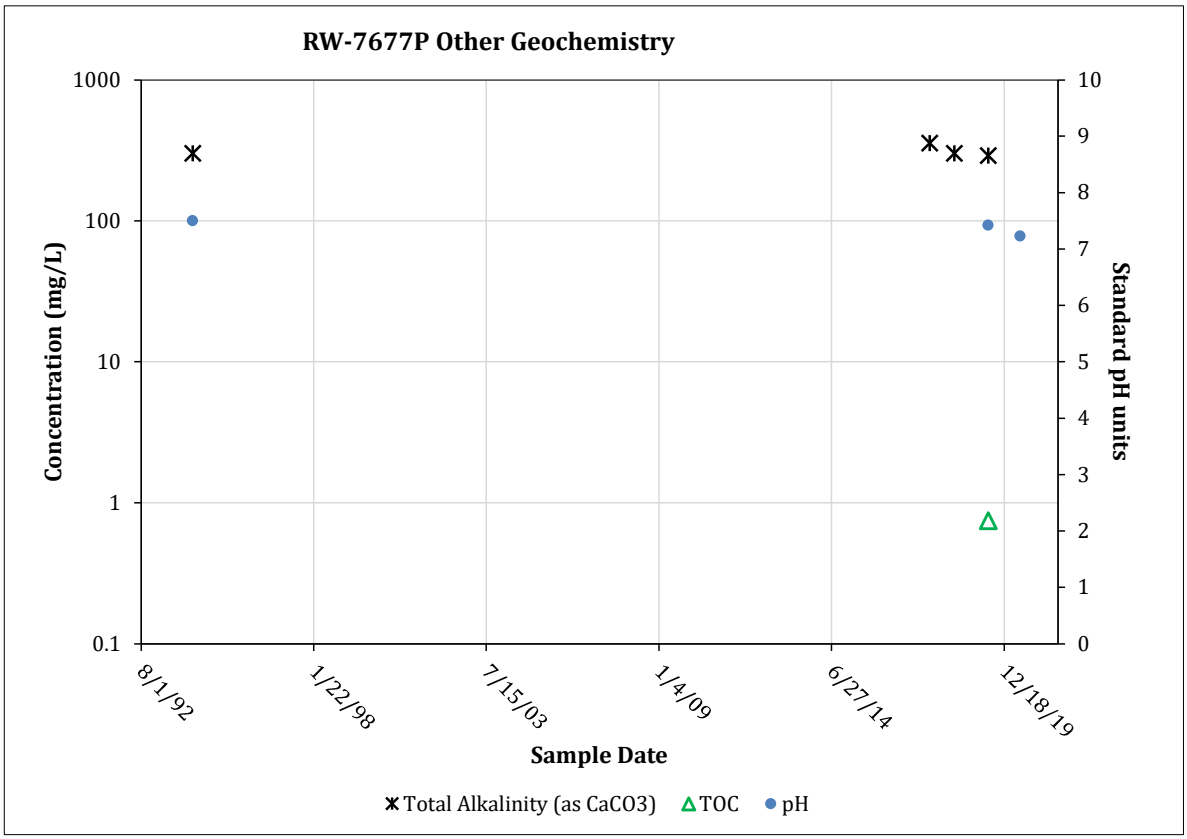


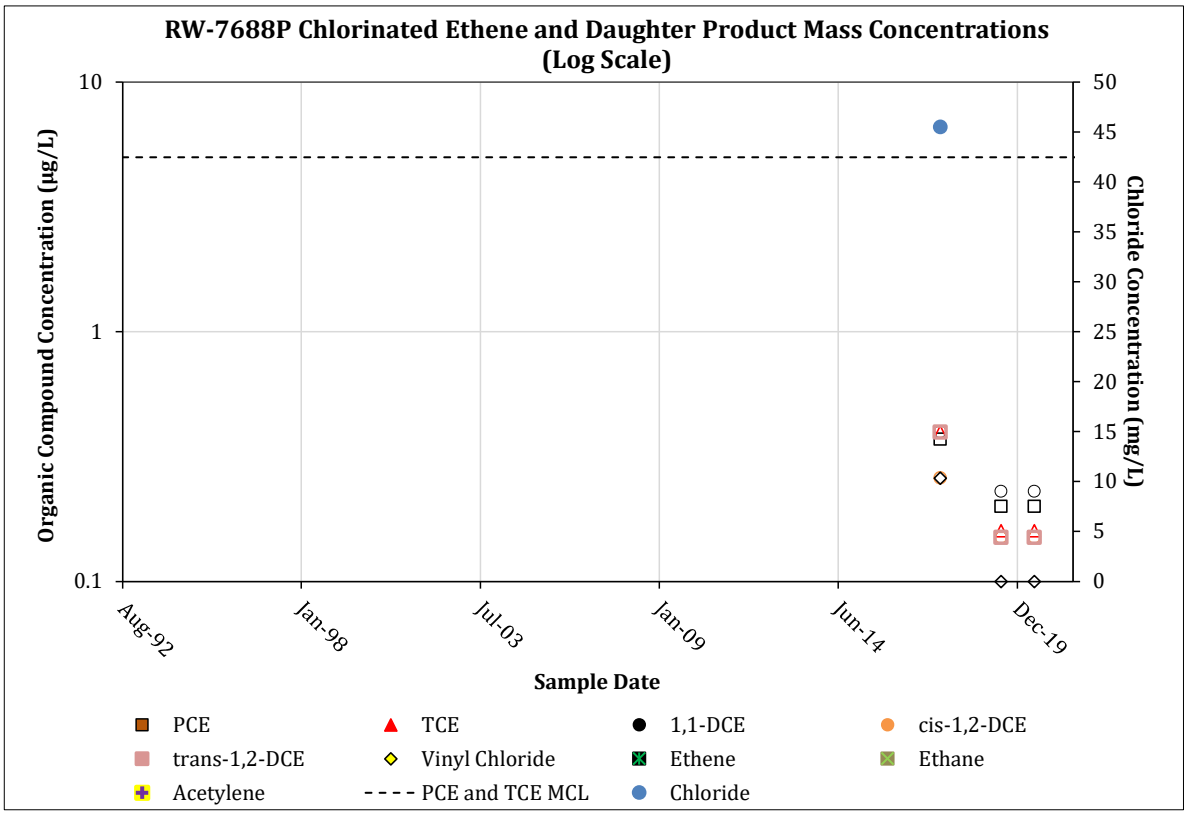


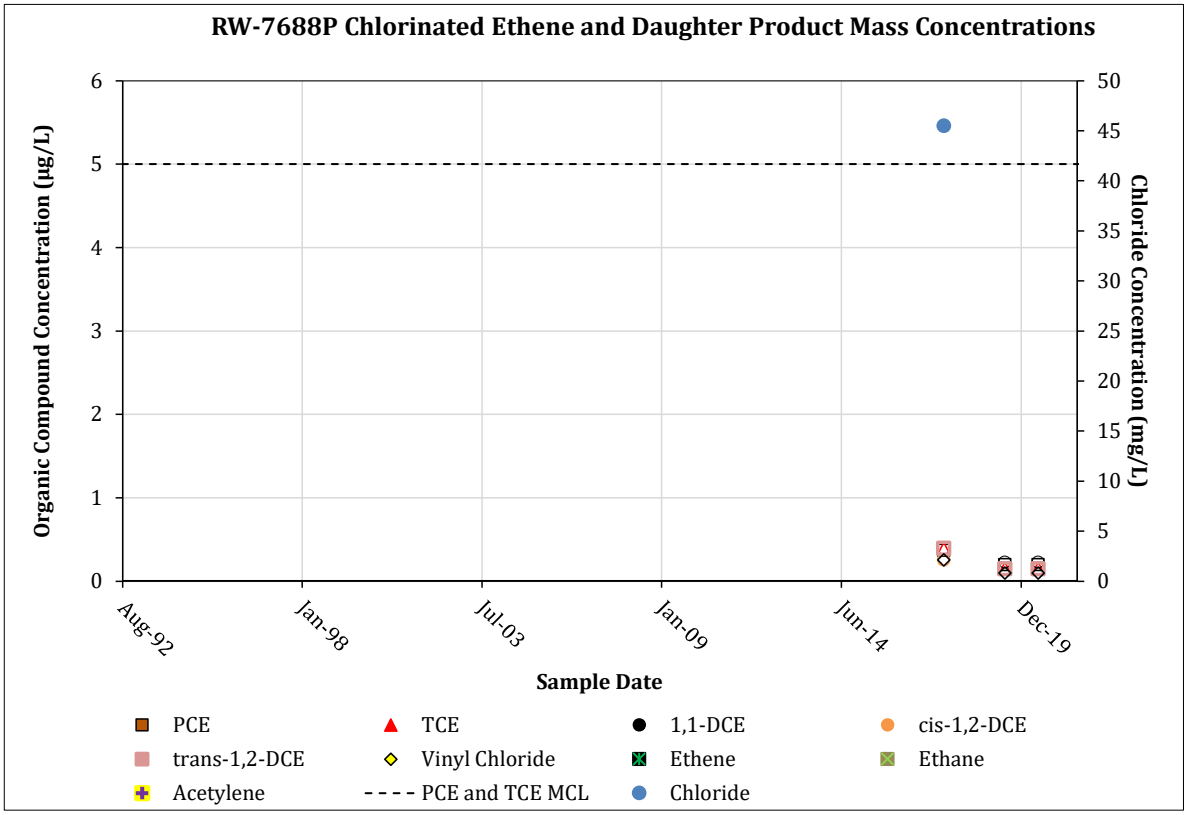
The symbol without fill designates a non-detect result.


RW-7677P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
10/1/1992
2/1/1994
6/1/1995
10/1/1996
2/1/1998
6/1/1999
10/1/2000
2/1/2002
6/1/2003
10/1/2004
2/1/2006
6/1/2007
10/1/2008
2/1/2010
6/1/2011
10/1/2012
2/1/2014
6/1/2015
10/1/2016
2/1/2018
6/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

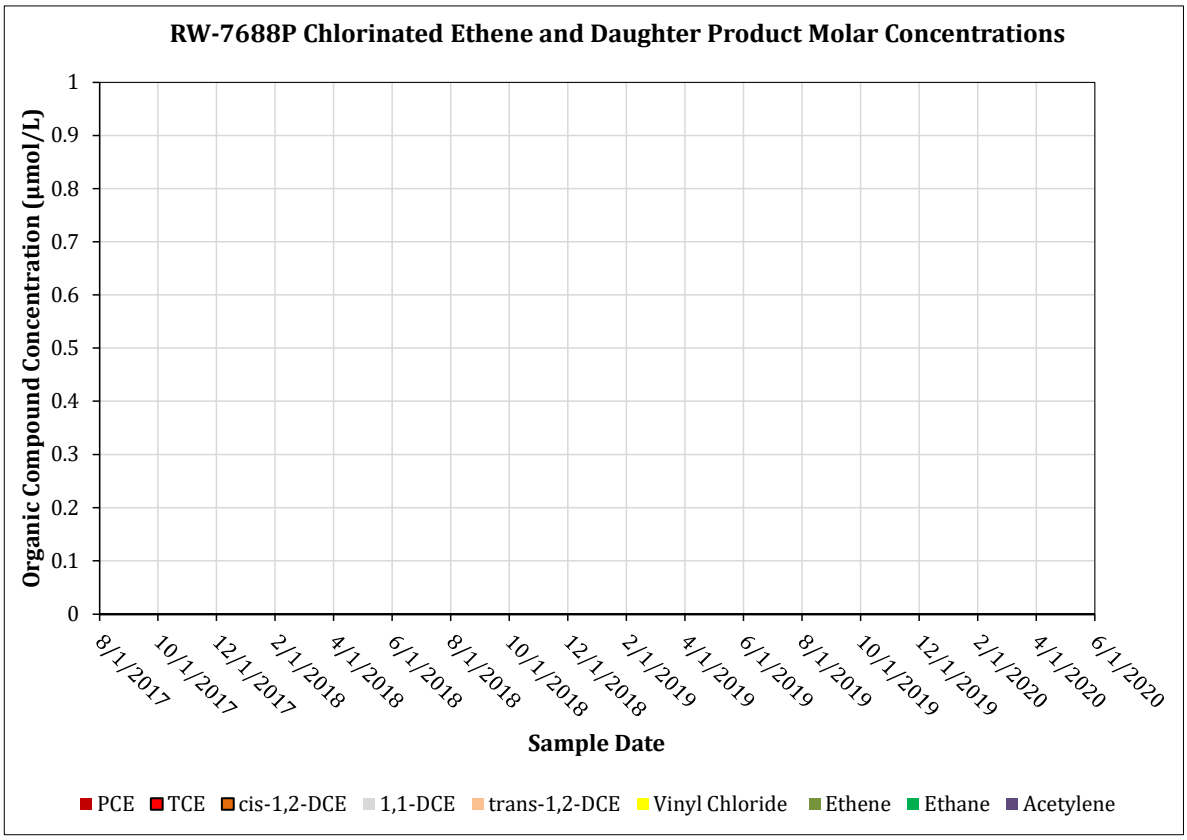

RW-7677P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

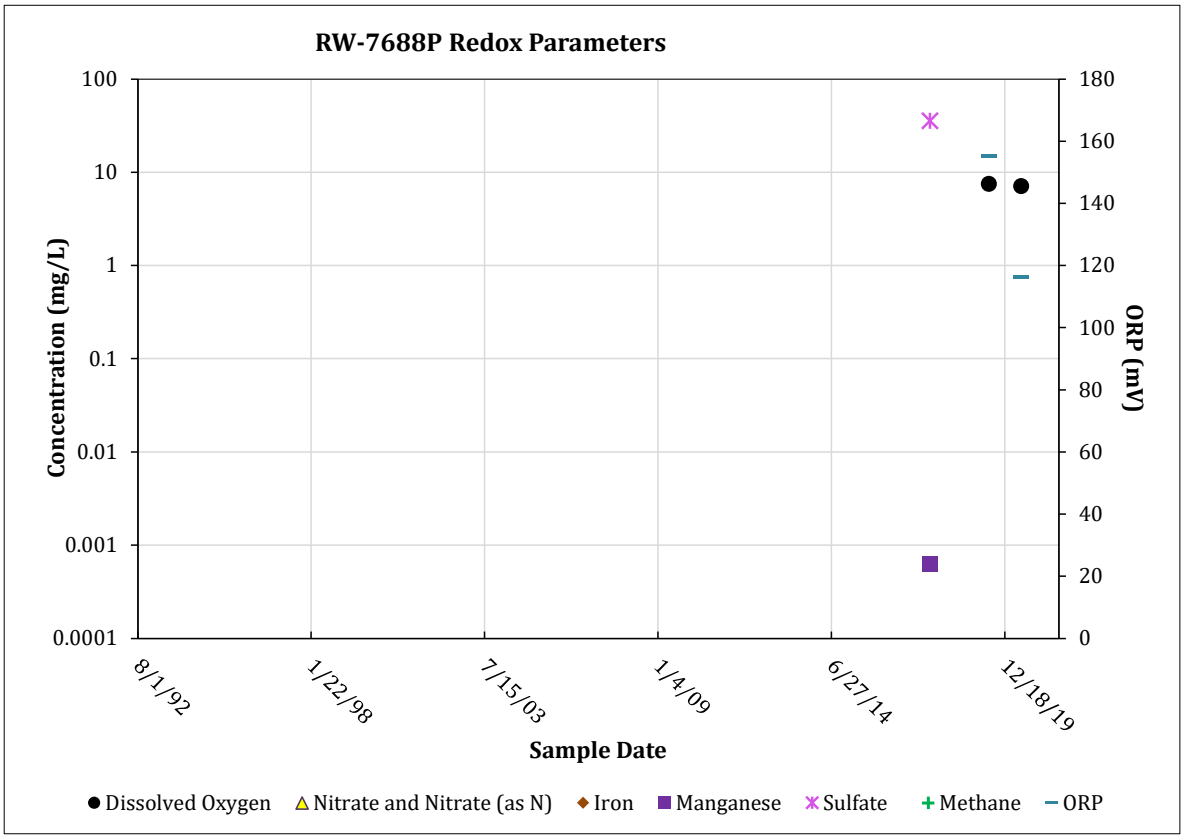

RW-7677P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
0.1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

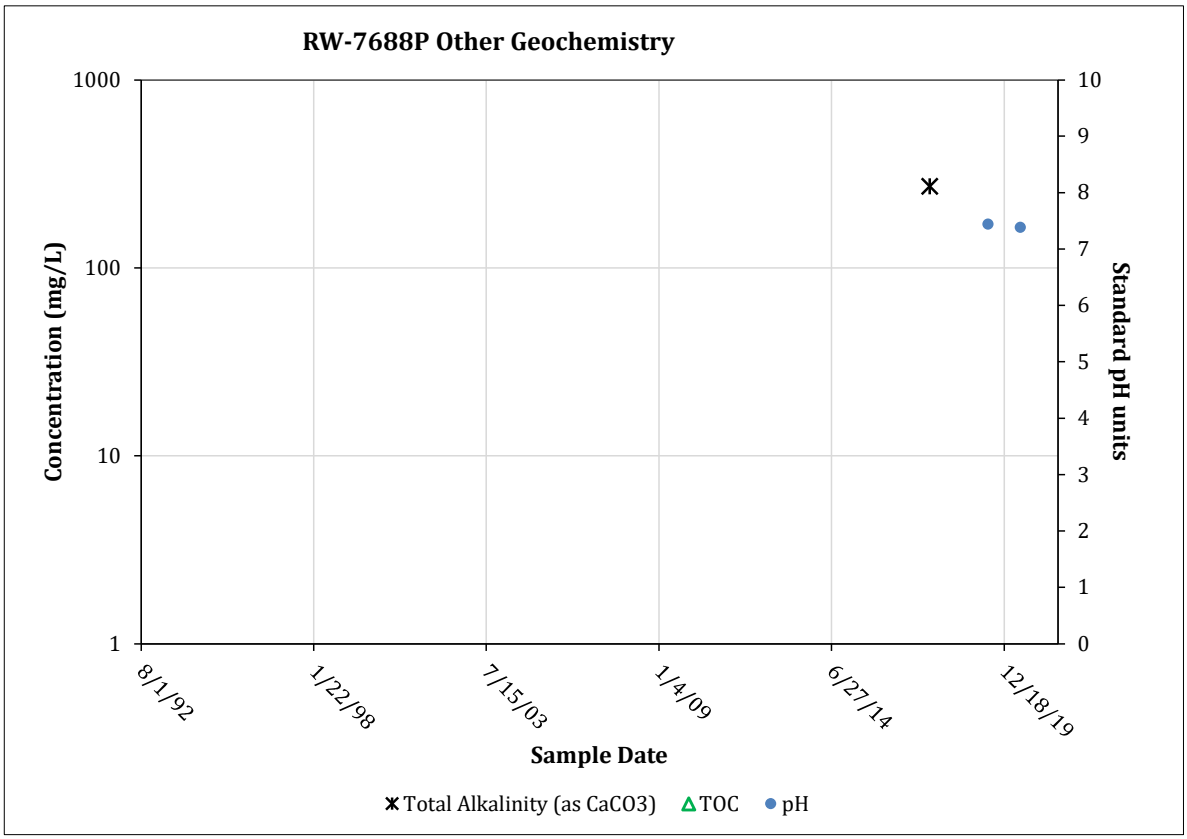


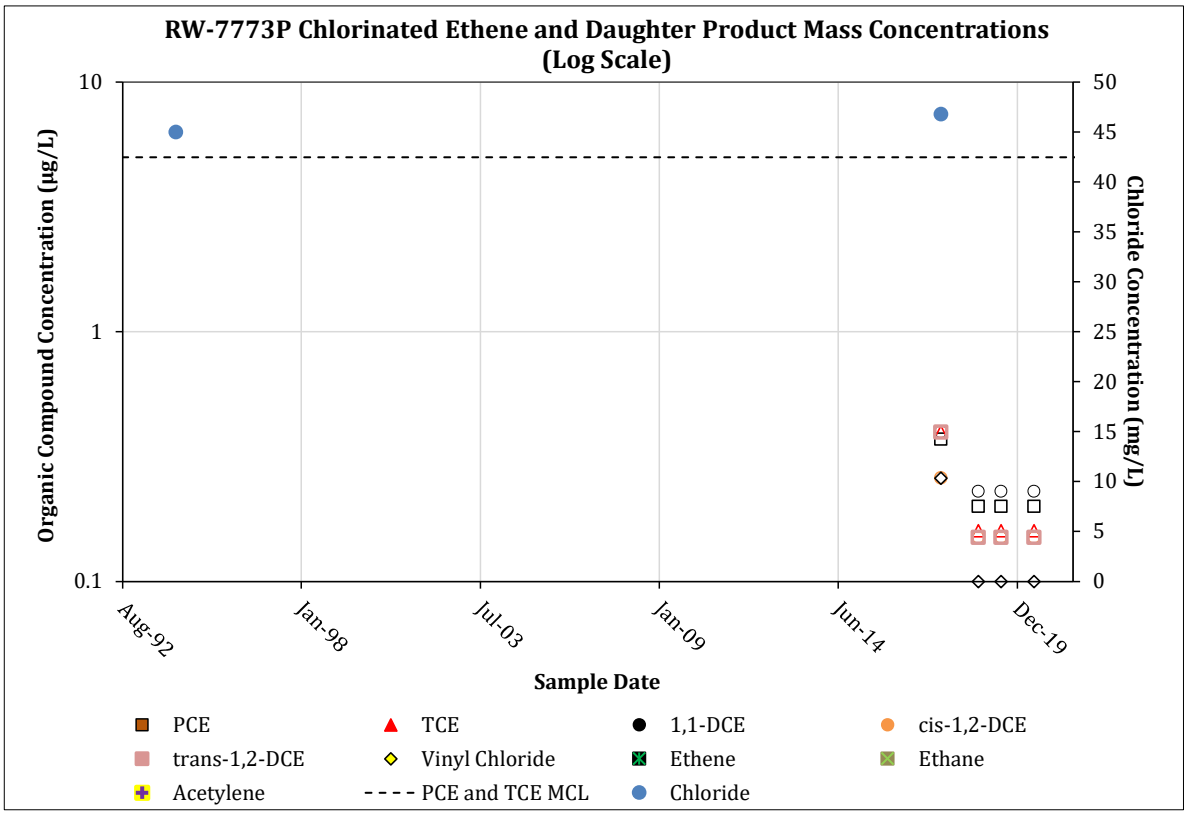


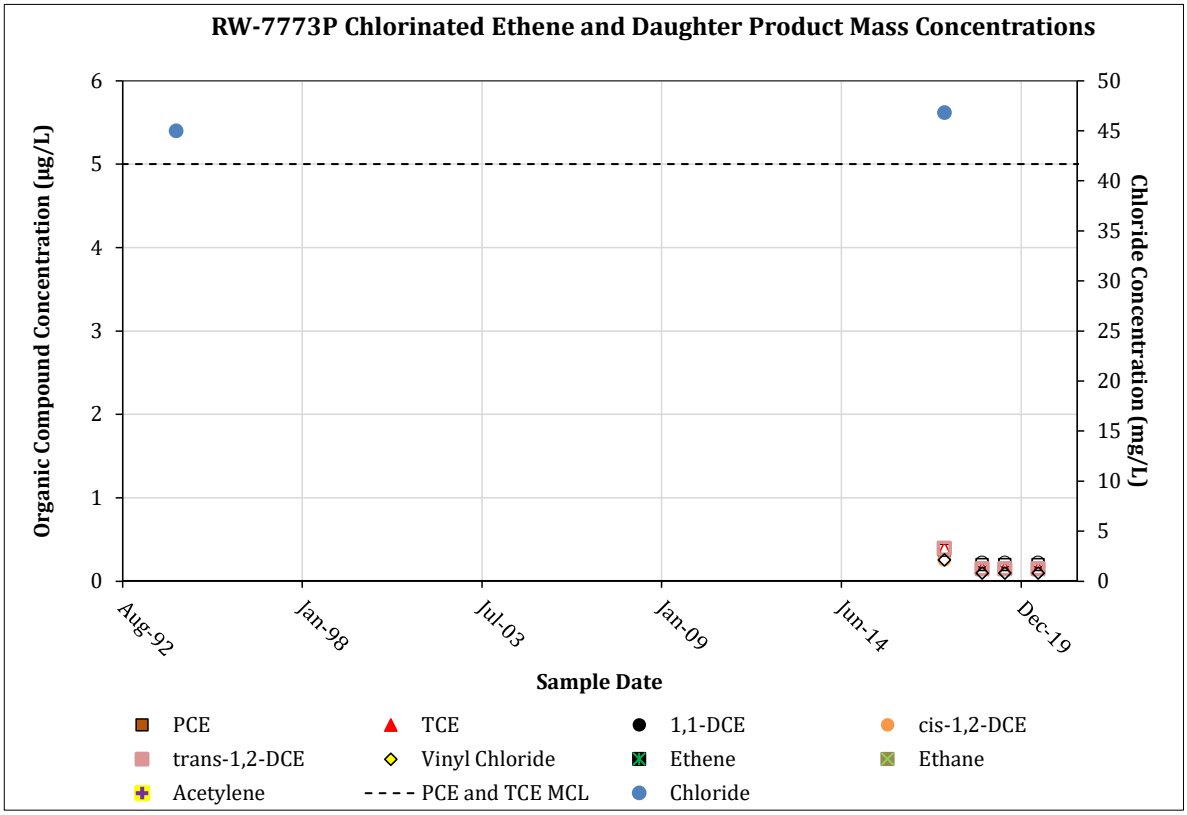
The symbol without fill designates a non-detect result.


RW-7688P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

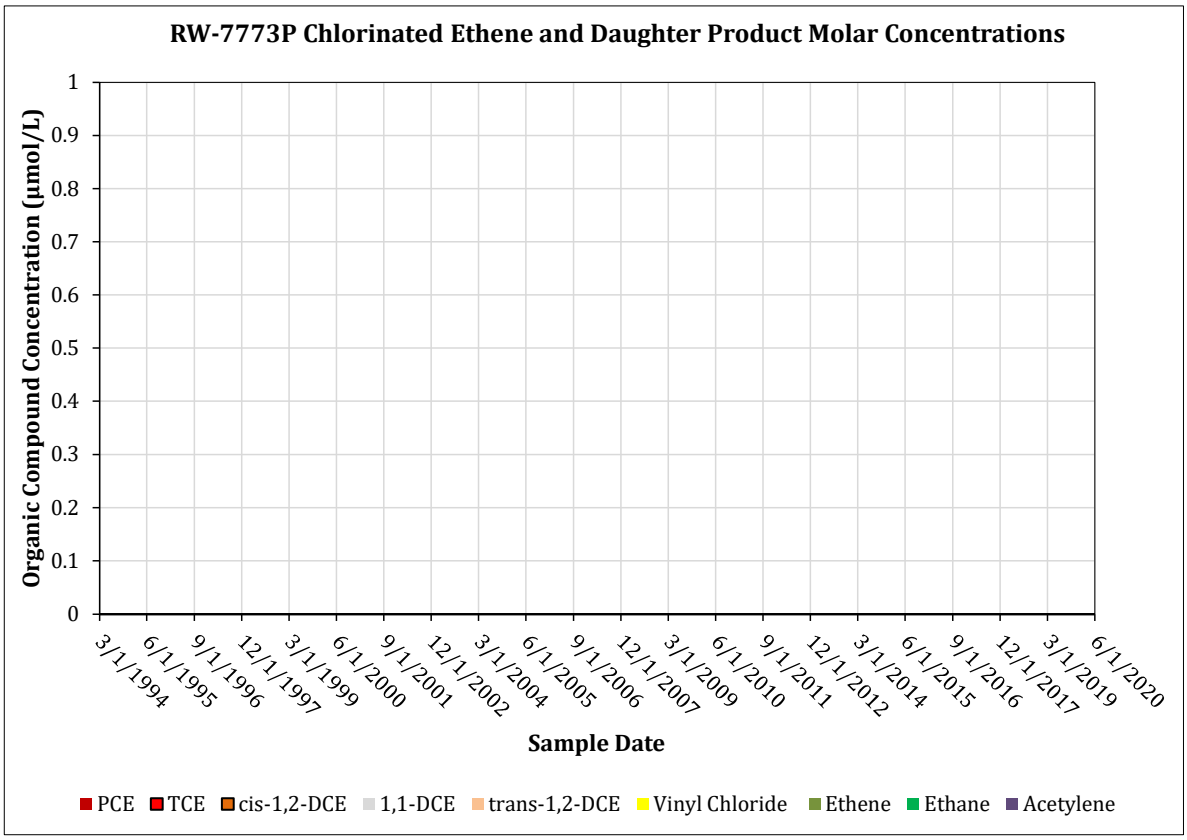

RW-7688P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

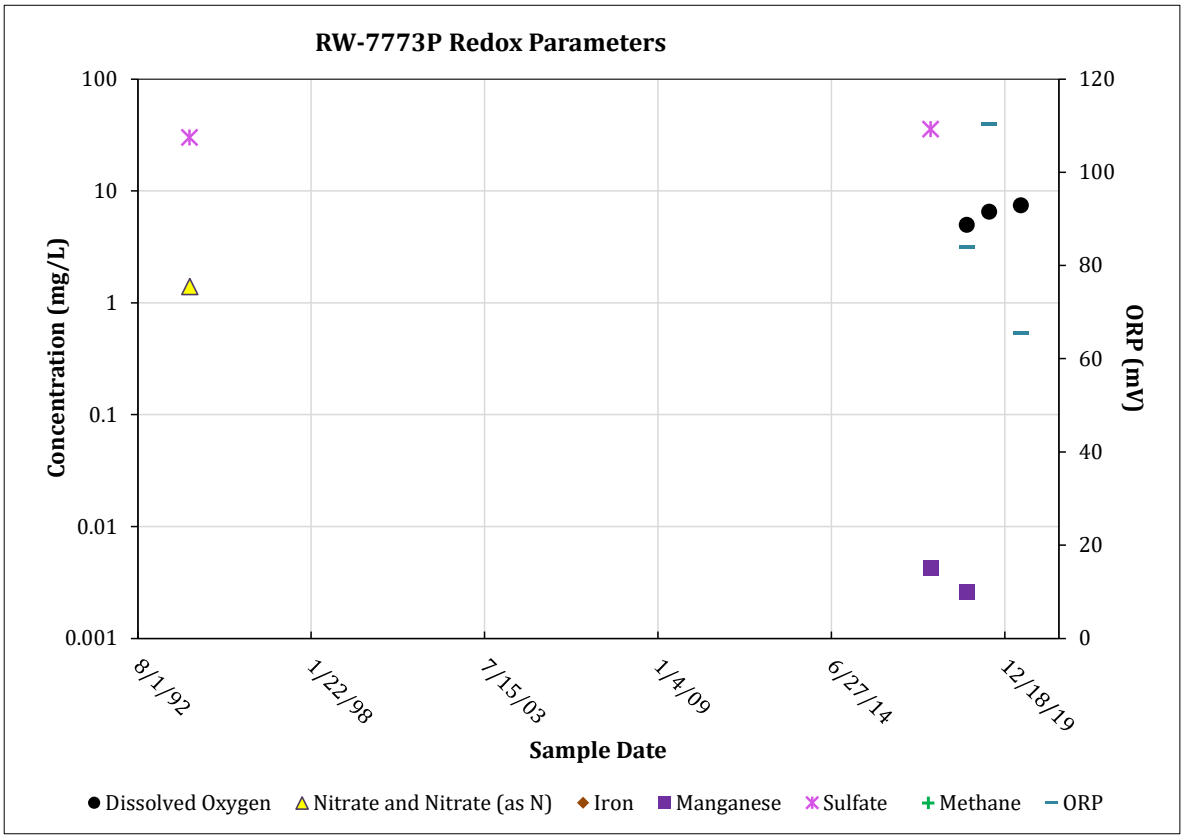

RW-7688P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

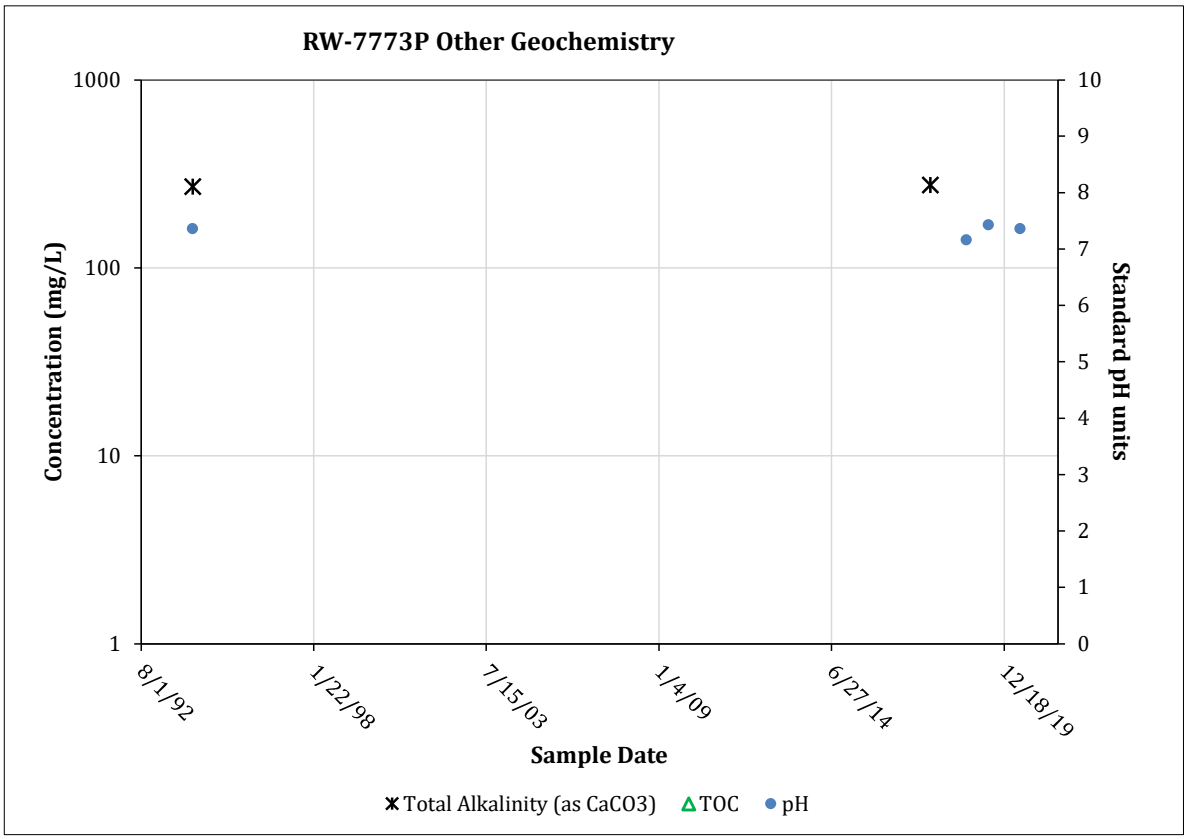


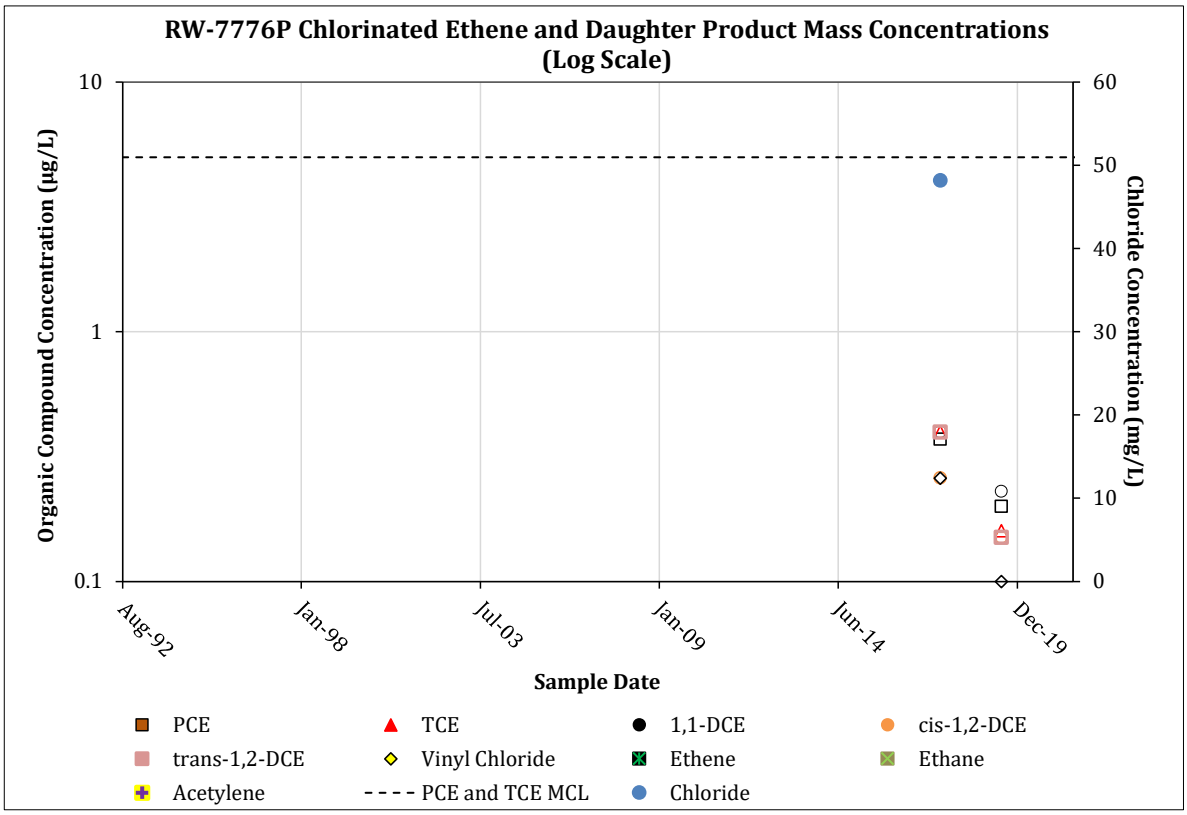


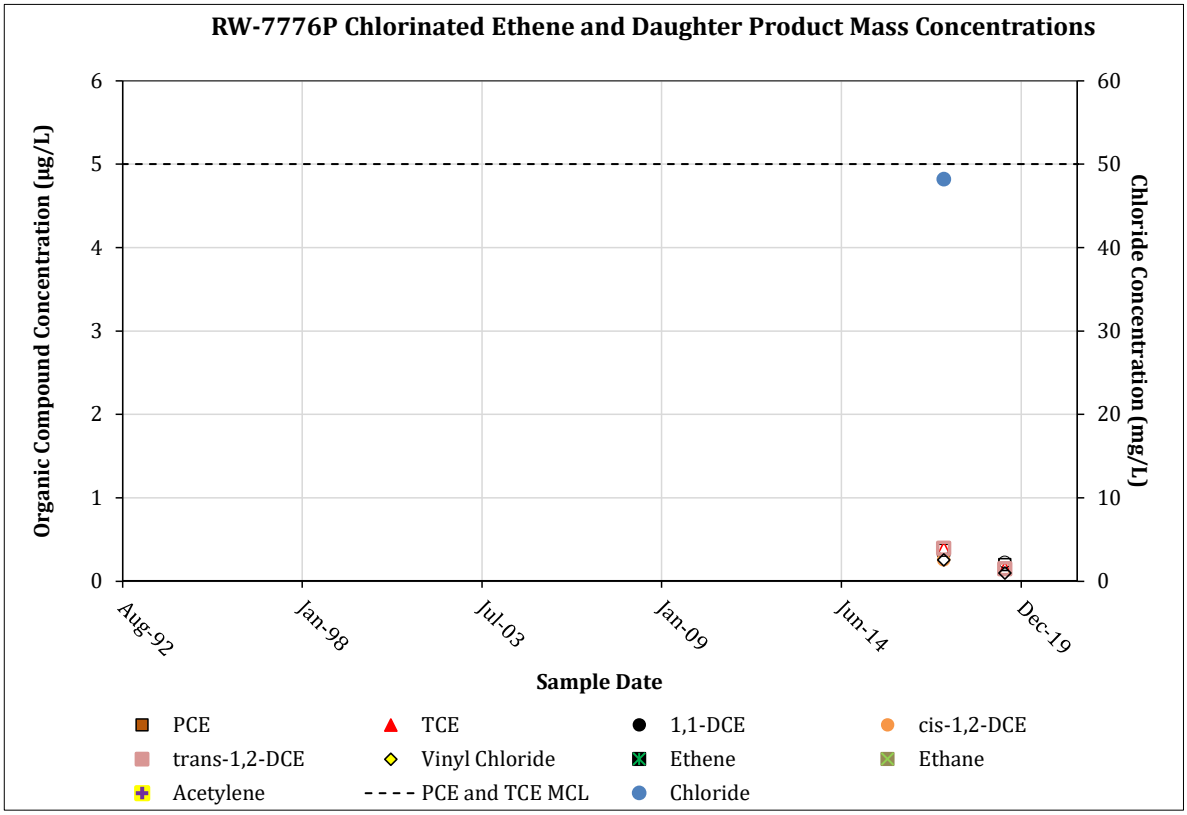
The symbol without fill designates a non-detect result.


RW-7773P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
3/1/1994
6/1/1995
9/1/1996
12/1/1997
3/1/1999
6/1/2000
9/1/2001
12/1/2002
3/1/2004
6/1/2005
9/1/2006
12/1/2007
3/1/2009
6/1/2010
9/1/2011
12/1/2012
3/1/2014
6/1/2015
9/1/2016
12/1/2017
3/1/2019
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

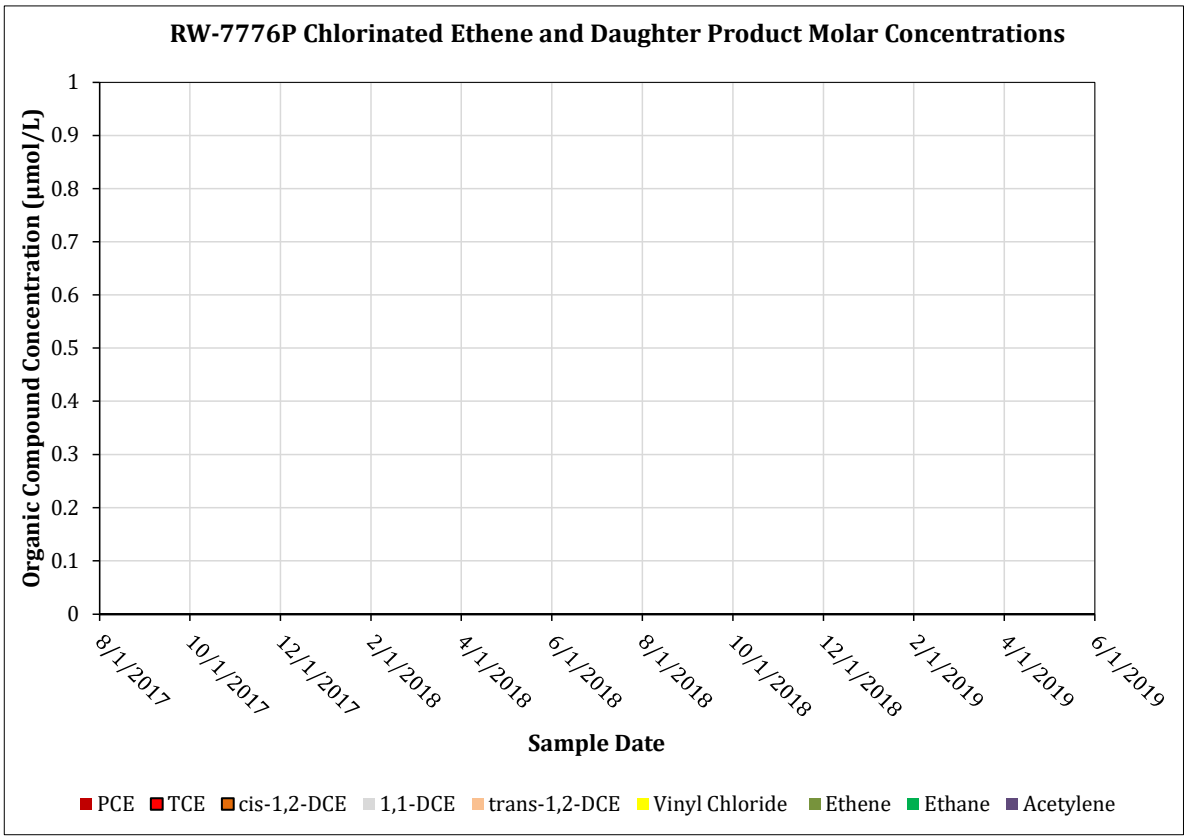

RW-7773P Redox Parameters
Concentration (mg/L)
ORP (mV)
100
10
1
0.1
0.01
0.001
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

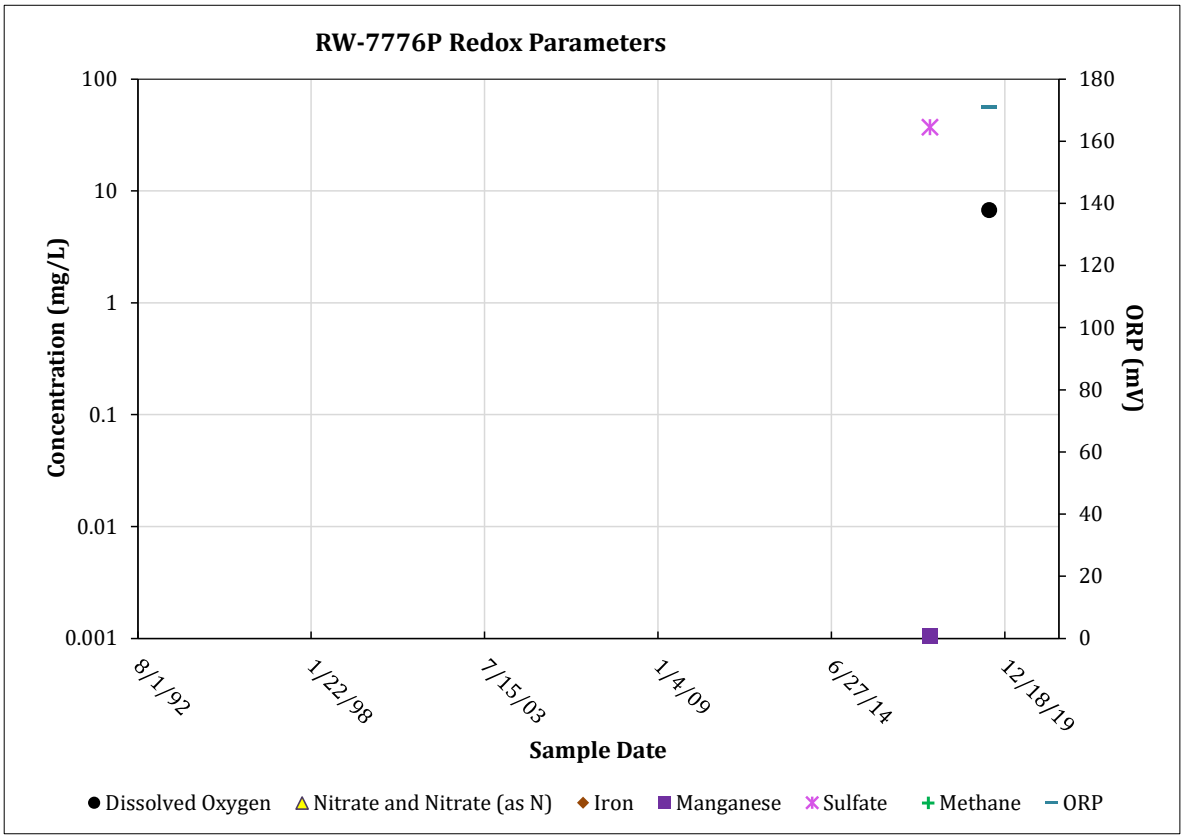

RW-7773P Other Geochemistry
Concentration (mg/L)
Standard pH units
1000
100
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

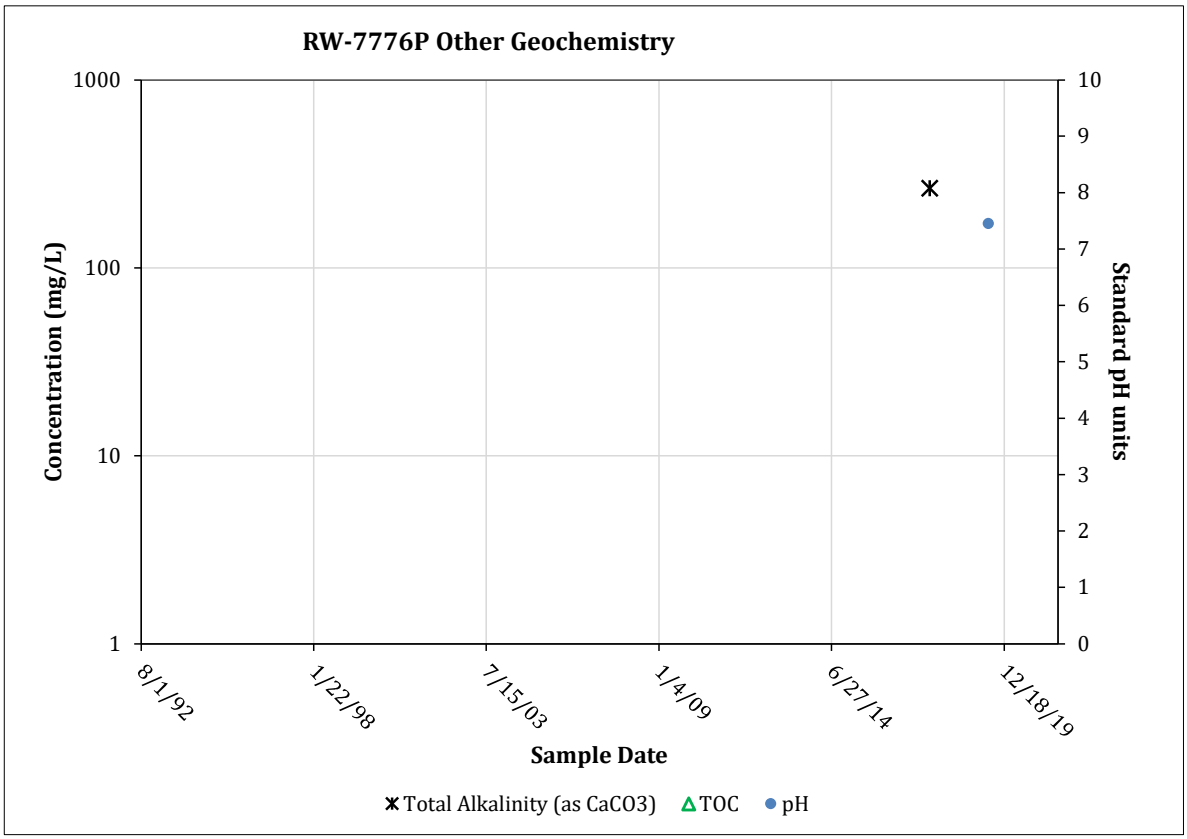


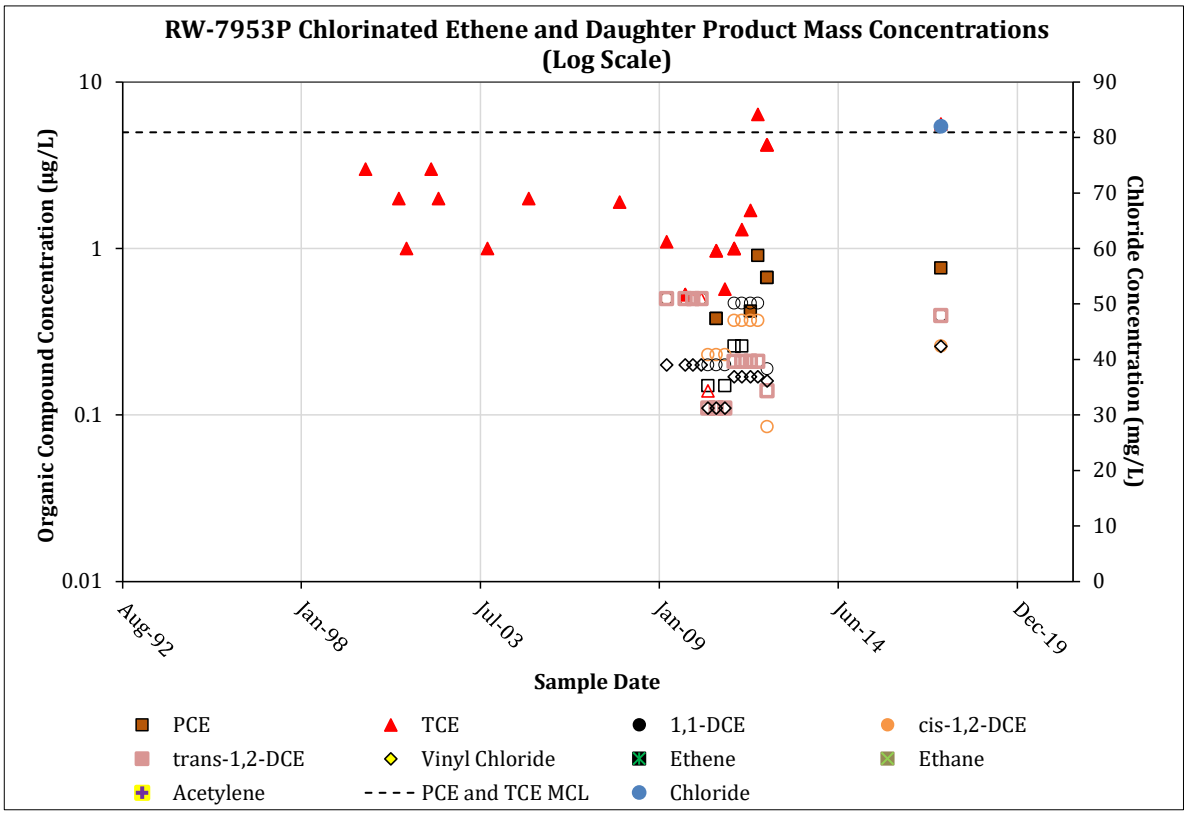


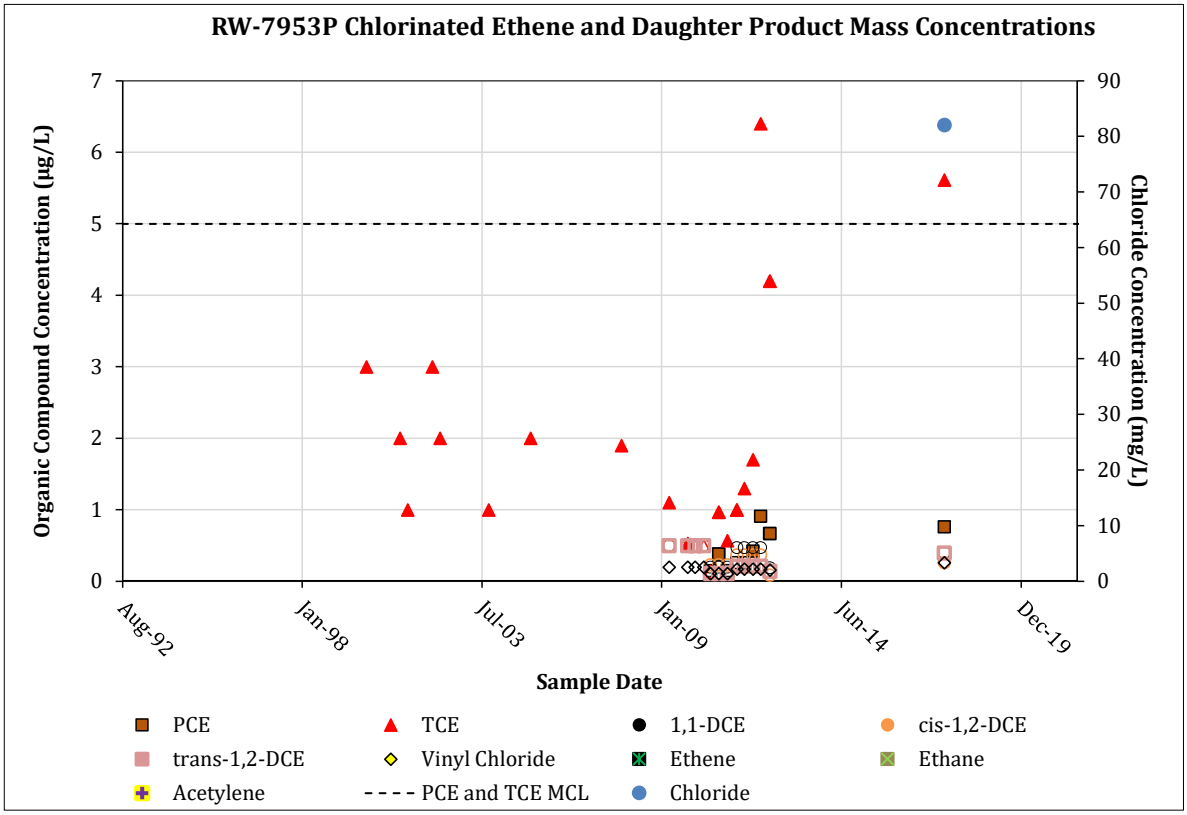
The symbol without fill designates a non-detect result.


RW-7776P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

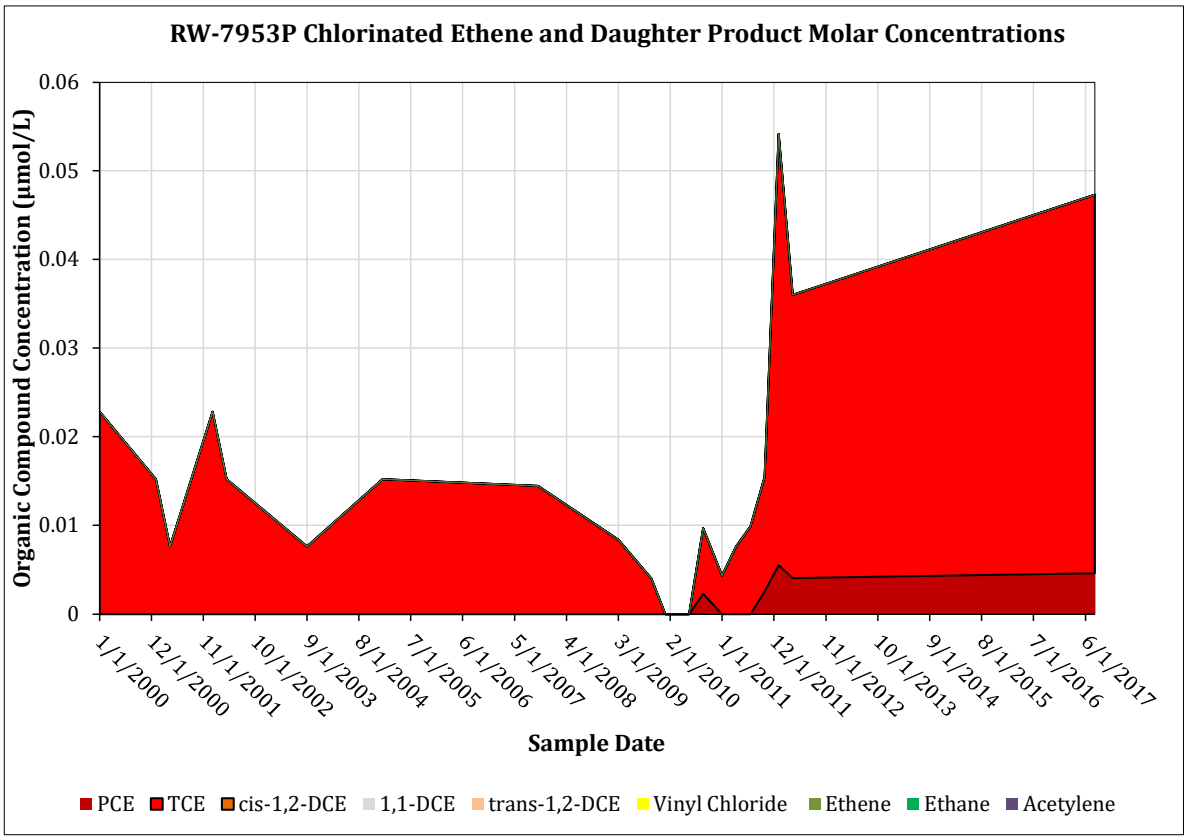

RW-7776P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

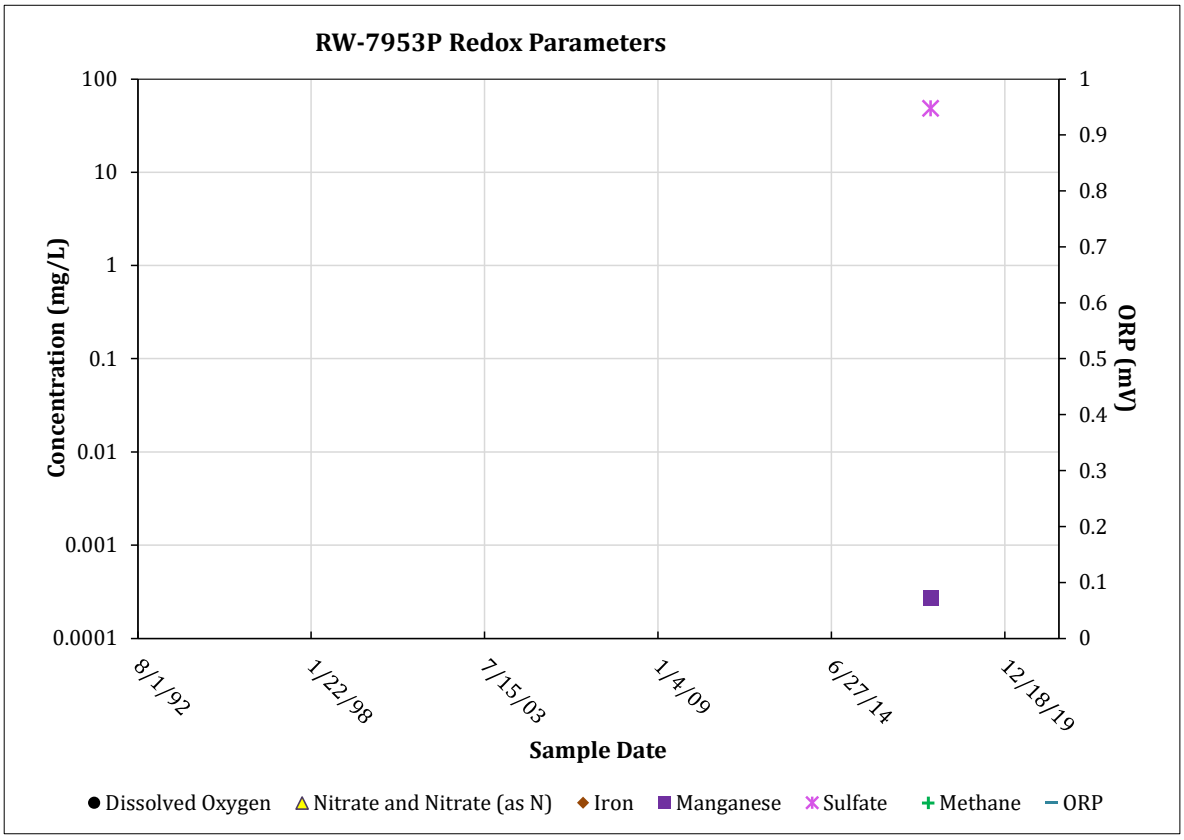

RW-7776P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

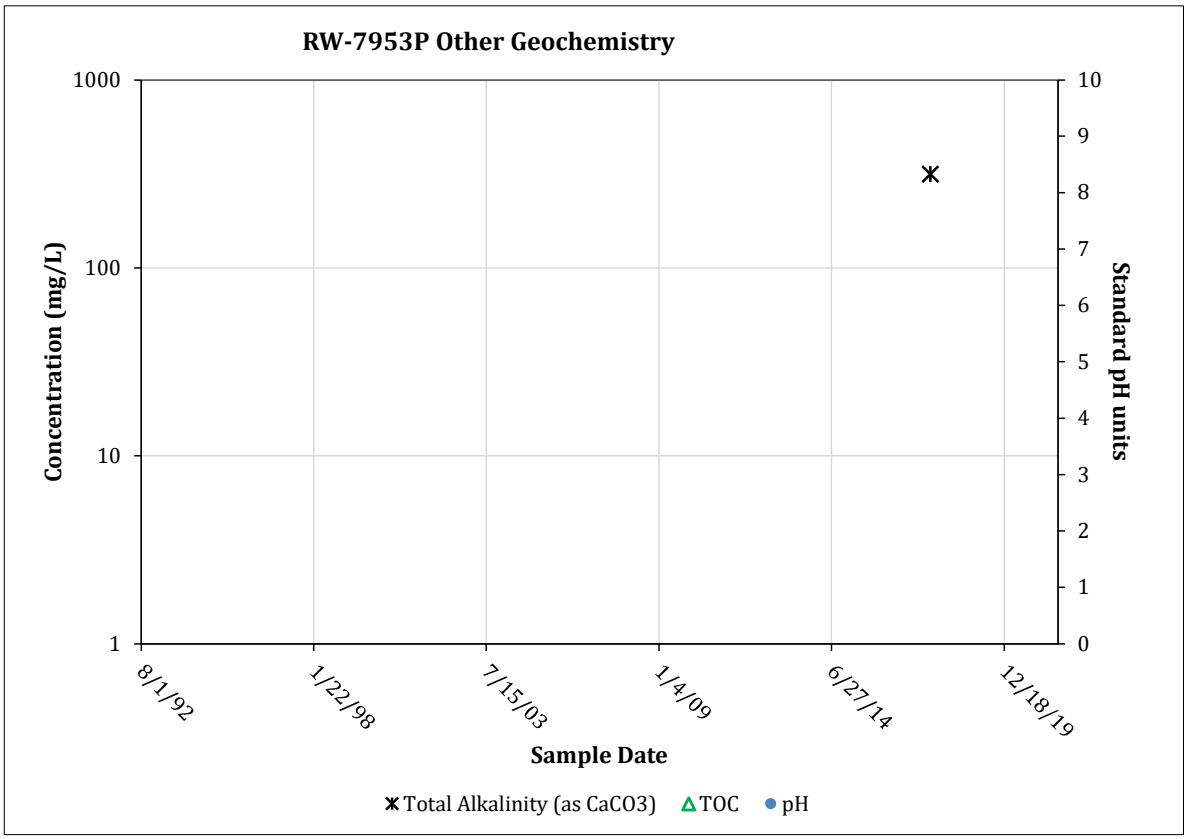


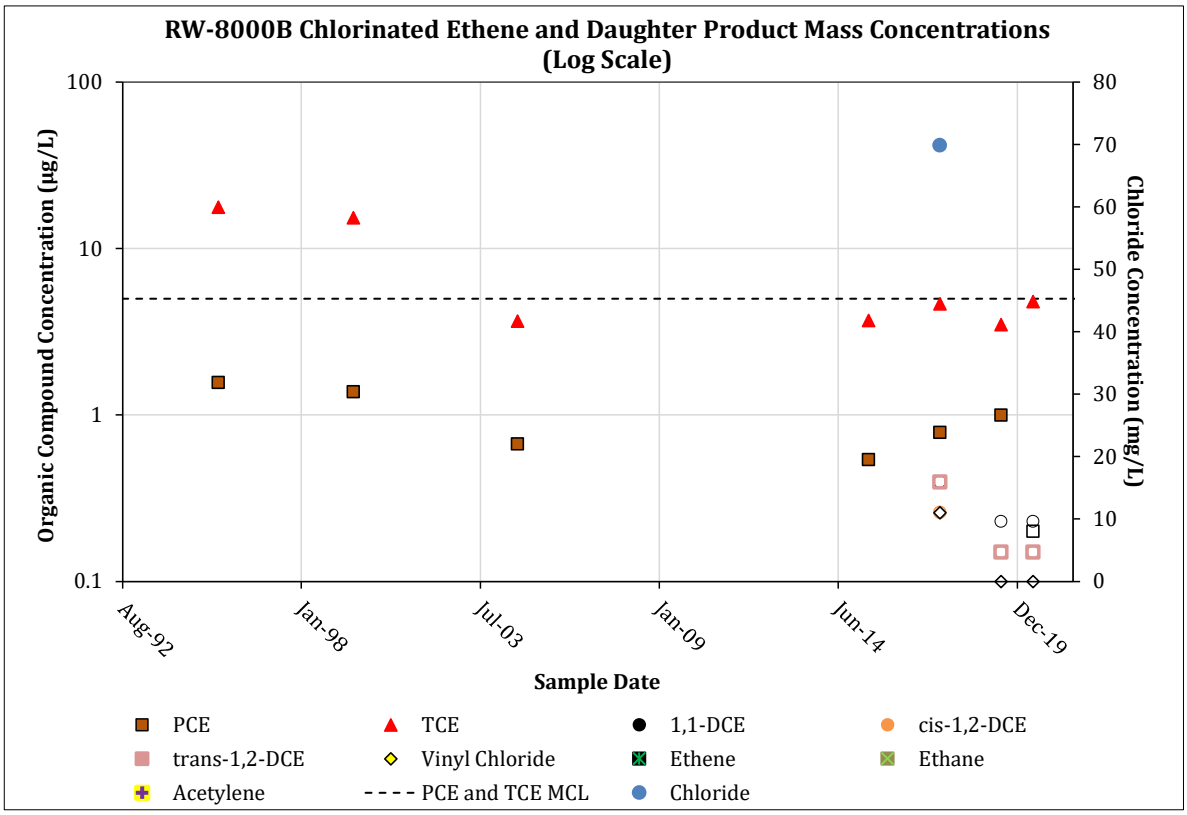


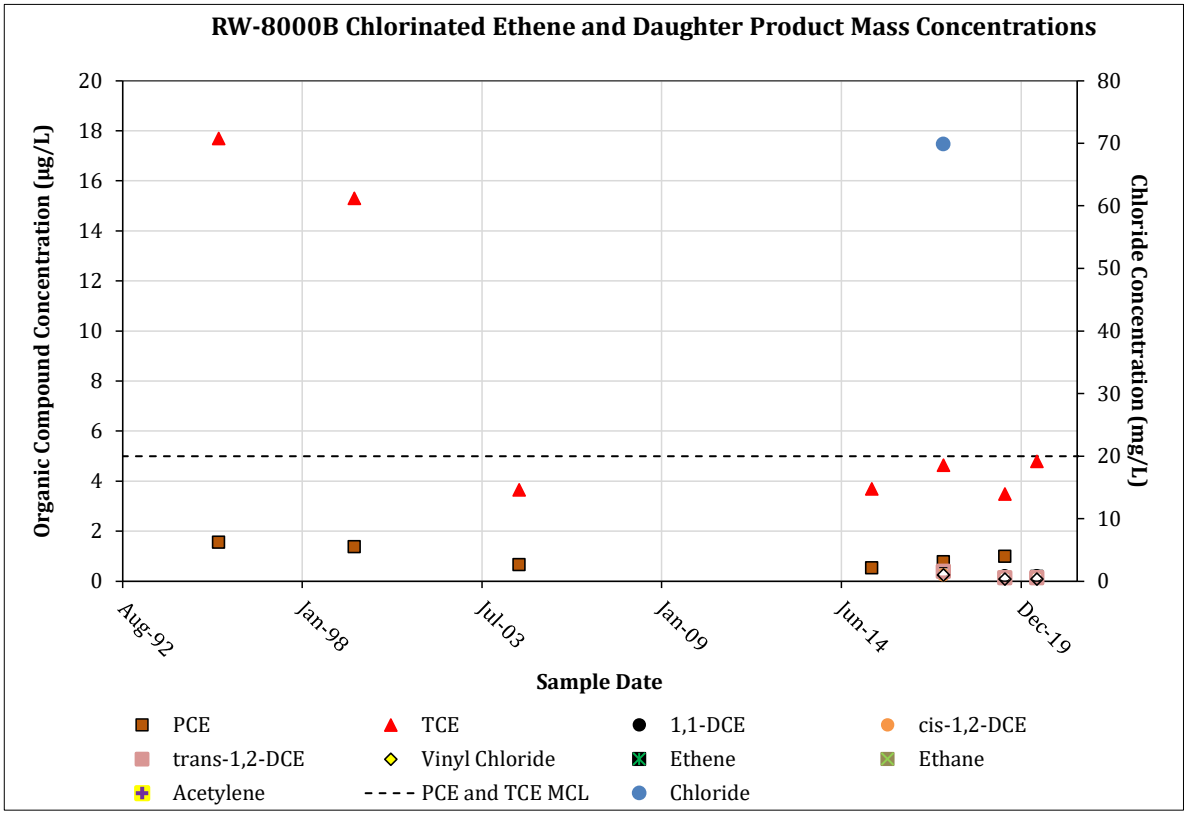
The symbol without fill designates a non-detect result.


RW-7953P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.06
0.05
0.04
0.03
0.02
0.01
0
1/1/2000
12/1/2000
11/1/2001
10/1/2002
9/1/2003
8/1/2004
7/1/2005
6/1/2006
5/1/2007
4/1/2008
3/1/2009
2/1/2010
1/1/2011
12/1/2011
11/1/2012
10/1/2013
9/1/2014
8/1/2015
7/1/2016
6/1/2017
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

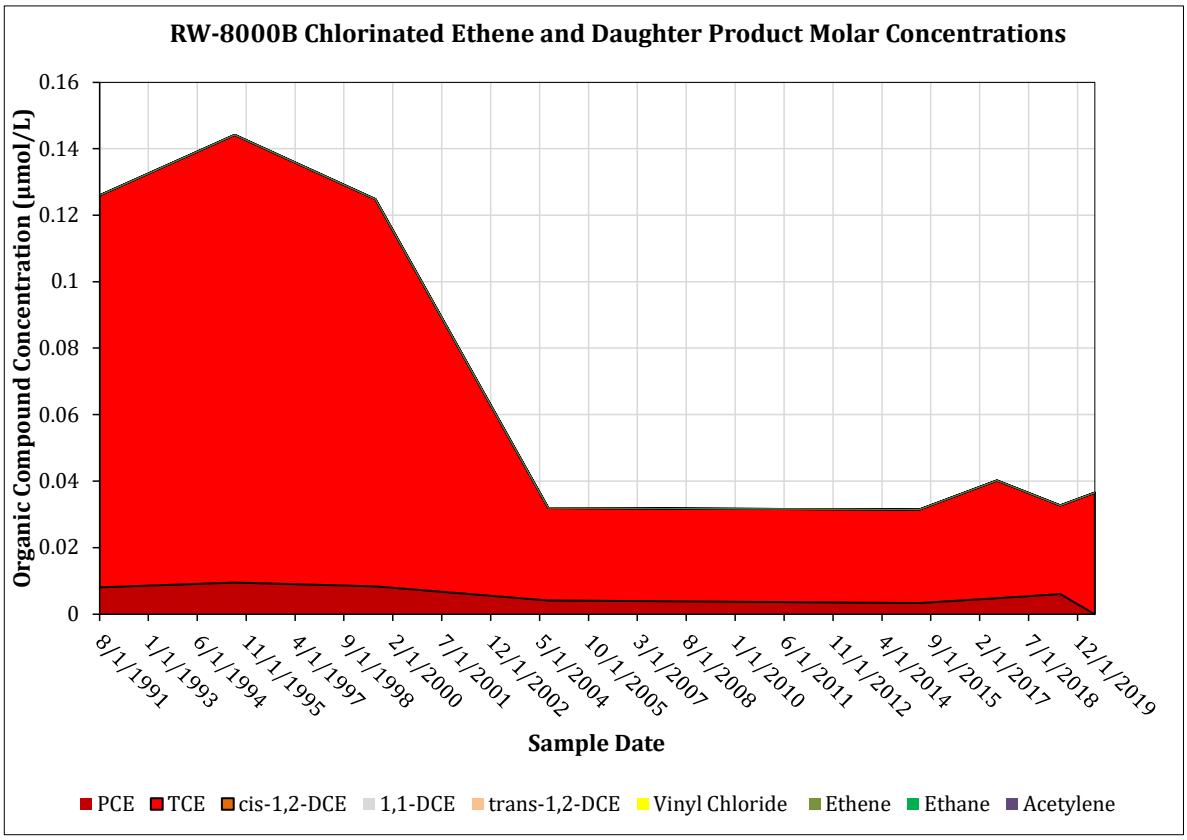

RW-7953P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

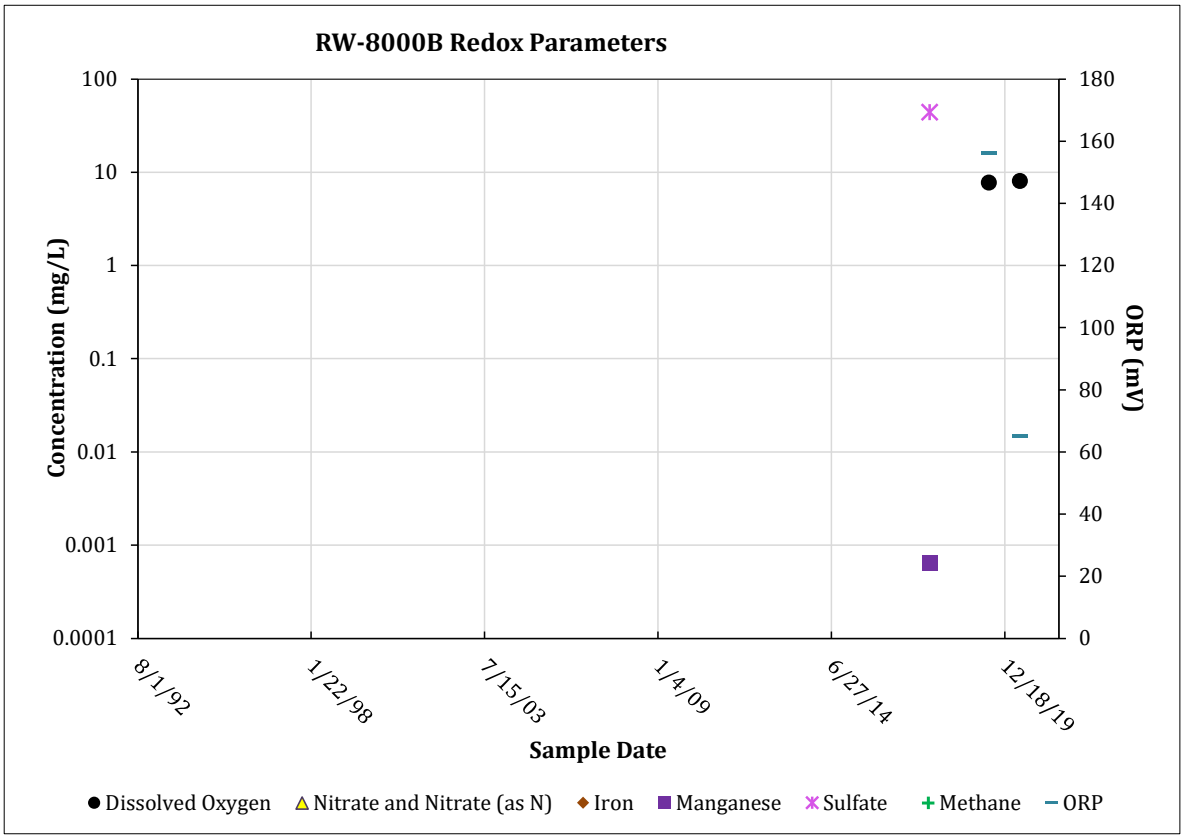

RW-7953P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

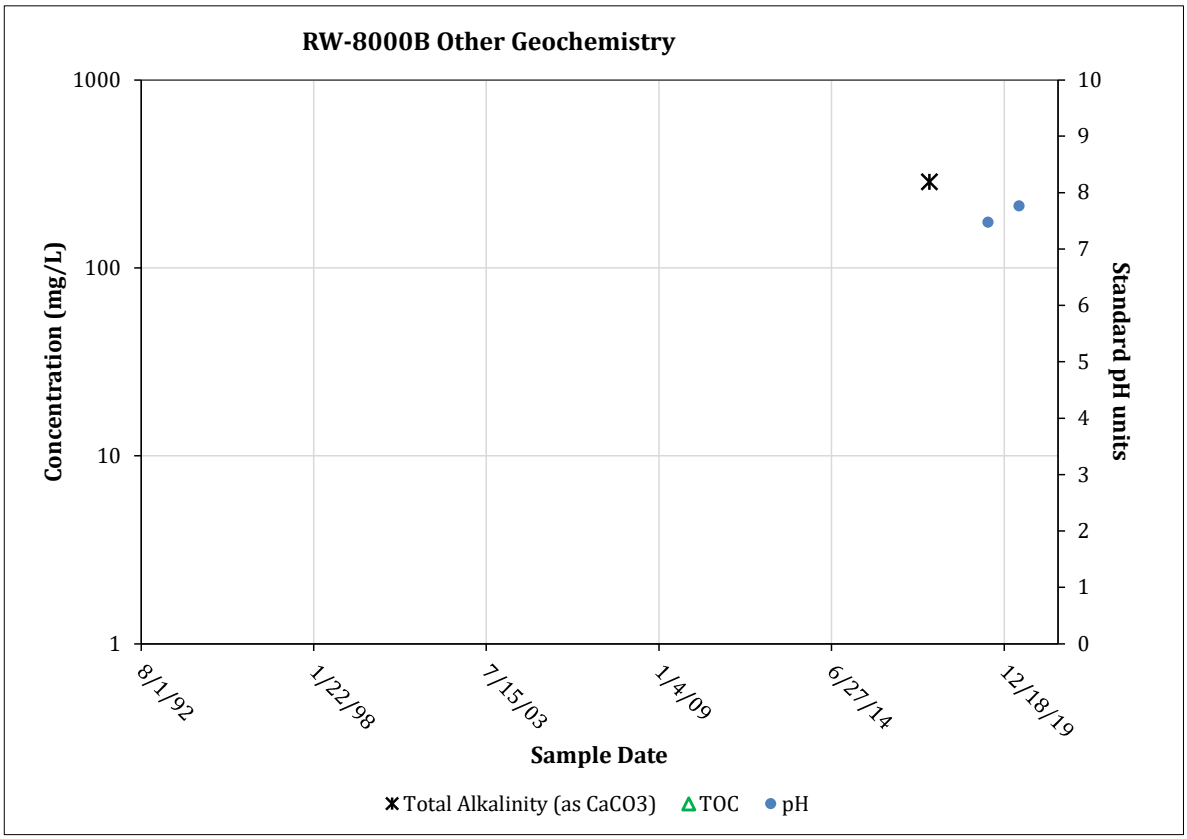


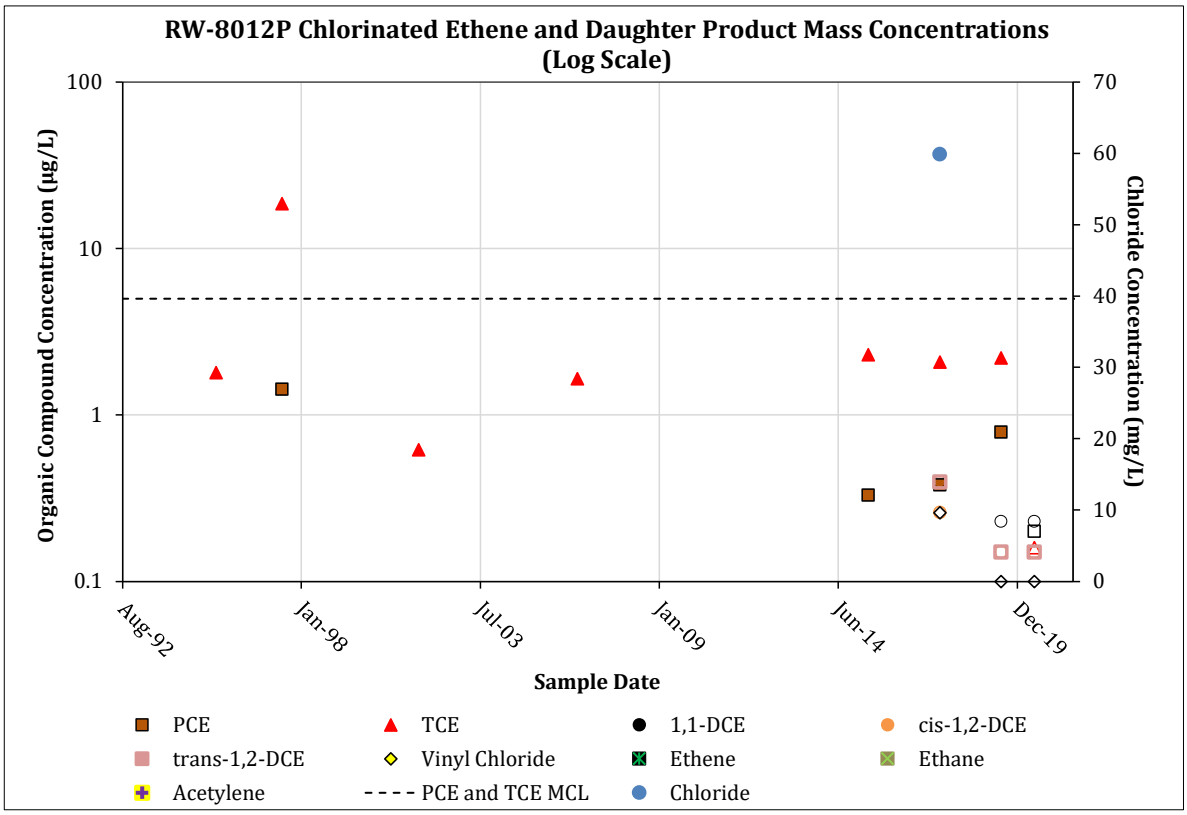


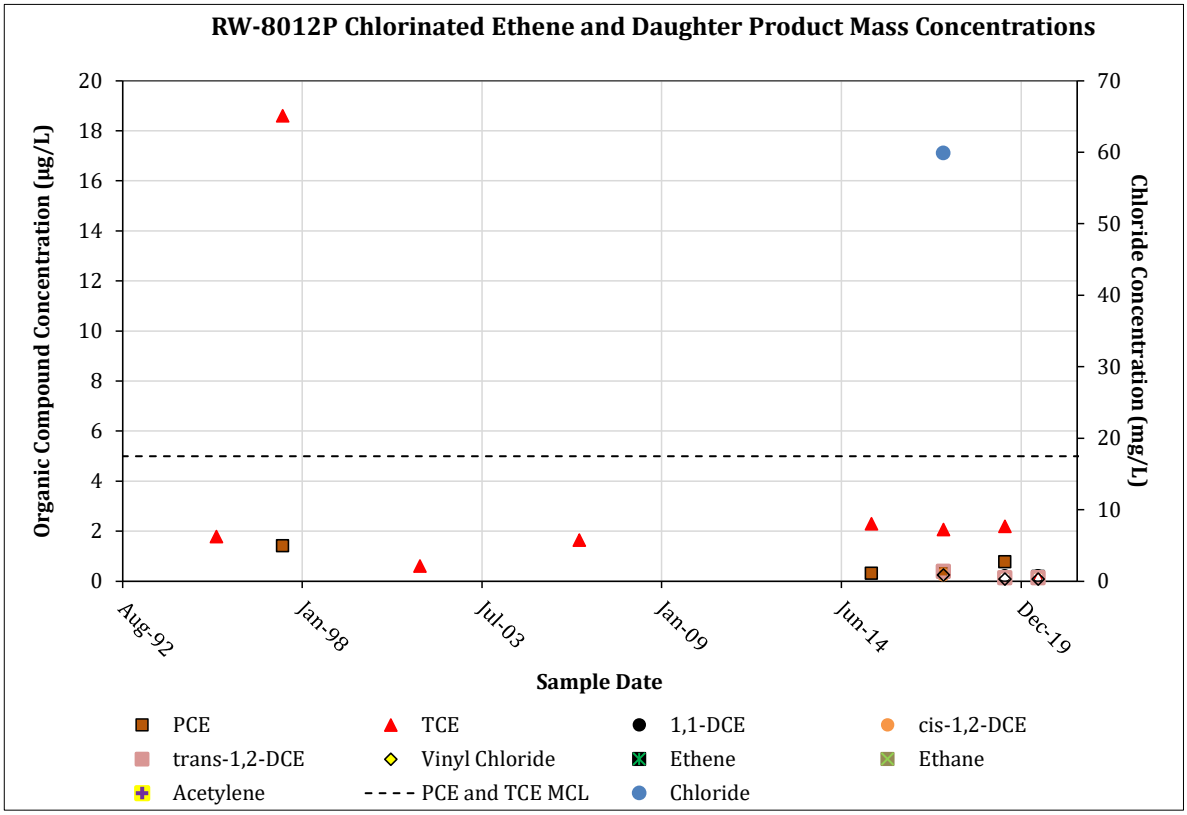
The symbol without fill designates a non-detect result.


RW-8000B Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
8/1/1991
1/1/1993
6/1/1994
11/1/1995
4/1/1997
9/1/1998
2/1/2000
7/1/2001
12/1/2002
5/1/2004
10/1/2005
3/1/2007
8/1/2008
1/1/2010
6/1/2011
11/1/2012
4/1/2014
9/1/2015
2/1/2017
7/1/2018
12/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

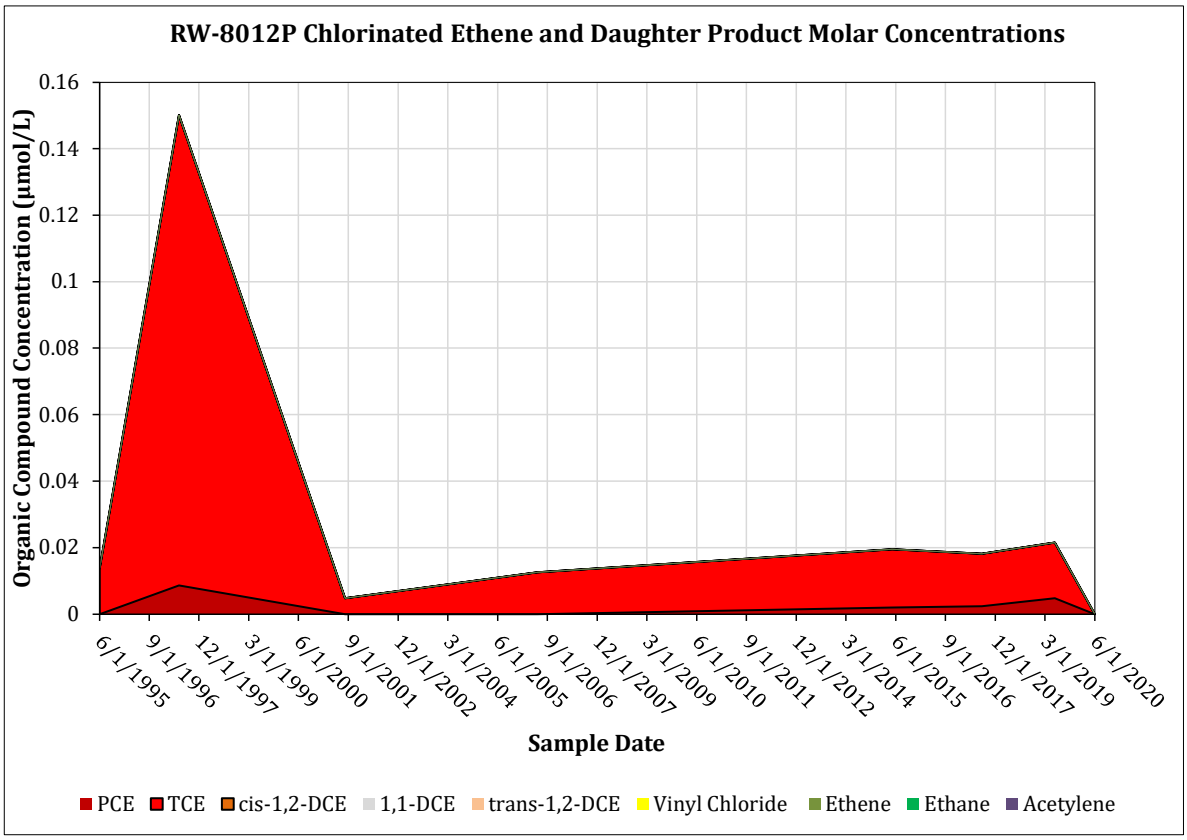

RW-8000B Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

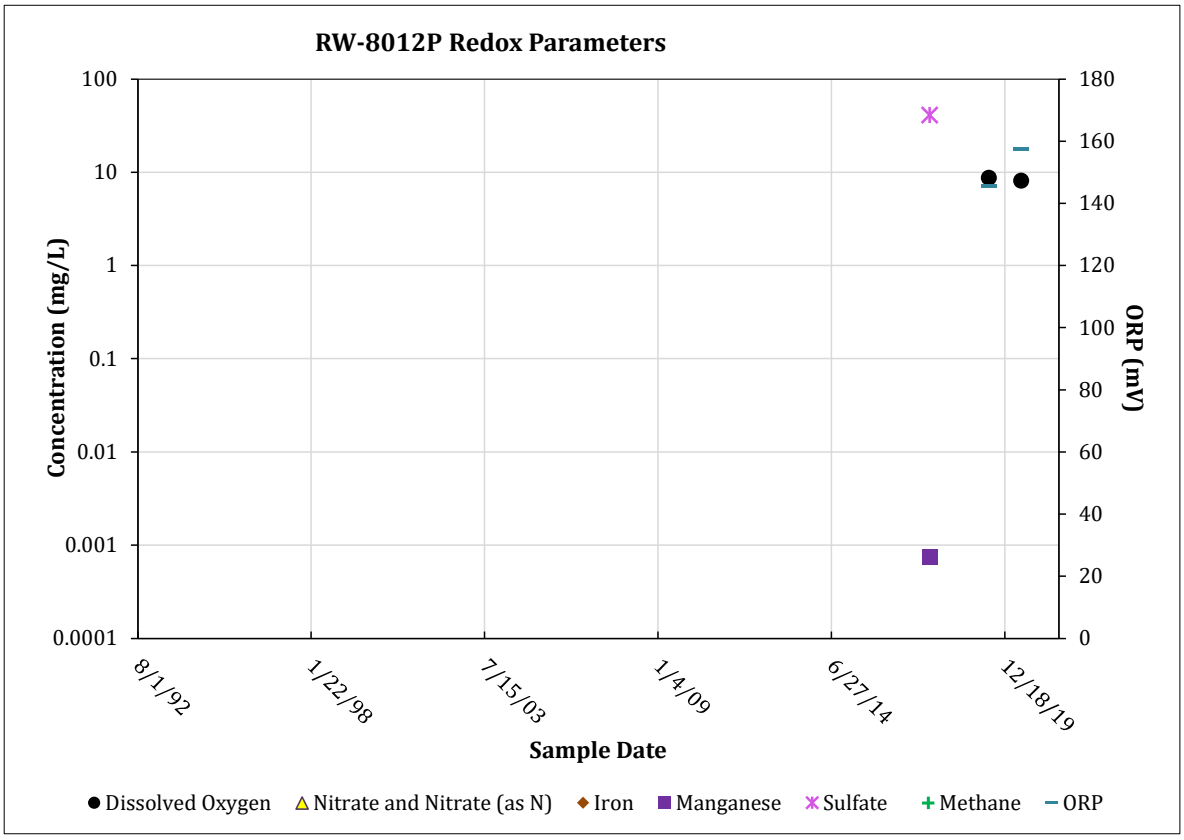

RW-8000B Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

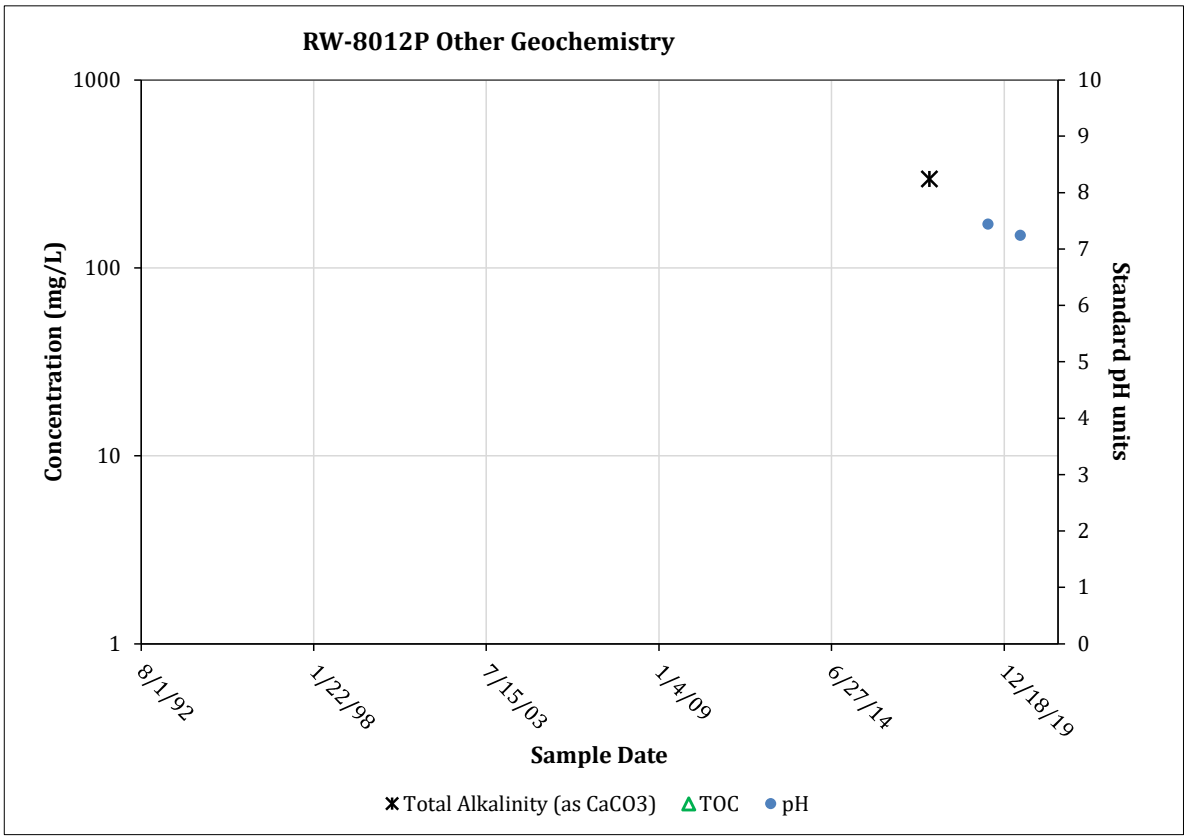


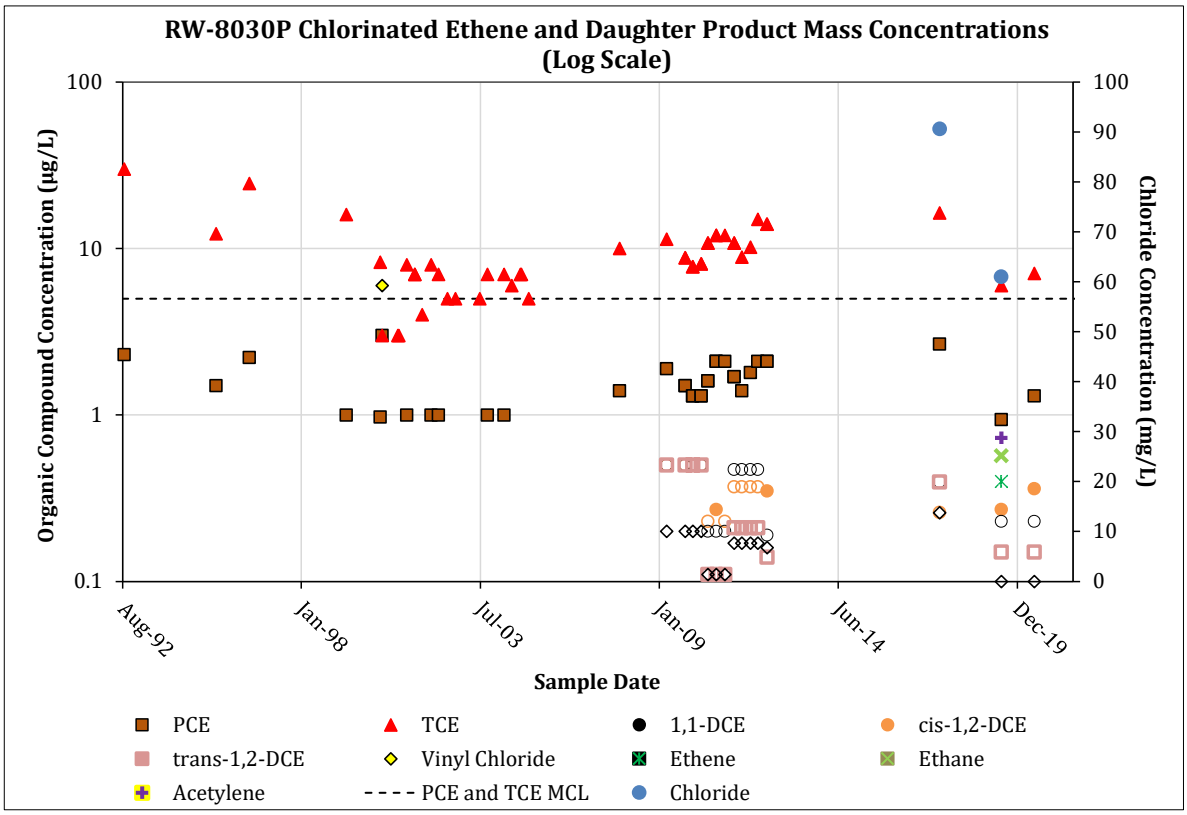


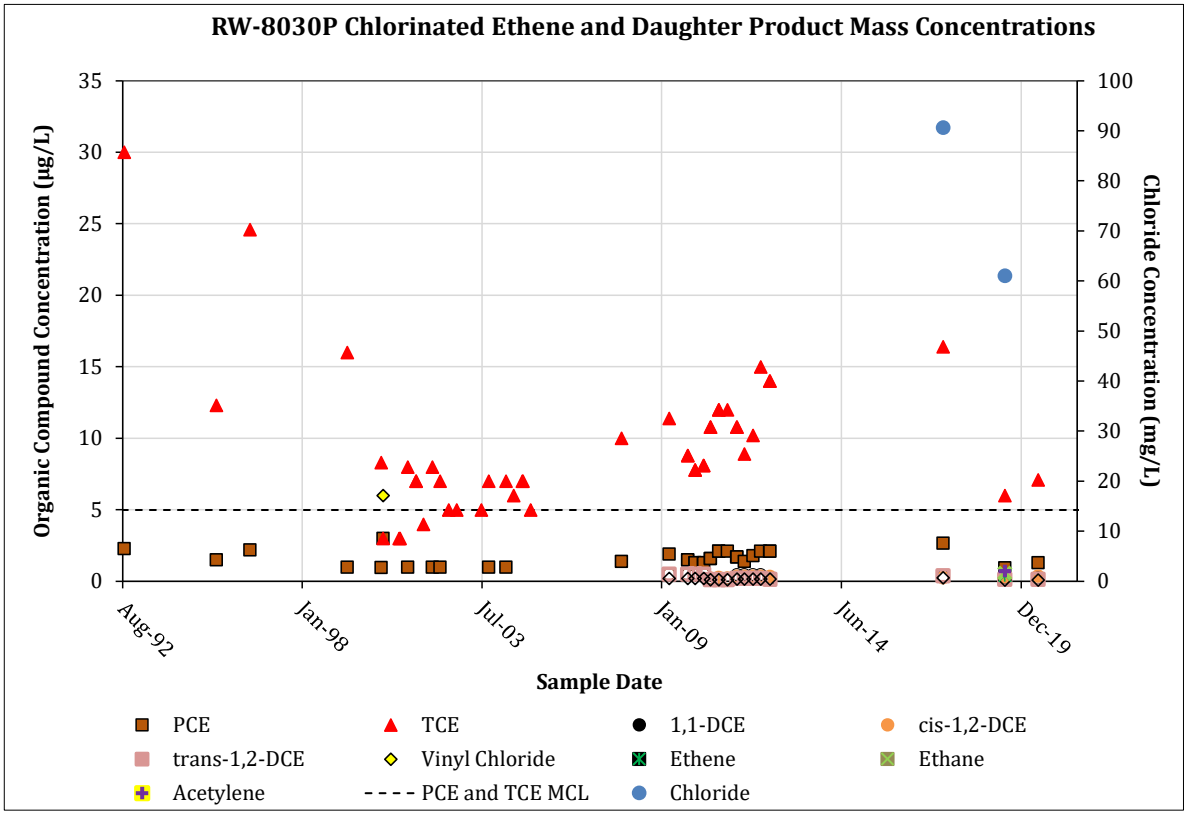
The symbol without fill designates a non-detect result.


RW-8012P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
6/1/1995
9/1/1996
12/1/1997
3/1/1999
6/1/2000
9/1/2001
12/1/2002
3/1/2004
6/1/2005
9/1/2006
12/1/2007
3/1/2009
6/1/2010
9/1/2011
12/1/2012
3/1/2014
6/1/2015
9/1/2016
12/1/2017
3/1/2019
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

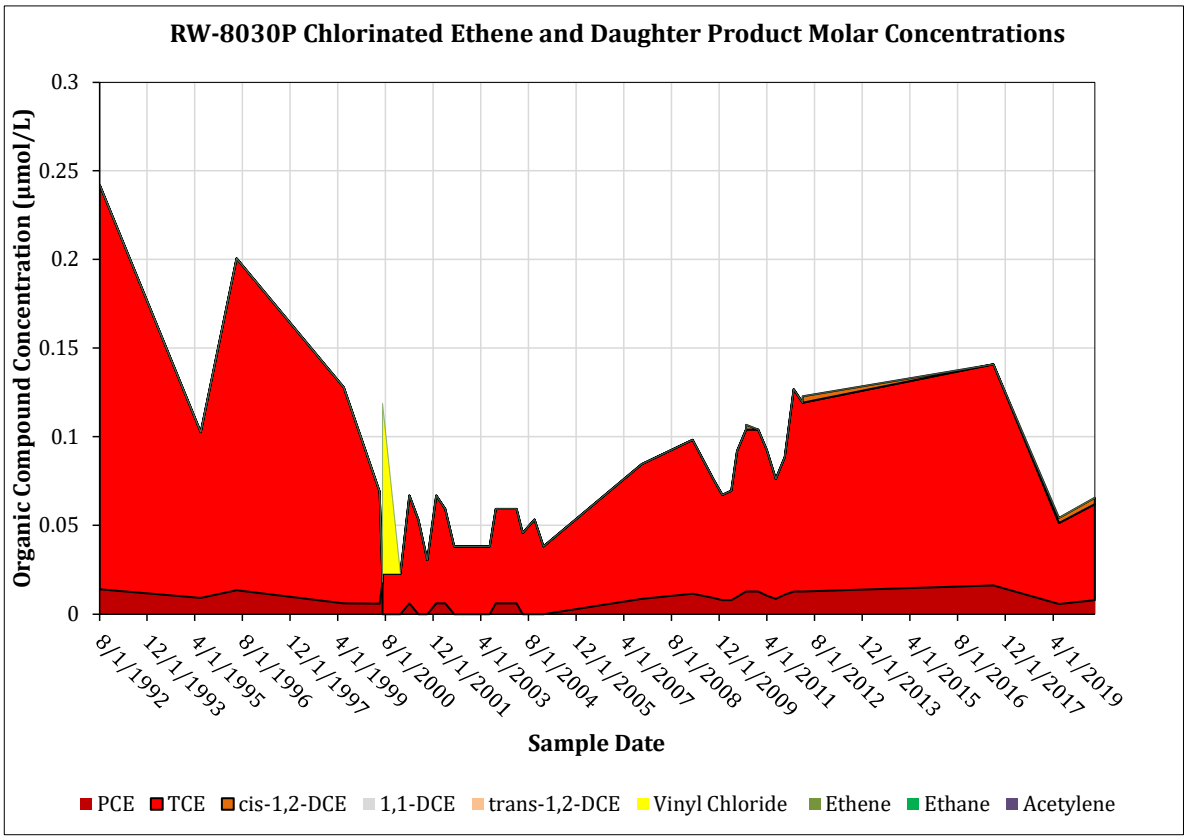

RW-8012P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

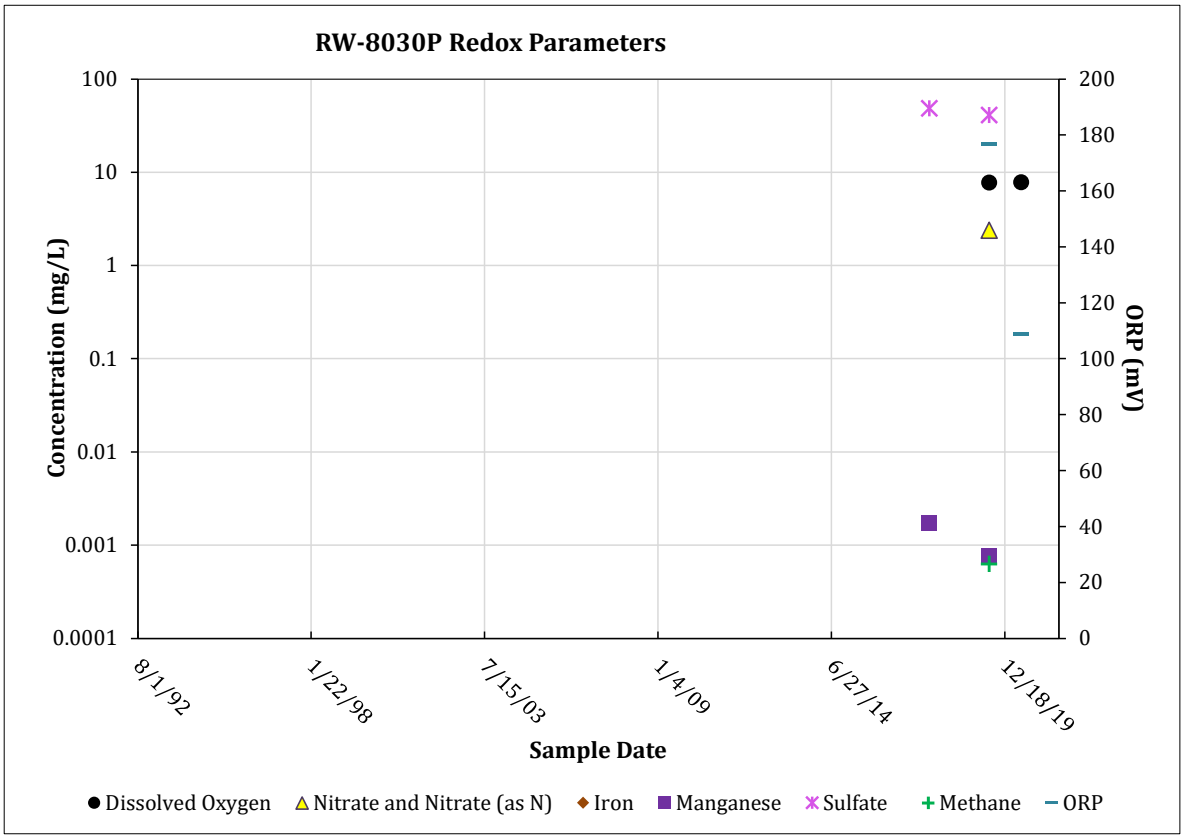

RW-8012P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

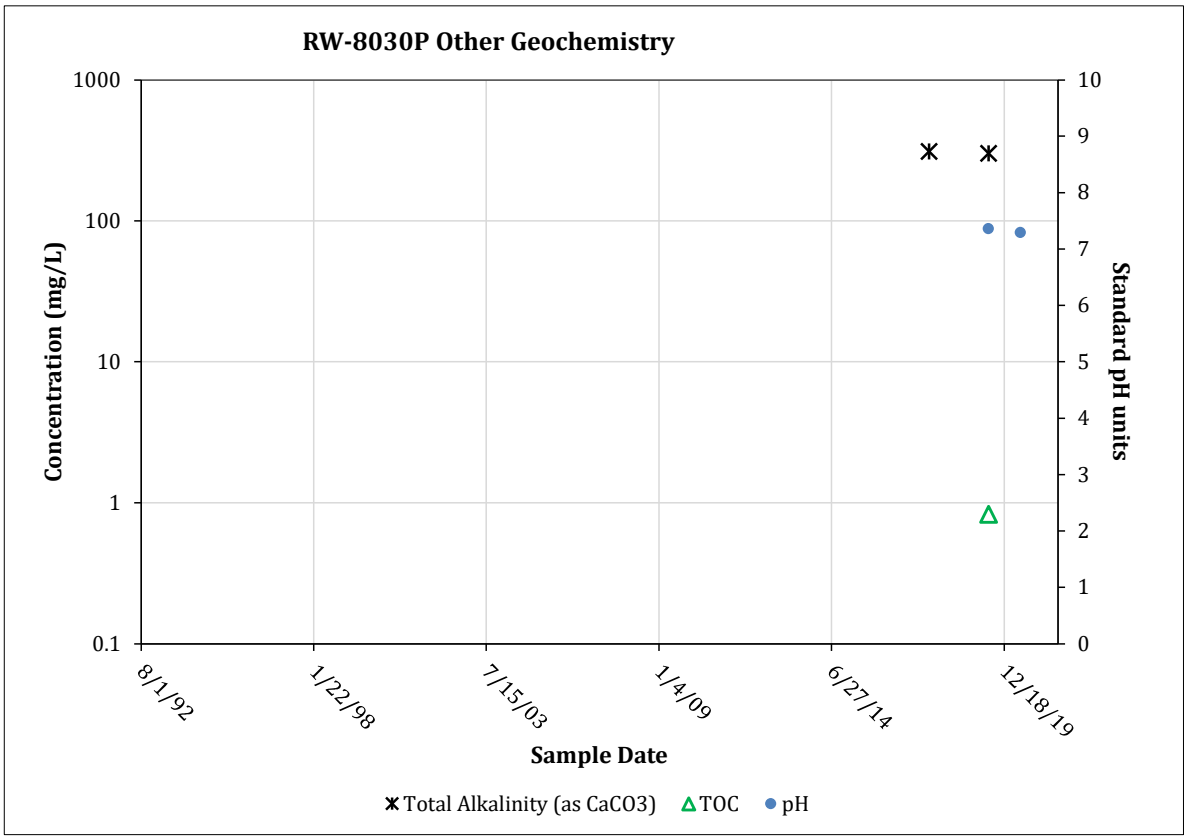


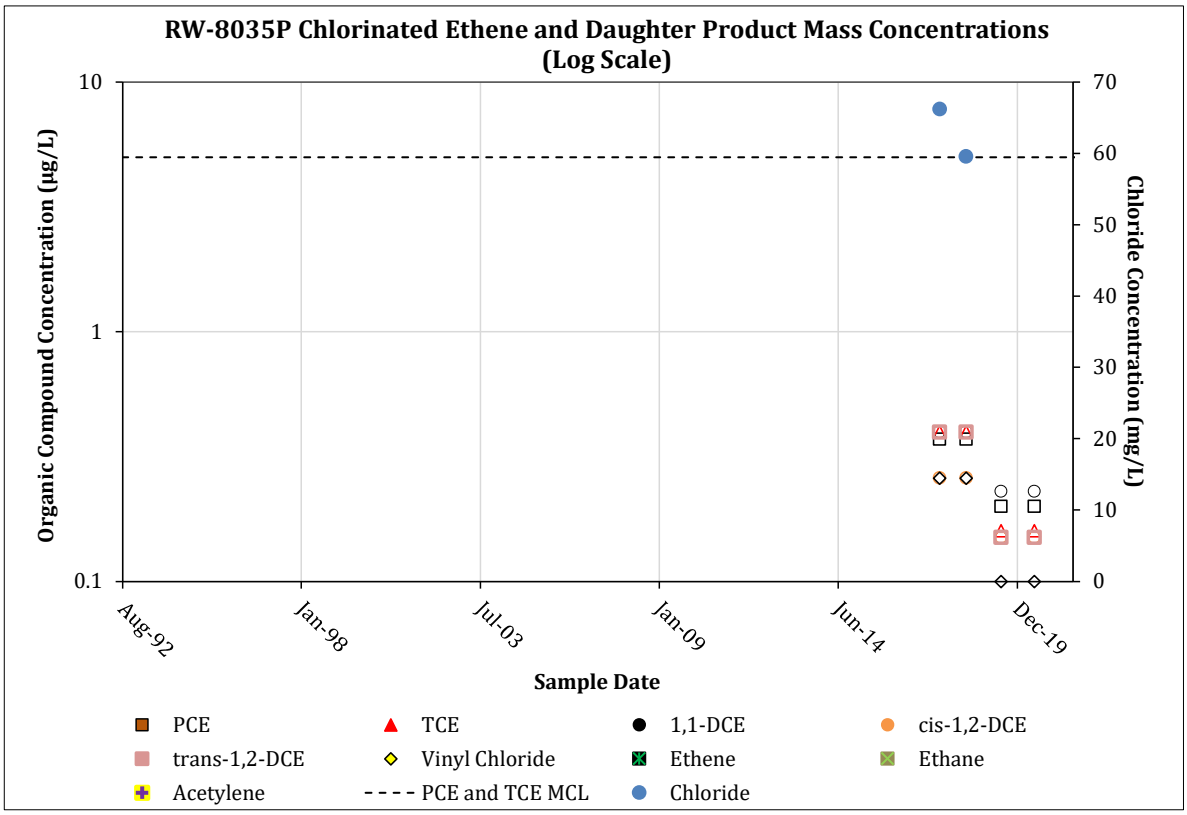


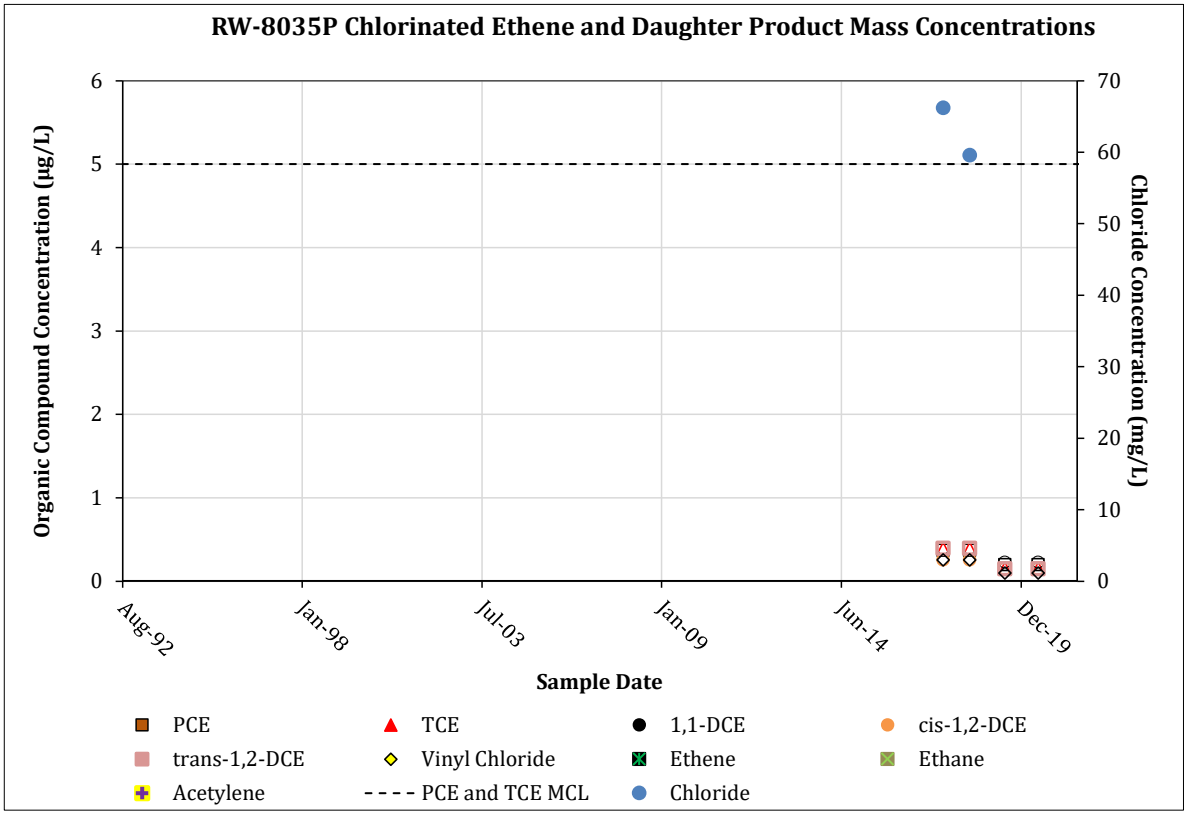
The symbol without fill designates a non-detect result.


RW-8030P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.3
0.25
0.2
0.15
0.1
0.05
0
8/1/1992
12/1/1993
4/1/1995
8/1/1996
12/1/1997
4/1/1999
8/1/2000
12/1/2001
4/1/2003
8/1/2004
12/1/2005
4/1/2007
8/1/2008
12/1/2009
4/1/2011
8/1/2012
12/1/2013
4/1/2015
8/1/2016
12/1/2017
4/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

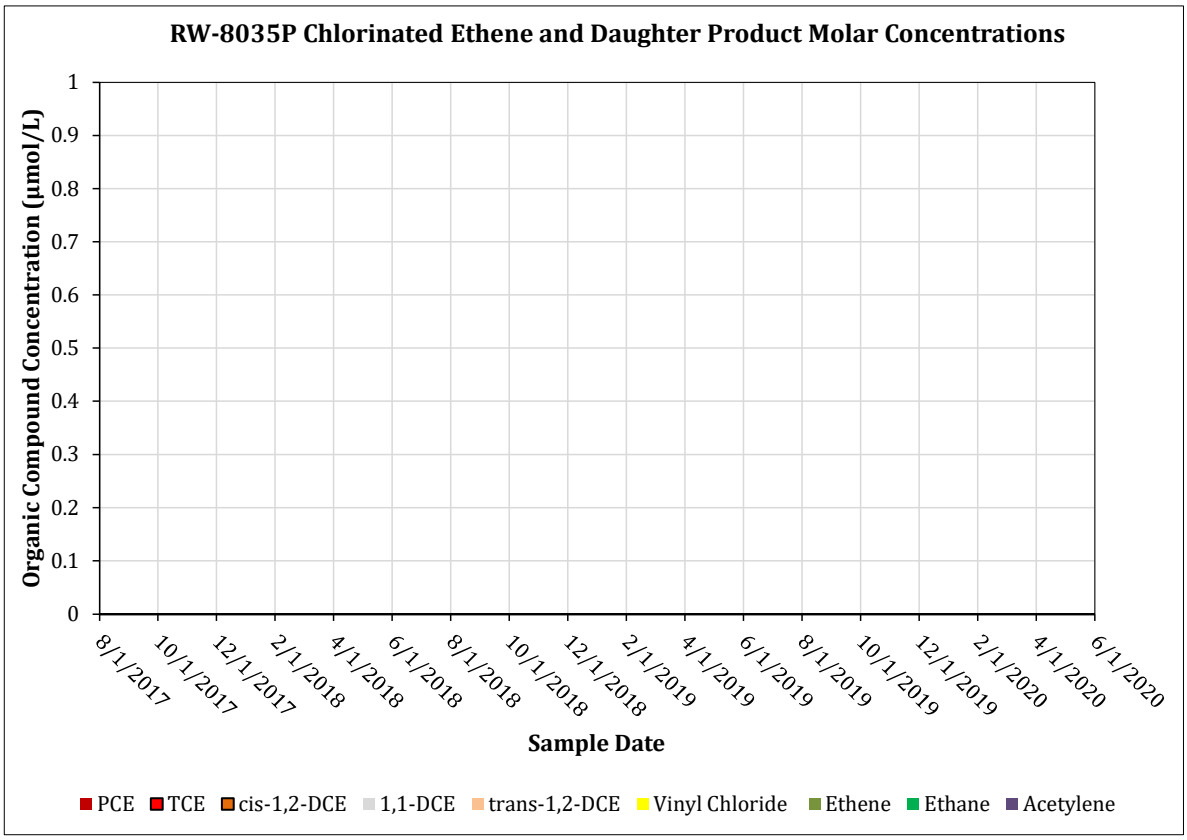

RW-8030P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

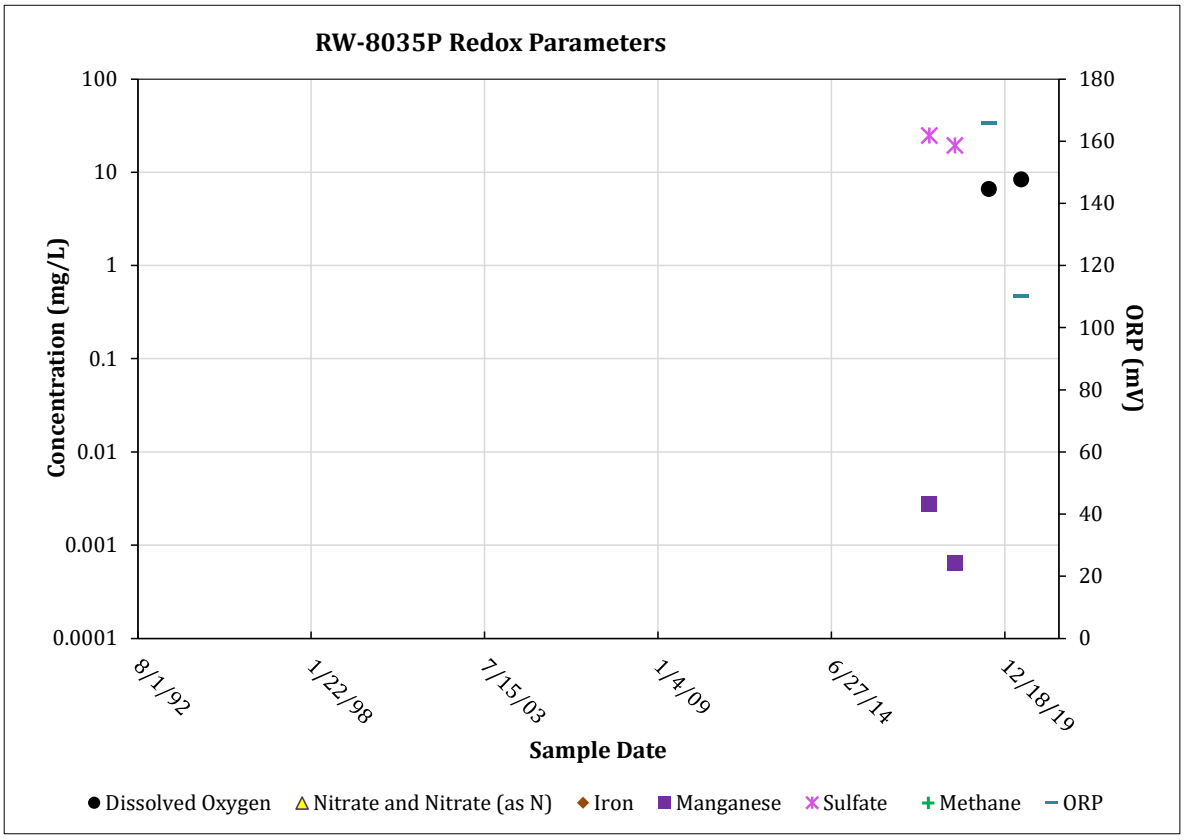

RW-8030P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
0.1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

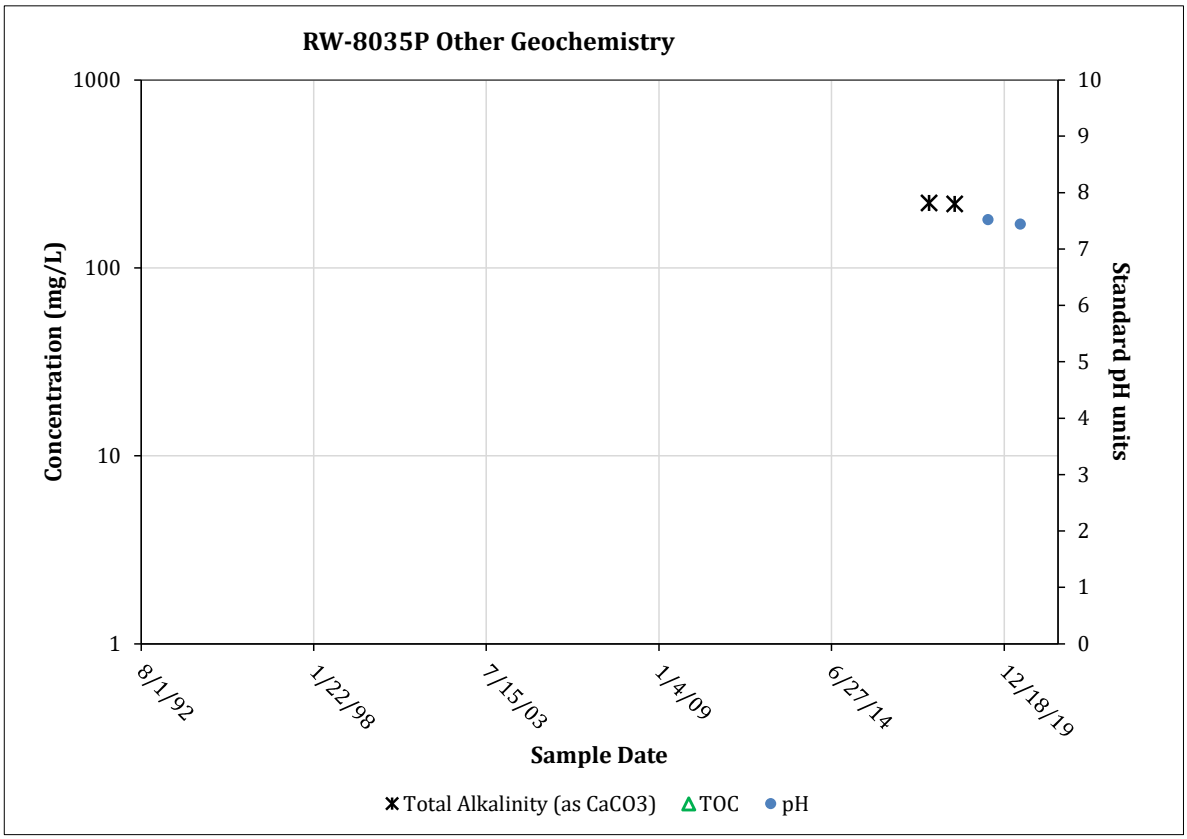


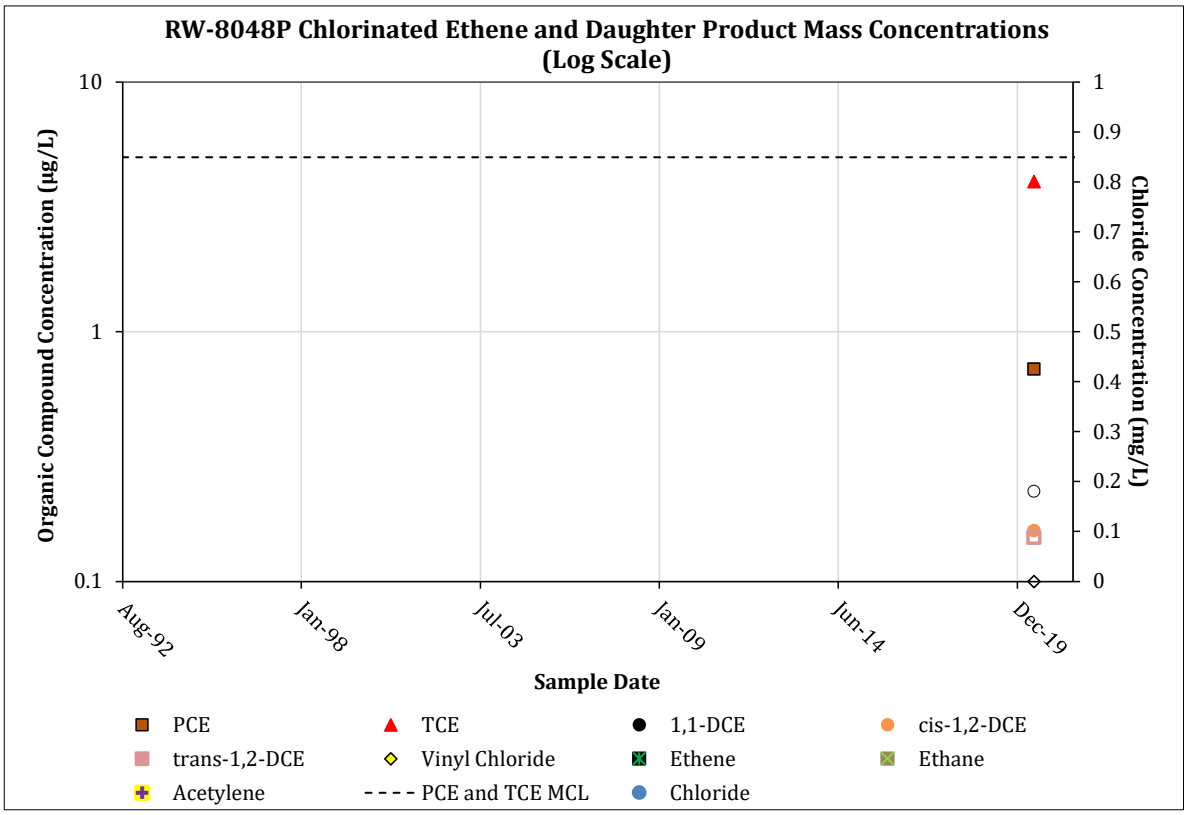


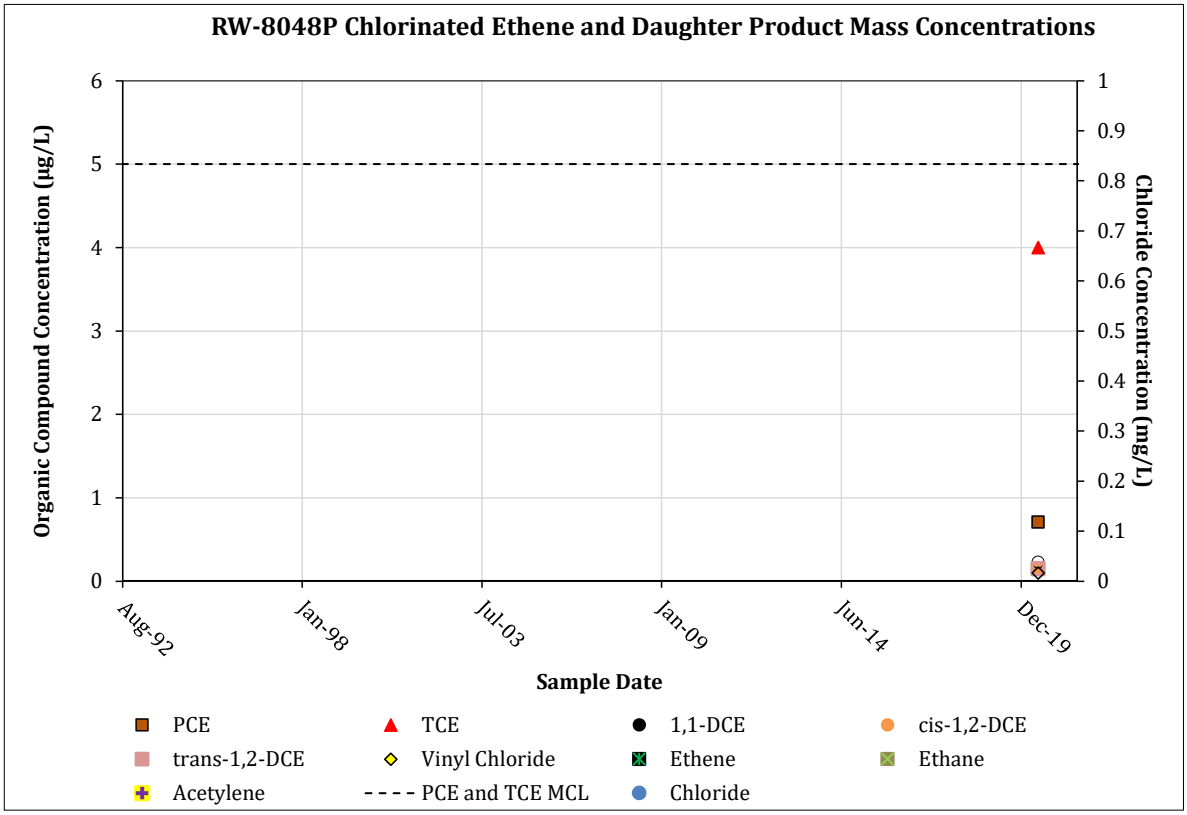
The symbol without fill designates a non-detect result.


RW-8035P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

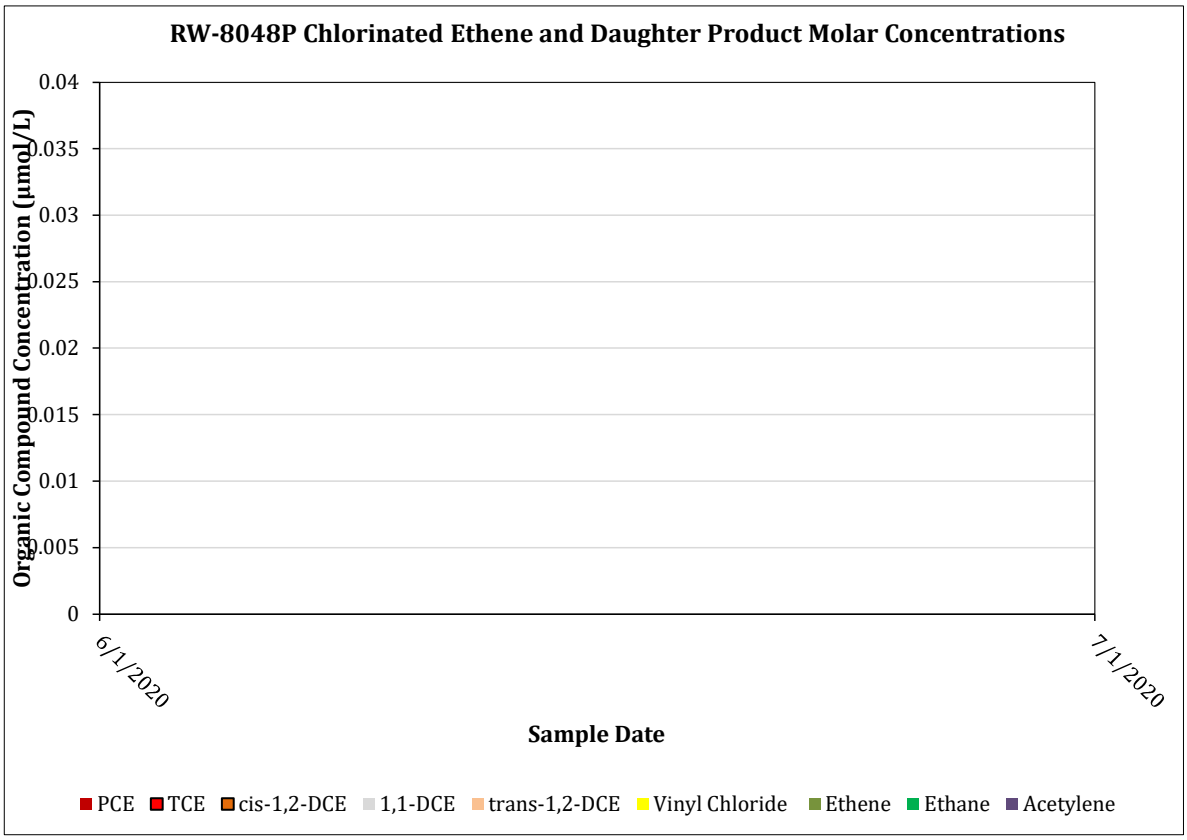

RW-8035P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

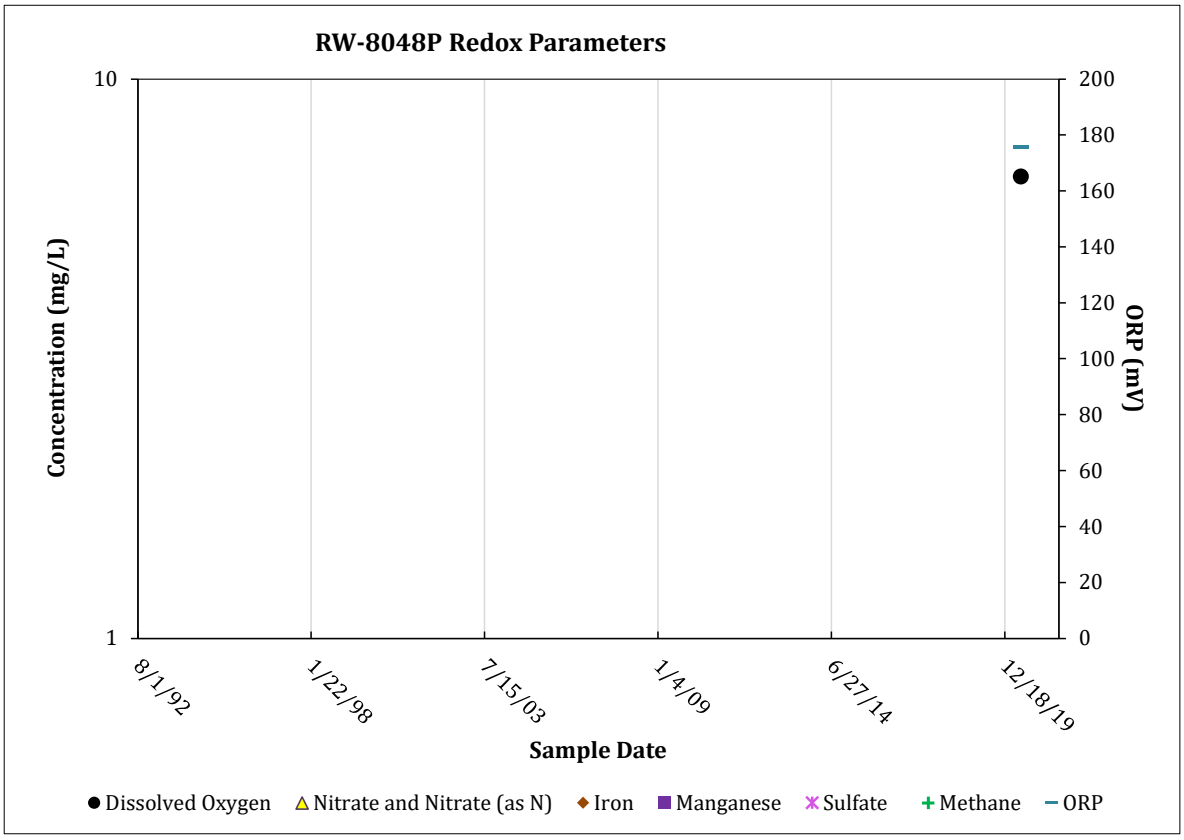

RW-8035P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

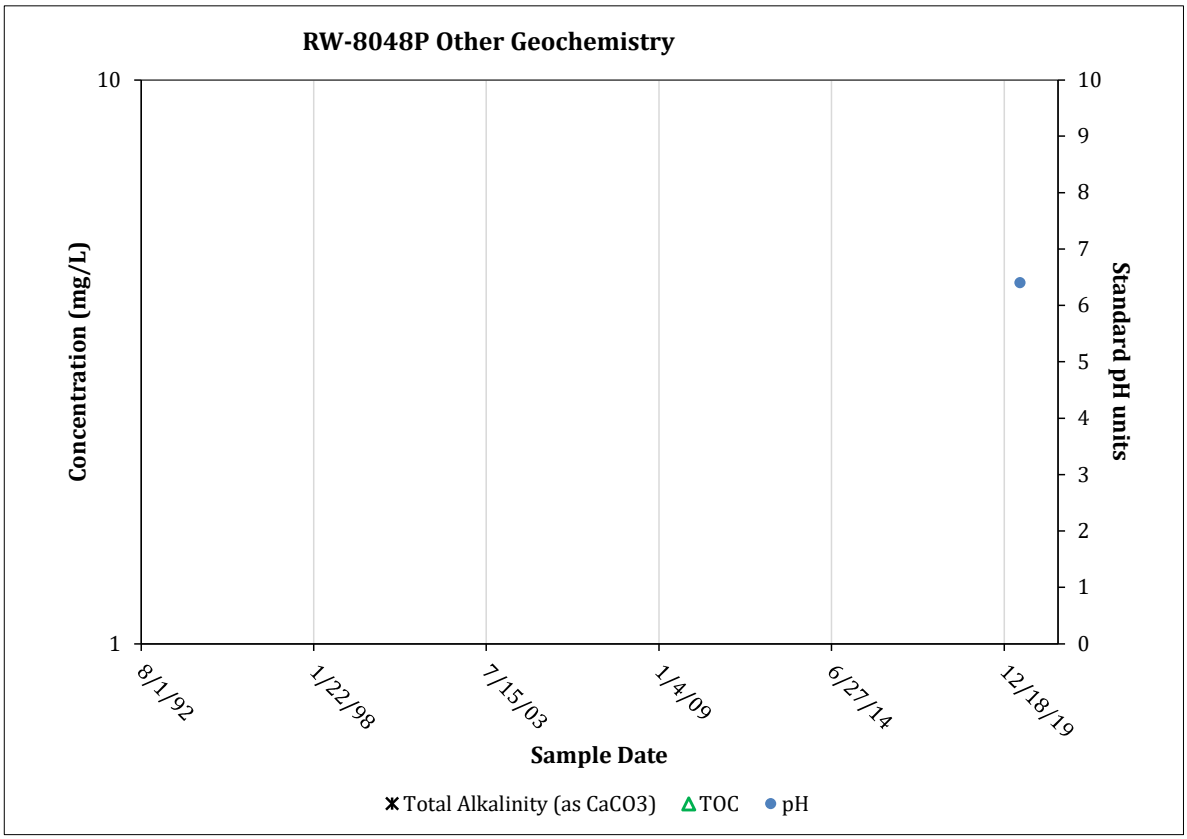


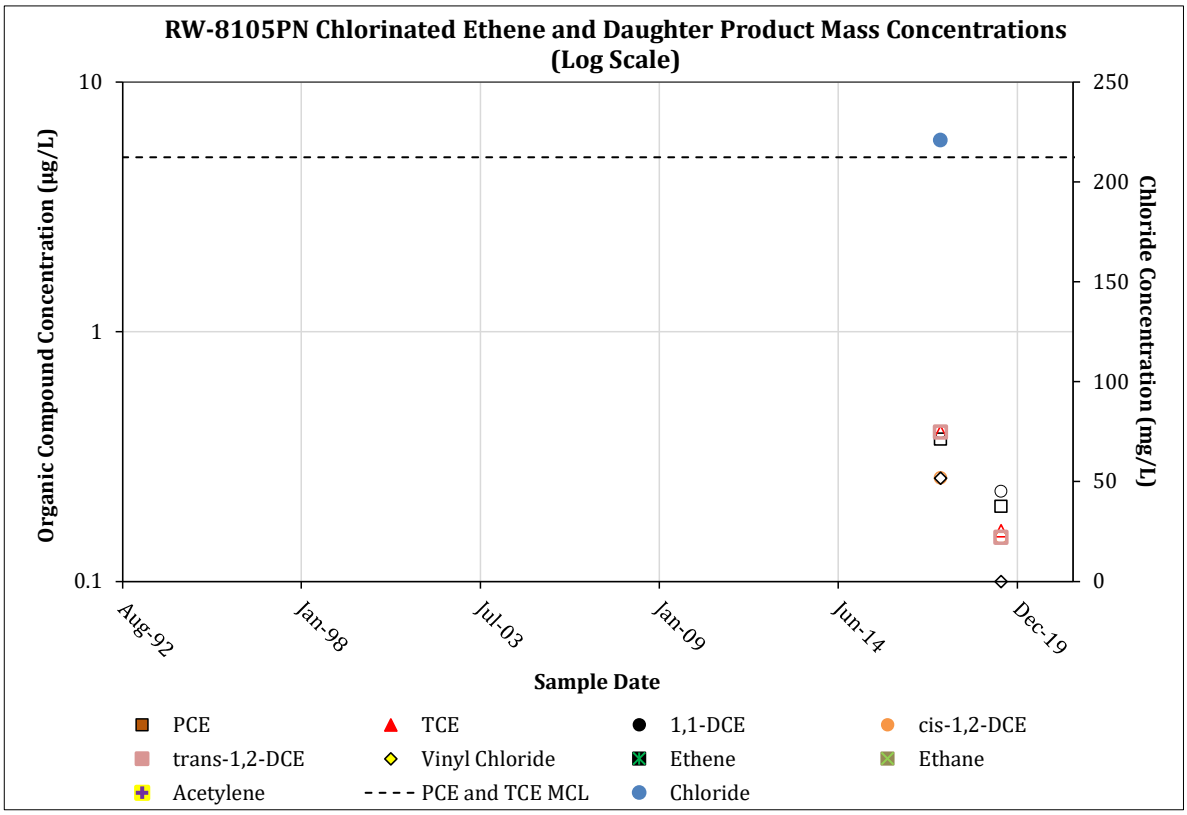


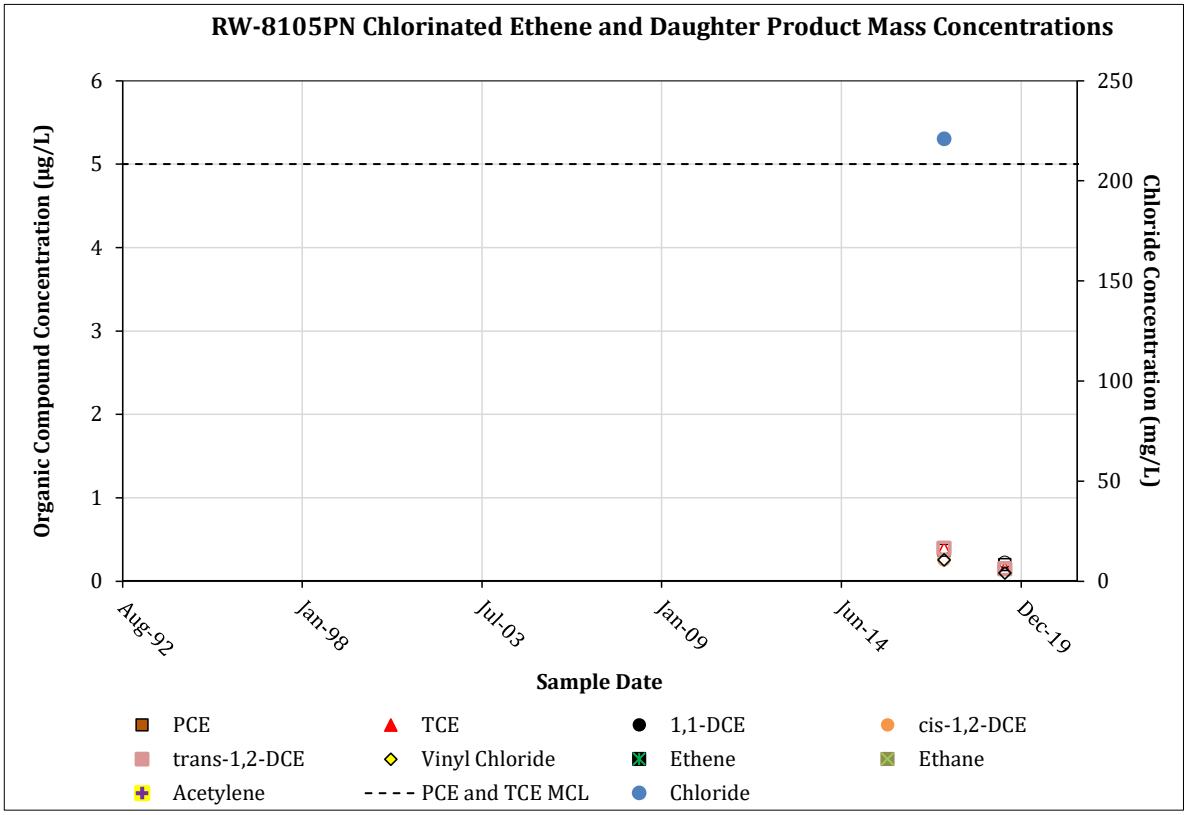
The symbol without fill designates a non-detect result.


RW-8048P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
6/1/2020
7/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

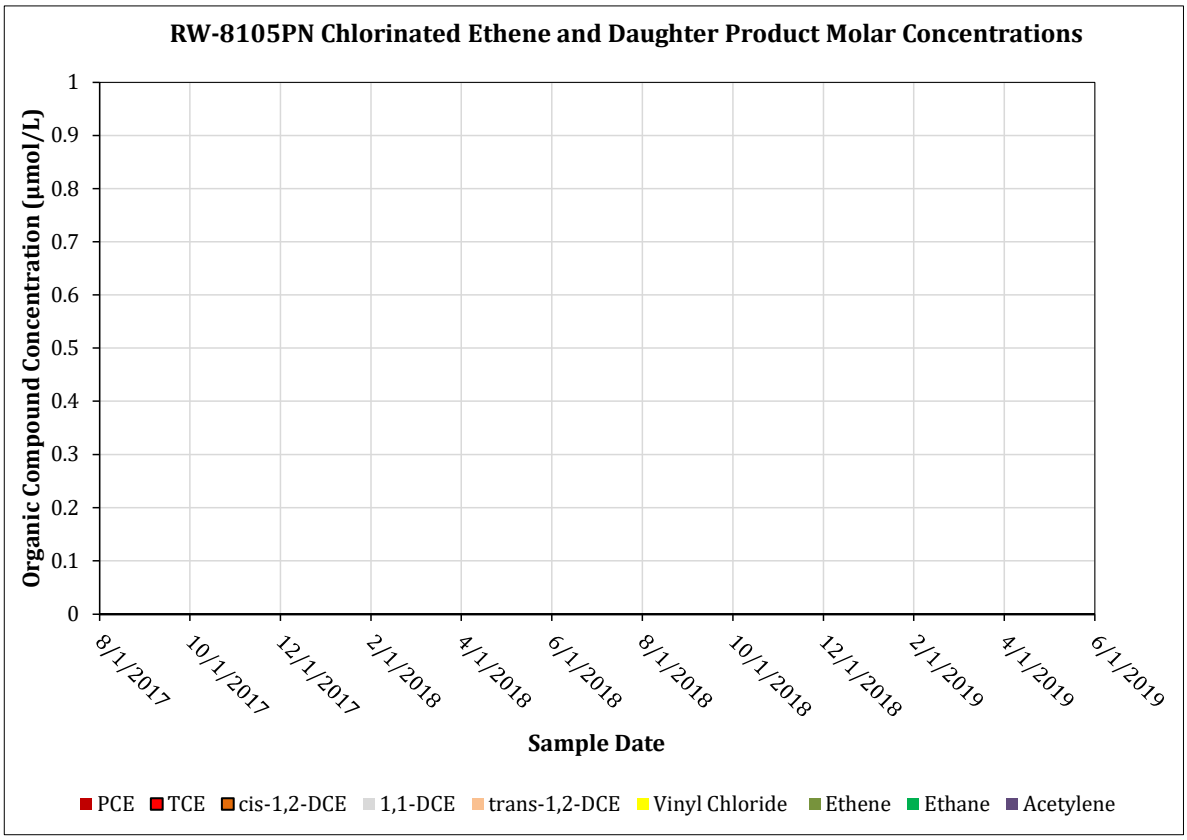

RW-8048P Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
200
180
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

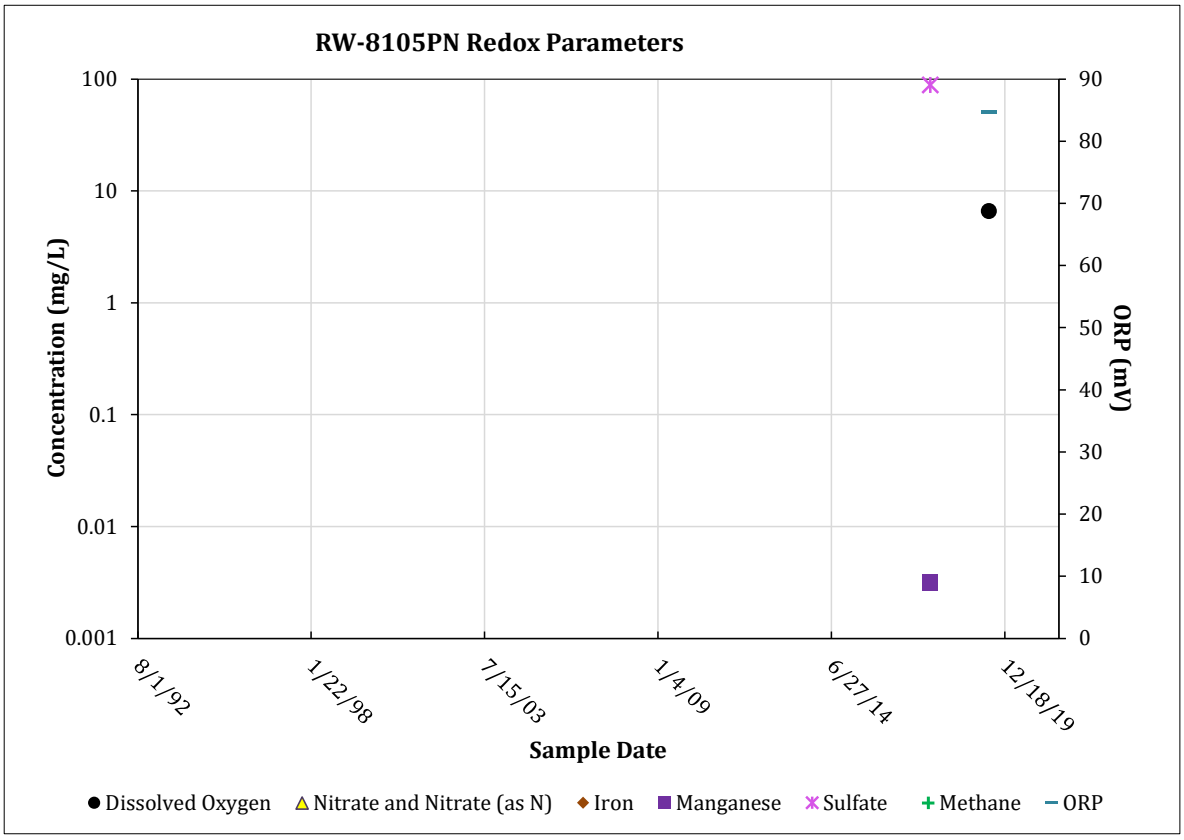

RW-8048P Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

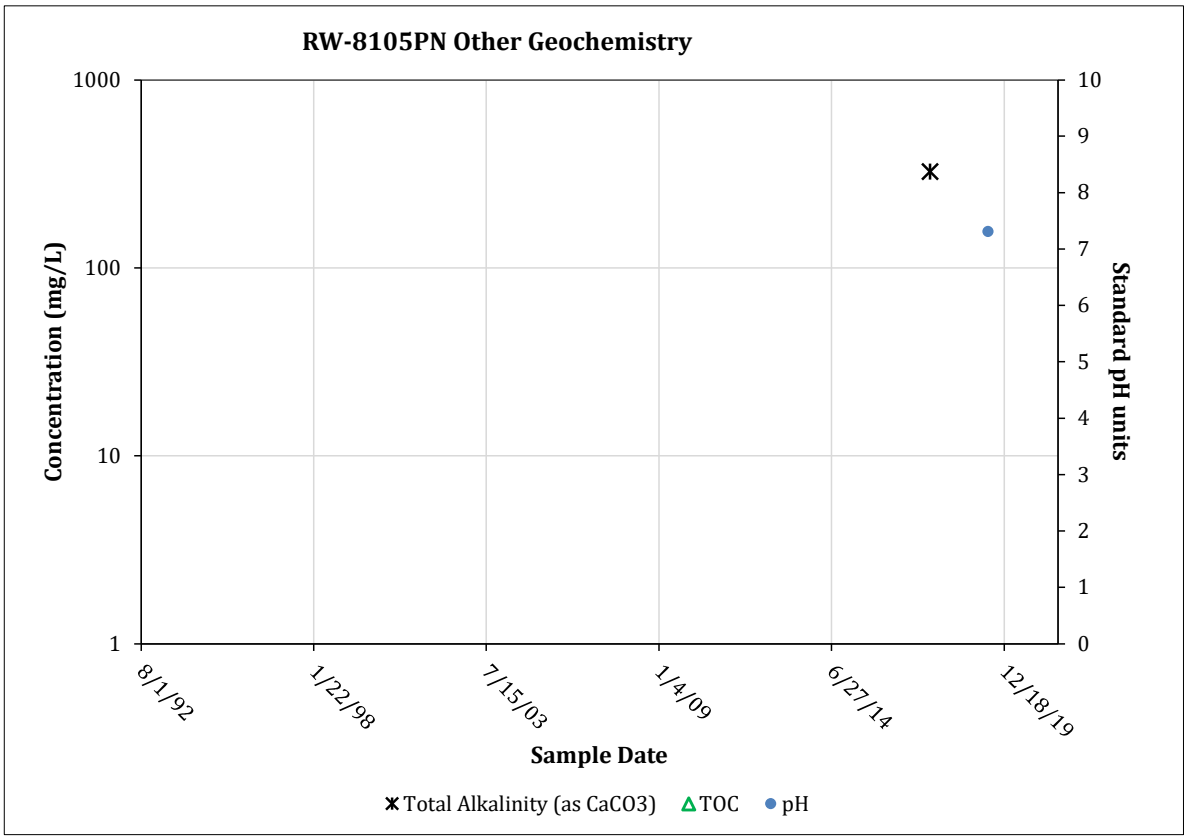


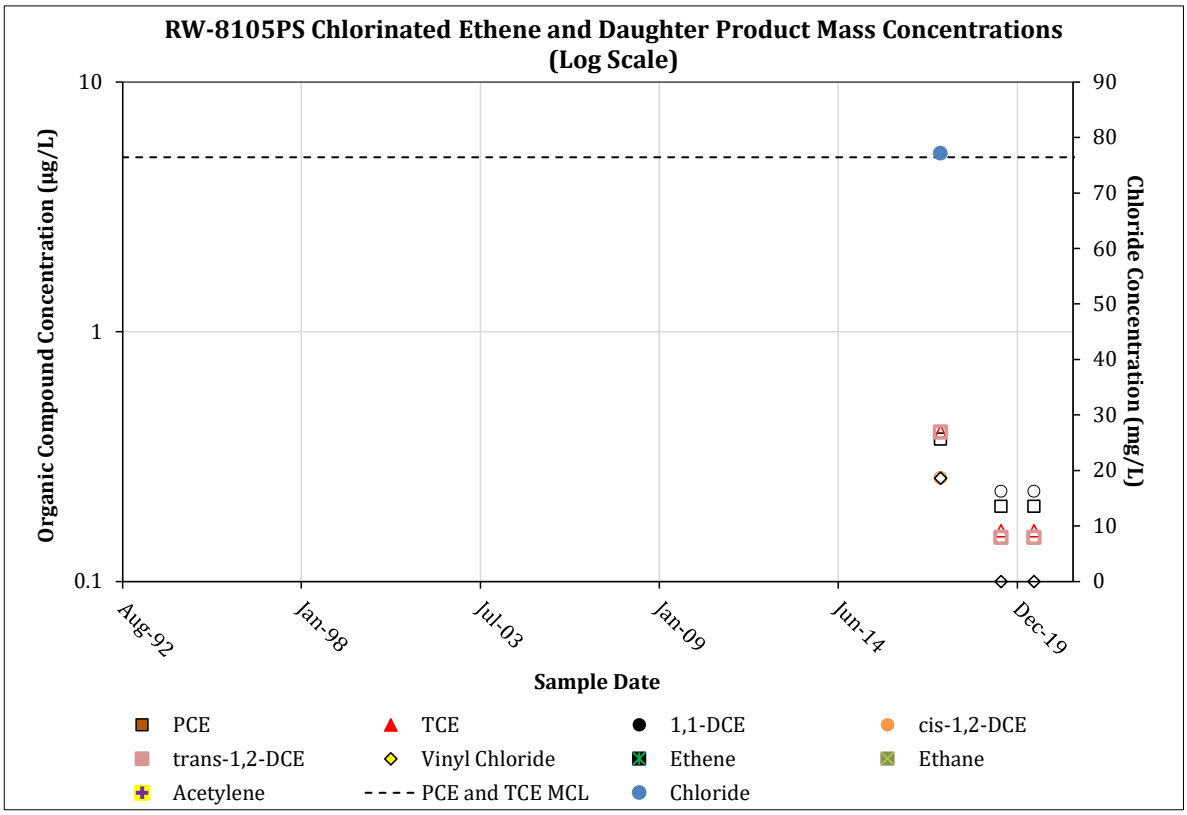


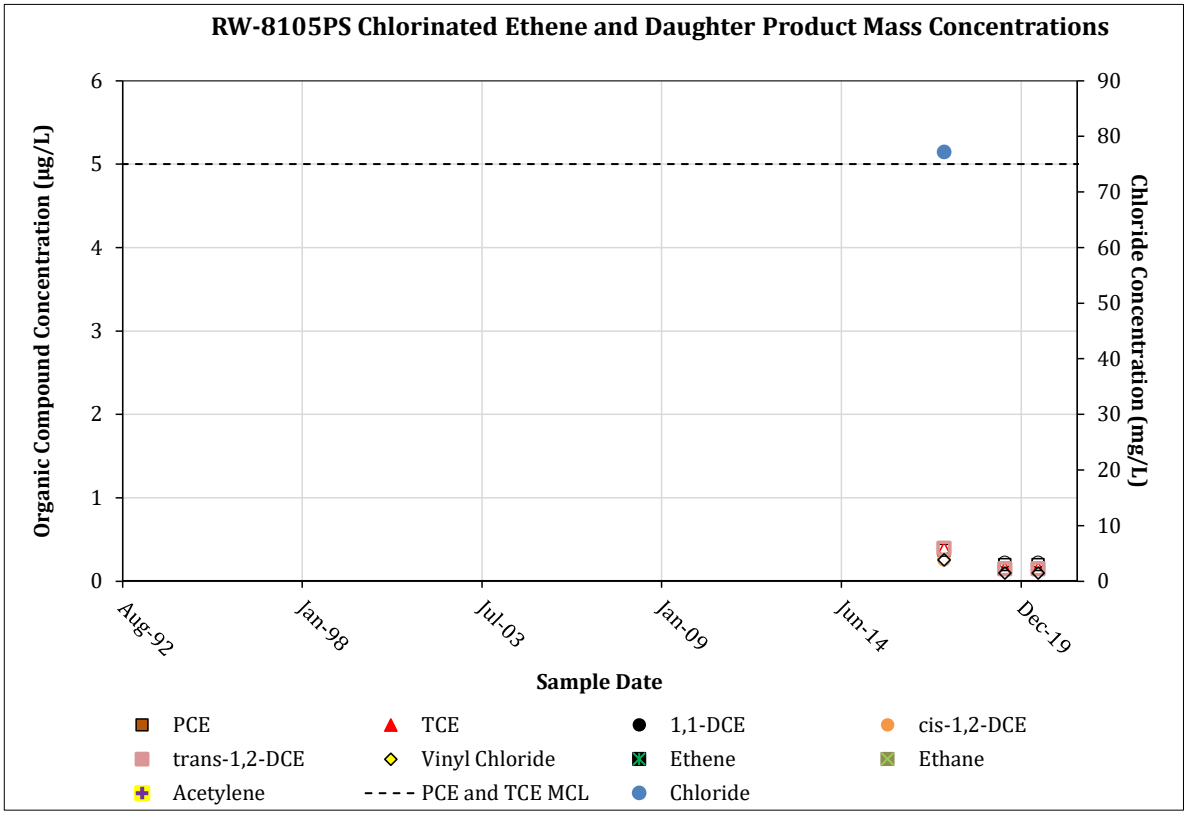
The symbol without fill designates a non-detect result.


RW-8105PN Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

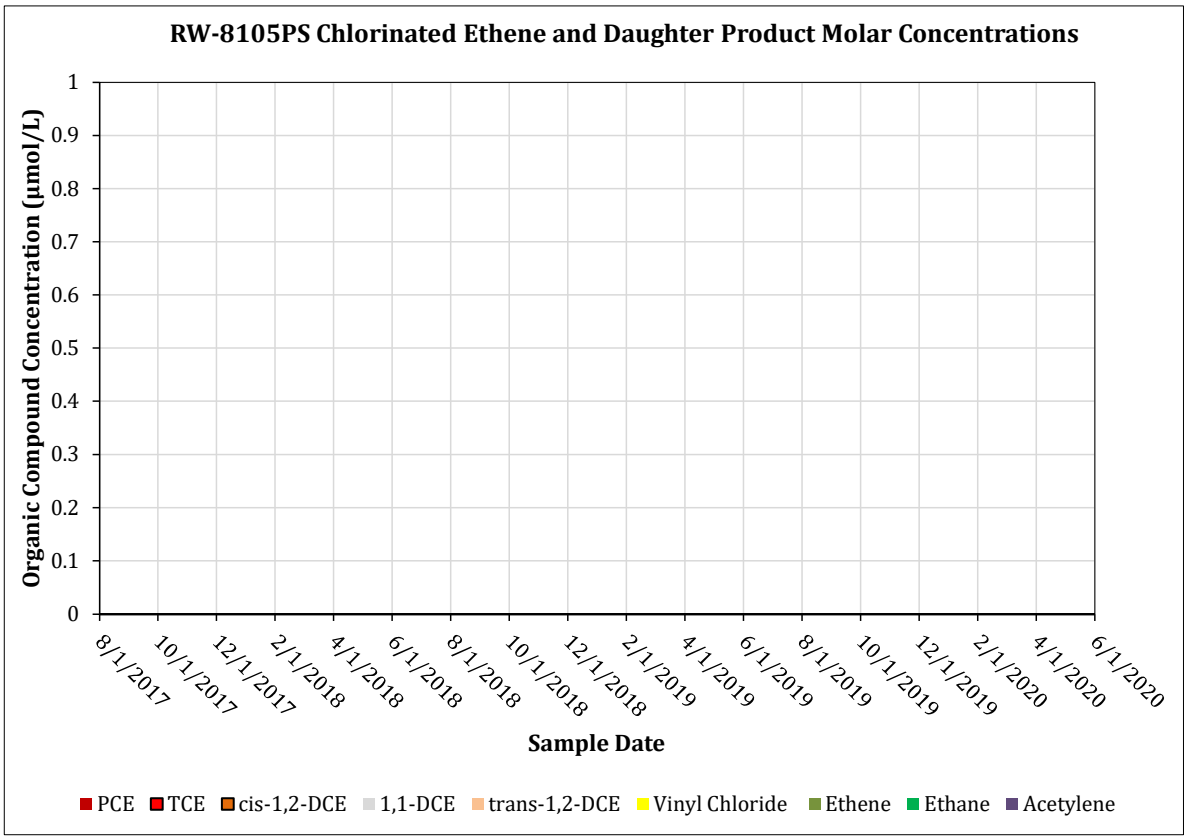

RW-8105PN Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
ORP (mV)
90
80
70
60
50
40
30
20
10
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

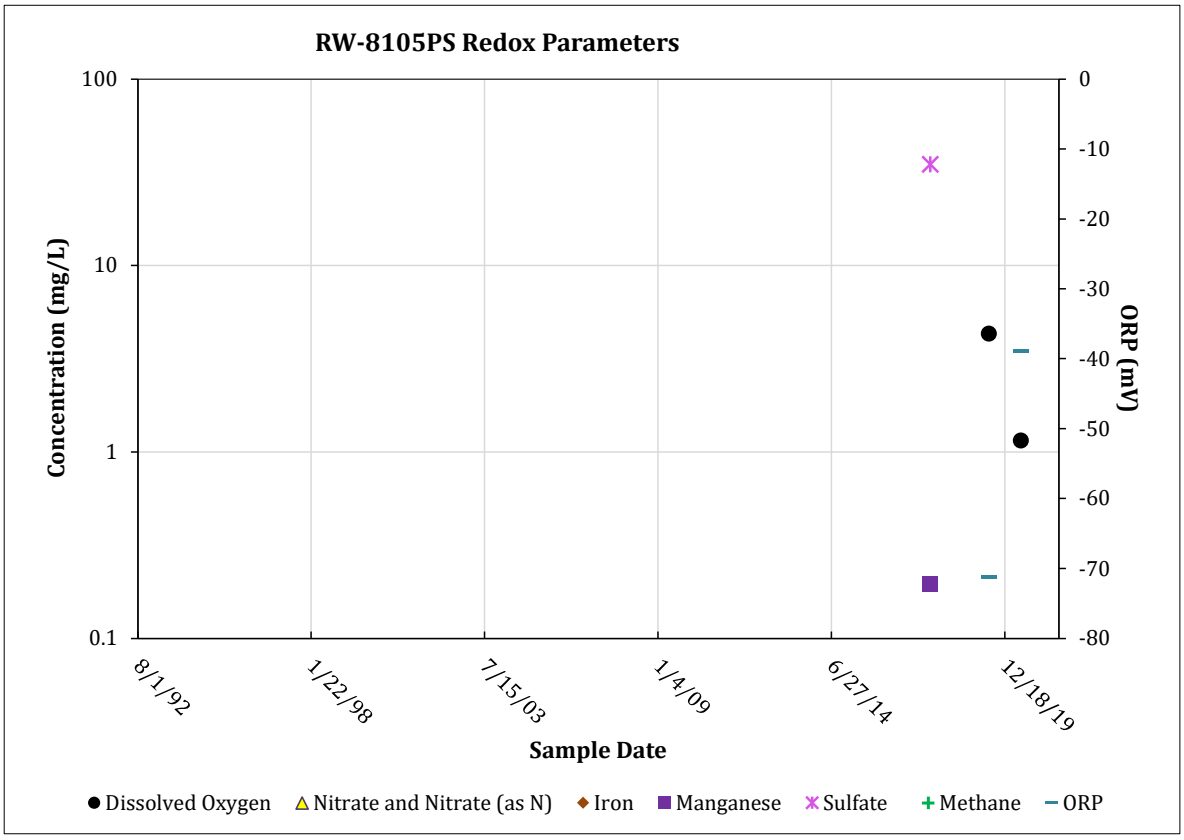

RW-8105PN Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

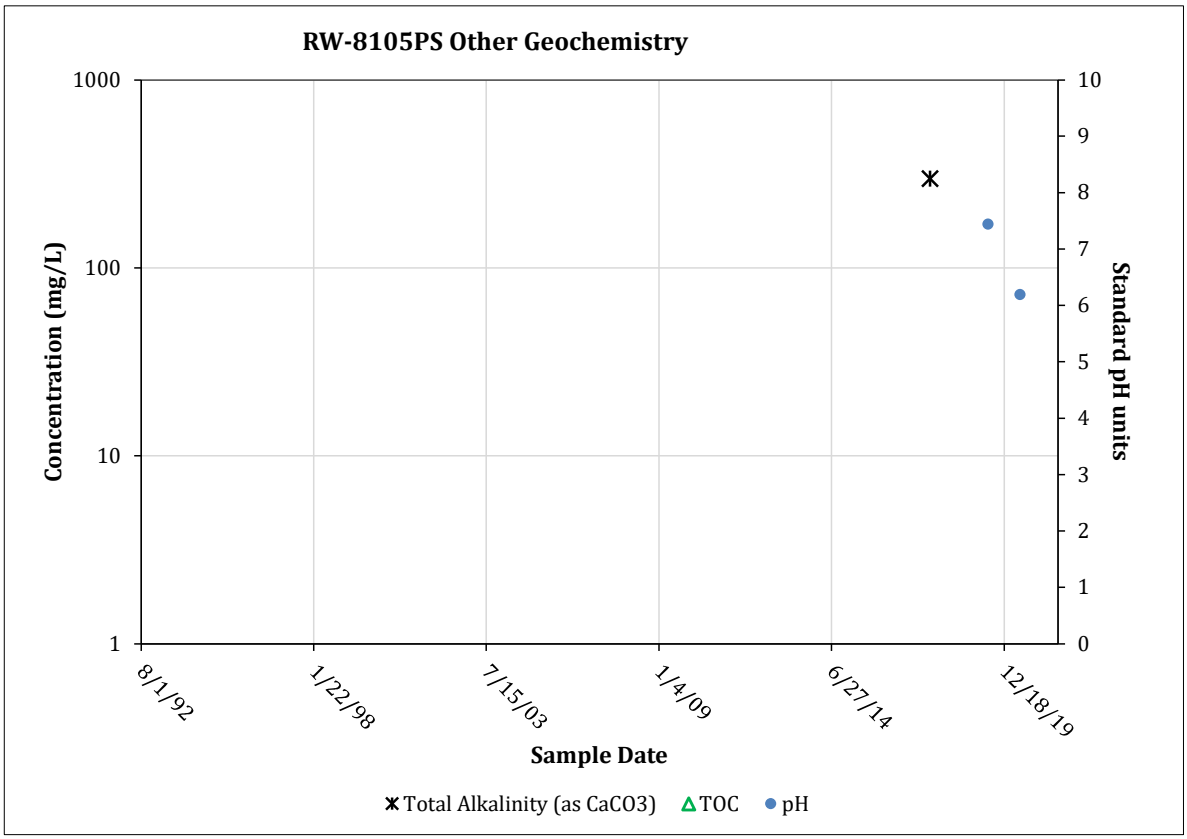


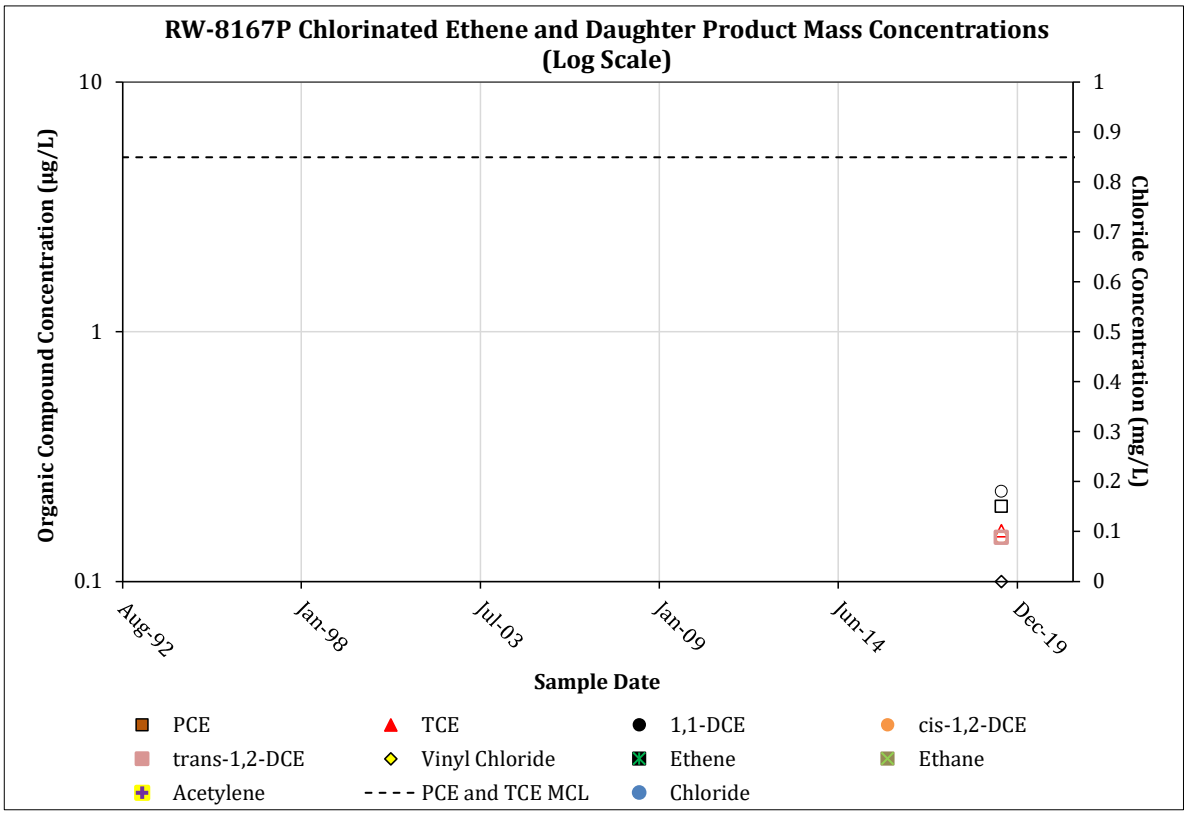


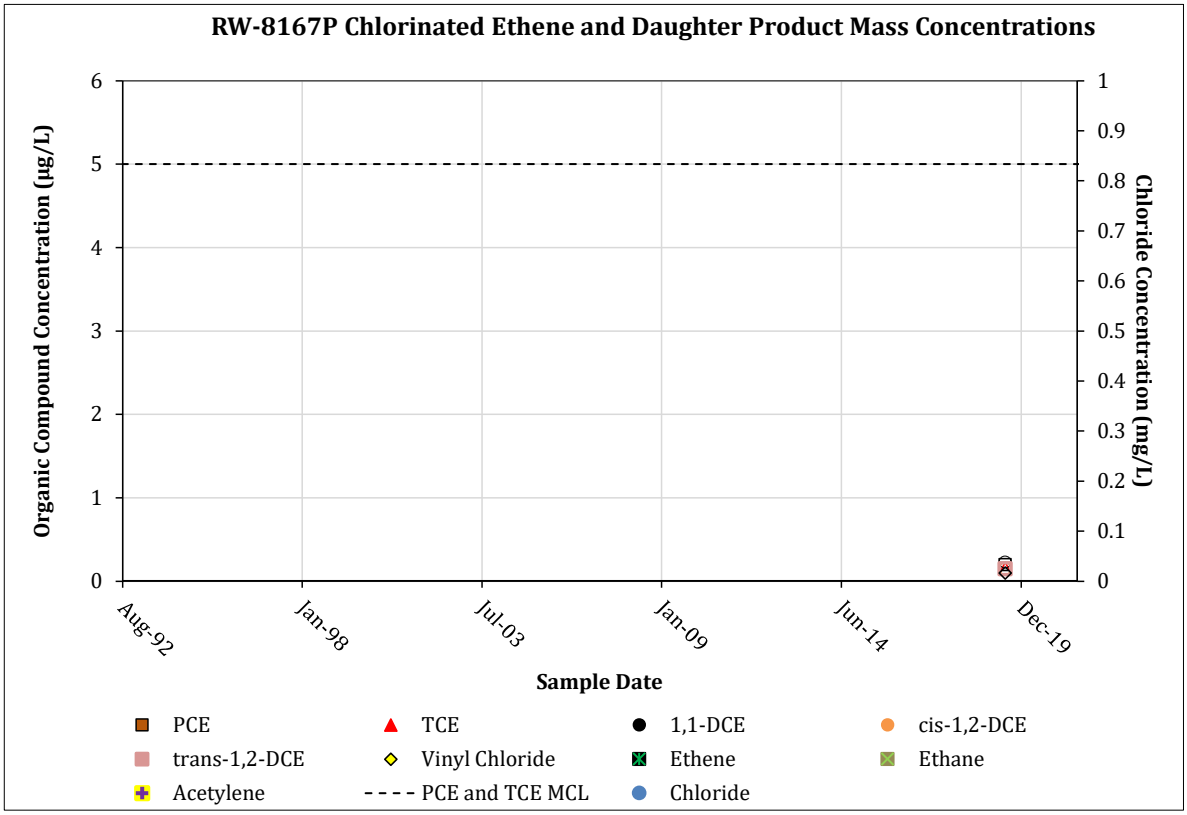
The symbol without fill designates a non-detect result.


RW-8105PS Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

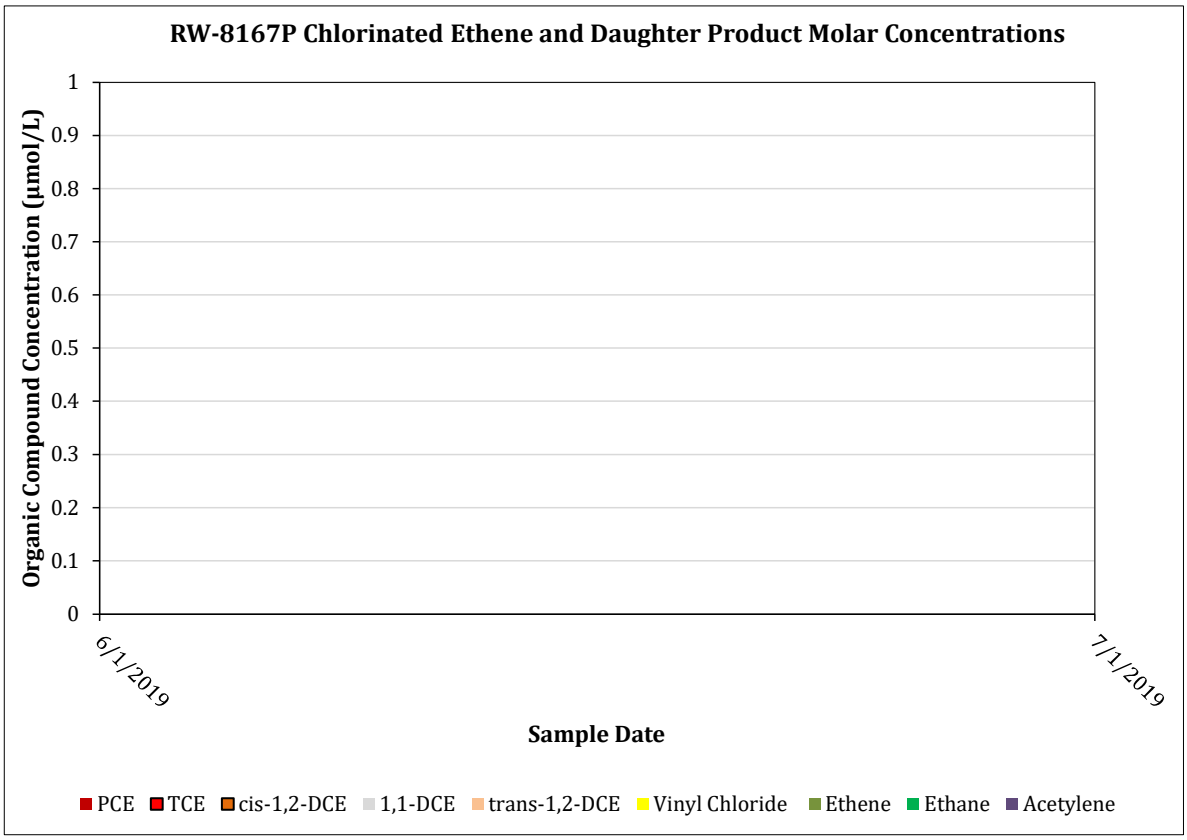

RW-8105PS Redox Parameters
Concentration (mg/L)
100
10
1
0.1
ORP (mV)
0
-10
-20
-30
-40
-50
-60
-70
-80
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

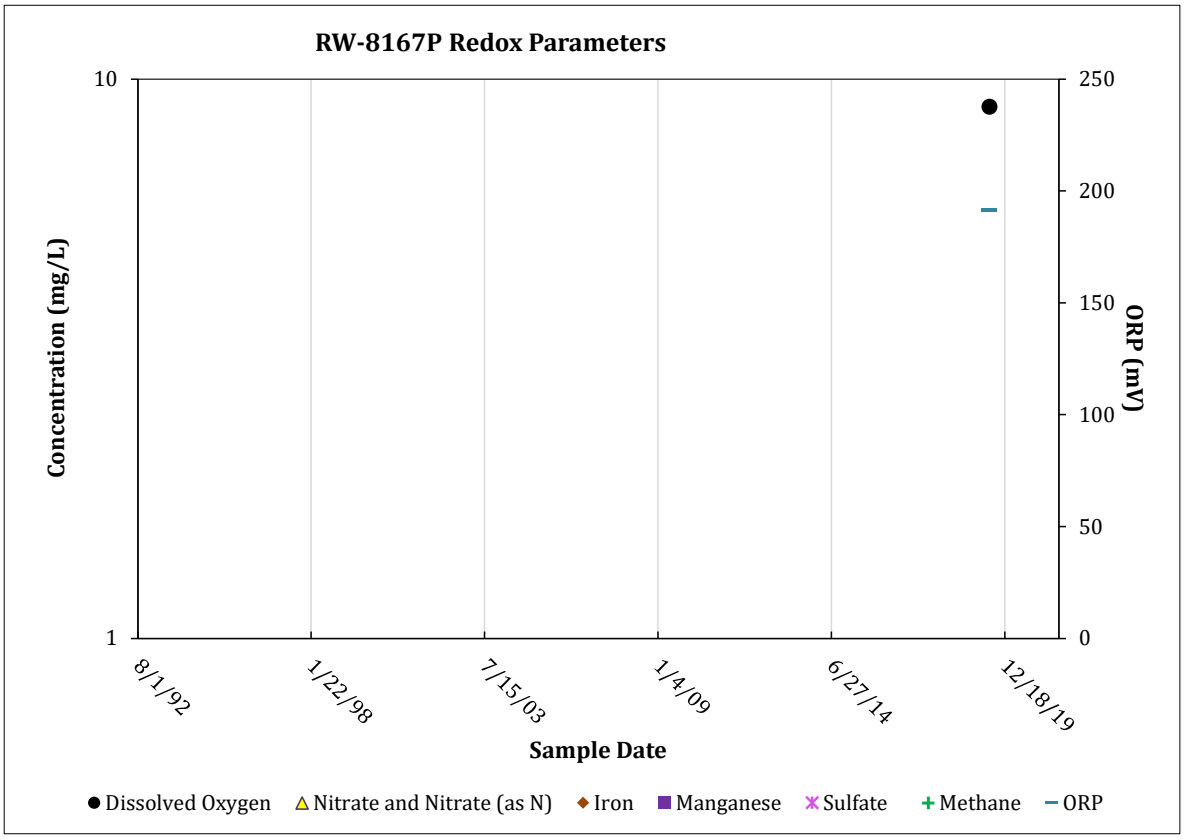

RW-8105PS Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

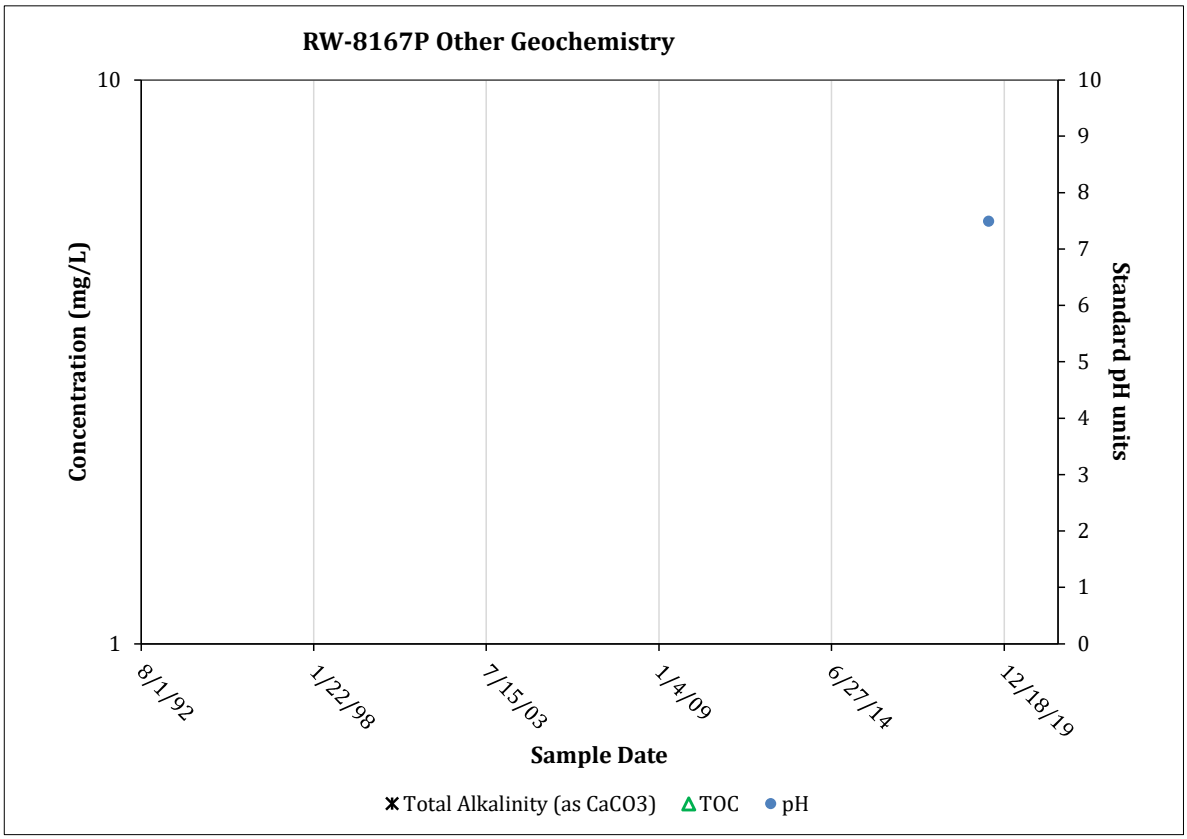


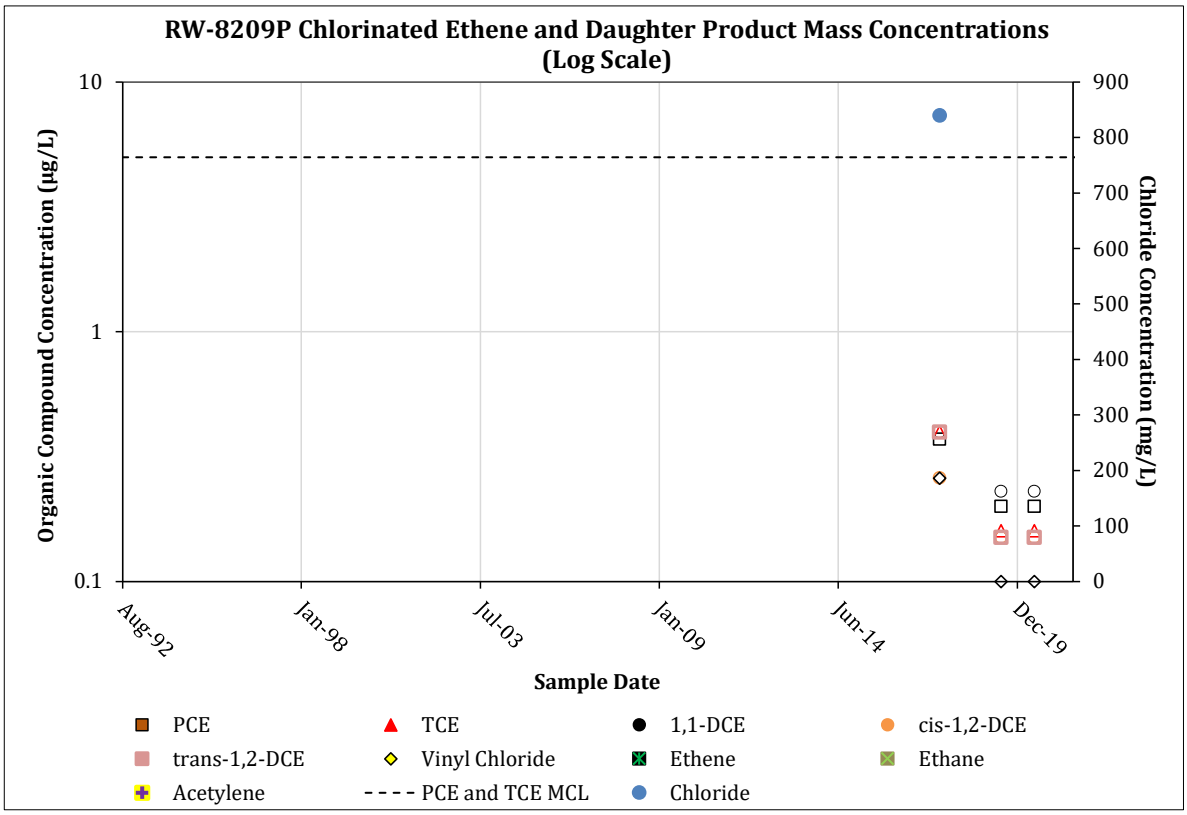


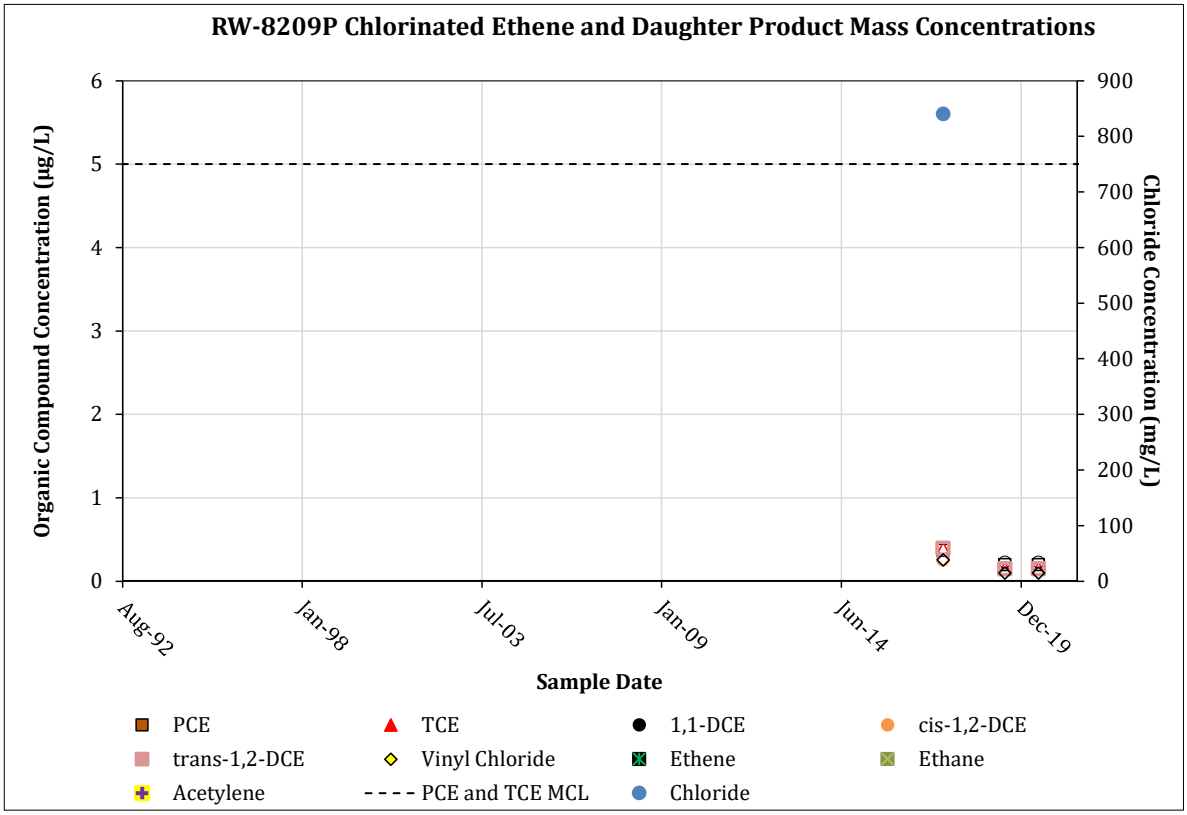
The symbol without fill designates a non-detect result.


RW-8167P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
6/1/2019
7/1/2019
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

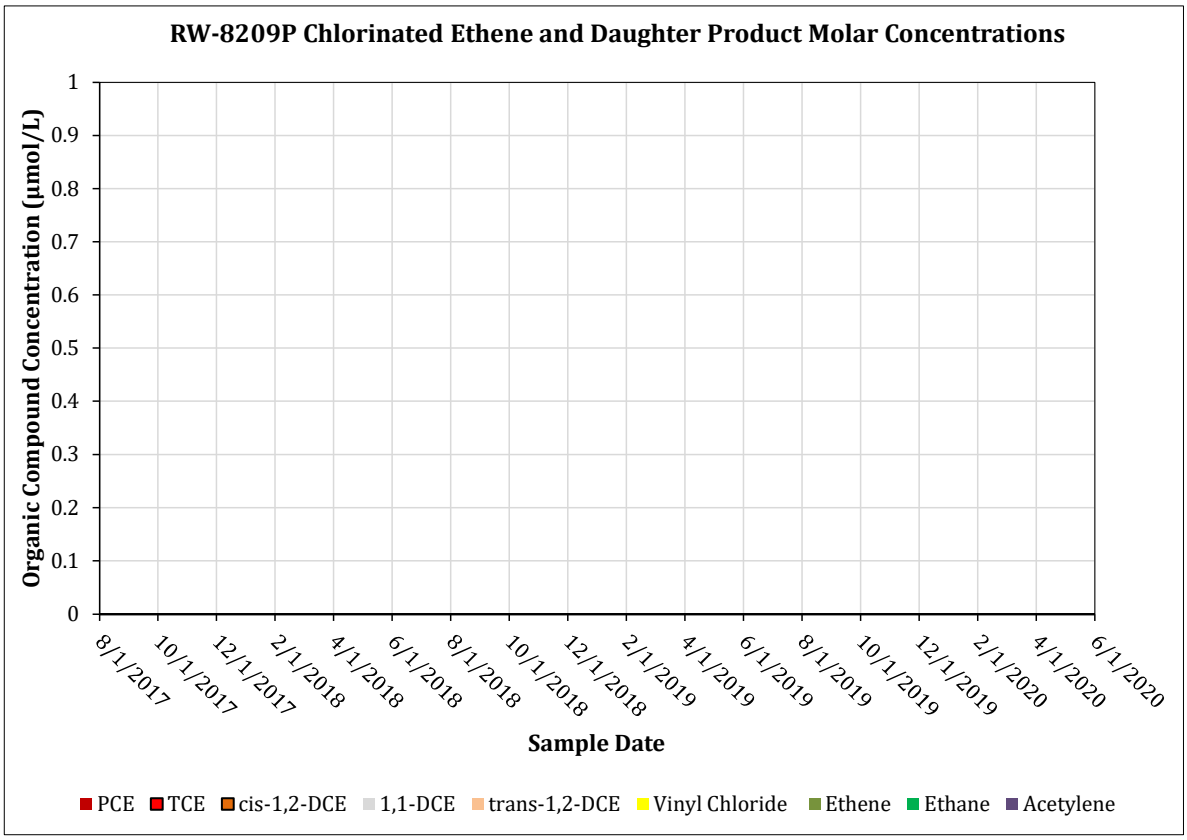

RW-8167P Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
250
200
150
100
50
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

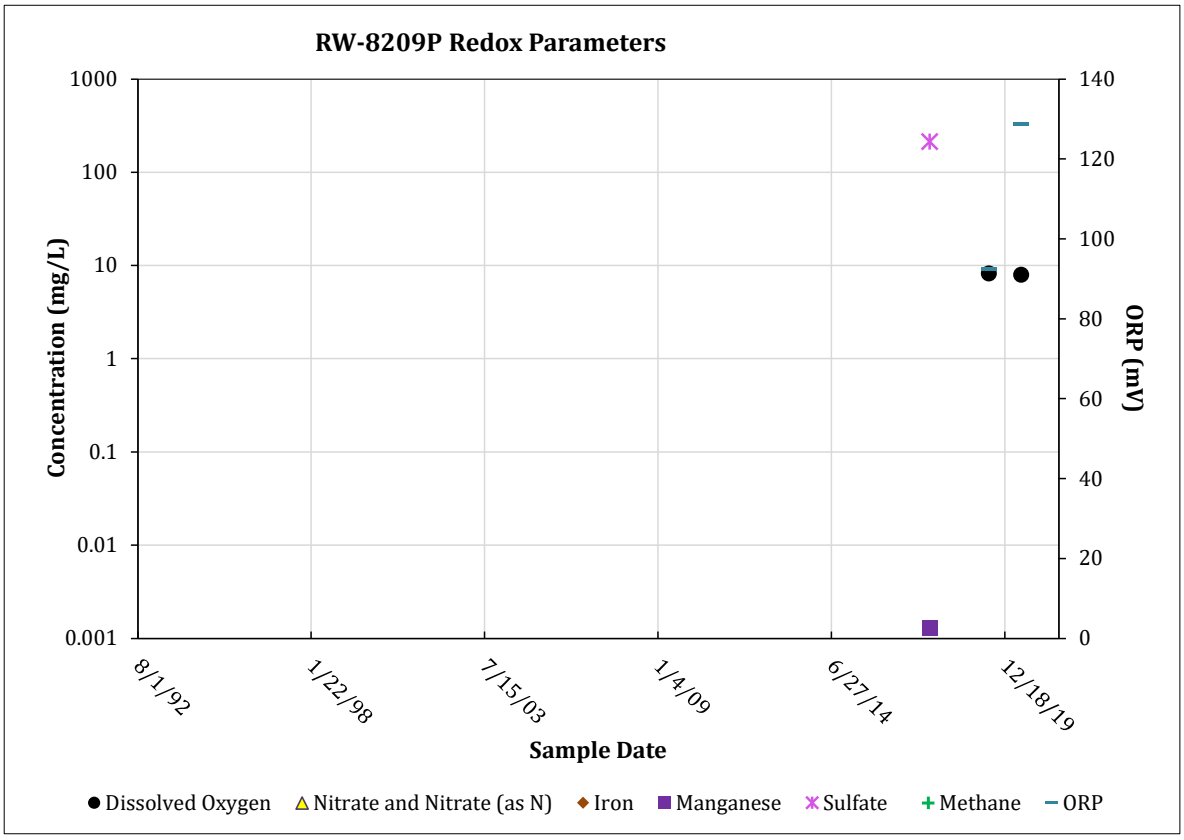

RW-8167P Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

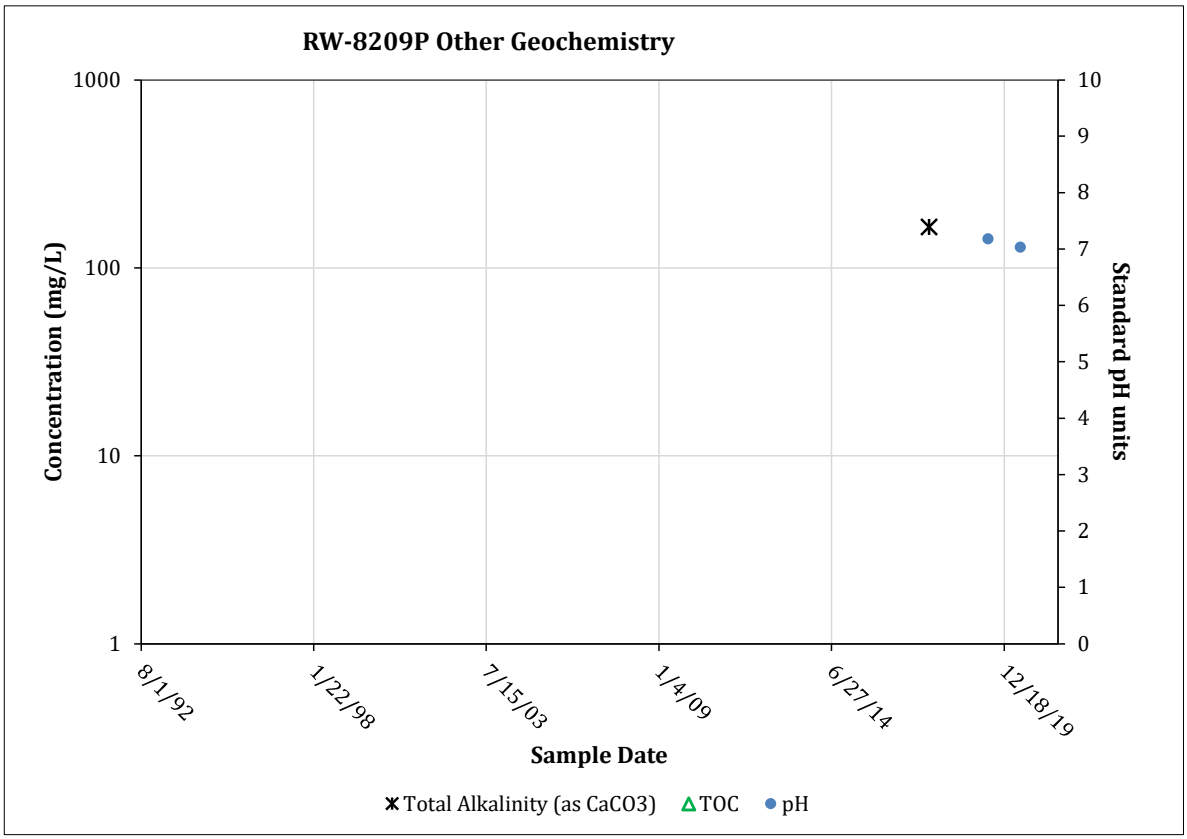


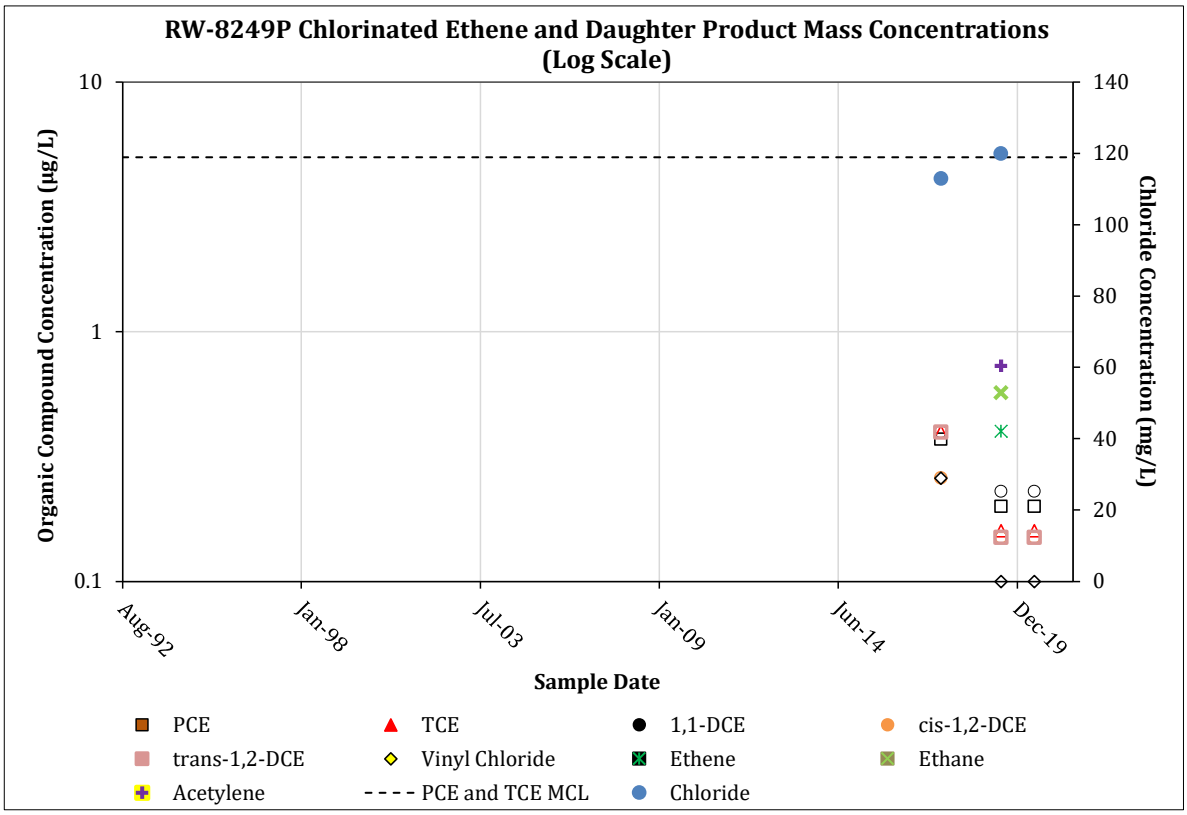


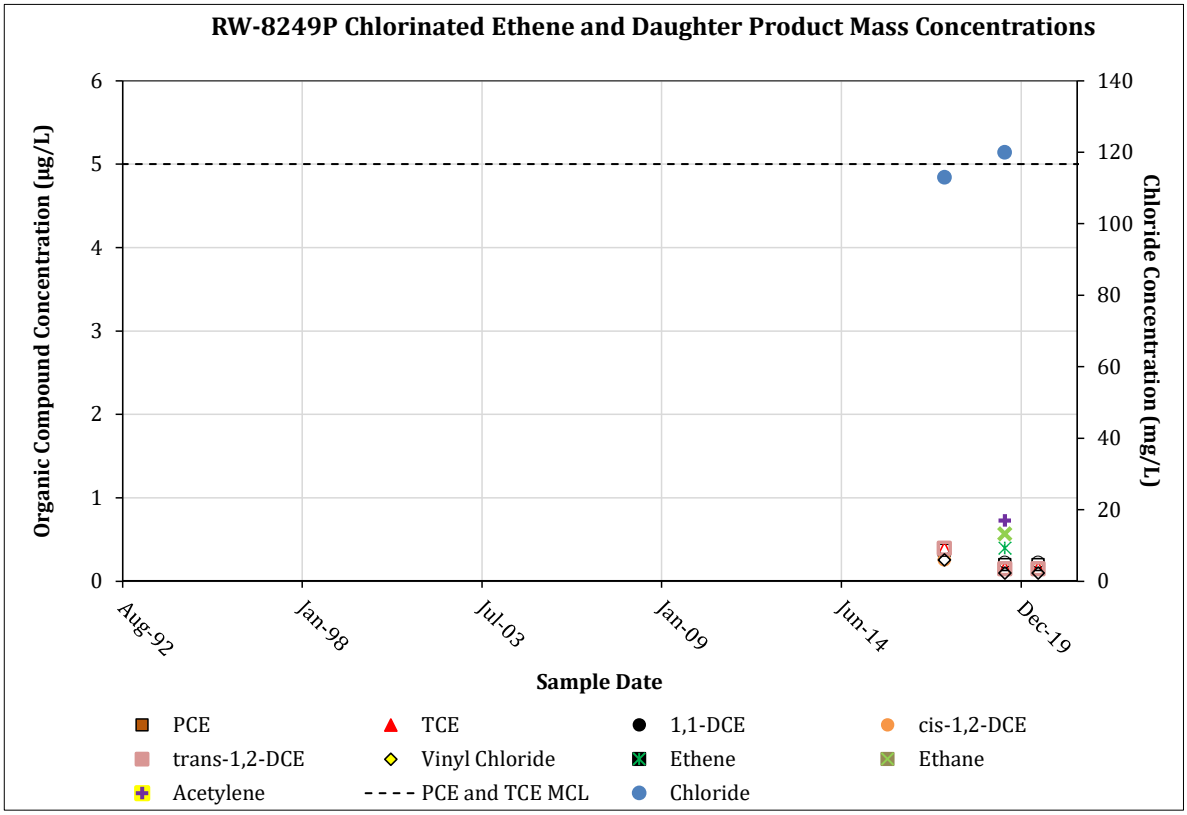
The symbol without fill designates a non-detect result.


RW-8209P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

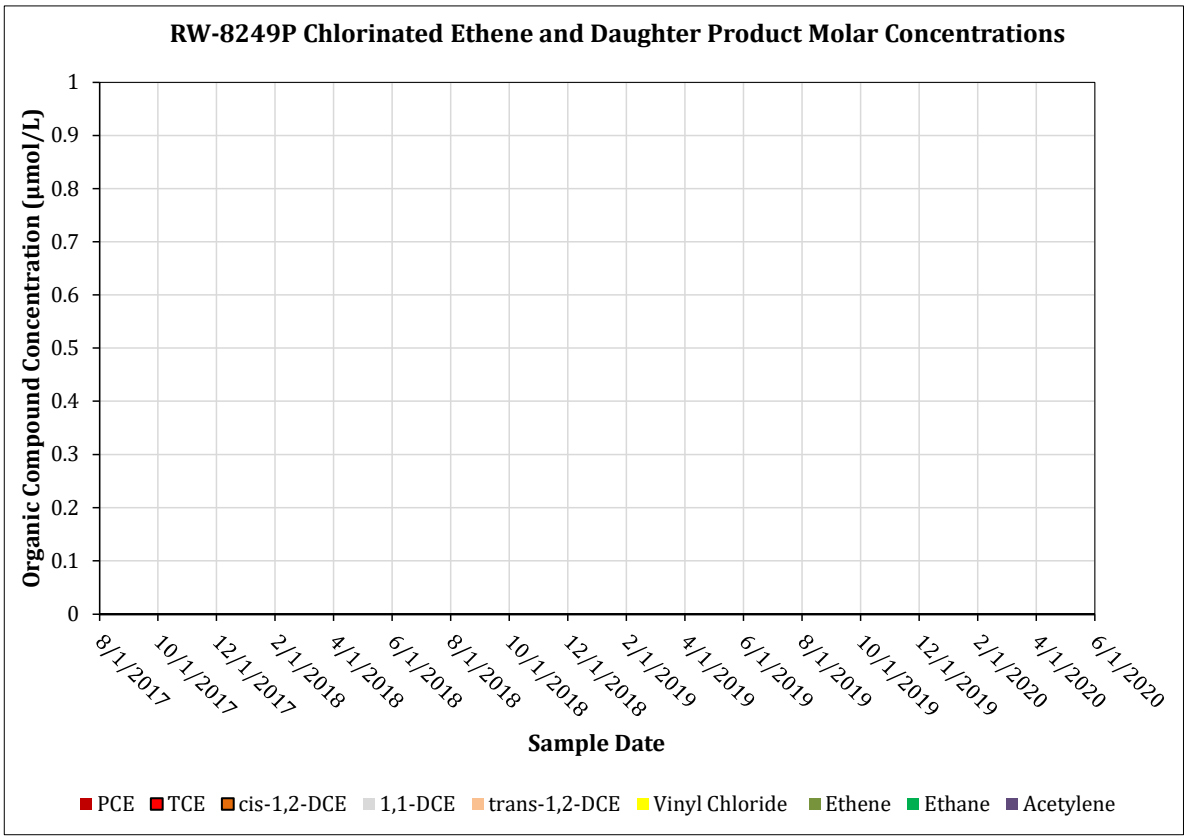

RW-8209P Redox Parameters
Concentration (mg/L)
1000
100
10
1
0.1
0.01
0.001
ORP (mV)
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

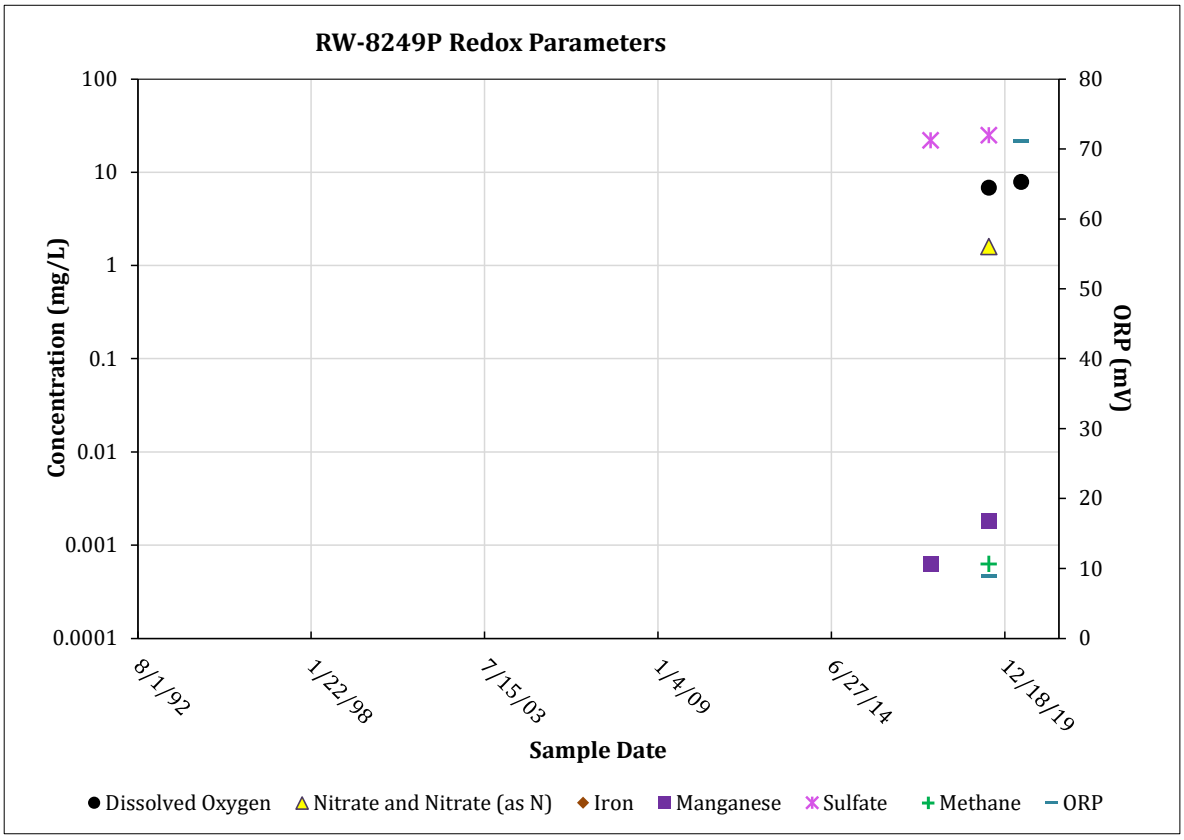

RW-8209P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

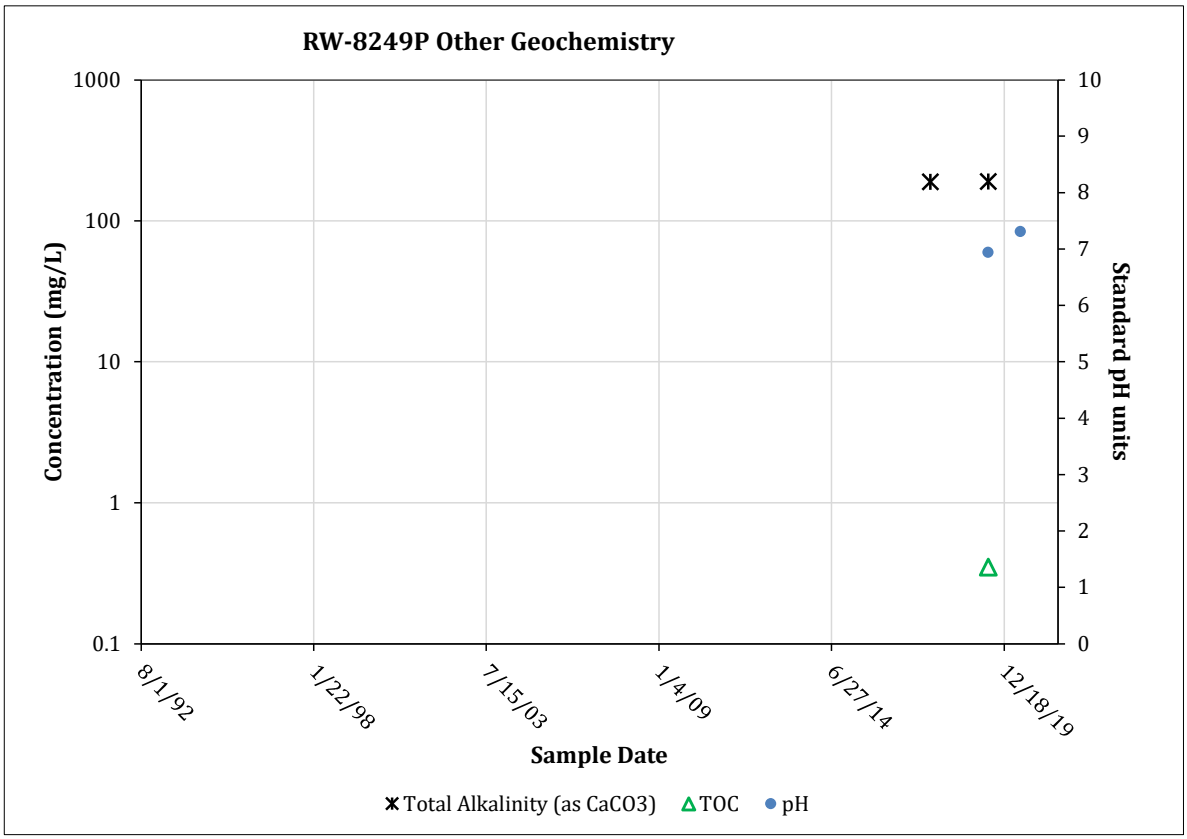


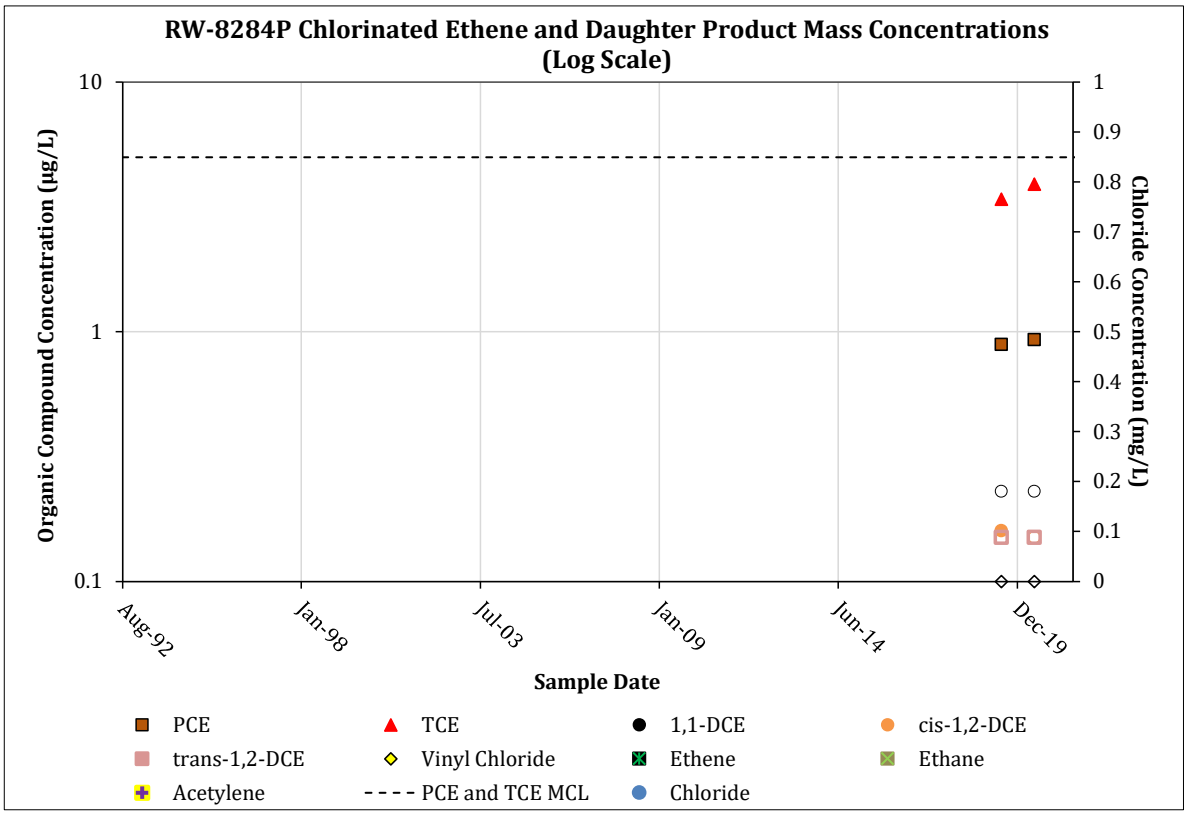


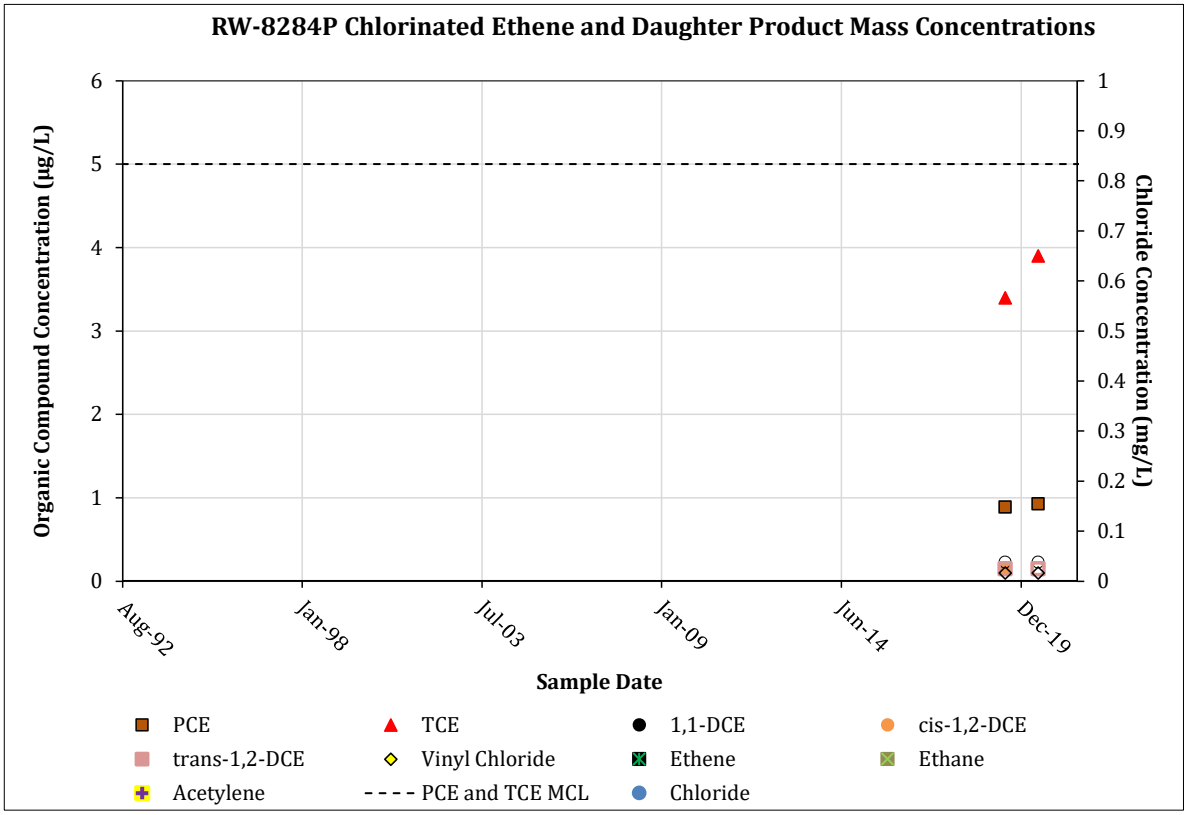
The symbol without fill designates a non-detect result.


RW-8249P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
8/1/2017
10/1/2017
12/1/2017
2/1/2018
4/1/2018
6/1/2018
8/1/2018
10/1/2018
12/1/2018
2/1/2019
4/1/2019
6/1/2019
8/1/2019
10/1/2019
12/1/2019
2/1/2020
4/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

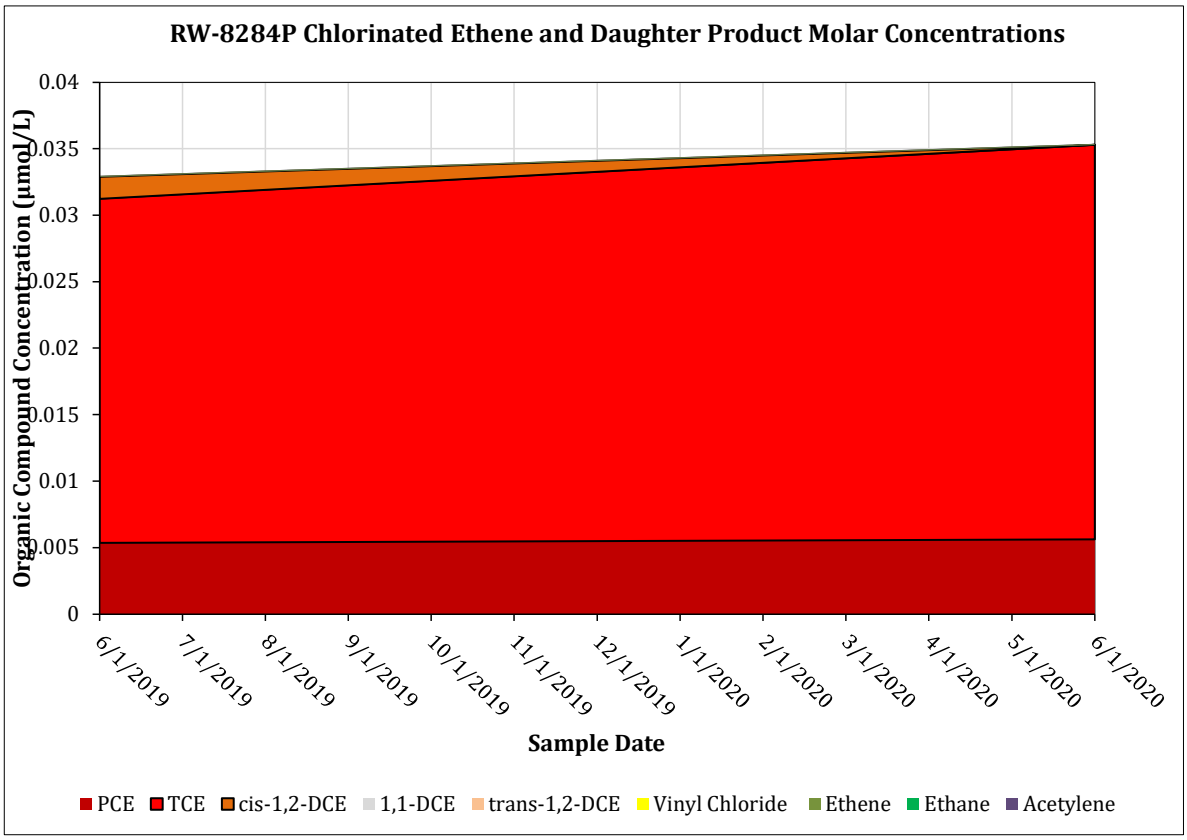

RW-8249P Redox Parameters
Concentration (mg/L)
100
10
1
0.1
0.01
0.001
0.0001
ORP (mV)
80
70
60
50
40
30
20
10
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

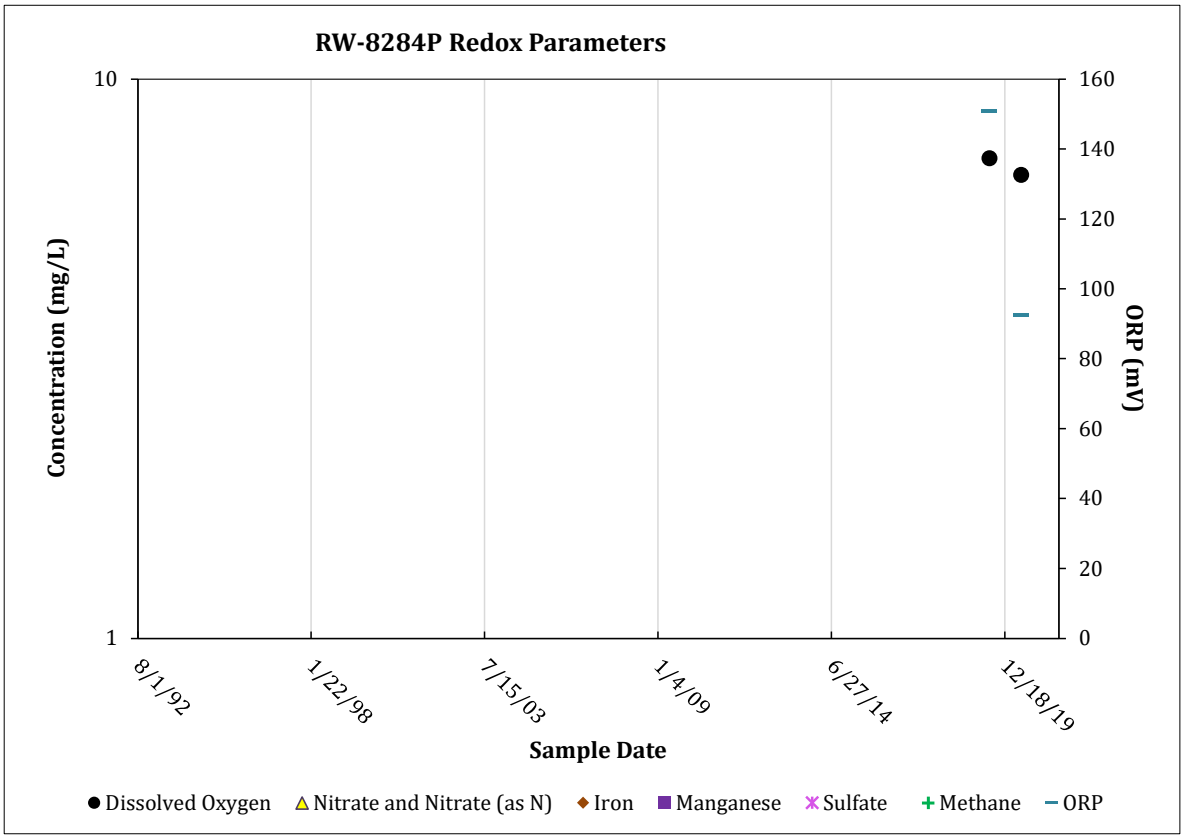

RW-8249P Other Geochemistry
Concentration (mg/L)
1000
100
10
1
0.1
Standard pH units
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH

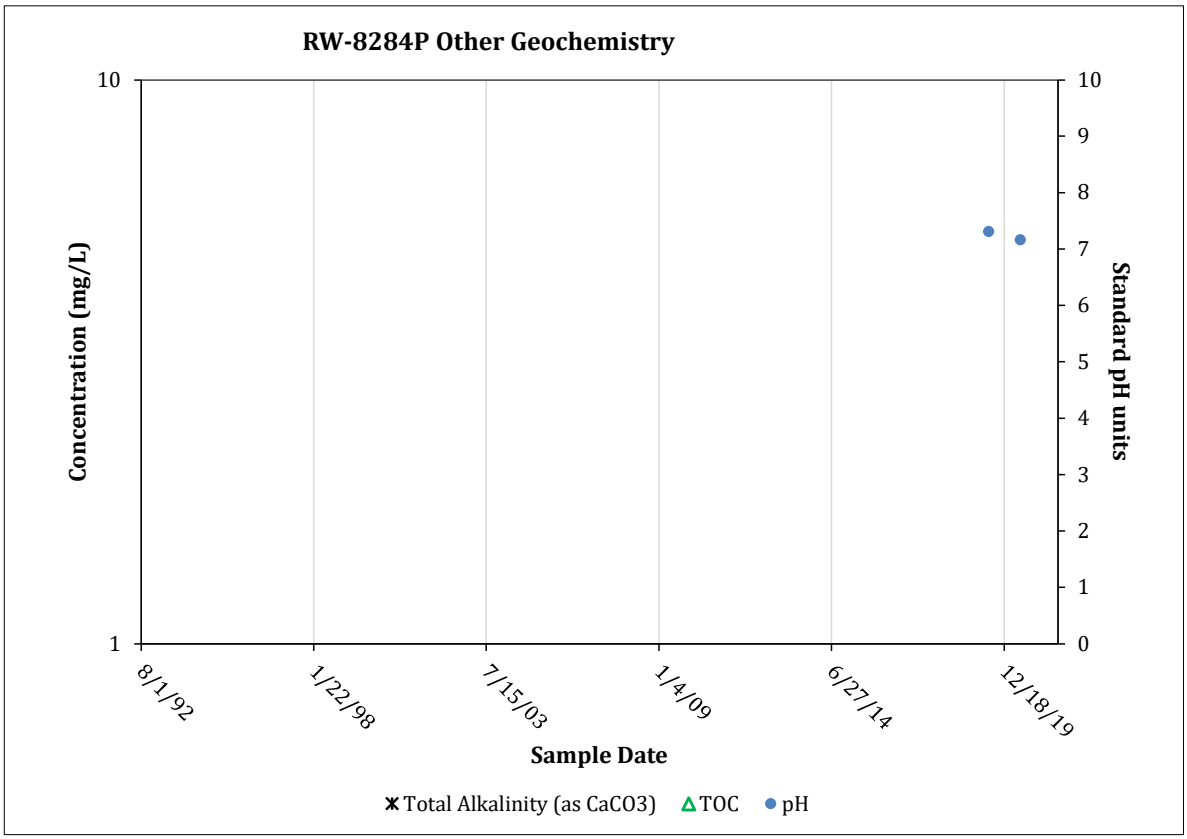


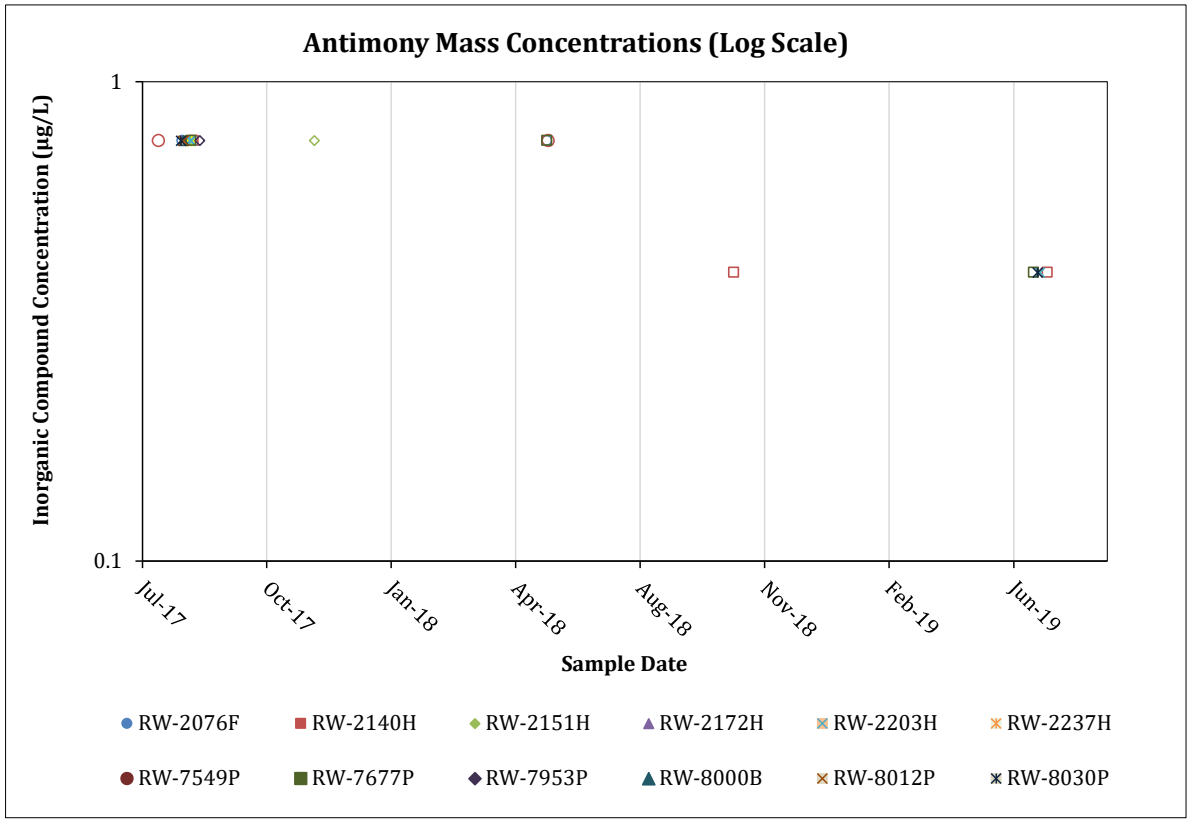


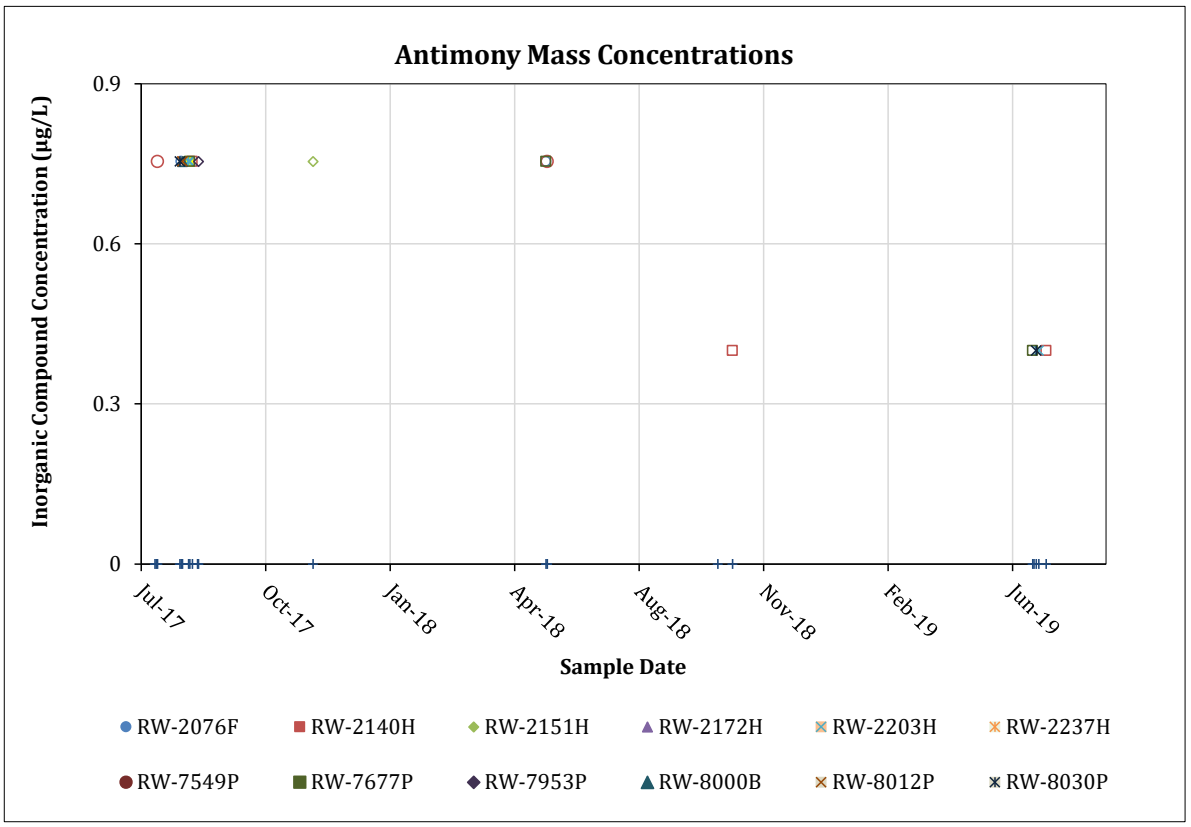
The symbol without fill designates a non-detect result.


RW-8284P Chlorinated Ethene and Daughter Product Molar Concentrations
Organic Compound Concentration (µmol/L)
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
6/1/2019
7/1/2019
8/1/2019
9/1/2019
10/1/2019
11/1/2019
12/1/2019
1/1/2020
2/1/2020
3/1/2020
4/1/2020
5/1/2020
6/1/2020
Sample Date
PCE
TCE
cis-1,2-DCE
1,1-DCE
trans-1,2-DCE
Vinyl Chloride
Ethene
Ethane
Acetylene

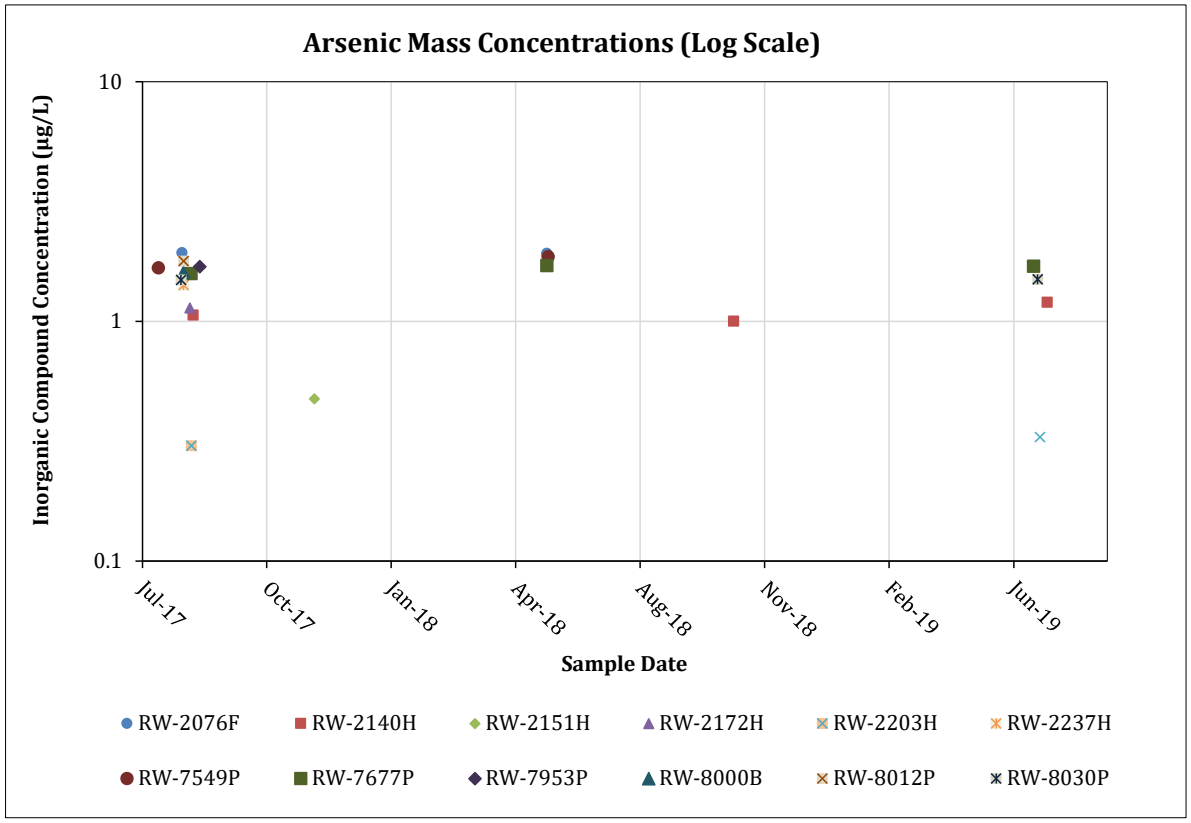

RW-8284P Redox Parameters
Concentration (mg/L)
ORP (mV)
10
1
160
140
120
100
80
60
40
20
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Dissolved Oxygen
Nitrate and Nitrate (as N)
Iron
Manganese
Sulfate
Methane
ORP

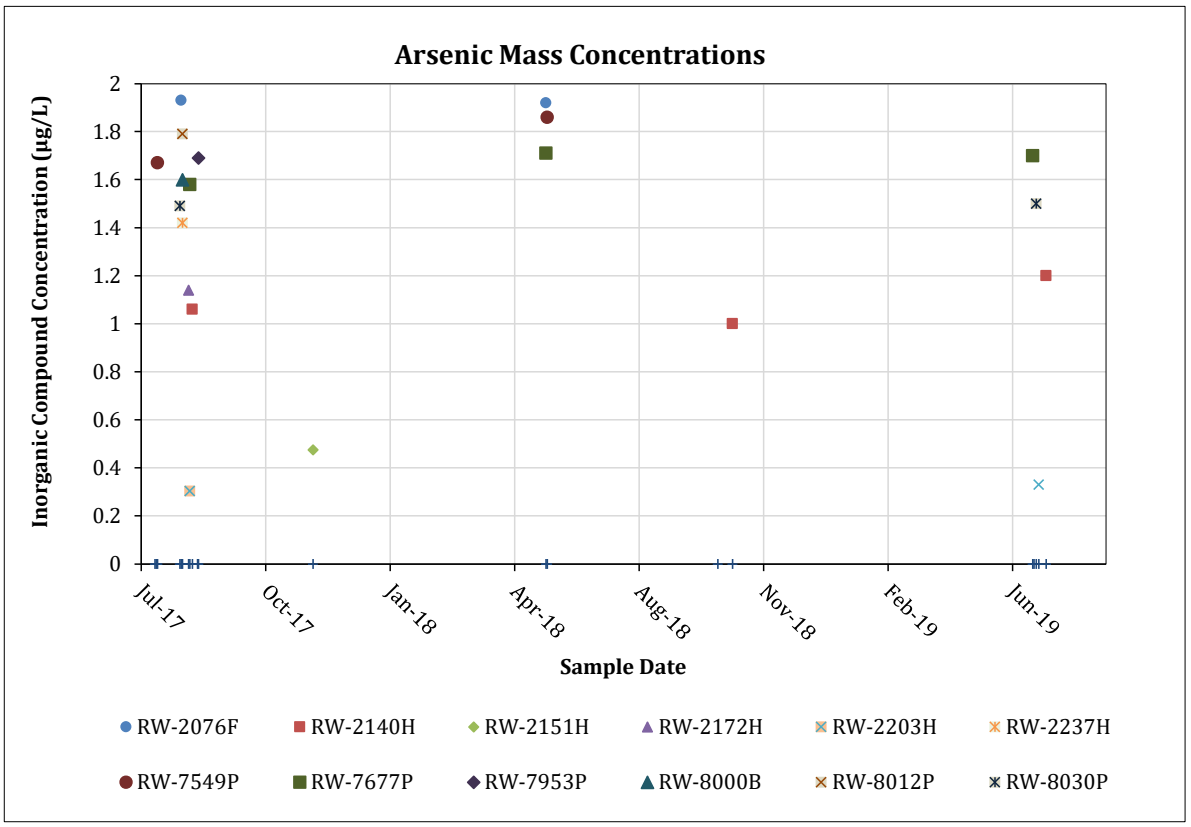

RW-8284P Other Geochemistry
Concentration (mg/L)
Standard pH units
10
1
10
9
8
7
6
5
4
3
2
1
0
8/1/92
1/22/98
7/15/03
1/4/09
6/27/14
12/18/19
Sample Date
Total Alkalinity (as CaCO3)
TOC
pH



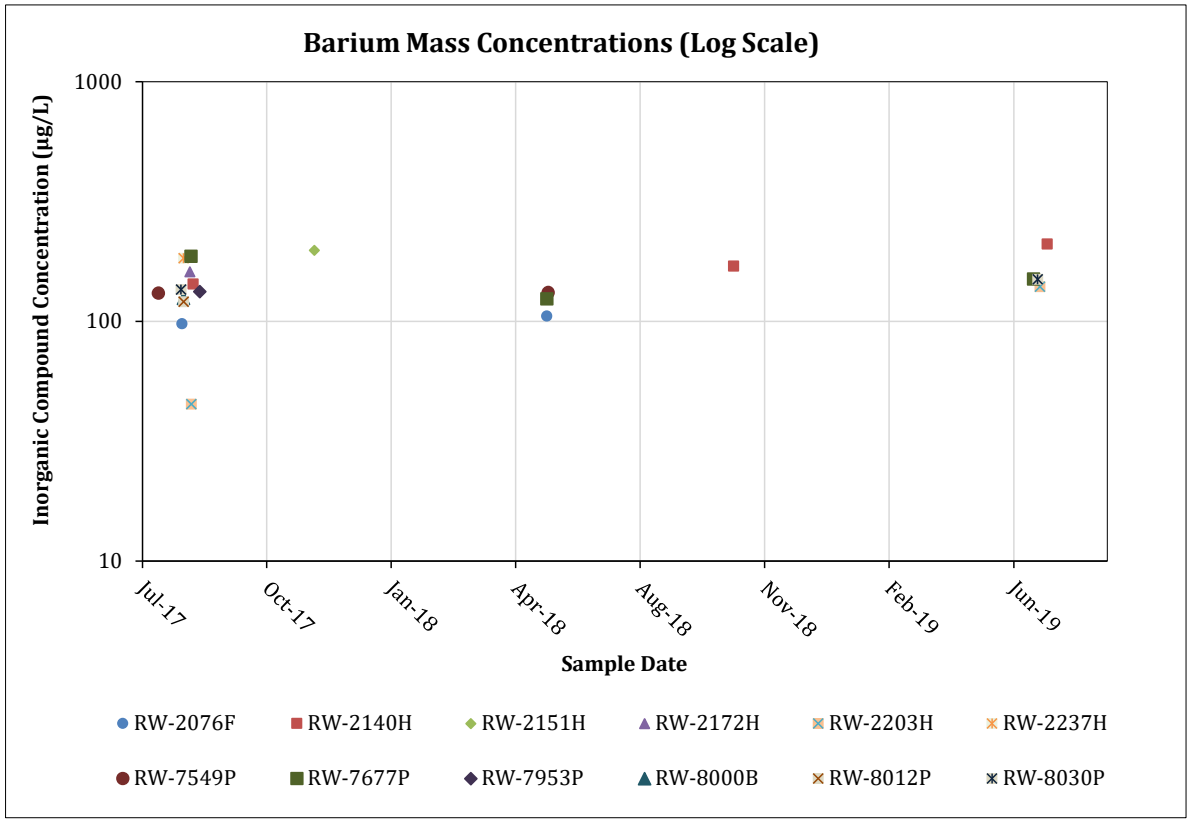


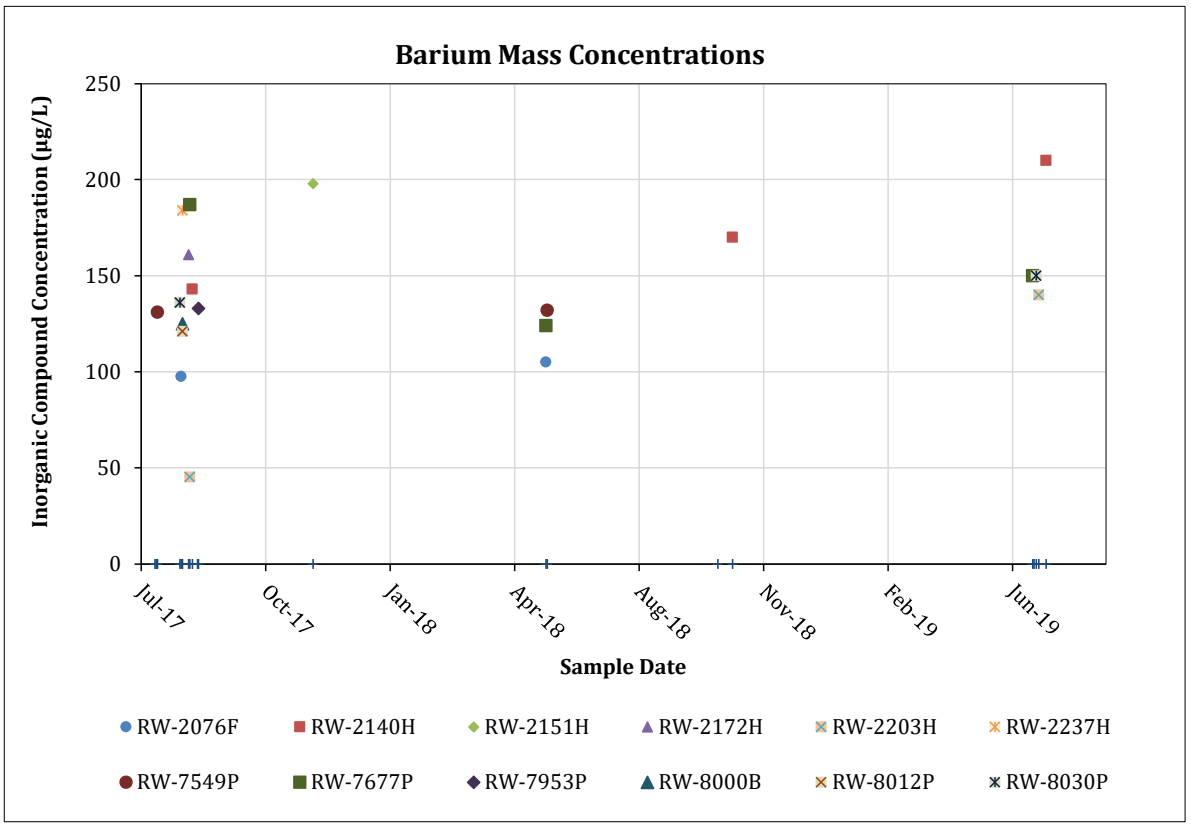
The symbol without fill designates a non-detect result.



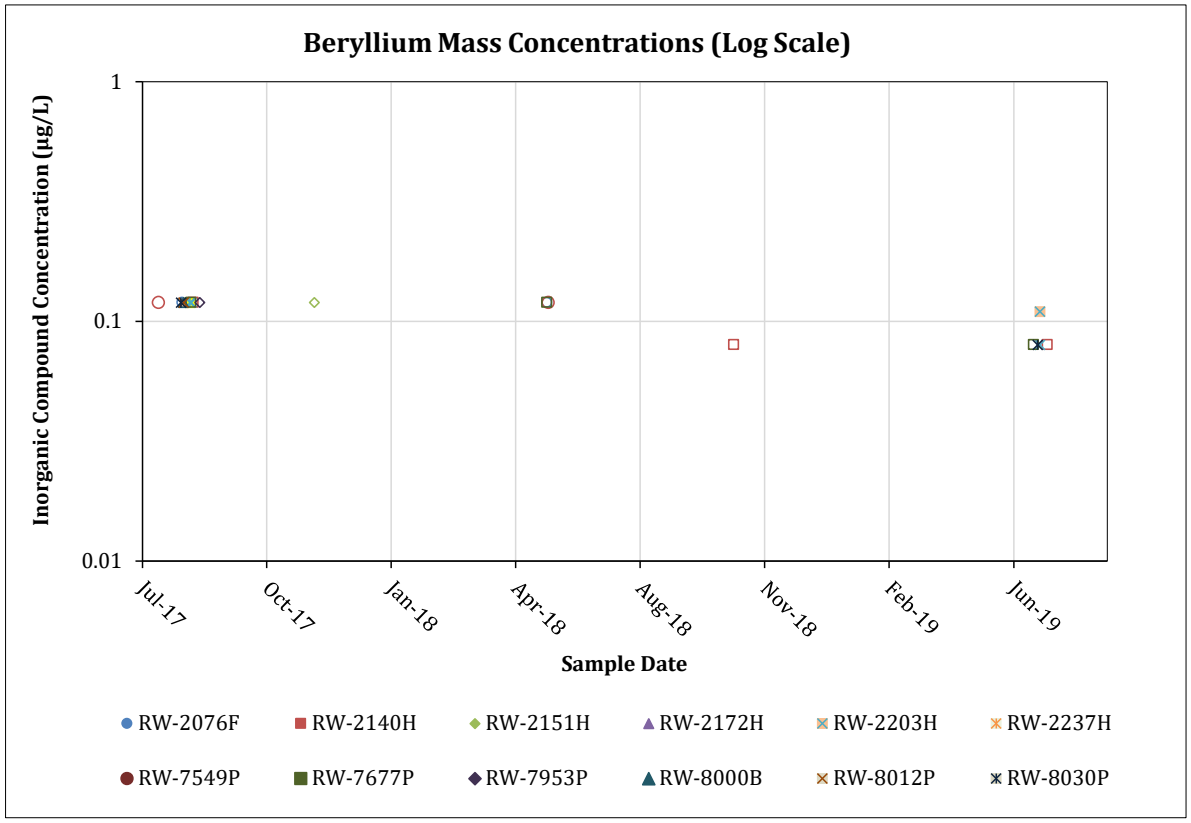


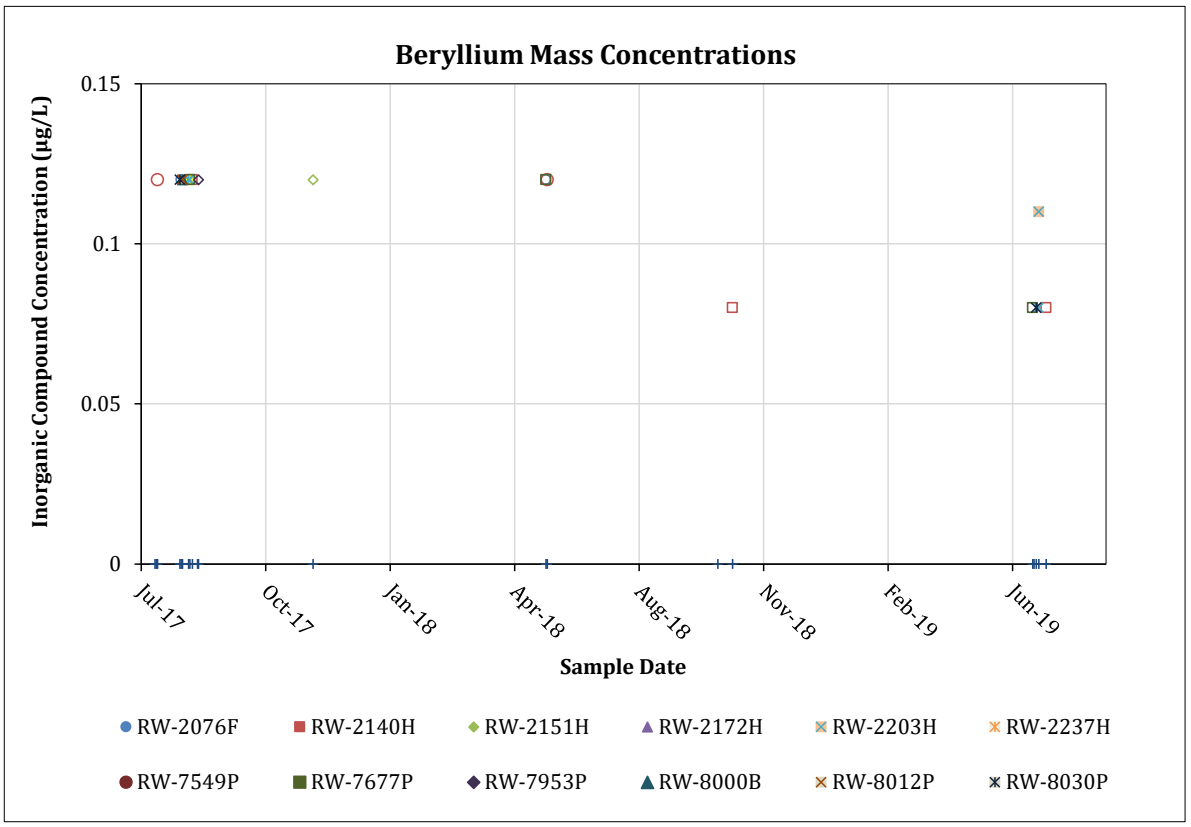
The symbol without fill designates a non-detect result.





The symbol without fill designates a non-detect result.





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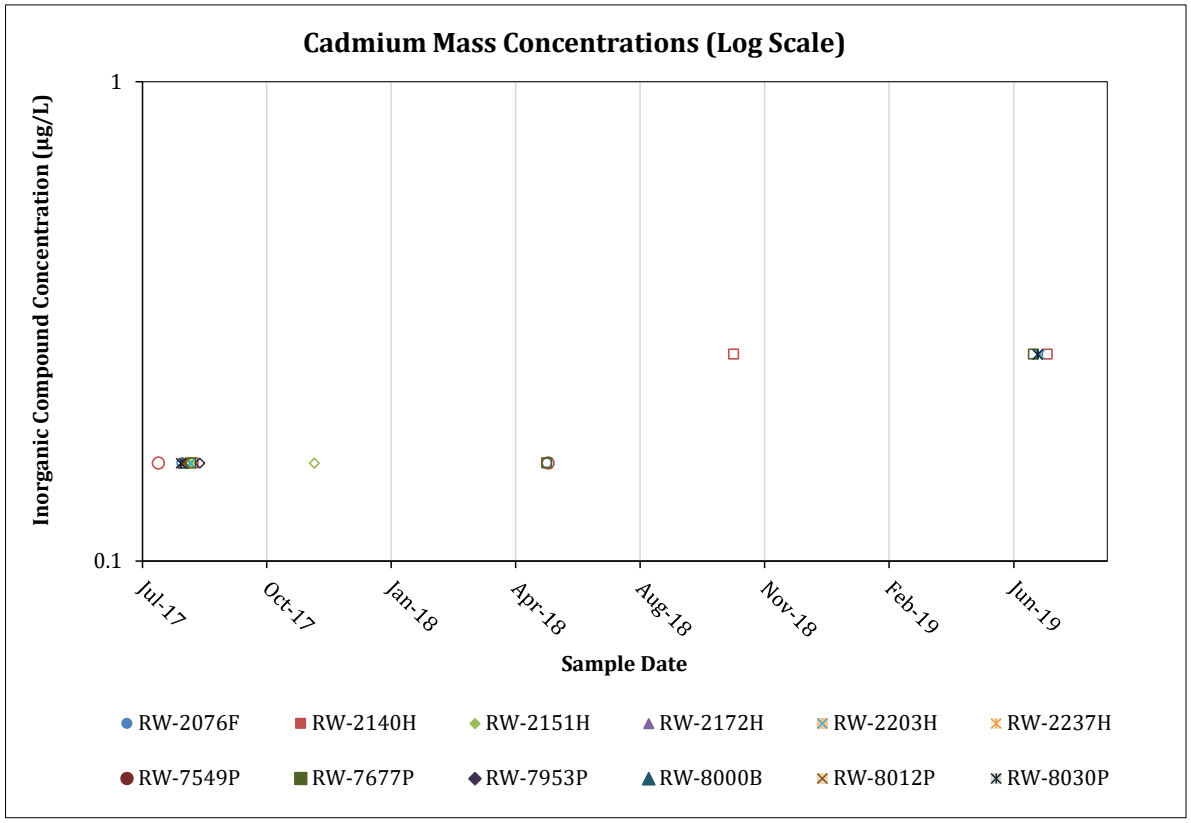

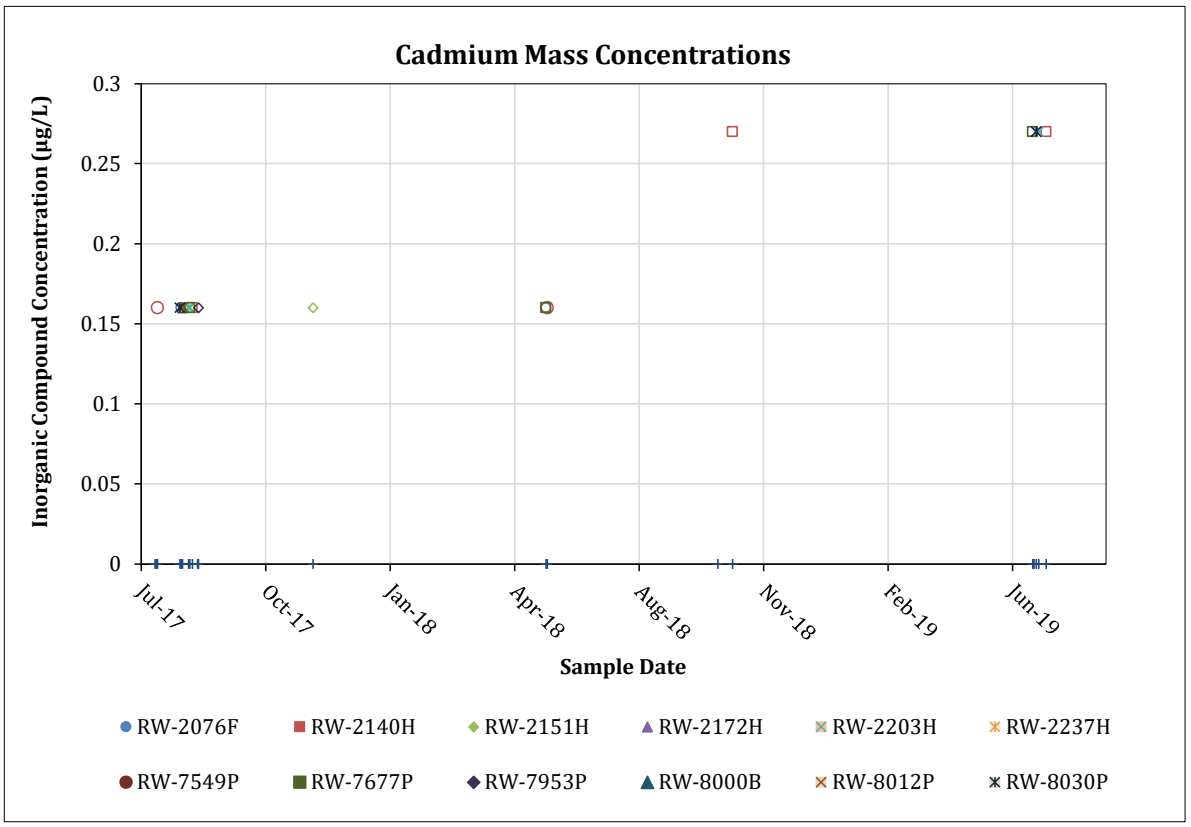

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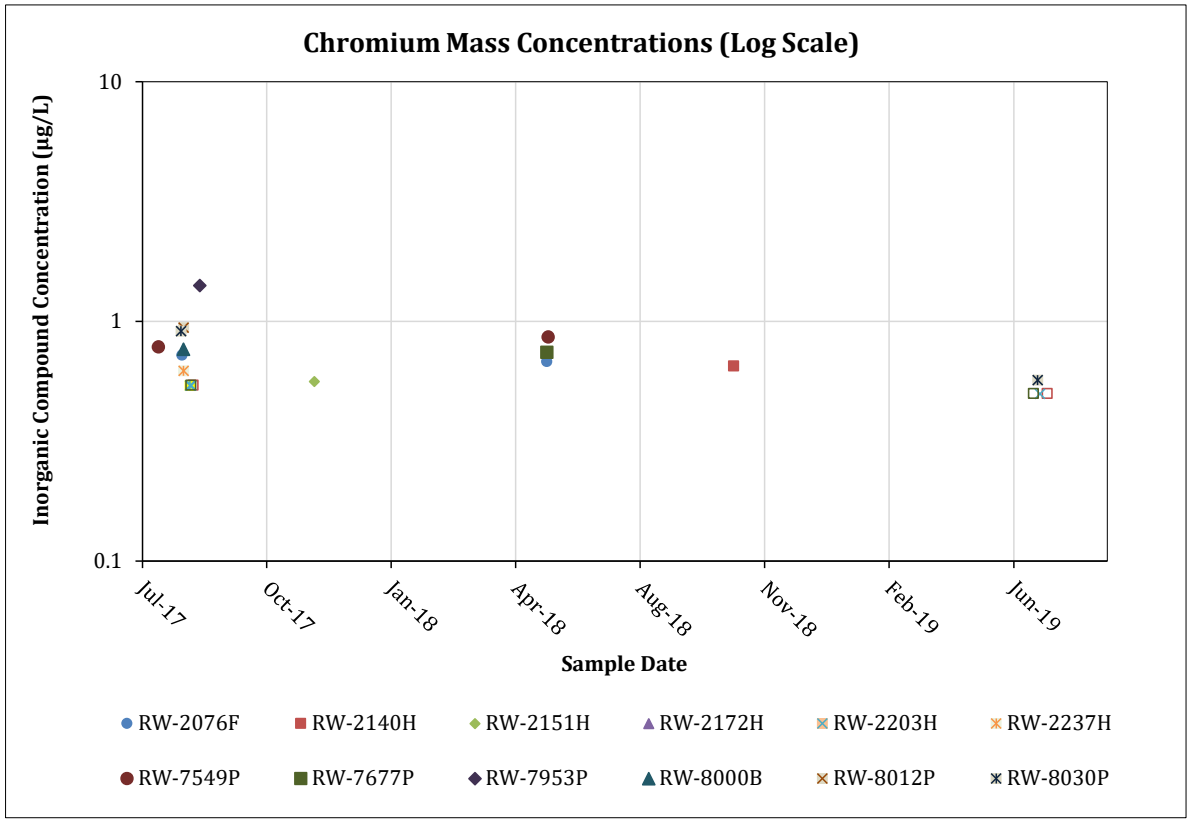
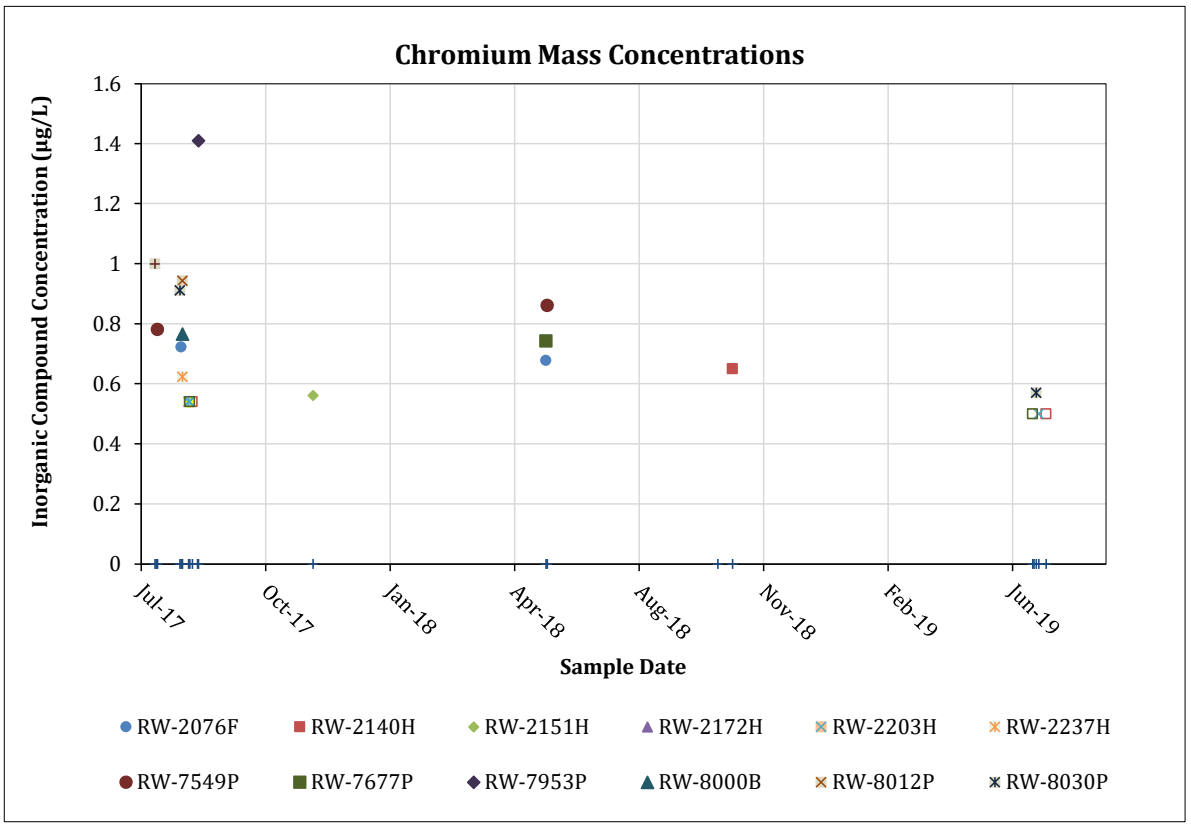
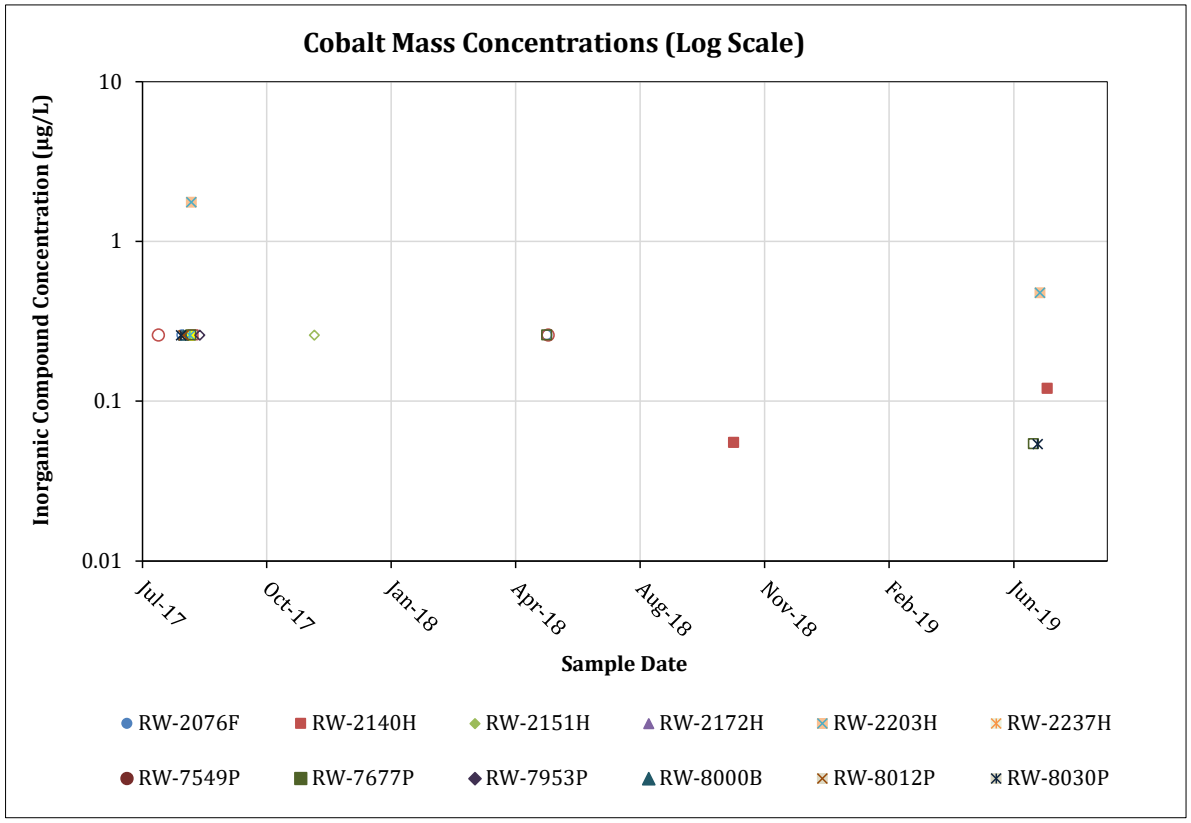
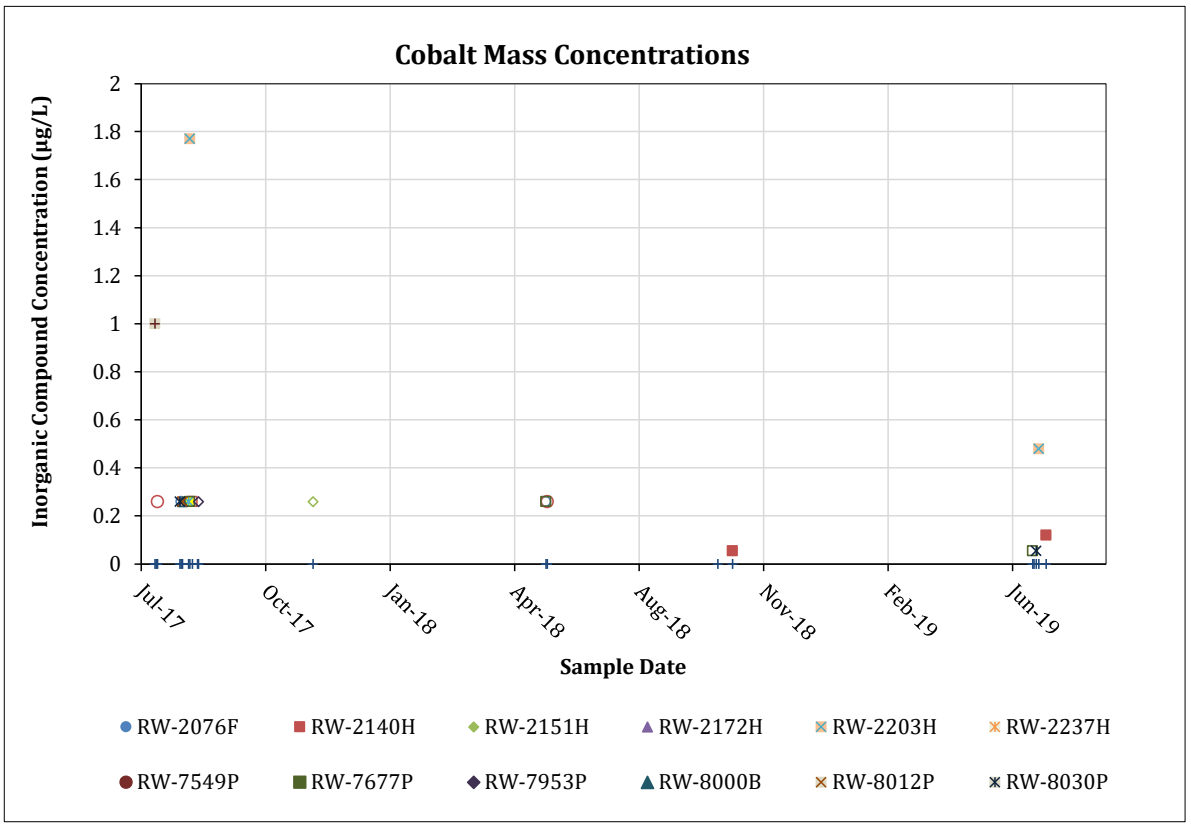


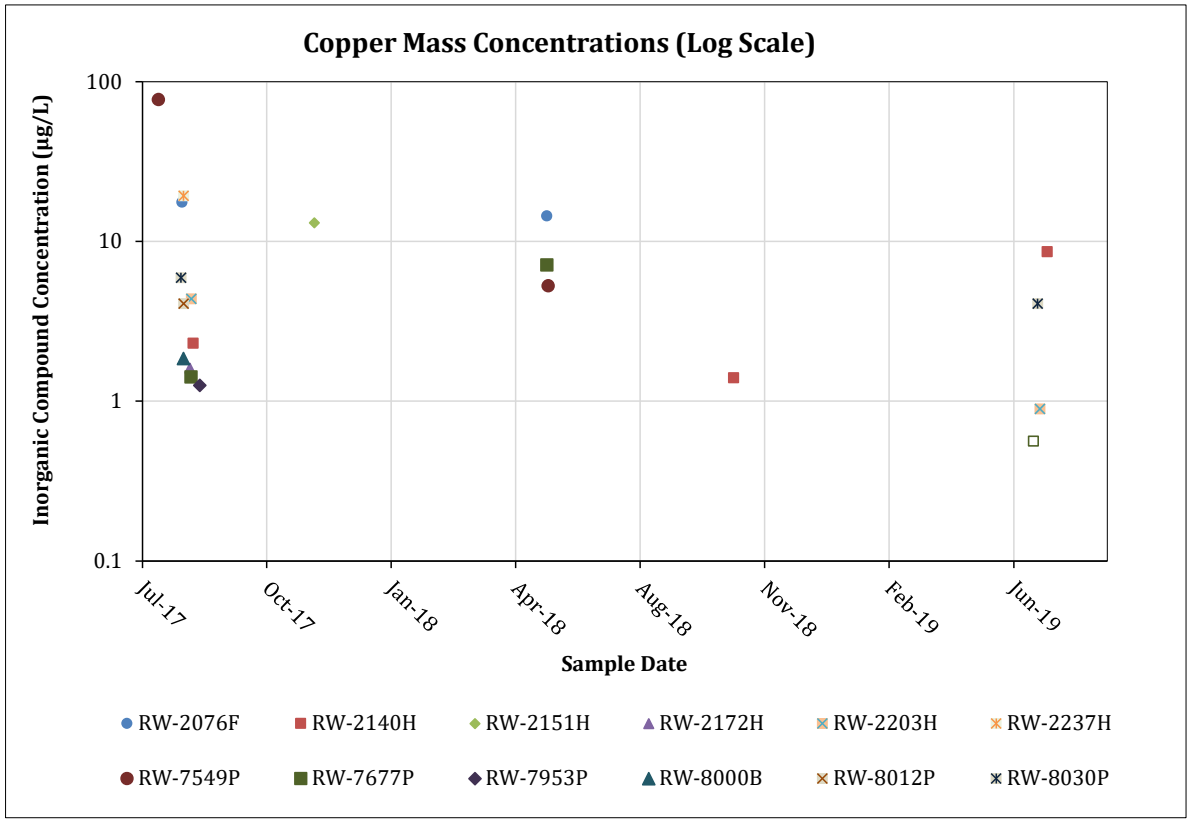


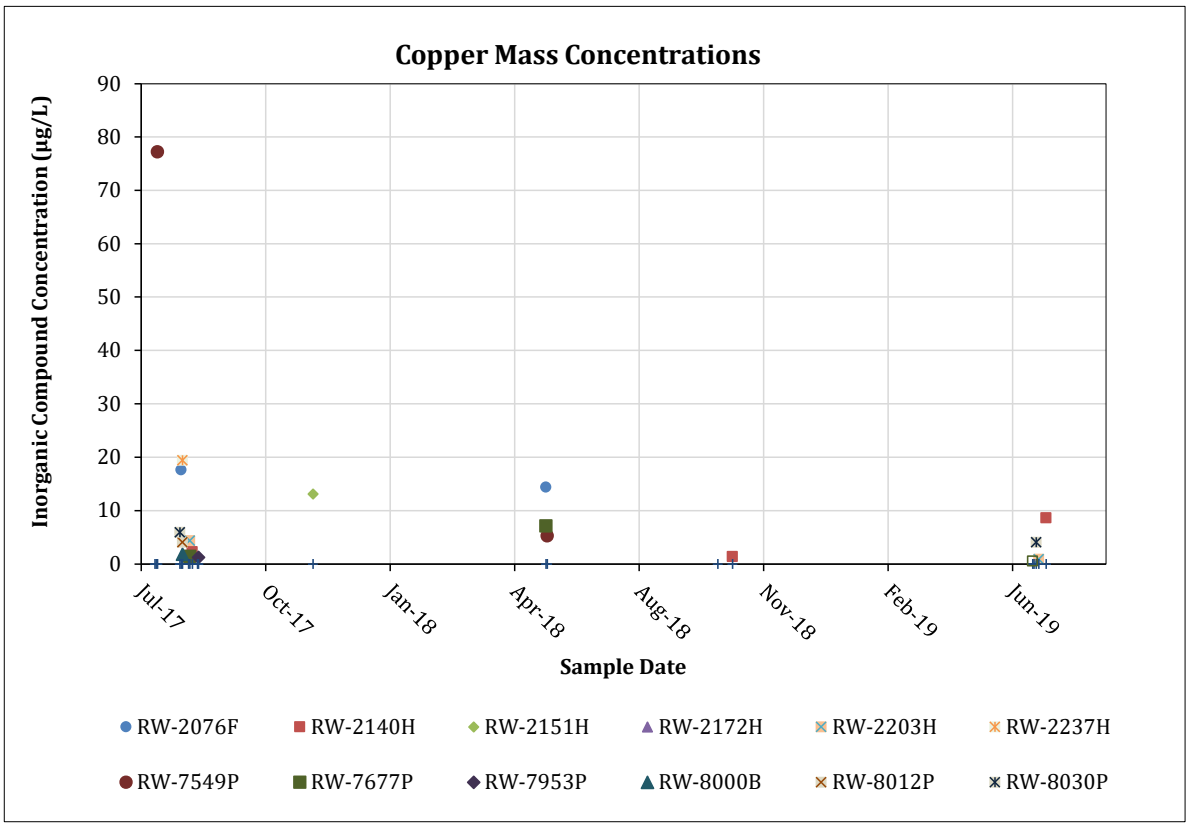
The symbol without fill designates a non-detect result.





The symbol without fill designates a non-detect result.





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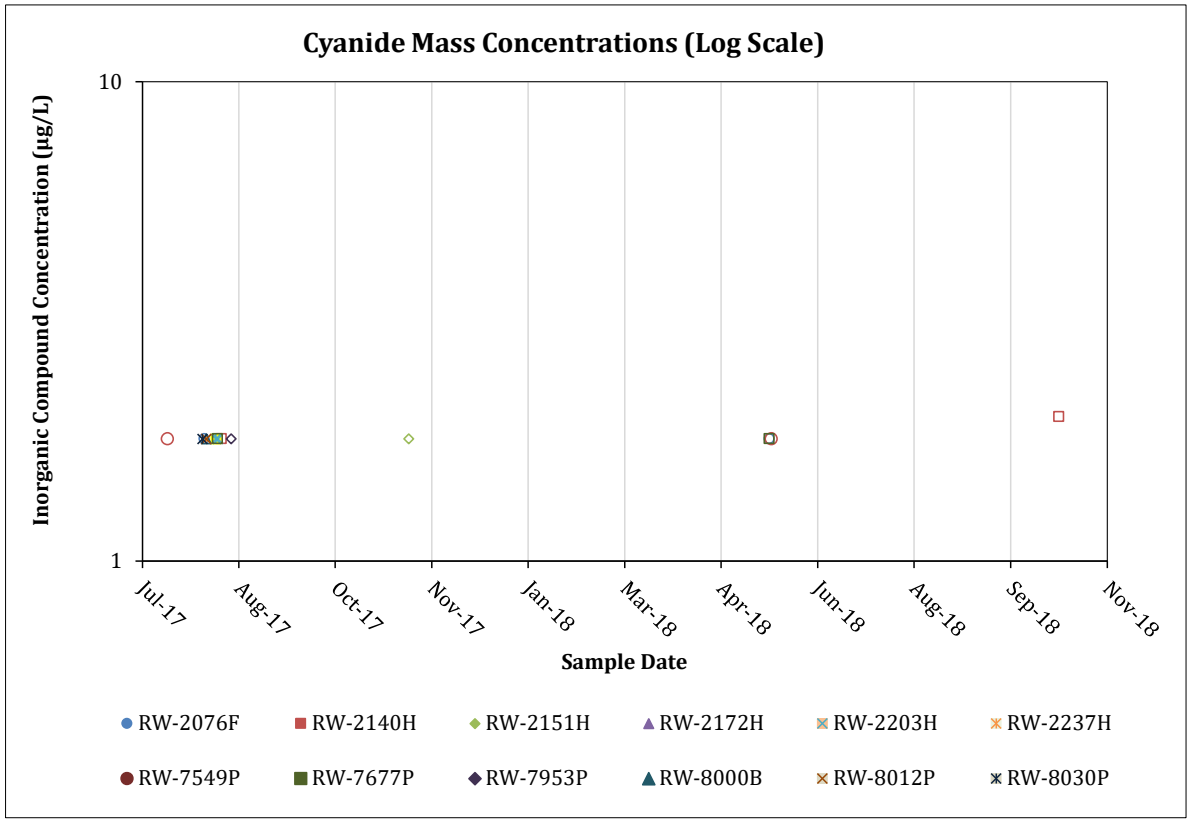

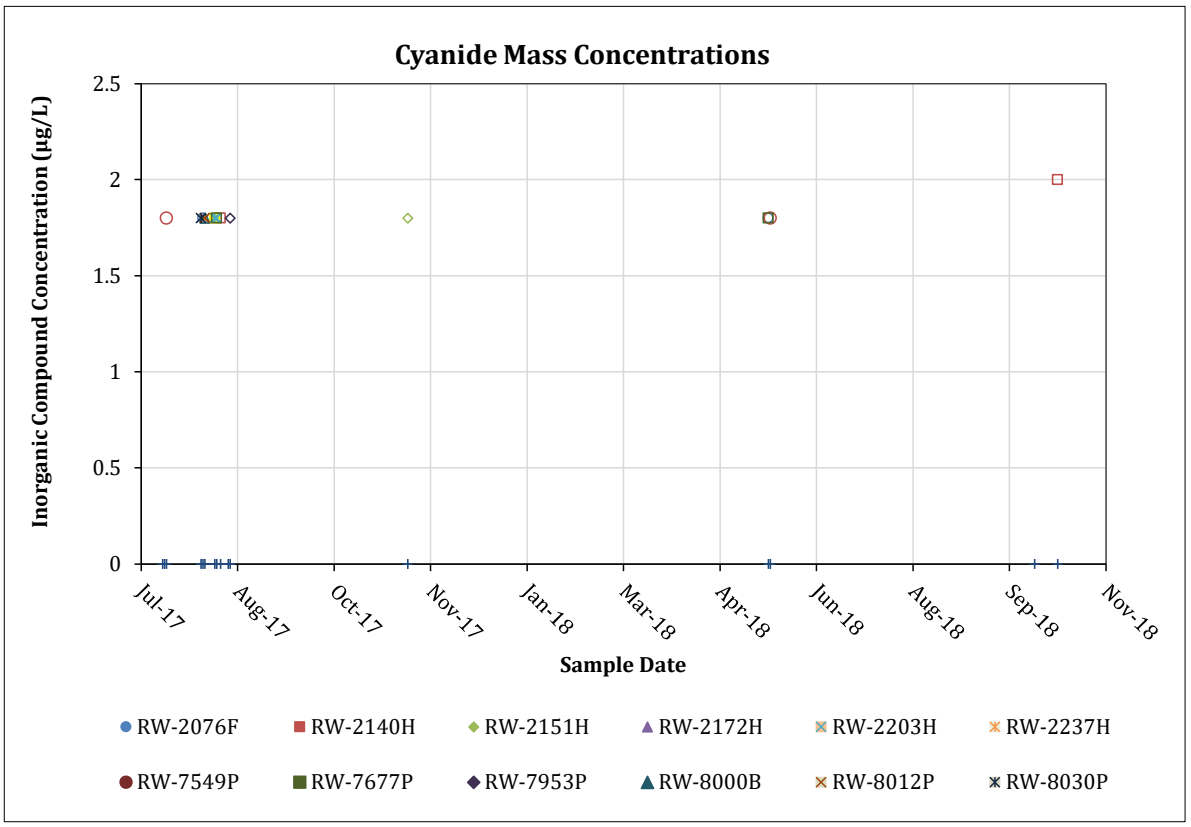

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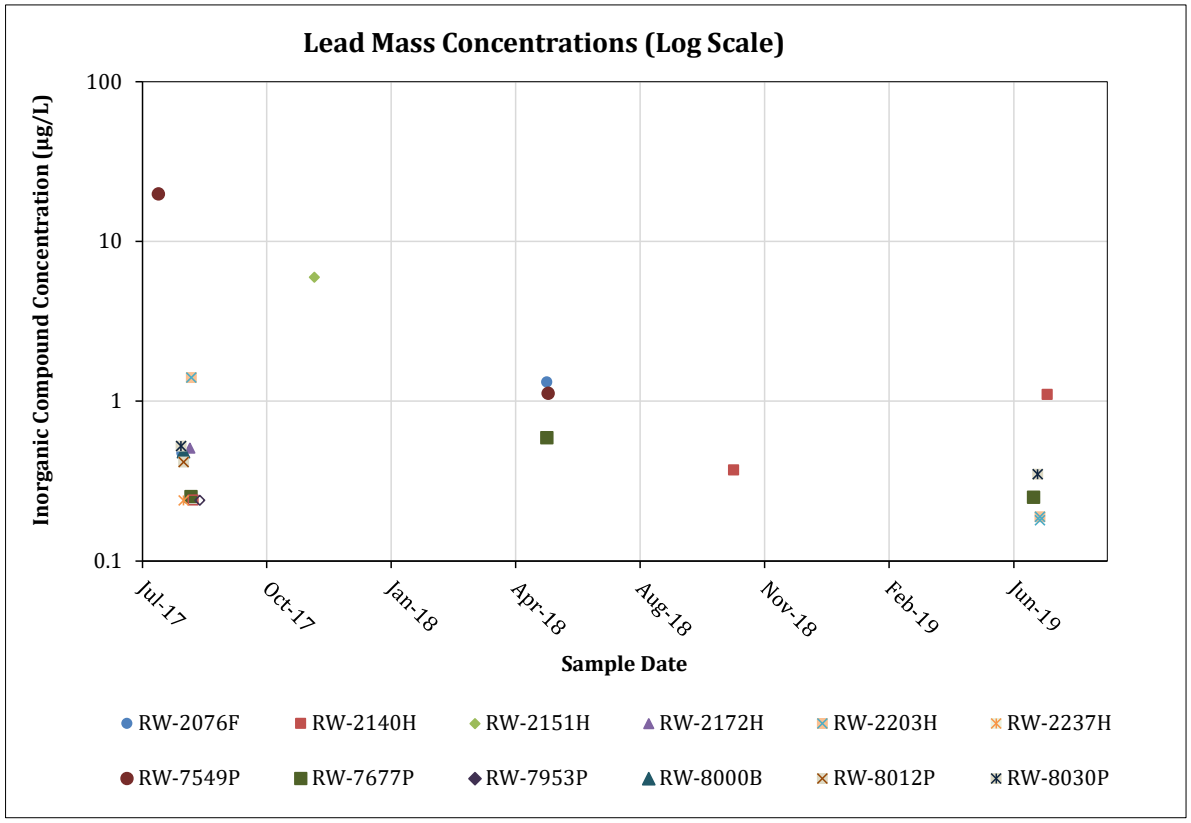
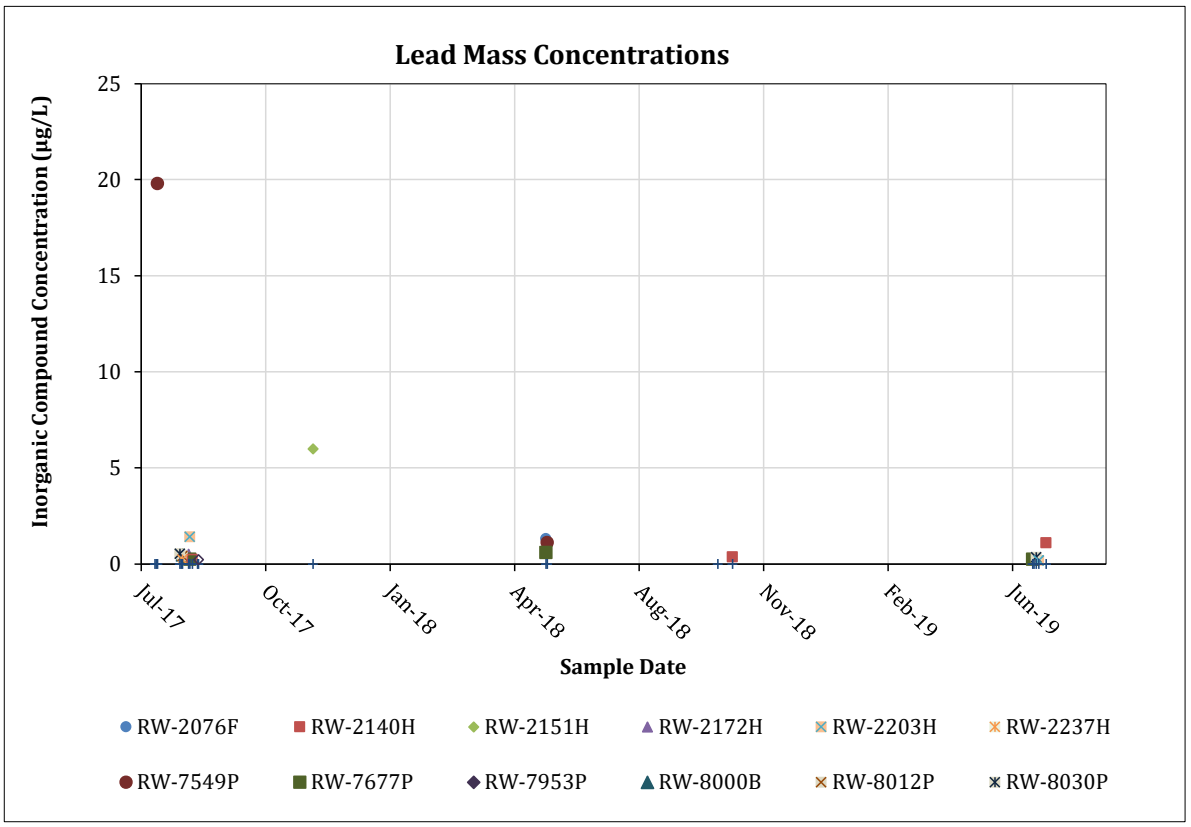
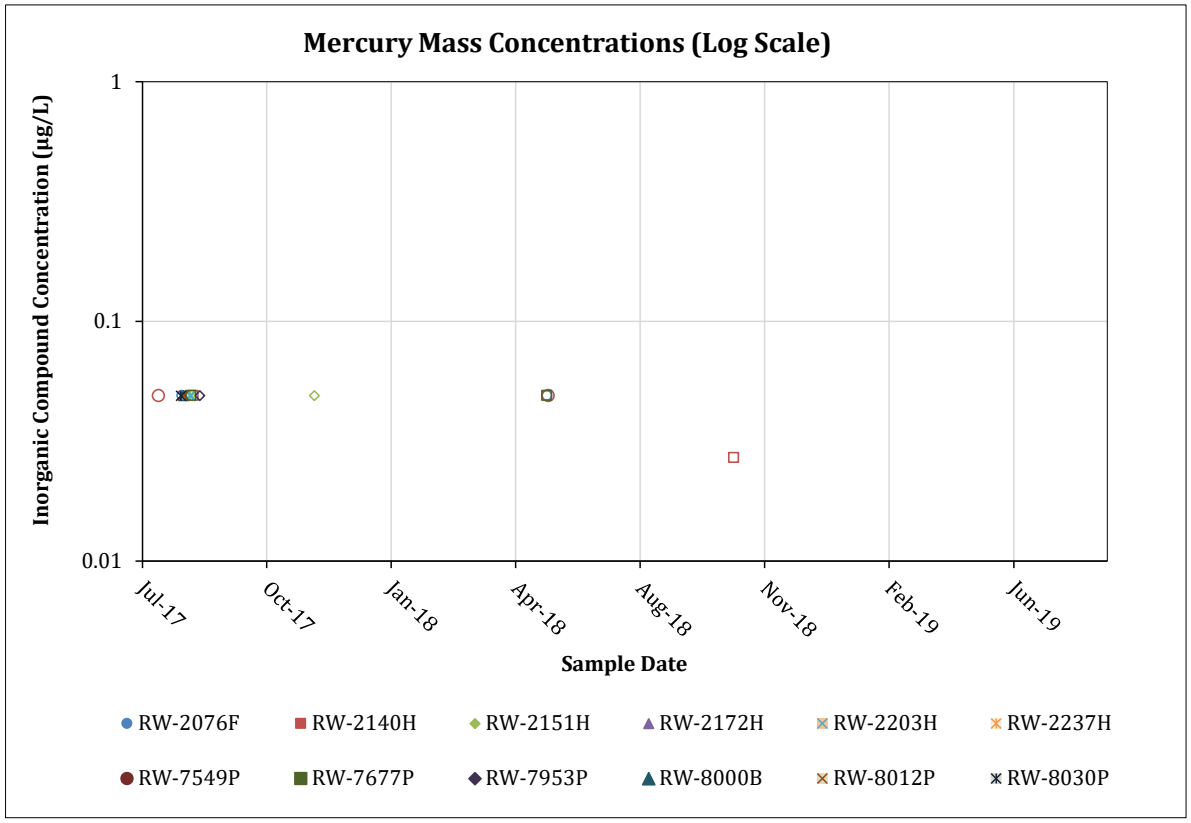
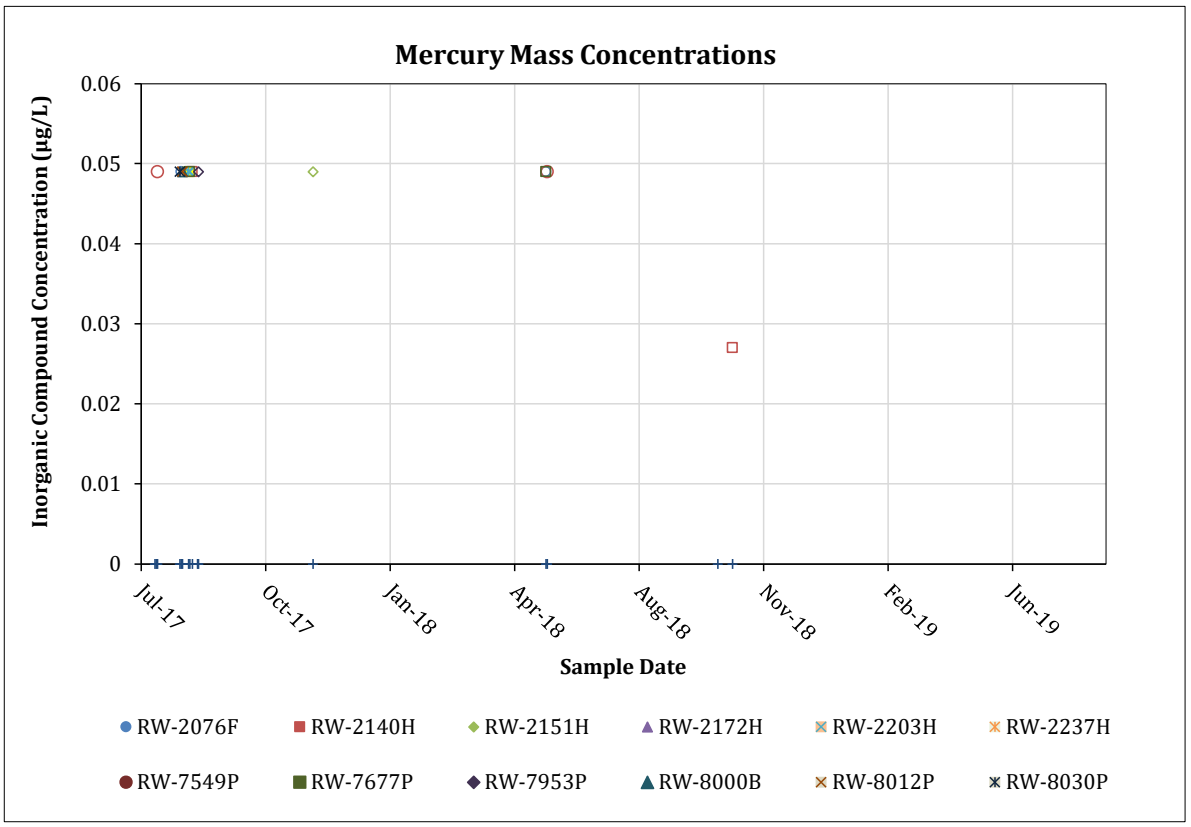


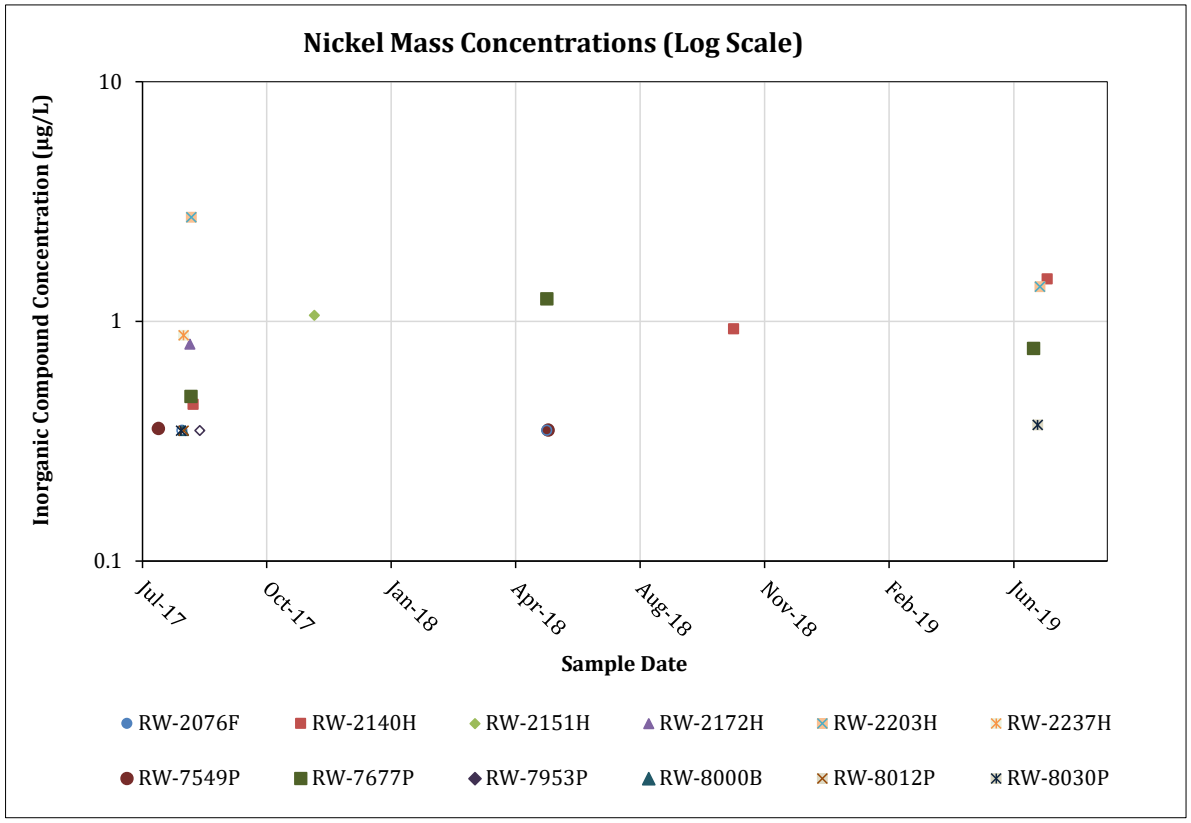


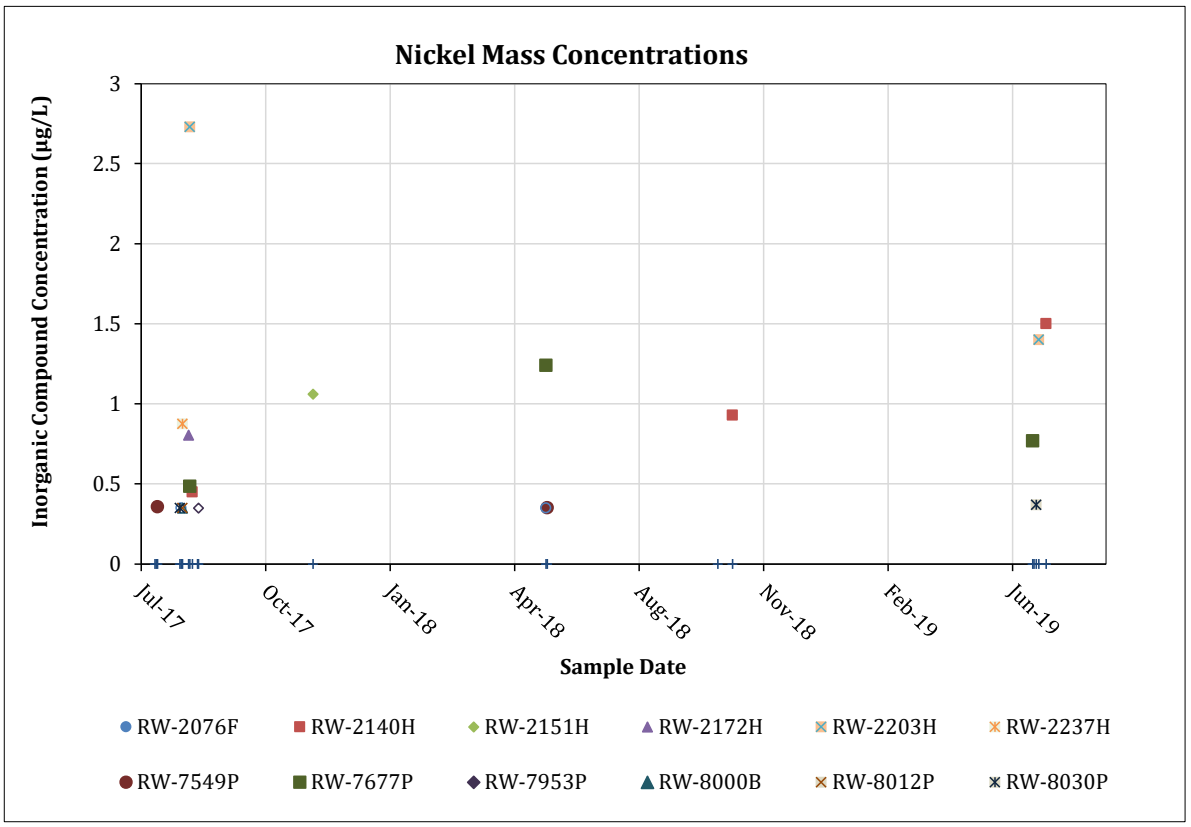
The symbol without fill designates a non-detect result.



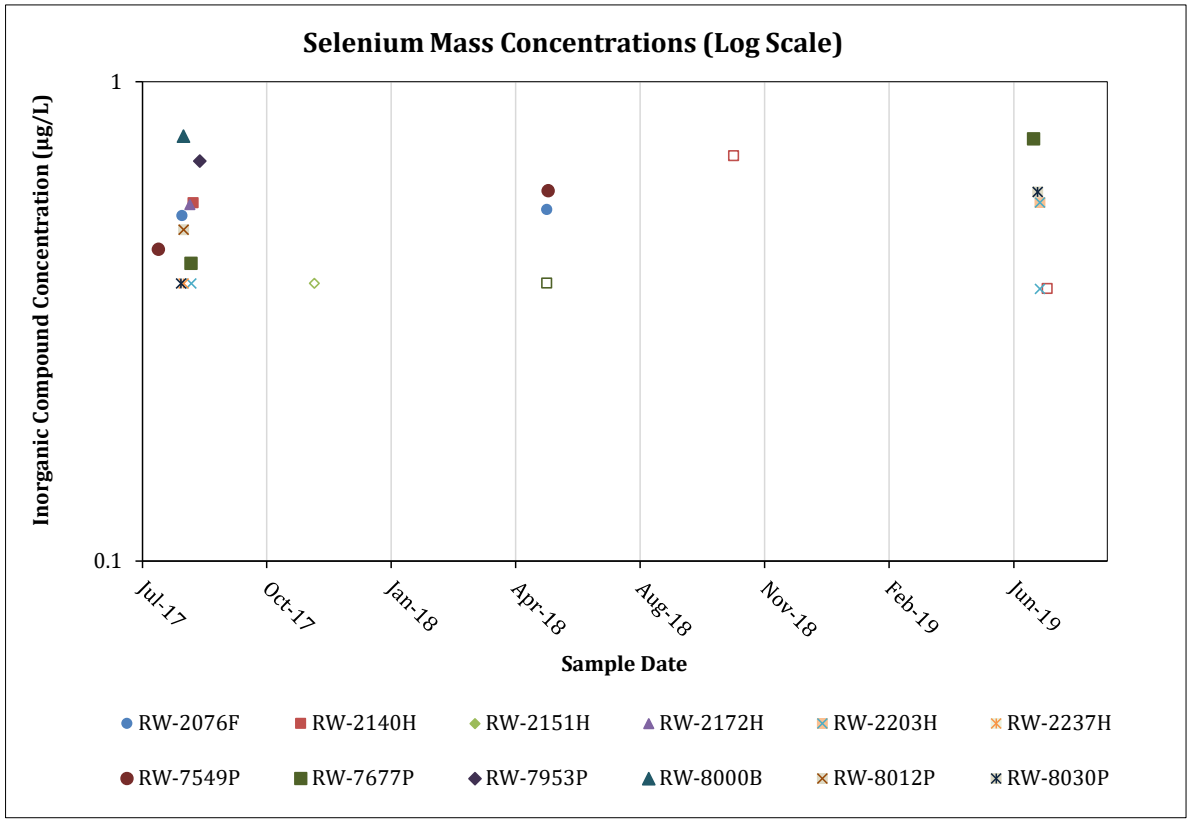


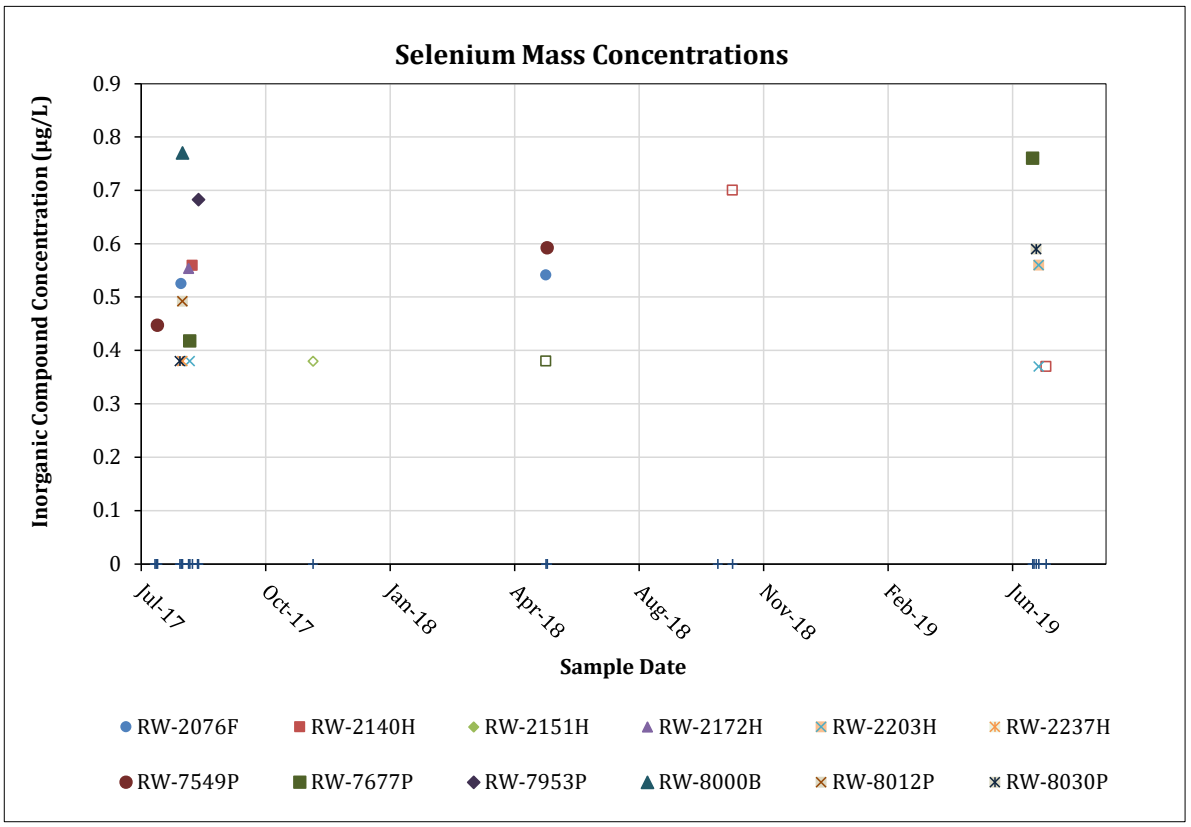
The symbol without fill designates a non-detect result.



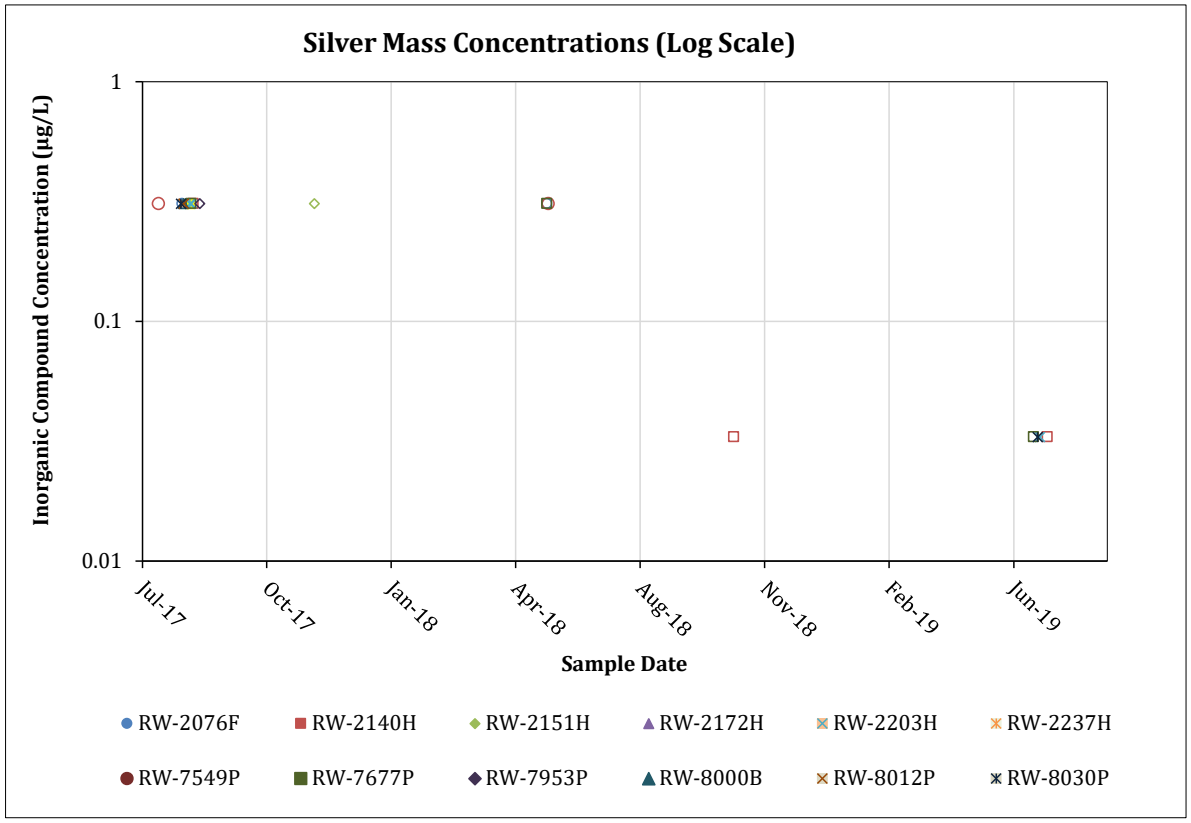


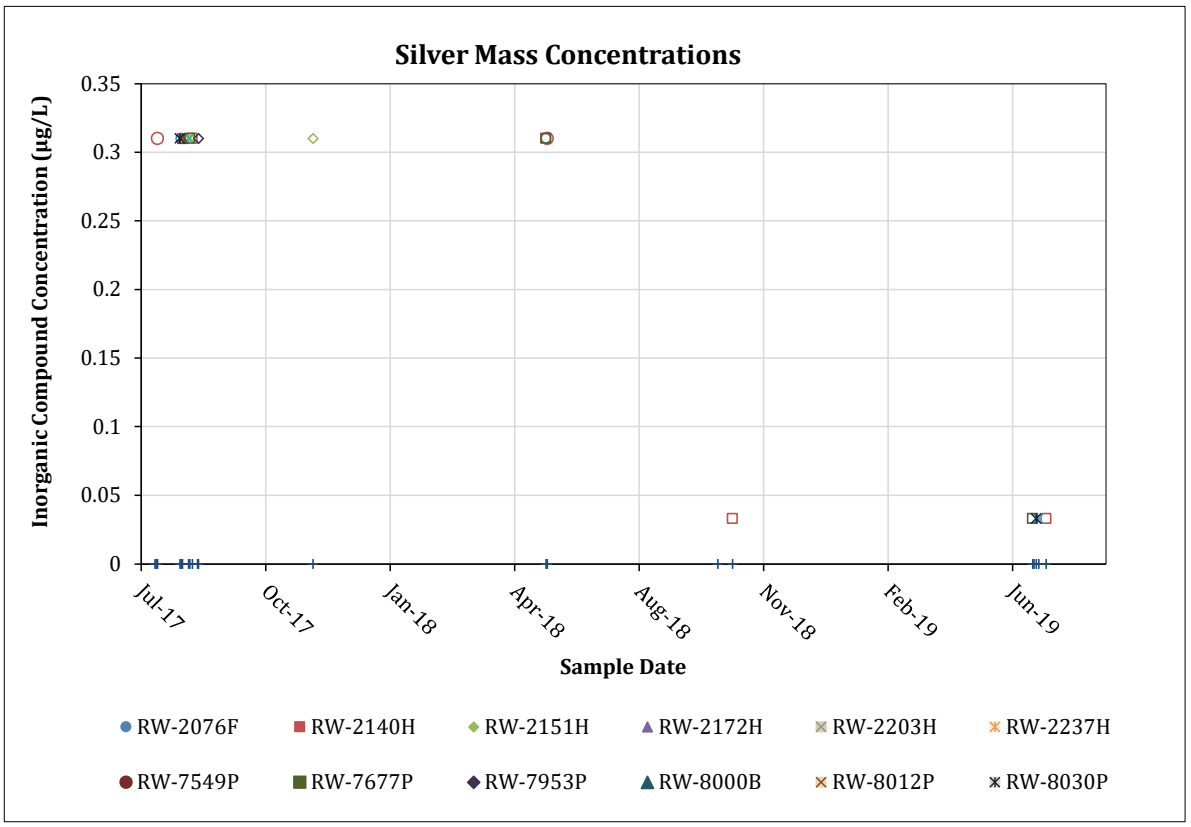
The symbol without fill designates a non-detect result.



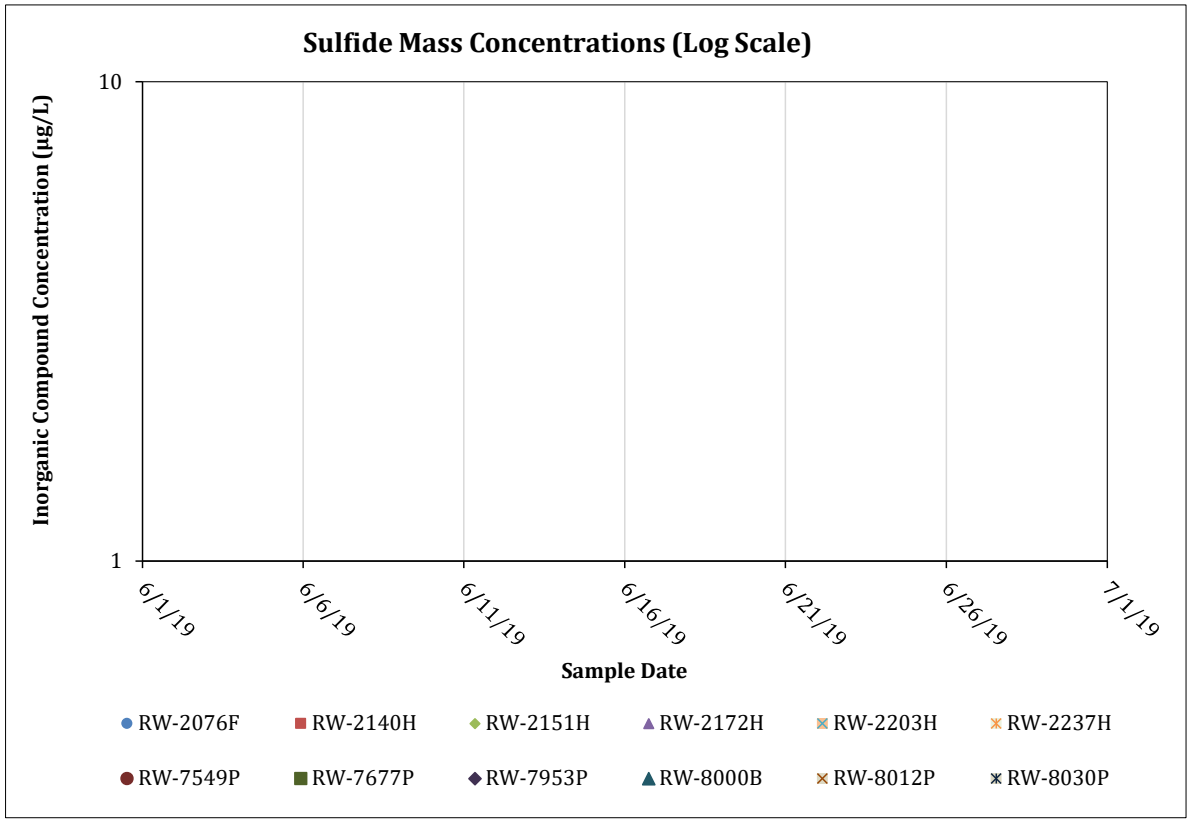


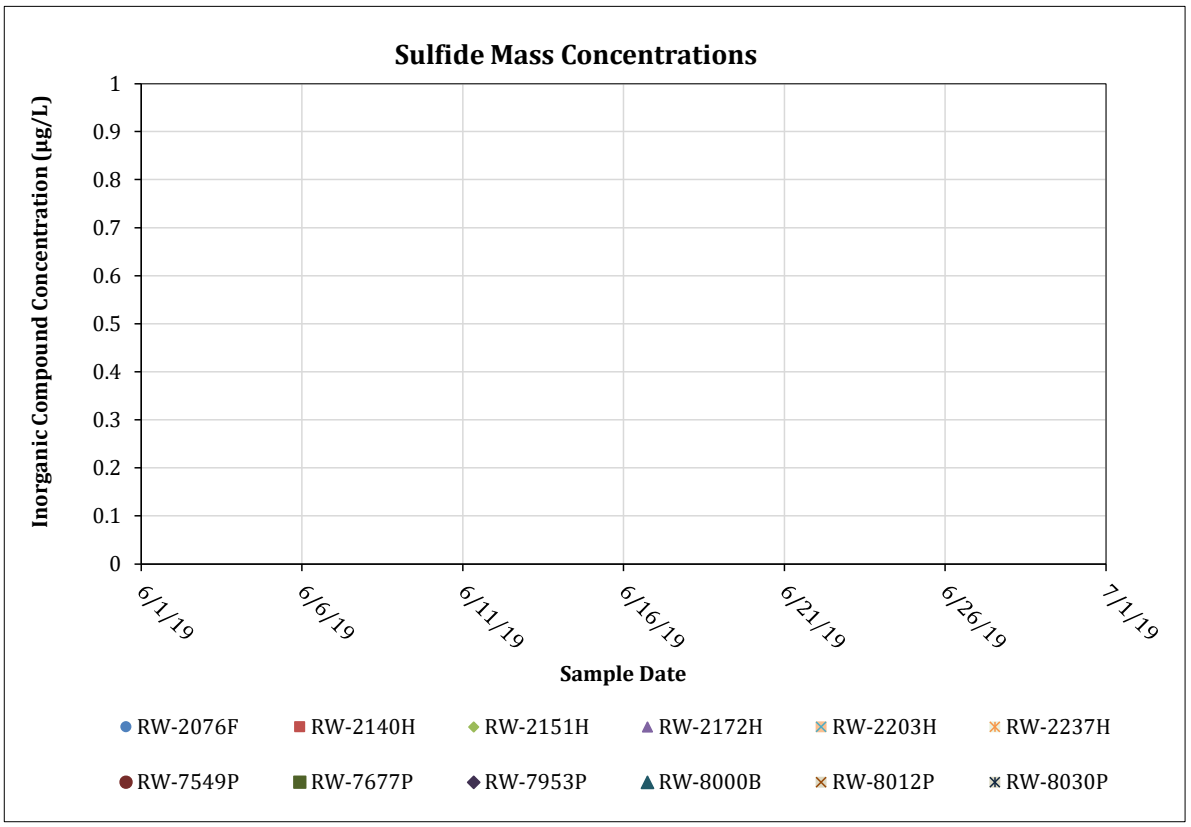
The symbol without fill designates a non-detect result.



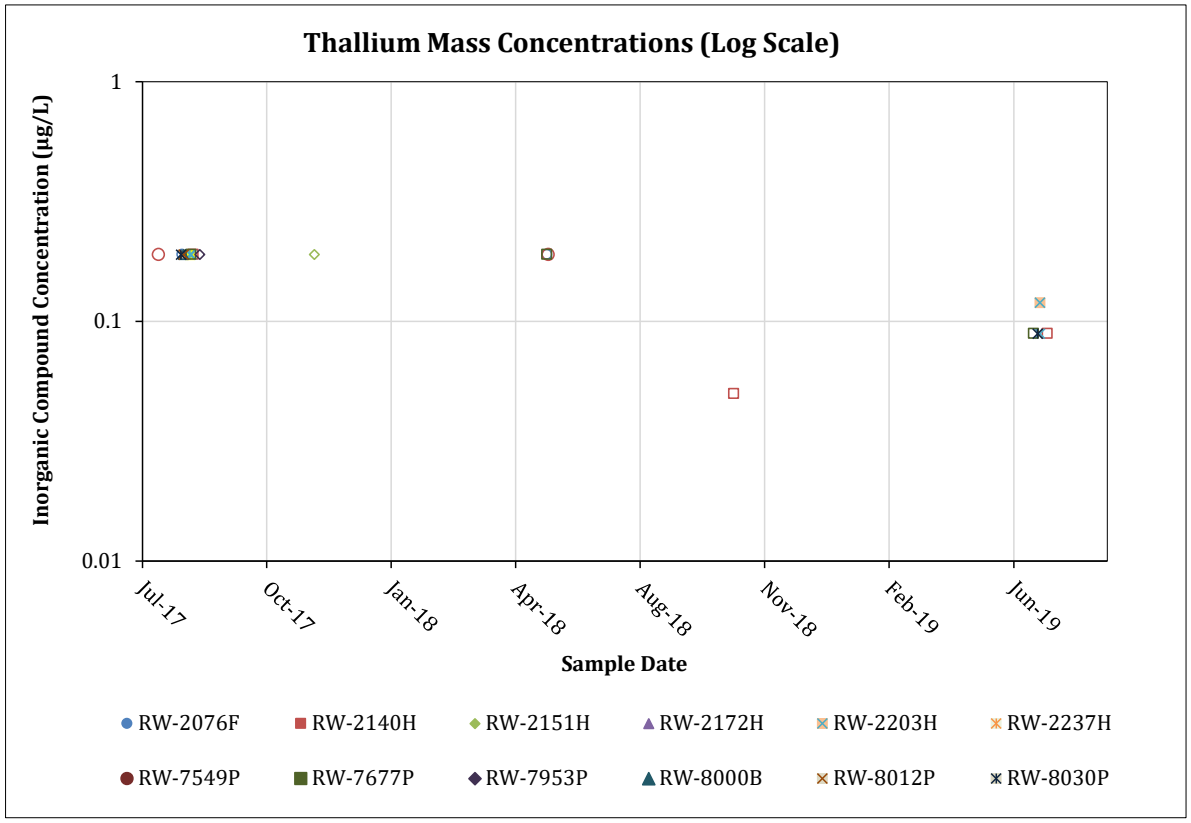


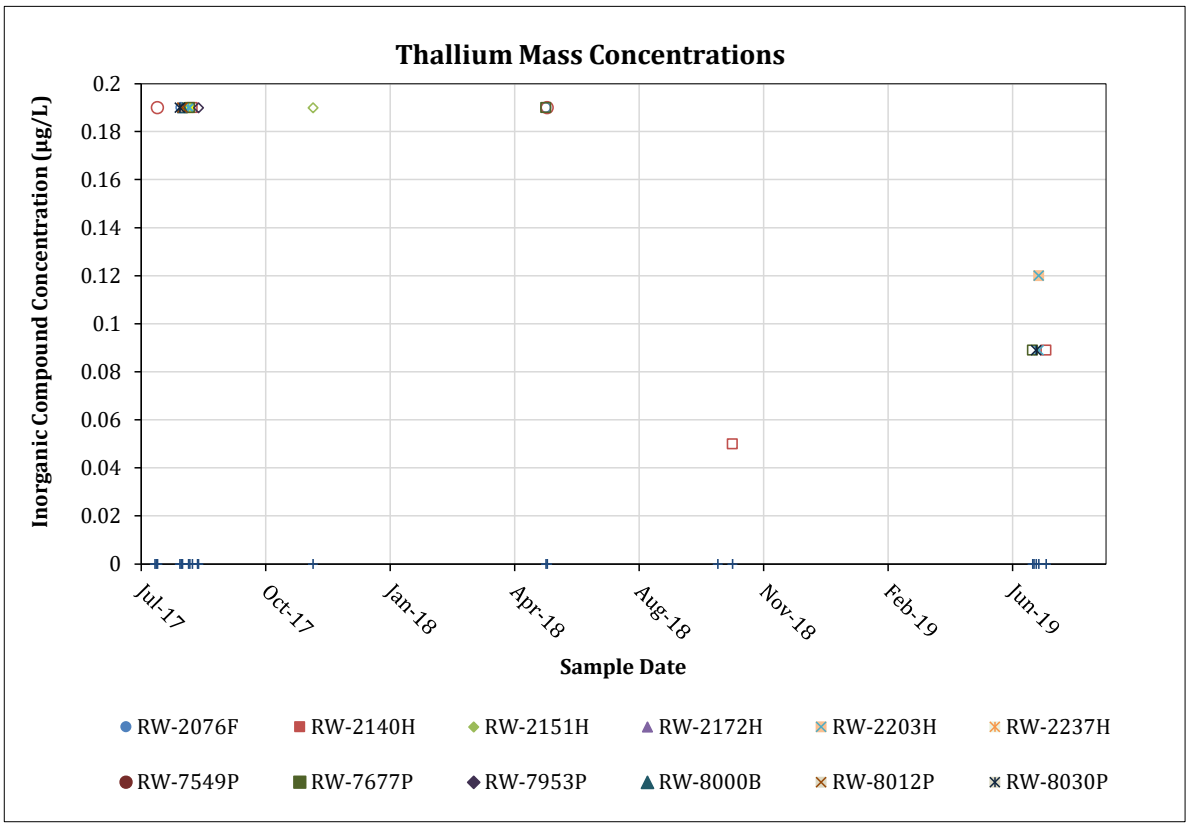
The symbol without fill designates a non-detect result.



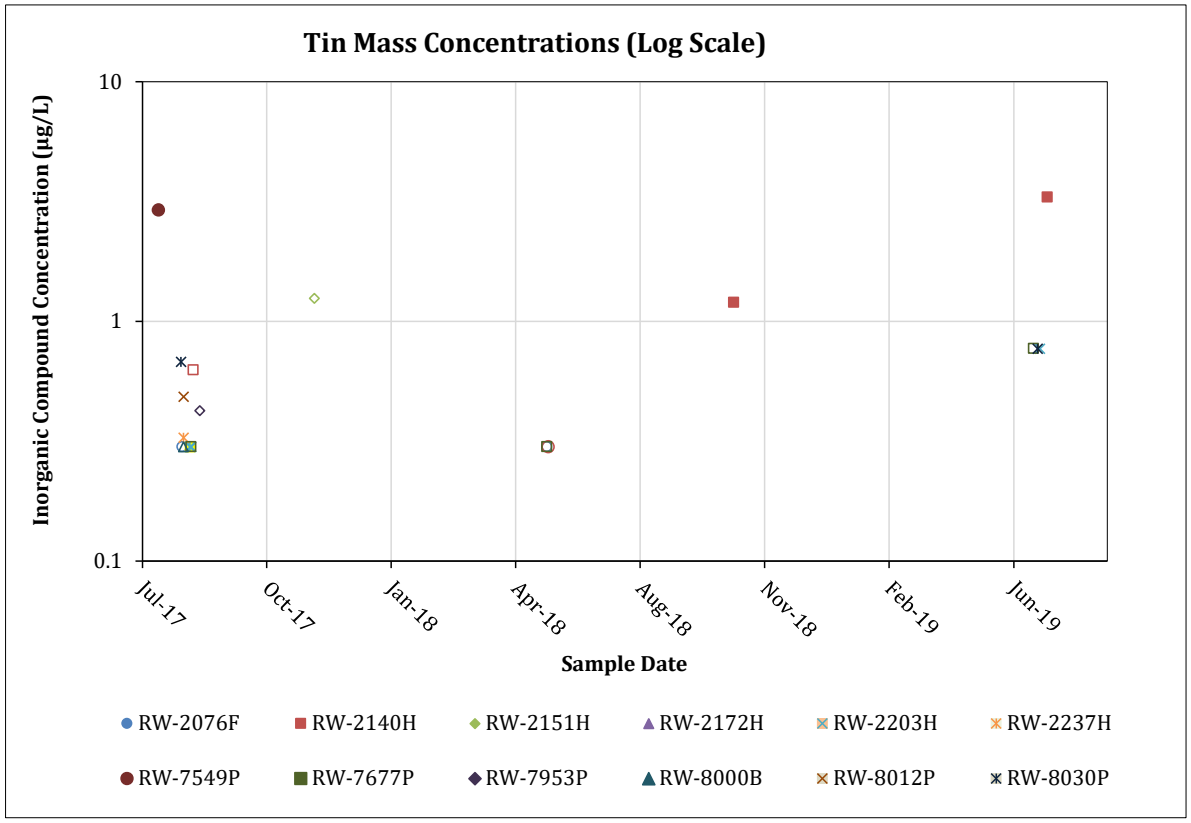


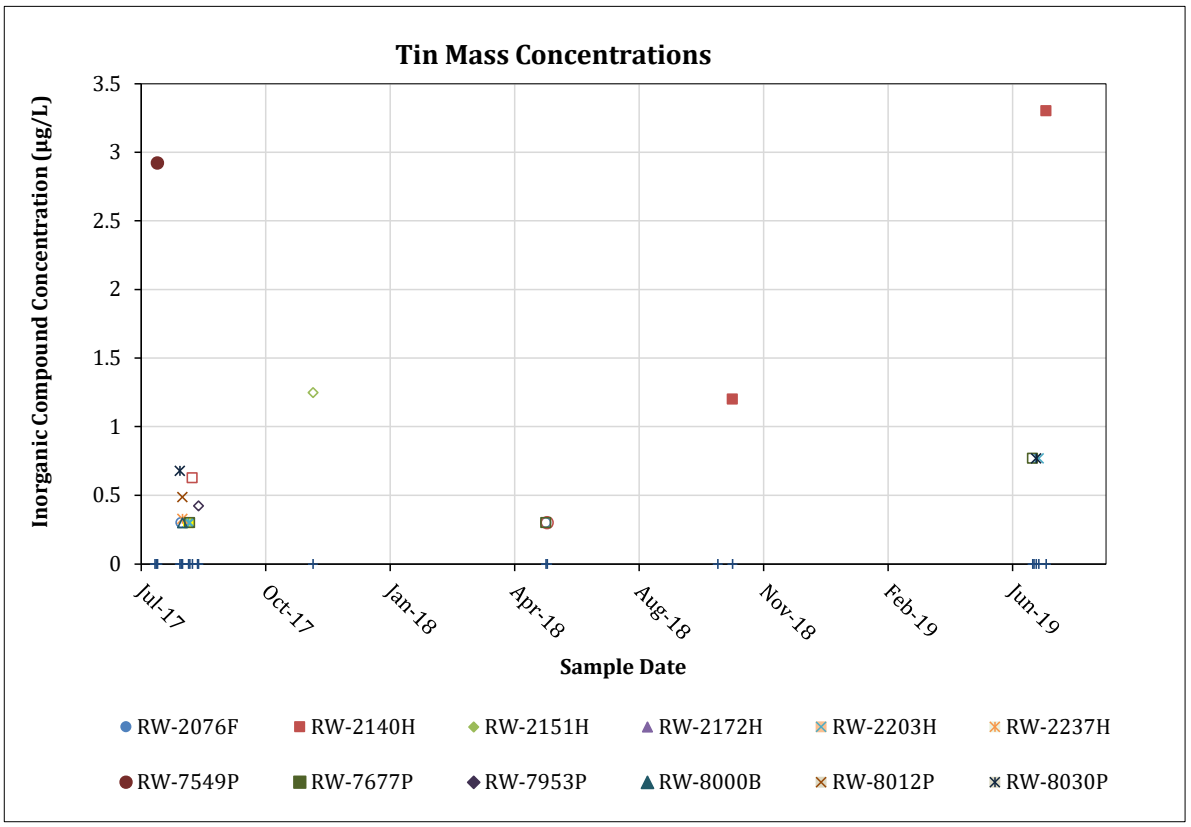
The symbol without fill designates a non-detect result.



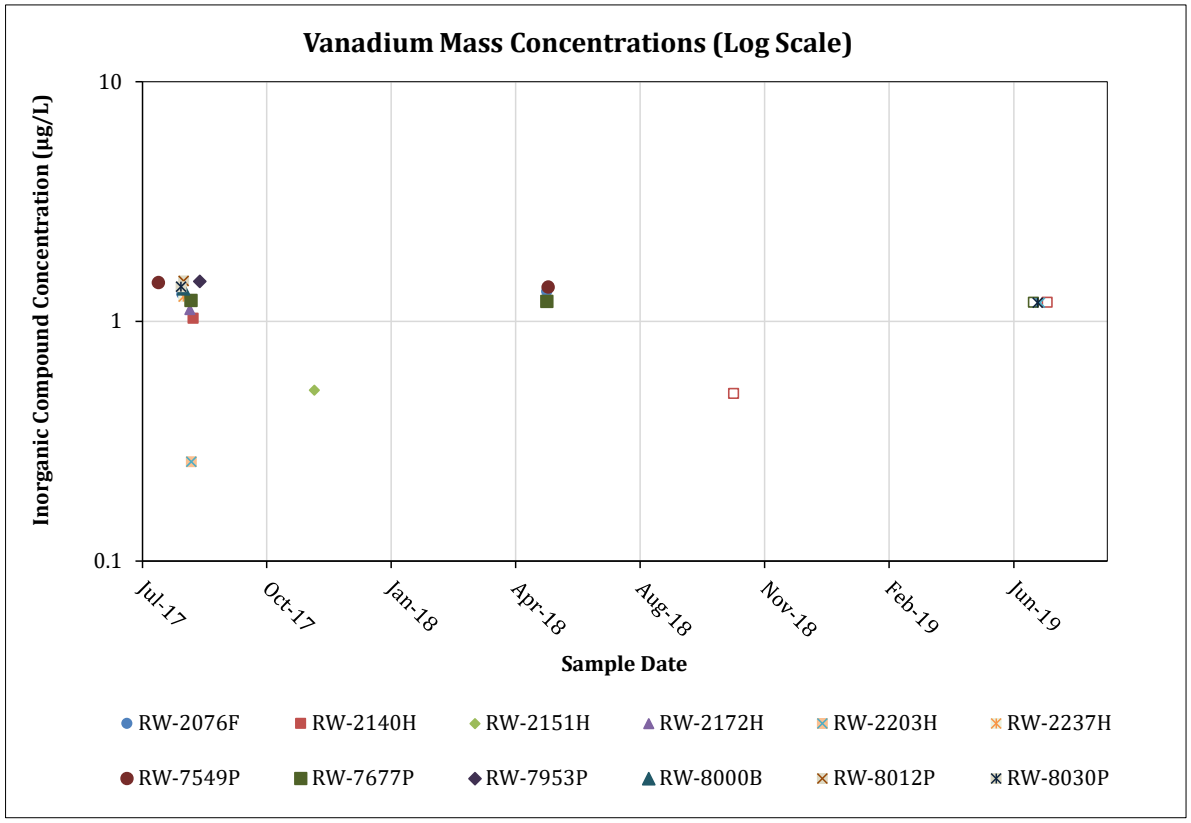


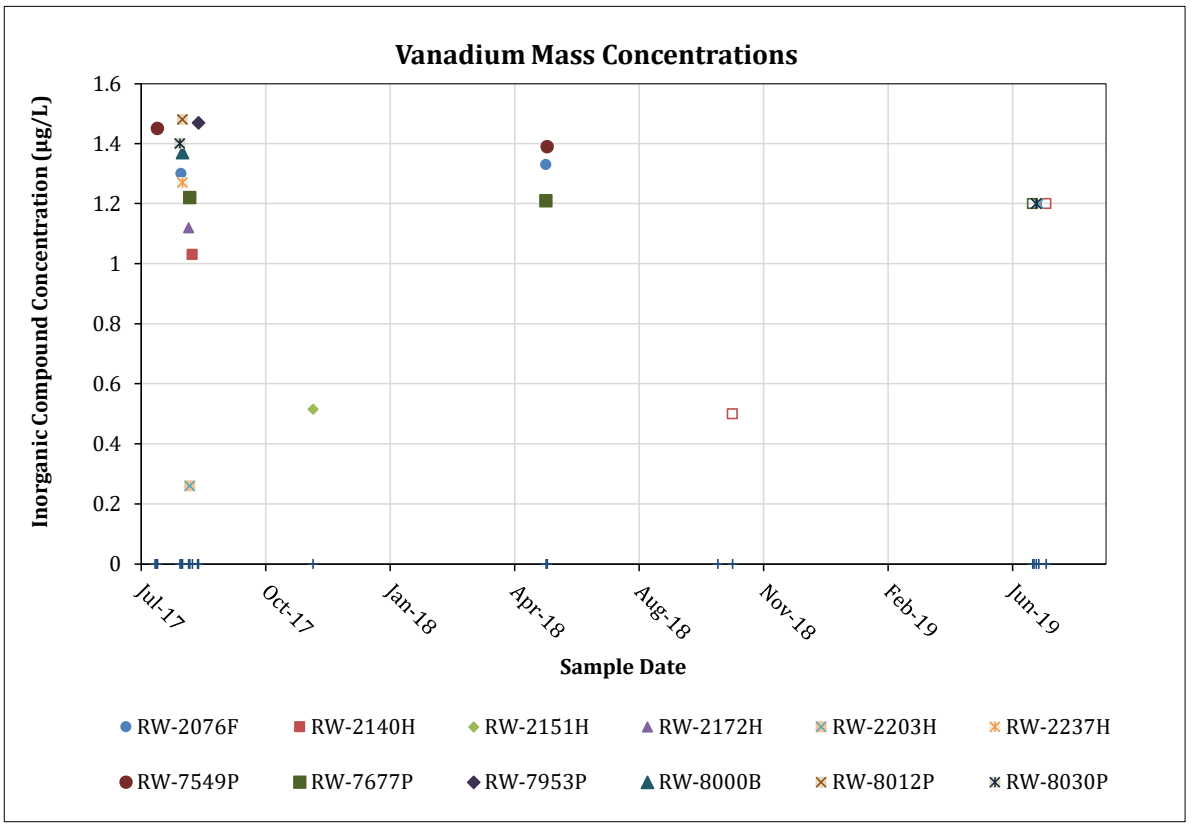
The symbol without fill designates a non-detect result.





The symbol without fill designates a non-detect result.





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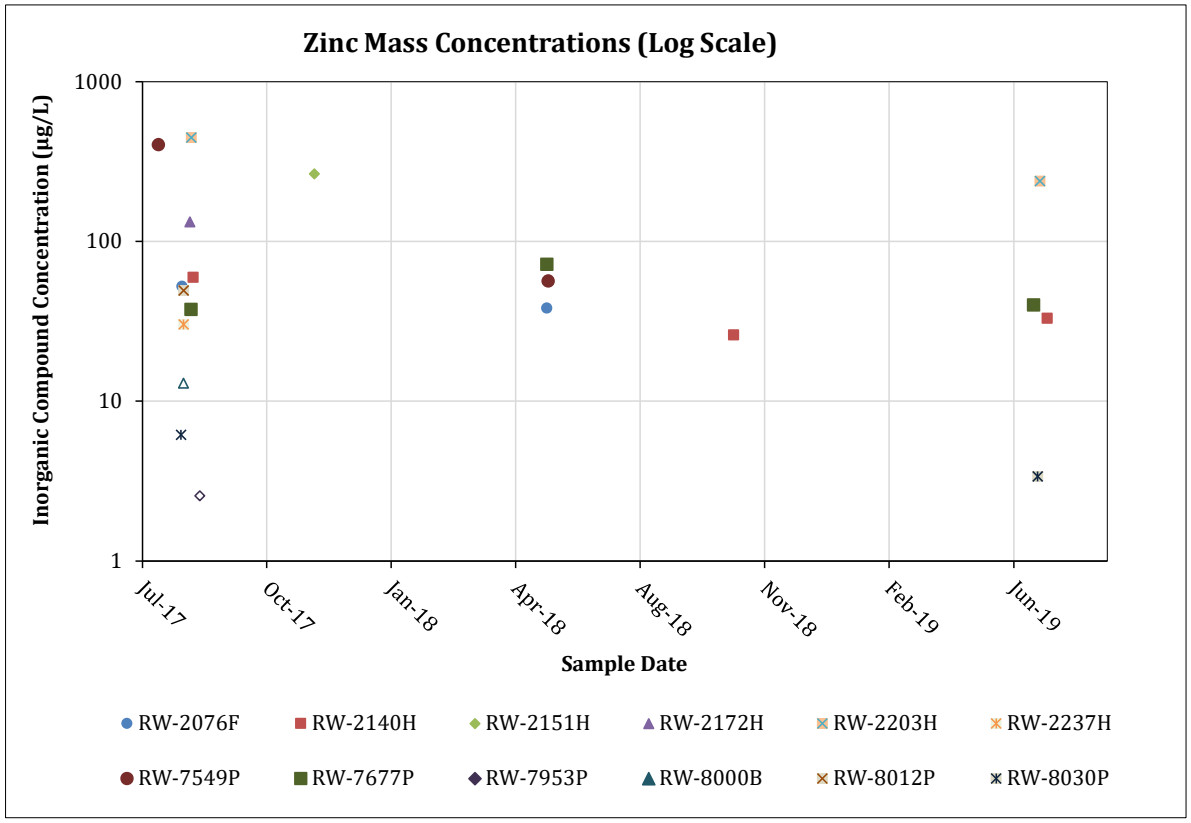

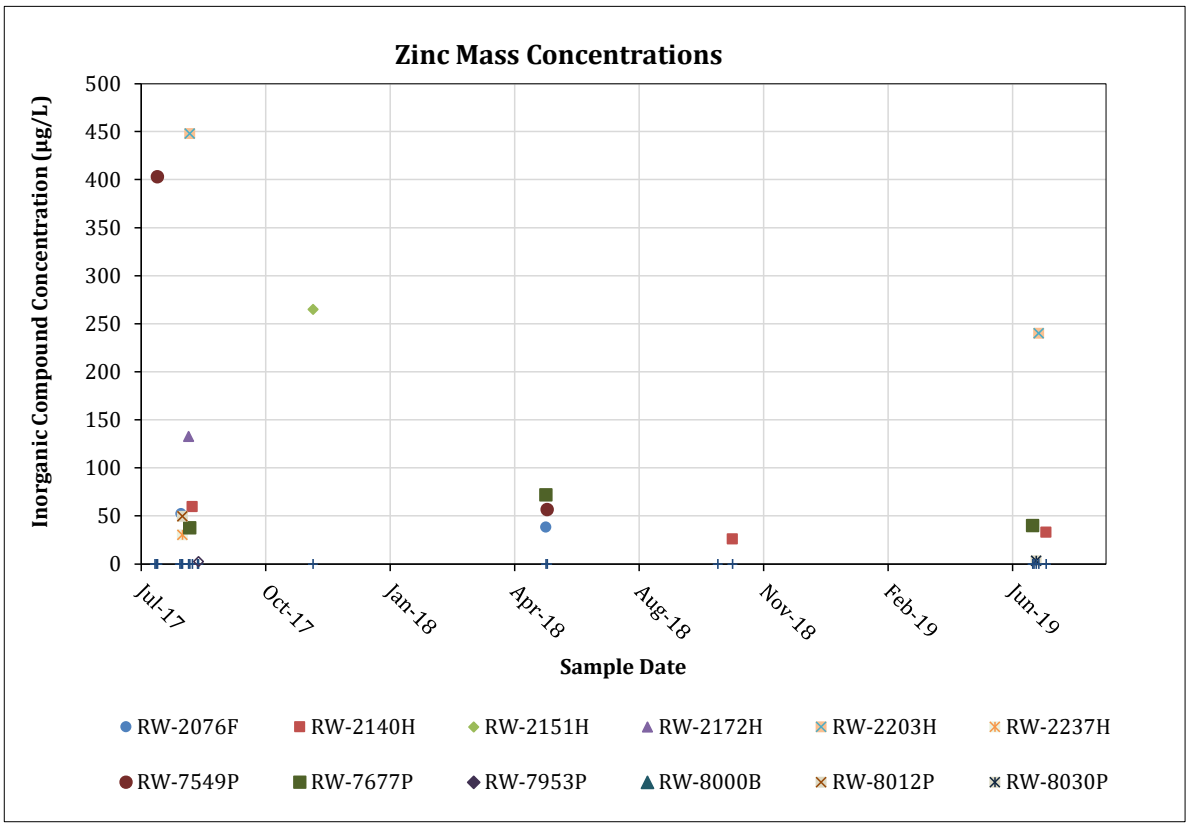

The symbol without fill designates a non-detect result.