

Fort Hall Mine Landfill
1500 North Fort Hall Mine Road
Pocatello, Idaho

2021 Offsite Groundwater Monitoring Report

FINAL

PREPARED FOR:

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Table of Contents

Section 1 Introduction	1-1
1.1 Purpose of the Report.....	1-1
1.2 Site Background	1-1
1.2.1 Site Location and Use	1-2
1.2.2 COC Discharge from the FHML to the PVA.....	1-2
1.2.3 Site Geology	1-2
1.2.4 Site Hydrogeology.....	1-3
1.2.5 Offsite Monitoring and Domestic Well Network.....	1-4
1.2.6 COC Fate and Transport.....	1-5
1.3 Report Organization	1-7
Section 2 2021 Offsite Field Sampling Activities.....	2-1
2.1 Private Property Access.....	2-1
2.1.1 City Monitoring Well Access.....	2-1
2.1.2 Domestic Well Access.....	2-1
2.2 Groundwater Sampling	2-1
2.2.1 Domestic Well Reconnaissance.....	2-2
2.2.2 Groundwater Elevation Measurements	2-2
2.2.3 Groundwater Sampling Procedures.....	2-2
2.2.3.1 City Monitoring Wells.....	2-3
2.2.3.2 Municipal Supply Wells	2-3
2.2.3.3 Domestic Wells.....	2-3
2.2.4 Sample Analysis	2-4
2.3 Decontamination and Investigation-Derived Waste	2-4
2.4 Deviations	2-4
2.4.1 City of Pocatello Monitoring Wells	2-4
2.4.2 City of Pocatello Municipal Supply Wells.....	2-5
2.4.3 Domestic Wells.....	2-5
2.4.4 Bannock County Monitoring Wells.....	2-5
2.4.5 Sample Equipment	2-5
Section 3 Groundwater Monitoring Results.....	3-1
3.1 Groundwater Data Usability Assessment.....	3-1
3.1.1 Precision	3-1
3.1.2 Accuracy.....	3-1
3.1.3 Comparability	3-2
3.1.4 Completeness.....	3-2
3.1.5 Sensitivity	3-2
3.2 Offsite Monitoring and Domestic Well Groundwater Analytical Results.....	3-2
3.2.1 VOCs.....	3-2
3.2.1.1 City Monitoring and Municipal Supply Wells	3-2
3.2.1.2 Domestic Wells.....	3-3
3.2.1.3 Bannock County Monitoring Wells	3-4
3.2.2 Geochemical Parameters	3-4
3.2.2.1 Specific Conductance	3-4
3.2.2.2 pH.....	3-4
3.2.2.3 Redox Conditions	3-4

Section 4 Data Analysis.....	4-1
4.1 Plume Extent.....	4-1
4.2 Statistical Analysis of PCE and TCE.....	4-2
4.2.1 Statistical Approach	4-2
4.2.2 City Monitoring Wells.....	4-3
4.2.3 Municipal Supply Wells	4-3
4.2.4 Domestic Wells.....	4-4
4.2.5 Bannock County Monitoring Wells	4-5
Section 5 Screening-Level Risk Assessment	5-1
5.1 Current and Potential Future Uses of Groundwater	5-2
5.2 HHRA Approach.....	5-2
5.2.1 HHRA Data Evaluation/Hazard Identification.....	5-3
5.2.2 Toxicity Assessment.....	5-3
5.2.2.1 Overview	5-3
5.2.2.2 Noncancer Effects.....	5-3
5.2.2.3 Cancer Effects.....	5-4
5.2.3 Toxicity Values	5-5
5.2.4 Exposure Assessment.....	5-6
5.2.4.1 Site Conceptual Exposure Model.....	5-6
5.2.4.2 Exposure Assessment.....	5-7
5.3 Risk Characterization for Groundwater	5-8
5.4 Risk Characterization for Indoor Air	5-8
5.5 Risk Characterization for Fruits and Vegetables.....	5-9
5.6 Total Human Health Risk.....	5-9
5.7 Uncertainty Analysis.....	5-10
5.7.1 Exposure Assessment.....	5-10
5.7.2 Risk Characterization	5-10
5.7.3 Pathways Not Evaluated Quantitatively	5-11
5.7.4 Conclusions.....	5-11
5.8 Ecological Risk Evaluation	5-11
5.8.1 Terrestrial Plant Exposures and Risks.....	5-12
5.8.2 Terrestrial Bird/Mammal Exposures and Risks	5-12
Section 6 Conclusions and Recommendations.....	6-1
6.1 Results of Offsite and Domestic Well Monitoring	6-1
6.2 Screening Level Risk Assessment	6-2
6.3 Recommendations for 2022 City and Domestic Well Monitoring	6-3
6.3.1 2022 City and Domestic Well Sampling and Analysis	6-3
6.3.2 Evaluate Risk.....	6-3
Section 7 References	7-1

List of Figures

Figure 1-1	Site Location Map
Figure 1-2	Offsite City and Domestic Groundwater Wells
Figure 1-3	Historical Maximum TCE Plume Extent
Figure 1-4	Lower PVA Water Budget
Figure 2-1	Offsite City and Domestic Wells Sampled in 2021
Figure 3-1	2021 Chlorinated Ethene Results for Offsite City and Monitoring Wells
Figure 3-2	2021 Chlorinated Ethene Results for Domestic Wells - North
Figure 3-3	2021 Chlorinated Ethene Results for Domestic Wells – South
Figure 4-1	Tetrachloroethene: Current Plume Extent and Trends Analysis
Figure 4-2	Trichloroethene: Current Plume Extent and Trends Analysis
Figure 4-3	Cross-Section through the Southern Lower Portneuf Valley Aquifer
Figure 5-1	Domestic Water Source Inventory Area Parcel and Well Information
Figure 5-2	Lower PVA Drinking Water Source Inventory Area and Domestic Wells
Figure 5-3	Site Conceptual Exposure Model

List of Tables

Table 2-1	Offsite Well Completion Details
Table 2-2	2021 Offsite Well Sample Collection Information
Table 3-1	City Monitoring and Municipal Supply Wells VOC and Field Parameter Results
Table 3-2	Domestic Supply Wells VOC and Field Parameter Results
Table 4-1	Statistical Summary – Offsite Monitoring, Supply, and Domestic Wells
Table 5-1	Human Health Chemicals of Potential Concern Selection
Table 5-2	Human Health Reasonable Maximum Exposure Parameters
Table 5-3	Human Health Groundwater Non-Cancer Hazard Evaluation
Table 5-4	Human Health Vapor Intrusion Non-Cancer Hazard Evaluation
Table 5-5	Human Health Total Non-Cancer Hazard Quotients - 2021
Table 5-6	Ecological Chemicals of Potential Concern Selection
Table 6-1	2021 Annual Offsite Sampling Plan

Appendices

Appendix A	Table 6-1 from the <i>2020 Offsite Groundwater Monitoring Report</i> - Recommendations for 2021 Annual Offsite Sampling
Appendix B	2021 Annual Offsite Sampling Event Field Documentation
Appendix C	2021 Annual Offsite Sampling Event Laboratory Analytical Results
Appendix D	2021 Annual Offsite Sampling Event Data Usability Assessment Report
Appendix E	2021 Annual Offsite Sampling Event Analytical Laboratory Data Packages
Appendix F	City and Domestic Well Chlorinated Ethene and Geochemistry Time Series Plots

Acronyms and Abbreviations

µg/L	micrograms per liter
alpha	significance level
alluvium	alluvial sediments
bgs	below ground surface
BHHRA	baseline human health risk assessment
CF	confidence factor
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
CTE	central tendency exposure
DO	dissolved oxygen
DWSIA	domestic water source inventory area
EcoSSL	EPA's Ecological Soil Screening Levels
EPA	U.S. Environmental Protection Agency
ft/ft	feet per foot
FHML	Fort Hall Mine Landfill (the Site)
GPS	global positioning system
HI	hazard index
HQ	hazard quotient
IDGW	Idaho Groundwater Rule
IDEQ	Idaho Department of Environmental Quality
IDWR	Idaho Department of Water Resources
IRIS	Integrated Risk Information System
IUR	inhalation unit risk
J	estimated result
LANL	Los Alamos National Laboratory
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
LDS	Latter-Day Saints (The Church of Jesus Christ of Latter-Day Saints)
LOAEL	Lowest-observed-adverse-effect level
LPRV	Lower Portneuf River Valley
mg/L	milligrams per liter
MCL	maximum contaminant level
MDL	method detection limit
MS/MSD	matrix spike/matrix spike duplicate
µS/cm	microsiemens per centimeter
MW	monitoring well
n	number of data points
NCEA	National Center for Environmental Assessment
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
U	nondetect result
UJ	estimated nondetect result
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. 8 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 to evaluate a chemical of concern (COC) plume emanating from the Fort Hall Mine Landfill (FHML) (the Site) (**Figure 1-1**). Field activities, laboratory results, data validation, and updated COC distribution and statistical trends are presented herein.

1.1 Purpose of the Report

The 2021 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 2021 offsite monitoring event was to assess the impacts of 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 2021 offsite groundwater sampling event
- Update the lateral trichloroethene (TCE) groundwater plume extent downgradient of the FHML
- Evaluate COC trends in offsite City of Pocatello (City), Bannock County, 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 2022 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 7 miles southeast and hydrologically upgradient of the City (**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 nonhazardous 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, 2021).

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 because of 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 1991 at varying frequency. **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 that impacts continue, with 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 volcanoclastics 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 comprise 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 below ground surface (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).

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 volcanoclastics” 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 1-4**).

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 (unitless), 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). The contact between the Upper Gravels and underlying Tertiary 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 was measured at upgradient well pair MW-116S/D in 2019, 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 and offsite in the PVA to evaluate the impacts of the FHML to groundwater (**Figure 1-2**). The offsite groundwater 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. These wells are considered to be on-site; however, there are included herein for context. Additionally, there are eight Bannock County monitoring wells located outside the FHML property boundary located on private property (**Figure 1-2**). Three of these compose the currently sampled offsite monitoring well group. These wells 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, except for MW-116S (CDM Smith 2020c, 2021).
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. Approximately 10 of these 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 46 domestic or irrigation groundwater wells (designated with “RW”) in the PVA have been monitored at least once between 1991 and 2021 to assess the extent of the offsite groundwater plume and to monitor COC concentrations within and surrounding impacted residential domestic water wells. CDM Smith samples most of these domestic wells annually.

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. Under aerobic conditions, tetrachloroethene (PCE) is considered recalcitrant (i.e., it does not degrade biologically), 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.

However, under anaerobic conditions, PCE and TCE can undergo biotic transformation via anaerobic reductive dechlorination, in which bacteria use PCE and TCE 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 vinyl chloride (VC) to ethene and/or ethane and chloride. The most common dechlorination pathway is the 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 transition 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 side of Fort Hall Canyon. Generally, anaerobic conditions are interpreted based on concentrations of dissolved oxygen (DO) greater than 1 milligram per liter (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, 2021b). Additionally, oxidation-reduction potential (ORP) is generally positive under aerobic conditions and negative under anaerobic conditions. Within the PVA, geochemical conditions are aerobic (i.e., oxygen is present, ORP is positive).

A summary of geochemical conditions recently observed is provided below:

- On-Site Cell 1 Bannock County Monitoring Wells (CDM Smith 2021b)
 - Monitoring wells that were aerobic (with DO greater than 1 mg/L) included MP-3, MP-4, MW-101S, MW-109S/D, MW-110D, MW-112M/D, MW-118D, MW-119S/D, MW-120D, and MW-123.
 - Monitoring wells that were anaerobic (with low DO less than 1 mg/L, low/negative ORP, and ferrous iron greater than 0.2 mg/L) included MP-1, MP-2, MW-105S/D, MW-110S, MW-111S/D, MW-113S/D, and MW-120S.
 - Sulfate ranged from approximately 2.5 J to 190 mg/L. The lowest concentration was observed in MW-111S (2.5 J mg/L), while the highest observed concentration was in MW-105S (190 mg/L).
 - Very high levels of methane (greater than 1 mg/L) were detected in MW-111S/D (2.8 and 4.4 mg/L, respectively) and MW-113S/D (4.4 and 1.1 mg/L, respectively) (Table 3-3). Methane was detected at lower levels (approximately 1–34 µg/L) in MP-2, MW-105S/D, MW-110S/D, MW-118D, and MW-123.
- Offsite Dissolved Phase Plume Wells (CDM Smith 2021b, 2020c)
 - Wells that were aerobic in spring 2021 included MW-103S, MW-115S, and RW-2076F, with DO ranging from approximately 7.21 to 7.98 mg/L and ORP ranging from approximately 125 to 161.9 millivolts (CDM Smith 2021b).
 - Except for MW-38, all City monitoring, municipal supply, and domestic supply wells exhibited aerobic conditions in 2020 (DO greater than 1 mg/L and a positive ORP) (CDM Smith 2020c).
 - In 2020, DO and ORP readings indicated anaerobic conditions in MW-38, which exhibited low DO and negative ORP (CDM Smith 2020c).

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 Off-Site Field Groundwater Sampling Activities: This section presents a summary of the 2021 offsite sampling activities, including private property owner correspondence, groundwater sampling and analysis, decontamination and handling of investigation-derived waste, and any deviations from the QAPP (CDM Smith 2019a).

3.0 Groundwater Monitoring Results: This section presents the results of the 2021 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 updated SLRA 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 2021 offsite groundwater sampling activities at the Site.

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

The following appendices are also provided:

- **Appendix A** – Table 6-1 from 2020 Annual Offsite Groundwater Monitoring Report
- **Appendix B** – 2021 Annual Offsite Sampling Event Field Documentation
- **Appendix C** – 2021 Annual Offsite Sampling Event Laboratory Analytical Results
- **Appendix D** – 2021 Annual Offsite Sampling Event Data Usability Assessment Report
- **Appendix E** – 2021 Annual Offsite Sampling Event Analytical Laboratory Data Packages
- **Appendix F** – City and Domestic Well Chlorinated Ethene and Geochemistry Time Series

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Section 2

2021 Offsite Field Sampling Activities

During the 2021 annual offsite sampling event (June 21–27), groundwater samples were collected from domestic wells, municipal supply wells, and City of Pocatello and Bannock County monitoring wells. Offsite well construction details are presented in **Table 2-1**. All 2021 offsite sample locations are presented in **Table 2-2** and on **Figure 2-1**. All June 2021 offsite well data will be presented and analyzed herein, except for offsite Bannock County monitoring wells MW-103S and MW-115S, which are sampled semiannually and discussed under a separate cover (CDM Smith 2021b).

The 2021 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 1-week period only. Additionally, the nearby residents leasing the land from the LDS Church were notified of sampling in person or via phone during the event.

2.1.2 Domestic Well Access

Prior to the annual offsite sampling event, each property owner was contacted to confirm their receipt of 2020 sampling data (if their well was sampled) and to schedule a sampling appointment. If not already on file, property access consent forms were obtained for each private property sampled in 2021. 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.

2.2 Groundwater Sampling

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

Appendix B contains the field documentation for the 2021 annual offsite sampling event, including equipment calibration forms, well purge forms, sample chain-of-custody forms, the field logbook, and sampling event photo log. Previously sampled wells were not photographed unless there was a change from 2020 (CDM Smith 2020a).

2.2.1 Domestic Well Reconnaissance

Efforts were conducted in 2019 and 2020 to confirm the existence, location, and general characteristics of the wells and incorporated into the CDM Smith database, as described in previous offsite sampling reports (CDM Smith 2020a, 2020c). 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. Field teams verified global positioning system (GPS) coordinates via a cellular phone application for each domestic well. Field-verified coordinates and lithology from well logs were incorporated into the FHML conceptual site model and used to update site maps and geologic cross sections.

With each subsequent annual domestic well sampling event, updated information obtained from property owners via telephone or in-person during sampling the well is updated in the CDM Smith database and communication log.

2.2.2 Groundwater Elevation Measurements

Synoptic water levels were not collected for City monitoring wells and offsite monitoring wells during the 2021 offsite monitoring event. Domestic wells are not opened by sampling teams, and water is only accessible by a spigot at the well head. Groundwater elevation was measured at each individual well at which a pump was deployed for sampling; these measurements are listed on well purge forms (**Appendix B**) but are not presented visually herein.

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 Pro Digital Sampling System or a Horiba U-50 Series multiparameter water quality meter:

- DO
- ORP

- pH
- Turbidity
- Temperature
- Specific conductivity

2.2.3.1 City Monitoring Wells

City monitoring 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 (**Table 2-2**). 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 **Appendix B**.

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 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 because of historical contamination.

By City request, field parameters were measured with grab samples every 3 minutes for approximately 15 minutes or until field parameters were stable, whichever was shorter. The grab samples were sealed in a water quality 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 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.

Groundwater was purged from domestic wells at the maximum flow rate prior to field parameter measurement. For wells with unknown well construction, 300 gallons were purged at the maximum flow rate. For wells with known well construction, the minimum purge volume was either 3 well volumes or 300 gallons, whichever was lower. Volumes purged from each well are presented in **Table 2-2**. Purge water was disposed according to the owner’s preferences, typically in the lawn or a nearby field and usually diverted with a garden hose.

After purging the minimum volume, water quality parameters were collected every 3 to 5 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. Purge forms for domestic wells are provided in **Appendix B**.

RW-7200P was sampled for the first time during this sampling event. This well was photographed, and GPS coordinates were collected during the 2020 offsite event (CDM Smith, 2020c).

2.2.4 Sample Analysis

Samples were analyzed according to the QAPP (CDM Smith 2019a) and analyzed parameters are summarized in **Table 2-2**. All 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 2021.

2.3 Decontamination and Investigation-Derived Waste

All nondedicated 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, reuse, 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 2021 offsite monitoring event:

- The shallow- and intermediate-screened intervals of PA-4 had inconsistent and poor flow; there was not enough water to sample. Because of difficulties at the shallower intervals, the deepest interval was not sampled either.
- Because the portable bladder pump should be deployed at a depth of approximately 173 feet bgs at PA-7, compressed gas is required for sampling. Compressed gas cylinders are transported in field trucks. Because PA-7 is located in an active farm field, PA-7 was inaccessible by vehicle and could not be sampled with compressed gas.

- The deepest screened interval at PA-8 was not sampled because of a faulty compressor/controller and insufficient time to troubleshoot.

2.4.2 City of Pocatello Municipal Supply Wells

The following deviations with respect to City municipal supply wells occurred during the 2021 offsite monitoring event:

- Muni-well-14 and muni-well-33 were sampled without parameter stabilization because the City could not run the pump longer than about 15 minutes. Because the wells have a very high flow rate, discharging high amounts of water from the well into the street alarms nearby residents and results in complaints to the City.

2.4.3 Domestic Wells

The following deviations with respect to domestic monitoring wells occurred during the 2021 offsite monitoring event:

- The property owner for well RW-2213F changed since 2020. The 2020 sampling results packet and a blank property access consent form with return request were sent to the new owners prior to the 2021 sampling event. Attempts were made to contact the new owner in person during the sampling event without success; thus, RW-2213F was not sampled in 2021.
- RW-2203H is typically sampled with low-flow sampling procedures (SOP 1-12) because the wellhead is easily detached, and the property owner does not use the well. However, in 2021, the water level was too low to set the pump above the existing well infrastructure; thus, RW-2203H was not sampled in 2021.
- RW-7091R is sampled from a hand pump to bypass the groundwater treatment system. Therefore, during field parameter measurements and sample collection, groundwater could not be pumped at a consistent flow rate. After the minimum purge volume is met via the property owner's sprinkler system, the well was pumped manually for 4 minutes prior to the first field parameter measurement; the well was manually pumped for an additional 22 minutes during field parameter measurements. Because of the physical demand of manual pumping, field parameters were measured every 3 minutes instead of 5 minutes. At sample collection, pH readings were just outside of the acceptable range for stabilization: 7.97, 7.99, and 8.09 standard units. Therefore, sampling at RW-7091R deviated from SOP 6-1.

2.4.4 Bannock County Monitoring Wells

MW-116S was added to the offsite sampling event because it was not sampled during the spring 2021 event as originally planned.

2.4.5 Sample Equipment

Both of the Horiba water quality meters had malfunctioning DO sensors during the first several days of the sampling event. The issue was unable to be fixed via troubleshooting with the equipment rental company. Thus, for some wells, recorded DO readings were higher than expected for groundwater (i.e., approximately 8–9 mg/L at stabilization). The field team recorded on well purge forms where DO readings were suspected to be inaccurate. The potentially affected wells were sampled on June 21, 22, and 23, 2021. For these wells, if DO

did not stabilize, other purge parameters were used to determine when parameters had stabilized adequately for sampling.

Section 3

Groundwater Monitoring Results

This section presents the groundwater monitoring results of the 2021 annual offsite sampling event. **Figure 2-1** presents the groundwater wells sampled during this event, which include City municipal supply wells and domestic wells. 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 for Inorganic Superfund Methods Data Review (EPA 2020), and National Functional Guidelines for Organic Superfund Methods Data Review (EPA 2020).

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 (RLs), and compound identification and quantification were included in the review.

CDM Smith validated laboratory analytical data with the EQuIS Data Quality Module 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 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 RLs 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 nonrejected 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 RLs achieved for all samples were adequate to meet the data quality objectives.

3.2 Offsite Monitoring and Domestic Well Groundwater Analytical Results

Analytical results from the 2021 annual offsite sampling event are discussed below.

3.2.1 VOCs

Detections of VOCs are presented in **Tables 3-1** (City wells and MW-116S) and **3-2** (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 the 2021 analytical data and all available historical TCE and PCE data. Time series plots in **Appendix F** present available data for chlorinated ethenes and geochemical parameters by well.

3.2.1.1 City Monitoring and Municipal Supply Wells

Consistent with 2020 results (CDM Smith 2020c), none of the City monitoring or municipal supply well VOC results exceeded the EPA MCL or IDGW primary standard (**Table 3-1**).

However, TCE was detected in the following wells:

- MW-37 (1.6 and 1.3 µg/L)
- MW-38 (2.2 µg/L, 2.5 µg/L, and 2.5 µg/L, for the shallow, middle, and deep intervals, respectively)
- PA-1 (1.5 µg/L)
- PA-3 (1.2 µg/L)
- PA-5 (0.6 J µg/L)

- Muni-well-14 (1.2 µg/L)
- Muni-well-33 (1.9 µg/L)

PCE was only detected in muni-well-33 (0.39 µg/L).

3.2.1.2 Domestic Wells

TCE exceeded the MCL and IDGW primary standard in the following wells (**Table 3-2**):

- RW-2076F (24 µg/L)
- RW-2140H (26 µg/L)
- RW-2151H (14 µg/L)
- RW-2172H (21 µg/L)
- RW-2237H (8.6 µg/L)
- RW-7677P (5.3 µg/L)

These results are consistent with 2020 findings (CDM Smith 2020a). TCE was detected below the MCL in the following domestic wells:

- RW-5898B1 (0.26 µg/L)
- RW-7070B (3.2 µg/L)
- RW-7091R (1 µg/L)
- RW-8000B (4.1 µg/L)
- RW-8030P (4.6 µg/L)
- RW-8048P (3.8 µg/L)
- RW-8284P (4.9 µg/L)

PCE exceeded the MCL and IDGW primary standard only in RW-2172H (5.4 µg/L) and was detected in the following domestic wells (**Table 3-2**):

- RW-2076F (4.6 µg/L)
- RW-2140H (4.5 µg/L)
- RW-2151H (2.7 µg/L)
- RW-2237H (1.2 µg/L)
- RW-7677P (1.1 µg/L)
- RW-8000B (0.84 µg/L)
- RW-8030P (0.8 µg/L)
- RW-8284P (0.54 µg/L)

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

- RW-2076F (1.3 µg/L)
- RW-2140H (1.1 µg/L)
- RW-2151H (0.64 J µg/L)
- RW-2172H (1.1 and 1.3 µg/L)
- RW-7677P (0.29 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 toluene in RW-7200P (0.43 J µg/L).

3.2.1.3 Bannock County Monitoring Wells

MW-116S was the only offsite Bannock County monitoring well sampled during the 2021 offsite sampling event. PCE (4.2 µg/L), TCE (27 µg/L), and cis-1,2-DCE (1.3 µg/L) were detected, and TCE exceeded the MCL and IDGW Primary Standard (**Table 3-1**).

3.2.2 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, and ORP) are presented in **Tables 3-1** (City wells and MW-116S) and **3-2** (domestic wells). Additional geochemical parameters were not measured in the 2021 annual offsite sampling event.

3.2.2.1 Specific Conductance

Specific conductance was measured at all sampled wells. Results are presented in **Tables 3-1** and **3-2**. Relatively high specific conductance (greater than 1,000 microsiemens per centimeter [µS/cm]) was observed at wells MW-116S, RW-2076F, RW-2140H, RW-2172H, RW-2879M, RW-8209P, and RW-8249. All other locations had specific conductance less than 1,000 µS/cm.

3.2.2.2 pH

pH was measured at all sampled wells. In City monitoring and municipal supply wells (**Table 3-2**), pH ranged from 6.81 to 9.14 standard units. pH levels outside of the IDGW Secondary drinking water standard (range 6.5 to 8.5 standard units) were observed in PA-8 shallow and intermediate intervals (9.14 and 9.07, respectively). In domestic wells and MW-116S, pH ranged from 6.93 to 8 (**Table 3-2**), and no pH levels outside of the IDGW Secondary drinking water standard (range 6.5 to 8.5 standard units) were observed.

3.2.2.3 Redox Conditions

DO, ORP, sulfate, ferrous iron, and methane are redox parameters used to evaluate reducing conditions at a location. 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.

In 2021, all City monitoring, municipal supply, domestic supply wells, and MW-116S exhibited aerobic conditions, as indicated by DO greater than 1 milligram per liter (mg/L) (**Tables 3-1 and 3-2**). This is generally consistent with 2020 results (CDM Smith 2020c). However, DO readings from the following wells were suspected to be erroneously high because of faulty water quality meters (**Section 2.4.5**): Muni-Well-14, Muni-Well-33, MW-37, PA-1, PA-3, PA-8, RW-2151H, RW-2172H, RW-7091R, RW-7200P, RW-7586P, RW-7677P, RW-7773P, RW-8000B, RW-8030P, and RW-8249P. DO in RW-8105PS was significantly lower than in other wells (1.54 mg/L).

Negative ORP readings were observed at domestic supply wells RW-2151H, RW-8105PS, and RW-8209P, and City well MW-38. ORP readings were positive in all other sampled wells.

In 2020, MW-38 exhibited low DO (less than 1 mg/L), negative ORP, low pH, high turbidity (groundwater was black), and very high specific conductivity. These results were not repeated in 2021, except that ORP was negative in the deepest screened interval sample (121 to 130 feet bgs).

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Section 4

Data Analysis

4.1 Plume Extent

Groundwater sampling results collected from the spring semiannual and offsite 2021 monitoring events were used to update the current lateral extents of PCE and TCE groundwater plumes via data interpolation with modeling software Leapfrog Works, version 2.2.2. These updated isoconcentration contours are presented in **Figure 4-1** (PCE only, 5 µg/L) and **Figure 4-2** (TCE only, 5 and 100 µg/L) with June 2021 results. **Figure 4-3** shows a cross-section through the southern Lower PVA, including the most current TCE isoconcentration contours.

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 offsite concentrations of PCE occurred in RW-2076F and RW-2172H and exceeded the MCL.

As shown in **Figures 4-2** and **4-3**, the TCE plume has a similar footprint to PCE, but it extends 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 distal edge of the 5 µg/L isoconcentration contour is currently estimated to be in the vicinity of RW-8284P. As with the PCE plume, there is little bounding data available in the offsite area between the remediation system and 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 estimated and manually adjusted. Consistent with previous sampling events, the highest offsite concentrations of TCE exceeded the MCL and occurred in RW-2076F, MW-116S, and MW-2140H. Additionally, TCE was detected within the Lower PVA at the most distal well monitoring locations, muni-well-14 and muni-well-33. TCE was detected above the MCL at muni-well-33 in spring 2018; however, sampling results collected between September 2018 and June 2021, have been below the MCL.

The data used for isoconcentration interpolation include annual 2021 sampling results from domestic wells, City monitoring wells, and municipal supply wells (#14 and #33) (presented herein), and spring 2021 sampling results from Cells 1, 2, and 4, presented under a separate cover (CDM Smith 2021b). Thus, approximately 100 locations on-site and offsite contribute to the contouring.

A description of the model development is provided in the Final QAPP (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 2021. 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 because of high RLs. 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.

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, domestic wells, and MW-116S.

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 sampled in 2021 were analyzed for statistically significant concentration trends. Trends were evaluated with Mann-Kendall and Theil-Sen statistics to identify datasets with increasing, decreasing, stable trend, or no trend.

Statistical trend 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.

Mann-Kendall analysis compares each data point to later data points in the same data set to develop a summation statistic, the S, based on all the individual data point comparisons (EPA 2009). The magnitude of S illustrates the variance of the data set, and the sign of S corresponds to the trend. The probability (p-value) is the test statistic used to determine whether the trend is statistically significant at the alpha level chosen. The confidence level, or confidence factor (CF), is the p-value subtracted from one, as a percentage. The coefficient of variation is the data set standard deviation divided by its mean and is used to distinguish between data sets with no trend and a stable trend.

The Mann-Kendall trend result is based on the following parameters, as described in the Mann-Kendall Analysis Decision Matrix (Aziz et al. 2003):

- Increasing (S greater than 0, CF greater than 95%)
- Probably increasing (S greater than 0, CF between or equal to 95%, and 90%)
- No trend (S greater than 0, CF less than 90%)
- Stable (if S is less than or equal to zero and coefficient of variation less than 1)
- Probably decreasing (S less than 0, CF between or equal to 95%, and 90%)
- Decreasing (S less than 0, CF greater than 95%)

All available data was used in the analysis. The groundwater treatment system began operation in 2002; however, many wells did not have at least six data points since 2002, so all data were used.

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. **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. 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 time frame. For most wells, there are three to five data points between 2018 and 2021. City monitoring wells or intervals not sampled in June 2021 were not evaluated.

The statistical summary for City monitoring wells is presented in **Table 4-1**. **Figures 4-1** and **4-2** present the offsite monitoring well trend summary for PCE and TCE, respectively. Datasets with at least six data points and fewer than 50% MDL results were available for PA-1, PA-3, PA-5 (TCE only), and PA-8 (shallow and intermediate intervals, TCE only). Data from Bannock County monitoring wells (CDM Smith 2021b) is shown for completeness. The statistical summary is as follows:

- PCE displayed decreasing trends in all wells with sufficient data to analyze: PA-1, PA-3, and muni-well-33.
- TCE displayed decreasing trends in all wells with sufficient data to analyze: PA-1, PA-3, PA-5, PA-8 (shallow and deep intervals), muni-well-14, and muni-well-33.
- Except for TCE in PA-5 ($p = 0.025$), all p -values associated with Mann-Kendall trend results were very small, on the order of 0.001 or smaller.

These results suggest that the COC plume is stable or retracting.

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 4-1** and **4-2** 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.

There are no sampling results available for the municipal supply wells between 2005 and 2018, so the entire historical datasets were evaluated. In 2022, both wells will have at least six data points; thereafter, trends can be analyzed from 2018 to present.

The statistical summary is as follows:

- In muni-well-14, TCE ($p=0.0024$) displayed a decreasing trend.

- In muni-well-33, PCE ($p = 0.00081$) and TCE ($p = 0.0013$) displayed decreasing trends over the entire historical datasets.

These results are consistent with 2020 (CDM Smith 2020c) and suggest that the COC plume is stable or retracting.

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.

For most domestic wells, significant time gaps existed in the datasets, leaving fewer than six data points between 2002 and 2021. Most wells have data four to five data points between 2017 and 2021. Therefore, the entire date range was included in the analysis for all locations. The RW-8030P dataset was analyzed between 2011 and 2021 because this well has been sampled more frequently.

The statistical summary is presented in **Table 4-2**. **Figures 4-1** and **4-2** present the offsite monitoring well trend summary for PCE and TCE, respectively. Twelve domestic wells met the criteria for statistical trend analysis. The statistical summary is as follows:

- PCE exhibited stable trends in RW-2140H, RW-2237H, RW-7677P, RW-8000B, RW-8012P, and RW-8030P.
- TCE exhibited stable trends in RW-2237H, RW-8000B, and RW-8030P.
- No statistically significant trend was exhibited by TCE in RW-7505P or RW-8012P.
- PCE exhibited decreasing trends in RW-2076F, RW-2151H, and RW-2172H.
- TCE exhibited decreasing trends in RW-2076F, RW-2140H, RW-2151H, RW-2172H, RW-5898B1, RW-7549P, and RW-7677P.

Notably, domestic wells with some of the highest TCE concentrations (RW-2140H, RW-2076F, 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 because of 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 complete containment of the COC plume from FHML has not been achieved and that COC discharge continues to impact the Lower PVA.

4.2.5 Bannock County Monitoring Wells

MW-116S is located on private property with RW-2140H and was sampled during the 2021 offsite annual event. For the complete historical datasets (January 2000 to present), the PCE and TCE statistical trend results are as follows:

- PCE: stable trend ($p = 0.23$)
- TCE: stable trend ($p = 0.71$)

From July 2016 to July 2021, the PCE and TCE statistical trend results are as follow:

- PCE: probably increasing ($p = 0.060$), with a confidence level of 94%
- TCE: stable trend ($p = 0.18$)

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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 2021:

- 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 and 2020 as reported in (CDM Smith 2020c). The results of the 2019 and 2020 SLRA have been retained in several tables in this report for ease of comparison with the outcomes of the SLRA based upon the 2021 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 2021 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 COCs 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 2021 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 because of 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 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 because of 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 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 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 RL; and (2) detection of metals above the Federal Primary Drinking Water MCLs. The dataset used for this evaluation consists of the samples collected in 2021 from the offsite Bannock County and City monitoring wells, City municipal supply wells, and residential/domestic wells (42 locations total). TCE and PCE are the primary VOCs that were detected in groundwater within the DWSIA (**Table 5-1**). TCE was detected in 26 wells at concentrations ranging from 0.26 µg/L at PA-8 to 29 µg/L in RW-2076F. PCE was detected in 13 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 noncancer 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 noncancer effects.

5.2.2.2 Noncancer 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 noncancer 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 adverse effect, and the lowest dose that does produce an effect. These are referred to as the

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.

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), noncancer 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, or the reference concentration (RfC), with units of milligrams per cubic meter 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 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 2021a). 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 sources of

information that are the most current, are transparent and publicly available, and which 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 2021b). All toxicity values used in this assessment were taken from the most recent version of the RSL tables (May 2021).

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 (e.g., 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 noncancer hazards because noncancer hazards are the more sensitive endpoint compared to cancer risks for the COPCs evaluated (i.e., PCE and TCE). The potential for noncancer 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 noncancer 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, noncancer 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, 2020, and 2021 dataset. In 2021, 10 of the 42 wells have HQ values that exceed the threshold of 1. Six of these 10 wells also exceeded the HQ threshold of 1 in 2019; eight of these wells had exceedances in 2020. Wells with HQ values greater than 1 are shaded gray. In 2021, HQ values ranged from 2 to 10 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 noncancer 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 upward 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 composing 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 2021 (with results from 2019 and 2020 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 because of 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 upward through unsaturated soils toward 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**, in 2021 none of the 42 wells had VI HQ values greater than 1. Wells with historical HQ values greater than 1 are shaded gray.

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 because of 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 in 2021; values are displayed to one significant

digit. As seen, 12 of the 42 wells assessed in 2021 have HQ values that exceed the threshold of 1, with HQ values ranging from 2 to 11 for TCE. All PCE HQ values were less than 1. The magnitude of exceedances is consistent with those observed in 2020 and has declined from a maximum HQ of 15 in 2019.

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 noncancer 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 because of 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, based on historical groundwater concentrations, HQ values for TCE and possibly PCE were slightly greater than 1 with HQ values of 2 based on VI exposure. However, more recent sampling conducted in 2021 indicates all VI HQs are less than or equal to 1. The following sections describe the uncertainties associated with the estimated 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 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 or less 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 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 data used in models and 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 because of 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 (i.e., HQ values are greater than 1) based on ingestion of groundwater. Vapor intrusion exposure for select properties resulted in a HQ of 2 based on sampling conducted in 2019 and 2020. Sampling in 2021 at two of these properties resulted in predicted HQ values that are less than or equal to 1. One property was not resampled; therefore, it is unknown if the VI-based HQ value has changed.

It is important to note that HQ values of 2 may not necessarily be indicative that exposures are unacceptable. This is because HQ estimates are based on conservative exposure assumptions (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 because of groundwater being used as a drinking water source and application of groundwater to plants. Risks were evaluated for terrestrial receptors only; aquatic and semiaquatic receptors were not evaluated because 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

Potential risks due to the use of groundwater as an irrigation source for crops were not evaluated 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 4.2, 2020). 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 NOAEL and LOAEL 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 collected in 2019, 2020, and 2021. 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's 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 2021 offsite monitoring event sampling results (**Tables 3-1 and 3-2, 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).
- Where analyzed, PCE and TCE trends were decreasing in muni-well-14 and muni-well-33 (**Table 4-1**).
- 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 MW-37, MW-38 (all three intervals), PA-1, PA-3, and PA-5. PCE was not detected in any of the wells sampled.
- In general, trends that could be evaluated using the historical datasets indicated decreasing trends (for PA-1, PA-3, PA-5, and PA-8) for PCE and 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 without more recent data.

- **Domestic Supply Wells:**

- TCE was detected and exceeded the EPA MCL and IDGW primary standard in samples collected from RW-2076F, RW-2140H, RW-2151H, RW-2172H, RW-2237H, and RW-7677H. PCE exceeded the MCL and IDGW primary standard in RW-2172H.
- 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-2076F, RW-2140H, RW-2151H, RW-2172H, and RW-7677P, fewer wells than in 2020.
- PCE and TCE concentration trends were generally stable or decreasing, where analyzed

- RW-2203H and RW-2213F were unable to be sampled in 2021.
- ***Bannock County Monitoring Wells:***
 - PCE and TCE were detected near or above the MCLs in MW-116S in June 2021. Over the complete historical dataset, the concentration trends are stable. Since 2017, the statistical trend for PCE is probably increasing, while the statistical trend for TCE is stable. The confidence level for the PCE trend is 94%. Additional monitoring is needed to determine if this trend persists. The data set from 2017 to 2021 is relatively small; therefore, additional data points will increase confidence in trend results.
 - As reported under a separate cover (CDM Smith 2021b), samples from offsite and boundary Bannock County monitoring wells continue to exceed groundwater criteria. However, over the last 5 years, PCE and TCE concentration trends are statistically decreasing or stable at offsite monitoring wells MW-103S and MW-115S. Additionally, PCE and TCE concentration trends are similarly stable or decreasing in boundary monitoring wells MW-118D, MW-119S/D, and MW-120S/D.

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 2021. Human exposures, cancer risks, and noncancer health hazards associated with groundwater used as domestic tap water as well as VI were evaluated. Risk interpretation was focused on noncancer endpoints, as these are more sensitive than cancer endpoints.

Ecological risk was evaluated through agricultural receptors and application of groundwater to plants for groundwater that may be used for drinking water.

For human exposure, residents were evaluated as potential receptors. For groundwater exposure pathways, HQ values exceeded the threshold of 1 for 10 of 42 wells evaluated, with HQ values ranging from 2 to 10 for TCE. All groundwater exposure pathway HQs for PCE were less than 1. For VI, all TCE and PCE HQ values were less than 1.

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 42 wells have HQ values that exceed the threshold of 1, with HQ values ranging from 2 to 11 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 Recommendations for 2022 City and Domestic Well Monitoring

The results of the 2021 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.

6.3.1 2022 City and Domestic Well Sampling and Analysis

- Conduct a 2022 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 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 RW-2213F after new owners provide property access consent.
 - Sample any additional domestic wells identified 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.
 - Analyze field parameters and VOCs for all wells sampled during the annual 2022 sampling event.
- Continue to sample RW-2076F during spring and fall semiannual and annual offsite sampling events. This well has historically had the highest TCE concentration in a domestic well.
- Statistically evaluate shorter time frames as data becomes available for the Mann-Kendall trend analysis (i.e., recent time frames include six or more data points with more than 50% detected results). Many data sets have a nearly 20-year gap in sampling data before 2018. However, RW-2076F and RW-2151H data sets will have six data points since 2018 after the next sampling event, allowing for a more recent data set statistical trend analysis.

6.3.2 Evaluate 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, and 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.

Section 7

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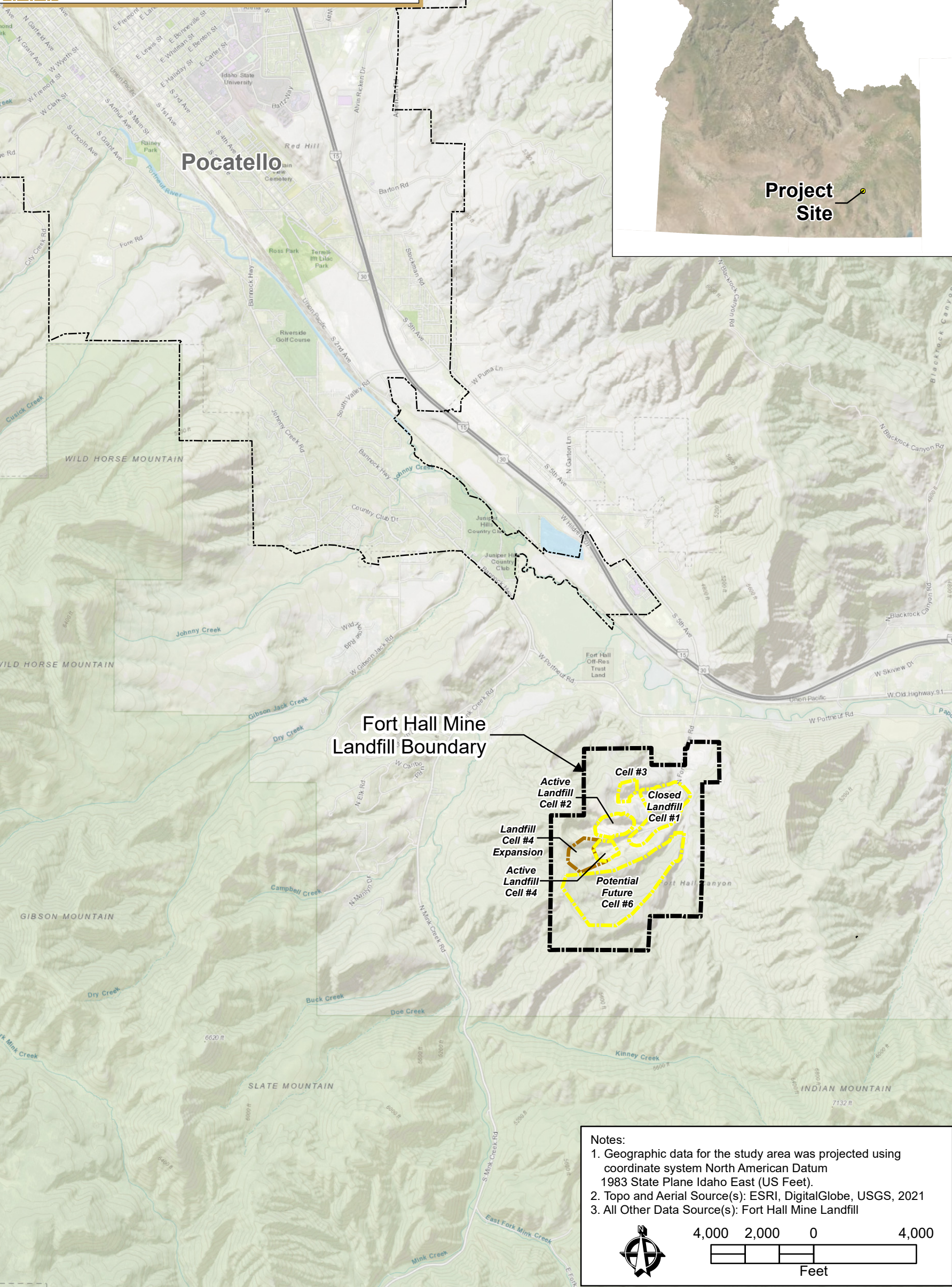
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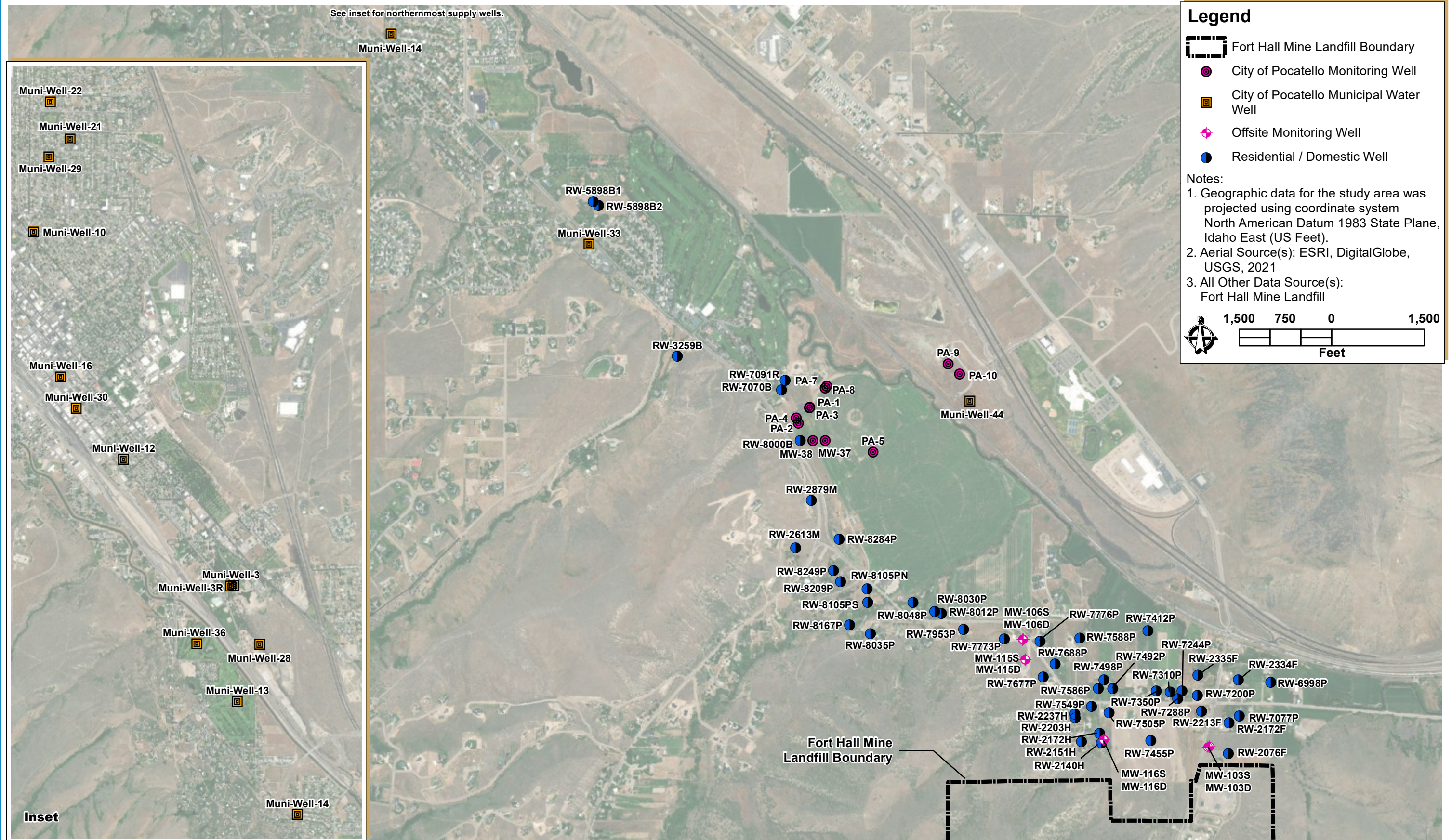
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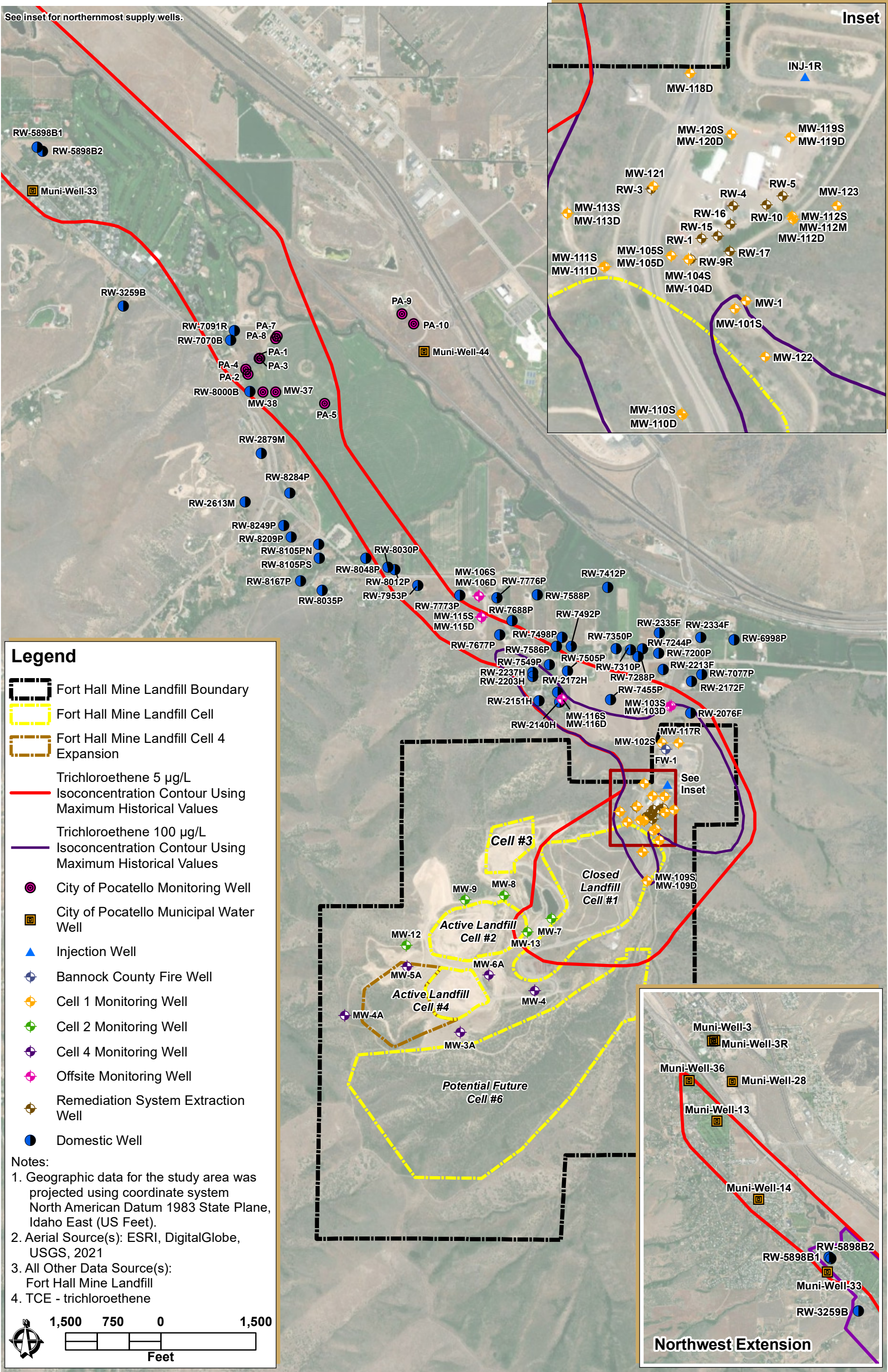
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- Fort Hall Mine Landfill Boundary
- Fort Hall Mine Landfill Cell
- Fort Hall Mine Landfill Cell 4 Expansion



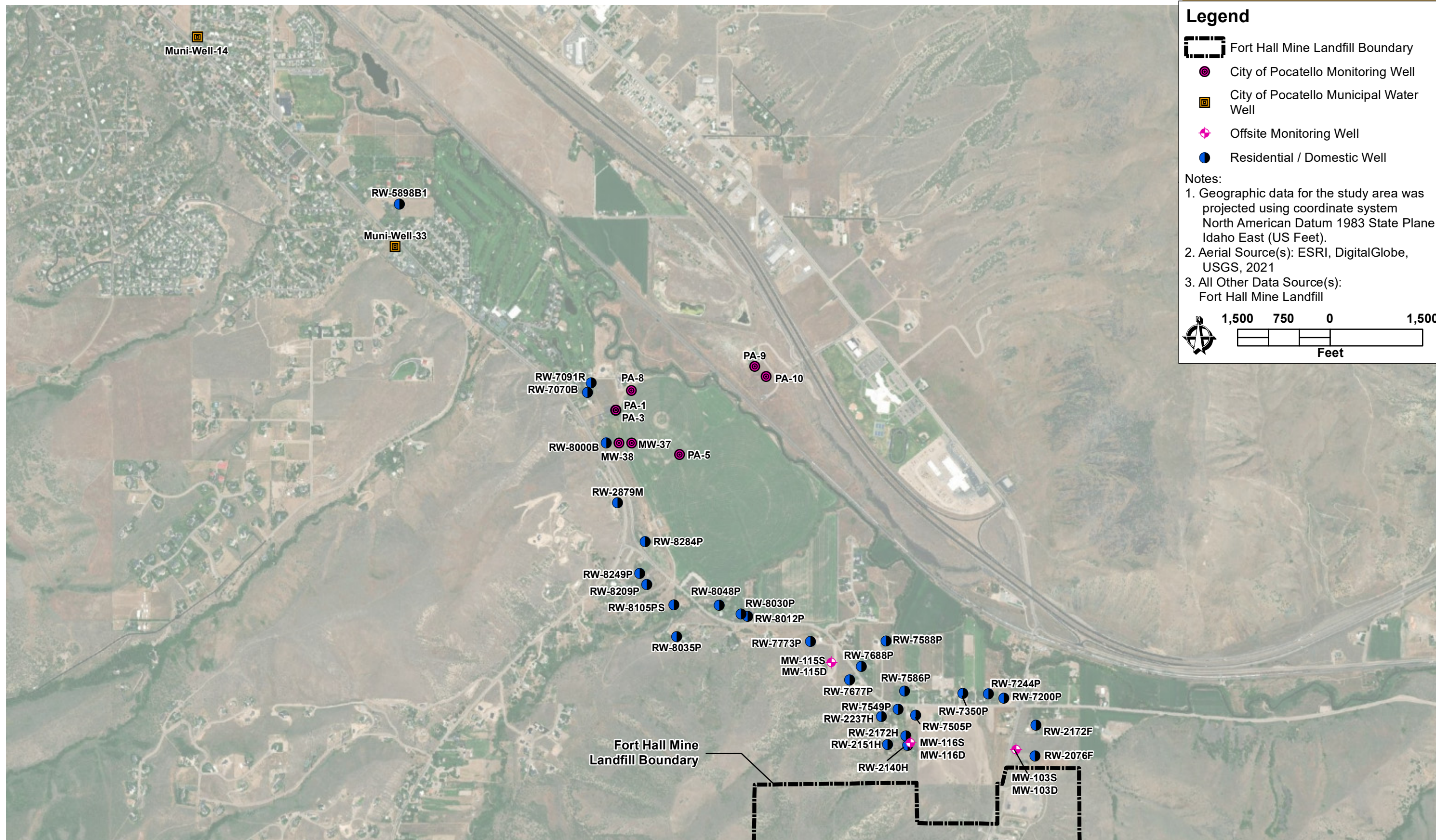
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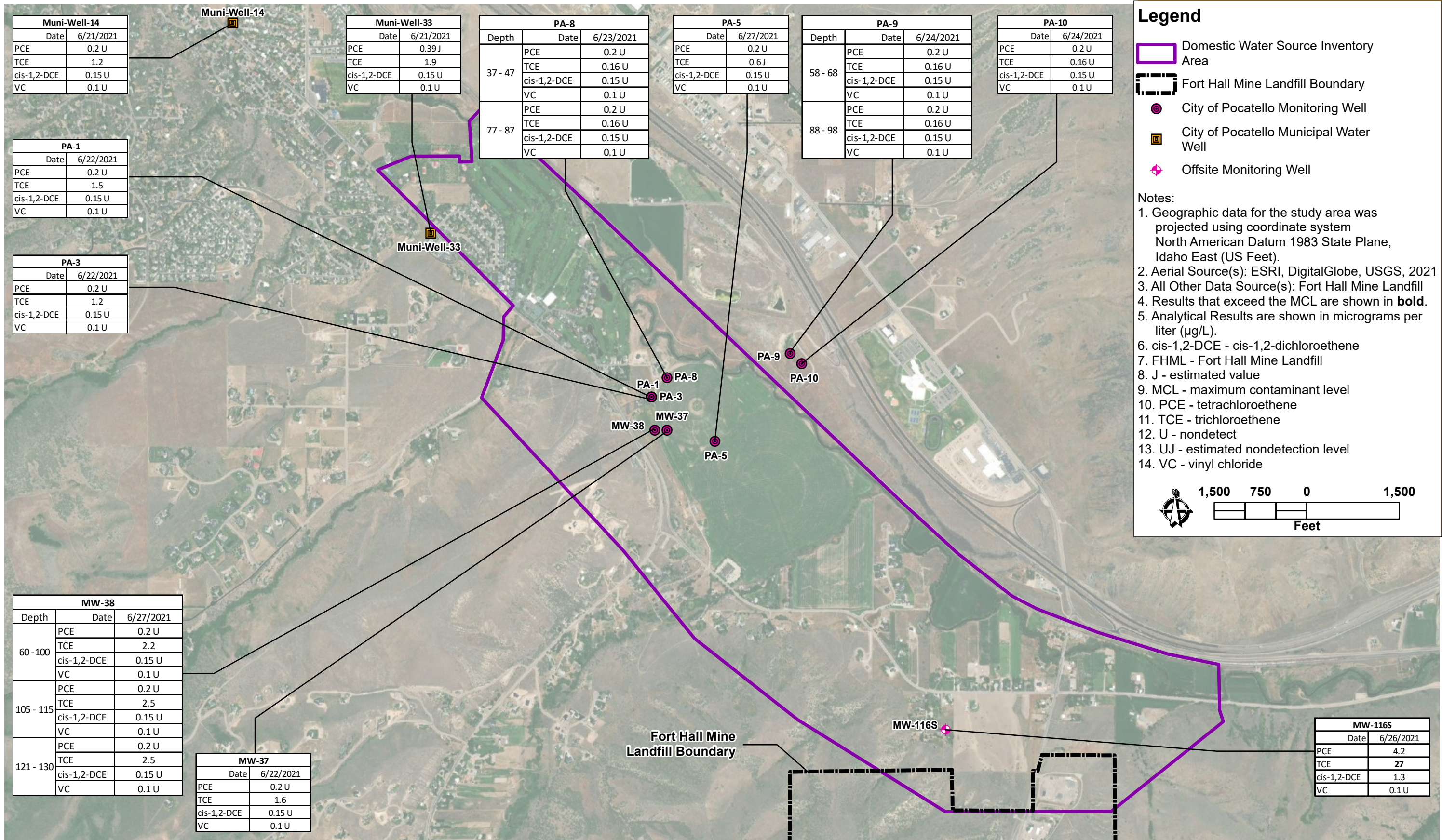
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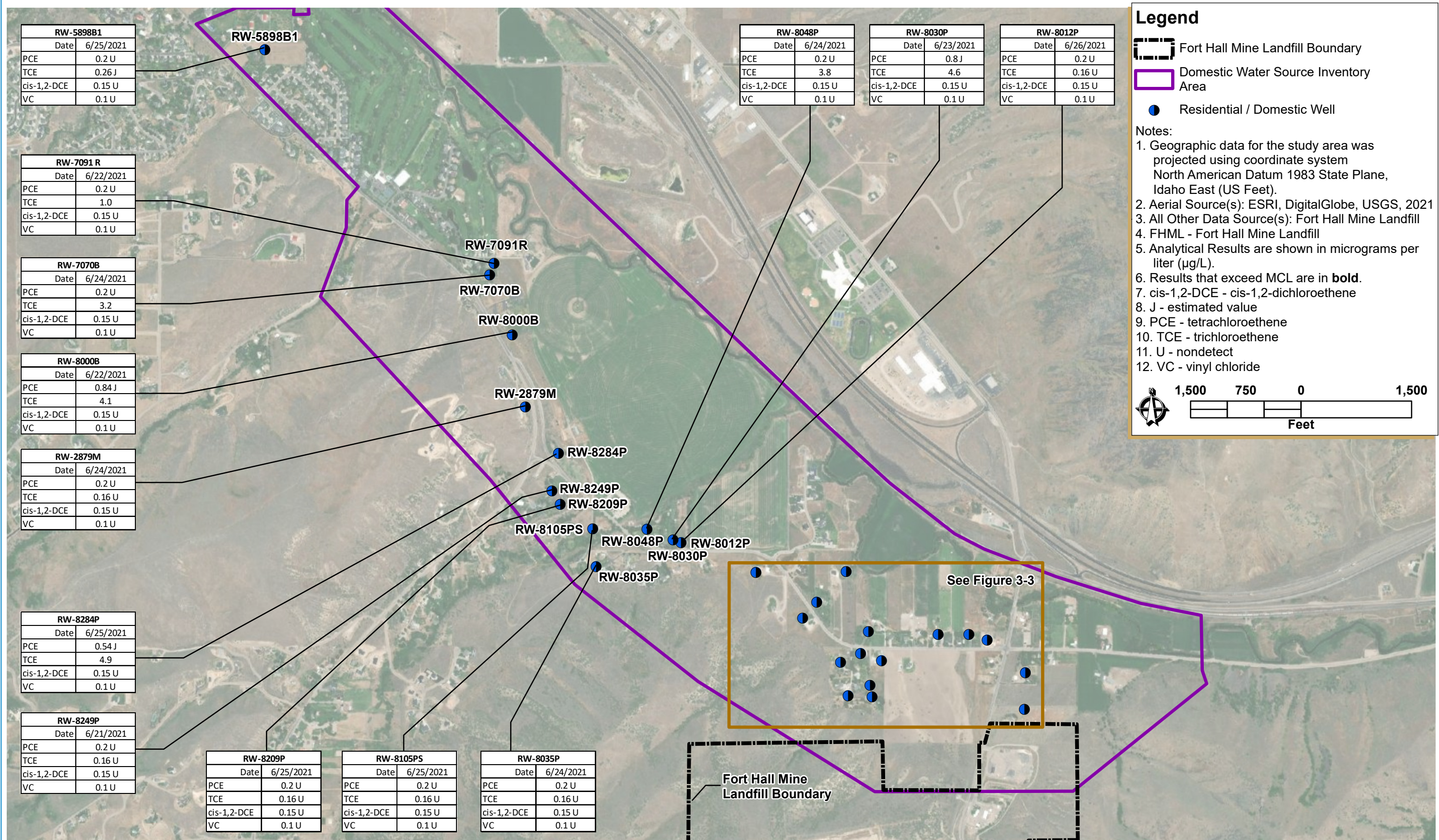
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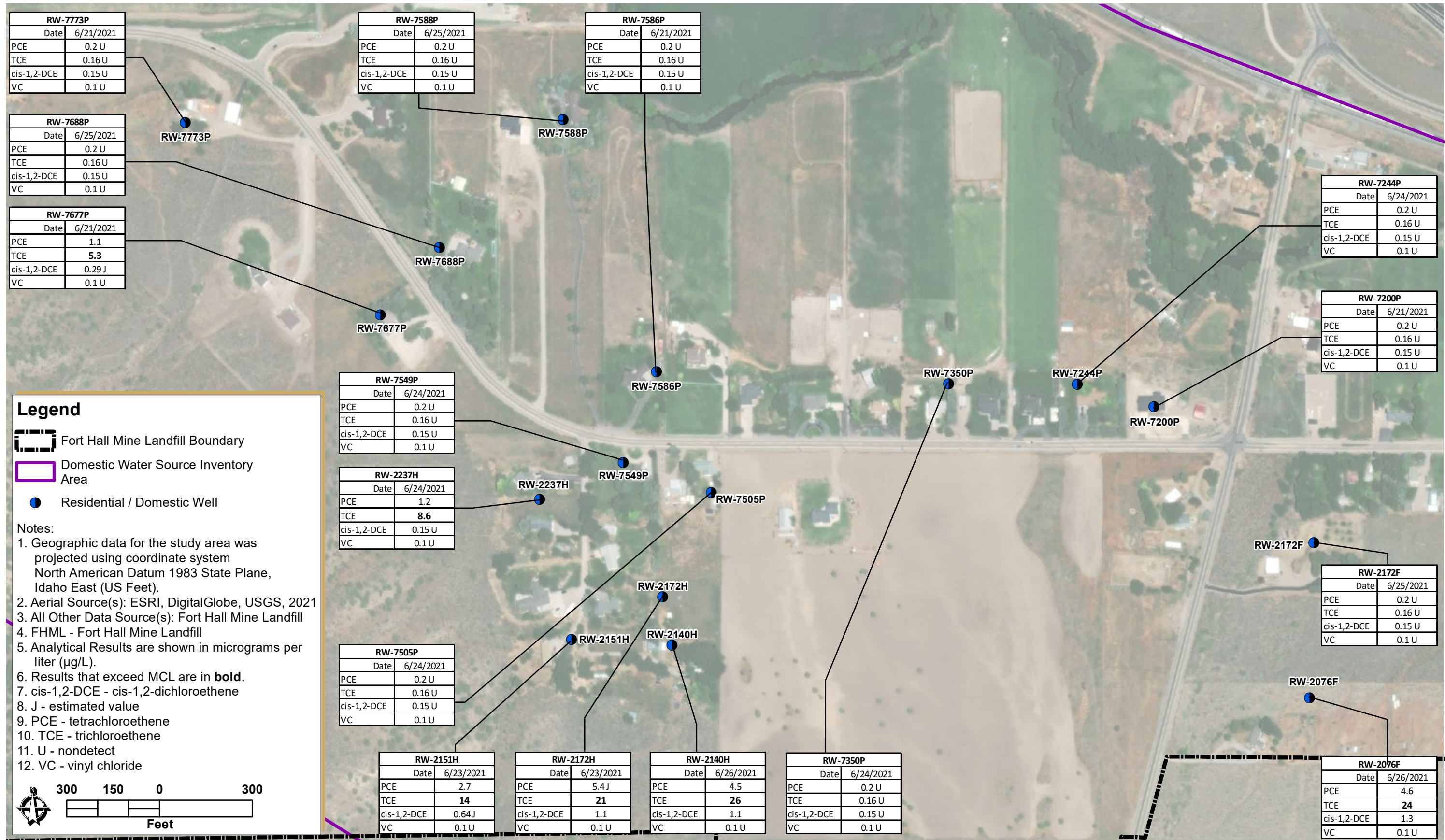
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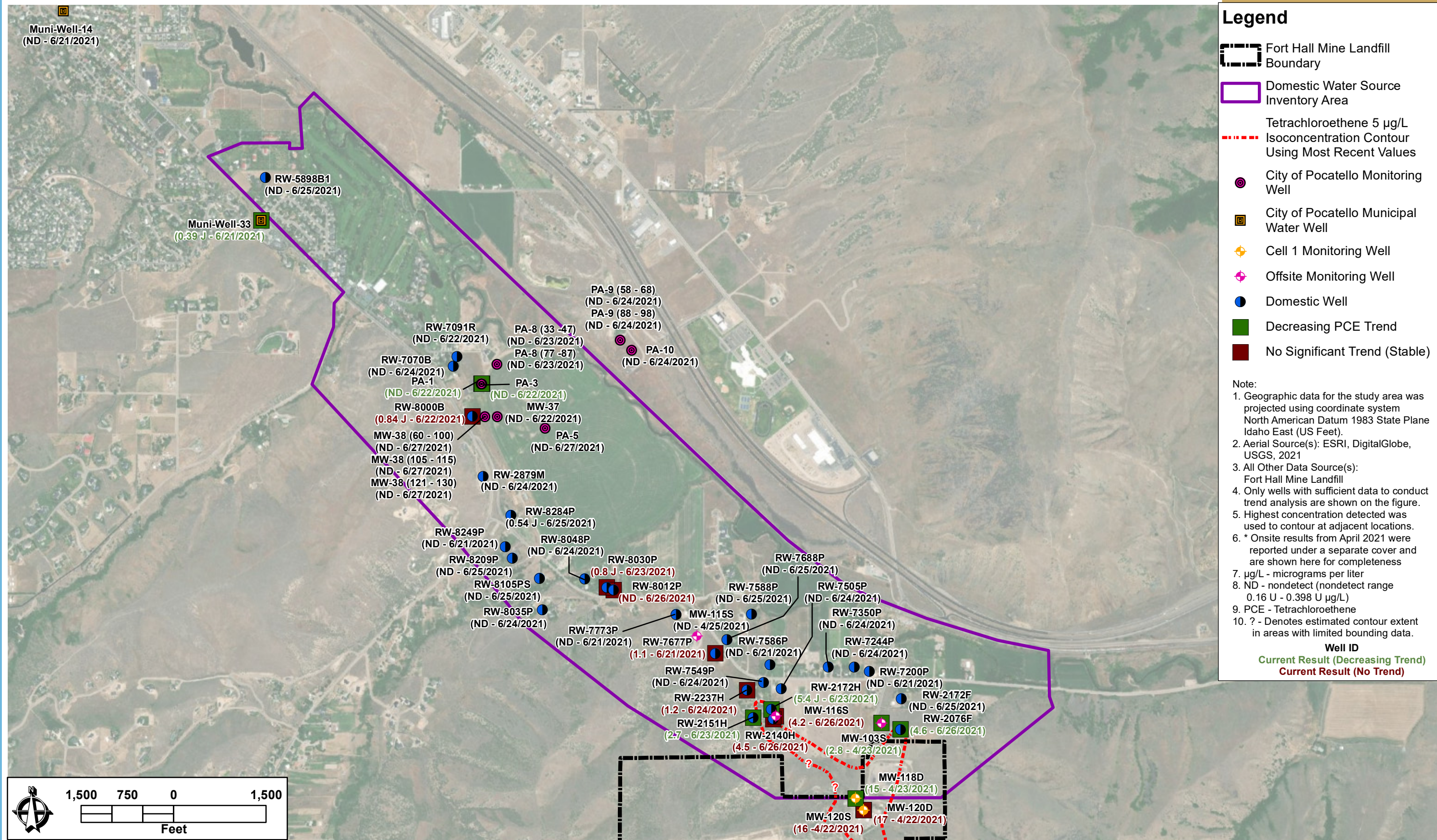
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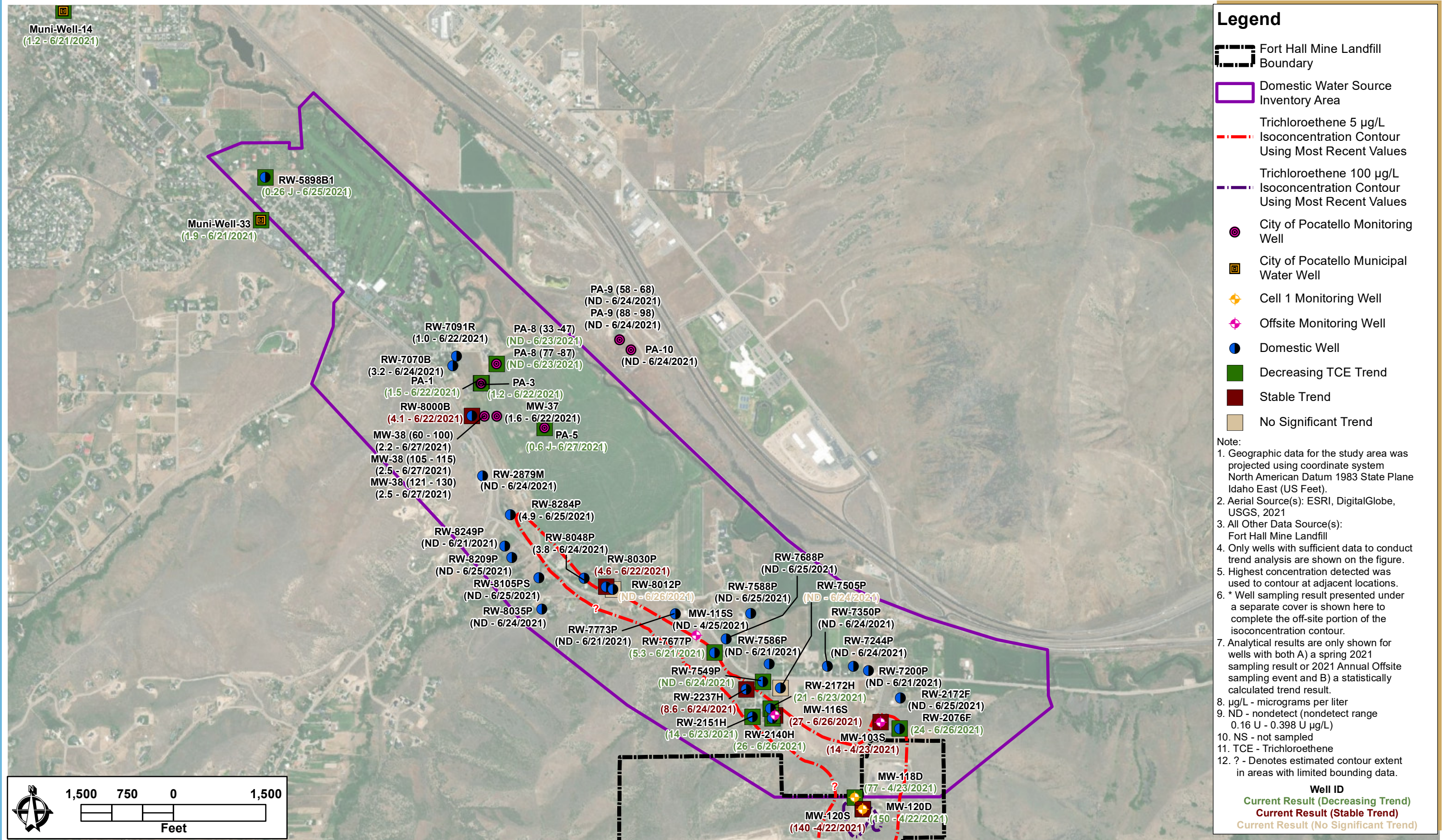
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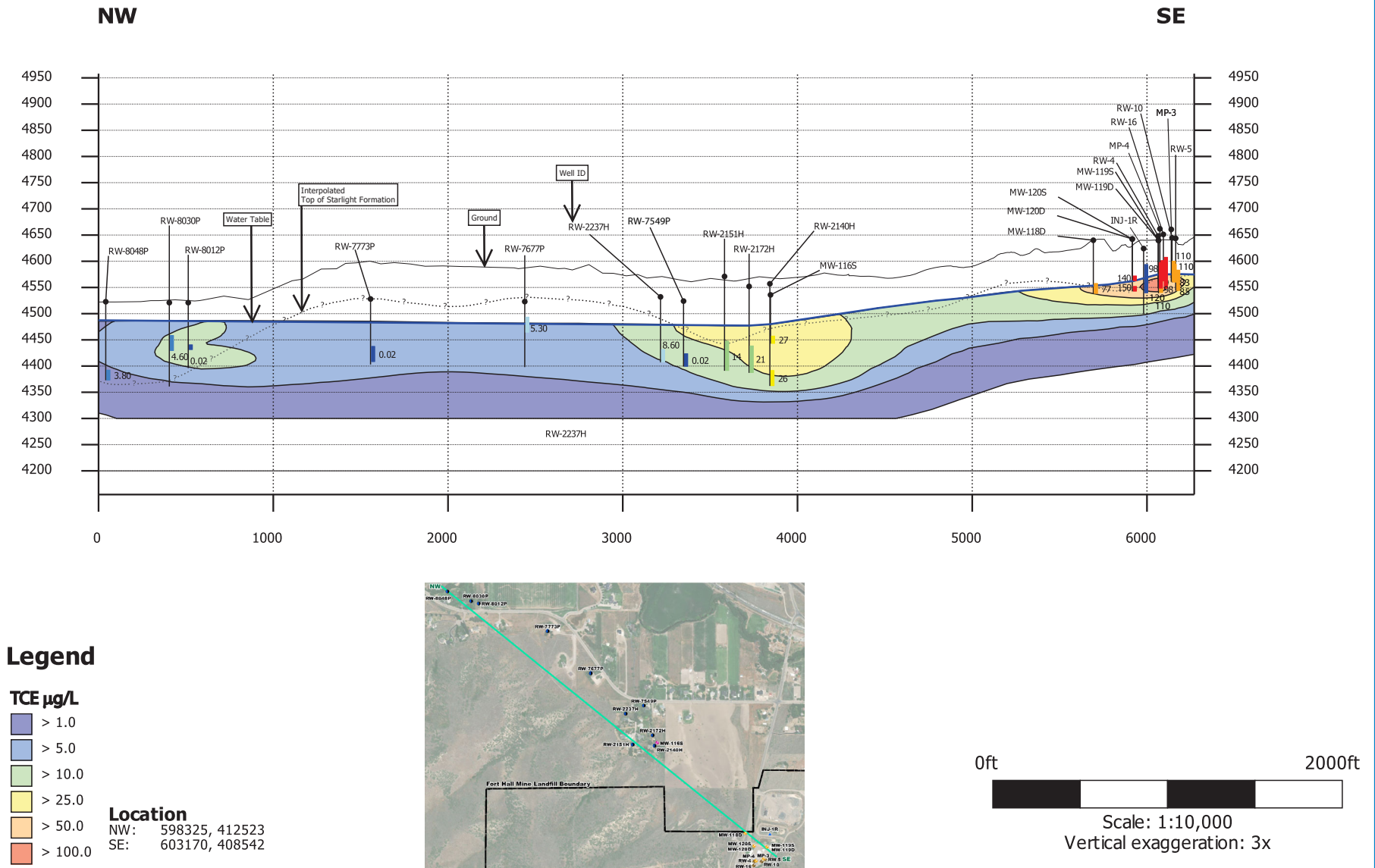


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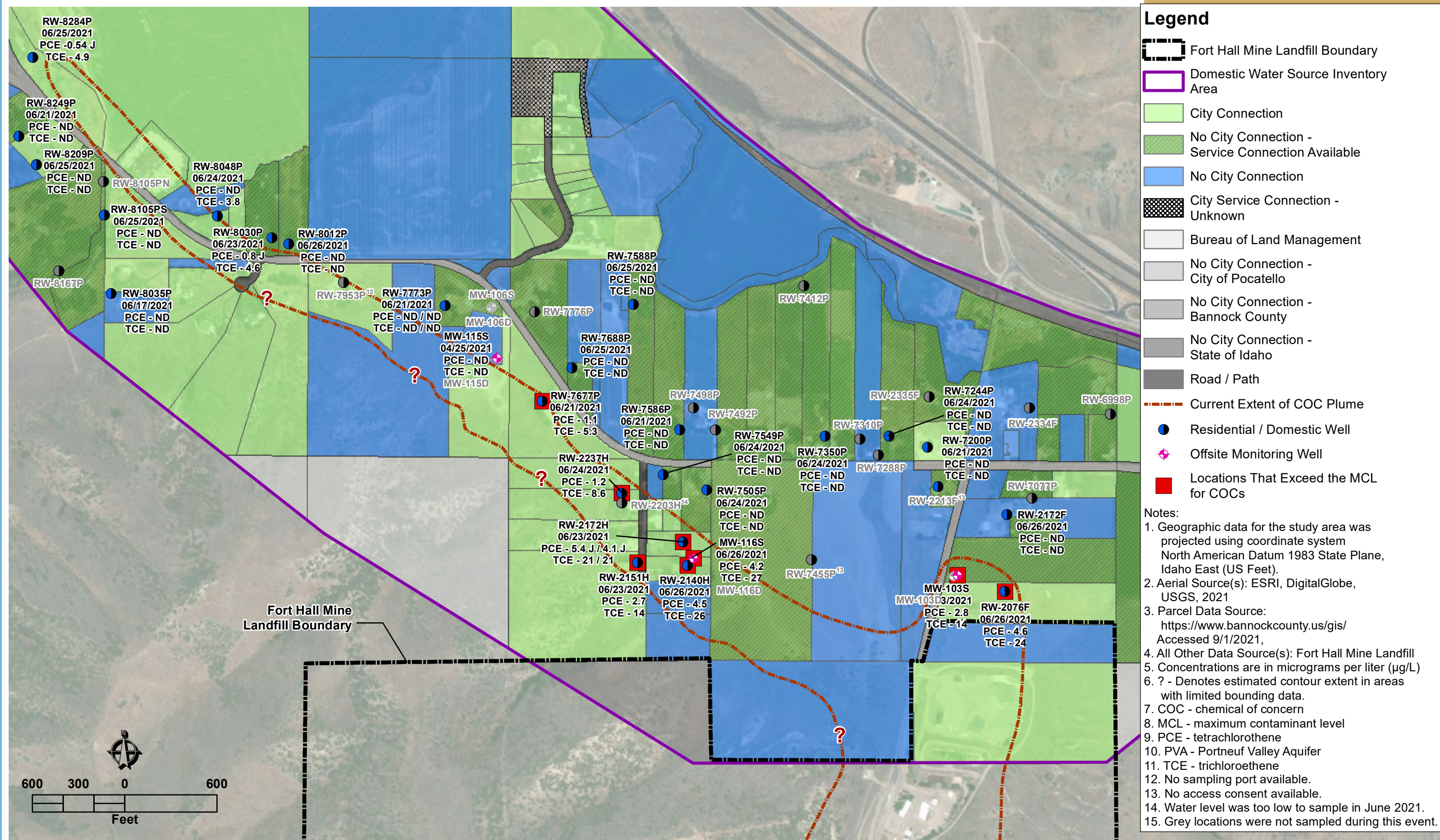


2021 Annual Offsite Groundwater Monitoring Report
Fort Hall Mine Landfill, Bannock County, Idaho

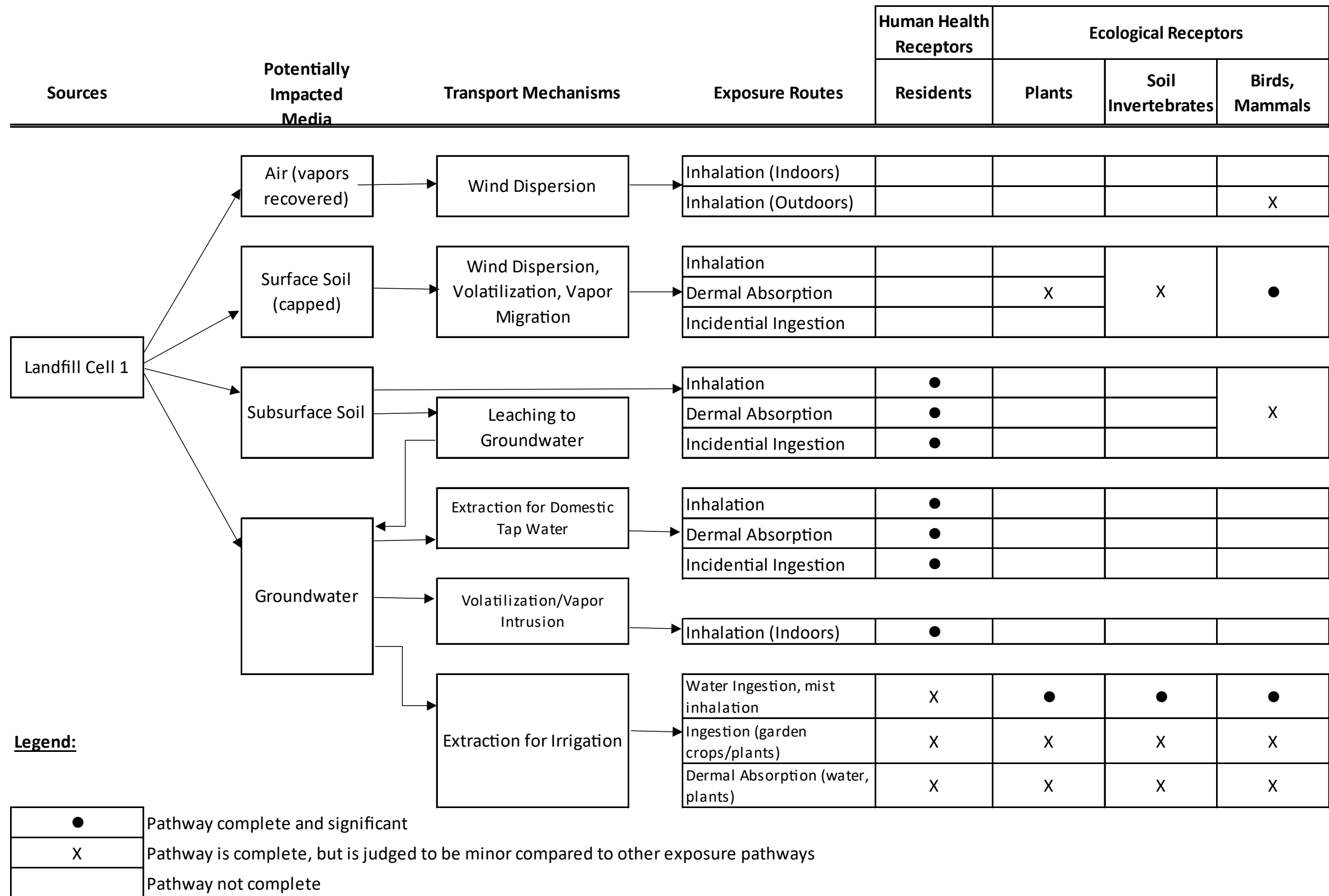
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Trichloroethene: Current Plume Extent
and Trends Analysis



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Tables

Table 2-1
Offsite 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)	Well Diameter (in)
Bannock County Offsite Monitoring Wells*							
MW-116S	601412.65	410222.65	4535.81	73.5	78	93	6
City of Pocatello Monitoring Wells							
MW-37	596895.44	415075.61	4503	119	57	107	18
MW-38 (shallow)	596694.57	415075.59	4501	135	60	100	18
MW-38 (middle)	596694.57	415075.59	4501	135	105	115	18
MW-38 (deep)	596694.57	415075.59	4501	135	121	130	18
PA-1	596644.63	415607.75	4502.96	149	128.5	148.5	4
PA-3	596636.44	415606.15	4503.23	68	47.5	67.5	4
PA-4 (shallow)	596422.76	415438.08	4518.65	145	64.5	74.5	4
PA-4 (middle)	596422.76	415438.08	4518.65	145	99.5	109.5	4
PA-4 (deep)	596422.76	415438.08	4518.65	145	134.5	145.5	4
PA-5	597670.68	414891.60	4498	86.5	36	86.5	4
PA-7	596917.81	415954.19	4488	176.5	171	176.5	4
PA-8 (shallow)	596893.98	415920.84	4490	127	37	47	4
PA-8 (middle)	596893.98	415920.84	4490	127	77	87	4
PA-8 (deep)	596893.98	415920.84	4490	127	117	127	4
PA-9 (shallow)	598890.52	416316.33	4482	98	57.5	67.5	4
PA-9 (deep)	598890.52	416316.33	4482	98	87.5	98	4
PA-10	599076.35	416149.56	4485	62	22	62	4
City of Pocatello Municipal Supply Wells							
Muni-Well-14	589854.12	421658.16	4470	82	Unknown	Unknown	12
Muni-Well-33	593063.94	418259.59	4510	115	56	115	12
Domestic Supply Wells							
RW-2076F	603437.23	410006.10	4568	89	89	89	6
RW-2140H	601376.86	410184.78	4557	195	195	195	8
RW-2151H	601048.98	410194.52	4571	180	123	180	8
RW-2172F	603451.12	410506.72	4545	110	110	110	6
RW-2172H	601343.83	410331.91	4552	165	100	113	8
RW-2203H	600946.89	410582.10	4542	Unknown	Unknown	Unknown	6
RW-2213F	603003.31	410689.99	4533	Unknown	Unknown	Unknown	8
RW-2237H	600946.28	410646.63	4532	100	Unknown	Unknown	9
RW-2879M	596669.00	414104.78	4604	205	110	110	6
RW-5898B1	593134.42	418944.16	4487	100	100	100	10
RW-7070B	596184.00	415892.25	4523	Unknown	Unknown	Unknown	8
RW-7091R	596242.44	416046.04	4505	100	110	110	6
RW-7200P	602934.13	410945.27	4512	140	133	138	6
RW-7244P	602684.69	411018.74	4513	80	N/A	N/A	6
RW-7350P	602268.67	411019.73	4527	Unknown	Unknown	Unknown	Unknown
RW-7505P	601500.56	410668.29	4536	Unknown	Unknown	Unknown	Unknown
RW-7549P	601215.93	410767.15	4524	Unknown	Unknown	Unknown	8
RW-7586P	601324.00	411058.45	4516	110	90	110	6
RW-7588P	601021.80	411873.88	4495	70	Unknown	Unknown	8
RW-7677P	600430.68	411242.85	4523	59	Unknown	Unknown	6
RW-7688P	600621.78	411461.05	4515	79	Unknown	Unknown	6
RW-7773P	599798.81	411863.98	4528	120	Unknown	Unknown	6
RW-8000B	596489.98	415079.60	4516	Unknown	Unknown	Unknown	Unknown
RW-8012P	598779.95	412267.43	4521	90	80	90	8
RW-8030P	598670.00	412304.15	4521	92	Unknown	Unknown	8
RW-8035P	597627.73	411942.38	4569	170	Unknown	Unknown	8
RW-8048P	598316.55	412447.03	4523	150	130	150	6
RW-8105PS	597583.43	412452.72	4539	Unknown	80	96	8
RW-8209P	597141.45	412781.87	4562	Unknown	140 and 185	150 and 195	8
RW-8249P	597026.53	412964.39	4575	267	247	267	6
RW-8284P	598141.93	412556.97	4524	100	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 2021 annual offsite event

Abbreviations:

feet bgs = feet below ground surface

feet msl = feet above mean sea level

in = inches

Table 2-2
2021 Offsite Well Sample Collection Information
Fort Hall Mine Landfill

Well ID	Sampling Method	Field parameters*	VOCs (Method 8260B)	Pump Depth (feet bgs)	2021 Purge Volume~ (gal)
Bannock County Offsite Monitoring Wells					
MW-116S	Low flow	1	1	85	5.5
City of Pocatello Monitoring Wells					
MW-37	Low flow	1	1	86	5.8
MW-38 (shallow)	Low flow	1	1	80	5.0
MW-38 (middle)	Low flow	1	1	110	5.1
MW-38 (deep)	Low flow	1	1	125	6.3
PA-1	Low flow	1	1	133.5	3.7
PA-3	Low flow	1	1	57	2.6
PA-4 (shallow)	Low flow	NS	NS	NS	NS
PA-4 (middle)	Low flow	NS	NS	NS	NS
PA-4 (deep)	Low flow	NS	NS	NS	NS
PA-5	Low flow	1	1	60	3.2
PA-7	Low flow	NS	NS	NS	NS
PA-8 (shallow)	Low flow	1	1	46.5	3.2
PA-8 (middle)	Low flow	1	1	82	2.8
PA-8 (deep)	Low flow	NS	NS	NS	NS
PA-9 (shallow)	Low flow	1	1	64	3.2
PA-9 (deep)	Low flow	1	1	91	4.4
PA-10	Low flow	1	1	44	5.7
City of Pocatello Municipal Supply Wells					
Muni-Well-14	Tap	1	1	Unknown	5,000
Muni-Well-33	Tap	1	1	Unknown	5,000
Domestic Supply Wells					
RW-2076F	Tap	1	1	Unknown	113
RW-2140H	Tap	1	1	Unknown	400
RW-2151H	Tap	1	1	Unknown	300
RW-2172F	Tap	1	1	Unknown	100
RW-2172H	Tap	1	1	Unknown	300
RW-2203H	Low-flow	NS	NS	Unknown	NS
RW-2213F	Tap	NS	NS	Unknown	NS
RW-2237H	Tap	1	1	Unknown	300
RW-2879M	Tap	1	1	Unknown	300
RW-5898B1	Tap	1	1	Unknown	300
RW-7070B	Tap	1	1	Unknown	100
RW-7091R	Tap	1	1	Unknown	100
RW-7200P	Tap	1	1	Unknown	90
RW-7244P	Tap	1	1	Unknown	100
RW-7350P	Tap	1	1	Unknown	300
RW-7505P	Tap	1	1	Unknown	300
RW-7549P	Tap	1	1	Unknown	300
RW-7586P	Tap	1	1	Unknown	200
RW-7588P	Tap	1	1	Unknown	200
RW-7677P	Tap	1	1	Unknown	100
RW-7688P	Tap	1	1	Unknown	100
RW-7773P	Tap	1	1	Unknown	100
RW-8000B	Tap	1	1	Unknown	Unknown^
RW-8012P	Tap	1	1	Unknown	200
RW-8030P	Tap	1	1	Unknown	200
RW-8035P	Tap	1	1	Unknown	300
RW-8048P	Tap	1	1	Unknown	300
RW-8105PS	Tap	1	1	Unknown	200
RW-8209P	Tap	1	1	Unknown	500
RW-8249P	Tap	1	1	Unknown	300
RW-8284P	Tap	1	1	Unknown	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

~Calculated for municipal supply wells and wells sampled via low flow methods by multiplying the total purge time by the flow rate. Equal to minimum purge rate for domestic wells.

Abbreviations:

feet bgs = feet below ground surface

gal = gallons

NS = not sampled

VOCs = volatile organic compounds

**Table 3-1
City Monitoring and Municipal Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	Muni-Well-14		Muni-Well-33		MW-116S		MW-37				MW-38				MW-38	
				Sample Name	MUNI-WELL-14-20210621		MUNI-WELL-33-20210621		MW-116S-20210626		MW-37-20210622		MW-37Q-20210622		MW-38-105-115-20210627		MW-38-121-130-20210627			
				Sample Date	6/21/2021		6/21/2021		6/26/2021		6/22/2021		6/22/2021		6/27/2021		6/27/2021			
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
Field Parameters																				
Dissolved Oxygen				mg/l	10.77		8.83		7.51		9.16		9.16		7.43		6.61			
Oxidation-Reduction Potential				millivolts	183		170		79.9		146		146		15.4		-101.4			
pH			6.5 to 8.5	su	7.57		8.38		6.98		8.14		8.14		7.1		6.81			
Specific Conductance				µs/cm	796		799		1108		363		363		896		931			
Temperature				°C	13.21		14.29		13.3		13.42		13.42		19		16.5			
Turbidity				ntu					0.22		3.2		3.2		0		0.06			
VOCs																				
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	1.3		0.15	U	0.15	U	0.15	U	0.15	U		
Tetrachloroethene	5	5		µg/l	0.2	U	0.39	J	4.2		0.2	U	0.2	U	0.2	U	0.2	U		
Trichloroethene	5	5		µg/l	1.2		1.9		27		1.6		1.3		2.5		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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

mg/l = milligram per liter

µs/cm = microSiemens per centimeter

NS = not sampled

NR = not reported

ntu = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

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 3-1
City Monitoring and Municipal Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	MW-38		PA-1		PA-10		PA-3		PA-5		PA-8		PA-8	
				Sample Name	MW-38-60-100-20210627		PA-1-20210622		PA-10-20210624		PA-3-20210622		PA-5-20210627		PA-8-37-47-20210623		PA-8-77-87-20210623	
				Sample Date	6/27/2021		6/22/2021		6/24/2021		6/22/2021		6/27/2021		6/23/2021		6/23/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																		
Dissolved Oxygen				mg/l	7.42		7.99		7.46		11.87		7.05		10.26		9.77	
Oxidation-Reduction Potential				millivolts	34.8		170		77.9		155		73		117		117	
pH			6.5 to 8.5	su	7.2		7.42		7.27		7.39		7.13		9.14		9.07	
Specific Conductance				µs/cm	880		760		756		761		792		472		476	
Temperature				°C	17.4		15.29		11.2		17.79		16.2		23.37		26.16	
Turbidity				ntu	18.22				2.6				30.2					
VOCs																		
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
Tetrachloroethene	5	5		µg/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Trichloroethene	5	5		µg/l	2.2		1.5		0.16	U	1.2		0.6	J	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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L = microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

mg/l = milligram per liter

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NS = not sampled

NR = not reported

ntu = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

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 3-1
City Monitoring and Municipal Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	PA-9		PA-9	
				Sample Name	PA-9-58-68-20210624		PA-9-88-98-20210624	
				Sample Date	6/24/2021		6/24/2021	
				Unit	Result	Q	Result	Q
Field Parameters								
Dissolved Oxygen				mg/l	6.74		6.59	
Oxidation-Reduction Potential				millivolts	82.5		80.1	
pH			6.5 to 8.5	su	7.24		7.25	
Specific Conductance				µs/cm	749		757	
Temperature				°C	14.3		11.8	
Turbidity				ntu	8.32		0.29	
VOCs								
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/l	0.2	U	0.2	U
Trichloroethene	5	5		µg/l	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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

mg/l = milligram per liter

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NS = not sampled

NR = not reported

ntu = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

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
Domestic Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-2076F		RW-2140H		RW-2151H		RW-2172F		RW-2172H				RW-2237H		RW-2879M	
				Sample Name	RW-2076F-20210626		RW-2140H-20210626		RW-2151H-20210623		RW-2172F-20210625		RW-2172H-20210623		RW-2172HQ-20210623		RW-2237H-20210624		RW-2879M-20210624	
				Sample Date	6/26/2021		6/26/2021		6/23/2021		6/25/2021		6/23/2021		6/23/2021		6/24/2021		6/24/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																				
Dissolved Oxygen				mg/l	7.48		8.88		10.57		7.03		8.56		8.56		8.28		6.77	
Oxidation-Reduction Potential				millivolts	77.9		85.5		-6		86.2		6		6		135.2		0.5	
pH			6.5 to 8.5	su	7		7.09		8		7.25		7.7		7.7		7.27		6.93	
Specific Conductance				µs/cm	1101		1149		976		808		1200		1200		851		1673	
Temperature				°C	13.3		13.4		13.76		13.5		13.11		13.11		15.6		13.6	
Turbidity				ntu	1.23		0		7.1		0.16		0		0		0		2.81	
VOCs																				
cis-1,2-Dichloroethene	70	70		µg/l	1.3		1.1		0.64	J	0.15	U	1.1		1.3		0.15	U	0.15	U
Tetrachloroethene	5	5		µg/l	4.6		4.5		2.7		0.2	U	5.4	J	4.1	J	1.2		0.2	U
Toluene	1,000	1,000		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
Trichloroethene	5	5		µg/l	24		26		14		0.16	U	21		21		8.6		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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

mg/l = milligram per liter

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NS = not sampled

NR = not reported

ntu = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

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
Domestic Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-5898B1		RW-7070B		RW-7091R		RW-7200P		RW-7244P		RW-7350P		RW-7505P		RW-7549P	
				Sample Name	RW-5898B1-20210625		RW-7070B-20210624		RW-7091R-20210622		RW-7200P-20210621		RW-7244P-20210624		RW-7350P-20210624		RW-7505P-20210624		RW-7549P-20210624	
				Sample Date	6/25/2021		6/24/2021		6/22/2021		6/21/2021		6/24/2021		6/24/2021		6/24/2021		6/24/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																				
Dissolved Oxygen				mg/l	6.63		9.25		7.3		8.61		7.87		8.05		8.49		8.01	
Oxidation-Reduction Potential				millivolts	71.8		115.7		90		112		137.3		144.9		150.1		135.4	
pH			6.5 to 8.5	su	7.41		7.28		7.99		7.79		7.26		7.34		7.21		7.29	
Specific Conductance				µs/cm	648		807		342		702		692		702		701		708	
Temperature				°C	14		13.9		12.65		13.79		12.8		14.2		14.2		14.9	
Turbidity				ntu	15.98		0		0		0		0		0		0		0	
VOCs																				
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	0.15	U
Tetrachloroethene	5	5		µg/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Toluene	1,000	1,000		µg/l	0.17	U	0.17	U	0.17	U	0.43	J	0.17	U	0.17	U	0.17	U	0.17	U
Trichloroethene	5	5		µg/l	0.26	J	3.2		1		0.16	U	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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

mg/l = milligram per liter

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NS = not sampled

NR = not reported

ntu = nephelometric turbidity Units

su = standard units

USEPA = United States Environmental Protection Agency

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
Domestic Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-7586P		RW-7588P		RW-7677P		RW-7688P		RW-7773P		RW-8000B		RW-8012P	
				Sample Name	RW-7586P-20210621		RW-7588P-20210625		RW-7677P-20210621		RW-7688P-20210625		RW-7773P-20210621		RW-8000B-20210622		RW-8012P-20210626	
				Sample Date	6/21/2021		6/25/2021		6/21/2021		6/25/2021		6/21/2021		6/21/2021		6/26/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																		
Dissolved Oxygen				mg/l	8.13		7.36		8.61		8.06		8.55		8.55		8.58	
Oxidation-Reduction Potential				millivolts	151		89.6		174		57.4		141		141		172	
pH			6.5 to 8.5	su	7.32		7.26		6.95		7.38		7.41		7.41		7.68	
Specific Conductance				µs/cm	704		778		858		803		717		717		398	
Temperature				°C	13.09		13.6		13.6		14.3		13.12		13.12		13.03	
Turbidity				ntu	0		0.56		0		0.37		0		0		0	
VOCs																		
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	0.29	J	0.15	U	0.15	U	0.15	U	0.15	U
Tetrachloroethene	5	5		µg/l	0.2	U	0.2	U	1.1		0.2	U	0.2	U	0.2	U	0.84	J
Toluene	1,000	1,000		µg/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Trichloroethene	5	5		µg/l	0.16	U	0.16	U	5.3		0.16	U	0.16	U	0.16	U	4.1	

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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

mg/l = milligram per liter

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su = standard units

USEPA = United States Environmental Protection Agency

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
Domestic Supply Wells VOC and Field Parameter Results**

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-8030P		RW-8035P		RW-8048P		RW-8105PS		RW-8209P		RW-8249P		RW-8284P	
				Sample Name	RW-8030P-20210623		RW-8035P-20210624		RW-8048P-20210624		RW-8105PS-20210624		RW-8209P-20210625		RW-8249P-20210621		RW-8284P-20210625	
				Sample Date	6/23/2021		6/24/2021		6/24/2021		6/24/2021		6/25/2021		6/21/2021		6/25/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters																		
Dissolved Oxygen				mg/l	7.69		9.45		8.38		1.54		9.68		9.19		8	
Oxidation-Reduction Potential				millivolts	157		129.3		128.3		-79		-9		147		70.1	
pH			6.5 to 8.5	su	7.82		7.69		7.13		7.08		7.09		7.03		7.15	
Specific Conductance				µs/cm	888		566		879		898		3532		1490		976	
Temperature				°C	12.74		15.5		13.6		10.7		12.9		15.47		15.8	
Turbidity				ntu	1.9		0.1		0		0.16		0.15		0		0	
VOCs																		
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
Tetrachloroethene	5	5		µg/l	0.8	J	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.54	J
Toluene	1,000	1,000		µg/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Trichloroethene	5	5		µg/l	4.6		0.16	U	3.8		0.16	U	0.16	U	0.16	U	4.9	

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

Red fill indicates a DO result suspected to be erroneously high due to malfunctioning water quality meters.

Acronyms and Abbreviations:

°C = degrees celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

MCL = maximum contaminant level

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NS = not sampled

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su = standard units

USEPA = United States Environmental Protection Agency

Q = qualifier

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J = Result is estimated

Table 4-1
Statistical Summary
Offsite Monitoring, Supply, and Domestic Wells
Fort Hall Mine Landfill

General					Dataset Information					Mann Kendall Trend Analysis					
Well ID	Analyte (µg/l)	Latest value	Qualifier	Latest value > Standard?	Dataset Min	Dataset Max	Dataset n	ND n	Percent ND	Kendall S	Var(S)	Intercept	Theil Sen Slope	p-value	Significant trend?
Offsite Monitoring Wells															
MW-116S	PCE	4.2		No	1/7/00	6/26/21	19	0	0.00	34	768.00	-2	0.00011	0.23	No Trend - Stable
MW-116S	PCE	27		Yes	1/7/00	6/26/21	24	0	0.00	-16	1621.33	63	-0.0012	0.71	No Trend - Stable
MW-116S	PCE	4.2		No	8/11/17	6/26/21	6	0	0.00	11	28.33	-81	0.0019	0.06	Probably Increasing
MW-116S	PCE	27		Yes	8/11/17	6/26/21	6	0	0.00	8	27.33	-160	0.0042	0.18	No Trend - Stable
Pocatello City Monitoring Well															
PA-1	PCE	0.2	U	No	4/25/94	6/22/21	8	4	50.00	-23	61.67	5.1	-0.00011	0.0051	Decreasing
PA-1	TCE	1.5		No	4/25/94	6/22/21	11	0	0.00	-46	164.00	38	-0.00082	0.00044	Decreasing
PA-3	PCE	0.2	U	No	4/25/94	6/22/21	8	3	37.50	-25	64.33	3	-0.000063	0.0028	Decreasing
PA-3	TCE	1.2		No	4/25/94	6/22/21	13	0	0.00	-53	267.67	41	-0.0009	0.0015	Decreasing
PA-5	TCE	0.6	J	No	4/25/94	6/27/21	10	0	0.00	-26	124.00	22	-0.00048	0.025	Decreasing
PA-8-37-47	TCE	0.16	U	No	4/25/94	6/23/21	7	1	14.29	-21	44.33	24	-0.00055	0.0027	Decreasing
PA-8-77-87	TCE	0.16	U	No	4/25/94	6/23/21	6	1	16.67	-15	28.33	29	-0.00065	0.0085	Decreasing
Pocatello City Municipal Supply Well															
Muni-Well-14	TCE	1.2		No	3/24/93	6/21/21	15	0	0.00	-62	404.67	20	-0.00042	0.0024	Decreasing
Muni-Well-33	PCE	0.39	J	No	3/25/93	6/21/21	19	7	36.84	-94	770.67	1.9	-0.000034	0.00081	Decreasing
Muni-Well-33	TCE	1.9		No	3/25/93	6/21/21	20	0	0.00	-100	948.00	33	-0.00072	0.0013	Decreasing
Residential Wells															
RW-2076F	PCE	4.6		No	8/26/92	6/26/21	46	2	4.35	-419	11107.10	62	-0.0014	0.000073	Decreasing
RW-2076F	TCE	24		Yes	8/26/92	6/26/21	46	0	0.00	-372	11142.68	500	-0.012	0.00044	Decreasing
RW-2140H	PCE	4.5		No	9/28/92	6/26/21	13	0	0.00	-16	266.67	8.1	-0.000073	0.36	No Trend - Stable
RW-2140H	TCE	26		Yes	9/28/92	6/26/21	14	0	0.00	-51	331.67	190	-0.0036	0.006	Decreasing
RW-2151H	TCE	14		Yes	9/28/92	6/23/21	11	0	0.00	-38	164.00	690	-0.016	0.0039	Decreasing
RW-2151H	PCE	2.7		No	9/28/92	6/23/21	11	1	9.09	-34	164.00	61	-0.0014	0.01	Decreasing
RW-2172H	PCE	5.4	J	Yes	9/28/92	6/23/21	8	0	0.00	-17	64.33	45	-0.00089	0.046	Decreasing
RW-2172H	TCE	21		Yes	9/28/92	6/23/21	8	0	0.00	-21	64.33	530	-0.012	0.013	Decreasing
RW-2237H	PCE	1.2		No	9/28/92	6/24/21	6	0	0.00	-4	27.33	2.9	-0.00003	0.57	Stable
RW-2237H	TCE	8.6		Yes	9/28/92	6/24/21	6	0	0.00	-8	27.33	33	-0.00055	0.18	Stable
RW-5898B1	TCE	0.26	J	No	7/30/93	6/25/21	12	0	0.00	-45	211.67	23	-0.00052	0.0025	Decreasing
RW-7505P	TCE	0.16	U	No	9/28/92	6/24/21	9	3	33.33	-15	91.00	1.2	-0.000024	0.14	No Trend
RW-7549P	TCE	0.16	U	No	9/28/92	6/24/21	16	3	18.75	-54	486.67	2.8	-0.000057	0.016	Decreasing
RW-7677P	PCE	1.1		No	3/22/94	6/21/21	8	0	0.00	-5	60.77	7.2	-0.00014	0.61	Stable
RW-7677P	TCE	5.3		Yes	10/23/92	6/21/21	12	0	0.00	-38	208.05	66	-0.0014	0.01	Decreasing
RW-8000B	TCE	4.1		No	8/21/91	6/22/21	9	0	0.00	-14	92.00	55	-0.0012	0.18	Stable
RW-8000B	PCE	0.84	J	No	8/21/91	6/22/21	9	1	11.11	-14	92.00	3.9	-0.000072	0.18	Stable
RW-8012P	PCE	0.2	U	No	6/17/97	6/26/21	6	2	33.33	-8	27.33	5.8	-0.00013	0.18	Stable
RW-8012P	TCE	0.16	U	No	6/13/95	6/26/21	9	2	22.22	-11	91.00	8.5	-0.00018	0.29	No Trend
RW-8030P	PCE	0.8	J	No	1/5/11	6/23/21	12	0	0.00	-11	203.00	6.6	-0.00012	0.48	Stable
RW-8030P	TCE	4.6		No	1/5/11	6/23/21	12	0	0.00	-14	210.67	64	-0.0013	0.37	Stable

Abbreviations and Acronyms

µg/L - micrograms per liter
 J - estimated value
 n - number of datapoints
 NC - not calculated
 ND - nondetect
 PCE - tetrachloroethene
 S - Mann Kendall test statistic
 SF - significant figures
 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 ND results in the analyzed data set
 Percent ND - percent of ND results in the analyzed dataset

Bold indicates a detected result in spring 2021.

Italics indicate a nondetect result in spring 2021.

Red fill indicates exceedances of standard or increasing trend.

Trend Analysis

Kendall S - Mann-Kendall test statistic, S
 Var(S) - variance of S, rounded to two decimal places
 Intercept - y-intercept of the Theil Sen trendline (where x=0), rounded to 2 decimal places
 Theil Sen slope - slope of the regression line rounded to 2 SF
 p-value - probability that S would occur in a dataset without a significant trend rounded to 2 SF
Significant trend? - trend analysis result

Table 5-1
Human Health Chemicals of Potential Concern Selection
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	MCL (µg/L)	2019						2020					2021				
		Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	MCL (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?
1,1,1,2-Tetrachloroethane	NA	60	NA	0%	0.21	NA	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
1,1,1-Trichloroethane	200	60	2	3%	0.27	200	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
1,1,2,2-Tetrachloroethane	NA	60	NA	0%	0.21	NA	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
1,1,2-Trichloroethane	5	60	NA	0%	0.27	5	N	51	NA	0%	0.27	N	52	NA	0%	0.27	N
1,1-Dichloroethane	NA	60	2	3%	0.26	NA	N	51	2	4%	0.25	N	52	NA	0%	0.22	N
1,1-Dichloroethene	7	60	NA	0%	0.23	7	N	51	NA	0%	0.23	N	52	NA	0%	0.23	N
1,1-Dichloropropene	NA	60	NA	0%	0.19	NA	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
1,2,3-Trichloropropane	NA	60	NA	0%	0.33	NA	N	51	NA	0%	0.33	N	52	NA	0%	0.33	N
1,2,4-Trichlorobenzene	70	60	NA	0%	0.21	70	N	51	NA	0%	0.21	N	52	1	2%	0.4	N
1,2-Dibromo-3-Chloropropane	0.2	60	NA	0%	0.47	0.2	N	51	NA	0%	0.47	N	52	NA	0%	0.47	N
1,2-Dibromoethane	0.05	60	NA	0%	0.18	0.05	N	51	NA	0%	0.18	N	52	NA	0%	0.18	N
1,2-Dichlorobenzene	600	60	NA	0%	0.15	600	N	51	NA	0%	0.15	N	52	NA	0%	0.15	N
1,2-Dichloroethane	5	60	3	5%	2	5	N	51	NA	0%	0.13	N	52	1	2%	0.17	N
1,2-Dichloropropane	5	60	1	2%	0.29	5	N	51	NA	0%	0.18	N	52	NA	0%	0.18	N
1,3-Dichlorobenzene	NA	60	NA	0%	0.13	NA	N	51	NA	0%	0.13	N	52	NA	0%	0.13	N
1,3-Dichloropropane	NA	60	NA	0%	0.09	NA	N	51	NA	0%	0.09	N	52	NA	0%	0.09	N
1,4-Dichlorobenzene	75	60	NA	0%	0.16	75	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
2,2-Dichloropropane	NA	60	NA	0%	0.38	NA	N	51	NA	0%	0.38	N	52	NA	0%	0.38	N
2-Butanone (MEK)	NA	60	NA	0%	2	NA	N	51	NA	0%	2	N	52	NA	0%	2	N
2-Hexanone	NA	60	NA	0%	1.7	NA	N	51	NA	0%	1.7	N	52	NA	0%	1.7	N
4-Methyl-2-pentanone (MIBK)	NA	60	NA	0%	0.98	NA	N	51	NA	0%	0.98	N	52	NA	0%	0.98	N
Acetone	NA	60	1	2%	10	NA	N	51	1	2%	2.3	N	52	NA	0%	1.9	N
Acetonitrile; methyl cyanide	NA	60	NA	0%	9.6	NA	N	51	NA	0%	9.6	N	52	NA	0%	9.6	N
Acetylene	NA	14	NA	0%	2.2	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.73	N
Acrolein	NA	60	NA	0%	2.8	NA	N	51	NA	0%	2.8	N	52	NA	0%	2.8	N
Acrylonitrile	NA	60	NA	0%	1.4	NA	N	51	NA	0%	1.4	N	52	NA	0%	1.4	N
Allyl chloride	NA	60	1	2%	0.75	NA	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Antimony	6	14	NA	0%	0.4	6	N	NA	NA	0%	NA	N	2	1	50%	1.2	N
Arsenic	10	14	10	71%	8.1	10	N	NA	NA	0%	NA	N	2	2	100%	2.1	N
Barium	2000	14	14	100%	310	2000	N	NA	NA	0%	NA	N	2	2	100%	140	N
Benzene	5	60	NA	0%	0.16	5	N	51	1	2%	0.5	N	52	NA	0%	0.16	N
Beryllium	4	14	1	7%	0.11	4	N	NA	NA	0%	NA	N	2	NA	0%	0.08	N
Bromochloromethane	NA	60	NA	0%	0.1	NA	N	51	NA	0%	0.1	N	52	NA	0%	0.1	N
Bromodichloromethane	80	60	1	2%	1.4	80	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Bromoform	80	60	1	2%	3	80	N	51	NA	0%	0.46	N	52	NA	0%	0.46	N
Bromomethane	NA	60	NA	0%	0.21	NA	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
Cadmium	NA	14	NA	0%	0.27	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.27	N
Carbon disulfide	NA	60	1	2%	0.22	NA	N	51	1	2%	0.41	N	52	NA	0%	0.17	N
Carbon tetrachloride	5	60	NA	0%	0.19	5	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
Chlorobenzene	100	60	NA	0%	0.17	100	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Chlorodibromomethane	80	60	1	2%	3	80	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Chloroethane	NA	60	NA	0%	0.41	NA	N	51	NA	0%	0.41	N	52	NA	0%	0.41	N
Chloroform	80	60	6	10%	0.62	80	N	51	4	8%	0.25	N	52	1	2%	0.16	N
Chloromethane	NA	60	NA	0%	0.3	NA	N	51	NA	0%	0.3	N	52	NA	0%	0.3	N
Chloroprene	NA	60	NA	0%	0.21	NA	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
Chromium	100	14	8	57%	1.7	100	N	NA	NA	0%	NA	N	2	2	100%	1	N
cis-1,2-Dichloroethene	70	60	9	15%	2.5	70	N	51	11	22%	2	N	52	9	17%	1.7	N
cis-1,3-Dichloropropene	NA	60	NA	0%	0.16	NA	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
Cobalt	NA	14	7	50%	0.48	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.092	N
Copper	1300	14	10	71%	14	1300	N	NA	NA	0%	NA	N	2	NA	0%	0.56	N
Dibromomethane	NA	60	1	2%	0.32	NA	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N

Table 5-1
Human Health Chemicals of Potential Concern Selection
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	MCL (µg/L)	2019						2020					2021				
		Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	MCL (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?
Dichlorodifluoromethane	NA	60	NA	0%	0.31	NA	N	51	NA	0%	0.31	N	52	NA	0%	0.31	N
Ethane	NA	14	NA	0%	1.7	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.57	N
Ethene	NA	14	NA	0%	1.2	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.4	N
Ethyl methacrylate	NA	60	NA	0%	0.86	NA	N	51	NA	0%	0.86	N	52	NA	0%	0.86	N
Ethylbenzene	700	60	NA	0%	1	700	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
Iodomethane	NA	60	NA	0%	0.23	NA	N	51	NA	0%	0.23	N	52	NA	0%	0.23	N
Iron	NA	14	10	71%	1800	NA	N	NA	NA	0%	NA	N	2	1	50%	100	N
Isobutanol; Isobutyl alcohol	NA	60	NA	0%	37	NA	N	51	NA	0%	37	N	52	NA	0%	37	N
Lead	15	14	8	57%	9.1	15	N	NA	NA	0%	NA	N	2	NA	0%	0.18	N
m,p-Xylene	NA	60	1	2%	2	NA	N	51	NA	0%	0.15	N	52	NA	0%	0.15	N
Manganese	NA	14	9	64%	480	NA	N	NA	NA	0%	NA	N	4	2	50%	0.68	N
Methacrylonitrile	NA	60	NA	0%	1.6	NA	N	51	NA	0%	1.6	N	52	NA	0%	1.6	N
Methane	NA	14	1	7%	1300	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.00063	N
Methyl methacrylate	NA	60	NA	0%	1.1	NA	N	51	NA	0%	1.1	N	52	NA	0%	1.1	N
Methylene Chloride	5	60	NA	0%	0.94	5	N	51	NA	0%	0.94	N	52	NA	0%	0.94	N
Nickel	NA	14	8	57%	1.5	NA	N	NA	NA	0%	NA	N	2	2	100%	0.61	N
o-xylene (1,2-dimethylbenzene)	NA	60	NA	0%	0.19	NA	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
Propane	NA	14	NA	0%	1.7	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.56	N
Propionitrile; ethyl cyanide	NA	60	NA	0%	3.7	NA	N	51	NA	0%	3.7	N	52	NA	0%	3.7	N
Selenium	50	14	8	57%	3	50	N	NA	NA	0%	NA	N	2	2	100%	0.64	N
Silver	NA	14	2	14%	0.036	NA	N	NA	NA	0%	NA	N	2	NA	0%	5	N
Styrene	100	60	NA	0%	0.36	100	N	51	NA	0%	0.36	N	52	NA	0%	0.36	N
Tetrachloroethene	5	60	20	33%	7	5	Y	51	17	33%	6.1	Y	52	14	27%	5.4	Y
Thallium	2	14	1	7%	0.12	2	N	NA	NA	0%	NA	N	2	NA	0%	0.089	N
Tin	NA	14	1	7%	3.3	NA	N	NA	NA	0%	NA	N	2	NA	0%	0.77	N
Toluene	1000	60	1	2%	0.19	1000	N	51	NA	0%	0.17	N	52	1	2%	0.43	N
trans-1,2-Dichloroethene	100	60	NA	0%	0.15	100	N	51	NA	0%	0.15	N	52	NA	0%	0.15	N
trans-1,3-Dichloropropene	NA	60	NA	0%	0.19	NA	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
trans-1,4-Dichloro-2-butene	NA	60	NA	0%	0.8	NA	N	51	NA	0%	0.8	N	52	NA	0%	0.8	N
Trichloroethene	5	60	27	45%	42	5	Y	51	28	55%	34	Y	52	29	56%	29	Y
Trichlorofluoromethane	NA	60	NA	0%	0.29	NA	N	51	NA	0%	0.29	N	52	NA	0%	0.29	N
Vanadium	NA	14	NA	0%	1.2	NA	N	NA	NA	0%	NA	N	2	1	50%	1.7	N
Vinyl acetate	NA	60	1	2%	1	NA	N	51	NA	0%	0.94	N	52	NA	0%	0.94	N
Vinyl chloride	2	60	NA	0%	0.1	2	N	51	NA	0%	0.1	N	52	NA	0%	0.1	N
Xylene (Total)	10000	60	1	2%	2	10000	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
Zinc	NA	14	10	71%	790	NA	N	NA	NA	0%	NA	N	2	NA	0%	2	N

Notes

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

Acronyms/Abbreviations

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

Acronyms/Abbreviations

cm² - squared centimeter

L - liter

mg - milligrams

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	2021	2109	2020	2021	2019	2020	2021	2109	2020	2021
MUNI-WELL-14	1.1	1.2	1.2	0.2	0.25	0.2	0.4	0.4	0.4	0.005	0.006	0.005
MUNI-WELL-33	1.9	2.1	1.9	0.31	0.37	0.39	0.7	0.8	0.7	0.008	0.009	0.010
MW-103S	NA	6.8	14	NA	1.1	2.8	NA	2	5	NA	0.03	0.07
MW-106D	0.16	NA	NA	0.2	NA	NA	0.1	NA	NA	0.005	NA	NA
MW-106S	0.16	NA	NA	0.2	NA	NA	0.1	NA	NA	0.005	NA	NA
MW-115S	NA	0.16	0.16	NA	0.2	0.2	NA	0.1	0.1	NA	0.005	0.005
MW-116D	0.16	NA	NA	0.2	NA	NA	0.1	NA	NA	0.005	NA	NA
MW-116S	31	26	27	3	3.7	4.2	11	9	10	0.07	0.09	0.1
MW-37	2.6	2	1.6	0.39	0.2	0.2	0.9	0.7	0.6	0.01	0.005	0.005
MW-38	1.5	0.16	2.5	0.23	0.2	0.2	0.5	0.1	0.9	0.006	0.005	0.005
PA-1	1.6	1.6	1.5	0.2	0.2	0.2	0.6	0.6	0.5	0.005	0.005	0.005
PA-10	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
PA-2	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
PA-3	1.7	2	1.2	0.24	0.2	0.2	0.6	0.7	0.4	0.006	0.005	0.005
PA-4	2.3	2.8	NA	0.25	0.63	NA	0.8	1.0	NA	0.006	0.02	NA
PA-5	1.1	0.86	0.6	0.2	0.2	0.2	0.4	0.3	0.2	0.005	0.005	0.005
PA-8	0.45	0.32	0.16	0.2	0.2	0.2	0.2	0.1	0.1	0.005	0.005	0.005
PA-9	0.16	NA	0.16	0.2	0.2	0.2	0.1	NA	0.1	0.005	0.005	0.005
RW-2076F	NA	NA	29	NA	NA	5.3	NA	NA	10	NA	NA	0.1
RW-2140H	30	34	26	4.6	6.1	4.5	11	12	9	0.1	0.1	0.1
RW-2151H	12	5.8	14	1.8	0.2	2.7	4	2	5	0.04	0.005	0.07
RW-2172F	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-2172H	42	28	21	7	4.9	5.4	15	10	8	0.2	0.1	0.1
RW-2203H	31	33	NA	4.6	5.2	NA	11	12	NA	0.1	0.1	NA
RW-2213F	0.16	0.16	NA	0.2	0.2	NA	0.06	0.1	NA	0.005	0.005	NA
RW-2237H	NA	9.8	8.6	NA	1.9	1.2	NA	4	3	NA	0.05	0.03
RW-2334F	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-2335F	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-2613M	NA	0.16	NA	NA	0.2	NA	NA	0.1	NA	NA	0.005	NA
RW-2879M	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-3259B	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-5898B1	0.88	0.78	0.26	0.2	0.2	0.2	0.3	0.3	0.1	0.005	0.005	0.005
RW-6998P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-7070B	2.9	3.4	3.2	0.9	0.59	0.2	1	1.2	1	0.022	0.01	0.005
RW-7077P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-7091R	NA	1.4	1	NA	0.24	0.2	NA	0.5	0.4	NA	0.006	0.005
RW-7200P	NA	NA	0.16	NA	NA	0.2	NA	NA	0.1	NA	NA	0.005
RW-7244P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-7288P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-7310P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA

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		
RW-7350P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-7492P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-7498P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-7505P	0.29	0.16	0.16	0.2	0.2	0.2	0.1	0.1	0.1	0.005	0.005	0.005
RW-7549P	0.26	0.16	0.16	0.2	0.2	0.2	0.09	0.1	0.1	0.005	0.005	0.005
RW-7586P	0.16	0.16	0.16	0.2	0.2	0.2	0.1	0.1	0.1	0.005	0.005	0.005
RW-7588P	0.16	0.16	0.16	0.2	0.2	0.2	0.1	0.1	0.1	0.005	0.005	0.005
RW-7677P	6.3	5.9	5.3	1.2	1.2	1.1	2	2	2	0.029	0.03	0.03
RW-7688P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-7773P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-7776P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-8000B	3.5	4.8	4.1	1	0.2	0.84	1	2	1	0.02	0.005	0.02
RW-8012P	2.2	0.16	0.16	0.79	0.2	0.2	0.8	0.1	0.1	0.02	0.005	0.005
RW-8030P	6	7.1	4.6	0.94	1.3	0.8	2	3	2	0.02	0.03	0.020
RW-8035P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-8048P	NA	4	3.8	NA	0.71	0.2	NA	1	1	NA	0.02	0.005
RW-8105PN	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-8105PS	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-8167P	0.16	NA	NA	0.2	NA	NA	0.06	NA	NA	0.005	NA	NA
RW-8209P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-8249P	0.16	0.16	0.16	0.2	0.2	0.2	0.06	0.1	0.1	0.005	0.005	0.005
RW-8284P	3.4	3.9	4.9	0.89	0.93	0.54	1	1	2	0.02	0.02	0.01

Acronyms/Abbreviations

µg/L - micrograms per liter

HQ - hazard quotient

ID - identifier

NA - not available

PCE - tetrachloroethene

RSL - Regional Screening Level

TCE - trichloroethene

VI - vapor intrusion

Notes

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

Well ID	Chemical	2019				2020				2021			
		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	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	0.2	0.04	4E-09	0.001
	TCE	1.1	0.12	3E-07	0.1	1.2	0.14	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	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	1.9	0.21	4E-07	0.1
MW-103S	PCE	NA	NA	NA	NA	1.1	0.21	2E-08	0.005	2.8	0.53	5E-08	0.013
	TCE	NA	NA	NA	NA	6.8	0.77	2E-06	0.4	14.0	1.58	3E-06	0.8
MW-106D	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
MW-106S	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
MW-116D	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
MW-115S	PCE	NA	NA	NA	NA	0.2	0.04	4E-09	0.001	0.2	0.04	4E-09	0.001
	TCE	NA	NA	NA	NA	0.2	0.02	4E-08	0.009	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	4.2	0.80	7E-08	0.02
	TCE	31	3.51	7E-06	2	26.0	2.94	6E-06	1	27.0	3.05	6E-06	1
MW-37	PCE	0.4	0.07	7E-09	0.002	0.2	0.04	4E-09	0.001	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	1.6	0.18	4E-07	0.1
MW-38	PCE	0.2	0.04	4E-09	0.001	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	2.5	0.28	6E-07	0.14
PA-1	PCE	0.2	0.04	4E-09	0.0009	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	1.5	0.17	4E-07	0.1
PA-10	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009
PA-2	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
PA-3	PCE	0.2	0.05	4E-09	0.001	0.2	0.04	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	1.2	0.14	3E-07	0.1
PA-4	PCE	0.3	0.05	4E-09	0.001	0.6	0.12	1E-08	0.003	NA	NA	NA	NA
	TCE	2.3	0.26	5E-07	0.1	2.8	0.32	7E-07	0.2	NA	NA	NA	NA
PA-5	PCE	0.2	0.04	4E-09	0.0009	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	0.6	0.07	1E-07	0.03
PA-8	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.01
PA-9	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009
RW-2076F	PCE	NA	NA	NA	NA	NA	NA	NA	NA	5.3	0.04	4E-09	0.0009
	TCE	NA	NA	NA	NA	NA	NA	NA	NA	29.0	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	4.5	0.85	8E-08	0.02
	TCE	30	3.39	7E-06	2	34.0	3.84	8E-06	2	26.0	2.94	6E-06	1
RW-2151H	PCE	1.8	0.34	3E-08	0.01	0.2	0.04	4E-09	0.001	2.7	0.51	5E-08	0.01
	TCE	12	1.36	3E-06	0.7	5.8	0.66	1E-06	0.3	14.0	1.58	3E-06	0.8
RW-2172F	PCE	0.2	0.04	4E-09	0.0009	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	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	5.4	1.02	9E-08	0.02
	TCE	42	4.75	1E-05	2	28.0	3.17	7E-06	2	21.0	2.37	5E-06	1
RW-2203H	PCE	4.6	0.87	8E-08	0.02	5.2	0.99	9E-08	0.02	NA	NA	NA	NA
	TCE	31	3.51	7E-06	2	33.0	3.73	8E-06	2	NA	NA	NA	NA
RW-2213F	PCE	0.2	0.04	4E-09	0.0009	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	0.2	0.02	4E-08	0.009	NA	NA	NA	NA
RW-2237H	PCE	NA	NA	NA	NA	1.9	0.36	3E-08	0.009	1.2	0.23	2E-08	0.005
	TCE	NA	NA	NA	NA	9.8	1.11	2E-06	0.5	8.6	0.97	2E-06	0.5
RW-2334F	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-2335F	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-2613M	PCE	NA	NA	NA	NA	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA
	TCE	NA	NA	NA	NA	0.2	0.02	4E-08	0.009	NA	NA	NA	NA
RW-2879M	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009
RW-3259B	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-5898B1	PCE	0.2	0.04	4E-09	0.0009	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	0.3	0.03	6E-08	0.01
RW-6998P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-7070B	PCE	0.9	0.17	2E-08	0.00	0.6	0.11	1E-08	0.003	0.2	0.04	4E-09	0.001
	TCE	2.9	0.33	7E-07	0.2	3.4	0.38	8E-07	0.2	3.2	0.36	8E-07	0.2
RW-7077P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-7091R	PCE	NA	NA	NA	NA	0.2	0.05	4E-09	0.001	0.2	0.04	4E-09	0.001
	TCE	NA	NA	NA	NA	1.4	0.16	3E-07	0.08	1.0	0.11	2E-07	0.05
RW-7200P	PCE	NA	NA	NA	NA	NA	NA	NA	NA	0.2	0.04	4E-09	0.001
	TCE	NA	NA	NA	NA	NA	NA	NA	NA	0.2	0.11	2E-07	0.05
RW-7244P	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009

Table 5-4
Human Health Vapor Intrusion Non-cancer Hazard Evaluation
Fort Hall Mine Landfill, Bannock County, Idaho

Well ID	Chemical	2019				2020				2021			
		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	Groundwater Concentration (µg/L)	Calculated Indoor Air Concentration (µg/m ³)	VI Carcinogenic Risk	VI HQ
RW-7288P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-7310P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-7350P	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009
RW-7492P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-7498P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-7505P	PCE	0.2	0.04	4E-09	0.0009	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	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	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	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	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	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	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	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	1.1	0.21	2E-08	0.01
	TCE	6.3	0.71	1E-06	0.3	5.9	0.67	1E-06	0.3	5.3	0.60	1E-06	0.3
RW-7688P	PCE	0.2	0.04	4E-09	0.0009	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	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	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	0.2	0.02	4E-08	0.009
RW-7776P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-8000B	PCE	1.0	0.19	2E-08	0.00	0.2	0.04	4E-09	0.001	0.8	0.16	1E-08	0.004
	TCE	3.5	0.40	8E-07	0.2	4.8	0.54	1E-06	0.3	4.1	0.46	1E-06	0.2
RW-8012P	PCE	0.8	0.15	1E-08	0.00	0.2	0.04	4E-09	0.0009	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	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	0.8	0.15	1E-08	0.00
	TCE	6	0.68	1E-06	0.3	7.1	0.80	2E-06	0.4	4.6	0.52	1E-06	0.2
RW-8035P	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009
RW-8048P	PCE	NA	NA	NA	NA	0.7	0.13	1E-08	0.003	0.2	0.04	4E-09	0.001
	TCE	NA	NA	NA	NA	4.0	0.45	9E-07	0.2	3.8	0.43	9E-07	0.2
RW-8105PN	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-8105PS	PCE	0.2	0.04	4E-09	0.0009	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	0.2	0.02	4E-08	0.009
RW-8167P	PCE	0.2	0.04	4E-09	0.0009	NA	NA	NA	NA	NA	NA	NA	NA
	TCE	0.16	0.02	4E-08	0.009	NA	NA	NA	NA	NA	NA	NA	NA
RW-8209P	PCE	0.2	0.04	4E-09	0.0009	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	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	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	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	0.5	0.10	9E-09	0.002
	TCE	3.4	0.38	8E-07	0.2	3.9	0.44	9E-07	0.2	4.9	0.55	1E-06	0.3

Notes

Groundwater temperature was set to 13.5 (°C) in the VISL calculator.

Shading indicates locations with HQs greater than 1.

Acronyms/Abbreviations

µg/L - micrograms per liter

µg/m³ - micrograms per cubic meter

HQ - hazard quotient

ID - identifier

NA - not available

PCE - tetrachloroethene

TCE - trichloroethene

VI - vapor intrusion

VISL - vapor intrusion screening level

Table 5-5
Human Health Total Non-cancer Hazard Quotients - 2021
Fort Hall Mine Landfill, Bannock County, Idaho

Well ID	Groundwater HQ		VI HQ		Total HI	
	TCE	PCE	TCE	PCE	TCE	PCE
Muni-Well-14	0.4	0.005	0.07	0.001	0.5	0.006
Muni-Well-33	0.7	0.01	0.1	0.002	0.8	0.01
MW-103S	5	0.07	0.8	0.01	6	0.08
MW-115S	0.06	0.005	0.01	0.001	0.07	0.01
MW-116S	10	0.1	1	0.02	11	0.1
MW-37	0.6	0.005	0.09	0.001	0.66	0.01
MW-38	0.9	0.005	0.1	0.001	1	0.01
PA-1	0.5	0.005	0.1	0.001	1	0.01
PA-10	0.06	0.005	0.01	0.001	0.07	0.01
PA-3	0.4	0.005	0.07	0.001	0.5	0.01
PA-5	0.2	0.005	0.03	0.001	0.2	0.01
PA-8	0.06	0.005	0.01	0.001	0.07	0.01
PA-9	0.06	0.005	0.009	0.001	0.07	0.01
RW-2076F	10	0.1	0.01	0.001	10	0.1
RW-2140H	9	0.1	1	0.02	11	0.1
RW-2151H	5	0.07	0.8	0.01	6	0.08
RW-2172F	0.06	0.005	0.01	0.001	0.07	0.01
RW-2172H	8	0.1	1	0.02	9	0.2
RW-2237H	3	0.03	0.5	0.005	4	0.03
RW-2879M	0.06	0.005	0.01	0.001	0.07	0.01
RW-5898B1	0.09	0.005	0.01	0.001	0.1	0.01
RW-7070B	1	0.005	0.2	0.001	1	0.01
RW-7091R	0.4	0.005	0.05	0.001	0.4	0.01
RW-7200P	0.06	0.005	0.05	0.001	0.1	0.01
RW-7244P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7350P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7505P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7549P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7586P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7588P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7677P	2	0.03	0.3	0.005	2	0.03
RW-7688P	0.06	0.005	0.01	0.001	0.07	0.01
RW-7773P	0.06	0.005	0.01	0.001	0.07	0.01
RW-8000B	1	0.02	0.2	0.004	2	0.02
RW-8012P	0.06	0.005	0.01	0.001	0.07	0.01
RW-8030P	2	0.02	0.2	0.004	2	0.02
RW-8035P	0.06	0.005	0.01	0.001	0.07	0.01
RW-8048P	1	0.005	0.2	0.001	2	0.01
RW-8105PS	0.06	0.005	0.01	0.001	0.07	0.01
RW-8209P	0.06	0.005	0.01	0.001	0.07	0.01
RW-8249P	0.06	0.005	0.01	0.001	0.07	0.01
RW-8284P	2	0.01	0.3	0.002	2	0.02

HI - hazard index
HQ - hazard quotient
ID - identifier
PCE - tetrachloroethene
TCE - trichloroethene
VI - vapor intrusion

Shading indicates HQ values greater than 1.

Table 5-6
Ecological Chemicals of Potential Concern Selection
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	Screening Value (µg/L)	2019					2020					2021				
		Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?
1,1,1,2-Tetrachloroethane	NA	60	NA	0%	0.21	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
1,1,1-Trichloroethane	4400000	60	2	3%	0.27	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
1,1,2,2-Tetrachloroethane	NA	60	NA	0%	0.21	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
1,1,2-Trichloroethane	NA	60	NA	0%	0.27	N	51	NA	0%	0.27	N	52	NA	0%	0.27	N
1,1-Dichloroethane	1700000	60	2	3%	0.26	N	51	2	4%	0.25	N	52	NA	0%	0.22	N
1,1-Dichloroethene	130000	60	NA	0%	0.23	N	51	NA	0%	0.23	N	52	NA	0%	0.23	N
1,1-Dichloropropene	NA	60	NA	0%	0.19	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
1,2,3-Trichloropropane	NA	60	NA	0%	0.33	N	51	NA	0%	0.33	N	52	NA	0%	0.33	N
1,2,4-Trichlorobenzene	6600	60	NA	0%	0.21	N	51	NA	0%	0.21	N	52	1	2%	0.4	N
1,2-Dibromo-3-Chloropropane	NA	60	NA	0%	0.47	N	51	NA	0%	0.47	N	52	NA	0%	0.47	N
1,2-Dibromoethane	NA	60	NA	0%	0.18	N	51	NA	0%	0.18	N	52	NA	0%	0.18	N
1,2-Dichlorobenzene	NA	60	NA	0%	0.15	N	51	NA	0%	0.15	N	52	NA	0%	0.15	N
1,2-Dichloroethane	19000	60	3	5%	2	N	51	NA	0%	0.13	N	52	1	2%	0.17	N
1,2-Dichloropropane	NA	60	1	2%	0.29	N	51	NA	0%	0.18	N	52	NA	0%	0.18	N
1,3-Dichlorobenzene	NA	60	NA	0%	0.13	N	51	NA	0%	0.13	N	52	NA	0%	0.13	N
1,3-Dichloropropane	NA	60	NA	0%	0.09	N	51	NA	0%	0.09	N	52	NA	0%	0.09	N
1,4-Dichlorobenzene	11000	60	NA	0%	0.16	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
2,2-Dichloropropane	NA	60	NA	0%	0.38	N	51	NA	0%	0.38	N	52	NA	0%	0.38	N
2-Butanone (MEK)	7900000	60	NA	0%	2	N	51	NA	0%	2	N	52	NA	0%	2	N
2-Hexanone	NA	60	NA	0%	1.7	N	51	NA	0%	1.7	N	52	NA	0%	1.7	N
4-Methyl-2-pentanone (MIBK)	NA	60	NA	0%	0.98	N	51	NA	0%	0.98	N	52	NA	0%	0.98	N
Acetone	44000	60	1	2%	10	N	51	1	2%	2.3	N	52	NA	0%	1.9	N
Acetonitrile; methyl cyanide	NA	60	NA	0%	9.6	N	51	NA	0%	9.6	N	52	NA	0%	9.6	N
Acetylene	NA	14	NA	0%	2.2	N	NA	NA	0%	NA	N	2	NA	0%	0.73	N
Acrolein	NA	60	NA	0%	2.8	N	51	NA	0%	2.8	N	52	NA	0%	2.8	N
Acrylonitrile	NA	60	NA	0%	1.4	N	51	NA	0%	1.4	N	52	NA	0%	1.4	N
Allyl chloride	NA	60	1	2%	0.75	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Antimony	690	14	NA	0%	0.4	N	NA	NA	0%	NA	N	2	1	50%	1.2	N
Arsenic	560	14	10	71%	8.1	N	NA	NA	0%	NA	N	2	2	100%	2.1	N
Barium	6100	14	14	100%	310	N	NA	NA	0%	NA	N	2	2	100%	140	N
Benzene	110000	60	NA	0%	0.16	N	51	1	2%	0.5	N	52	NA	0%	0.16	N
Beryllium	2900	14	1	7%	0.11	N	NA	NA	0%	NA	N	2	NA	0%	0.08	N
Bromochloromethane	NA	60	NA	0%	0.1	N	51	NA	0%	0.1	N	52	NA	0%	0.1	N
Bromodichloromethane	NA	60	1	2%	1.4	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Bromoform	NA	60	1	2%	3	N	51	NA	0%	0.46	N	52	NA	0%	0.46	N
Bromomethane	NA	60	NA	0%	0.21	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
Cadmium	4800	14	NA	0%	0.27	N	NA	NA	0%	NA	N	2	NA	0%	0.27	N
Carbon disulfide	NA	60	1	2%	0.22	N	51	1	2%	0.41	N	52	NA	0%	0.17	N
Carbon tetrachloride	NA	60	NA	0%	0.19	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
Chlorobenzene	260000	60	NA	0%	0.17	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Chlorodibromomethane	NA	60	1	2%	3	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Chloroethane	NA	60	NA	0%	0.41	N	51	NA	0%	0.41	N	52	NA	0%	0.41	N
Chloroform	67000	60	6	10%	0.62	N	51	4	8%	0.25	N	52	1	2%	0.16	N
Chloromethane	NA	60	NA	0%	0.3	N	51	NA	0%	0.3	N	52	NA	0%	0.3	N
Chloroprene	NA	60	NA	0%	0.21	N	51	NA	0%	0.21	N	52	NA	0%	0.21	N
Chromium	7100	14	8	57%	1.7	N	NA	NA	0%	NA	N	2	2	100%	1	N
cis-1,2-Dichloroethene	NA	60	9	15%	2.5	N	51	11	22%	2	N	52	9	17%	1.7	N
cis-1,3-Dichloropropene	NA	60	NA	0%	0.16	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
Cobalt	82	14	7	50%	0.48	N	NA	NA	0%	NA	N	2	NA	0%	0.092	N
Copper	12000	14	10	71%	14	N	NA	NA	0%	NA	N	2	NA	0%	0.56	N

Table 5-6
Ecological Chemicals of Potential Concern Selection
Fort Hall Mine Landfill, Bannock County, Idaho

Chemical	Screening Value (µg/L)	2019					2020					2021				
		Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?	Number of Samples	Number of Detects	Detection Frequency	Maximum (µg/L)	COPC?
Dibromomethane	NA	60	1	2%	0.32	N	51	NA	0%	0.17	N	52	NA	0%	0.17	N
Dichlorodifluoromethane	NA	60	NA	0%	0.31	N	51	NA	0%	0.31	N	52	NA	0%	0.31	N
Ethane	NA	14	NA	0%	1.7	N	NA	NA	0%	NA	N	2	NA	0%	0.57	N
Ethene	NA	14	NA	0%	1.2	N	NA	NA	0%	NA	N	2	NA	0%	0.4	N
Ethyl methacrylate	NA	60	NA	0%	0.86	N	51	NA	0%	0.86	N	52	NA	0%	0.86	N
Ethylbenzene	NA	60	NA	0%	1	N	51	NA	0%	0.16	N	52	NA	0%	0.16	N
Iodomethane	NA	60	NA	0%	0.23	N	51	NA	0%	0.23	N	52	NA	0%	0.23	N
Iron	NA	14	10	71%	1800	N	NA	NA	0%	NA	N	2	1	50%	100	N
Isobutanol; Isobutyl alcohol	NA	60	NA	0%	37	N	51	NA	0%	37	N	52	NA	0%	37	N
Lead	4300	14	8	57%	9.1	N	NA	NA	0%	NA	N	2	NA	0%	0.18	N
m,p-Xylene	NA	60	1	2%	2	N	51	NA	0%	0.15	N	52	NA	0%	0.15	N
Manganese	190000	14	9	64%	480	N	NA	NA	0%	NA	N	4	2	50%	0.68	N
Methacrylonitrile	NA	60	NA	0%	1.6	N	51	NA	0%	1.6	N	52	NA	0%	1.6	N
Methane	NA	14	1	7%	1300	N	NA	NA	0%	NA	N	2	NA	0%	0.00063	N
Methyl methacrylate	NA	60	NA	0%	1.1	N	51	NA	0%	1.1	N	52	NA	0%	1.1	N
Methylene Chloride	26000	60	NA	0%	0.94	N	51	NA	0%	0.94	N	52	NA	0%	0.94	N
Nickel	300	14	8	57%	1.5	N	NA	NA	0%	NA	N	2	2	100%	0.61	N
o-xylene (1,2-dimethylbenzene)	NA	60	NA	0%	0.19	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
Propane	NA	14	NA	0%	1.7	N	NA	NA	0%	NA	N	2	NA	0%	0.56	N
Propionitrile; ethyl cyanide	NA	60	NA	0%	3.7	N	51	NA	0%	3.7	N	52	NA	0%	3.7	N
Selenium	890	14	8	57%	3	N	NA	NA	0%	NA	N	2	2	100%	0.64	N
Silver	22000	14	2	14%	0.036	N	NA	NA	0%	NA	N	2	NA	0%	5	N
Styrene	NA	60	NA	0%	0.36	N	51	NA	0%	0.36	N	52	NA	0%	0.36	N
Tetrachloroethene	8900	60	20	33%	7	N	51	17	33%	6.1	N	52	14	27%	5.4	N
Thallium	31	14	1	7%	0.12	N	NA	NA	0%	NA	N	2	NA	0%	0.089	N
Tin	NA	14	1	7%	3.3	N	NA	NA	0%	NA	N	2	NA	0%	0.77	N
Toluene	110000	60	1	2%	0.19	N	51	NA	0%	0.17	N	52	1	2%	0.43	N
trans-1,2-Dichloroethene	NA	60	NA	0%	0.15	N	51	NA	0%	0.15	N	52	NA	0%	0.15	N
trans-1,3-Dichloropropene	NA	60	NA	0%	0.19	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
trans-1,4-Dichloro-2-butene	NA	60	NA	0%	0.8	N	51	NA	0%	0.8	N	52	NA	0%	0.8	N
Trichloroethene	440000	60	27	45%	42	N	51	28	55%	34	N	52	29	56%	29	N
Trichlorofluoromethane	NA	60	NA	0%	0.29	N	51	NA	0%	0.29	N	52	NA	0%	0.29	N
Vanadium	4500	14	NA	0%	1.2	N	NA	NA	0%	NA	N	2	1	50%	1.7	N
Vinyl acetate	NA	60	1	2%	1	N	51	NA	0%	0.94	N	52	NA	0%	0.94	N
Vinyl chloride	NA	60	NA	0%	0.1	N	51	NA	0%	0.1	N	52	NA	0%	0.1	N
Xylene (Total)	9400	60	1	2%	2	N	51	NA	0%	0.19	N	52	NA	0%	0.19	N
Zinc	490000	14	10	71%	790	N	NA	NA	0%	NA	N	2	NA	0%	2	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
2022 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	113	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	90	Plume boundary
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 *2020 Offsite Groundwater Monitoring Report* - Recommendations for 2021 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

2021 Annual Offsite Sampling Event Field Documentation

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

Well No.: Muni-Well-14		Date: 6/21/21		Samplers: EE, IC			
Tap Location: Well house off Bannock Hwy on Cree (right of Bannock)							
Well Diameter (inches):		1" - 0.041 Gal/ft.	Minimum purge volume (gallons) = 5,000				
Total Depth of Well (feet):		2" - 0.16 Gal/ft.					
Depth to Water (feet):		4" - 0.65 Gal/ft.					
Water Column Height (feet):		6" - 1.47 Gal/ft.					
		8" - 2.60 Gal/ft.					
Purge Rate (gallon/minute):	~1000	Begin Purge (time):	15:25				
Required Purge Time (minute):	~5	End Purge (time):	15:30				
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): 15:28							
Time	Temp. (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
15:28	14.87	7.88	10.41	784	Ø	178	erroneous DO
15:31	13.48	7.74	10.75	785	Ø	181	erroneous DO
15:34	13.21	7.57	10.77	802.79	Ø	183	erroneous DO
15:37	SAMPLE						
Sample ID: Muni-Well-14-20210621		Sample Time: 15:37					
QC Samples Collected: None							
Analytical Parameters: VOCs							

**CDM
Smith**

PID: Ø all ; 21.2% oxy * DO brased high (Horiba)
 ** Well was sampled without reaching stabilization of field parameters because the City cannot run the pump too long

Muni-Well-14 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba
- Well was sampled without reaching stabilization of field parameters because City cannot run pump too long

FORT HALL MINE LANDFILL, BANNOCK COUNTY, POCA TELLO, ID

[illegible]

PID: ϕ all except 21.3% O_2

A. Well was sampled without parameter stabilization because the City cannot run the pump too long

Muni-Well-33 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba
- Well was sampled without reaching stabilization of field parameters because City cannot run pump too long

GROUNDWATER MONITORING WELL LOW-FLOW SAMPLING DATA SHEET

Site Name: FHML Date: 6/26/21 OVM: FID ☐ PID ☒ In Casing (ppm): (Initial) (Vented to)

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

Analytical Parameters: VOCs (8260)

QC Samples Collected: None

Initial Static Water Level (feet btoc): 83.92

Final Water Level (feet btoc): 83.92

Purge Start Time: 1045

Sample Time: 1230

Samplers' Signatures: [Signature]

Ferrous Iron (mg/L): NA Allowable Drawdown (ft): 0.1

Controller Settings: Recharge: 14 secs Discharge: 6 secs Pressure: 65 psi

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
1125	83.92	16.3	7.05	1133	7.55	85.7	0.25	150	
1130	83.92	14.2	7.03	1131	7.39	88.4	0.99	200	
1135	83.92	13.2	6.99	1152	6.08	70.4	1.72	200	min purge met b4 reading
1140	83.92	13.4	6.94	1155	5.51	3.0	1.49	200	
1145	83.92	13.4	7.00	1128	7.00	2.9	0.55	200	
1150	83.92	13.4	6.99	1123	6.99	20.6	0.21	200	
1155	83.92	13.3	6.99	1122	7.32	29.3	0.35	206	
1200	83.92	13.3	6.98	1119	7.47	40.1	0.27	200	
1205	83.92	13.5	6.98	1119	7.47	56.4	0.24	200	
1210	83.92	13.3	6.98	1118	7.50	63.9	0.23	200	
1215	83.92	13.3	6.99	1109	7.51	73.6	0.21	200	
1220	83.92	13.4	6.99	1109	7.50	75.3	0.22	200	
1225	83.92	13.3	6.98	1108	7.51	79.9	0.22	200	
1230	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 Flow Rate: 200-325 mL/min
Pressure: 60 psi Cycles Per Minute: 3

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

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

MW-37 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

(Vented to) _____

Pump depth (ft btoc): 110

VOCs (8260)

20

0.

70 psi

Cycles Per Minute:

LC 6/27/21

$$\text{Water Col. X Casing Factor} = \text{Gallons per Casing Volume}$$

Casing Factors: 2" diameter well: 0.16 / 4" diameter well: 0.65 / 6" diameter well: 1.47

Discharge:

Flow Rate:

3.2 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

2023 3/26 11345

Well ID:	MW-38 (deep)	Purging/Sampling Device:	Portable pump
		Pump depth (ft btoc):	125

Analytical Parameters:
VOCs (8260)

QC Samples Collected: 20

Ferrous Iron (mg/L): ND#

~~Controller Settings: Recharge:~~

[Signature]

H.C. 5/27/2

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

Pressure: 70 psi

Cycles Per Minute:	Flow Rate:
2	200-300 mL/min

Screened Interval:	121-130 ft bgs	Minimum purge volume:	3.5 gallons
--------------------	----------------	-----------------------	-------------

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

PA-1 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

PA-3 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

(Vented to)

(Vented to)

Pump depth (ft btoc): 60

[illegible]

Allowable Drawdown (ft): 0.1

Discharge: 6 secs Pressure: 40 psi

Cycles Per Minute: 51

5

1.1 gallons

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

PA-5 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous turbidity



PA-5 Well 06/27/2021



PA-5 Well 06/27/2021

GROUNDWATER MONITORING WELL LOW-FLOW SAMPLING DATA SHEET

Site Name: FHML Date: 06/23/2021 OVM: FID ☒ PID ☐ In Casing (ppm): (Initial) (Vented to) _____

Well ID: PA-8 (Mid) Pumping/Sampling Device: Portable pump Pump depth (ft btoc): 82

Initial Static Water Level (feet btoc): 45.04 ^{MG 06/23} Analytical Parameters: VOCs (8260) _____

Final Water Level (feet btoc): 45.05 ^{MG 06/23} QC Samples Collected: None

Purge Start Time: 12:10 12:28 Ferrous Iron (mg/L): N/A Allowable Drawdown (ft): 0.1

Sample Time: 1413 Controller Settings: Recharge: 10 secs Discharge: 5 secs Pressure: 80 psi

Samplers' Signatures: MG Cycles Per Minute: 4

Possibly inaccurate pressure gauge

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
1310	45.04	24.54	9.03	456	9.76	115	4.5	120	
1320	45.04	24.74	9.05	456	9.49	115	0.0	110	
1338	45.04	25.10	9.00	454	9.68	123	0.0	100	minimum purge met
1343	45.04	25.42	8.95	455	9.94	116	0.0	100	
1348	45.04	25.71	9.07	455	9.48	121	0.0	100	
1353	45.04	25.68	8.96	459	10.02	124	0.0	100	
1358	45.04	25.78	9.07	478	10.65	117	0.0	100	
1403	45.04	25.95	9.07	475	9.69	124	0.0	100	
1408	45.04	26.16	9.07	476	9.77	117	0.0	90	
1413	sample								

* DO biased high (Horiba)

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

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: 10 secs Discharge: 5 secs
Pressure: 70 psi Cycles Per Minute: 4 Flow Rate: 100-150 mL/min

Screened Interval: 77-87 ft bgs Minimum purge volume: 2.2 gallons

PA-8 Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba
- Possibly inaccurate pressure gauge

$$Ox\gamma = 20, \text{ other} = 0$$

Well ID:	PA-9 (Shallow)
Purging/Sampling Device:	Portable pump
Pump depth (ft bblc):	5

CC Samples Collected:	None
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Put the start time:

cycles per minute: 3

Samp1ers' Signatures: _____

Cycles per Minute: _____

[illegible]

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

Flow Rate:	3
40 psi	3

Pressure: 40 psi Cycles Per Minute: 3 Flow Rate: _____

Screened Interval: 57.5-67.5 ft bgs Minimum purge volume: 1.7 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

$$0 \times 1 = 0, 0 \times 0 = 0$$

6/24/61

min purge met b4 reading

Water Col. X Casing Factor = Gallons per Casing Volume

Previous controller settings: Recharge: 8 secs.

300 mL/min

Screened Interval: 87.5-98 ft bgs Minimum purge volume: 1.7 gallons

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



PA-9 Gate Lock 06/24/2021

other = 0
(Vented to) 20.9% OX₂

(Vented to) 201) 10 2x 1

Pump depth (ft btoc): 44

54.28

2/4
 Ferric Iron (mg/l):
 Allowable Drawdown (ft): 0.1

Controller Settings: Recharge: 8

IC. EE

min purge met b4 reading

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

Discharge: 7 secs

Cycles Per Minute:

350-400 mL/min

Minimum purge volume: 0.8

0.8 gallons

Parameter	Unit	DO	ORP	Water Level	Turbidity
Temperature	°C	± 1	± 0.1	± 0.1	± 10
pH	pH unit	± 0.1	± 0.1	± 0.1	± 10mV
Conductivity	µS/cm	± 10	± 10	± 0.1	± 0.1 foot
					< 50 NTU

PA-10 Notes:

Considerations for 2021 Spring Sample Results:

- Slightly Fluctuating DO values

RW-

Notes:

talked to owners son
(see Private Property Comm Record)



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

Well No.: RW-2140H		Date: <u>6/26/21</u>		Samplers: <u>MG, IC, EE</u>			
Tap Location:							
Well Diameter (inches):	<u>8</u>	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = <u>400</u> 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	<u>195</u> (-)						
Depth to Water (feet):	<u> </u>						
Water Column Height (feet):	<u> </u> (x)						
Purge Rate (gallon/minute):	<u>16.39</u>	Begin Purge (time):		<u>10:15</u>			
Required Purge Time (minute):	<u>25</u>	End Purge (time):		<u>10:54</u>			
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): <u>1054</u>							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1054	15.2	7.03	8.61	1168	-0.11	83.2	
1059	13.9	7.06	8.61	1145	-0.08	83.2	
1104	13.9	7.09	8.98	1150	-0.06	87.2	
1109	13.4	7.09	8.88	1149	-0.03	85.5	
1114	sample						<u>MG 06/26</u>
1120	sample						
Sample ID: RW-2140H - <u>20200626</u>				Sample Time: <u>1120</u>			
QC Samples Collected: None							
Analytical Parameters: VOCs							



* sampled from green house protruding from irrigation line in front yard. Can control flow rate with valve on front end of hose. Purged water into field below front lawn

RW-2140H Notes:

Considerations for 2021 Spring Sample Results:

- Had to turn hose back on after a couple minutes of being off because initial samples were taken while truck was running 50 ft away. New samples were taken.

Considerations for Next Sampling Event:

- Sampled from green hose protruding from irrigation line in front yard
- Can control flow rate with valve on front end of hose
- Purged water into field below front lawn

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

Well No.: RW-2151H		Date: 6/23/21		Samplers: IC, EE			
Tap Location:							
Well Diameter (inches):	8	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 300 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	180 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	15 gpm	Begin Purge (time):		1329			
Required Purge Time (minute):	20 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): 1350							
Time	Temp. (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1350	18.82	8.74	14.76	582	22.6	46	
1355	18.9	8.19	7.94	592	28.5	27	
1400							orange water iron present
1403	17.32	7.95	12.87	630	23.2	44	water is clear
1408	16.83	7.85	12.13	639	34.2	37	
1409							water orange
1415	14.82	7.86	8.72	717	21.9	54	water clear
1415							water orange
1417	14.07	7.84	7.61	718	18.4	48	water clear
1420	14.29	7.98	8.07	773	14.3	19	" clear
1423	13.89	7.92	7.83	819	34.4	-3	" clear
1426	13.82	7.83	9.23	880	12.4	-1	" clear
1429	13.60	7.98	10.04	917	7.7	-4	" "
1432	13.44	8.01	12.73	946	7.7	-9	" "
Sample ID: RW-2151H-20210623		Sample Time: 14:39					
QC Samples Collected: None							
Analytical Parameters: VOCs							



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

PID:

OXY = 21.3%, other = 0

Flow fluctuates, iron present = brown/red water @ ~1358
orange water lasts 2 min, occurs every 8 min

1 of 2

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

Well No.: <u>RW-2151H</u>		Date: <u>6/23/21</u>		Samplers: <u>EE, IC</u>			
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. = _____ (X) 3 = _____					
Water Column Height (feet): _____ (x)		6" - 1.47 Gal/ft.					
		8" - 2.60 Gal/ft.					
Purge Rate (gallon/minute): _____		Begin Purge (time): _____					
Required Purge Time (minute): _____		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
<u>14:36</u>	<u>13.76</u>	<u>8.00</u>	<u>10.57</u>	<u>976</u>	<u>7.1</u>	<u>-6</u>	<u>clear</u>
<u>14:39</u>	<u>SAMPLE</u>	_____	_____	_____	_____	_____	_____
Sample ID: <u>RW-2151H - 20210623</u>				Sample Time: <u>14:39</u>			
QC Samples Collected: <u>None</u>							
Analytical Parameters: <u>VOCs</u>							



7.9 gpm appears to prevent orange cycles (pump cycling)
 * DO biased high (Horiba)

2 of 2

RW-2151H Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba
- Flow fluctuated, iron present, brown/red water @13:58, orange water lasts 2 min., occurs every 8 min.

Considerations for Next Sampling Event:

- 7.9 GPM appears to prevent orange cycles

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

Well No.: RW-2172F		Date: 06/25/2021		Samplers: AN MG			
Tap Location:							
Well Diameter (inches):	6	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 100 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	110 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	12	Begin Purge (time):		1230			
Required Purge Time (minute):	9	End Purge (time):		1239			
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): 1240							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1240	13.6	7.27	7.14	814	0.09	79.9	
1245	13.5	7.26	7.11	811	0.04	83.5	
1250	13.5	7.25	7.03	808	0.16	86.2	
1255	sample						
1257	MS/MSD						
1259	MS/MSD						
Sample ID: RW-2172F-20210625				Sample Time: 1255			
QC Samples Collected: MS/MSD				1257/1259			
Analytical Parameters: VOCs							

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

Well No.: RW-2172H		Date: 06/23/2021		Samplers: MG, AN			
Tap Location:							
Well Diameter (inches):	8	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 300 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	165 (-)						
Depth to Water (feet):	_____						
Water Column Height (feet):	_____ (x)						
Purge Rate (gallon/minute):	~ 15	Begin Purge (time):		16:38			
Required Purge Time (minute):	20	End Purge (time):		17:00			
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
1707	19.42	8.60	8.18	1080	0.0	97	
1712	16.62	8.27	7.12	1120	0.0	89	
1717	15.82	8.05	8.33	1140	0.0	72	
1722	15.07	7.95	8.68	1160	0.0	51	
1727	14.60	7.87	8.20	1160	0.0	36	
1732	14.35	7.80	8.66	1160	0.0	19	
1737	14.37	7.74	8.55	1170	0.0	24	
1742	13.99	7.70	8.50	1180	0.0	12	
1751	13.42	7.70	8.43	1190	0.0	9	
1756	13.11	7.70	8.56	1200	0.0	6	
1757	sample						
1759	FD						
Sample ID: RW-2172H 20210623				Sample Time: 1757			
QC Samples Collected: FD							
Analytical Parameters: VOCs							

RW-2172H Notes:

Considerations for 2021 Spring Sample Results:

- Sample taken through rubber hose

Considerations for Next Sampling Event:

- Spigot consists of adaptor to support 3 hose connections
- no valve present to throttle flow
- sample collected through hose
- breaker under bucket near well head used to turn spigot on/off



RW-2172H Breaker box 06/23/2021



RW-2172H Well head 06/23/2021

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

Well No.: RW-2237H		Date: 06/24/2021		Samplers: AN MG			
Tap Location:							
Well Diameter (inches):	9	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 300 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	100 (-)						
Depth to Water (feet):	65 (est)						
Water Column Height (feet):	35 (x)						
Purge Rate (gallon/minute):	10	Begin Purge (time):		15:14			
Required Purge Time (minute):	30	End Purge (time):		15:44			
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): 1545							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1545	14.6	7.23	8.46	852	0.8	134.9	
1550	15.3	7.26	8.32	850	0.6	136.1	
1555	15.6	7.27	8.28	851	-0.1	135.2	
1600	sample						
Sample ID: RW-2237H-20210624				Sample Time: 1600			
QC Samples Collected: None							
Analytical Parameters: VOCs							

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

Well No.: RW-2879M		Date: 6/24/24		Samplers: EE, IC			
Tap Location:							
Well Diameter (inches):	6	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					
Total Depth of Well (feet):	205 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	13	Begin Purge (time):		08:15			
Required Purge Time (minute):	23	End Purge (time):		08:28			
PARAMETERS FOR WATER QUALITY STABILIZATION							
Temperature	± 1°C	DO	± 10 %	(YST)			
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
08:40	14.7	6.49	6.87	1,670	1.75	18.6	
08:45	14.1	6.87	6.94	1,678	1.89	-1.5	
08:50	13.8	6.93	6.97	1,677	2.03	-7.4	
08:55	13.8	6.88	6.97	1,676	1.97	1.94	
09:00	13.7	6.89	7.03	1,678	2.08	-2.1	
09:05	13.6	6.93	7.03	1,673	2.81	0.5	
09:10	SAMPLE						
Sample ID: RW-2879M-20210624		Sample Time: 0910					
QC Samples Collected: None							
Analytical Parameters: VOCs							



PID: OXY = 20.9% other = Ø

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

Well No.: RW-5898B1		Date: 6/25/21		Samplers: EE, IC			
Tap Location: Spigot on outside of barn (go inside barn to open valve). Post-filtration source.							
Well Diameter (inches):	_____	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					
Total Depth of Well (feet):	_____ (-)						
Depth to Water (feet):	_____						
Water Column Height (feet):	_____ (x)						
Purge Rate (gallon/minute):	5.5		Begin Purge (time):	16:08			
Required Purge Time (minute):	55 min		End Purge (time):	17:05			
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):		17:05					
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
17:05	16.0	7.42	6.42	657	0.08	70.5	
17:10	13.8	7.41	6.25	648	0.25	71.2	
17:15	13.7	7.43	6.45	647	0.26	70.2	
17:20	14.0	7.38	6.31	647	0.32	69.1	
17:25	13.7	7.39	6.37	646	0.22	68.4	
17:30	13.8	7.39	6.47	648	0.27	67.5	
17:35	14.0	7.41	6.78	647	23.51	66.5	
17:40	13.9	7.41	6.77	647	30.93	66.3	
17:45	14.0	7.42	6.53	647	32.19	65.8	
17:50	14.0	7.43	6.66	648	31.70	73.2	
17:55	14.0	7.41	6.63	648	15.98	71.8	
1800	SAMPLE						
Sample ID: RW-5898B1-20210625		Sample Time: 1800					
QC Samples Collected: None							
Analytical Parameters: VOCs							

CDM Smith

This is the house well - inside barn.
 The irrigation well is beneath the whiskey barrel next to the barn - not sampled.

This water goes through treatment

VOC = 3 ppm
 OXY = 20.9 %

VOC vented to 1 ppm

RW-5898B1 Notes:

Considerations for 2021 Spring Sample Results:

- This water goes through treatment.
- VOC count started at 3 ppm, vented to 1 ppm

Considerations for Next Sampling Event:

- Tap location is the house well inside the barn, not the irrigation well beneath the whiskey barrel next to the barn



RW-5898B1 Filter 06/25/2021



RW-5898B1 Spigot 06/25/2021

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

** Need updated owner contact info.*

Well No.: RW-7070B		Date: 06/24/2021		Samplers: AN, MG			
Tap Location:							
Well Diameter (inches):	8	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 100 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	100 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	15	Begin Purge (time):		unk			
Required Purge Time (minute):	7	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				
Begin Parameter Collection for Stabilization (time): 1641							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1641	15.9	7.30	9.15	826	-0.2	120.1	
1646	14.7	7.31	9.25	810	-0.2	115.4	
1651	14.2	7.30	9.32	807	-0.1	116.3	
1656	13.9	7.28	9.25	807	-0.2	115.7	
1659	sample						
Sample ID: RW-7070B-20210624				Sample Time: 1659			
QC Samples Collected: None							
Analytical Parameters: VOCs							



** owner has been running sprinkler off of wells for the day, assumed well purged*

RW-7070B Notes:**Considerations for 2021 Spring Sample Results:**

- Owner had been running sprinkler off of well for the day, assumed purged well

Considerations for Next Sampling Event:

- Tap location is the SW corner of gated yard

Updated Contact Information:

- Don (male): (208)-220-2609

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

Well No.: RW-7091R		Date: 6/22/2021		Samplers: AN, MG			
Tap Location: Outside fenceline on northeast side of property. Hand pump							
Well Diameter (inches):	6	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 100 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	100 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	100 (per owner)		Begin Purge (time):	18:30			
Required Purge Time (minute):	1		End Purge (time):	18:40			
PARAMETERS FOR WATER QUALITY STABILIZATION							
Temperature	± 1°C	DO	± 10 %	<i>Due to hand pumping, not all parameters reach stabilization.</i>			
pH	± 0.1 pH unit	ORP	± 10 mV				
Conductivity	± 10 %	Turbidity	< 50 NTU				
Begin Parameter Collection for Stabilization (time): 1842							
Time	Temp. (°C)	pH	DO * (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1842	16.31	8.62	3.35	273	10.5	53	
1847	14.12	8.46	2.85	332	0.0	59	
1850	13.52	8.23	7.08	333	0.0	75	
1853	13.06	8.09	6.77	338	0.0	84	
1856	12.76	7.97	7.16	347	0.0	93	
1859	12.65	7.99	7.30	342	0.0	90	<i>All except pH</i>
1902	sample						
Sample ID: RW-7091R-20210622		Sample Time: 1902					
QC Samples Collected: None							
Analytical Parameters: VOCs							

RW-7091R Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba
- Field parameters taken every 3 minutes because of hand pumping
- all parameters reached stabilization except pH.

Considerations for Next Sampling Event:

- Tap location is hand pump outside of fenced backyard
- Purge can be routed through pond in backyard, owner can turn on when prompted
- Purge rate estimated to be 100 gpm (per owner)

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

Well No.: RW-7200P Date: 06/21/21 Samplers: AN, MG

Tap Location:

Well Diameter (inches):	<u>6</u>	$\left\{ \begin{array}{l} 1'' - 0.041 \text{ Gal/ft.} \\ 2'' - 0.16 \text{ Gal/ft.} \\ 4'' - 0.65 \text{ Gal/ft.} \\ 6'' - 1.47 \text{ Gal/ft.} \\ 8'' - 2.60 \text{ Gal/ft.} \end{array} \right.$	Minimum purge volume (gallons) = <u>90</u> (3 volumes is 275)
Total Depth of Well (feet):	<u>133</u> (-)		
Depth to Water (feet):	<u>68.6</u>		
Water Column Height (feet):	<u>62.4</u> (x)		

Purge Rate (gallon/minute): 10 gpm Begin Purge (time): 15:24
 Required Purge Time (minute): 9 min End Purge (time): 15:34

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): 1536

Time	Temp. (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
15:36	18.31	7.11	8.95	717	0.0	118	
15:41	14.81	7.32	8.30	692	0.0	130	
15:46	15.30	7.24	8.17	697	0.0	136	
15:51	13.89	7.37	8.46	703	0.0	132	
15:56	13.75	7.40	8.80	700	0.0	128	
16:01	13.78	7.38	16.02	705	0.0	129	
16:06	13.80	7.83	8.62	700	0.0	106	
16:11	13.82	7.80	8.58	700	0.0	109	
16:16	13.79	7.79	8.61	702	0.0	112	
16:22							

Sample ID: RW-7200P-20210621 Sample Time: 16:22

QC Samples Collected: None

Analytical Parameters: VOCs



*DO biased high (Hanna)

First time sampling this well - recently installed new spigot next to dog pen, transfer purge water to right of dog pen

RW-7200P Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

Considerations for Next Sampling Event:

- recently installed new spigot next to dog pen
- transferred purge water to right of dog pen

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

Well No.: RW-7244P Date: 6/24/21 Samplers: A. NESESS, M. GATES

Tap Location: DIRECTLY OFF NW CORNER OF HOUSE

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

Purge Rate (gallon/minute): 25 Begin Purge (time): UNK
 Required Purge Time (minute): 4 End Purge (time): 1447

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): 1448

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1448	13.8	7.32	8.18	696	~0.2	135.6	
1453	13.2	7.30	7.99	694	0.1	135.1	
1458	12.8	7.26	7.87	692	0.0	137.3	
15:03	SAMPLE						

Sample ID: RW-7244P-06-20210624 Sample Time: 1503

QC Samples Collected: None

Analytical Parameters: VOCs



* OWNER HAD SPRINKLER RUNNING WHEN CREW ARRIVED ON SITE, SO HE STATED THAT HE HAS KEPT IT RUNNING NON-STOP FOR LAST COUPLE OF DAYS, SO CREW ASSUMED WELL IS PURGED.

RW-7244P Notes:**Considerations for 2021 Spring Sample Results:**

- Owner has sprinkler running when crew arrived onsite, he stated that he has kept it running nonstop for last couple of days, crew assumed purged upon arrival

Considerations for Next Sampling Event:

- Tap location is directly off NW corner of house

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

Well No.: RW-7350P Date: 06/24/2021 Samplers: AN, MG

Tap Location: NW side of property behind shed

Well Diameter (inches): _____	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 300 6" - 1.47 Gal/ft. No well information. Assume 8" - 2.60 Gal/ft. 300 gal adequate.	Minimum purge volume (gallons)
Total Depth of Well (feet): _____ (-)		
Depth to Water (feet): _____		
Water Column Height (feet): _____ (x)		

Purge Rate (gallon/minute): 15 Begin Purge (time): 12:12
 Required Purge Time (minute): 20 End Purge (time): 12:32

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): 1233

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1233	14.9	7.36	8.00	710	0.0	141.4	
1238	14.1	7.31 7.34	7.89	703	-0.1	144.6	
1243	14.2	7.34	8.05	702	-0.1	144.9	
1248	Sample —						

Sample ID: RW-7350P-20210624 Sample Time: 12:48

QC Samples Collected: None

Analytical Parameters: VOCs



* took sample from spigot located in horse barn on north side of property in pasture behind house

RW-7350P Notes:

Considerations for Next Sampling Event:

- Took sample from spigot located in horse barn on north side of property



RW-7350P Barn 06/24/2021



RW-7350P Spigot 06/24/2021

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

Well No.: RW-7505P Date: 06/24/2021 Samplers: AN, MG

Tap Location:

Well Diameter (inches): _____	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = <u>300</u> 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons) No well information. Assume 300 gal adequate.
Total Depth of Well (feet): _____ (-)		
Depth to Water (feet): _____		
Water Column Height (feet): _____ (x)		

Purge Rate (gallon/minute): 20 Begin Purge (time): 08:12
 Required Purge Time (minute): 15 End Purge (time): 08:27

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): 0829

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
0829	14.9	7.13	8.60	697	0.0	153.7	
0834	14.2	7.14	8.23	698	-0.2	152.1	
0839	14.2	7.21	8.49	701	-0.1	150.1	
0844 sample							

Sample ID: RW-7505P-20210624 Sample Time: 0844

QC Samples Collected: None

Analytical Parameters: VOCs

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

Well No.: RW-7549P	Date: 06/24/2021	Samplers: AN MG					
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. = 300 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)					
Purge Rate (gallon/minute): 15	Begin Purge (time): 13:40						
Required Purge Time (minute): 20	End Purge (time): 14:00						
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): 1401							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1401	14.1	7.30	8.07	721	-0.3	131.6	
1406	14.9	7.30	8.06	709	0.1	133.2	
1411	14.9	7.29	8.01	708	-0.1	135.4	
1413	SAMPLE						
Sample ID: RW-7549P-20210624				Sample Time: 1413			
QC Samples Collected: None							
Analytical Parameters: VOCs							



* took sample from northern most spigot next to large rocks in front lawn

RW-7549P Notes:

Considerations for Next Sampling Event:

- Took sample from northern most spigot next to large rocks in front lawn

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

Well No.: RW-7586P		Date: 06/21/21		Samplers: AN, MG			
Tap Location: piping around garden - no spigot (pump control in garage)							
Well Diameter (inches):	8	1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 200 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.		Minimum purge volume (gallons)			
Total Depth of Well (feet):	120 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	30 gpm	Begin Purge (time):		16:50			
Required Purge Time (minute):	6.7	End Purge (time):		17:10			
PARAMETERS FOR WATER QUALITY STABILIZATION							
Temperature	± 1°C	DO	± 10 %	* Used Horiba			
pH	± 0.1 pH unit	ORP	± 10 mV				
Conductivity	± 10 %	Turbidity	< 50 NTU				
Begin Parameter Collection for Stabilization (time): 17:10							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
17:10	17.5	7.59	7.30	701	0.2	142	
17:15	15.2	7.39	6.90	695	0.0	152	
17:20	13.32	7.39	6.90 6.97	697	0.0	154	
17:25	13.60	7.42	7.77	697	0.0	152	
17:30	13.09	7.32	8.13	704	0.0	151	
17:35	Sample						
Sample ID: RW-7586P-20210621				Sample Time: 1735			
QC Samples Collected: None							
Analytical Parameters: VOCs							



no spigot, sampled out of where underground conveyance line comes above ground on eastern side of garden, home owner has to turn on pumps, had owner set pump timer to 2 hrs, can turn off whenever finished sampling

RW-7586P Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

Considerations for Next Sampling Event:

- No spigot, sampled out of where underground conveyance line comes above ground on eastern side of garden
- homeowner has to turn pumps on, had owner set pump timer to 2 hours, can turn off whenever finished sampling



RW-7586P Conveyance Line 06/21/2021



RW-7586P Valve 06/21/2021

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

Well No.: RW-7588P		Date: 06/25/2021		Samplers: AN MG			
Tap Location:							
Well Diameter (inches):	8	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 200 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	70 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	8.57	Begin Purge (time):		1345			
Required Purge Time (minute):	23.337	End Purge (time):		1409			
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): 1412							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1412	15.0	7.34	7.53	799	-0.07	83.7	
1417	13.5	7.31	7.65	782	0.24	86.6	
1422	13.6	7.27	7.43	781	0.44	88.6	
1427	13.6	7.26	7.36	778	0.56	89.6	
1431	Sample						
Sample ID: RW-7588P-20210625				Sample Time: 1431			
QC Samples Collected: None							
Analytical Parameters: VOCs							

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

Well No.: RW-7677P	Date: 6/21/21	Samplers: IC, EE
Tap Location: behind the house, multiple switches, 2 ports (manual pump control on hill)		
Well Diameter (inches): 6	1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 100 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons) <i>by the playground</i>
Total Depth of Well (feet): 60 (-)		
Depth to Water (feet):		
Water Column Height (feet): (x)		

Purge Rate (gallon/minute): 37.5	Begin Purge (time): 1810
Required Purge Time (minute): 3 min	End Purge (time): 1813

PARAMETERS FOR WATER QUALITY STABILIZATION

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

** DO brased high (Horiba)*

Begin Parameter Collection for Stabilization (time): 1817

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1817	15.99	7.84	15.86	825	0.0	108	
1822	14.14	7.61	9.40	851	0.0	132	
1827	13.97	7.35	9.10	856	0.0	148	
1832	13.77	7.13	8.79	856	0.0	162	
1837	14.18	7.06	8.68	866	0.0	165	
1842	13.94	6.99	8.69	868	0.0	169	
1848	13.60	6.95	MISSING	858	0.0	174	
1855	SAMPLE	x	x	✓	✓	✓	

Sample ID: RW-7677P-20210621

Sample Time: 1855

QC Samples Collected: None

Analytical Parameters: VOCs

CDM Smith

IC 20 21.502
 * Sample collected after 30 min purging - wanted to avoid overheating the high flow rate pump

"Hand" on the switch up the hill behind pine trees.
 Opened valves to avoid burning pump

RW-7677P Notes:**Considerations for 2021 Spring Sample Results:**

- Erroneous DO due to use of malfunctioning Horiba

Considerations for Next Sampling Event:

- Tap location is behind the house, multiple switches, 2 ports (manual pump control on hill by playground)

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

Well No.: RW-7688P		Date: 06/25/2021	Samplers: AN MG				
Tap Location:							
Well Diameter (inches):	<u>6</u>	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = <u>100</u> 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	<u>79</u> (-)						
Depth to Water (feet):	<u> </u>						
Water Column Height (feet):	<u> </u> (x)						
Purge Rate (gallon/minute):	<u>10</u>	Begin Purge (time):	<u>1612</u>				
Required Purge Time (minute):	<u>10</u>	End Purge (time):	<u>1622</u>				
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): <u>1623</u>							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1623	15.0	7.44	8.05	804	0.23	49.1	
1628	14.4	M.C.H.D.S. ³⁹ 7.42	7.90	799	0.30	54.7	
1632	14.3	7.38	8.06	803	0.37	57.4	
1638	sample _____						
Sample ID: RW-7688P-20210625				Sample Time: 1638			
QC Samples Collected: None							
Analytical Parameters: VOCs							

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

Well No.: RW-7773P Date: 6/21/21 Samplers: IC, EE, MG, AM

Tap Location: Near the old house

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

Purge Rate (gallon/minute): 4.58 gpm Begin Purge (time): 13:50
 Required Purge Time (minute): 19 min End Purge (time): 14:09

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): 1409

Time	Temp. IC (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1409	28.19	8.75	8.43	709	0.0	177	
1413	15.49	7.75	9.56	689	0.0	202	
1418	15.43	7.62	9.02	711	0.0	195	
1422	14.01	7.27	7.88	707	0.0	186	
1428	13.61	7.21	7.86	713	0.0	175	
1433	13.41	7.23	15.51	716	0.0	163	
1439	13.05	7.32	8.04	721	0.0	152	
1444	13.03	7.37	8.04	722	0.0	148	
1449	13.15	7.43	8.19	716	0.0	141	
1454	13.12	7.41	8.55	717	0.0	141	
1457	sample						

Sample ID: RW-7773-20210621 Sample Time: 1457

QC Samples Collected: FD 1502

Analytical Parameters: VOCs



* DO biased high (Horba)

RW-7773P Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

Considerations for Next Sampling Event:

- Tap location near old house

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

Well No.: RW-8000B	Date: 6/22/21	Samplers: AN, EE, MG
Tap Location: well house at LDS ball field		
Well Diameter (inches): _____	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 No well information. Assume 300 gal adequate.	
Total Depth of Well (feet): _____ (-)		
Depth to Water (feet): _____		
Water Column Height (feet): _____ (x)		

Purge Rate (gallon/minute): <u>unk</u>	Begin Purge (time): <u>unk (before 11:15)</u>
Required Purge Time (minute): <u>unk</u>	End Purge (time): <u>N/A</u>

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): 11:30							
Time	Temp. (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
11:30	18.6	9.74	8.72	406	Ø	181	
11:35	15.7	9.17	8.45	383	Ø	181	
11:40	14.65	8.55	7.55	386	Ø	185	
11:45	14.05	8.22	7.81	389	Ø	185	
11:50	13.94	7.99	7.98	391	Ø	183	
11:55	13.58	7.83	9.01	393	Ø	181	
12:00	13.47	7.74	9.03	395	Ø	179	
12:05	13.39	7.67	9.07	395	Ø	173	
12:10	13.03	7.68	8.68	398	Ø	172	
12:15	sample						

Sample ID: RW-8000B-20210622	Sample Time: 12:15
QC Samples Collected: None	
Analytical Parameters: VOCs	



PID: 20.9% oxy
 2 ppm CO
 *DO readings biased high (Hombac)

Arrived at LDS ball field ~ 11:15. Sprinklers were running (pump on).

RW-8000B Notes:**Considerations for 2021 Spring Sample Results:**

- Erroneous DO due to use of malfunctioning Horiba
- assumed purge due to sprinklers being on upon arrival

Considerations for Next Sampling Event:

- Tap location is on LDS ballfield

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

[illegible]

No treatment to water near well or off the house, as of 2020.



Note: got to house @ 1515 and spoke to owner. She said well has been running out spicket for 1 hr => purge start stated ~~at~~ 1415.

RW-8012 Notes:**Considerations for 2021 Spring Sample Results:**

- 10 sprinklers running for an hour upon arrival, well assumed purged

Considerations for Next Sampling Event:

- Sampled spigot near well



RW-8012P Well Tag 06/26/2021

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

Well No.: RW-8030P		Date: 6/23/21		Samplers: EE, IC			
Tap Location: spigot nearest to well along eastern irrigation manifold - backyard							
Well Diameter (inches):	8	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 200 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	92 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	70 (per owner)		Begin Purge (time):	15:05			
Required Purge Time (minute):	3		End Purge (time):	15:10			
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): 1510							
Time	Temp. (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1510	14.10	8.06	12.87	864	1.2	123	
1515	14.79	7.67	7.80	879	1.4	165	
1522	12.97	7.72	7.58	881	3.3	163	
1527	12.41	7.77	7.64	888	1.4	164	
1532	12.74	7.82	7.69	888	1.9	157	
1540	SAMPLE						
Sample ID: RW-8030P-20210623				Sample Time: 1540			
QC Samples Collected: MS/MSD							
Analytical Parameters: VOCs							

RW-8030P Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

Considerations for Next Sampling Event:

- Tap location is spigot nearest to well along eastern irrigation manifold- backyard

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

Well No.: RW-8035P		Date: 06/24/2021		Samplers: AN, MG			
Tap Location: spigot of front of house; do not water flows w/ purge water							
Well Diameter (inches):	8	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 300 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	170 (-)						
Depth to Water (feet):							
Water Column Height (feet):	(x)						
Purge Rate (gallon/minute):	25	Begin Purge (time):		11:04			
Required Purge Time (minute):	12	End Purge (time):		11:16			
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): 1118							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1118	16.0	7.70	9.37	568	0.3	137.9	
1123	15.3	7.71	9.57	564	0.0	138.6	
1128	15.5	7.69	9.45	566	0.1	129.3	
1133	Sample	e					
Sample ID: RW-8035P-20210624				Sample Time: 11:33			
QC Samples Collected: None							
Analytical Parameters: VOCs							



* Sampled directly out of filter/pump on front side of house in garden, attached hose to spigot to redistribute purge water onto lawn

RW-8035P Notes:

Considerations for Next Sampling Event:

- Sampled directly out of filter/pump on front side of house in garden
- attached hose to spigot to redistribute purge water onto lawn

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

Well No.: RW-8048P		Date: 06/24/2021		Samplers: AN, MG			
Tap Location: Front yard ~30 ft from well - owner's hose (no spigot)							
Well Diameter (inches):	5	{	1" - 0.041 Gal/ft.	Minimum purge volume (gallons) = 300			
Total Depth of Well (feet):	150 (-)		2" - 0.16 Gal/ft.				
Depth to Water (feet):			4" - 0.65 Gal/ft.				
Water Column Height (feet):	(x)		6" - 1.47 Gal/ft.				
			8" - 2.60 Gal/ft.				
Purge Rate (gallon/minute):	10	Begin Purge (time):		0935			
Required Purge Time (minute):	30	End Purge (time):		1005			
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): 1007							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1007	14.7	7.15	7.85	866	0.1	133.8	
1012	14.1	7.14	8.35	865	-0.2	133.4	
1017	13.6	7.11	8.26	881	-0.2	132.4	
1022	13.6	7.13	8.38	879	-0.2	128.3	
1029	sample						
Sample ID: RW-8048P-20210624				Sample Time: 1029			
QC Samples Collected: None							
Analytical Parameters: VOCs							



* pump cap contains valve to control water, sampled from hose adapter closest to pump cap

RW-8048P Notes:

Considerations for Next Sampling Event:

- Pump cap contains valve to control water, sampled from hose adapter closest to pump cap



RW-8048P Well Cap 06/24/2021



RW-8048P Well Valve 06/24/2021

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

Well No.: RW-8105PS		Date: 6/24/21		Samplers: FE, IC			
Tap Location: Behind house next to gate near wellhouse							
Well Diameter (inches):	_____	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 200 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	_____ (-)						
Depth to Water (feet):	_____						
Water Column Height (feet):	_____ (x)						
Purge Rate (gallon/minute):	10 gpm		Begin Purge (time): 16:30				
Required Purge Time (minute):	20 min		End Purge (time): 16:50				
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
16:50	11.9	7.16	1.74	924	0.28	-92.9	
16:55	10.6	7.10	1.77	901	0.27	-87.7	
17:00	10.6	7.09	1.85	902	0.14	-82.1	
17:05	10.6	7.09	1.45	906	0.0	-81.5	
17:10	11.0	7.10	1.69	898	0.16	-85.9	
17:15	10.5	7.11	1.45	897	0.01	-83.0	
17:20	10.6	7.09	1.44	895	0.12	-81.7	
17:25	10.7	7.08	1.54	898	0.16	-79.0	
17:35	SAMPLE						
Sample ID: RW-8105PS-20210624				Sample Time: 1735			
QC Samples Collected: None							
Analytical Parameters: VOCs							



O₂ = 20.9%
Other = 0

RW-8105PS Notes:

Considerations for Next Sampling Event:

- Tap location is behind house next to gate near wellhouse

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

Well No.: RW-8209P		Date: 06/25/2021		Samplers: AN MG			
Tap Location: Basement tap along pipe with black pipe							
Well Diameter (inches):	_____	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 500 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)				
Total Depth of Well (feet):	_____ (-)						
Depth to Water (feet):	_____						
Water Column Height (feet):	_____ (x)		Extra volume due to distance from well				
Purge Rate (gallon/minute):		unk		Begin Purge (time):			
Required Purge Time (minute):				unk			
				1505			
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): 1507							
Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1507	14.3	6.96	9.13	1447	12.3	162.7	
1512	13.4	7.04	9.39	4021	15.99	84.3	
1517	13.0	7.04	9.57	3926	3.22	73.9	
1522	13.0	7.05	9.52	3880	2.07	64.2	
1527	13.1	7.07	9.37	3829	0.98	43.8	
1532	13.1	7.10	9.44	3881	-0.01	28.3	
1537	13.0	7.12	9.59	3625	0.36	-0.9	
1542	13.0	7.11	9.70	3601	0.9	-8.4	
1547	12.9	7.09	9.68	3532	0.15	-9.0	
1551	Sample						
Sample ID: RW-8209P-20210625		Sample Time: 1551					
QC Samples Collected: None							
Analytical Parameters: VOCs							



* owner running sprinklers off of well for 4 hours upon arrival.

RW-8209P Notes:**Considerations for 2021 Spring Sample Results:**

- Owner running sprinklers off of well for 4 hours upon arrival, assumed purged well

Considerations for Next Sampling Event:

- Tap location is the basement along pipe with black pipe

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

Well No.: RW-8249P Date: 6/21/21 Samplers: EE, IC

Tap Location:

Well Diameter (inches):	6	{ 1" - 0.041 Gal/ft. 2" - 0.16 Gal/ft. 4" - 0.65 Gal/ft. = 300 6" - 1.47 Gal/ft. 8" - 2.60 Gal/ft.	Minimum purge volume (gallons)
Total Depth of Well (feet):	267 (-)		
Depth to Water (feet):			
Water Column Height (feet):	(x)		

Purge Rate (gallon/minute): 10.7 Begin Purge (time): 16:08
 Required Purge Time (minute): 28 End Purge (time): 16:46

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature	± 1°C	DO	± 10 %	Pump was not cycling this year
pH	± 0.1 pH unit	ORP	± 10 mV	
Conductivity	± 10 %	Turbidity	< 50 NTU	

Begin Parameter Collection for Stabilization (time): 1648

Time	Temp. (°C)	pH	DO* (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
1648	19.25	8.35	12.96	1285	0.0	114	
1653	17.27	8.12	9.39	1316	0.0	117	
1658	17.07	7.77	9.42	1330	0.0	126	
1703	16.71	7.56	9.34	1340	0.0	134	
1709	16.90	7.44	9.46	1350	0.0	138	
1714	16.91	7.32		1330	0.0	143	spilled
1722	15.99	7.06	8.65	1730	0.0	149	
1727	15.85	7.10	8.74	1500	0.0	146	
1732	15.44	7.05	9.12	1500	0.0	149	
1737	15.47	7.03	9.19	1490	0.0	147	
1745	SAMPLE						

Sample ID: RW-8249P-20210621 Sample Time: 1745

QC Samples Collected: None

Analytical Parameters: VOCs



Pump did not appear to cycle

PID 21.7%
 OK!
 *DO based high (Honba)

RW-8249P Notes:

Considerations for 2021 Spring Sample Results:

- Erroneous DO due to use of malfunctioning Horiba

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

Well No.: RW-8284P	Date: 06/25/2021	Samplers: AN, MG
Tap Location:		
Well Diameter (inches):	{ 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	
Total Depth of Well (feet): 100 (-)		
Depth to Water (feet):		
Water Column Height (feet): (x)		
Purge Rate (gallon/minute): 5	Begin Purge (time): 10:04	
Required Purge Time (minute): 60	End Purge (time): 11:40	

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): ~~11:05~~ 11:46 mg 06/25

Time	Temp. (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity (NTU)	ORP (mV)	Comments
11:05	17.5						mg 06/25
11:46	17.2	7.17	8.26	987	-0.09	61.9	
11:51	16.1	7.20	8.42	980	-0.12	65.7	
11:56	15.9	7.21	8.56	978	-0.08	67.1	
12:01	15.8	7.15	8.00	976	-0.03	70.1	
12:06	sample						

Sample ID: RW-8284P-20210625 Sample Time: 1206

QC Samples Collected: None

Analytical Parameters: VOCs



* took sample from spigot on right side of driveway, purged water into adjacent field

RW-8284P Notes:

Considerations for Next Sampling Event:

- Took sample from spigot on right side of driveway, purged water into adjacent field

Date: 6/21/2021

Weather: Sunny ~65°

PPE: Level D

Personnel (CDM Smith): Emma Ehret (EE)
Madison Gates (MG), Iona Campbell (IC),
Adam Neisess (AN)

Project: Fort Hall Mine Landfill (FHML)

Event: Offsite Groundwater Sampling

Plan: Set up, check equipment, safety
meet, sample domestic & muni
wells in the afternoon. AN to
arrive midday.

Author: Emma Ehret (EE)



0715 EE, MG, IC onsite. Keys, equipment
& bottle order checks, calibration

1000 Troubleshooting PID/4-gas meter with
FEI. Pulled back off & reset sensor,
re-calibrated with single span VOC
using different isobutylene tank
(first one has low PSI - marking empty).

1115 Break

1140 Horiba calibrations

1200 AN onsite

1230 Finish calibrations, call residents

6/21/2021

for the afternoon. Plug in batteries.

1330 Team leaves site for RW-7773P.

1350 EE goes to gas station for ice

1410 EE back at RW-7773P.

Start time	Sample Time	Sample ID
1350	1457	RW-7773P-20210621
"	1502	RW-7773PQ-20210621

1450 EE, IC depart RW-7773P for Muni Wells to meet City staff

Purge Start	Sample	Sample ID
14:59	15:15	Muni-Well-33-20210621
15:25	15:37	Muni-Well-14-20210621
16:08	17:45	RW-8249P-20210621
15:21	16:22	RW-7200P-20210621

17:00 AN & MG did not find a spigot for RW-7586P (Sutton). EE called

Karla for 2019 photo reference.

EE called AN, who says garden transfer lines run at 50 gal/min.

AN & MG will sample, take notes & photos so it is clearer for next team. Owner has a pump controller in garage. Hoses are by garden, 50+ feet from wells.

Sample ID	Purge Start	Sample Time
RW-8249P-20210621	16:08	17:45
RW-7586P-20210621	16:50	17:35

18:15 AN, MG report that owner for RW-7077P

is not available to turn on the pump.

EE, IC arrive at RW-7077P.

RW-7077P. RW-7077P has a manual switch that must turn to "Hand". The spigot is behind the house. Open other valves during parameter collection.

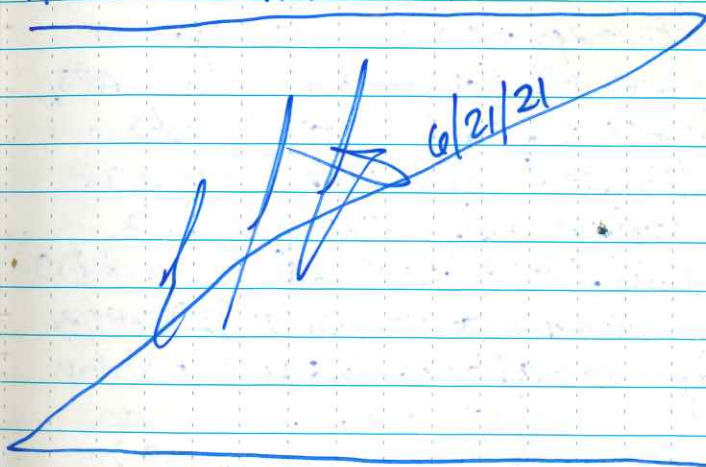
Sample ID	Purge Start	Sample Time
RW-7077P-20210621	1810	1855

1830 AN, MG arrive at RW-7077P.

1900 Team goes to landfill office.

Unpack, rearrange equipment, debrief.

1915 CDM Smith offsite.



6/22/2021

Date: 6/22/21

Project: Fort Hall Mine Landfill

Event: Offsite Groundwater Sampling

Weather: Sunny, 70° - 95° F

PPE: Level D

Personnel (CDM Smith): Emma Ehret (EE),
Madison Gates (MG), Adam Nersess (AN),
Iona Campbell (IC)

Plan: Correct DO calibration, gather
dedicated tubing, start on PA-1 all
together, sample City monitoring
wells, RW-7091R, & RW-8030P.

Author: EE

0730 Field team onsite. Calibrations,
equipment checks, load up.

0900 Troubleshooted DO probes with
FEI. Replaced DO & pH probe
fluids - initialized instruments,
& rechecked. DO still reads
10-11 mg/L. No error noted on
instrument. Consulted Karta
Leslie. Field team will record DO
for stabilization, but DO data
from faulty probes will not be
used in database. If DO is the
only parameter not stabilizing,

Scale: 1 square = _____

6/22/21

samples may be collected without stabili-
zied DO. FEI will send YSI meters
Priority overnight for delivery to landfill.

1045 Safety meeting - snakes, hot weather,
driving, animals at residences,

sunscreen, knives for cutting pump
string. Schedule update: Team will
set up at a PA well together, review
procedures. Second team will set up
second MW. In the afternoon, both
teams will finish domestic wells from
Monday at add some from later in
the week. EE will stop by RW-2213F.

1100 Field team departs landfill for LDS
ballfield. PA-4 has wasps inside.
We left outer casing open & went to
the RW-8000B well house. The sprinkles
were running since arrival.

Sample ID	Purge Start	Sample Time
RW-8000B-20210622	before 1100	1215

1215-1230 Break.

1230 Field team moved to PA-1, set
up equipment. Placed trash bag
over PA-4 to prevent wasps from
returning.

Scale: 1 square = _____

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Hitt in the Rain

6/22/21

Sample ID Purge Start Sample Time
 PA-1-20210622 13:32 (MS/MSD) 1505

1345-AN, EE walked to MW-37 to unlock & confirm access.

1400 AN, MG leave to buy second canopy, set up at MW-37.

Sample ID	Purge Start	Sample Time
MW-37-20210622	16:10	17:38
PA-3-20210622	16:05	16:55

1730 EE, IC leave LDS ballfield for landfill office. MG & AN arrived at MW-37 around 1500.

1820 EB-01 collected. Pump 1 (EE & IC). After PA-3. After decon

1830 AN, MG head to RW-7091R.

owner leaving town tomorrow, so needs done today. EE, IC head to RW-7091R to collect

Pump 2 EB.

1850 EB-02 collected. Pump 2 (EE & AN, MG). After MW-37. After decon.

Sample ID	Purge Start	Sample Time
RW-7091R-20210622	18:36	19:02

Due to hand pumping the field team sampled after 20 minutes of collecting purge parameters every

Scale: 1 square = _____

6/22/21

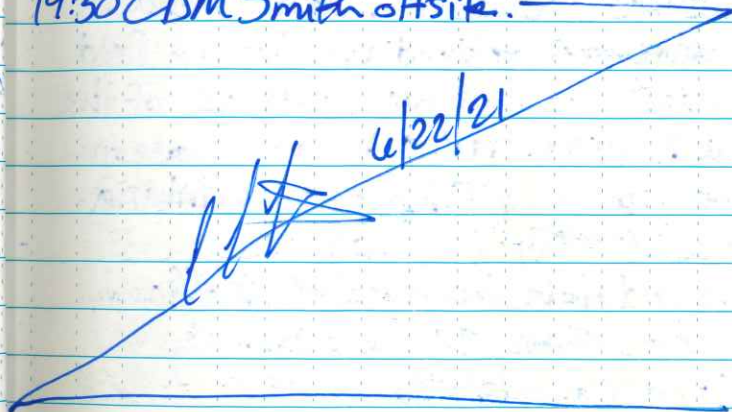
3 minutes. pH was the only parameter that did not meet stabilization criteria (off by 0.02 units). The well owner told the field team that his pump runs at 100 gpm. There is no way to field verify. For purge parameter collection, the high flow pump is turned off, & only the hand pump (located directly atop the well) is used. Hand pumping was consistent between purge parameter readings. Correction/addition to sample at

MW-37: MW-37Q-20210622

Purge start: 16:10 Sample: 17:41

19:15 Field team returns to landfill office. Unload, debrief.

19:30 CDM Smith offsite.



Scale: 1 square = _____

Rite in the Rain

20

6/23/21

Date: 6/23/21

Project: FHML

Event: offsite GW Sampling

Weather: Sunny, 70's

PPE: Level D

Personnel (CDM Smith): Emma Ehrt (EE)
 Iona Campbell (IC), Adam Neisess (AN),
 Maddie Gates (MG)

Plan: Calibrations, EE/IC sample
 PA-4 (3 screens), AN/MG sample
 PA-8 (3 screens), YSI's arrive,
 domestic wells in afternoon.

Author: EE

0730 Field team onsite. Equipment
 load up, schedule adjustments,
 calibrations (PID, Horiba
 multi-meters).

0830 Health & Safety. Wasps & spiders,
 coyote (seen yesterday), fueling field
 vehicles (EE had fuel spill out of the
 truck this morning & had to alert
 the station attendant), drinking
 water supply & hydration.

0900 Field team departs (and fill office for
 LDS ballfield. EE shows MG, AN
 to location of PA-8.

Scale: 1 square = _____

6/23/21

21

0945-Start purge at PA-4 (shallow).
 Pump set at 74 ft btoc per Karla Leslie,
 because initial water level was 72.3
 ft btoc (original pump set depth = 70).
 1015- MG called to ask about pump depth
 for PA-8 (shallow). Initial setting did not
 have water. I suggested setting the pump
 at 36.5 ft btoc (screen ends at 37).

11:45- Horiba flow-through cell at PA-4 has
 leaked twice. Flow has fluctuated, adjusted
 pressure & CPM. Pulled up pump,
 replaced bladder, re-positioned to 74 ft
 btoc. Consulted Karla & dropped
 the pump 2 feet lower. (Stickup height
 is about 2 feet.)

12:40 No consistent water from PA-4
 (shallow). Pausing compressor & will
 try team #2 compressor after PA-8
 (mid) is sampled.

13:15 EE, IC leave LDS ballfield to
 sample domestic wells.

1329 Start purge at RW-2151H (EE, IC).
 Pump cycles at low flow rate.
 Collecting field parameters at
 ~7.9 ppm seems to prevent cycling
 & discoloration.

Scale: 1 square = _____

Rite in the Rain

Sample ID	Purge Start	Sample
RW-2151H-20210623	13:29	14:39
PA-8-37-47-20210623	10:32	11:52
PA-8-77-87-20210623	13:38	14:13
PA-8-117-127-20210623	NA	NA

RW-8030P-20210623 15:05 ——— 226/23

15:00- AN, MG report issues with PA-8 (deep). Water seen in air output line.

It is possible that there is a hole in the airline that was finally submerged at the deepest interval. EE consulted Karta Leslie, & they decided that the deep interval will not be an efficient use of time or valuable data point (all 3 TCE results were the same at each interval in 2020). PA-8-117-127 was abandoned. AN, MG will clean up at PA-8 & meet EE, IC at PA-4 for compressor.

Sample ID	Purge Time	Sample
RW-8030P-20210623	15:05	15:40

(MS/MSD sample)

16:00 EE, IC stop at landfill & office to pick up VSI's.

16:15 All convene at PA-4. AN, MG

head to RW-2172H. IC, EE use team #2 compressor at PA-4 (shallow)

1630° 70 psi, 4 cpm, 10 sec recharge, 5 sec discharge → 100 mL/min

• 70 psi, 3 cpm, 11 sec recharge, 9 sec discharge → 100 mL/min

• 80 psi, 3 cpm, 11 sec ^{rech} dis, 9 sec dis → 120 mL/min

• 80 psi, 3 cpm, 10 sec recharge & dis → 50 mL/min

• 80 psi, 4 cpm, 10 sec rech, 5 sec dis → flowed fine for a few min, sat down to measure, flow stopped.

Trying 80/3/11/9 again.

The compressor has been stopping & not releasing pressure at high pressure. So going back to 65 psi. No flow.

17:25 - Back to compressor #1. 60 psi 10/5, 4 cpm → 100 mL/min.

A few minutes later, same issue.

Almost no flow. Increased psi to max (~80).

After consulting with Karta Leslie, EE decides to abandon PA-4 (shallow) due to insufficient & highly irregular

flow, after hours of troubleshooting - switching compressors, replacing bladder, resetting pump, lowering pump, adjusting controller/compressor settings.

18:00 - PA-4 (middle) did not yield water. The team will use both compressors tomorrow at PA-10 to determine if equipment is malfunctioning. PA-4 (middle) notes - compressor pressure dial was not moving but it sounded normal (#1).

~~18:15 - EE, IC, AN, MG~~ ~~EE~~ 6/23/21

Sample ID	Purge Start	Sample
RW-2172H-20210623	16:38	17:59
RW-2172HA-20210623	"	17:59

RW-2172H was sampled through the hose to ensure low flow.

18:15 - EE, IC, AN, MG convene at LDS ballfield. Decon pumps, collect EB samples.

Sample ID	Purge Start	Sample
EB-04-20210623	after PA-8	1830
EB-03-20210623	after PA-4	1835

18:30 Field team returns to landfill office

19:00 CDM Smith offsite.

6/24/21

6/29
EE 25

Date: 6/24/21 Project: FITMU

Event: Offsite GW Sampling

Weather: Sunny, 70s-80s

PPE: Level D

Personnel: Emma Ehret (EE), Iona Campbell (IC), Adam Nersiss (AN), Madison Gates (MG)

Plan: Calibrate new YSI's, 08:00 appointments, test compressors at PA-10, sample domestic wells.

06:30 Field team onsite. Equipment load up, calibrations (PIDs, YSI's), plan & schedule. Called well owners who requested a reminder call.

07:50 H&S meeting.

08:00 GDM Smith departs landfill.

AN, MG head to ^{RW-}7505P. EE, IC head to RW-2879M.

Sample ID	Purge Start	Sample Time
RW-2879M-20210624	08:15	09:10
RW-7505P-20210624	08:12	08:44

09:20 EE, IC stop briefly at landfill office.

AN, MG get ice, call next home owners.

09:50 There is a large, additional pad lock & chain at the gate to PA-10. EE called Harold Hargraves with the city to ask if he knows about it. He helped us break

282694pg

6/24/21

the extra chain.

Sample ID	Purge Start	Sample
RW-8048P-20210624	09:35	10:29
RW-8035P-20210624	11:04	11:33
PA-10-20210624	11:32	12:20

Team 1 (EE, IC) used compressor #1 at PA-10. Minimum purge volume was met very quickly. Equipment seems to be functioning well without the truck turned on.

12:00 AM, MG could not find a spigot for ~~RW-8-986624~~ RW-7350P according to the purge form directions. There is a spigot in the barn. EE directed them to sample the spigot they could find & keep notes.

12:00 EE, IC lunch. Head to PA-9.

Sample ID	Purge Start	Sample
RW-7350P-20210624	12:12	12:48
PA-9-58-68-20210624		
PA-9-58-68-20210624	13:40	14:20
RW-7549P-20210624	13:40	14:13
PA-9-88-98-20210624	14:35	15:30
RW-7244P-20210624	Wk (2 days ago)	15:03

Notes: At PA-10, compressor #2 did not cycle or change pressure. When turned off, a gush of air released. The compressed

Scale: 1 square = _____

6/24/21

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air had been pressurizing the controller but not releasing to the tubing during discharge. No water was produced. This was tested after PA-10-20210624 was collected using compressor #1.

15:00 - EE, IC still out at PA-9. EE performing QC of sample labels, purge form & filling out COCs. A man & his dog walked out to ask if we were alright. He had driven a white car down. Either Harold dummy locked the gate earlier, or the man may have had a key. He left shortly after. 15:47 - Pump decon & leave City wells PA-9, PA-10. EE, IC head to domestic wells.

Sample ID	Purge Start	Sample
RW-2237H-20210624	15:14	16:00

16:30 Field teams convene at landfill office.

Sample ID	Purge Start	Sample
RW-7070B-20210624	All day	16:59
RW-8105PS-20210624	16:30	17:35

17:15 AM, MG stop by RW-8105PS & pick up bladder pump for E13 at office.

17:45 EE, IC return to landfill. RW-8105PS note: 2nd 2 VOA vials collected after temporary water shut off.

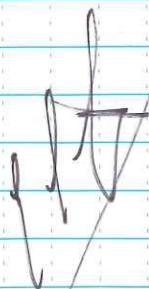
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Rite in the Rain

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6/24/21

1800 CDM Smith offsite.



6/24/21

Scale: 1 square = _____

6/25/21

Date: 6/25/21 Author: EE

[Signature]

2529

6/29

Event: offsite GW Sampling

Weather: Sunny, 70's - 80's °F

PPE: Level D

Personnel (CDM Smith): Emma Elvet (EE),
Iona Campbell (IC), Adam Neisess (AN), Madison
Gates (MG)

Plan: AN & MG to sample domestic wells,
dump purge water in leachate pond;
EE & IC to sample RW-2203H & RW-8209P,
also stop by RW-2213F to try to contact
to new owners. Ship 1-2 coolers.

07:15 - CDM Smith onsite. Equipment
checks, calibrations, planning, schedule.

08:15 - IC onsite after buying field supplies
& ice.

08:40 Health & Safety brief - skunks &
wildlife, exhaustion, hot weather,
driving after a long field day/week.

08:45 - one YSI did not retain 80%
charge overnight. AN, MG are charging.
Calibrations are extremely off.

09:00 EE, IC leave for RW-2203H. AN, MG
troubleshoot & charge YSI.

10:00 - The static water level in RW-2203H
was 75 ft btoe. The pump depth

2:30 9/6/29

6/25/21

was to be 75 ft btoC. EE, IC pulled the pump, cleaned the rusty particulates off, & attempted to deploy beyond 75 feet after consulting Karla Leslie. Well depth is unknown. The team does not want to test the well depth with rental equipment.

10:30 - The pump would not go below 75 ft btoC. The water level meter will. The original supply pump is likely at 75 ft btoC.

11:00 - Frank Bradish (Rae Jean's son) came home & talked to us while cleaning up. He said he thought the old pump was at about 75 ft btoC. We told him we will not sample. He confirmed it has been a dry year. Last year, water level was ~ 68 ft btoC. We asked for updated contact info & said we might check back to sample in the fall.

11:30 - EE, IC return to landfill, dump trash in Cell 4 (weighed 40 LB), took lunch break.

12:00 - MG came to landfill

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to get team 1 YSI, because team 2 YSI pH readings are highly abnormal, despite initial calibration. AN, MG had attempted to re-calibrate, but the instrument is not allowing values to be reset for adjusting cal value.

12:15 - EE updates to logbook, IC decon pump, collect EB-6. MG & AN are still at RW-8284P, using replaced YSI. EE & C. checks COCs, cooler packing.

EB collected:

EB-6-20210625

12:30

Trip blank: TB-01-20210625 Time: 13:45

EB Notes: EB-05-20210624 Time: 17:35

collected after PA-9-88-98-20210624

& before attempting to sample RW-2203H.

EB-06-20210625 sampled after attempt to sample RW-2203H, before PA5 (planned for 6/26).

Sample ID	Purge Start	Time
RW-8284P-20210625	10:04	12:06
RW-2172F-20210625	12:30	12:55
(MS/MSD Sample)		

Scale: 1 square = _____

Rite in the Rain

2832 EE 6/29

6/25/21

14:50 - EE, IC head to FedEx, get ice.

Sample ID	Purge	Sample
RW-7588P-20210625	13:45	14:31
RW-8209P-20210625	4hr before 15:00	15:51
RW-7688P-20210625	16:12	16:38
RW-5898BI-20210625	16:08	18:00

~15:45 - EE, IC meet AN, MG at RW-8209P to get bottleware. AN, MG depart for RW-7688P. EE, IC depart for RW-5898BI. (AN, MG had attempted earlier but were not sure how to access the well room.)

~16:45 - MG, AN bring YSI to RW-5898BI. Team debriefs & MG, AN leave for landfill. AN is driving home to Helena tonight. MG will meet IC, EE in the morning to support sampling or organization.

17:00 MG offsite.

18:05 EE, IC head to landfill.

18:60 EE, IC offsite.

~~2/1/21~~ 6/25/21

6/26/21

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6/29

Date: 6/26/21

Event: Offsite GW Sampling

Weather: Sunny, 80's

PPE: Level D

Personnel: Emma Ehret (EE), Iona Campbell (IC), Madison Gates (MG) - CDM Smith

Author: EE

Plan: Sample RW-2140H, MW-116S, obtain updated consent form from Jody Bunker; Sample DA-5, pack equipment not using tomorrow.

08:45 - CDM Smith onsite. Calibrated 2 PID's, 1 YSI. Second YSI pH calibration is still not working. Measured tubing for MW-116S, but it has dedicated tubing downhole.

10:00 - EE, MG, IC depart for Bunker property, single truck. Obtained a consent form from Jody. Purged RW-2140H from green hose. Increased flow by adjusting valve. The red spigot in the pasture does not work.

Sample ID	Purge Start	Sample
RW-2140H-20210626	10:15	11:20
MW-116S-20210626	10:45	12:30

13:00 - EE, MG, IC return to land fill office, unload CDM truck, debrief. Dropped off another results packet at RW-2213F.

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Rite in the Rain

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6/26/21

13:30-EE, IC lunch break, MG offsite

14:00-Depart for RW-2213F & RW-2076F.

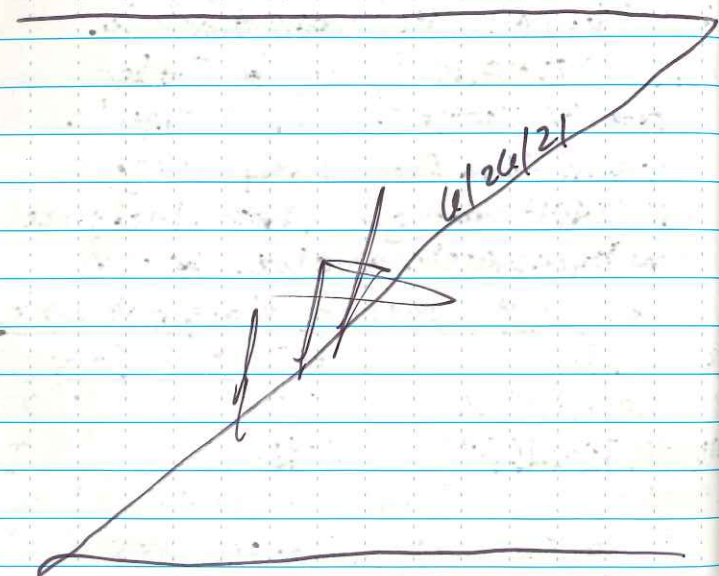
Met Kari Lynn Steed's son. at RW-2076F.
Filled out a property owner communication record. Kari does not always live on the property. Confirmed her phone number with Cameron. Obtained Kari's daughter's phone.

Sample ID	Purge	Sample
RW-2076F-20210626	14:18	14:55
RW-8012P-20210626	14:15 (owner)	15:40

16:00-EE, IC return to landfill office.

Unload, debrief, plan.

16:15-CDM Smith offsite.



Scale: 1 square = _____

6/27/21

Date: 6/27/21

35-31
98 6/29

Event: Offsite GW Sampling

Weather:

PPE: level D

Personnel: Emma Ehret (EE), Iona Campbell (IC) - CDM Smith

Author: EE

Plan: Collect EB, sample PA-5 & MW-38, pack equipment, sample QC

07:45 CDM Smith onsite. Equipment calibration, load, organize.

08:50 collect EB-07-2021-0627 after MW-116S before PA-5

09:10 Health & safety - hot weather, sun, last day is when mistakes happen, slips/trips/falls, safe lifting of purge water buckets

09:15 EE, IC leave landfill for PA-5 via driveway at 8170 W. Portneut.

10:00 Setting up at PA-5. Forgot YSI flow thru cell, so EE heads up to landfill.

11:00 The gate keypad was not registering the code (0607) that worked earlier this morning. EE called

32-36 98 6/29

6/27/21

Jason Kaapp for correct County contact info. Jason messaged Tyson & Dillon & Kiel. Tyson is sending Josh out to check the gate. EE pulled as close as possible & walked across the creeke bed to access the field trailer in the meantime. If Josh cannot fix the gate, he will dummy lock the outer white gates for us to lock tonight. Tyson: 208-251-8311. EE back at PA-5. Pump deployed.

Sample ID	Purge Start	Sample
PA-5-20210627	10:50	11:50

12:15 - Pack gear, 2 trips across field to return to truck.

12:45 - Drive to MW-38, break.

13:15 - Setup at MW-38 (shallow).

Sample ID	Purge	Sample
MW-38-60-100-20210627	13:30	15:05
MW-38-105-115-20210627	15:25	16:50
MW-38-121-130-20210627	17:30	19:30

~~18:00~~ 98 6/27

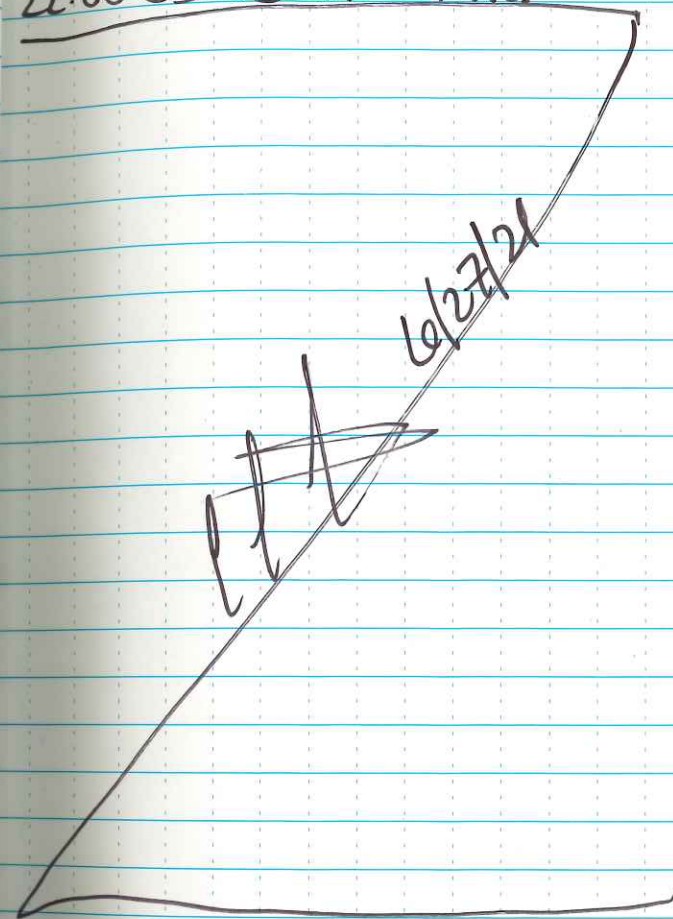
TB-02-20210627 NA 18:00

TB-03-20210627 NA 19:30

20:00 EE, IC return to landfill,

6/27/21

19 37 33
12 6/27
unload, pack equipment, drop trash at Cell 4, empty leachate tank of purge water at leachate ponds, update shed supply inventory, lock trailer & shed, leave keys in treatment system building.
22:00 CDM Smith offsite.



Scale: 1 square = _____

Rite in the Rain

Scale: 1 square = _____

EQUIPMENT CALIBRATION LOG

SITE NAME: Fort Hall Mine LandfillInstrument (Name/Model No./Serial No.): U90352X HoribaManufacturer: Horiba

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
6/21/21	-	Auto cal 4.5m pH=4.0	Stem 7005360 6/21/22	none	3.97 pH 4.1 NTU 4.49 mS/cm 11.12 mg/L	fail	gg
"	"	"	"	"	4.01 pH 0 NTU 4.51 mS/cm 11.13 mg/L	pass	gg
"	"	100 NTU	21170215 May '22	none	103 NTU	pass	gg
"	"	pH 7.0	8012081 12/17/22	none	7.00	pass	gg
"	"	pH 10.0	8012077 12/16/22	none	10.00	pass	gg
"	"	ORP STANDARD 220 mV	8105278 2/22/22	none	220 mV	pass	gg
6/22/21		AUTOCAL: 4.01 pH; 0.449 mS/cm 8.92 mg/L					
6/22/21	pH=4.01 0 NTU cond: 4.49 mS/cm 5.7 mg/L DO	pH 4 4.5 mS/cm 0 NTU (Autocal)	7005360 6/2/22	AN 6/22/21 DO: 5.7 - REINITIALIZED - REPLACED DO: PH SOLUTIONS	3.82 pH 4.44 mS/cm 0.0 NTU 10.38 mg/L DO	FAIL pH; DO	MC
6/22/21	-	pH 4 4.4 mS/cm 0 NTU (Autocal)	7005360 6/2/22	none	4.01 pH 4.46 mS/cm 0.0 NTU 11.67 mg/L	PASS	MC
"	"	100 NTU	21170215 May '22	none	76.5 NTU	FAIL	MC
"	"	pH 7.0	8012081 12/17/22	none	7.00	PASS	MC
"	"	pH 10.0	8012077 12/16/22	none	10.00	PASS	MC
"	"	ORP STANDARD 220 mV	8105278 2/22/22	none	220 mV	pass	MC

SITE NAME: FORT HALL MINE LANDFILL

SITE NAME: FORT HALL MINE LANDFILL

AN 6/23/21

AN 6123621

Instrument (Name/Model No./Serial No.):	U90325X	U90325X	U90325X
	U90325X	U90325X	U90325X
	U90325X	U90325X	U90325X

u90352x

Manufacturer: HOERBA

[illegible]

EQUIPMENT CALIBRATION LOG

SITE NAME: Fort Hall Mine LandfillInstrument (Name/Model No./Serial No.): 1671 202X NORIBAManufacturer: NORIBA

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
6/21/21	-	AUTO CAL 4.45 mS/cm PH=4.0 @ TURB	7005360 6/22/23	NONE	5.94 PH 4.45 mS/cm 1.3 NTU 10.13 mg/L	PASS	AK
"	"	100 NTU	21170215 MAY 2021	none	100	pass	ZE
"	"	PH 7	8012081 12/17/22	none	7.0	pass	ZE
"	"	PH 10	8012077 12/16/22	none	10.0	pass	ZE
"	"	ORP	8105278 2/22/22	none	220	pass	ZE
6/22/21	PH 4.0149 mS/cm ON TU 8.92 mg/L @ ON TU (Auto Cal)	PH 4.45 mS/cm ON TU (Auto Cal)	7005360 6-2-22	re-initiated replaced DO g PH solutions	4.01 PH 0.0 NTU 4.46 mS/cm 11.34 4.46 mS/cm 11.34	fail (02)	ZE
6/22/21	-	AUTO CAL 4.45 mS/cm PH=4.0 @ TURB	SAA	none	4.02 PH 0.4 NTU 4.49 mS/cm 12.06	PASS	I C
"	-	100 NTU	SAA	none	55.8 NTU	fail	ZE
"	9.74	PH 10	SAA	none	10.0	pass	ZE
"	201	ORP 220 mV	SAA	none	220	pass	ZE
06/23/21	-	AUTO CAL 4.45 mS/cm PH=4.0 @ TURB	7005360 06/02/22	none	3.98 PH 4.51 mS/cm 0.2 NTU 9.58 mg/L	pass	MG
06/23/21	-	100 NTU	21170215 MAY 2022	none	100 NTU	pass	MG
06/23/21	-	PH 7.0	8012081 12/17/22	none	7.0	pass	MG
06/23/21	-	PH 10.0	8012077 12/16/22	none	10.0	pass	MG
06/23/21	-	ORP 220 mV	8105278 2/22/2022	none	220 mV	pass	MG

consulted
FEInote in
log

EQUIPMENT CALIBRATION LOG

SITE NAME: FORT HALL MINE LANDFILLInstrument (Name/Model No./Serial No.): YSI PR6 DSS 101714Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
6/24/21	7.07	pH 7.00	7003167 3/1/22	on 6/14/21 7.00 none	7.00	PASS	Jul
"	3.95	pH 4.00	7909203 9/1/21	none	4.00	PASS	Jul
"	9.95	pH 10.00	7005144 5/1/22	none	10.00	PASS	AM
"	218.9	ORP 220mV	8105276 3/22/22	none	220mV	PASS	AM
"	1349	CONDUCTIVITY 1409 μ S/cm	8009541 10/18/22	none	1409 μ S/cm	PASS	AM
"	0.6 NTU	deionized water (0 NTU)	8012473 6/30/22	none	0 NTU	PASS	EG
"	604 NTU	100 NTU	21170215 May 2022	none	100 NTU	pass	EG
"	658.4mmHg	—	—	—	758.7mmHg	Pass	IC
"	87.0%DO	fresh air over water	—	—	99.8%DO	Pass	IC
6/25/21	7.12	pH 7.00	7003167 3/1/22	—	7.00	PASS	AM
"	3.96	pH 4.0	7909203 9/1/21	—	4.00	PASS	AM
"	10.03	pH 10.0	7005144 5/1/22	—	10.00	PASS	AM
"	220.9	ORP 220 mV	8105276 2/18/22	—	220 mV	PASS	AM
"	1340 μ S/cm	CONDUCTIVITY 1409 μ mo/cm	8009541 10/18/22	—	1409 μ S/cm	PASS	AM
"	0.32 NTU	0 NTU (TUEB)	8012473 6/30/22	—	0.0 NTU	PASS	AM
"	99.27	100 NTU (TUEB)	21170215 MAY/22	—	100 NTU	PASS	AM
"	758.7mmHg	—	—	—	759.5mmHg	PASS	IC
"	90.6%DO	fresh air over water	—	—	99.9%DO	Pass	IC

Date	initial	standard	LOT/ EXP.	adjustment	final	pass/ fail	IN
06/26/2021	1533	conductivity 1409 $\mu\text{mho/cm}$	8009541 10/8/22	none	1409	pass	MG
06/26/2021	4.00	pH 4.0	7909203 9/1/21	none	4.00	pass	MG
06/26/2021	7.05	pH 7.0	7003167 3/1/22	none	7.00	pass	MG
06/26/2021	10.06	pH 10.0	7005144 5/1/22	none	10.00	pass	MG
06/26/2021	-0.13	TURB 0.0 DI water	8012473 6/30/22	none	0.0	pass	MG
06/26/2021	90.89	TURB 100.0 NTU	21170215 Mant 2022	none	100.0	pass	MG
06/26/2021	205.6	ORP 220 mV	8105278 2/22/2022	none	220	pass	MG
06/26/2021	762.4	mmHg	—	none	765.3	pass	MG
06/26/2021	96.8% DO	fresh air over water	—	none	100.7% DO	pass	MG
06/27/21	4.36	pH 4.0	SAA	none	4.00	pass	IC
06/27/21	7.25	pH 7.0	7005274 8/26/22	none	7.00	pass	IC
06/27/21	9.91	pH 10.0	SAA	none	10.00	pass	IC
06/27/21	5.55	TURB 0.0 mV DI water	8009244 3/23/22	none	0.00	pass	IC
06/27/21	98.35	TURB 100.0 μm	SAA	none	100.0	pass	IC
06/27/21	1300	COND 1409 $\mu\text{mho/cm}$	7906263 6/1/21	none	1409	pass	IC
06/27/21	227.8	220 mV ORP	SAA	none	220	pass	IC
06/27/21	763.52 mmHg	—	—	none	763.52 mmHg	pass	IC
06/27/21	97.0%	fresh air over water	—	none	100.5%	pass	IC

EQUIPMENT CALIBRATION LOG

SITE NAME: Fort Hall Mine LandfillInstrument (Name/Model No./Serial No.): YSI Pro DSS V91687X 19B102110Manufacturer: YSI

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
06/24/2021	132A	conductivity 1409 μ mol/cm	8009541 10/8/22	none	1410	pass	MG
06/24/2021	4.21	pH 4.0	7909203 9/1/21	none	3.91	pass	MG
06/24/2021	7.10	pH 7.0	7008244 8/26/22	none	6.90	pass	MG
06/24/2021	9.86	pH 10.0	7003144 5/1/22	none	9.92	pass	MG
06/24/2021	2.4	DI water, NTU ϕ	8012473 6/30/22	none	-0.1	pass	MG
06/24/2021	45313.8	100 NTU	21170215 May 2022	none	97.9	pass	MG
06/24/2021	658.9 mm Hg	—	—	—	758.6 mm Hg	pass	MG
"	88% DO	Fresh air over thin layer water	—	—	99.8% DO		
06/25/2021	690	conductivity 1409 μ mol/cm	8909541 10/8/22	none	1409	pass	MG
06/25/2021	3.99 9.03	pH 4.0	7909203 9/1/21	none	4.0	PASS	OR
06/25/2021	12.52	pH 10.0	7005144 5/1/22	none	9.82 ^{9.82} _{12.00}	pass	MG
"	10.48	pH 7.0	7008244 8/26/22	none	7.0	PASS	AN
"	212.9	ORP 220 mV	8105376 2/23/22	none	220 mV	PASS	OR
"	0.2	0.0 NTU (TURB)	8012473 6/30/22	none	0.0 NTU	PASS	OR
"	81.2	100.0 NTU (TURB)	21170215 MAY 22	none	100 NTU	PASS	OR
"	758.4	PRESSURE ATM	—	—	759.5 mmHg	PASS	OR
"	101.7%	FRESH AIR OVER WATER	—	—	99.9%	PASS	OR

[illegible]

EQUIPMENT CALIBRATION LOG

SITE NAME: Fort Hall Mine LandfillInstrument (Name/Model No./Serial No.): 170814X RAE MultiRAE Lite multi gas + PID
Manufacturer: RAE MultiRAE

Calibration Date	Reading Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
6/21/21	—	fresh air	N/A	none	H ₂ S, CO, LEL VOC = 0 20.9%	pass	EE
"	—	multi sensor span 4-gas	305-401683795-1 12/12/21	none	H ₂ S 10.1 CO 51ppm LEL 50ppm O ₂ 18%	pass	EE
"	Ø	multi sensor 5% span - VOC 100%	21-7767 2/2/25	none	—	pass	EE
"	—	CO 50ppm 50% LEL H ₂ S 10ppm 18% O ₂	305-401683795-1 12/12/21	none	10 H ₂ S 50 LEL 50 CO 17.9 O ₂	pass	EE recheck
"	"	isobutylene recheck 100ppm	21-7767 2/2/25	none	none shown	fail	EE recheck
"	—	isobutylene 100ppm (single span)	19-7061 1/30/24	none	100ppm	pass	EE recheck
6/22/21	—	fresh air	—	none	O ₂ = 20.9% H ₂ S, CO, LEL, VOC = 0	Pass	IC
"	—	CO = 50ppm O ₂ = 18% H ₂ S = 10ppm CH ₄ = 50% LEL	305-401683795-1 12/12/21	none	H ₂ 510.1 LEL 50% CO 50ppm O ₂ 17.9%	Pass	IC
"	—	C ₄ H ₈ = 100ppm	THB3-248-100-16 8/12/23	none	100ppm	Pass	IC
6/23/21	—	fresh air	—	—	O ₂ = 20.9% Other = 0	Pass	IC
"	—	CO = 50ppm, O ₂ = 18% H ₂ S = 10ppm, CH ₄ = 50%	305-401683795-1 12/12/21	—	H ₂ 510.1 LEL 50% CO 50ppm O ₂ 18%	Pass	IC
"	—	100ppm C ₄ H ₈	THB3-248-100-16 8/12/23	—	100ppm	Pass	IC
6/24/21	—	fresh air	—	—	O ₂ = 20.9% Other = 0	Pass	IC
"	—	CO 50ppm CH ₄ 50% H ₂ S 10ppm O ₂ 18%	SAF (6/23)	—	CO 50ppm O ₂ 18% H ₂ S 10.1 LEL 50%	Pass	IC
"	—	100ppm C ₄ H ₈	SAF (6/23)	—	100ppm	Pass	IC

PID lamp
Alarm posted
called FEI
All good

U7-0814X

6/25/21	-	fresh air	-	none	20.9% O ₂ ; other = 0	pass	99
6/25/21	-	50ppm CO; 10ppm H ₂ S 50% LEL; 18% O ₂	305-4068795-1 12/12/21	none	51ppm CO; 10.1ppm H ₂ S 50% LEL; 18% O ₂	pass	99
6/25/21	-	isobutylene 100ppm	20-777 20-7483 8/14/24	none	unk	fail	99
6/25/21	-	isobutylene 100ppm single sensor span	saa	none	100ppm	pass	99
6/26/21	-	fresh air	none	20.9% O ₂ ; other = 0		pass	IC
6/26/21	-	50ppm CO; 10ppm H ₂ S 50% LEL; 18% O ₂	SAA	none	H ₂ S 10.1ppm LEL 50% CO 51ppm OXY 18%	Pass	IC
6/26/21	-	100ppm C4H8	#THB-248-103-16 8/12/23	none	100ppm	Pass	

EQUIPMENT CALIBRATION LOG

SITE NAME: Fort Hall Mine Landfill

SITE NAME:

Instrument (Name/Model No./Serial No.): UG7342X - RAE - MultiRae Lite multi gas + PIDManufacturer: RAE

Calibration Date	Initial Setting	Standard/ Gas Used (Concentration)	Lot Control No. Expiration Date	Adjustments Made	Final Reading	Comments Pass/Fail	Signature
6/21/21	—	fresh air	—	—	20.902	Pass	IC
"	—	CO 50ppm, H ₂ S 10ppm CH ₄ 50% LEL, O ₂ 18%	#21-7113 2/5/23	—	CO 51ppm LEL 50% O ₂ 17.9% H ₂ S 10ppm	Fail H ₂ S	IC
"	—	CO 50ppm H ₂ S 10ppm CH ₄ 50% O ₂ 18%	#305-401683795 12/12/21	—	CO 50ppm LEL 50% O ₂ 17.9% H ₂ S 10ppm	Pass	IC
"	—	100.0ppm CH ₄ S	21-7161 2/2/25	—	94ppm	Pass	IC
6/22/21	—	FRESH AIR	—	—	20.902	PASS	IC
"	—	CO 50ppm H ₂ S 10ppm CH ₄ 50% O ₂ 18%	#305-401683795 12/12/21	—	CO 50ppm LEL 50% O ₂ 18% H ₂ S 9.9ppm	PASS	IC
"	—	100.0ppm CH ₄ S no gas	THBS-348-100-16 08/12/23	—	130 ppm	PASS	
6/23/21	—	fresh air	—	—	20.902	Pass	IC
"	—	CO 50ppm H ₂ S 10ppm CH ₄ 50% O ₂ 18%	#305-401683795-1 12/12/21	—	CO 51ppm LEL 50% O ₂ 17.9% H ₂ S 10.1ppm	Pass	IC
"	—	100.0ppm CH ₄ S	#THBS-245-100-16 8/12/23	—	100ppm	Pass	IC
6/24/21	—	fresh air	—	—	20.902	Pass	IC
"	—	CO 50ppm CH ₄ 50% H ₂ S 10ppm O ₂ 18%	#305-401683795-1 12/12/21	—	CO 51ppm LEL 50% O ₂ 17.9% H ₂ S 10.1ppm	Pass	IC
"	—	100ppm CH ₄ S	#THBS-245-100-16 8/12/23	—	100ppm	Pass	IC

UG73+2X

6/25/21	—	fresh air	—	none	20.9% O ₂ ; other = 0	pass	99
6/25/21	—	50ppm CO; H ₂ S 10ppm 50% LEL; 18% O ₂	305-401683795-1 12/12/21	none	51ppm CO; 10.1 ppm H ₂ S 50% LEL; 18% O ₂	pass	99
6/25/21	—	isobutylene 100ppm	20-7483 8/14/24	none	113ppm	pass	99

6/26/21	—	fresh air	—	none	20.9% O ₂ ; other = 0	pass	IC
11	—	50ppm CO 50% LEL 18% O ₂	SATA	none	CO = 5 ppm H ₂ S = 10.1 ppm OXY = 17.9% LEL = 50%	pass	IC
11	—	100ppm C ₄ H ₈	#THBJ-248-100-16 8/12/23	none	99ppm voc	pass	IC

6/27/21	—	fresh air	—	—	20.9% O ₂ ; other = 0	pass	IC
6/27/21	—	50ppm CO 50% H ₂ S 10ppm H ₂ S 18% O ₂	SATA	—	OXY 18% LEL 50% CO 51ppm H ₂ S 10.1 ppm	pass	IC
6/27/21	—	100ppm C ₄ H ₈	SATA	—	100ppm	pass	IC

Denver #280

Chain of Custody Record

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



Environment Testing
TestAmerica

Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Ft. Hall Mine LF, Idaho Site: Offsite GW Sampling		Lab PM: Bienulis, Dylan T. E-Mail: Dylan.Bienulis@testamericainc.com Carrier Tracking No(s): Lab #: Job #: COC No:																																																																																																						
Due Date Requested: TAT Requested (days): 15 business days PO #: TBD WO #: Project #: 28018772 SSOW#:		Analysis Requested <table border="1"> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (Water, Solid, On-surface, etc.)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8260B - VOCs</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>RW-8284P-20210625</td> <td>6/25/21</td> <td>12:00</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td rowspan="10">MS/MSD</td> </tr> <tr> <td>RW-2172F-20210625</td> <td>6/25/21</td> <td>12:55</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-7588P-20210625</td> <td>6/25/21</td> <td>14:31</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-8709P-20210625</td> <td>6/25/21</td> <td>15:51</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-7688P-20210625</td> <td>6/25/21</td> <td>16:38</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-5898B1-20210625</td> <td>6/25/21</td> <td>18:00</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-2140H-20210626</td> <td>6/26/21</td> <td>11:20</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>NW-116S-20210626</td> <td>6/26/21</td> <td>12:30</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-2076F-20210626</td> <td>6/26/21</td> <td>14:54</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>RW-4012P-20210626</td> <td>6/26/21</td> <td>15:40</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>1</td> </tr> <tr> <td>FB-07-20210627</td> <td>6/27/21</td> <td>08:50</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> </tr> </table>		Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, On-surface, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	Total Number of Containers	Special Instructions/Note:	RW-8284P-20210625	6/25/21	12:00	G	W	X	X	X	1	MS/MSD	RW-2172F-20210625	6/25/21	12:55	G	W	X	X	1	RW-7588P-20210625	6/25/21	14:31	G	W	X	X	1	RW-8709P-20210625	6/25/21	15:51	G	W	X	X	1	RW-7688P-20210625	6/25/21	16:38	G	W	X	X	1	RW-5898B1-20210625	6/25/21	18:00	G	W	X	X	1	RW-2140H-20210626	6/26/21	11:20	G	W	X	X	1	NW-116S-20210626	6/26/21	12:30	G	W	X	X	1	RW-2076F-20210626	6/26/21	14:54	G	W	X	X	1	RW-4012P-20210626	6/26/21	15:40	G	W	X	X	1	FB-07-20210627	6/27/21	08:50	G	W	X	X	X	1
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, On-surface, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	Total Number of Containers	Special Instructions/Note:																																																																																															
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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: Relinquished by: Relinquished by: Relinquished by:		Date: Date: Date: Date:																																																																																																						
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:																																																																																																						

Denver #280

Chain of Custody Record

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

Client Information		Sampler: <u>Environ-Elect</u>		Lab Plot: <u>Bienilius, Dylan T.</u>		Carrier Tracking No(s):	
Client Contact: <u>Mary Lou Fox</u>		Phone: <u>208-310-0192</u>		E-Mail: <u>Dylan.Bienilius@testamericainc.com</u>		COC No: <u>208-310-0192</u>	
Company: <u>CDM Smith, Inc.</u>		Address: <u>14432 S.E. Eastgate Way Suite 100</u>		City: <u>Bellevue</u>		State: <u>WA</u> Zip: <u>98007</u>	
Phone: <u>425-519-8300</u>		Fax: <u>425-519-8300</u>		PO #: <u>TBD</u>		WO #: <u></u>	
Email: <u>FoxML@cdmsmith.com</u>		Project Name: <u>Barnock Ft. Hall Mine LF, Idaho</u>		Project #: <u>28018772</u>		SSOW#: <u></u>	
Site: <u>Offsite Bulk Sampling</u>		Due Date Requested: <u>15 business days</u>		TAT Requested (days): <u>15 business days</u>		Analysis Requested	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Matrix (View, Spec, On-site, G=grab, A=Lab)		Preservation Code		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
8260B - VOCs		A		X		X	
RW-7244P-20210624		6/24/21 15:03		C		W	
RW-7237H-20210624		6/24/21 16:00		C		W	
RW-7040B-20210624		6/24/21 16:59		C		W	
RW-8105PS-20210624		6/24/21 17:35		C		W	
MW-38-105-115-20210627		6/27/21 16:50		C		W	
TB-02-20210627		6/27/21 18:00		C		W	
MW-38-121-150-20210627		6/27/21 17:30		C		W	
TB-05-20210627		6/27/21 17:30		C		W	
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)		Empty Kit Relinquished by:		Relinquished by:		Relinquished by:	
Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Company:		Company:		Company:		Company:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	
Special Instructions/Note:		Total Number of Containers		Preservation Codes:		Other:	
A - HCL		M - Hexane		B - NaOH		N - None	
C - Zn Acetate		O - AsNaO2		D - Nitric Acid		P - Na2OAS	
E - NaHSO4		Q - Na2SO3		F - MeOH		R - Na2S2O3	
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)	

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

Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Fl. Hall Mine L.F., Idaho Site:		Lab PM: Bieniulis, Dylan T. E-Mail: Dylan.Bieniulis@testamericainc.com Carrier Tracking No(s):		COC No: Page: 1 of 2 Job #:
Due Date Requested: TAT Requested (days): 15 business days PO #: TBD WO #:		Analysis Requested		
Matrix (Wet, Solid, On-wash, BT-Tissue, AAR) Sample Type (C=Comp, G=grab) Sample Date: 6/27/21 19:30 Sample Time:		Field Filtered Sample (Yes or No) ☒ A Perform MS/MSD (Yes or No) ☒ A Total Number of Containers:		
Preservation Code:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2OAS E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 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:		
Special Instructions/Note:		Special Instructions/QC Requirements:		
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		
Empty Kit Relinquished by:		Relinquished by:		
Relinquished by:		Relinquished by:		
Relinquished by:		Relinquished by:		
Custody Seals Intact: ☒ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks:		

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

Client Information		Lab PM:		Carrier Tracking No(s):		COC No:					
Client Contact: Mary Lou Fox		Blenius, Dylan T.				Page: 2 of 2					
Company: CDM Smith, Inc.		E-Mail: Dylan.Blenius@testamericainc.com				Job #:					
Address: 14432 S.E. Eastgate Way Suite 100		Due Date Requested:		Analysis Requested		Preservation Codes:					
City: Bellevue		TAT Requested (days): 15 business days				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 Other:					
State, Zip: WA, 98007		PO #:				M - Hexano N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)					
Phone: 425-519-8300		TBD									
Email: FoxML@cdmsmith.com		WO #:									
Project Name: Bannock Ft. Hall Mine LF, Idaho		Project #: 28018772									
Site: Bannock Ft. Hall Mine LF, Idaho		SSOW#:									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Overhead, DT-Trans, Aque)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs	Total Number of Containers	Special Instructions/Note:	
PA-3-20210624	6/24/21 11:50	G	W			X	X				
RW-26-PM-20210624	6/24/21 15:05	G	W			X	X				
RW-305P-20210624	6/24/21 08:40	G	W			X	X				
RW-8048P-20210624	6/24/21 08:44	G	W			X	X				
RW-8055P-20210624	6/24/21 08:27	G	W			X	X				
PA-10-20210624	6/24/21 11:33	G	W			X	X				
RW-7350P-20210624	6/24/21 12:20	G	W			X	X				
PA-7-58-68-20210624	6/24/21 12:48	G	W			X	X				
PA-7-68-78-20210624	6/24/21 14:20	G	W			X	X				
RW-7547P-20210624	6/24/21 15:30	G	W			X	X				
RW-7547P-20210624	6/24/21 14:13	G	W			X	X				
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Special Instructions/QC Requirements:		Return To Client		Disposal By Lab		Archive For	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological											
Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Received by:		Company	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Company	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Company	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:							

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Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Fl. Hall Mine LF, Idaho Site: 28018772		Lab PM: Blenulis, Dylan T. E-Mail: Dylan.Blenulis@testamericainc.com Carrier Tracking No(s): Lab P/N: Blenulis, Dylan T. E-Mail: Dylan.Blenulis@testamericainc.com		COC No: Page: 1013 Job #:
Due Date Requested: TAT Requested (days): 15 business days PO #: TBD WO #: Project #: 28018772 SSOW#:		Analysis Requested		
Sample Identification Sample ID: MW-1-20210622 Sample ID: MW-1-20210622 Sample ID: RW-8249P-20210622 Sample ID: RW-7773P-20210622 Sample ID: RW-7773PQ-20210622 Sample ID: RW-7720P-20210622 Sample ID: RW-7586P-20210622 Sample ID: RW-7677P-20210622 Sample ID: RW-8008-20210622 Sample ID: PA-1-20210622 Sample ID: MW-37-20210622		Matrix (Weir, Sealed, BT+Tissue, AAR) Sample Type (C=Comp, G=Grab) Preservation Code:	Field Filled Sample (Yes or No) Perform MS/MSD (Yes or No) 8260B - VOCs	Total Number of Containers Special Instructions/Note:
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: 6/22/21 Time: 15:30 Relinquished by:		
Relinquished by:		Date: 6/22/21 Time: 15:30 Relinquished by:		
Relinquished by:		Date: 6/22/21 Time: 15:30 Relinquished by:		
Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

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Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Barnock Ft. Hall Mine LF, Idaho Site: Offsite GW Sampling		Lab PM: Bienulis, Dylan T. E-Mail: Dylan.Bienulis@testamericainc.com Carrier Tracking No(s): Lab #: Job #: COC No:	
Due Date Requested: TAT Requested (days): 15 business days PO #: TBD WO #: Project #: 28018772 SSOW#:		Analysis Requested Total Number of Containers:	
Sample Identification MW-370-20210622 PA-3-20210622 RW-3091R-20210622 RW-2151H-20210623 PA-37-47-20210623 PA-37-87-20210623 RW-3030P-20210623 RW-2724H-20210623 RW-2172HQ-20210623 TB-01-20210625		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8260B - VOCs 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 Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (Weirater, Spigot, Onstream, D1+Tissue, AWG)		Special Instructions/Note: MS/MSD trip blank	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: Relinquished by:			
Relinquished by:			
Relinquished by:			
Relinquished by:			
Custody Seal Intact: Δ Yes Δ No			
Cooler Temperature(s) °C and Other Remarks:			

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Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Ft. Hall Mine LF, Idaho Site:		Lab PM: Bienulis, Dylan T. E-Mail: Dylan.Bienulis@testamericainc.com Carrier Tracking No(s):		COC No: Page: 3 of 3 Job #:
Due Date Requested: TAT Requested (days): 15 business days PO #: TBD WO #:		Analysis Requested		
Sample: Emma Ebert Phone: 208-310-0772		Total Number of Containers		
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 Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		
Sample Identification EB-01-20210622 EB-02-20210622 EB-03-20210623 EB-04-20210623 EB-05-20210624 EB-06-20210625		Special Instructions/Note:		
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant 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		
Empty Kit Relinquished by:		Special Instructions/QC Requirements:		
Relinquished by:		Date: 6/25/21 Time: 15:00		
Relinquished by:		Date:		
Relinquished by:		Date:		
Relinquished by:		Date:		
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:		

Appendix C

2021 Annual Offsite Sampling Event Laboratory Analytical Results

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-2076F		RW-2140H		RW-2151H		RW-2172F		
				Sample Name	RW-2076F-20210626		RW-2140H-20210626		RW-2151H-20210623		RW-2172F-20210625		
				Sample Date	6/26/2021		6/26/2021		6/23/2021		6/25/2021		
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	
Field Parameters													
Dissolved Oxygen				mg/l	7.48		8.88		10.57		7.03		
Oxidation-Reduction Potential				millivolts	77.9		85.5		-6		86.2		
pH			6.5 to 8.5	su	7		7.09		8		7.25		
Specific Conductance				µs/cm	1101		1149		976		808		
Temperature				°C	13.3		13.4		13.76		13.5		
Turbidity				ntu	1.23		0		7.1		0.16		
VOCs													
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	
1,2-DIBROMOETHANE (ETHYLENE DIBR	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	1.3		1.1		0.64	J	0.15	U	
CIS-1,3-DICHLOROPROPENE				µg/l	0.16	U	0.16	U	0.16	U	0.16	U	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U	
Tetrachloroethylene	5	5		µg/l	4.6		4.5		2.7		0.2	U	
Toluene	1000	1000		µg/l	0.17	U	0.17	U	0.17	U	0.17	U	
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	
Trichloroethylene	5	5		µg/l	24		26		14		0.16	U	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	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 celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

J = Result is estimated

MCL = maximum contaminant level

mg/l = milligram per liter

ms/cm = milliSiemens per centimeter

NR = not reported

NS = not sampled

ntu = nephelometric turbidity Units

Q = qualifier

su = standard units

U = Analyte was not detected at the associated value

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

USEPA = United States Environmental Protection Agency

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-2172H				RW-2237H		RW-2879M		
				Sample Name	RW-2172H-20210623		RW-2172HQ-20210623		RW-2237H-20210624		RW-2879M-20210624		
				Sample Date	6/23/2021		6/23/2021		6/24/2021		6/24/2021		
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	
Field Parameters													
Dissolved Oxygen				mg/l	8.56		8.56		8.28		6.77		
Oxidation-Reduction Potential				millivolts	6		6		135.2		0.5		
pH			6.5 to 8.5	su	7.7		7.7		7.27		6.93		
Specific Conductance				µs/cm	1200		1200		851		1673		
Temperature				°C	13.11		13.11		15.6		13.6		
Turbidity				ntu	0		0		0		2.81		
VOCs													
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	
1,2-DIBROMOETHANE (ETHYLENE DIBR	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	1.1		1.3		0.15	U	0.15	U	
CIS-1,3-DICHLOROPROPENE				µg/l	0.16	U	0.16	U	0.16	U	0.16	U	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U	
Tetrachloroethylene	5	5		µg/l	5.4	J	4.1	J	1.2		0.2	U	
Toluene	1000	1000		µg/l	0.17	U	0.17	U	0.17	U	0.17	U	
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	
Trichloroethylene	5	5		µg/l	21		21		8.6		0.16	U	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	

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Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID		RW-5898B1		RW-7070B		RW-7091R		RW-7200P	
				Sample Name	RW-5898B1-20210625	RW-7070B-20210624		RW-7091R-20210622		RW-7200P-20210621			
				Sample Date	6/25/2021	6/24/2021		6/22/2021		6/21/2021			
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	
Field Parameters													
Dissolved Oxygen				mg/l	6.63		9.25		7.3		8.61		
Oxidation-Reduction Potential				millivolts	71.8		115.7		90		112		
pH			6.5 to 8.5	su	7.41		7.28		7.99		7.79		
Specific Conductance				µs/cm	648		807		342		702		
Temperature				°C	14		13.9		12.65		13.79		
Turbidity				ntu	15.98		0		0		0		
VOCs													
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	
1,2-DIBROMOETHANE (ETHYLENE DIBR	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	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	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U	
Tetrachloroethylene	5	5		µg/l	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	0.43	J	
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	
Trichloroethylene	5	5		µg/l	0.26	J	3.2		1		0.16	U	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	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 celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

J = Result is estimated

MCL = maximum contaminant level

mg/l = milligram per liter

ms/cm = milliSiemens per centimeter

NR = not reported

NS = not sampled

ntu = nephelometric turbidity Units

Q = qualifier

su = standard units

U = Analyte was not detected at the associated value

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

USEPA = United States Environmental Protection Agency

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-7244P		RW-7350P		RW-7505P		RW-7549P		
				Sample Name	RW-7244P-20210624		RW-7350P-20210624		RW-7505P-20210624		RW-7549P-20210624		
				Sample Date	6/24/2021		6/24/2021		6/24/2021		6/24/2021		
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	
Field Parameters													
Dissolved Oxygen				mg/l	7.87		8.05		8.49		8.01		
Oxidation-Reduction Potential				millivolts	137.3		144.9		150.1		135.4		
pH			6.5 to 8.5	su	7.26		7.34		7.21		7.29		
Specific Conductance				µs/cm	692		702		701		708		
Temperature				°C	12.8		14.2		14.2		14.9		
Turbidity				ntu	0		0		0		0		
VOCs													
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	
1,2-DIBROMOETHANE (ETHYLENE DIBR	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	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	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U	
Tetrachloroethylene	5	5		µg/l	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	
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	
Trichloroethylene	5	5		µg/l	0.16	U	0.16	U	0.16	U	0.16	U	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	

Notes:

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USEPA = United States Environmental Protection Agency

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID Sample Name	RW-7586P		RW-7588P		RW-7677P		RW-7688P	
					RW-7586P-20210621		RW-7588P-20210625		RW-7677P-20210621		RW-7688P-20210625	
					Sample Date	6/21/2021	6/25/2021	6/25/2021	6/21/2021	6/25/2021	6/25/2021	6/25/2021
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/l	8.13		7.36		8.61		8.06	
Oxidation-Reduction Potential				millivolts	151		89.6		174		57.4	
pH			6.5 to 8.5	su	7.32		7.26		6.95		7.38	
Specific Conductance				µs/cm	704		778		858		803	
Temperature				°C	13.09		13.6		13.6		14.3	
Turbidity				ntu	0		0.56		0		0.37	
VOCs												
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U
1,2-DIBROMOETHANE (ETHYLENE DIBR)	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	0.29	J	0.15	U
CIS-1,3-DICHLOROPROPENE				µg/l	0.16	U	0.16	U	0.16	U	0.16	U
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U
Tetrachloroethylene	5	5		µg/l	0.2	U	0.2	U	1.1		0.2	U
Toluene	1000	1000		µg/l	0.17	U	0.17	U	0.17	U	0.17	U
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethylene	5	5		µg/l	0.16	U	0.16	U	5.3		0.16	U
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	U

Notes:

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Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID		RW-7773P				RW-8000B		RW-8012P	
				Sample Name	RW-7773P-20210621	RW-7773PQ-20210621		RW-8000B-20210622		RW-8012P-20210626			
				Sample Date	6/21/2021	6/21/2021		6/22/2021		6/26/2021			
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	
Field Parameters													
Dissolved Oxygen				mg/l	8.55		8.55		8.58		8.86		
Oxidation-Reduction Potential				millivolts	141		141		172		82.6		
pH			6.5 to 8.5	su	7.41		7.41		7.68		7.34		
Specific Conductance				µs/cm	717		717		398		795		
Temperature				°C	13.12		13.12		13.03		12		
Turbidity				ntu	0		0		0		10.41		
VOCs													
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	
1,2-DIBROMOETHANE (ETHYLENE DIBR	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	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	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U	
Tetrachloroethylene	5	5		µg/l	0.2	U	0.2	U	0.84	J	0.2	U	
Toluene	1000	1000		µg/l	0.17	U	0.17	U	0.17	U	0.17	U	
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	
Trichloroethylene	5	5		µg/l	0.16	U	0.16	U	4.1		0.16	U	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	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 celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

J = Result is estimated

MCL = maximum contaminant level

mg/l = milligram per liter

ms/cm = milliSiemens per centimeter

NR = not reported

NS = not sampled

ntu = nephelometric turbidity Units

Q = qualifier

su = standard units

U = Analyte was not detected at the associated value

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

USEPA = United States Environmental Protection Agency

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID Sample Name	RW-8030P		RW-8035P		RW-8048P		RW-8105PS	
					RW-8030P-20210623		RW-8035P-20210624		RW-8048P-20210624		RW-8105PS-20210624	
					6/23/2021	6/24/2021	6/24/2021	6/24/2021	6/24/2021	6/24/2021	6/24/2021	6/24/2021
				Unit	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters												
Dissolved Oxygen				mg/l	7.69		9.45		8.38		1.54	
Oxidation-Reduction Potential				millivolts	157		129.3		128.3		-79	
pH			6.5 to 8.5	su	7.82		7.69		7.13		7.08	
Specific Conductance				µs/cm	888		566		879		898	
Temperature				°C	12.74		15.5		13.6		10.7	
Turbidity				ntu	1.9		0.1		0		0.16	
VOCs												
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	UJ	0.47	U	0.47	U	0.47	U
1,2-DIBROMOETHANE (ETHYLENE DIBR)	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,2-Dichloroethene	70	70		µg/l	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
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U
ISOBUTANOL				ug/l	37	UJ	37	U	37	U	37	U
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U
Tetrachloroethylene	5	5		µg/l	0.8	J	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
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethylene	5	5		µg/l	4.6		0.16	U	3.8		0.16	U
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U		
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U		
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U		
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U		

Notes:

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U = Analyte was not detected at the associated value

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Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	RW-8209P		RW-8249P		RW-8284P		
				Sample Name	RW-8209P-20210625		RW-8249P-20210621		RW-8284P-20210625		
				Sample Date	6/25/2021		6/21/2021		6/25/2021		
				Unit	Result	Q	Result	Q	Result	Q	
Field Parameters											
Dissolved Oxygen				mg/l	9.68		9.19		8		
Oxidation-Reduction Potential				millivolts	-9		147		70.1		
pH			6.5 to 8.5	su	7.09		7.03		7.15		
Specific Conductance				µs/cm	3532		1490		976		
Temperature				°C	12.9		15.47		15.8		
Turbidity				ntu	0.15		0		0		
VOCs											
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	
1,2-DIBROMOETHANE (ETHYLENE DIBR	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	0.15	U	
CIS-1,3-DICHLOROPROPENE				µg/l	0.16	U	0.16	U	0.16	U	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	
ISOBUTANOL				ug/l	37	U	37	U	37	U	
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	
O-XYLENE (1,2-DIMETHYLBENZENE)	10000			ug/l	0.19	U	0.19	U	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	
Tetrachloroethylene	5	5		µg/l	0.2	U	0.2	U	0.54	J	
Toluene	1000	1000		µg/l	0.17	U	0.17	U	0.17	U	
TRANS-1,2-DICHLOROETHENE	100	100		ug/l	0.15	U	0.15	U	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	
Trichloroethylene	5	5		µg/l	0.16	U	0.16	U	4.9		
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	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 celsius

µg/L - microgram per liter

IDGW = Idaho Groundwater Standards

J = Result is estimated

MCL = maximum contaminant level

mg/l = milligram per liter

ms/cm = milliSiemens per centimeter

NR = not reported

NS = not sampled

ntu = nephelometric turbidity Units

Q = qualifier

su = standard units

U = Analyte was not detected at the associated value

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

USEPA = United States Environmental Protection Agency

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	Muni-Well-14		Muni-Well-33		MW-1165		MW-37			
				Sample Name	MUNI-WELL-14-20210621		MUNI-WELL-33-20210621		MW-1165-20210626		MW-37-20210622		MW-37Q-20210622	
				Sample Date	6/21/2021		6/21/2021		6/26/2021		6/22/2021		6/22/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters														
Dissolved Oxygen				mg/l	10.77		8.83		7.51		9.16		9.16	
Oxidation-Reduction Potential				millivolts	183		170		79.9		146		146	
pH			6.5 to 8.5	su	7.57		8.38		6.98		8.14		8.14	
Specific Conductance				µs/cm	796		799		1108		363		363	
Temperature				°C	13.21		14.29		13.3		13.42		13.42	
Turbidity				ntu					0.22		3.2		3.2	
VOCs														
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-DIBROMO-3-CHLOROPRO	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-DIBROMOETHANE (ETHY	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	0.41	U
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	1.3		0.15	U	0.15	U
CIS-1,3-DICHLOROPROPENE				ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	2	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
O-XYLENE (1,2-DIMETHYLBEN	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
STYRENE	100	100		ug/l	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U
Tetrachloroethene	5	5		µg/l	0.2	U	0.39	J	4.2		0.2	U	0.2	U
TOLUENE	1000	1000		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
TRANS-1,2-DICHLOROETHEN	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5		µg/l	1.2		1.9		27		1.6		1.3	
TRICHLOROFUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

Notes:

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Highlight indicates values greater than the MCL.

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U = Analyte was not detected at the associated value

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Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	MW-38		MW-38		MW-38		PA-1		PA-10	
				Sample Name	MW-38-105-115-20210627		MW-38-121-130-20210627		MW-38-60-100-20210627		PA-1-20210622		PA-10-20210624	
				Sample Date	6/27/2021		6/27/2021		6/27/2021		6/22/2021		6/24/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters														
Dissolved Oxygen				mg/l	7.43		6.61		7.42		7.99		7.46	
Oxidation-Reduction Potential				millivolts	15.4		-101.4		34.8		170		77.9	
pH			6.5 to 8.5	su	7.1		6.81		7.2		7.42		7.27	
Specific Conductance				µs/cm	896		931		880		760		756	
Temperature				°C	19		16.5		17.4		15.29		11.2	
Turbidity				ntu	0		0.06		18.22				2.6	
VOCs														
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-DIBROMO-3-CHLOROPRO	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-DIBROMOETHANE (ETHY	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	0.41	U
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
CIS-1,3-DICHLOROPROPENE				ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	2	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
O-XYLENE (1,2-DIMETHYLBEN	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
STYRENE	100	100		ug/l	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
TOLUENE	1000	1000		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
TRANS-1,2-DICHLOROETHEN	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5		µg/l	2.5		2.5		2.2		1.5		0.16	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	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 celsius

µg/L - microgram per liter

µs/cm = microSiemens per centimeter

IDGW = Idaho Groundwater Standards

J = Result is estimated

MCL = maximum contaminant level

mg/l = milligram per liter

NR = not reported

NS = not sampled

ntu = nephelometric turbidity Units

Q = qualifier

su = standard units

U = Analyte was not detected at the associated value

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

USEPA = United States Environmental Protection Agency

Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID	PA-3		PA-5		PA-8		PA-8		PA-9	
				Sample Name	PA-3-20210622		PA-5-20210627		PA-8-37-47-20210623		PA-8-77-87-20210623		PA-9-58-68-20210624	
				Sample Date	6/22/2021		6/27/2021		6/23/2021		6/23/2021		6/24/2021	
				Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Field Parameters														
Dissolved Oxygen				mg/l	11.87		7.05		10.26		9.77		6.74	
Oxidation-Reduction Potential				millivolts	155		73		117		117		82.5	
pH			6.5 to 8.5	su	7.39		7.13		9.14		9.07		7.24	
Specific Conductance				µs/cm	761		792		472		476		749	
Temperature				°C	17.79		16.2		23.37		26.16		14.3	
Turbidity				ntu			30.2						8.32	
VOCs														
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
1,1-DICHLOROETHANE				ug/l	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,1-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2-DIBROMO-3-CHLOROPRO	0.2	0.2		ug/l	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
1,2-DIBROMOETHANE (ETHY	0.05	0.05		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
1,3-DICHLOROPROPANE				ug/l	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
2,2-DICHLOROPROPANE				ug/l	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
2-HEXANONE				ug/l	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
ACETONE				ug/l	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
ACETONITRILE				ug/l	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
ACROLEIN				ug/l	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
ACRYLONITRILE				ug/l	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BENZENE	5	5		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE				ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BROMOFORM	80	100		ug/l	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U
BROMOMETHANE				ug/l	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
CARBON DISULFIDE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
CHLOROBENZENE	100	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
CHLOROETHANE				ug/l	0.41	U	0.41	U	0.41	U	0.41	U	0.41	U
CHLOROFORM	80	2		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
CHLOROMETHANE				ug/l	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
CIS-1,3-DICHLOROPROPENE				ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
DIBROMOMETHANE				ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
ETHYL METHACRYLATE				ug/l	0.86	U	0.86	U	0.86	U	0.86	U	0.86	U
ETHYLBENZENE	700	700		ug/l	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
ISOBUTANOL				ug/l	37	U	37	U	37	U	37	U	37	U
m,p-Xylene	10000			ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	2	U	2	U	2	U	2	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
METHYL METHACRYLATE				ug/l	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
METHYLACRYLONITRILE				ug/l	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
O-XYLENE (1,2-DIMETHYLBEN	10000			ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
STYRENE	100	100		ug/l	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
TOLUENE	1000	1000		ug/l	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
TRANS-1,2-DICHLOROETHEN	100	100		ug/l	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Trichloroethene	5	5		µg/l	1.2		0.6	J	0.16	U	0.16	U	0.16	U
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
VINYL ACETATE				ug/l	0.94	U	0.94	U	0.94	U	0.94	U	0.94	U
VINYL CHLORIDE	2	2		ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Xylenes	10000	10000		ug/l	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U

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MCL = maximum contaminant level

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Analyte	USEPA MCL	ID GW Primary Standard	ID GW Secondary Standard	Well ID		PA-9	
				Sample Name	PA-9-88-98-20210624		
				Sample Date	6/24/2021		
				Unit	Result	Q	
Field Parameters							
Dissolved Oxygen				mg/l	6.59		
Oxidation-Reduction Potential				millivolts	80.1		
pH			6.5 to 8.5	su	7.25		
Specific Conductance				µs/cm	757		
Temperature				°C	11.8		
Turbidity				ntu	0.29		
VOCs							
1,1,1,2-Tetrachloroethane				ug/l	0.21	U	
1,1,1-TRICHLOROETHANE	200	200		ug/l	0.16	U	
1,1,2,2-TETRACHLOROETHANE				ug/l	0.21	U	
1,1,2-TRICHLOROETHANE	5	5		ug/l	0.27	U	
1,1-DICHLOROETHANE				ug/l	0.22	U	
1,1-DICHLOROETHENE	7	7		ug/l	0.23	U	
1,1-DICHLOROPROPENE				ug/l	0.19	U	
1,2,3-TRICHLOROPROPANE				ug/l	0.33	U	
1,2,4-TRICHLOROBENZENE	70	70		ug/l	0.21	U	
1,2-DIBROMO-3-CHLOROPRO	0.2	0.2		ug/l	0.47	U	
1,2-DIBROMOETHANE (ETHYL	0.05	0.05		ug/l	0.18	U	
1,2-DICHLOROBENZENE	600	600		ug/l	0.15	U	
1,2-DICHLOROETHANE	5	5		ug/l	0.13	U	
1,2-DICHLOROPROPANE	5	5		ug/l	0.18	U	
1,3-DICHLOROBENZENE		600		ug/l	0.13	U	
1,3-DICHLOROPROPANE				ug/l	0.09	U	
1,4-DICHLOROBENZENE	75	75		ug/l	0.16	U	
2,2-DICHLOROPROPANE				ug/l	0.38	U	
2-CHLORO-1,3-BUTADIENE				ug/l	0.21	U	
2-HEXANONE				ug/l	1.7	U	
ACETONE				ug/l	1.9	U	
ACETONITRILE				ug/l	9.6	U	
ACROLEIN				ug/l	2.8	U	
ACRYLONITRILE				ug/l	1.4	U	
ALLYL CHLORIDE (3-CHLOROPROPENE)				ug/l	0.17	U	
BENZENE	5	5		ug/l	0.16	U	
BROMOCHLOROMETHANE				ug/l	0.1	U	
BROMODICHLOROMETHANE	80	100		ug/l	0.17	U	
BROMOFORM	80	100		ug/l	0.46	U	
BROMOMETHANE				ug/l	0.21	U	
CARBON DISULFIDE				ug/l	0.17	U	
CARBON TETRACHLORIDE	5	5		ug/l	0.19	U	
CHLOROETHANE	100	100		ug/l	0.17	U	
CHLOROETHANE				ug/l	0.41	U	
CHLOROFORM	80	2		ug/l	0.16	U	
CHLOROMETHANE				ug/l	0.3	U	
cis-1,2-Dichloroethene	70	70		µg/l	0.15	U	
CIS-1,3-DICHLOROPROPENE				ug/l	0.16	U	
DIBROMOCHLOROMETHANE	80	100		ug/l	0.17	U	
DIBROMOMETHANE				ug/l	0.17	U	
DICHLORODIFLUOROMETHANE				ug/l	0.31	U	
ETHYL METHACRYLATE				ug/l	0.86	U	
ETHYLBENZENE	700	700		ug/l	0.16	U	
IODOMETHANE (METHYL IODIDE)				ug/l	0.23	U	
ISOBUTANOL				ug/l	37	U	
m,p-Xylene	10000			ug/l	0.15	U	
METHYL ETHYL KETONE (2-BUTANONE)				ug/l	2	U	
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				ug/l	0.98	U	
METHYL METHACRYLATE				ug/l	1.1	U	
METHYLACRYLONITRILE				ug/l	1.6	U	
METHYLENE CHLORIDE	5	5		ug/l	0.94	U	
O-XYLENE (1,2-DIMETHYLBEN	10000			ug/l	0.19	U	
PROPANE NITRILE (PROPIONITRILE)				ug/l	3.7	U	
STYRENE	100	100		ug/l	0.36	U	
Tetrachloroethene	5	5		µg/l	0.2	U	
TOLUENE	1000	1000		ug/l	0.17	U	
TRANS-1,2-DICHLOROETHEN	100	100		ug/l	0.15	U	
TRANS-1,3-DICHLOROPROPENE				ug/l	0.19	U	
TRANS-1,4-DICHLORO-2-BUTENE				ug/l	0.8	U	
Trichloroethene	5	5		µg/l	0.16	U	
TRICHLOROFLUOROMETHANE				ug/l	0.29	U	
VINYL ACETATE				ug/l	0.94	U	
VINYL CHLORIDE	2	2		ug/l	0.1	U	
Xylenes	10000	10000		ug/l	0.19	U	

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Q = qualifier

su = standard units

U = Analyte was not detected at the associated value

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

USEPA = United States Environmental Protection Agency

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
Muni-Well-10	12/21/1999	ND U	1	Historical Data - Previous Consultant
Muni-Well-10	9/26/2000	ND U	0.5	Historical Data - Previous Consultant
Muni-Well-10	9/18/2001	ND U	0.7	Historical Data - Previous Consultant
Muni-Well-10	10/8/2001	ND U	0.6	Historical Data - Previous Consultant
Muni-Well-10	9/4/2002	ND U	0.6	Historical Data - Previous Consultant
Muni-Well-10	9/16/2003	ND U	2	Historical Data - Previous Consultant
Muni-Well-10	9/8/2004	0.5 U	0.5 U	Historical Data - Previous Consultant
Muni-Well-10	10/26/2005	ND U	0.5	Historical Data - Previous Consultant
Muni-Well-10	10/26/2005	0.5 U	0.5	Historical Data - Previous Consultant
Muni-Well-10	9/20/2006	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	12/5/2007	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	10/24/2008	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	11/30/2009	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	9/14/2010	ND U	0.54	Historical Data - Previous Consultant
Muni-Well-10	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	9/13/2011	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	10/2/2012	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	9/18/2013	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-10	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
Muni-Well-12	7/20/1993	ND U	1.6	Historical Data - Previous Consultant
Muni-Well-12	10/18/1993	ND U	1.8	Historical Data - Previous Consultant
Muni-Well-12	3/17/1994	ND U	3	Historical Data - Previous Consultant
Muni-Well-12	8/23/1994	ND U	2.1	Historical Data - Previous Consultant
Muni-Well-12	12/13/1994	ND U	2.5	Historical Data - Previous Consultant
Muni-Well-12	3/22/1995	ND U	3.3	Historical Data - Previous Consultant
Muni-Well-12	6/24/1997	ND U	2.4	Historical Data - Previous Consultant
Muni-Well-12	10/19/1998	ND U	3.8	Historical Data - Previous Consultant
Muni-Well-12	12/21/1999	ND U	4.5	Historical Data - Previous Consultant
Muni-Well-12	9/26/2000	ND U	1.3	Historical Data - Previous Consultant
Muni-Well-12	7/3/2001	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-12	9/18/2001	ND U	1.7	Historical Data - Previous Consultant
Muni-Well-12	10/8/2001	ND U	1.6	Historical Data - Previous Consultant
Muni-Well-12	6/17/2002	ND U	1.3	Historical Data - Previous Consultant
Muni-Well-12	9/4/2002	ND U	1.2	Historical Data - Previous Consultant
Muni-Well-12	9/16/2003	ND U	2.6	Historical Data - Previous Consultant
Muni-Well-12	6/23/2004	0.5	0.7	Historical Data - Previous Consultant
Muni-Well-12	9/8/2004	ND U	0.7	Historical Data - Previous Consultant
Muni-Well-12	9/8/2004	0.5	0.7	Historical Data - Previous Consultant
Muni-Well-12	10/26/2005	ND U	0.7	Historical Data - Previous Consultant
Muni-Well-12	10/26/2005	0.5	0.7	Historical Data - Previous Consultant
Muni-Well-12	9/20/2006	ND U	0.6	Historical Data - Previous Consultant
Muni-Well-12	9/20/2006	0.5	0.6	Historical Data - Previous Consultant
Muni-Well-12	12/5/2007	ND U	0.76	Historical Data - Previous Consultant
Muni-Well-12	12/5/2007	0.5	0.76	Historical Data - Previous Consultant
Muni-Well-12	10/24/2008	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-12	11/30/2009	ND U	0.68	Historical Data - Previous Consultant
Muni-Well-12	11/30/2009	0.5	0.68	Historical Data - Previous Consultant
Muni-Well-12	9/14/2010	ND U	0.58	Historical Data - Previous Consultant
Muni-Well-12	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-12	9/13/2011	ND U	0.58	Historical Data - Previous Consultant
Muni-Well-12	9/13/2011	0.5	0.58	Historical Data - Previous Consultant
Muni-Well-12	10/11/2012	ND U	0.75	Historical Data - Previous Consultant
Muni-Well-12	10/11/2012	0.5	0.75	Historical Data - Previous Consultant
Muni-Well-12	9/18/2013	ND U	0.54	Historical Data - Previous Consultant
Muni-Well-12	9/18/2013	0.5	0.54	Historical Data - Previous Consultant
Muni-Well-12	9/9/2014	ND U	0.54	Historical Data - Previous Consultant
Muni-Well-12	9/9/2014	0.5	0.54	Historical Data - Previous Consultant
Muni-Well-12	9/10/2015	0.5	0.5	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-12	10/18/2016	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-12	10/5/2017	0.5	0.53	Historical Data - Previous Consultant
Muni-Well-12	9/26/2018	0.5	1	Historical Data - Previous Consultant
Muni-Well-13	6/29/1993	ND U	2	Historical Data - Previous Consultant
Muni-Well-13	7/20/1993	ND U	2.5	Historical Data - Previous Consultant
Muni-Well-13	10/18/1993	ND U	2.7	Historical Data - Previous Consultant
Muni-Well-13	3/17/1994	ND U	3.8	Historical Data - Previous Consultant
Muni-Well-13	5/26/1994	ND U	3.2	Historical Data - Previous Consultant
Muni-Well-13	6/2/1994	ND U	3.2	Historical Data - Previous Consultant
Muni-Well-13	8/23/1994	ND U	3.1	Historical Data - Previous Consultant
Muni-Well-13	11/28/1994	0.6	6.2	Historical Data - Previous Consultant
Muni-Well-13	12/12/1994	0.5	5.7	Historical Data - Previous Consultant
Muni-Well-13	7/10/1997	ND U	4.5	Historical Data - Previous Consultant
Muni-Well-13	10/19/1998	ND U	3.5	Historical Data - Previous Consultant
Muni-Well-13	2/2/1999	ND U	3	Historical Data - Previous Consultant
Muni-Well-13	12/21/1999	ND U	3.6	Historical Data - Previous Consultant
Muni-Well-13	9/26/2000	ND U	0.5	Historical Data - Previous Consultant
Muni-Well-13	2/27/2001	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-13	6/26/2001	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-13	9/18/2001	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-13	10/8/2001	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-13	1/31/2002	ND U	2	Historical Data - Previous Consultant
Muni-Well-13	6/17/2002	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-13	9/4/2002	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-13	9/16/2003	ND U	2.2	Historical Data - Previous Consultant
Muni-Well-13	6/23/2004	0.5	0.6	Historical Data - Previous Consultant
Muni-Well-13	9/8/2004	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	10/26/2005	ND U	0.8	Historical Data - Previous Consultant
Muni-Well-13	10/26/2005	0.5	0.8	Historical Data - Previous Consultant
Muni-Well-13	9/20/2006	ND U	0.7	Historical Data - Previous Consultant
Muni-Well-13	9/20/2006	0.5	0.7	Historical Data - Previous Consultant
Muni-Well-13	12/5/2007	ND U	0.82	Historical Data - Previous Consultant
Muni-Well-13	12/5/2007	0.5	0.82	Historical Data - Previous Consultant
Muni-Well-13	10/24/2008	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	11/30/2009	ND U	0.81	Historical Data - Previous Consultant
Muni-Well-13	11/30/2009	0.5	0.81	Historical Data - Previous Consultant
Muni-Well-13	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	9/13/2011	ND U	0.77	Historical Data - Previous Consultant
Muni-Well-13	9/13/2011	0.5	0.77	Historical Data - Previous Consultant
Muni-Well-13	10/2/2012	ND U	0.67	Historical Data - Previous Consultant
Muni-Well-13	10/2/2012	0.5	0.67	Historical Data - Previous Consultant
Muni-Well-13	9/18/2013	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	9/9/2014	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	9/10/2015	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-13	10/5/2017	0.5	0.75	Historical Data - Previous Consultant
Muni-Well-13	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
Muni-Well-14	6/29/1993	ND U	4.6	Historical Data - Previous Consultant
Muni-Well-14	7/20/1993	ND U	6.3	Historical Data - Previous Consultant
Muni-Well-14	10/18/1993	0.6	5.2	Historical Data - Previous Consultant
Muni-Well-14	11/28/1994	0.8	9.4	Historical Data - Previous Consultant
Muni-Well-14	10/19/1998	ND U	6.1	Historical Data - Previous Consultant
Muni-Well-14	2/1/1999	ND U	4.7	Historical Data - Previous Consultant
Muni-Well-14	6/23/2004	0.5 U	2.2	Historical Data - Previous Consultant
Muni-Well-14	9/8/2004	0.5 U	1.9	Historical Data - Previous Consultant
Muni-Well-14	6/8/2005	0.5 U	1.2	Historical Data - Previous Consultant
Muni-Well-14	6/13/2018	0.5 U	2.46	Historical Data - Previous Consultant
Muni-Well-14	9/26/2018	0.5 U	1.4	Historical Data - Previous Consultant
MUNI-WELL-14	6/19/2019	0.2 U	1.1	2019 June Offsite Residential

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
MUNI-WELL-14	6/24/2020	0.25 J	1.2	2020 Spring Off-Site Sampling
Muni-Well-14	6/21/2021	0.2 U	1.2	2021 June Offsite Sampling
Muni-Well-16	3/24/1993	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-16	6/7/1993	ND U	1.2	Historical Data - Previous Consultant
Muni-Well-16	7/20/1993	ND U	1.2	Historical Data - Previous Consultant
Muni-Well-16	10/18/1993	ND U	1.2	Historical Data - Previous Consultant
Muni-Well-16	3/16/1994	ND U	2.2	Historical Data - Previous Consultant
Muni-Well-16	5/26/1994	ND U	2	Historical Data - Previous Consultant
Muni-Well-16	8/23/1994	ND U	1.9	Historical Data - Previous Consultant
Muni-Well-16	12/21/1994	ND U	1.4	Historical Data - Previous Consultant
Muni-Well-16	3/21/1995	ND U	1.8	Historical Data - Previous Consultant
Muni-Well-16	5/12/1997	ND U	2.1	Historical Data - Previous Consultant
Muni-Well-16	10/19/1998	ND U	2.6	Historical Data - Previous Consultant
Muni-Well-16	2/1/1999	ND U	3.4	Historical Data - Previous Consultant
Muni-Well-16	12/21/1999	ND U	2.6	Historical Data - Previous Consultant
Muni-Well-16	9/26/2000	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-16	2/27/2001	ND U	1.3	Historical Data - Previous Consultant
Muni-Well-16	9/18/2001	ND U	1	Historical Data - Previous Consultant
Muni-Well-16	1/31/2002	ND U	1	Historical Data - Previous Consultant
Muni-Well-16	9/4/2002	ND U	0.8	Historical Data - Previous Consultant
Muni-Well-16	9/16/2003	ND U	2.2	Historical Data - Previous Consultant
Muni-Well-16	10/26/2005	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-16	12/5/2007	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-16	2/23/2009	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-16	4/22/2009	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-16	6/8/2009	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-16	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
Muni-Well-29	10/26/2005	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-29	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-29	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-30	7/20/1993	ND U	0.8	Historical Data - Previous Consultant
Muni-Well-30	10/18/1993	ND U	1.2	Historical Data - Previous Consultant
Muni-Well-30	3/16/1994	ND U	1.9	Historical Data - Previous Consultant
Muni-Well-30	5/26/1994	ND U	2	Historical Data - Previous Consultant
Muni-Well-30	8/23/1994	ND U	1.4	Historical Data - Previous Consultant
Muni-Well-30	11/28/1994	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-30	6/27/1996	ND U	0.6	Historical Data - Previous Consultant
Muni-Well-30	5/12/1997	ND U	1	Historical Data - Previous Consultant
Muni-Well-30	10/19/1998	ND U	1.5	Historical Data - Previous Consultant
Muni-Well-30	2/1/1999	ND U	1.6	Historical Data - Previous Consultant
Muni-Well-30	12/21/1999	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-30	9/26/2000	ND U	0.5	Historical Data - Previous Consultant
Muni-Well-30	2/27/2001	ND U	0.8	Historical Data - Previous Consultant
Muni-Well-30	9/18/2001	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-30	10/8/2001	ND U	0.6	Historical Data - Previous Consultant
Muni-Well-30	9/16/2003	ND U	2.1	Historical Data - Previous Consultant
Muni-Well-30	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
Muni-Well-33	6/29/1993	0.7	7	Historical Data - Previous Consultant
Muni-Well-33	10/18/1993	0.7	7.1	Historical Data - Previous Consultant
Muni-Well-33	6/2/1994	1.2	15	Historical Data - Previous Consultant
Muni-Well-33	11/28/1994	1.2	13.2	Historical Data - Previous Consultant
Muni-Well-33	10/19/1998	1.6	14.4	Historical Data - Previous Consultant
Muni-Well-33	2/1/1999	0.6	9.6	Historical Data - Previous Consultant
Muni-Well-33	9/26/2000	ND U	3.9	Historical Data - Previous Consultant
Muni-Well-33	6/23/2004	0.5 U	2.8	Historical Data - Previous Consultant
Muni-Well-33	9/8/2004	0.5 U	2.1	Historical Data - Previous Consultant
Muni-Well-33	6/8/2005	0.5 U	2	Historical Data - Previous Consultant
Muni-Well-33	1/23/2006	0.5 U	2.5	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-33	6/8/2009	ND U	2.27	Historical Data - Previous Consultant
Muni-Well-33	6/8/2009	0.5 U	2.27	Historical Data - Previous Consultant
Muni-Well-33	9/29/2009	0.5 U	2.67	Historical Data - Previous Consultant
Muni-Well-33	5/2/2018	0.55	5.16	Historical Data - Previous Consultant
Muni-Well-33	6/18/2018	0.5 U	4.41	Historical Data - Previous Consultant
Muni-Well-33	9/26/2018	0.51	3.24	Historical Data - Previous Consultant
MUNI-WELL-33	6/19/2019	0.31 J	1.9	2019 June Offsite Residential
MUNI-WELL-33	6/24/2020	0.37 J	2.1	2020 Spring Off-Site Sampling
Muni-Well-33	6/21/2021	0.39 J	1.9	2021 June Offsite Sampling
Muni-Well-36	10/14/1993	ND U	1.2	Historical Data - Previous Consultant
Muni-Well-36	3/16/1994	0.5	4	Historical Data - Previous Consultant
Muni-Well-36	5/26/1994	ND U	3.1	Historical Data - Previous Consultant
Muni-Well-36	8/23/1994	ND U	4	Historical Data - Previous Consultant
Muni-Well-36	11/28/1994	ND U	5.2	Historical Data - Previous Consultant
Muni-Well-36	12/12/1994	0.5	6	Historical Data - Previous Consultant
Muni-Well-36	6/7/1995	ND U	4.7	Historical Data - Previous Consultant
Muni-Well-36	9/18/1995	ND U	4.9	Historical Data - Previous Consultant
Muni-Well-36	12/15/1995	ND U	3.9	Historical Data - Previous Consultant
Muni-Well-36	3/29/1996	ND U	3	Historical Data - Previous Consultant
Muni-Well-36	6/27/1996	0.7	4.9	Historical Data - Previous Consultant
Muni-Well-36	7/10/1997	ND U	4.3	Historical Data - Previous Consultant
Muni-Well-36	8/21/1997	ND U	5.2	Historical Data - Previous Consultant
Muni-Well-36	8/28/1997	0.6	6.2	Historical Data - Previous Consultant
Muni-Well-36	9/22/1997	ND U	4.8	Historical Data - Previous Consultant
Muni-Well-36	9/30/1997	0.5	5.3	Historical Data - Previous Consultant
Muni-Well-36	6/8/1998	0.71	10.9	Historical Data - Previous Consultant
Muni-Well-36	10/19/1998	ND U	3.5	Historical Data - Previous Consultant
Muni-Well-36	2/1/1999	ND U	3.4	Historical Data - Previous Consultant
Muni-Well-36	10/11/1999	ND U	4.2	Historical Data - Previous Consultant
Muni-Well-36	12/21/1999	ND U	4.2	Historical Data - Previous Consultant
Muni-Well-36	9/26/2000	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-36	2/27/2001	ND U	1	Historical Data - Previous Consultant
Muni-Well-36	6/26/2001	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-36	9/18/2001	ND U	1.4	Historical Data - Previous Consultant
Muni-Well-36	6/17/2002	ND U	1.5	Historical Data - Previous Consultant
Muni-Well-36	10/10/2002	ND U	1.1	Historical Data - Previous Consultant
Muni-Well-36	9/16/2003	ND U	2.2	Historical Data - Previous Consultant
Muni-Well-36	6/23/2004	0.5	1.38	Historical Data - Previous Consultant
Muni-Well-36	9/8/2004	ND U	0.6	Historical Data - Previous Consultant
Muni-Well-36	10/26/2005	ND U	0.7	Historical Data - Previous Consultant
Muni-Well-36	10/26/2005	0.5	0.7	Historical Data - Previous Consultant
Muni-Well-36	9/20/2006	ND U	0.7	Historical Data - Previous Consultant
Muni-Well-36	12/5/2007	ND U	0.88	Historical Data - Previous Consultant
Muni-Well-36	12/5/2007	0.5	0.7	Historical Data - Previous Consultant
Muni-Well-36	10/24/2008	0.5	0.88	Historical Data - Previous Consultant
Muni-Well-36	11/30/2009	ND U	0.81	Historical Data - Previous Consultant
Muni-Well-36	11/30/2009	0.5	0.81	Historical Data - Previous Consultant
Muni-Well-36	9/14/2010	ND U	0.61	Historical Data - Previous Consultant
Muni-Well-36	9/13/2011	ND U	0.85	Historical Data - Previous Consultant
Muni-Well-36	9/13/2011	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-36	10/2/2012	ND U	0.9	Historical Data - Previous Consultant
Muni-Well-36	10/2/2012	0.9	0.85	Historical Data - Previous Consultant
Muni-Well-36	9/9/2014	ND U	0.59	Historical Data - Previous Consultant
Muni-Well-36	9/9/2014	0.5	0.59	Historical Data - Previous Consultant
Muni-Well-36	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-36	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
Muni-Well-39	11/15/2007	0.5 U	0.5 U	Historical Data - Previous Consultant
Muni-Well-39	6/1/2011	0.5 U	0.5 U	Historical Data - Previous Consultant
Muni-Well-39	12/6/2016	0.5 U	0.5 U	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
Muni-Well-44	12/5/2007	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-44	9/14/2010	0.5	0.5	Historical Data - Previous Consultant
Muni-Well-44	10/17/2016	0.5	0.5	Historical Data - Previous Consultant
MW-103D	3/23/1994		0.35	Historical Data - Previous Consultant
MW-103D	6/21/1994		1	Historical Data - Previous Consultant
MW-103D	12/13/1994		1	Historical Data - Previous Consultant
MW-103D	3/20/1997	0.6	8.2	Historical Data - Previous Consultant
MW-103D	5/28/1998		2	Historical Data - Previous Consultant
MW-103D	8/9/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
MW-103D	10/9/2018	0.2 U	0.16 U	2018 Fall Groundwater
MW-103D	5/7/2019	0.2 U	0.16 U	2019 Spring Groundwater
MW-103S	3/23/1994	13	130	Historical Data - Previous Consultant
MW-103S	6/1/1994	5.4	67	Historical Data - Previous Consultant
MW-103S	6/21/1994	5.4	67	Historical Data - Previous Consultant
MW-103S	12/13/1994	3.5	52	Historical Data - Previous Consultant
MW-103S	3/20/1997	7	0.7	Historical Data - Previous Consultant
MW-103S	5/28/1998		2	Historical Data - Previous Consultant
MW-103S	10/30/1998	1	10	Historical Data - Previous Consultant
MW-103S	6/7/1999		4	Historical Data - Previous Consultant
MW-103S	7/14/1999		2	Historical Data - Previous Consultant
MW-103S	10/8/1999	2	16	Historical Data - Previous Consultant
MW-103S	1/5/2000	4	36	Historical Data - Previous Consultant
MW-103S	4/12/2000	7	61	Historical Data - Previous Consultant
MW-103S	7/11/2000	7	54	Historical Data - Previous Consultant
MW-103S	10/5/2000	7	57	Historical Data - Previous Consultant
MW-103S	1/8/2001	8	51	Historical Data - Previous Consultant
MW-103S	4/9/2001	10	58	Historical Data - Previous Consultant
MW-103S	7/10/2001	7	37	Historical Data - Previous Consultant
MW-103S	10/2/2001	5	33	Historical Data - Previous Consultant
MW-103S	1/9/2002	5	34	Historical Data - Previous Consultant
MW-103S	4/2/2002	12	66	Historical Data - Previous Consultant
MW-103S	7/9/2002	4	30	Historical Data - Previous Consultant
MW-103S	10/7/2002	3	18	Historical Data - Previous Consultant
MW-103S	1/13/2003	4	22	Historical Data - Previous Consultant
MW-103S	4/3/2003	5	29	Historical Data - Previous Consultant
MW-103S	7/7/2003	4	27	Historical Data - Previous Consultant
MW-103S	9/29/2003	6	33	Historical Data - Previous Consultant
MW-103S	1/15/2004	4	28	Historical Data - Previous Consultant
MW-103S	4/5/2004	8	52	Historical Data - Previous Consultant
MW-103S	6/30/2004	7	40	Historical Data - Previous Consultant
MW-103S	10/4/2004	3	26	Historical Data - Previous Consultant
MW-103S	1/5/2005	4	23	Historical Data - Previous Consultant
MW-103S	3/25/2009	11.9	77.6	Historical Data - Previous Consultant
MW-103S	10/19/2009	7.7	46.4	Historical Data - Previous Consultant
MW-103S	1/9/2010	5.2	33.6	Historical Data - Previous Consultant
MW-103S	4/14/2010	9.2	61.7	Historical Data - Previous Consultant
MW-103S	6/28/2010	8.6	55.8	Historical Data - Previous Consultant
MW-103S	9/29/2010	5.1	33.7	Historical Data - Previous Consultant
MW-103S	10/15/2010	5.1	33.7	Historical Data - Previous Consultant
MW-103S	1/5/2011	7.8	50.9	Historical Data - Previous Consultant
MW-103S	1/6/2011	7.8	50.9	Historical Data - Previous Consultant
MW-103S	4/19/2011	7.6	54	Historical Data - Previous Consultant
MW-103S	7/11/2011	0.47 J	2.8	Historical Data - Previous Consultant
MW-103S	10/19/2011	0.26 U	0.65 J	Historical Data - Previous Consultant
MW-103S	1/6/2012	0.68 J	4	Historical Data - Previous Consultant
MW-103S	1/10/2012	0.68 J	4	Historical Data - Previous Consultant
MW-103S	4/19/2012	2.2	14.8	Historical Data - Previous Consultant
MW-103S	7/27/2012	1.7 J	16.5 J	Historical Data - Previous Consultant
MW-103S	10/10/2012	2.8	30	Historical Data - Previous Consultant
MW-103S	1/17/2013	5	42.3	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
MW-103S	4/8/2013	5.8	52.6	Historical Data - Previous Consultant
MW-103S	4/10/2013	5.8	52.6	Historical Data - Previous Consultant
MW-103S	7/22/2013	2.8	33.1	Historical Data - Previous Consultant
MW-103S	10/8/2013	0.82 J	7.5 J	Historical Data - Previous Consultant
MW-103s	1/21/2014	1.3	10.1	Historical Data - Previous Consultant
MW-103S	4/9/2014	1.5	13.2	Historical Data - Previous Consultant
MW-103S	7/16/2014	1.4	8.8	Historical Data - Previous Consultant
MW-103S	10/16/2014	1	11.2	Historical Data - Previous Consultant
MW-103S	4/29/2015	2.7 J	16.8	Historical Data - Previous Consultant
MW-103S	7/8/2015	2.1	15.5	Historical Data - Previous Consultant
MW-103S	1/7/2016	5.2	32.2	Historical Data - Previous Consultant
MW-103S	4/12/2016	8.3	55.7	Historical Data - Previous Consultant
MW-103S	4/13/2016	8.3	55.7	Historical Data - Previous Consultant
MW-103S	7/20/2016	4.7	27.8	Historical Data - Previous Consultant
MW-103S	7/21/2016	4.7	27.8	Historical Data - Previous Consultant
MW-103S	12/14/2016	4.06	28	Historical Data - Previous Consultant
MW-103S	2/16/2017	7.19	60.1	Historical Data - Previous Consultant
MW-103S	5/2/2017	1.77	12.6	Historical Data - Previous Consultant
MW-103S	7/20/2017	2.72	20.7	Historical Data - Previous Consultant
MW-103S	8/9/2017	0.471 J	1.72	Historical Data - Previous Consultant
MW-103S	1/25/2018	1.39	7.47	2018 Winter Groundwater
MW-103S	4/16/2018	1.11	5.2	2018 Spring Groundwater
MW-103S	10/9/2018	1.4	8	2018 Fall Groundwater
MW-103S	5/6/2019	1.6 J	10 J	2019 Spring Groundwater
MW-103S	10/7/2019	0.91 J	4.4	2019 Fall Sampling Event
MW-103S	6/6/2020	1.1	6.8	2020 Spring On-Site Sampling
MW-103S	4/23/2021	2.8	14	2021 Spring Groundwater
MW-106D	8/15/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
MW-106D	10/8/2018	0.2 U	0.16 U	2018 Fall Groundwater
MW-106D	6/19/2019	0.2 U	0.16 U	2019 June Offsite Residential
MW-106S	8/15/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
MW-106S	10/7/2018	0.2 U	0.16 U	2018 Fall Groundwater
MW-106S	6/19/2019	0.2 U	0.16 U	2019 June Offsite Residential
MW-107S	5/12/1999	2	18	Historical Data - Previous Consultant
MW-107S	6/2/1999	3	728	Historical Data - Previous Consultant
MW-107S	7/6/1999	3	42	Historical Data - Previous Consultant
MW-107S	7/7/1999	3	42	Historical Data - Previous Consultant
MW-107S	10/14/1999	1	16	Historical Data - Previous Consultant
MW-107S	1/5/2000		7	Historical Data - Previous Consultant
MW-107S	4/11/2000		8	Historical Data - Previous Consultant
MW-107S	7/12/2000		3	Historical Data - Previous Consultant
MW-107S	10/5/2000		4	Historical Data - Previous Consultant
MW-107S	1/8/2001	1	13	Historical Data - Previous Consultant
MW-107S	4/11/2001	1	13	Historical Data - Previous Consultant
MW-107S	7/12/2001		8	Historical Data - Previous Consultant
MW-107S	10/3/2001		5	Historical Data - Previous Consultant
MW-107S	1/9/2002	1	9	Historical Data - Previous Consultant
MW-107S	4/3/2002		17	Historical Data - Previous Consultant
MW-107S	4/4/2002		17	Historical Data - Previous Consultant
MW-115D	8/15/2017	0.372 U	2.17	Historical Data - Previous Consultant
MW-115D	5/23/2018	0.372 U	0.398 U	2018 Spring Groundwater
MW-115D	10/8/2018	0.2 U	0.16 U	2018 Fall Groundwater
MW-115D	5/7/2019	0.2 U	0.16 U	2019 Spring Groundwater
MW-115S	10/20/1999		1	Historical Data - Previous Consultant
MW-115S	1/9/2002		2	Historical Data - Previous Consultant
MW-115S	4/4/2002		1	Historical Data - Previous Consultant
MW-115S	7/10/2002		1	Historical Data - Previous Consultant
MW-115S	8/15/2017	1.44	11.6	Historical Data - Previous Consultant
MW-115S	5/23/2018	0.372 U	0.528 J	2018 Spring Groundwater

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
MW-115S	10/8/2018	0.2 U	0.35 J	2018 Fall Groundwater
MW-115S	5/7/2019	0.2 U	0.16 U	2019 Spring Groundwater
MW-115S	10/7/2019	0.2 U	0.29 J	2019 Fall Sampling Event
MW-115S	6/9/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
MW-115S	4/25/2021	0.2 U	0.16 U	2021 Spring Groundwater
MW-116D	8/11/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
MW-116D	10/19/2018	0.2 U	0.16 U	2018 Fall Groundwater
MW-116D	10/19/2018	0.2 U	0.16 U	2018 Fall Groundwater
MW-116D	6/28/2019	0.2 U	0.16 U	2019 June Offsite Residential
MW-116S	1/7/2000	6	57	Historical Data - Previous Consultant
MW-116S	4/12/2000	7	65	Historical Data - Previous Consultant
MW-116S	7/17/2000	2	18	Historical Data - Previous Consultant
MW-116S	10/11/2000		21	Historical Data - Previous Consultant
MW-116S	1/9/2001	1	13	Historical Data - Previous Consultant
MW-116S	4/11/2001	1	12	Historical Data - Previous Consultant
MW-116S	7/11/2001	1	11	Historical Data - Previous Consultant
MW-116S	4/4/2002	1	17	Historical Data - Previous Consultant
MW-116S	7/8/2002	3	28	Historical Data - Previous Consultant
MW-116S	10/8/2002	2	22	Historical Data - Previous Consultant
MW-116S	1/9/2003	2	19	Historical Data - Previous Consultant
MW-116S	4/2/2003	1	15	Historical Data - Previous Consultant
MW-116S	7/8/2003	1	12	Historical Data - Previous Consultant
MW-116S	9/30/2003	1	10	Historical Data - Previous Consultant
MW-116S	4/5/2004		6	Historical Data - Previous Consultant
MW-116S	7/1/2004		6	Historical Data - Previous Consultant
MW-116S	10/4/2004		5	Historical Data - Previous Consultant
MW-116S	1/6/2005		5	Historical Data - Previous Consultant
MW-116S	8/11/2017	2.93	21.6	Historical Data - Previous Consultant
MW-116S	10/19/2018	2.2	26	2018 Fall Groundwater
MW-116S	6/28/2019	3	31	2019 June Offsite Residential
MW-116S	6/26/2020	3.7	26	2020 Spring Off-Site Sampling
MW-116S	6/26/2021	4.2	27	2021 June Offsite Sampling
MW-37	4/4/2018	0.372 U	2.65	2018 Spring Groundwater
MW-37	6/27/2019	0.39 J	2.6	2019 June Offsite Residential
MW-37	6/9/2020	0.2 U	2	2020 Spring On-Site Sampling
MW-37	6/22/2021	0.2 U	1.6	2021 June Offsite Sampling
MW-38	6/26/2019	0.23 J	1.5	2019 June Offsite Residential
MW-38	6/9/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
MW-38	6/27/2021	0.2 U	2.2	2021 June Offsite Sampling
MW-38	6/27/2021	0.2 U	2.5	2021 June Offsite Sampling
MW-38	6/27/2021	0.2 U	2.5	2021 June Offsite Sampling
MW-38	8/10/2017	0.381 J	2.94	Historical Data - Previous Consultant
MW-38	4/5/2018	0.598 J	4.19	2018 Spring Groundwater
PA-1	4/25/1994	1.5	19.9	Historical Data - Previous Consultant
PA-1	8/8/1994	1.1	14.2	Historical Data - Previous Consultant
PA-1	11/12/1997	0.5	6.3	Historical Data - Previous Consultant
PA-1	6/26/2000	ND U	6.8	Historical Data - Previous Consultant
PA-1	2/27/2001	ND U	7.4	Historical Data - Previous Consultant
PA-1	1/31/2002	ND U	4.7	Historical Data - Previous Consultant
PA-1	8/10/2017	0.372 U	2.12	Historical Data - Previous Consultant
PA-1	4/6/2018	0.409 J	2.94	2018 Spring Groundwater
PA-1	6/27/2019	0.2 U	1.6	2019 June Offsite Residential
PA-1	6/9/2020	0.2 U	1.6	2020 Spring On-Site Sampling
PA-1	6/9/2020	0.2 U	1.6	2020 Spring On-Site Sampling
PA-1	6/22/2021	0.2 U	1.5	2021 June Offsite Sampling
PA-10	11/12/1997	ND U	0.4	Historical Data - Previous Consultant
PA-10	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
PA-10	6/10/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
PA-10	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
PA-2	11/12/1997	ND U	0.7	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
PA-2	4/9/2018	0.372 U	0.398 U	2018 Spring Groundwater
PA-2	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
PA-3	8/8/1994	0.8	10.5	Historical Data - Previous Consultant
PA-3	11/12/1997	0.7	9.9	Historical Data - Previous Consultant
PA-3	3/20/2000	ND U	3.8	Historical Data - Previous Consultant
PA-3	6/26/2000	ND U	3.8	Historical Data - Previous Consultant
PA-3	9/26/2000	ND U	4.1	Historical Data - Previous Consultant
PA-3	2/27/2001	ND U	8.3	Historical Data - Previous Consultant
PA-3	1/31/2002	ND U	4.2	Historical Data - Previous Consultant
PA-3	8/10/2017	0.372 U	1.66	Historical Data - Previous Consultant
PA-3	4/9/2018	0.409 J	3.04	2018 Spring Groundwater
PA-3	6/27/2019	0.24 J	1.7	2019 June Offsite Residential
PA-3	6/9/2020	0.2 U	2	2020 Spring On-Site Sampling
PA-3	6/22/2021	0.2 U	1.2	2021 June Offsite Sampling
PA-4	4/25/1994	2.1	26.5	Historical Data - Previous Consultant
PA-4	8/8/1994	1.8	22.5	Historical Data - Previous Consultant
PA-4	11/12/1997	1.2	15.5	Historical Data - Previous Consultant
PA-4	6/26/2000	ND U	9.1	Historical Data - Previous Consultant
PA-4	2/27/2001	0.6	5.7	Historical Data - Previous Consultant
PA-4	1/31/2002	0.6	6.1	Historical Data - Previous Consultant
PA-4	9/16/2003	0.6	5.4	Historical Data - Previous Consultant
PA-4	8/10/2017	0.372 U	2.18	Historical Data - Previous Consultant
PA-4	4/9/2018	0.675 J	3.88	2018 Spring Groundwater
PA-4	4/9/2018	0.604 J	3.81	2018 Spring Groundwater
PA-4	4/9/2018	0.453 J	3.94	2018 Spring Groundwater
PA-4	6/27/2019	0.25 J	2.3	2019 June Offsite Residential
PA-4	6/27/2019	0.29 J	2.3	2019 June Offsite Residential
PA-4	6/27/2019	0.35 J	2.4	2019 June Offsite Residential
PA-4	6/10/2020	0.2 U	2.5	2020 Spring On-Site Sampling
PA-4	6/10/2020	0.63 J	2.8	2020 Spring On-Site Sampling
PA-4	6/11/2020	0.58 J	2.5	2020 Spring On-Site Sampling
PA-5	4/25/1994	2.1	8.2	Historical Data - Previous Consultant
PA-5	8/8/1994	ND U	4.8	Historical Data - Previous Consultant
PA-5	11/12/1997	0.4	4.8	Historical Data - Previous Consultant
PA-5	3/21/2000	ND U	0.5	Historical Data - Previous Consultant
PA-5	2/27/2001	ND U	1.8	Historical Data - Previous Consultant
PA-5	1/31/2002	ND U	1.9	Historical Data - Previous Consultant
PA-5	4/5/2018	0.372 U	1.76	2018 Spring Groundwater
PA-5	4/5/2018	0.372 U	1.96	2018 Spring Groundwater
PA-5	6/26/2019	0.2 UJ	1.1 J	2019 June Offsite Residential
PA-5	6/11/2020	0.2 U	0.86 J	2020 Spring On-Site Sampling
PA-5	6/27/2021	0.2 U	0.6 J	2021 June Offsite Sampling
PA-6	4/25/1994	0.6	7.6	Historical Data - Previous Consultant
PA-6	8/8/1994	ND U	3.6	Historical Data - Previous Consultant
PA-6	11/17/1997	0.2	3.1	Historical Data - Previous Consultant
PA-6	3/20/2000	ND U	1.3	Historical Data - Previous Consultant
PA-6	6/26/2000	ND U	1.5	Historical Data - Previous Consultant
PA-6	9/26/2000	ND U	1	Historical Data - Previous Consultant
PA-6	2/27/2001	ND U	1.5	Historical Data - Previous Consultant
PA-6	1/31/2002	ND U	1.6	Historical Data - Previous Consultant
PA-6	4/5/2018	0.372 U	0.87 J	2018 Spring Groundwater
PA-6	4/5/2018	0.372 U	1.36	2018 Spring Groundwater
PA-7	4/25/1994	0.8	7.9	Historical Data - Previous Consultant
PA-7	8/8/1994	0.6	7.3	Historical Data - Previous Consultant
PA-7	11/12/1997	0.3	3.6	Historical Data - Previous Consultant
PA-7	3/20/2000	ND U	2.1	Historical Data - Previous Consultant
PA-7	6/26/2000	ND U	2.9	Historical Data - Previous Consultant
PA-7	9/26/2000	ND U	2	Historical Data - Previous Consultant
PA-7	2/27/2001	ND U	1.9	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
PA-7	1/31/2002	ND U	2.5	Historical Data - Previous Consultant
PA-7	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
PA-8	8/8/1994	ND U	6.5	Historical Data - Previous Consultant
PA-8	11/12/1997	0.3	3.4	Historical Data - Previous Consultant
PA-8	3/20/2000	ND U	1.2	Historical Data - Previous Consultant
PA-8	6/26/2000	ND U	2.3	Historical Data - Previous Consultant
PA-8	2/27/2001	ND U	2.3	Historical Data - Previous Consultant
PA-8	1/31/2002	ND U	1.9	Historical Data - Previous Consultant
PA-8	4/4/2018	0.372 U	0.879 J	2018 Spring Groundwater
PA-8	4/4/2018	0.372 U	0.674 J	2018 Spring Groundwater
PA-8	4/4/2018	0.372 U	0.869 J	2018 Spring Groundwater
PA-8	6/28/2019	0.2 U	0.45 J	2019 June Offsite Residential
PA-8	6/10/2020	0.2 U	0.26 J	2020 Spring On-Site Sampling
PA-8	6/10/2020	0.2 U	0.37 J	2020 Spring On-Site Sampling
PA-8	6/10/2020	0.2 U	0.32 J	2020 Spring On-Site Sampling
PA-8	6/23/2021	0.2 U	0.16 U	2021 June Offsite Sampling
PA-8	6/23/2021	0.2 U	0.16 U	2021 June Offsite Sampling
PA-9	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
PA-9	6/21/2019	0.2 U	0.16 U	2019 June Offsite Residential
PA-9	6/10/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
PA-9	6/10/2020	0.2 U	0.16 U	2020 Spring On-Site Sampling
PA-9	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
PA-9	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-2076F	8/26/1992	15	210	Historical Data - Previous Consultant
RW-2076F	9/28/1992	12	150	Historical Data - Previous Consultant
RW-2076F	10/22/1992	15	ND U	Historical Data - Previous Consultant
RW-2076F	12/1/1992	6.4	90	Historical Data - Previous Consultant
RW-2076F	12/3/1992	6.4	90	Historical Data - Previous Consultant
RW-2076F	1/20/1993	15	130	Historical Data - Previous Consultant
RW-2076F	2/25/1993	190	ND U	Historical Data - Previous Consultant
RW-2076F	3/30/1993	190	260	Historical Data - Previous Consultant
RW-2076F	5/5/1993	290	290	Historical Data - Previous Consultant
RW-2076F	6/16/1993	0.88	6.9	Historical Data - Previous Consultant
RW-2076F	6/17/1993	0.66	6.9	Historical Data - Previous Consultant
RW-2076F	9/23/1993	0.24	2.31	Historical Data - Previous Consultant
RW-2076F	12/15/1993	ND U	1.3	Historical Data - Previous Consultant
RW-2076F	3/24/1994	24	230	Historical Data - Previous Consultant
RW-2076F	6/20/1994	14	160	Historical Data - Previous Consultant
RW-2076F	12/14/1994	12	160	Historical Data - Previous Consultant
RW-2076F	7/18/1995	13	160	Historical Data - Previous Consultant
RW-2076F	12/20/1996	ND U	0.67	Historical Data - Previous Consultant
RW-2076F	6/1/1998	13	ND U	Historical Data - Previous Consultant
RW-2076F	11/9/1998	ND U	7	Historical Data - Previous Consultant
RW-2076F	6/2/1999	ND U	8	Historical Data - Previous Consultant
RW-2076F	7/6/1999	ND U	6	Historical Data - Previous Consultant
RW-2076F	1/7/2000	8	59	Historical Data - Previous Consultant
RW-2076F	4/12/2000	10	77	Historical Data - Previous Consultant
RW-2076F	7/11/2000	10	68	Historical Data - Previous Consultant
RW-2076F	10/4/2000	9	68	Historical Data - Previous Consultant
RW-2076F	1/8/2001	11	63	Historical Data - Previous Consultant
RW-2076F	4/9/2001	12	70	Historical Data - Previous Consultant
RW-2076F	7/10/2001	9	49	Historical Data - Previous Consultant
RW-2076F	10/1/2001	6	34	Historical Data - Previous Consultant
RW-2076F	1/8/2002	9	54 J	Historical Data - Previous Consultant
RW-2076F	4/2/2002	14	80	Historical Data - Previous Consultant
RW-2076F	7/9/2002	8	48	Historical Data - Previous Consultant
RW-2076F	10/7/2002	6	32 J	Historical Data - Previous Consultant
RW-2076F	1/13/2003	7	37	Historical Data - Previous Consultant
RW-2076F	4/3/2003	9	46	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-2076F	7/7/2003	7	37	Historical Data - Previous Consultant
RW-2076F	9/29/2003	6	31	Historical Data - Previous Consultant
RW-2076F	1/15/2004	7	37	Historical Data - Previous Consultant
RW-2076F	4/5/2004	11	60	Historical Data - Previous Consultant
RW-2076F	6/30/2004	8	45	Historical Data - Previous Consultant
RW-2076F	10/4/2004	6	32	Historical Data - Previous Consultant
RW-2076F	1/5/2005	7	38	Historical Data - Previous Consultant
RW-2076F	8/2/2017	0.372 U	0.588 J	Historical Data - Previous Consultant
RW-2076F	5/22/2018	0.372 U	1.89	2018 Spring Groundwater
RW-2076F	4/28/2021	5.3	29	2021 Spring Groundwater
RW-2076F	6/26/2021	4.6	24	2021 June Offsite Sampling
RW-2140H	9/28/1992	4.2	55	Historical Data - Previous Consultant
RW-2140H	3/23/1994	7.9	78	Historical Data - Previous Consultant
RW-2140H	3/24/1994	7.9	78	Historical Data - Previous Consultant
RW-2140H	6/3/1999	4	47	Historical Data - Previous Consultant
RW-2140H	7/7/1999	7	71	Historical Data - Previous Consultant
RW-2140H	10/15/1999	5	46	Historical Data - Previous Consultant
RW-2140H	4/13/2000	5	50	Historical Data - Previous Consultant
RW-2140H	7/11/2000	6	6	Historical Data - Previous Consultant
RW-2140H	7/11/2001	ND U	5	Historical Data - Previous Consultant
RW-2140H	8/11/2017	5.68	33.9	Historical Data - Previous Consultant
RW-2140H	10/19/2018	4.9	34	2018 Fall Groundwater
RW-2140H	6/28/2019	4.6	30	2019 June Offsite Residential
RW-2140H	6/26/2020	6.1	34	2020 Spring Off-Site Sampling
RW-2140H	6/26/2021	4.5	26	2021 June Offsite Sampling
RW-2151H	9/28/1992	8.4	110	Historical Data - Previous Consultant
RW-2151H	3/23/1994	23	250	Historical Data - Previous Consultant
RW-2151H	3/24/1994	23	250	Historical Data - Previous Consultant
RW-2151H	3/20/1997	7.7	86.7	Historical Data - Previous Consultant
RW-2151H	11/13/1998	12	137	Historical Data - Previous Consultant
RW-2151H	6/3/1999	2	23	Historical Data - Previous Consultant
RW-2151H	7/12/2000	4	40	Historical Data - Previous Consultant
RW-2151H	11/16/2017	4.66	34.4	Historical Data - Previous Consultant
RW-2151H	6/21/2019	1.8	12	2019 June Offsite Residential
RW-2151H	6/21/2019	1.9	12	2019 June Offsite Residential
RW-2151H	6/23/2020	0.2 U	5.8	2020 Spring Off-Site Sampling
RW-2151H	6/23/2021	2.7	14	2021 June Offsite Sampling
RW-2172F	12/15/1993	0.34	ND U	Historical Data - Previous Consultant
RW-2172F	8/2/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-2172F	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-2172F	6/22/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-2172F	6/25/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-2172H	9/28/1992	12	140	Historical Data - Previous Consultant
RW-2172H	3/24/1994	15	140	Historical Data - Previous Consultant
RW-2172H	3/19/1997	21.5	207.1	Historical Data - Previous Consultant
RW-2172H	6/4/1999	7	72	Historical Data - Previous Consultant
RW-2172H	8/8/2017	6.69	37.7	Historical Data - Previous Consultant
RW-2172H	6/24/2019	7	42	2019 June Offsite Residential
RW-2172H	6/25/2020	4.9	28	2020 Spring Off-Site Sampling
RW-2172H	6/23/2021	5.4 J	21	2021 June Offsite Sampling
RW-2203H	9/28/1992	18	140	Historical Data - Previous Consultant
RW-2203H	3/23/1994	28	250	Historical Data - Previous Consultant
RW-2203H	3/24/1994	28	250	Historical Data - Previous Consultant
RW-2203H	6/4/1999	4	49	Historical Data - Previous Consultant
RW-2203H	7/13/1999	7	72	Historical Data - Previous Consultant
RW-2203H	10/14/1999	7	68	Historical Data - Previous Consultant
RW-2203H	8/9/2017	2.5	27.5	Historical Data - Previous Consultant
RW-2203H	6/22/2019	4.6	31	2019 June Offsite Residential
RW-2203H	6/22/2019	4.7	31	2019 June Offsite Residential
RW-2203H	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
RW-2213F	5/22/2018	0.372 U	0.398 U	2018 Spring Groundwater
RW-2213F	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-2213F	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
RW-2237H	3/24/1994	1.5	14	Historical Data - Previous Consultant
RW-2237H	6/24/1994	1.5	14	Historical Data - Previous Consultant
RW-2237H	8/3/2017	7.84	44.3	Historical Data - Previous Consultant
RW-2237H	6/23/2020	1.9	9.8	2020 Spring Off-Site Sampling
RW-2237H	6/24/2021	1.2	8.6	2021 June Offsite 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
RW-2879M	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-2879M	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-2879M	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-3259B	8/16/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-3259B	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
RW-5898B1	6/18/1996	ND U	5.03	Historical Data - Previous Consultant
RW-5898B1	6/17/1997	ND U	5.65	Historical Data - Previous Consultant
RW-5898B1	7/29/1998	ND U	5.87	Historical Data - Previous Consultant
RW-5898B1	8/23/1999	0.54	6.69	Historical Data - Previous Consultant
RW-5898B1	6/18/2000	ND U	4.04	Historical Data - Previous Consultant
RW-5898B1	8/24/2001	ND U	2.98	Historical Data - Previous Consultant
RW-5898B1	8/31/2004	ND U	2.04	Historical Data - Previous Consultant
RW-5898B1	9/3/2008	ND U	2.04	Historical Data - Previous Consultant
RW-5898B1	6/20/2019	0.2 U	0.88 J	2019 June Offsite Residential
RW-5898B1	6/22/2020	0.2 U	0.78 J	2020 Spring Off-Site Sampling
RW-5898B1	6/25/2021	0.2 U	0.26 J	2021 June Offsite Sampling
RW-6998P	1/6/2011	0.15 U	0.14 U	Historical Data - Previous Consultant
RW-6998P	4/20/2011	0.26 U	0.2 U	Historical Data - Previous Consultant
RW-6998P	7/13/2011	0.26 U	0.2 U	Historical Data - Previous Consultant
RW-6998P	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
RW-7070B	6/22/2020	0.59 J	3.4	2020 Spring Off-Site Sampling
RW-7070B	6/24/2021	0.2 U	3.2	2021 June Offsite Sampling
RW-7077P	8/2/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7077P	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-7091R	6/22/2021	0.2 U	1	2021 June Offsite Sampling
RW-7200P	6/21/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7244P	8/8/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7244P	6/21/2019	0.2 UJ	0.16 UJ	2019 June Offsite Residential
RW-7244P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7244P	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7288P	7/14/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7288P	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
RW-7310P	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
RW-7350P	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7350P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7350P	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7492P	7/12/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7492P	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
RW-7498P	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7505P	9/28/1992	ND U	0.6	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-7505P	2/25/1993	ND U	0.2	Historical Data - Previous Consultant
RW-7505P	12/15/1993	0.37	2.5	Historical Data - Previous Consultant
RW-7505P	6/21/1994	ND U	0.28	Historical Data - Previous Consultant
RW-7505P	7/18/1995	ND U	0.38	Historical Data - Previous Consultant
RW-7505P	7/13/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7505P	6/21/2019	0.2 U	0.29 J	2019 June Offsite Residential
RW-7505P	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7505P	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7549P	9/28/1992	ND U	1.1	Historical Data - Previous Consultant
RW-7549P	2/25/1993	ND U	1.1	Historical Data - Previous Consultant
RW-7549P	3/30/1993	ND U	0.71	Historical Data - Previous Consultant
RW-7549P	5/5/1993	ND U	0.7	Historical Data - Previous Consultant
RW-7549P	6/16/1993	ND U	0.89	Historical Data - Previous Consultant
RW-7549P	6/17/1993	ND U	0.89	Historical Data - Previous Consultant
RW-7549P	9/23/1993	0.24	2.83	Historical Data - Previous Consultant
RW-7549P	3/22/1994	ND U	0.7	Historical Data - Previous Consultant
RW-7549P	6/20/1994	ND U	0.31	Historical Data - Previous Consultant
RW-7549P	12/14/1994	ND U	0.7	Historical Data - Previous Consultant
RW-7549P	1/8/2002	ND U	1	Historical Data - Previous Consultant
RW-7549P	7/14/2017	0.822 J	5.5	Historical Data - Previous Consultant
RW-7549P	5/23/2018	0.372 U	0.398 U	2018 Spring Groundwater
RW-7549P	6/18/2019	0.2 U	0.26 J	2019 June Offsite Residential
RW-7549P	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7549P	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7586P	7/13/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7586P	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7586P	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7586P	6/21/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7588P	7/14/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7588P	6/19/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7588P	6/24/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7588P	6/25/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7677P	10/23/1992	ND U	32	Historical Data - Previous Consultant
RW-7677P	3/22/1994	3.1	32	Historical Data - Previous Consultant
RW-7677P	6/21/1994	1	11	Historical Data - Previous Consultant
RW-7677P	10/1/1995	ND U	32	Historical Data - Previous Consultant
RW-7677P	6/8/1999	ND U	10	Historical Data - Previous Consultant
RW-7677P	7/10/2000	ND U	6	Historical Data - Previous Consultant
RW-7677P	8/9/2017	5.45	33.8	Historical Data - Previous Consultant
RW-7677P	5/22/2018	0.614 J	2.95	2018 Spring Groundwater
RW-7677P	6/17/2019	1.2	6.3	2019 June Offsite Residential
RW-7677P	6/22/2020	1.2	5.9	2020 Spring Off-Site Sampling
RW-7677P	6/22/2020	1.2	5.8	2020 Spring Off-Site Sampling
RW-7677P	6/21/2021	1.1	5.3	2021 June Offsite Sampling
RW-7688P	8/8/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7688P	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7688P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7688P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7688P	6/25/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7773P	8/15/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7773P	10/7/2018	0.2 U	0.16 U	2018 Fall Groundwater
RW-7773P	6/19/2019	0.2 UJ	0.16 UJ	2019 June Offsite Residential
RW-7773P	6/22/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-7773P	6/21/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-7776P	8/8/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-7776P	6/20/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-7953P	1/6/2000	ND U	3	Historical Data - Previous Consultant
RW-7953P	1/14/2001	ND U	2	Historical Data - Previous Consultant
RW-7953P	4/10/2001	ND U	1	Historical Data - Previous Consultant
RW-7953P	1/9/2002	ND U	3	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-7953P	4/3/2002	ND U	2	Historical Data - Previous Consultant
RW-7953P	9/29/2003	ND U	1	Historical Data - Previous Consultant
RW-7953P	1/5/2005	ND U	2	Historical Data - Previous Consultant
RW-7953P	10/15/2007	ND U	1.9	Historical Data - Previous Consultant
RW-7953P	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
RW-7953P	10/20/2009	0.5 U	0.53 J	Historical Data - Previous Consultant
RW-7953P	1/11/2010	0.5 U	0.5 U	Historical Data - Previous Consultant
RW-7953P	4/15/2010	0.5 U	0.5 U	Historical Data - Previous Consultant
RW-7953P	6/29/2010	0.15 U	0.14 U	Historical Data - Previous Consultant
RW-7953P	9/29/2010	0.38 J	0.97 J	Historical Data - Previous Consultant
RW-7953P	9/30/2010	0.38 J	0.97 J	Historical Data - Previous Consultant
RW-7953P	1/5/2011	0.15 U	0.57 J	Historical Data - Previous Consultant
RW-7953P	4/19/2011	ND U	1	Historical Data - Previous Consultant
RW-7953P	4/20/2011	0.26 U	1	Historical Data - Previous Consultant
RW-7953P	7/13/2011	0.26 U	1.3	Historical Data - Previous Consultant
RW-7953P	10/18/2011	0.42 J	1.7	Historical Data - Previous Consultant
RW-7953P	1/10/2012	0.91 J	6.4	Historical Data - Previous Consultant
RW-7953P	4/19/2012	0.67 J	4.2	Historical Data - Previous Consultant
RW-7953P	4/21/2012	0.67 J	4.2	Historical Data - Previous Consultant
RW-7953P	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
RW-8000B	7/8/1995	1.57	17.7	Historical Data - Previous Consultant
RW-8000B	8/23/1999	1.38	15.3	Historical Data - Previous Consultant
RW-8000B	8/31/2004	0.67	3.66	Historical Data - Previous Consultant
RW-8000B	5/28/2015	0.54	3.7	Historical Data - Previous Consultant
RW-8000B	8/3/2017	0.786 J	4.65	Historical Data - Previous Consultant
RW-8000B	6/18/2019	1	3.5	2019 June Offsite Residential
RW-8000B	6/9/2020	0.2 U	4.8	2020 Spring On-Site Sampling
RW-8000B	6/22/2021	0.84 J	4.1	2021 June Offsite Sampling
RW-8012P	6/13/1995	ND U	1.8	Historical Data - Previous Consultant
RW-8012P	6/17/1997	1.43	18.6	Historical Data - Previous Consultant
RW-8012P	8/24/2001	ND U	0.62	Historical Data - Previous Consultant
RW-8012P	6/30/2006	ND U	1.65	Historical Data - Previous Consultant
RW-8012P	5/27/2015	0.33	2.3	Historical Data - Previous Consultant
RW-8012P	8/3/2017	0.381 J	2.08	Historical Data - Previous Consultant
RW-8012P	6/18/2019	0.79 J	2.2	2019 June Offsite Residential
RW-8012P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8012P	6/26/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-8030P	8/20/1992	2.3	30	Historical Data - Previous Consultant
RW-8030P	6/13/1995	1.5	12.3	Historical Data - Previous Consultant
RW-8030P	6/18/1996	2.21	24.6	Historical Data - Previous Consultant
RW-8030P	6/8/1999	1	16	Historical Data - Previous Consultant
RW-8030P	6/19/2000	0.97	8.3	Historical Data - Previous Consultant
RW-8030P	7/10/2000	3	ND U	Historical Data - Previous Consultant
RW-8030P	7/11/2000	ND U	3	Historical Data - Previous Consultant
RW-8030P	1/4/2001	ND U	3	Historical Data - Previous Consultant
RW-8030P	1/14/2001	ND U	3	Historical Data - Previous Consultant
RW-8030P	4/11/2001	1	8	Historical Data - Previous Consultant
RW-8030P	7/10/2001	ND U	7	Historical Data - Previous Consultant
RW-8030P	7/11/2001	ND U	7	Historical Data - Previous Consultant
RW-8030P	10/1/2001	ND U	4	Historical Data - Previous Consultant
RW-8030P	1/9/2002	1	8	Historical Data - Previous Consultant
RW-8030P	4/3/2002	1	7	Historical Data - Previous Consultant
RW-8030P	7/10/2002	ND U	5	Historical Data - Previous Consultant
RW-8030P	10/7/2002	ND U	5	Historical Data - Previous Consultant
RW-8030P	7/7/2003	ND U	5	Historical Data - Previous Consultant
RW-8030P	9/29/2003	1	7	Historical Data - Previous Consultant
RW-8030P	4/5/2004	1	7	Historical Data - Previous Consultant
RW-8030P	6/30/2004	ND U	6	Historical Data - Previous Consultant

Well ID	Sample Date	PCE (µg/L)	TCE (µg/L)	Data Source
RW-8030P	10/4/2004	ND U	7	Historical Data - Previous Consultant
RW-8030P	10/14/2004	ND U	7	Historical Data - Previous Consultant
RW-8030P	1/5/2005	ND U	5	Historical Data - Previous Consultant
RW-8030P	10/15/2007	1.4	10	Historical Data - Previous Consultant
RW-8030P	3/26/2009	1.9	11.4	Historical Data - Previous Consultant
RW-8030P	10/19/2009	1.5	8.8	Historical Data - Previous Consultant
RW-8030P	10/20/2009	1.5	8.8	Historical Data - Previous Consultant
RW-8030P	1/9/2010	1.3	7.8	Historical Data - Previous Consultant
RW-8030P	1/11/2010	1.3	7.8	Historical Data - Previous Consultant
RW-8030P	4/14/2010	1.3	8.1	Historical Data - Previous Consultant
RW-8030P	4/15/2010	1.3	8.1	Historical Data - Previous Consultant
RW-8030P	6/28/2010	1.6	10.8	Historical Data - Previous Consultant
RW-8030P	6/29/2010	1.6	10.8	Historical Data - Previous Consultant
RW-8030P	9/29/2010	2.1	12	Historical Data - Previous Consultant
RW-8030P	9/30/2010	2.1	12	Historical Data - Previous Consultant
RW-8030P	1/5/2011	2.1	12	Historical Data - Previous Consultant
RW-8030P	4/19/2011	1.7	10.8	Historical Data - Previous Consultant
RW-8030P	4/20/2011	1.7	10.8	Historical Data - Previous Consultant
RW-8030P	7/13/2011	1.4	8.9	Historical Data - Previous Consultant
RW-8030P	10/18/2011	1.8	10.2	Historical Data - Previous Consultant
RW-8030P	1/10/2012	2.1	15	Historical Data - Previous Consultant
RW-8030P	4/19/2012	2.1	14	Historical Data - Previous Consultant
RW-8030P	4/21/2012	2.1	14	Historical Data - Previous Consultant
RW-8030P	8/1/2017	2.67	16.4	Historical Data - Previous Consultant
RW-8030P	6/20/2019	0.94 J	6	2019 June Offsite Residential
RW-8030P	6/24/2020	1.3	7.1	2020 Spring Off-Site Sampling
RW-8030P	6/23/2021	0.8 J	4.6	2021 June Offsite Sampling
RW-8035P	8/1/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-8035P	5/23/2018	0.372 U	0.398 U	2018 Spring Groundwater
RW-8035P	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-8035P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8035P	6/24/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-8048P	6/22/2020	0.71 J	4	2020 Spring Off-Site Sampling
RW-8048P	6/24/2021	0.2 U	3.8	2021 June Offsite Sampling
RW-8105PN	8/11/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-8105PN	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
RW-8105PS	6/18/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-8105PS	6/22/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8105PS	6/25/2021	0.2 U	0.16 U	2021 June Offsite 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
RW-8209P	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-8209P	6/25/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8209P	6/25/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-8249P	8/16/2017	0.372 U	0.398 U	Historical Data - Previous Consultant
RW-8249P	6/17/2019	0.2 U	0.16 U	2019 June Offsite Residential
RW-8249P	6/23/2020	0.2 U	0.16 U	2020 Spring Off-Site Sampling
RW-8249P	6/21/2021	0.2 U	0.16 U	2021 June Offsite Sampling
RW-8284P	6/23/2019	0.89 J	3.4	2019 June Offsite Residential
RW-8284P	6/23/2020	0.93 J	3.9	2020 Spring Off-Site Sampling
RW-8284P	6/25/2021	0.54 J	4.9	2021 June Offsite Sampling

Appendix D

2021 Annual Offsite Sampling Event Data Usability Assessment Report

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 2021.

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] 2020) and NFGs for Inorganic Superfund Methods Data Review (EPA 2020), 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 2021

From June 21 to June 27, 2021, 44 primary samples, 3 field duplicates, 7 rinsate blanks, and 3 trip blanks were collected for analysis of VOCs. Data were qualified as estimated (J or UJ) based on matrix spike/matrix spike duplicate (MS/MSD) 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.

No target analytes were detected in the trip blanks and no data were qualified for trip blank results..

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

Three 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 except for the tetrachloroethylene result for the sample and field duplicate collected from the RW-2172H location. These tetrachloroethylene results were qualified estimated (J).

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 acrylonitrile in the LCSD associated with VOC analyses of samples in SDG 280-150290-1 was above the control limits. The compounds were not detected in the samples and no sample acrylonitrile results were qualified.

1.1.6 Matrix Spike Results

All MS/MSD % recoveries and RPDs met the QC limits except for the following samples/analytes:

- Sample RW-2172F-20210625: percent recovery of acrylonitrile was above the control limits. The acrylonitrile result for the parent sample was not detected and no data were qualified.
- Sample RW-8030P-20210623: percent recoveries of 1,2-dibromo-3-chloropropane and isobutanol were below the control limits in the MS. The 1,2-dibromo-3-chloropropane and isobutanol results for sample RW-8030P-20210623 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/ UJ” 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. 2020. *National Functional Guidelines for Superfund Inorganics Methods Data Review*. November.

United States Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. 2020. *National Functional Guidelines for Superfund Organics Methods Data Review*. November.

TABLE D-1

Table D-1
Sample ID, Laboratory SDG, and Data Validation Report References

Analytical Method	SW8260B
Sample ID	LAB SDG
EB-01-20210622	280-150245-1
EB-02-20210622	280-150245-1
EB-03-20210623	280-150245-1
EB-04-20210623	280-150245-1
EB-05-20210624	280-150245-1
EB-06-20210625	280-150245-1
EB-07-20210627	280-150290-1
MUNI-WELL-14-20210621	280-150245-1
MUNI-WELL-33-20210621	280-150245-1
MW-116S-20210626	280-150290-1
MW-37-20210622	280-150245-1
MW-37Q-20210622	280-150245-1
MW-38-105-115-20210627	280-150290-1
MW-38-121-130-20210627	280-150290-1
MW-38-60-100-20210627	280-150290-1
PA-10-20210624	280-150290-1
PA-1-20210622	280-150245-1
PA-3-20210622	280-150245-1
PA-5-20210627	280-150290-1
PA-8-37-47-20210623	280-150245-1
PA-8-77-87-20210623	280-150245-1
PA-9-58-68-20210624	280-150290-1
PA-9-88-98-20210624	280-150290-1
RW-2076F-20210626	280-150290-1
RW-2140H-20210626	280-150290-1
RW-2151H-20210623	280-150245-1
RW-2172F-20210625	280-150290-1
RW-2172H-20210623	280-150245-1
RW-2172HQ-20210623	280-150245-1
RW-2237H-20210624	280-150290-1
RW-2879M-20210624	280-150290-1
RW-5898B1-20210625	280-150290-1
RW-7070B-20210624	280-150290-1
RW-7091R-20210622	280-150245-1
RW-7200P-20210621	280-150245-1
RW-7244P-20210624	280-150290-1
RW-7350P-20210624	280-150290-1
RW-7505P-20210624	280-150290-1
RW-7549P-20210624	280-150290-1
RW-7586P-20210621	280-150245-1
RW-7588P-20210625	280-150290-1
RW-7677P-20210621	280-150245-1
RW-7688P-20210625	280-150290-1
RW-7773P-20210621	280-150245-1
RW-7773PQ-20210621	280-150245-1
RW-8000B-20210622	280-150245-1
RW-8012P-20210626	280-150290-1
RW-8030P-20210623	280-150245-1
RW-8035P-20210624	280-150290-1
RW-8048P-20210624	280-150290-1
RW-8105PS-20210624	280-150290-1
RW-8209P-20210625	280-150290-1
RW-8249P-20210621	280-150245-1
RW-8284P-20210625	280-150290-1
TB 062521 13:45	280-150245-1
TB 062721 18:00	280-150290-1
TB 062721 19:30	280-150290-1

Notes:
ID = identification
SDG = sample delivery group

TABLE D-2

Table D-2
Groundwater Field Duplicates Comparisons

Method	Analyte	Unit	Location ID		MW-37		RDL	5x RDL	RPD or Absolute Difference	RW-2172H		RW-2172H		RDL	5x RDL	RPD or Absolute Difference	RW-7773P		RW-7773P		RDL	5x RDL	RPD or Absolute Difference		
			Sample Type	Sample Date	N					FD		N					FD		N					FD	
					Result	Q				Result	Q	Result	Q				Result	Q	Result	Q					
																								6/22/2021	6/22/2021
SW82608	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	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	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	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	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	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	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	0.19	U	0.19	U	1	5	NC		
	1,2,3-TRICHLOROPROPANE	ug/l	0.33	U	0.33	U	2.5	12.5	NC	0.33	U	0.33	U	2.5	12.5	NC	0.33	U	0.33	U	2.5	12.5	NC		
	1,2,4-TRICHLOROETHANE	ug/l	0.21	U	0.21	U	1	5	NC	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	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	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	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	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	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	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	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	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	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	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	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	1.9	U	1.9	U	10	50	NC		
	ACETONITRILE	ug/l	9.6	U	9.6	U	30	150	NC	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	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	1.4	U	1.4	U	20	100	NC		
	ALLYL CHLORIDE (3-CHLOROPROPENE)	ug/l	0.17	U	0.17	U	2	10	NC	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	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	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	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	0.46	U	0.46	U	1	5	NC		
	BROMOMETHANE	ug/l	0.21	U	0.21	U	2	10	NC	0.21	U	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	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	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	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	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	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	0.3	U	0.3	U	2	10	NC		
	CIS-1,2-DICHLOROETHYLENE	ug/l	0.15	U	0.15	U	1	5	NC	1.1		1.3		1	5	0.2	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	0.16	U	0.16	U	1	5	NC		
	DIBROMOCHLOROMETHANE	ug/l	0.17	U	0.17	U	1	5	NC	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	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	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	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	0.16	U	0.16	U	1	5	NC		
	IODOMETHANE (METHYL IODIDE)	ug/l	0.23	U	0.23	U	1	5	NC	0.23	U	0.23	U	1	5	NC	0.23	U	0.23	U	1	5	NC		
	ISOBUTANOL	ug/l	37	U	37	U	110	550	NC	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	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	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	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	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	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	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	0.19	U	0.19	U	1	5	NC		
	PROPANE NITRILE (PROPIONITRILE)	ug/l	3.7	U	3.7	U	20	100	NC	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	0.36	U	0.36	U	1	5	NC		
	TETRACHLOROETHYLENE (PCE)	ug/l	0.2	U	0.2	U	1	5	NC	5.4	J	4.1	J	1	5	63.41	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	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	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	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	0.8	U	0.8	U	3	15	NC		
	TRICHLOROETHYLENE (TCE)	ug/l	1.6	U	1.3	U	1	5	0.3	21		21		1	5	0	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	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	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	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	0.19	U	0.19	U	2	10	NC		

Appendix E

2021 Annual Offsite Sampling Event Analytical Laboratory Data Packages

ANALYTICAL REPORT

Job Number: 280-150245-1

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
7/1/2021 10:10 AM

Dylan T Bieniulis, Project Manager I
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07/01/2021

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

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Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	9
Default Detection Limits	50
Surrogate Summary	52
QC Sample Results	54
QC Association	72
Chronicle	73
Certification Summary	77
Method Summary	78
Sample Summary	79
Manual Integration Summary	80
Reagent Traceability	89
COAs	105
Organic Sample Data	198
GC/MS VOA	198
Method 8260B	198
Method 8260B QC Summary	199
Method 8260B Sample Data	234
Standards Data	433
Method 8260B ICAL Data	433
Method 8260B CCAL Data	866
Raw QC Data	911

Table of Contents

Method 8260B Tune Data	911
Method 8260B Blank Data	931
Method 8260B LCS/LCSD Data	953
Method 8260B MS/MSD Data	1001
Method 8260B Run Logs	1061
Method 8260B Prep Data	1086
Shipping and Receiving Documents	1097
Client Chain of Custody	1098
Sample Receipt Checklist	1101

Definitions/Glossary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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.
α	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: 280-150245-1

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 06/26/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.5 C.

One of three HCl preserved VOA vials for RW-7773P-20210621 (280-150245-4) was received with a headspace bubble greater than 6mm in diameter. Sufficient sample containers without headspace greater than 6mm in diameter were received to perform the requested analysis. No corrective action necessary. The client was notified on 6/28/2021.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples Muni-Well-14-20210621 (280-150245-1), Muni-Well-33-20210621 (280-150245-2), RW-8249P-20210621 (280-150245-3), RW-7773P-20210621 (280-150245-4), RW-7773PQ-20210621 (280-150245-5), RW-7200P-20210621 (280-150245-6), RW-7586P-20210621 (280-150245-7), RW-7677P-20210621 (280-150245-8), RW-8000B-20210622 (280-150245-9), PA-1-20210622 (280-150245-10), MW-37-20210622 (280-150245-11), MW-37Q-20210622 (280-150245-12), PA-3-20210622 (280-150245-13), RW-7091R-20210622 (280-150245-14), RW-2151H-20210623 (280-150245-15), PA-8-37-47-20210623 (280-150245-16), PA-8-77-87-20210623 (280-150245-17), RW-8030P-20210623 (280-150245-18), RW-2172H-20210623 (280-150245-19), RW-2172HQ-20210623 (280-150245-20), TB-01-20210625 (280-150245-21), EB-01-20210622 (280-150245-22), EB-02-20210622 (280-150245-23), EB-03-20210623 (280-150245-24), EB-04-20210623 (280-150245-25), EB-05-20210624 (280-150245-26) and EB-06-20210625 (280-150245-27) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/30/2021.

Acetone was detected in method blank MB 280-541784/9 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

1,2-Dibromo-3-Chloropropane and Isobutyl alcohol failed the recovery criteria low for the MS of sample RW-8030P-20210623 (280-150245-18) in batch 280-541786. 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: 280-150245-1

Client Sample ID: Muni-Well-14-20210621

Lab Sample ID: 280-150245-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.2		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Muni-Well-33-20210621

Lab Sample ID: 280-150245-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.39	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	1.9		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8249P-20210621

Lab Sample ID: 280-150245-3

No Detections.

Client Sample ID: RW-7773P-20210621

Lab Sample ID: 280-150245-4

No Detections.

Client Sample ID: RW-7773PQ-20210621

Lab Sample ID: 280-150245-5

No Detections.

Client Sample ID: RW-7200P-20210621

Lab Sample ID: 280-150245-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.43	J	1.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7586P-20210621

Lab Sample ID: 280-150245-7

No Detections.

Client Sample ID: RW-7677P-20210621

Lab Sample ID: 280-150245-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.29	J	1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.1		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	5.3		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8000B-20210622

Lab Sample ID: 280-150245-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.84	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	4.1		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: PA-1-20210622

Lab Sample ID: 280-150245-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.5		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-37-20210622

Lab Sample ID: 280-150245-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.6		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-37Q-20210622

Lab Sample ID: 280-150245-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.3		1.0	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-3-20210622

Lab Sample ID: 280-150245-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	1.2		1.0	0.16	ug/L	1			8260B	Total/NA

Client Sample ID: RW-7091R-20210622

Lab Sample ID: 280-150245-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	1.0		1.0	0.16	ug/L	1			8260B	Total/NA

Client Sample ID: RW-2151H-20210623

Lab Sample ID: 280-150245-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.64	J	1.0	0.15	ug/L	1			8260B	Total/NA
Tetrachloroethene	2.7		1.0	0.20	ug/L	1			8260B	Total/NA
Trichloroethene	14		1.0	0.16	ug/L	1			8260B	Total/NA

Client Sample ID: PA-8-37-47-20210623

Lab Sample ID: 280-150245-16

No Detections.

Client Sample ID: PA-8-77-87-20210623

Lab Sample ID: 280-150245-17

No Detections.

Client Sample ID: RW-8030P-20210623

Lab Sample ID: 280-150245-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Tetrachloroethene	0.80	J	1.0	0.20	ug/L	1			8260B	Total/NA
Trichloroethene	4.6		1.0	0.16	ug/L	1			8260B	Total/NA

Client Sample ID: RW-2172H-20210623

Lab Sample ID: 280-150245-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.1		1.0	0.15	ug/L	1			8260B	Total/NA
Tetrachloroethene	5.4		1.0	0.20	ug/L	1			8260B	Total/NA
Trichloroethene	21		1.0	0.16	ug/L	1			8260B	Total/NA

Client Sample ID: RW-2172HQ-20210623

Lab Sample ID: 280-150245-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.15	ug/L	1			8260B	Total/NA
Tetrachloroethene	4.1		1.0	0.20	ug/L	1			8260B	Total/NA
Trichloroethene	21		1.0	0.16	ug/L	1			8260B	Total/NA

Client Sample ID: TB-01-20210625

Lab Sample ID: 280-150245-21

No Detections.

Client Sample ID: EB-01-20210622

Lab Sample ID: 280-150245-22

No Detections.

Client Sample ID: EB-02-20210622

Lab Sample ID: 280-150245-23

No Detections.

Client Sample ID: EB-03-20210623

Lab Sample ID: 280-150245-24

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-04-20210623

Lab Sample ID: 280-150245-25

☐ No Detections.

Client Sample ID: EB-05-20210624

Lab Sample ID: 280-150245-26

☐ No Detections.

Client Sample ID: EB-06-20210625

Lab Sample ID: 280-150245-27

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: Muni-Well-14-20210621

Lab Sample ID: 280-150245-1

Date Collected: 06/21/21 15:37

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:33	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 02:33	1
Acrolein	ND		20	2.8	ug/L			06/30/21 02:33	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 02:33	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 02:33	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 02:33	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 02:33	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 02:33	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 02:33	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 02:33	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 02:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 02:33	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 02:33	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 02:33	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:33	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 02:33	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 02:33	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 02:33	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 02:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 02:33	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:33	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 02:33	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 02:33	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 02:33	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 02:33	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 02:33	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 02:33	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 02:33	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:33	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:33	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 02:33	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 02:33	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 02:33	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 02:33	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 02:33	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 02:33	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 02:33	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 02:33	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 02:33	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 02:33	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 02:33	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 02:33	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 02:33	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 02:33	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 02:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 02:33	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 02:33	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 02:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:33	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: Muni-Well-14-20210621

Lab Sample ID: 280-150245-1

Date Collected: 06/21/21 15:37

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:33	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 02:33	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 02:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 02:33	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 02:33	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 02:33	1
Trichloroethene	1.2		1.0	0.16	ug/L			06/30/21 02:33	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 02:33	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 02:33	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 02:33	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 02:33	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 02:33	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 02:33	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 02:33	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 02:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					06/30/21 02:33	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 02:33	1
4-Bromofluorobenzene (Surr)	94		78 - 120					06/30/21 02:33	1
Dibromofluoromethane (Surr)	100		77 - 120					06/30/21 02:33	1

Client Sample ID: Muni-Well-33-20210621

Lab Sample ID: 280-150245-2

Date Collected: 06/21/21 15:15

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:57	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 02:57	1
Acrolein	ND		20	2.8	ug/L			06/30/21 02:57	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 02:57	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 02:57	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 02:57	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 02:57	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 02:57	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 02:57	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 02:57	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 02:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 02:57	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 02:57	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 02:57	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:57	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 02:57	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 02:57	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 02:57	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 02:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 02:57	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:57	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 02:57	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: Muni-Well-33-20210621

Lab Sample ID: 280-150245-2

Date Collected: 06/21/21 15:15

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:57	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 02:57	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 02:57	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 02:57	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 02:57	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 02:57	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:57	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:57	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 02:57	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 02:57	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 02:57	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 02:57	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 02:57	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 02:57	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 02:57	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 02:57	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 02:57	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 02:57	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 02:57	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 02:57	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 02:57	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 02:57	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 02:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 02:57	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 02:57	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 02:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:57	1
Tetrachloroethene	0.39	J	1.0	0.20	ug/L			06/30/21 02:57	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 02:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 02:57	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 02:57	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 02:57	1
Trichloroethene	1.9		1.0	0.16	ug/L			06/30/21 02:57	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 02:57	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 02:57	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 02:57	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 02:57	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 02:57	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 02:57	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 02:57	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 02:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 127		06/30/21 02:57	1
Toluene-d8 (Surr)	98		80 - 125		06/30/21 02:57	1
4-Bromofluorobenzene (Surr)	96		78 - 120		06/30/21 02:57	1
Dibromofluoromethane (Surr)	101		77 - 120		06/30/21 02:57	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-8249P-20210621

Lab Sample ID: 280-150245-3

Date Collected: 06/21/21 17:45

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:20	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 03:20	1
Acrolein	ND		20	2.8	ug/L			06/30/21 03:20	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 03:20	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 03:20	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 03:20	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 03:20	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 03:20	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 03:20	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 03:20	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 03:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 03:20	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 03:20	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 03:20	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:20	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 03:20	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 03:20	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 03:20	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 03:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 03:20	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:20	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 03:20	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 03:20	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 03:20	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 03:20	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 03:20	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 03:20	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 03:20	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:20	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:20	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 03:20	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 03:20	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 03:20	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 03:20	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 03:20	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 03:20	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 03:20	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 03:20	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 03:20	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 03:20	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 03:20	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 03:20	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 03:20	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 03:20	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 03:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 03:20	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 03:20	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 03:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:20	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-8249P-20210621

Lab Sample ID: 280-150245-3

Date Collected: 06/21/21 17:45

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:20	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 03:20	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 03:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 03:20	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 03:20	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 03:20	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 03:20	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 03:20	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 03:20	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 03:20	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 03:20	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 03:20	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 03:20	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 03:20	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 03:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127		06/30/21 03:20	1
Toluene-d8 (Surr)	100		80 - 125		06/30/21 03:20	1
4-Bromofluorobenzene (Surr)	96		78 - 120		06/30/21 03:20	1
Dibromofluoromethane (Surr)	100		77 - 120		06/30/21 03:20	1

Client Sample ID: RW-7773P-20210621

Lab Sample ID: 280-150245-4

Date Collected: 06/21/21 14:57

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:43	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 03:43	1
Acrolein	ND		20	2.8	ug/L			06/30/21 03:43	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 03:43	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 03:43	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 03:43	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 03:43	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 03:43	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 03:43	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 03:43	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 03:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 03:43	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 03:43	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 03:43	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:43	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 03:43	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 03:43	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 03:43	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 03:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 03:43	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:43	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 03:43	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7773P-20210621

Lab Sample ID: 280-150245-4

Date Collected: 06/21/21 14:57

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:43	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 03:43	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 03:43	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 03:43	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 03:43	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 03:43	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:43	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:43	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 03:43	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 03:43	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 03:43	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 03:43	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 03:43	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 03:43	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 03:43	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 03:43	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 03:43	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 03:43	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 03:43	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 03:43	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 03:43	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 03:43	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 03:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 03:43	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 03:43	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 03:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:43	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 03:43	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 03:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 03:43	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 03:43	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 03:43	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 03:43	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 03:43	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 03:43	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 03:43	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 03:43	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 03:43	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 03:43	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 03:43	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 03:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 127					06/30/21 03:43	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 03:43	1
4-Bromofluorobenzene (Surr)	95		78 - 120					06/30/21 03:43	1
Dibromofluoromethane (Surr)	99		77 - 120					06/30/21 03:43	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7773PQ-20210621

Lab Sample ID: 280-150245-5

Date Collected: 06/21/21 15:02

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:06	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 04:06	1
Acrolein	ND		20	2.8	ug/L			06/30/21 04:06	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 04:06	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 04:06	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 04:06	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 04:06	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 04:06	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 04:06	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 04:06	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 04:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 04:06	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 04:06	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 04:06	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:06	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 04:06	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 04:06	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 04:06	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 04:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 04:06	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:06	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 04:06	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 04:06	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 04:06	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 04:06	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 04:06	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 04:06	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 04:06	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:06	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:06	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 04:06	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 04:06	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 04:06	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 04:06	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 04:06	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 04:06	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 04:06	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 04:06	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 04:06	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 04:06	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 04:06	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 04:06	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 04:06	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 04:06	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 04:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 04:06	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 04:06	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 04:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:06	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7773PQ-20210621

Lab Sample ID: 280-150245-5

Date Collected: 06/21/21 15:02

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:06	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 04:06	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 04:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 04:06	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 04:06	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 04:06	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 04:06	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 04:06	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 04:06	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 04:06	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 04:06	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 04:06	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 04:06	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 04:06	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 04:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					06/30/21 04:06	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 04:06	1
4-Bromofluorobenzene (Surr)	97		78 - 120					06/30/21 04:06	1
Dibromofluoromethane (Surr)	100		77 - 120					06/30/21 04:06	1

Client Sample ID: RW-7200P-20210621

Lab Sample ID: 280-150245-6

Date Collected: 06/21/21 16:22

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:29	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 04:29	1
Acrolein	ND		20	2.8	ug/L			06/30/21 04:29	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 04:29	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 04:29	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 04:29	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 04:29	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 04:29	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 04:29	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 04:29	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 04:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 04:29	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 04:29	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 04:29	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:29	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 04:29	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 04:29	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 04:29	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 04:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 04:29	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:29	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 04:29	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7200P-20210621

Lab Sample ID: 280-150245-6

Date Collected: 06/21/21 16:22

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:29	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 04:29	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 04:29	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 04:29	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 04:29	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 04:29	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:29	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:29	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 04:29	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 04:29	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 04:29	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 04:29	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 04:29	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 04:29	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 04:29	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 04:29	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 04:29	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 04:29	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 04:29	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 04:29	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 04:29	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 04:29	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 04:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 04:29	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 04:29	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 04:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:29	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 04:29	1
Toluene	0.43	J	1.0	0.17	ug/L			06/30/21 04:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 04:29	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 04:29	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 04:29	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 04:29	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 04:29	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 04:29	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 04:29	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 04:29	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 04:29	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 04:29	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 04:29	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 04:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					06/30/21 04:29	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 04:29	1
4-Bromofluorobenzene (Surr)	96		78 - 120					06/30/21 04:29	1
Dibromofluoromethane (Surr)	101		77 - 120					06/30/21 04:29	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7586P-20210621

Lab Sample ID: 280-150245-7

Date Collected: 06/21/21 17:35

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:52	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 04:52	1
Acrolein	ND		20	2.8	ug/L			06/30/21 04:52	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 04:52	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 04:52	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 04:52	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 04:52	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 04:52	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 04:52	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 04:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 04:52	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 04:52	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 04:52	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:52	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 04:52	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 04:52	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 04:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 04:52	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:52	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 04:52	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 04:52	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 04:52	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 04:52	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 04:52	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 04:52	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:52	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:52	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 04:52	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 04:52	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 04:52	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 04:52	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 04:52	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 04:52	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 04:52	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 04:52	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 04:52	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 04:52	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 04:52	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 04:52	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 04:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 04:52	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 04:52	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 04:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:52	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7586P-20210621

Lab Sample ID: 280-150245-7

Date Collected: 06/21/21 17:35

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:52	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 04:52	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 04:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 04:52	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 04:52	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 04:52	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 04:52	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 04:52	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 04:52	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 04:52	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 04:52	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 04:52	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 04:52	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 04:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127		06/30/21 04:52	1
Toluene-d8 (Surr)	99		80 - 125		06/30/21 04:52	1
4-Bromofluorobenzene (Surr)	96		78 - 120		06/30/21 04:52	1
Dibromofluoromethane (Surr)	100		77 - 120		06/30/21 04:52	1

Client Sample ID: RW-7677P-20210621

Lab Sample ID: 280-150245-8

Date Collected: 06/21/21 18:55

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:15	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 05:15	1
Acrolein	ND		20	2.8	ug/L			06/30/21 05:15	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 05:15	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 05:15	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 05:15	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 05:15	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 05:15	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 05:15	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 05:15	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 05:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 05:15	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 05:15	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 05:15	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:15	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 05:15	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 05:15	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 05:15	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 05:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 05:15	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:15	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 05:15	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7677P-20210621

Lab Sample ID: 280-150245-8

Date Collected: 06/21/21 18:55

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:15	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 05:15	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 05:15	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 05:15	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 05:15	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 05:15	1
cis-1,2-Dichloroethene	0.29	J	1.0	0.15	ug/L			06/30/21 05:15	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:15	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 05:15	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 05:15	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 05:15	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 05:15	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 05:15	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 05:15	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 05:15	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 05:15	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 05:15	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 05:15	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 05:15	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 05:15	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 05:15	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 05:15	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 05:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 05:15	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 05:15	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 05:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 05:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 05:15	1
Tetrachloroethene	1.1		1.0	0.20	ug/L			06/30/21 05:15	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 05:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 05:15	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 05:15	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 05:15	1
Trichloroethene	5.3		1.0	0.16	ug/L			06/30/21 05:15	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 05:15	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 05:15	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 05:15	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 05:15	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 05:15	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 05:15	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 05:15	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 05:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					06/30/21 05:15	1
Toluene-d8 (Surr)	100		80 - 125					06/30/21 05:15	1
4-Bromofluorobenzene (Surr)	95		78 - 120					06/30/21 05:15	1
Dibromofluoromethane (Surr)	100		77 - 120					06/30/21 05:15	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-8000B-20210622

Lab Sample ID: 280-150245-9

Date Collected: 06/22/21 12:15

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:38	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 05:38	1
Acrolein	ND		20	2.8	ug/L			06/30/21 05:38	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 05:38	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 05:38	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 05:38	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 05:38	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 05:38	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 05:38	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 05:38	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 05:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 05:38	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 05:38	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 05:38	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:38	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 05:38	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 05:38	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 05:38	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 05:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 05:38	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:38	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 05:38	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 05:38	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 05:38	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 05:38	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 05:38	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 05:38	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 05:38	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:38	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:38	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 05:38	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 05:38	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 05:38	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 05:38	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 05:38	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 05:38	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 05:38	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 05:38	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 05:38	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 05:38	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 05:38	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 05:38	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 05:38	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 05:38	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 05:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 05:38	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 05:38	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 05:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 05:38	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-8000B-20210622

Lab Sample ID: 280-150245-9

Date Collected: 06/22/21 12:15

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:38	1
Tetrachloroethene	0.84	J	1.0	0.20	ug/L			06/30/21 05:38	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 05:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 05:38	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 05:38	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 05:38	1
Trichloroethene	4.1		1.0	0.16	ug/L			06/30/21 05:38	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 05:38	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 05:38	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 05:38	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 05:38	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 05:38	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 05:38	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 05:38	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 05:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					06/30/21 05:38	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 05:38	1
4-Bromofluorobenzene (Surr)	96		78 - 120					06/30/21 05:38	1
Dibromofluoromethane (Surr)	100		77 - 120					06/30/21 05:38	1

Client Sample ID: PA-1-20210622

Lab Sample ID: 280-150245-10

Date Collected: 06/22/21 15:05

Matrix: Water

Date Received: 06/26/21 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			06/30/21 06:00	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 06:00	1
Acrolein	ND		20	2.8	ug/L			06/30/21 06:00	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 06:00	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 06:00	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 06:00	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 06:00	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 06:00	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 06:00	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 06:00	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 06:00	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 06:00	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 06:00	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 06:00	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 06:00	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 06:00	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 06:00	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 06:00	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 06:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 06:00	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 06:00	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 06:00	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-1-20210622

Lab Sample ID: 280-150245-10

Date Collected: 06/22/21 15:05

Matrix: Water

Date Received: 06/26/21 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			06/30/21 06:00	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 06:00	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 06:00	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 06:00	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 06:00	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 06:00	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 06:00	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 06:00	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 06:00	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 06:00	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 06:00	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 06:00	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 06:00	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 06:00	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 06:00	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 06:00	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 06:00	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 06:00	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 06:00	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 06:00	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 06:00	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 06:00	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 06:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 06:00	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 06:00	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 06:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 06:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 06:00	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 06:00	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 06:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 06:00	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 06:00	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 06:00	1
Trichloroethene	1.5		1.0	0.16	ug/L			06/30/21 06:00	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 06:00	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 06:00	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 06:00	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 06:00	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 06:00	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 06:00	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 06:00	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 06:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					06/30/21 06:00	1
Toluene-d8 (Surr)	98		80 - 125					06/30/21 06:00	1
4-Bromofluorobenzene (Surr)	95		78 - 120					06/30/21 06:00	1
Dibromofluoromethane (Surr)	99		77 - 120					06/30/21 06:00	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: MW-37-20210622

Lab Sample ID: 280-150245-11

Date Collected: 06/22/21 17:38

Matrix: Water

Date Received: 06/26/21 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			06/30/21 06:23	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 06:23	1
Acrolein	ND		20	2.8	ug/L			06/30/21 06:23	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 06:23	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 06:23	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 06:23	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 06:23	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 06:23	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 06:23	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 06:23	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 06:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 06:23	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 06:23	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 06:23	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 06:23	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 06:23	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 06:23	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 06:23	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 06:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 06:23	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 06:23	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 06:23	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 06:23	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 06:23	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 06:23	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 06:23	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 06:23	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 06:23	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 06:23	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 06:23	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 06:23	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 06:23	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 06:23	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 06:23	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 06:23	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 06:23	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 06:23	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 06:23	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 06:23	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 06:23	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 06:23	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 06:23	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 06:23	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 06:23	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 06:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 06:23	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 06:23	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 06:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 06:23	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: MW-37-20210622

Lab Sample ID: 280-150245-11

Date Collected: 06/22/21 17:38

Matrix: Water

Date Received: 06/26/21 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			06/30/21 06:23	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 06:23	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 06:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 06:23	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 06:23	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 06:23	1
Trichloroethene	1.6		1.0	0.16	ug/L			06/30/21 06:23	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 06:23	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 06:23	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 06:23	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 06:23	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 06:23	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 06:23	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 06:23	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 06:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127					06/30/21 06:23	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 06:23	1
4-Bromofluorobenzene (Surr)	96		78 - 120					06/30/21 06:23	1
Dibromofluoromethane (Surr)	100		77 - 120					06/30/21 06:23	1

Client Sample ID: MW-37Q-20210622

Lab Sample ID: 280-150245-12

Date Collected: 06/22/21 17:41

Matrix: Water

Date Received: 06/26/21 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			06/30/21 00:17	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 00:17	1
Acrolein	ND		20	2.8	ug/L			06/30/21 00:17	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 00:17	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 00:17	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 00:17	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 00:17	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 00:17	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 00:17	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 00:17	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 00:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 00:17	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 00:17	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 00:17	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 00:17	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 00:17	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 00:17	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 00:17	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 00:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 00:17	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 00:17	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 00:17	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: MW-37Q-20210622

Lab Sample ID: 280-150245-12

Date Collected: 06/22/21 17:41

Matrix: Water

Date Received: 06/26/21 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			06/30/21 00:17	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 00:17	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 00:17	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 00:17	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 00:17	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 00:17	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 00:17	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 00:17	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 00:17	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 00:17	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 00:17	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 00:17	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 00:17	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 00:17	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 00:17	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 00:17	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 00:17	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 00:17	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 00:17	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 00:17	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 00:17	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 00:17	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 00:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 00:17	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 00:17	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 00:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 00:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 00:17	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 00:17	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 00:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 00:17	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 00:17	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 00:17	1
Trichloroethene	1.3		1.0	0.16	ug/L			06/30/21 00:17	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 00:17	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 00:17	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 00:17	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 00:17	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 00:17	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 00:17	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 00:17	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 00:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127		06/30/21 00:17	1
Toluene-d8 (Surr)	96		80 - 125		06/30/21 00:17	1
4-Bromofluorobenzene (Surr)	93		78 - 120		06/30/21 00:17	1
Dibromofluoromethane (Surr)	99		77 - 120		06/30/21 00:17	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-3-20210622

Lab Sample ID: 280-150245-13

Date Collected: 06/22/21 16:55

Matrix: Water

Date Received: 06/26/21 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			06/30/21 00:38	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 00:38	1
Acrolein	ND		20	2.8	ug/L			06/30/21 00:38	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 00:38	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 00:38	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 00:38	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 00:38	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 00:38	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 00:38	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 00:38	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 00:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 00:38	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 00:38	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 00:38	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 00:38	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 00:38	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 00:38	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 00:38	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 00:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 00:38	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 00:38	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 00:38	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 00:38	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 00:38	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 00:38	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 00:38	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 00:38	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 00:38	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 00:38	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 00:38	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 00:38	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 00:38	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 00:38	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 00:38	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 00:38	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 00:38	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 00:38	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 00:38	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 00:38	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 00:38	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 00:38	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 00:38	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 00:38	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 00:38	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 00:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 00:38	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 00:38	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 00:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 00:38	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-3-20210622

Lab Sample ID: 280-150245-13

Date Collected: 06/22/21 16:55

Matrix: Water

Date Received: 06/26/21 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			06/30/21 00:38	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 00:38	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 00:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 00:38	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 00:38	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 00:38	1
Trichloroethene	1.2		1.0	0.16	ug/L			06/30/21 00:38	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 00:38	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 00:38	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 00:38	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 00:38	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 00:38	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 00:38	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 00:38	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 00:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					06/30/21 00:38	1
Toluene-d8 (Surr)	97		80 - 125					06/30/21 00:38	1
4-Bromofluorobenzene (Surr)	93		78 - 120					06/30/21 00:38	1
Dibromofluoromethane (Surr)	101		77 - 120					06/30/21 00:38	1

Client Sample ID: RW-7091R-20210622

Lab Sample ID: 280-150245-14

Date Collected: 06/22/21 19:02

Matrix: Water

Date Received: 06/26/21 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			06/30/21 01:00	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 01:00	1
Acrolein	ND		20	2.8	ug/L			06/30/21 01:00	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 01:00	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 01:00	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 01:00	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 01:00	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 01:00	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 01:00	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 01:00	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 01:00	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 01:00	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 01:00	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 01:00	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 01:00	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 01:00	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 01:00	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 01:00	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 01:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 01:00	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 01:00	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 01:00	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7091R-20210622

Lab Sample ID: 280-150245-14

Date Collected: 06/22/21 19:02

Matrix: Water

Date Received: 06/26/21 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			06/30/21 01:00	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 01:00	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 01:00	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 01:00	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 01:00	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 01:00	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 01:00	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 01:00	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 01:00	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 01:00	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 01:00	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 01:00	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 01:00	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 01:00	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 01:00	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 01:00	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 01:00	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 01:00	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 01:00	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 01:00	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 01:00	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 01:00	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 01:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 01:00	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 01:00	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 01:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 01:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 01:00	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 01:00	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 01:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 01:00	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 01:00	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 01:00	1
Trichloroethene	1.0		1.0	0.16	ug/L			06/30/21 01:00	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 01:00	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 01:00	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 01:00	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 01:00	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 01:00	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 01:00	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 01:00	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127					06/30/21 01:00	1
Toluene-d8 (Surr)	100		80 - 125					06/30/21 01:00	1
4-Bromofluorobenzene (Surr)	93		78 - 120					06/30/21 01:00	1
Dibromofluoromethane (Surr)	96		77 - 120					06/30/21 01:00	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-2151H-20210623

Lab Sample ID: 280-150245-15

Date Collected: 06/23/21 14:39

Matrix: Water

Date Received: 06/26/21 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			06/30/21 01:21	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 01:21	1
Acrolein	ND		20	2.8	ug/L			06/30/21 01:21	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 01:21	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 01:21	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 01:21	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 01:21	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 01:21	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 01:21	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 01:21	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 01:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 01:21	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 01:21	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 01:21	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 01:21	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 01:21	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 01:21	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 01:21	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 01:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 01:21	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 01:21	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 01:21	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 01:21	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 01:21	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 01:21	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 01:21	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 01:21	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 01:21	1
cis-1,2-Dichloroethene	0.64	J	1.0	0.15	ug/L			06/30/21 01:21	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 01:21	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 01:21	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 01:21	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 01:21	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 01:21	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 01:21	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 01:21	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 01:21	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 01:21	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 01:21	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 01:21	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 01:21	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 01:21	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 01:21	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 01:21	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 01:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 01:21	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 01:21	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 01:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 01:21	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-2151H-20210623

Lab Sample ID: 280-150245-15

Date Collected: 06/23/21 14:39

Matrix: Water

Date Received: 06/26/21 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			06/30/21 01:21	1
Tetrachloroethene	2.7		1.0	0.20	ug/L			06/30/21 01:21	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 01:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 01:21	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 01:21	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 01:21	1
Trichloroethene	14		1.0	0.16	ug/L			06/30/21 01:21	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 01:21	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 01:21	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 01:21	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 01:21	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 01:21	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 01:21	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 01:21	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 127					06/30/21 01:21	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 01:21	1
4-Bromofluorobenzene (Surr)	92		78 - 120					06/30/21 01:21	1
Dibromofluoromethane (Surr)	97		77 - 120					06/30/21 01:21	1

Client Sample ID: PA-8-37-47-20210623

Lab Sample ID: 280-150245-16

Date Collected: 06/23/21 11:52

Matrix: Water

Date Received: 06/26/21 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			06/30/21 01:42	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 01:42	1
Acrolein	ND		20	2.8	ug/L			06/30/21 01:42	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 01:42	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 01:42	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 01:42	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 01:42	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 01:42	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 01:42	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 01:42	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 01:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 01:42	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 01:42	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 01:42	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 01:42	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 01:42	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 01:42	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 01:42	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 01:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 01:42	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 01:42	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 01:42	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-8-37-47-20210623

Lab Sample ID: 280-150245-16

Date Collected: 06/23/21 11:52

Matrix: Water

Date Received: 06/26/21 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			06/30/21 01:42	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 01:42	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 01:42	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 01:42	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 01:42	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 01:42	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 01:42	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 01:42	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 01:42	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 01:42	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 01:42	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 01:42	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 01:42	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 01:42	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 01:42	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 01:42	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 01:42	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 01:42	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 01:42	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 01:42	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 01:42	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 01:42	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 01:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 01:42	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 01:42	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 01:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 01:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 01:42	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 01:42	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 01:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 01:42	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 01:42	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 01:42	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 01:42	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 01:42	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 01:42	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 01:42	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 01:42	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 01:42	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 01:42	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 01:42	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 01:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127					06/30/21 01:42	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 01:42	1
4-Bromofluorobenzene (Surr)	93		78 - 120					06/30/21 01:42	1
Dibromofluoromethane (Surr)	96		77 - 120					06/30/21 01:42	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-8-77-87-20210623

Lab Sample ID: 280-150245-17

Date Collected: 06/23/21 14:13

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:03	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 02:03	1
Acrolein	ND		20	2.8	ug/L			06/30/21 02:03	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 02:03	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 02:03	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 02:03	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 02:03	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 02:03	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 02:03	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 02:03	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 02:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 02:03	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 02:03	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 02:03	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:03	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 02:03	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 02:03	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 02:03	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 02:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 02:03	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:03	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 02:03	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 02:03	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 02:03	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 02:03	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 02:03	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 02:03	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 02:03	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:03	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:03	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 02:03	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 02:03	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 02:03	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 02:03	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 02:03	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 02:03	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 02:03	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 02:03	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 02:03	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 02:03	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 02:03	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 02:03	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 02:03	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 02:03	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 02:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 02:03	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 02:03	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 02:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:03	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: PA-8-77-87-20210623

Lab Sample ID: 280-150245-17

Date Collected: 06/23/21 14:13

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:03	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 02:03	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 02:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 02:03	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 02:03	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 02:03	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 02:03	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 02:03	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 02:03	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 02:03	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 02:03	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 02:03	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 02:03	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 02:03	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 02:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 127					06/30/21 02:03	1
Toluene-d8 (Surr)	98		80 - 125					06/30/21 02:03	1
4-Bromofluorobenzene (Surr)	95		78 - 120					06/30/21 02:03	1
Dibromofluoromethane (Surr)	98		77 - 120					06/30/21 02:03	1

Client Sample ID: RW-8030P-20210623

Lab Sample ID: 280-150245-18

Date Collected: 06/23/21 15:40

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:24	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 02:24	1
Acrolein	ND		20	2.8	ug/L			06/30/21 02:24	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 02:24	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 02:24	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 02:24	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 02:24	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 02:24	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 02:24	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 02:24	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 02:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 02:24	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 02:24	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 02:24	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:24	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 02:24	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 02:24	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 02:24	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 02:24	1
1,2-Dibromo-3-Chloropropane	ND	F1	5.0	0.47	ug/L			06/30/21 02:24	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:24	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 02:24	1

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Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-8030P-20210623

Lab Sample ID: 280-150245-18

Date Collected: 06/23/21 15:40

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:24	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 02:24	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 02:24	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 02:24	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 02:24	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 02:24	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:24	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:24	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 02:24	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 02:24	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 02:24	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 02:24	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 02:24	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 02:24	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 02:24	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 02:24	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 02:24	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 02:24	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 02:24	1
Isobutyl alcohol	ND	F1	110	37	ug/L			06/30/21 02:24	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 02:24	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 02:24	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 02:24	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 02:24	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 02:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:24	1
Tetrachloroethene	0.80	J	1.0	0.20	ug/L			06/30/21 02:24	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 02:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 02:24	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 02:24	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 02:24	1
Trichloroethene	4.6		1.0	0.16	ug/L			06/30/21 02:24	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 02:24	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 02:24	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 02:24	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 02:24	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 02:24	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 02:24	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 02:24	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 02:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 127					06/30/21 02:24	1
Toluene-d8 (Surr)	97		80 - 125					06/30/21 02:24	1
4-Bromofluorobenzene (Surr)	96		78 - 120					06/30/21 02:24	1
Dibromofluoromethane (Surr)	99		77 - 120					06/30/21 02:24	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-2172H-20210623

Lab Sample ID: 280-150245-19

Date Collected: 06/23/21 17:57

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:45	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 02:45	1
Acrolein	ND		20	2.8	ug/L			06/30/21 02:45	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 02:45	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 02:45	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 02:45	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 02:45	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 02:45	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 02:45	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 02:45	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 02:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 02:45	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 02:45	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 02:45	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:45	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 02:45	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 02:45	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 02:45	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 02:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 02:45	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 02:45	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 02:45	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 02:45	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 02:45	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 02:45	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 02:45	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 02:45	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 02:45	1
cis-1,2-Dichloroethene	1.1		1.0	0.15	ug/L			06/30/21 02:45	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 02:45	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 02:45	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 02:45	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 02:45	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 02:45	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 02:45	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 02:45	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 02:45	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 02:45	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 02:45	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 02:45	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 02:45	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 02:45	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 02:45	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 02:45	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 02:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 02:45	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 02:45	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 02:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 02:45	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-2172H-20210623

Lab Sample ID: 280-150245-19

Date Collected: 06/23/21 17:57

Matrix: Water

Date Received: 06/26/21 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			06/30/21 02:45	1
Tetrachloroethene	5.4		1.0	0.20	ug/L			06/30/21 02:45	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 02:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 02:45	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 02:45	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 02:45	1
Trichloroethene	21		1.0	0.16	ug/L			06/30/21 02:45	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 02:45	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 02:45	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 02:45	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 02:45	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 02:45	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 02:45	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 02:45	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 02:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 127					06/30/21 02:45	1
Toluene-d8 (Surr)	98		80 - 125					06/30/21 02:45	1
4-Bromofluorobenzene (Surr)	98		78 - 120					06/30/21 02:45	1
Dibromofluoromethane (Surr)	97		77 - 120					06/30/21 02:45	1

Client Sample ID: RW-2172HQ-20210623

Lab Sample ID: 280-150245-20

Date Collected: 06/23/21 17:59

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:06	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 03:06	1
Acrolein	ND		20	2.8	ug/L			06/30/21 03:06	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 03:06	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 03:06	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 03:06	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 03:06	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 03:06	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 03:06	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 03:06	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 03:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 03:06	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 03:06	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 03:06	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:06	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 03:06	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 03:06	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 03:06	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 03:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 03:06	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:06	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 03:06	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-2172HQ-20210623

Lab Sample ID: 280-150245-20

Date Collected: 06/23/21 17:59

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:06	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 03:06	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 03:06	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 03:06	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 03:06	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 03:06	1
cis-1,2-Dichloroethene	1.3		1.0	0.15	ug/L			06/30/21 03:06	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:06	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 03:06	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 03:06	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 03:06	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 03:06	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 03:06	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 03:06	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 03:06	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 03:06	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 03:06	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 03:06	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 03:06	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 03:06	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 03:06	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 03:06	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 03:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 03:06	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 03:06	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 03:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:06	1
Tetrachloroethene	4.1		1.0	0.20	ug/L			06/30/21 03:06	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 03:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 03:06	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 03:06	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 03:06	1
Trichloroethene	21		1.0	0.16	ug/L			06/30/21 03:06	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 03:06	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 03:06	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 03:06	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 03:06	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 03:06	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 03:06	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 03:06	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 03:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 127					06/30/21 03:06	1
Toluene-d8 (Surr)	96		80 - 125					06/30/21 03:06	1
4-Bromofluorobenzene (Surr)	93		78 - 120					06/30/21 03:06	1
Dibromofluoromethane (Surr)	96		77 - 120					06/30/21 03:06	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: TB-01-20210625

Lab Sample ID: 280-150245-21

Date Collected: 06/25/21 13:45

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:27	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 03:27	1
Acrolein	ND		20	2.8	ug/L			06/30/21 03:27	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 03:27	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 03:27	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 03:27	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 03:27	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 03:27	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 03:27	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 03:27	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 03:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 03:27	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 03:27	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 03:27	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:27	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 03:27	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 03:27	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 03:27	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 03:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 03:27	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:27	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 03:27	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 03:27	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 03:27	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 03:27	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 03:27	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 03:27	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 03:27	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:27	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:27	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 03:27	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 03:27	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 03:27	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 03:27	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 03:27	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 03:27	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 03:27	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 03:27	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 03:27	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 03:27	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 03:27	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 03:27	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 03:27	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 03:27	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 03:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 03:27	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 03:27	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 03:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:27	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: TB-01-20210625

Lab Sample ID: 280-150245-21

Date Collected: 06/25/21 13:45

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:27	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 03:27	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 03:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 03:27	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 03:27	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 03:27	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 03:27	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 03:27	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 03:27	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 03:27	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 03:27	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 03:27	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 03:27	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 03:27	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 03:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127					06/30/21 03:27	1
Toluene-d8 (Surr)	100		80 - 125					06/30/21 03:27	1
4-Bromofluorobenzene (Surr)	95		78 - 120					06/30/21 03:27	1
Dibromofluoromethane (Surr)	97		77 - 120					06/30/21 03:27	1

Client Sample ID: EB-01-20210622

Lab Sample ID: 280-150245-22

Date Collected: 06/22/21 18:20

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:48	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 03:48	1
Acrolein	ND		20	2.8	ug/L			06/30/21 03:48	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 03:48	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 03:48	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 03:48	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 03:48	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 03:48	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 03:48	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 03:48	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 03:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 03:48	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 03:48	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 03:48	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:48	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 03:48	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 03:48	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 03:48	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 03:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 03:48	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 03:48	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 03:48	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-01-20210622

Lab Sample ID: 280-150245-22

Date Collected: 06/22/21 18:20

Matrix: Water

Date Received: 06/26/21 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			06/30/21 03:48	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 03:48	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 03:48	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 03:48	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 03:48	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 03:48	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:48	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 03:48	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 03:48	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 03:48	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 03:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 03:48	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 03:48	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 03:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 03:48	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 03:48	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 03:48	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 03:48	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 03:48	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 03:48	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 03:48	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 03:48	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 03:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 03:48	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 03:48	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 03:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 03:48	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 03:48	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 03:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 03:48	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 03:48	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 03:48	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 03:48	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 03:48	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 03:48	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 03:48	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 03:48	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 03:48	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 03:48	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 03:48	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 03:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 127					06/30/21 03:48	1
Toluene-d8 (Surr)	99		80 - 125					06/30/21 03:48	1
4-Bromofluorobenzene (Surr)	93		78 - 120					06/30/21 03:48	1
Dibromofluoromethane (Surr)	99		77 - 120					06/30/21 03:48	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-02-20210622

Lab Sample ID: 280-150245-23

Date Collected: 06/22/21 18:50

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:10	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 04:10	1
Acrolein	ND		20	2.8	ug/L			06/30/21 04:10	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 04:10	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 04:10	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 04:10	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 04:10	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 04:10	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 04:10	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 04:10	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 04:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 04:10	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 04:10	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 04:10	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:10	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 04:10	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 04:10	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 04:10	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 04:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 04:10	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:10	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 04:10	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 04:10	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 04:10	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 04:10	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 04:10	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 04:10	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 04:10	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:10	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:10	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 04:10	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 04:10	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 04:10	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 04:10	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 04:10	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 04:10	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 04:10	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 04:10	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 04:10	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 04:10	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 04:10	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 04:10	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 04:10	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 04:10	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 04:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 04:10	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 04:10	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 04:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:10	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-02-20210622

Lab Sample ID: 280-150245-23

Date Collected: 06/22/21 18:50

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:10	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 04:10	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 04:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 04:10	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 04:10	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 04:10	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 04:10	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 04:10	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 04:10	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 04:10	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 04:10	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 04:10	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 04:10	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 04:10	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 04:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127		06/30/21 04:10	1
Toluene-d8 (Surr)	99		80 - 125		06/30/21 04:10	1
4-Bromofluorobenzene (Surr)	94		78 - 120		06/30/21 04:10	1
Dibromofluoromethane (Surr)	97		77 - 120		06/30/21 04:10	1

Client Sample ID: EB-03-20210623

Lab Sample ID: 280-150245-24

Date Collected: 06/23/21 18:35

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:31	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 04:31	1
Acrolein	ND		20	2.8	ug/L			06/30/21 04:31	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 04:31	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 04:31	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 04:31	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 04:31	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 04:31	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 04:31	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 04:31	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 04:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 04:31	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 04:31	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 04:31	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:31	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 04:31	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 04:31	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 04:31	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 04:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 04:31	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:31	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 04:31	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-03-20210623

Lab Sample ID: 280-150245-24

Date Collected: 06/23/21 18:35

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:31	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 04:31	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 04:31	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 04:31	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 04:31	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 04:31	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:31	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:31	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 04:31	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 04:31	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 04:31	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 04:31	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 04:31	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 04:31	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 04:31	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 04:31	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 04:31	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 04:31	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 04:31	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 04:31	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 04:31	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 04:31	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 04:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 04:31	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 04:31	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 04:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:31	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 04:31	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 04:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 04:31	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 04:31	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 04:31	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 04:31	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 04:31	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 04:31	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 04:31	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 04:31	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 04:31	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 04:31	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 04:31	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 04:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 127					06/30/21 04:31	1
Toluene-d8 (Surr)	100		80 - 125					06/30/21 04:31	1
4-Bromofluorobenzene (Surr)	94		78 - 120					06/30/21 04:31	1
Dibromofluoromethane (Surr)	99		77 - 120					06/30/21 04:31	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-04-20210623

Lab Sample ID: 280-150245-25

Date Collected: 06/23/21 18:30

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:52	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 04:52	1
Acrolein	ND		20	2.8	ug/L			06/30/21 04:52	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 04:52	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 04:52	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 04:52	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 04:52	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 04:52	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 04:52	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 04:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 04:52	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 04:52	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 04:52	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:52	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 04:52	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 04:52	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 04:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 04:52	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 04:52	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 04:52	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 04:52	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 04:52	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 04:52	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 04:52	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 04:52	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:52	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 04:52	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 04:52	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 04:52	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 04:52	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 04:52	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 04:52	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 04:52	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 04:52	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 04:52	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 04:52	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 04:52	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 04:52	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 04:52	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 04:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 04:52	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 04:52	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 04:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 04:52	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-04-20210623

Lab Sample ID: 280-150245-25

Date Collected: 06/23/21 18:30

Matrix: Water

Date Received: 06/26/21 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			06/30/21 04:52	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 04:52	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 04:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 04:52	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 04:52	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 04:52	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 04:52	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 04:52	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 04:52	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 04:52	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 04:52	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 04:52	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 04:52	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 04:52	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 04:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 127					06/30/21 04:52	1
Toluene-d8 (Surr)	95		80 - 125					06/30/21 04:52	1
4-Bromofluorobenzene (Surr)	94		78 - 120					06/30/21 04:52	1
Dibromofluoromethane (Surr)	98		77 - 120					06/30/21 04:52	1

Client Sample ID: EB-05-20210624

Lab Sample ID: 280-150245-26

Date Collected: 06/24/21 17:35

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:13	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 05:13	1
Acrolein	ND		20	2.8	ug/L			06/30/21 05:13	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 05:13	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 05:13	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 05:13	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 05:13	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 05:13	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 05:13	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 05:13	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 05:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 05:13	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 05:13	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 05:13	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:13	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 05:13	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 05:13	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 05:13	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 05:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 05:13	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:13	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 05:13	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-05-20210624

Lab Sample ID: 280-150245-26

Date Collected: 06/24/21 17:35

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:13	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 05:13	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 05:13	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 05:13	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 05:13	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 05:13	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:13	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:13	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 05:13	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 05:13	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 05:13	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 05:13	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 05:13	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 05:13	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 05:13	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 05:13	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 05:13	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 05:13	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 05:13	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 05:13	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 05:13	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 05:13	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 05:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 05:13	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 05:13	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 05:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 05:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 05:13	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 05:13	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 05:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 05:13	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 05:13	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 05:13	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 05:13	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 05:13	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 05:13	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 05:13	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 05:13	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 05:13	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 05:13	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 05:13	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 05:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 127					06/30/21 05:13	1
Toluene-d8 (Surr)	100		80 - 125					06/30/21 05:13	1
4-Bromofluorobenzene (Surr)	97		78 - 120					06/30/21 05:13	1
Dibromofluoromethane (Surr)	100		77 - 120					06/30/21 05:13	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-06-20210625

Lab Sample ID: 280-150245-27

Date Collected: 06/25/21 12:30

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:34	1
Acetonitrile	ND		30	9.6	ug/L			06/30/21 05:34	1
Acrolein	ND		20	2.8	ug/L			06/30/21 05:34	1
Acrylonitrile	ND		20	1.4	ug/L			06/30/21 05:34	1
Benzene	ND		1.0	0.16	ug/L			06/30/21 05:34	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/30/21 05:34	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/30/21 05:34	1
Bromoform	ND		1.0	0.46	ug/L			06/30/21 05:34	1
Bromomethane	ND		2.0	0.21	ug/L			06/30/21 05:34	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/30/21 05:34	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/30/21 05:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/30/21 05:34	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/30/21 05:34	1
Chloroprene	ND		1.0	0.21	ug/L			06/30/21 05:34	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:34	1
Chloroethane	ND		2.0	0.41	ug/L			06/30/21 05:34	1
Chloroform	ND		1.0	0.16	ug/L			06/30/21 05:34	1
Chloromethane	ND		2.0	0.30	ug/L			06/30/21 05:34	1
Allyl chloride	ND		2.0	0.17	ug/L			06/30/21 05:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/30/21 05:34	1
Dibromomethane	ND		1.0	0.17	ug/L			06/30/21 05:34	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/30/21 05:34	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/30/21 05:34	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/30/21 05:34	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/30/21 05:34	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/30/21 05:34	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/30/21 05:34	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/30/21 05:34	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:34	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/30/21 05:34	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/30/21 05:34	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/30/21 05:34	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/30/21 05:34	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/30/21 05:34	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/30/21 05:34	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/30/21 05:34	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/30/21 05:34	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/30/21 05:34	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/30/21 05:34	1
2-Hexanone	ND		5.0	1.7	ug/L			06/30/21 05:34	1
Iodomethane	ND		1.0	0.23	ug/L			06/30/21 05:34	1
Isobutyl alcohol	ND		110	37	ug/L			06/30/21 05:34	1
Methacrylonitrile	ND		10	1.6	ug/L			06/30/21 05:34	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/30/21 05:34	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/30/21 05:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/30/21 05:34	1
Propionitrile	ND		20	3.7	ug/L			06/30/21 05:34	1
Styrene	ND		1.0	0.36	ug/L			06/30/21 05:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/21 05:34	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-06-20210625

Lab Sample ID: 280-150245-27

Date Collected: 06/25/21 12:30

Matrix: Water

Date Received: 06/26/21 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			06/30/21 05:34	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/30/21 05:34	1
Toluene	ND		1.0	0.17	ug/L			06/30/21 05:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/30/21 05:34	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/30/21 05:34	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/30/21 05:34	1
Trichloroethene	ND		1.0	0.16	ug/L			06/30/21 05:34	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/30/21 05:34	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/30/21 05:34	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/30/21 05:34	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/30/21 05:34	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/30/21 05:34	1
o-Xylene	ND		1.0	0.19	ug/L			06/30/21 05:34	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/30/21 05:34	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/30/21 05:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127					06/30/21 05:34	1
Toluene-d8 (Surr)	102		80 - 125					06/30/21 05:34	1
4-Bromofluorobenzene (Surr)	95		78 - 120					06/30/21 05:34	1
Dibromofluoromethane (Surr)	97		77 - 120					06/30/21 05:34	1

Default Detection Limits

Client: CDM Smith, Inc.

Job ID: 280-150245-1

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: 280-150245-1

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.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-127)	TOL (80-125)	BFB (78-120)	DBFM (77-120)
280-150245-1	Muni-Well-14-20210621	98	99	94	100
280-150245-2	Muni-Well-33-20210621	100	98	96	101
280-150245-3	RW-8249P-20210621	99	100	96	100
280-150245-4	RW-7773P-20210621	97	99	95	99
280-150245-5	RW-7773PQ-20210621	98	99	97	100
280-150245-6	RW-7200P-20210621	98	99	96	101
280-150245-7	RW-7586P-20210621	99	99	96	100
280-150245-8	RW-7677P-20210621	98	100	95	100
280-150245-9	RW-8000B-20210622	95	99	96	100
280-150245-10	PA-1-20210622	98	98	95	99
280-150245-10 MS	PA-1-20210622	97	99	92	100
280-150245-10 MS	PA-1-20210622	100	97	95	102
280-150245-10 MSD	PA-1-20210622	99	97	96	102
280-150245-10 MSD	PA-1-20210622	99	98	95	101
280-150245-11	MW-37-20210622	98	99	96	100
280-150245-12	MW-37Q-20210622	95	96	93	99
280-150245-13	PA-3-20210622	95	97	93	101
280-150245-14	RW-7091R-20210622	96	100	93	96
280-150245-15	RW-2151H-20210623	97	99	92	97
280-150245-16	PA-8-37-47-20210623	96	99	93	96
280-150245-17	PA-8-77-87-20210623	94	98	95	98
280-150245-18	RW-8030P-20210623	97	97	96	99
280-150245-18 MS	RW-8030P-20210623	96	97	94	99
280-150245-18 MS	RW-8030P-20210623	96	100	95	95
280-150245-18 MSD	RW-8030P-20210623	98	98	94	99
280-150245-18 MSD	RW-8030P-20210623	95	97	97	95
280-150245-19	RW-2172H-20210623	93	98	98	97
280-150245-20	RW-2172HQ-20210623	99	96	93	96
280-150245-21	TB-01-20210625	96	100	95	97
280-150245-22	EB-01-20210622	94	99	93	99
280-150245-23	EB-02-20210622	98	99	94	97
280-150245-24	EB-03-20210623	94	100	94	99
280-150245-25	EB-04-20210623	97	95	94	98
280-150245-26	EB-05-20210624	94	100	97	100
280-150245-27	EB-06-20210625	96	102	95	97
LCS 280-541784/4	Lab Control Sample	100	99	95	100
LCS 280-541784/6	Lab Control Sample	98	98	95	101
LCS 280-541786/4	Lab Control Sample	96	98	97	99
LCS 280-541786/6	Lab Control Sample	95	97	91	98
LCSD 280-541784/5	Lab Control Sample Dup	99	99	95	102
LCSD 280-541784/7	Lab Control Sample Dup	99	98	97	100
LCSD 280-541786/5	Lab Control Sample Dup	97	100	97	96
LCSD 280-541786/7	Lab Control Sample Dup	93	96	96	96
MB 280-541784/9	Method Blank	98	99	96	100
MB 280-541786/9	Method Blank	96	98	94	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: CDM Smith, Inc.

Job ID: 280-150245-1

Project/Site: Bannock Ft. Hall Mine LF, Idaho

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-541784/9

Matrix: Water

Analysis Batch: 541784

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.76	J	10	1.9	ug/L			06/29/21 23:53	1
Acetonitrile	ND		30	9.6	ug/L			06/29/21 23:53	1
Acrolein	ND		20	2.8	ug/L			06/29/21 23:53	1
Acrylonitrile	ND		20	1.4	ug/L			06/29/21 23:53	1
Benzene	ND		1.0	0.16	ug/L			06/29/21 23:53	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/29/21 23:53	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/29/21 23:53	1
Bromoform	ND		1.0	0.46	ug/L			06/29/21 23:53	1
Bromomethane	ND		2.0	0.21	ug/L			06/29/21 23:53	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/29/21 23:53	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/29/21 23:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/29/21 23:53	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/29/21 23:53	1
Chloroprene	ND		1.0	0.21	ug/L			06/29/21 23:53	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/29/21 23:53	1
Chloroethane	ND		2.0	0.41	ug/L			06/29/21 23:53	1
Chloroform	ND		1.0	0.16	ug/L			06/29/21 23:53	1
Chloromethane	ND		2.0	0.30	ug/L			06/29/21 23:53	1
Allyl chloride	ND		2.0	0.17	ug/L			06/29/21 23:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/29/21 23:53	1
Dibromomethane	ND		1.0	0.17	ug/L			06/29/21 23:53	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/29/21 23:53	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/29/21 23:53	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/29/21 23:53	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/29/21 23:53	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/29/21 23:53	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/29/21 23:53	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/29/21 23:53	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/29/21 23:53	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/29/21 23:53	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/29/21 23:53	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/29/21 23:53	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/29/21 23:53	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/29/21 23:53	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/29/21 23:53	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/29/21 23:53	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/29/21 23:53	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/29/21 23:53	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/29/21 23:53	1
2-Hexanone	ND		5.0	1.7	ug/L			06/29/21 23:53	1
Iodomethane	ND		1.0	0.23	ug/L			06/29/21 23:53	1
Isobutyl alcohol	ND		110	37	ug/L			06/29/21 23:53	1
Methacrylonitrile	ND		10	1.6	ug/L			06/29/21 23:53	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/29/21 23:53	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/29/21 23:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/29/21 23:53	1
Propionitrile	ND		20	3.7	ug/L			06/29/21 23:53	1
Styrene	ND		1.0	0.36	ug/L			06/29/21 23:53	1

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-541784/9

Matrix: Water

Analysis Batch: 541784

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			06/29/21 23:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/29/21 23:53	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/29/21 23:53	1
Toluene	ND		1.0	0.17	ug/L			06/29/21 23:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/29/21 23:53	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/29/21 23:53	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/29/21 23:53	1
Trichloroethene	ND		1.0	0.16	ug/L			06/29/21 23:53	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/29/21 23:53	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/29/21 23:53	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/29/21 23:53	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/29/21 23:53	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/29/21 23:53	1
o-Xylene	ND		1.0	0.19	ug/L			06/29/21 23:53	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/29/21 23:53	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/29/21 23:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 127		06/29/21 23:53	1
Toluene-d8 (Surr)	99		80 - 125		06/29/21 23:53	1
4-Bromofluorobenzene (Surr)	96		78 - 120		06/29/21 23:53	1
Dibromofluoromethane (Surr)	100		77 - 120		06/29/21 23:53	1

Lab Sample ID: LCS 280-541784/4

Matrix: Water

Analysis Batch: 541784

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	98.7		ug/L		99	39 - 156
Acrolein	247	239		ug/L		97	36 - 147
Acrylonitrile	250	247		ug/L		99	56 - 135
Benzene	25.0	25.9		ug/L		104	65 - 135
Chlorobromomethane	25.0	26.3		ug/L		105	65 - 135
Dichlorobromomethane	25.0	26.2		ug/L		105	65 - 135
Bromoform	25.0	26.5		ug/L		106	62 - 135
Bromomethane	25.0	31.2		ug/L		125	45 - 135
2-Butanone (MEK)	100	98.0		ug/L		98	44 - 177
Carbon disulfide	25.0	23.7		ug/L		95	55 - 143
Carbon tetrachloride	25.0	28.8		ug/L		115	65 - 135
Chlorobenzene	25.0	25.7		ug/L		103	65 - 135
Chlorodibromomethane	25.0	25.6		ug/L		102	65 - 135
Chloroethane	25.0	25.8		ug/L		103	46 - 136
Chloroform	25.0	25.6		ug/L		102	65 - 135
Chloromethane	25.0	24.2		ug/L		97	34 - 145
Allyl chloride	25.0	25.0		ug/L		100	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	25.7		ug/L		103	57 - 135
Dibromomethane	25.0	26.1		ug/L		104	65 - 135
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	65 - 135

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-541784/4

Matrix: Water

Analysis Batch: 541784

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	25.3		ug/L		101	65 - 135
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135
trans-1,4-Dichloro-2-butene	25.0	20.6		ug/L		82	53 - 135
Dichlorodifluoromethane	25.0	30.7		ug/L		123	43 - 142
1,1-Dichloroethane	25.0	25.6		ug/L		102	65 - 135
1,2-Dichloroethane	25.0	24.8		ug/L		99	65 - 135
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	65 - 135
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	65 - 135
1,1-Dichloroethene	25.0	27.3		ug/L		109	65 - 136
1,2-Dichloropropane	25.0	25.1		ug/L		100	64 - 135
1,3-Dichloropropane	25.0	25.2		ug/L		101	64 - 135
2,2-Dichloropropane	25.0	27.4		ug/L		110	65 - 135
cis-1,3-Dichloropropene	25.0	24.9		ug/L		99	65 - 135
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	65 - 135
1,1-Dichloropropene	25.0	26.7		ug/L		107	65 - 135
Ethylbenzene	25.0	26.5		ug/L		106	65 - 135
Ethyl methacrylate	25.0	24.8		ug/L		99	50 - 135
2-Hexanone	100	98.6		ug/L		99	57 - 139
Iodomethane	25.0	26.1		ug/L		105	65 - 142
Isobutyl alcohol	625	621		ug/L		99	55 - 135
Methylene Chloride	25.0	23.8		ug/L		95	54 - 141
4-Methyl-2-pentanone (MIBK)	100	102		ug/L		102	60 - 150
Styrene	25.0	25.9		ug/L		104	65 - 135
1,1,1,2-Tetrachloroethane	25.0	26.4		ug/L		106	65 - 135
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		99	58 - 135
Tetrachloroethene	25.0	27.8		ug/L		111	65 - 135
Toluene	25.0	25.9		ug/L		104	65 - 135
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	58 - 135
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	65 - 135
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	64 - 135
Trichloroethene	25.0	26.0		ug/L		104	65 - 135
Trichlorofluoromethane	25.0	28.5		ug/L		114	53 - 137
1,2,3-Trichloropropane	25.0	25.2		ug/L		101	65 - 135
Vinyl acetate	50.0	50.5		ug/L		101	11 - 187
Vinyl chloride	25.0	26.3		ug/L		105	40 - 137
m-Xylene & p-Xylene	25.0	26.0		ug/L		104	65 - 135
o-Xylene	25.0	26.0		ug/L		104	65 - 135
Xylenes, Total	50.0	52.0		ug/L		104	65 - 135
1,2-Dibromoethane	25.0	25.4		ug/L		101	65 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-541784/6

Matrix: Water

Analysis Batch: 541784

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	250	205		ug/L		82	50 - 150
Chloroprene	25.0	23.9		ug/L		96	50 - 150
Methacrylonitrile	250	220		ug/L		88	50 - 150
Methyl methacrylate	50.0	46.8		ug/L		94	50 - 150
Propionitrile	250	215		ug/L		86	50 - 150

Surrogate	%Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

Lab Sample ID: LCSD 280-541784/5

Matrix: Water

Analysis Batch: 541784

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	95.8		ug/L		96	39 - 156	3	23
Acrolein	247	238		ug/L		96	36 - 147	1	30
Acrylonitrile	250	243		ug/L		97	56 - 135	1	30
Benzene	25.0	25.5		ug/L		102	65 - 135	1	20
Chlorobromomethane	25.0	26.2		ug/L		105	65 - 135	0	29
Dichlorobromomethane	25.0	25.7		ug/L		103	65 - 135	2	20
Bromoform	25.0	26.7		ug/L		107	62 - 135	1	27
Bromomethane	25.0	29.4		ug/L		118	45 - 135	6	33
2-Butanone (MEK)	100	94.5		ug/L		95	44 - 177	4	32
Carbon disulfide	25.0	23.2		ug/L		93	55 - 143	2	20
Carbon tetrachloride	25.0	27.5		ug/L		110	65 - 135	5	21
Chlorobenzene	25.0	25.0		ug/L		100	65 - 135	3	20
Chlorodibromomethane	25.0	25.4		ug/L		102	65 - 135	1	20
Chloroethane	25.0	25.9		ug/L		104	46 - 136	0	25
Chloroform	25.0	25.3		ug/L		101	65 - 135	1	20
Chloromethane	25.0	23.4		ug/L		94	34 - 145	3	24
Allyl chloride	25.0	23.5		ug/L		94	50 - 135	6	30
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	57 - 135	5	22
Dibromomethane	25.0	25.8		ug/L		103	65 - 135	1	26
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	65 - 135	3	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	65 - 135	3	20
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	65 - 135	3	23
trans-1,4-Dichloro-2-butene	25.0	19.1		ug/L		76	53 - 135	8	25
Dichlorodifluoromethane	25.0	30.3		ug/L		121	43 - 142	1	30
1,1-Dichloroethane	25.0	25.2		ug/L		101	65 - 135	2	21
1,2-Dichloroethane	25.0	24.4		ug/L		98	65 - 135	2	20
cis-1,2-Dichloroethene	25.0	25.6		ug/L		103	65 - 135	2	20
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	65 - 135	1	24
1,1-Dichloroethene	25.0	26.2		ug/L		105	65 - 136	4	20
1,2-Dichloropropane	25.0	24.5		ug/L		98	64 - 135	3	20
1,3-Dichloropropane	25.0	24.6		ug/L		98	64 - 135	2	20

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-541784/5

Matrix: Water

Analysis Batch: 541784

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	27.0		ug/L		108	65 - 135	2	20
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	65 - 135	2	26
trans-1,3-Dichloropropene	25.0	24.9		ug/L		100	65 - 135	1	26
1,1-Dichloropropene	25.0	26.0		ug/L		104	65 - 135	3	21
Ethylbenzene	25.0	25.4		ug/L		102	65 - 135	4	20
Ethyl methacrylate	25.0	24.3		ug/L		97	50 - 135	2	30
2-Hexanone	100	96.8		ug/L		97	57 - 139	2	25
Iodomethane	25.0	26.3		ug/L		105	65 - 142	1	25
Isobutyl alcohol	625	623		ug/L		100	55 - 135	0	30
Methylene Chloride	25.0	23.5		ug/L		94	54 - 141	1	26
4-Methyl-2-pentanone (MIBK)	100	99.9		ug/L		100	60 - 150	2	22
Styrene	25.0	25.3		ug/L		101	65 - 135	2	26
1,1,1,2-Tetrachloroethane	25.0	25.6		ug/L		102	65 - 135	3	20
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	58 - 135	4	20
Tetrachloroethene	25.0	26.9		ug/L		107	65 - 135	3	20
Toluene	25.0	25.5		ug/L		102	65 - 135	1	20
1,2,4-Trichlorobenzene	25.0	24.3		ug/L		97	58 - 135	1	25
1,1,1-Trichloroethane	25.0	26.6		ug/L		106	65 - 135	2	20
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	64 - 135	0	27
Trichloroethene	25.0	25.6		ug/L		103	65 - 135	1	20
Trichlorofluoromethane	25.0	27.5		ug/L		110	53 - 137	4	27
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	65 - 135	4	23
Vinyl acetate	50.0	51.1		ug/L		102	11 - 187	1	24
Vinyl chloride	25.0	25.3		ug/L		101	40 - 137	4	24
m-Xylene & p-Xylene	25.0	25.0		ug/L		100	65 - 135	4	20
o-Xylene	25.0	25.1		ug/L		100	65 - 135	4	20
Xylenes, Total	50.0	50.1		ug/L		100	65 - 135	4	20
1,2-Dibromoethane	25.0	24.7		ug/L		99	65 - 135	3	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

Lab Sample ID: LCSD 280-541784/7

Matrix: Water

Analysis Batch: 541784

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	202		ug/L		81	50 - 150	2	30
Chloroprene	25.0	23.6		ug/L		94	50 - 150	1	30
Methacrylonitrile	250	217		ug/L		87	50 - 150	1	30
Methyl methacrylate	50.0	47.4		ug/L		95	50 - 150	1	30
Propionitrile	250	211		ug/L		85	50 - 150	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-541784/7

Matrix: Water

Analysis Batch: 541784

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

Lab Sample ID: 280-150245-10 MS

Matrix: Water

Analysis Batch: 541784

Client Sample ID: PA-1-20210622

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	85.4		ug/L		85	39 - 156
Acrolein	ND		247	229		ug/L		93	36 - 147
Acrylonitrile	ND		250	230		ug/L		92	56 - 135
Benzene	ND		25.0	25.8		ug/L		103	65 - 135
Chlorobromomethane	ND		25.0	26.3		ug/L		105	65 - 135
Dichlorobromomethane	ND		25.0	25.2		ug/L		101	65 - 135
Bromoform	ND		25.0	24.0		ug/L		96	62 - 135
Bromomethane	ND		25.0	26.9		ug/L		108	45 - 135
2-Butanone (MEK)	ND		100	88.0		ug/L		88	44 - 177
Carbon disulfide	ND		25.0	23.1		ug/L		92	55 - 143
Carbon tetrachloride	ND		25.0	28.2		ug/L		113	65 - 135
Chlorobenzene	ND		25.0	25.4		ug/L		102	65 - 135
Chlorodibromomethane	ND		25.0	24.5		ug/L		98	65 - 135
Chloroethane	ND		25.0	26.7		ug/L		107	46 - 136
Chloroform	ND		25.0	25.4		ug/L		102	65 - 135
Chloromethane	ND		25.0	25.0		ug/L		100	34 - 145
Allyl chloride	ND		25.0	23.9		ug/L		96	50 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	22.1		ug/L		88	57 - 135
Dibromomethane	ND		25.0	25.3		ug/L		101	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	65 - 135
1,3-Dichlorobenzene	ND		25.0	24.1		ug/L		96	65 - 135
1,4-Dichlorobenzene	ND		25.0	23.3		ug/L		93	65 - 135
trans-1,4-Dichloro-2-butene	ND		25.0	17.2		ug/L		69	53 - 135
Dichlorodifluoromethane	ND		25.0	32.1		ug/L		128	43 - 142
1,1-Dichloroethane	ND		25.0	25.1		ug/L		100	65 - 135
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	65 - 135
cis-1,2-Dichloroethene	ND		25.0	25.9		ug/L		104	65 - 135
trans-1,2-Dichloroethene	ND		25.0	26.4		ug/L		106	65 - 135
1,1-Dichloroethene	ND		25.0	27.0		ug/L		108	65 - 136
1,2-Dichloropropane	ND		25.0	24.6		ug/L		99	64 - 135
1,3-Dichloropropane	ND		25.0	24.8		ug/L		99	64 - 135
2,2-Dichloropropane	ND		25.0	24.9		ug/L		100	65 - 135
cis-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	65 - 135
trans-1,3-Dichloropropene	ND		25.0	23.3		ug/L		93	65 - 135
1,1-Dichloropropene	ND		25.0	26.9		ug/L		108	65 - 135
Ethylbenzene	ND		25.0	26.2		ug/L		105	65 - 135
Ethyl methacrylate	ND		25.0	23.7		ug/L		95	50 - 135
2-Hexanone	ND		100	90.2		ug/L		90	57 - 139
Iodomethane	ND		25.0	24.1		ug/L		96	65 - 142

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-10 MS

Matrix: Water

Analysis Batch: 541784

Client Sample ID: PA-1-20210622

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isobutyl alcohol	ND		625	560		ug/L		90	55 - 135
Methylene Chloride	ND		25.0	23.4		ug/L		94	54 - 141
4-Methyl-2-pentanone (MIBK)	ND		100	93.3		ug/L		93	60 - 150
Styrene	ND		25.0	25.9		ug/L		104	65 - 135
1,1,1,2-Tetrachloroethane	ND		25.0	26.0		ug/L		104	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	22.4		ug/L		90	58 - 135
Tetrachloroethene	ND		25.0	28.2		ug/L		113	65 - 135
Toluene	ND		25.0	25.8		ug/L		103	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	22.8		ug/L		91	58 - 135
1,1,1-Trichloroethane	ND		25.0	27.7		ug/L		111	65 - 135
1,1,2-Trichloroethane	ND		25.0	25.5		ug/L		102	64 - 135
Trichloroethene	1.5		25.0	27.8		ug/L		105	65 - 135
Trichlorofluoromethane	ND		25.0	30.0		ug/L		120	53 - 137
1,2,3-Trichloropropane	ND		25.0	23.0		ug/L		92	65 - 135
Vinyl acetate	ND		50.0	45.1		ug/L		90	11 - 187
Vinyl chloride	ND		25.0	27.3		ug/L		109	40 - 137
m-Xylene & p-Xylene	ND		25.0	26.1		ug/L		104	65 - 135
o-Xylene	ND		25.0	25.9		ug/L		104	65 - 135
Xylenes, Total	ND		50.0	52.0		ug/L		104	65 - 135
1,2-Dibromoethane	ND		25.0	24.7		ug/L		99	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	92		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

Lab Sample ID: 280-150245-10 MS

Matrix: Water

Analysis Batch: 541784

Client Sample ID: PA-1-20210622

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	ND		250	192		ug/L		77	50 - 150
Chloroprene	ND		25.0	22.7		ug/L		91	50 - 150
Methacrylonitrile	ND		250	212		ug/L		85	50 - 150
Methyl methacrylate	ND		50.0	46.8		ug/L		94	50 - 150
Propionitrile	ND		250	206		ug/L		83	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-10 MSD

Matrix: Water

Analysis Batch: 541784

Client Sample ID: PA-1-20210622

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	88.2		ug/L		88	39 - 156	3	23
Acrolein	ND		247	224		ug/L		91	36 - 147	2	30
Acrylonitrile	ND		250	225		ug/L		90	56 - 135	2	30
Benzene	ND		25.0	24.8		ug/L		99	65 - 135	4	20
Chlorobromomethane	ND		25.0	25.9		ug/L		104	65 - 135	2	29
Dichlorobromomethane	ND		25.0	24.5		ug/L		98	65 - 135	3	20
Bromoform	ND		25.0	23.8		ug/L		95	62 - 135	1	27
Bromomethane	ND		25.0	27.1		ug/L		108	45 - 135	1	33
2-Butanone (MEK)	ND		100	86.2		ug/L		86	44 - 177	2	32
Carbon disulfide	ND		25.0	21.8		ug/L		87	55 - 143	6	20
Carbon tetrachloride	ND		25.0	26.8		ug/L		107	65 - 135	5	21
Chlorobenzene	ND		25.0	24.3		ug/L		97	65 - 135	4	20
Chlorodibromomethane	ND		25.0	23.8		ug/L		95	65 - 135	3	20
Chloroethane	ND		25.0	24.4		ug/L		98	46 - 136	9	25
Chloroform	ND		25.0	24.7		ug/L		99	65 - 135	3	20
Chloromethane	ND		25.0	23.9		ug/L		95	34 - 145	5	24
Allyl chloride	ND		25.0	22.4		ug/L		90	50 - 135	6	30
1,2-Dibromo-3-Chloropropane	ND		25.0	23.4		ug/L		94	57 - 135	6	22
Dibromomethane	ND		25.0	24.4		ug/L		98	65 - 135	4	26
1,2-Dichlorobenzene	ND		25.0	24.1		ug/L		97	65 - 135	1	20
1,3-Dichlorobenzene	ND		25.0	24.5		ug/L		98	65 - 135	1	20
1,4-Dichlorobenzene	ND		25.0	23.6		ug/L		95	65 - 135	2	23
trans-1,4-Dichloro-2-butene	ND		25.0	18.4		ug/L		74	53 - 135	7	25
Dichlorodifluoromethane	ND		25.0	30.7		ug/L		123	43 - 142	4	30
1,1-Dichloroethane	ND		25.0	24.2		ug/L		97	65 - 135	4	21
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	65 - 135	0	20
cis-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	65 - 135	5	20
trans-1,2-Dichloroethene	ND		25.0	25.1		ug/L		100	65 - 135	5	24
1,1-Dichloroethene	ND		25.0	24.9		ug/L		100	65 - 136	8	20
1,2-Dichloropropane	ND		25.0	23.5		ug/L		94	64 - 135	5	20
1,3-Dichloropropane	ND		25.0	23.8		ug/L		95	64 - 135	4	20
2,2-Dichloropropane	ND		25.0	23.6		ug/L		95	65 - 135	5	20
cis-1,3-Dichloropropene	ND		25.0	22.6		ug/L		90	65 - 135	6	26
trans-1,3-Dichloropropene	ND		25.0	23.4		ug/L		93	65 - 135	0	26
1,1-Dichloropropene	ND		25.0	25.1		ug/L		100	65 - 135	7	21
Ethylbenzene	ND		25.0	24.2		ug/L		97	65 - 135	8	20
Ethyl methacrylate	ND		25.0	22.7		ug/L		91	50 - 135	4	30
2-Hexanone	ND		100	85.6		ug/L		86	57 - 139	5	25
Iodomethane	ND		25.0	24.1		ug/L		97	65 - 142	0	25
Isobutyl alcohol	ND		625	530		ug/L		85	55 - 135	5	30
Methylene Chloride	ND		25.0	22.8		ug/L		91	54 - 141	3	26
4-Methyl-2-pentanone (MIBK)	ND		100	89.6		ug/L		90	60 - 150	4	22
Styrene	ND		25.0	24.7		ug/L		99	65 - 135	5	26
1,1,1,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	65 - 135	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.2		ug/L		93	58 - 135	3	20
Tetrachloroethene	ND		25.0	26.2		ug/L		105	65 - 135	8	20
Toluene	ND		25.0	24.7		ug/L		99	65 - 135	4	20
1,2,4-Trichlorobenzene	ND		25.0	23.9		ug/L		96	58 - 135	5	25

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-10 MSD

Matrix: Water

Analysis Batch: 541784

Client Sample ID: PA-1-20210622

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	26.0		ug/L		104	65 - 135	6	20
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	64 - 135	3	27
Trichloroethene	1.5		25.0	25.6		ug/L		97	65 - 135	8	20
Trichlorofluoromethane	ND		25.0	28.1		ug/L		112	53 - 137	7	27
1,2,3-Trichloropropane	ND		25.0	23.5		ug/L		94	65 - 135	2	23
Vinyl acetate	ND		50.0	44.2		ug/L		88	11 - 187	2	24
Vinyl chloride	ND		25.0	25.9		ug/L		103	40 - 137	5	24
m-Xylene & p-Xylene	ND		25.0	24.2		ug/L		97	65 - 135	7	20
o-Xylene	ND		25.0	24.1		ug/L		96	65 - 135	7	20
Xylenes, Total	ND		50.0	48.3		ug/L		97	65 - 135	7	20
1,2-Dibromoethane	ND		25.0	23.9		ug/L		96	65 - 135	3	27

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

Lab Sample ID: 280-150245-10 MSD

Matrix: Water

Analysis Batch: 541784

Client Sample ID: PA-1-20210622

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile	ND		250	194		ug/L		78	50 - 150	1	30
Chloroprene	ND		25.0	22.2		ug/L		89	50 - 150	2	30
Methacrylonitrile	ND		250	212		ug/L		85	50 - 150	0	30
Methyl methacrylate	ND		50.0	45.8		ug/L		92	50 - 150	2	30
Propionitrile	ND		250	203		ug/L		81	50 - 150	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

Lab Sample ID: MB 280-541786/9

Matrix: Water

Analysis Batch: 541786

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			06/29/21 23:41	1
Acetonitrile	ND		30	9.6	ug/L			06/29/21 23:41	1
Acrolein	ND		20	2.8	ug/L			06/29/21 23:41	1
Acrylonitrile	ND		20	1.4	ug/L			06/29/21 23:41	1
Benzene	ND		1.0	0.16	ug/L			06/29/21 23:41	1
Chlorobromomethane	ND		1.0	0.10	ug/L			06/29/21 23:41	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			06/29/21 23:41	1
Bromoform	ND		1.0	0.46	ug/L			06/29/21 23:41	1

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-541786/9

Matrix: Water

Analysis Batch: 541786

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		2.0	0.21	ug/L			06/29/21 23:41	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			06/29/21 23:41	1
Carbon disulfide	ND		2.0	0.17	ug/L			06/29/21 23:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			06/29/21 23:41	1
Chlorobenzene	ND		1.0	0.17	ug/L			06/29/21 23:41	1
Chloroprene	ND		1.0	0.21	ug/L			06/29/21 23:41	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			06/29/21 23:41	1
Chloroethane	ND		2.0	0.41	ug/L			06/29/21 23:41	1
Chloroform	ND		1.0	0.16	ug/L			06/29/21 23:41	1
Chloromethane	ND		2.0	0.30	ug/L			06/29/21 23:41	1
Allyl chloride	ND		2.0	0.17	ug/L			06/29/21 23:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			06/29/21 23:41	1
Dibromomethane	ND		1.0	0.17	ug/L			06/29/21 23:41	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/29/21 23:41	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			06/29/21 23:41	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			06/29/21 23:41	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			06/29/21 23:41	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			06/29/21 23:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			06/29/21 23:41	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			06/29/21 23:41	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/29/21 23:41	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			06/29/21 23:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			06/29/21 23:41	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			06/29/21 23:41	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			06/29/21 23:41	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			06/29/21 23:41	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			06/29/21 23:41	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			06/29/21 23:41	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			06/29/21 23:41	1
Ethylbenzene	ND		1.0	0.16	ug/L			06/29/21 23:41	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			06/29/21 23:41	1
2-Hexanone	ND		5.0	1.7	ug/L			06/29/21 23:41	1
Iodomethane	ND		1.0	0.23	ug/L			06/29/21 23:41	1
Isobutyl alcohol	ND		110	37	ug/L			06/29/21 23:41	1
Methacrylonitrile	ND		10	1.6	ug/L			06/29/21 23:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			06/29/21 23:41	1
Methyl methacrylate	ND		4.0	1.1	ug/L			06/29/21 23:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			06/29/21 23:41	1
Propionitrile	ND		20	3.7	ug/L			06/29/21 23:41	1
Styrene	ND		1.0	0.36	ug/L			06/29/21 23:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/29/21 23:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/29/21 23:41	1
Tetrachloroethene	ND		1.0	0.20	ug/L			06/29/21 23:41	1
Toluene	ND		1.0	0.17	ug/L			06/29/21 23:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			06/29/21 23:41	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			06/29/21 23:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			06/29/21 23:41	1
Trichloroethene	ND		1.0	0.16	ug/L			06/29/21 23:41	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			06/29/21 23:41	1

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-541786/9

Matrix: Water

Analysis Batch: 541786

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			06/29/21 23:41	1
Vinyl acetate	ND		3.0	0.94	ug/L			06/29/21 23:41	1
Vinyl chloride	ND		1.0	0.10	ug/L			06/29/21 23:41	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			06/29/21 23:41	1
o-Xylene	ND		1.0	0.19	ug/L			06/29/21 23:41	1
Xylenes, Total	ND		2.0	0.19	ug/L			06/29/21 23:41	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			06/29/21 23:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127		06/29/21 23:41	1
Toluene-d8 (Surr)	98		80 - 125		06/29/21 23:41	1
4-Bromofluorobenzene (Surr)	94		78 - 120		06/29/21 23:41	1
Dibromofluoromethane (Surr)	98		77 - 120		06/29/21 23:41	1

Lab Sample ID: LCS 280-541786/4

Matrix: Water

Analysis Batch: 541786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	82.0		ug/L		82	39 - 156
Acrolein	247	217		ug/L		88	36 - 147
Acrylonitrile	250	231		ug/L		92	56 - 135
Benzene	25.0	26.4		ug/L		106	65 - 135
Chlorobromomethane	25.0	25.0		ug/L		100	65 - 135
Dichlorobromomethane	25.0	21.6		ug/L		86	65 - 135
Bromoform	25.0	19.4		ug/L		78	62 - 135
Bromomethane	25.0	25.3		ug/L		101	45 - 135
2-Butanone (MEK)	100	81.1		ug/L		81	44 - 177
Carbon disulfide	25.0	24.4		ug/L		98	55 - 143
Carbon tetrachloride	25.0	23.0		ug/L		92	65 - 135
Chlorobenzene	25.0	24.3		ug/L		97	65 - 135
Chlorodibromomethane	25.0	21.3		ug/L		85	65 - 135
Chloroethane	25.0	25.6		ug/L		103	46 - 136
Chloroform	25.0	25.0		ug/L		100	65 - 135
Chloromethane	25.0	25.1		ug/L		100	34 - 145
Allyl chloride	25.0	24.9		ug/L		100	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	16.9		ug/L		68	57 - 135
Dibromomethane	25.0	24.8		ug/L		99	65 - 135
1,2-Dichlorobenzene	25.0	27.1		ug/L		109	65 - 135
1,3-Dichlorobenzene	25.0	26.6		ug/L		107	65 - 135
1,4-Dichlorobenzene	25.0	25.5		ug/L		102	65 - 135
trans-1,4-Dichloro-2-butene	25.0	19.1		ug/L		77	53 - 135
Dichlorodifluoromethane	25.0	24.3		ug/L		97	43 - 142
1,1-Dichloroethane	25.0	24.9		ug/L		100	65 - 135
1,2-Dichloroethane	25.0	24.7		ug/L		99	65 - 135
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	65 - 135
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	65 - 135
1,1-Dichloroethene	25.0	26.3		ug/L		105	65 - 136

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-541786/4

Matrix: Water

Analysis Batch: 541786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	24.7		ug/L		99	64 - 135
1,3-Dichloropropane	25.0	23.9		ug/L		96	64 - 135
2,2-Dichloropropane	25.0	24.7		ug/L		99	65 - 135
cis-1,3-Dichloropropene	25.0	22.9		ug/L		92	65 - 135
trans-1,3-Dichloropropene	25.0	23.2		ug/L		93	65 - 135
1,1-Dichloropropene	25.0	26.5		ug/L		106	65 - 135
Ethylbenzene	25.0	25.0		ug/L		100	65 - 135
Ethyl methacrylate	25.0	22.0		ug/L		88	50 - 135
2-Hexanone	100	87.2		ug/L		87	57 - 139
Iodomethane	25.0	24.6		ug/L		98	65 - 142
Isobutyl alcohol	625	447		ug/L		72	55 - 135
Methylene Chloride	25.0	25.7		ug/L		103	54 - 141
4-Methyl-2-pentanone (MIBK)	100	93.2		ug/L		93	60 - 150
Styrene	25.0	24.8		ug/L		99	65 - 135
1,1,1,2-Tetrachloroethane	25.0	23.7		ug/L		95	65 - 135
1,1,2,2-Tetrachloroethane	25.0	20.3		ug/L		81	58 - 135
Tetrachloroethene	25.0	28.9		ug/L		116	65 - 135
Toluene	25.0	25.8		ug/L		103	65 - 135
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	58 - 135
1,1,1-Trichloroethane	25.0	23.1		ug/L		93	65 - 135
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	64 - 135
Trichloroethene	25.0	23.4		ug/L		94	65 - 135
Trichlorofluoromethane	25.0	27.1		ug/L		108	53 - 137
1,2,3-Trichloropropane	25.0	23.2		ug/L		93	65 - 135
Vinyl acetate	50.0	47.3		ug/L		95	11 - 187
Vinyl chloride	25.0	30.0		ug/L		120	40 - 137
m-Xylene & p-Xylene	25.0	25.3		ug/L		101	65 - 135
o-Xylene	25.0	25.9		ug/L		104	65 - 135
Xylenes, Total	50.0	51.2		ug/L		102	65 - 135
1,2-Dibromoethane	25.0	24.2		ug/L		97	65 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120

Lab Sample ID: LCS 280-541786/6

Matrix: Water

Analysis Batch: 541786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	250	235		ug/L		94	50 - 150
Chloroprene	25.0	24.6		ug/L		98	50 - 150
Methacrylonitrile	250	247		ug/L		99	50 - 150
Methyl methacrylate	50.0	47.7		ug/L		95	50 - 150
Propionitrile	250	231		ug/L		92	50 - 150

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-541786/6

Matrix: Water

Analysis Batch: 541786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	91		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

Lab Sample ID: LCSD 280-541786/5

Matrix: Water

Analysis Batch: 541786

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	75.0		ug/L		75	39 - 156	9	23
Acrolein	247	199		ug/L		81	36 - 147	8	30
Acrylonitrile	250	214		ug/L		86	56 - 135	7	30
Benzene	25.0	24.5		ug/L		98	65 - 135	8	20
Chlorobromomethane	25.0	22.9		ug/L		92	65 - 135	9	29
Dichlorobromomethane	25.0	21.0		ug/L		84	65 - 135	3	20
Bromoform	25.0	18.3		ug/L		73	62 - 135	6	27
Bromomethane	25.0	23.6		ug/L		95	45 - 135	7	33
2-Butanone (MEK)	100	76.8		ug/L		77	44 - 177	6	32
Carbon disulfide	25.0	22.6		ug/L		90	55 - 143	8	20
Carbon tetrachloride	25.0	21.6		ug/L		87	65 - 135	6	21
Chlorobenzene	25.0	24.6		ug/L		98	65 - 135	1	20
Chlorodibromomethane	25.0	20.7		ug/L		83	65 - 135	3	20
Chloroethane	25.0	23.3		ug/L		93	46 - 136	10	25
Chloroform	25.0	22.5		ug/L		90	65 - 135	11	20
Chloromethane	25.0	22.5		ug/L		90	34 - 145	11	24
Allyl chloride	25.0	24.6		ug/L		99	50 - 135	1	30
1,2-Dibromo-3-Chloropropane	25.0	17.5		ug/L		70	57 - 135	3	22
Dibromomethane	25.0	23.2		ug/L		93	65 - 135	6	26
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	65 - 135	8	20
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	65 - 135	6	20
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	65 - 135	6	23
trans-1,4-Dichloro-2-butene	25.0	17.7		ug/L		71	53 - 135	8	25
Dichlorodifluoromethane	25.0	22.3		ug/L		89	43 - 142	8	30
1,1-Dichloroethane	25.0	22.9		ug/L		92	65 - 135	9	21
1,2-Dichloroethane	25.0	24.3		ug/L		97	65 - 135	1	20
cis-1,2-Dichloroethene	25.0	22.6		ug/L		91	65 - 135	7	20
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	65 - 135	11	24
1,1-Dichloroethene	25.0	23.4		ug/L		94	65 - 136	12	20
1,2-Dichloropropane	25.0	23.9		ug/L		96	64 - 135	3	20
1,3-Dichloropropane	25.0	23.3		ug/L		93	64 - 135	3	20
2,2-Dichloropropane	25.0	23.1		ug/L		92	65 - 135	7	20
cis-1,3-Dichloropropene	25.0	23.1		ug/L		92	65 - 135	1	26
trans-1,3-Dichloropropene	25.0	21.6		ug/L		86	65 - 135	7	26
1,1-Dichloropropene	25.0	23.7		ug/L		95	65 - 135	11	21
Ethylbenzene	25.0	24.3		ug/L		97	65 - 135	3	20
Ethyl methacrylate	25.0	22.4		ug/L		90	50 - 135	2	30
2-Hexanone	100	81.7		ug/L		82	57 - 139	6	25

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-541786/5

Matrix: Water

Analysis Batch: 541786

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
Iodomethane	25.0	22.9		ug/L		91	65 - 142	7	25
Isobutyl alcohol	625	439		ug/L		70	55 - 135	2	30
Methylene Chloride	25.0	24.1		ug/L		96	54 - 141	6	26
4-Methyl-2-pentanone (MIBK)	100	88.7		ug/L		89	60 - 150	5	22
Styrene	25.0	25.3		ug/L		101	65 - 135	2	26
1,1,1,2-Tetrachloroethane	25.0	23.2		ug/L		93	65 - 135	2	20
1,1,2,2-Tetrachloroethane	25.0	20.0		ug/L		80	58 - 135	1	20
Tetrachloroethene	25.0	27.5		ug/L		110	65 - 135	5	20
Toluene	25.0	24.2		ug/L		97	65 - 135	6	20
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	58 - 135	1	25
1,1,1-Trichloroethane	25.0	21.6		ug/L		86	65 - 135	7	20
1,1,2-Trichloroethane	25.0	21.7		ug/L		87	64 - 135	7	27
Trichloroethene	25.0	23.0		ug/L		92	65 - 135	1	20
Trichlorofluoromethane	25.0	25.3		ug/L		101	53 - 137	7	27
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	65 - 135	1	23
Vinyl acetate	50.0	45.8		ug/L		92	11 - 187	3	24
Vinyl chloride	25.0	27.4		ug/L		110	40 - 137	9	24
m-Xylene & p-Xylene	25.0	24.2		ug/L		97	65 - 135	4	20
o-Xylene	25.0	26.1		ug/L		105	65 - 135	1	20
Xylenes, Total	50.0	50.3		ug/L		101	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)	97		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

Lab Sample ID: LCSD 280-541786/7

Matrix: Water

Analysis Batch: 541786

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	241		ug/L		96	50 - 150	2	30
Chloroprene	25.0	24.0		ug/L		96	50 - 150	2	30
Methacrylonitrile	250	261		ug/L		104	50 - 150	5	30
Methyl methacrylate	50.0	49.6		ug/L		99	50 - 150	4	30
Propionitrile	250	231		ug/L		92	50 - 150	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-18 MS

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	65.3		ug/L		65	39 - 156
Acrolein	ND		247	176		ug/L		71	36 - 147
Acrylonitrile	ND		250	203		ug/L		81	56 - 135
Benzene	ND		25.0	24.8		ug/L		99	65 - 135
Chlorobromomethane	ND		25.0	24.7		ug/L		99	65 - 135
Dichlorobromomethane	ND		25.0	21.2		ug/L		85	65 - 135
Bromoform	ND		25.0	16.6		ug/L		66	62 - 135
Bromomethane	ND		25.0	25.1		ug/L		101	45 - 135
2-Butanone (MEK)	ND		100	64.4		ug/L		64	44 - 177
Carbon disulfide	ND		25.0	23.9		ug/L		96	55 - 143
Carbon tetrachloride	ND		25.0	22.6		ug/L		90	65 - 135
Chlorobenzene	ND		25.0	24.6		ug/L		98	65 - 135
Chlorodibromomethane	ND		25.0	19.2		ug/L		77	65 - 135
Chloroethane	ND		25.0	25.4		ug/L		102	46 - 136
Chloroform	ND		25.0	23.5		ug/L		94	65 - 135
Chloromethane	ND		25.0	24.0		ug/L		96	34 - 145
Allyl chloride	ND		25.0	25.0		ug/L		100	50 - 135
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	14.1	F1	ug/L		56	57 - 135
Dibromomethane	ND		25.0	22.4		ug/L		89	65 - 135
1,2-Dichlorobenzene	ND		25.0	24.8		ug/L		99	65 - 135
1,3-Dichlorobenzene	ND		25.0	24.2		ug/L		97	65 - 135
1,4-Dichlorobenzene	ND		25.0	24.1		ug/L		96	65 - 135
trans-1,4-Dichloro-2-butene	ND		25.0	15.1		ug/L		60	53 - 135
Dichlorodifluoromethane	ND		25.0	24.2		ug/L		97	43 - 142
1,1-Dichloroethane	ND		25.0	24.2		ug/L		97	65 - 135
1,2-Dichloroethane	ND		25.0	24.1		ug/L		97	65 - 135
cis-1,2-Dichloroethene	ND		25.0	24.3		ug/L		97	65 - 135
trans-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	65 - 135
1,1-Dichloroethene	ND		25.0	24.1		ug/L		96	65 - 136
1,2-Dichloropropane	ND		25.0	25.2		ug/L		101	64 - 135
1,3-Dichloropropane	ND		25.0	22.2		ug/L		89	64 - 135
2,2-Dichloropropane	ND		25.0	24.0		ug/L		96	65 - 135
cis-1,3-Dichloropropene	ND		25.0	21.7		ug/L		87	65 - 135
trans-1,3-Dichloropropene	ND		25.0	20.5		ug/L		82	65 - 135
1,1-Dichloropropene	ND		25.0	25.5		ug/L		102	65 - 135
Ethylbenzene	ND		25.0	25.6		ug/L		102	65 - 135
Ethyl methacrylate	ND		25.0	19.8		ug/L		79	50 - 135
2-Hexanone	ND		100	70.8		ug/L		71	57 - 139
Iodomethane	ND		25.0	20.8		ug/L		83	65 - 142
Isobutyl alcohol	ND	F1	625	330	F1	ug/L		53	55 - 135
Methylene Chloride	ND		25.0	25.3		ug/L		101	54 - 141
4-Methyl-2-pentanone (MIBK)	ND		100	76.5		ug/L		76	60 - 150
Styrene	ND		25.0	24.0		ug/L		96	65 - 135
1,1,1,2-Tetrachloroethane	ND		25.0	22.8		ug/L		91	65 - 135
1,1,1,2,2-Tetrachloroethane	ND		25.0	18.0		ug/L		72	58 - 135
Tetrachloroethene	0.80	J	25.0	28.2		ug/L		109	65 - 135
Toluene	ND		25.0	25.1		ug/L		101	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.5		ug/L		86	58 - 135

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-18 MS

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	22.6		ug/L		90	65 - 135
1,1,2-Trichloroethane	ND		25.0	22.7		ug/L		91	64 - 135
Trichloroethene	4.6		25.0	27.1		ug/L		90	65 - 135
Trichlorofluoromethane	ND		25.0	26.8		ug/L		107	53 - 137
1,2,3-Trichloropropane	ND		25.0	20.8		ug/L		83	65 - 135
Vinyl acetate	ND		50.0	41.0		ug/L		82	11 - 187
Vinyl chloride	ND		25.0	28.8		ug/L		115	40 - 137
m-Xylene & p-Xylene	ND		25.0	25.2		ug/L		101	65 - 135
o-Xylene	ND		25.0	25.1		ug/L		100	65 - 135
Xylenes, Total	ND		50.0	50.3		ug/L		101	65 - 135
1,2-Dibromoethane	ND		25.0	21.4		ug/L		86	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	94		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120

Lab Sample ID: 280-150245-18 MS

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	ND		250	222		ug/L		89	50 - 150
Chloroprene	ND		25.0	26.0		ug/L		104	50 - 150
Methacrylonitrile	ND		250	238		ug/L		95	50 - 150
Methyl methacrylate	ND		50.0	43.4		ug/L		87	50 - 150
Propionitrile	ND		250	209		ug/L		83	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

Lab Sample ID: 280-150245-18 MSD

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	65.6		ug/L		66	39 - 156	0	23
Acrolein	ND		247	183		ug/L		74	36 - 147	3	30
Acrylonitrile	ND		250	198		ug/L		79	56 - 135	3	30
Benzene	ND		25.0	25.2		ug/L		101	65 - 135	1	20
Chlorobromomethane	ND		25.0	24.5		ug/L		98	65 - 135	1	29
Dichlorobromomethane	ND		25.0	20.7		ug/L		83	65 - 135	2	20
Bromoform	ND		25.0	16.4		ug/L		66	62 - 135	1	27
Bromomethane	ND		25.0	24.3		ug/L		97	45 - 135	3	33

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QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-18 MSD

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	ND		100	65.4		ug/L		65	44 - 177	1	32
Carbon disulfide	ND		25.0	23.0		ug/L		92	55 - 143	4	20
Carbon tetrachloride	ND		25.0	22.7		ug/L		91	65 - 135	0	21
Chlorobenzene	ND		25.0	24.1		ug/L		96	65 - 135	2	20
Chlorodibromomethane	ND		25.0	20.3		ug/L		81	65 - 135	6	20
Chloroethane	ND		25.0	24.4		ug/L		97	46 - 136	4	25
Chloroform	ND		25.0	23.3		ug/L		93	65 - 135	1	20
Chloromethane	ND		25.0	23.6		ug/L		95	34 - 145	1	24
Allyl chloride	ND		25.0	24.8		ug/L		99	50 - 135	1	30
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	14.6		ug/L		58	57 - 135	3	22
Dibromomethane	ND		25.0	23.3		ug/L		93	65 - 135	4	26
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	65 - 135	4	20
1,3-Dichlorobenzene	ND		25.0	24.8		ug/L		99	65 - 135	3	20
1,4-Dichlorobenzene	ND		25.0	23.1		ug/L		92	65 - 135	4	23
trans-1,4-Dichloro-2-butene	ND		25.0	14.5		ug/L		58	53 - 135	4	25
Dichlorodifluoromethane	ND		25.0	23.4		ug/L		93	43 - 142	4	30
1,1-Dichloroethane	ND		25.0	24.2		ug/L		97	65 - 135	0	21
1,2-Dichloroethane	ND		25.0	23.1		ug/L		92	65 - 135	4	20
cis-1,2-Dichloroethene	ND		25.0	23.0		ug/L		92	65 - 135	5	20
trans-1,2-Dichloroethene	ND		25.0	23.2		ug/L		93	65 - 135	2	24
1,1-Dichloroethene	ND		25.0	24.5		ug/L		98	65 - 136	2	20
1,2-Dichloropropane	ND		25.0	24.0		ug/L		96	64 - 135	5	20
1,3-Dichloropropane	ND		25.0	22.5		ug/L		90	64 - 135	1	20
2,2-Dichloropropane	ND		25.0	23.1		ug/L		92	65 - 135	4	20
cis-1,3-Dichloropropene	ND		25.0	21.4		ug/L		86	65 - 135	1	26
trans-1,3-Dichloropropene	ND		25.0	20.2		ug/L		81	65 - 135	2	26
1,1-Dichloropropene	ND		25.0	25.2		ug/L		101	65 - 135	1	21
Ethylbenzene	ND		25.0	24.8		ug/L		99	65 - 135	3	20
Ethyl methacrylate	ND		25.0	19.4		ug/L		78	50 - 135	2	30
2-Hexanone	ND		100	69.3		ug/L		69	57 - 139	2	25
Iodomethane	ND		25.0	22.5		ug/L		90	65 - 142	8	25
Isobutyl alcohol	ND	F1	625	356		ug/L		57	55 - 135	8	30
Methylene Chloride	ND		25.0	24.5		ug/L		98	54 - 141	3	26
4-Methyl-2-pentanone (MIBK)	ND		100	74.1		ug/L		74	60 - 150	3	22
Styrene	ND		25.0	23.4		ug/L		94	65 - 135	2	26
1,1,1,2-Tetrachloroethane	ND		25.0	21.3		ug/L		85	65 - 135	7	20
1,1,2,2-Tetrachloroethane	ND		25.0	17.7		ug/L		71	58 - 135	2	20
Tetrachloroethene	0.80	J	25.0	27.7		ug/L		108	65 - 135	1	20
Toluene	ND		25.0	23.9		ug/L		96	65 - 135	5	20
1,2,4-Trichlorobenzene	ND		25.0	22.9		ug/L		92	58 - 135	6	25
1,1,1-Trichloroethane	ND		25.0	22.7		ug/L		91	65 - 135	0	20
1,1,2-Trichloroethane	ND		25.0	21.4		ug/L		85	64 - 135	6	27
Trichloroethene	4.6		25.0	26.4		ug/L		87	65 - 135	2	20
Trichlorofluoromethane	ND		25.0	25.7		ug/L		103	53 - 137	4	27
1,2,3-Trichloropropane	ND		25.0	18.7		ug/L		75	65 - 135	11	23
Vinyl acetate	ND		50.0	39.8		ug/L		80	11 - 187	3	24
Vinyl chloride	ND		25.0	28.8		ug/L		115	40 - 137	0	24
m-Xylene & p-Xylene	ND		25.0	24.8		ug/L		99	65 - 135	2	20
o-Xylene	ND		25.0	24.8		ug/L		99	65 - 135	1	20

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150245-18 MSD

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	ND		50.0	49.6		ug/L		99	65 - 135	1	20
1,2-Dibromoethane	ND		25.0	21.2		ug/L		85	65 - 135	1	27
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	98		70 - 127								
Toluene-d8 (Surr)	98		80 - 125								
4-Bromofluorobenzene (Surr)	94		78 - 120								
Dibromofluoromethane (Surr)	99		77 - 120								

Lab Sample ID: 280-150245-18 MSD

Matrix: Water

Analysis Batch: 541786

Client Sample ID: RW-8030P-20210623

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetonitrile	ND		250	217		ug/L		87	50 - 150	2	30
Chloroprene	ND		25.0	23.5		ug/L		94	50 - 150	10	30
Methacrylonitrile	ND		250	226		ug/L		90	50 - 150	5	30
Methyl methacrylate	ND		50.0	46.8		ug/L		94	50 - 150	7	30
Propionitrile	ND		250	207		ug/L		83	50 - 150	1	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	95		70 - 127								
Toluene-d8 (Surr)	97		80 - 125								
4-Bromofluorobenzene (Surr)	97		78 - 120								
Dibromofluoromethane (Surr)	95		77 - 120								

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

GC/MS VOA

Analysis Batch: 541784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150245-1	Muni-Well-14-20210621	Total/NA	Water	8260B	
280-150245-2	Muni-Well-33-20210621	Total/NA	Water	8260B	
280-150245-3	RW-8249P-20210621	Total/NA	Water	8260B	
280-150245-4	RW-7773P-20210621	Total/NA	Water	8260B	
280-150245-5	RW-7773PQ-20210621	Total/NA	Water	8260B	
280-150245-6	RW-7200P-20210621	Total/NA	Water	8260B	
280-150245-7	RW-7586P-20210621	Total/NA	Water	8260B	
280-150245-8	RW-7677P-20210621	Total/NA	Water	8260B	
280-150245-9	RW-8000B-20210622	Total/NA	Water	8260B	
280-150245-10	PA-1-20210622	Total/NA	Water	8260B	
280-150245-11	MW-37-20210622	Total/NA	Water	8260B	
MB 280-541784/9	Method Blank	Total/NA	Water	8260B	
LCS 280-541784/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-541784/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-541784/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-541784/7	Lab Control Sample Dup	Total/NA	Water	8260B	
280-150245-10 MS	PA-1-20210622	Total/NA	Water	8260B	
280-150245-10 MS	PA-1-20210622	Total/NA	Water	8260B	
280-150245-10 MSD	PA-1-20210622	Total/NA	Water	8260B	
280-150245-10 MSD	PA-1-20210622	Total/NA	Water	8260B	

Analysis Batch: 541786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150245-12	MW-37Q-20210622	Total/NA	Water	8260B	
280-150245-13	PA-3-20210622	Total/NA	Water	8260B	
280-150245-14	RW-7091R-20210622	Total/NA	Water	8260B	
280-150245-15	RW-2151H-20210623	Total/NA	Water	8260B	
280-150245-16	PA-8-37-47-20210623	Total/NA	Water	8260B	
280-150245-17	PA-8-77-87-20210623	Total/NA	Water	8260B	
280-150245-18	RW-8030P-20210623	Total/NA	Water	8260B	
280-150245-19	RW-2172H-20210623	Total/NA	Water	8260B	
280-150245-20	RW-2172HQ-20210623	Total/NA	Water	8260B	
280-150245-21	TB-01-20210625	Total/NA	Water	8260B	
280-150245-22	EB-01-20210622	Total/NA	Water	8260B	
280-150245-23	EB-02-20210622	Total/NA	Water	8260B	
280-150245-24	EB-03-20210623	Total/NA	Water	8260B	
280-150245-25	EB-04-20210623	Total/NA	Water	8260B	
280-150245-26	EB-05-20210624	Total/NA	Water	8260B	
280-150245-27	EB-06-20210625	Total/NA	Water	8260B	
MB 280-541786/9	Method Blank	Total/NA	Water	8260B	
LCS 280-541786/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-541786/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-541786/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-541786/7	Lab Control Sample Dup	Total/NA	Water	8260B	
280-150245-18 MS	RW-8030P-20210623	Total/NA	Water	8260B	
280-150245-18 MS	RW-8030P-20210623	Total/NA	Water	8260B	
280-150245-18 MSD	RW-8030P-20210623	Total/NA	Water	8260B	
280-150245-18 MSD	RW-8030P-20210623	Total/NA	Water	8260B	

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: Muni-Well-14-20210621

Lab Sample ID: 280-150245-1

Date Collected: 06/21/21 15:37

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 02:33	PP	TAL DEN

Client Sample ID: Muni-Well-33-20210621

Lab Sample ID: 280-150245-2

Date Collected: 06/21/21 15:15

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 02:57	PP	TAL DEN

Client Sample ID: RW-8249P-20210621

Lab Sample ID: 280-150245-3

Date Collected: 06/21/21 17:45

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 03:20	PP	TAL DEN

Client Sample ID: RW-7773P-20210621

Lab Sample ID: 280-150245-4

Date Collected: 06/21/21 14:57

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 03:43	PP	TAL DEN

Client Sample ID: RW-7773PQ-20210621

Lab Sample ID: 280-150245-5

Date Collected: 06/21/21 15:02

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 04:06	PP	TAL DEN

Client Sample ID: RW-7200P-20210621

Lab Sample ID: 280-150245-6

Date Collected: 06/21/21 16:22

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 04:29	PP	TAL DEN

Client Sample ID: RW-7586P-20210621

Lab Sample ID: 280-150245-7

Date Collected: 06/21/21 17:35

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 04:52	PP	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-7677P-20210621

Lab Sample ID: 280-150245-8

Date Collected: 06/21/21 18:55

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 05:15	PP	TAL DEN

Client Sample ID: RW-8000B-20210622

Lab Sample ID: 280-150245-9

Date Collected: 06/22/21 12:15

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 05:38	PP	TAL DEN

Client Sample ID: PA-1-20210622

Lab Sample ID: 280-150245-10

Date Collected: 06/22/21 15:05

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 06:00	PP	TAL DEN

Client Sample ID: MW-37-20210622

Lab Sample ID: 280-150245-11

Date Collected: 06/22/21 17:38

Matrix: Water

Date Received: 06/26/21 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	541784	06/30/21 06:23	PP	TAL DEN

Client Sample ID: MW-37Q-20210622

Lab Sample ID: 280-150245-12

Date Collected: 06/22/21 17:41

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 00:17	PP	TAL DEN

Client Sample ID: PA-3-20210622

Lab Sample ID: 280-150245-13

Date Collected: 06/22/21 16:55

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 00:38	PP	TAL DEN

Client Sample ID: RW-7091R-20210622

Lab Sample ID: 280-150245-14

Date Collected: 06/22/21 19:02

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 01:00	PP	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: RW-2151H-20210623

Lab Sample ID: 280-150245-15

Date Collected: 06/23/21 14:39

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 01:21	PP	TAL DEN

Client Sample ID: PA-8-37-47-20210623

Lab Sample ID: 280-150245-16

Date Collected: 06/23/21 11:52

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 01:42	PP	TAL DEN

Client Sample ID: PA-8-77-87-20210623

Lab Sample ID: 280-150245-17

Date Collected: 06/23/21 14:13

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 02:03	PP	TAL DEN

Client Sample ID: RW-8030P-20210623

Lab Sample ID: 280-150245-18

Date Collected: 06/23/21 15:40

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 02:24	PP	TAL DEN

Client Sample ID: RW-2172H-20210623

Lab Sample ID: 280-150245-19

Date Collected: 06/23/21 17:57

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 02:45	PP	TAL DEN

Client Sample ID: RW-2172HQ-20210623

Lab Sample ID: 280-150245-20

Date Collected: 06/23/21 17:59

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 03:06	PP	TAL DEN

Client Sample ID: TB-01-20210625

Lab Sample ID: 280-150245-21

Date Collected: 06/25/21 13:45

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 03:27	PP	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Client Sample ID: EB-01-20210622

Lab Sample ID: 280-150245-22

Date Collected: 06/22/21 18:20

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 03:48	PP	TAL DEN

Client Sample ID: EB-02-20210622

Lab Sample ID: 280-150245-23

Date Collected: 06/22/21 18:50

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 04:10	PP	TAL DEN

Client Sample ID: EB-03-20210623

Lab Sample ID: 280-150245-24

Date Collected: 06/23/21 18:35

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 04:31	PP	TAL DEN

Client Sample ID: EB-04-20210623

Lab Sample ID: 280-150245-25

Date Collected: 06/23/21 18:30

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 04:52	PP	TAL DEN

Client Sample ID: EB-05-20210624

Lab Sample ID: 280-150245-26

Date Collected: 06/24/21 17:35

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 05:13	PP	TAL DEN

Client Sample ID: EB-06-20210625

Lab Sample ID: 280-150245-27

Date Collected: 06/25/21 12:30

Matrix: Water

Date Received: 06/26/21 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	541786	06/30/21 05:34	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.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Laboratory: Eurofins TestAmerica, Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025-011	01-08-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Dichlorobromomethane

Method Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

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.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150245-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-150245-1	Muni-Well-14-20210621	Water	06/21/21 15:37	06/26/21 09:30	
280-150245-2	Muni-Well-33-20210621	Water	06/21/21 15:15	06/26/21 09:30	
280-150245-3	RW-8249P-20210621	Water	06/21/21 17:45	06/26/21 09:30	
280-150245-4	RW-7773P-20210621	Water	06/21/21 14:57	06/26/21 09:30	
280-150245-5	RW-7773PQ-20210621	Water	06/21/21 15:02	06/26/21 09:30	
280-150245-6	RW-7200P-20210621	Water	06/21/21 16:22	06/26/21 09:30	
280-150245-7	RW-7586P-20210621	Water	06/21/21 17:35	06/26/21 09:30	
280-150245-8	RW-7677P-20210621	Water	06/21/21 18:55	06/26/21 09:30	
280-150245-9	RW-8000B-20210622	Water	06/22/21 12:15	06/26/21 09:30	
280-150245-10	PA-1-20210622	Water	06/22/21 15:05	06/26/21 09:30	
280-150245-11	MW-37-20210622	Water	06/22/21 17:38	06/26/21 09:30	
280-150245-12	MW-37Q-20210622	Water	06/22/21 17:41	06/26/21 09:30	
280-150245-13	PA-3-20210622	Water	06/22/21 16:55	06/26/21 09:30	
280-150245-14	RW-7091R-20210622	Water	06/22/21 19:02	06/26/21 09:30	
280-150245-15	RW-2151H-20210623	Water	06/23/21 14:39	06/26/21 09:30	
280-150245-16	PA-8-37-47-20210623	Water	06/23/21 11:52	06/26/21 09:30	
280-150245-17	PA-8-77-87-20210623	Water	06/23/21 14:13	06/26/21 09:30	
280-150245-18	RW-8030P-20210623	Water	06/23/21 15:40	06/26/21 09:30	
280-150245-19	RW-2172H-20210623	Water	06/23/21 17:57	06/26/21 09:30	
280-150245-20	RW-2172HQ-20210623	Water	06/23/21 17:59	06/26/21 09:30	
280-150245-21	TB-01-20210625	Water	06/25/21 13:45	06/26/21 09:30	
280-150245-22	EB-01-20210622	Water	06/22/21 18:20	06/26/21 09:30	
280-150245-23	EB-02-20210622	Water	06/22/21 18:50	06/26/21 09:30	
280-150245-24	EB-03-20210623	Water	06/23/21 18:35	06/26/21 09:30	
280-150245-25	EB-04-20210623	Water	06/23/21 18:30	06/26/21 09:30	
280-150245-26	EB-05-20210624	Water	06/24/21 17:35	06/26/21 09:30	
280-150245-27	EB-06-20210625	Water	06/25/21 12:30	06/26/21 09:30	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_MS1 Analysis Batch Number: 538548Lab Sample ID: STD010 280-538548/24 IC Client Sample ID: _____Date Analyzed: 06/04/21 10:18 Lab File ID: MS1_2712.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrothiophene	8.02	Assign Peak	seifertj	06/05/21 11:08
2-Nitropropane		Invalid Compound ID	seifertj	06/04/21 13:32
n-Butanol		Invalid Compound ID	seifertj	06/04/21 13:32
1,3,5-Trichlorobenzene	12.22	Assign Peak	seifertj	06/05/21 11:11

Lab Sample ID: STD020 280-538548/25 IC Client Sample ID: _____Date Analyzed: 06/04/21 10:39 Lab File ID: MS1_2713.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	2.91	Assign Peak	seifertj	06/04/21 10:55
1,3,5-Trichlorobenzene	12.22	Assign Peak	seifertj	06/04/21 10:55

Lab Sample ID: STD050 280-538548/26 IC Client Sample ID: _____Date Analyzed: 06/04/21 11:00 Lab File ID: MS1_2714.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Propanol	3.41	Assign Peak	seifertj	06/04/21 11:45

Lab Sample ID: STD10 280-538548/27 IC Client Sample ID: _____Date Analyzed: 06/04/21 11:21 Lab File ID: MS1_2715.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	6.03	Peak Tail	seifertj	06/04/21 13:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_MS1 Analysis Batch Number: 538548Lab Sample ID: STD005 280-538548/14 IC Client Sample ID: _____Date Analyzed: 06/04/21 13:50 Lab File ID: MS1_2722.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	seifertj	06/05/21 09:04
Bromomethane		Invalid Compound ID	seifertj	06/05/21 09:03
Ethyl methacrylate		Invalid Compound ID	seifertj	06/05/21 09:04

Lab Sample ID: STD010 280-538548/15 IC Client Sample ID: _____Date Analyzed: 06/04/21 14:11 Lab File ID: MS1_2723.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.70	Assign Peak	seifertj	06/05/21 09:05
Chloromethane	1.90	Assign Peak	seifertj	06/05/21 09:05
Chloroethane	2.46	Assign Peak	seifertj	06/05/21 09:05
Iodomethane	3.38	Assign Peak	seifertj	06/05/21 09:05
Methyl acetate	3.58	Assign Peak	seifertj	06/05/21 09:05
sec-Butyl Alcohol	4.99	Assign Peak	seifertj	06/05/21 09:05
Chlorobromomethane	5.06	Assign Peak	seifertj	06/05/21 09:06
1,1-Dichloropropene	5.42	Assign Peak	seifertj	06/05/21 09:06
1,2-Dichloroethane	5.63	Assign Peak	seifertj	06/05/21 09:06
2-Pentanone	6.29	Assign Peak	seifertj	06/05/21 09:06
1,2-Dichloropropane	6.38	Assign Peak	seifertj	06/05/21 09:06
Ethyl methacrylate	7.52	Poor chromatography	seifertj	06/05/21 09:34
1,3-Dichloropropane	7.83	Assign Peak	seifertj	06/05/21 09:07
Bromoform	9.38	Assign Peak	seifertj	06/05/21 09:07
trans-1,4-Dichloro-2-butene	9.86	Assign Peak	seifertj	06/05/21 09:07
1,2,3-Trichloropropane	9.88	Assign Peak	seifertj	06/05/21 09:08
Isobutyl alcohol		Invalid Compound ID	seifertj	06/05/21 09:06
1,2-Dibromo-3-Chloropropane	12.03	Assign Peak	seifertj	06/05/21 09:08
Hexachlorobutadiene	12.99	Assign Peak	seifertj	06/05/21 09:08
Naphthalene	13.12	Assign Peak	seifertj	06/05/21 09:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_MS1 Analysis Batch Number: 538548Lab Sample ID: STD020 280-538548/16 IC Client Sample ID: _____Date Analyzed: 06/04/21 14:33 Lab File ID: MS1_2724.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.69	Assign Peak	seifertj	06/05/21 09:09
Chloroethane	2.46	Assign Peak	seifertj	06/05/21 09:09
1,4-Dioxane	6.43	Assign Peak	seifertj	06/05/21 09:10
Bromoform	9.38	Assign Peak	seifertj	06/05/21 09:10
1,2-Dibromo-3-Chloropropane	12.02	Assign Peak	seifertj	06/05/21 09:09
Hexachlorobutadiene	12.99	Assign Peak	seifertj	06/05/21 09:09

Lab Sample ID: ICV 280-538548/23 Client Sample ID: _____Date Analyzed: 06/04/21 17:24 Lab File ID: MS1_2732.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.14	Assign Peak	seifertj	06/05/21 11:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 541263Lab Sample ID: STD010 280-541263/15 IC Client Sample ID: _____Date Analyzed: 06/25/21 13:13 Lab File ID: P6265.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propene oxide	2.61	Wrong peak	seifertj	06/25/21 15:47

Lab Sample ID: STD020 280-541263/16 IC Client Sample ID: _____Date Analyzed: 06/25/21 13:36 Lab File ID: P6266.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propene oxide	2.61	Wrong peak	seifertj	06/25/21 14:47

Lab Sample ID: STD050 280-541263/17 IC Client Sample ID: _____Date Analyzed: 06/25/21 13:59 Lab File ID: P6267.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propene oxide	2.61	Wrong peak	seifertj	06/25/21 14:46
2-Nitropropane	5.71	Wrong peak	seifertj	06/25/21 14:46

Lab Sample ID: STD10 280-541263/18 IC Client Sample ID: _____Date Analyzed: 06/25/21 14:22 Lab File ID: P6268.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propene oxide	2.61	Assign Peak	seifertj	06/25/21 14:45
2-Nitropropane	5.71	Assign Peak	seifertj	06/25/21 14:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 541263Lab Sample ID: STD50 280-541263/19 IC Client Sample ID: _____Date Analyzed: 06/25/21 14:46 Lab File ID: P6269.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propene oxide	2.61	Wrong peak	seifertj	06/25/21 15:44
2-Nitropropane	5.71	Wrong peak	seifertj	06/25/21 15:46

Lab Sample ID: STD100 280-541263/20 IC Client Sample ID: _____Date Analyzed: 06/25/21 15:09 Lab File ID: P6270.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propene oxide	2.60	Wrong peak	seifertj	06/25/21 15:45
2-Nitropropane	5.71	Wrong peak	seifertj	06/25/21 15:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 541369Lab Sample ID: STD005 280-541369/14 IC Client Sample ID: _____Date Analyzed: 06/26/21 15:46 Lab File ID: P6311.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.54	Assign Peak	seifertj	06/26/21 16:38
Vinyl chloride	1.80	Assign Peak	seifertj	06/26/21 16:38
Bromomethane	2.06	Shouldering	seifertj	06/28/21 07:27
Chloroethane	2.16	Assign Peak	seifertj	06/26/21 16:38
2,2-Dichloropropane	4.04	Assign Peak	seifertj	06/26/21 16:38
1,2-Dichloroethane	4.69	Assign Peak	seifertj	06/26/21 16:38
Bromoform	8.16	Assign Peak	seifertj	06/26/21 16:38
trans-1,4-Dichloro-2-butene	8.64	Assign Peak	seifertj	06/26/21 16:39

Lab Sample ID: STD010 280-541369/15 IC Client Sample ID: _____Date Analyzed: 06/26/21 16:09 Lab File ID: P6312.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.55	Assign Peak	seifertj	06/26/21 16:39
Bromomethane	2.07	Shouldering	seifertj	06/28/21 07:27
Iodomethane	2.88	Shouldering	seifertj	06/28/21 07:29
1,2-Dichloroethane	4.69	Assign Peak	seifertj	06/26/21 16:40
trans-1,4-Dichloro-2-butene	8.64	Assign Peak	seifertj	06/26/21 16:40

Lab Sample ID: STD020 280-541369/16 IC Client Sample ID: _____Date Analyzed: 06/26/21 16:32 Lab File ID: P6313.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.54	Assign Peak	seifertj	06/26/21 16:48
Iodomethane	2.87	Peak Tail	seifertj	06/28/21 07:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 541369Lab Sample ID: STD10 280-541369/18 IC Client Sample ID: _____Date Analyzed: 06/26/21 17:18 Lab File ID: P6315.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.06	Peak Tail	seifertj	06/28/21 07:26
Iodomethane	2.87	Peak Tail	seifertj	06/28/21 07:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 541784Lab Sample ID: MB 280-541784/9 Client Sample ID: _____Date Analyzed: 06/29/21 23:53 Lab File ID: P6401.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dichlorobenzene		Invalid Compound ID	seifertj	06/30/21 11:24
1,4-Dichlorobenzene		Invalid Compound ID	seifertj	06/30/21 11:24
Acetonitrile		Invalid Compound ID	seifertj	06/30/21 11:23
Carbon disulfide		Invalid Compound ID	seifertj	06/30/21 11:23
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:23

Lab Sample ID: 280-150245-1 Client Sample ID: Muni-Well-14-20210621Date Analyzed: 06/30/21 02:33 Lab File ID: P6408.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:30

Lab Sample ID: 280-150245-2 Client Sample ID: Muni-Well-33-20210621Date Analyzed: 06/30/21 02:57 Lab File ID: P6409.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:30

Lab Sample ID: 280-150245-4 Client Sample ID: RW-7773P-20210621Date Analyzed: 06/30/21 03:43 Lab File ID: P6411.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:32

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Analysis Batch Number: 541784Lab Sample ID: 280-150245-5 Client Sample ID: RW-7773PQ-20210621Date Analyzed: 06/30/21 04:06 Lab File ID: P6412.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:32

Lab Sample ID: 280-150245-6 Client Sample ID: RW-7200P-20210621Date Analyzed: 06/30/21 04:29 Lab File ID: P6413.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:32

Lab Sample ID: 280-150245-7 Client Sample ID: RW-7586P-20210621Date Analyzed: 06/30/21 04:52 Lab File ID: P6414.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:33

Lab Sample ID: 280-150245-9 Client Sample ID: RW-8000B-20210622Date Analyzed: 06/30/21 05:38 Lab File ID: P6416.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:33

Lab Sample ID: 280-150245-10 Client Sample ID: PA-1-20210622Date Analyzed: 06/30/21 06:00 Lab File ID: P6417.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol		Invalid Compound ID	seifertj	06/30/21 11:34

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Acrolein B_00005	06/08/21	05/08/21	Methanol, Lot 230446	10 mL	MV-568720.sec_00033	500 uL	Acrolein	987.5 ug/mL
.MV-568720.sec_00033	09/30/21		RESTEK, Lot A0159281		(Purchased Reagent)		Acrolein	19750 ug/mL
Acrolein B_00006	07/23/21	06/23/21	Methanol, Lot 230446	10 mL	MV-568720.sec_00033	500 uL	Acrolein	987.5 ug/mL
.MV-568720.sec_00033	09/30/21		RESTEK, Lot A0159281		(Purchased Reagent)		Acrolein	19750 ug/mL
mv-Cent BFB_00003							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					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_00089	06/06/21	05/06/21	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
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00007	1250 uL	2-Chloroethyl vinyl ether	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
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00007	02/28/22		RESTEK, Lot A0158872		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00091	07/01/21	06/01/21	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
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MV-569723_00007	1250 uL	2-Chloroethyl vinyl ether	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
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00007	02/28/22	RESTEK, Lot A0158872			(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas B_00091	06/20/21	05/20/21	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_SS_00018	08/27/21	02/27/21	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-Main add A_00001	07/24/21	06/24/21	P&T Methanol, Lot 181124	12.5 mL	MV-CUS17739_00008	1000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
.MV-CUS17739_00008	02/28/23	Agilent, Lot 6582355			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMain B_00047	06/22/21	05/22/21	P&T Methanol, Lot 181124	25 mL	MV-569721.sec_00006	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MV-569724.sec_00027 MV-571992.sec_00005	1000 uL 1000 uL	4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
							Vinyl acetate	200 ug/mL
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	100 ug/mL
							Xylenes, Total	200 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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-MegaMain B_00049	07/02/21	06/23/21	P&T Methanol, Lot 181124	25 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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00050	06/08/21	05/08/21	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	3000 uL	Cyclohexanone	3000 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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	2000 uL	1-Chlorohexane	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00050	06/08/21	05/08/21	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-MegaMainA_00052	07/17/21	06/17/21	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			

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-MegaMainA_00052	07/17/21	06/17/21	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_00050	08/10/21	02/10/21	P&T Methanol, Lot 199628	20 mL	mv-570808_00007	400 uL	Chloroprene	50 ug/mL
					mv-570809_00007	400 uL	Methacrylonitrile	500 ug/mL
					mv-571993_00004	400 uL	Methyl methacrylate	100 ug/mL
							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 A_00051	09/30/21	03/30/21	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
							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_00011	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.mv-571993_00004	01/31/21		RESTEK, Lot A0144915		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
							Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
.mv-571994_00004	12/31/22		RESTEK, Lot A0156082		(Purchased Reagent)		Tert-butyl ethyl ether	2500 ug/mL
.mv-VO-TAOH-5_00011	03/01/21		SPEX, Lot CP200901024		(Purchased Reagent)		Ethanol	100000 ug/mL
							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 A_00052	11/02/21	05/14/21	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
					mv-570809_00007	400 uL	n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
					mv-571993_00004	400 uL	Methyl methacrylate	100 ug/mL
							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
							cis-1,4-Dichloro-2-butene	100 ug/mL
							Propene oxide	5000 ug/mL
					mv-VO-TAOH-5_00012	2000 uL	Tetrahydrothiophene	100 ug/mL
							1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Chloroprene	2500 ug/mL
.mv-570808_00007	05/31/21		Restek, Lot A0154734		(Purchased Reagent)		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_00012	11/02/21		SPEX, Lot AA210506021A		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
							Propene oxide	50000 ug/mL
							Tetrahydrothiophene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MV-Supp B_00033	06/30/21	05/01/21	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00005	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00005	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00004	400 uL	Acetonitrile	500 ug/mL
.mv-570808.sec_00005	04/30/21		Restek, Lot A0154206		(Purchased Reagent)		Propionitrile	500 ug/mL
							Chloroprene	2500 ug/mL
.mv-570809.sec_00005	03/31/21		Restek, Lot A0153337		(Purchased Reagent)		Methacrylonitrile	25000 ug/mL
.mv-571993.sec_00004	11/30/20		RESTEK, Lot A0143318		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
							Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL
MV-Supp B_00034	07/15/21	05/15/21	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00005	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00005	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00004	400 uL	Acetonitrile	500 ug/mL
.mv-570808.sec_00005	04/30/21		Restek, Lot A0154206		(Purchased Reagent)		Propionitrile	500 ug/mL
							Chloroprene	2500 ug/mL
.mv-570809.sec_00005	03/31/21		Restek, Lot A0153337		(Purchased Reagent)		Methacrylonitrile	25000 ug/mL
.mv-571993.sec_00004	11/30/20		RESTEK, Lot A0143318		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
							Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL

Reagent

mv-30241_00008



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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)

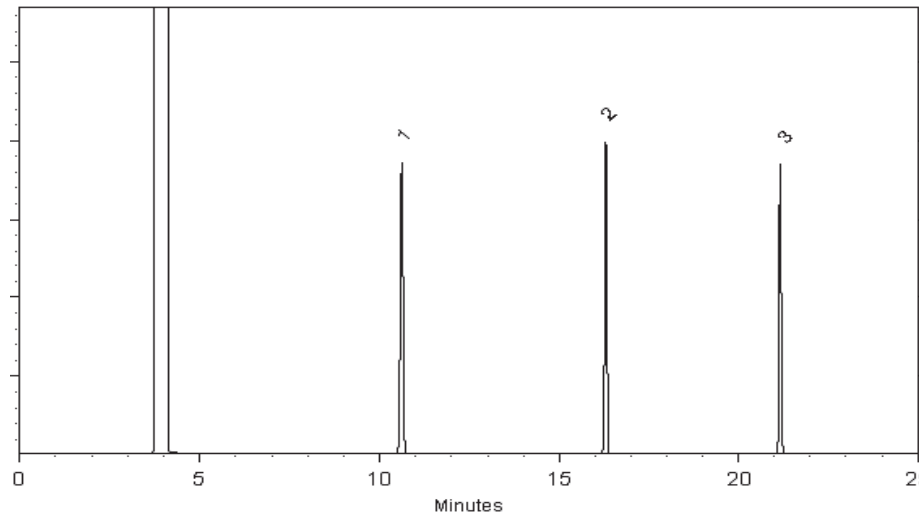
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

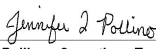
Det. Type:
FID



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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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
Om

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dibromofluoromethane CAS # 1868-53-7 (Lot 0012017) Purity 99.8%	2,500.2 µg/mL	+/- 14.5364 µg/mL Gravimetric +/- 140.1837 µg/mL Unstressed +/- 143.4639 µg/mL Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot PR-26748) Purity 99%	2,500.2 µg/mL	+/- 14.5361 µg/mL Gravimetric +/- 140.1809 µg/mL Unstressed +/- 143.4610 µg/mL Stressed
3	Toluene-d8 CAS # 2037-26-5 (Lot PR-26623) Purity 99%	2,500.2 µg/mL	+/- 14.5364 µg/mL Gravimetric +/- 140.1837 µg/mL Unstressed +/- 143.4639 µg/mL Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KOV) Purity 99%	2,500.3 µg/mL	+/- 14.5370 µg/mL Gravimetric +/- 140.1893 µg/mL Unstressed +/- 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:

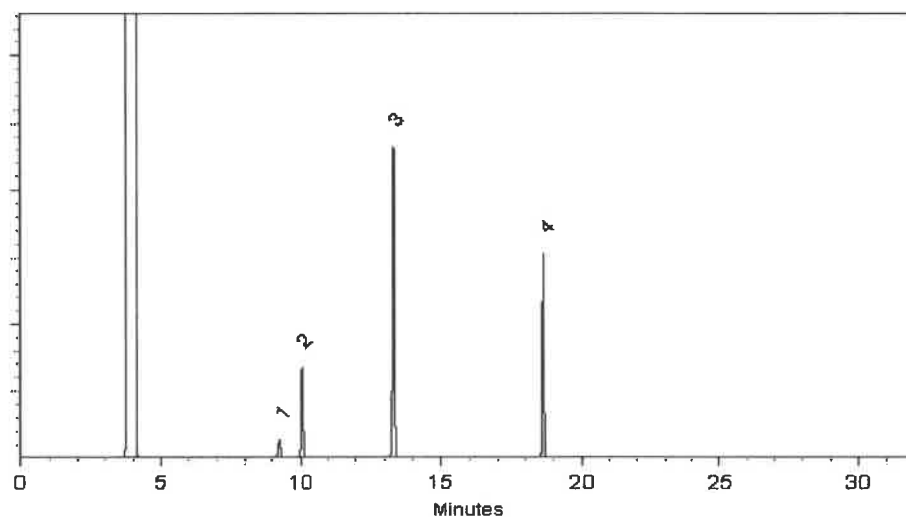
200°C

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 Maje

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 25725-11-5 Purity 98% (Lot CD-107)	5,018.0 µg/mL	+/- 29.1735 µg/mL Gravimetric +/- 107.4354 µg/mL Unstressed +/- 110.5588 µg/mL Stressed
2	2-Butanone-d5 CAS # 24313-50-6 Purity 99% (Lot M-276)	1,253.8 µg/mL	+/- 7.2897 µg/mL Gravimetric +/- 26.8440 µg/mL Unstressed +/- 27.6244 µg/mL Stressed
3	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot BCBK8171V)	250.1 µg/mL	+/- 1.4575 µg/mL Gravimetric +/- 5.3556 µg/mL Unstressed +/- 5.5112 µg/mL Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 Purity 99% (Lot I-19942)	5,004.8 µg/mL	+/- 29.0965 µg/mL Gravimetric +/- 107.1519 µg/mL Unstressed +/- 110.2670 µg/mL Stressed
5	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-23926)	250.4 µg/mL	+/- 1.4589 µg/mL Gravimetric +/- 5.3609 µg/mL Unstressed +/- 5.5167 µg/mL Stressed
6	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	250.6 µg/mL	+/- 1.4604 µg/mL Gravimetric +/- 5.3663 µg/mL Unstressed +/- 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)

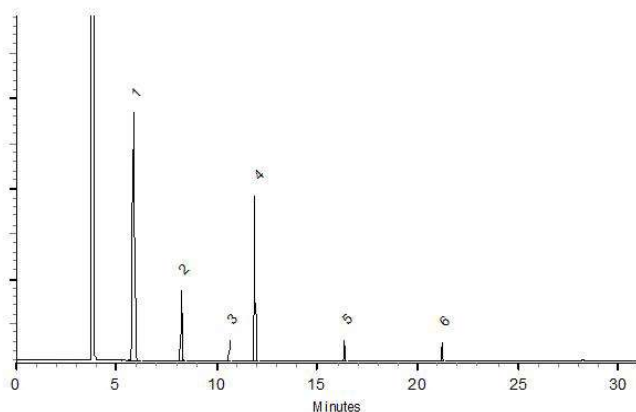
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

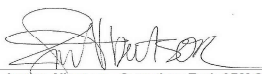


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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_00033



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



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.:** A0159281
Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : September 30, 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	19,756.8 µg/mL	+/- 115.6804 µg/mL Gravimetric
	CAS # 107-02-8.SEC (Lot CS-D0310)		+/- 394.6881 µg/mL Unstressed
	Purity 99%		+/- 885.4724 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:

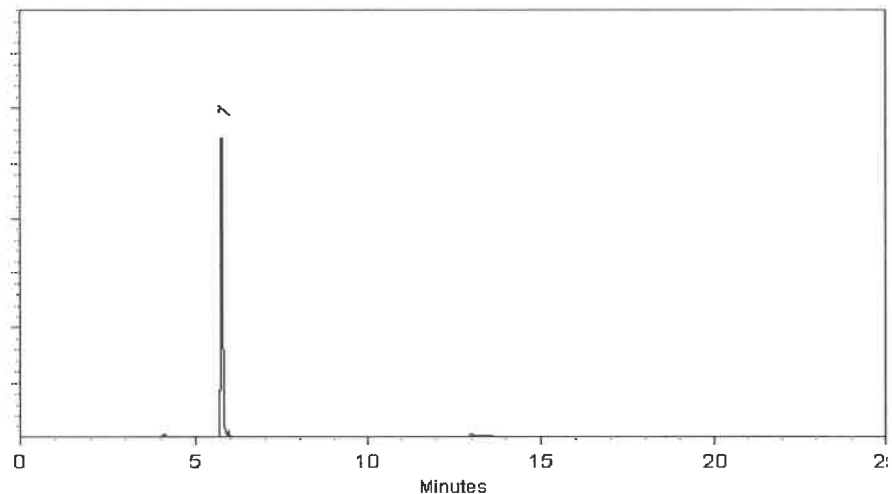
200°C

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.

Michael Mage

Date Mixed: 27-Mar-2020

Balance: 1127510105

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 03-Apr-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

MV-568720_00033



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



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 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.

Rec'd 4/28/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acrolein CAS # 107-02-8 Purity 99% (Lot D0012019410)	19,810.7 µg/mL	+/- 115.9958 µg/mL Gravimetric +/- 395.7642 µg/mL Unstressed +/- 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:

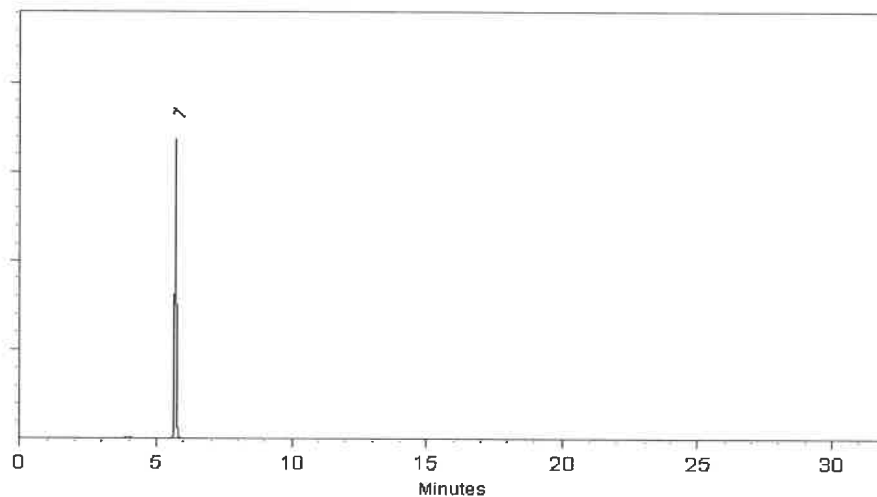
200°C

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 67-64-1.SEC (Lot U13B039) Purity 99%	12,509.0 µg/mL	+/- 73.2429 µg/mL Gravimetric +/- 754.7732 µg/mL Unstressed +/- 756.5649 µg/mL Stressed
2	2-Butanone (MEK) CAS # 78-93-3.SEC (Lot RGZ2A) Purity 99%	12,558.0 µg/mL	+/- 73.5299 µg/mL Gravimetric +/- 757.7297 µg/mL Unstressed +/- 759.5285 µg/mL Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1.SEC (Lot E29T040) Purity 99%	12,547.0 µg/mL	+/- 73.4654 µg/mL Gravimetric +/- 757.0660 µg/mL Unstressed +/- 758.8632 µg/mL Stressed
4	2-Hexanone CAS # 591-78-6.SEC (Lot V3NRA) Purity 99%	12,561.0 µg/mL	+/- 73.5474 µg/mL Gravimetric +/- 757.9108 µg/mL Unstressed +/- 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)

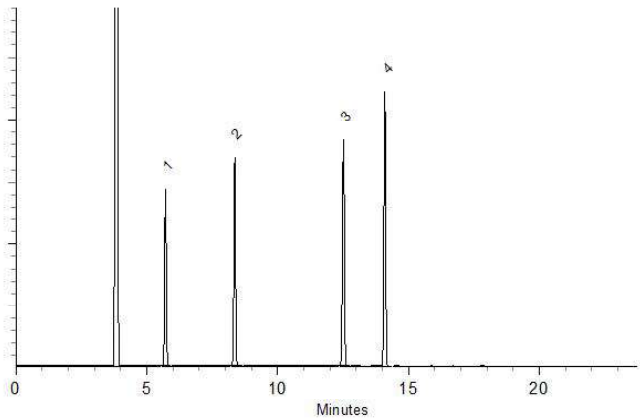
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 67-64-1 (Lot SHBJ7699) Purity 99%	12,500.5 µg/mL	+/- 72.6790 µg/mL Gravimetric +/- 754.2106 µg/mL Unstressed +/- 756.0012 µg/mL Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBF2461V) Purity 99%	12,501.0 µg/mL	+/- 72.6819 µg/mL Gravimetric +/- 754.2407 µg/mL Unstressed +/- 756.0314 µg/mL Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBH8930) Purity 99%	12,501.5 µg/mL	+/- 72.6848 µg/mL Gravimetric +/- 754.2709 µg/mL Unstressed +/- 756.0617 µg/mL Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKCD9048) Purity 99%	12,501.8 µg/mL	+/- 72.6863 µg/mL Gravimetric +/- 754.2860 µg/mL Unstressed +/- 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)

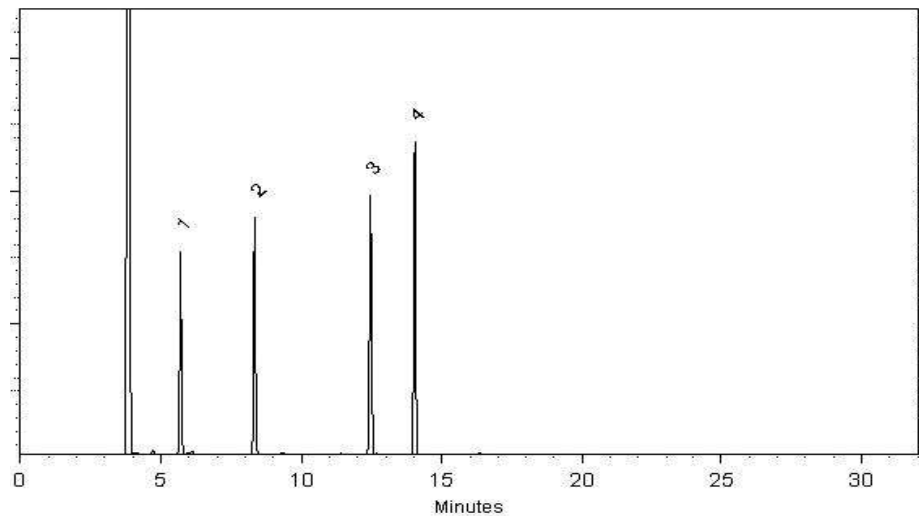
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

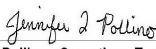
Det. Type:
FID



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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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.sec_00010



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



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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) CAS # 75-71-8.SEC (Lot 24847) Purity 99%	2,499.3 µg/mL	+/- 25.7724 µg/mL Gravimetric +/- 141.7384 µg/mL Unstressed +/- 144.9810 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,506.0 µg/mL	+/- 21.8612 µg/mL Gravimetric +/- 141.4482 µg/mL Unstressed +/- 144.7145 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,505.4 µg/mL	+/- 25.4396 µg/mL Gravimetric +/- 142.0168 µg/mL Unstressed +/- 145.2689 µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 22331) Purity 99%	2,500.1 µg/mL	+/- 22.0034 µg/mL Gravimetric +/- 141.1491 µg/mL Unstressed +/- 144.4071 µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,511.9 µg/mL	+/- 23.0453 µg/mL Gravimetric +/- 141.9646 µg/mL Unstressed +/- 145.2346 µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,498.5 µg/mL	+/- 23.5866 µg/mL Gravimetric +/- 141.3133 µg/mL Unstressed +/- 144.5633 µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 * (Lot 7766400) Purity 97%	2,450.0 µg/mL	+/- 14.3780 µg/mL Gravimetric +/- 137.3830 µg/mL Unstressed +/- 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)

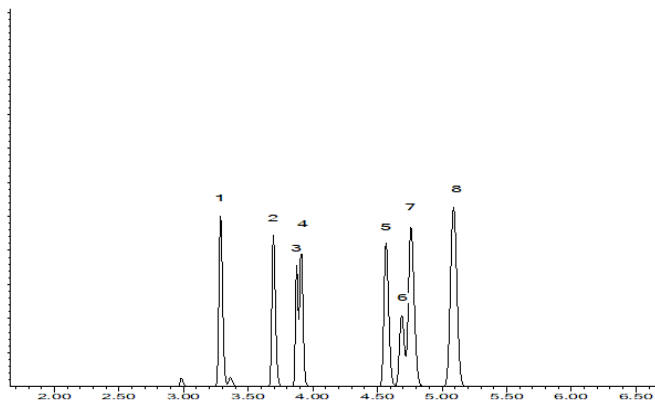
Carrier Gas:
helium-constant pressure 30 psi

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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 Lot No.: A0159085

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2023 Storage: 0°C or colder

REC'D
6/2/20
Gm

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)

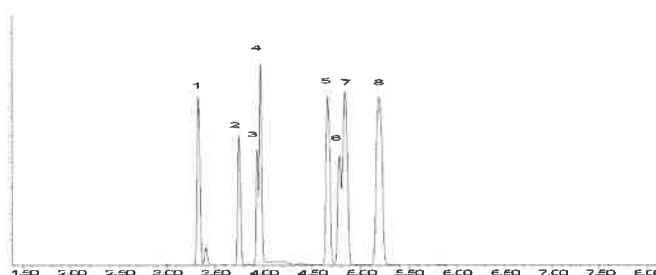
Carrier Gas:
 helium-constant pressure 30 psi

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

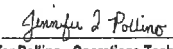


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


 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_00007



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0158872
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 : March 31, 2023 **Storage:** 0°C or colder

Rec'd 6/2/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether CAS # 110-75-8 (Lot MKBS6526V) Purity 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL Gravimetric +/- 53.5360 µg/mL Unstressed +/- 55.0924 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)

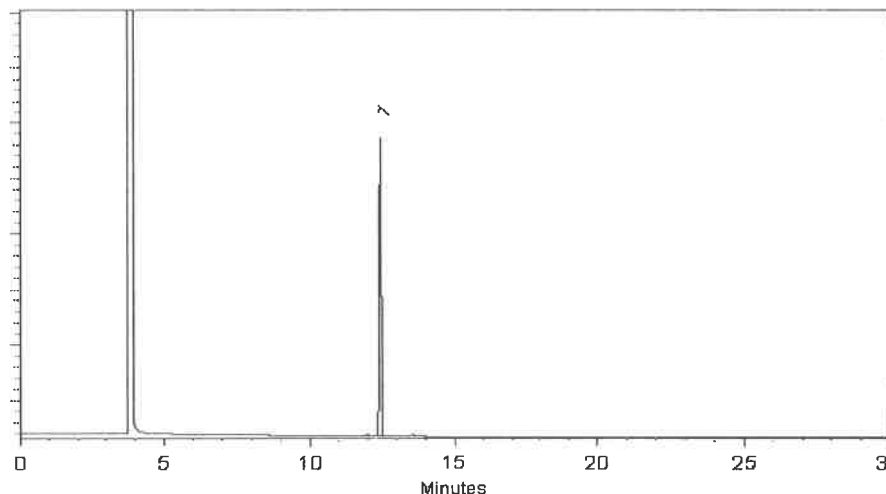
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 16-Mar-2020 **Balance:** B707717271

Tyler Brown - Operations Tech-ARM QC

Date Passed: 18-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

MV-569724.sec_00027



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



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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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 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	Vinyl acetate CAS # 108-05-4.SEC (Lot 190320CGKJ) Purity 99%	5,034.0 µg/mL	+/- 29.5423 µg/mL Gravimetric +/- 303.7501 µg/mL Unstressed +/- 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:

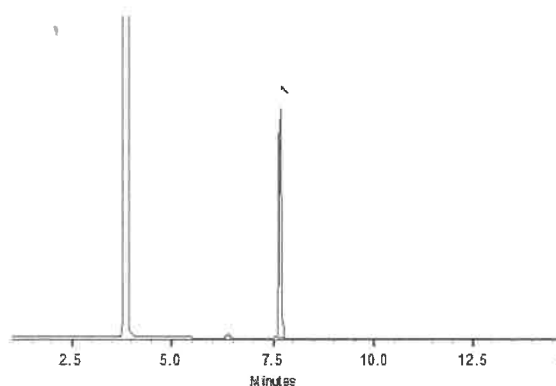
200°C

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

MV-569724_00025



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Catalog No. : 569724 **Lot No.:** A0156559
Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)
8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2021 **Storage:** 0°C or colder
Handling: This product is photosensitive.

REC 11)
4/24/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Vinyl acetate CAS # 108-05-4 (Lot 192709KJ) Purity 99%	5,040.0 µg/mL	+/- 29.5103 µg/mL Gravimetric +/- 304.1056 µg/mL Unstressed +/- 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:

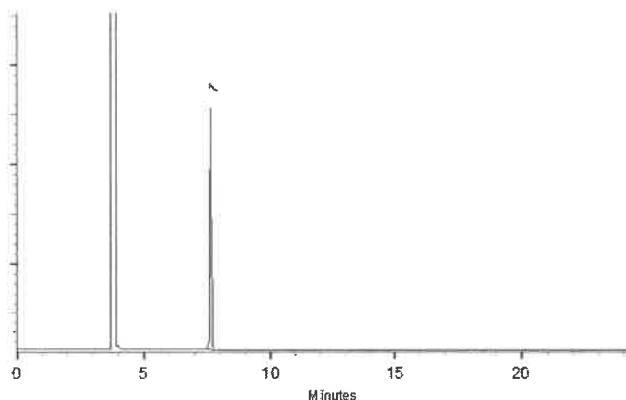
200°C

Det. Temp:

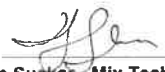
250°C

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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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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : March 31, 2022

Storage: 10°C or colder

REC'D 4/28/20

Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Cyclohexanone CAS # 108-94-1 Purity 99% (Lot MKCD4357)	25,006.0 µg/mL	+/- 146.4156 µg/mL Gravimetric +/- 1,508.8223 µg/mL Unstressed +/- 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:

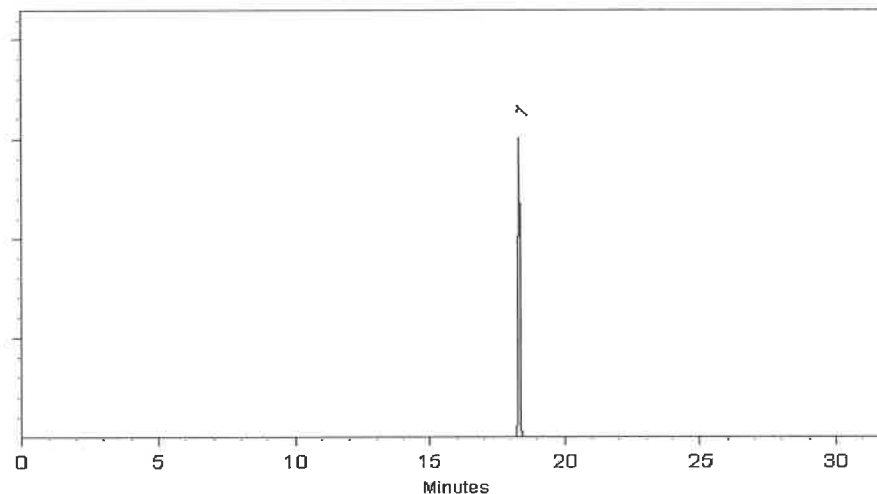
200°C

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

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808.SEC Lot No.: A0154206

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 : April 30, 2021 Storage: 0°C or colder

REC'D 4/23/20

GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol) CAS # 67-63-0.SEC (Lot NWVYK) Purity 99%	25,035.5 µg/mL	+/- 146.5884 µg/mL +/- 1,238.5738 µg/mL +/- 1,269.3660 µg/mL
2	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 * (Lot 190814JLM) Purity 99%	2,506.0 µg/mL	+/- 14.7066 µg/mL +/- 123.9825 µg/mL +/- 127.0647 µg/mL
3	Methacrylonitrile CAS # 126-98-7 * (Lot 1012019) Purity 99%	25,025.5 µg/mL	+/- 146.5298 µg/mL +/- 1,238.0790 µg/mL +/- 1,268.8590 µg/mL
4	2,2,4-Trimethylpentane (Isooctane) CAS # 540-84-1.SEC (Lot 4597900) Purity 99%	2,525.0 µg/mL	+/- 14.8181 µg/mL +/- 124.9226 µg/mL +/- 128.0281 µg/mL
5	1-Butanol CAS # 71-36-3.SEC (Lot ELBOC) Purity 99%	62,526.5 µg/mL	+/- 366.0875 µg/mL +/- 3,093.3525 µg/mL +/- 3,170.2566 µg/mL
6	2-Nitropropane CAS # 79-46-9.SEC (Lot Y4YWD) Purity 98%	5,006.8 µg/mL	+/- 29.3160 µg/mL +/- 247.7009 µg/mL +/- 253.8590 µg/mL
7	1-Chlorohexane CAS # 544-10-5.SEC (Lot 8171700) Purity 99%	2,501.0 µg/mL	+/- 14.6773 µg/mL +/- 123.7352 µg/mL +/- 126.8112 µg/mL

8	1,2,3-Trimethylbenzene CAS # 526-73-8.SEC Purity 97%	(Lot 8658900)	2,502.6 µg/mL	+/- 14.6867 +/- 123.8143 +/- 126.8923	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride CAS # 100-44-7.SEC Purity 99%	(Lot H29N03)	2,506.0 µg/mL	+/- 14.7066 +/- 123.9825 +/- 127.0647	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene CAS # 108-70-3.SEC Purity 99%	(Lot I28U021)	2,518.5 µg/mL	+/- 14.7800 +/- 124.6010 +/- 127.6985	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

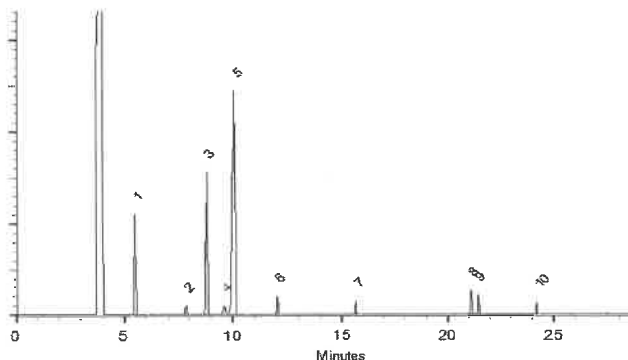
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe
Lane Kibe - Mix Technician

Date Mixed: 22-Oct-2019

Balance: 1128342314

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 25-Oct-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

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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
Gm

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 Gravimetric +/- 1,243.4963 µg/mL Unstressed +/- 1,274.4109 µg/mL 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 Gravimetric +/- 124.8483 µg/mL Unstressed +/- 127.9520 µg/mL Stressed
3	Methacrylonitrile CAS # 126-98-7 (Lot 1012019) Purity 99%	25,164.0 µg/mL	+/- 147.3408 µg/mL Gravimetric +/- 1,244.9310 µg/mL Unstressed +/- 1,275.8813 µg/mL Stressed
4	2,2,4-Trimethylpentane (isooctane) CAS # 540-84-1 (Lot SHBD2922V) Purity 99%	2,512.0 µg/mL	+/- 14.7418 µg/mL Gravimetric +/- 124.2794 µg/mL Unstressed +/- 127.3689 µg/mL Stressed
5	1-Butanol CAS # 71-36-3 (Lot SHBK4786) Purity 99%	63,024.5 µg/mL	+/- 369.0033 µg/mL Gravimetric +/- 3,117.9899 µg/mL Unstressed +/- 3,195.5065 µg/mL Stressed
6	2-Nitropropane CAS # 79-46-9 (Lot BCBL0537V) Purity 98%	5,009.8 µg/mL	+/- 29.3332 µg/mL Gravimetric +/- 247.8464 µg/mL Unstressed +/- 254.0081 µg/mL Stressed
7	1-Chlorohexane CAS # 544-10-5 (Lot BCBS3368V) Purity 98%	2,516.6 µg/mL	+/- 14.7691 µg/mL Gravimetric +/- 124.5090 µg/mL Unstressed +/- 127.6042 µg/mL Stressed

8	1,2,3-Trimethylbenzene CAS # 526-73-8 Purity 98%	(Lot 877605-12)	2,510.3 µg/mL	+/- 14.7317 +/- 124.1938 +/- 127.2812	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	2,516.0 µg/mL	+/- 14.7653 +/- 124.4773 +/- 127.5717	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	2,523.0 µg/mL	+/- 14.8064 +/- 124.8236 +/- 127.9267	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

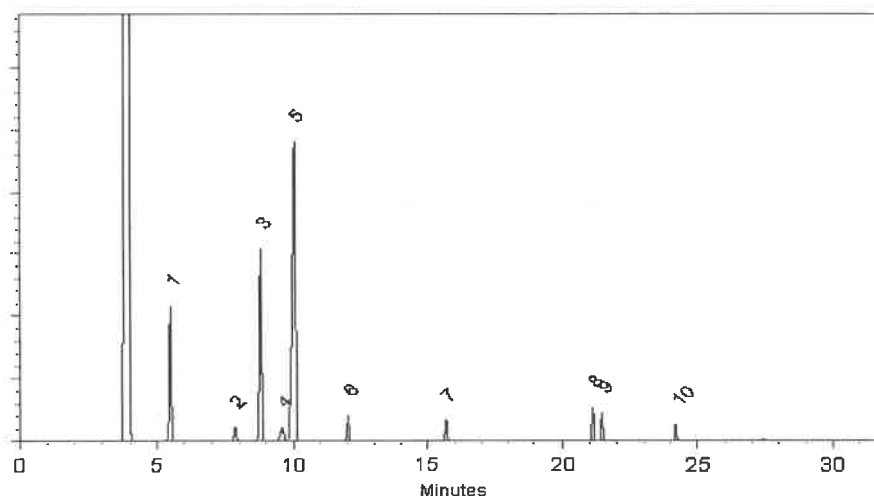
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckal - 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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Testing Laboratory
Certificate #3222.02

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Catalog No.: 570809.SEC Lot No.: A0153337
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: March 31, 2021 Storage: 0°C or colder

REC'D
4/23/20
GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Ethyl acetate CAS # 141-78-6.SEC (Lot C386A-GG) Purity 99%	5,020.0 µg/mL	+/- 29.3932 µg/mL Gravimetric +/- 302.8988 µg/mL Unstressed +/- 303.6179 µg/mL Stressed
2	Ethyl acrylate CAS # 140-88-5.SEC (Lot YIFAM-TG) Purity 99%	2,514.0 µg/mL	+/- 14.7536 µg/mL Gravimetric +/- 151.6940 µg/mL Unstressed +/- 152.0541 µg/mL Stressed
3	Methyl methacrylate CAS # 80-62-6.SEC (Lot G01X021) Purity 99%	5,042.5 µg/mL	+/- 29.5249 µg/mL Gravimetric +/- 304.2564 µg/mL Unstressed +/- 304.9787 µg/mL Stressed
4	Butyl acetate CAS # 123-86-4.SEC (Lot V2L2G-GT) Purity 99%	2,502.5 µg/mL	+/- 14.6861 µg/mL Gravimetric +/- 151.0001 µg/mL Unstressed +/- 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:

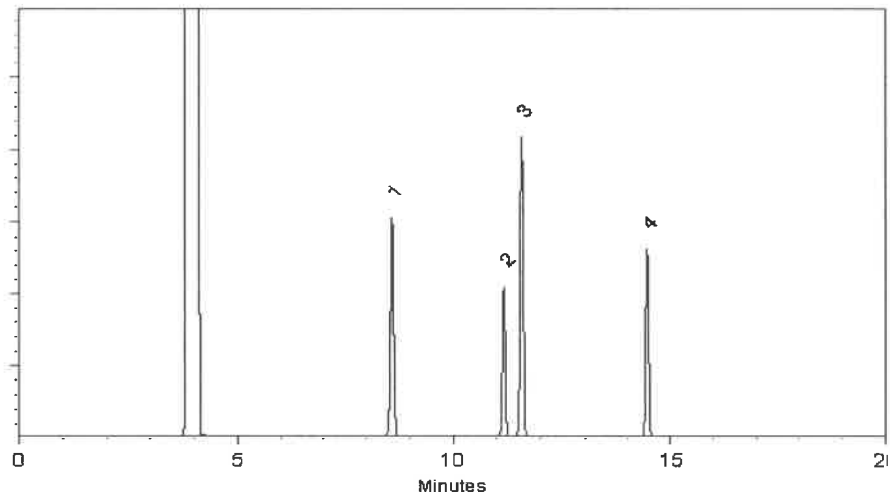
200°C

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.

Lane Kibe

Lane Kibe - Mix Technician

Date Mixed: 26-Sep-2019

Balance: 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Sep-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

mv-570809_00007



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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

REC'D 4/23/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate CAS # 141-78-6 Purity 99% (Lot SHBL1336)	5,015.6 µg/mL	+/- 29.3674	µg/mL	Gravimetric
			+/- 302.6333	µg/mL	Unstressed
			+/- 303.3517	µg/mL	Stressed
2	Ethyl acrylate CAS # 140-88-5 Purity 99% (Lot 10129902)	2,508.8 µg/mL	+/- 14.7230	µg/mL	Gravimetric
			+/- 151.3803	µg/mL	Unstressed
			+/- 151.7396	µg/mL	Stressed
3	Methyl methacrylate CAS # 80-62-6 Purity 99% (Lot MKCG6589)	5,015.2 µg/mL	+/- 29.3651	µg/mL	Gravimetric
			+/- 302.6092	µg/mL	Unstressed
			+/- 303.3275	µg/mL	Stressed
4	Butyl acetate CAS # 123-86-4 Purity 99% (Lot SHBK5137)	2,512.0 µg/mL	+/- 14.7418	µg/mL	Gravimetric
			+/- 151.5733	µg/mL	Unstressed
			+/- 151.9331	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:

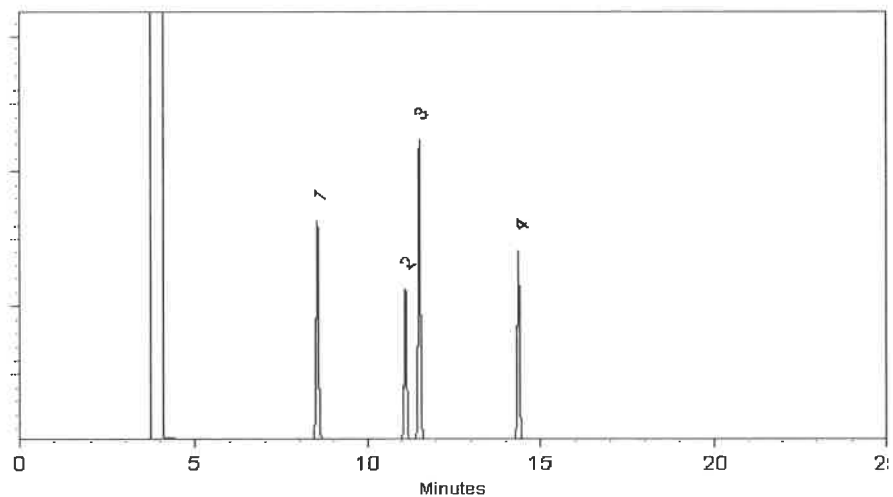
200°C

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.

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 22-Dec-2019

Balance: B442140311

Tyler Brown
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



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Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

REC'D
4/24/20

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
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
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
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
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
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
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

8	Methylene chloride (dichloromethane) CAS # 75-09-2.SEC (Lot FGM02) Purity 99%	2,506.7 µg/mL	+/-	14.5740 µg/mL	Gravimetric
			+/-	151.2383 µg/mL	Unstressed
			+/-	151.5974 µg/mL	Stressed
9	Carbon disulfide CAS # 75-15-0.SEC (Lot MKBL1376V) Purity 99%	2,500.7 µg/mL	+/-	14.5391 µg/mL	Gravimetric
			+/-	150.8763 µg/mL	Unstressed
			+/-	151.2345 µg/mL	Stressed
10	Acrylonitrile CAS # 107-13-1.SEC (Lot UERIL) Purity 99%	25,001.2 µg/mL	+/-	145.3513 µg/mL	Gravimetric
			+/-	1,508.4304 µg/mL	Unstressed
			+/-	1,512.0117 µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4.SEC (Lot ZHKYA) Purity 99%	2,501.5 µg/mL	+/-	14.5439 µg/mL	Gravimetric
			+/-	150.9266 µg/mL	Unstressed
			+/-	151.2849 µg/mL	Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2.SEC (Lot HGC01-BLKT) Purity 98%	2,501.3 µg/mL	+/-	14.5427 µg/mL	Gravimetric
			+/-	150.9137 µg/mL	Unstressed
			+/-	151.2720 µg/mL	Stressed
13	n-Hexane (C6) CAS # 110-54-3.SEC (Lot K24W001) Purity 97%	2,503.2 µg/mL	+/-	14.5541 µg/mL	Gravimetric
			+/-	151.0320 µg/mL	Unstressed
			+/-	151.3905 µg/mL	Stressed
14	1,1-Dichloroethane CAS # 75-34-3.SEC (Lot 5379000) Purity 99%	2,502.0 µg/mL	+/-	14.5468 µg/mL	Gravimetric
			+/-	150.9567 µg/mL	Unstressed
			+/-	151.3151 µg/mL	Stressed
15	2,2-Dichloropropane CAS # 594-20-7.SEC (Lot I7E8E) Purity 98%	2,503.2 µg/mL	+/-	14.5541 µg/mL	Gravimetric
			+/-	151.0320 µg/mL	Unstressed
			+/-	151.3905 µg/mL	Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5.SEC (Lot TS5UB) Purity 97%	2,501.0 µg/mL	+/-	14.5409 µg/mL	Gravimetric
			+/-	150.8954 µg/mL	Unstressed
			+/-	151.2537 µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1.SEC (Lot PH2XK) Purity 99%	62,508.3 µg/mL	+/-	363.4098 µg/mL	Gravimetric
			+/-	3,771.4029 µg/mL	Unstressed
			+/-	3,780.3569 µg/mL	Stressed
18	Chloroform CAS # 67-66-3.SEC (Lot 1297547) Purity 99%	2,500.5 µg/mL	+/-	14.5381 µg/mL	Gravimetric
			+/-	150.8662 µg/mL	Unstressed
			+/-	151.2244 µg/mL	Stressed
19	Bromochloromethane CAS # 74-97-5.SEC (Lot 5670200) Purity 99%	2,507.0 µg/mL	+/-	14.5759 µg/mL	Gravimetric
			+/-	151.2584 µg/mL	Unstressed
			+/-	151.6175 µg/mL	Stressed
20	Tetrahydrofuran CAS # 109-99-9.SEC (Lot 8DAOJ) Purity 99%	5,006.7 µg/mL	+/-	29.1092 µg/mL	Gravimetric
			+/-	302.0744 µg/mL	Unstressed
			+/-	302.7916 µg/mL	Stressed
21	1,1,1-Trichloroethane CAS # 71-55-6.SEC (Lot 7998000) Purity 99%	2,507.7 µg/mL	+/-	14.5798 µg/mL	Gravimetric
			+/-	151.2986 µg/mL	Unstressed
			+/-	151.6579 µg/mL	Stressed
22	Cyclohexane CAS # 110-82-7.SEC (Lot YADRA) Purity 99%	2,508.0 µg/mL	+/-	14.5817 µg/mL	Gravimetric
			+/-	151.3188 µg/mL	Unstressed
			+/-	151.6780 µg/mL	Stressed
23	1,1-Dichloropropene CAS # 563-58-6.SEC (Lot 5221100) Purity 96%	2,502.4 µg/mL	+/-	14.5492 µg/mL	Gravimetric
			+/-	150.9809 µg/mL	Unstressed
			+/-	151.3393 µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/-	14.5953 µg/mL	Gravimetric
				+/-	151.4595 µg/mL	Unstressed
				+/-	151.8191 µg/mL	Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/-	14.6040 µg/mL	Gravimetric
				+/-	151.5500 µg/mL	Unstressed
				+/-	151.9098 µg/mL	Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/-	14.5430 µg/mL	Gravimetric
				+/-	150.9165 µg/mL	Unstressed
				+/-	151.2748 µg/mL	Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/-	14.5633 µg/mL	Gravimetric
				+/-	151.1277 µg/mL	Unstressed
				+/-	151.4865 µg/mL	Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/-	14.5856 µg/mL	Gravimetric
				+/-	151.3590 µg/mL	Unstressed
				+/-	151.7183 µg/mL	Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/-	14.5614 µg/mL	Gravimetric
				+/-	151.1076 µg/mL	Unstressed
				+/-	151.4663 µg/mL	Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/-	14.5585 µg/mL	Gravimetric
				+/-	151.0774 µg/mL	Unstressed
				+/-	151.4361 µg/mL	Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/-	290.7356 µg/mL	Gravimetric
				+/-	3,017.2028 µg/mL	Unstressed
				+/-	3,024.3661 µg/mL	Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/-	14.5904 µg/mL	Gravimetric
				+/-	151.4093 µg/mL	Unstressed
				+/-	151.7687 µg/mL	Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/-	14.5468 µg/mL	Gravimetric
				+/-	150.9567 µg/mL	Unstressed
				+/-	151.3151 µg/mL	Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/-	14.5439 µg/mL	Gravimetric
				+/-	150.9266 µg/mL	Unstressed
				+/-	151.2849 µg/mL	Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/-	14.5866 µg/mL	Gravimetric
				+/-	151.3690 µg/mL	Unstressed
				+/-	151.7284 µg/mL	Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/-	14.5520 µg/mL	Gravimetric
				+/-	151.0098 µg/mL	Unstressed
				+/-	151.3684 µg/mL	Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/-	14.5498 µg/mL	Gravimetric
				+/-	150.9869 µg/mL	Unstressed
				+/-	151.3454 µg/mL	Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/-	14.5507 µg/mL	Gravimetric
				+/-	150.9970 µg/mL	Unstressed
				+/-	151.3555 µg/mL	Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/-	14.5643 µg/mL	Gravimetric
				+/-	151.1378 µg/mL	Unstressed
				+/-	151.4966 µg/mL	Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4	µg/mL	+/-	14.5494	µg/mL	Gravimetric
					+/-	150.9832	µg/mL	Unstressed
					+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
					+/-	151.0372	µg/mL	Unstressed
					+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
					+/-	151.1277	µg/mL	Unstressed
					+/-	151.4865	µg/mL	Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7	µg/mL	+/-	7.2941	µg/mL	Gravimetric
					+/-	75.5202	µg/mL	Unstressed
					+/-	75.6995	µg/mL	Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7	µg/mL	+/-	7.3058	µg/mL	Gravimetric
					+/-	75.6409	µg/mL	Unstressed
					+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
					+/-	151.0472	µg/mL	Unstressed
					+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
					+/-	151.2383	µg/mL	Unstressed
					+/-	151.5974	µg/mL	Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2	µg/mL	+/-	14.5594	µg/mL	Gravimetric
					+/-	151.0875	µg/mL	Unstressed
					+/-	151.4462	µg/mL	Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2	µg/mL	+/-	14.5769	µg/mL	Gravimetric
					+/-	151.2685	µg/mL	Unstressed
					+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2	µg/mL	+/-	14.5653	µg/mL	Gravimetric
					+/-	151.1478	µg/mL	Unstressed
					+/-	151.5067	µg/mL	Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
					+/-	150.8661	µg/mL	Unstressed
					+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
					+/-	150.9137	µg/mL	Unstressed
					+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
					+/-	150.9567	µg/mL	Unstressed
					+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7	µg/mL	+/-	14.5682	µg/mL	Gravimetric
					+/-	151.1780	µg/mL	Unstressed
					+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2	µg/mL	+/-	14.6177	µg/mL	Gravimetric
					+/-	151.6922	µg/mL	Unstressed
					+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
					+/-	151.0573	µg/mL	Unstressed
					+/-	151.4159	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,506.2 µg/mL	+/-	14.5711 µg/mL	Gravimetric
				+/-	151.2081 µg/mL	Unstressed
				+/-	151.5671 µg/mL	Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,510.0 µg/mL	+/-	14.5934 µg/mL	Gravimetric
				+/-	151.4394 µg/mL	Unstressed
				+/-	151.7990 µg/mL	Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,504.7 µg/mL	+/-	14.5623 µg/mL	Gravimetric
				+/-	151.1176 µg/mL	Unstressed
				+/-	151.4764 µg/mL	Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,509.2 µg/mL	+/-	14.5885 µg/mL	Gravimetric
				+/-	151.3891 µg/mL	Unstressed
				+/-	151.7486 µg/mL	Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	2,505.8 µg/mL	+/-	14.5691 µg/mL	Gravimetric
				+/-	151.1880 µg/mL	Unstressed
				+/-	151.5470 µg/mL	Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot JMIYD)	2,508.7 µg/mL	+/-	14.5856 µg/mL	Gravimetric
				+/-	151.3590 µg/mL	Unstressed
				+/-	151.7183 µg/mL	Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,504.7 µg/mL	+/-	14.5623 µg/mL	Gravimetric
				+/-	151.1176 µg/mL	Unstressed
				+/-	151.4764 µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 6628200)	2,500.3 µg/mL	+/-	14.5372 µg/mL	Gravimetric
				+/-	150.8562 µg/mL	Unstressed
				+/-	151.2143 µg/mL	Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,506.3 µg/mL	+/-	14.5720 µg/mL	Gravimetric
				+/-	151.2182 µg/mL	Unstressed
				+/-	151.5772 µg/mL	Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,509.8 µg/mL	+/-	14.5924 µg/mL	Gravimetric
				+/-	151.4294 µg/mL	Unstressed
				+/-	151.7889 µg/mL	Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	2,513.7 µg/mL	+/-	14.6147 µg/mL	Gravimetric
				+/-	151.6607 µg/mL	Unstressed
				+/-	152.0207 µg/mL	Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot R6QDM)	2,501.8 µg/mL	+/-	14.5459 µg/mL	Gravimetric
				+/-	150.9467 µg/mL	Unstressed
				+/-	151.3051 µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	2,508.5 µg/mL	+/-	14.5845 µg/mL	Gravimetric
				+/-	151.3473 µg/mL	Unstressed
				+/-	151.7066 µg/mL	Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,503.3 µg/mL	+/-	14.5546 µg/mL	Gravimetric
				+/-	151.0372 µg/mL	Unstressed
				+/-	151.3958 µg/mL	Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	2,504.4 µg/mL	+/-	14.5607 µg/mL	Gravimetric
				+/-	151.1002 µg/mL	Unstressed
				+/-	151.4590 µg/mL	Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,503.3 µg/mL	+/-	14.5546 µg/mL	Gravimetric
				+/-	151.0372 µg/mL	Unstressed
				+/-	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:

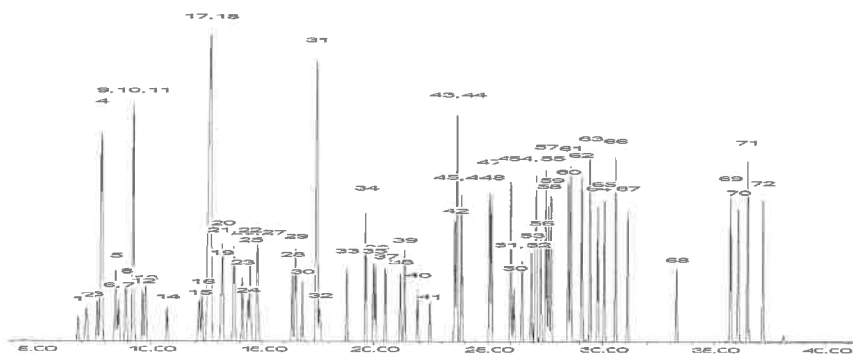
200°C

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

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018

Balance: 1127510105

Diane Shaffer

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 571992 Lot No.: A0143774
Description: 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: June 30, 2021 Storage: 0°C or colder

RECEIVED
8/30/19
4x/mL
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 (Lot SHBJ5713) Purity 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL Gravimetric +/- 150.8738 µg/mL Unstressed +/- 151.2320 µg/mL Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00009482) Purity 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL Gravimetric +/- 150.9341 µg/mL Unstressed +/- 151.2925 µg/mL Stressed
3	1,1-dichloroethene CAS # 75-35-4 (Lot SHBG8609V) Purity 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL Gravimetric +/- 150.9492 µg/mL Unstressed +/- 151.3076 µg/mL Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBJ9404) Purity 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL Gravimetric +/- 1,508.8503 µg/mL Unstressed +/- 1,512.4325 µg/mL Stressed
5	Methyl acetate CAS # 79-20-9 (Lot SHBG4345V) Purity 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL Gravimetric +/- 301.7174 µg/mL Unstressed +/- 302.4337 µg/mL Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBH4362V) Purity 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL Gravimetric +/- 150.8738 µg/mL Unstressed +/- 151.2320 µg/mL Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot WXBH7852V) Purity 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL Gravimetric +/- 150.9567 µg/mL Unstressed +/- 151.3151 µg/mL Stressed

8	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBK5095) Purity 99%	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
				+/-	150.8813	µg/mL	Unstressed
				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide CAS # 75-15-0 (Lot U22D706) Purity 99%	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
				+/-	150.9040	µg/mL	Unstressed
				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile CAS # 107-13-1 (Lot R15D047) Purity 99%	25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
				+/-	1,508.9860	µg/mL	Unstressed
				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 (Lot SHBH9526) Purity 99%	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
				+/-	150.8512	µg/mL	Unstressed
				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
				+/-	150.9115	µg/mL	Unstressed
				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6) CAS # 110-54-3 (Lot SHBH8106) Purity 99%	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
				+/-	150.8813	µg/mL	Unstressed
				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane CAS # 75-34-3 (Lot 462600) Purity 99%	2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
				+/-	150.8587	µg/mL	Unstressed
				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBT5124) Purity 99%	2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
				+/-	150.8512	µg/mL	Unstressed
				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 (Lot SHBK0551) Purity 99%	62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
				+/-	3,770.9529	µg/mL	Unstressed
				+/-	3,779.9058	µg/mL	Stressed
18	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
				+/-	150.8662	µg/mL	Unstressed
				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane CAS # 74-97-5 (Lot 00008541) Purity 98%	2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
				+/-	150.8718	µg/mL	Unstressed
				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran CAS # 109-99-9 (Lot SHBJ6179) Purity 99%	5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
				+/-	301.7099	µg/mL	Unstressed
				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane CAS # 71-55-6 (Lot B15W12061) Purity 99%	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
				+/-	150.8813	µg/mL	Unstressed
				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane CAS # 110-82-7 (Lot MKCC9660) Purity 99%	2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene CAS # 563-58-6 (Lot 180531JLM) Purity 99%	2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
				+/-	150.8738	µg/mL	Unstressed
				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/-	14.5418 µg/mL	Gravimetric
				+/-	150.9040 µg/mL	Unstressed
				+/-	151.2622 µg/mL	Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/-	14.5447 µg/mL	Gravimetric
				+/-	150.9341 µg/mL	Unstressed
				+/-	151.2925 µg/mL	Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/-	14.5425 µg/mL	Gravimetric
				+/-	150.9115 µg/mL	Unstressed
				+/-	151.2698 µg/mL	Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/-	14.5403 µg/mL	Gravimetric
				+/-	150.8889 µg/mL	Unstressed
				+/-	151.2471 µg/mL	Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/-	14.5381 µg/mL	Gravimetric
				+/-	150.8662 µg/mL	Unstressed
				+/-	151.2244 µg/mL	Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/-	14.5447 µg/mL	Gravimetric
				+/-	150.9341 µg/mL	Unstressed
				+/-	151.2925 µg/mL	Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/-	14.5381 µg/mL	Gravimetric
				+/-	150.8662 µg/mL	Unstressed
				+/-	151.2244 µg/mL	Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/-	290.6957 µg/mL	Gravimetric
				+/-	3,016.7880 µg/mL	Unstressed
				+/-	3,023.9503 µg/mL	Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/-	14.5468 µg/mL	Gravimetric
				+/-	150.9567 µg/mL	Unstressed
				+/-	151.3151 µg/mL	Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/-	14.5432 µg/mL	Gravimetric
				+/-	150.9190 µg/mL	Unstressed
				+/-	151.2773 µg/mL	Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/-	14.5359 µg/mL	Gravimetric
				+/-	150.8436 µg/mL	Unstressed
				+/-	151.2017 µg/mL	Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/-	14.5512 µg/mL	Gravimetric
				+/-	151.0020 µg/mL	Unstressed
				+/-	151.3605 µg/mL	Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/-	14.5387 µg/mL	Gravimetric
				+/-	150.8718 µg/mL	Unstressed
				+/-	151.2300 µg/mL	Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/-	14.5374 µg/mL	Gravimetric
				+/-	150.8587 µg/mL	Unstressed
				+/-	151.2169 µg/mL	Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/-	14.5403 µg/mL	Gravimetric
				+/-	150.8889 µg/mL	Unstressed
				+/-	151.2471 µg/mL	Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/-	14.5410 µg/mL	Gravimetric
				+/-	150.8964 µg/mL	Unstressed
				+/-	151.2547 µg/mL	Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKCC0877)	2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
					+/-	150.9827	µg/mL	Unstressed
					+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
					+/-	150.8587	µg/mL	Unstressed
					+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBH4459V)	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
					+/-	150.9040	µg/mL	Unstressed
					+/-	151.2622	µg/mL	Stressed
43	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBJ2338)	1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
					+/-	75.5085	µg/mL	Unstressed
					+/-	75.6878	µg/mL	Stressed
44	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
					+/-	75.4256	µg/mL	Unstressed
					+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed
47	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH7231)	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
					+/-	150.8813	µg/mL	Unstressed
					+/-	151.2395	µg/mL	Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot MKCC9766)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
					+/-	150.8436	µg/mL	Unstressed
					+/-	151.2017	µg/mL	Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBG3138V)	2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
					+/-	150.8964	µg/mL	Unstressed
					+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCF8470)	2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
					+/-	150.9341	µg/mL	Unstressed
					+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
					+/-	150.8662	µg/mL	Unstressed
					+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
					+/-	150.9115	µg/mL	Unstressed
					+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 94%	(Lot MKBX7788V)	2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
					+/-	150.8389	µg/mL	Unstressed
					+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot WXBC3346V)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- +/- +/-	14.5348 150.8320 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- +/- +/-	14.5432 150.9190 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- +/- +/-	14.5519 151.0095 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- +/- +/-	14.5476 150.9643 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- +/- +/-	14.5512 151.0020 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

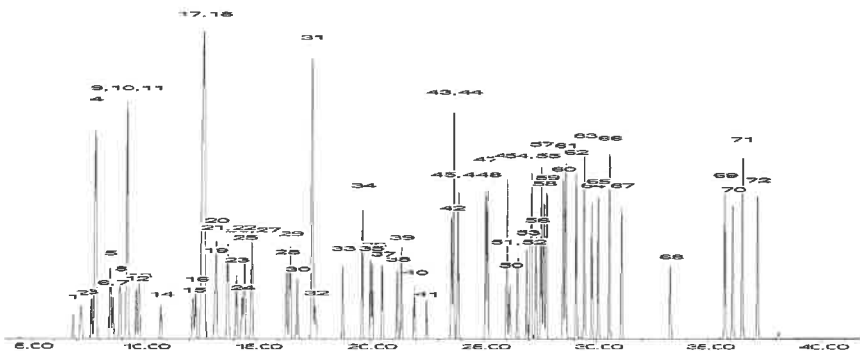
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 **Balance:** B251644995

Diane Shaffer
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_00004



110 Benner Circle
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Tel: (800)356-1688
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993.SEC **Lot No.:** A0143318

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 : November 30, 2020 **Storage:** 0°C or colder

Rec'd
5/26/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetonitrile CAS # 75-05-8.SEC (Lot 7KGDA) Purity 99%	25,020.5 µg/mL	+/- 146.5005 µg/mL Gravimetric +/- 1,237.8317 µg/mL Unstressed +/- 1,268.6055 µg/mL Stressed
2	Diisopropyl ether (DIPE) CAS # 108-20-3.SEC (Lot LL7TN-SH) Purity 98%	2,506.8 µg/mL	+/- 14.7115 µg/mL Gravimetric +/- 124.0241 µg/mL Unstressed +/- 127.1073 µg/mL Stressed
3	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3.SEC (Lot MHBIG-QK) Purity 99%	2,509.0 µg/mL	+/- 14.7242 µg/mL Gravimetric +/- 124.1310 µg/mL Unstressed +/- 127.2168 µg/mL Stressed
4	Propionitrile CAS # 107-12-0.SEC (Lot PS48O) Purity 99%	25,017.5 µg/mL	+/- 146.4830 µg/mL Gravimetric +/- 1,237.6833 µg/mL Unstressed +/- 1,268.4534 µg/mL Stressed
5	tert-Amyl alcohol CAS # 75-85-4.SEC (Lot ZL6RD) Purity 99%	25,019.0 µg/mL	+/- 146.4917 µg/mL Gravimetric +/- 1,237.7575 µg/mL Unstressed +/- 1,268.5294 µg/mL Stressed
6	tert-Amyl methyl ether (TAME) CAS # 994-05-8.SEC (Lot 7375800) Purity 98%	2,510.3 µg/mL	+/- 14.7317 µg/mL Gravimetric +/- 124.1938 µg/mL Unstressed +/- 127.2812 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)

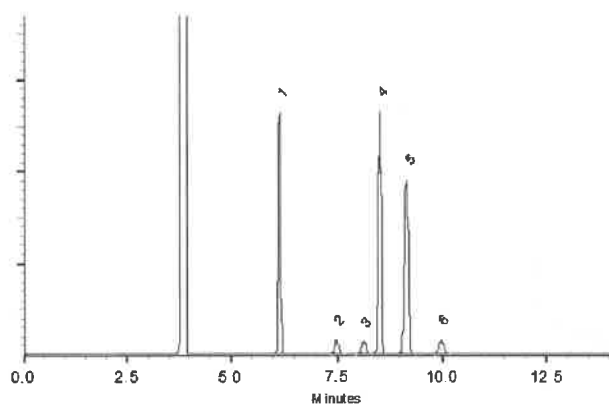
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 15-Nov-2018 **Balance:** 1128342314

Justin Alberson
Justin Alberson - Operations Tech-ARM QC

Date Passed: 20-Nov-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

mv-571993_00004



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 75-05-8 (Lot SHBH6233) Purity 99%	25,249.0 µg/mL	+/- 147.8384 µg/mL Gravimetric +/- 1,249.1362 µg/mL Unstressed +/- 1,280.1910 µg/mL Stressed
2	Diisopropyl ether (DIPE) CAS # 108-20-3 (Lot SHBH1927V) Purity 99%	2,524.3 µg/mL	+/- 14.8142 µg/mL Gravimetric +/- 124.8896 µg/mL Unstressed +/- 127.9943 µg/mL Stressed
3	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 (Lot MKCC2702) Purity 99%	2,524.3 µg/mL	+/- 14.8142 µg/mL Gravimetric +/- 124.8896 µg/mL Unstressed +/- 127.9943 µg/mL Stressed
4	Propionitrile CAS # 107-12-0 (Lot BCBV8545) Purity 99%	25,249.7 µg/mL	+/- 147.8424 µg/mL Gravimetric +/- 1,249.1692 µg/mL Unstressed +/- 1,280.2248 µg/mL Stressed
5	tert-Amyl alcohol CAS # 75-85-4 (Lot STBG1140V) Purity 99%	25,249.0 µg/mL	+/- 147.8384 µg/mL Gravimetric +/- 1,249.1362 µg/mL Unstressed +/- 1,280.1910 µg/mL Stressed
6	tert-Amyl methyl ether (TAME) CAS # 994-05-8 (Lot HMBF8365V) Purity 99%	2,523.7 µg/mL	+/- 14.8103 µg/mL Gravimetric +/- 124.8566 µg/mL Unstressed +/- 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)

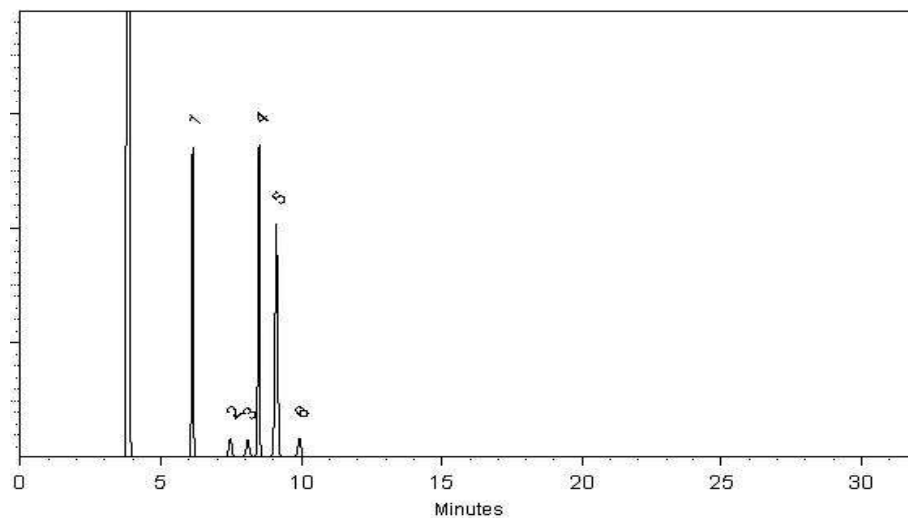
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Jessica McClenahan - Operations Technician I

Date Mixed: 14-Jan-2019

Balance: B251644995

Jennifer I Pollino

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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

REC'D 4/23/20

Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Ethanol CAS # 64-17-5 Purity 99% (Lot SHBK6489)	100,295.5 µg/mL	+/- 587.2219 µg/mL Gravimetric +/- 2,148.4543 µg/mL Unstressed +/- 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
@ 5°C/min.

Inj. Temp:

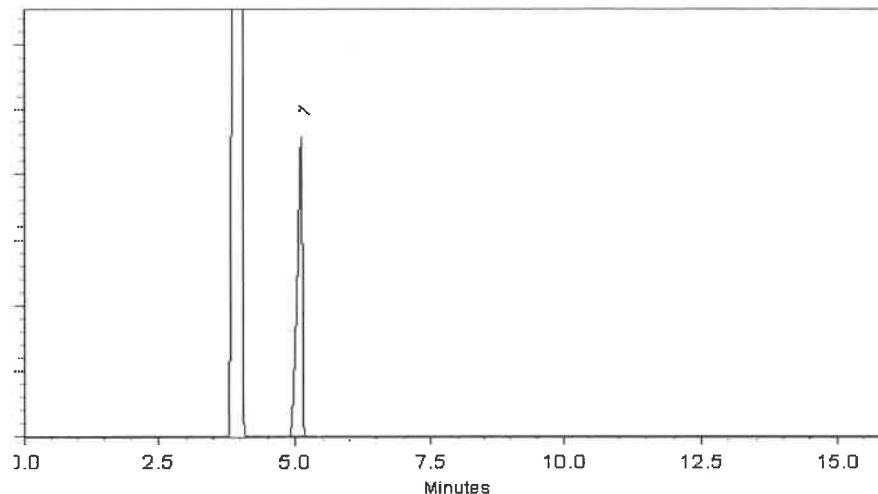
200°C

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

Certificate of Analysis

ISO 17034

Custom Standard

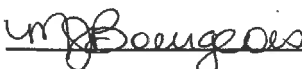
Product Number: CUS-17739**Page:** 1 of 1**Lot Number:** 0006503344**Lot Issue Date:** 12-Nov-2019**Expiration Date:** 31-Dec-2021

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/NCCL 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



ISO 17034 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO 17025 Cert No.
AT-1937

Reagent

MV-CUS17739_00008



Certificate of Analysis

REC'D
6/24/21

Product Name: Custom Standard

Product Number: CUS-17739

Lot Number: 0006582355

Lot Issue Date: 12-Jan-2021

Expiration Date: 28-Feb-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration $\pm$ Uncertainty
1-chlorohexane	000544-10-5	RM15291	1004 $\pm$ 5 μ g/mL
2-pentanone	000107-87-9	RM13478	4018 $\pm$ 20 μ g/mL
sec-butanol	000078-92-2	RM01299	30102 $\pm$ 151 μ g/mL

Matrix: methanol (purge & trap grade)

Storage Conditions: Store Frozen (-25° to -10° C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20° C to 25° C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

Reagent

mv-IS/SS Tune_00001



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

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	tert-Butyl-d9-alcohol	(Lot CD-107)	5,000.1 µg/mL	+/- 29.0694 µg/mL	Gravimetric		
	CAS # 25725-11-5			+/- 107.0521 µg/mL	Unstressed		
	Purity 98%			+/- 110.1643 µg/mL	Stressed		
2	Dibromofluoromethane	(Lot 0012017)	250.2 µg/mL	+/- 1.4580 µg/mL	Gravimetric		
	CAS # 1868-53-7			+/- 5.3577 µg/mL	Unstressed		
	Purity 99%			+/- 5.5134 µg/mL	Stressed		
3	1,2-Dichloroethane-d4	(Lot PR-29377)	250.3 µg/mL	+/- 1.4584 µg/mL	Gravimetric		
	CAS # 17060-07-0			+/- 5.3592 µg/mL	Unstressed		
	Purity 99%			+/- 5.5149 µg/mL	Stressed		
4	1,4-Dioxane-d8	(Lot I-19942)	5,000.5 µg/mL	+/- 29.0716 µg/mL	Gravimetric		
	CAS # 17647-74-4			+/- 107.0602 µg/mL	Unstressed		
	Purity 99%			+/- 110.1726 µg/mL	Stressed		
5	Fluorobenzene	(Lot BCBK8171V)	250.1 µg/mL	+/- 1.4573 µg/mL	Gravimetric		
	CAS # 462-06-6			+/- 5.3549 µg/mL	Unstressed		
	Purity 99%			+/- 5.5105 µg/mL	Stressed		
6	Toluene-d8	(Lot PR-27311)	250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric		
	CAS # 2037-26-5			+/- 5.3556 µg/mL	Unstressed		
	Purity 99%			+/- 5.5112 µg/mL	Stressed		
7	Chlorobenzene-d5	(Lot PR-23926)	250.5 µg/mL	+/- 1.4600 µg/mL	Gravimetric		
	CAS # 3114-55-4			+/- 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)

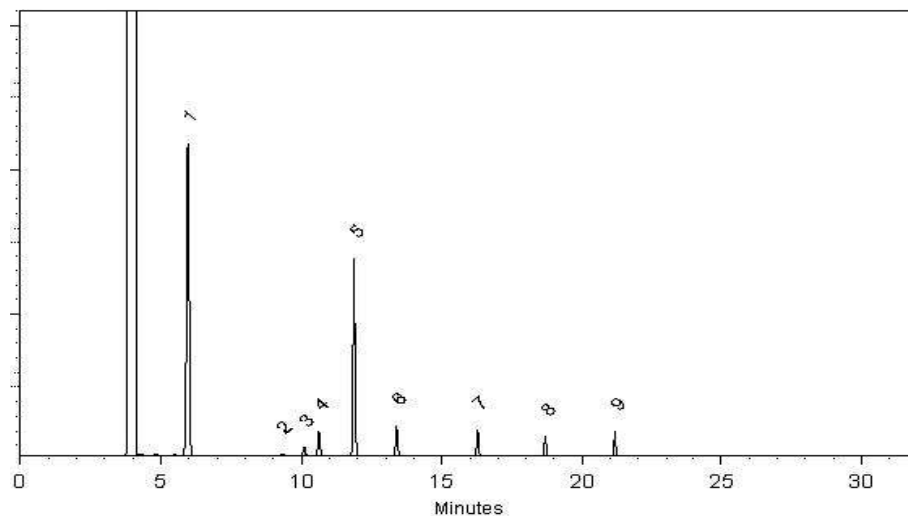
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

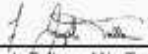
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

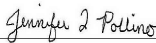


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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_00011

SPExertificate®

Certificate of Reference Material

Catalog Number: VO-TAOH-5

Lot No. CP200901024

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: September 2, 2020

Expiration Date: March 1, 2021

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:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
Propylene oxide	75-56-9	50000 µg/mL	99%	49920 µg/mL	± 1797 µg/mL
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	49993 µg/mL	± 1800 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	999 µg/mL	± 36 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	1018 µg/mL	± 37 µg/mL

* - 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: September 2, 2020

Certifying Officer: Shannon Macieira
Shannon Macieira, Operations Manager

Report of Certification

Catalog Number: VO-TAOH-5

Lot No. CP200901024

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: September 2, 2020

Expiration Date: March 1, 2021

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 labels
- ISO Guide 35: Reference 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 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
- $U = k u_c$ 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 breach 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.

SPEX CertiPrep

Your Science is Our Passion.®

203 Norcross Ave. Metuchen, NJ 08840

www.spexcrtiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647



Reagent

mv-VO-TAOH-5_00012

SPEXertificate®

Certificate of Reference Material

Catalog Number: VO-TAOH-5

Lot No. AA210506021

Description: Custom Organic Standard

Manufactured Date: May 6, 2021

Matrix: Methanol (Purge & Trap Grade)

Expiration Date: November 2, 2021

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:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	50032 µg/mL	± 1801 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	1003 µg/mL	± 36 µg/mL
Propylene oxide	75-56-9	50000 µg/mL	99%	50007 µg/mL	± 1800 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	1006 µg/mL	± 36 µg/mL

REC'D 5/14/21

* - 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 6, 2021

Certifying Officer: Shannon Macieira
Shannon Macieira, Operations Manager

Method 8260B

Volatile Organic Compounds (GC/MS)
by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

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-14-20210621	280-150245-1	100	98	99	94
Muni-Well-33-20210621	280-150245-2	101	100	98	96
RW-8249P-20210621	280-150245-3	100	99	100	96
RW-7773P-20210621	280-150245-4	99	97	99	95
RW-7773PQ-20210621	280-150245-5	100	98	99	97
RW-7200P-20210621	280-150245-6	101	98	99	96
RW-7586P-20210621	280-150245-7	100	99	99	96
RW-7677P-20210621	280-150245-8	100	98	100	95
RW-8000B-20210622	280-150245-9	100	95	99	96
PA-1-20210622	280-150245-10	99	98	98	95
MW-37-20210622	280-150245-11	100	98	99	96
MW-37Q-20210622	280-150245-12	99	95	96	93
PA-3-20210622	280-150245-13	101	95	97	93
RW-7091R-20210622	280-150245-14	96	96	100	93
RW-2151H-20210623	280-150245-15	97	97	99	92
PA-8-37-47-20210623	280-150245-16	96	96	99	93
PA-8-77-87-20210623	280-150245-17	98	94	98	95
RW-8030P-20210623	280-150245-18	99	97	97	96
RW-2172H-20210623	280-150245-19	97	93	98	98
RW-2172HQ-20210623	280-150245-20	96	99	96	93
TB-01-20210625	280-150245-21	97	96	100	95
EB-01-20210622	280-150245-22	99	94	99	93
EB-02-20210622	280-150245-23	97	98	99	94
EB-03-20210623	280-150245-24	99	94	100	94
EB-04-20210623	280-150245-25	98	97	95	94
EB-05-20210624	280-150245-26	100	94	100	97
EB-06-20210625	280-150245-27	97	96	102	95
	MB 280-541784/9	100	98	99	96
	MB 280-541786/9	98	96	98	94
	LCS 280-541784/4	100	100	99	95
	LCS 280-541784/6	101	98	98	95
	LCS 280-541786/4	99	96	98	97
	LCS 280-541786/6	98	95	97	91

QC LIMITS

DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

77-120
70-127
80-125
78-120

Column to be used to flag recovery values

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 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 280-541784/5	102	99	99	95
	LCSD 280-541784/7	100	99	98	97
	LCSD 280-541786/5	96	97	100	97
	LCSD 280-541786/7	96	93	96	96
PA-1-20210622 MS	280-150245-10 MS	100	97	99	92
PA-1-20210622 MS	280-150245-10 MS	102	100	97	95
RW-8030P-20210623 MS	280-150245-18 MS	99	96	97	94
RW-8030P-20210623 MS	280-150245-18 MS	95	96	100	95
PA-1-20210622 MSD	280-150245-10 MSD	102	99	97	96
PA-1-20210622 MSD	280-150245-10 MSD	101	99	98	95
RW-8030P-20210623 MSD	280-150245-18 MSD	99	98	98	94
RW-8030P-20210623 MSD	280-150245-18 MSD	95	95	97	97

DBFM = Dibromofluoromethane (Surr)
 DCA = 1,2-Dichloroethane-d4 (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

QC LIMITS
 77-120
 70-127
 80-125
 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.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: P6396.D

Lab ID: LCS 280-541784/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	98.7	99	39-156	
Acrolein	247	239	97	36-147	
Acrylonitrile	250	247	99	56-135	
Benzene	25.0	25.9	104	65-135	
Chlorobromomethane	25.0	26.3	105	65-135	
Dichlorobromomethane	25.0	26.2	105	65-135	
Bromoform	25.0	26.5	106	62-135	
Bromomethane	25.0	31.2	125	45-135	
2-Butanone (MEK)	100	98.0	98	44-177	
Carbon disulfide	25.0	23.7	95	55-143	
Carbon tetrachloride	25.0	28.8	115	65-135	
Chlorobenzene	25.0	25.7	103	65-135	
Chlorodibromomethane	25.0	25.6	102	65-135	
Chloroethane	25.0	25.8	103	46-136	
Chloroform	25.0	25.6	102	65-135	
Chloromethane	25.0	24.2	97	34-145	
Allyl chloride	25.0	25.0	100	50-135	
1,2-Dibromo-3-Chloropropane	25.0	25.7	103	57-135	
Dibromomethane	25.0	26.1	104	65-135	
1,2-Dichlorobenzene	25.0	25.1	100	65-135	
1,3-Dichlorobenzene	25.0	25.3	101	65-135	
1,4-Dichlorobenzene	25.0	24.5	98	65-135	
trans-1,4-Dichloro-2-butene	25.0	20.6	82	53-135	
Dichlorodifluoromethane	25.0	30.7	123	43-142	
1,1-Dichloroethane	25.0	25.6	102	65-135	
1,2-Dichloroethane	25.0	24.8	99	65-135	
cis-1,2-Dichloroethene	25.0	26.3	105	65-135	
trans-1,2-Dichloroethene	25.0	26.5	106	65-135	
1,1-Dichloroethene	25.0	27.3	109	65-136	
1,2-Dichloropropane	25.0	25.1	100	64-135	
1,3-Dichloropropane	25.0	25.2	101	64-135	
2,2-Dichloropropane	25.0	27.4	110	65-135	
cis-1,3-Dichloropropene	25.0	24.9	99	65-135	
trans-1,3-Dichloropropene	25.0	25.3	101	65-135	
1,1-Dichloropropene	25.0	26.7	107	65-135	
Ethylbenzene	25.0	26.5	106	65-135	
Ethyl methacrylate	25.0	24.8	99	50-135	
2-Hexanone	100	98.6	99	57-139	
Iodomethane	25.0	26.1	105	65-142	
Isobutyl alcohol	625	621	99	55-135	
Methylene Chloride	25.0	23.8	95	54-141	
4-Methyl-2-pentanone (MIBK)	100	102	102	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: P6396.D
 Lab ID: LCS 280-541784/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	25.9	104	65-135	
1,1,1,2-Tetrachloroethane	25.0	26.4	106	65-135	
1,1,2,2-Tetrachloroethane	25.0	24.9	99	58-135	
Tetrachloroethene	25.0	27.8	111	65-135	
Toluene	25.0	25.9	104	65-135	
1,2,4-Trichlorobenzene	25.0	24.7	99	58-135	
1,1,1-Trichloroethane	25.0	27.2	109	65-135	
1,1,2-Trichloroethane	25.0	25.8	103	64-135	
Trichloroethene	25.0	26.0	104	65-135	
Trichlorofluoromethane	25.0	28.5	114	53-137	
1,2,3-Trichloropropane	25.0	25.2	101	65-135	
Vinyl acetate	50.0	50.5	101	11-187	
Vinyl chloride	25.0	26.3	105	40-137	
m-Xylene & p-Xylene	25.0	26.0	104	65-135	
o-Xylene	25.0	26.0	104	65-135	
Xylenes, Total	50.0	52.0	104	65-135	
1,2-Dibromoethane	25.0	25.4	101	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: P6398.D
Lab ID: LCS 280-541784/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	205	82	50-150	
Chloroprene	25.0	23.9	96	50-150	
Methacrylonitrile	250	220	88	50-150	
Methyl methacrylate	50.0	46.8	94	50-150	
Propionitrile	250	215	86	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3853.D

Lab ID: LCS 280-541786/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	82.0	82	39-156	
Acrolein	247	217	88	36-147	
Acrylonitrile	250	231	92	56-135	
Benzene	25.0	26.4	106	65-135	
Chlorobromomethane	25.0	25.0	100	65-135	
Dichlorobromomethane	25.0	21.6	86	65-135	
Bromoform	25.0	19.4	78	62-135	
Bromomethane	25.0	25.3	101	45-135	
2-Butanone (MEK)	100	81.1	81	44-177	
Carbon disulfide	25.0	24.4	98	55-143	
Carbon tetrachloride	25.0	23.0	92	65-135	
Chlorobenzene	25.0	24.3	97	65-135	
Chlorodibromomethane	25.0	21.3	85	65-135	
Chloroethane	25.0	25.6	103	46-136	
Chloroform	25.0	25.0	100	65-135	
Chloromethane	25.0	25.1	100	34-145	
Allyl chloride	25.0	24.9	100	50-135	
1,2-Dibromo-3-Chloropropane	25.0	16.9	68	57-135	
Dibromomethane	25.0	24.8	99	65-135	
1,2-Dichlorobenzene	25.0	27.1	109	65-135	
1,3-Dichlorobenzene	25.0	26.6	107	65-135	
1,4-Dichlorobenzene	25.0	25.5	102	65-135	
trans-1,4-Dichloro-2-butene	25.0	19.1	77	53-135	
Dichlorodifluoromethane	25.0	24.3	97	43-142	
1,1-Dichloroethane	25.0	24.9	100	65-135	
1,2-Dichloroethane	25.0	24.7	99	65-135	
cis-1,2-Dichloroethene	25.0	24.2	97	65-135	
trans-1,2-Dichloroethene	25.0	24.2	97	65-135	
1,1-Dichloroethene	25.0	26.3	105	65-136	
1,2-Dichloropropane	25.0	24.7	99	64-135	
1,3-Dichloropropane	25.0	23.9	96	64-135	
2,2-Dichloropropane	25.0	24.7	99	65-135	
cis-1,3-Dichloropropene	25.0	22.9	92	65-135	
trans-1,3-Dichloropropene	25.0	23.2	93	65-135	
1,1-Dichloropropene	25.0	26.5	106	65-135	
Ethylbenzene	25.0	25.0	100	65-135	
Ethyl methacrylate	25.0	22.0	88	50-135	
2-Hexanone	100	87.2	87	57-139	
Iodomethane	25.0	24.6	98	65-142	
Isobutyl alcohol	625	447	72	55-135	
Methylene Chloride	25.0	25.7	103	54-141	
4-Methyl-2-pentanone (MIBK)	100	93.2	93	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_3853.D
 Lab ID: LCS 280-541786/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	24.8	99	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.7	95	65-135	
1,1,2,2-Tetrachloroethane	25.0	20.3	81	58-135	
Tetrachloroethene	25.0	28.9	116	65-135	
Toluene	25.0	25.8	103	65-135	
1,2,4-Trichlorobenzene	25.0	24.8	99	58-135	
1,1,1-Trichloroethane	25.0	23.1	93	65-135	
1,1,2-Trichloroethane	25.0	23.2	93	64-135	
Trichloroethene	25.0	23.4	94	65-135	
Trichlorofluoromethane	25.0	27.1	108	53-137	
1,2,3-Trichloropropane	25.0	23.2	93	65-135	
Vinyl acetate	50.0	47.3	95	11-187	
Vinyl chloride	25.0	30.0	120	40-137	
m-Xylene & p-Xylene	25.0	25.3	101	65-135	
o-Xylene	25.0	25.9	104	65-135	
Xylenes, Total	50.0	51.2	102	65-135	
1,2-Dibromoethane	25.0	24.2	97	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: MS1_3855.D

Lab ID: LCS 280-541786/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	235	94	50-150	
Chloroprene	25.0	24.6	98	50-150	
Methacrylonitrile	250	247	99	50-150	
Methyl methacrylate	50.0	47.7	95	50-150	
Propionitrile	250	231	92	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: P6397.D

Lab ID: LCSD 280-541784/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	95.8	96	3	23	39-156	
Acrolein	247	238	96	1	30	36-147	
Acrylonitrile	250	243	97	1	30	56-135	
Benzene	25.0	25.5	102	1	20	65-135	
Chlorobromomethane	25.0	26.2	105	0	29	65-135	
Dichlorobromomethane	25.0	25.7	103	2	20	65-135	
Bromoform	25.0	26.7	107	1	27	62-135	
Bromomethane	25.0	29.4	118	6	33	45-135	
2-Butanone (MEK)	100	94.5	95	4	32	44-177	
Carbon disulfide	25.0	23.2	93	2	20	55-143	
Carbon tetrachloride	25.0	27.5	110	5	21	65-135	
Chlorobenzene	25.0	25.0	100	3	20	65-135	
Chlorodibromomethane	25.0	25.4	102	1	20	65-135	
Chloroethane	25.0	25.9	104	0	25	46-136	
Chloroform	25.0	25.3	101	1	20	65-135	
Chloromethane	25.0	23.4	94	3	24	34-145	
Allyl chloride	25.0	23.5	94	6	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	24.5	98	5	22	57-135	
Dibromomethane	25.0	25.8	103	1	26	65-135	
1,2-Dichlorobenzene	25.0	24.2	97	3	20	65-135	
1,3-Dichlorobenzene	25.0	24.5	98	3	20	65-135	
1,4-Dichlorobenzene	25.0	23.8	95	3	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	19.1	76	8	25	53-135	
Dichlorodifluoromethane	25.0	30.3	121	1	30	43-142	
1,1-Dichloroethane	25.0	25.2	101	2	21	65-135	
1,2-Dichloroethane	25.0	24.4	98	2	20	65-135	
cis-1,2-Dichloroethene	25.0	25.6	103	2	20	65-135	
trans-1,2-Dichloroethene	25.0	26.2	105	1	24	65-135	
1,1-Dichloroethene	25.0	26.2	105	4	20	65-136	
1,2-Dichloropropane	25.0	24.5	98	3	20	64-135	
1,3-Dichloropropane	25.0	24.6	98	2	20	64-135	
2,2-Dichloropropane	25.0	27.0	108	2	20	65-135	
cis-1,3-Dichloropropene	25.0	24.3	97	2	26	65-135	
trans-1,3-Dichloropropene	25.0	24.9	100	1	26	65-135	
1,1-Dichloropropene	25.0	26.0	104	3	21	65-135	
Ethylbenzene	25.0	25.4	102	4	20	65-135	
Ethyl methacrylate	25.0	24.3	97	2	30	50-135	
2-Hexanone	100	96.8	97	2	25	57-139	
Iodomethane	25.0	26.3	105	1	25	65-142	
Isobutyl alcohol	625	623	100	0	30	55-135	
Methylene Chloride	25.0	23.5	94	1	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	99.9	100	2	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: P6397.D
 Lab ID: LCSD 280-541784/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	25.3	101	2	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	25.6	102	3	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	23.8	95	4	20	58-135	
Tetrachloroethene	25.0	26.9	107	3	20	65-135	
Toluene	25.0	25.5	102	1	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.3	97	1	25	58-135	
1,1,1-Trichloroethane	25.0	26.6	106	2	20	65-135	
1,1,2-Trichloroethane	25.0	25.7	103	0	27	64-135	
Trichloroethene	25.0	25.6	103	1	20	65-135	
Trichlorofluoromethane	25.0	27.5	110	4	27	53-137	
1,2,3-Trichloropropane	25.0	24.2	97	4	23	65-135	
Vinyl acetate	50.0	51.1	102	1	24	11-187	
Vinyl chloride	25.0	25.3	101	4	24	40-137	
m-Xylene & p-Xylene	25.0	25.0	100	4	20	65-135	
o-Xylene	25.0	25.1	100	4	20	65-135	
Xylenes, Total	50.0	50.1	100	4	20	65-135	
1,2-Dibromoethane	25.0	24.7	99	3	27	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: P6399.D
 Lab ID: LCSD 280-541784/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	202	81	2	30	50-150	
Chloroprene	25.0	23.6	94	1	30	50-150	
Methacrylonitrile	250	217	87	1	30	50-150	
Methyl methacrylate	50.0	47.4	95	1	30	50-150	
Propionitrile	250	211	85	1	30	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3854.D

Lab ID: LCSD 280-541786/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	75.0	75	9	23	39-156	
Acrolein	247	199	81	8	30	36-147	
Acrylonitrile	250	214	86	7	30	56-135	
Benzene	25.0	24.5	98	8	20	65-135	
Chlorobromomethane	25.0	22.9	92	9	29	65-135	
Dichlorobromomethane	25.0	21.0	84	3	20	65-135	
Bromoform	25.0	18.3	73	6	27	62-135	
Bromomethane	25.0	23.6	95	7	33	45-135	
2-Butanone (MEK)	100	76.8	77	6	32	44-177	
Carbon disulfide	25.0	22.6	90	8	20	55-143	
Carbon tetrachloride	25.0	21.6	87	6	21	65-135	
Chlorobenzene	25.0	24.6	98	1	20	65-135	
Chlorodibromomethane	25.0	20.7	83	3	20	65-135	
Chloroethane	25.0	23.3	93	10	25	46-136	
Chloroform	25.0	22.5	90	11	20	65-135	
Chloromethane	25.0	22.5	90	11	24	34-145	
Allyl chloride	25.0	24.6	99	1	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	17.5	70	3	22	57-135	
Dibromomethane	25.0	23.2	93	6	26	65-135	
1,2-Dichlorobenzene	25.0	25.0	100	8	20	65-135	
1,3-Dichlorobenzene	25.0	25.2	101	6	20	65-135	
1,4-Dichlorobenzene	25.0	24.1	96	6	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	17.7	71	8	25	53-135	
Dichlorodifluoromethane	25.0	22.3	89	8	30	43-142	
1,1-Dichloroethane	25.0	22.9	92	9	21	65-135	
1,2-Dichloroethane	25.0	24.3	97	1	20	65-135	
cis-1,2-Dichloroethene	25.0	22.6	91	7	20	65-135	
trans-1,2-Dichloroethene	25.0	21.7	87	11	24	65-135	
1,1-Dichloroethene	25.0	23.4	94	12	20	65-136	
1,2-Dichloropropane	25.0	23.9	96	3	20	64-135	
1,3-Dichloropropane	25.0	23.3	93	3	20	64-135	
2,2-Dichloropropane	25.0	23.1	92	7	20	65-135	
cis-1,3-Dichloropropene	25.0	23.1	92	1	26	65-135	
trans-1,3-Dichloropropene	25.0	21.6	86	7	26	65-135	
1,1-Dichloropropene	25.0	23.7	95	11	21	65-135	
Ethylbenzene	25.0	24.3	97	3	20	65-135	
Ethyl methacrylate	25.0	22.4	90	2	30	50-135	
2-Hexanone	100	81.7	82	6	25	57-139	
Iodomethane	25.0	22.9	91	7	25	65-142	
Isobutyl alcohol	625	439	70	2	30	55-135	
Methylene Chloride	25.0	24.1	96	6	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	88.7	89	5	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_3854.D
 Lab ID: LCSD 280-541786/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	25.3	101	2	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.2	93	2	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	20.0	80	1	20	58-135	
Tetrachloroethene	25.0	27.5	110	5	20	65-135	
Toluene	25.0	24.2	97	6	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.6	98	1	25	58-135	
1,1,1-Trichloroethane	25.0	21.6	86	7	20	65-135	
1,1,2-Trichloroethane	25.0	21.7	87	7	27	64-135	
Trichloroethene	25.0	23.0	92	1	20	65-135	
Trichlorofluoromethane	25.0	25.3	101	7	27	53-137	
1,2,3-Trichloropropane	25.0	23.0	92	1	23	65-135	
Vinyl acetate	50.0	45.8	92	3	24	11-187	
Vinyl chloride	25.0	27.4	110	9	24	40-137	
m-Xylene & p-Xylene	25.0	24.2	97	4	20	65-135	
o-Xylene	25.0	26.1	105	1	20	65-135	
Xylenes, Total	50.0	50.3	101	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
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_3856.D
 Lab ID: LCSD 280-541786/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	241	96	2	30	50-150	
Chloroprene	25.0	24.0	96	2	30	50-150	
Methacrylonitrile	250	261	104	5	30	50-150	
Methyl methacrylate	50.0	49.6	99	4	30	50-150	
Propionitrile	250	231	92	0	30	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: P6419.D

Lab ID: 280-150245-10 MS

Client ID: PA-1-20210622 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	100	ND	85.4	85	39-156	
Acrolein	247	ND	229	93	36-147	
Acrylonitrile	250	ND	230	92	56-135	
Benzene	25.0	ND	25.8	103	65-135	
Chlorobromomethane	25.0	ND	26.3	105	65-135	
Dichlorobromomethane	25.0	ND	25.2	101	65-135	
Bromoform	25.0	ND	24.0	96	62-135	
Bromomethane	25.0	ND	26.9	108	45-135	
2-Butanone (MEK)	100	ND	88.0	88	44-177	
Carbon disulfide	25.0	ND	23.1	92	55-143	
Carbon tetrachloride	25.0	ND	28.2	113	65-135	
Chlorobenzene	25.0	ND	25.4	102	65-135	
Chlorodibromomethane	25.0	ND	24.5	98	65-135	
Chloroethane	25.0	ND	26.7	107	46-136	
Chloroform	25.0	ND	25.4	102	65-135	
Chloromethane	25.0	ND	25.0	100	34-145	
Allyl chloride	25.0	ND	23.9	96	50-135	
1,2-Dibromo-3-Chloropropane	25.0	ND	22.1	88	57-135	
Dibromomethane	25.0	ND	25.3	101	65-135	
1,2-Dichlorobenzene	25.0	ND	23.9	96	65-135	
1,3-Dichlorobenzene	25.0	ND	24.1	96	65-135	
1,4-Dichlorobenzene	25.0	ND	23.3	93	65-135	
trans-1,4-Dichloro-2-butene	25.0	ND	17.2	69	53-135	
Dichlorodifluoromethane	25.0	ND	32.1	128	43-142	
1,1-Dichloroethane	25.0	ND	25.1	100	65-135	
1,2-Dichloroethane	25.0	ND	24.0	96	65-135	
cis-1,2-Dichloroethene	25.0	ND	25.9	104	65-135	
trans-1,2-Dichloroethene	25.0	ND	26.4	106	65-135	
1,1-Dichloroethene	25.0	ND	27.0	108	65-136	
1,2-Dichloropropane	25.0	ND	24.6	99	64-135	
1,3-Dichloropropane	25.0	ND	24.8	99	64-135	
2,2-Dichloropropane	25.0	ND	24.9	100	65-135	
cis-1,3-Dichloropropene	25.0	ND	24.0	96	65-135	
trans-1,3-Dichloropropene	25.0	ND	23.3	93	65-135	
1,1-Dichloropropene	25.0	ND	26.9	108	65-135	
Ethylbenzene	25.0	ND	26.2	105	65-135	
Ethyl methacrylate	25.0	ND	23.7	95	50-135	
2-Hexanone	100	ND	90.2	90	57-139	
Iodomethane	25.0	ND	24.1	96	65-142	
Isobutyl alcohol	625	ND	560	90	55-135	
Methylene Chloride	25.0	ND	23.4	94	54-141	
4-Methyl-2-pentanone (MIBK)	100	ND	93.3	93	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: P6419.D

Lab ID: 280-150245-10 MS

Client ID: PA-1-20210622 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	104	65-135	
1,1,1,2-Tetrachloroethane	25.0	ND	26.0	104	65-135	
1,1,2,2-Tetrachloroethane	25.0	ND	22.4	90	58-135	
Tetrachloroethene	25.0	ND	28.2	113	65-135	
Toluene	25.0	ND	25.8	103	65-135	
1,2,4-Trichlorobenzene	25.0	ND	22.8	91	58-135	
1,1,1-Trichloroethane	25.0	ND	27.7	111	65-135	
1,1,2-Trichloroethane	25.0	ND	25.5	102	64-135	
Trichloroethene	25.0	1.5	27.8	105	65-135	
Trichlorofluoromethane	25.0	ND	30.0	120	53-137	
1,2,3-Trichloropropane	25.0	ND	23.0	92	65-135	
Vinyl acetate	50.0	ND	45.1	90	11-187	
Vinyl chloride	25.0	ND	27.3	109	40-137	
m-Xylene & p-Xylene	25.0	ND	26.1	104	65-135	
o-Xylene	25.0	ND	25.9	104	65-135	
Xylenes, Total	50.0	ND	52.0	104	65-135	
1,2-Dibromoethane	25.0	ND	24.7	99	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: P6421.D
Lab ID: 280-150245-10 MS Client ID: PA-1-20210622 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetonitrile	250	ND	192	77	50-150	
Chloroprene	25.0	ND	22.7	91	50-150	
Methacrylonitrile	250	ND	212	85	50-150	
Methyl methacrylate	50.0	ND	46.8	94	50-150	
Propionitrile	250	ND	206	83	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3875.D

Lab ID: 280-150245-18 MS

Client ID: RW-8030P-20210623 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	100	ND	65.3	65	39-156	
Acrolein	247	ND	176	71	36-147	
Acrylonitrile	250	ND	203	81	56-135	
Benzene	25.0	ND	24.8	99	65-135	
Chlorobromomethane	25.0	ND	24.7	99	65-135	
Dichlorobromomethane	25.0	ND	21.2	85	65-135	
Bromoform	25.0	ND	16.6	66	62-135	
Bromomethane	25.0	ND	25.1	101	45-135	
2-Butanone (MEK)	100	ND	64.4	64	44-177	
Carbon disulfide	25.0	ND	23.9	96	55-143	
Carbon tetrachloride	25.0	ND	22.6	90	65-135	
Chlorobenzene	25.0	ND	24.6	98	65-135	
Chlorodibromomethane	25.0	ND	19.2	77	65-135	
Chloroethane	25.0	ND	25.4	102	46-136	
Chloroform	25.0	ND	23.5	94	65-135	
Chloromethane	25.0	ND	24.0	96	34-145	
Allyl chloride	25.0	ND	25.0	100	50-135	
1,2-Dibromo-3-Chloropropane	25.0	ND	14.1	56	57-135	F1
Dibromomethane	25.0	ND	22.4	89	65-135	
1,2-Dichlorobenzene	25.0	ND	24.8	99	65-135	
1,3-Dichlorobenzene	25.0	ND	24.2	97	65-135	
1,4-Dichlorobenzene	25.0	ND	24.1	96	65-135	
trans-1,4-Dichloro-2-butene	25.0	ND	15.1	60	53-135	
Dichlorodifluoromethane	25.0	ND	24.2	97	43-142	
1,1-Dichloroethane	25.0	ND	24.2	97	65-135	
1,2-Dichloroethane	25.0	ND	24.1	97	65-135	
cis-1,2-Dichloroethene	25.0	ND	24.3	97	65-135	
trans-1,2-Dichloroethene	25.0	ND	23.7	95	65-135	
1,1-Dichloroethene	25.0	ND	24.1	96	65-136	
1,2-Dichloropropane	25.0	ND	25.2	101	64-135	
1,3-Dichloropropane	25.0	ND	22.2	89	64-135	
2,2-Dichloropropane	25.0	ND	24.0	96	65-135	
cis-1,3-Dichloropropene	25.0	ND	21.7	87	65-135	
trans-1,3-Dichloropropene	25.0	ND	20.5	82	65-135	
1,1-Dichloropropene	25.0	ND	25.5	102	65-135	
Ethylbenzene	25.0	ND	25.6	102	65-135	
Ethyl methacrylate	25.0	ND	19.8	79	50-135	
2-Hexanone	100	ND	70.8	71	57-139	
Iodomethane	25.0	ND	20.8	83	65-142	
Isobutyl alcohol	625	ND	330	53	55-135	F1
Methylene Chloride	25.0	ND	25.3	101	54-141	
4-Methyl-2-pentanone (MIBK)	100	ND	76.5	76	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3875.D

Lab ID: 280-150245-18 MS

Client ID: RW-8030P-20210623 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Styrene	25.0	ND	24.0	96	65-135	
1,1,1,2-Tetrachloroethane	25.0	ND	22.8	91	65-135	
1,1,2,2-Tetrachloroethane	25.0	ND	18.0	72	58-135	
Tetrachloroethene	25.0	0.80 J	28.2	109	65-135	
Toluene	25.0	ND	25.1	101	65-135	
1,2,4-Trichlorobenzene	25.0	ND	21.5	86	58-135	
1,1,1-Trichloroethane	25.0	ND	22.6	90	65-135	
1,1,2-Trichloroethane	25.0	ND	22.7	91	64-135	
Trichloroethene	25.0	4.6	27.1	90	65-135	
Trichlorofluoromethane	25.0	ND	26.8	107	53-137	
1,2,3-Trichloropropane	25.0	ND	20.8	83	65-135	
Vinyl acetate	50.0	ND	41.0	82	11-187	
Vinyl chloride	25.0	ND	28.8	115	40-137	
m-Xylene & p-Xylene	25.0	ND	25.2	101	65-135	
o-Xylene	25.0	ND	25.1	100	65-135	
Xylenes, Total	50.0	ND	50.3	101	65-135	
1,2-Dibromoethane	25.0	ND	21.4	86	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3877.D

Lab ID: 280-150245-18 MS

Client ID: RW-8030P-20210623 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetonitrile	250	ND	222	89	50-150	
Chloroprene	25.0	ND	26.0	104	50-150	
Methacrylonitrile	250	ND	238	95	50-150	
Methyl methacrylate	50.0	ND	43.4	87	50-150	
Propionitrile	250	ND	209	83	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: P6420.D

Lab ID: 280-150245-10 MSD

Client ID: PA-1-20210622 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	88.2	88	3	23	39-156	
Acrolein	247	224	91	2	30	36-147	
Acrylonitrile	250	225	90	2	30	56-135	
Benzene	25.0	24.8	99	4	20	65-135	
Chlorobromomethane	25.0	25.9	104	2	29	65-135	
Dichlorobromomethane	25.0	24.5	98	3	20	65-135	
Bromoform	25.0	23.8	95	1	27	62-135	
Bromomethane	25.0	27.1	108	1	33	45-135	
2-Butanone (MEK)	100	86.2	86	2	32	44-177	
Carbon disulfide	25.0	21.8	87	6	20	55-143	
Carbon tetrachloride	25.0	26.8	107	5	21	65-135	
Chlorobenzene	25.0	24.3	97	4	20	65-135	
Chlorodibromomethane	25.0	23.8	95	3	20	65-135	
Chloroethane	25.0	24.4	98	9	25	46-136	
Chloroform	25.0	24.7	99	3	20	65-135	
Chloromethane	25.0	23.9	95	5	24	34-145	
Allyl chloride	25.0	22.4	90	6	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	23.4	94	6	22	57-135	
Dibromomethane	25.0	24.4	98	4	26	65-135	
1,2-Dichlorobenzene	25.0	24.1	97	1	20	65-135	
1,3-Dichlorobenzene	25.0	24.5	98	1	20	65-135	
1,4-Dichlorobenzene	25.0	23.6	95	2	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	18.4	74	7	25	53-135	
Dichlorodifluoromethane	25.0	30.7	123	4	30	43-142	
1,1-Dichloroethane	25.0	24.2	97	4	21	65-135	
1,2-Dichloroethane	25.0	24.0	96	0	20	65-135	
cis-1,2-Dichloroethene	25.0	24.7	99	5	20	65-135	
trans-1,2-Dichloroethene	25.0	25.1	100	5	24	65-135	
1,1-Dichloroethene	25.0	24.9	100	8	20	65-136	
1,2-Dichloropropane	25.0	23.5	94	5	20	64-135	
1,3-Dichloropropane	25.0	23.8	95	4	20	64-135	
2,2-Dichloropropane	25.0	23.6	95	5	20	65-135	
cis-1,3-Dichloropropene	25.0	22.6	90	6	26	65-135	
trans-1,3-Dichloropropene	25.0	23.4	93	0	26	65-135	
1,1-Dichloropropene	25.0	25.1	100	7	21	65-135	
Ethylbenzene	25.0	24.2	97	8	20	65-135	
Ethyl methacrylate	25.0	22.7	91	4	30	50-135	
2-Hexanone	100	85.6	86	5	25	57-139	
Iodomethane	25.0	24.1	97	0	25	65-142	
Isobutyl alcohol	625	530	85	5	30	55-135	
Methylene Chloride	25.0	22.8	91	3	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	89.6	90	4	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: P6420.D

Lab ID: 280-150245-10 MSD

Client ID: PA-1-20210622 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	24.7	99	5	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	25.2	101	3	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	23.2	93	3	20	58-135	
Tetrachloroethene	25.0	26.2	105	8	20	65-135	
Toluene	25.0	24.7	99	4	20	65-135	
1,2,4-Trichlorobenzene	25.0	23.9	96	5	25	58-135	
1,1,1-Trichloroethane	25.0	26.0	104	6	20	65-135	
1,1,2-Trichloroethane	25.0	24.8	99	3	27	64-135	
Trichloroethene	25.0	25.6	97	8	20	65-135	
Trichlorofluoromethane	25.0	28.1	112	7	27	53-137	
1,2,3-Trichloropropane	25.0	23.5	94	2	23	65-135	
Vinyl acetate	50.0	44.2	88	2	24	11-187	
Vinyl chloride	25.0	25.9	103	5	24	40-137	
m-Xylene & p-Xylene	25.0	24.2	97	7	20	65-135	
o-Xylene	25.0	24.1	96	7	20	65-135	
Xylenes, Total	50.0	48.3	97	7	20	65-135	
1,2-Dibromoethane	25.0	23.9	96	3	27	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: P6422.D
 Lab ID: 280-150245-10 MSD Client ID: PA-1-20210622 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	194	78	1	30	50-150	
Chloroprene	25.0	22.2	89	2	30	50-150	
Methacrylonitrile	250	212	85	0	30	50-150	
Methyl methacrylate	50.0	45.8	92	2	30	50-150	
Propionitrile	250	203	81	1	30	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3876.D

Lab ID: 280-150245-18 MSD

Client ID: RW-8030P-20210623 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	65.6	66	0	23	39-156	
Acrolein	247	183	74	3	30	36-147	
Acrylonitrile	250	198	79	3	30	56-135	
Benzene	25.0	25.2	101	1	20	65-135	
Chlorobromomethane	25.0	24.5	98	1	29	65-135	
Dichlorobromomethane	25.0	20.7	83	2	20	65-135	
Bromoform	25.0	16.4	66	1	27	62-135	
Bromomethane	25.0	24.3	97	3	33	45-135	
2-Butanone (MEK)	100	65.4	65	1	32	44-177	
Carbon disulfide	25.0	23.0	92	4	20	55-143	
Carbon tetrachloride	25.0	22.7	91	0	21	65-135	
Chlorobenzene	25.0	24.1	96	2	20	65-135	
Chlorodibromomethane	25.0	20.3	81	6	20	65-135	
Chloroethane	25.0	24.4	97	4	25	46-136	
Chloroform	25.0	23.3	93	1	20	65-135	
Chloromethane	25.0	23.6	95	1	24	34-145	
Allyl chloride	25.0	24.8	99	1	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	14.6	58	3	22	57-135	
Dibromomethane	25.0	23.3	93	4	26	65-135	
1,2-Dichlorobenzene	25.0	23.9	96	4	20	65-135	
1,3-Dichlorobenzene	25.0	24.8	99	3	20	65-135	
1,4-Dichlorobenzene	25.0	23.1	92	4	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	14.5	58	4	25	53-135	
Dichlorodifluoromethane	25.0	23.4	93	4	30	43-142	
1,1-Dichloroethane	25.0	24.2	97	0	21	65-135	
1,2-Dichloroethane	25.0	23.1	92	4	20	65-135	
cis-1,2-Dichloroethene	25.0	23.0	92	5	20	65-135	
trans-1,2-Dichloroethene	25.0	23.2	93	2	24	65-135	
1,1-Dichloroethene	25.0	24.5	98	2	20	65-136	
1,2-Dichloropropane	25.0	24.0	96	5	20	64-135	
1,3-Dichloropropane	25.0	22.5	90	1	20	64-135	
2,2-Dichloropropane	25.0	23.1	92	4	20	65-135	
cis-1,3-Dichloropropene	25.0	21.4	86	1	26	65-135	
trans-1,3-Dichloropropene	25.0	20.2	81	2	26	65-135	
1,1-Dichloropropene	25.0	25.2	101	1	21	65-135	
Ethylbenzene	25.0	24.8	99	3	20	65-135	
Ethyl methacrylate	25.0	19.4	78	2	30	50-135	
2-Hexanone	100	69.3	69	2	25	57-139	
Iodomethane	25.0	22.5	90	8	25	65-142	
Isobutyl alcohol	625	356	57	8	30	55-135	
Methylene Chloride	25.0	24.5	98	3	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	74.1	74	3	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_3876.D

Lab ID: 280-150245-18 MSD

Client ID: RW-8030P-20210623 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	23.4	94	2	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	21.3	85	7	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	17.7	71	2	20	58-135	
Tetrachloroethene	25.0	27.7	108	1	20	65-135	
Toluene	25.0	23.9	96	5	20	65-135	
1,2,4-Trichlorobenzene	25.0	22.9	92	6	25	58-135	
1,1,1-Trichloroethane	25.0	22.7	91	0	20	65-135	
1,1,2-Trichloroethane	25.0	21.4	85	6	27	64-135	
Trichloroethene	25.0	26.4	87	2	20	65-135	
Trichlorofluoromethane	25.0	25.7	103	4	27	53-137	
1,2,3-Trichloropropane	25.0	18.7	75	11	23	65-135	
Vinyl acetate	50.0	39.8	80	3	24	11-187	
Vinyl chloride	25.0	28.8	115	0	24	40-137	
m-Xylene & p-Xylene	25.0	24.8	99	2	20	65-135	
o-Xylene	25.0	24.8	99	1	20	65-135	
Xylenes, Total	50.0	49.6	99	1	20	65-135	
1,2-Dibromoethane	25.0	21.2	85	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_3878.D
 Lab ID: 280-150245-18 MSD Client ID: RW-8030P-20210623 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	217	87	2	30	50-150	
Chloroprene	25.0	23.5	94	10	30	50-150	
Methacrylonitrile	250	226	90	5	30	50-150	
Methyl methacrylate	50.0	46.8	94	7	30	50-150	
Propionitrile	250	207	83	1	30	50-150	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab File ID: MS1_3858.D Lab Sample ID: MB 280-541786/9
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: VMS_MS1 Date Analyzed: 06/29/2021 23:41
 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 280-541786/4	MS1_3853.D	06/29/2021 21:55
	LCSD 280-541786/5	MS1_3854.D	06/29/2021 22:16
	LCS 280-541786/6	MS1_3855.D	06/29/2021 22:37
	LCSD 280-541786/7	MS1_3856.D	06/29/2021 22:58
MW-37Q-20210622	280-150245-12	MS1_3859.D	06/30/2021 00:17
PA-3-20210622	280-150245-13	MS1_3860.D	06/30/2021 00:38
RW-7091R-20210622	280-150245-14	MS1_3861.D	06/30/2021 01:00
RW-2151H-20210623	280-150245-15	MS1_3862.D	06/30/2021 01:21
PA-8-37-47-20210623	280-150245-16	MS1_3863.D	06/30/2021 01:42
PA-8-77-87-20210623	280-150245-17	MS1_3864.D	06/30/2021 02:03
RW-8030P-20210623	280-150245-18	MS1_3865.D	06/30/2021 02:24
RW-2172H-20210623	280-150245-19	MS1_3866.D	06/30/2021 02:45
RW-2172HQ-20210623	280-150245-20	MS1_3867.D	06/30/2021 03:06
TB-01-20210625	280-150245-21	MS1_3868.D	06/30/2021 03:27
EB-01-20210622	280-150245-22	MS1_3869.D	06/30/2021 03:48
EB-02-20210622	280-150245-23	MS1_3870.D	06/30/2021 04:10
EB-03-20210623	280-150245-24	MS1_3871.D	06/30/2021 04:31
EB-04-20210623	280-150245-25	MS1_3872.D	06/30/2021 04:52
EB-05-20210624	280-150245-26	MS1_3873.D	06/30/2021 05:13
EB-06-20210625	280-150245-27	MS1_3874.D	06/30/2021 05:34
RW-8030P-20210623 MS	280-150245-18 MS	MS1_3875.D	06/30/2021 05:55
RW-8030P-20210623 MSD	280-150245-18 MSD	MS1_3876.D	06/30/2021 06:16
RW-8030P-20210623 MS	280-150245-18 MS	MS1_3877.D	06/30/2021 06:37
RW-8030P-20210623 MSD	280-150245-18 MSD	MS1_3878.D	06/30/2021 06:58

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab File ID: P6401.D Lab Sample ID: MB 280-541784/9
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: VMS_P Date Analyzed: 06/29/2021 23:53
 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 280-541784/4	P6396.D	06/29/2021 21:58
	LCSD 280-541784/5	P6397.D	06/29/2021 22:21
	LCS 280-541784/6	P6398.D	06/29/2021 22:44
	LCSD 280-541784/7	P6399.D	06/29/2021 23:07
Muni-Well-14-20210621	280-150245-1	P6408.D	06/30/2021 02:33
Muni-Well-33-20210621	280-150245-2	P6409.D	06/30/2021 02:57
RW-8249P-20210621	280-150245-3	P6410.D	06/30/2021 03:20
RW-7773P-20210621	280-150245-4	P6411.D	06/30/2021 03:43
RW-7773PQ-20210621	280-150245-5	P6412.D	06/30/2021 04:06
RW-7200P-20210621	280-150245-6	P6413.D	06/30/2021 04:29
RW-7586P-20210621	280-150245-7	P6414.D	06/30/2021 04:52
RW-7677P-20210621	280-150245-8	P6415.D	06/30/2021 05:15
RW-8000B-20210622	280-150245-9	P6416.D	06/30/2021 05:38
PA-1-20210622	280-150245-10	P6417.D	06/30/2021 06:00
MW-37-20210622	280-150245-11	P6418.D	06/30/2021 06:23
PA-1-20210622 MS	280-150245-10 MS	P6419.D	06/30/2021 06:46
PA-1-20210622 MSD	280-150245-10 MSD	P6420.D	06/30/2021 07:09
PA-1-20210622 MS	280-150245-10 MS	P6421.D	06/30/2021 07:32
PA-1-20210622 MSD	280-150245-10 MSD	P6422.D	06/30/2021 07:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Lab File ID: MS1_2711.D BFB Injection Date: 06/04/2021
Instrument ID: VMS_MS1 BFB Injection Time: 09:51
Analysis Batch No.: 538548

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	24.1
75	30.0 - 60.0 % of mass 95	58.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	67.3
175	5.0 - 9.0 % of mass 174	4.2 (6.2) 1
176	95.0 - 101.0 % of mass 174	65.8 (97.8) 1
177	5.0 - 9.0 % of mass 176	4.2 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD010 280-538548/24	MS1_2712.D	06/04/2021	10:18
	STD020 280-538548/25	MS1_2713.D	06/04/2021	10:39
	STD050 280-538548/26	MS1_2714.D	06/04/2021	11:00
	STD10 280-538548/27	MS1_2715.D	06/04/2021	11:21
	STD50 280-538548/28	MS1_2716.D	06/04/2021	11:42
	STD75 280-538548/29	MS1_2717.D	06/04/2021	12:04
	STD100 280-538548/30	MS1_2718.D	06/04/2021	12:25
	STD200 280-538548/31	MS1_2719.D	06/04/2021	12:47
	ICV 280-538548/32	MS1_2721.D	06/04/2021	13:29
	STD005 280-538548/14	MS1_2722.D	06/04/2021	13:50
	STD010 280-538548/15	MS1_2723.D	06/04/2021	14:11
	STD020 280-538548/16	MS1_2724.D	06/04/2021	14:33
	STD10 280-538548/18	MS1_2726.D	06/04/2021	15:16
	ICIS 280-538548/19	MS1_2727.D	06/04/2021	15:37
	STD75 280-538548/20	MS1_2728.D	06/04/2021	15:58
	STD100 280-538548/21	MS1_2729.D	06/04/2021	16:20
	STD200 280-538548/22	MS1_2730.D	06/04/2021	16:41
	ICV 280-538548/23	MS1_2732.D	06/04/2021	17:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Lab File ID: MS1_3850.D BFB Injection Date: 06/29/2021
Instrument ID: VMS_MS1 BFB Injection Time: 20:49
Analysis Batch No.: 541786

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.7
75	30.0 - 60.0 % of mass 95	56.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.3
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	65.9
175	5.0 - 9.0 % of mass 174	5.2 (7.9) 1
176	95.0 - 101.0 % of mass 174	63.3 (96.0) 1
177	5.0 - 9.0 % of mass 176	4.6 (7.2) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-541786/2	MS1_3851.D	06/29/2021	21:12
	CCV 280-541786/3	MS1_3852.D	06/29/2021	21:33
	LCS 280-541786/4	MS1_3853.D	06/29/2021	21:55
	LCSD 280-541786/5	MS1_3854.D	06/29/2021	22:16
	LCS 280-541786/6	MS1_3855.D	06/29/2021	22:37
	LCSD 280-541786/7	MS1_3856.D	06/29/2021	22:58
	MB 280-541786/9	MS1_3858.D	06/29/2021	23:41
MW-37Q-20210622	280-150245-12	MS1_3859.D	06/30/2021	0:17
PA-3-20210622	280-150245-13	MS1_3860.D	06/30/2021	0:38
RW-7091R-20210622	280-150245-14	MS1_3861.D	06/30/2021	1:00
RW-2151H-20210623	280-150245-15	MS1_3862.D	06/30/2021	1:21
PA-8-37-47-20210623	280-150245-16	MS1_3863.D	06/30/2021	1:42
PA-8-77-87-20210623	280-150245-17	MS1_3864.D	06/30/2021	2:03
RW-8030P-20210623	280-150245-18	MS1_3865.D	06/30/2021	2:24
RW-2172H-20210623	280-150245-19	MS1_3866.D	06/30/2021	2:45
RW-2172HQ-20210623	280-150245-20	MS1_3867.D	06/30/2021	3:06
TB-01-20210625	280-150245-21	MS1_3868.D	06/30/2021	3:27
EB-01-20210622	280-150245-22	MS1_3869.D	06/30/2021	3:48
EB-02-20210622	280-150245-23	MS1_3870.D	06/30/2021	4:10
EB-03-20210623	280-150245-24	MS1_3871.D	06/30/2021	4:31
EB-04-20210623	280-150245-25	MS1_3872.D	06/30/2021	4:52
EB-05-20210624	280-150245-26	MS1_3873.D	06/30/2021	5:13
EB-06-20210625	280-150245-27	MS1_3874.D	06/30/2021	5:34
RW-8030P-20210623 MS	280-150245-18 MS	MS1_3875.D	06/30/2021	5:55
RW-8030P-20210623 MSD	280-150245-18 MSD	MS1_3876.D	06/30/2021	6:16
RW-8030P-20210623 MS	280-150245-18 MS	MS1_3877.D	06/30/2021	6:37
RW-8030P-20210623 MSD	280-150245-18 MSD	MS1_3878.D	06/30/2021	6:58

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Lab File ID: P6264.D BFB Injection Date: 06/25/2021
Instrument ID: VMS_P BFB Injection Time: 12:39
Analysis Batch No.: 541263

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.2
75	30.0 - 60.0 % of mass 95	53.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	63.9
175	5.0 - 9.0 % of mass 174	3.5 (5.5) 1
176	95.0 - 101.0 % of mass 174	61.5 (96.3) 1
177	5.0 - 9.0 % of mass 176	4.1 (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
	STD010 280-541263/15	P6265.D	06/25/2021	13:13
	STD020 280-541263/16	P6266.D	06/25/2021	13:36
	STD050 280-541263/17	P6267.D	06/25/2021	13:59
	STD10 280-541263/18	P6268.D	06/25/2021	14:22
	STD50 280-541263/19	P6269.D	06/25/2021	14:46
	STD100 280-541263/20	P6270.D	06/25/2021	15:09
	STD200 280-541263/21	P6271.D	06/25/2021	15:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Lab File ID: P6298.D BFB Injection Date: 06/26/2021
Instrument ID: VMS_P BFB Injection Time: 10:40
Analysis Batch No.: 541369

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.3
75	30.0 - 60.0 % of mass 95	55.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	63.8
175	5.0 - 9.0 % of mass 174	5.1 (8.0) 1
176	95.0 - 101.0 % of mass 174	62.2 (97.4) 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 280-541369/14	P6311.D	06/26/2021	15:46
	STD010 280-541369/15	P6312.D	06/26/2021	16:09
	STD020 280-541369/16	P6313.D	06/26/2021	16:32
	STD050 280-541369/17	P6314.D	06/26/2021	16:55
	STD10 280-541369/18	P6315.D	06/26/2021	17:18
	ICIS 280-541369/19	P6316.D	06/26/2021	17:41
	STD75 280-541369/20	P6317.D	06/26/2021	18:04
	STD100 280-541369/21	P6318.D	06/26/2021	18:27
	STD200 280-541369/22	P6319.D	06/26/2021	18:50
	ICV 280-541369/30	P6321A.D	06/26/2021	19:36

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
SDG No.: _____
Lab File ID: P6393.D BFB Injection Date: 06/29/2021
Instrument ID: VMS_P BFB Injection Time: 20:49
Analysis Batch No.: 541784

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.2
75	30.0 - 60.0 % of mass 95	54.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	69.5
175	5.0 - 9.0 % of mass 174	5.3 (7.6) 1
176	95.0 - 101.0 % of mass 174	67.1 (96.6) 1
177	5.0 - 9.0 % of mass 176	4.3 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-541784/2	P6394.D	06/29/2021	21:12
	CCV 280-541784/3	P6395.D	06/29/2021	21:35
	LCS 280-541784/4	P6396.D	06/29/2021	21:58
	LCSD 280-541784/5	P6397.D	06/29/2021	22:21
	LCS 280-541784/6	P6398.D	06/29/2021	22:44
	LCSD 280-541784/7	P6399.D	06/29/2021	23:07
	MB 280-541784/9	P6401.D	06/29/2021	23:53
Muni-Well-14-20210621	280-150245-1	P6408.D	06/30/2021	2:33
Muni-Well-33-20210621	280-150245-2	P6409.D	06/30/2021	2:57
RW-8249P-20210621	280-150245-3	P6410.D	06/30/2021	3:20
RW-7773P-20210621	280-150245-4	P6411.D	06/30/2021	3:43
RW-7773PQ-20210621	280-150245-5	P6412.D	06/30/2021	4:06
RW-7200P-20210621	280-150245-6	P6413.D	06/30/2021	4:29
RW-7586P-20210621	280-150245-7	P6414.D	06/30/2021	4:52
RW-7677P-20210621	280-150245-8	P6415.D	06/30/2021	5:15
RW-8000B-20210622	280-150245-9	P6416.D	06/30/2021	5:38
PA-1-20210622	280-150245-10	P6417.D	06/30/2021	6:00
MW-37-20210622	280-150245-11	P6418.D	06/30/2021	6:23
PA-1-20210622 MS	280-150245-10 MS	P6419.D	06/30/2021	6:46
PA-1-20210622 MSD	280-150245-10 MSD	P6420.D	06/30/2021	7:09
PA-1-20210622 MS	280-150245-10 MS	P6421.D	06/30/2021	7:32
PA-1-20210622 MSD	280-150245-10 MSD	P6422.D	06/30/2021	7:55

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Sample No.: ICIS 280-538548/19 Date Analyzed: 06/04/2021 15:37
 Instrument ID: VMS_MS1 GC Column: DB-624 (60.25) ID: 0.25 (mm)
 Lab File ID (Standard): MS1_2727.D Heated Purge: (Y/N) N
 Calibration ID: 54226

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		769988	5.84	161871	8.58	257514	10.86
UPPER LIMIT		1539976	6.34	323742	9.08	515028	11.36
LOWER LIMIT		384994	5.34	80936	8.08	128757	10.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-538548/23		749174	5.84	154032	8.58	248786	10.86
CCV 280-541786/2		768238	5.84	162612	8.58	262909	10.86
CCV 280-541786/3		742862	5.84	161912	8.58	266090	10.85
LCS 280-541786/4		734265	5.84	161086	8.58	255897	10.85
LCSD 280-541786/5		766100	5.84	162537	8.58	268161	10.86
LCS 280-541786/6		739735	5.84	158583	8.58	262363	10.86
LCSD 280-541786/7		741437	5.84	162174	8.58	260114	10.85
MB 280-541786/9		721241	5.84	159672	8.58	268574	10.86
280-150245-12	MW-37Q-20210622	746367	5.84	164424	8.58	265953	10.86
280-150245-13	PA-3-20210622	741499	5.84	165458	8.58	269052	10.86
280-150245-14	RW-7091R-20210622	733888	5.84	158328	8.58	265471	10.86
280-150245-15	RW-2151H-20210623	727648	5.84	156941	8.58	267572	10.86
280-150245-16	PA-8-37-47-20210623	708469	5.84	157017	8.58	262482	10.85
280-150245-17	PA-8-77-87-20210623	734163	5.84	159822	8.58	256619	10.86
280-150245-18	RW-8030P-20210623	754651	5.84	165525	8.58	269644	10.86
280-150245-19	RW-2172H-20210623	748006	5.84	159202	8.58	259891	10.85
280-150245-20	RW-2172HQ-20210623	744959	5.84	166691	8.58	271632	10.85
280-150245-21	TB-01-20210625	752587	5.84	162140	8.58	270191	10.85
280-150245-22	EB-01-20210622	735110	5.84	158470	8.58	264136	10.85
280-150245-23	EB-02-20210622	721028	5.84	154981	8.58	265418	10.86
280-150245-24	EB-03-20210623	726669	5.84	157717	8.58	265153	10.86
280-150245-25	EB-04-20210623	721190	5.84	163404	8.58	264379	10.86
280-150245-26	EB-05-20210624	713025	5.84	156465	8.58	255546	10.85
280-150245-27	EB-06-20210625	706828	5.84	150247	8.58	261350	10.85
280-150245-18 MS	RW-8030P-20210623 MS	746723	5.84	163355	8.58	266129	10.86
280-150245-18 MSD	RW-8030P-20210623 MSD	745745	5.84	163851	8.58	271643	10.85
280-150245-18 MS	RW-8030P-20210623 MS	753376	5.84	160526	8.58	264782	10.86
280-150245-18 MSD	RW-8030P-20210623 MSD	757868	5.84	165555	8.58	265988	10.85

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Sample No.: ICIS 280-541369/19 Date Analyzed: 06/26/2021 17:41
 Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25 (mm)
 Lab File ID (Standard): P6316.D Heated Purge: (Y/N) N
 Calibration ID: 54820

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1736664	4.88	387900	7.39	549502	9.61
UPPER LIMIT		3473328	5.38	775800	7.89	1099004	10.11
LOWER LIMIT		868332	4.38	193950	6.89	274751	9.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-541369/30		1746109	4.88	388046	7.39	551048	9.61
CCV 280-541784/2		1524273	4.88	339568	7.39	497762	9.61
CCV 280-541784/3		1510845	4.88	341927	7.39	467347	9.61
LCS 280-541784/4		1480918	4.88	334309	7.39	477502	9.61
LCSD 280-541784/5		1454342	4.88	330842	7.39	480352	9.61
LCS 280-541784/6		1477381	4.88	330701	7.39	465914	9.61
LCSD 280-541784/7		1487592	4.88	335384	7.39	463713	9.61
MB 280-541784/9		1438060	4.88	325899	7.39	453084	9.61
280-150245-1	Muni-Well-14-20210621	1432976	4.88	320829	7.39	456058	9.61
280-150245-2	Muni-Well-33-20210621	1408576	4.88	324286	7.39	452748	9.61
280-150245-3	RW-8249P-20210621	1426816	4.88	321226	7.39	451815	9.61
280-150245-4	RW-7773P-20210621	1406764	4.88	317950	7.39	443636	9.61
280-150245-5	RW-7773PQ-20210621	1404992	4.88	317957	7.39	440806	9.61
280-150245-6	RW-7200P-20210621	1434981	4.88	326738	7.39	454134	9.61
280-150245-7	RW-7586P-20210621	1387416	4.88	316154	7.39	443629	9.61
280-150245-8	RW-7677P-20210621	1397448	4.88	315369	7.39	446634	9.61
280-150245-9	RW-8000B-20210622	1346598	4.88	305301	7.39	414822	9.61
280-150245-10	PA-1-20210622	1382418	4.88	312990	7.39	436514	9.61
280-150245-11	MW-37-20210622	1405581	4.88	317743	7.39	444785	9.61
280-150245-10 MS	PA-1-20210622 MS	1408601	4.88	317952	7.39	471683	9.61
280-150245-10 MSD	PA-1-20210622 MSD	1418989	4.87	327588	7.39	458773	9.61
280-150245-10 MS	PA-1-20210622 MS	1410651	4.87	325887	7.39	461755	9.61
280-150245-10 MSD	PA-1-20210622 MSD	1423576	4.88	323605	7.39	453352	9.61

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: Muni-Well-14-20210621 Lab Sample ID: 280-150245-1
 Matrix: Water Lab File ID: P6408.D
 Analysis Method: 8260B Date Collected: 06/21/2021 15:37
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:33
 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.: 541784 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: Muni-Well-14-20210621 Lab Sample ID: 280-150245-1
 Matrix: Water Lab File ID: P6408.D
 Analysis Method: 8260B Date Collected: 06/21/2021 15:37
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 02:33
 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.: 541784 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	1.2		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)	98		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)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\IP6408.D
 Lims ID: 280-150245-C-1
 Client ID: Muni-Well-14-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:33:30 ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-1 pH
 Misc. Info.: 280-0102808-020
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:30:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	99	1432976	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	88	320829	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	456058	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.382	4.373	0.009	92	350383	50.1	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.636	4.637	-0.001	98	433016	48.8	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1374024	49.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.477	8.478	-0.001	85	492802	47.1	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76	2.926	2.928	-0.002	95	1769	0.1313	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.116	3.107	0.009	87	1426	0.2594	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95	5.153	5.154	-0.001	96	5914	1.16	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	7
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:36

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6408.D

Injection Date: 30-Jun-2021 02:33:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-C-1

Lab Sample ID: 280-150245-1

Worklist Smp#: 20

Client ID: Muni-Well-14-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

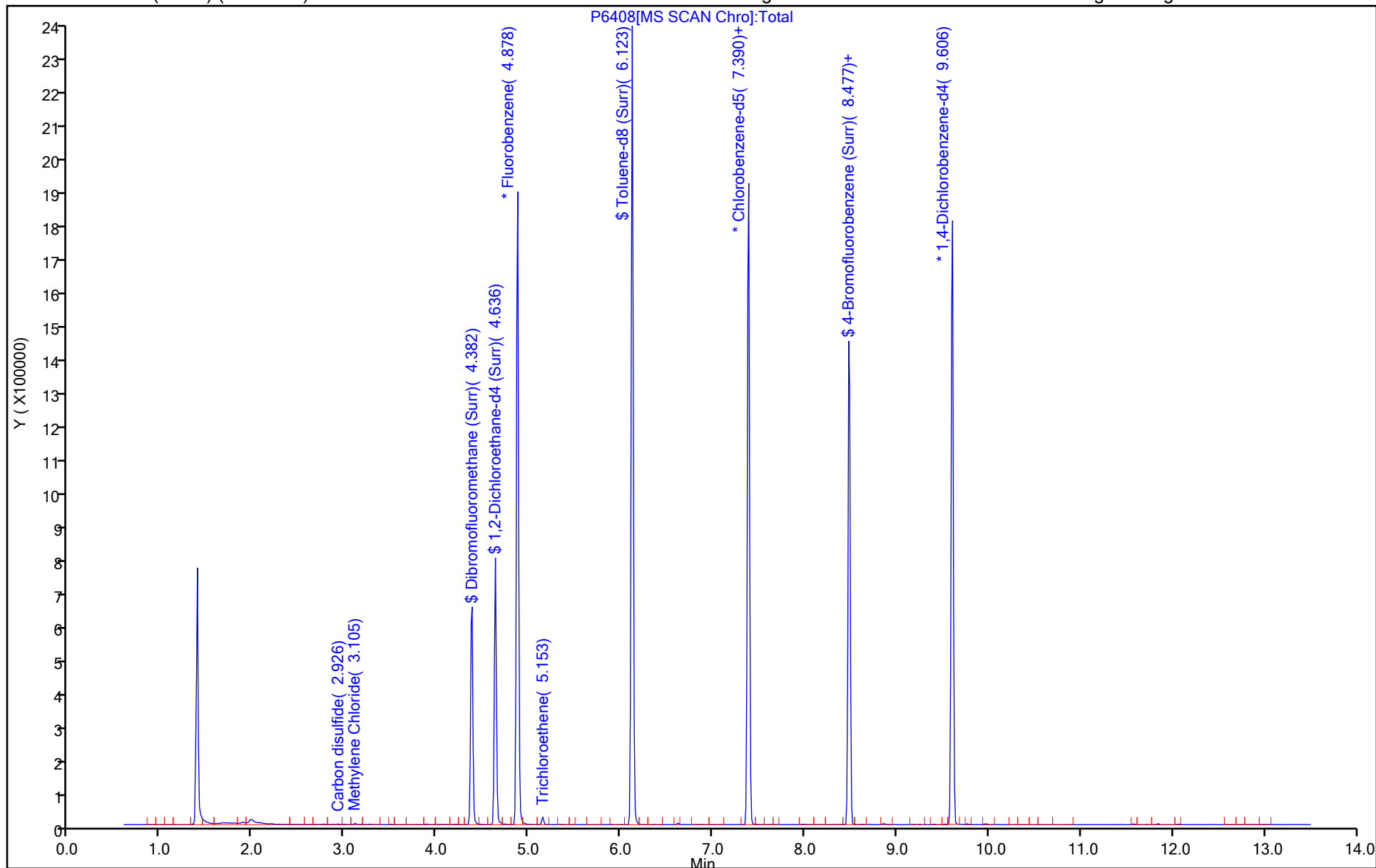
ALS Bottle#: 15

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\20210629-102808.b\IP6408.D
 Lims ID: 280-150245-C-1
 Client ID: Muni-Well-14-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:33:30 ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-1 pH
 Misc. Info.: 280-0102808-020
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:30:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.26
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.8	97.62
\$ 6 Toluene-d8 (Surr)	50.0	49.7	99.50
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.1	94.19

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6408.D

Injection Date: 30-Jun-2021 02:33:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-1

Lab Sample ID: 280-150245-1

Client ID: Muni-Well-14-20210621

Operator ID: PETUNINP

ALS Bottle#: 15

Worklist Smp#: 20

Purge Vol: 5.000 mL

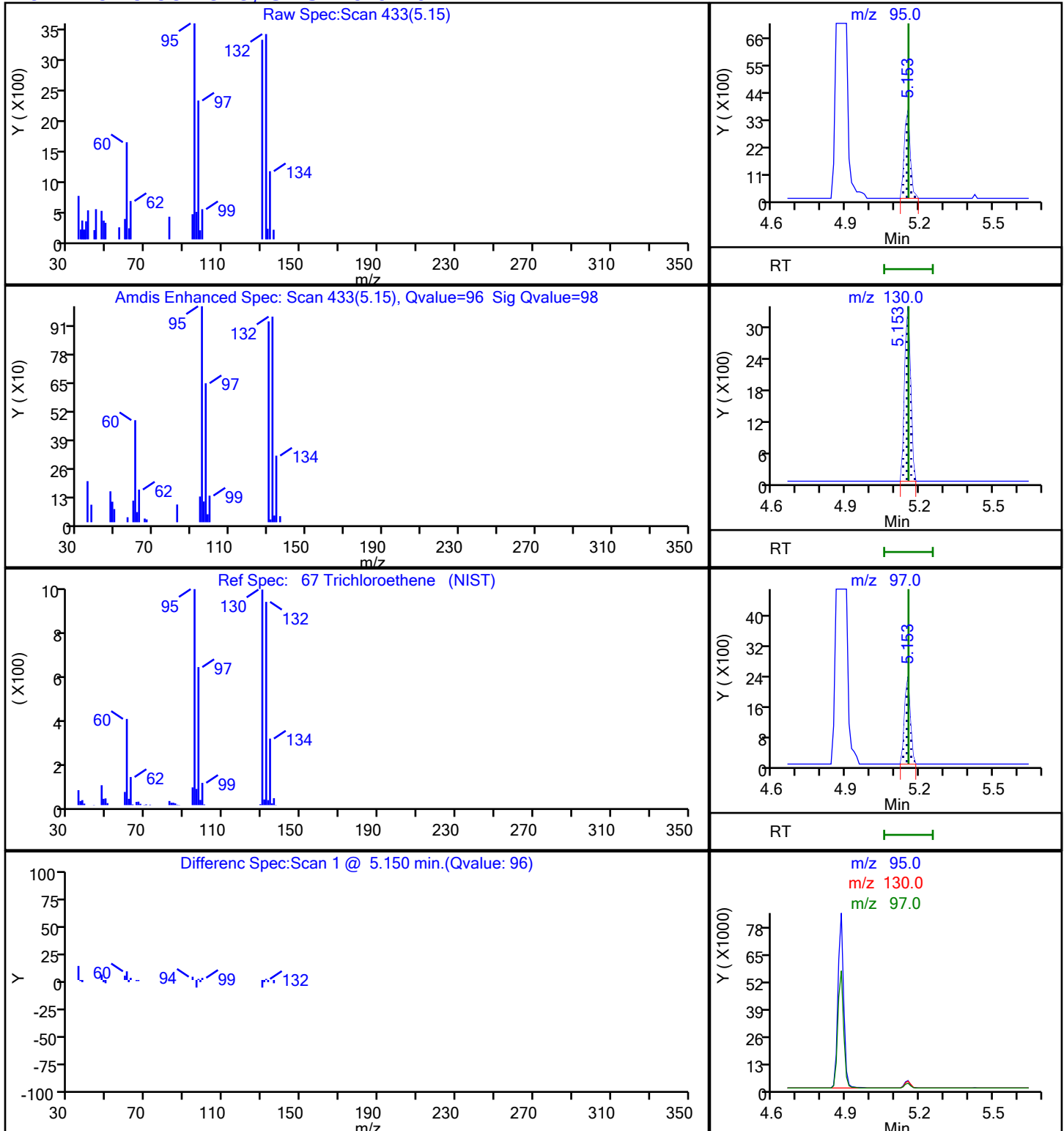
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

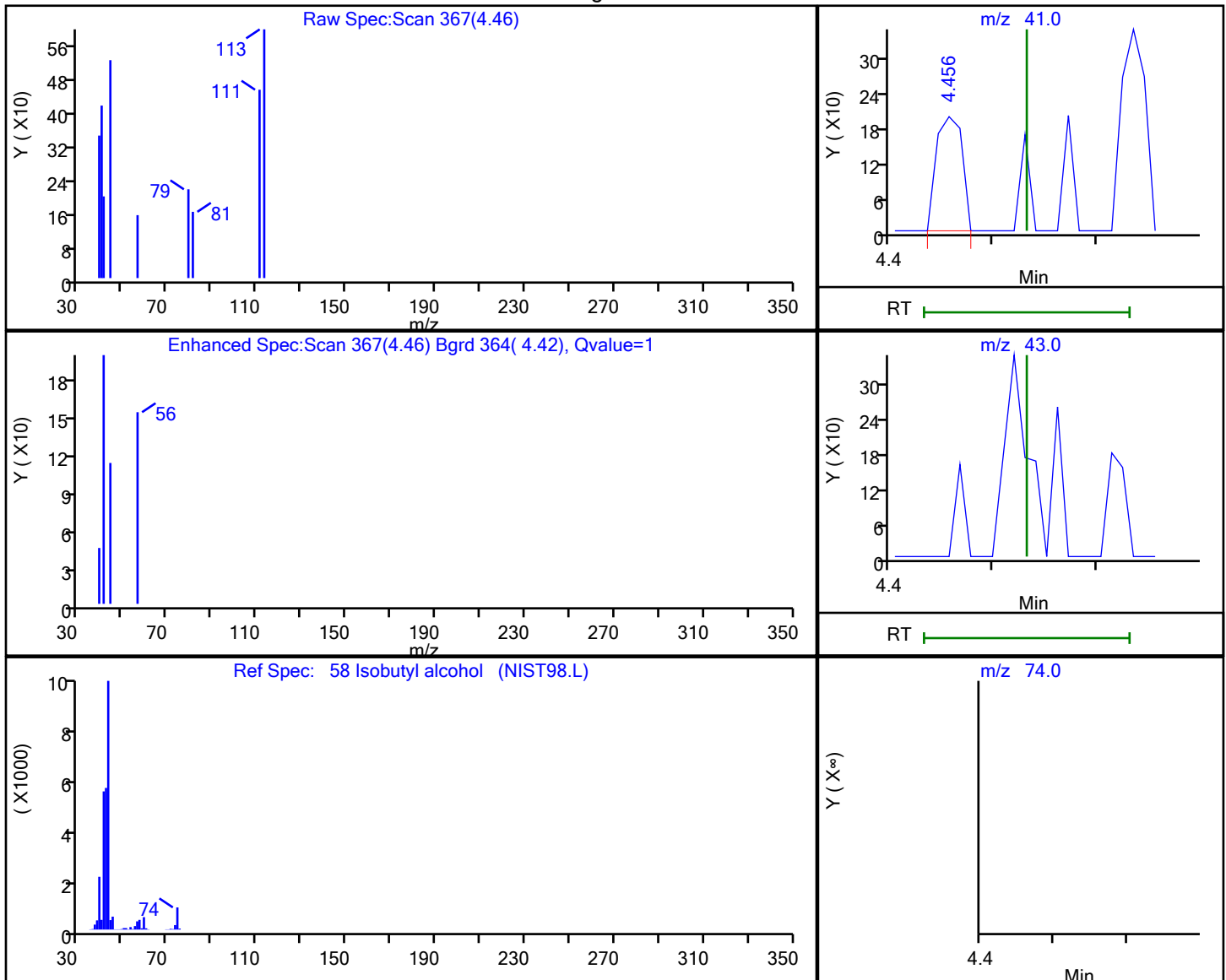
67 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6408.D
Injection Date: 30-Jun-2021 02:33:30 Instrument ID: VMS_P
Lims ID: 280-150245-C-1 Lab Sample ID: 280-150245-1
Client ID: Muni-Well-14-20210621
Operator ID: PETUNINP ALS Bottle#: 15 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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.46	41.00	341	1.543286
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:30:21

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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: Muni-Well-33-20210621 Lab Sample ID: 280-150245-2
 Matrix: Water Lab File ID: P6409.D
 Analysis Method: 8260B Date Collected: 06/21/2021 15:15
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:57
 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.: 541784 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>Muni-Well-33-20210621</u>	Lab Sample ID: <u>280-150245-2</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6409.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/21/2021 15:15</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 02:57</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

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	0.39	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	1.9		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)	100		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_P\20210629-102808.b\6409.D
 Lims ID: 280-150245-C-2
 Client ID: Muni-Well-33-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:57:30 ALS Bottle#: 16 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-2 pH
 Misc. Info.: 280-0102808-021
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:30:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.878	-0.001	98	1408576	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	324286	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	452748	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.381	4.373	0.008	91	346338	50.4	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	435945	50.0	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1361813	48.8	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	83	498789	48.0	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76	2.925	2.928	-0.003	95	1349	0.1019	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.105	3.107	-0.002	90	1138	0.2106	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95	5.152	5.154	-0.002	96	9626	1.88	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164	6.629	6.621	0.008	74	1317	0.3869	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	7
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6409.D

Injection Date: 30-Jun-2021 02:57:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-C-2

Lab Sample ID: 280-150245-2

Worklist Smp#: 21

Client ID: Muni-Well-33-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

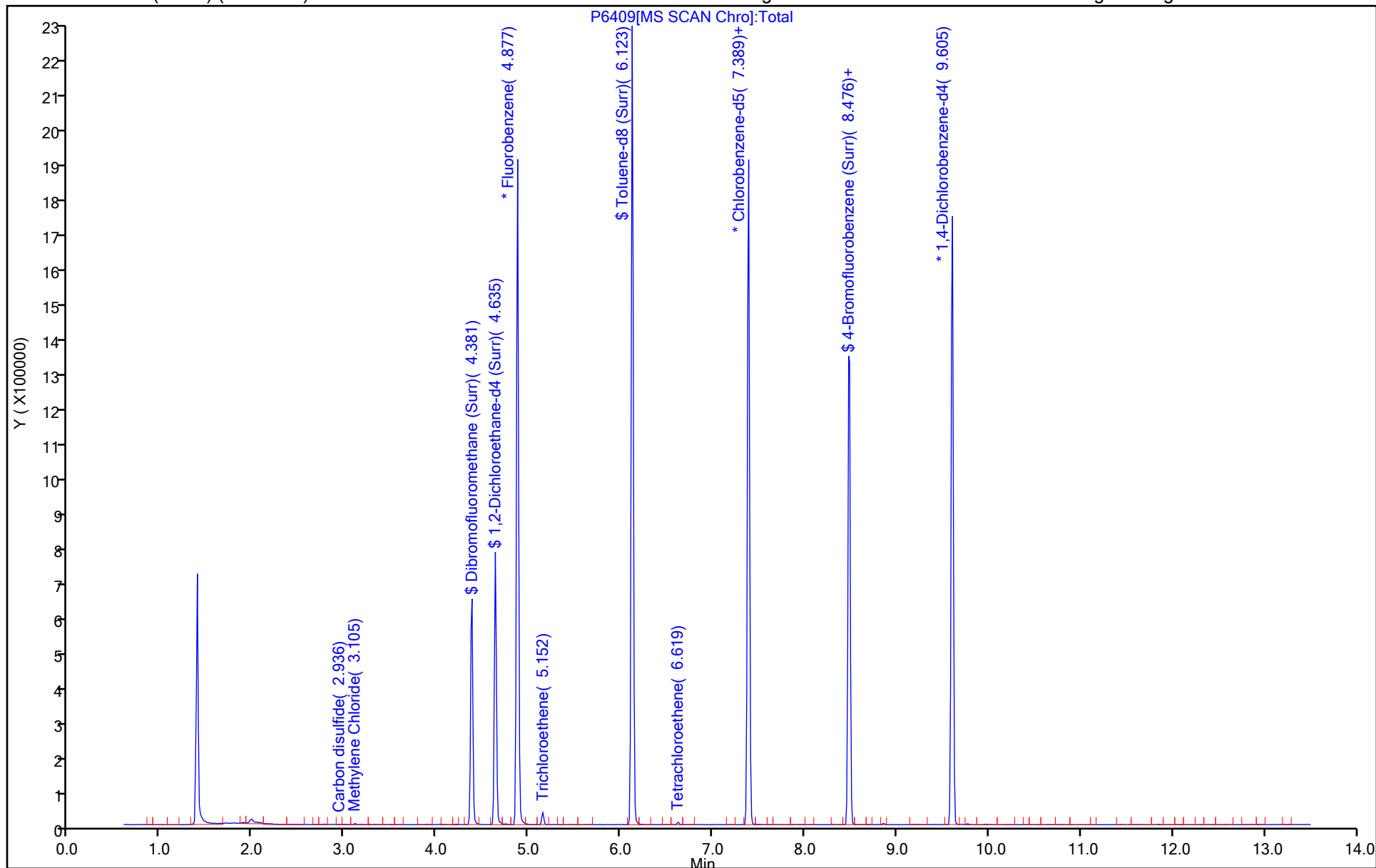
ALS Bottle#: 16

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\20210629-102808.b\IP6409.D
 Lims ID: 280-150245-C-2
 Client ID: Muni-Well-33-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:57:30 ALS Bottle#: 16 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-2 pH
 Misc. Info.: 280-0102808-021
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:30:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.4	100.82
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.0	99.98
\$ 6 Toluene-d8 (Surr)	50.0	48.8	97.56
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.0	96.03

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6409.D

Injection Date: 30-Jun-2021 02:57:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-2

Lab Sample ID: 280-150245-2

Client ID: Muni-Well-33-20210621

Operator ID: PETUNINP

ALS Bottle#: 16

Worklist Smp#: 21

Purge Vol: 5.000 mL

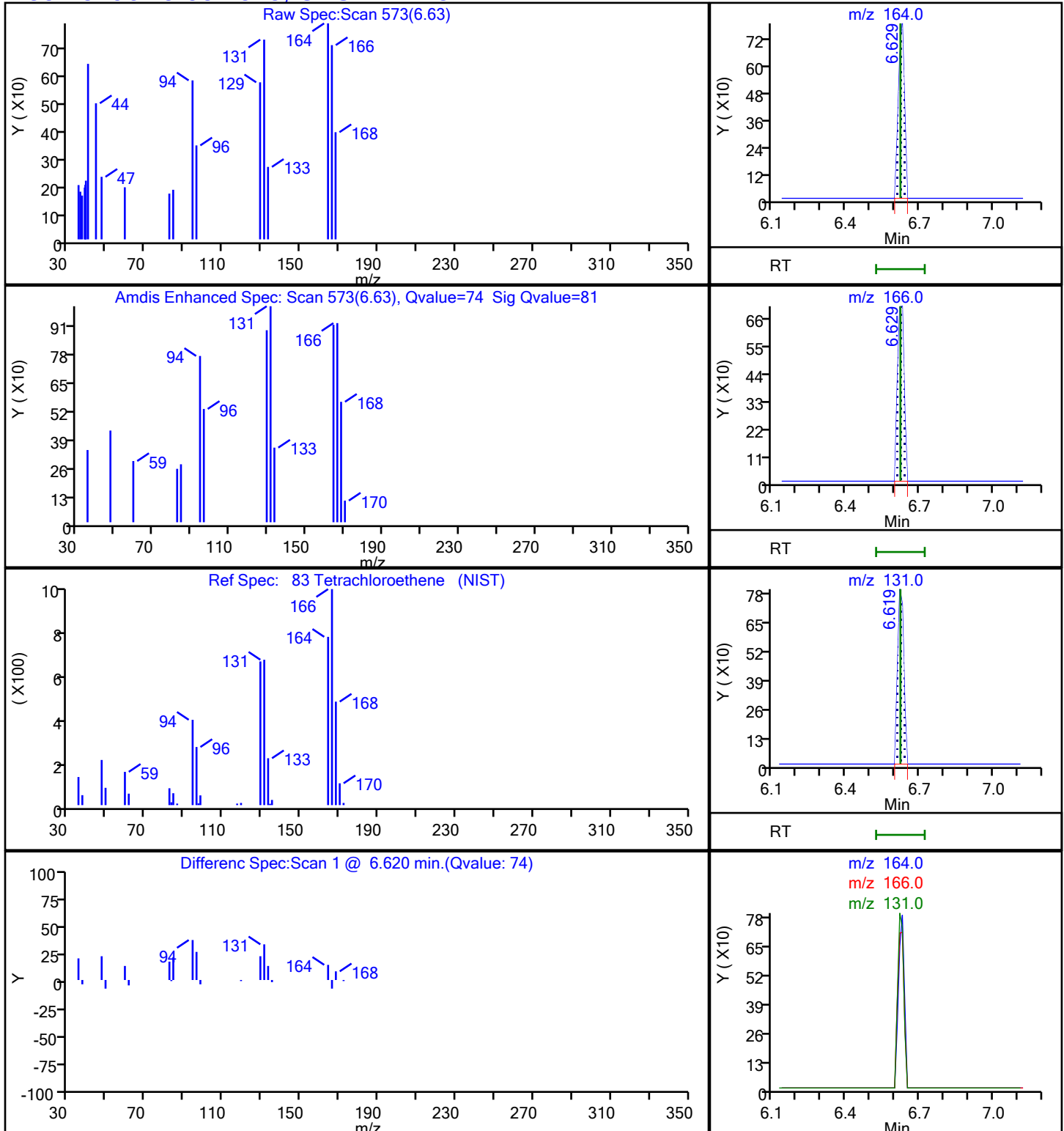
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

83 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6409.D

Injection Date: 30-Jun-2021 02:57:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-2

Lab Sample ID: 280-150245-2

Client ID: Muni-Well-33-20210621

Operator ID: PETUNINP

ALS Bottle#: 16

Worklist Smp#: 21

Purge Vol: 5.000 mL

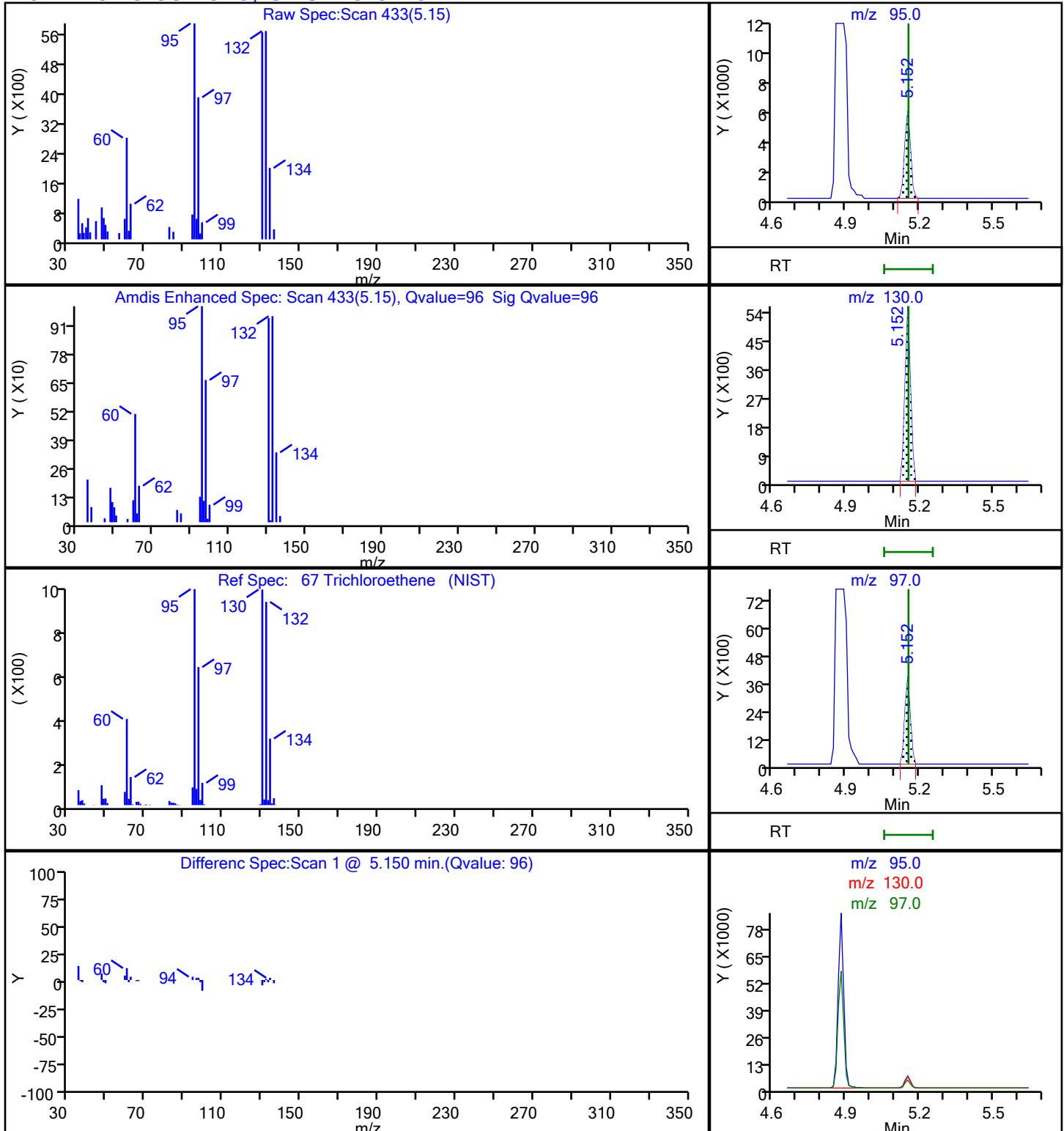
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

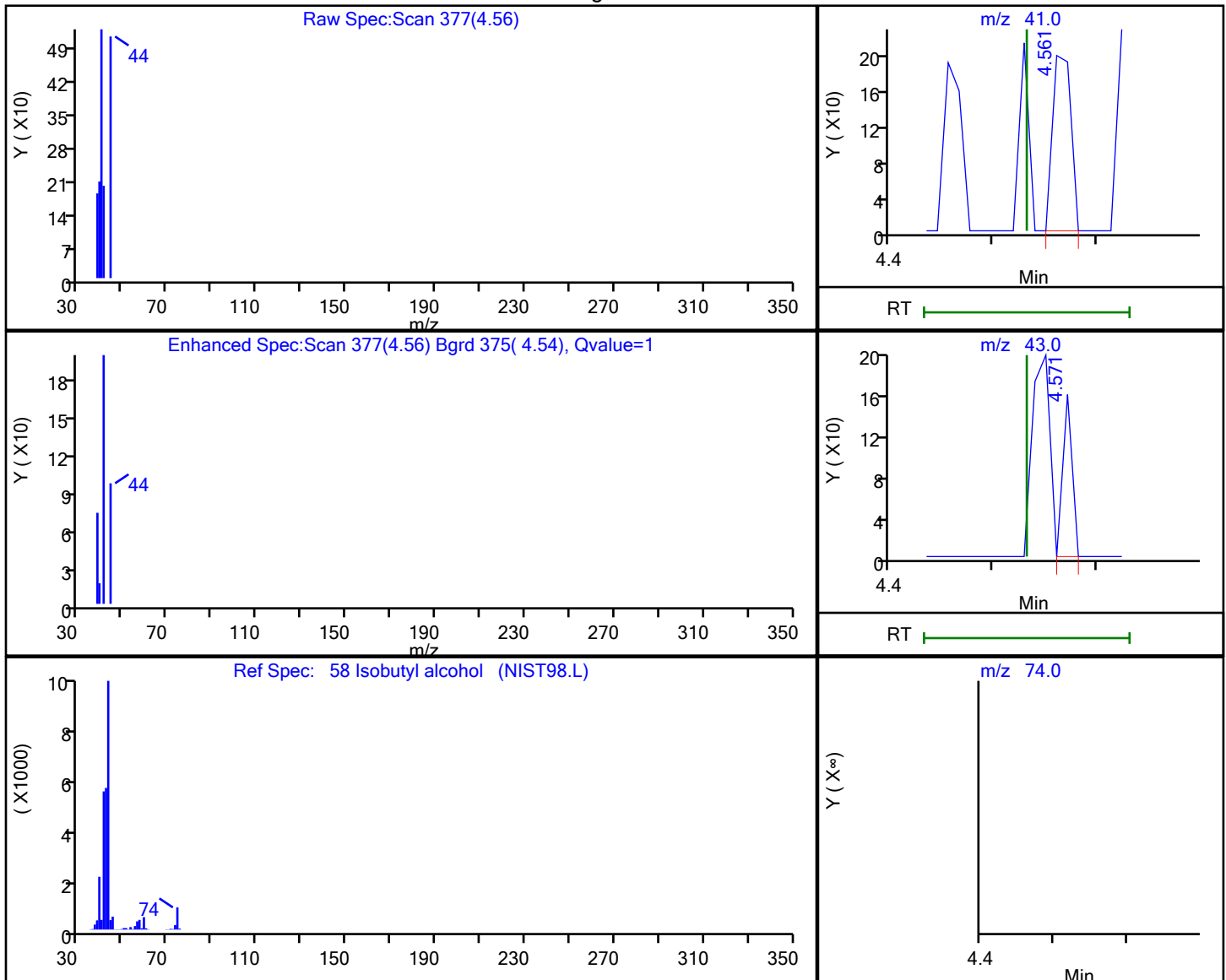
67 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6409.D
Injection Date: 30-Jun-2021 02:57:30 Instrument ID: VMS_P
Lims ID: 280-150245-C-2 Lab Sample ID: 280-150245-2
Client ID: Muni-Well-33-20210621
Operator ID: PETUNINP ALS Bottle#: 16 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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.56	41.00	241	1.109603
4.57	43.00	101	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:30:47

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.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-8249P-20210621 Lab Sample ID: 280-150245-3

Matrix: Water Lab File ID: P6410.D

Analysis Method: 8260B Date Collected: 06/21/2021 17:45

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:20

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.: 541784 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8249P-20210621 Lab Sample ID: 280-150245-3
 Matrix: Water Lab File ID: P6410.D
 Analysis Method: 8260B Date Collected: 06/21/2021 17:45
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 03:20
 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.: 541784 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)	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\20210629-102808.b\VP6410.D
 Lims ID: 280-150245-C-3
 Client ID: RW-8249P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:20:30 ALS Bottle#: 17 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-3 pH
 Misc. Info.: 280-0102808-022
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:31:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1426816	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	321226	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	451815	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.382	4.373	0.009	92	349243	50.2	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	436271	49.4	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1376718	49.8	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	85	498106	48.1	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	7
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.115	3.107	0.008	92	1231	0.2249	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95		5.154				ND	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:39

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6410.D

Injection Date: 30-Jun-2021 03:20:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-C-3

Lab Sample ID: 280-150245-3

Worklist Smp#: 22

Client ID: RW-8249P-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

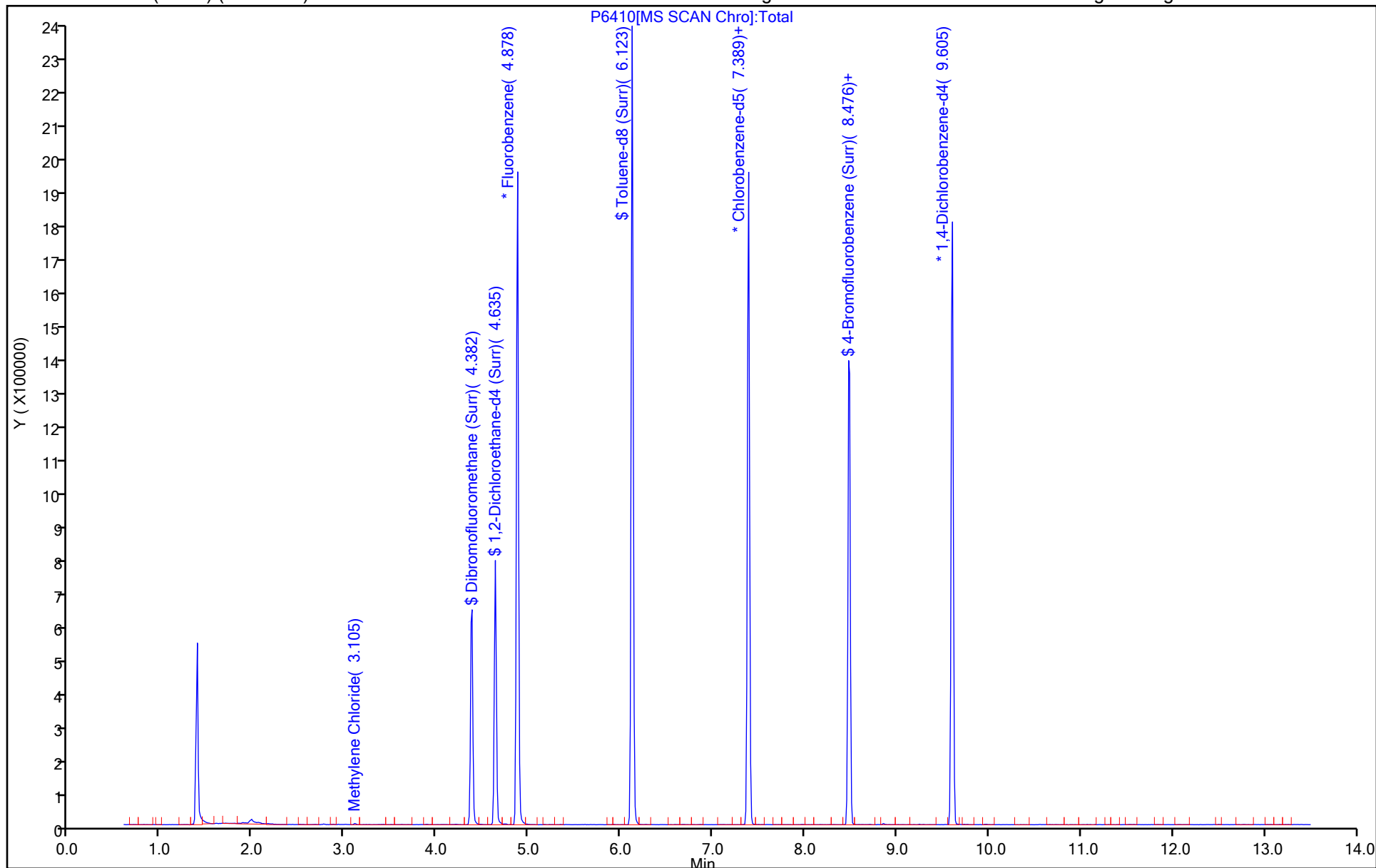
ALS Bottle#: 17

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\20210629-102808.b\IP6410.D
 Lims ID: 280-150245-C-3
 Client ID: RW-8249P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:20:30 ALS Bottle#: 17 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-3 pH
 Misc. Info.: 280-0102808-022
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:31:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.37
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.4	98.78
\$ 6 Toluene-d8 (Surr)	50.0	49.8	99.57
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.1	96.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-7773P-20210621 Lab Sample ID: 280-150245-4
 Matrix: Water Lab File ID: P6411.D
 Analysis Method: 8260B Date Collected: 06/21/2021 14:57
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:43
 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.: 541784 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-7773P-20210621 Lab Sample ID: 280-150245-4
 Matrix: Water Lab File ID: P6411.D
 Analysis Method: 8260B Date Collected: 06/21/2021 14:57
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:43
 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.: 541784 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)	97		70-127
2037-26-5	Toluene-d8 (Surr)	99		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\20210629-102808.b\6411.D
 Lims ID: 280-150245-A-4
 Client ID: RW-7773P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:43:30 ALS Bottle#: 18 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-4 pH
 Misc. Info.: 280-0102808-023
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:32:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.878	-0.001	98	1406764	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	317950	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	443636	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.381	4.373	0.008	92	339287	49.4	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.634	4.637	-0.003	98	423497	48.6	
\$ 6 Toluene-d8 (Surr)	98	6.122	6.125	-0.003	94	1348693	49.3	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.475	8.478	-0.003	83	485592	47.7	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.115	3.107	0.008	84	1231	0.2281	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95		5.154				ND	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6411.D

Injection Date: 30-Jun-2021 03:43:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-A-4

Lab Sample ID: 280-150245-4

Worklist Smp#: 23

Client ID: RW-7773P-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

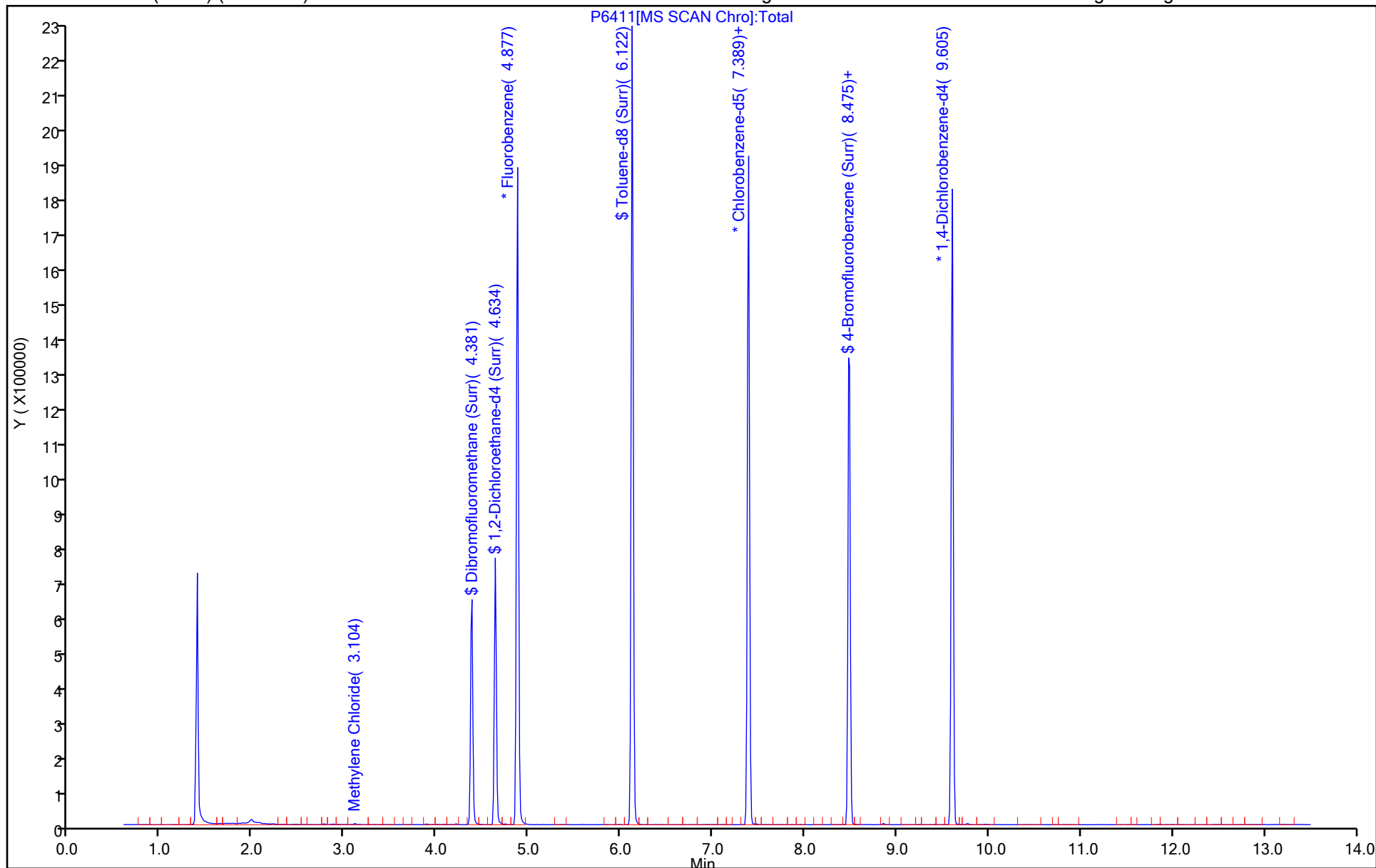
ALS Bottle#: 18

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\20210629-102808.b\IP6411.D
 Lims ID: 280-150245-A-4
 Client ID: RW-7773P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:43:30 ALS Bottle#: 18 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-4 pH
 Misc. Info.: 280-0102808-023
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:32:16

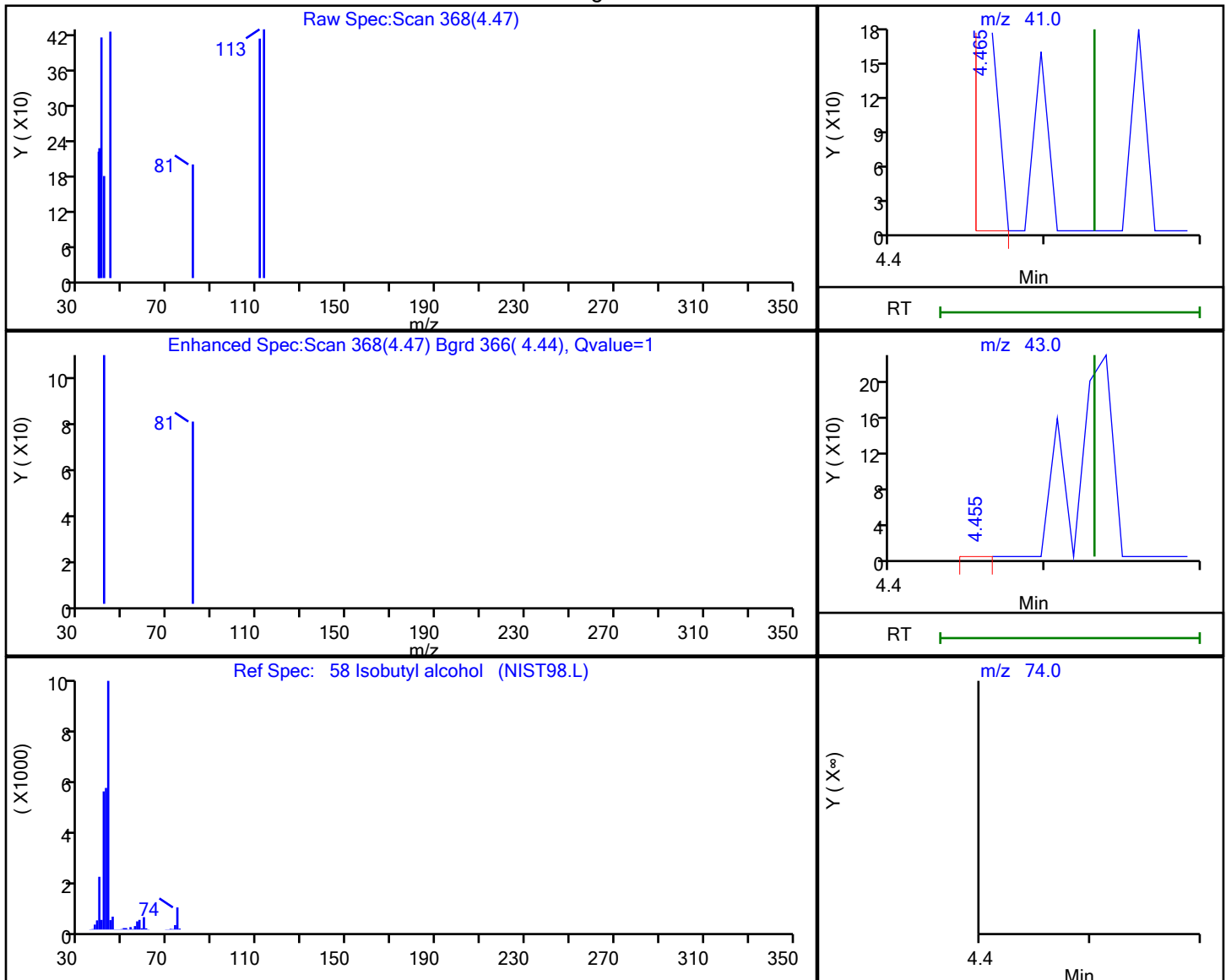
Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	49.4	98.89
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.26
\$ 6 Toluene-d8 (Surr)	50.0	49.3	98.55
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.41

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6411.D
Injection Date: 30-Jun-2021 03:43:30 Instrument ID: VMS_P
Lims ID: 280-150245-A-4 Lab Sample ID: 280-150245-4
Client ID: RW-7773P-20210621
Operator ID: PETUNINP ALS Bottle#: 18 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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.47	41.00	111	0.511720
4.45	43.00	125	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:32:11

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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-7773PQ-20210621 Lab Sample ID: 280-150245-5
 Matrix: Water Lab File ID: P6412.D
 Analysis Method: 8260B Date Collected: 06/21/2021 15:02
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 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.: 541784 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-7773PQ-20210621</u>	Lab Sample ID: <u>280-150245-5</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6412.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/21/2021 15:02</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 04:06</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

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)	98		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\20210629-102808.b\IP6412.D
 Lims ID: 280-150245-B-5
 Client ID: RW-7773PQ-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:06:30 ALS Bottle#: 19 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-5 pH
 Misc. Info.: 280-0102808-024
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:32:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.881	4.878	0.003	99	1404992	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.389	0.003	88	317957	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.606	0.002	97	440806	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	92	341246	49.8	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.638	4.637	0.001	98	426121	49.0	
\$ 6 Toluene-d8 (Surr)	98	6.126	6.125	0.001	94	1354619	49.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	83	489181	48.4	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.108	3.107	0.001	93	1151	0.2136	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95		5.154				ND	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:41

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6412.D

Injection Date: 30-Jun-2021 04:06:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-B-5

Lab Sample ID: 280-150245-5

Worklist Smp#: 24

Client ID: RW-7773PQ-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

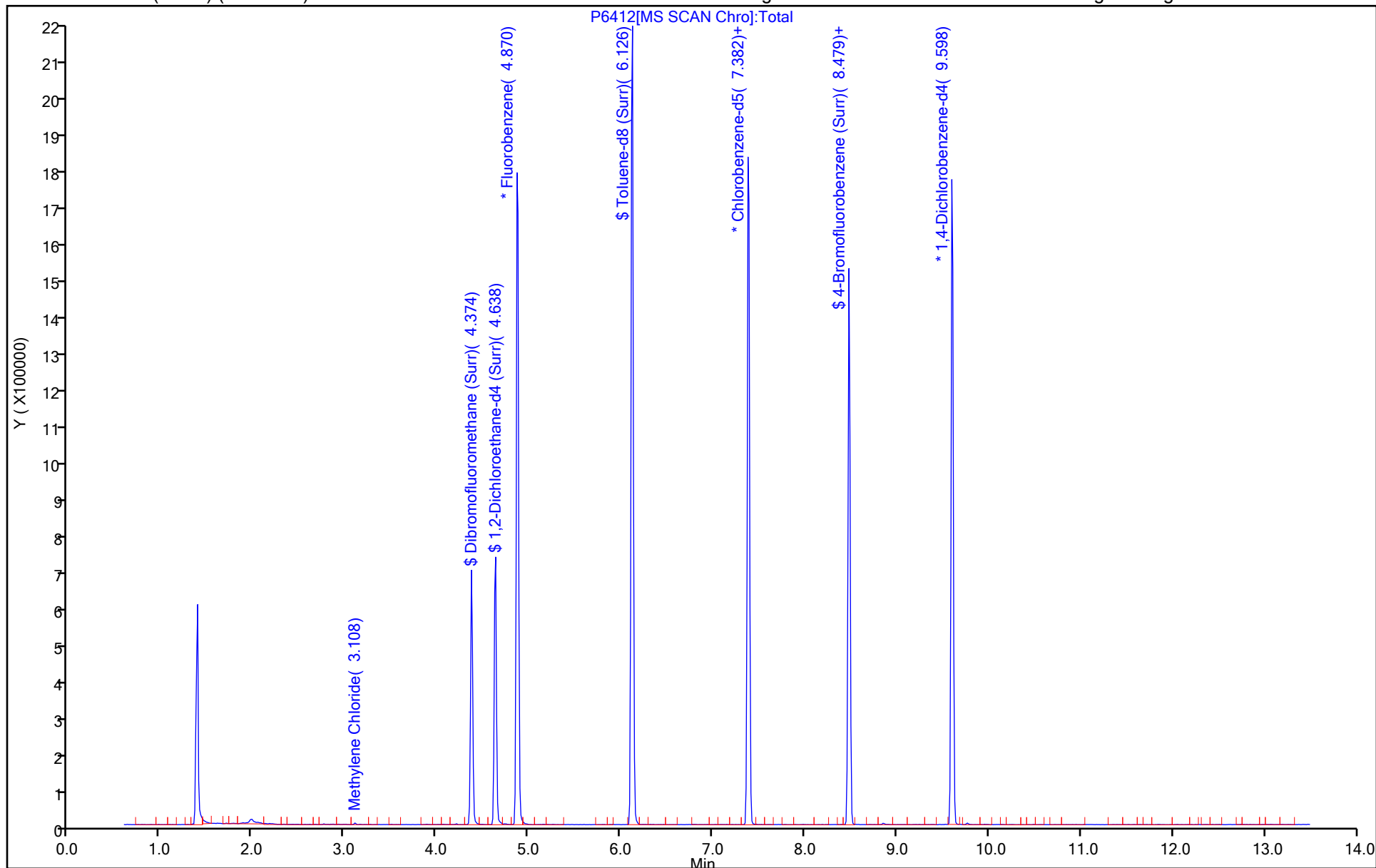
ALS Bottle#: 19

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\20210629-102808.b\IP6412.D
 Lims ID: 280-150245-B-5
 Client ID: RW-7773PQ-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:06:30 ALS Bottle#: 19 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-5 pH
 Misc. Info.: 280-0102808-024
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:32:48

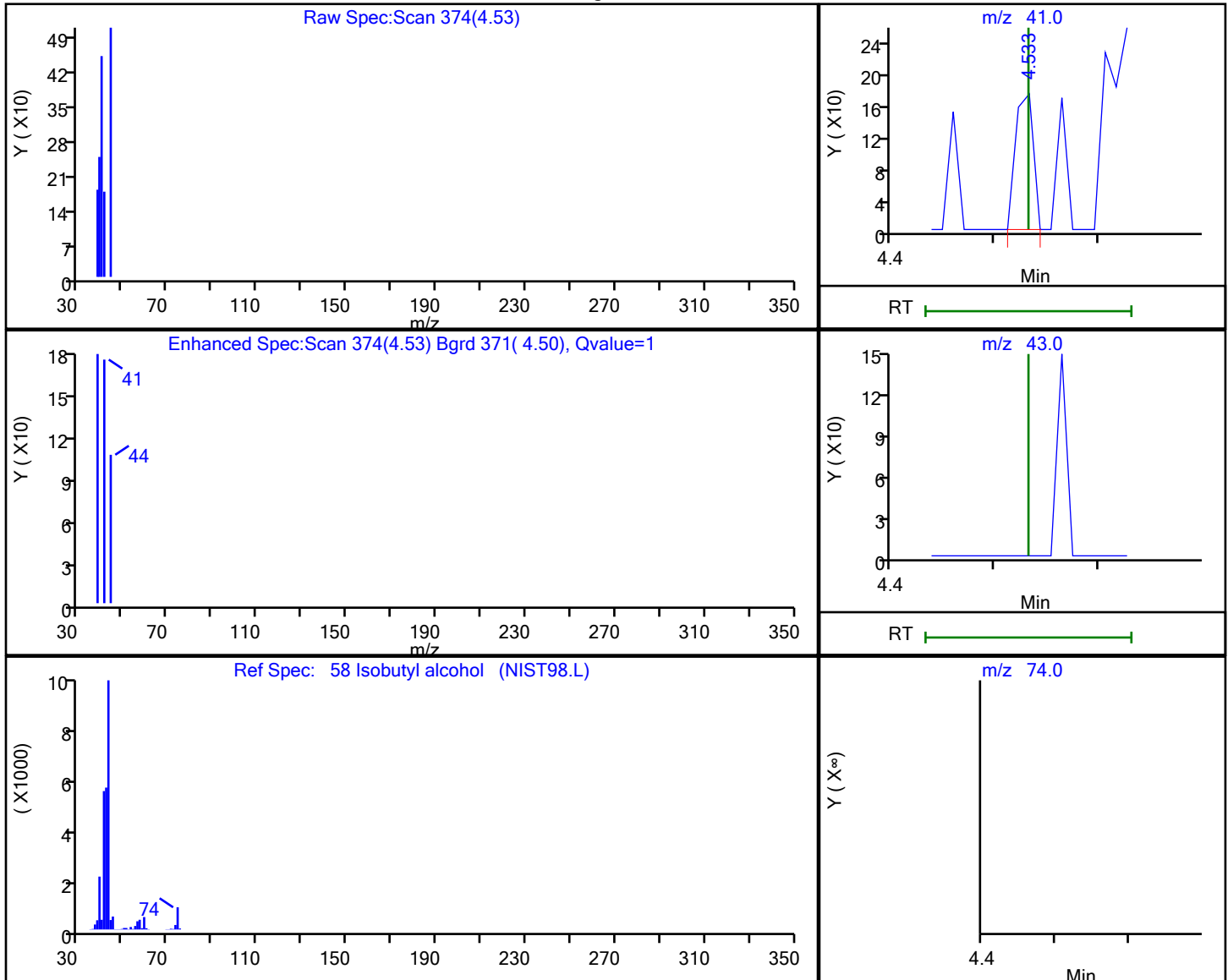
Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	49.8	99.59
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.0	97.98
\$ 6 Toluene-d8 (Surr)	50.0	49.5	98.98
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.4	96.74

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6412.D
Injection Date: 30-Jun-2021 04:06:30 Instrument ID: VMS_P
Lims ID: 280-150245-B-5 Lab Sample ID: 280-150245-5
Client ID: RW-7773PQ-20210621
Operator ID: PETUNINP ALS Bottle#: 19 Worklist Smp#: 24
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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.53	41.00	210	0.969340
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:32:42

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.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-7200P-20210621 Lab Sample ID: 280-150245-6

Matrix: Water Lab File ID: P6413.D

Analysis Method: 8260B Date Collected: 06/21/2021 16:22

Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 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.: 541784 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.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-7200P-20210621 Lab Sample ID: 280-150245-6

Matrix: Water Lab File ID: P6413.D

Analysis Method: 8260B Date Collected: 06/21/2021 16:22

Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 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.: 541784 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	0.43	J	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)	98		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_P\20210629-102808.b\6413.D
 Lims ID: 280-150245-B-6
 Client ID: RW-7200P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:29:30 ALS Bottle#: 20 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-6 pH
 Misc. Info.: 280-0102808-025
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:33:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.879	4.878	0.001	99	1434981	50.0	
* 2 Chlorobenzene-d5	119	7.391	7.389	0.002	88	326738	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.607	9.606	0.001	97	454134	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.373	4.373	0.000	92	353611	50.5	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	98	437514	49.2	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1391609	49.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.478	8.478	0.000	85	500944	48.1	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.106	3.107	-0.001	77	1122	0.2038	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95		5.154				ND	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91	6.177	6.178	-0.001	97	9511	0.4261	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:42

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6413.D

Injection Date: 30-Jun-2021 04:29:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-B-6

Lab Sample ID: 280-150245-6

Worklist Smp#: 25

Client ID: RW-7200P-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

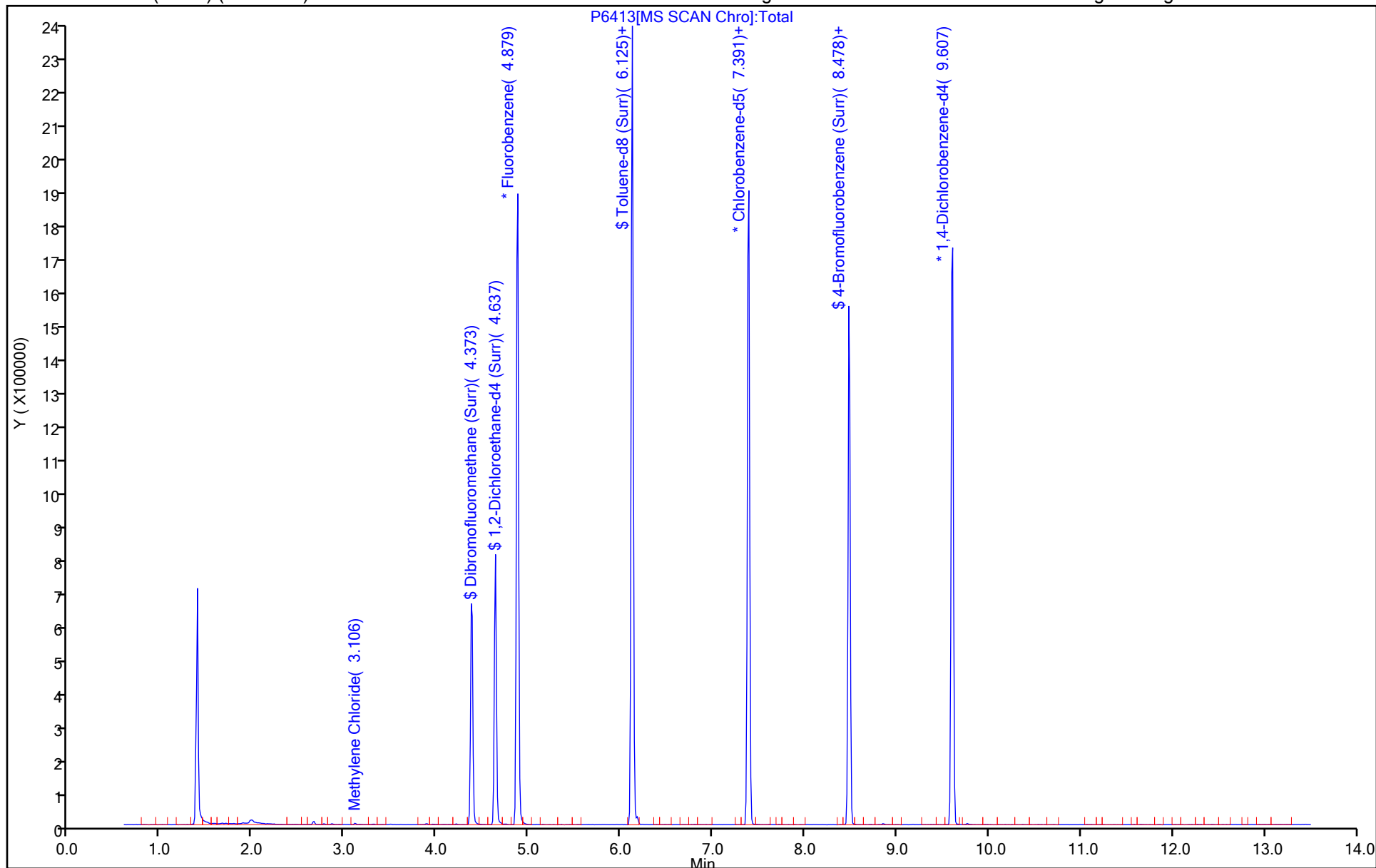
ALS Bottle#: 20

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\20210629-102808.b\IP6413.D
 Lims ID: 280-150245-B-6
 Client ID: RW-7200P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:29:30 ALS Bottle#: 20 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-6 pH
 Misc. Info.: 280-0102808-025
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:33:06

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	98.50
\$ 6 Toluene-d8 (Surr)	50.0	49.5	98.95
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.1	96.16

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6413.D

Injection Date: 30-Jun-2021 04:29:30

Instrument ID: VMS_P

Lims ID: 280-150245-B-6

Lab Sample ID: 280-150245-6

Client ID: RW-7200P-20210621

Operator ID: PETUNINP

ALS Bottle#: 20

Worklist Smp#: 25

Purge Vol: 5.000 mL

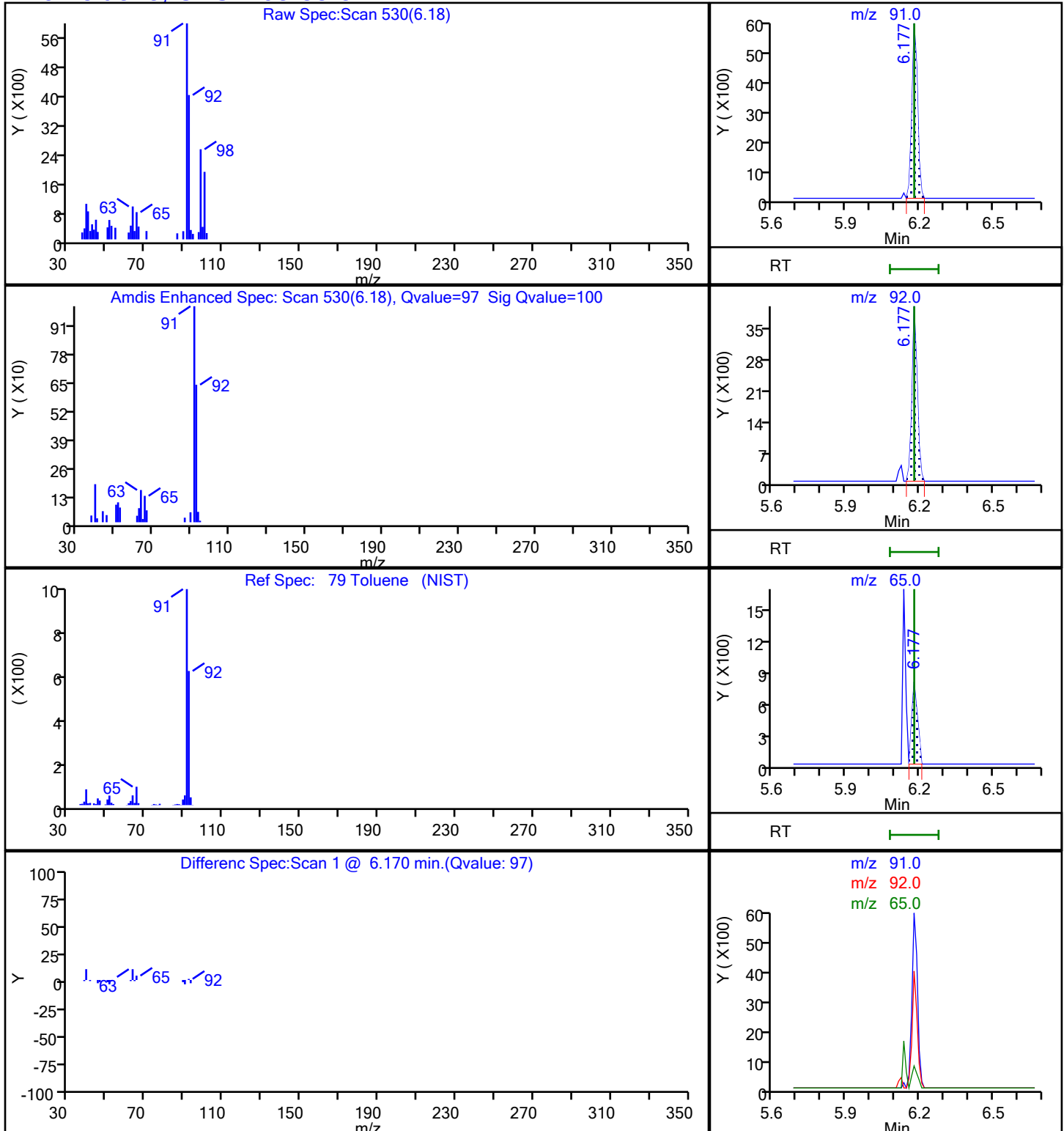
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

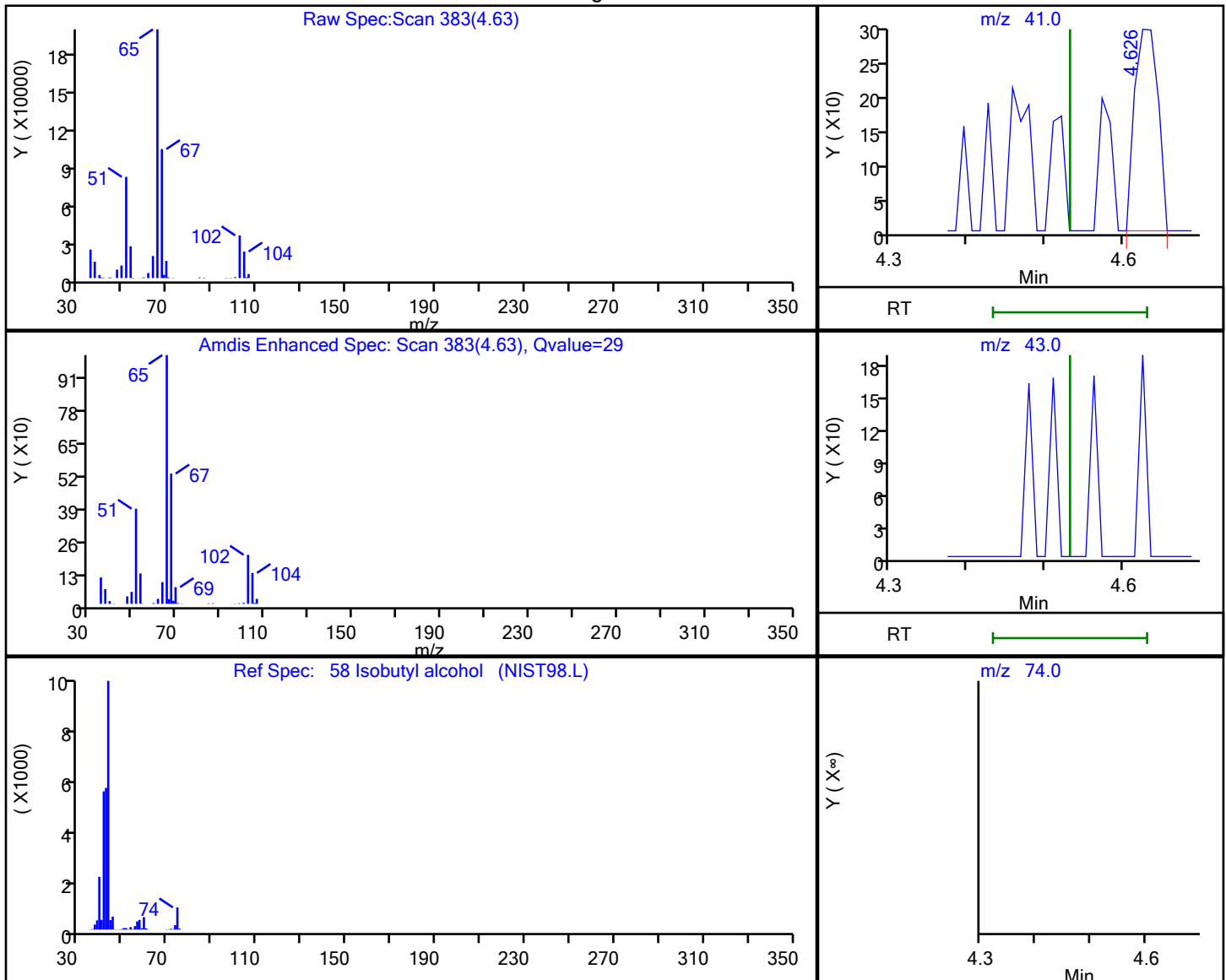
79 Toluene, CAS: 108-88-3

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6413.D
Injection Date: 30-Jun-2021 04:29:30 Instrument ID: VMS_P
Lims ID: 280-150245-B-6 Lab Sample ID: 280-150245-6
Client ID: RW-7200P-20210621
Operator ID: PETUNINP ALS Bottle#: 20 Worklist Smp#: 25
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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.63	41.00	618	2.793014
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:32:58

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.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-7586P-20210621 Lab Sample ID: 280-150245-7

Matrix: Water Lab File ID: P6414.D

Analysis Method: 8260B Date Collected: 06/21/2021 17:35

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 04:52

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.: 541784 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-7586P-20210621</u>	Lab Sample ID: <u>280-150245-7</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6414.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/21/2021 17:35</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 04:52</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

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)	99		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\20210629-102808.b\6414.D
 Lims ID: 280-150245-C-7
 Client ID: RW-7586P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:52:30 ALS Bottle#: 21 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-7 pH
 Misc. Info.: 280-0102808-026
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:33:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.879	4.878	0.001	98	1387416	50.0	
* 2 Chlorobenzene-d5	119	7.391	7.389	0.002	88	316154	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.607	9.606	0.001	97	443629	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.372	4.373	-0.001	91	336791	49.8	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.636	4.637	-0.001	98	424540	49.4	
\$ 6 Toluene-d8 (Surr)	98	6.124	6.125	-0.001	94	1340692	49.3	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.478	8.478	0.000	85	489518	48.1	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84		3.107				ND	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95		5.154				ND	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:44

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6414.D

Injection Date: 30-Jun-2021 04:52:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-C-7

Lab Sample ID: 280-150245-7

Worklist Smp#: 26

Client ID: RW-7586P-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

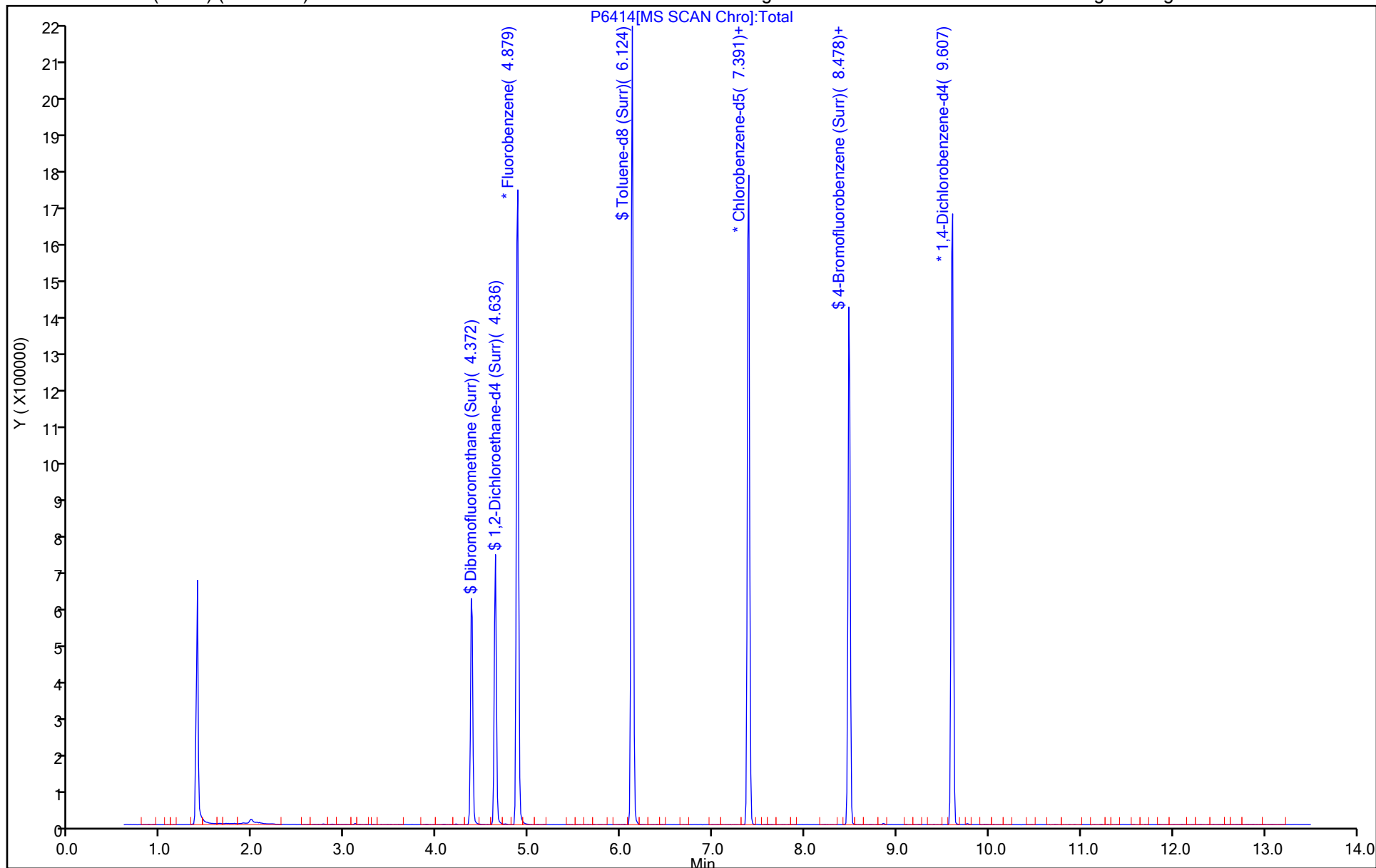
ALS Bottle#: 21

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\20210629-102808.b\IP6414.D
 Lims ID: 280-150245-C-7
 Client ID: RW-7586P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:52:30 ALS Bottle#: 21 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-7 pH
 Misc. Info.: 280-0102808-026
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:33:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	49.8	99.54
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.4	98.85
\$ 6 Toluene-d8 (Surr)	50.0	49.3	98.52
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.1	96.19

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\p6414.D

Injection Date: 30-Jun-2021 04:52:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-7

Lab Sample ID: 280-150245-7

Client ID: RW-7586P-20210621

Operator ID: PETUNINP

ALS Bottle#: 21

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMSP_8260

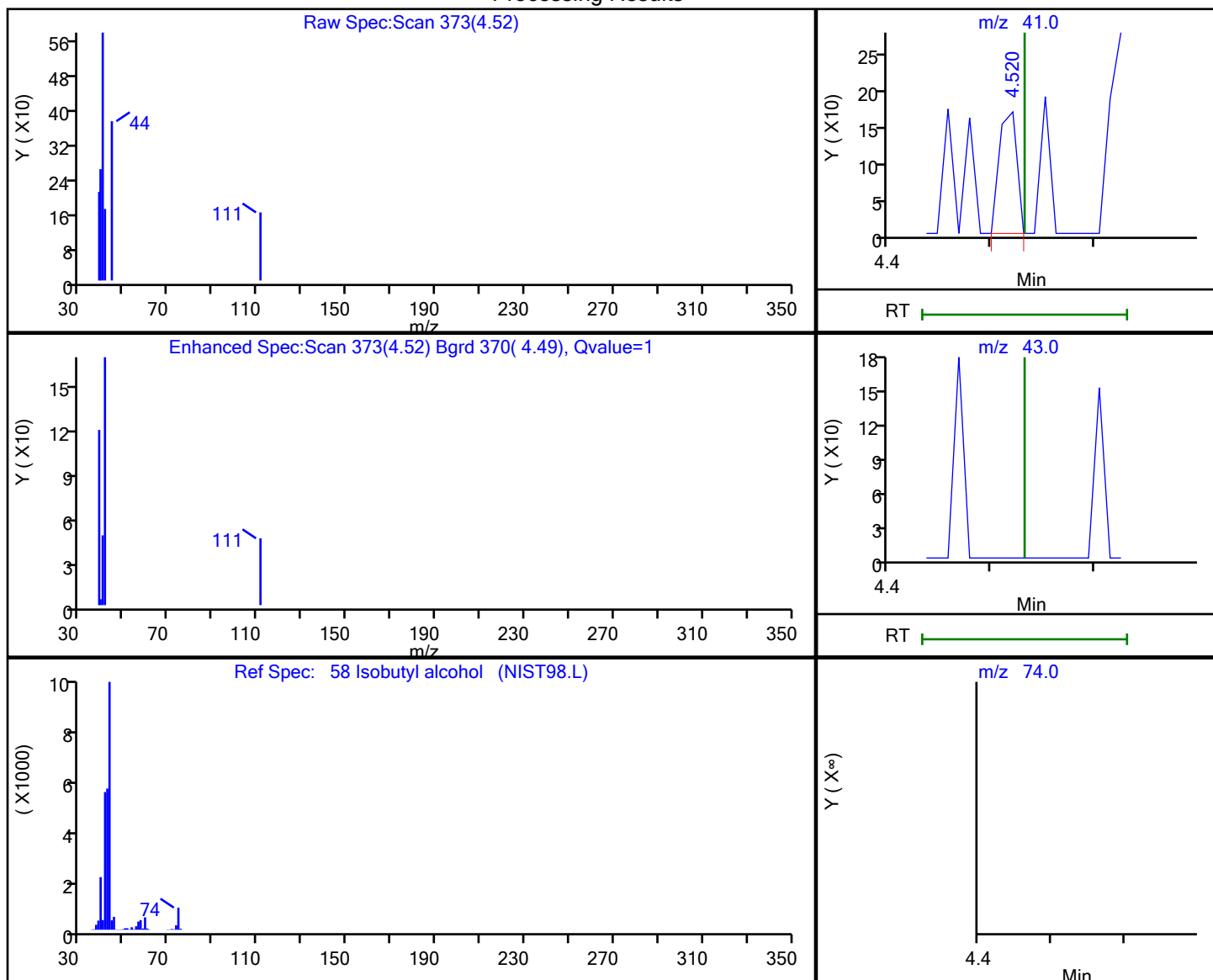
Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.52	41.00	201	0.939551
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:33:13

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.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-7677P-20210621 Lab Sample ID: 280-150245-8

Matrix: Water Lab File ID: P6415.D

Analysis Method: 8260B Date Collected: 06/21/2021 18:55

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:15

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.: 541784 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	0.29	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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-7677P-20210621 Lab Sample ID: 280-150245-8
 Matrix: Water Lab File ID: P6415.D
 Analysis Method: 8260B Date Collected: 06/21/2021 18:55
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:15
 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.: 541784 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	1.1		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	5.3		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)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\IP6415.D
 Lims ID: 280-150245-C-8
 Client ID: RW-7677P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:15:30 ALS Bottle#: 22 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-8 pH
 Misc. Info.: 280-0102808-027
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:33:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.878	-0.001	98	1397448	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	315369	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	446634	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.382	4.373	0.009	92	341024	50.0	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	424859	49.1	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1352175	49.8	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	86	484389	47.3	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84		3.107				ND	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96	4.023	4.025	-0.002	81	1510	0.2878	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95	5.152	5.154	-0.002	96	26334	5.28	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164	6.619	6.621	-0.002	94	3634	1.10	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:45

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6415.D

Injection Date: 30-Jun-2021 05:15:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-C-8

Lab Sample ID: 280-150245-8

Worklist Smp#: 27

Client ID: RW-7677P-20210621

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

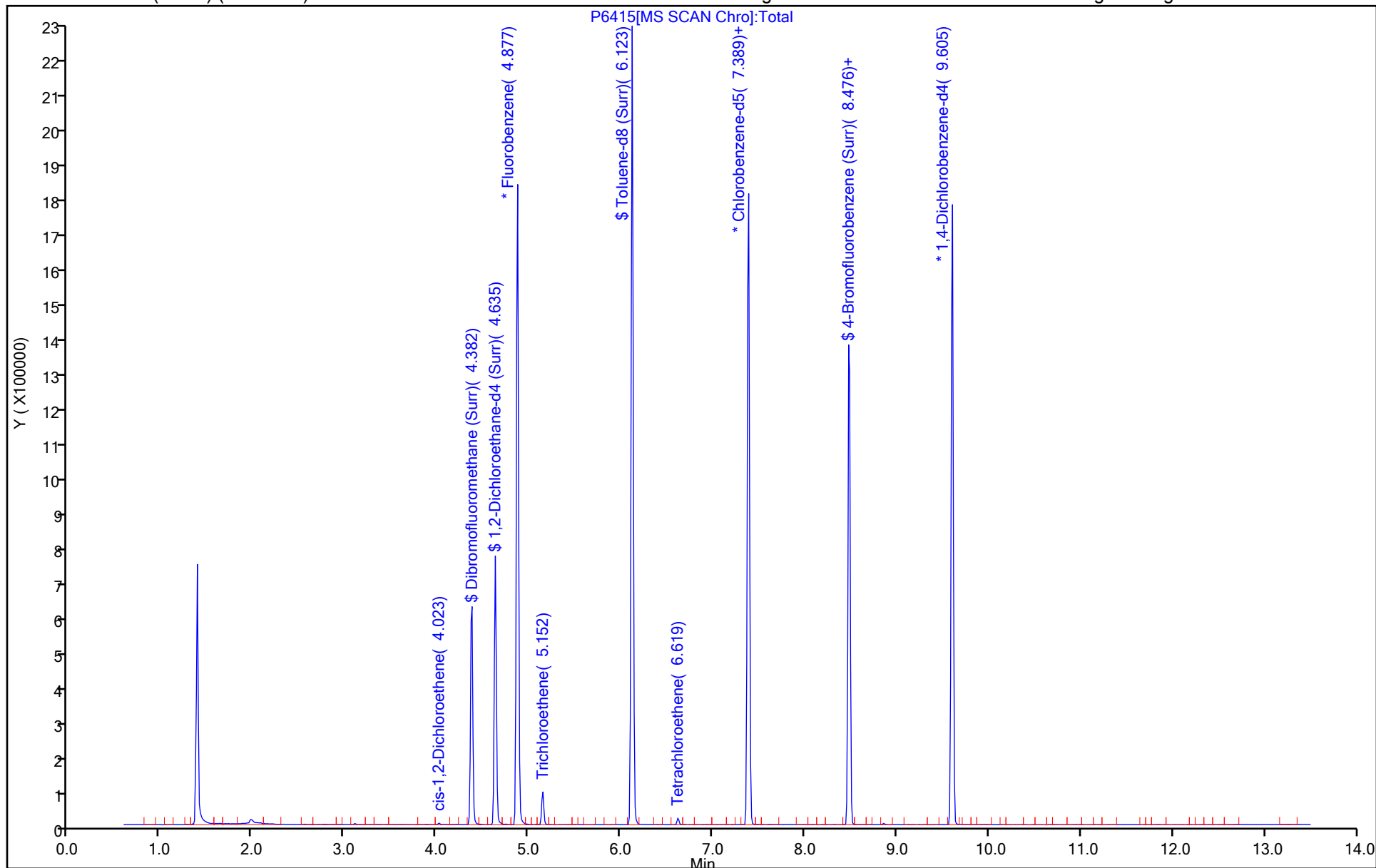
ALS Bottle#: 22

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\20210629-102808.b\IP6415.D
 Lims ID: 280-150245-C-8
 Client ID: RW-7677P-20210621
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:15:30 ALS Bottle#: 22 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-8 pH
 Misc. Info.: 280-0102808-027
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:33:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.0	100.06
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.22
\$ 6 Toluene-d8 (Surr)	50.0	49.8	99.61
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.3	94.54

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6415.D

Injection Date: 30-Jun-2021 05:15:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-8

Lab Sample ID: 280-150245-8

Client ID: RW-7677P-20210621

Operator ID: PETUNINP

ALS Bottle#: 22

Worklist Smp#: 27

Purge Vol: 5.000 mL

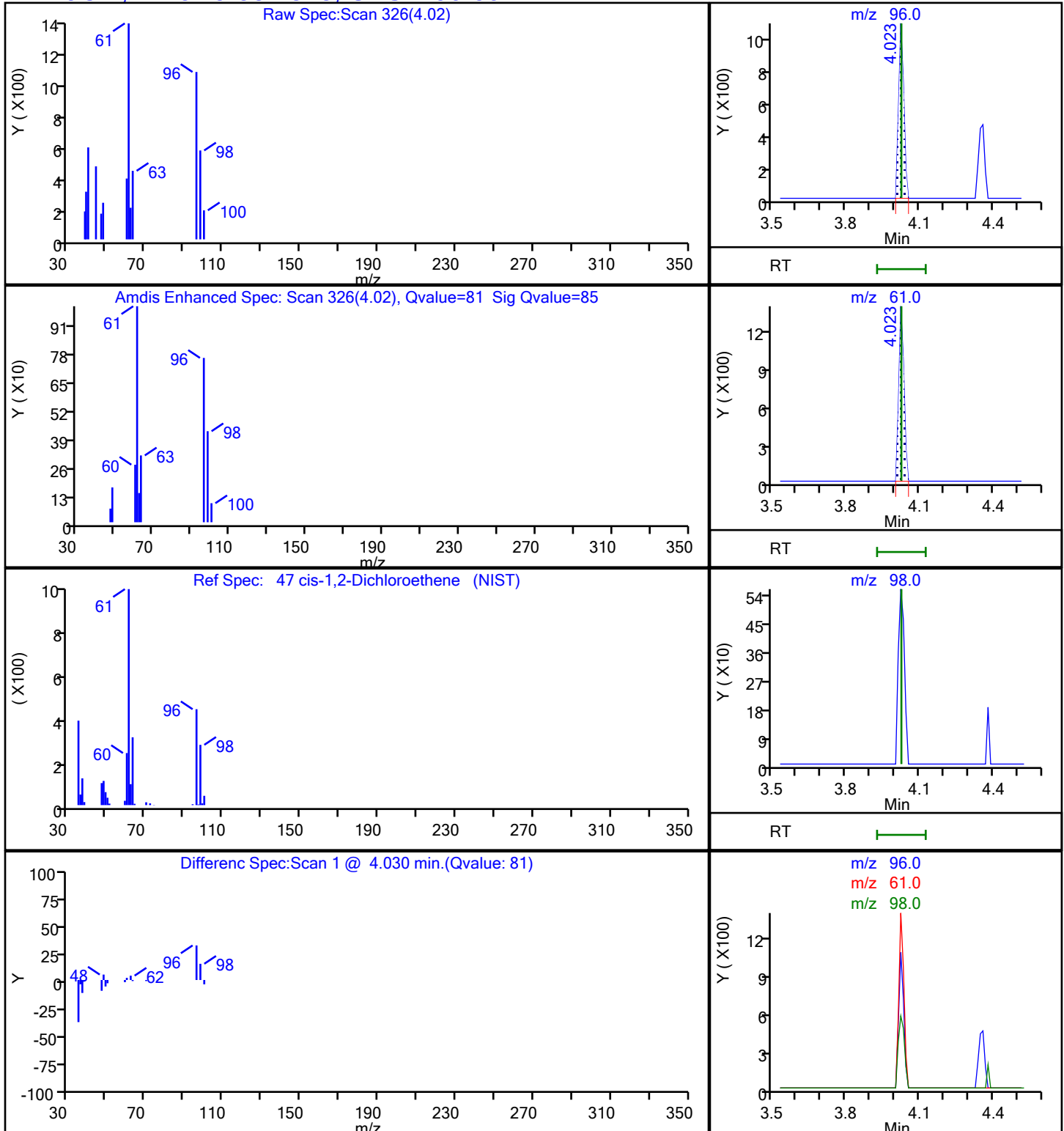
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

47 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6415.D

Injection Date: 30-Jun-2021 05:15:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-8

Lab Sample ID: 280-150245-8

Client ID: RW-7677P-20210621

Operator ID: PETUNINP

ALS Bottle#: 22

Worklist Smp#: 27

Purge Vol: 5.000 mL

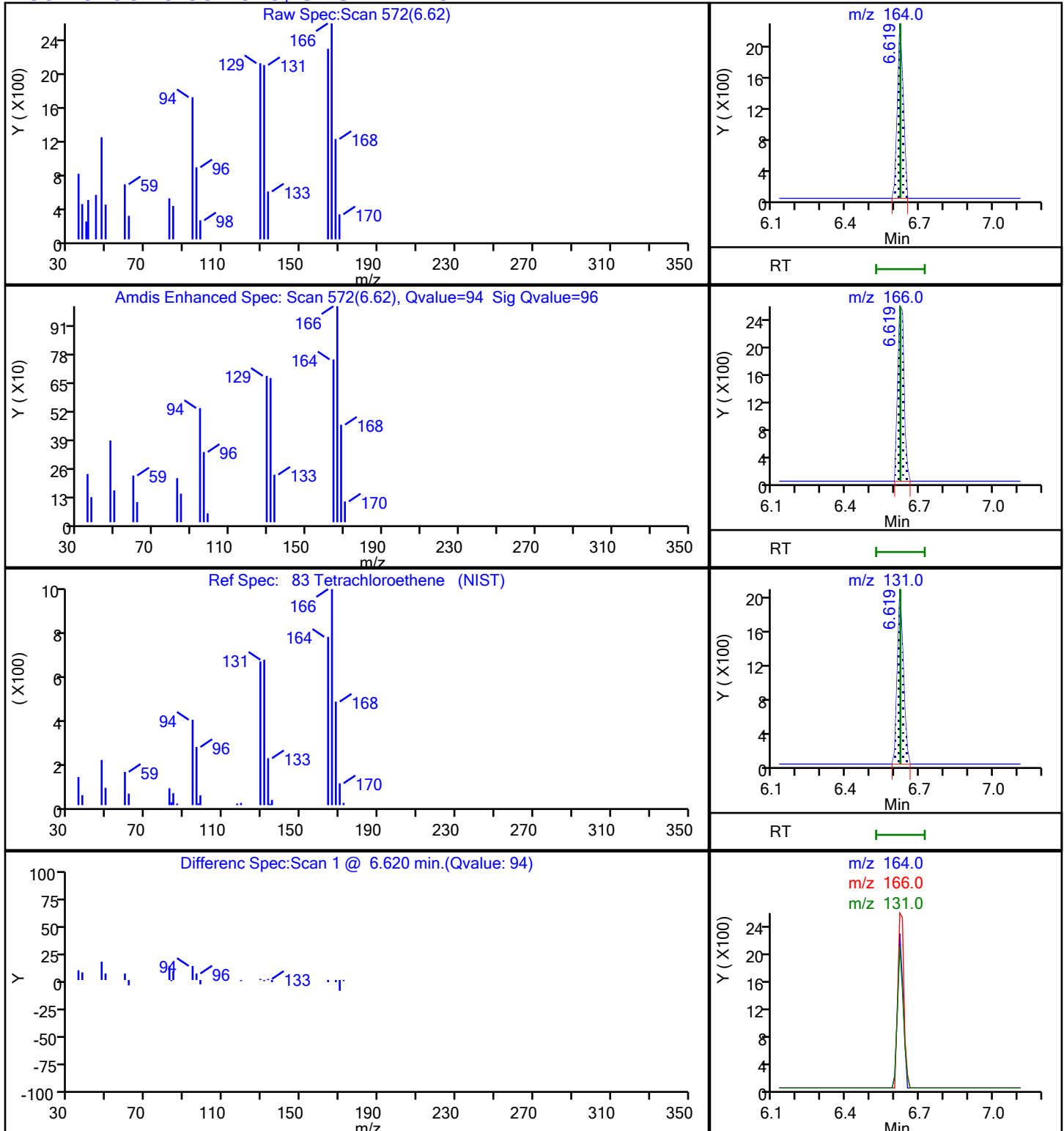
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

83 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6415.D

Injection Date: 30-Jun-2021 05:15:30

Instrument ID: VMS_P

Lims ID: 280-150245-C-8

Lab Sample ID: 280-150245-8

Client ID: RW-7677P-20210621

Operator ID: PETUNINP

ALS Bottle#: 22

Worklist Smp#: 27

Purge Vol: 5.000 mL

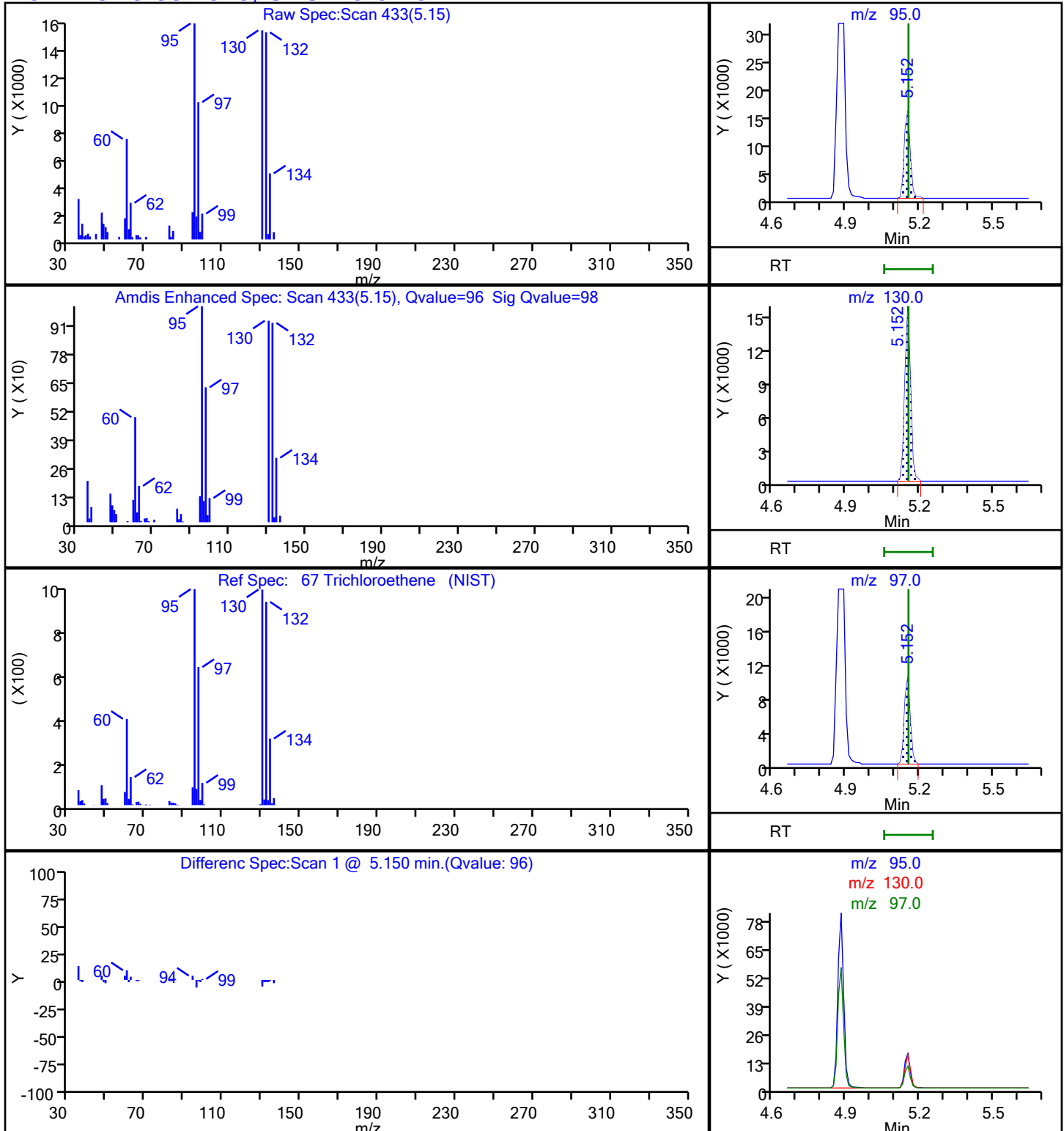
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

67 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-8000B-20210622 Lab Sample ID: 280-150245-9

Matrix: Water Lab File ID: P6416.D

Analysis Method: 8260B Date Collected: 06/22/2021 12:15

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:38

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.: 541784 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.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-8000B-20210622 Lab Sample ID: 280-150245-9

Matrix: Water Lab File ID: P6416.D

Analysis Method: 8260B Date Collected: 06/22/2021 12:15

Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 05:38

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.: 541784 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	0.84	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	4.1		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)	99		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\20210629-102808.b\P6416.D
 Lims ID: 280-150245-A-9
 Client ID: RW-8000B-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:38:30 ALS Bottle#: 23 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-9 pH
 Misc. Info.: 280-0102808-028
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:34:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1346598	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	88	305301	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	414822	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.372	4.373	-0.001	91	329207	50.1	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.636	4.637	-0.001	98	397920	47.7	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1305473	49.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.477	8.478	-0.001	84	458615	48.2	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.105	3.107	-0.002	89	1033	0.2000	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95	5.153	5.154	-0.001	95	19686	4.07	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164	6.619	6.621	-0.002	94	2702	0.8432	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:46

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6416.D

Injection Date: 30-Jun-2021 05:38:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-A-9

Lab Sample ID: 280-150245-9

Worklist Smp#: 28

Client ID: RW-8000B-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

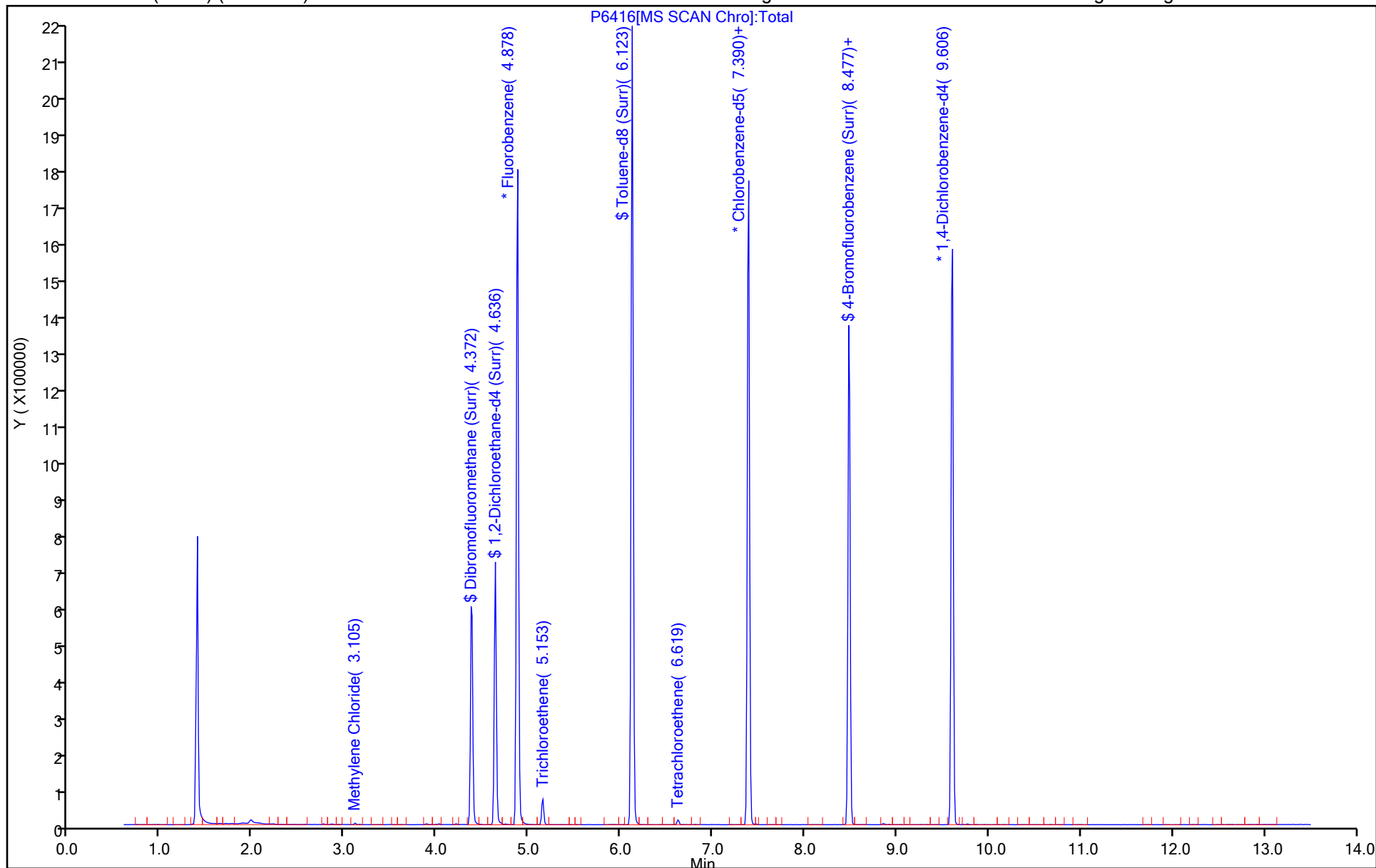
ALS Bottle#: 23

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\20210629-102808.b\IP6416.D
 Lims ID: 280-150245-A-9
 Client ID: RW-8000B-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:38:30 ALS Bottle#: 23 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-9 pH
 Misc. Info.: 280-0102808-028
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:34:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.24
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.46
\$ 6 Toluene-d8 (Surr)	50.0	49.7	99.34
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.2	96.37

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6416.D

Injection Date: 30-Jun-2021 05:38:30

Instrument ID: VMS_P

Lims ID: 280-150245-A-9

Lab Sample ID: 280-150245-9

Client ID: RW-8000B-20210622

Operator ID: PETUNINP

ALS Bottle#: 23

Worklist Smp#: 28

Purge Vol: 5.000 mL

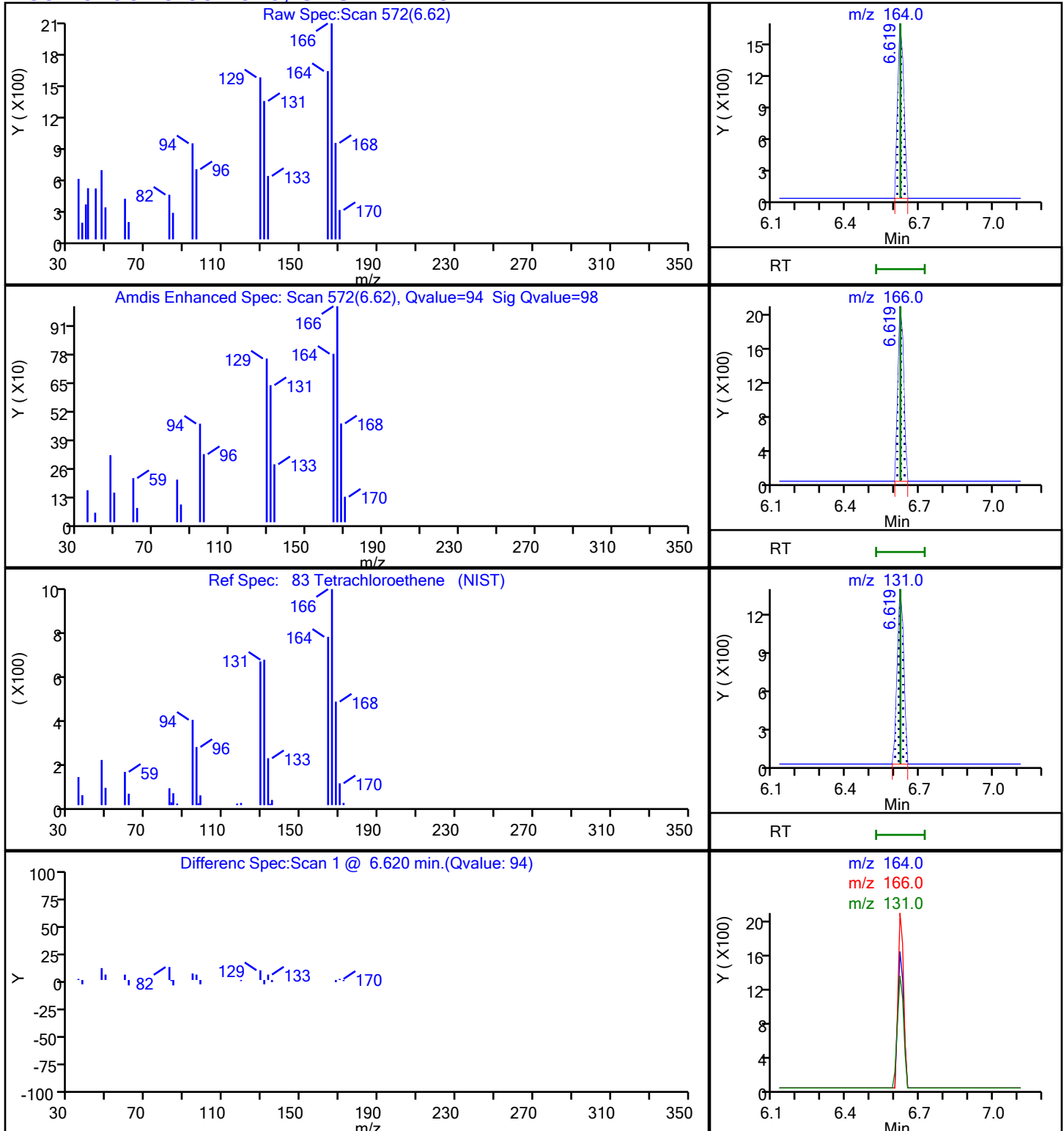
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

83 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6416.D

Injection Date: 30-Jun-2021 05:38:30

Instrument ID: VMS_P

Lims ID: 280-150245-A-9

Lab Sample ID: 280-150245-9

Client ID: RW-8000B-20210622

Operator ID: PETUNINP

ALS Bottle#: 23

Worklist Smp#: 28

Purge Vol: 5.000 mL

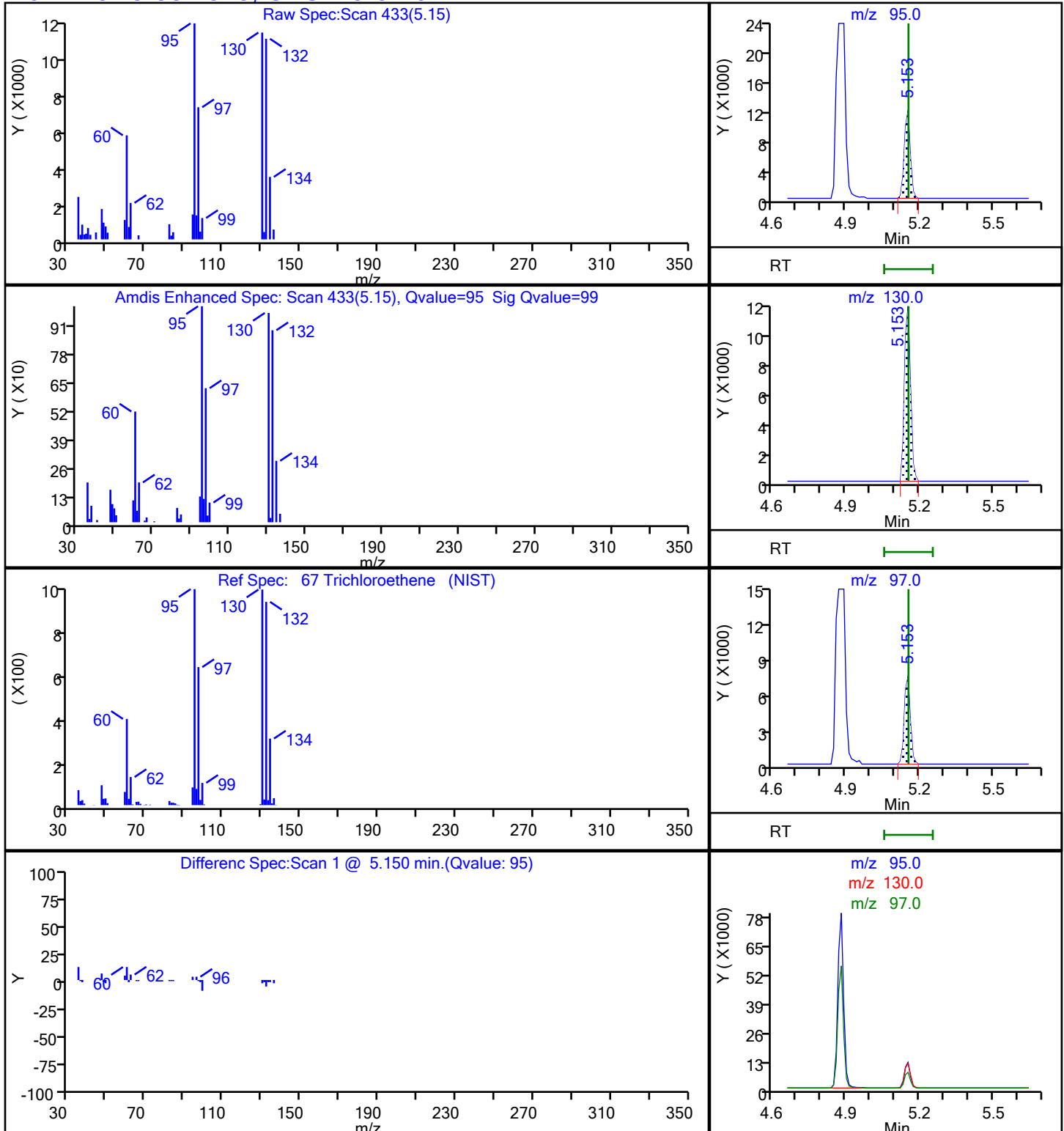
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

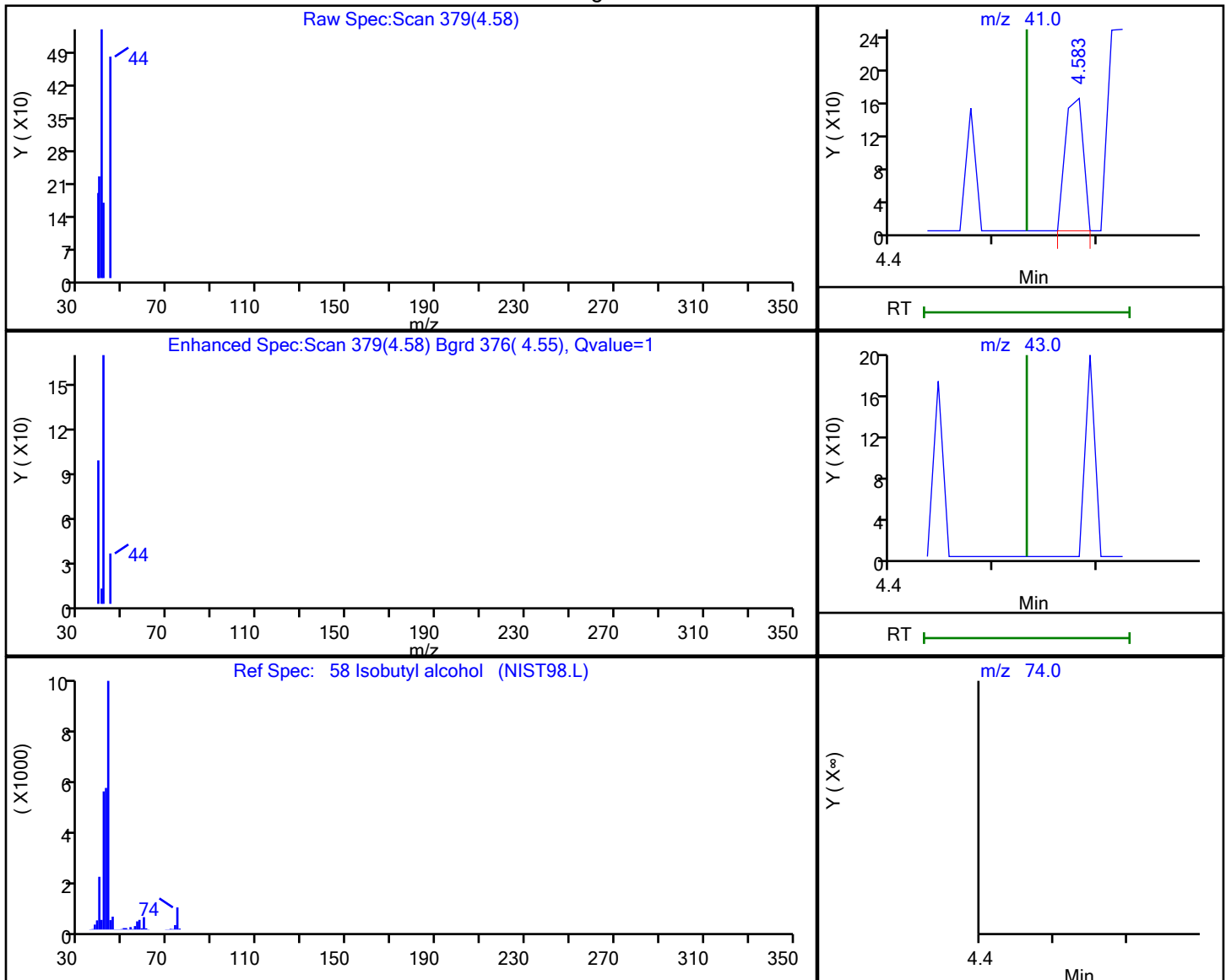
67 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6416.D
Injection Date: 30-Jun-2021 05:38:30 Instrument ID: VMS_P
Lims ID: 280-150245-A-9 Lab Sample ID: 280-150245-9
Client ID: RW-8000B-20210622
Operator ID: PETUNINP ALS Bottle#: 23 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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.58	41.00	199	0.958398
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:33:56

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.: 280-150245-1

SDG No.: _____

Client Sample ID: PA-1-20210622 Lab Sample ID: 280-150245-10

Matrix: Water Lab File ID: P6417.D

Analysis Method: 8260B Date Collected: 06/22/2021 15:05

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 06:00

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.: 541784 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-1-20210622 Lab Sample ID: 280-150245-10
 Matrix: Water Lab File ID: P6417.D
 Analysis Method: 8260B Date Collected: 06/22/2021 15:05
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 06:00
 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.: 541784 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	1.5		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)	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\20210629-102808.b\IP6417.D
 Lims ID: 280-150245-B-10
 Client ID: PA-1-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 06:00:30 ALS Bottle#: 24 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-10 pH
 Misc. Info.: 280-0102808-029
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:34:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.878	0.002	99	1382418	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.389	0.003	88	312990	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.606	0.002	97	436514	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	92	334320	49.6	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.638	4.637	0.001	98	420667	49.2	
\$ 6 Toluene-d8 (Surr)	98	6.126	6.125	0.001	94	1326509	49.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	83	477997	47.7	
\$ 8 Trifluorotoluene (Surr)	1		0.000				ND	
\$ 9 BFB	95		3.389				ND	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
13 Ethylene oxide	43		2.039				ND	7
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
16 Dichlorofluoromethane	67		2.326				ND	
17 Trichlorofluoromethane	101		2.358				ND	
18 Ethanol	45		2.472				ND	
19 Ethyl ether	59		2.569				ND	
20 Propene oxide	58		2.609				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151		2.759				ND	
24 Acetone	43		2.769				ND	
25 Isopropyl alcohol	45		2.852				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
29 Methyl acetate	43		2.991				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.108	3.107	0.001	86	1066	0.2010	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 2-Methyl-2-propanol	59		3.149				ND	
33 Acrylonitrile	53		3.265				ND	
34 Methyl tert-butyl ether	73		3.297				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
36 Hexane	57		3.498				ND	
38 Vinyl acetate	43		3.603				ND	
40 Isopropyl ether	87		3.622				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
37 Chlorotrifluoroethene	116		3.818				ND	
43 Tert-butyl ethyl ether	59		3.875				ND	
44 2-Butanone (MEK)	43		4.004				ND	
46 Ethyl acetate	43		4.013				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
50 sec-Butyl Alcohol	45		4.109				ND	
51 Methacrylonitrile	41		4.160				ND	
52 Tetrahydrofuran	42		4.205				ND	
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
56 Cyclohexane	56		4.458				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	U
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
63 n-Butanol	56		4.730				ND	
62 Tert-amyl methyl ether	73		4.730				ND	
66 n-Heptane	43		4.848				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	5.144	5.154	-0.010	95	7248	1.46	
68 2-Pentanone	43		5.249				ND	
69 Methylcyclohexane	55		5.344				ND	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
72 1,4-Dioxane	88		5.397				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
75 2-Nitropropane	41		5.712				ND	
76 2-Chloroethyl vinyl ether	63		5.756				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
87 Tetrahydrothiophene	60		6.862				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
89 1-Chlorohexane	91		7.380				ND	U
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
97 Isopropylbenzene	105		8.310				ND	
98 cis-1,4-Dichloro-2-butene	53		8.360				ND	
99 Cyclohexanone	55		8.405				ND	U
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
101 Bromobenzene	156		8.626				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
104 N-Propylbenzene	120		8.711				ND	
105 2-Chlorotoluene	126		8.806				ND	
106 1,3,5-Trimethylbenzene	105		8.879				ND	
107 4-Chlorotoluene	126		8.922				ND	
108 tert-Butylbenzene	119		9.186				ND	
127 Pentachloroethane	167		9.225				ND	
109 1,2,4-Trimethylbenzene	105		9.249				ND	
110 sec-Butylbenzene	134		9.407				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
112 4-Isopropyltoluene	119		9.555				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
114 1,2,3-Trimethylbenzene	105		9.648				ND	
115 n-Butylbenzene	91		9.956				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
118 1,3,5-Trichlorobenzene	180		10.946				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
120 Hexachlorobutadiene	225		11.729				ND	
121 Naphthalene	128		11.845				ND	
122 1,2,3-Trichlorobenzene	180		12.066				ND	
136 1-Chlorohexane TIC	1		0.000				ND	
129 n-Nonyl Aldehyde	1		0.000				ND	
124 2,3-Dimethylpentane	1		0.000				ND	
123 3,3-Dimethylpentane	1		0.000				ND	
138 Dimethyl disulfide	1		0.000				ND	
134 2,2-Dimethylpentane	1		0.000				ND	
131 Propene oxide TIC	58		0.000				ND	
126 3-Ethylpentane	1		0.000				ND	
128 2,4-Dimethylpentane	1		0.000				ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
135 3-Methylhexane	1		0.000				ND	
132 2-Methylhexane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
125 2,2,3-Trimethylbutane	1		0.000				ND	
S 139 1,2-Dichloroethene, Total (URS)	95		2.000				ND	7
S 142 Xylenes, Total	106		0.000				ND	7
S 141 TAH	1				0		0	7
S 140 Trihalomethanes, Total	1		0.000				ND	7
S 143 Xylenes, Total (URS)	1		0.000				ND	7
S 146 Total BTEX	1		0.000				ND	7
S 145 1,3-Dichloropropene, Total	1		0.000				ND	7
S 144 1,2-Dichloroethene, Total	1		0.000				ND	7
T 147 1,3-Butadiene TIC	1		0.000				ND	
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 137 Cyclohexane TIC	1		0.000				ND	
T 133 Methyl cyclohexane TIC	1		0.000				ND	
T 154 Dichloroacetonitrile TIC	74		0.000				ND	
T 153 2-Butoxyethanol TIC	1		0.000				ND	
T 150 4-Ethyltoluene TIC	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:48

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6417.D

Injection Date: 30-Jun-2021 06:00:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-B-10

Lab Sample ID: 280-150245-10

Worklist Smp#: 29

Client ID: PA-1-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

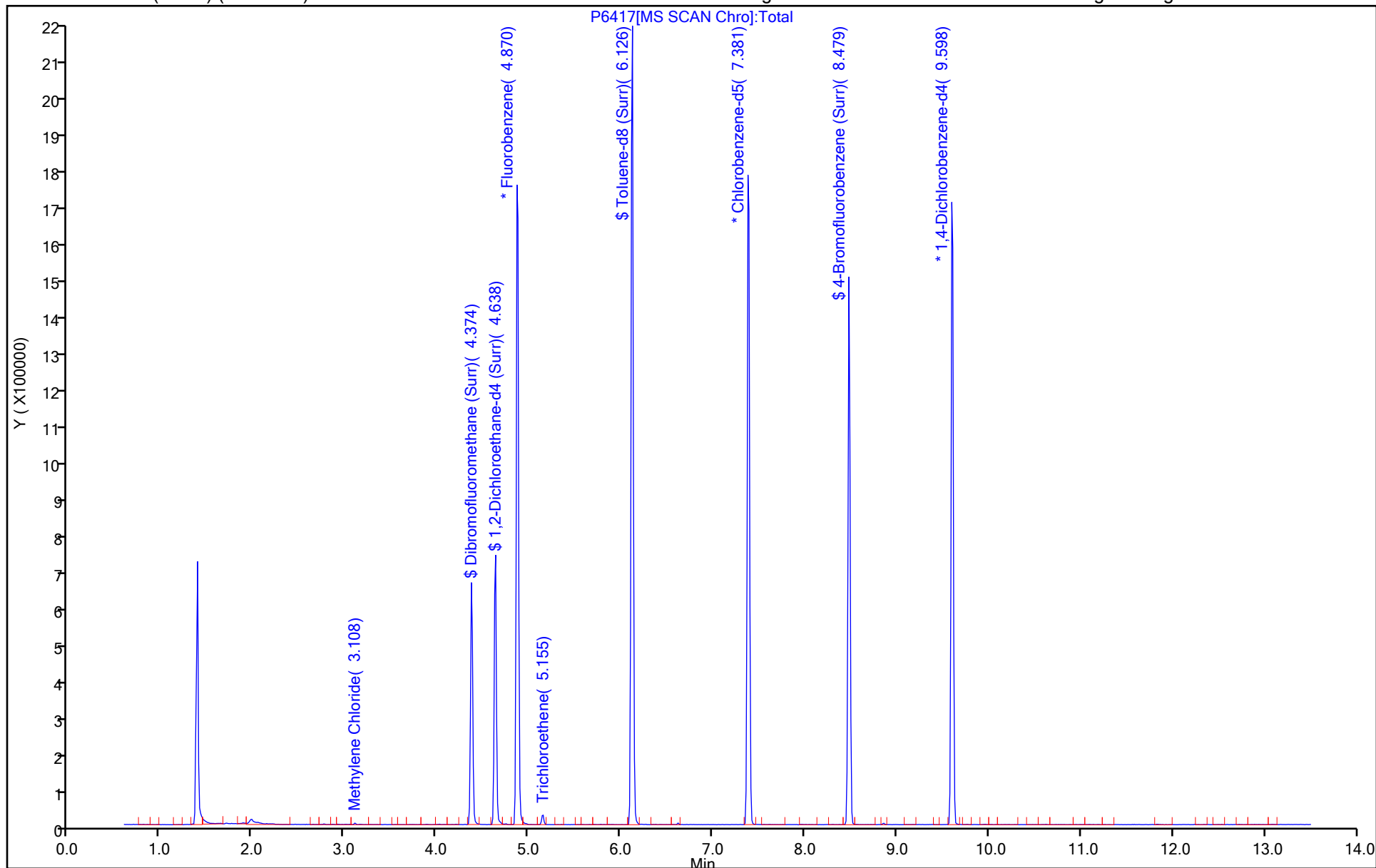
ALS Bottle#: 24

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\20210629-102808.b\IP6417.D
 Lims ID: 280-150245-B-10
 Client ID: PA-1-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 06:00:30 ALS Bottle#: 24 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-10 pH
 Misc. Info.: 280-0102808-029
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:34:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	49.6	99.16
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.2	98.31
\$ 6 Toluene-d8 (Surr)	50.0	49.2	98.46
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.45

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6417.D

Injection Date: 30-Jun-2021 06:00:30

Instrument ID: VMS_P

Lims ID: 280-150245-B-10

Lab Sample ID: 280-150245-10

Client ID: PA-1-20210622

Operator ID: PETUNINP

ALS Bottle#: 24

Worklist Smp#: 29

Purge Vol: 5.000 mL

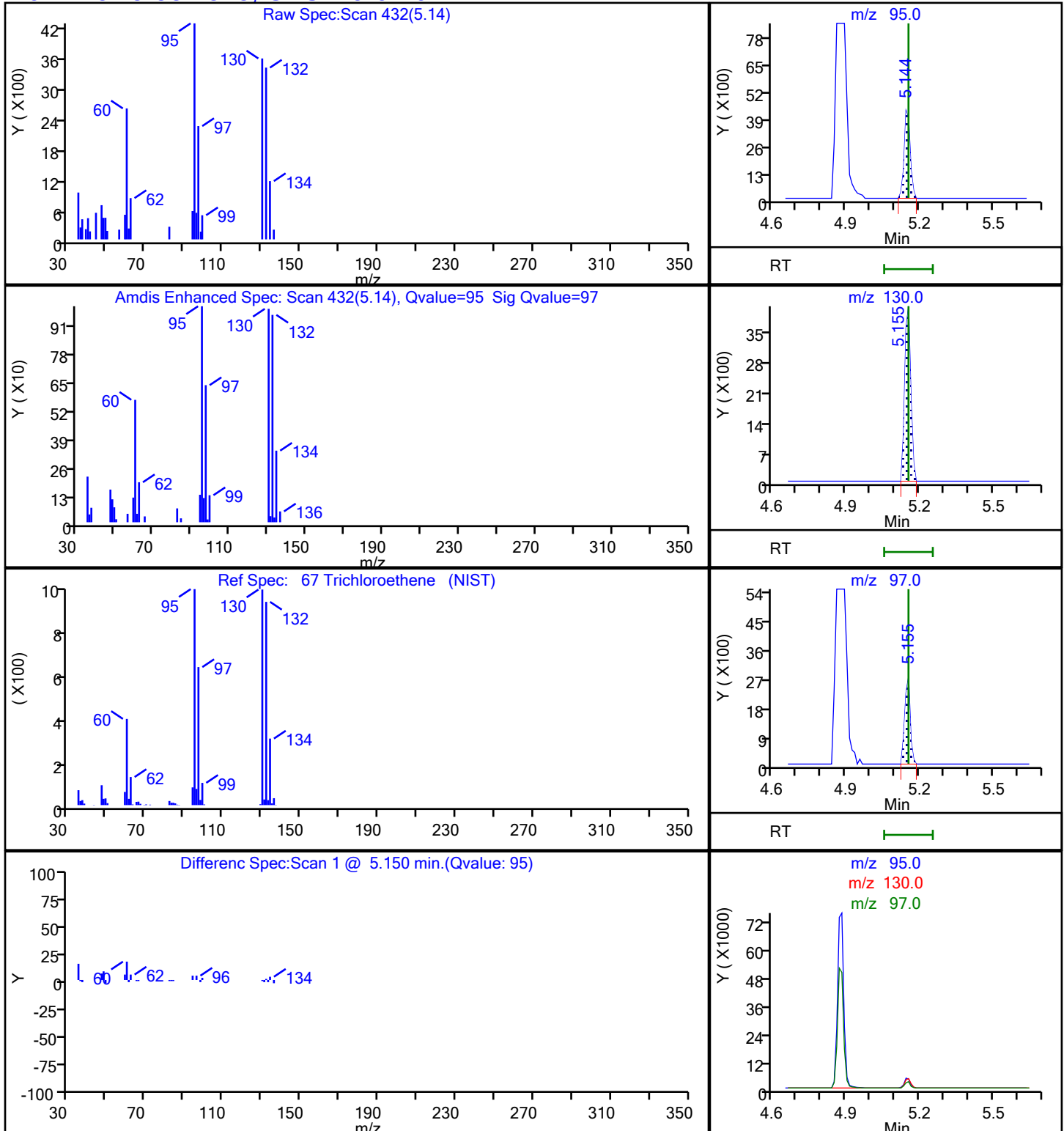
Dil. Factor: 1.0000

Method: AQ_VMSP_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

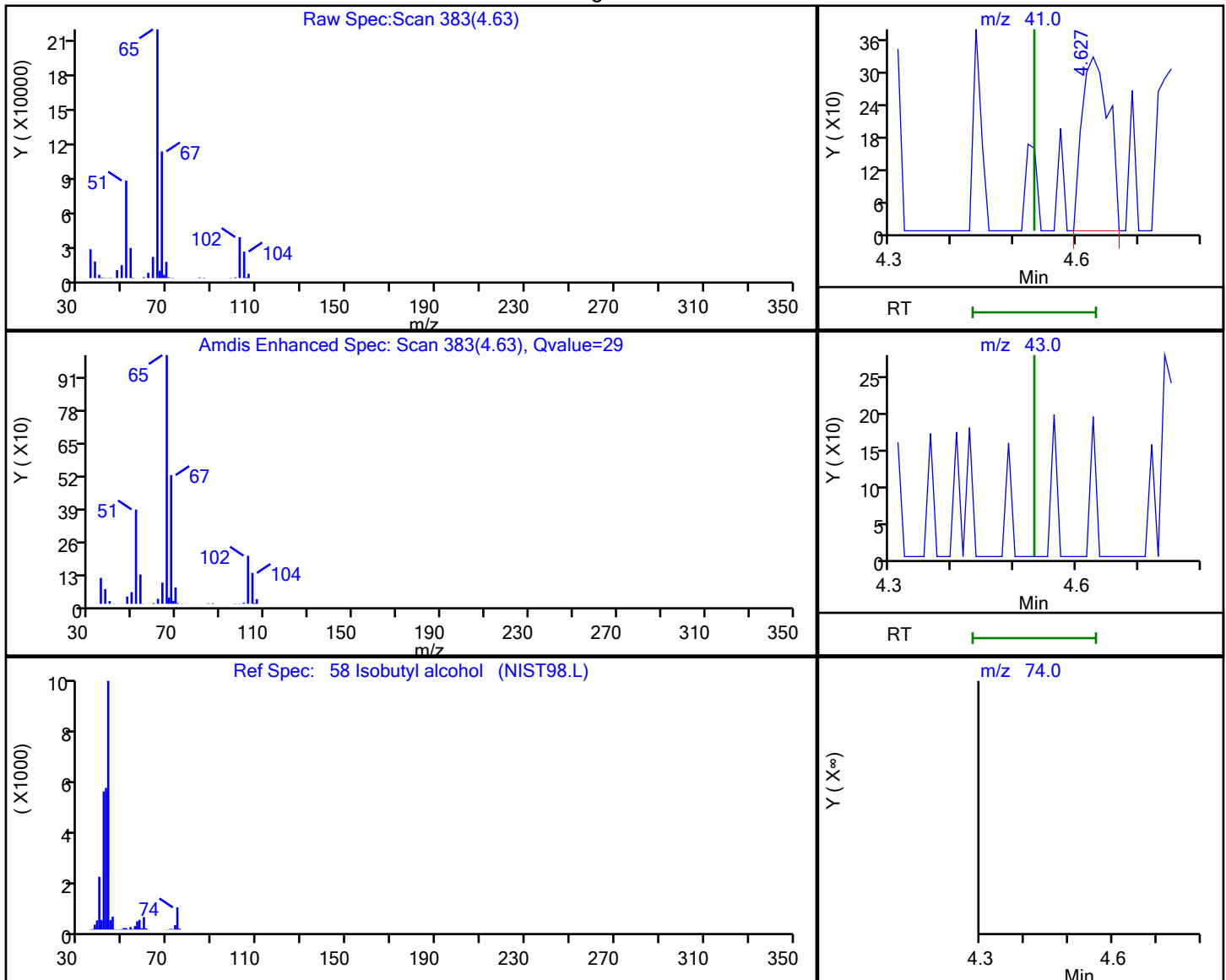
67 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6417.D
Injection Date: 30-Jun-2021 06:00:30 Instrument ID: VMS_P
Lims ID: 280-150245-B-10 Lab Sample ID: 280-150245-10
Client ID: PA-1-20210622
Operator ID: PETUNINP ALS Bottle#: 24 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

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.63	41.00	967	4.536469
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:34:14

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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: MW-37-20210622 Lab Sample ID: 280-150245-11
 Matrix: Water Lab File ID: P6418.D
 Analysis Method: 8260B Date Collected: 06/22/2021 17:38
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 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.: 541784 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>MW-37-20210622</u>	Lab Sample ID: <u>280-150245-11</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6418.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/22/2021 17:38</u>
Sample wt/vol: <u>5(mL)</u>	Date Analyzed: <u>06/30/2021 06:23</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25(mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

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	1.6		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)	99		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\20210629-102808.b\IP6418.D
 Lims ID: 280-150245-A-11
 Client ID: MW-37-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 06:23:30 ALS Bottle#: 25 Worklist Smp#: 34
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-11 pH
 Misc. Info.: 280-0102808-034
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:37:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1405581	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	317743	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	98	444785	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.371	4.373	-0.002	91	343041	50.0	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	425247	48.9	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1357869	49.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	85	487539	47.8	
10 Dichlorodifluoromethane	85		1.535				ND	
11 Chloromethane	50		1.704				ND	
12 Vinyl chloride	62		1.799				ND	
14 Bromomethane	94		2.073				ND	7
15 Chloroethane	64		2.157				ND	
17 Trichlorofluoromethane	101		2.358				ND	
21 Acrolein	56		2.674				ND	
22 1,1-Dichloroethene	96		2.748				ND	
24 Acetone	43		2.769				ND	
26 Iodomethane	142		2.875				ND	
27 Carbon disulfide	76		2.928				ND	
28 Acetonitrile	41		2.968				ND	
30 3-Chloro-1-propene	41		3.012				ND	
31 Methylene Chloride	84	3.105	3.107	-0.002	94	1087	0.2016	
33 Acrylonitrile	53		3.265				ND	
35 trans-1,2-Dichloroethene	96		3.308				ND	
38 Vinyl acetate	43		3.603				ND	
39 1,1-Dichloroethane	63		3.624				ND	
41 2-Chloro-1,3-butadiene	53		3.675				ND	
44 2-Butanone (MEK)	43		4.004				ND	
47 cis-1,2-Dichloroethene	96		4.025				ND	
48 2,2-Dichloropropane	77		4.036				ND	
49 Propionitrile	54		4.044				ND	
51 Methacrylonitrile	41		4.160				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		4.205				ND	
54 Chloroform	83		4.257				ND	
55 1,1,1-Trichloroethane	97		4.405				ND	
57 1,1-Dichloropropene	75		4.511				ND	
59 Carbon tetrachloride	117		4.521				ND	
58 Isobutyl alcohol	41		4.532				ND	
60 Benzene	78		4.658				ND	
61 1,2-Dichloroethane	62		4.690				ND	
67 Trichloroethene	95	5.152	5.154	-0.002	97	7816	1.55	
70 1,2-Dichloropropane	63		5.355				ND	
71 Methyl methacrylate	100		5.363				ND	
73 Dibromomethane	93		5.429				ND	
74 Dichlorobromomethane	83		5.545				ND	
77 cis-1,3-Dichloropropene	75		5.893				ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999				ND	
79 Toluene	91		6.178				ND	
80 trans-1,3-Dichloropropene	75		6.357				ND	
81 Ethyl methacrylate	69		6.389				ND	
82 1,1,2-Trichloroethane	97		6.537				ND	
83 Tetrachloroethene	164		6.621				ND	
84 1,3-Dichloropropane	76		6.674				ND	
85 2-Hexanone	43		6.695				ND	
86 Chlorodibromomethane	129		6.874				ND	
88 Ethylene Dibromide	107		6.991				ND	
90 Chlorobenzene	112		7.413				ND	
91 1,1,1,2-Tetrachloroethane	131		7.486				ND	
92 Ethylbenzene	106		7.497				ND	
93 m-Xylene & p-Xylene	106		7.613				ND	
94 o-Xylene	106		7.972				ND	
95 Styrene	104		7.982				ND	
96 Bromoform	173		8.172				ND	
100 1,1,2,2-Tetrachloroethane	83		8.595				ND	
102 trans-1,4-Dichloro-2-butene	53		8.637				ND	
103 1,2,3-Trichloropropane	110		8.658				ND	
111 1,3-Dichlorobenzene	146		9.534				ND	
113 1,4-Dichlorobenzene	146		9.629				ND	
116 1,2-Dichlorobenzene	146		9.977				ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758				ND	
119 1,2,4-Trichlorobenzene	180		11.581				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:57

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6418.D

Injection Date: 30-Jun-2021 06:23:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-A-11

Lab Sample ID: 280-150245-11

Worklist Smp#: 34

Client ID: MW-37-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

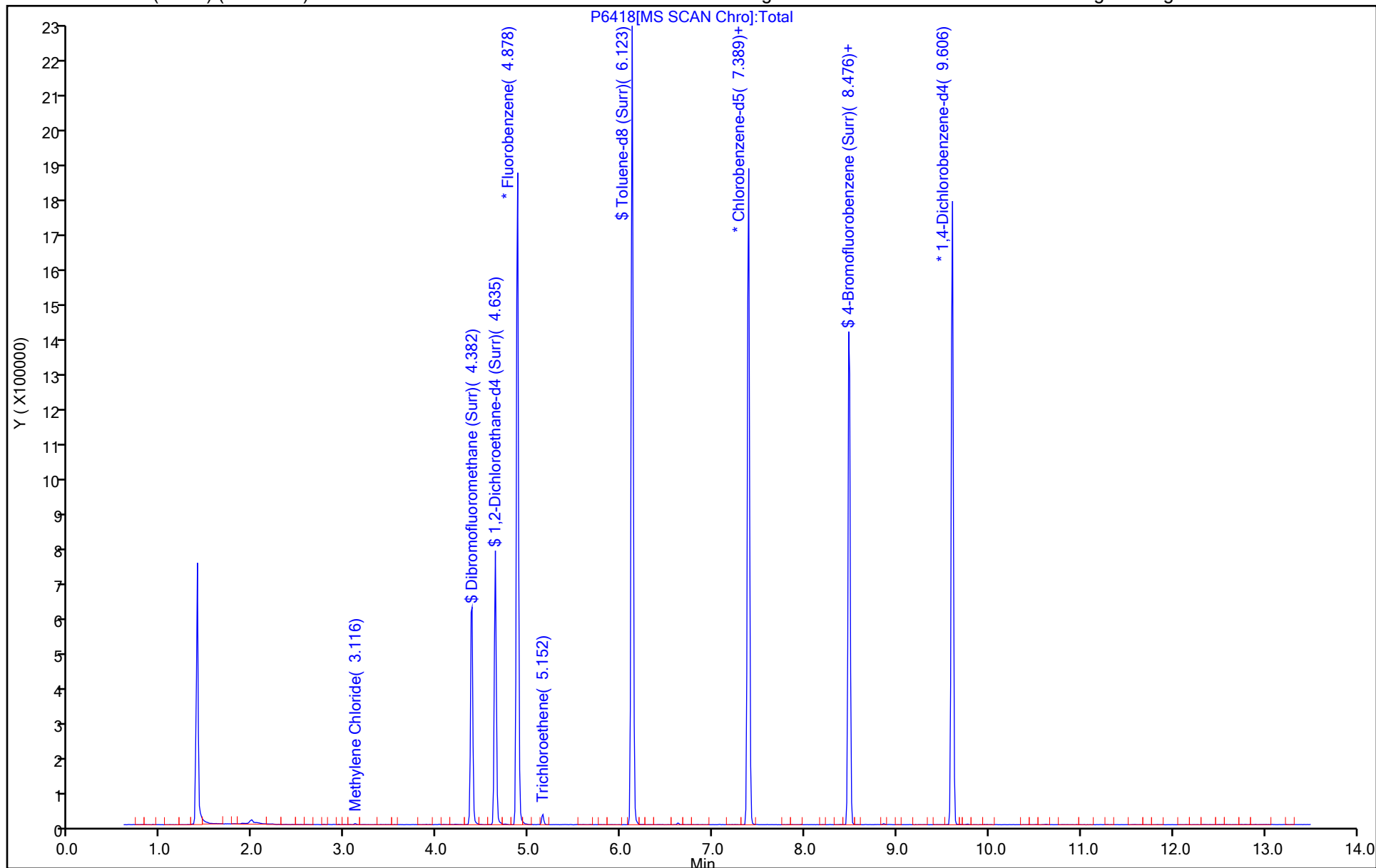
ALS Bottle#: 25

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\20210629-102808.b\IP6418.D
 Lims ID: 280-150245-A-11
 Client ID: MW-37-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 06:23:30 ALS Bottle#: 25 Worklist Smp#: 34
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-11 pH
 Misc. Info.: 280-0102808-034
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:37:05

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.0	100.07
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.9	97.74
\$ 6 Toluene-d8 (Surr)	50.0	49.6	99.28
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.8	95.55

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6418.D

Injection Date: 30-Jun-2021 06:23:30

Instrument ID: VMS_P

Lims ID: 280-150245-A-11

Lab Sample ID: 280-150245-11

Client ID: MW-37-20210622

Operator ID: PETUNINP

ALS Bottle#: 25

Worklist Smp#: 34

Purge Vol: 5.000 mL

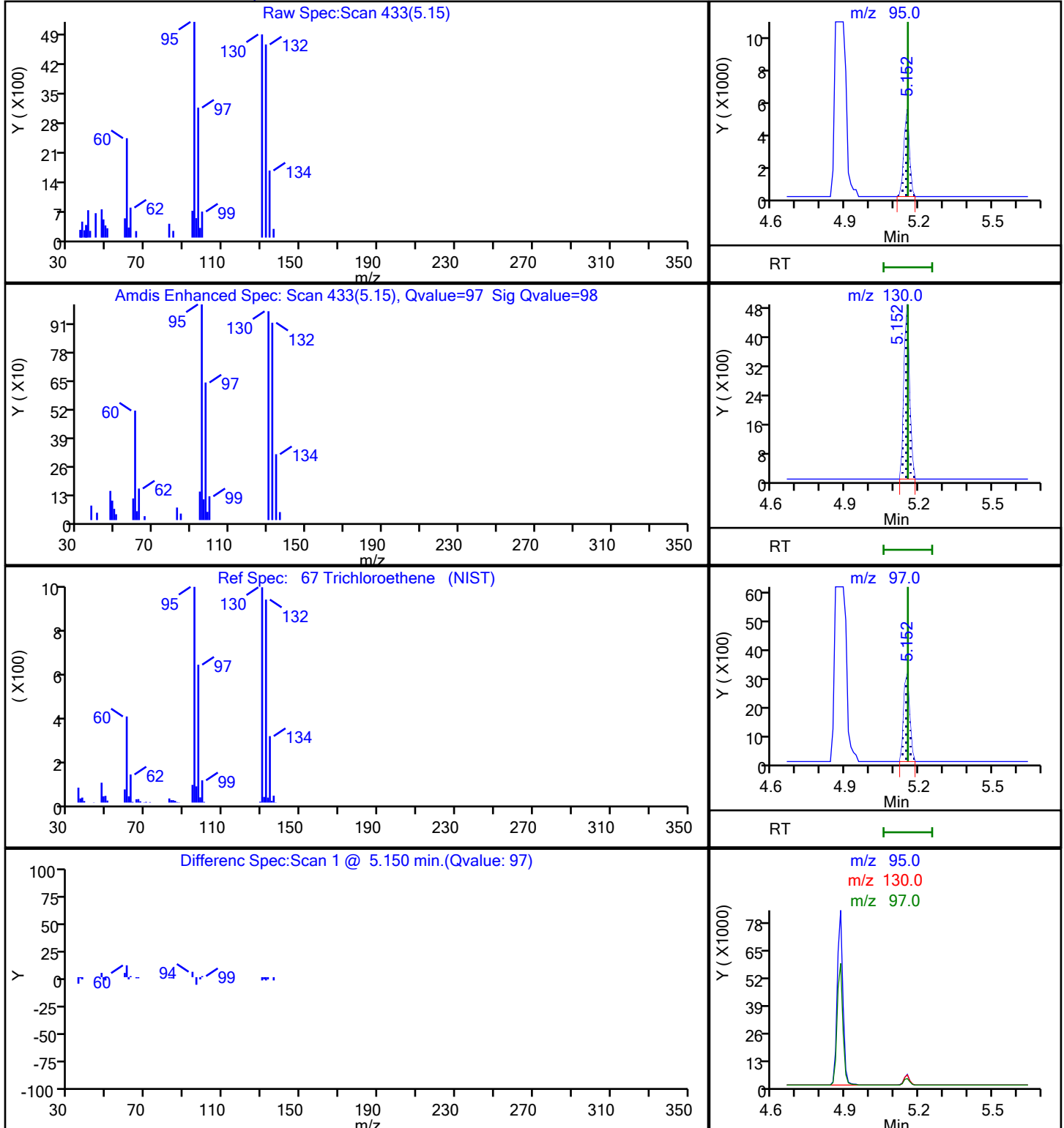
Dil. Factor: 1.0000

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.: 280-150245-1

SDG No.: _____

Client Sample ID: MW-37Q-20210622 Lab Sample ID: 280-150245-12

Matrix: Water Lab File ID: MS1_3859.D

Analysis Method: 8260B Date Collected: 06/22/2021 17:41

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 00:17

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.: 541786 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.: 280-150245-1

SDG No.: _____

Client Sample ID: MW-37Q-20210622 Lab Sample ID: 280-150245-12

Matrix: Water Lab File ID: MS1_3859.D

Analysis Method: 8260B Date Collected: 06/22/2021 17:41

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 00:17

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.: 541786 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	1.3		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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3859.D
 Lims ID: 280-150245-A-12
 Client ID: MW-37Q-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 00:17:30 ALS Bottle#: 9 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-12 pH
 Misc. Info.: 280-0102809-014
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:11:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	746367	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.575	0.001	90	164424	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	265953	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	196631	49.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	250741	47.3	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	681612	47.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	268801	46.6	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	88	3903	1.28	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:09

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3859.D

Injection Date: 30-Jun-2021 00:17:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-A-12

Lab Sample ID: 280-150245-12

Worklist Smp#: 14

Client ID: MW-37Q-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

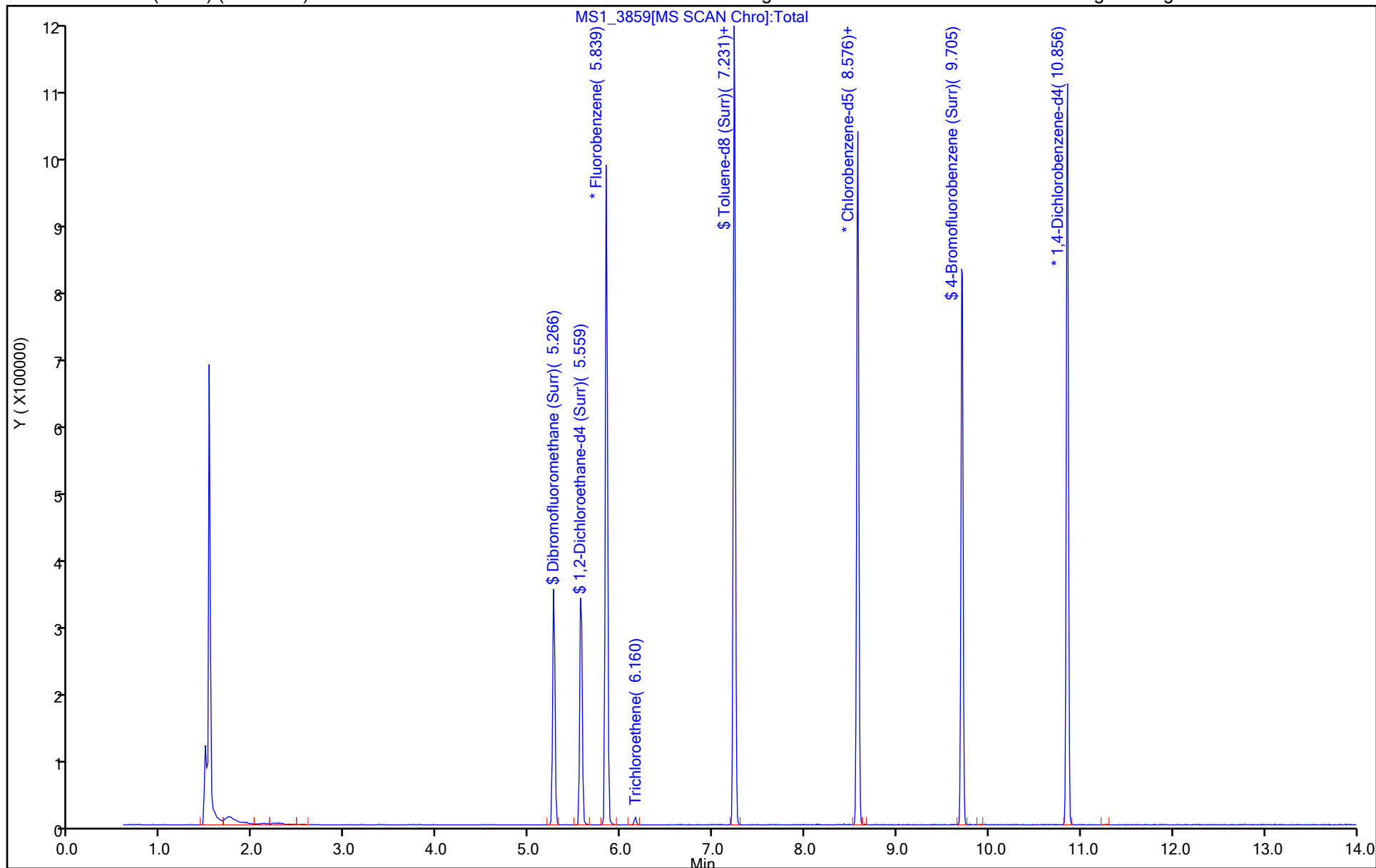
ALS Bottle#: 9

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3859.D
 Lims ID: 280-150245-A-12
 Client ID: MW-37Q-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 00:17:30 ALS Bottle#: 9 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-12 pH
 Misc. Info.: 280-0102809-014
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:11:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.7	99.40
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.3	94.62
\$ 7 Toluene-d8 (Surr)	50.0	47.9	95.70
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.6	93.15

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3859.D

Injection Date: 30-Jun-2021 00:17:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-A-12

Lab Sample ID: 280-150245-12

Client ID: MW-37Q-20210622

Operator ID: PETUNINP

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 5.000 mL

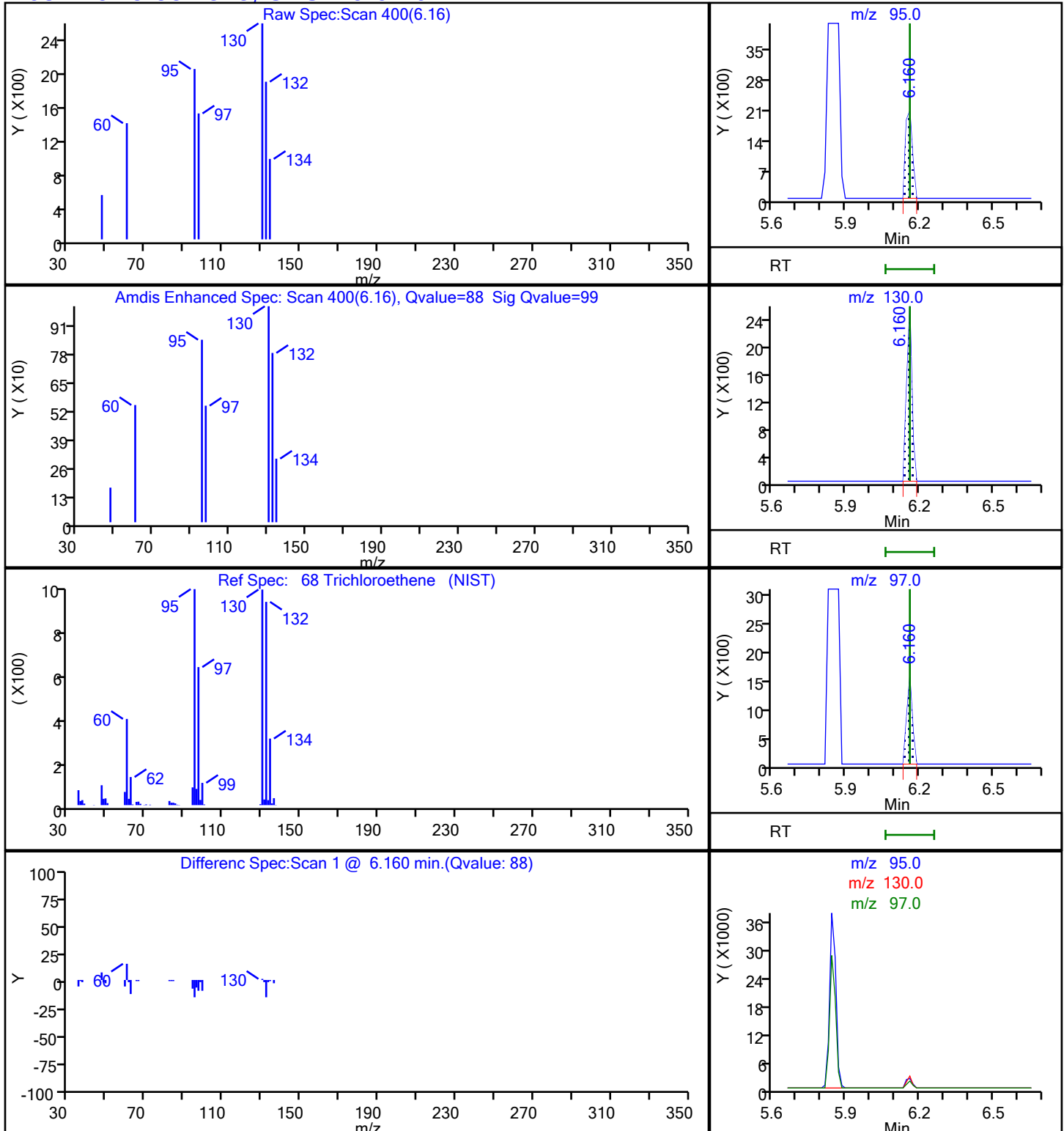
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-3-20210622 Lab Sample ID: 280-150245-13
 Matrix: Water Lab File ID: MS1_3860.D
 Analysis Method: 8260B Date Collected: 06/22/2021 16:55
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 00:38
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-3-20210622 Lab Sample ID: 280-150245-13
 Matrix: Water Lab File ID: MS1_3860.D
 Analysis Method: 8260B Date Collected: 06/22/2021 16:55
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 00:38
 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.: 541786 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	1.2		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)	95		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)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3860.D
 Lims ID: 280-150245-B-13
 Client ID: PA-3-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 00:38:30 ALS Bottle#: 10 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-13 pH
 Misc. Info.: 280-0102809-015
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	741499	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	165458	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	269052	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	197806	50.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	250378	47.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	695667	48.5	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	83	270742	46.4	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	90	3755	1.22	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:10

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3860.D

Injection Date: 30-Jun-2021 00:38:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-13

Lab Sample ID: 280-150245-13

Worklist Smp#: 15

Client ID: PA-3-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

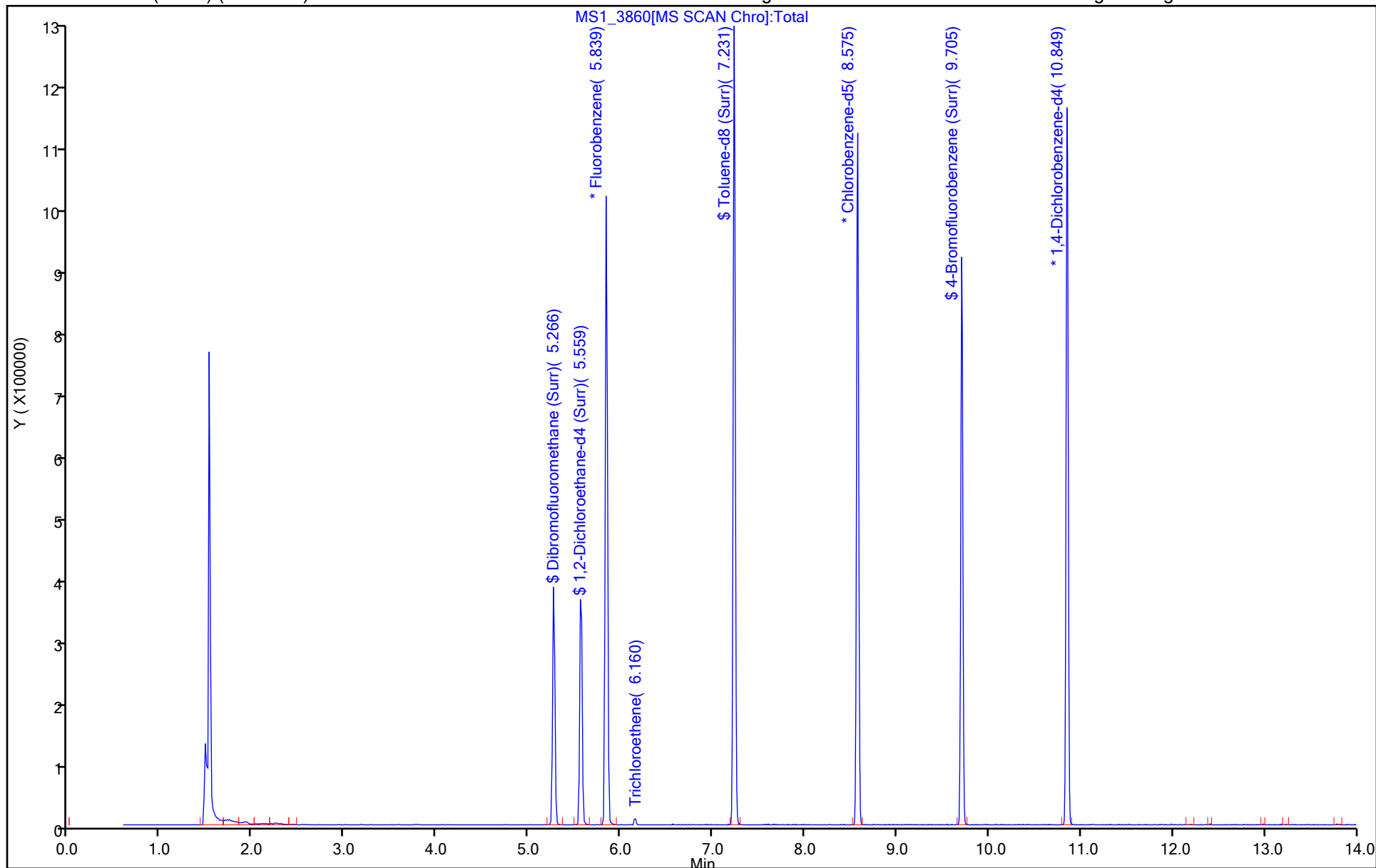
ALS Bottle#: 10

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3860.D
 Lims ID: 280-150245-B-13
 Client ID: PA-3-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 00:38:30 ALS Bottle#: 10 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-13 pH
 Misc. Info.: 280-0102809-015
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	50.3	100.65
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	95.10
\$ 7 Toluene-d8 (Surr)	50.0	48.5	97.07
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.4	92.74

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3860.D

Injection Date: 30-Jun-2021 00:38:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-13

Lab Sample ID: 280-150245-13

Client ID: PA-3-20210622

Operator ID: PETUNINP

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 5.000 mL

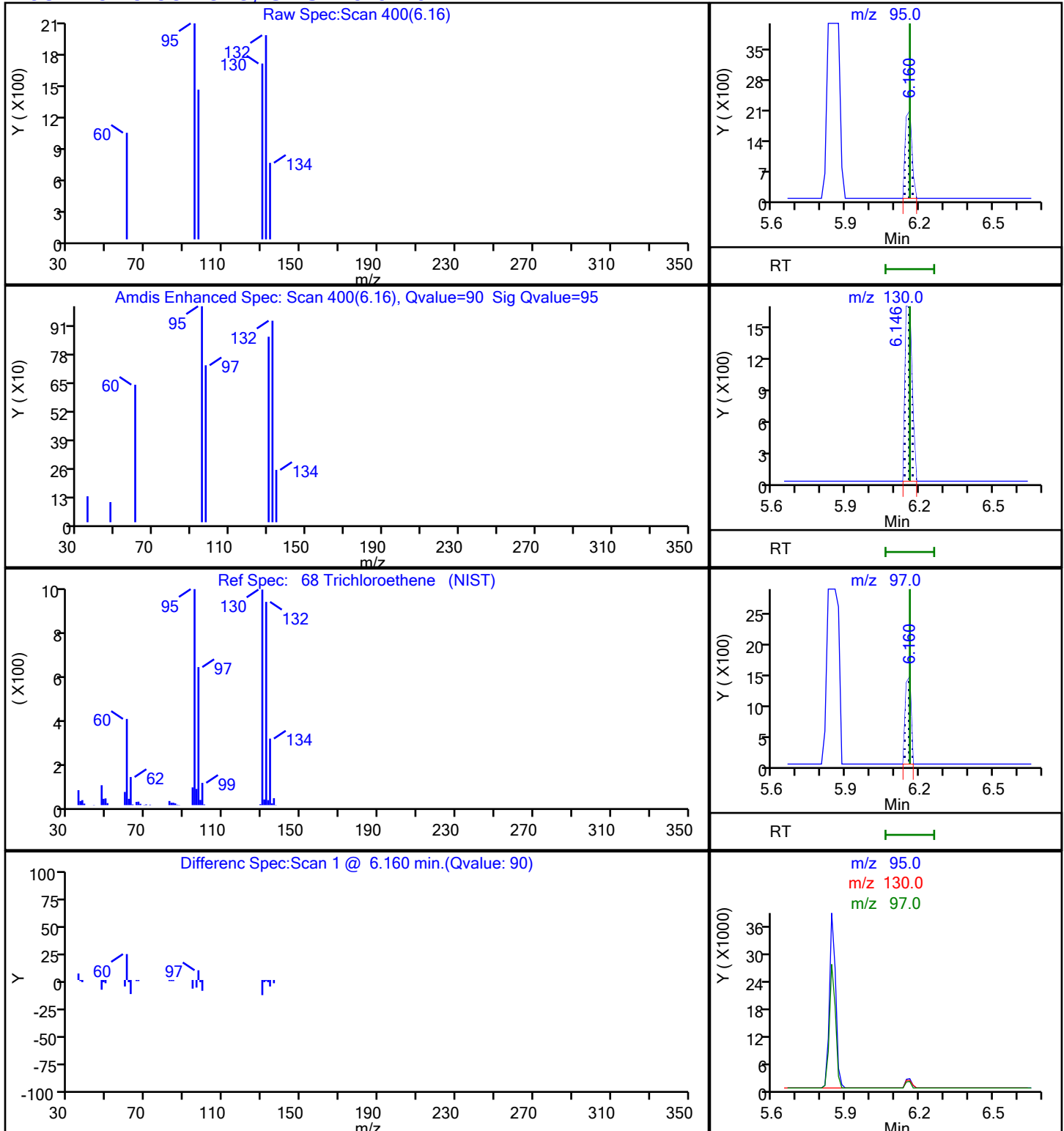
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-7091R-20210622 Lab Sample ID: 280-150245-14
 Matrix: Water Lab File ID: MS1_3861.D
 Analysis Method: 8260B Date Collected: 06/22/2021 19:02
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 01:00
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-7091R-20210622 Lab Sample ID: 280-150245-14
 Matrix: Water Lab File ID: MS1_3861.D
 Analysis Method: 8260B Date Collected: 06/22/2021 19:02
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 01:00
 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.: 541786 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	1.0		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)	96		70-127
2037-26-5	Toluene-d8 (Surr)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3861.D
 Lims ID: 280-150245-C-14
 Client ID: RW-7091R-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 01:00:30 ALS Bottle#: 11 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-14 pH
 Misc. Info.: 280-0102809-016
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	733888	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	158328	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	265471	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	187290	48.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	251430	48.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	683126	49.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	268842	46.7	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	41	2993	1.02	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:12

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3861.D

Injection Date: 30-Jun-2021 01:00:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-C-14

Lab Sample ID: 280-150245-14

Worklist Smp#: 16

Client ID: RW-7091R-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

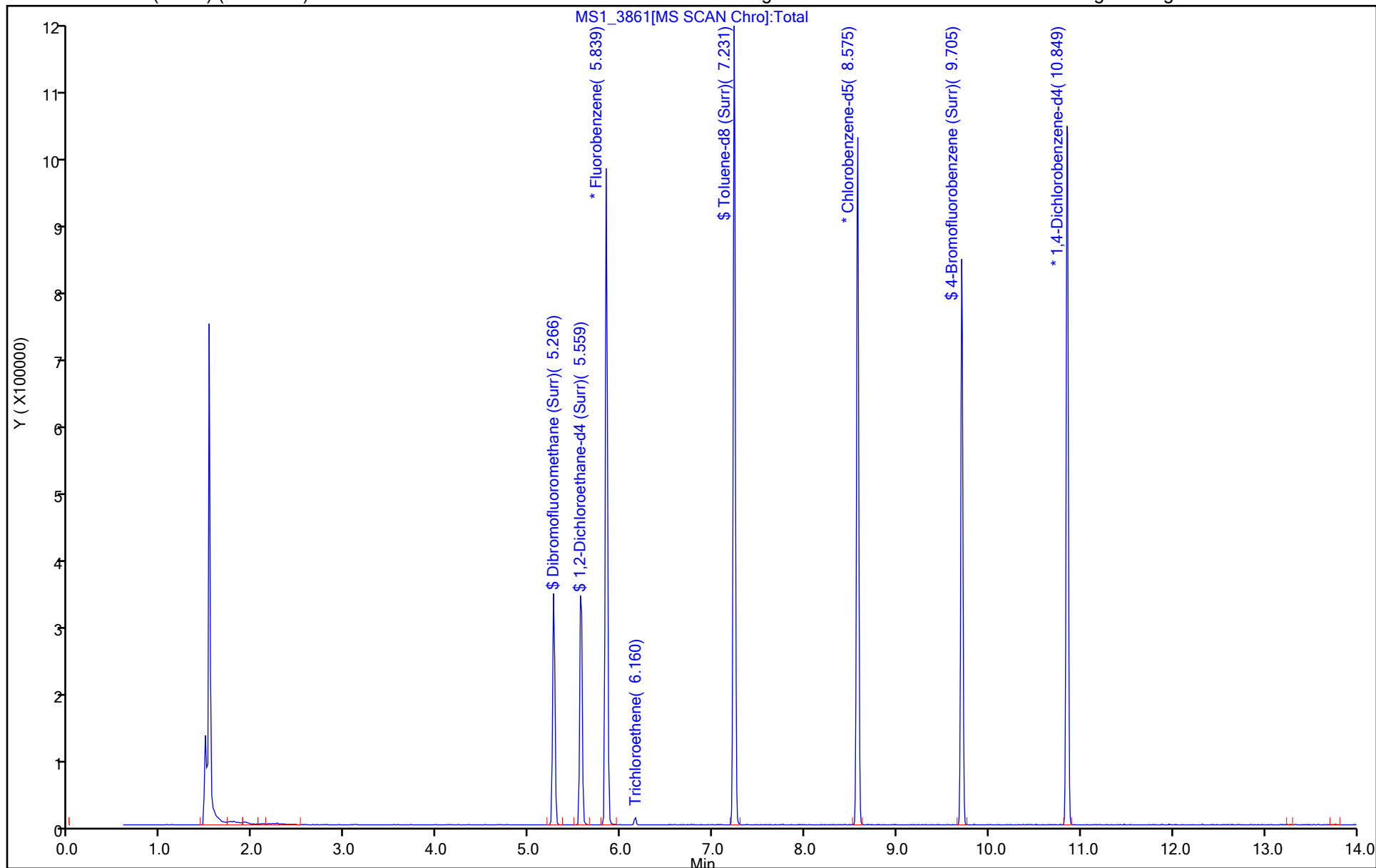
ALS Bottle#: 11

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3861.D
 Lims ID: 280-150245-C-14
 Client ID: RW-7091R-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 01:00:30 ALS Bottle#: 11 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-14 pH
 Misc. Info.: 280-0102809-016
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.1	96.29
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.2	96.49
\$ 7 Toluene-d8 (Surr)	50.0	49.8	99.61
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.7	93.33

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3861.D

Injection Date: 30-Jun-2021 01:00:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-C-14

Lab Sample ID: 280-150245-14

Client ID: RW-7091R-20210622

Operator ID: PETUNINP

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 5.000 mL

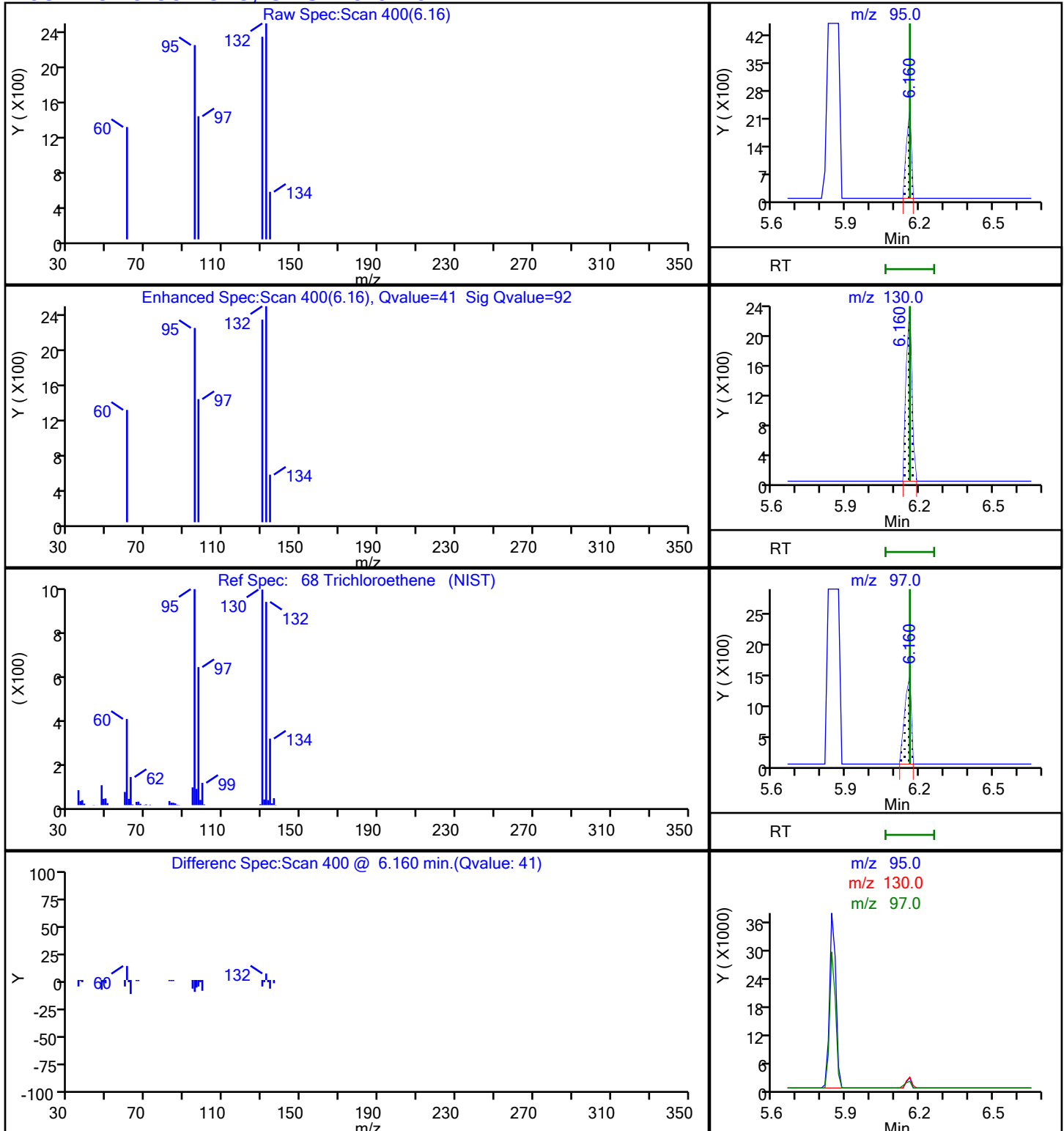
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Client Sample ID: RW-2151H-20210623 Lab Sample ID: 280-150245-15

Matrix: Water Lab File ID: MS1_3862.D

Analysis Method: 8260B Date Collected: 06/23/2021 14:39

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 01:21

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.: 541786 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	0.64	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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-2151H-20210623 Lab Sample ID: 280-150245-15
 Matrix: Water Lab File ID: MS1_3862.D
 Analysis Method: 8260B Date Collected: 06/23/2021 14:39
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 01:21
 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.: 541786 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	2.7		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	14		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)	97		70-127
2037-26-5	Toluene-d8 (Surr)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	92		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3862.D
 Lims ID: 280-150245-B-15
 Client ID: RW-2151H-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 01:21:30 ALS Bottle#: 12 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-15 pH
 Misc. Info.: 280-0102809-017
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:02:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	727648	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	156941	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	267572	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	187891	48.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	251159	48.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	673794	49.6	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	83	265830	45.8	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	81	1777	0.6352	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	96	40572	13.9	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164	7.767	7.768	-0.001	82	4362	2.68	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:13

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3862.D

Injection Date: 30-Jun-2021 01:21:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-15

Lab Sample ID: 280-150245-15

Worklist Smp#: 17

Client ID: RW-2151H-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

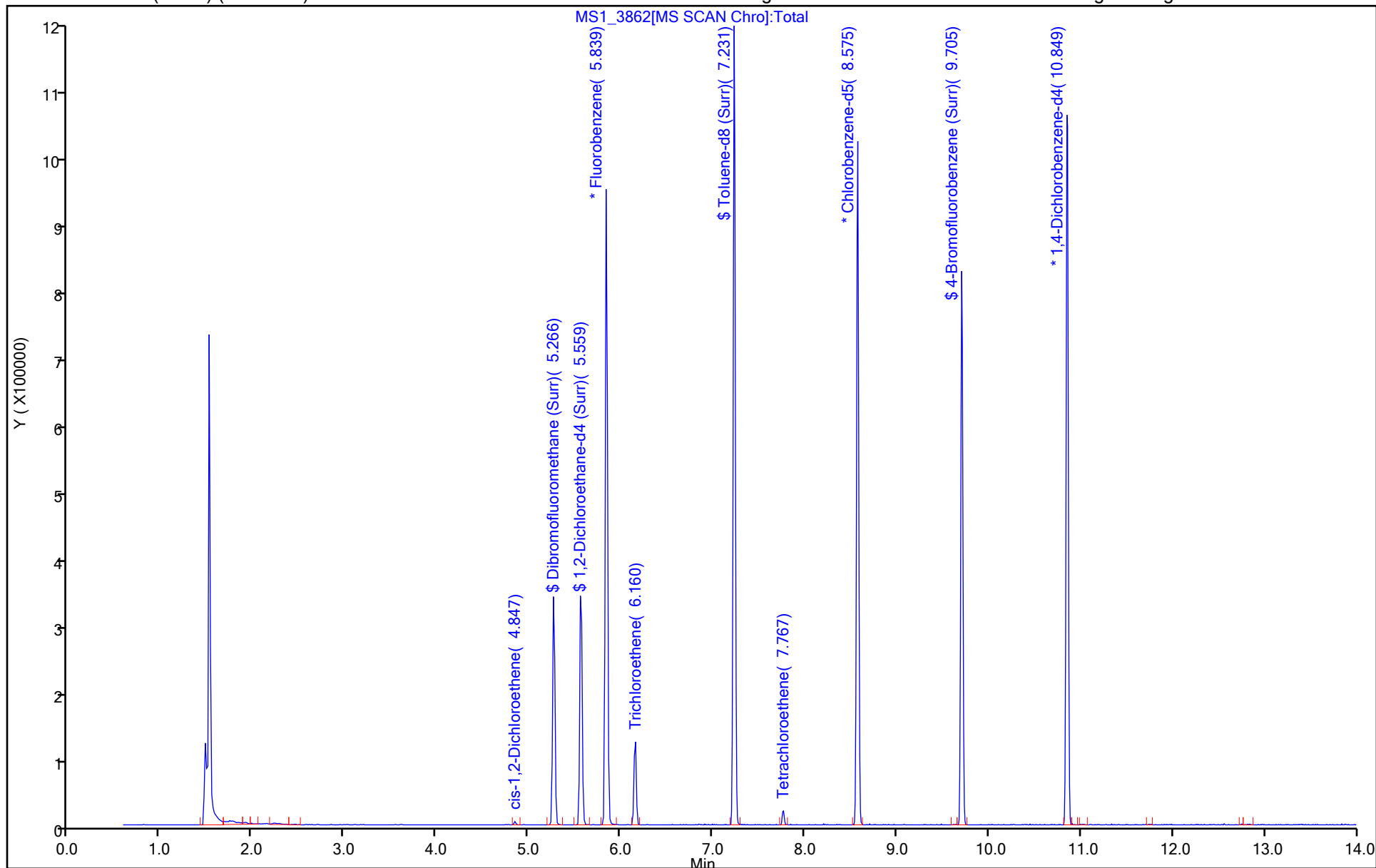
ALS Bottle#: 12

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3862.D
 Lims ID: 280-150245-B-15
 Client ID: RW-2151H-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 01:21:30 ALS Bottle#: 12 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-15 pH
 Misc. Info.: 280-0102809-017
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:02:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.7	97.43
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.21
\$ 7 Toluene-d8 (Surr)	50.0	49.6	99.12
\$ 8 4-Bromofluorobenzene (Surr)	50.0	45.8	91.56

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3862.D

Injection Date: 30-Jun-2021 01:21:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-15

Lab Sample ID: 280-150245-15

Client ID: RW-2151H-20210623

Operator ID: PETUNINP

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 5.000 mL

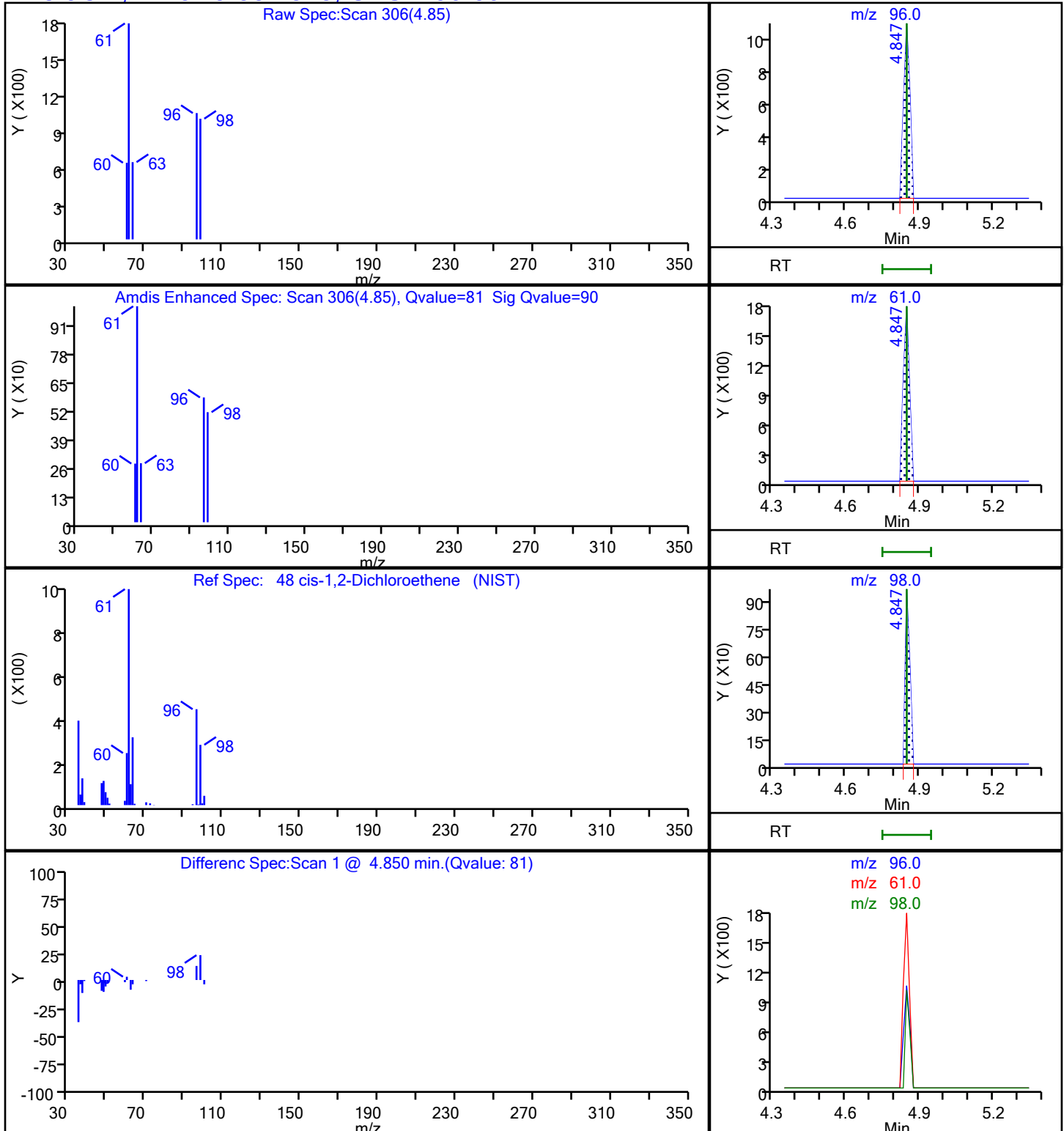
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

48 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3862.D

Injection Date: 30-Jun-2021 01:21:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-15

Lab Sample ID: 280-150245-15

Client ID: RW-2151H-20210623

Operator ID: PETUNINP

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 5.000 mL

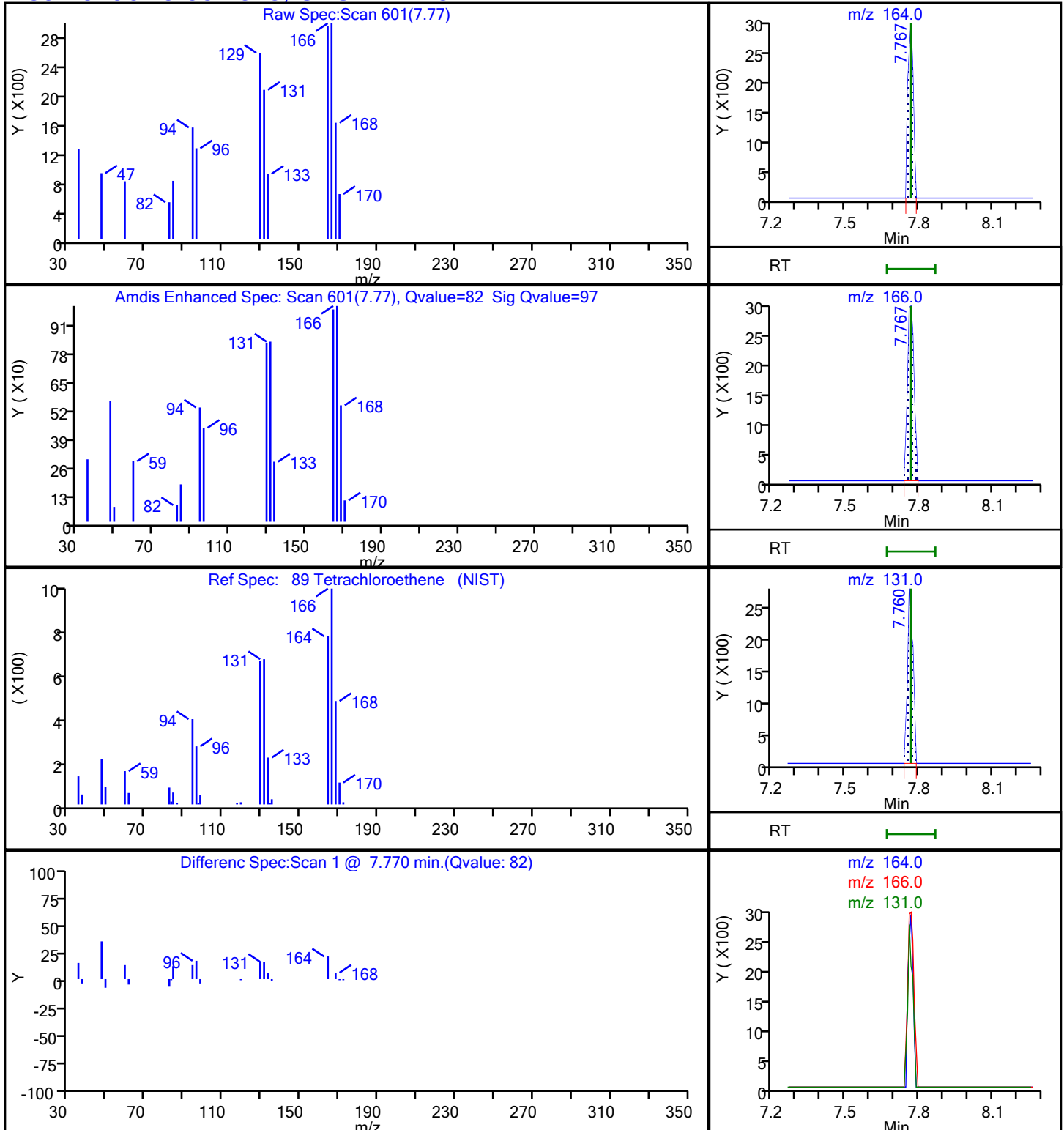
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

89 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3862.D

Injection Date: 30-Jun-2021 01:21:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-15

Lab Sample ID: 280-150245-15

Client ID: RW-2151H-20210623

Operator ID: PETUNINP

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 5.000 mL

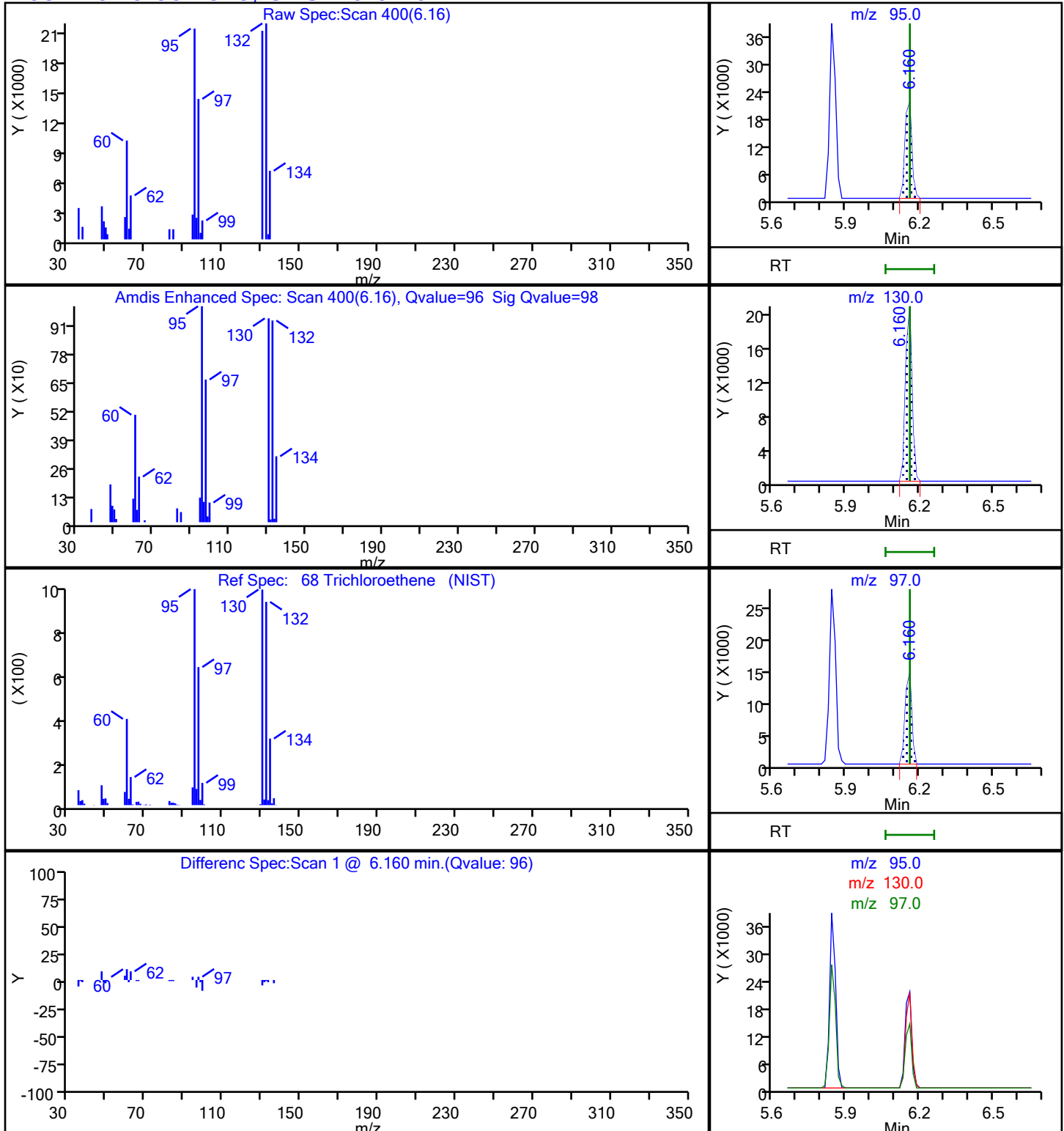
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-8-37-47-20210623 Lab Sample ID: 280-150245-16
 Matrix: Water Lab File ID: MS1_3863.D
 Analysis Method: 8260B Date Collected: 06/23/2021 11:52
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 01:42
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-8-37-47-20210623 Lab Sample ID: 280-150245-16
 Matrix: Water Lab File ID: MS1_3863.D
 Analysis Method: 8260B Date Collected: 06/23/2021 11:52
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 01:42
 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.: 541786 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)	99		80-125
460-00-4	4-Bromofluorobenzene (Surr)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3863.D
 Lims ID: 280-150245-A-16
 Client ID: PA-8-37-47-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 01:42:30 ALS Bottle#: 13 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-16 pH
 Misc. Info.: 280-0102809-018
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	708469	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	157017	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	262482	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	179523	47.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	241546	48.0	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	670744	49.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	264673	46.5	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:15

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3863.D

Injection Date: 30-Jun-2021 01:42:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-A-16

Lab Sample ID: 280-150245-16

Worklist Smp#: 18

Client ID: PA-8-37-47-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

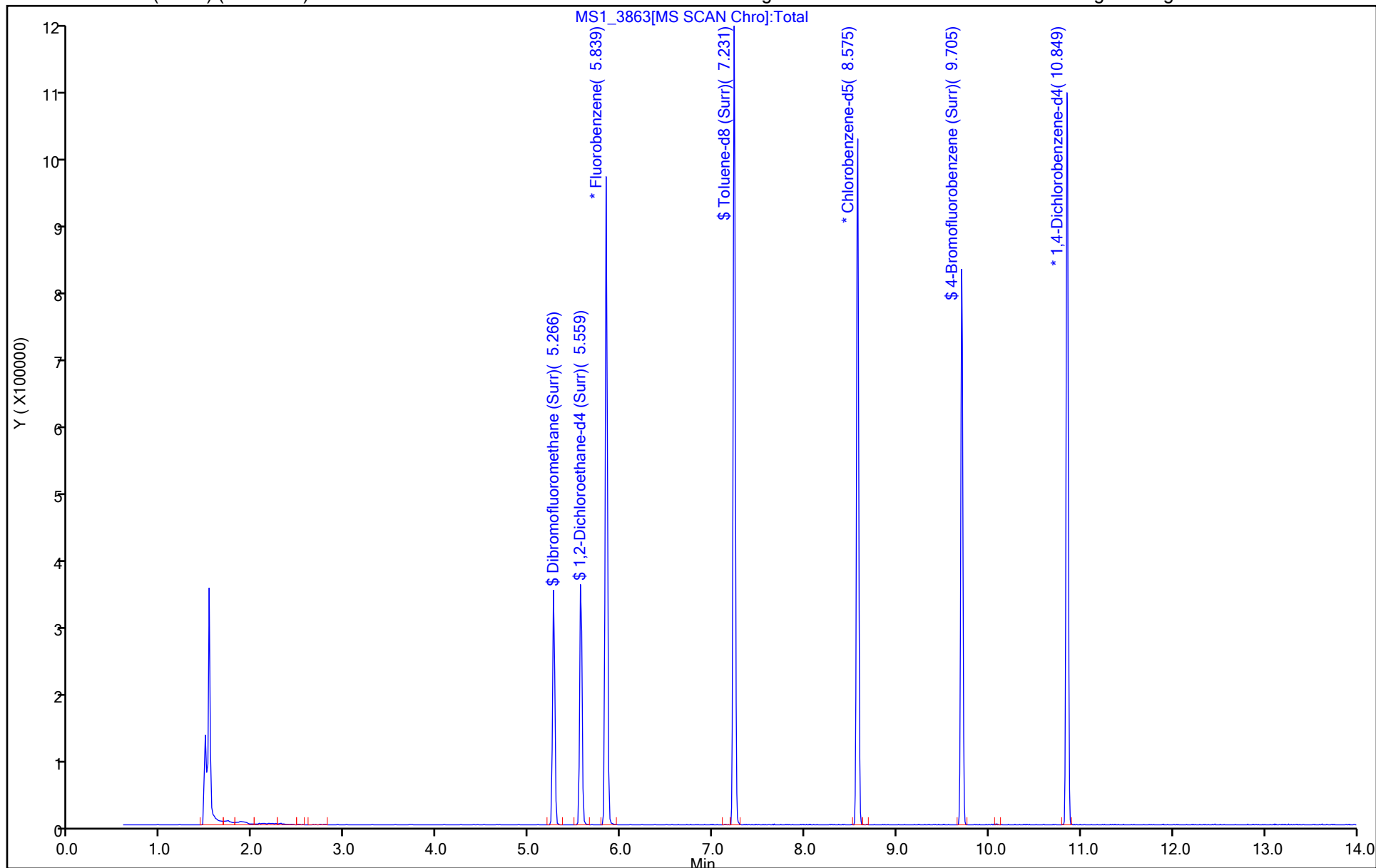
ALS Bottle#: 13

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3863.D
 Lims ID: 280-150245-A-16
 Client ID: PA-8-37-47-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 01:42:30 ALS Bottle#: 13 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-16 pH
 Misc. Info.: 280-0102809-018
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.8	95.61
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	96.02
\$ 7 Toluene-d8 (Surr)	50.0	49.3	98.62
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.5	92.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-8-77-87-20210623 Lab Sample ID: 280-150245-17
 Matrix: Water Lab File ID: MS1_3864.D
 Analysis Method: 8260B Date Collected: 06/23/2021 14:13
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:03
 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.: 541786 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.: 280-150245-1

SDG No.: _____

Client Sample ID: PA-8-77-87-20210623 Lab Sample ID: 280-150245-17

Matrix: Water Lab File ID: MS1_3864.D

Analysis Method: 8260B Date Collected: 06/23/2021 14:13

Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 02:03

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.: 541786 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)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3864.D
 Lims ID: 280-150245-B-17
 Client ID: PA-8-77-87-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:03:30 ALS Bottle#: 14 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-17 pH
 Misc. Info.: 280-0102809-019
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	734163	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	159822	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	256619	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	189854	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	245093	47.0	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	678934	49.0	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	265380	47.7	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:16

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3864.D

Injection Date: 30-Jun-2021 02:03:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-17

Lab Sample ID: 280-150245-17

Worklist Smp#: 19

Client ID: PA-8-77-87-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

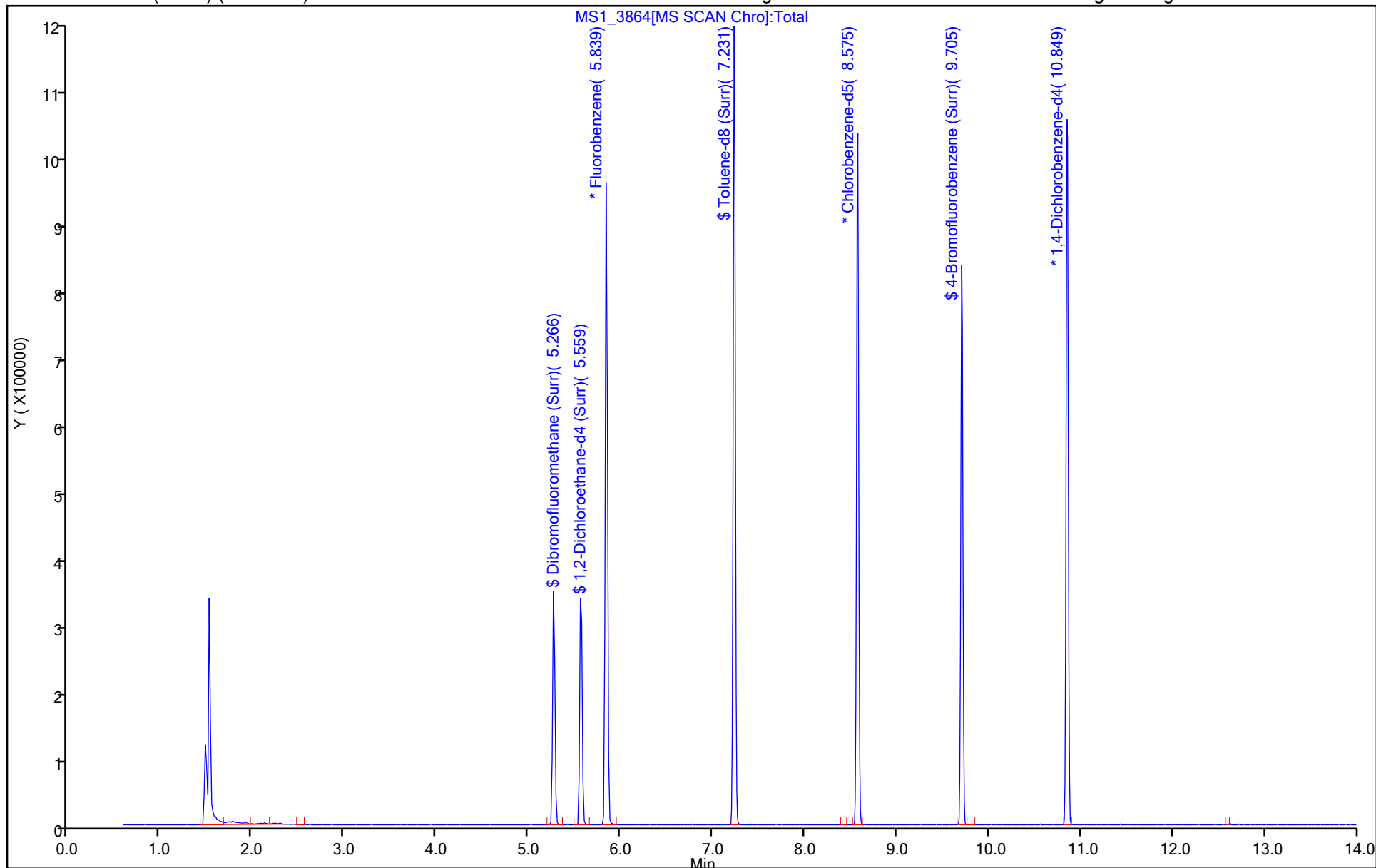
ALS Bottle#: 14

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3864.D
 Lims ID: 280-150245-B-17
 Client ID: PA-8-77-87-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:03:30 ALS Bottle#: 14 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-17 pH
 Misc. Info.: 280-0102809-019
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.57
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.0	94.02
\$ 7 Toluene-d8 (Surr)	50.0	49.0	98.07
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.7	95.31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8030P-20210623 Lab Sample ID: 280-150245-18
 Matrix: Water Lab File ID: MS1_3865.D
 Analysis Method: 8260B Date Collected: 06/23/2021 15:40
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:24
 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.: 541786 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	F1	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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8030P-20210623 Lab Sample ID: 280-150245-18
 Matrix: Water Lab File ID: MS1_3865.D
 Analysis Method: 8260B Date Collected: 06/23/2021 15:40
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:24
 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.: 541786 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	F1	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	0.80	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	4.6		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)	97		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)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3865.D
 Lims ID: 280-150245-C-18
 Client ID: RW-8030P-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:24:30 ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-18 pH
 Misc. Info.: 280-0102809-020
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:03:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	754651	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	165525	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	269644	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	197914	49.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	259570	48.4	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	692987	48.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	282118	48.2	
\$ 9 Trifluorotoluene (Surr)	1		0.000				ND	
\$ 10 BFB	95		3.579				ND	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
14 Ethylene oxide	43		2.319				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
17 Dichlorofluoromethane	67		2.696				ND	
18 Trichlorofluoromethane	101		2.724				ND	
19 Ethanol	45		2.892				ND	
20 Ethyl ether	59		3.004				ND	
21 Propene oxide	58		3.059				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
24 112TCTFE	151		3.255				ND	
25 Acetone	43		3.269				ND	
27 Isopropyl alcohol	45		3.395				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
30 Methyl acetate	43		3.576				ND	
31 3-Chloro-1-propene	41		3.590				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 Methylene Chloride	84		3.716				ND	
33 2-Methyl-2-propanol	59		3.786				ND	
34 Acrylonitrile	53		3.911				ND	
35 Methyl tert-butyl ether	73		3.939				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
37 Hexane	57		4.205				ND	
38 Chlorotrifluoroethene	116		4.248				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
41 Isopropyl ether	87		4.372				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472				ND	
44 Tert-butyl ethyl ether	59		4.679				ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737				ND	
46 2-Butanone (MEK)	43		4.819				ND	
47 Ethyl acetate	43		4.847				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
51 sec-Butyl Alcohol	45		4.973				ND	
52 Methacrylonitrile	41		5.015				ND	
54 Tetrahydrofuran	42		5.057				ND	
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
57 Cyclohexane	56		5.350				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505				ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
65 Tert-amyl methyl ether	73		5.685				ND	
66 n-Heptane	43		5.825				ND	
67 n-Butanol	56		6.034				ND	
68 Trichloroethene	95	6.160	6.160	0.000	93	14137	4.61	
69 2-Pentanone	43		6.272				ND	
70 Methylcyclohexane	55		6.369				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
73 1,4-Dioxane	88		6.439				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
76 2-Nitropropane	41		6.795				ND	
77 2-Chloroethyl vinyl ether	63		6.838				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
80 2,2-Dimethylpentane	57		7.251				ND	
81 2,4-Dimethylpentane	43		7.293				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
83 2,2,3-Trimethylbutane	57		7.502				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
86 3,3-Dimethylpentane	43		7.682				ND	
89 Tetrachloroethene	164	7.760	7.768	-0.008	76	1376	0.8030	
88 2-Methylhexane	43		7.810				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
93 2,3-Dimethylpentane	56		7.949				ND	
92 3-Methylhexane	43		7.949				ND	
94 Tetrahydrothiophene	60		8.018				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
97 3-Ethylpentane	43		8.214				ND	
98 1-Chlorohexane	91		8.568				ND	7
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
105 Dimethyl disulfide	94		9.388				ND	
107 Isopropylbenzene	105		9.534				ND	
108 cis-1,4-Dichloro-2-butene	53		9.584				ND	
109 Cyclohexanone	55		9.627				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
111 Bromobenzene	156		9.855				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
114 N-Propylbenzene	120		9.934				ND	
115 2-Chlorotoluene	126		10.034				ND	
116 1,3,5-Trimethylbenzene	105		10.113				ND	
117 4-Chlorotoluene	126		10.156				ND	
118 tert-Butylbenzene	119		10.427				ND	
119 1,2,4-Trimethylbenzene	105		10.485				ND	
120 sec-Butylbenzene	134		10.649				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
122 4-Isopropyltoluene	119		10.799				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
124 1,2,3-Trimethylbenzene	105		10.899				ND	
125 n-Butylbenzene	91		11.207				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
126 Pentachloroethane	167		11.283				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
129 1,3,5-Trichlorobenzene	180		12.215				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
131 Hexachlorobutadiene	225		12.994				ND	
132 Naphthalene	128		13.123				ND	
133 n-Nonyl Aldehyde	57		13.340				ND	
134 1,2,3-Trichlorobenzene	180		13.345				ND	
145 Ethyl acrylate	55		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
135 Pentachloroethane TIC	1		0.000				ND	
136 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
144 1-Chlorohexane TIC	1		0.000				ND	
138 1,4-Dibromobenzene	1		0.000				ND	
140 4-Bromofluorobenzene	95		0.000				ND	
147 n-Nonane TIC	1		0.000				ND	
148 1-Bromo-2-chloroethane	1		0.000				ND	
146 t-Amyl alcohol	1		0.000				ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000				ND	
141 4-Chlorobenzotrifluoride	1		0.000				ND	
139 1,3-Dibromobenzene	1		0.000				ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000				ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000				ND	
S 149 1,2-Dichloroethene, Total (URS)	95		2.000				ND	7
S 150 1,2-Dichloroethene, Total	1		0.000				ND	7
S 151 Trihalomethanes, Total	1		0.000				ND	7
S 152 Total BTEX	1		0.000				ND	7
S 153 Xylenes, Total (URS)	1		0.000				ND	7
S 154 TAH	1				0		0	
S 155 Xylenes, Total	106		0.000				ND	7
S 156 1,3-Dichloropropene, Total	1		0.000				ND	7
T 157 Dichloroacetonitrile TIC	74		1.000				ND	
T 158 2,3-dichloro-1-propene TIC	75		1.000				ND	
T 159 Propene oxide TIC	58		5.334				ND	
T 166 Propene TIC	1		0.000				ND	
T 163 2-Butoxyethanol TIC	1		0.000				ND	
T 165 Dicyclopentadiene TIC	1		0.000				ND	
T 162 4-Ethyltoluene TIC	1		0.000				ND	
T 164 1,3-Butadiene TIC	1		0.000				ND	
T 161 Methyl cyclohexane TIC	1		0.000				ND	
T 160 Cyclohexane TIC	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:18

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3865.D

Injection Date: 30-Jun-2021 02:24:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-C-18

Lab Sample ID: 280-150245-18

Worklist Smp#: 20

Client ID: RW-8030P-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

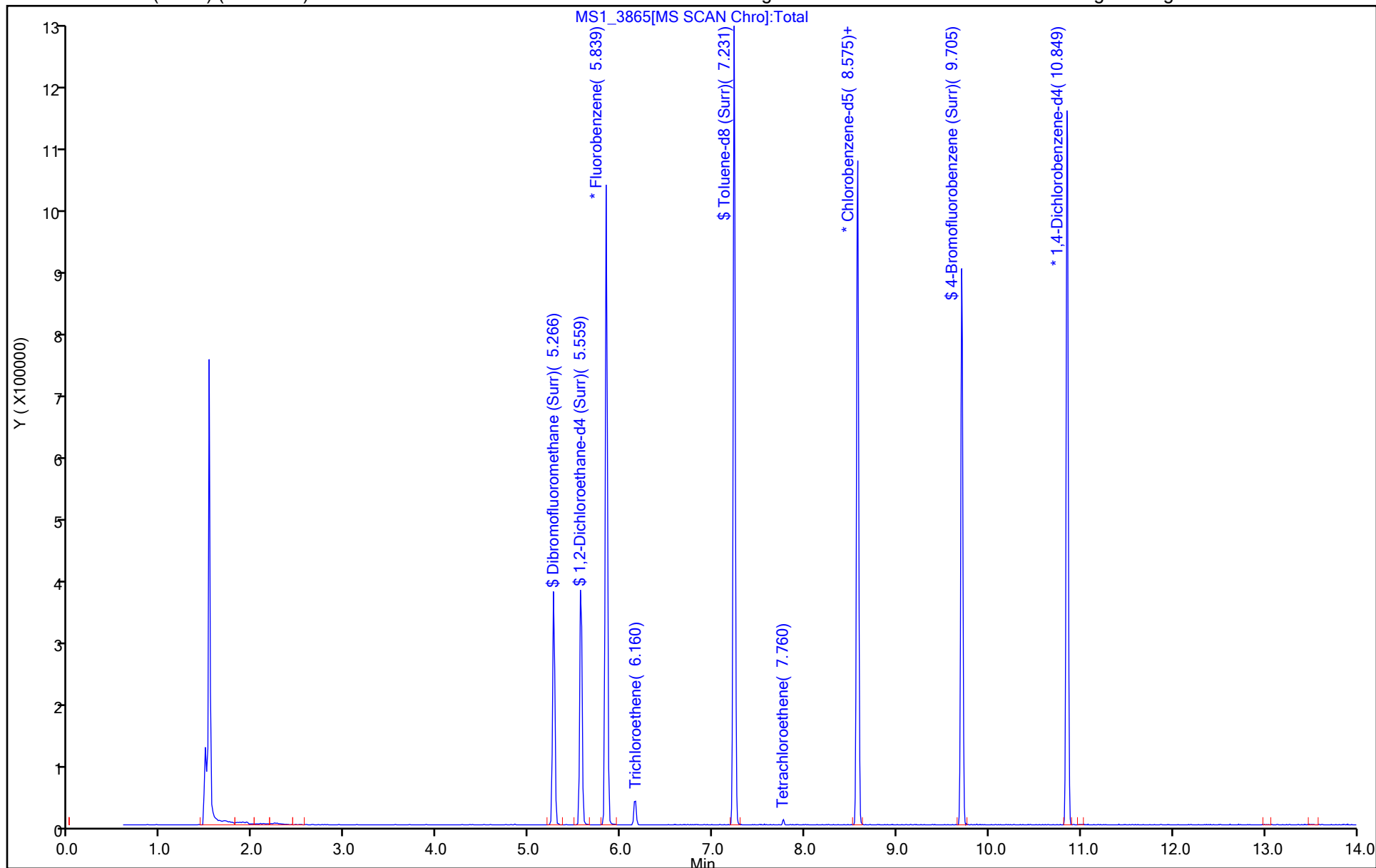
ALS Bottle#: 15

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3865.D
 Lims ID: 280-150245-C-18
 Client ID: RW-8030P-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:24:30 ALS Bottle#: 15 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-18 pH
 Misc. Info.: 280-0102809-020
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:03:30

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.5	98.95
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.4	96.87
\$ 7 Toluene-d8 (Surr)	50.0	48.3	96.65
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.42

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3865.D

Injection Date: 30-Jun-2021 02:24:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-C-18

Lab Sample ID: 280-150245-18

Client ID: RW-8030P-20210623

Operator ID: PETUNINP

ALS Bottle#: 15

Worklist Smp#: 20

Purge Vol: 5.000 mL

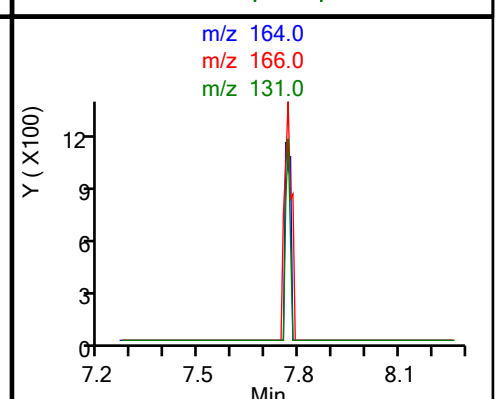
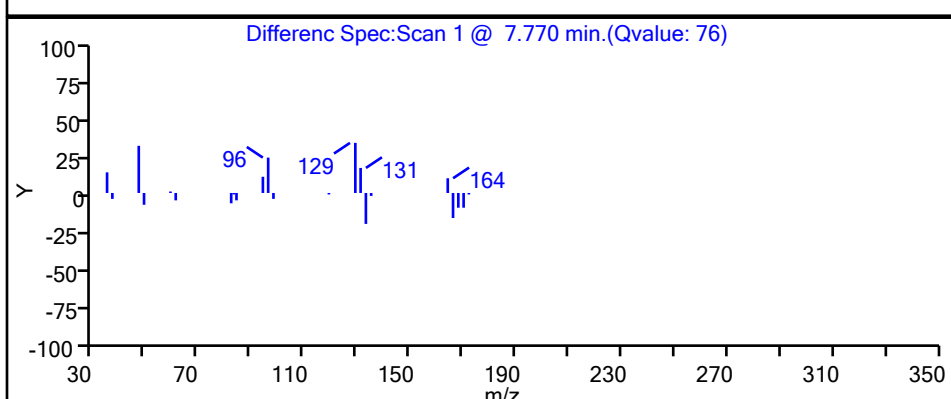
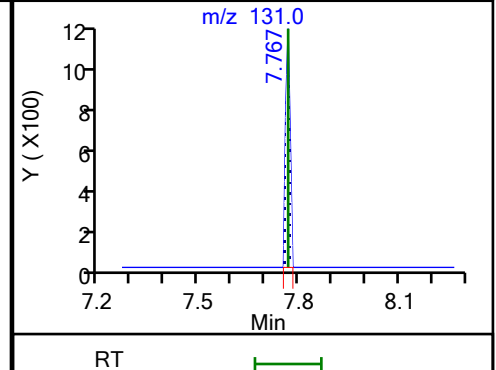
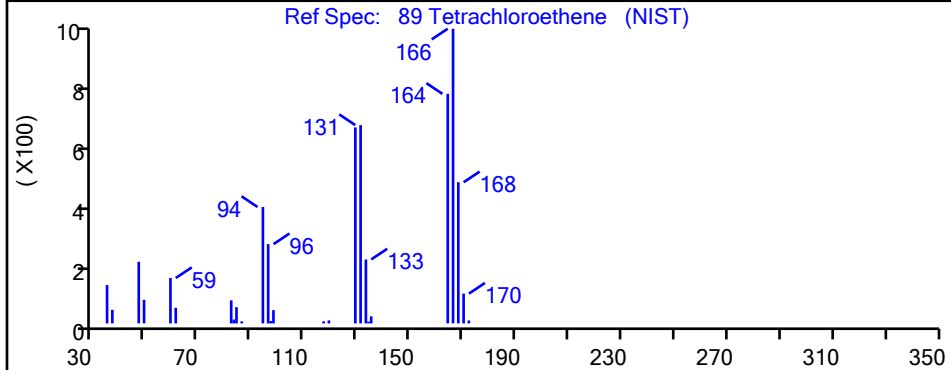
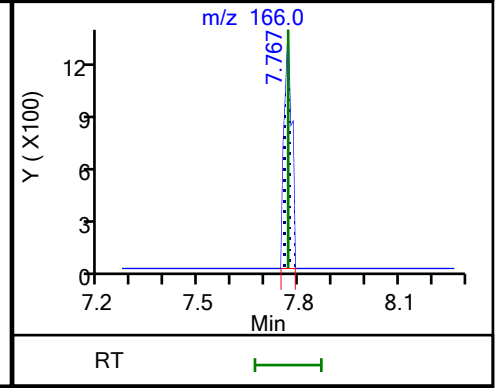
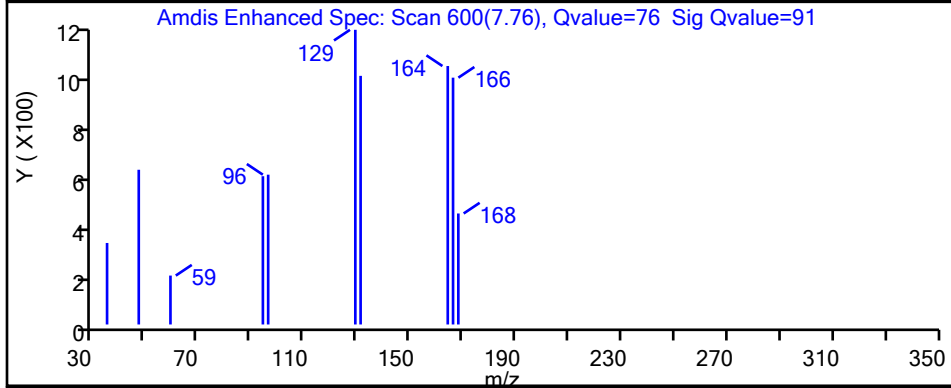
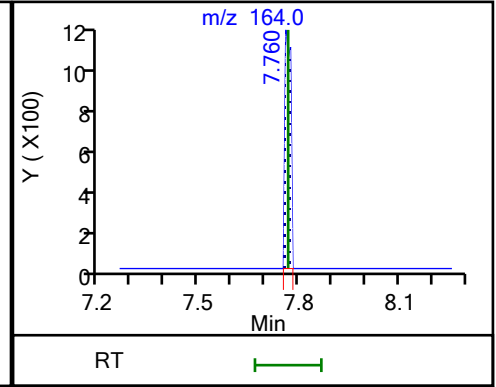
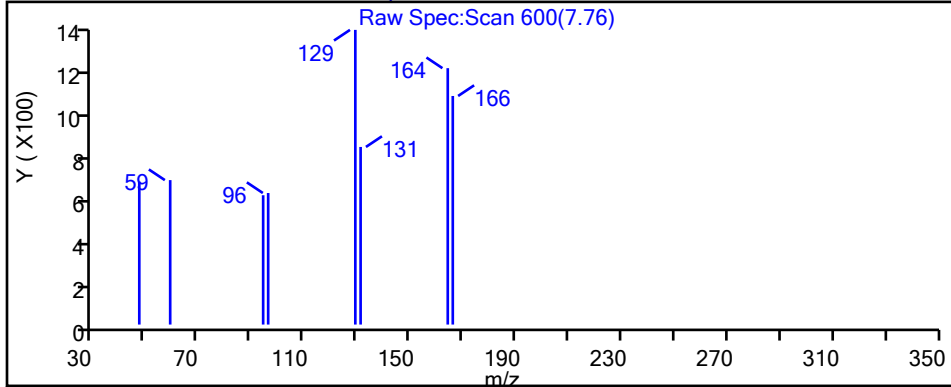
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

89 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3865.D

Injection Date: 30-Jun-2021 02:24:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-C-18

Lab Sample ID: 280-150245-18

Client ID: RW-8030P-20210623

Operator ID: PETUNINP

ALS Bottle#: 15

Worklist Smp#: 20

Purge Vol: 5.000 mL

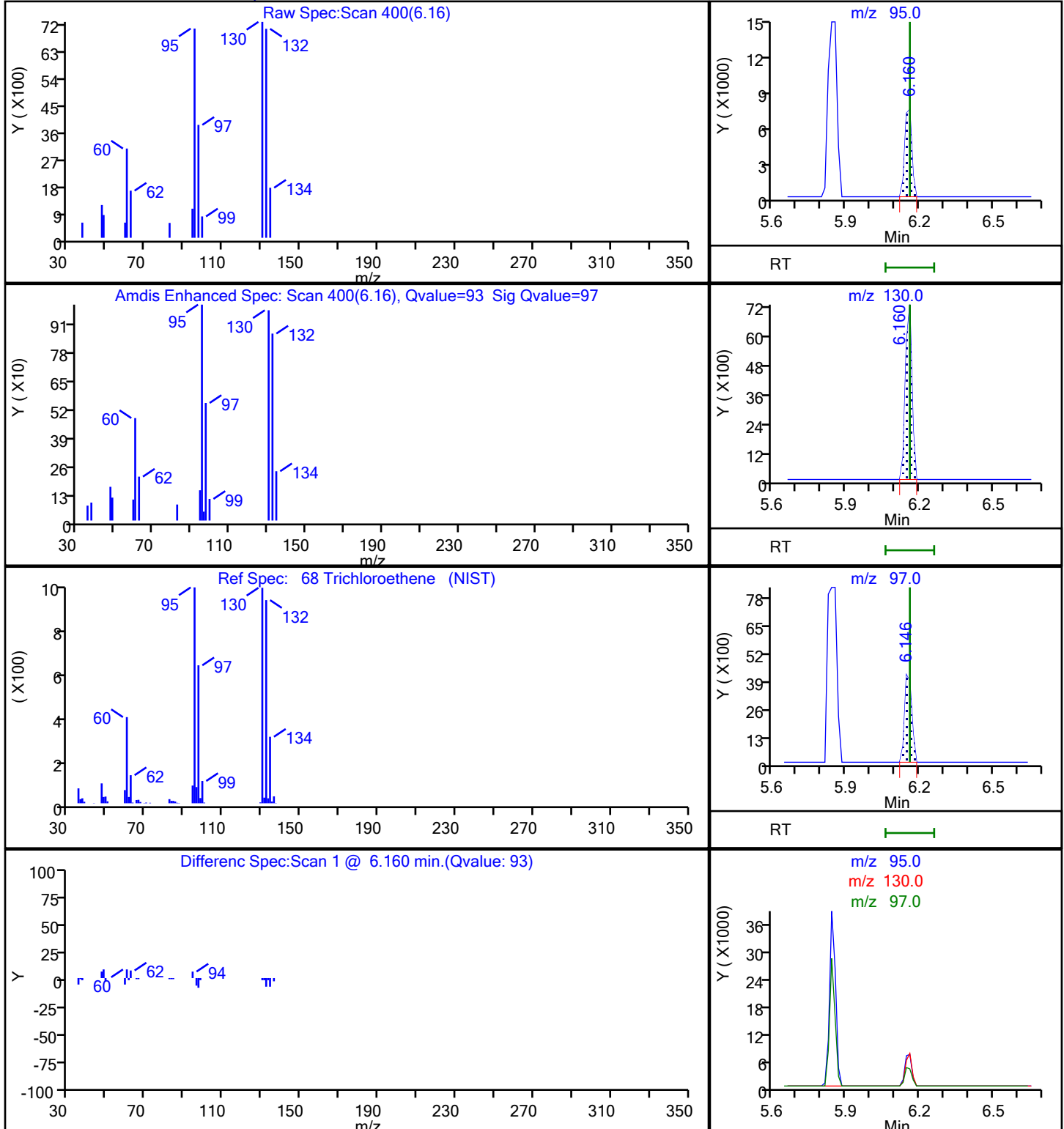
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-2172H-20210623 Lab Sample ID: 280-150245-19
 Matrix: Water Lab File ID: MS1_3866.D
 Analysis Method: 8260B Date Collected: 06/23/2021 17:57
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:45
 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.: 541786 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	1.1		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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-2172H-20210623 Lab Sample ID: 280-150245-19
 Matrix: Water Lab File ID: MS1_3866.D
 Analysis Method: 8260B Date Collected: 06/23/2021 17:57
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 02:45
 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.: 541786 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	5.4		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	21		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)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3866.D
 Lims ID: 280-150245-B-19
 Client ID: RW-2172H-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:45:30 ALS Bottle#: 16 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-19 pH
 Misc. Info.: 280-0102809-025
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:06:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	748006	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	159202	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	259891	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	193149	48.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	246904	46.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	672536	48.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	276846	49.1	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	79	3286	1.14	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	94	62067	21.0	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164	7.767	7.768	-0.001	91	8934	5.42	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:26

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3866.D

Injection Date: 30-Jun-2021 02:45:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-19

Lab Sample ID: 280-150245-19

Worklist Smp#: 25

Client ID: RW-2172H-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

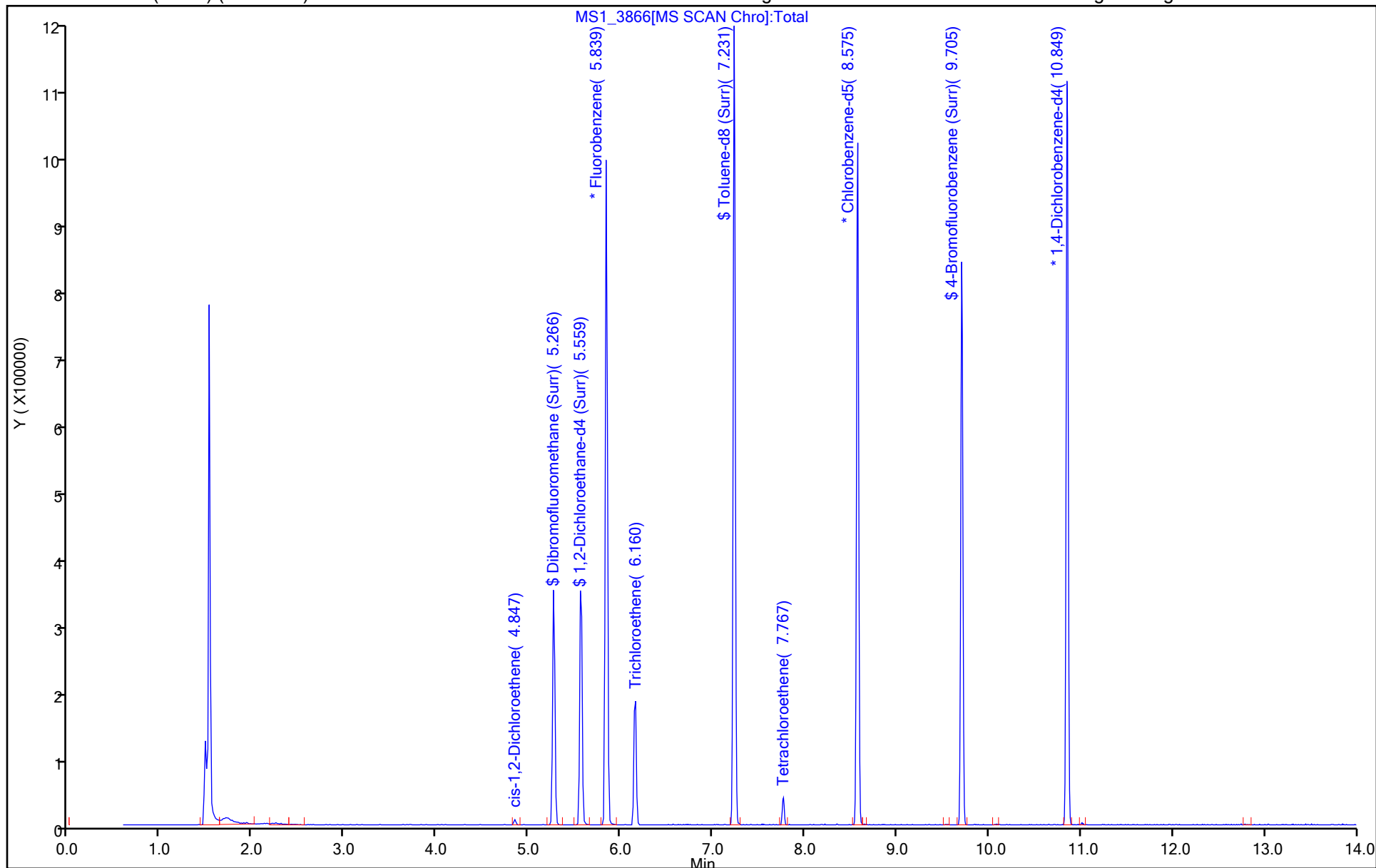
ALS Bottle#: 16

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3866.D
 Lims ID: 280-150245-B-19
 Client ID: RW-2172H-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 02:45:30 ALS Bottle#: 16 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-19 pH
 Misc. Info.: 280-0102809-025
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:06:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.7	97.43
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	92.96
\$ 7 Toluene-d8 (Surr)	50.0	48.8	97.53
\$ 8 4-Bromofluorobenzene (Surr)	50.0	49.1	98.17

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3866.D

Injection Date: 30-Jun-2021 02:45:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-19

Lab Sample ID: 280-150245-19

Client ID: RW-2172H-20210623

Operator ID: PETUNINP

ALS Bottle#: 16

Worklist Smp#: 25

Purge Vol: 5.000 mL

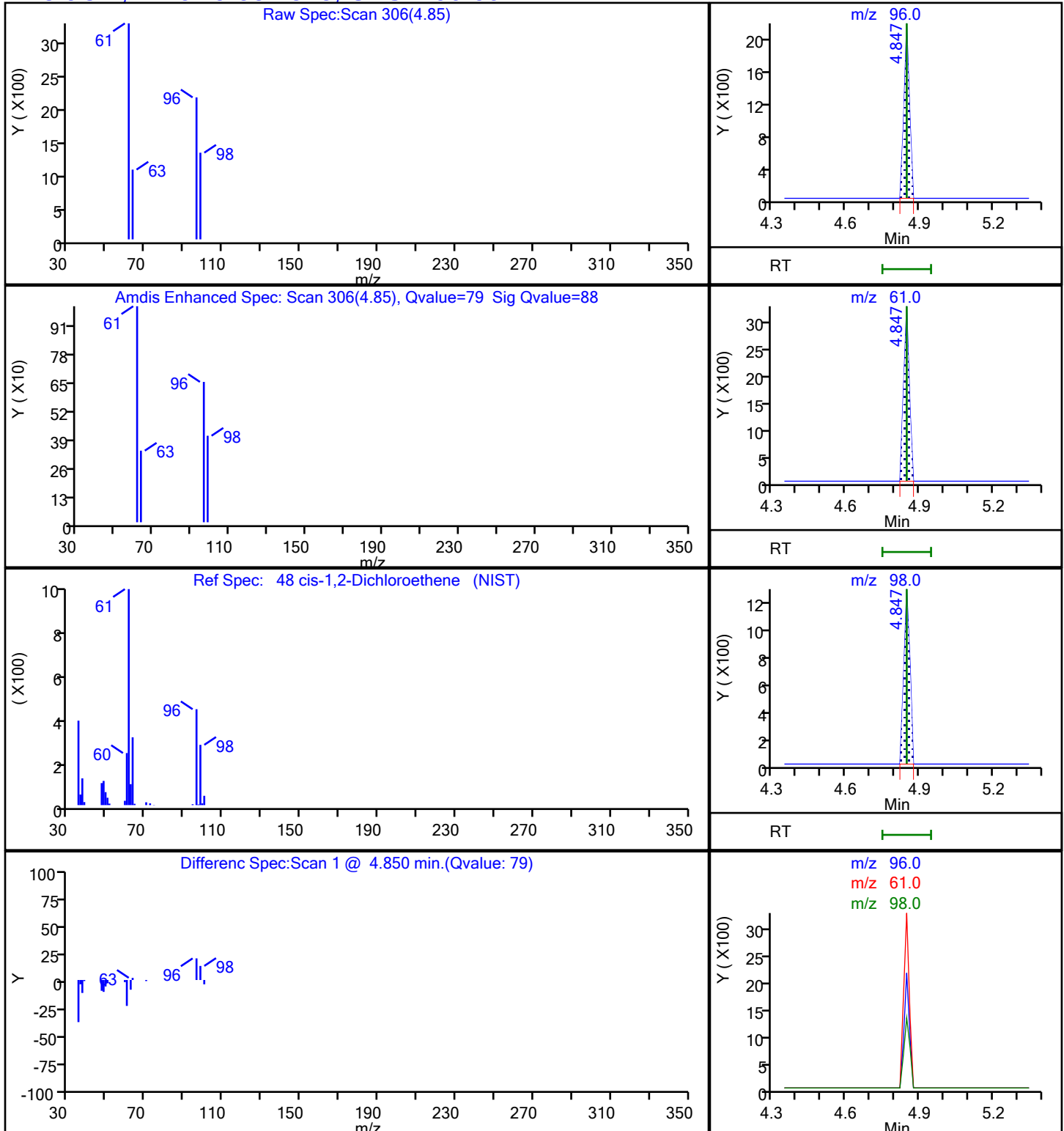
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

48 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3866.D

Injection Date: 30-Jun-2021 02:45:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-19

Lab Sample ID: 280-150245-19

Client ID: RW-2172H-20210623

Operator ID: PETUNINP

ALS Bottle#: 16

Worklist Smp#: 25

Purge Vol: 5.000 mL

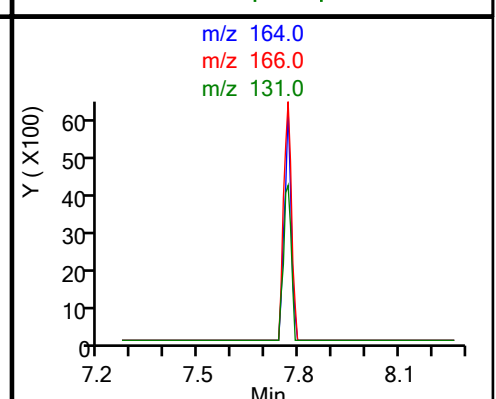
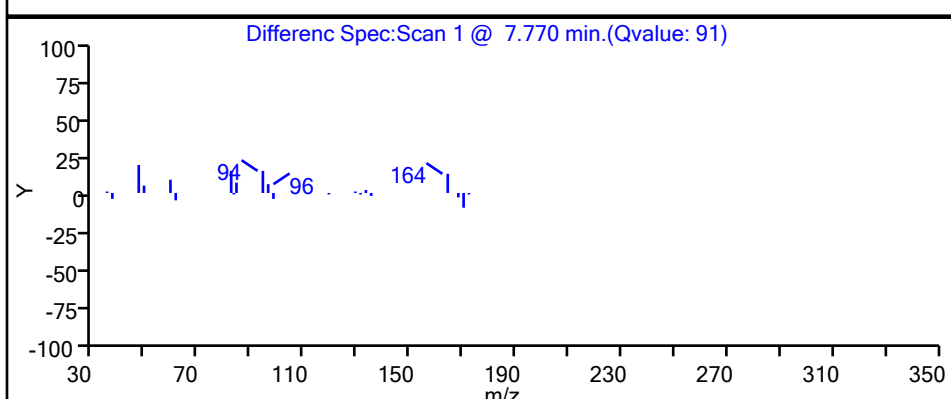
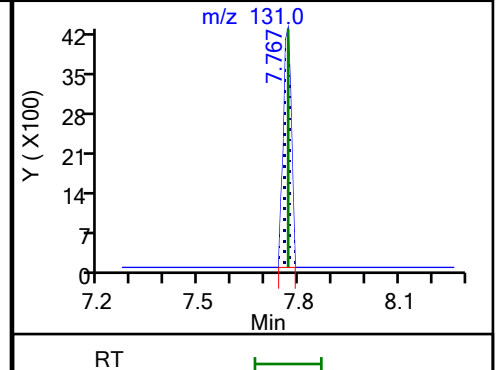
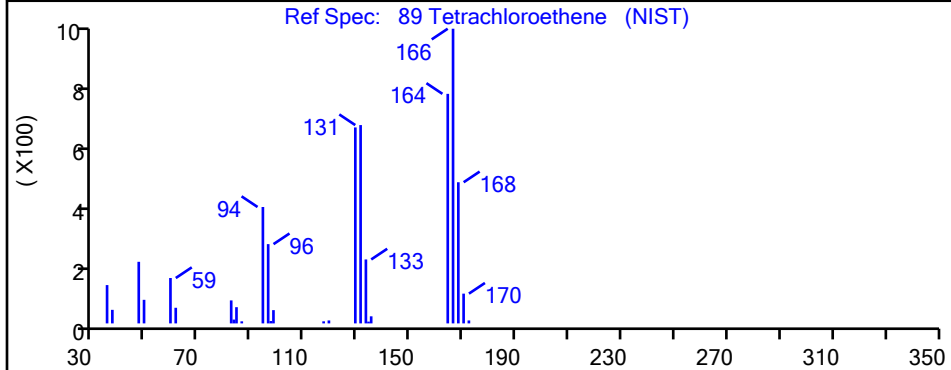
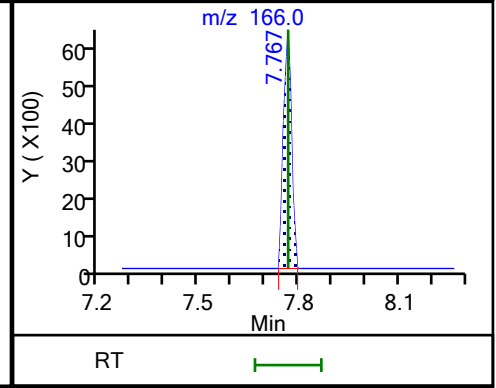
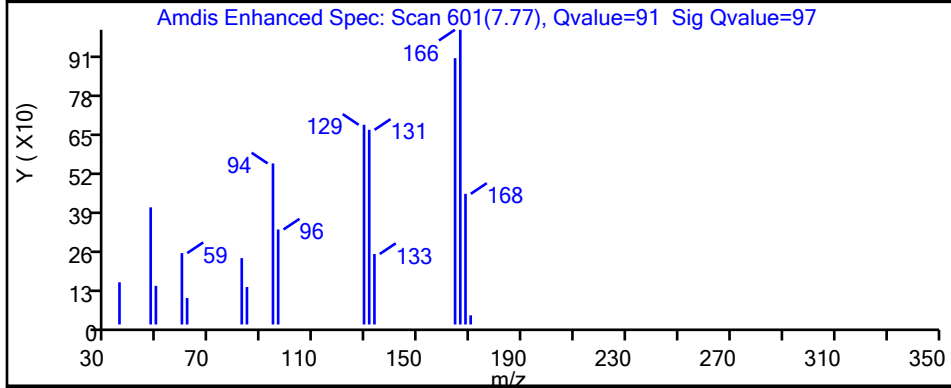
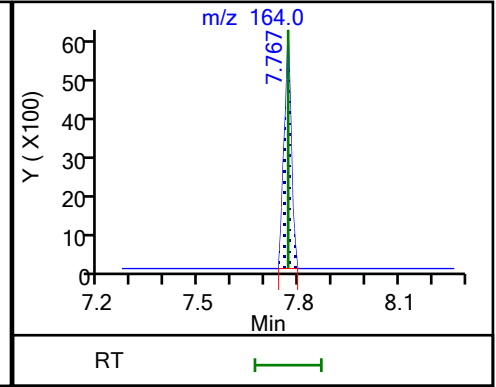
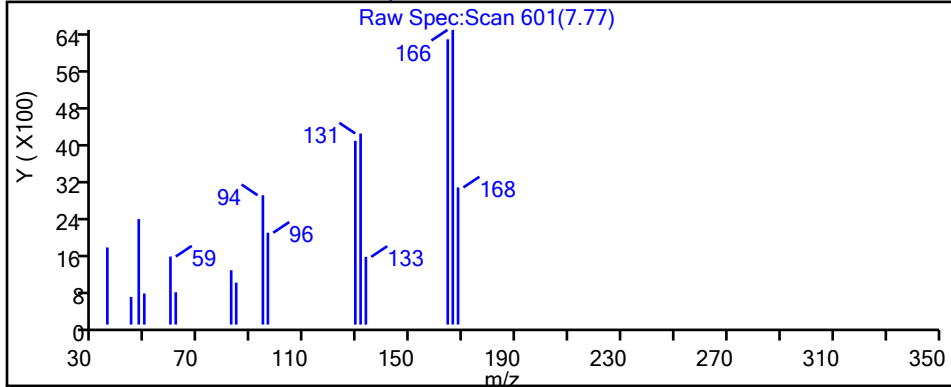
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

89 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3866.D

Injection Date: 30-Jun-2021 02:45:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-19

Lab Sample ID: 280-150245-19

Client ID: RW-2172H-20210623

Operator ID: PETUNINP

ALS Bottle#: 16

Worklist Smp#: 25

Purge Vol: 5.000 mL

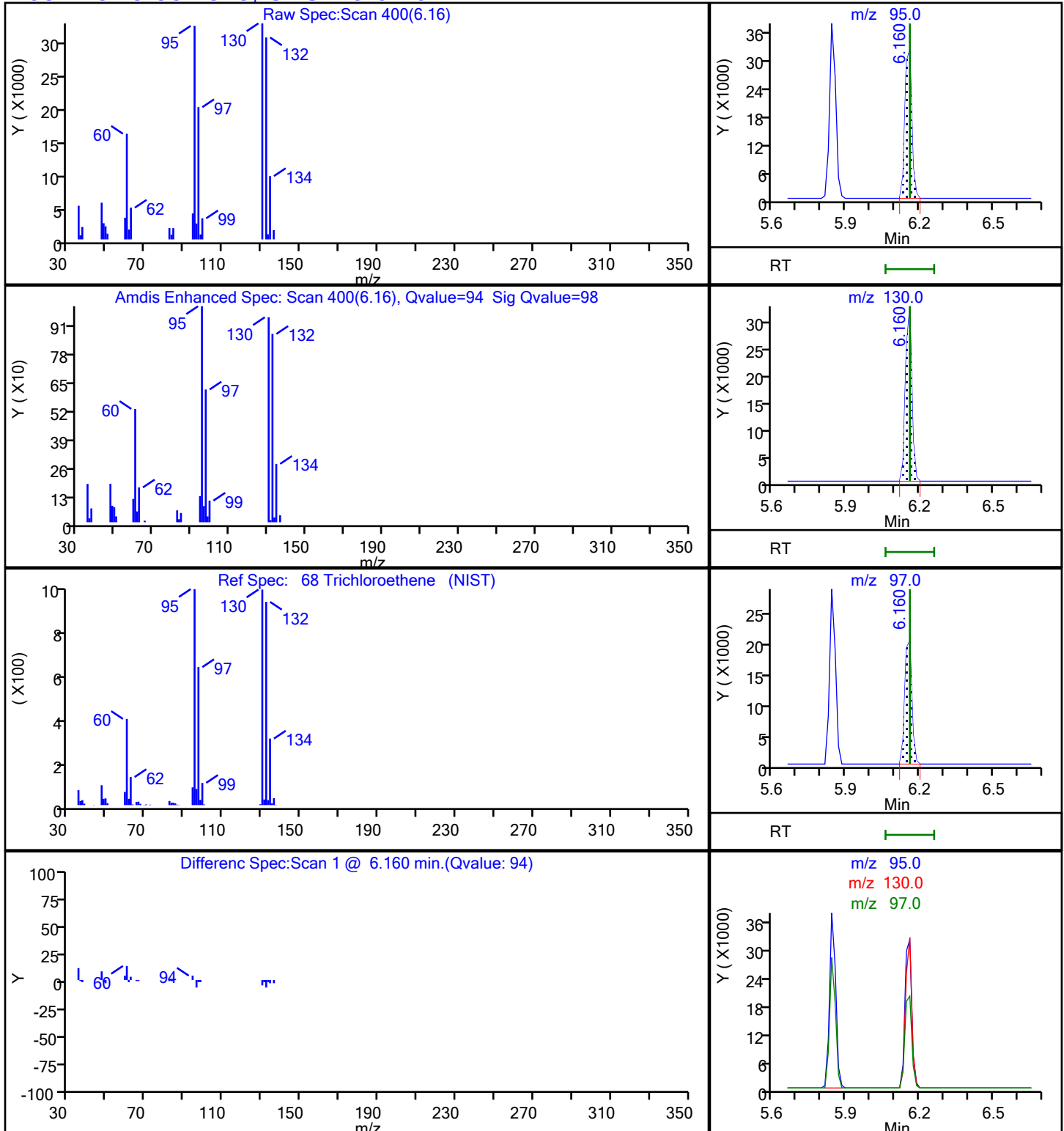
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-2172HQ-20210623 Lab Sample ID: 280-150245-20
 Matrix: Water Lab File ID: MS1_3867.D
 Analysis Method: 8260B Date Collected: 06/23/2021 17:59
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:06
 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.: 541786 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	1.3		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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-2172HQ-20210623 Lab Sample ID: 280-150245-20
 Matrix: Water Lab File ID: MS1_3867.D
 Analysis Method: 8260B Date Collected: 06/23/2021 17:59
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:06
 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.: 541786 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	4.1		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	21		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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3867.D
 Lims ID: 280-150245-B-20
 Client ID: RW-2172HQ-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:06:30 ALS Bottle#: 17 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-20 pH
 Misc. Info.: 280-0102809-026
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:06:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	744959	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	166691	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	271632	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	189073	47.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	260630	49.3	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	691192	47.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	273984	46.5	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	80	3692	1.29	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	94	64873	21.0	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164	7.760	7.768	-0.008	84	7155	4.15	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:28

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3867.D

Injection Date: 30-Jun-2021 03:06:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-20

Lab Sample ID: 280-150245-20

Worklist Smp#: 26

Client ID: RW-2172HQ-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

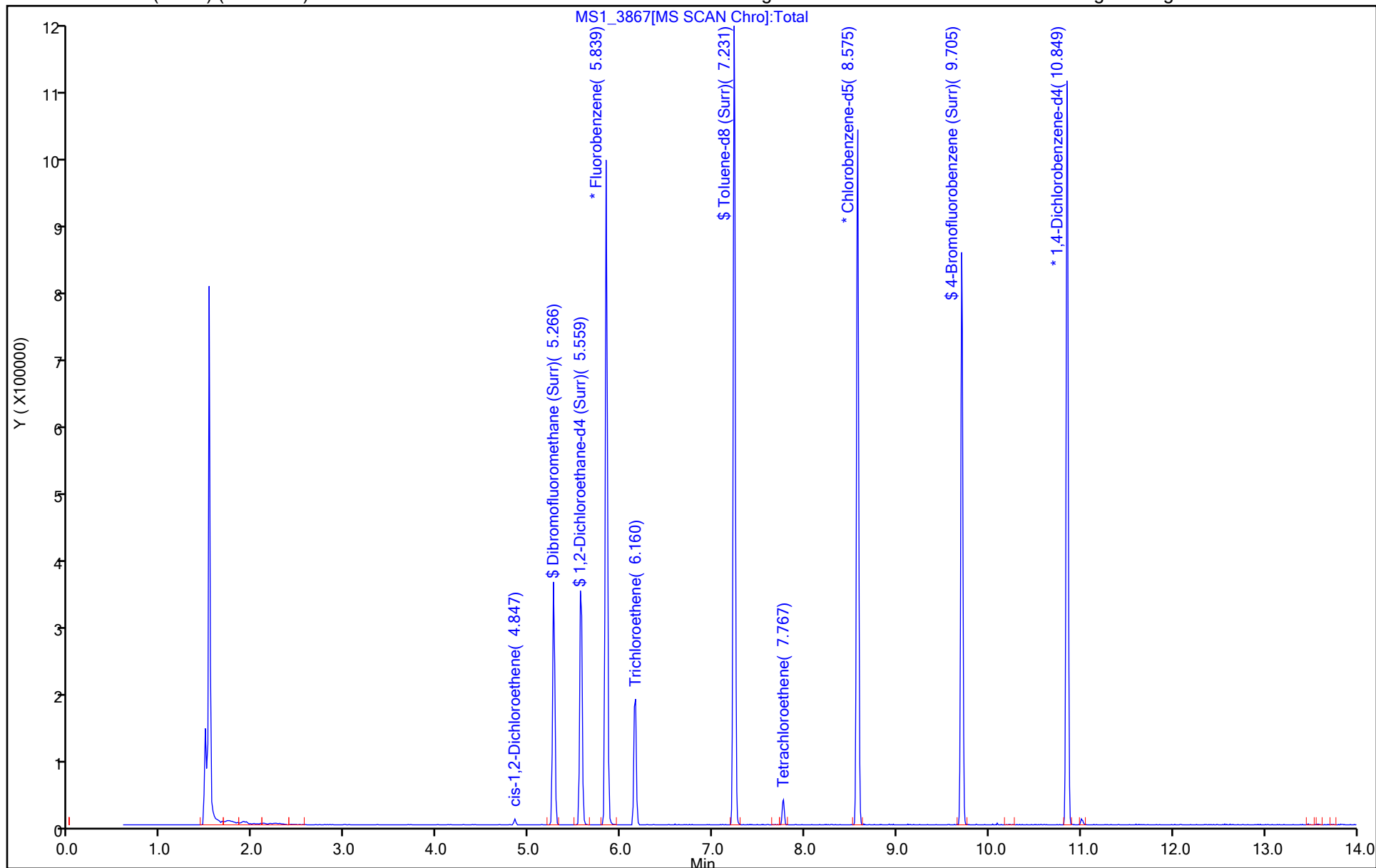
ALS Bottle#: 17

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3867.D
 Lims ID: 280-150245-B-20
 Client ID: RW-2172HQ-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:06:30 ALS Bottle#: 17 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-20 pH
 Misc. Info.: 280-0102809-026
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:06:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.9	95.76
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.3	98.53
\$ 7 Toluene-d8 (Surr)	50.0	47.9	95.73
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.5	92.96

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3867.D

Injection Date: 30-Jun-2021 03:06:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-20

Lab Sample ID: 280-150245-20

Client ID: RW-2172HQ-20210623

Operator ID: PETUNINP

ALS Bottle#: 17

Worklist Smp#: 26

Purge Vol: 5.000 mL

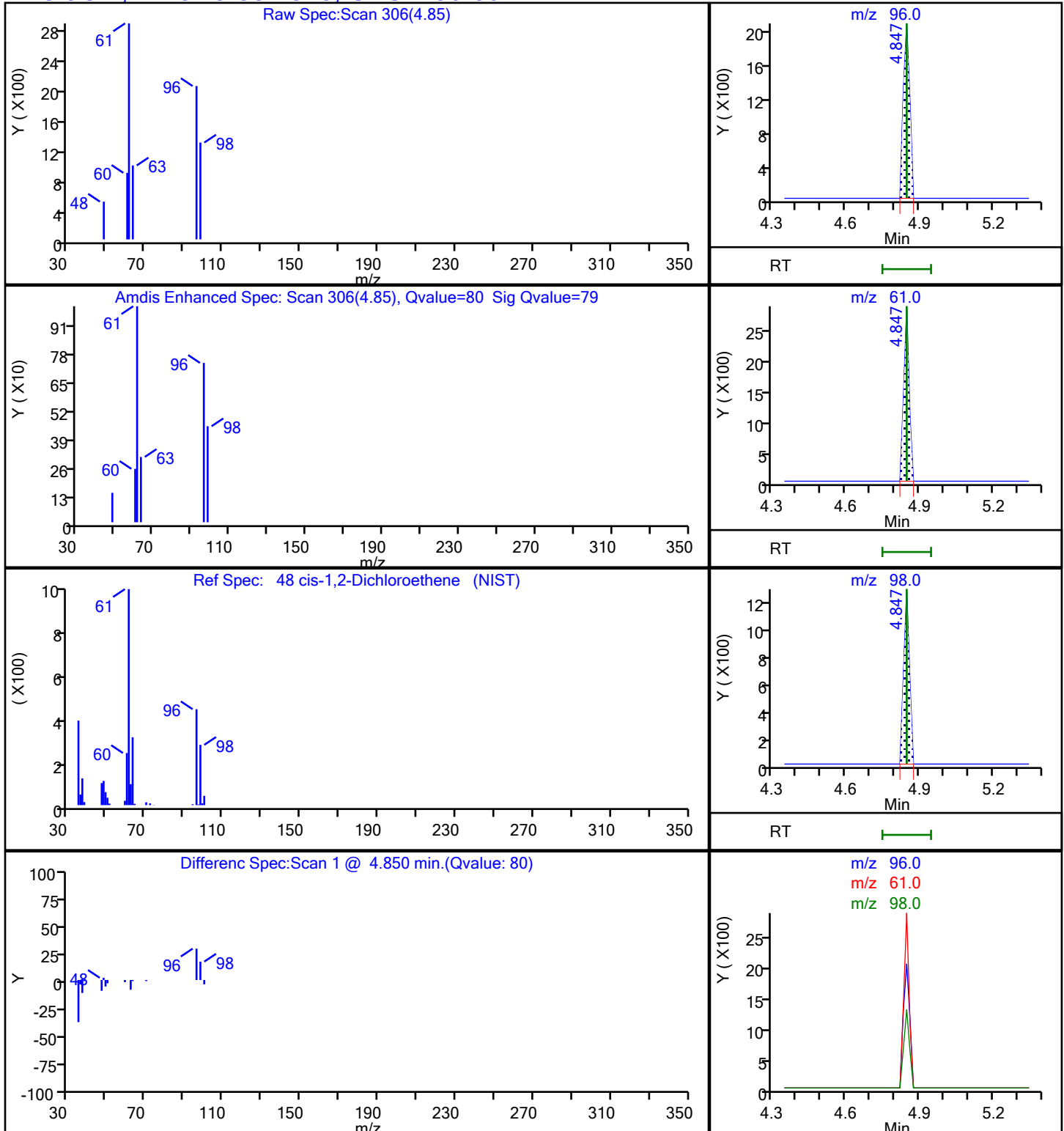
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

48 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3867.D

Injection Date: 30-Jun-2021 03:06:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-20

Lab Sample ID: 280-150245-20

Client ID: RW-2172HQ-20210623

Operator ID: PETUNINP

ALS Bottle#: 17

Worklist Smp#: 26

Purge Vol: 5.000 mL

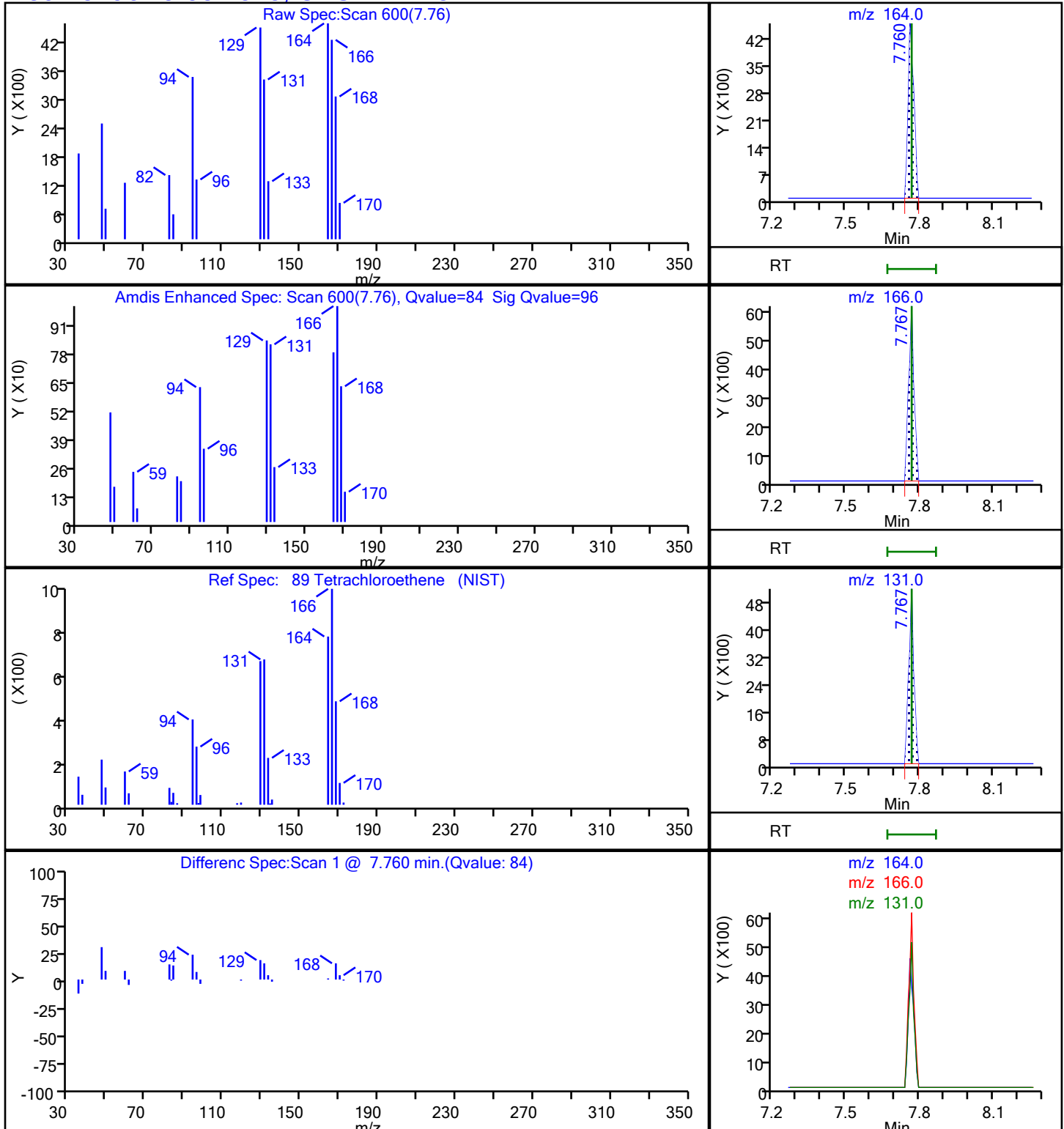
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

89 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3867.D

Injection Date: 30-Jun-2021 03:06:30

Instrument ID: VMS_MS1

Lims ID: 280-150245-B-20

Lab Sample ID: 280-150245-20

Client ID: RW-2172HQ-20210623

Operator ID: PETUNINP

ALS Bottle#: 17

Worklist Smp#: 26

Purge Vol: 5.000 mL

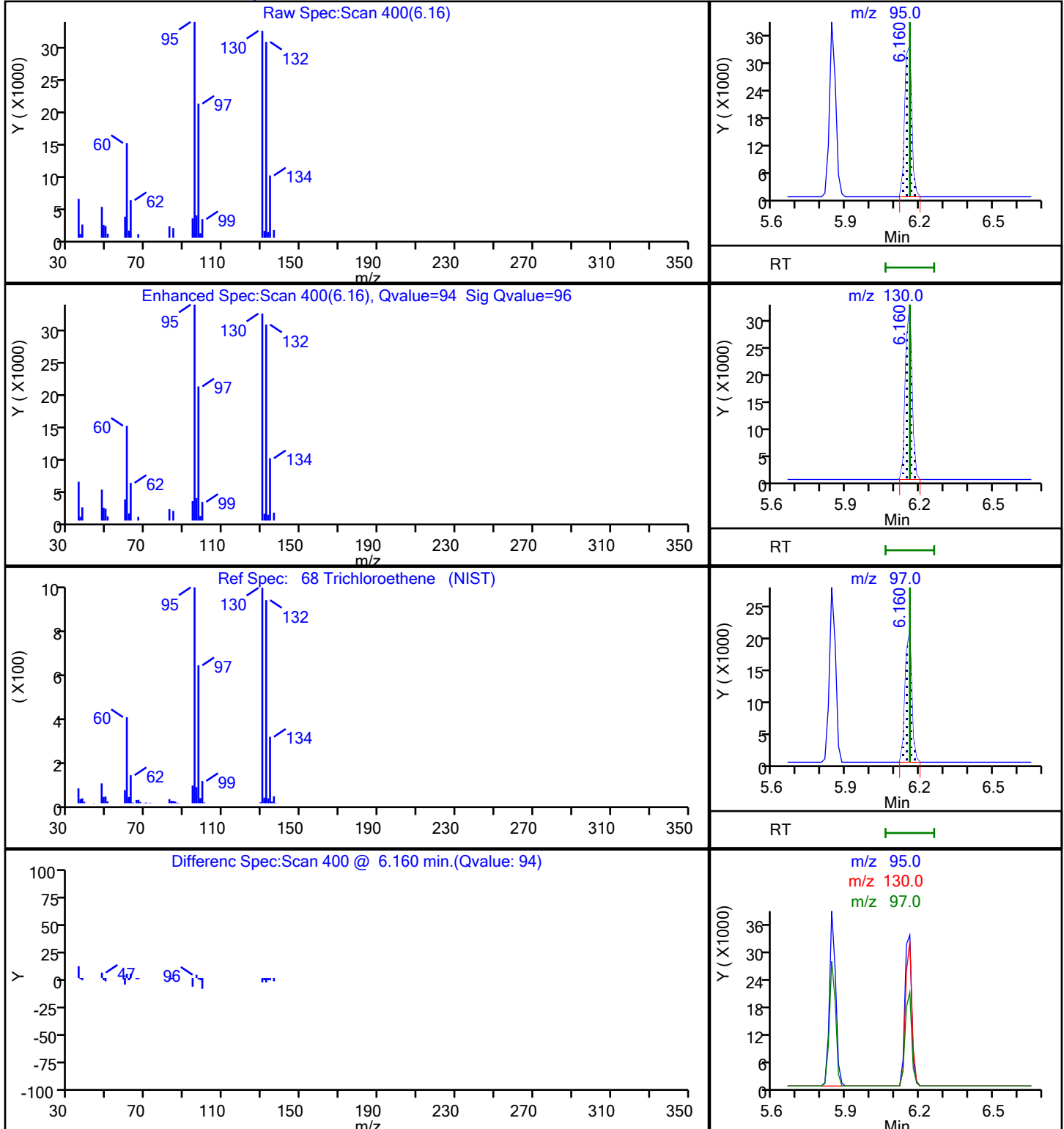
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: TB-01-20210625 Lab Sample ID: 280-150245-21
 Matrix: Water Lab File ID: MS1_3868.D
 Analysis Method: 8260B Date Collected: 06/25/2021 13:45
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:27
 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.: 541786 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.: 280-150245-1

SDG No.: _____

Client Sample ID: TB-01-20210625 Lab Sample ID: 280-150245-21

Matrix: Water Lab File ID: MS1_3868.D

Analysis Method: 8260B Date Collected: 06/25/2021 13:45

Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:27

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.: 541786 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)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3868.D
 Lims ID: 280-150245-B-21
 Client ID: TB-01-20210625
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:27:30 ALS Bottle#: 18 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-21 pH
 Misc. Info.: 280-0102809-027
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	752587	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	162140	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	99	270191	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	193317	48.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	256956	48.1	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	703439	50.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	277352	47.3	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:29

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3868.D

Injection Date: 30-Jun-2021 03:27:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-21

Lab Sample ID: 280-150245-21

Worklist Smp#: 27

Client ID: TB-01-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

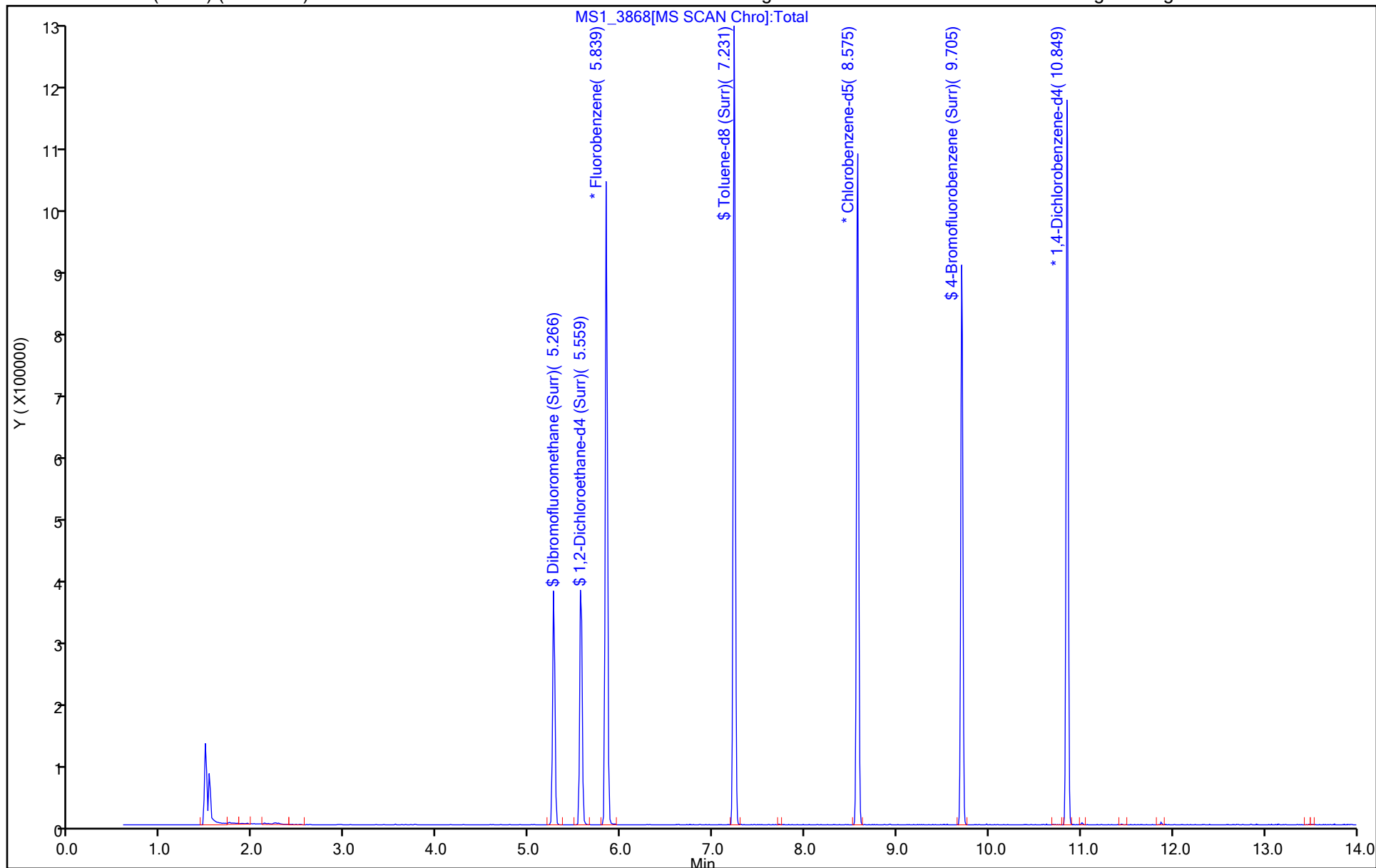
ALS Bottle#: 18

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3868.D
 Lims ID: 280-150245-B-21
 Client ID: TB-01-20210625
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:27:30 ALS Bottle#: 18 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-21 pH
 Misc. Info.: 280-0102809-027
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.5	96.92
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.16
\$ 7 Toluene-d8 (Surr)	50.0	50.1	100.16
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.3	94.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-01-20210622 Lab Sample ID: 280-150245-22
 Matrix: Water Lab File ID: MS1_3869.D
 Analysis Method: 8260B Date Collected: 06/22/2021 18:20
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:48
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-01-20210622 Lab Sample ID: 280-150245-22
 Matrix: Water Lab File ID: MS1_3869.D
 Analysis Method: 8260B Date Collected: 06/22/2021 18:20
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 03:48
 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.: 541786 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)	93		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3869.D
 Lims ID: 280-150245-B-22
 Client ID: EB-01-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:48:30 ALS Bottle#: 19 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-22 pH
 Misc. Info.: 280-0102809-028
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	735110	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	158470	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	264136	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	192143	49.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	244693	46.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	677152	49.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	84	266706	46.5	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3869.D

Injection Date: 30-Jun-2021 03:48:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-22

Lab Sample ID: 280-150245-22

Worklist Smp#: 28

Client ID: EB-01-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

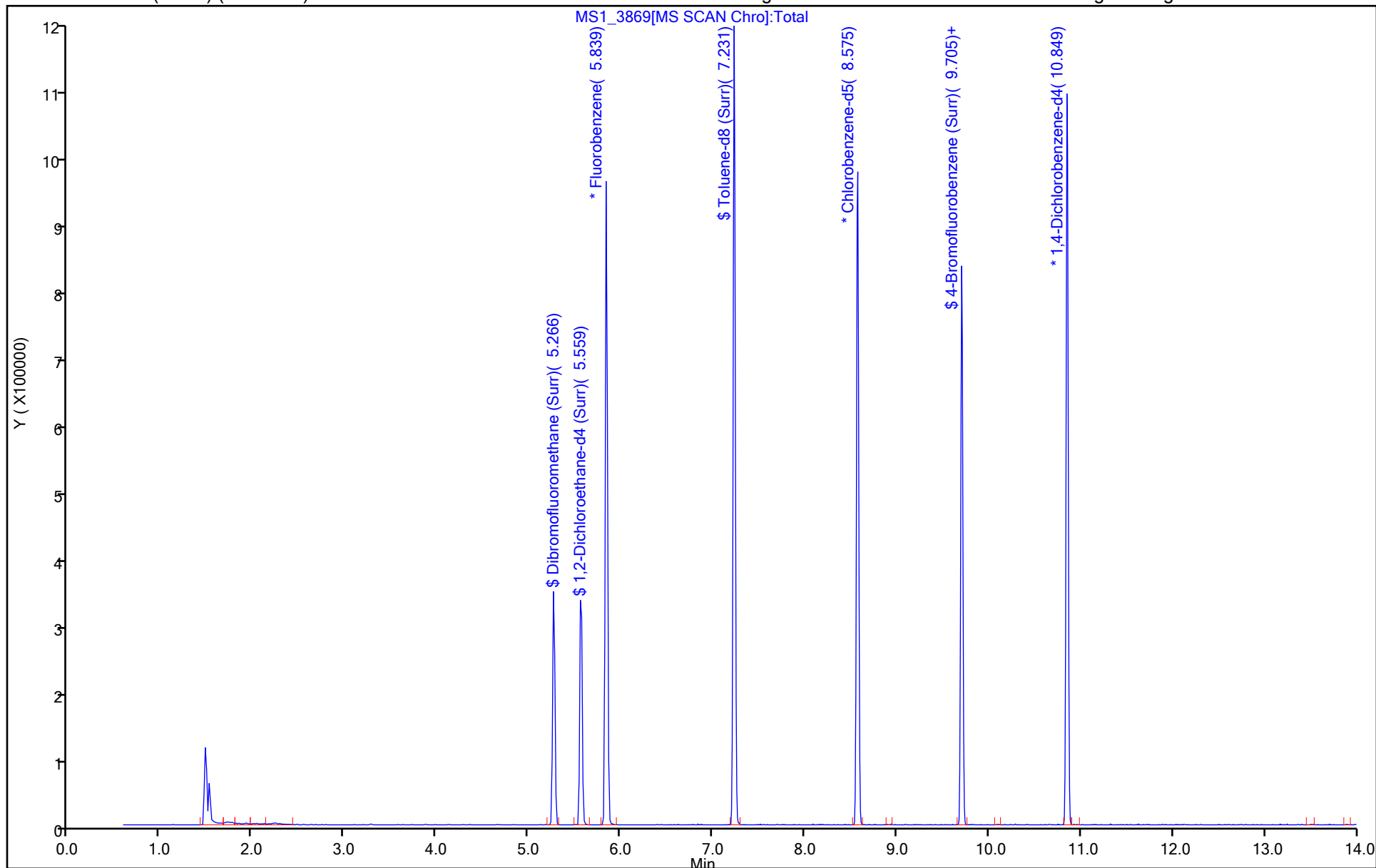
ALS Bottle#: 19

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3869.D
 Lims ID: 280-150245-B-22
 Client ID: EB-01-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 03:48:30 ALS Bottle#: 19 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-22 pH
 Misc. Info.: 280-0102809-028
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.62
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.9	93.75
\$ 7 Toluene-d8 (Surr)	50.0	49.3	98.65
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.5	93.06

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-02-20210622 Lab Sample ID: 280-150245-23
 Matrix: Water Lab File ID: MS1_3870.D
 Analysis Method: 8260B Date Collected: 06/22/2021 18:50
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 04:10
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-02-20210622 Lab Sample ID: 280-150245-23
 Matrix: Water Lab File ID: MS1_3870.D
 Analysis Method: 8260B Date Collected: 06/22/2021 18:50
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 04:10
 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.: 541786 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)	98		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)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3870.D
 Lims ID: 280-150245-C-23
 Client ID: EB-02-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:10:30 ALS Bottle#: 20 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-23 pH
 Misc. Info.: 280-0102809-029
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	721028	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	154981	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	265418	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	184807	48.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	250068	48.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	666172	49.6	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	270231	46.9	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:31

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3870.D

Injection Date: 30-Jun-2021 04:10:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-C-23

Lab Sample ID: 280-150245-23

Worklist Smp#: 29

Client ID: EB-02-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

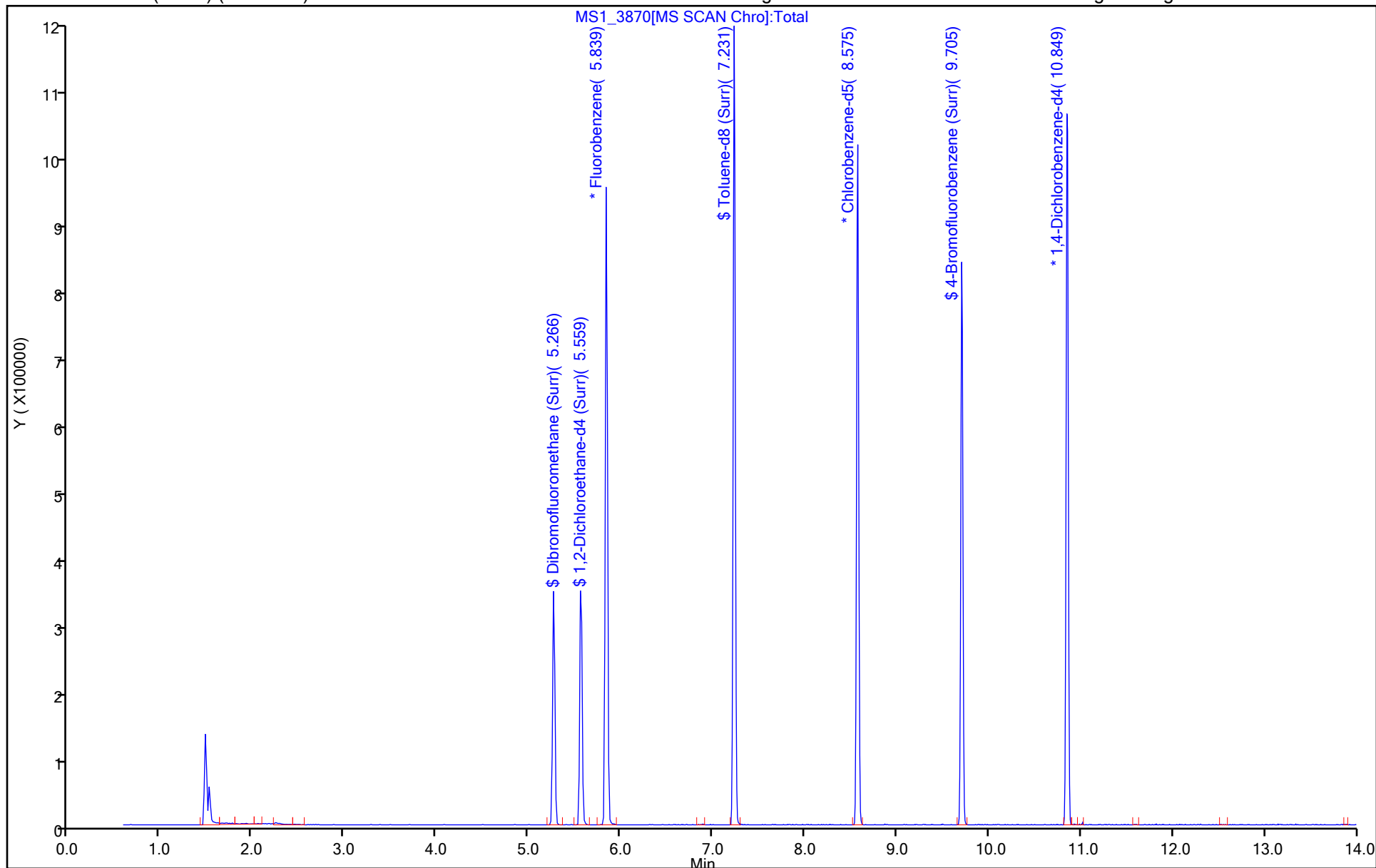
ALS Bottle#: 20

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3870.D
 Lims ID: 280-150245-C-23
 Client ID: EB-02-20210622
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:10:30 ALS Bottle#: 20 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-23 pH
 Misc. Info.: 280-0102809-029
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.4	96.71
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.8	97.68
\$ 7 Toluene-d8 (Surr)	50.0	49.6	99.24
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.9	93.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-03-20210623 Lab Sample ID: 280-150245-24
 Matrix: Water Lab File ID: MS1_3871.D
 Analysis Method: 8260B Date Collected: 06/23/2021 18:35
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 04:31
 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.: 541786 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>EB-03-20210623</u>	Lab Sample ID: <u>280-150245-24</u>
Matrix: <u>Water</u>	Lab File ID: <u>MS1_3871.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/23/2021 18:35</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 04:31</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541786</u>	Units: <u>ug/L</u>

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)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3871.D
 Lims ID: 280-150245-C-24
 Client ID: EB-03-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:31:30 ALS Bottle#: 21 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-24 pH
 Misc. Info.: 280-0102809-030
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	726669	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	157717	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	265153	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	189777	49.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	243644	47.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	94	684395	50.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	270183	47.0	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:32

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3871.D

Injection Date: 30-Jun-2021 04:31:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-C-24

Lab Sample ID: 280-150245-24

Worklist Smp#: 30

Client ID: EB-03-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

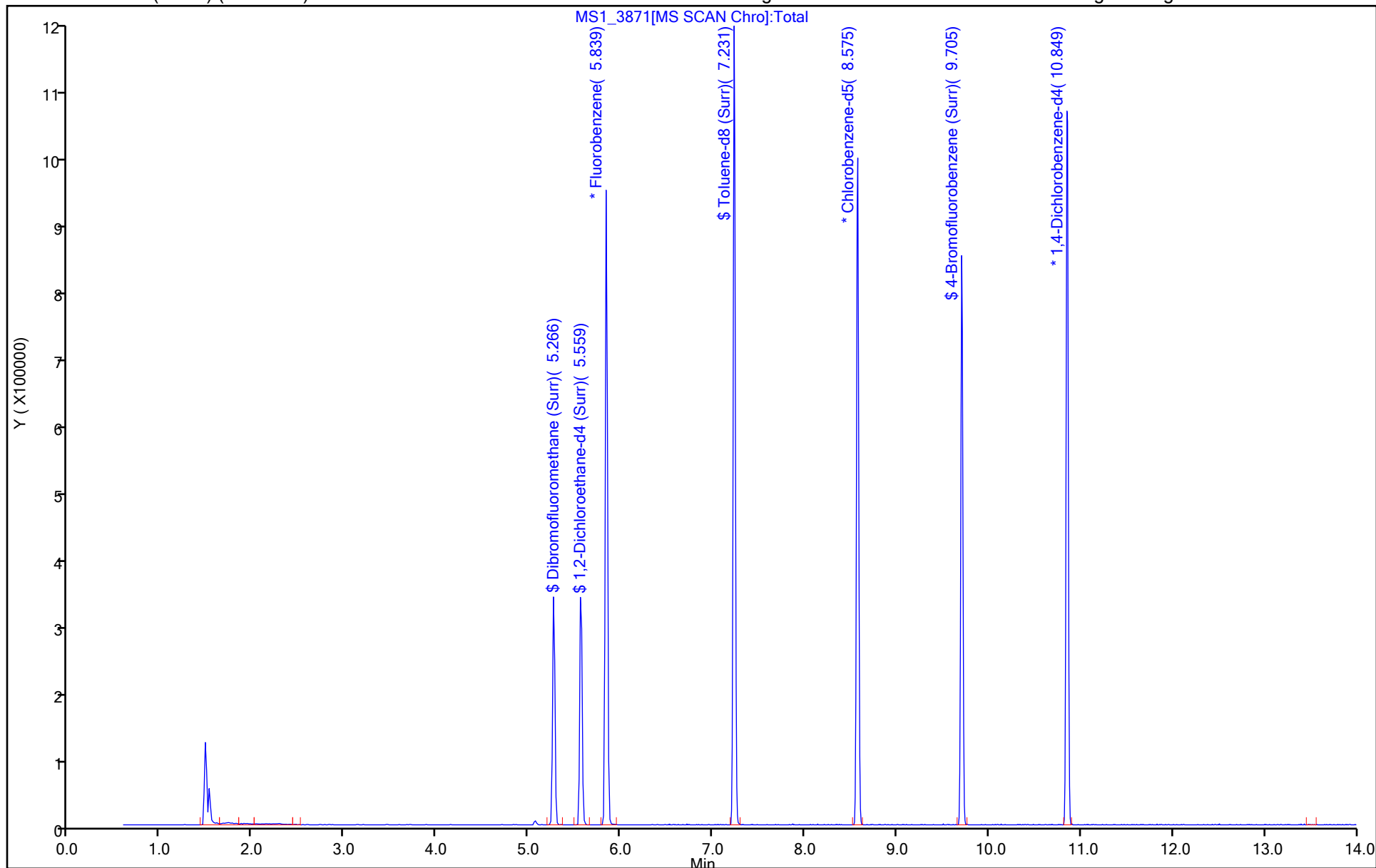
ALS Bottle#: 21

Method: AQ_VMS1_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_MS1\20210629-102809.b\MS1_3871.D
 Lims ID: 280-150245-C-24
 Client ID: EB-03-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:31:30 ALS Bottle#: 21 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-24 pH
 Misc. Info.: 280-0102809-030
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.54
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.2	94.43
\$ 7 Toluene-d8 (Surr)	50.0	50.1	100.18
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.0	93.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-04-20210623 Lab Sample ID: 280-150245-25
 Matrix: Water Lab File ID: MS1_3872.D
 Analysis Method: 8260B Date Collected: 06/23/2021 18:30
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 04:52
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-04-20210623 Lab Sample ID: 280-150245-25
 Matrix: Water Lab File ID: MS1_3872.D
 Analysis Method: 8260B Date Collected: 06/23/2021 18:30
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 04:52
 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.: 541786 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)	97		70-127
2037-26-5	Toluene-d8 (Surr)	95		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3872.D
 Lims ID: 280-150245-C-25
 Client ID: EB-04-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:52:30 ALS Bottle#: 22 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-25 pH
 Misc. Info.: 280-0102809-031
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	721190	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	163404	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	264379	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	187485	49.0	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	248025	48.4	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	674618	47.7	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	268982	46.9	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:34

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3872.D

Injection Date: 30-Jun-2021 04:52:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-C-25

Lab Sample ID: 280-150245-25

Worklist Smp#: 31

Client ID: EB-04-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

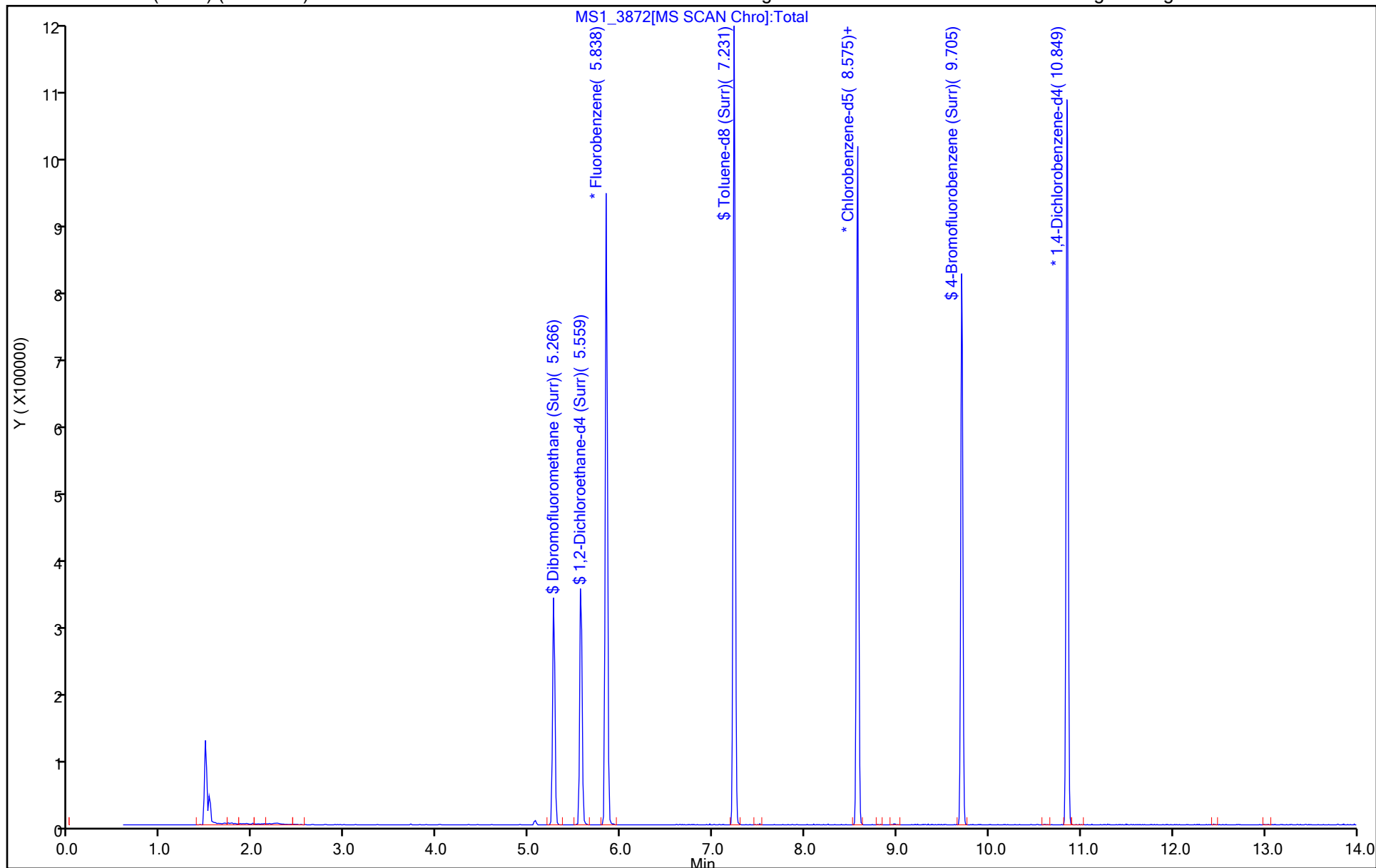
ALS Bottle#: 22

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3872.D
 Lims ID: 280-150245-C-25
 Client ID: EB-04-20210623
 Sample Type: Client
 Inject. Date: 30-Jun-2021 04:52:30 ALS Bottle#: 22 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-25 pH
 Misc. Info.: 280-0102809-031
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.0	98.09
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.4	96.86
\$ 7 Toluene-d8 (Surr)	50.0	47.7	95.31
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.9	93.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-05-20210624 Lab Sample ID: 280-150245-26
 Matrix: Water Lab File ID: MS1_3873.D
 Analysis Method: 8260B Date Collected: 06/24/2021 17:35
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:13
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-05-20210624 Lab Sample ID: 280-150245-26
 Matrix: Water Lab File ID: MS1_3873.D
 Analysis Method: 8260B Date Collected: 06/24/2021 17:35
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:13
 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.: 541786 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)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3873.D
 Lims ID: 280-150245-C-26
 Client ID: EB-05-20210624
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:13:30 ALS Bottle#: 23 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-26 pH
 Misc. Info.: 280-0102809-032
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	713025	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	156465	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	99	255546	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	188537	49.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	237623	46.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	680170	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	85	269756	48.6	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:35

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3873.D

Injection Date: 30-Jun-2021 05:13:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-C-26

Lab Sample ID: 280-150245-26

Worklist Smp#: 32

Client ID: EB-05-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

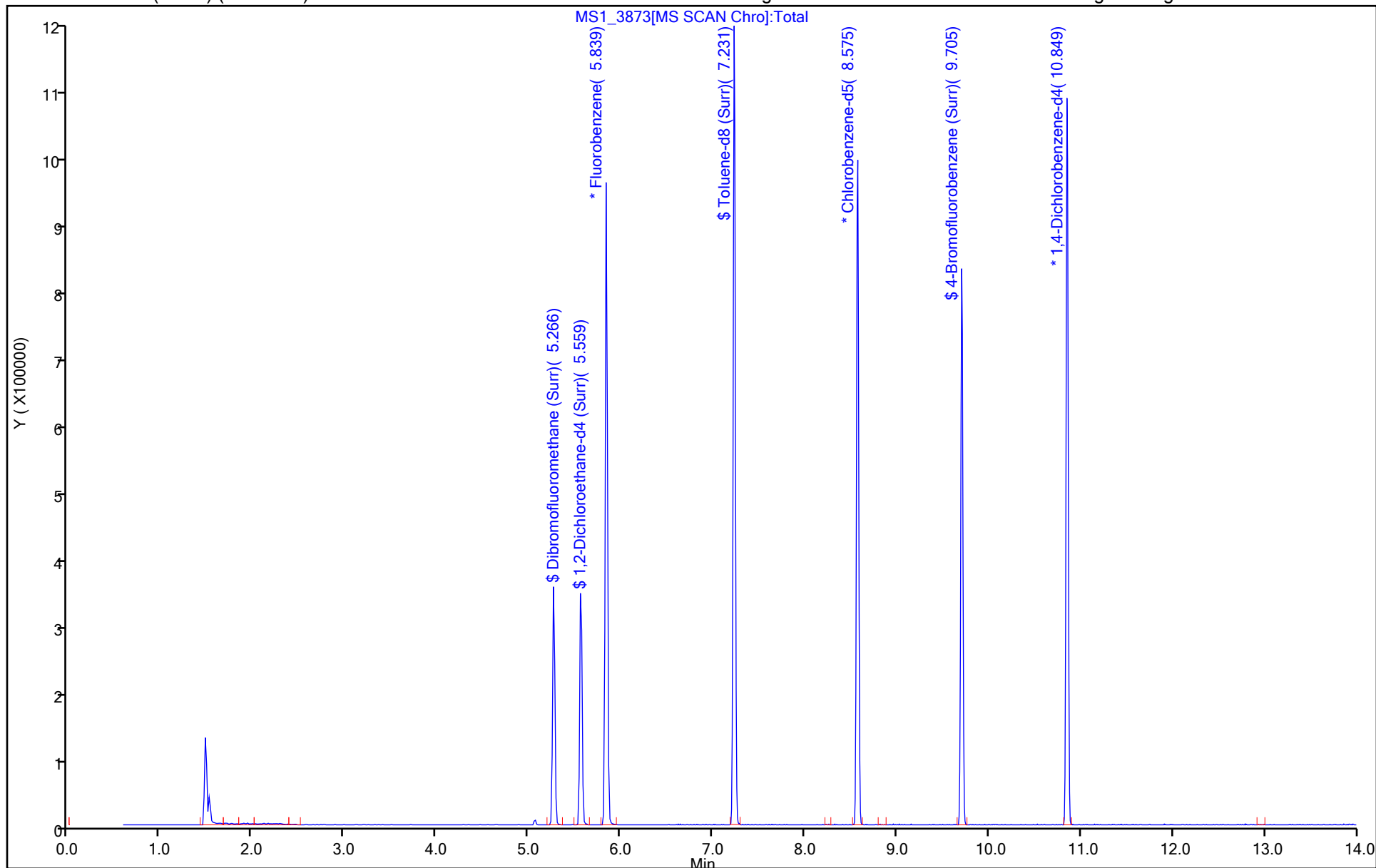
ALS Bottle#: 23

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3873.D
 Lims ID: 280-150245-C-26
 Client ID: EB-05-20210624
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:13:30 ALS Bottle#: 23 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-C-26 pH
 Misc. Info.: 280-0102809-032
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.9	99.77
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.9	93.86
\$ 7 Toluene-d8 (Surr)	50.0	50.2	100.36
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.6	97.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-06-20210625 Lab Sample ID: 280-150245-27
 Matrix: Water Lab File ID: MS1_3874.D
 Analysis Method: 8260B Date Collected: 06/25/2021 12:30
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:34
 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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: EB-06-20210625 Lab Sample ID: 280-150245-27
 Matrix: Water Lab File ID: MS1_3874.D
 Analysis Method: 8260B Date Collected: 06/25/2021 12:30
 Sample wt/vol: 5(mL) Date Analyzed: 06/30/2021 05:34
 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.: 541786 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)	102		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3874.D
 Lims ID: 280-150245-A-27
 Client ID: EB-06-20210625
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:34:30 ALS Bottle#: 24 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-27 pH
 Misc. Info.: 280-0102809-033
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:08:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	706828	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	150247	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	261350	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	180941	48.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	240919	48.0	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	662493	50.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	270172	47.6	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
39 Vinyl acetate	43		4.344				ND	
40 1,1-Dichloroethane	63		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.154				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 12:41:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3874.D

Injection Date: 30-Jun-2021 05:34:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-A-27

Lab Sample ID: 280-150245-27

Worklist Smp#: 33

Client ID: EB-06-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

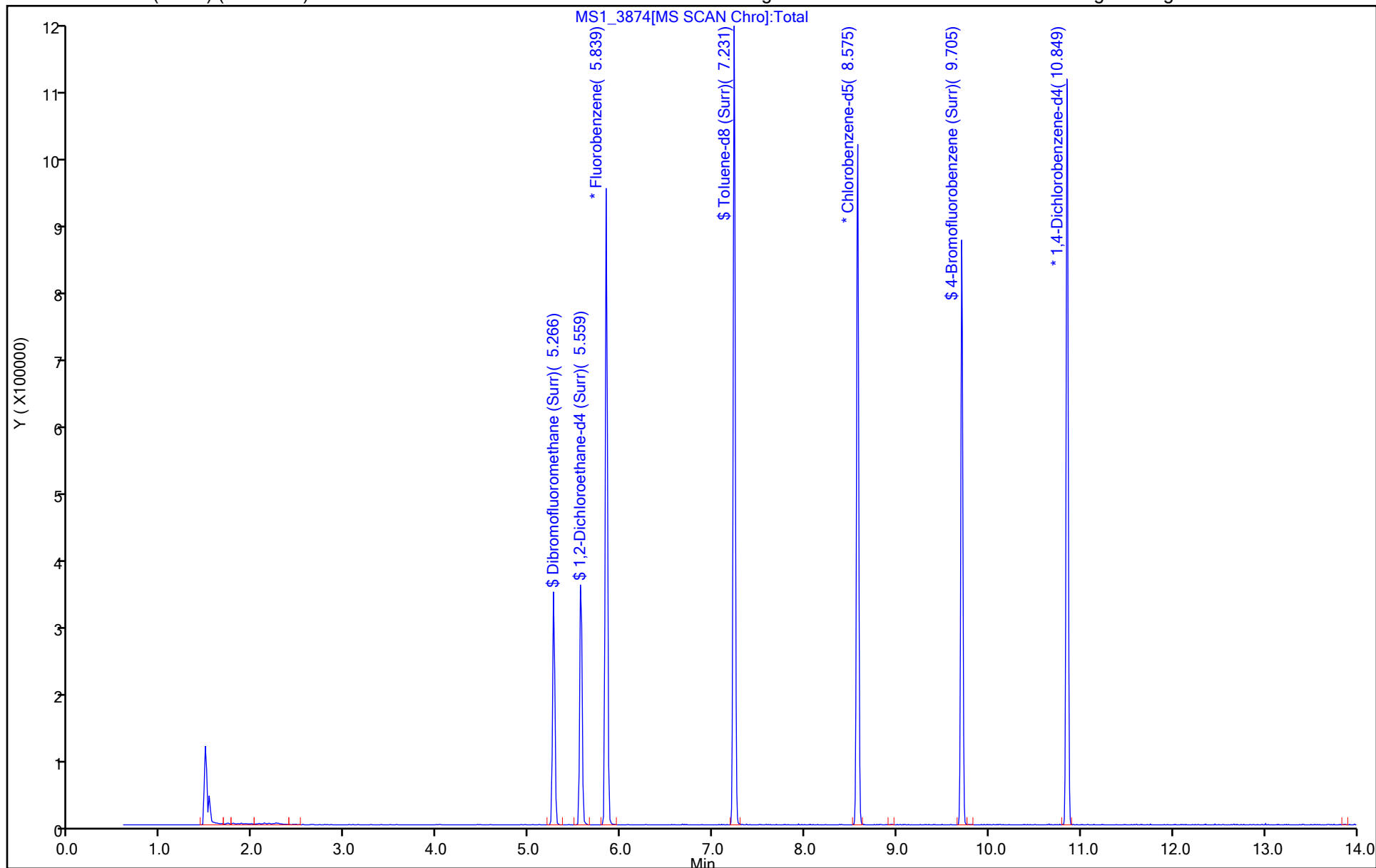
ALS Bottle#: 24

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3874.D
 Lims ID: 280-150245-A-27
 Client ID: EB-06-20210625
 Sample Type: Client
 Inject. Date: 30-Jun-2021 05:34:30 ALS Bottle#: 24 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-27 pH
 Misc. Info.: 280-0102809-033
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:08:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.3	96.59
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	96.00
\$ 7 Toluene-d8 (Surr)	50.0	50.9	101.80
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.6	95.27

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-538548/24	MS1_2712.D
Level 2	STD020 280-538548/25	MS1_2713.D
Level 3	STD050 280-538548/26	MS1_2714.D
Level 4	STD10 280-538548/27	MS1_2715.D
Level 5	STD50 280-538548/28	MS1_2716.D
Level 6	STD75 280-538548/29	MS1_2717.D
Level 7	STD100 280-538548/30	MS1_2718.D
Level 8	STD200 280-538548/31	MS1_2719.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								
Ethylene oxide	0.0171 0.0089	0.0130 0.0085	0.0115 0.0069	0.0106	0.0088	Qua	0.592 8	0.009 9	0						1.0000		0.9900
Ethanol	++++ 0.0021	0.0035 0.0020	0.0021 0.0023	0.0022	0.0020	Lin1	0.086 1	0.002 1							0.9950		0.9900
Propene oxide	0.0305 0.0293	0.0323 0.0278	0.0290 0.0298	0.0317	0.0286	Ave		0.029 9				5.2		15.0			
2-Propanol	++++ 0.0102	0.0125 0.0099	0.0120 0.0112	0.0115	0.0099	Ave		0.011 1				9.5		15.0			
Acetonitrile	0.0341 0.0226	0.0319 0.0216	0.0287 0.0240	0.0241	0.0223	Lin2	0.125 4	0.023 3							0.9920		0.9900
Di-isopropyl ether (DIPE)	++++ 0.1335	0.1205 0.1347	0.1328 0.1405	0.1376	0.1298	Ave		0.132 8				4.8		15.0			
Chloroprene	0.3897 0.2908	0.3137 0.2906	0.3073 0.2909	0.3211	0.2809	Ave		0.310 6				11.2		15.0			
Tert-butyl ethyl ether	0.4660 0.5133	0.5157 0.5108	0.4947 0.5399	0.5195	0.5067	Ave		0.508 3				4.2		15.0			
Ethyl acetate	++++ 0.1269	0.1579 0.1255	0.1212 0.1456	0.1157	0.1176	Ave		0.130 0				12.1		15.0			
Propionitrile	0.0429 0.0235	0.0345 0.0222	0.0233 0.0251	0.0261	0.0217	Lin2	0.204 6	0.022 7							0.9910		0.9900
Methacrylonitrile	0.1403 0.0954	0.1061 0.0938	0.0964 0.1029	0.0979	0.0920	Lin2	0.416 7	0.093 5							0.9950		0.9900
Tert-amyl methyl ether	0.4186 0.4504	0.4535 0.4453	0.4214 0.4742	0.4452	0.4287	Ave		0.442 1				4.2		15.0			
n-Butanol	++++ 0.0041	0.0041 0.0039	0.0035 0.0048	0.0044	0.0037	Ave		0.004 1				11.0		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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

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								
Methyl methacrylate	++++ 0.0398	0.0376 0.0379	0.0374 0.0422	0.0381	0.0370	Ave		0.038 6				4.8		15.0			
2-Nitropropane	++++ 0.0413	0.0931 0.0412	0.0599 0.0468	0.0496	0.0384	Lin2	0.208 1	0.040 3							0.9930		0.9900
Tetrahydrothiophene	0.2210 0.2112	0.2171 0.2087	0.2198 0.2214	0.2216	0.2076	Ave		0.216 0				2.8		15.0			
cis-1,4-Dichloro-2-butene	0.2957 0.2326	0.2783 0.2180	0.2347 0.2471	0.2286	0.2191	Ave		0.244 3				11.6		15.0			
1,2,3-Trimethylbenzene	2.2043 1.8923	1.8786 1.8140	1.7807 1.8763	1.9942	1.7670	Ave		1.900 9				7.5		15.0			
1,3,5-Trichlorobenzene	0.5686 0.5957	0.6106 0.5796	0.5248 0.6057	0.6083	0.5604	Ave		0.581 7				5.1		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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-538548/24	MS1_2712.D
Level 2	STD020 280-538548/25	MS1_2713.D
Level 3	STD050 280-538548/26	MS1_2714.D
Level 4	STD10 280-538548/27	MS1_2715.D
Level 5	STD50 280-538548/28	MS1_2716.D
Level 6	STD75 280-538548/29	MS1_2717.D
Level 7	STD100 280-538548/30	MS1_2718.D
Level 8	STD200 280-538548/31	MS1_2719.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
Ethylene oxide	FB	Qua	26068 1036589	38113 1325947	84752 2156198	154927	675626	100 7500	200 10000	500 20000	1000	5000
Ethanol	FB	Lin1	++++ 148252	6104 189484	9295 430073	19386	90674	++++ 4500	120 6000	300 12000	600	3000
Propene oxide	FB	Ave	46510 3412846	94633 4345569	213448 9367709	462698	2199226	100 7500	200 10000	500 20000	1000	5000
2-Propanol	FB	Ave	++++ 118762	3668 154722	8838 353633	16816	76551	++++ 750	20.0 1000	50.0 2000	100	500
Acetonitrile	FB	Lin2	5207 262979	9342 336478	21094 755055	35157	171419	10.0 750	20.0 1000	50.0 2000	100	500
Di-isopropyl ether (DIPE)	FB	Ave	++++ 155693	3527 210233	9769 441906	20052	99914	++++ 75.0	2.00 100	5.00 200	10.0	50.0
Chloroprene	FB	Ave	5950 339131	9185 453554	22612 914862	46806	216293	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Tert-butyl ethyl ether	FB	Ave	7115 598583	15102 797316	36395 1697935	75717	390067	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Ethyl acetate	FB	Ave	++++ 295874	9246 391747	17830 916063	33715	181020	++++ 150	4.00 200	10.0 400	20.0	100
Propionitrile	FB	Lin2	6552 273883	10115 345991	17161 788894	38061	167396	10.0 750	20.0 1000	50.0 2000	100	500
Methacrylonitrile	FB	Lin2	21423 1112747	31063 1464721	70916 3237312	142757	708538	10.0 750	20.0 1000	50.0 2000	100	500
Tert-amyl methyl ether	FB	Ave	6390 525182	13278 695022	31002 1491195	64899	330078	1.00 75.0	2.00 100	5.00 200	10.0	50.0
n-Butanol	FB	Ave	++++ 120882	3029 151525	6413 380063	16178	71615	++++ 1875	50.0 2500	125 5000	250	1250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

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
Methyl methacrylate	FB	Ave	+++++ 92850	2202 118435	5497 265731	11096	56906	+++++ 150	4.00 200	10.0 400	20.0	100
2-Nitropropane	FB	Lin2	+++++ 96340	5455 128713	8818 294580	14473	59124	+++++ 150	4.00 200	10.0 400	20.0	100
Tetrahydrothiophene	CBNZ d5	Ave	1432 102776	2721 135312	7052 295899	13786	66531	2.00 150	4.00 200	10.0 400	20.0	100
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	3048 174974	5665 229641	12139 514731	22598	114331	2.00 150	4.00 200	10.0 400	20.0	100
1,2,3-Trimethylbenzene	DCBd 4	Ave	11362 711897	19118 955425	46043 1954614	98549	461007	1.00 75.0	2.00 100	5.00 200	10.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	2931 224118	6214 305264	13570 630938	30060	146215	1.00 75.0	2.00 100	5.00 200	10.0	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_MS1\20210604-102067.b\VMS1_2712.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 04-Jun-2021 10:18:30 ALS Bottle#: 1 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD010
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:46 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 10:55:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	763333	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162017	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	257720	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	99	26068	100.0	113.4	
19 Ethanol	45		2.892				ND	ND	
21 Propene oxide	58	3.059	3.059	0.000	86	46510	100.0	102.0	
27 Isopropyl alcohol	45		3.395				ND	ND	
29 Acetonitrile	41	3.548	3.534	0.014	92	5207	10.0	9.28	
41 Isopropyl ether	87		4.372				ND	ND	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	88	5950	1.00	1.25	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	96	7115	1.00	0.9168	
47 Ethyl acetate	43	4.861	4.847	0.014	32	2788	2.00	1.40	
50 Propionitrile	54	4.889	4.875	0.014	91	6552	10.0	9.90	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	21423	10.0	10.6	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	82	6390	1.00	0.9467	
67 n-Butanol	56		6.034				ND	ND	U
72 Methyl methacrylate	100		6.397				ND	ND	
76 2-Nitropropane	41		6.788				ND	ND	U
94 Tetrahydrothiophene	60	8.018	8.018	0.000	1	1432	2.00	2.05	a
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	79	3048	2.00	2.42	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	93	11362	1.00	1.16	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	84	2931	1.00	0.9775	a
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MV-Supp A_00051

Amount Added: 1.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:46

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD010

Worklist Smp#: 24

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

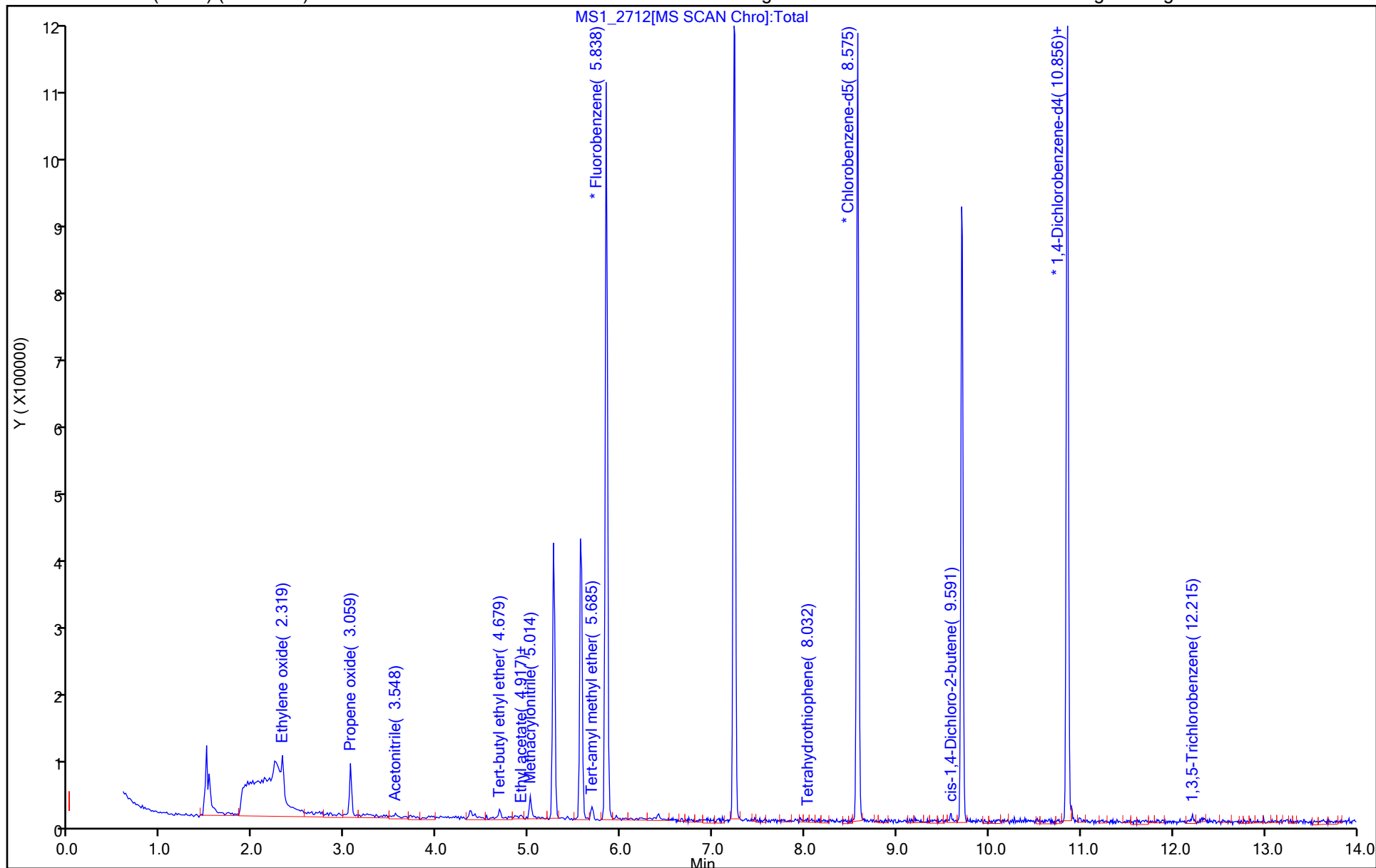
ALS Bottle#: 1

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

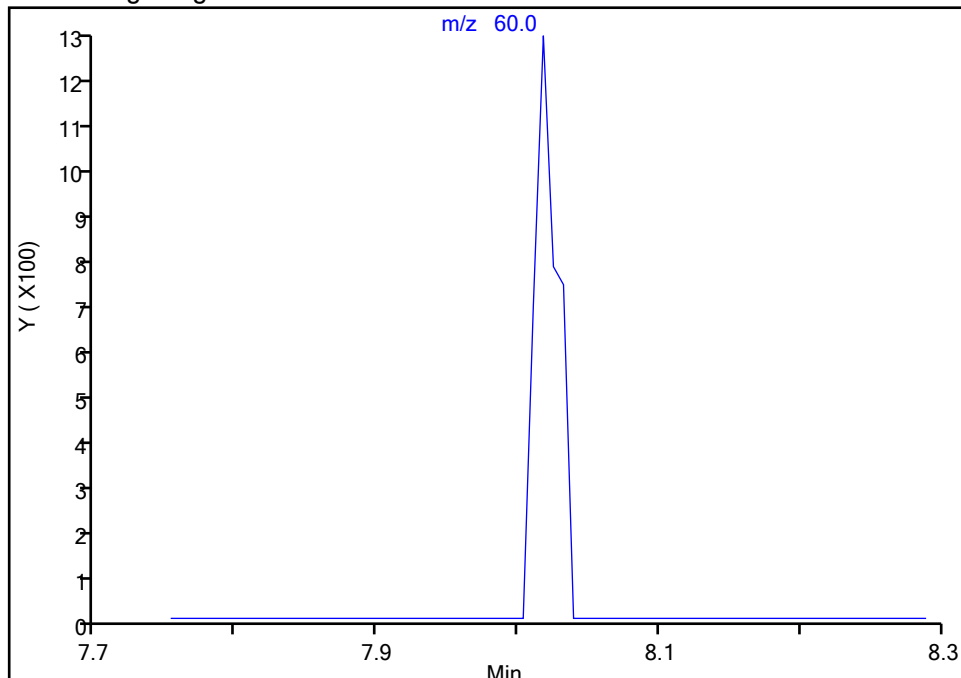
94 Tetrahydrothiophene, CAS: 110-01-0

Signal: 1

Not Detected

Expected RT: 8.02

Processing Integration Results



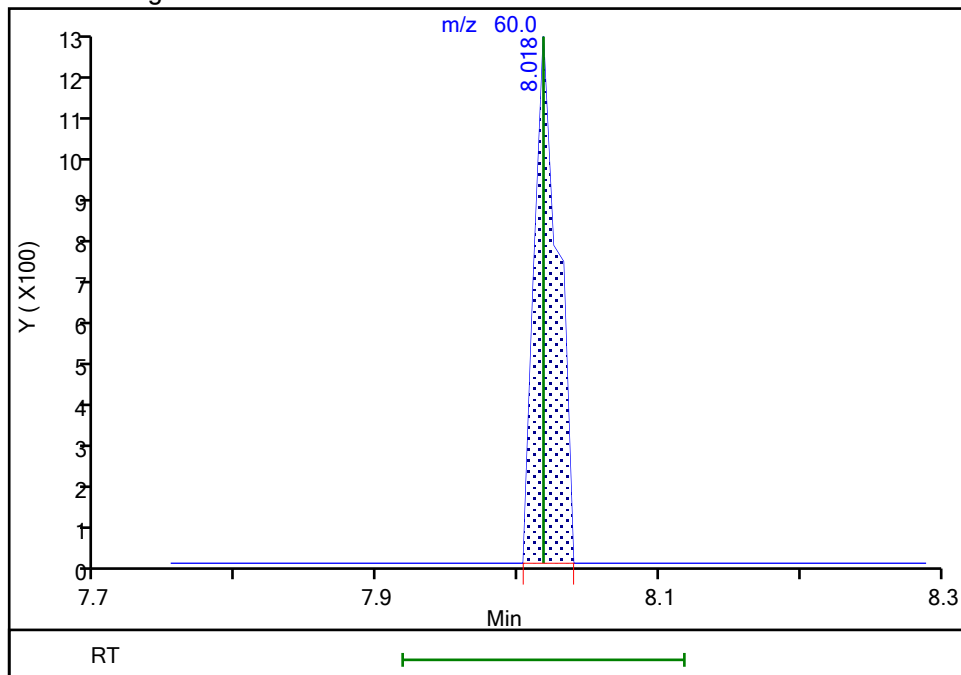
RT: 8.02

Area: 1432

Amount: 2.045579

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 11:08:30

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

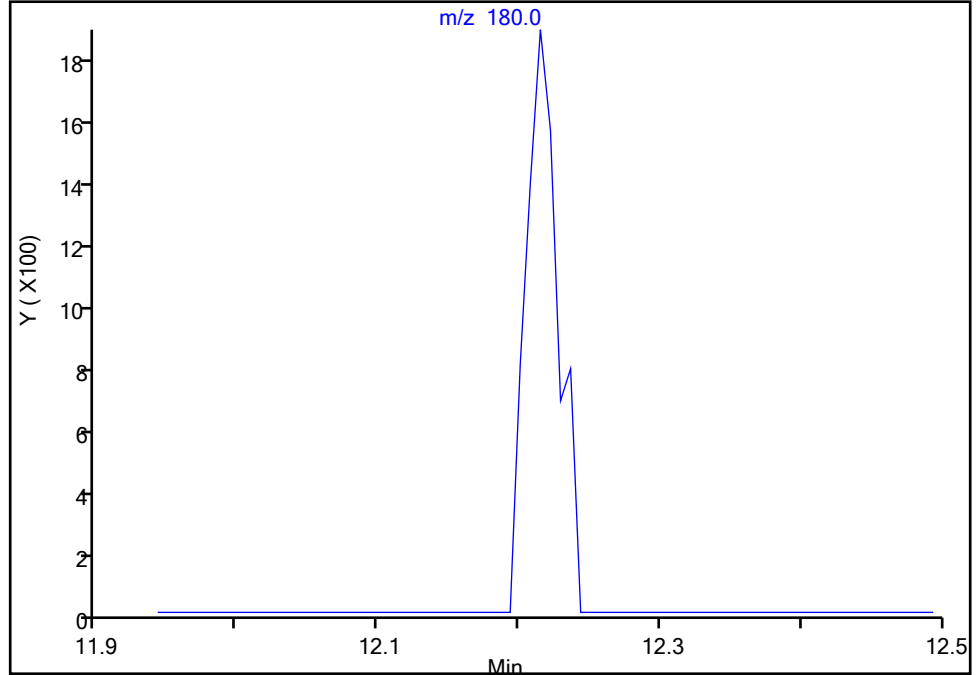
129 1,3,5-Trichlorobenzene, CAS: 108-70-3

Signal: 1

Not Detected

Expected RT: 12.21

Processing Integration Results



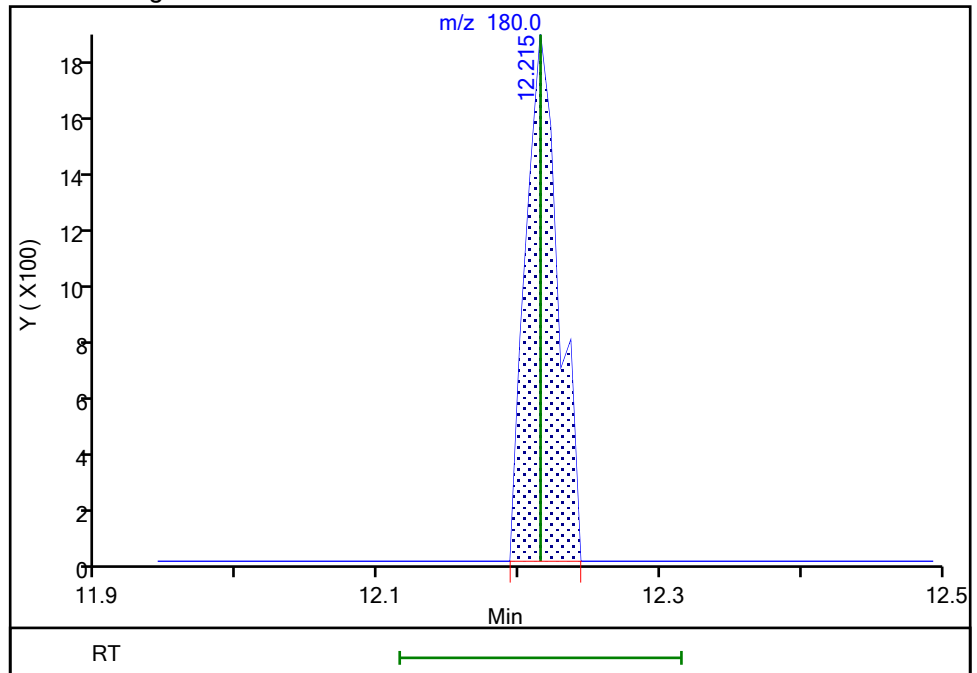
RT: 12.21

Area: 2931

Amount: 0.977512

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 11:11:32

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

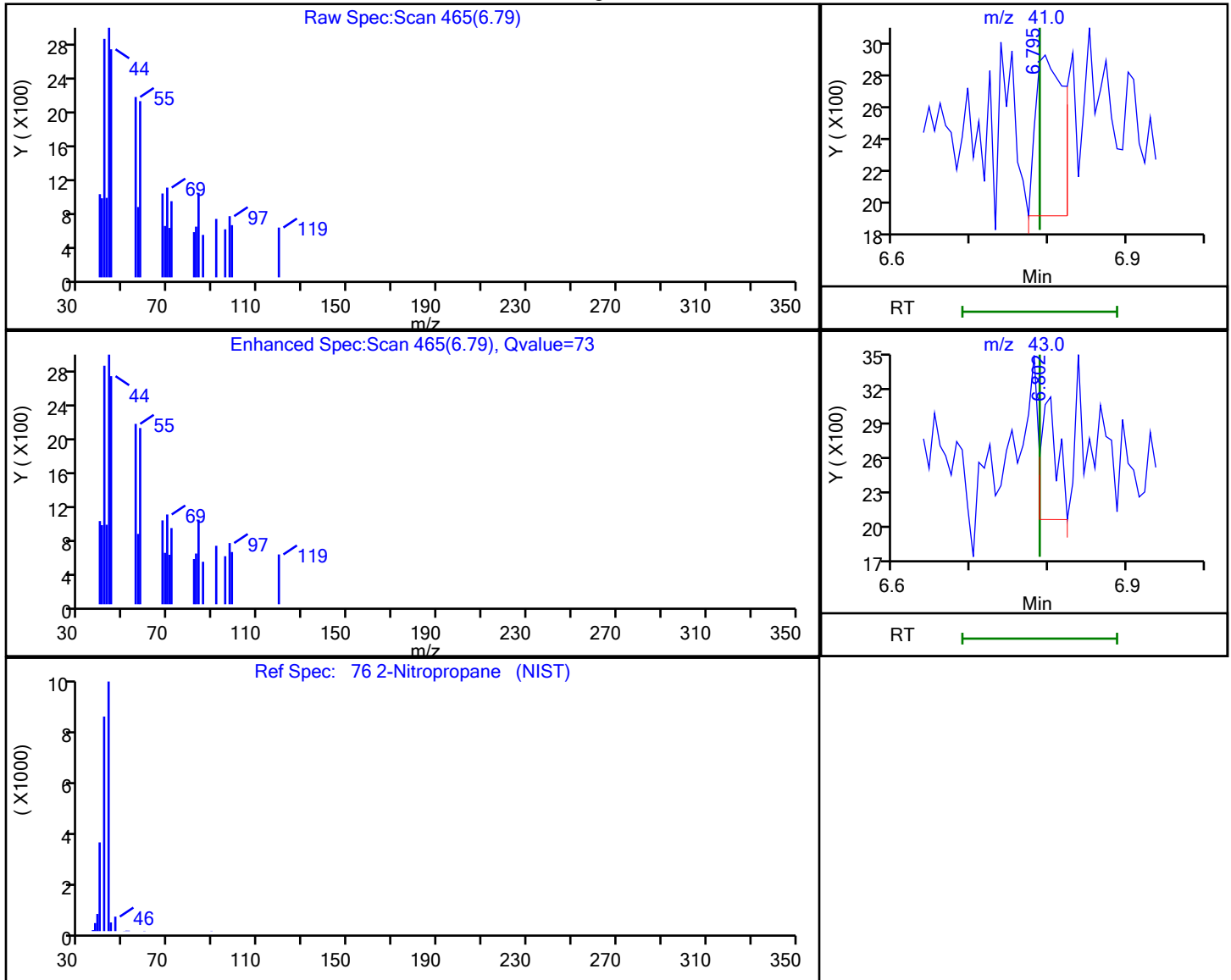
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

76 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
6.79	41.00	2363	1.015467
6.80	43.00	1535	

Reviewer: seifertj, 04-Jun-2021 13:32:08

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

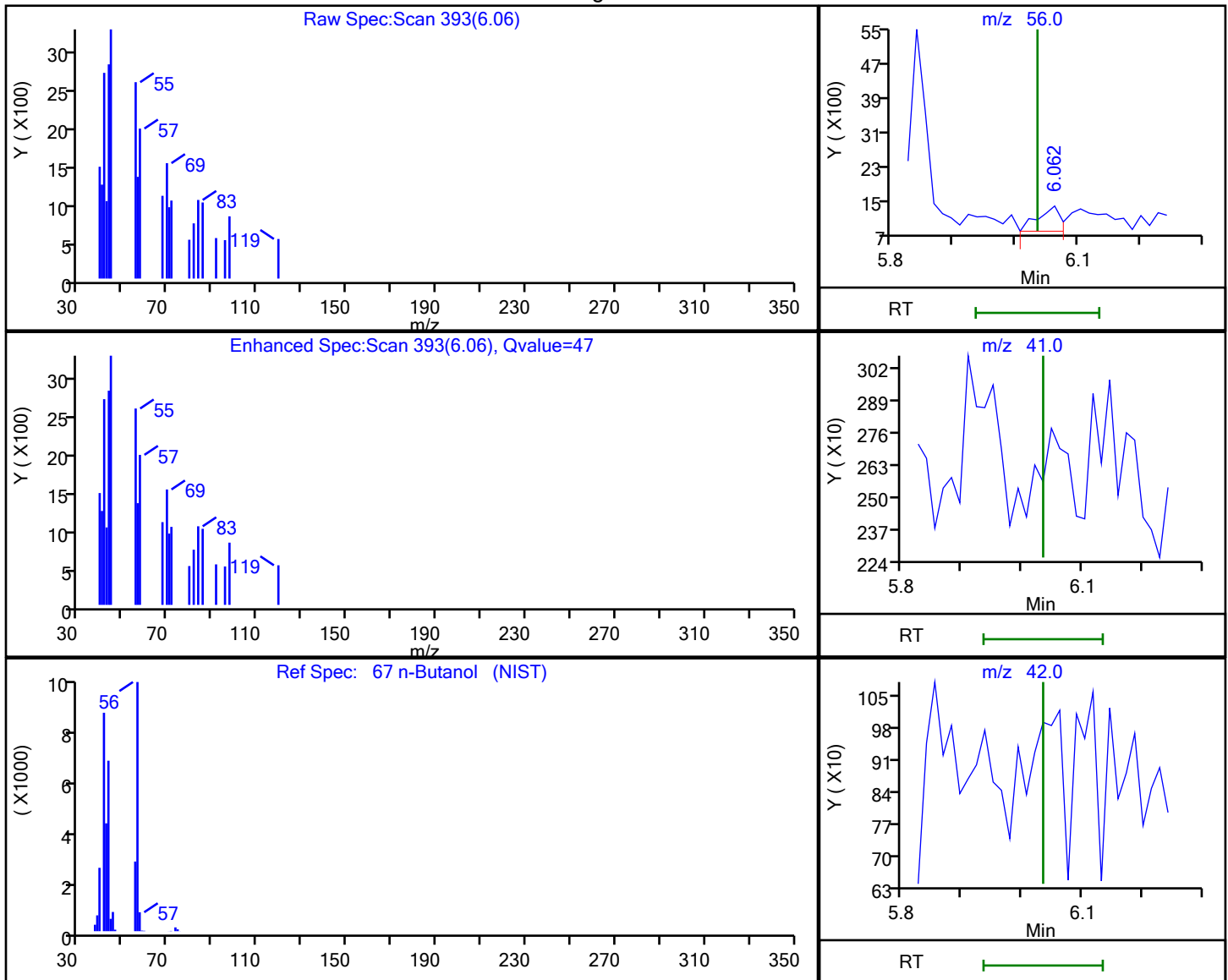
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

67 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
6.06	56.00	1484	23.133241
6.03	41.00	0	
6.03	42.00	0	

Reviewer: seifertj, 04-Jun-2021 13:32:02

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2713.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 04-Jun-2021 10:39:30 ALS Bottle#: 2 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD020
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:47 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 10:56:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	732042	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	156659	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	254416	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	38113	200.0	204.7	
19 Ethanol	45	2.906	2.892	0.014	35	6104	120.0	154.8	Ma
21 Propene oxide	58	3.059	3.059	0.000	88	94633	200.0	216.4	
27 Isopropyl alcohol	45	3.408	3.395	0.014	1	3668	20.0	22.7	
29 Acetonitrile	41	3.548	3.534	0.014	98	9342	20.0	22.0	
41 Isopropyl ether	87	4.372	4.372	0.000	94	3527	2.00	1.81	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	94	9185	2.00	2.02	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	15102	2.00	2.03	
47 Ethyl acetate	43	4.861	4.847	0.014	77	9246	4.00	4.86	
50 Propionitrile	54	4.889	4.875	0.014	92	10115	20.0	21.4	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	31063	20.0	18.2	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	88	13278	2.00	2.05	
67 n-Butanol	56	6.048	6.034	0.014	49	3029	50.0	50.6	
72 Methyl methacrylate	100	6.411	6.397	0.014	72	2202	4.00	3.90	
76 2-Nitropropane	41	6.788	6.788	0.000	88	5455	4.00	4.08	
94 Tetrahydrothiophene	60	8.025	8.018	0.007	68	2721	4.00	4.02	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	82	5665	4.00	4.56	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	94	19118	2.00	1.98	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	90	6214	2.00	2.10	a
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00051

Amount Added: 2.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:48

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2713.D

Injection Date: 04-Jun-2021 10:39:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD020

Worklist Smp#: 25

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 2

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2713.D

Injection Date: 04-Jun-2021 10:39:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

2

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

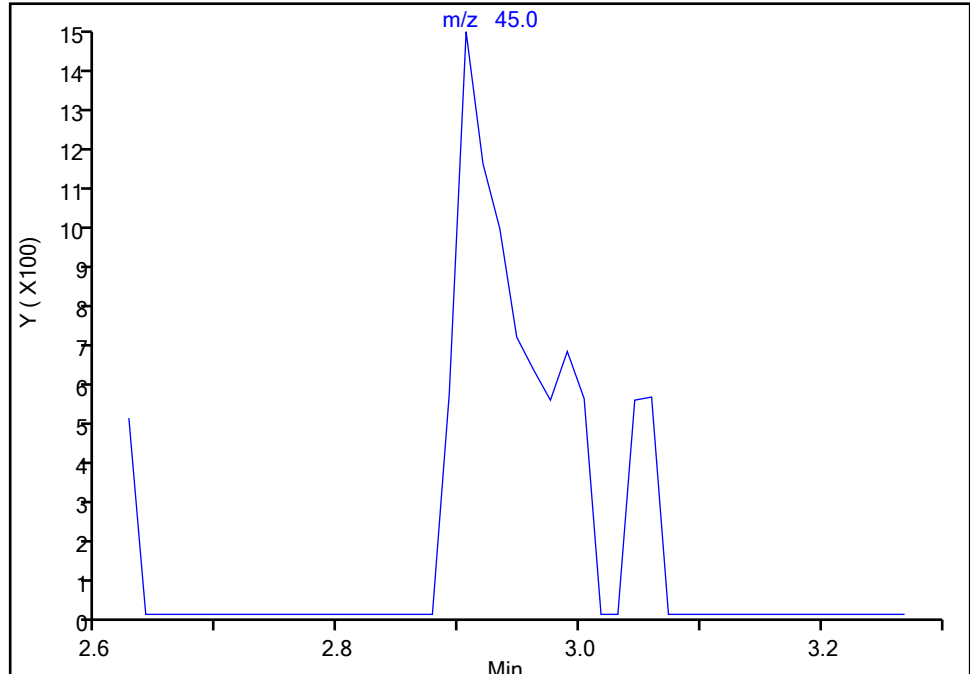
19 Ethanol, CAS: 64-17-5

Signal: 1

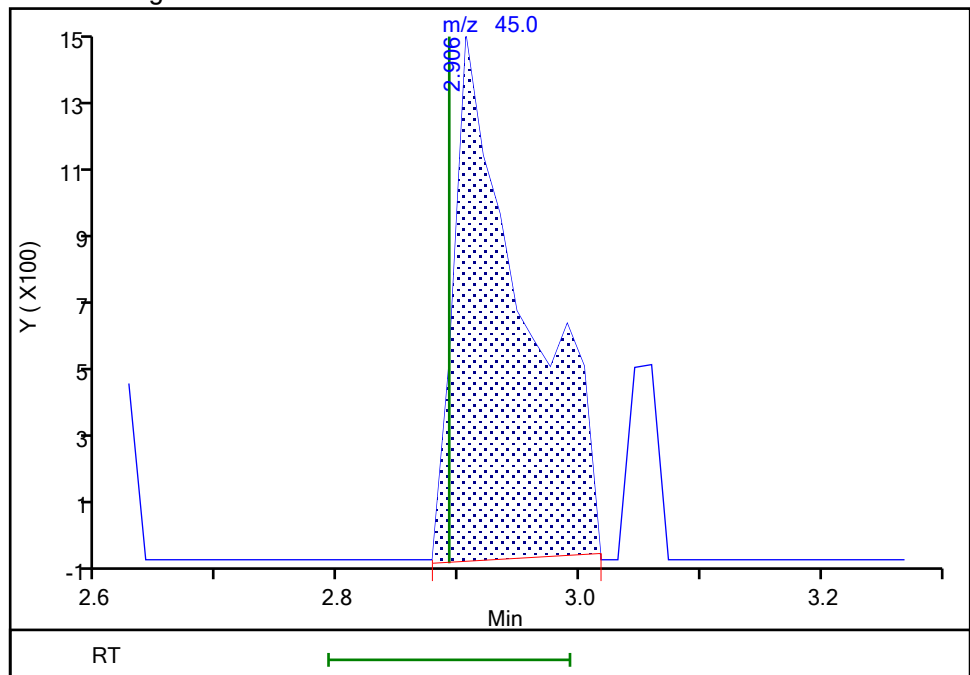
Not Detected

Expected RT: 2.89

Processing Integration Results



Manual Integration Results



RT: 2.91

Area: 6104

Amount: 154.7501

Amount Units: ug/l

Reviewer: seifertj, 04-Jun-2021 10:55:53

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2713.D		
Injection Date:	04-Jun-2021 10:39:30	Instrument ID:	VMS_MS1
Lims ID:	STD020		
Client ID:			
Operator ID:	SEIFERTJ	ALS Bottle#:	2 Workl
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Wat
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

ALS Bottle#: 2 Worklist Smp#: 25
Dil. Factor: 1.0000
Limit Group: MSV - 8260B Water and Solid
Detector: MS SCAN

Signal: 1

Not Detected
Expected RT: 12.21

The chromatogram displays a single, sharp peak at a retention time of 12.2 minutes. The peak is labeled with its mass-to-charge ratio, m/z 180.0. The y-axis represents the signal intensity, labeled as $Y (\times 100)$, with a scale from 0 to 39. The x-axis represents time in minutes, labeled as 'Min', with major ticks at 11.9, 12.1, 12.3, and 12.5. The baseline is stable and near zero throughout the run.

Time (Min)	Signal Intensity ($Y \times 100$)
11.9	0.5
12.1	0.5
12.2	39.5
12.3	0.5
12.5	0.5

RT: 12.21
Area: 6214
Amount: 2.099332
Amount Units: ug/l

Reviewer: seifertj, 04-Jun-2021 10:55:59
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2714.D
 Lims ID: STD050
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 04-Jun-2021 11:00:30 ALS Bottle#: 3 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD050
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:49 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 11:45:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	735722	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	160452	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	258566	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	84752	500.0	528.8	
19 Ethanol	45	2.906	2.892	0.014	94	9295	300.0	255.2	
21 Propene oxide	58	3.059	3.059	0.000	88	213448	500.0	485.6	
27 Isopropyl alcohol	45	3.408	3.395	0.014	95	8838	50.0	54.3	a
29 Acetonitrile	41	3.534	3.534	0.000	98	21094	50.0	56.3	
41 Isopropyl ether	87	4.358	4.372	-0.014	92	9769	5.00	5.00	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	22612	5.00	4.95	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	97	36395	5.00	4.87	
47 Ethyl acetate	43	4.861	4.847	0.014	99	17830	10.0	9.32	
50 Propionitrile	54	4.875	4.875	0.000	96	17161	50.0	42.4	
52 Methacrylonitrile	41	5.014	5.015	-0.001	94	70916	50.0	47.1	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	87	31002	5.00	4.77	
67 n-Butanol	56	6.034	6.034	0.000	63	6413	125.0	106.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	5497	10.0	9.69	
76 2-Nitropropane	41	6.788	6.788	0.000	97	8818	10.0	9.70	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	7052	10.0	10.2	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	84	12139	10.0	9.61	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	46043	5.00	4.68	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	89	13570	5.00	4.51	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		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_00051

Amount Added: 5.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:49

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2714.D

Injection Date: 04-Jun-2021 11:00:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD050

Worklist Smp#: 26

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

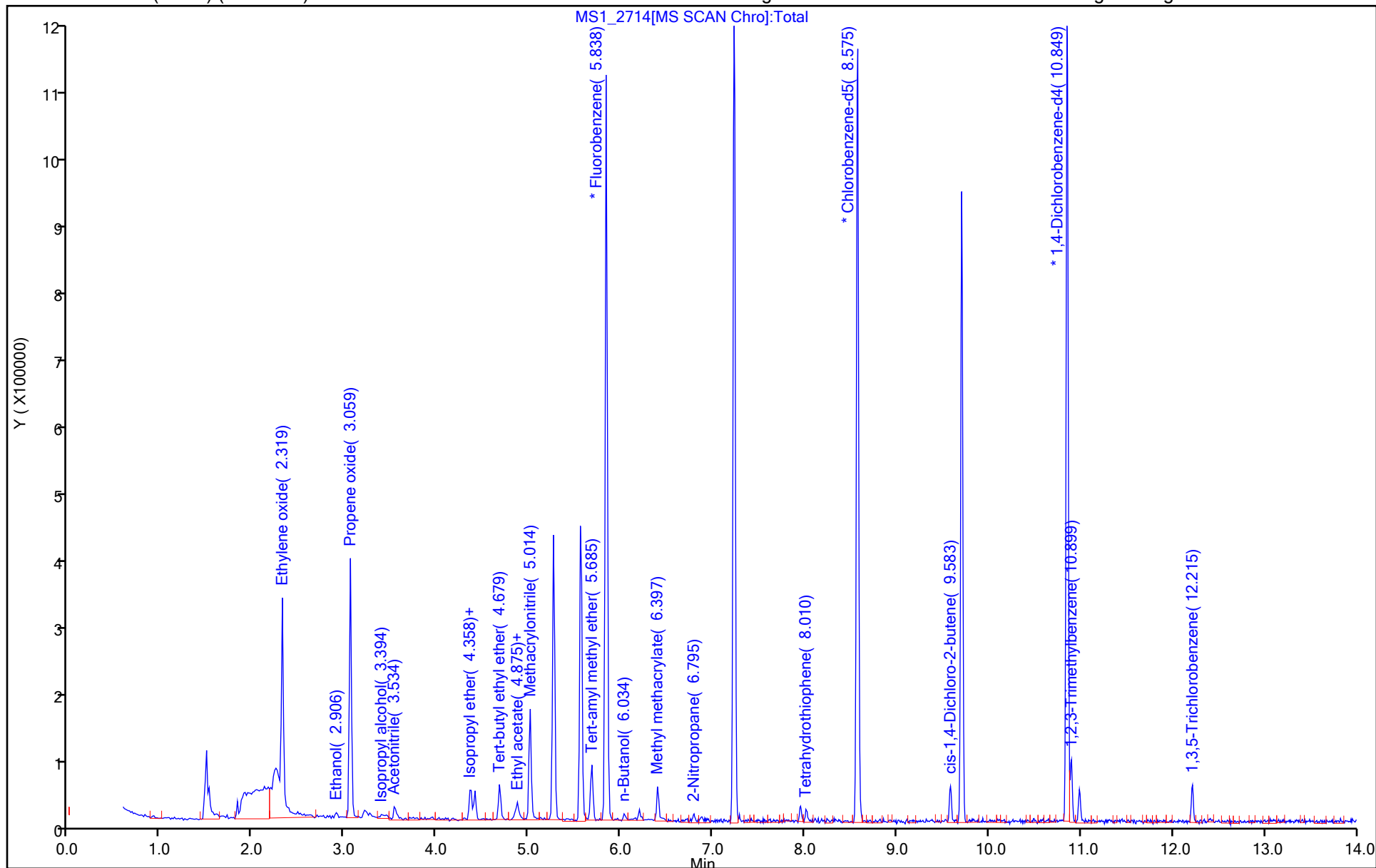
ALS Bottle#: 3

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2714.D

Injection Date: 04-Jun-2021 11:00:30

Instrument ID: VMS_MS1

Lims ID: STD050

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

3

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

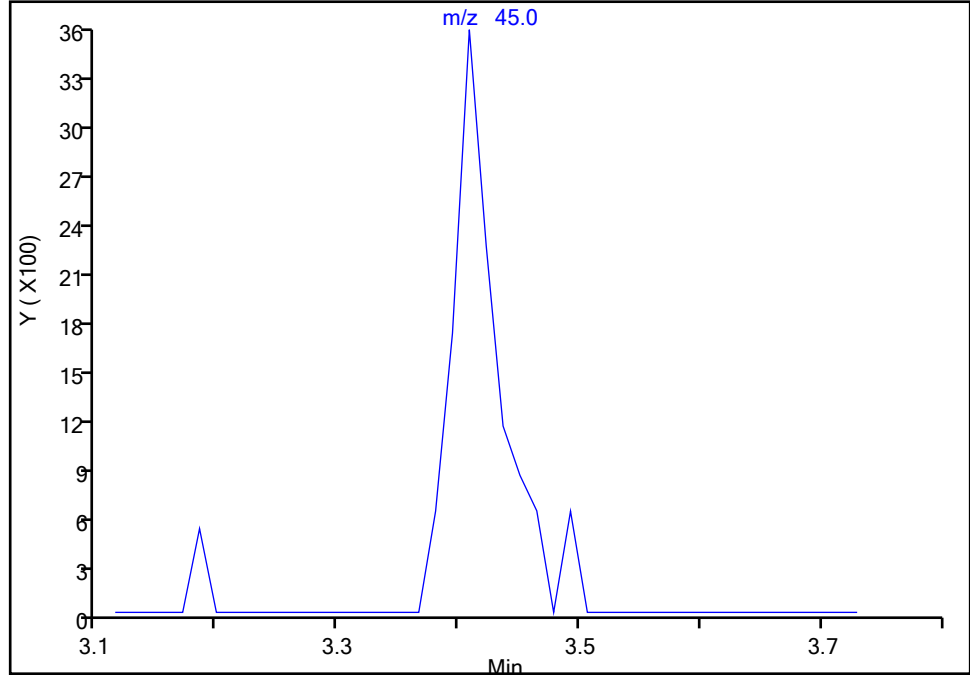
27 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

Not Detected

Expected RT: 3.39

Processing Integration Results



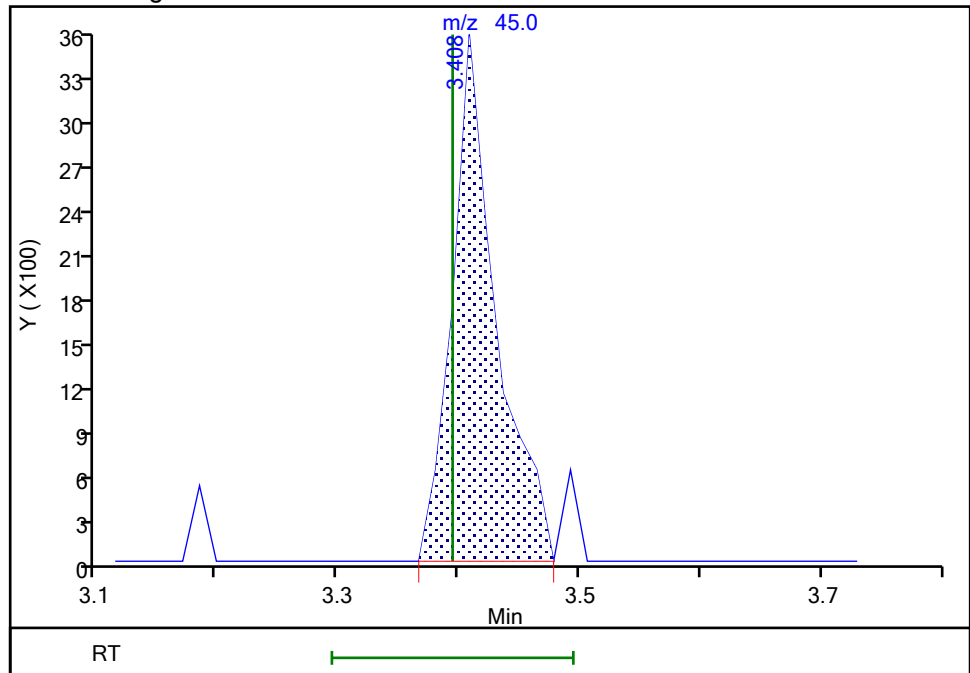
RT: 3.41

Area: 8838

Amount: 54.348681

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 04-Jun-2021 11:45:30

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2715.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 04-Jun-2021 11:21:30 ALS Bottle#: 4 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:50 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 11:50:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	728798	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	155504	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	247091	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	154927	1000.0	1035.2	
19 Ethanol	45	2.906	2.892	0.014	99	19386	600.0	581.9	
21 Propene oxide	58	3.059	3.059	0.000	86	462698	1000.0	1062.6	
27 Isopropyl alcohol	45	3.408	3.395	0.014	97	16816	100.0	104.4	
29 Acetonitrile	41	3.534	3.534	0.000	98	35157	100.0	98.3	
41 Isopropyl ether	87	4.372	4.372	0.000	92	20052	10.0	10.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	46806	10.0	10.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	75717	10.0	10.2	
47 Ethyl acetate	43	4.861	4.847	0.014	99	33715	20.0	17.8	
50 Propionitrile	54	4.875	4.875	0.000	98	38061	100.0	106.0	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	142757	100.0	100.3	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	84	64899	10.0	10.1	
67 n-Butanol	56	6.034	6.034	0.000	86	16178	250.0	271.2	M
72 Methyl methacrylate	100	6.397	6.397	0.000	90	11096	20.0	19.7	
76 2-Nitropropane	41	6.788	6.788	0.000	96	14473	20.0	19.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	13786	20.0	20.5	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	85	22598	20.0	18.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	98549	10.0	10.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	91	30060	10.0	10.5	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-Supp A_00051

Amount Added: 10.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:51

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2715.D

Injection Date: 04-Jun-2021 11:21:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD10

Worklist Smp#: 27

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

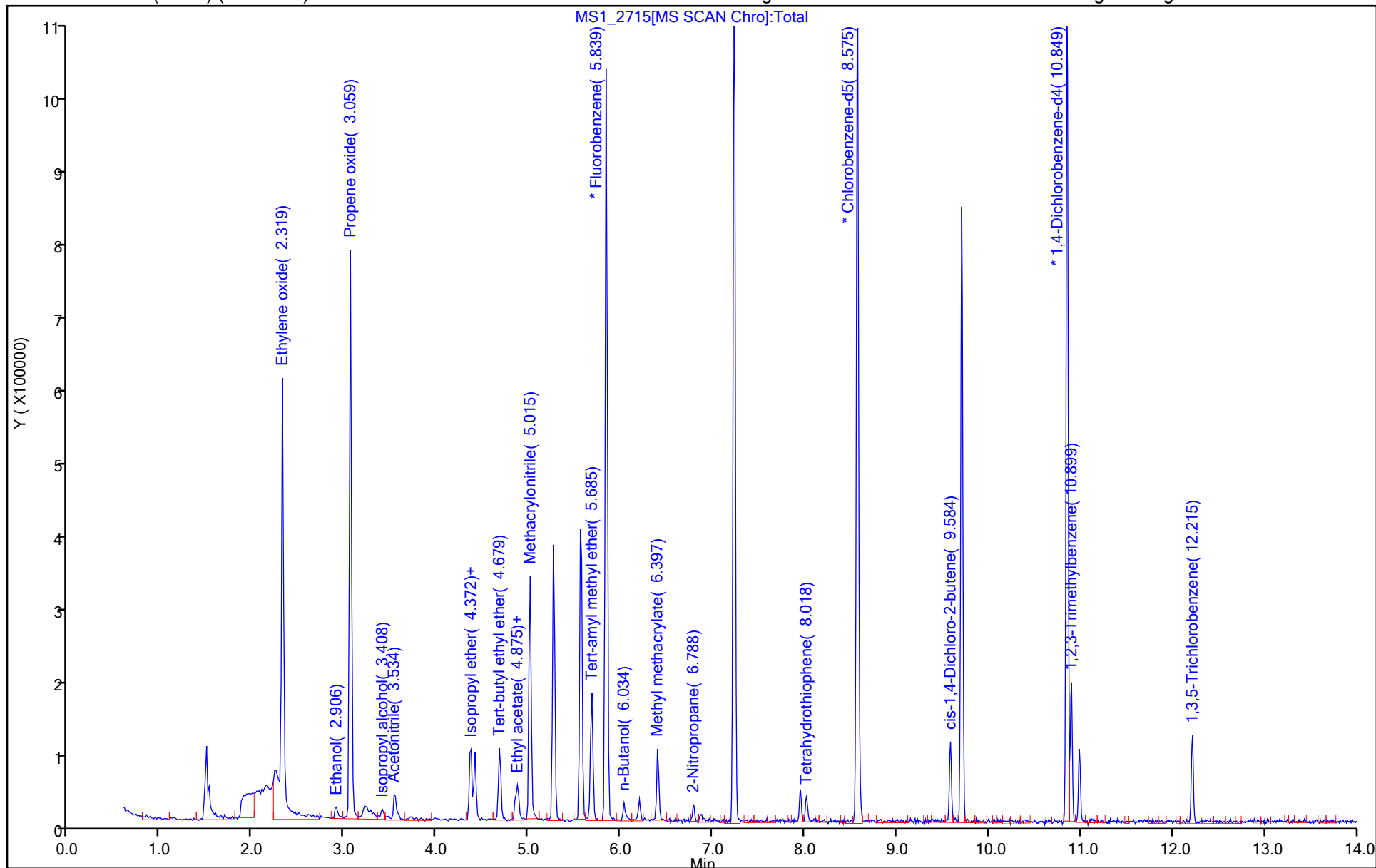
ALS Bottle#: 4

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2715.D

Injection Date: 04-Jun-2021 11:21:30

Instrument ID: VMS_MS1

Lims ID: STD10

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

4

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

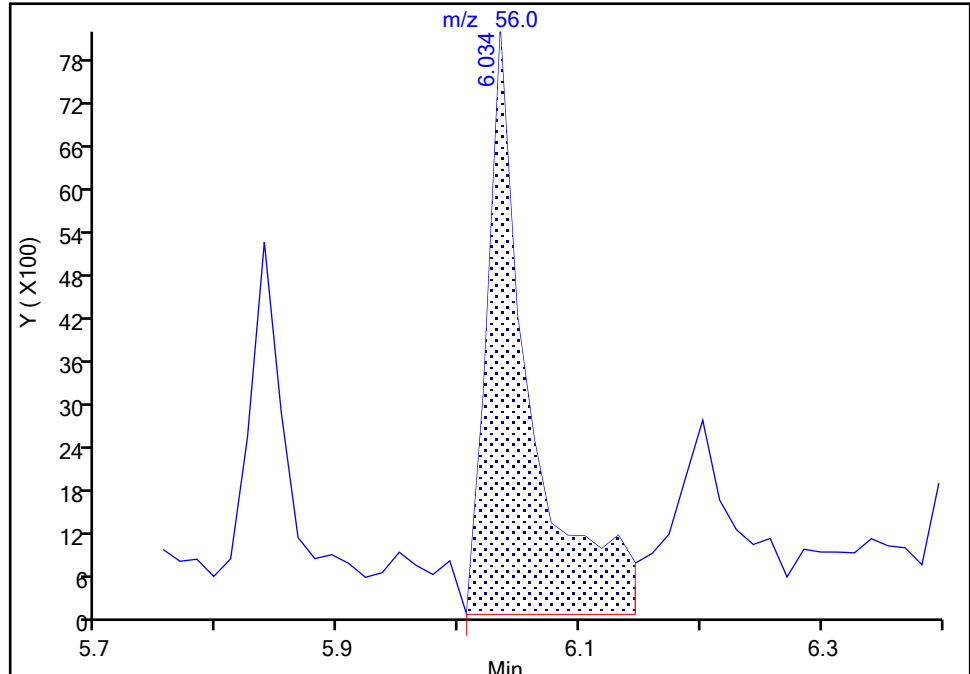
MS SCAN

67 n-Butanol, CAS: 71-36-3

Signal: 1

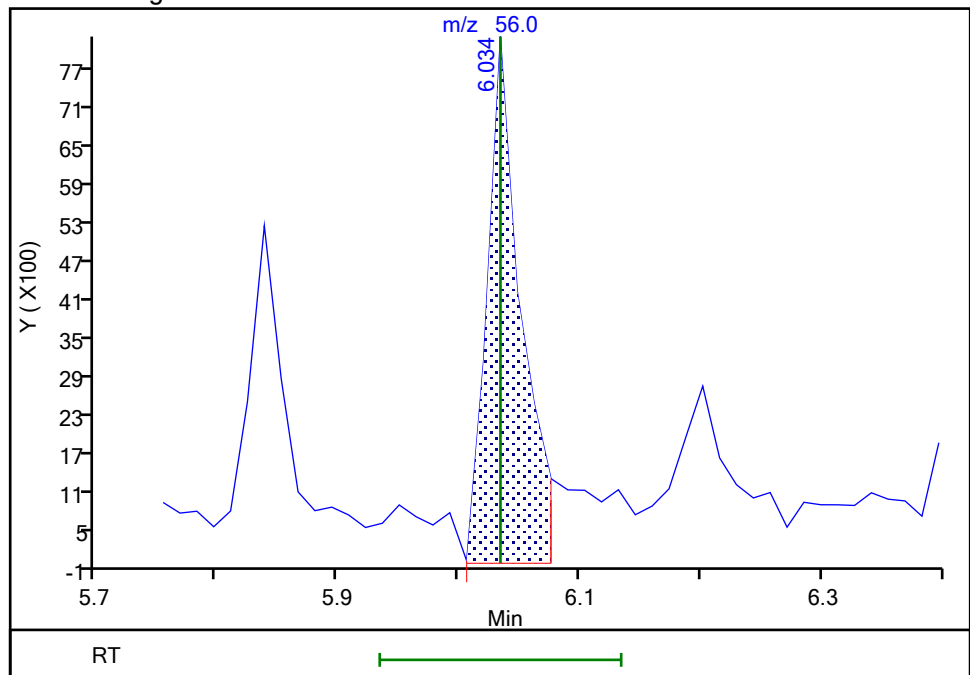
RT: 6.03
Area: 20111
Amount: 324.8890
Amount Units: ug/l

Processing Integration Results



RT: 6.03
Area: 16178
Amount: 271.1985
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 04-Jun-2021 13:35:21

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2716.D
 Lims ID: STD50
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 04-Jun-2021 11:42:30 ALS Bottle#: 5 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD50
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:52 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 12:08:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	769875	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	160270	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260891	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	675626	5000.0	4737.6	
19 Ethanol	45	2.892	2.892	0.000	100	90674	3000.0	2714.6	
21 Propene oxide	58	3.059	3.059	0.000	87	2199226	5000.0	4781.0	
27 Isopropyl alcohol	45	3.394	3.395	0.000	99	76551	500.0	449.9	
29 Acetonitrile	41	3.534	3.534	0.000	99	171419	500.0	473.4	
41 Isopropyl ether	87	4.372	4.372	0.000	92	99914	50.0	48.9	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	216293	50.0	45.2	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	390067	50.0	49.8	
47 Ethyl acetate	43	4.847	4.847	0.000	100	181020	100.0	90.4	
50 Propionitrile	54	4.875	4.875	0.000	98	167396	500.0	470.0	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	708538	500.0	487.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	330078	50.0	48.5	
67 n-Butanol	56	6.034	6.034	0.000	93	71615	1250.0	1136.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	56906	100.0	95.8	
76 2-Nitropropane	41	6.788	6.788	0.000	99	59124	100.0	90.1	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	96	66531	100.0	96.1	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	114331	100.0	89.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	461007	50.0	46.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	93	146215	50.0	48.2	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 50.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:52

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2716.D

Injection Date: 04-Jun-2021 11:42:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD50

Worklist Smp#: 28

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

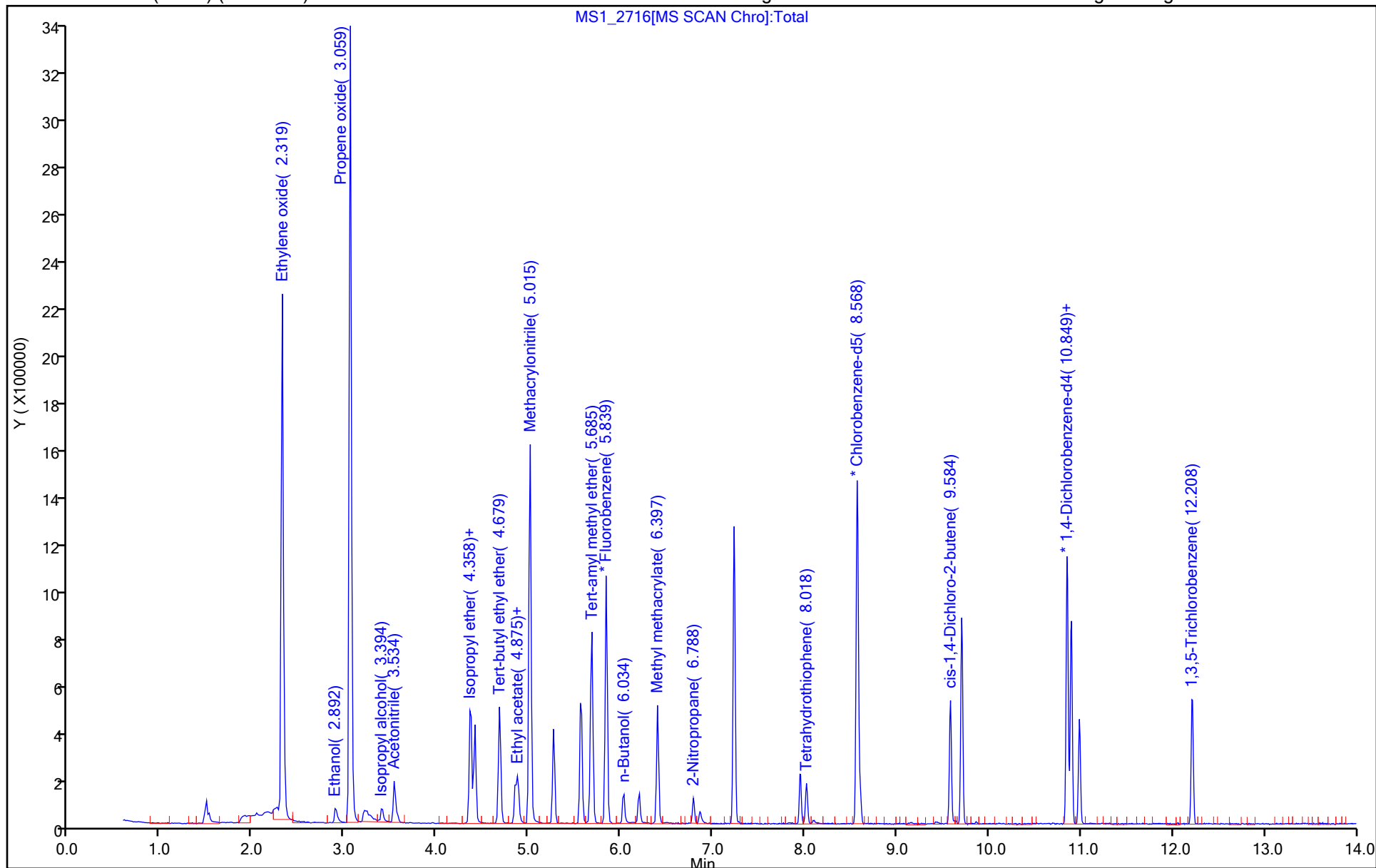
ALS Bottle#: 5

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2717.D
 Lims ID: STD75
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 04-Jun-2021 12:04:30 ALS Bottle#: 6 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD75
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:53 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 12:41:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	777438	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162224	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	250801	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	1036589	7500.0	7588.7	
19 Ethanol	45	2.892	2.892	0.000	99	148252	4500.0	4420.2	
21 Propene oxide	58	3.059	3.059	0.000	87	3412846	7500.0	7347.1	
27 Isopropyl alcohol	45	3.395	3.395	0.000	99	118762	750.0	691.1	
29 Acetonitrile	41	3.534	3.534	0.000	99	262979	750.0	722.0	
41 Isopropyl ether	87	4.372	4.372	0.000	92	155693	75.0	75.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	339131	75.0	70.2	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	598583	75.0	75.7	
47 Ethyl acetate	43	4.847	4.847	0.000	100	295874	150.0	146.3	
50 Propionitrile	54	4.875	4.875	0.000	98	273883	750.0	767.1	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	1112747	750.0	761.0	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	525182	75.0	76.4	
67 n-Butanol	56	6.034	6.034	0.000	90	120882	1875.0	1899.6	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	92850	150.0	154.8	
76 2-Nitropropane	41	6.788	6.788	0.000	99	96340	150.0	148.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	102776	150.0	146.6	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	174974	150.0	142.8	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	711897	75.0	74.7	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	224118	75.0	76.8	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 75.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:54

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2717.D

Injection Date: 04-Jun-2021 12:04:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD75

Worklist Smp#: 29

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

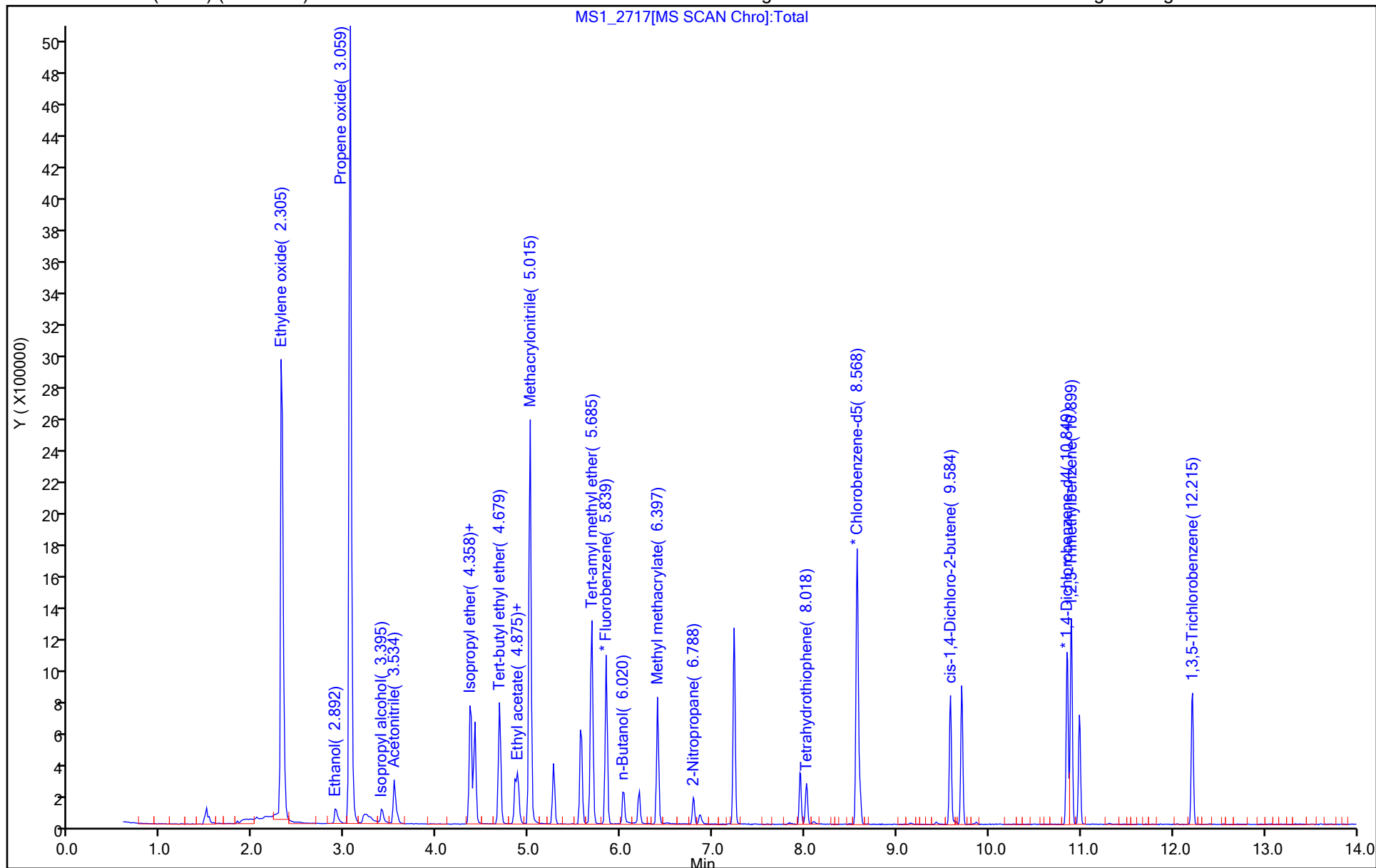
ALS Bottle#: 6

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2718.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 04-Jun-2021 12:25:30 ALS Bottle#: 7 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD100
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:55 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 13:30:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	780425	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162096	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	263349	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	1325947	10000	10136	
19 Ethanol	45	2.892	2.892	0.000	100	189484	6000.0	5638.9	
21 Propene oxide	58	3.059	3.059	0.000	87	4345569	10000	9319.2	
27 Isopropyl alcohol	45	3.394	3.395	-0.001	98	154722	1000.0	897.0	
29 Acetonitrile	41	3.534	3.534	0.000	99	336478	1000.0	921.8	
41 Isopropyl ether	87	4.372	4.372	0.000	92	210233	100.0	101.5	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	453554	100.0	93.5	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	797316	100.0	100.5	
47 Ethyl acetate	43	4.847	4.847	0.000	100	391747	200.0	193.0	
50 Propionitrile	54	4.875	4.875	0.000	98	345991	1000.0	967.7	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	1464721	1000.0	999.3	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	695022	100.0	100.7	
67 n-Butanol	56	6.034	6.034	0.000	92	151525	2500.0	2372.0	
72 Methyl methacrylate	100	6.397	6.397	0.000	89	118435	200.0	196.7	
76 2-Nitropropane	41	6.788	6.788	0.000	99	128713	200.0	199.4	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	135312	200.0	193.2	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	83	229641	200.0	178.5	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	955425	100.0	95.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	305264	100.0	99.6	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 100.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:55

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2718.D

Injection Date: 04-Jun-2021 12:25:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD100

Worklist Smp#: 30

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

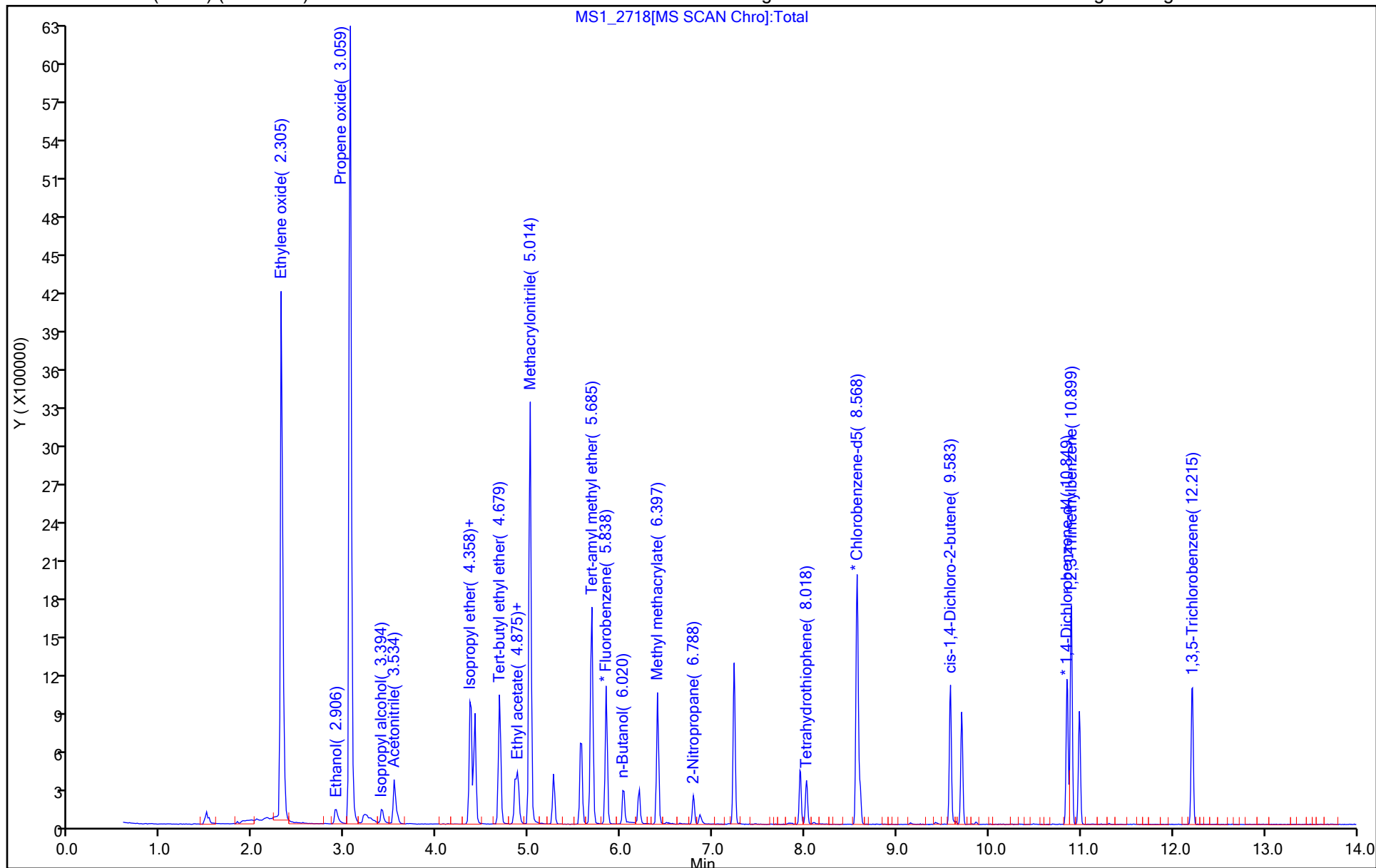
ALS Bottle#: 7

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2719.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 04-Jun-2021 12:47:30 ALS Bottle#: 8 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD200
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:56 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 13:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	786244	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	167037	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260433	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	2156198	20000	19951	
19 Ethanol	45	2.906	2.892	0.014	100	430073	12000	12754	
21 Propene oxide	58	3.059	3.059	0.000	86	9367709	20000	19941	
27 Isopropyl alcohol	45	3.408	3.395	0.013	99	353633	2000.0	2034.9	
29 Acetonitrile	41	3.534	3.534	0.000	99	755055	2000.0	2059.8	
41 Isopropyl ether	87	4.372	4.372	0.000	92	441906	200.0	211.7	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	914862	200.0	187.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	1697935	200.0	212.4	
47 Ethyl acetate	43	4.847	4.847	0.000	100	916063	400.0	448.0	
50 Propionitrile	54	4.875	4.875	0.000	98	788894	2000.0	2201.5	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	3237312	2000.0	2197.5	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	1491195	200.0	214.5	
67 n-Butanol	56	6.034	6.034	0.000	91	380063	5000.0	5905.7	
72 Methyl methacrylate	100	6.397	6.397	0.000	89	265731	400.0	438.2	
76 2-Nitropropane	41	6.788	6.788	0.000	99	294580	400.0	459.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	295899	400.0	410.0	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	84	514731	400.0	404.6	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	1954614	200.0	197.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	630938	200.0	208.2	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 200.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2719.D

Injection Date: 04-Jun-2021 12:47:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD200

Worklist Smp#: 31

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

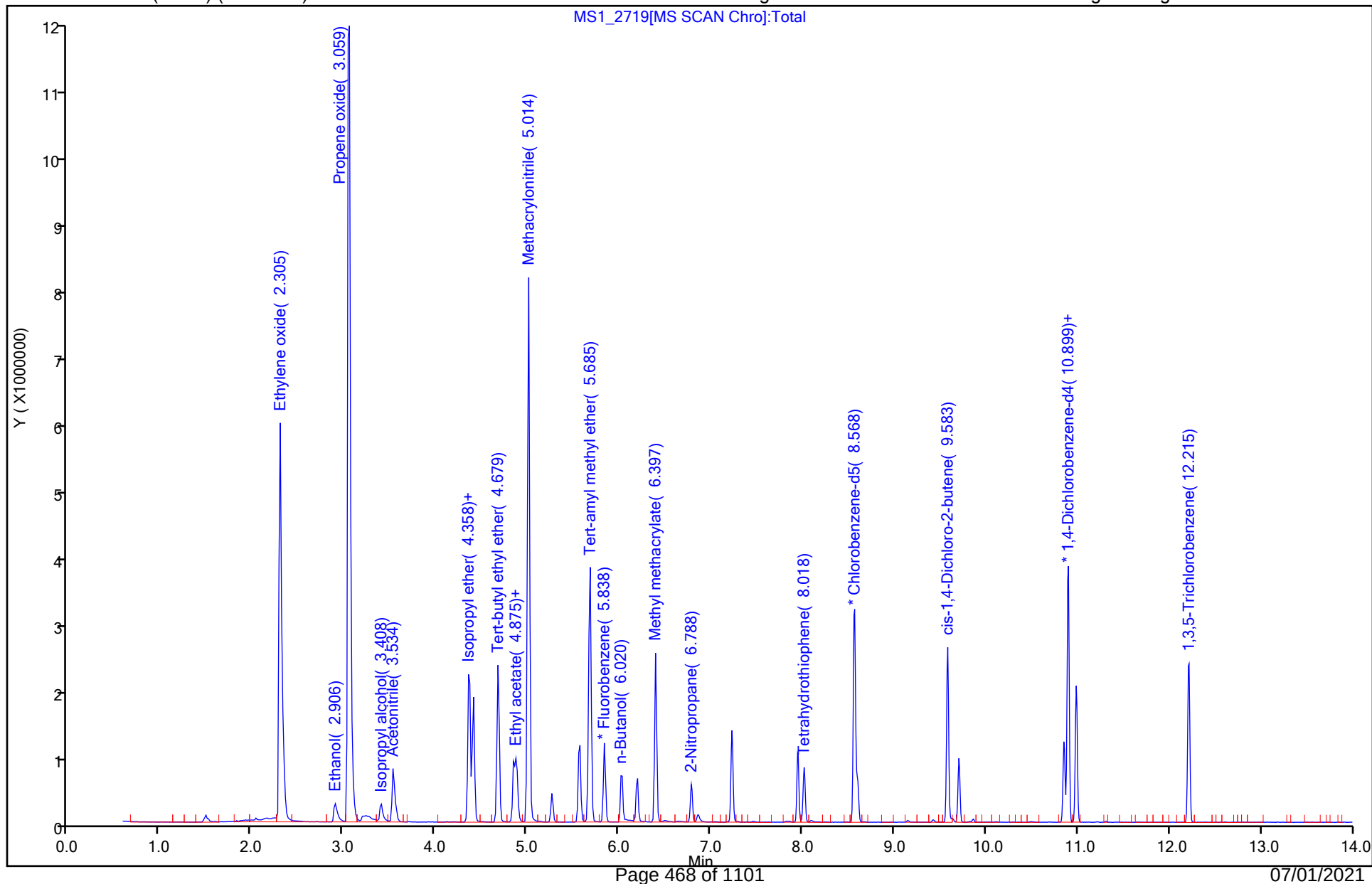
ALS Bottle#: 8

Method: AQ_VMS1_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



Calibration

/ Ethylene oxide

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

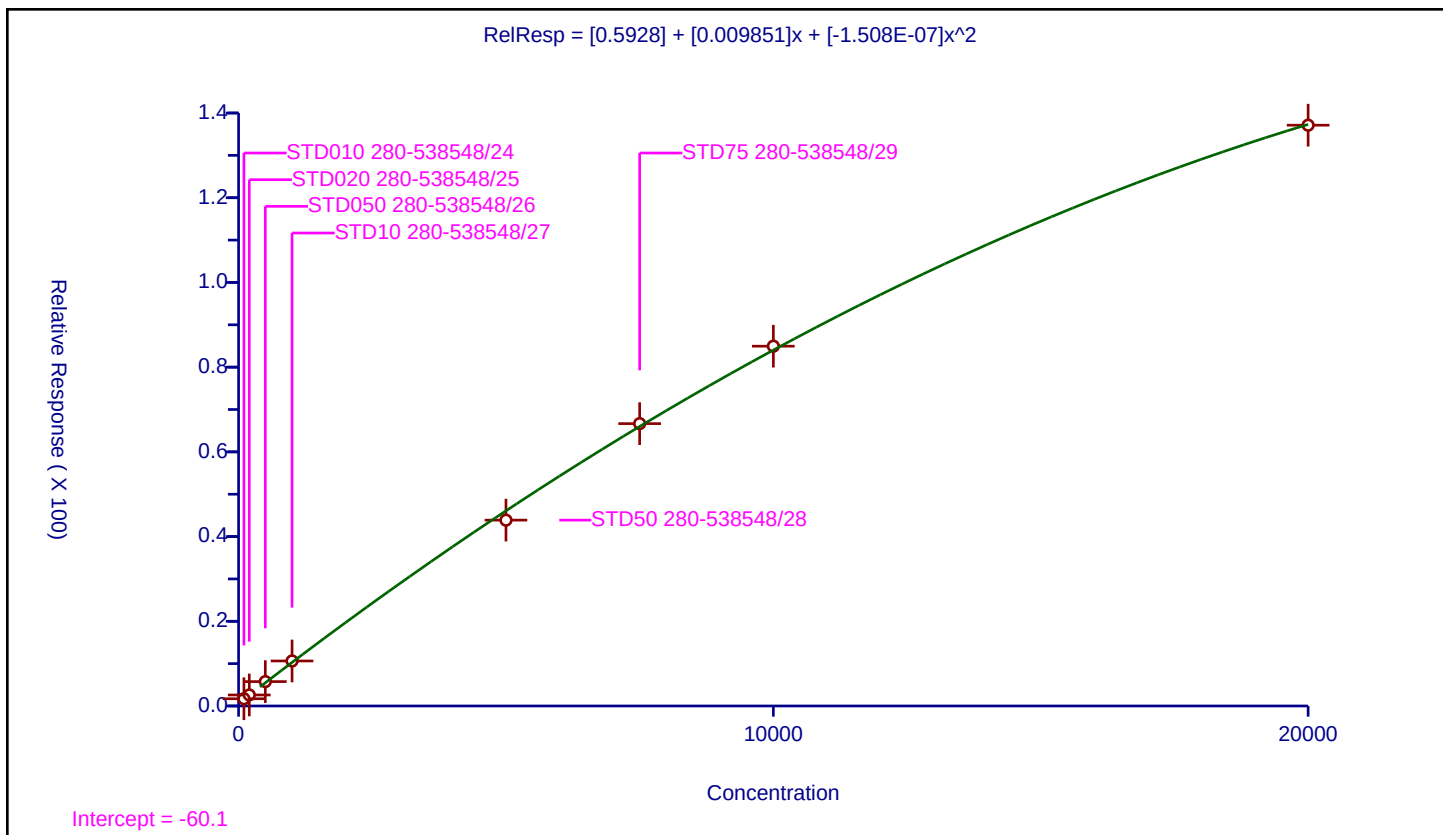
Curve Coefficients

Intercept: 0.5928
 Slope: 0.009851
 Second Order: -1.508E-07

Error Coefficients

Standard Error: 1260000
 Relative Standard Error: 7.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	100.0	1.707512	50.0	763333.0	0.017075	Y
2	STD020 280-538548/25	200.0	2.603198	50.0	732042.0	0.013016	Y
3	STD050 280-538548/26	500.0	5.759784	50.0	735722.0	0.01152	Y
4	STD10 280-538548/27	1000.0	10.62894	50.0	728798.0	0.010629	Y
5	STD50 280-538548/28	5000.0	43.878941	50.0	769875.0	0.008776	Y
6	STD75 280-538548/29	7500.0	66.666988	50.0	777438.0	0.008889	Y
7	STD100 280-538548/30	10000.0	84.950316	50.0	780425.0	0.008495	Y
8	STD200 280-538548/31	20000.0	137.120156	50.0	786244.0	0.006856	Y



Calibration

/ Ethanol

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

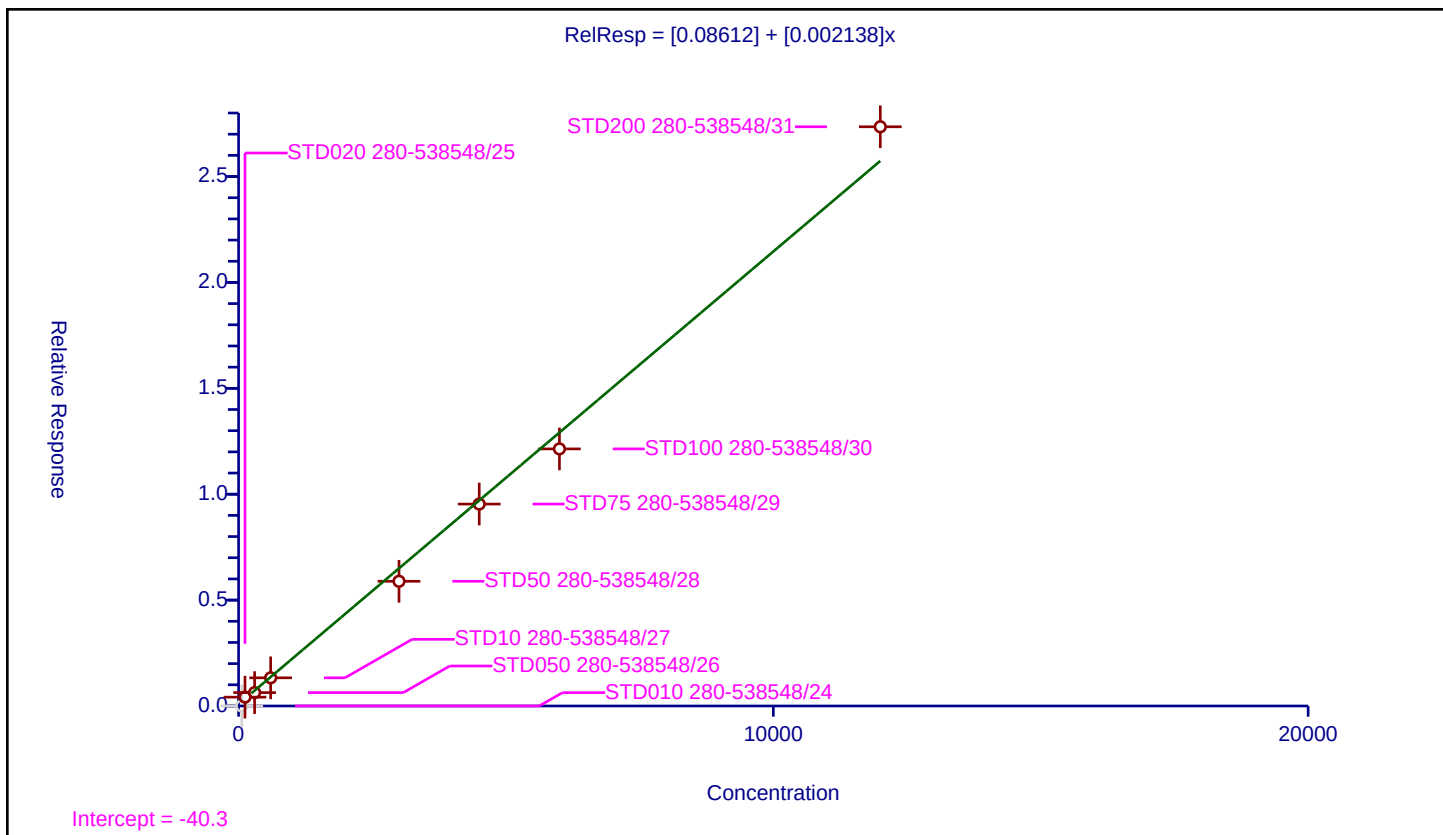
Curve Coefficients

Intercept: 0.08612
 Slope: 0.002138

Error Coefficients

Standard Error: 224000
 Relative Standard Error: 15.7
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	60.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	120.0	0.416916	50.0	732042.0	0.003474	Y
3	STD050 280-538548/26	300.0	0.631692	50.0	735722.0	0.002106	Y
4	STD10 280-538548/27	600.0	1.329998	50.0	728798.0	0.002217	Y
5	STD50 280-538548/28	3000.0	5.888878	50.0	769875.0	0.001963	Y
6	STD75 280-538548/29	4500.0	9.534651	50.0	777438.0	0.002119	Y
7	STD100 280-538548/30	6000.0	12.139796	50.0	780425.0	0.002023	Y
8	STD200 280-538548/31	12000.0	27.349843	50.0	786244.0	0.002279	Y



Calibration

/ Propene oxide

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

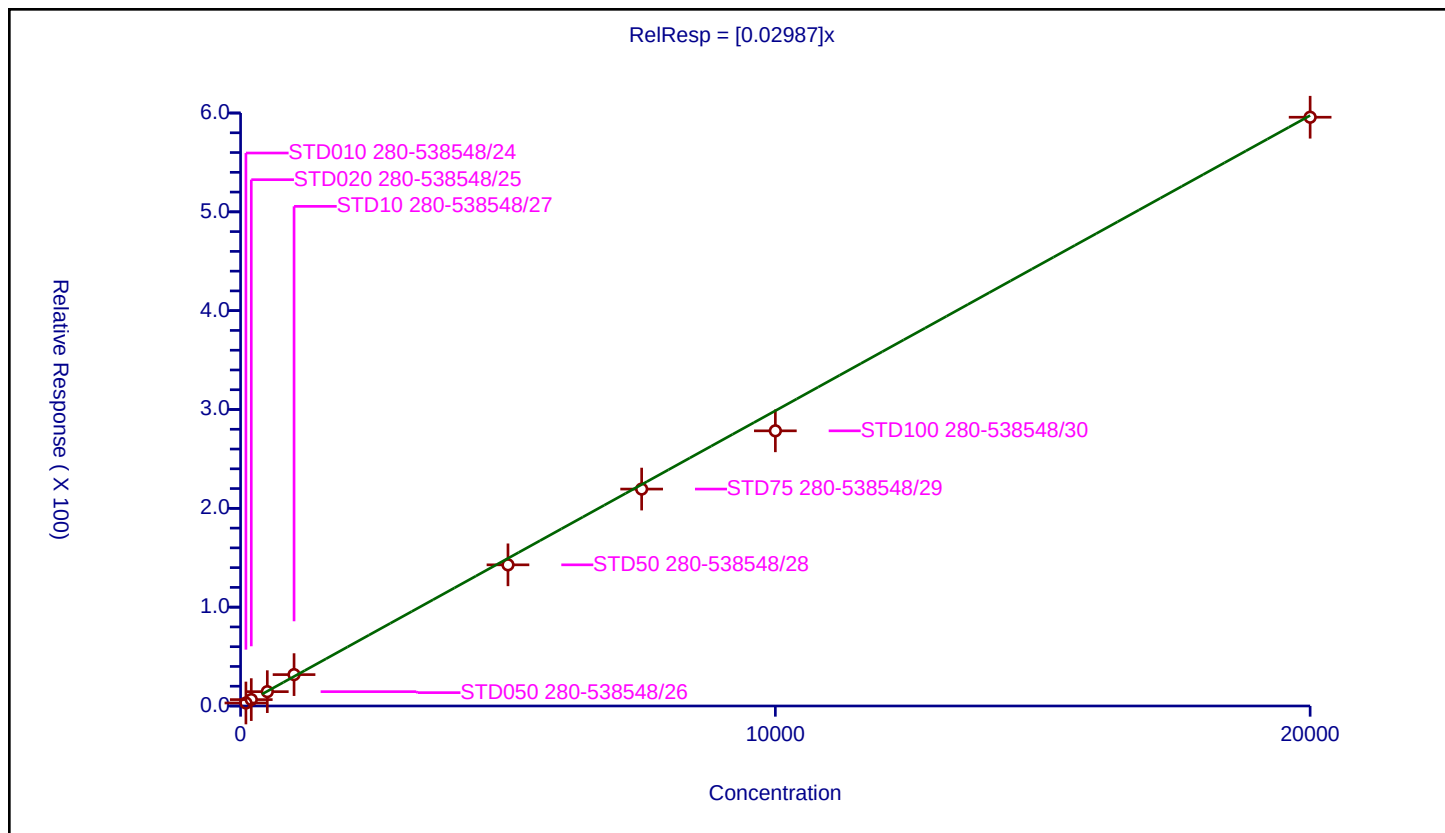
Curve Coefficients

Intercept: 0
Slope: 0.02987

Error Coefficients

Standard Error: 4200000
Relative Standard Error: 5.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	100.0	3.046508	50.0	763333.0	0.030465	Y
2	STD020 280-538548/25	200.0	6.463632	50.0	732042.0	0.032318	Y
3	STD050 280-538548/26	500.0	14.506023	50.0	735722.0	0.029012	Y
4	STD10 280-538548/27	1000.0	31.743913	50.0	728798.0	0.031744	Y
5	STD50 280-538548/28	5000.0	142.83007	50.0	769875.0	0.028566	Y
6	STD75 280-538548/29	7500.0	219.49313	50.0	777438.0	0.029266	Y
7	STD100 280-538548/30	10000.0	278.410417	50.0	780425.0	0.027841	Y
8	STD200 280-538548/31	20000.0	595.725309	50.0	786244.0	0.029786	Y



Calibration

/ Isopropyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

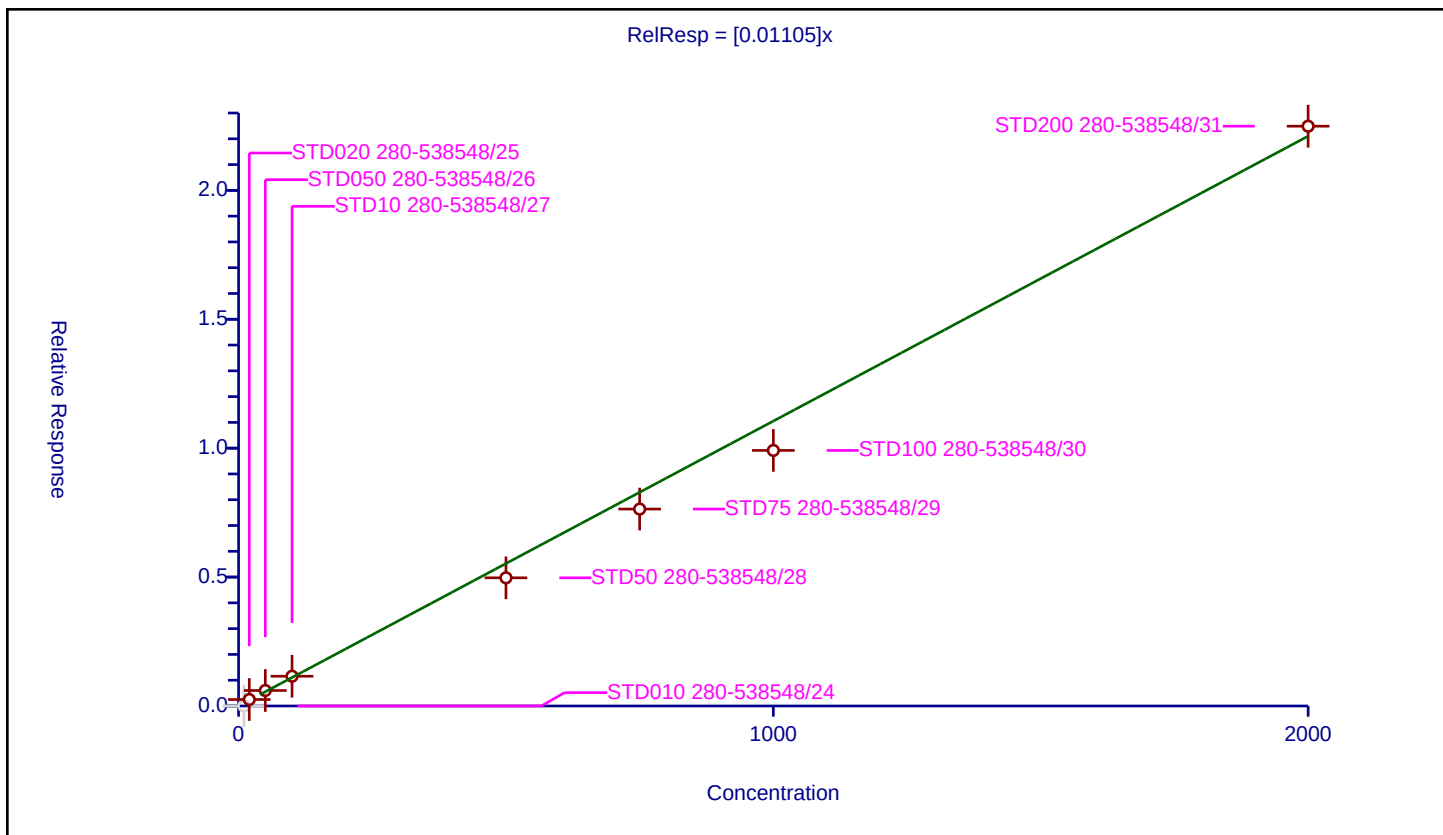
Curve Coefficients

Intercept: 0
 Slope: 0.01105

Error Coefficients

Standard Error: 168000
 Relative Standard Error: 9.5
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	20.0	0.250532	50.0	732042.0	0.012527	Y
3	STD050 280-538548/26	50.0	0.600634	50.0	735722.0	0.012013	Y
4	STD10 280-538548/27	100.0	1.15368	50.0	728798.0	0.011537	Y
5	STD50 280-538548/28	500.0	4.971651	50.0	769875.0	0.009943	Y
6	STD75 280-538548/29	750.0	7.638037	50.0	777438.0	0.010184	Y
7	STD100 280-538548/30	1000.0	9.912676	50.0	780425.0	0.009913	Y
8	STD200 280-538548/31	2000.0	22.488757	50.0	786244.0	0.011244	Y



Calibration

/ Acetonitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

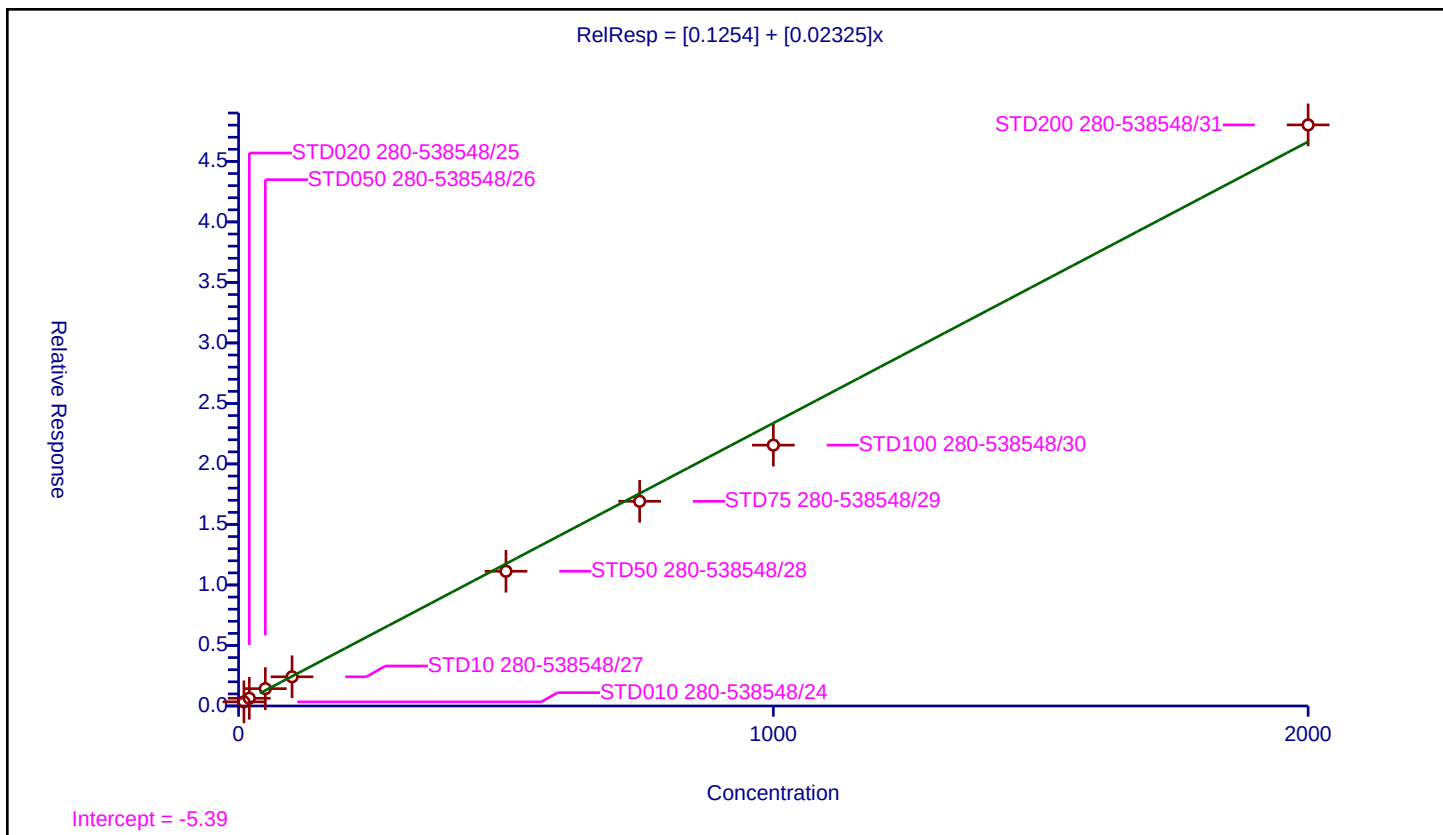
Curve Coefficients

Intercept: 0.1254
 Slope: 0.02325

Error Coefficients

Standard Error: 361000
 Relative Standard Error: 8.5
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.34107	50.0	763333.0	0.034107	Y
2	STD020 280-538548/25	20.0	0.638078	50.0	732042.0	0.031904	Y
3	STD050 280-538548/26	50.0	1.433558	50.0	735722.0	0.028671	Y
4	STD10 280-538548/27	100.0	2.411985	50.0	728798.0	0.02412	Y
5	STD50 280-538548/28	500.0	11.132911	50.0	769875.0	0.022266	Y
6	STD75 280-538548/29	750.0	16.913182	50.0	777438.0	0.022551	Y
7	STD100 280-538548/30	1000.0	21.557357	50.0	780425.0	0.021557	Y
8	STD200 280-538548/31	2000.0	48.016583	50.0	786244.0	0.024008	Y



Calibration

/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

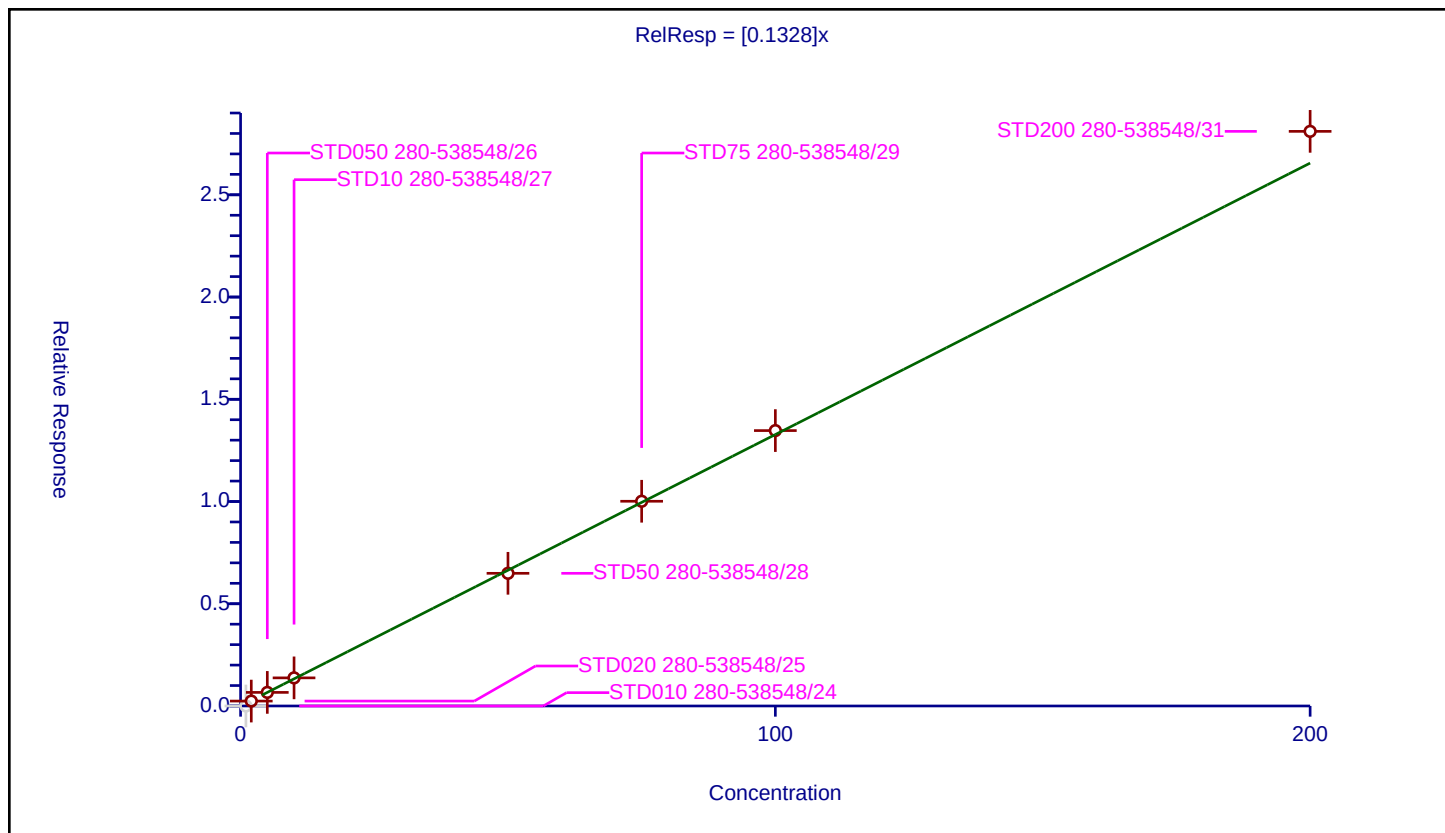
Curve Coefficients

Intercept: 0
 Slope: 0.1328

Error Coefficients

Standard Error: 214000
 Relative Standard Error: 4.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	2.0	0.240901	50.0	732042.0	0.120451	Y
3	STD050 280-538548/26	5.0	0.663906	50.0	735722.0	0.132781	Y
4	STD10 280-538548/27	10.0	1.37569	50.0	728798.0	0.137569	Y
5	STD50 280-538548/28	50.0	6.488975	50.0	769875.0	0.12978	Y
6	STD75 280-538548/29	75.0	10.01321	50.0	777438.0	0.133509	Y
7	STD100 280-538548/30	100.0	13.469135	50.0	780425.0	0.134691	Y
8	STD200 280-538548/31	200.0	28.102345	50.0	786244.0	0.140512	Y



Calibration

/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

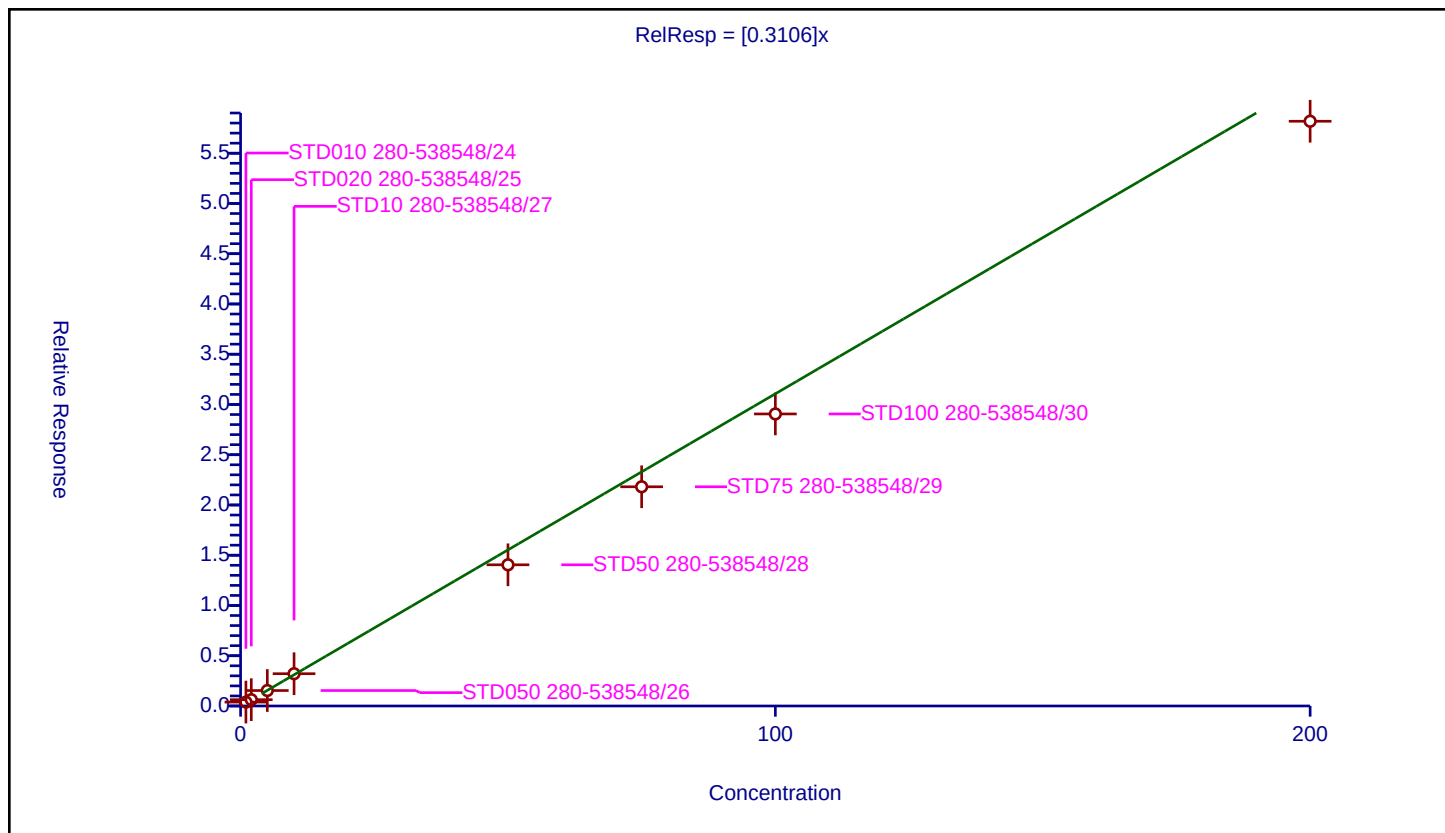
Curve Coefficients

Intercept: 0
 Slope: 0.3106

Error Coefficients

Standard Error: 415000
 Relative Standard Error: 11.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.389738	50.0	763333.0	0.389738	Y
2	STD020 280-538548/25	2.0	0.627355	50.0	732042.0	0.313677	Y
3	STD050 280-538548/26	5.0	1.536722	50.0	735722.0	0.307344	Y
4	STD10 280-538548/27	10.0	3.211178	50.0	728798.0	0.321118	Y
5	STD50 280-538548/28	50.0	14.04728	50.0	769875.0	0.280946	Y
6	STD75 280-538548/29	75.0	21.810807	50.0	777438.0	0.290811	Y
7	STD100 280-538548/30	100.0	29.058141	50.0	780425.0	0.290581	Y
8	STD200 280-538548/31	200.0	58.179268	50.0	786244.0	0.290896	Y



Calibration

/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

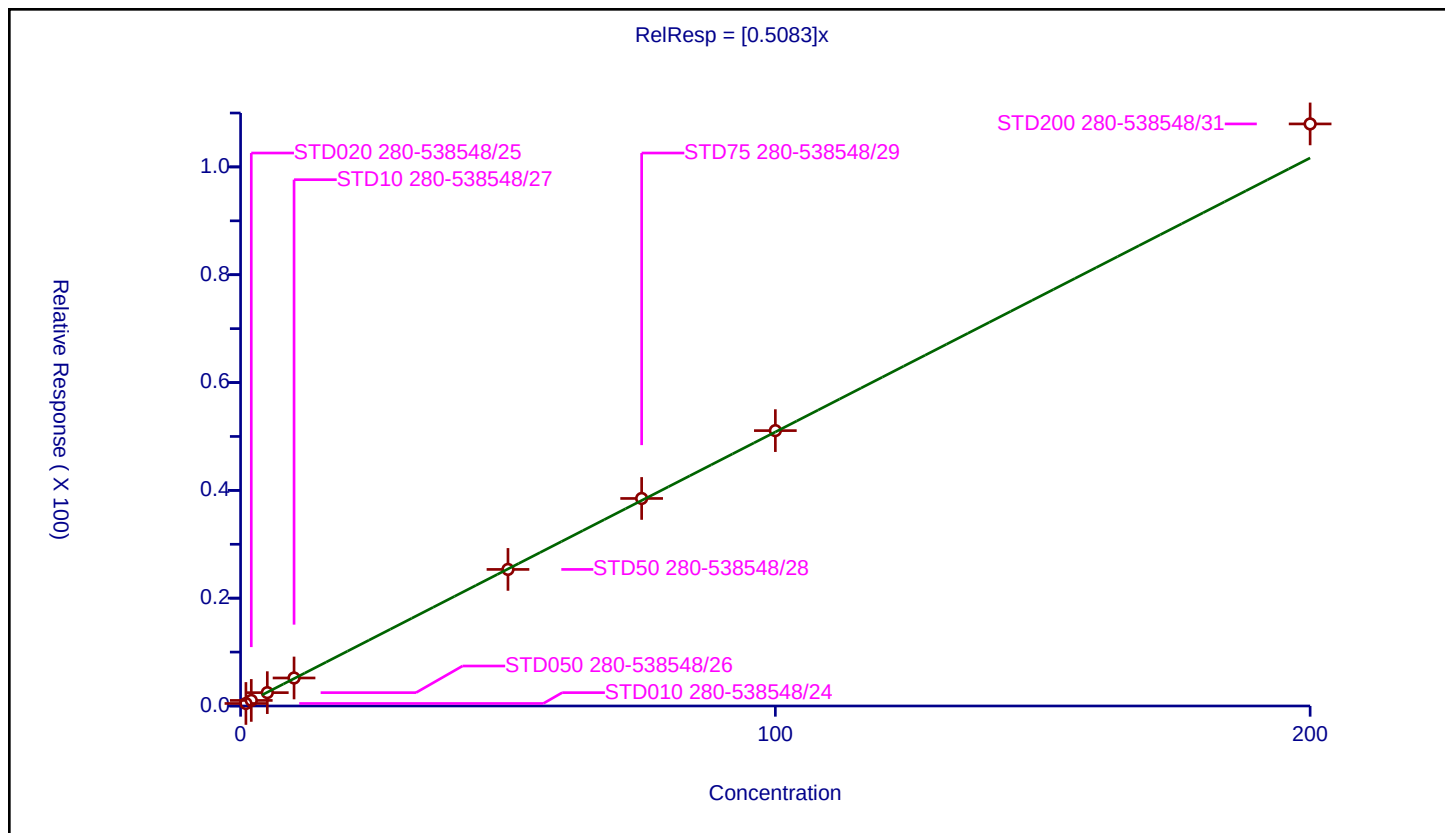
Curve Coefficients

Intercept: 0
 Slope: 0.5083

Error Coefficients

Standard Error: 759000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.466048	50.0	763333.0	0.466048	Y
2	STD020 280-538548/25	2.0	1.031498	50.0	732042.0	0.515749	Y
3	STD050 280-538548/26	5.0	2.473421	50.0	735722.0	0.494684	Y
4	STD10 280-538548/27	10.0	5.194649	50.0	728798.0	0.519465	Y
5	STD50 280-538548/28	50.0	25.333138	50.0	769875.0	0.506663	Y
6	STD75 280-538548/29	75.0	38.497153	50.0	777438.0	0.513295	Y
7	STD100 280-538548/30	100.0	51.082167	50.0	780425.0	0.510822	Y
8	STD200 280-538548/31	200.0	107.977613	50.0	786244.0	0.539888	Y



Calibration

/ Ethyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

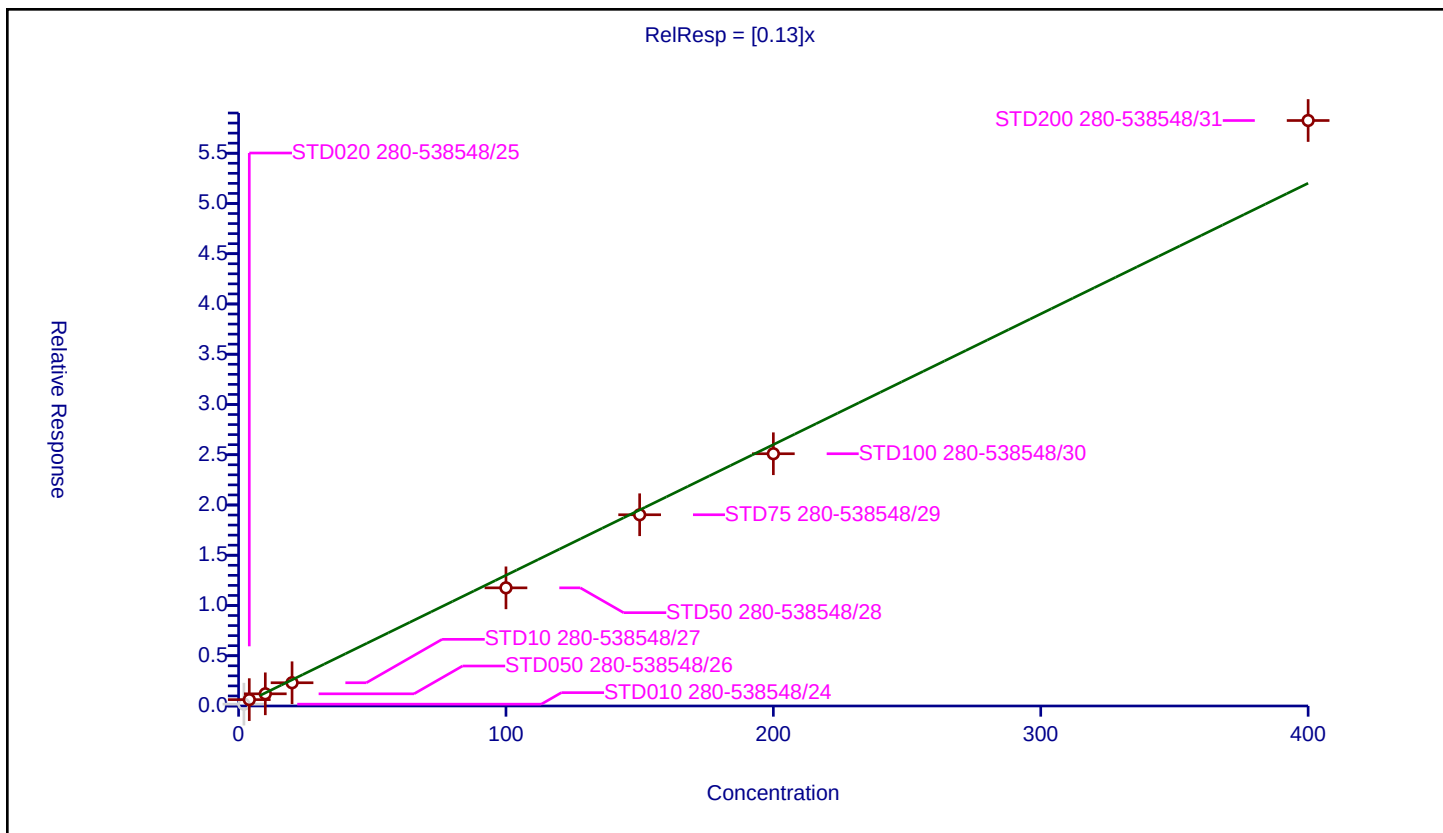
Curve Coefficients

Intercept: 0
 Slope: 0.13

Error Coefficients

Standard Error: 431000
 Relative Standard Error: 12.1
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.18262	50.0	763333.0	0.09131	N
2	STD020 280-538548/25	4.0	0.631521	50.0	732042.0	0.15788	Y
3	STD050 280-538548/26	10.0	1.211735	50.0	735722.0	0.121173	Y
4	STD10 280-538548/27	20.0	2.313055	50.0	728798.0	0.115653	Y
5	STD50 280-538548/28	100.0	11.756454	50.0	769875.0	0.117565	Y
6	STD75 280-538548/29	150.0	19.028784	50.0	777438.0	0.126859	Y
7	STD100 280-538548/30	200.0	25.098312	50.0	780425.0	0.125492	Y
8	STD200 280-538548/31	400.0	58.255643	50.0	786244.0	0.145639	Y



Calibration

/ Propionitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

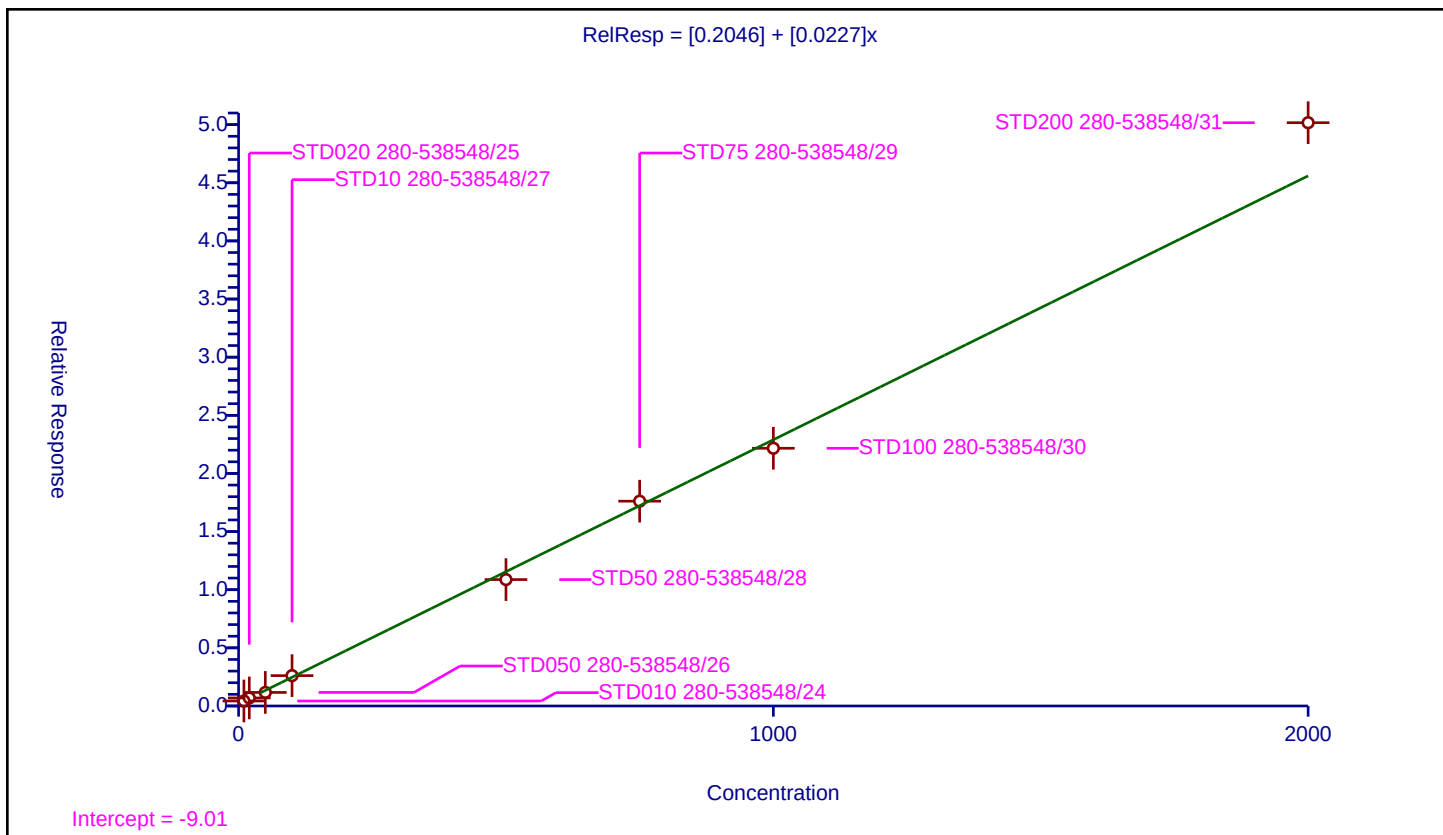
Curve Coefficients

Intercept: 0.2046
 Slope: 0.0227

Error Coefficients

Standard Error: 376000
 Relative Standard Error: 8.9
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.42917	50.0	763333.0	0.042917	Y
2	STD020 280-538548/25	20.0	0.690876	50.0	732042.0	0.034544	Y
3	STD050 280-538548/26	50.0	1.166269	50.0	735722.0	0.023325	Y
4	STD10 280-538548/27	100.0	2.611217	50.0	728798.0	0.026112	Y
5	STD50 280-538548/28	500.0	10.871635	50.0	769875.0	0.021743	Y
6	STD75 280-538548/29	750.0	17.614459	50.0	777438.0	0.023486	Y
7	STD100 280-538548/30	1000.0	22.166832	50.0	780425.0	0.022167	Y
8	STD200 280-538548/31	2000.0	50.168523	50.0	786244.0	0.025084	Y



Calibration

/ Methacrylonitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

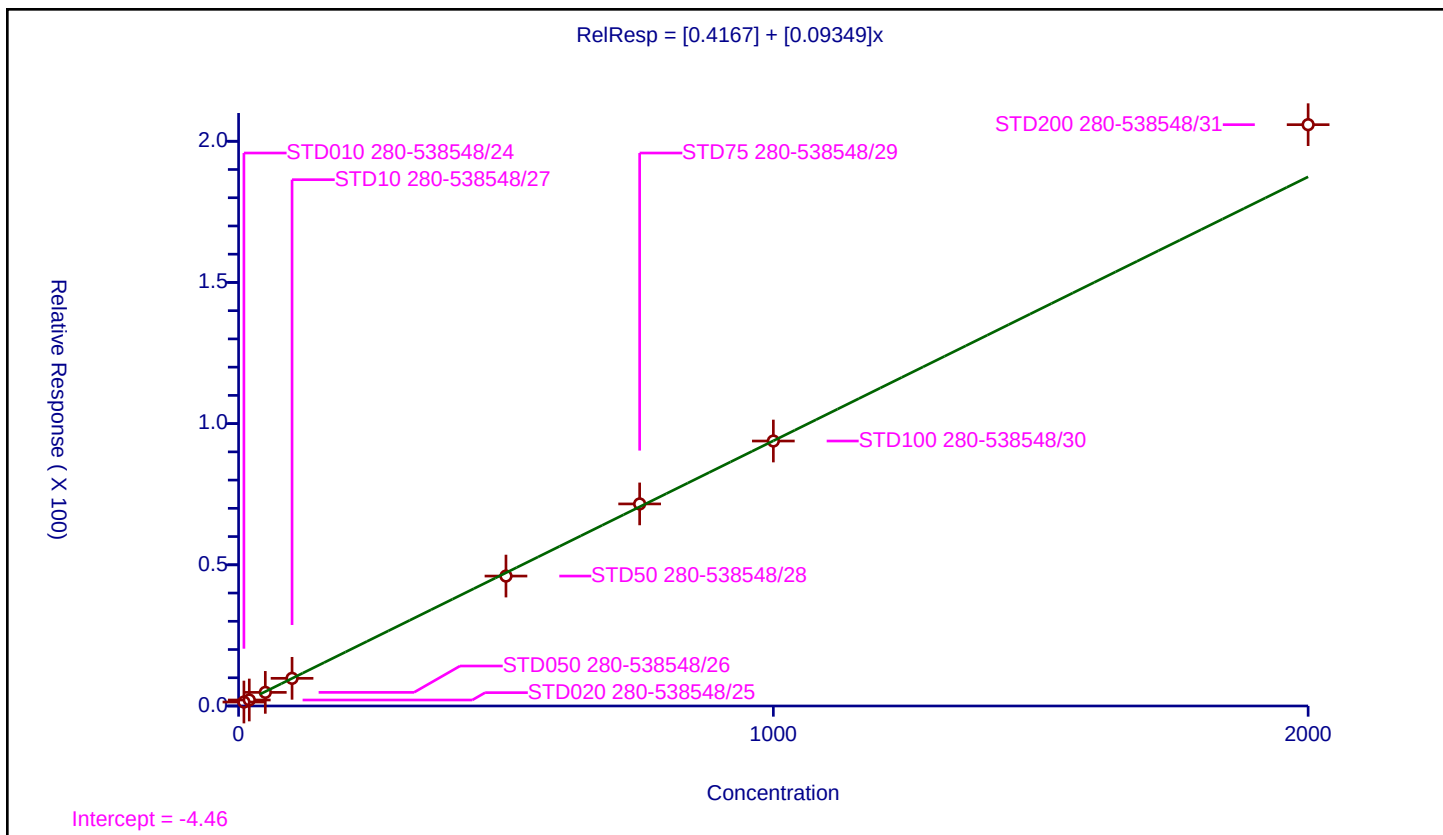
Curve Coefficients

Intercept: 0.4167
 Slope: 0.09349

Error Coefficients

Standard Error: 1550000
 Relative Standard Error: 6.4
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	1.403254	50.0	763333.0	0.140325	Y
2	STD020 280-538548/25	20.0	2.121668	50.0	732042.0	0.106083	Y
3	STD050 280-538548/26	50.0	4.819483	50.0	735722.0	0.09639	Y
4	STD10 280-538548/27	100.0	9.794003	50.0	728798.0	0.09794	Y
5	STD50 280-538548/28	500.0	46.016431	50.0	769875.0	0.092033	Y
6	STD75 280-538548/29	750.0	71.564999	50.0	777438.0	0.09542	Y
7	STD100 280-538548/30	1000.0	93.84124	50.0	780425.0	0.093841	Y
8	STD200 280-538548/31	2000.0	205.871968	50.0	786244.0	0.102936	Y



Calibration

/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

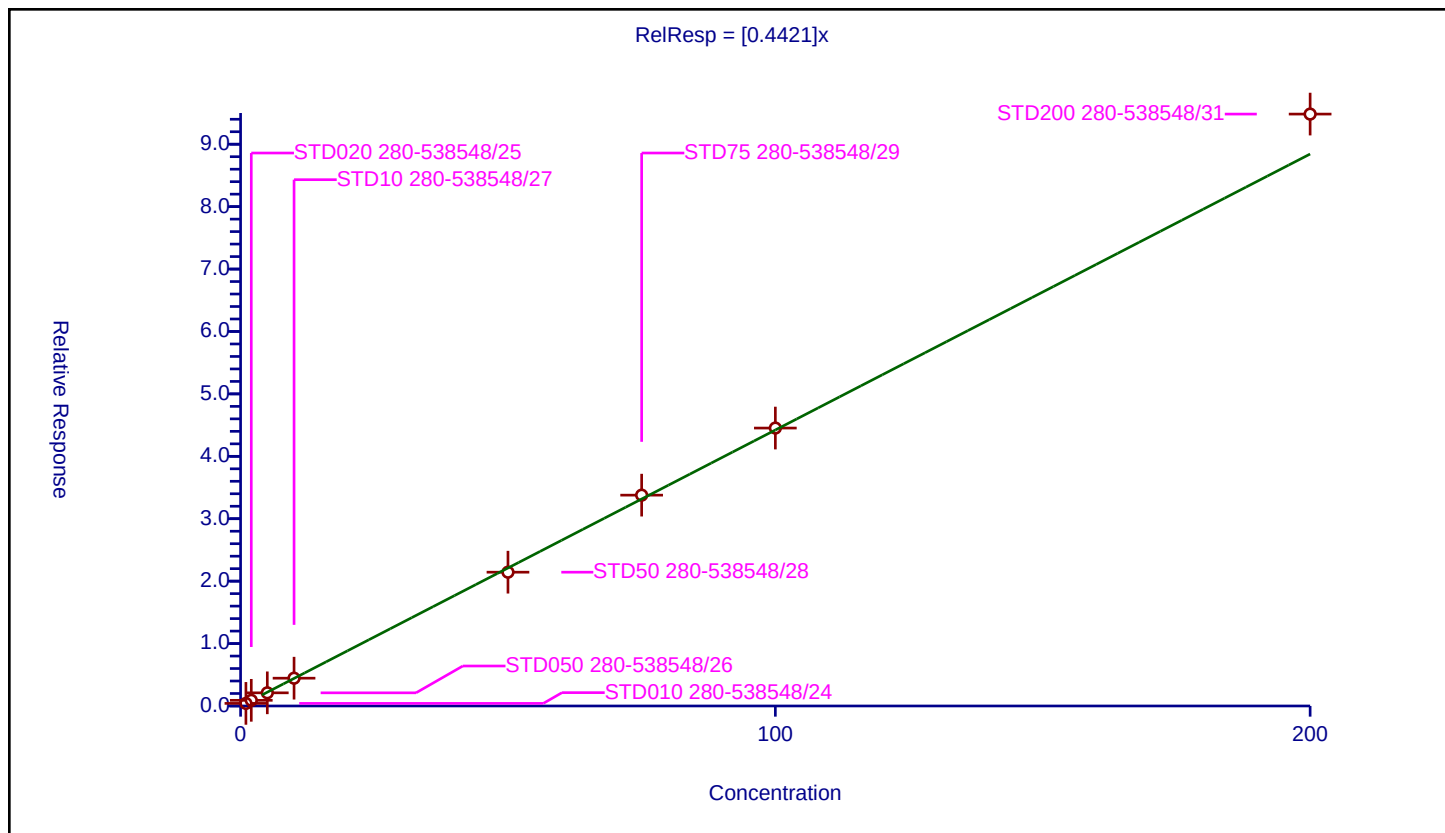
Curve Coefficients

Intercept: 0
 Slope: 0.4421

Error Coefficients

Standard Error: 665000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.418559	50.0	763333.0	0.418559	Y
2	STD020 280-538548/25	2.0	0.906915	50.0	732042.0	0.453458	Y
3	STD050 280-538548/26	5.0	2.10691	50.0	735722.0	0.421382	Y
4	STD10 280-538548/27	10.0	4.452468	50.0	728798.0	0.445247	Y
5	STD50 280-538548/28	50.0	21.437116	50.0	769875.0	0.428742	Y
6	STD75 280-538548/29	75.0	33.776455	50.0	777438.0	0.450353	Y
7	STD100 280-538548/30	100.0	44.52843	50.0	780425.0	0.445284	Y
8	STD200 280-538548/31	200.0	94.830294	50.0	786244.0	0.474151	Y



Calibration

/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

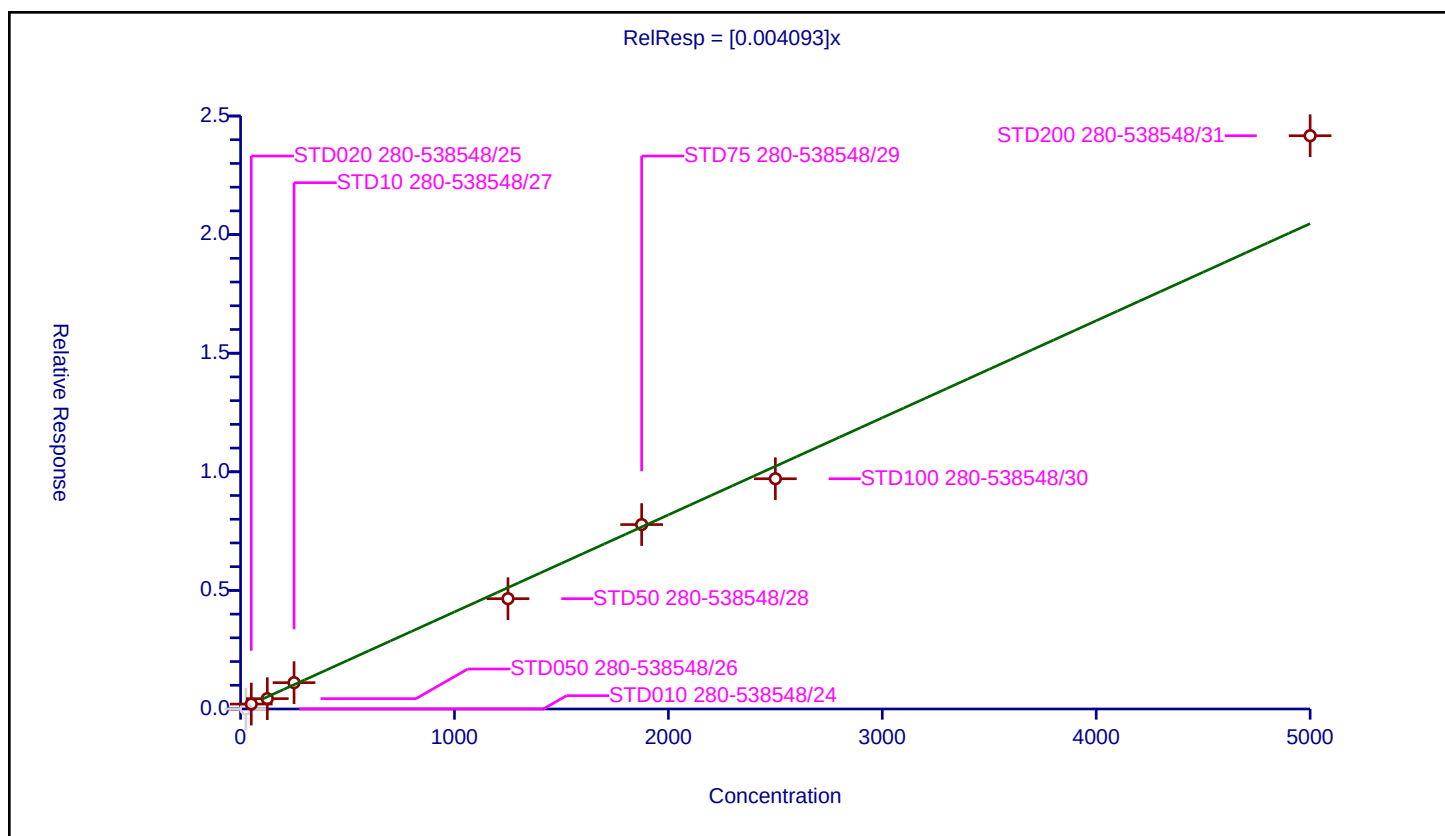
Curve Coefficients

Intercept: 0
 Slope: 0.004093

Error Coefficients

Standard Error: 177000
 Relative Standard Error: 11.0
 Correlation Coefficient: 0.988
 Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	25.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	50.0	0.206887	50.0	732042.0	0.004138	Y
3	STD050 280-538548/26	125.0	0.43583	50.0	735722.0	0.003487	Y
4	STD10 280-538548/27	250.0	1.10991	50.0	728798.0	0.00444	Y
5	STD50 280-538548/28	1250.0	4.65108	50.0	769875.0	0.003721	Y
6	STD75 280-538548/29	1875.0	7.774382	50.0	777438.0	0.004146	Y
7	STD100 280-538548/30	2500.0	9.707851	50.0	780425.0	0.003883	Y
8	STD200 280-538548/31	5000.0	24.169533	50.0	786244.0	0.004834	Y



Calibration

/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

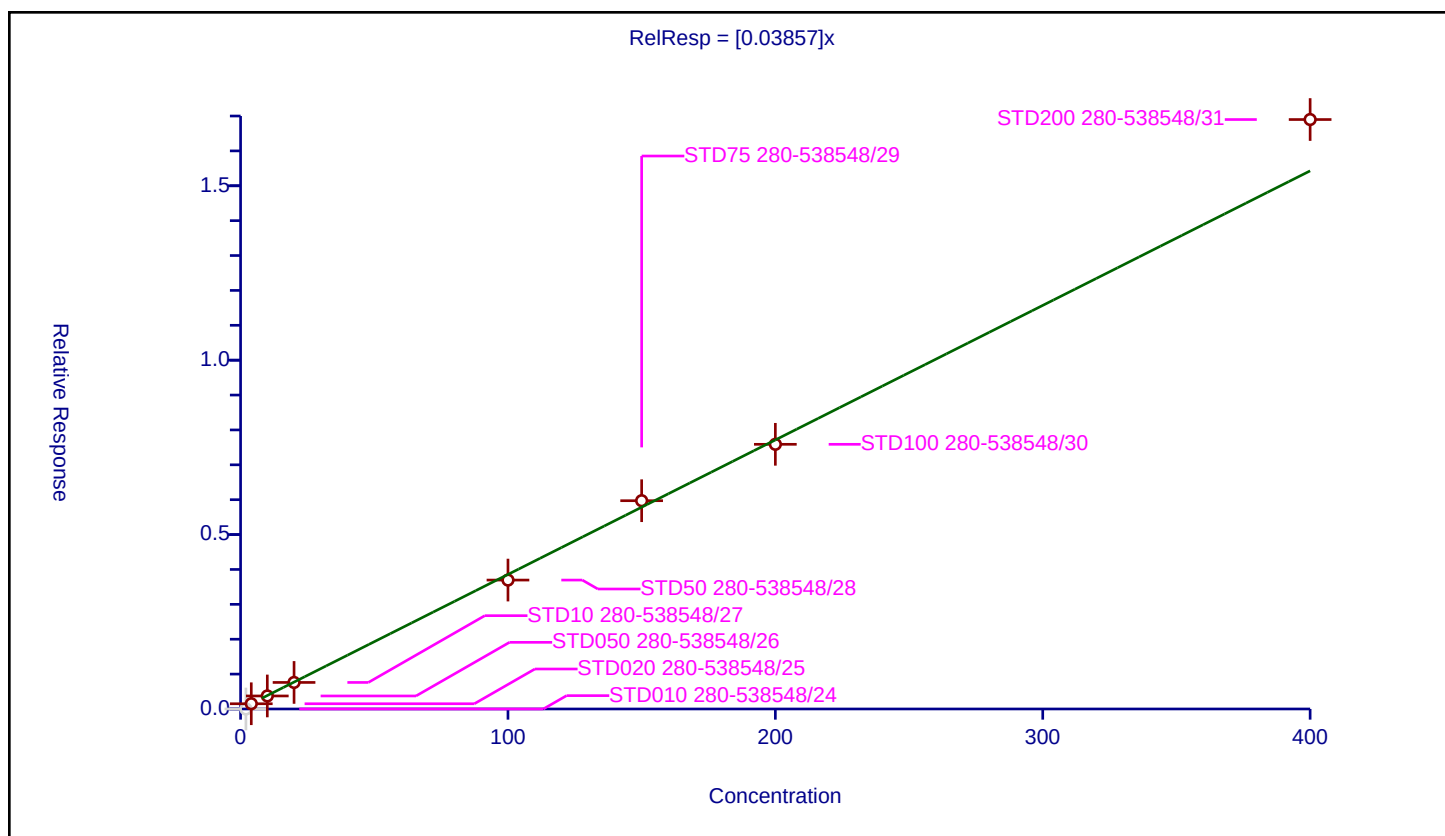
Curve Coefficients

Intercept: 0
 Slope: 0.03857

Error Coefficients

Standard Error: 127000
 Relative Standard Error: 4.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	4.0	0.150401	50.0	732042.0	0.0376	Y
3	STD050 280-538548/26	10.0	0.373579	50.0	735722.0	0.037358	Y
4	STD10 280-538548/27	20.0	0.761253	50.0	728798.0	0.038063	Y
5	STD50 280-538548/28	100.0	3.695795	50.0	769875.0	0.036958	Y
6	STD75 280-538548/29	150.0	5.971537	50.0	777438.0	0.03981	Y
7	STD100 280-538548/30	200.0	7.587853	50.0	780425.0	0.037939	Y
8	STD200 280-538548/31	400.0	16.898762	50.0	786244.0	0.042247	Y



Calibration

/ 2-Nitropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

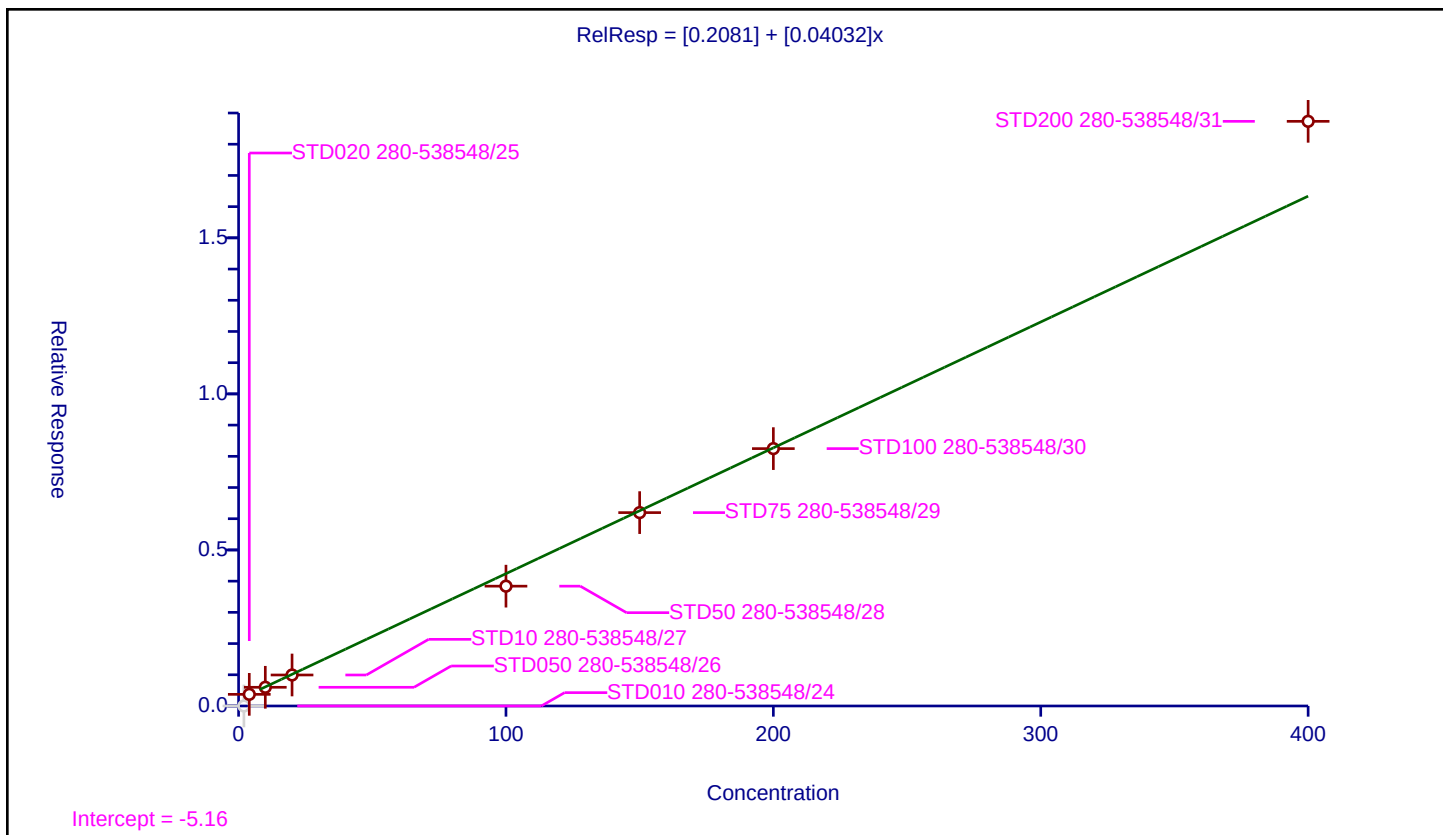
Curve Coefficients

Intercept: 0.2081
 Slope: 0.04032

Error Coefficients

Standard Error: 153000
 Relative Standard Error: 8.3
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	4.0	0.372588	50.0	732042.0	0.093147	Y
3	STD050 280-538548/26	10.0	0.599275	50.0	735722.0	0.059928	Y
4	STD10 280-538548/27	20.0	0.992936	50.0	728798.0	0.049647	Y
5	STD50 280-538548/28	100.0	3.839844	50.0	769875.0	0.038398	Y
6	STD75 280-538548/29	150.0	6.195992	50.0	777438.0	0.041307	Y
7	STD100 280-538548/30	200.0	8.24634	50.0	780425.0	0.041232	Y
8	STD200 280-538548/31	400.0	18.73337	50.0	786244.0	0.046833	Y



Calibration

/ Tetrahydrothiophene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

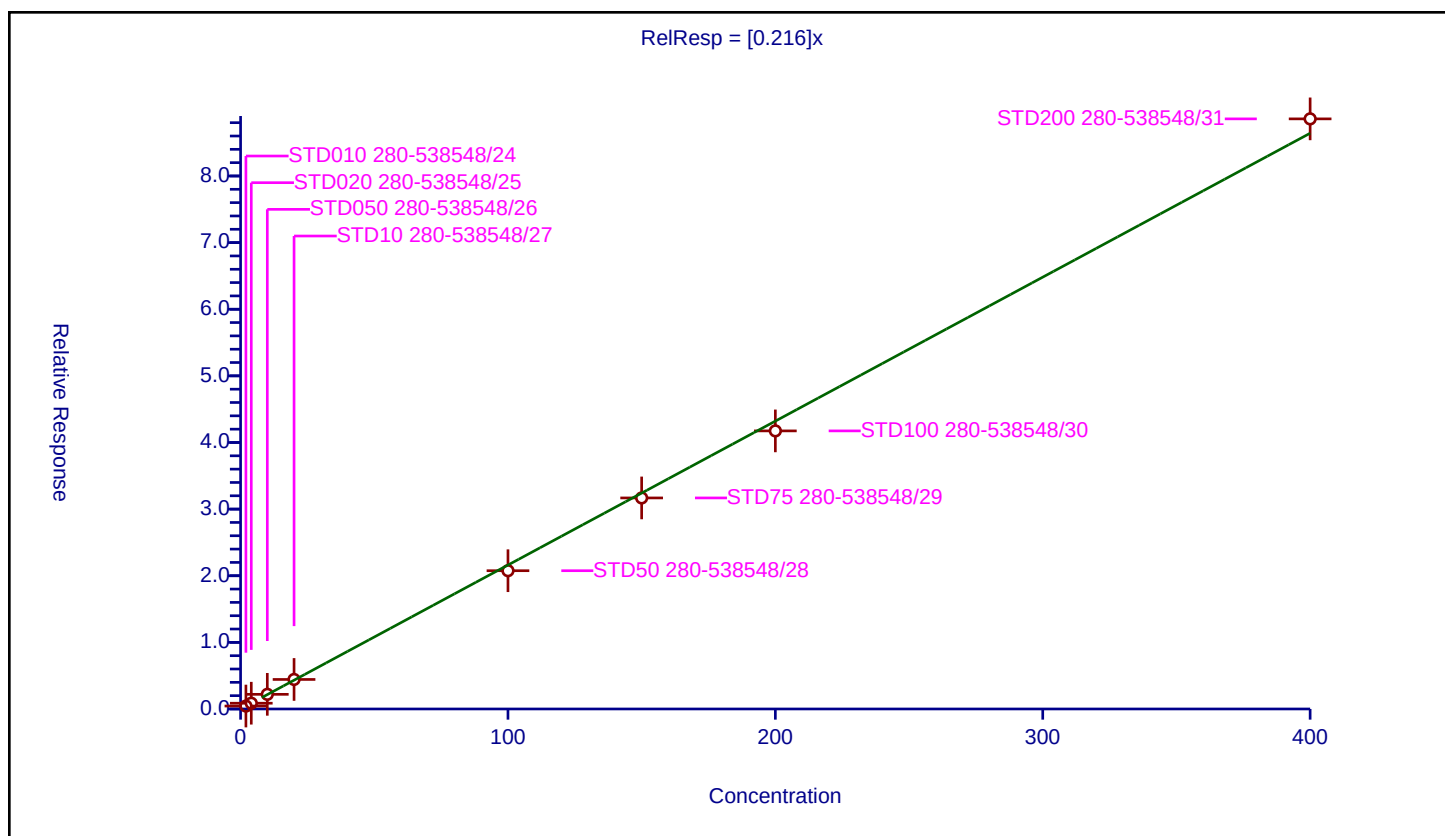
Curve Coefficients

Intercept: 0
Slope: 0.216

Error Coefficients

Standard Error: 131000
Relative Standard Error: 2.8
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.441929	50.0	162017.0	0.220964	Y
2	STD020 280-538548/25	4.0	0.868447	50.0	156659.0	0.217112	Y
3	STD050 280-538548/26	10.0	2.197542	50.0	160452.0	0.219754	Y
4	STD10 280-538548/27	20.0	4.432683	50.0	155504.0	0.221634	Y
5	STD50 280-538548/28	100.0	20.755912	50.0	160270.0	0.207559	Y
6	STD75 280-538548/29	150.0	31.677187	50.0	162224.0	0.211181	Y
7	STD100 280-538548/30	200.0	41.738229	50.0	162096.0	0.208691	Y
8	STD200 280-538548/31	400.0	88.572891	50.0	167037.0	0.221432	Y



Calibration

/ cis-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

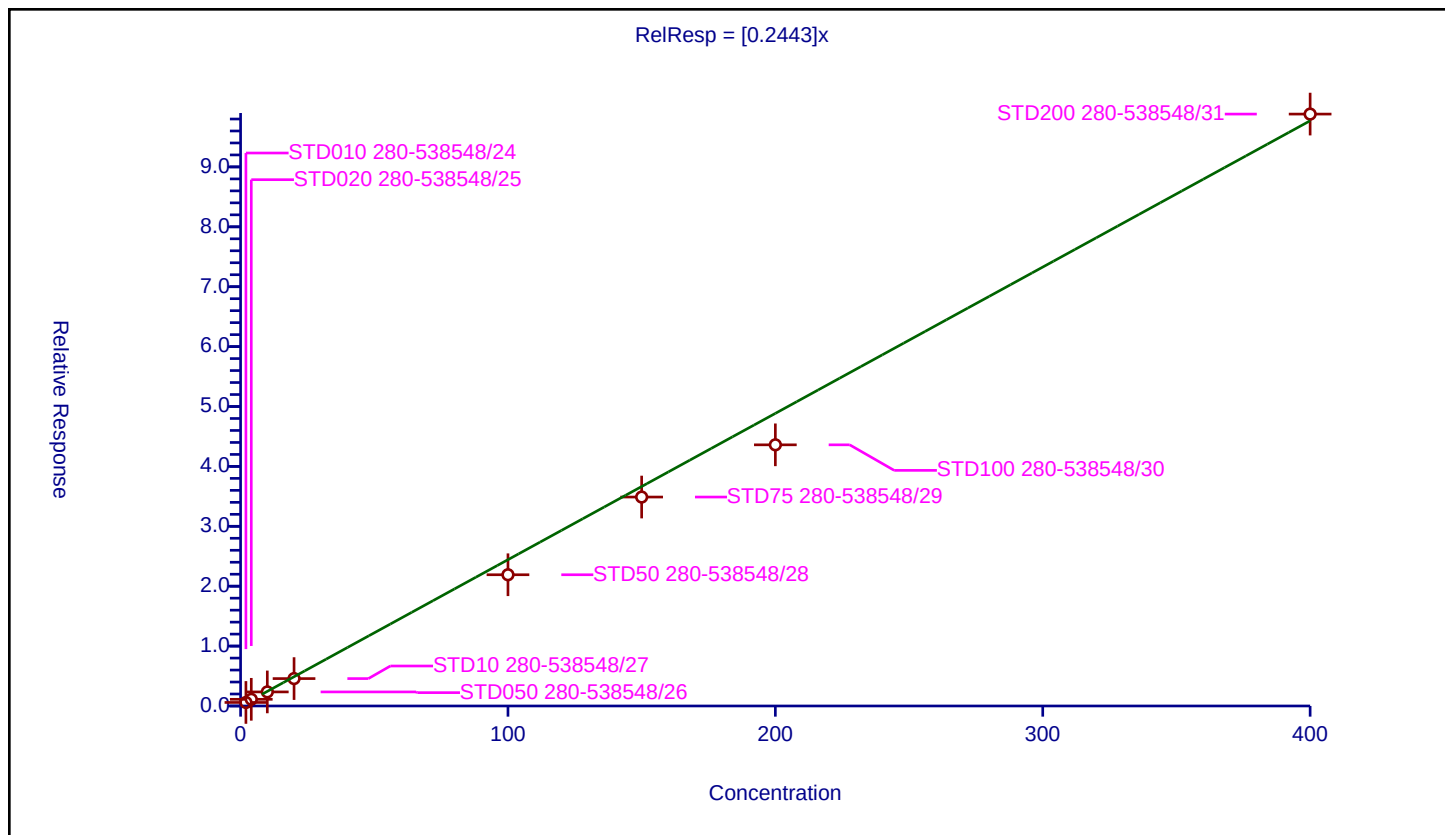
Curve Coefficients

Intercept: 0
 Slope: 0.2443

Error Coefficients

Standard Error: 227000
 Relative Standard Error: 11.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.591339	50.0	257720.0	0.29567	Y
2	STD020 280-538548/25	4.0	1.113334	50.0	254416.0	0.278334	Y
3	STD050 280-538548/26	10.0	2.34737	50.0	258566.0	0.234737	Y
4	STD10 280-538548/27	20.0	4.572809	50.0	247091.0	0.22864	Y
5	STD50 280-538548/28	100.0	21.911641	50.0	260891.0	0.219116	Y
6	STD75 280-538548/29	150.0	34.883035	50.0	250801.0	0.232554	Y
7	STD100 280-538548/30	200.0	43.600128	50.0	263349.0	0.218001	Y
8	STD200 280-538548/31	400.0	98.822154	50.0	260433.0	0.247055	Y



Calibration

/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

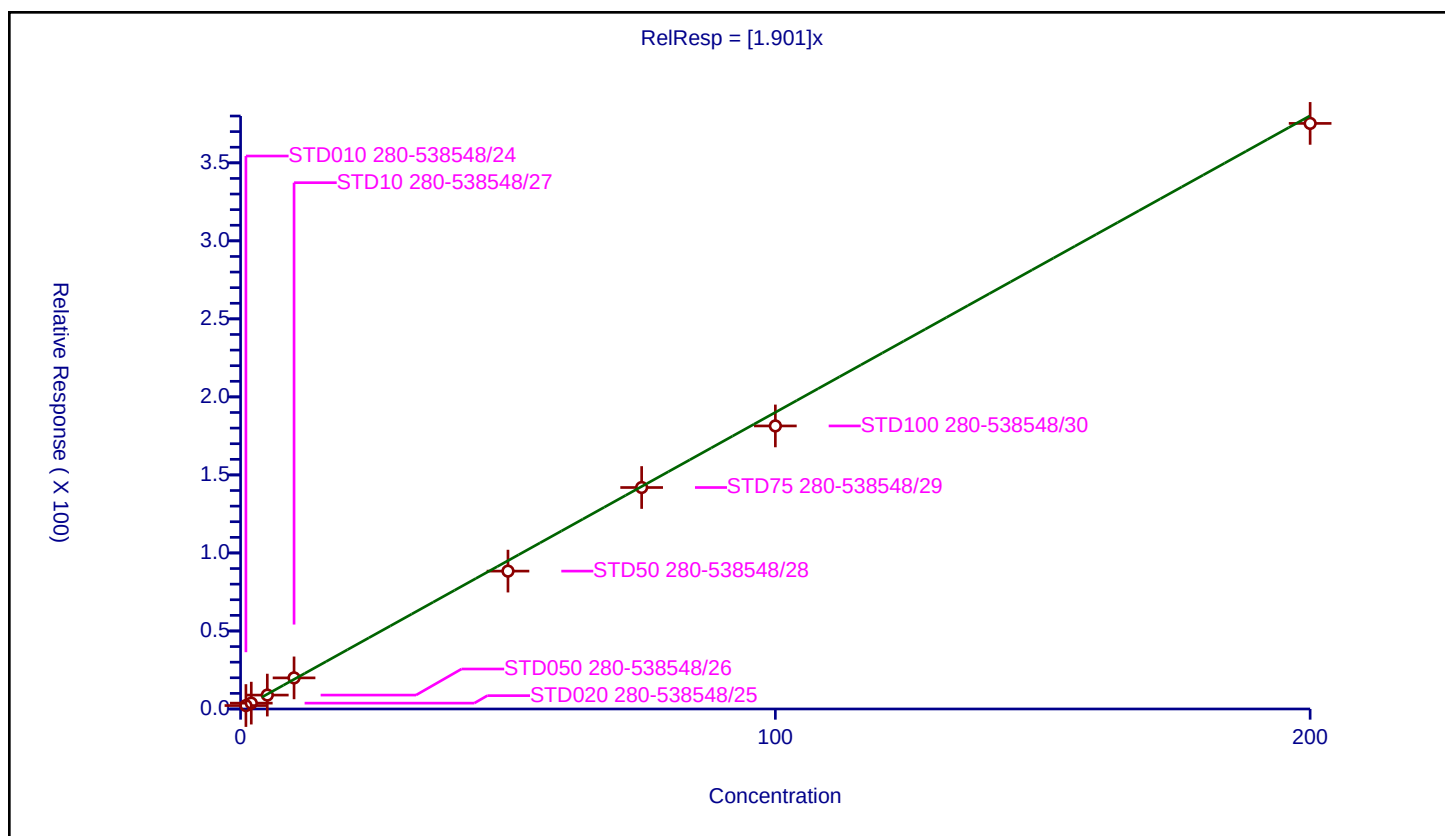
Curve Coefficients

Intercept: 0
 Slope: 1.901

Error Coefficients

Standard Error: 883000
 Relative Standard Error: 7.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	2.20433	50.0	257720.0	2.20433	Y
2	STD020 280-538548/25	2.0	3.757232	50.0	254416.0	1.878616	Y
3	STD050 280-538548/26	5.0	8.903529	50.0	258566.0	1.780706	Y
4	STD10 280-538548/27	10.0	19.941843	50.0	247091.0	1.994184	Y
5	STD50 280-538548/28	50.0	88.352415	50.0	260891.0	1.767048	Y
6	STD75 280-538548/29	75.0	141.924673	50.0	250801.0	1.892329	Y
7	STD100 280-538548/30	100.0	181.399018	50.0	263349.0	1.81399	Y
8	STD200 280-538548/31	200.0	375.262352	50.0	260433.0	1.876312	Y



Calibration

/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

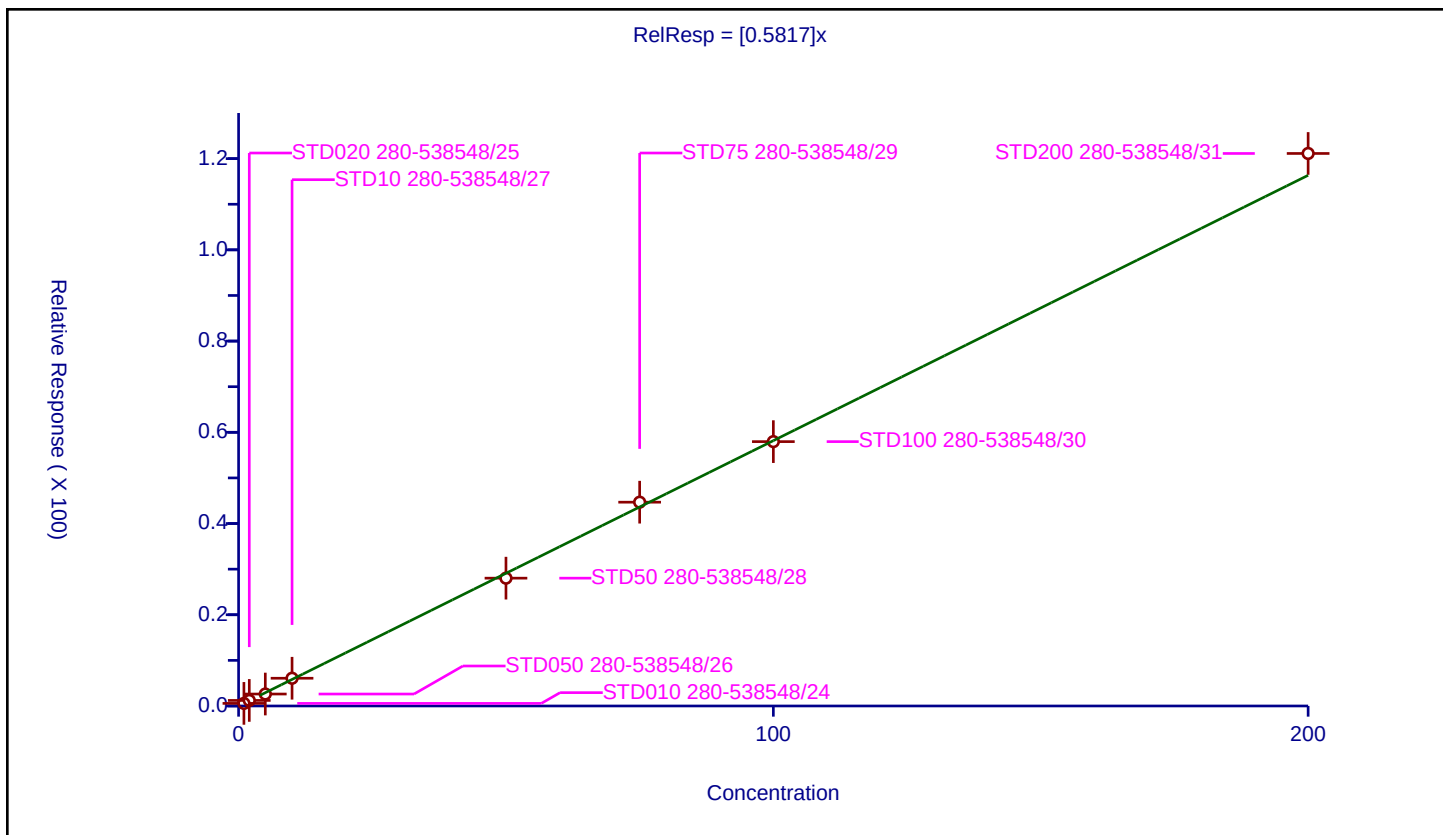
Curve Coefficients

Intercept: 0
 Slope: 0.5817

Error Coefficients

Standard Error: 284000
 Relative Standard Error: 5.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.56864	50.0	257720.0	0.56864	Y
2	STD020 280-538548/25	2.0	1.221228	50.0	254416.0	0.610614	Y
3	STD050 280-538548/26	5.0	2.624088	50.0	258566.0	0.524818	Y
4	STD10 280-538548/27	10.0	6.082779	50.0	247091.0	0.608278	Y
5	STD50 280-538548/28	50.0	28.022239	50.0	260891.0	0.560445	Y
6	STD75 280-538548/29	75.0	44.680444	50.0	250801.0	0.595739	Y
7	STD100 280-538548/30	100.0	57.958071	50.0	263349.0	0.579581	Y
8	STD200 280-538548/31	200.0	121.132499	50.0	260433.0	0.605662	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-538548/14	MS1_2722.D
Level 2	STD010 280-538548/15	MS1_2723.D
Level 3	STD020 280-538548/16	MS1_2724.D
Level 4	STD10 280-538548/18	MS1_2726.D
Level 5	ICIS 280-538548/19	MS1_2727.D
Level 6	STD75 280-538548/20	MS1_2728.D
Level 7	STD100 280-538548/21	MS1_2729.D
Level 8	STD200 280-538548/22	MS1_2730.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	++++ 0.2436	0.1945 0.2218	0.1649 0.2163	0.2742	0.2291	Lin1	-0.01 9	0.225 1							0.9960		0.9900
Chloromethane	++++ 0.2228	0.2098 0.2059	0.2126 0.2096	0.2437	0.2158	Ave		0.217 2			0.1000	5.9		15.0			
Vinyl chloride	++++ 0.1878	0.1442 0.1759	0.1666 0.1755	0.1929	0.1842	Ave		0.175 3				9.3		30.0			
Bromomethane	++++ 0.1314	0.1357 0.1268	0.1421 0.1219	0.1506	0.1364	Ave		0.135 0				7.1		15.0			
Chloroethane	++++ 0.1401	0.1179 0.1310	0.1331 0.1311	0.1512	0.1415	Ave		0.135 1				7.7		15.0			
Dichlorofluoromethane	0.7971 0.3480	0.5100 0.3224	0.4172 0.3248	0.4047	0.3446	Lin2	0.219 0	0.333 7							0.9900		0.9900
Trichlorofluoromethane	0.2928 0.3120	0.2419 0.2911	0.2545 0.2871	0.3254	0.3006	Ave		0.288 2				9.7		15.0			
Ethyl ether	++++ 0.1405	++++ 0.1426	0.1318 0.1440	0.1422	0.1446	Ave		0.140 9				3.3		15.0			
Acrolein	0.0559 0.0268	0.0424 0.0262	0.0457 0.0272	0.0302	0.0276	Lin1	0.182 1	0.026 8							0.9990		0.9900
1,1-Dichloroethene	++++ 0.1368	0.1400 0.1365	0.1611 0.1440	0.1573	0.1350	Ave		0.144 4				7.3		30.0			
Freon 113	++++ 0.1006	0.0819 0.1004	0.0786 0.1052	0.1053	0.0963	Ave		0.095 5				11.4		15.0			
Acetone	0.2176 0.0624	0.1401 0.0570	0.0887 0.0585	0.0608	0.0554	Lin2	0.323 4	0.055 7							0.9930		0.9900
Iodomethane	++++ 0.2179	0.1147 0.2237	0.1424 0.2284	0.2029	0.2193	Lin2	-0.11 6	0.220 0							0.9970		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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	++++ 0.4802	0.4831 0.4803	0.4400 0.4976	0.5410	0.4771	Ave		0.485 6				6.2		15.0			
Methyl acetate	++++ 0.1401	0.1607 0.1355	0.1240 0.1421	0.1239	0.1304	Ave		0.136 7				9.4		15.0			
Allyl chloride	++++ 0.2766	0.3013 0.2766	0.3105 0.2661	0.3206	0.2837	Ave		0.290 8				7.0		15.0			
Methylene Chloride	0.4044 0.1737	0.2781 0.1730	0.2225 0.1786	0.2048	0.1765	Lin2	0.111 5	0.175 6						0.9970		0.9900	
Tert-butyl alcohol (2-methyl-2-propanol)	++++ 0.0190	0.0141 0.0189	0.0156 0.0193	0.0177	0.0174	Ave		0.017 4				11.1		15.0			
Acrylonitrile	0.0767 0.0706	0.0644 0.0688	0.0662 0.0689	0.0695	0.0678	Ave		0.069 1				5.3		15.0			
Methyl tert-butyl ether	0.5135 0.5209	0.4851 0.5280	0.4636 0.5312	0.5105	0.5226	Ave		0.509 4				4.6		15.0			
trans-1,2-Dichloroethene	0.1969 0.1577	0.2094 0.1633	0.1740 0.1640	0.1790	0.1587	Ave		0.175 4				10.8		15.0			
Hexane	++++ 1.0405	0.5202 1.0278	0.9302 1.0384	1.0966	0.9867	Lin2	-0.48 1	1.061 9						0.9950		0.9900	
Vinyl acetate	++++ 0.4027	0.3213 0.4101	0.3737 0.4005	0.4168	0.4211	Ave		0.392 3				8.9		15.0			
1,1-Dichloroethane	++++ 0.3326	0.3157 0.3428	0.3473 0.3411	0.3575	0.3356	Ave		0.338 9			0.1000	3.9		15.0			
2-Butanone (MEK)	++++ 0.0862	0.1397 0.0835	0.1020 0.0867	0.0941	0.0818	Lin2	0.208 4	0.084 0						0.9960		0.9900	
2,2-Dichloropropane	0.3378 0.2796	0.3037 0.2792	0.3080 0.2878	0.3213	0.2811	Ave		0.299 8				7.3		15.0			
cis-1,2-Dichloroethene	++++ 0.1811	0.2206 0.1823	0.1936 0.1868	0.1979	0.1831	Ave		0.192 2				7.3		15.0			
sec-Butyl Alcohol	++++ 0.0148	0.0089 0.0145	0.0118 0.0151	0.0132	0.0135	Lin2	-0.13 2	0.014 4						0.9980		0.9900	
Chlorobromomethane	++++ 0.0829	0.0401 0.0853	0.0783 0.0859	0.0892	0.0854	Lin2	-0.04 2	0.088 0						0.9940		0.9900	
Tetrahydrofuran	++++ 0.0589	0.2277 0.0537	0.1205 0.0550	0.0684	0.0528	Lin1	0.317 9	0.053 6						0.9980		0.9900	
Chloroform	++++ 0.3255	0.4012 0.3259	0.3720 0.3387	0.3646	0.3334	Ave		0.351 6				8.1		30.0			

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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	++++ 0.2831	0.3833 0.2865	0.3120 0.3001	0.3146	0.2860	Ave		0.309 4				11.3		15.0			
Cyclohexane	++++ 0.3064	0.5249 0.3037	0.3573 0.3131	0.3499	0.2921	Lin1	0.185 4	0.306 0							0.9990		0.9900
1,1-Dichloropropene	++++ 0.2578	0.2247 0.2573	0.2247 0.2637	0.2703	0.2499	Ave		0.249 8				7.3		15.0			
Carbon tetrachloride	++++ 0.2303	0.2063 0.2388	0.1889 0.2469	0.2513	0.2310	Ave		0.227 6				9.9		15.0			
Isobutyl alcohol	++++ 0.0062	++++ 0.0062	0.0075 0.0063	0.0057	0.0056	Ave		0.006 2				10.9		15.0			
Benzene	0.7423 0.6831	0.6272 0.6978	0.6584 0.7128	0.7213	0.6925	Ave		0.691 9				5.3		15.0			
1,2-Dichloroethane	++++ 0.2806	0.2821 0.2923	0.2908 0.2986	0.3050	0.2927	Ave		0.291 7				2.9		15.0			
n-Heptane	0.3796 0.2013	0.2379 0.1978	0.2607 0.2064	0.2288	0.1963	Lin1	0.080 3	0.202 0							0.9990		0.9900
Trichloroethene	++++ 0.8633	1.1825 0.8775	0.9458 0.8778	0.8716	0.8710	Ave		0.927 1				12.5		15.0			
2-Pentanone	++++ 0.1400	0.1418 0.1381	0.1207 0.1413	0.1264	0.1319	Ave		0.134 3				6.1		15.0			
Methylcyclohexane	0.5210 0.2403	0.3056 0.2387	0.2685 0.2443	0.2525	0.2308	Lin1	0.105 4	0.239 6							0.9990		0.9900
1,2-Dichloropropane	++++ 0.1893	0.1543 0.1956	0.1875 0.1952	0.2042	0.1904	Ave		0.188 1				8.5		30.0			
1,4-Dioxane	++++ 0.0022	++++ 0.0022	0.0010 0.0022	0.0020	0.0020	Lin2	-0.04 8	0.002 2							0.9990		0.9900
Dibromomethane	++++ 0.1211	0.1002 0.1219	0.1104 0.1254	0.1270	0.1195	Ave		0.117 9				8.0		15.0			
Dichlorobromomethane	++++ 0.2432	0.3078 0.2500	0.2502 0.2525	0.2574	0.2451	Ave		0.258 0				8.7		15.0			
2-Chloroethyl vinyl ether	++++ 0.1258	0.1055 0.1159	0.0929 0.1190	0.1196	0.1268	Ave		0.115 1				10.5		15.0			
cis-1,3-Dichloropropene	++++ 1.4294	1.1338 1.4391	1.1952 1.4229	1.4098	1.4294	Ave		1.351 4				9.6		15.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.1646	0.1540 0.1610	0.1349 0.1656	0.1512	0.1591	Ave		0.155 8				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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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								
Toluene	++++ 0.6651	0.7321 0.6811	0.6513 0.7075	0.7160	0.6783	Ave		0.690 2				4.2		30.0			
trans-1,3-Dichloropropene	++++ 0.2854	0.2145 0.2886	0.2642 0.2972	0.2877	0.2938	Ave		0.275 9				10.5		15.0			
Ethyl methacrylate	++++ 1.0446	++++ 1.0197	0.8667 1.0116	1.0453	0.9877	Ave		0.995 9				6.7		15.0			
1,1,2-Trichloroethane	0.1988 0.1420	0.1942 0.1413	0.1580 0.1444	0.1514	0.1391	Lin2	0.031 7	0.144 2							0.9960		0.9900
Tetrachloroethene	++++ 0.5410	0.5007 0.5424	0.3991 0.5587	0.5525	0.5287	Ave		0.517 6				10.7		15.0			
1,3-Dichloropropane	++++ 1.3206	1.1641 1.2931	1.2174 1.2913	1.2824	1.3019	Ave		1.267 2				4.4		15.0			
2-Hexanone	0.2599 0.5515	0.4991 0.5329	0.4296 0.5204	0.5092	0.5120	Lin2	-0.47 8	0.531 3							0.9930		0.9900
Chlorodibromomethane	++++ 0.7682	0.6349 0.7873	0.7060 0.7981	0.7824	0.7540	Ave		0.747 3				7.8		15.0			
1,2-Dibromoethane	++++ 0.7419	0.6840 0.7322	0.7166 0.7336	0.7053	0.7218	Ave		0.719 3				2.7		15.0			
1-Chlorohexane	2.9701 1.0434	1.9332 1.0432	1.5024 1.0653	1.1655	1.0358	Lin2	0.762 7	1.035 1							0.9990		0.9900
Chlorobenzene	++++ 2.0330	2.0463 2.0529	1.9449 2.0757	2.0898	2.0478	Ave		2.041 5			0.3000	2.3		15.0			
1,1,1,2-Tetrachloroethane	++++ 0.7464	0.5820 0.7706	0.6744 0.7648	0.7623	0.7460	Ave		0.720 9				9.6		15.0			
Ethylbenzene	1.0731 1.0870	1.0190 1.1148	1.0116 1.1219	1.1533	1.0952	Ave		1.084 5				4.5		30.0			
m-Xylene & p-Xylene	1.3947 1.3489	1.2555 1.3733	1.4376 1.3725	1.4099	1.3426	Ave		1.366 9				4.0		15.0			
o-Xylene	1.1713 1.2971	1.1532 1.3230	1.3254 1.3237	1.2963	1.3233	Ave		1.276 6				5.6		15.0			
Styrene	2.4813 2.3230	2.1372 2.3499	2.2510 2.3567	2.4299	2.3425	Ave		2.333 9				4.5		15.0			
Bromoform	++++ 0.4877	0.1807 0.5022	0.3514 0.5022	0.4690	0.4708	Lin2	-0.31 1	0.496 6			0.1000				0.9990		0.9900
Isopropylbenzene	2.0599 2.2199	2.0181 2.2253	2.1407 2.3072	2.3519	2.1757	Ave		2.187 3				5.2		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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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								
Cyclohexanone	0.0580 0.0603	0.0648 0.0552	0.0582 ++++	0.0489	0.0466	Ave		0.056 0				11.4		15.0			
1,1,2,2-Tetrachloroethane	1.0853 0.6022	0.8819 0.5954	0.7225 0.6176	0.6241	0.5915	Lin2	0.249 2	0.601 4			0.3000				0.9990		0.9900
Bromobenzene	++++ 0.5075	0.4094 0.5118	0.4912 0.5366	0.5106	0.5082	Ave		0.496 5				8.2		15.0			
trans-1,4-Dichloro-2-butene	++++ 0.2199	0.2014 0.2166	0.2230 0.2304	0.2168	0.2195	Ave		0.218 2				4.0		15.0			
1,2,3-Trichloropropane	++++ 0.1764	0.2372 0.1733	0.1668 0.1759	0.1646	0.1683	Lin2	0.055 1	0.167 4							0.9910		0.9900
N-Propylbenzene	++++ 0.5956	0.5664 0.6082	0.6127 0.6305	0.6462	0.5943	Ave		0.607 7				4.3		15.0			
2-Chlorotoluene	++++ 0.5113	0.4052 0.5162	0.4641 0.5401	0.5293	0.5125	Ave		0.497 0				9.4		15.0			
1,3,5-Trimethylbenzene	2.1348 1.9074	1.8675 1.9118	1.8917 1.9953	2.0238	1.8949	Ave		1.953 4				4.7		15.0			
4-Chlorotoluene	0.5769 0.5361	0.5782 0.5513	0.4710 0.5685	0.5529	0.5410	Ave		0.547 0				6.3		15.0			
tert-Butylbenzene	++++ 1.5602	1.6929 1.5534	1.5345 1.6394	1.6811	1.5426	Ave		1.600 6				4.3		15.0			
1,2,4-Trimethylbenzene	2.2037 1.9572	1.9606 1.9810	1.8725 2.0301	2.0882	1.9336	Ave		2.003 3				5.1		15.0			
sec-Butylbenzene	++++ 0.4444	0.2789 0.4487	0.4392 0.4670	0.4764	0.4470	Lin2	-0.15 9	0.466 3							0.9950		0.9900
1,3-Dichlorobenzene	0.9297 0.9737	0.8559 0.9926	0.9944 1.0254	1.0114	0.9757	Ave		0.969 8				5.6		15.0			
4-Isopropyltoluene	2.3019 1.9506	1.8089 1.9616	1.8340 2.0491	2.0508	1.9330	Ave		1.986 2				7.8		15.0			
1,4-Dichlorobenzene	1.1208 1.0019	0.9724 1.0194	0.9736 1.0460	1.0144	0.9974	Ave		1.018 2				4.7		15.0			
n-Butylbenzene	2.1181 1.8768	1.8137 1.8527	1.9093 1.9206	1.9966	1.8335	Ave		1.915 2				5.2		15.0			
1,2-Dichlorobenzene	0.7924 0.9363	0.8559 0.9418	0.9121 0.9712	0.9532	0.9350	Ave		0.912 2				6.5		15.0			
1,2-Dibromo-3-Chloropropane	++++ 0.1322	0.0468 0.1280	0.0802 0.1314	0.1281	0.1226	Lin2	-0.08 6	0.130 2							0.9980		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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	++++ 0.6134	0.5534 0.6088	0.5828 0.6421	0.5872	0.5923	Ave		0.597 2				4.7		15.0			
Hexachlorobutadiene	++++ 0.2038	0.0575 0.2029	0.1498 0.2119	0.2118	0.1975	Lin2	-0.14 6	0.210 9							0.9970		0.9900
Naphthalene	++++ 1.8591	1.5848 1.8328	1.6197 1.8693	1.8735	1.7739	Ave		1.773 3				6.9		15.0			
1,2,3-Trichlorobenzene	++++ 0.5586	0.5249 0.5559	0.4821 0.5821	0.5592	0.5532	Ave		0.545 1				5.9		15.0			
Dibromofluoromethane (Surr)	0.2708 0.2587	0.2714 0.2591	0.2712 0.2626	0.2678	0.2586	Ave		0.265 0				2.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3532 0.3519	0.3605 0.3514	0.3614 0.3566	0.3599	0.3456	Ave		0.355 1				1.5		15.0			
Toluene-d8 (Surr)	4.3466 4.3502	4.3544 4.3575	4.3428 4.2747	4.2746	4.3512	Ave		4.331 5				0.8		15.0			
4-Bromofluorobenzene (Surr)	1.0990 1.0883	1.0908 1.0557	1.1042 1.0889	1.0922	1.0615	Ave		1.085 1				1.6		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-538548/14	MS1_2722.D
Level 2	STD010 280-538548/15	MS1_2723.D
Level 3	STD020 280-538548/16	MS1_2724.D
Level 4	STD10 280-538548/18	MS1_2726.D
Level 5	ICIS 280-538548/19	MS1_2727.D
Level 6	STD75 280-538548/20	MS1_2728.D
Level 7	STD100 280-538548/21	MS1_2729.D
Level 8	STD200 280-538548/22	MS1_2730.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	++++ 284607	2898 341786	4813 677738	40935	176418	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Chloromethane	FB	Ave	++++ 260275	3126 317305	6207 656518	36390	166165	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Vinyl chloride	FB	Ave	++++ 219368	2149 271019	4864 549679	28798	141801	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Bromomethane	FB	Ave	++++ 153469	2022 195406	4150 381898	22486	105022	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Chloroethane	FB	Ave	++++ 163644	1757 201788	3886 410848	22577	108932	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Dichlorofluoromethane	FB	Lin2	5909 406591	7600 496647	12181 1017407	60416	265332	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Trichlorofluoromethane	FB	Ave	2171 364532	3605 448550	7431 899290	48588	231476	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl ether	FB	Ave	++++ 164162	++++ 219725	3849 450987	21225	111308	++++ 75.0	++++ 100	2.00 200	10.0	50.0
Acrolein	FB	Lin1	4089 309474	6241 398118	13172 841506	44500	210093	4.94 741	9.88 988	19.8 1975	98.8	494
1,1-Dichloroethene	FB	Ave	++++ 159868	2087 210315	4703 451141	23478	103963	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Freon 113	FB	Ave	++++ 117548	1221 154610	2294 329503	15716	74141	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Acetone	FB	Lin2	6452 291619	8353 351099	10353 732628	36311	170768	2.00 300	4.00 400	8.00 800	40.0	200
Iodomethane	FB	Lin2	++++ 254607	1710 344718	4158 715491	30290	168827	++++ 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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
Carbon disulfide	FB	Ave	++++ 561075	7200 740012	12846 1558994	80765	367379	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Methyl acetate	FB	Ave	++++ 327410	4789 417578	7238 890400	36989	200777	++++ 150	2.00 200	4.00 400	20.0	100
Allyl chloride	FB	Ave	++++ 323120	4490 426172	9065 833624	47872	218412	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Methylene Chloride	FB	Lin2	2998 202992	4145 266563	6497 559662	30580	135869	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Tert-butyl alcohol (2-methyl-2-propanol)	FB	Ave	++++ 221885	2103 291368	4555 604617	26461	133797	++++ 750	10.0 1000	20.0 2000	100	500
Acrylonitrile	FB	Ave	5689 824753	9605 1060618	19333 2157748	103754	522237	5.00 750	10.0 1000	20.0 2000	100	500
Methyl tert-butyl ether	FB	Ave	3807 608637	7230 813446	13534 1664273	76215	402379	0.500 75.0	1.00 100	2.00 200	10.0	50.0
trans-1,2-Dichloroethene	FB	Ave	1460 184274	3121 251645	5079 513885	26723	122215	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Hexane	CBNZ d5	Lin2	++++ 252996	1632 331780	5710 702356	34832	159716	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Vinyl acetate	FB	Ave	++++ 941026	9578 1263615	21822 2509441	124457	648475	++++ 150	2.00 200	4.00 400	20.0	100
1,1-Dichloroethane	FB	Ave	++++ 388591	4705 528150	10140 1068575	53370	258402	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Butanone (MEK)	FB	Lin2	++++ 402800	8329 514764	11915 1085961	56212	252081	++++ 300	4.00 400	8.00 800	40.0	200
2,2-Dichloropropane	FB	Ave	2504 326634	4526 430208	8991 901541	47969	216419	0.500 75.0	1.00 100	2.00 200	10.0	50.0
cis-1,2-Dichloroethene	FB	Ave	++++ 211634	3288 280945	5653 585356	29549	140988	++++ 75.0	1.00 100	2.00 200	10.0	50.0
sec-Butyl Alcohol	FB	Lin2	++++ 414351	3183 535348	8253 1133775	47182	250296	++++ 1800	24.0 2400	48.0 4800	240	1200
Chlorobromomethane	FB	Lin2	++++ 96812	597 131412	2285 269171	13324	65722	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Tetrahydrofuran	FB	Lin1	++++ 137587	6788 165527	7039 344648	20411	81383	++++ 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.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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
Chloroform	FB	Ave	+++++ 380346	5979 502179	10862 1061208	54433	256700	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1,1-Trichloroethane	FB	Ave	+++++ 330741	5713 441385	9110 940114	46977	220241	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Cyclohexane	FB	Lin1	+++++ 357975	7823 467867	10432 980879	52233	224931	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1-Dichloropropene	FB	Ave	+++++ 301212	3349 396397	6559 826072	40352	192450	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Carbon tetrachloride	FB	Ave	+++++ 269121	3074 367905	5514 773566	37517	177897	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Isobutyl alcohol	FB	Ave	+++++ 181153	+++++ 237028	5445 497289	21152	107180	+++++ 1875	+++++ 2500	50.0 5000	250	1250
Benzene	FB	Ave	5503 798115	9347 1075144	19222 2233092	107690	533232	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichloroethane	FB	Ave	+++++ 327847	4204 450298	8489 935335	45534	225397	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
n-Heptane	FB	Lin1	2814 235218	3546 304713	7610 646535	34155	151151	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Trichloroethene	CBNZ d5	Ave	+++++ 209925	3710 283268	5806 593715	27685	140987	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Pentanone	FB	Ave	+++++ 523443	6764 681033	11280 1416166	60410	324899	+++++ 240	3.20 320	6.40 640	32.0	160
Methylcyclohexane	FB	Lin1	3862 280807	4554 367688	7839 765192	37693	177721	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichloropropane	FB	Ave	+++++ 221164	2299 301386	5473 611580	30490	146601	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,4-Dioxane	FB	Lin2	+++++ 51778	+++++ 66461	580 139700	5826	31314	+++++ 1500	+++++ 2000	40.0 4000	200	1000
Dibromomethane	FB	Ave	+++++ 141533	1494 187746	3222 392807	18955	92021	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Dichlorobromomethane	FB	Ave	+++++ 284099	4588 385100	7304 790878	38423	188758	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 146946	1572 178538	2713 372671	17861	97660	+++++ 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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-1,3-Dichloropropene	CBNZ d5	Ave	++++ 347569	3557 464577	7337 962416	44781	231384	++++ 75.0	1.00 100	2.00 200	10.0	50.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	++++ 769063	9180 992438	15752 2075132	90316	490067	++++ 300	4.00 400	8.00 800	40.0	200
Toluene	FB	Ave	++++ 777134	10911 1049392	19016 2216570	106895	522295	++++ 75.0	1.00 100	2.00 200	10.0	50.0
trans-1,3-Dichloropropene	FB	Ave	++++ 333444	3197 444618	7715 931126	42952	226226	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl methacrylate	CBNZ d5	Ave	++++ 254008	++++ 329168	5320 684215	33204	159888	++++ 75.0	++++ 100	2.00 200	10.0	50.0
1,1,2-Trichloroethane	FB	Lin2	1474 165901	2894 217713	4614 452414	22601	107076	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Tetrachloroethene	CBNZ d5	Ave	++++ 131552	1571 175087	2450 377868	17549	85583	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,3-Dichloropropane	CBNZ d5	Ave	++++ 321117	3652 417430	7473 873388	40733	210737	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Hexanone	CBNZ d5	Lin2	1610 536450	6263 688140	10548 1407897	64691	331503	2.00 300	4.00 400	8.00 800	40.0	200
Chlorodibromomethane	CBNZ d5	Ave	++++ 186804	1992 254169	4334 539788	24851	122044	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dibromoethane	CBNZ d5	Ave	++++ 180401	2146 236353	4399 496186	22403	116835	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1-Chlorohexane	CBNZ d5	Lin2	3680 202968	4852 269413	7378 576421	29616	134135	0.400 60.0	0.800 80.0	1.60 160	8.00	40.0
Chlorobenzene	CBNZ d5	Ave	++++ 494335	6420 662703	11939 1403932	66381	331478	++++ 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++	1826	4140	24212	120755	+++++	1.00	2.00	10.0	50.0
			181499	248769	517259			75.0	100	200		
Ethylbenzene	CBNZ d5	Ave	1662	3197	6210	36634	177275	0.500	1.00	2.00	10.0	50.0
			264323	359882	758836			75.0	100	200		
m-Xylene & p-Xylene	CBNZ d5	Ave	2160	3939	8825	44784	217333	0.500	1.00	2.00	10.0	50.0
			327998	443325	928312			75.0	100	200		
o-Xylene	CBNZ d5	Ave	1814	3618	8136	41175	214199	0.500	1.00	2.00	10.0	50.0
			315393	427099	895286			75.0	100	200		
Styrene	CBNZ d5	Ave	3843	6705	13818	77181	379177	0.500	1.00	2.00	10.0	50.0
			564847	758598	1593996			75.0	100	200		
Bromoform	CBNZ d5	Lin2	+++++	567	2157	14898	76209	+++++	1.00	2.00	10.0	50.0
			118591	162117	339679			75.0	100	200		
Isopropylbenzene	DCBd 4	Ave	5056	10101	20761	117182	560279	0.500	1.00	2.00	10.0	50.0
			858053	1146614	2397490			75.0	100	200		
Cyclohexanone	CBNZ d5	Ave	2696	6099	10716	46603	226441	15.0	30.0	60.0	300	1500
			440233	534760	+++++			2250	3000	+++++		
1,1,2,2-Tetrachloroethane	DCBd 4	Lin2	2664	4414	7007	31093	152322	0.500	1.00	2.00	10.0	50.0
			232780	306793	641786			75.0	100	200		
Bromobenzene	DCBd 4	Ave	+++++	2049	4764	25440	130861	+++++	1.00	2.00	10.0	50.0
			196163	263713	557639			75.0	100	200		
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++	1008	2163	10802	56519	+++++	1.00	2.00	10.0	50.0
			85012	111621	239439			75.0	100	200		
1,2,3-Trichloropropane	DCBd 4	Lin2	+++++	1187	1618	8203	43336	+++++	1.00	2.00	10.0	50.0
			68184	89319	182772			75.0	100	200		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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
N-Propylbenzene	DCBd 4	Ave	++++ 230236	2835 313375	5942 655122	32197	153038	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Chlorotoluene	DCBd 4	Ave	++++ 197622	2028 265995	4501 561245	26371	131982	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	5240 737280	9347 985068	18346 2073344	100834	487963	0.500 75.0	1.00 100	2.00 200	10.0	50.0
4-Chlorotoluene	DCBd 4	Ave	1416 207234	2894 284037	4568 590717	27546	139315	0.500 75.0	1.00 100	2.00 200	10.0	50.0
tert-Butylbenzene	DCBd 4	Ave	++++ 603080	8473 800394	14882 1703470	83762	397245	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	5409 756516	9813 1020729	18160 2109459	104041	497917	0.500 75.0	1.00 100	2.00 200	10.0	50.0
sec-Butylbenzene	DCBd 4	Lin2	++++ 171771	1396 231170	4259 485251	23738	115108	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,3-Dichlorobenzene	DCBd 4	Ave	2282 376351	4284 511419	9644 1065476	50391	251268	0.500 75.0	1.00 100	2.00 200	10.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	5650 753987	9054 1010734	17787 2129213	102178	497776	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,4-Dichlorobenzene	DCBd 4	Ave	2751 387260	4867 525253	9442 1086868	50543	256844	0.500 75.0	1.00 100	2.00 200	10.0	50.0
n-Butylbenzene	DCBd 4	Ave	5199 725430	9078 954625	18517 1995762	99478	472146	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	1945 361918	4284 485254	8846 1009176	47494	240782	0.500 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin2	+++++	234	778	6381	31563	+++++	1.00	2.00	10.0	50.0
			51111	65946	136502			75.0	100	200		
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++	2770	5652	29259	152525	+++++	1.00	2.00	10.0	50.0
			237116	313667	667214			75.0	100	200		
Hexachlorobutadiene	DCBd 4	Lin2	+++++	288	1453	10553	50864	+++++	1.00	2.00	10.0	50.0
			78775	104528	220210			75.0	100	200		
Naphthalene	DCBd 4	Ave	+++++	7932	15708	93344	456812	+++++	1.00	2.00	10.0	50.0
			718615	944344	1942455			75.0	100	200		
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++	2627	4676	27863	142446	+++++	1.00	2.00	10.0	50.0
			215935	286406	604902			75.0	100	200		
Dibromofluoromethane (Surr)	FB	Ave	200782	202219	197983	199938	199154	50.0	50.0	50.0	50.0	50.0
			201488	199583	205683			50.0	50.0	50.0		
1,2-Dichloroethane-d4 (Surr)	FB	Ave	261841	268609	263804	268659	266131	50.0	50.0	50.0	50.0	50.0
			274090	270692	279300			50.0	50.0	50.0		
Toluene-d8 (Surr)	CBNZ d5	Ave	673194	683061	666453	678886	704331	50.0	50.0	50.0	50.0	50.0
			705195	703336	722826			50.0	50.0	50.0		
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	269753	272976	267729	272092	273340	50.0	50.0	50.0	50.0	50.0
			280451	271979	282862			50.0	50.0	50.0		

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_MS1\20210604-102067.b\VMS1_2722.D
 Lims ID: STD005
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 04-Jun-2021 13:50:30 ALS Bottle#: 11 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD005
 Misc. Info.: 280-0102067-014
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:22 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 14:55:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	741336	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	154877	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	245453	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	200782	50.0	51.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	261841	50.0	49.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	673194	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	269753	50.0	50.6	
11 Dichlorodifluoromethane	85		1.690				ND	ND	
12 Chloromethane	50		1.900				ND	ND	
13 Vinyl chloride	62		1.998				ND	ND	
15 Bromomethane	94		2.347				ND	ND	U
16 Chloroethane	64		2.459				ND	ND	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	34	5909	0.5000	0.5380	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	92	2171	0.5000	0.5081	
20 Ethyl ether	59		3.003				ND	ND	
22 Acrolein	56	3.143	3.143	0.000	38	4089	4.94	3.49	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	5	1501	0.5000	0.7011	
24 112TCTFE	151		3.255				ND	ND	
25 Acetone	43	3.283	3.269	0.014	97	6452	2.00	2.01	
26 Iodomethane	142		3.380				ND	ND	
28 Carbon disulfide	76	3.450	3.450	0.000	94	4394	0.5000	0.6103	
30 Methyl acetate	43		3.576				ND	ND	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	40	2694	0.5000	0.6249	
32 Methylene Chloride	84	3.716	3.716	0.000	92	2998	0.5000	0.5166	
33 2-Methyl-2-propanol	59		3.785				ND	ND	
34 Acrylonitrile	53	3.911	3.911	0.000	78	5689	5.00	5.55	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	82	3807	0.5000	0.5040	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	82	1460	0.5000	0.5614	
37 Hexane	57	4.205	4.204	0.001	74	2659	0.5000	1.26	
39 Vinyl acetate	43	4.344	4.344	0.000	92	6958	1.00	1.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.358	4.344	0.014	1	2535	0.5000	0.5044	
46 2-Butanone (MEK)	43		4.819				ND	ND	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	60	2504	0.5000	0.5633	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	83	1849	0.5000	0.6487	
51 sec-Butyl Alcohol	45		4.973				ND	ND	
54 Tetrahydrofuran	42	5.070	5.056	0.014	40	4881	1.00	0.2115	
53 Chlorobromomethane	128		5.056				ND	ND	
55 Chloroform	83	5.126	5.126	0.000	87	4658	0.5000	0.8934	
56 1,1,1-Trichloroethane	97		5.280				ND	ND	
57 Cyclohexane	56	5.350	5.350	0.000	78	3189	0.5000	0.0970	
58 1,1-Dichloropropene	75		5.419				ND	ND	
59 Carbon tetrachloride	117		5.419				ND	ND	
60 Isobutyl alcohol	41	5.559	5.461	0.098	33	2612	12.5	28.3	
63 Benzene	78	5.587	5.587	0.000	88	5503	0.5000	0.5364	
64 1,2-Dichloroethane	62		5.629				ND	ND	
66 n-Heptane	43	5.825	5.824	0.001	36	2814	0.5000	0.5421	
68 Trichloroethene	95	6.160	6.146	0.014	1	1955	0.5000	0.6808	
69 2-Pentanone	43		6.271				ND	ND	
70 Methylcyclohexane	55	6.355	6.355	0.000	77	3862	0.5000	0.6470	
71 1,2-Dichloropropane	63		6.383				ND	ND	
73 1,4-Dioxane	88		6.425				ND	ND	
74 Dibromomethane	93		6.453				ND	ND	
75 Dichlorobromomethane	83		6.609				ND	ND	
77 2-Chloroethyl vinyl ether	63		6.838				ND	ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	ND	U
82 Toluene	91	7.296	7.295	0.001	95	6088	0.5000	0.5949	
84 trans-1,3-Dichloropropene	75		7.488				ND	ND	
85 Ethyl methacrylate	69		7.517				ND	ND	U
87 1,1,2-Trichloroethane	97	7.682	7.674	0.008	62	1474	0.5000	0.4696	
89 Tetrachloroethene	164		7.767				ND	ND	
90 1,3-Dichloropropane	76		7.824				ND	ND	
91 2-Hexanone	43	7.860	7.853	0.007	44	1610	2.00	1.88	
95 Chlorodibromomethane	129		8.032				ND	ND	
96 Ethylene Dibromide	107		8.146				ND	ND	
98 1-Chlorohexane	91	8.575	8.568	0.007	34	3680	0.4000	0.4110	
99 Chlorobenzene	112		8.604				ND	ND	
100 1,1,1,2-Tetrachloroethane	131		8.682				ND	ND	
101 Ethylbenzene	106	8.683	8.682	0.001	94	1662	0.5000	0.4947	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	94	2160	0.5000	0.5102	
103 o-Xylene	106	9.183	9.176	0.007	91	1814	0.5000	0.4587	
104 Styrene	104	9.197	9.197	0.000	75	3843	0.5000	0.5316	
106 Bromoform	173		9.383				ND	ND	
107 Isopropylbenzene	105	9.534	9.526	0.008	92	5056	0.5000	0.4709	
109 Cyclohexanone	55	9.619	9.626	-0.007	72	2696	15.0	15.5	
110 1,1,2,2-Tetrachloroethane	83	9.812	9.827	-0.015	1	2664	0.5000	0.4880	
111 Bromobenzene	156		9.855				ND	ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	ND	
113 1,2,3-Trichloropropane	110		9.891				ND	ND	
114 N-Propylbenzene	120		9.941				ND	ND	
115 2-Chlorotoluene	126	10.034	10.034	0.000	89	1414	0.5000	0.5796	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	86	5240	0.5000	0.5464	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.148	10.155	-0.007	89	1416	0.5000	0.5273	
118 tert-Butylbenzene	119		10.427				ND	ND	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	93	5409	0.5000	0.5500	
120 sec-Butylbenzene	134		10.649				ND	ND	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	88	2282	0.5000	0.4793	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	92	5650	0.5000	0.5795	
123 1,4-Dichlorobenzene	146	10.871	10.878	-0.007	21	2751	0.5000	0.5504	
125 n-Butylbenzene	91	11.214	11.207	0.007	93	5199	0.5000	0.5530	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	85	1945	0.5000	0.4343	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	ND	
131 Hexachlorobutadiene	225		12.994				ND	ND	
132 Naphthalene	128		13.123				ND	ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	ND	
S 149 1,2-Dichloroethene, Total (URS)	95				0		1.00	1.21	
S 150 1,2-Dichloroethene, Total	1				0		1.00	1.21	
S 151 Trihalomethanes, Total	1				0		2.00	0.8934	
S 152 Total BTEX	1				0			2.59	
S 153 Xylenes, Total (URS)	1				0		1.00	0.9689	
S 155 Xylenes, Total	106				0		1.00	0.9689	
S 156 1,3-Dichloropropene, Total	1				0		1.00	0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

MV-Gas A_00089

Amount Added: 0.10

Units: uL

MV-MegaMainA_00050

Amount Added: 0.25

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD005

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

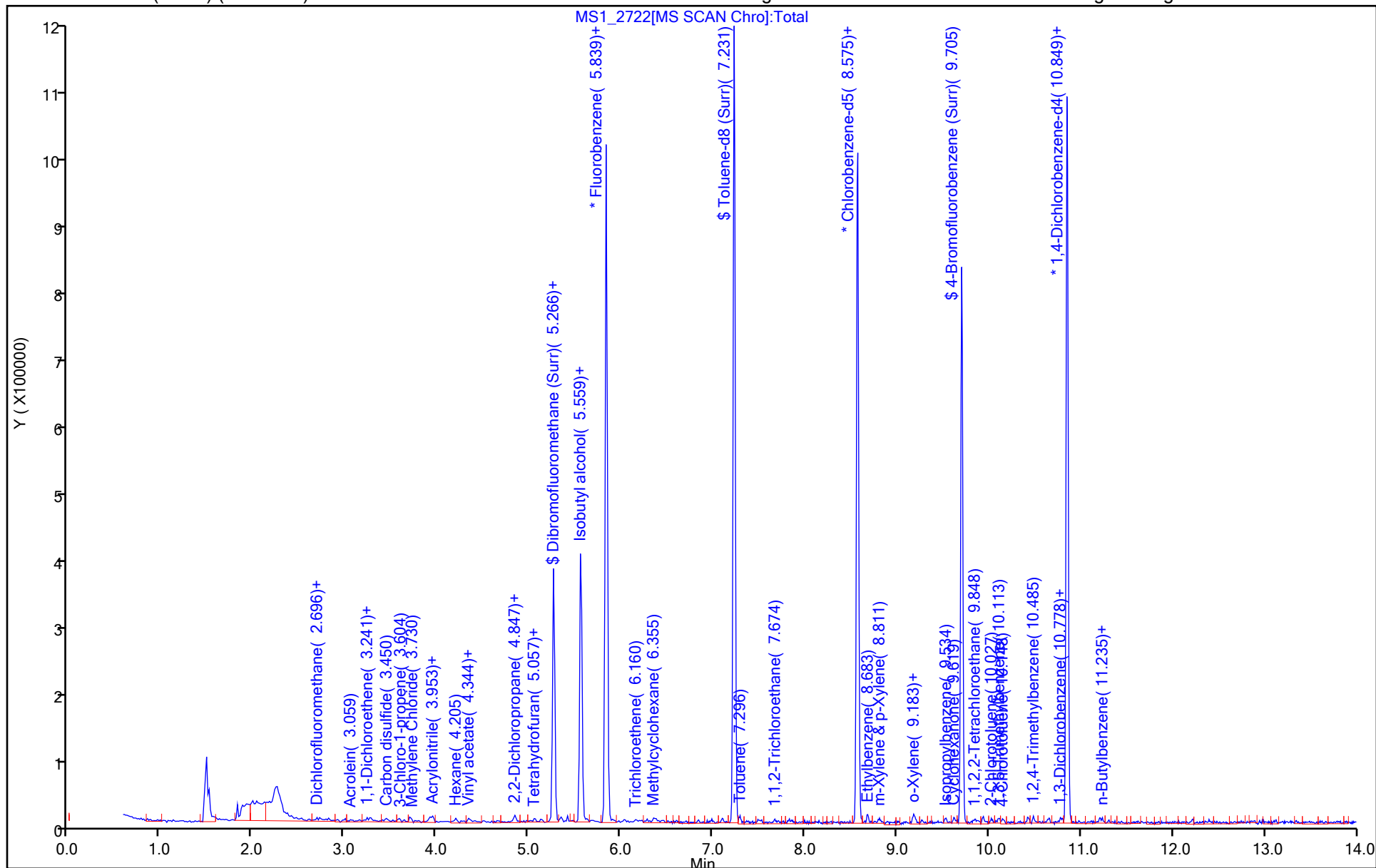
ALS Bottle#: 11

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

11

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

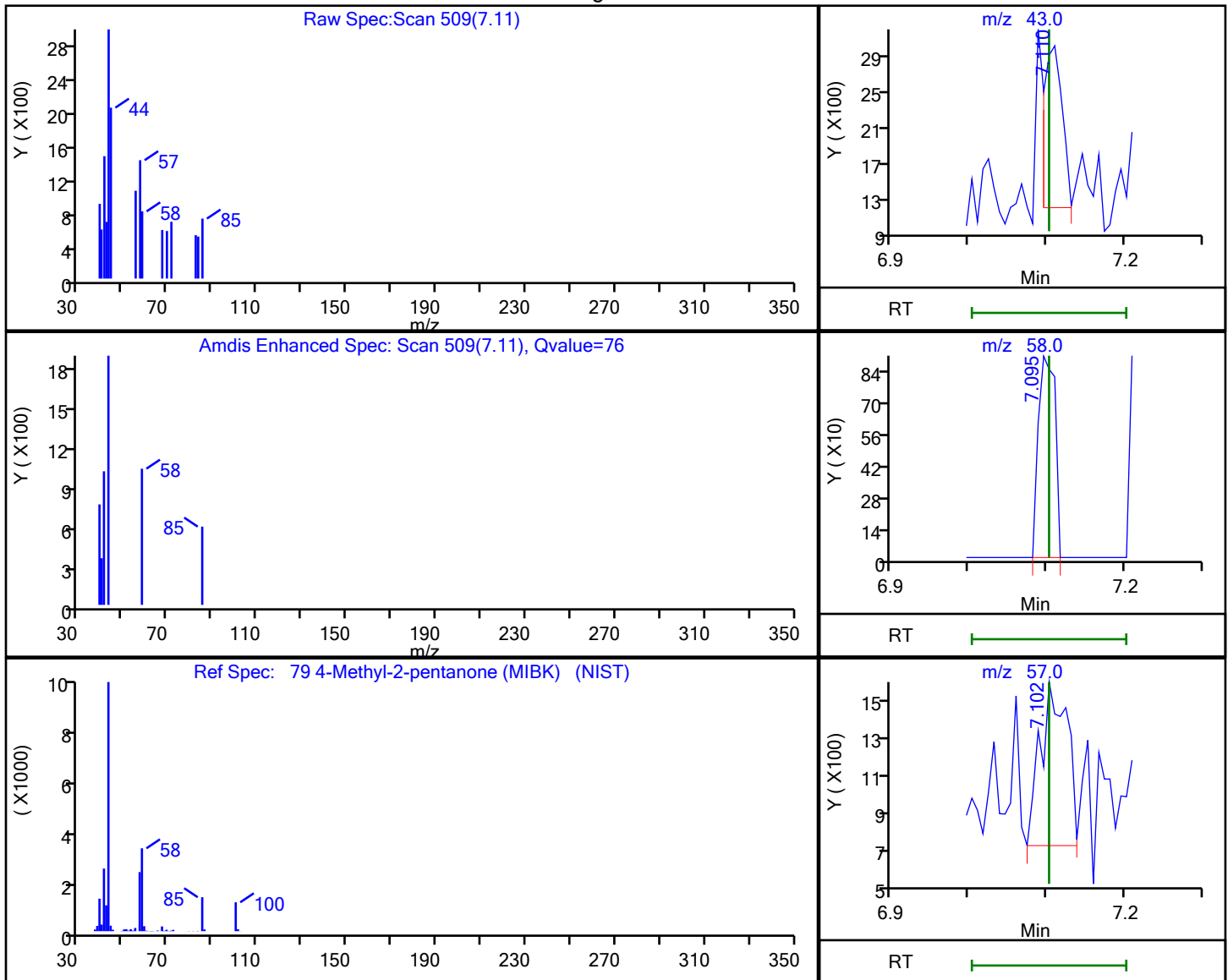
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

79 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.11	43.00	2989	1.353885
7.10	58.00	1350	
7.10	57.00	2080	

Reviewer: seifertj, 05-Jun-2021 09:04:16

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

11

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

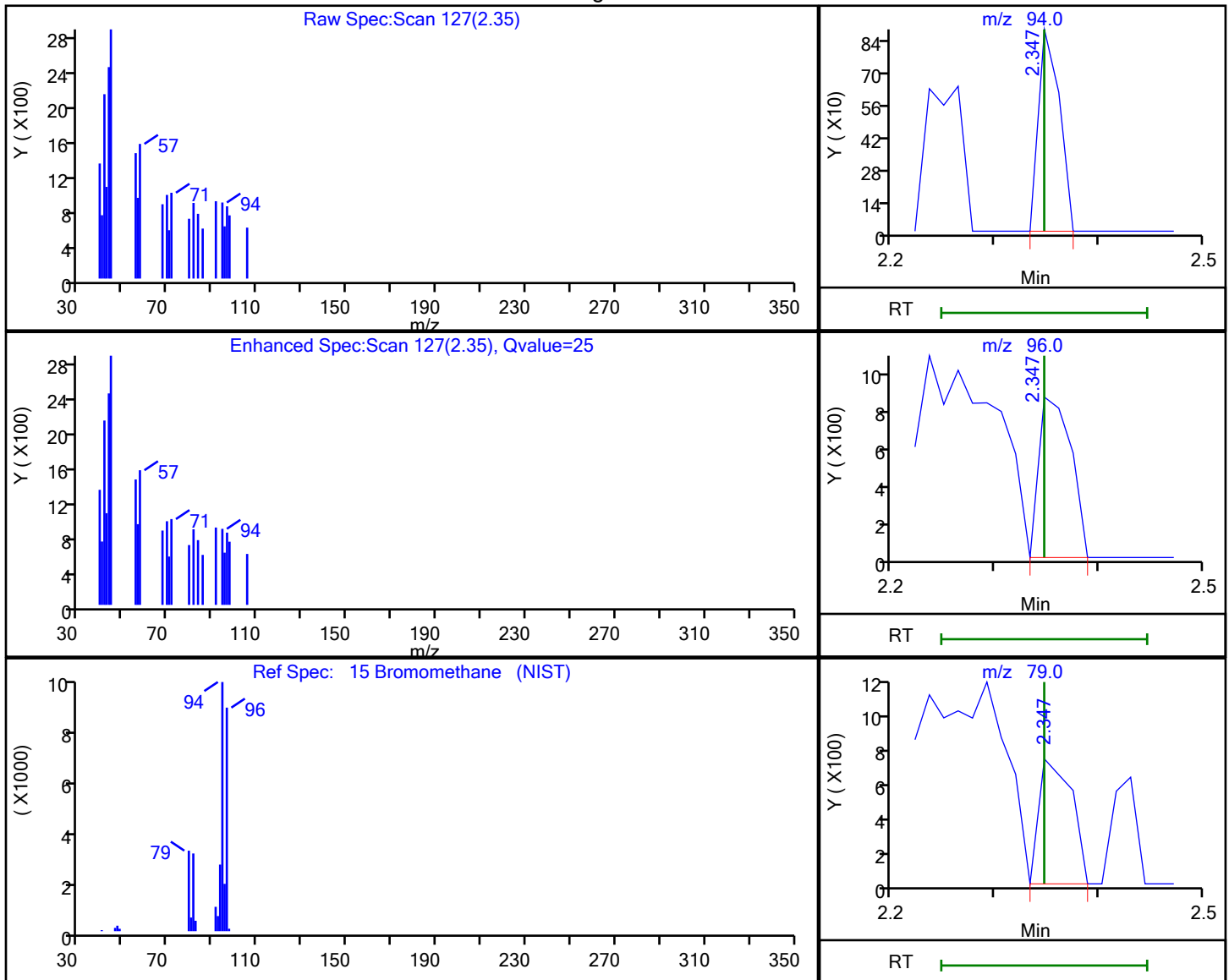
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.35	94.00	1246	0.604053
2.35	96.00	1811	
2.35	79.00	1522	

Reviewer: seifertj, 05-Jun-2021 09:03:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

11

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

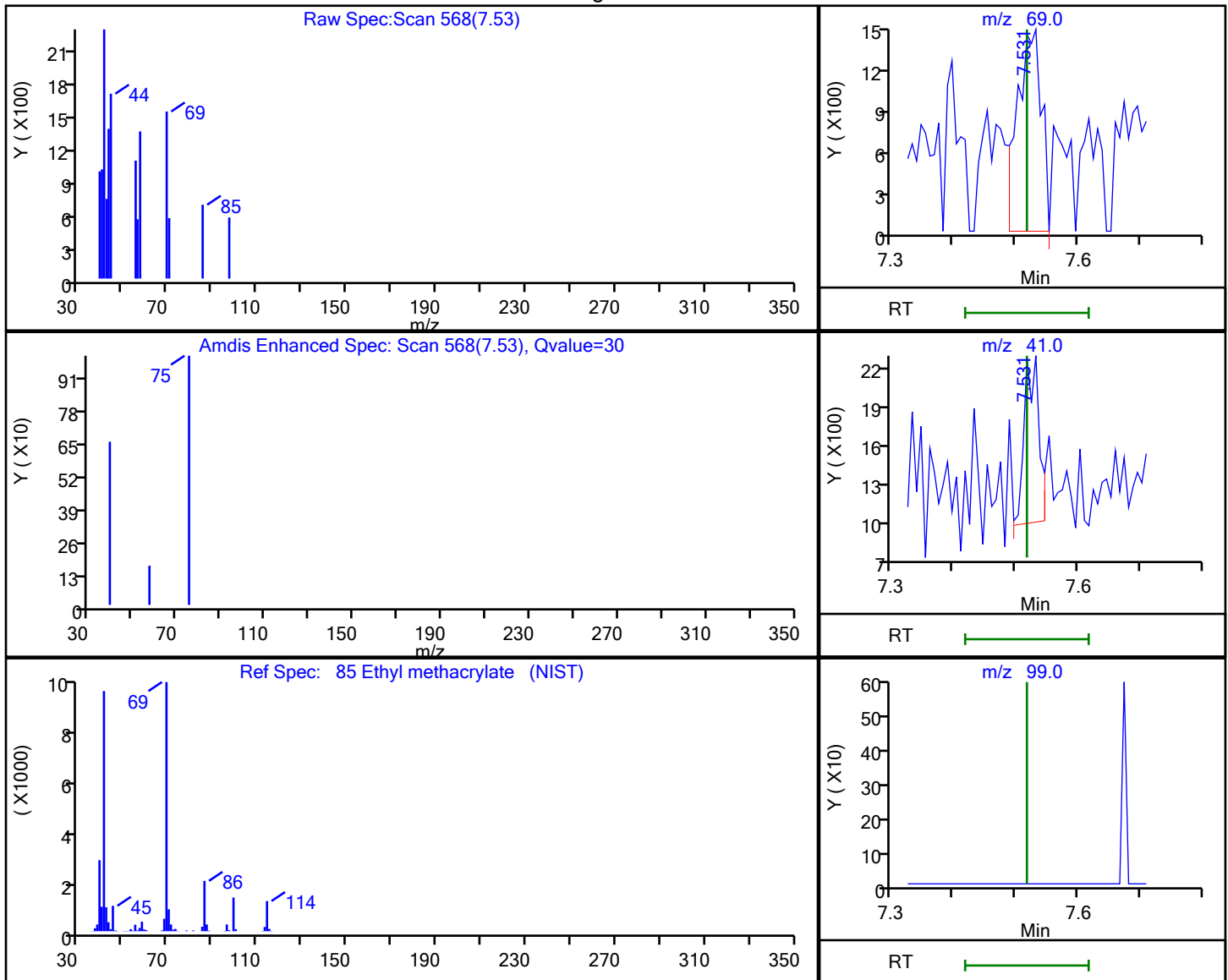
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

85 Ethyl methacrylate, CAS: 97-63-2

Processing Results



RT	Mass	Response	Amount
7.53	69.00	4052	1.143619
7.53	41.00	2030	
7.52	99.00	0	

Reviewer: seifertj, 05-Jun-2021 09:04:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 04-Jun-2021 14:11:30 ALS Bottle#: 12 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD010
 Misc. Info.: 280-0102067-015
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 14:49:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	745169	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	156866	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	250257	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	202219	50.0	51.2	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	268609	50.0	50.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	683061	50.0	50.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	272976	50.0	50.3	
11 Dichlorodifluoromethane	85	1.704	1.690	0.014	1	2898	1.00	0.9476	a
12 Chloromethane	50	1.900	1.900	0.000	93	3126	1.00	0.9659	a
13 Vinyl chloride	62	1.998	1.998	0.000	85	2149	1.00	0.8227	
15 Bromomethane	94	2.347	2.347	0.000	76	2022	1.00	1.01	
16 Chloroethane	64	2.459	2.459	0.000	1	1757	1.00	0.8725	a
17 Dichlorofluoromethane	67	2.696	2.696	0.000	94	7600	1.00	0.8719	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	95	3605	1.00	0.8393	
20 Ethyl ether	59	3.003	3.003	0.000	84	1969	1.00	0.9374	
22 Acrolein	56	3.143	3.143	0.000	93	6241	9.88	8.82	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	89	2087	1.00	0.9698	
24 112TCTFE	151	3.255	3.255	0.000	56	1221	1.00	0.8583	
25 Acetone	43	3.283	3.269	0.014	96	8353	4.00	4.26	
26 Iodomethane	142	3.380	3.380	0.000	1	1710	1.00	1.05	a
28 Carbon disulfide	76	3.450	3.450	0.000	94	7200	1.00	0.99	
30 Methyl acetate	43	3.576	3.576	0.000	70	4789	2.00	2.35	a
31 3-Chloro-1-propene	41	3.590	3.590	0.000	84	4490	1.00	1.04	
32 Methylene Chloride	84	3.702	3.716	-0.014	94	4145	1.00	0.9489	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	24	2103	10.0	8.10	
34 Acrylonitrile	53	3.911	3.911	0.000	98	9605	10.0	9.32	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	64	7230	1.00	0.9523	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	85	3121	1.00	1.19	
37 Hexane	57	4.204	4.204	0.000	77	1632	1.00	0.9428	
39 Vinyl acetate	43	4.344	4.344	0.000	98	9578	2.00	1.64	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	64	4705	1.00	0.9314	
46 2-Butanone (MEK)	43	4.833	4.819	0.014	87	8329	4.00	4.17	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	71	4526	1.00	1.01	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	80	3288	1.00	1.15	
51 sec-Butyl Alcohol	45	4.987	4.973	0.014	15	3183	24.0	24.0	a
54 Tetrahydrofuran	42	5.056	5.056	0.000	60	6788	2.00	2.57	
53 Chlorobromomethane	128	5.056	5.056	0.000	22	597	1.00	0.9316	Ma
55 Chloroform	83	5.140	5.126	0.014	90	5979	1.00	1.14	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	35	5713	1.00	1.24	
57 Cyclohexane	56	5.350	5.350	0.000	85	7823	1.00	1.11	
58 1,1-Dichloropropene	75	5.420	5.419	0.001	85	3349	1.00	0.8997	a
59 Carbon tetrachloride	117	5.420	5.419	0.001	83	3074	1.00	0.9061	
60 Isobutyl alcohol	41		5.461				ND	ND	U
63 Benzene	78	5.587	5.587	0.000	91	9347	1.00	0.9064	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	94	4204	1.00	0.9670	a
66 n-Heptane	43	5.825	5.824	0.001	36	3546	1.00	0.7804	
68 Trichloroethene	95	6.146	6.146	0.000	83	3710	1.00	1.28	
69 2-Pentanone	43	6.285	6.271	0.014	35	6764	3.20	3.38	a
70 Methylcyclohexane	55	6.355	6.355	0.000	84	4554	1.00	0.8352	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	65	2299	1.00	0.8202	a
73 1,4-Dioxane	88		6.425				ND	ND	
74 Dibromomethane	93	6.453	6.453	0.000	8	1494	1.00	0.8501	
75 Dichlorobromomethane	83	6.602	6.609	-0.007	88	4588	1.00	1.19	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	1	1572	1.00	0.9167	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	81	3557	1.00	0.8390	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	94	9180	4.00	3.95	
82 Toluene	91	7.295	7.295	0.000	97	10911	1.00	1.06	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	87	3197	1.00	0.7774	
85 Ethyl methacrylate	69	7.524	7.517	0.007	50	5251	1.00	1.68	M
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	80	2894	1.00	1.13	
89 Tetrachloroethene	164	7.767	7.767	0.000	75	1571	1.00	0.9675	
90 1,3-Dichloropropane	76	7.825	7.824	0.000	91	3652	1.00	0.9186	a
91 2-Hexanone	43	7.853	7.853	0.000	94	6263	4.00	4.66	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	81	1992	1.00	0.8497	
96 Ethylene Dibromide	107	8.153	8.146	0.007	77	2146	1.00	0.9509	
98 1-Chlorohexane	91	8.568	8.568	0.000	34	4852	0.8000	0.7573	
99 Chlorobenzene	112	8.604	8.604	0.000	94	6420	1.00	1.00	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.682	0.001	44	1826	1.00	0.8073	
101 Ethylbenzene	106	8.683	8.682	0.001	96	3197	1.00	0.9396	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	96	3939	1.00	0.9185	
103 o-Xylene	106	9.183	9.176	0.007	97	3618	1.00	0.9033	
104 Styrene	104	9.197	9.197	0.000	83	6705	1.00	0.9157	
106 Bromoform	173	9.376	9.383	-0.007	75	567	1.00	0.9897	Ma
107 Isopropylbenzene	105	9.526	9.526	0.000	95	10101	1.00	0.9226	
109 Cyclohexanone	55	9.626	9.626	0.000	90	6099	30.0	34.7	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	87	4414	1.00	1.05	
111 Bromobenzene	156	9.855	9.855	0.000	90	2049	1.00	0.8246	
112 trans-1,4-Dichloro-2-butene	53	9.855	9.862	-0.007	1	1008	1.00	0.9228	M
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	1	1187	1.00	1.09	M
114 N-Propylbenzene	120	9.934	9.941	-0.007	98	2835	1.00	0.9321	
115 2-Chlorotoluene	126	10.034	10.034	0.000	90	2028	1.00	0.8153	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	90	9347	1.00	0.9560	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	95	2894	1.00	1.06	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	8473	1.00	1.06	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	95	9813	1.00	0.9787	
120 sec-Butylbenzene	134	10.642	10.649	-0.007	93	1396	1.00	0.9397	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	90	4284	1.00	0.8825	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	93	9054	1.00	0.9107	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	80	4867	1.00	0.9550	
125 n-Butylbenzene	91	11.207	11.207	0.000	93	9078	1.00	0.9470	
127 1,2-Dichlorobenzene	146	11.242	11.235	0.007	85	4284	1.00	0.9383	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.022	0.007	1	234	1.00	1.02	Ma
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	81	2770	1.00	0.9268	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	1	288	1.00	0.9658	M
132 Naphthalene	128	13.123	13.123	0.000	95	7932	1.00	0.8937	a
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	86	2627	1.00	0.9628	
S 149 1,2-Dichloroethene, Total (URS)	95				0		2.00	2.34	
S 150 1,2-Dichloroethene, Total	1				0		2.00	2.34	
S 151 Trihalomethanes, Total	1				0		4.00	4.17	
S 152 Total BTEX	1				0			4.73	
S 153 Xylenes, Total (URS)	1				0		2.00	1.82	
S 155 Xylenes, Total	106				0		2.00	1.82	
S 156 1,3-Dichloropropene, Total	1				0		2.00	1.62	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MV-Gas A_00089

Amount Added: 0.20

Units: uL

MV-MegaMainA_00050

Amount Added: 0.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD010

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

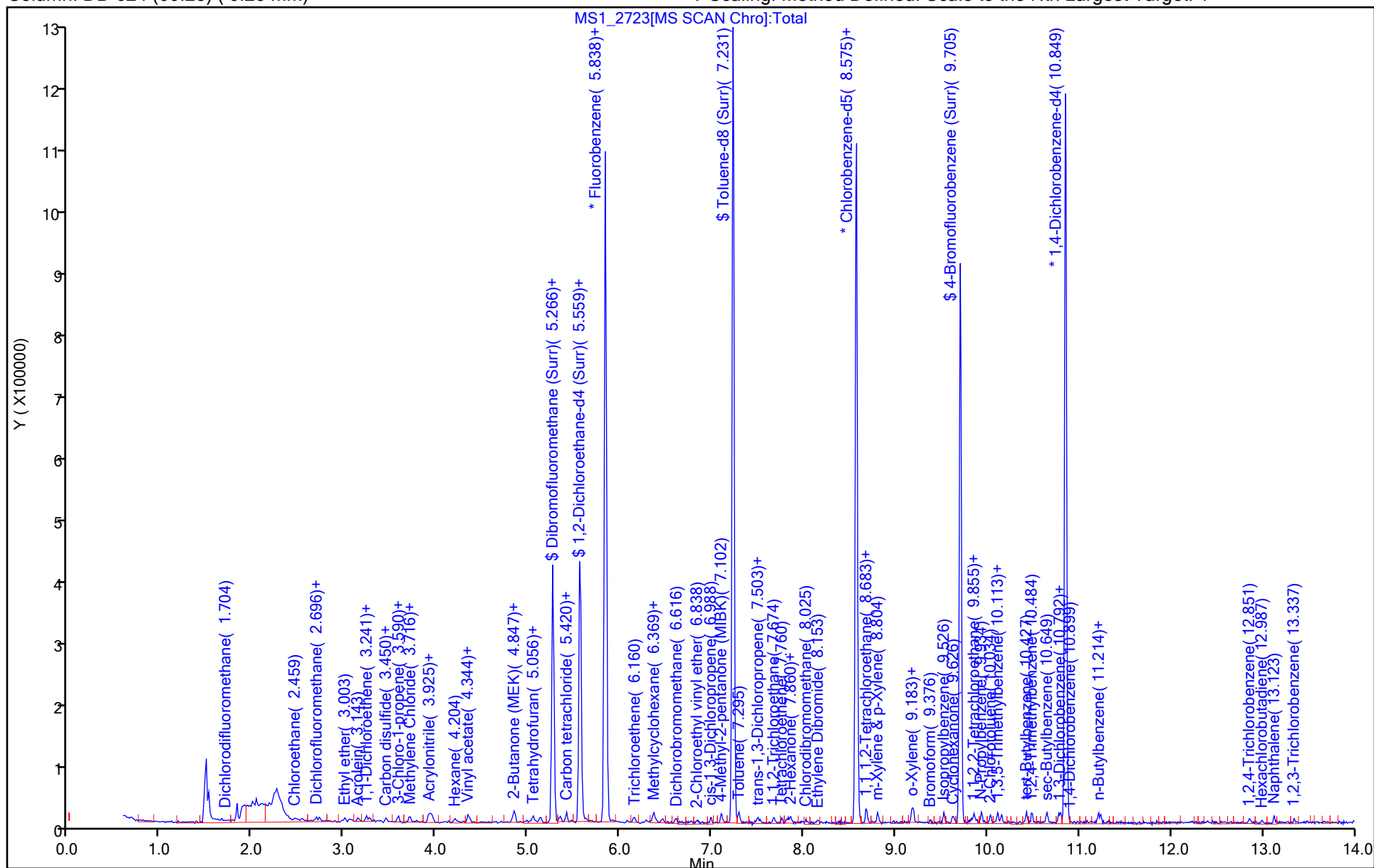
ALS Bottle#: 12

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

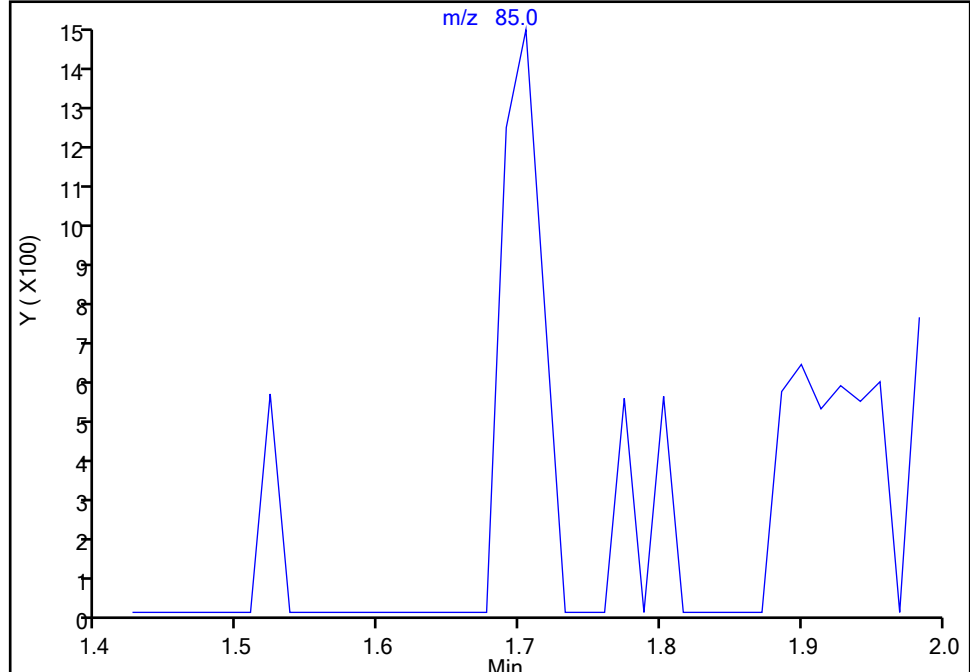
11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

Not Detected

Expected RT: 1.69

Processing Integration Results



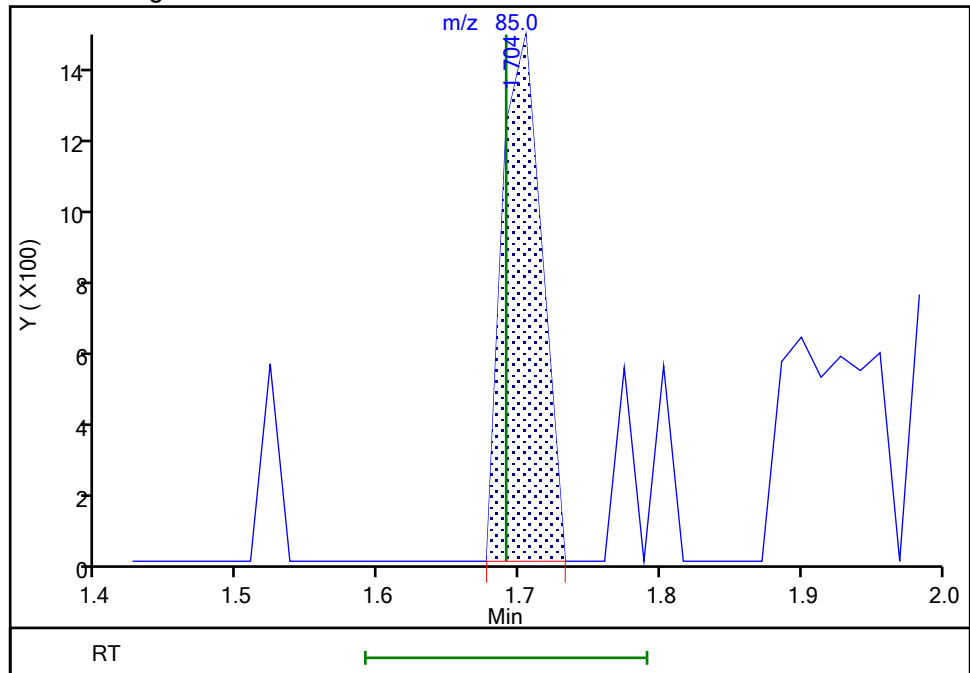
RT: 1.70

Area: 2898

Amount: 0.947636

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:00

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

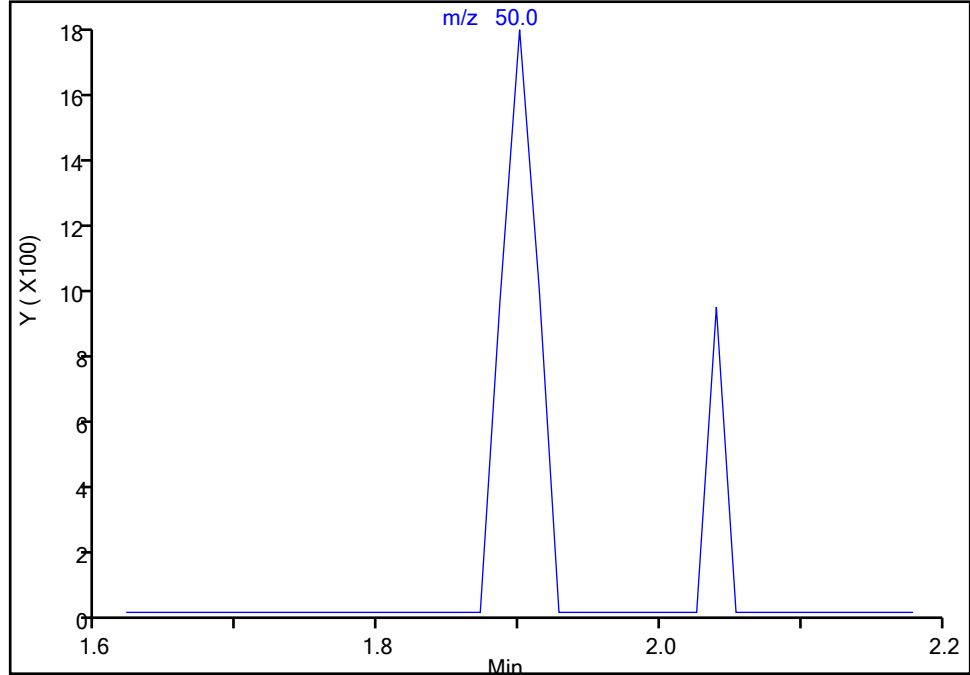
12 Chloromethane, CAS: 74-87-3

Signal: 1

Not Detected

Expected RT: 1.90

Processing Integration Results



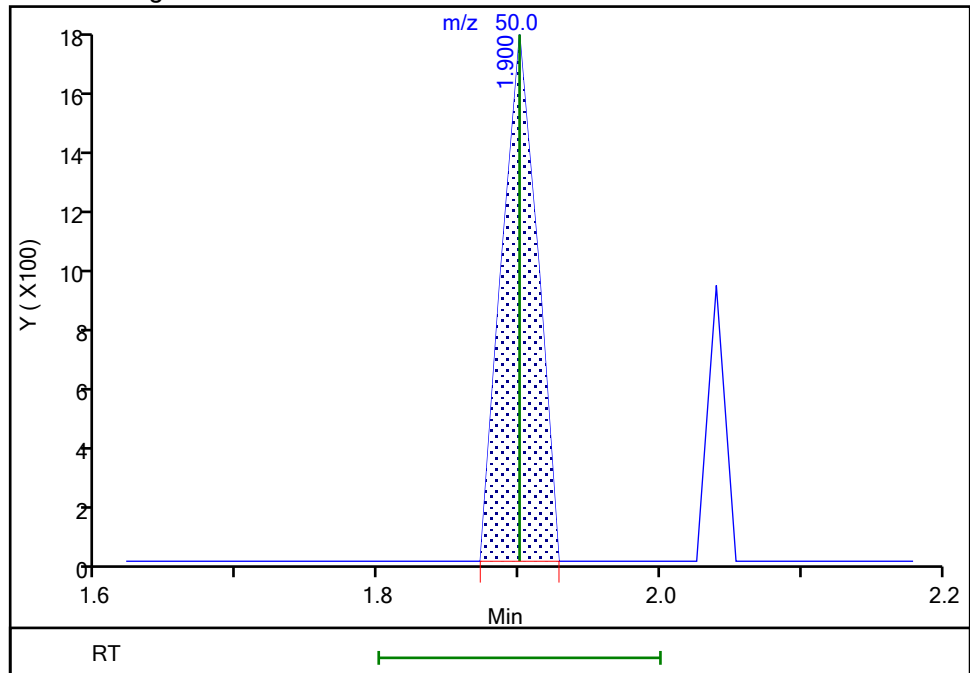
RT: 1.90

Area: 3126

Amount: 0.965853

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:05

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

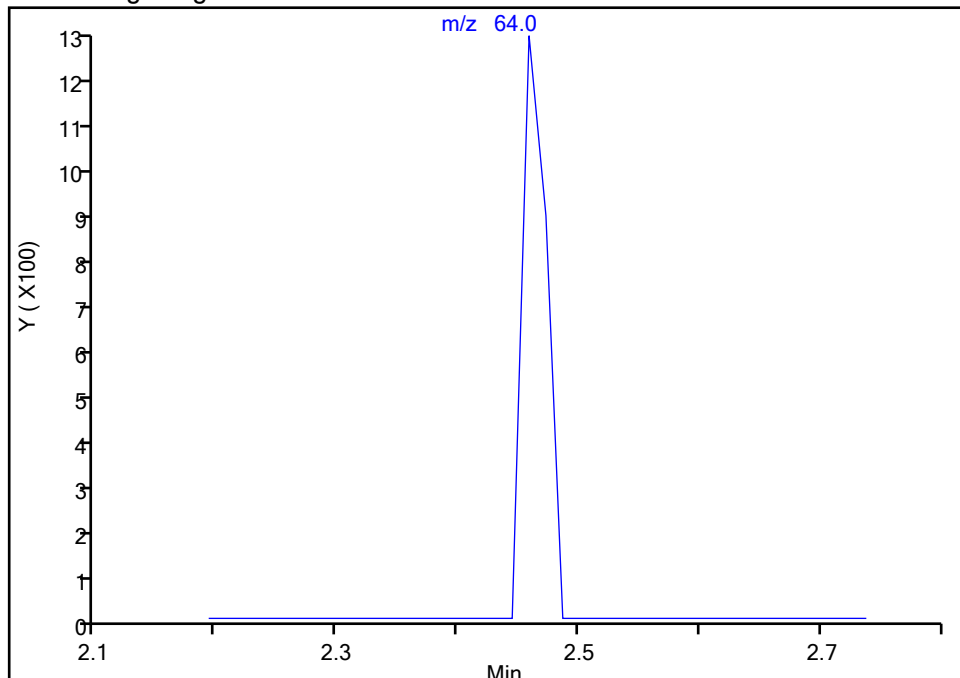
16 Chloroethane, CAS: 75-00-3

Signal: 1

Not Detected

Expected RT: 2.46

Processing Integration Results



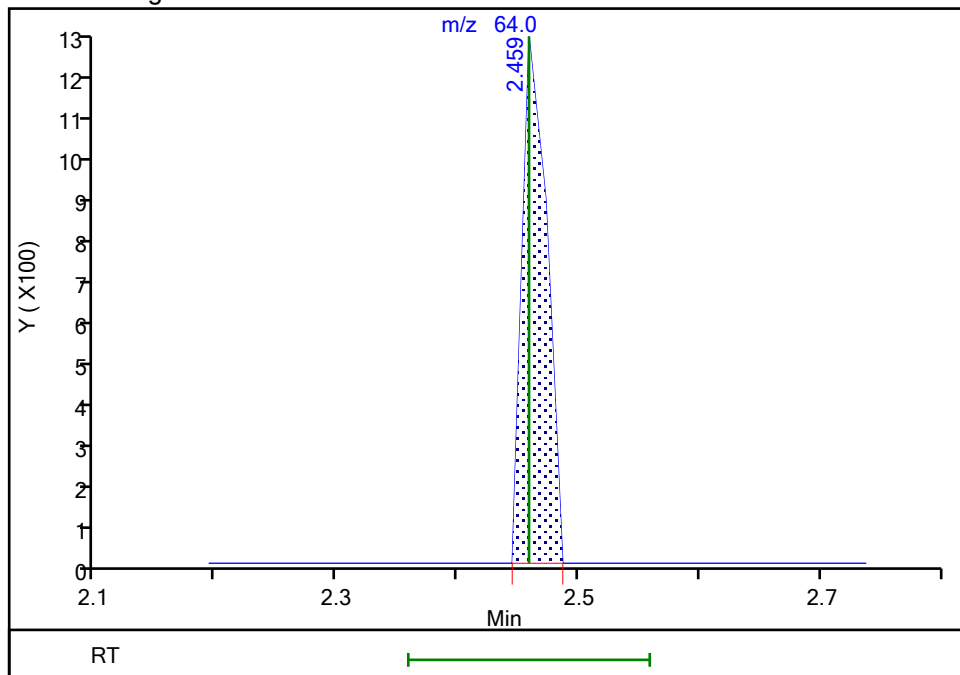
RT: 2.46

Area: 1757

Amount: 0.872484

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:12

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

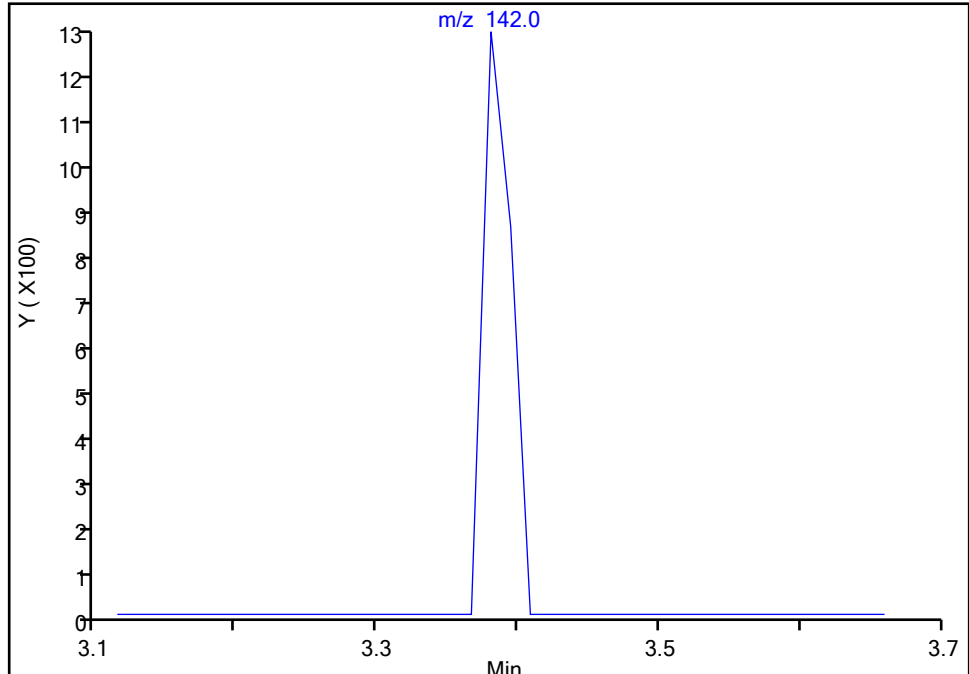
26 Iodomethane, CAS: 74-88-4

Signal: 1

Not Detected

Expected RT: 3.38

Processing Integration Results



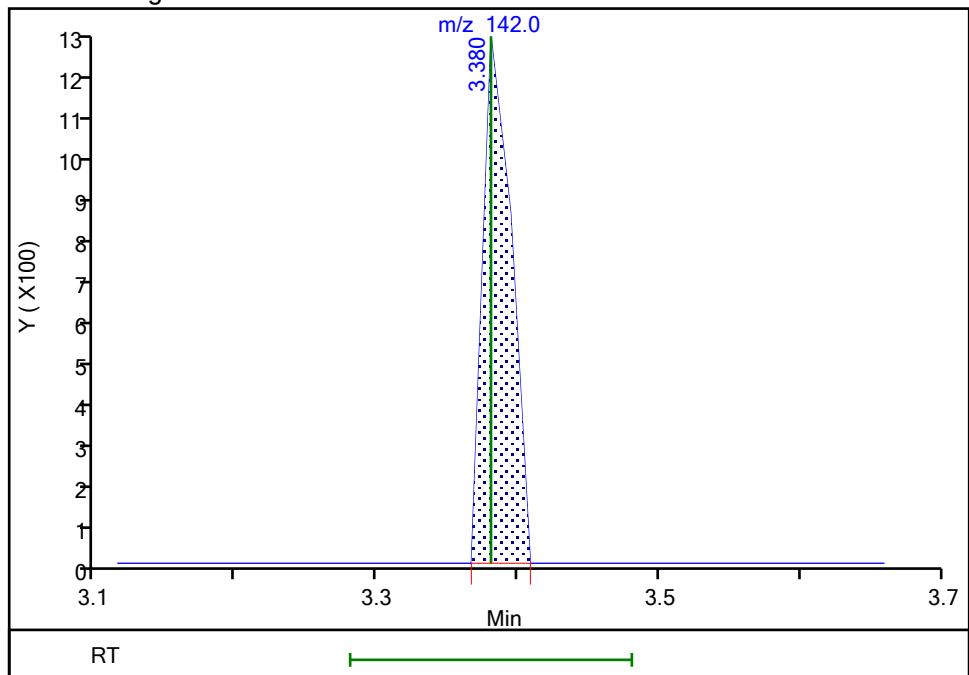
RT: 3.38

Area: 1710

Amount: 1.046931

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:27

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

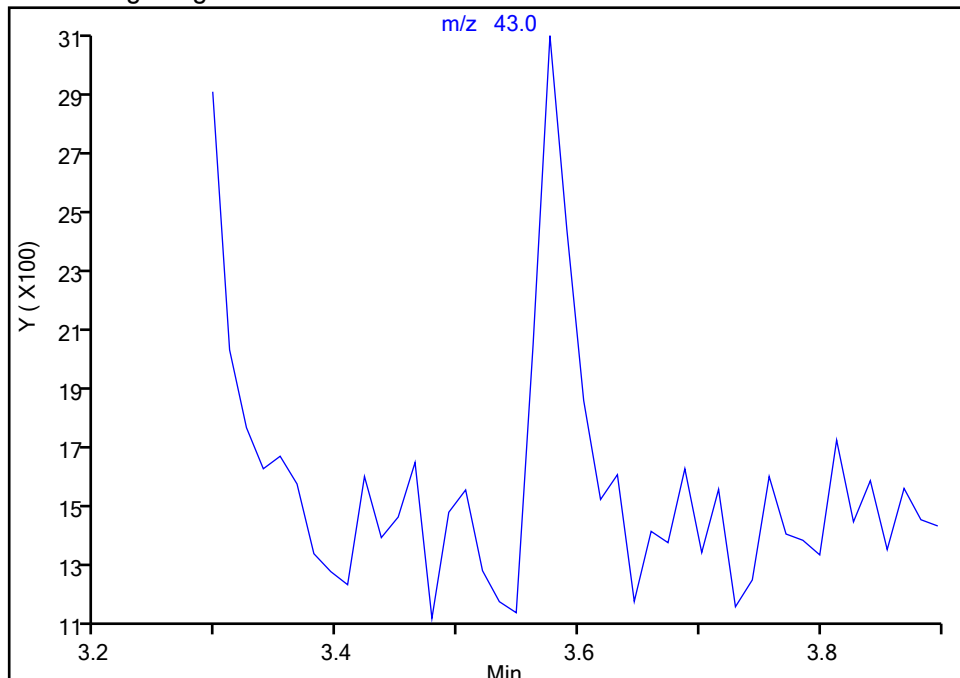
30 Methyl acetate, CAS: 79-20-9

Signal: 1

Not Detected

Expected RT: 3.58

Processing Integration Results



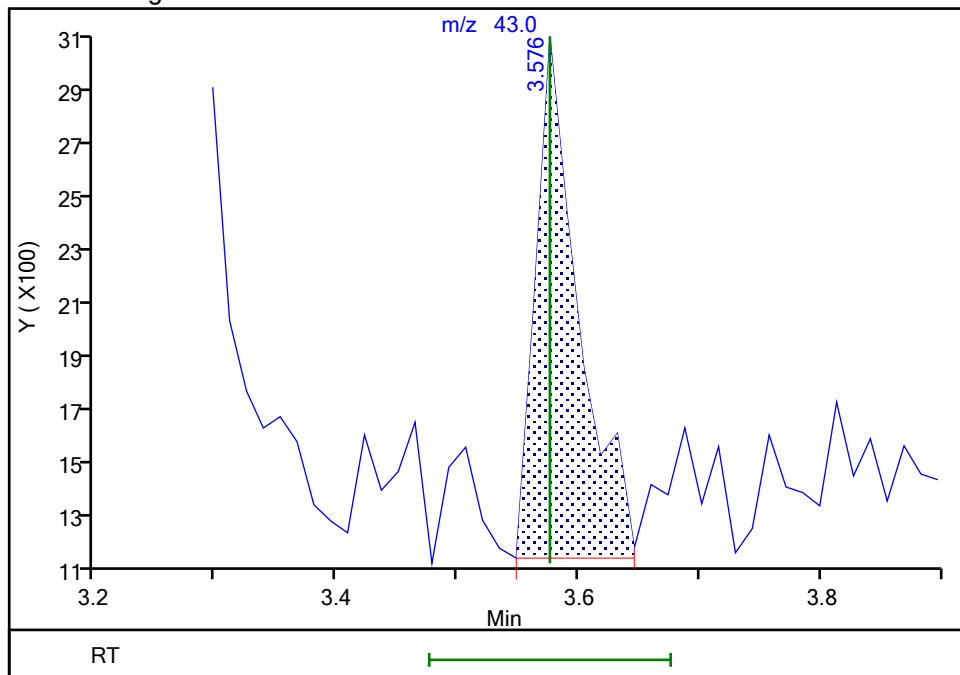
RT: 3.58

Area: 4789

Amount: 2.351372

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:35

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

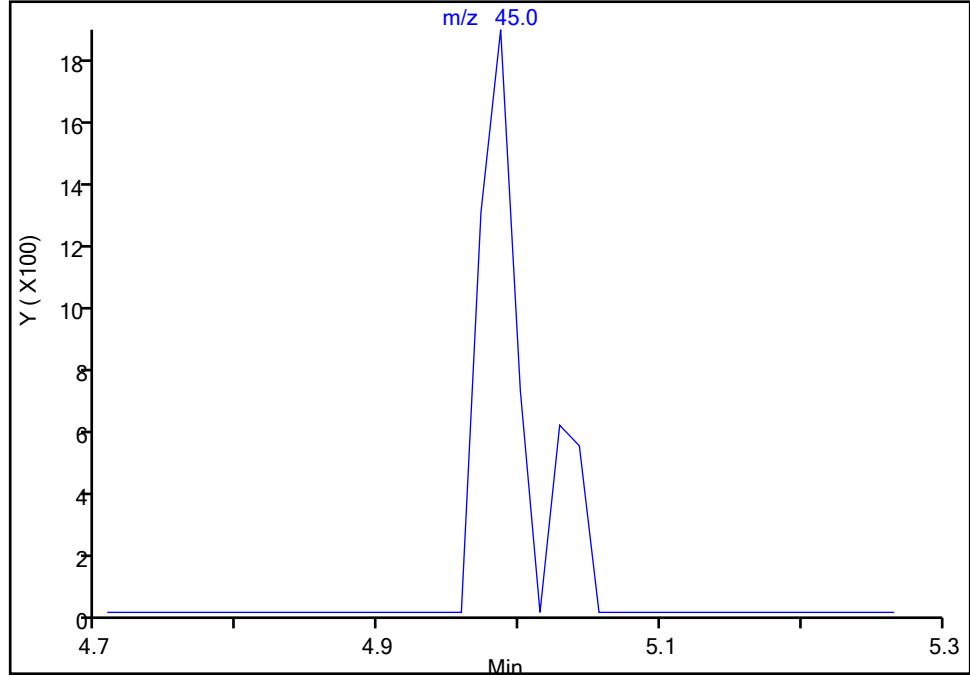
51 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

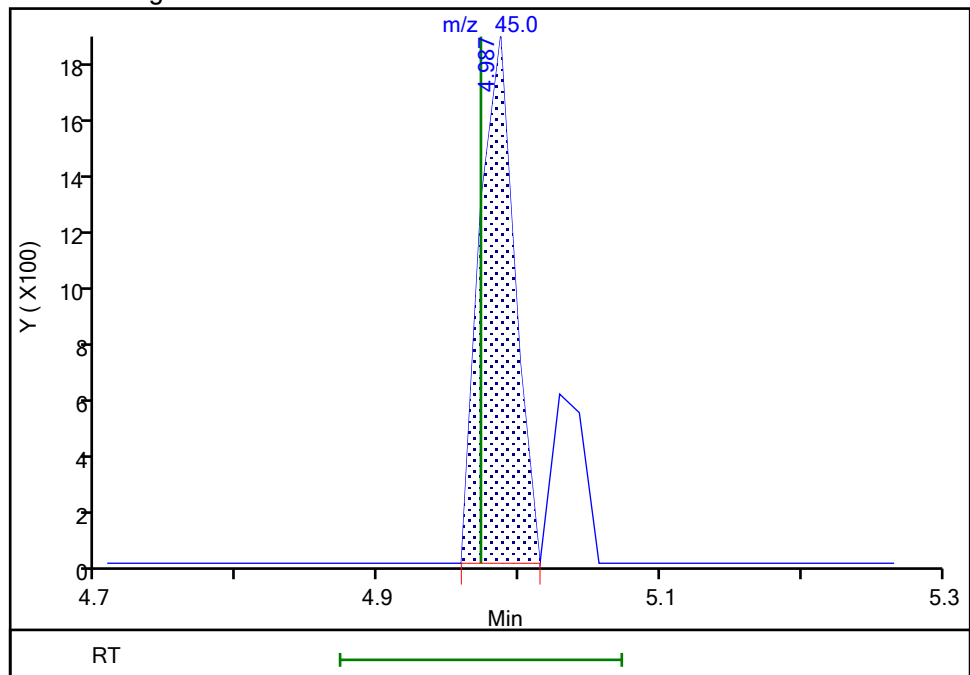
Not Detected

Expected RT: 4.97

Processing Integration Results



Manual Integration Results



RT: 4.99
Area: 3183
Amount: 24.010620
Amount Units: ug/l

Reviewer: seifertj, 05-Jun-2021 09:05:48

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

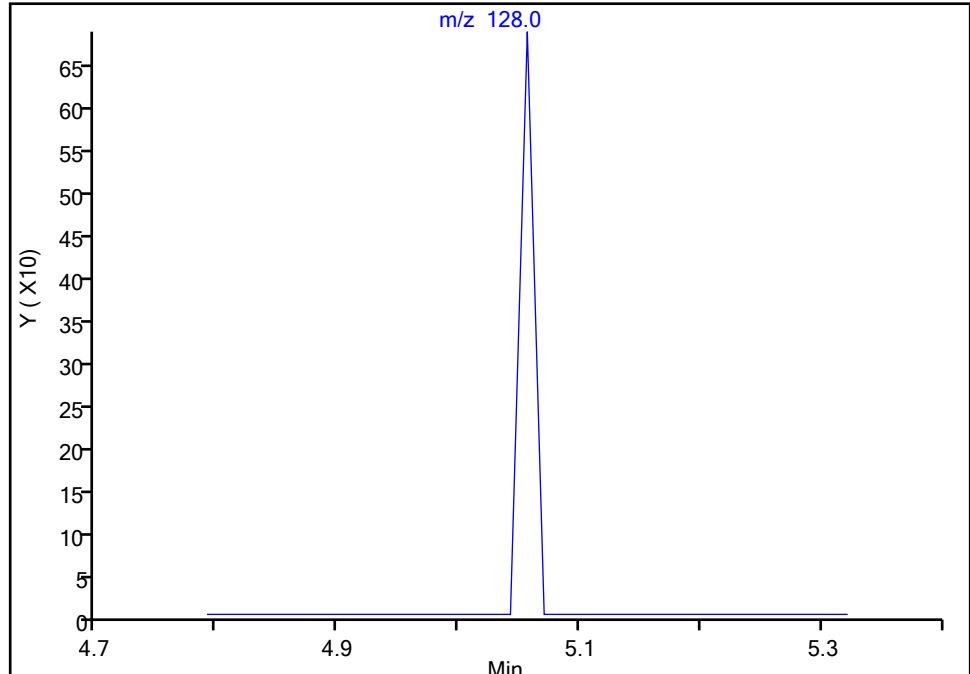
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

53 Chlorobromomethane, CAS: 74-97-5

Signal: 1

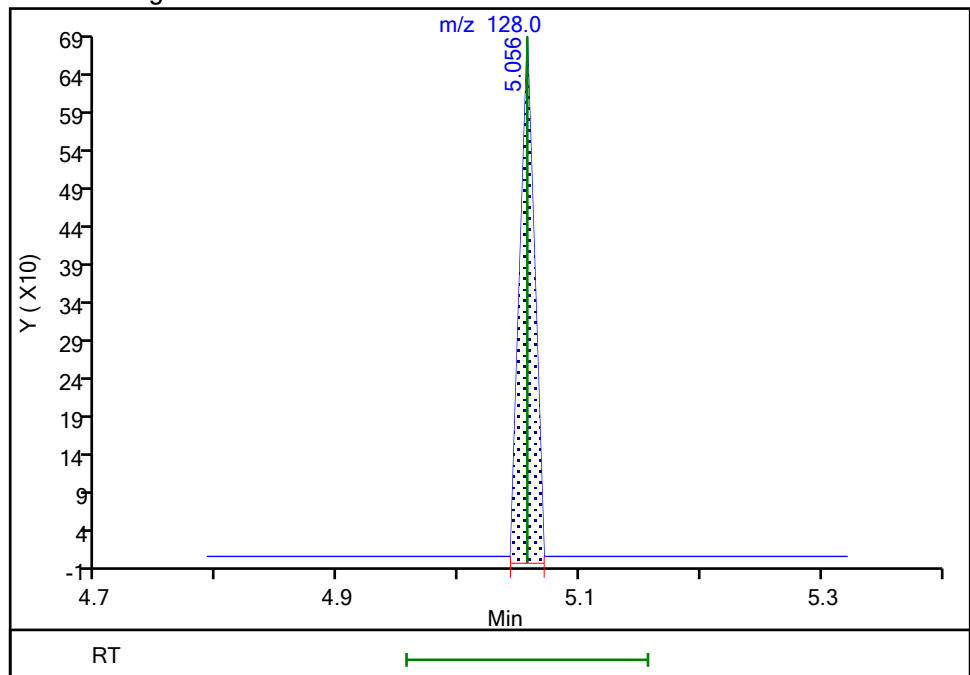
Not Detected
Expected RT: 5.06

Processing Integration Results



RT: 5.06
Area: 597
Amount: 0.931608
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:02
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

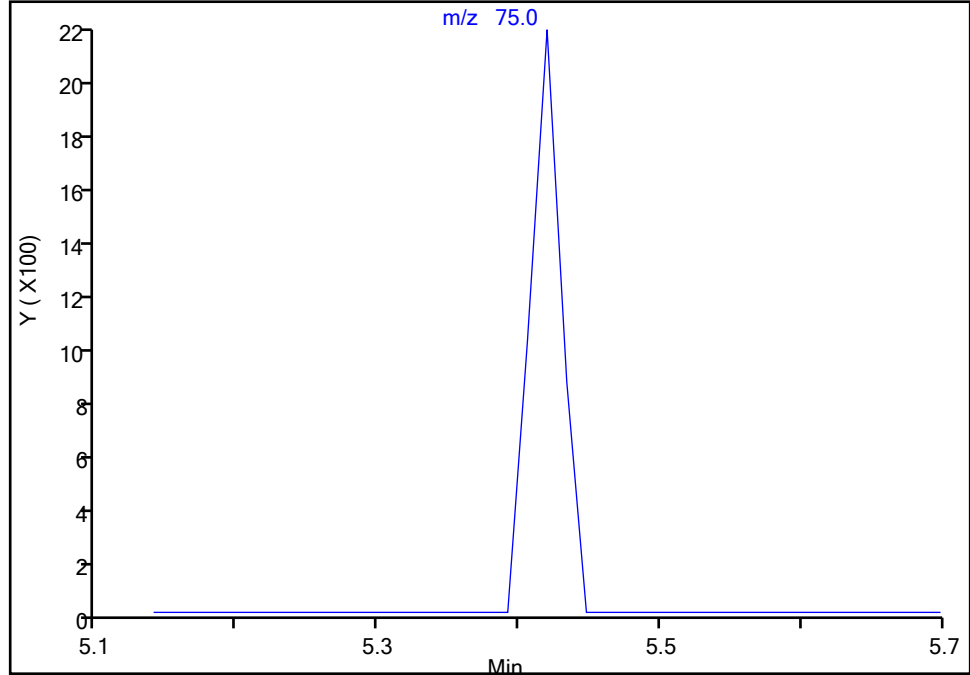
58 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

Not Detected

Expected RT: 5.42

Processing Integration Results



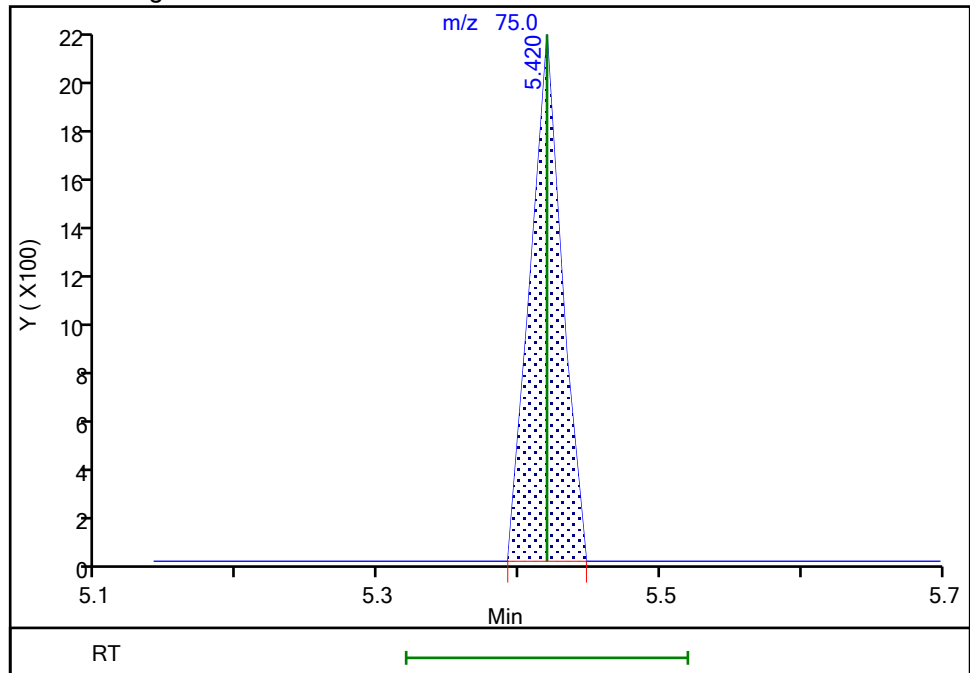
RT: 5.42

Area: 3349

Amount: 0.899702

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:11

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

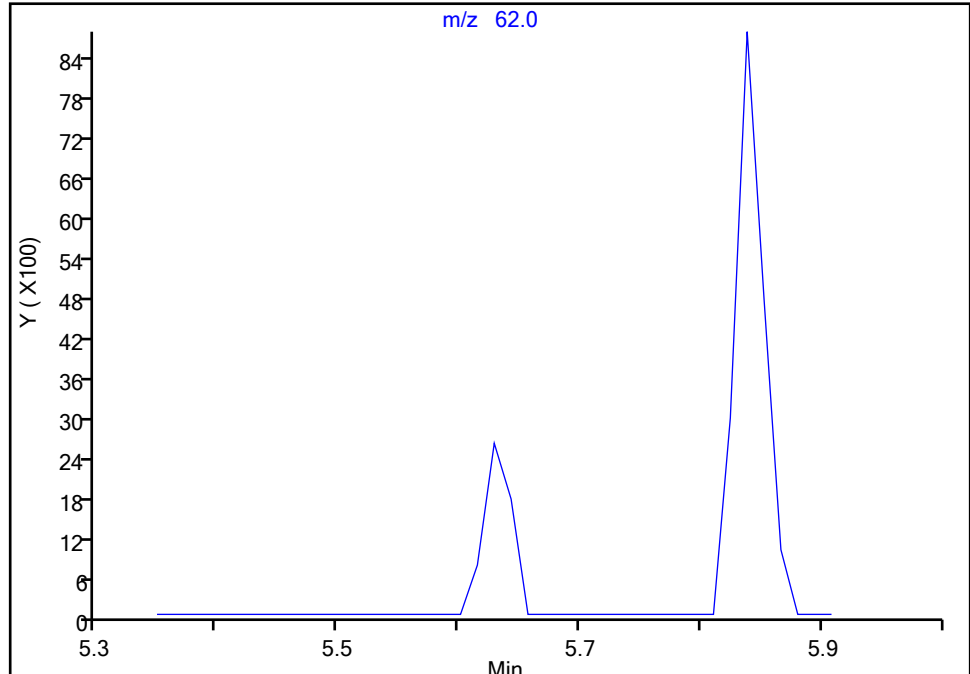
64 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

Not Detected

Expected RT: 5.63

Processing Integration Results



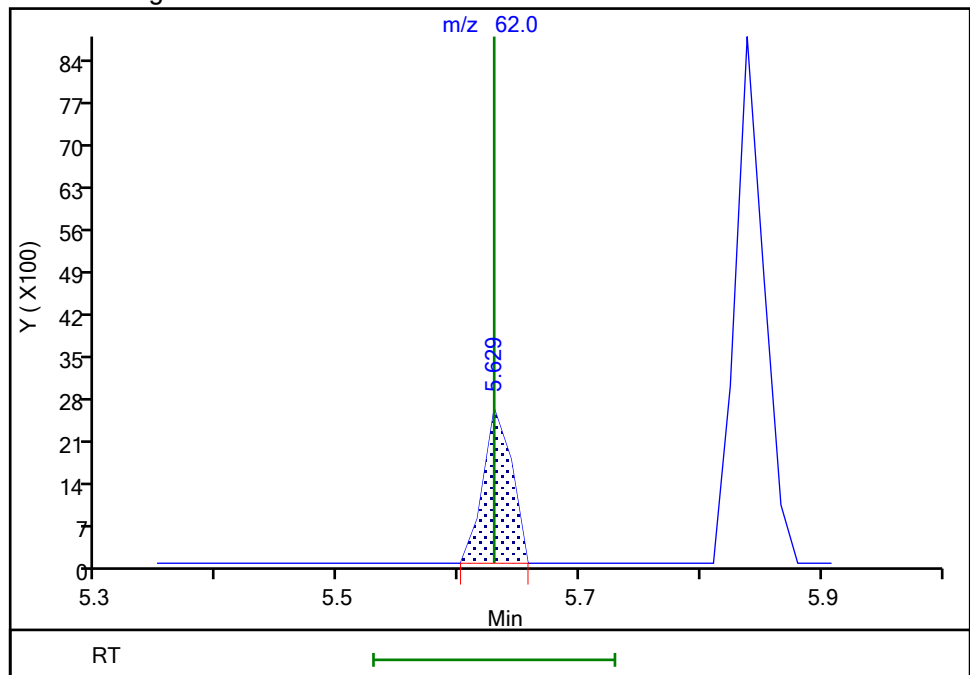
RT: 5.63

Area: 4204

Amount: 0.966993

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:29

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

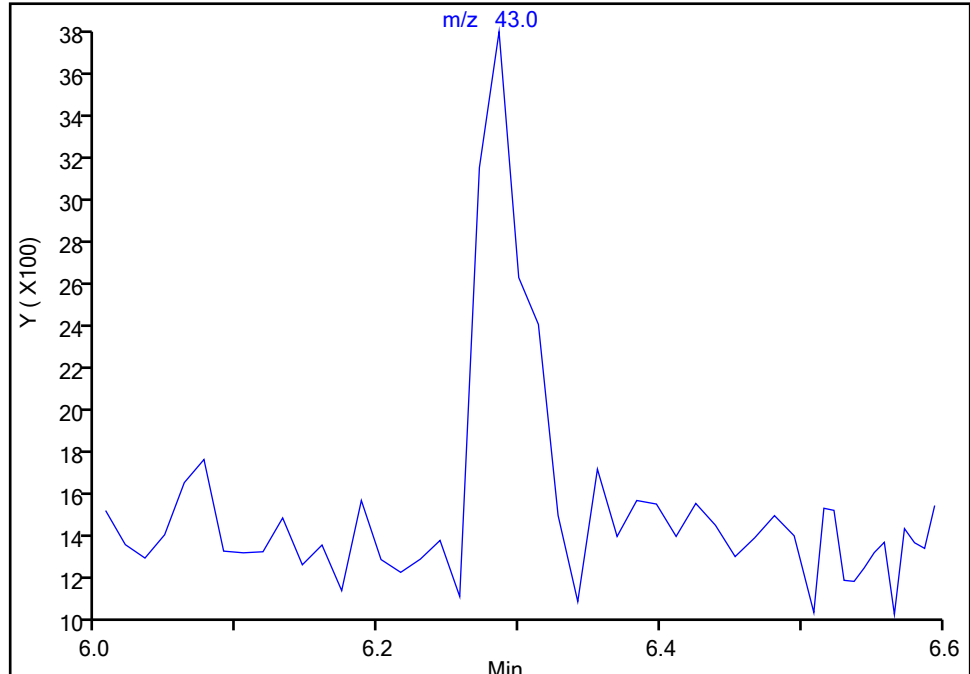
69 2-Pentanone, CAS: 107-87-9

Signal: 1

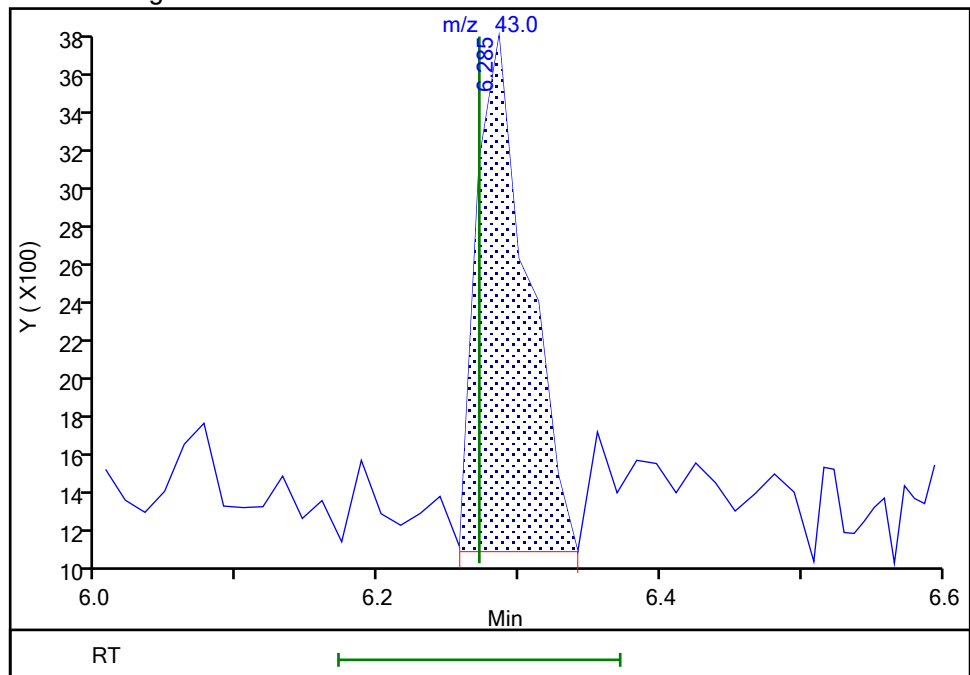
Not Detected

Expected RT: 6.27

Processing Integration Results



Manual Integration Results



RT: 6.29

Area: 6764

Amount: 3.378807

Amount Units: ug/l

Reviewer: seifertj, 05-Jun-2021 09:06:39

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

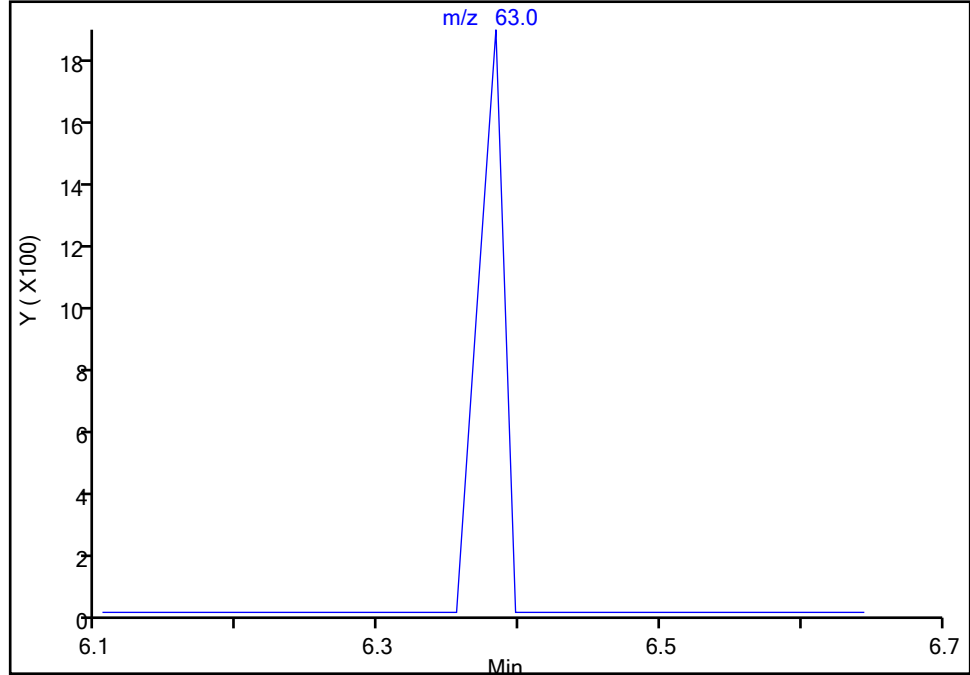
71 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

Not Detected

Expected RT: 6.38

Processing Integration Results



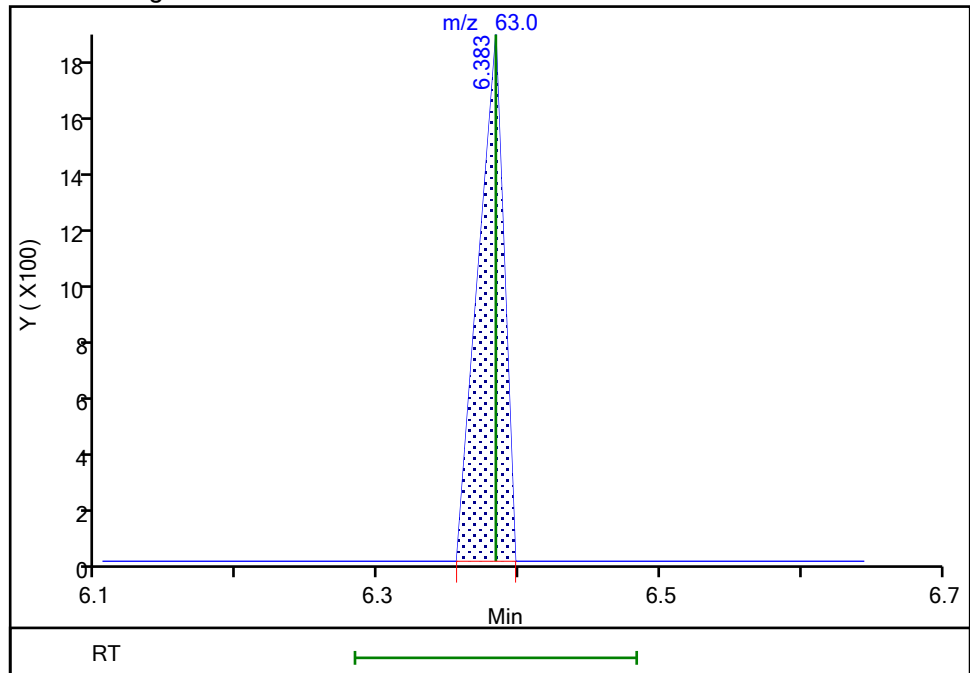
RT: 6.38

Area: 2299

Amount: 0.820248

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:46

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

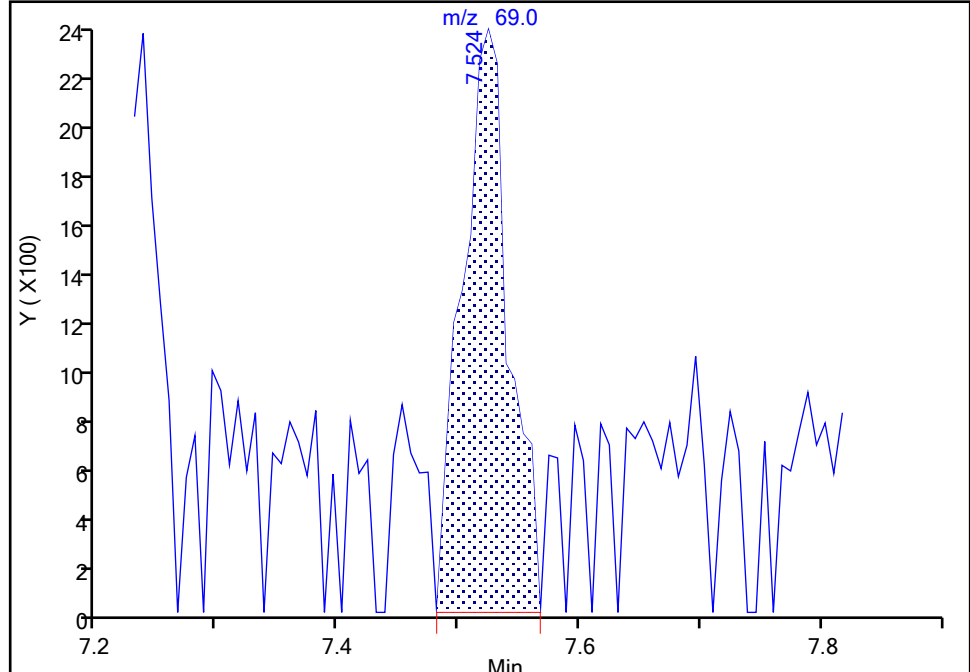
MS SCAN

85 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

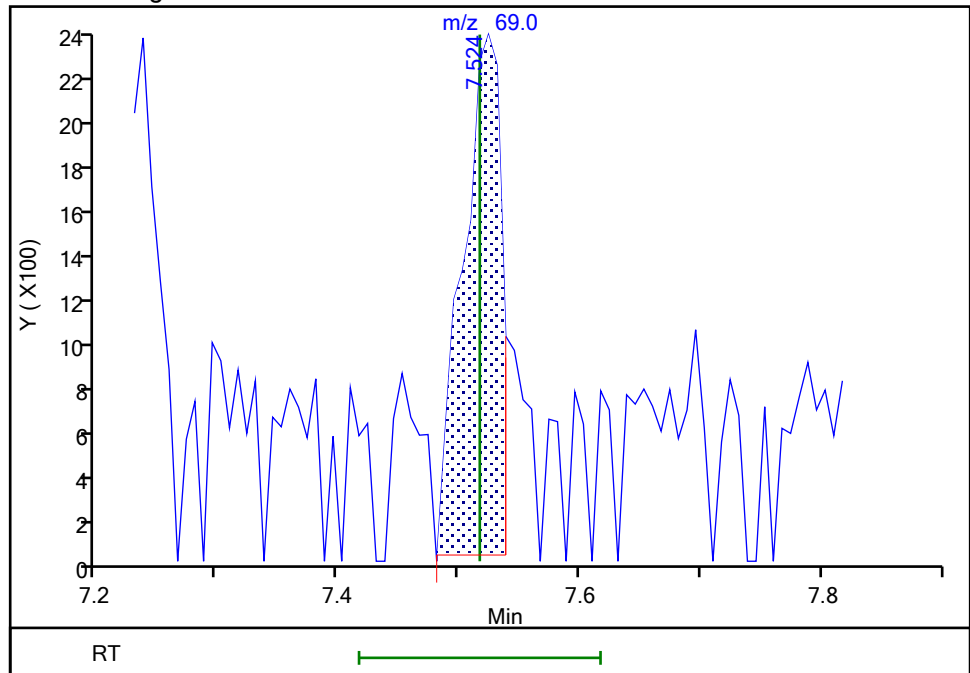
RT: 7.52
Area: 6373
Amount: 2.039633
Amount Units: ug/l

Processing Integration Results



RT: 7.52
Area: 5251
Amount: 1.680545
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:34:30

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Denver

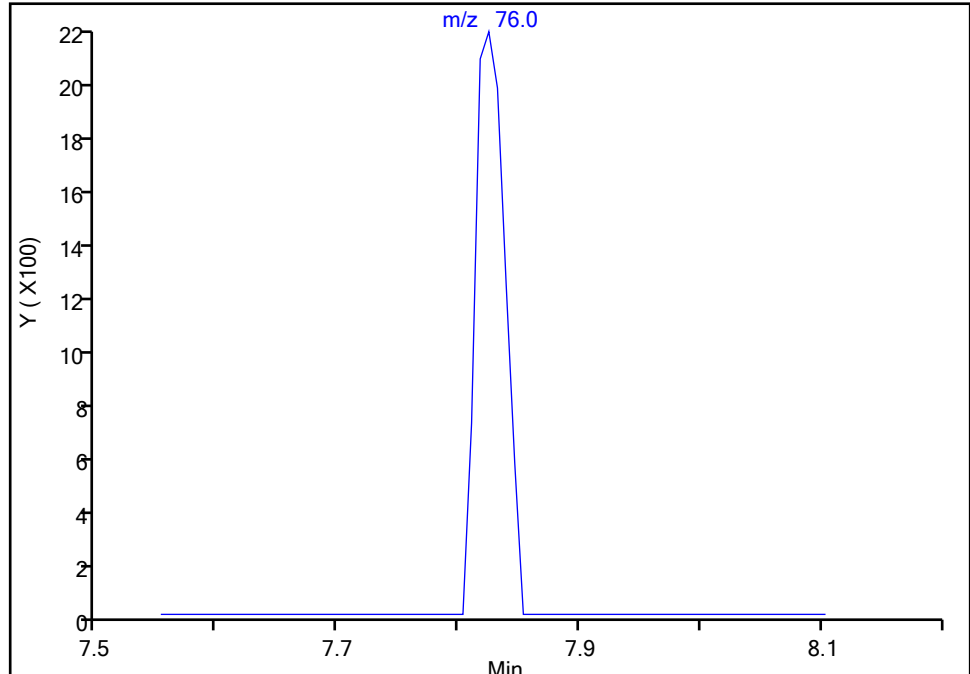
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

90 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

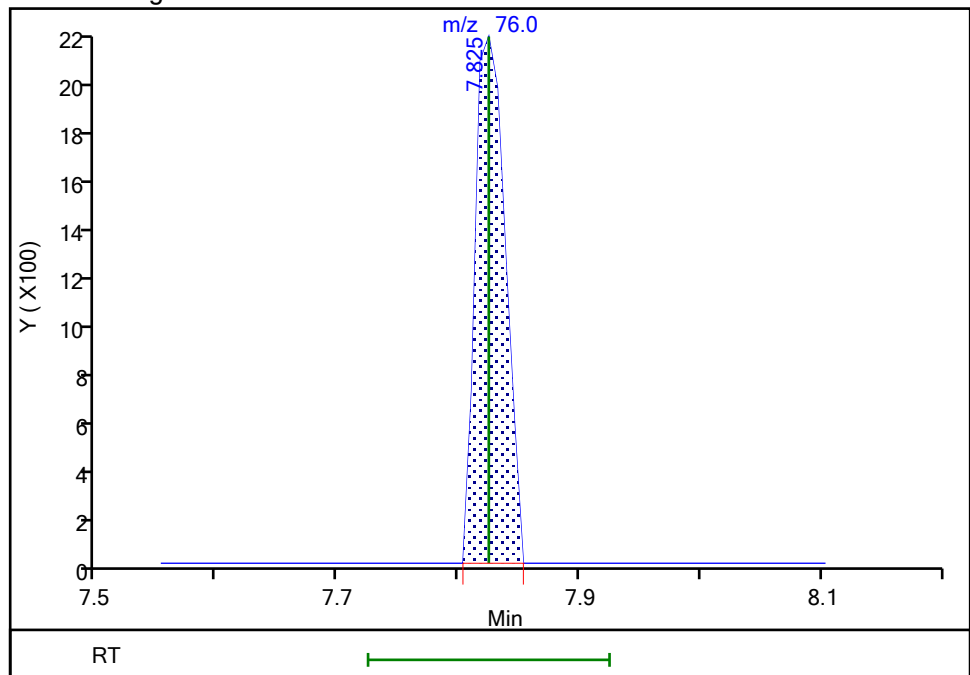
Not Detected
Expected RT: 7.82

Processing Integration Results



RT: 7.82
Area: 3652
Amount: 0.918572
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:07:00
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

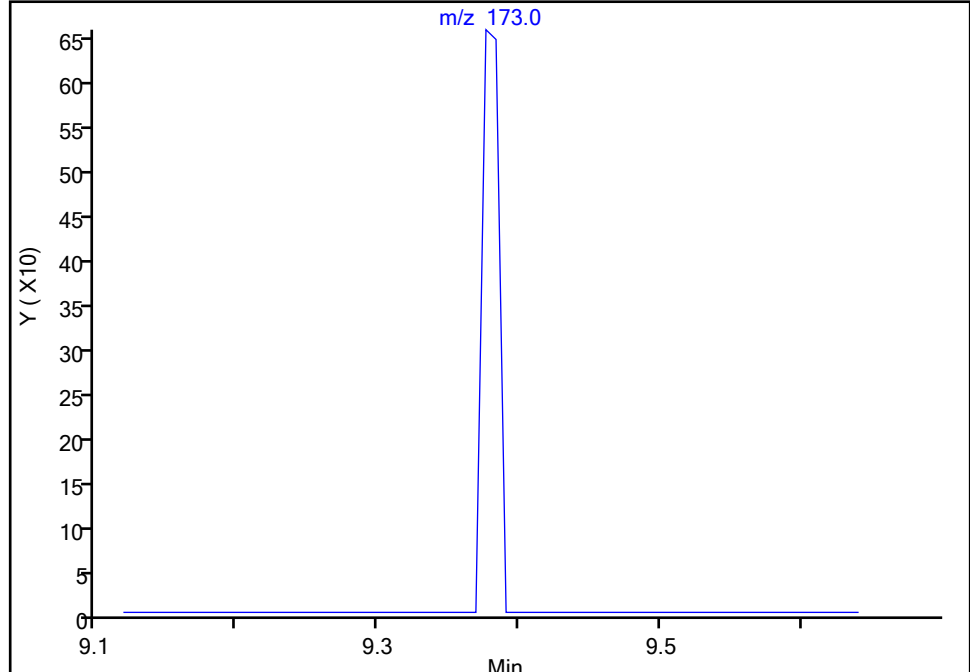
106 Bromoform, CAS: 75-25-2

Signal: 1

Not Detected

Expected RT: 9.38

Processing Integration Results



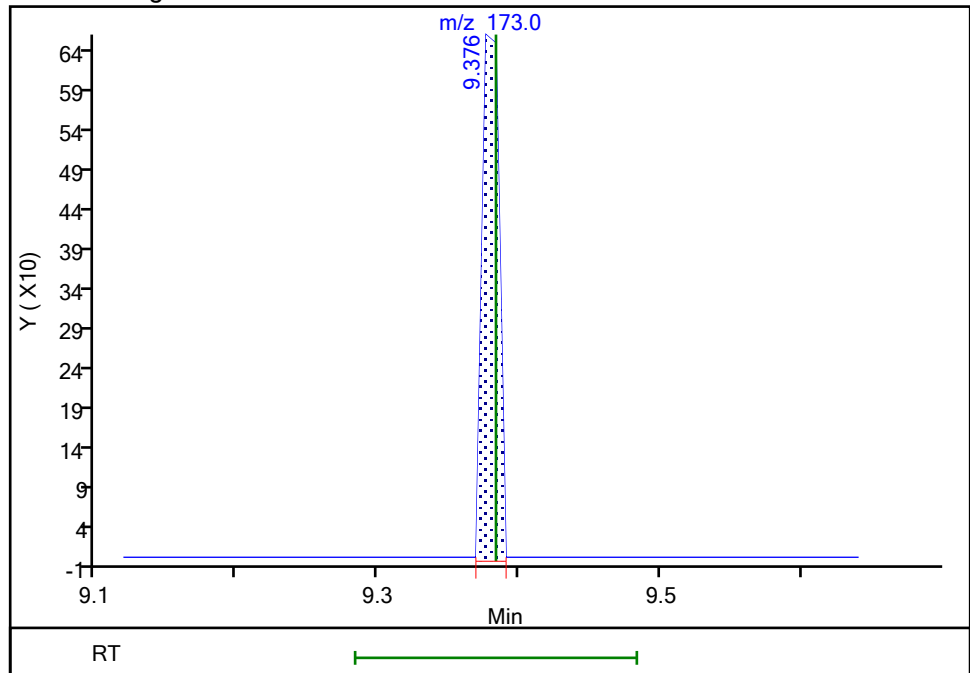
RT: 9.38

Area: 567

Amount: 0.989735

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:07:28

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

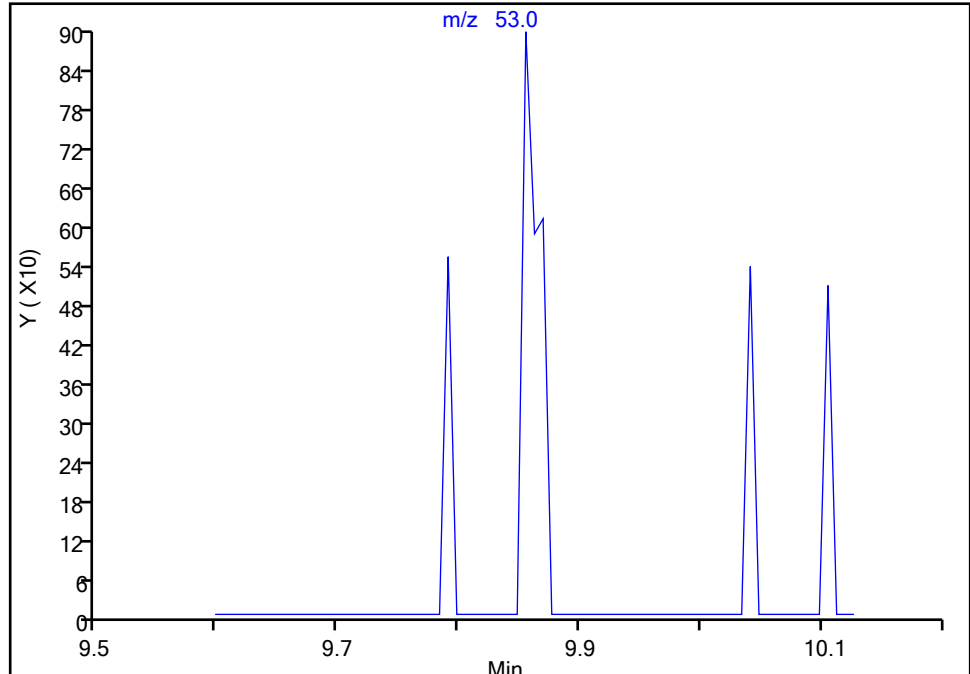
112 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

Not Detected

Expected RT: 9.86

Processing Integration Results



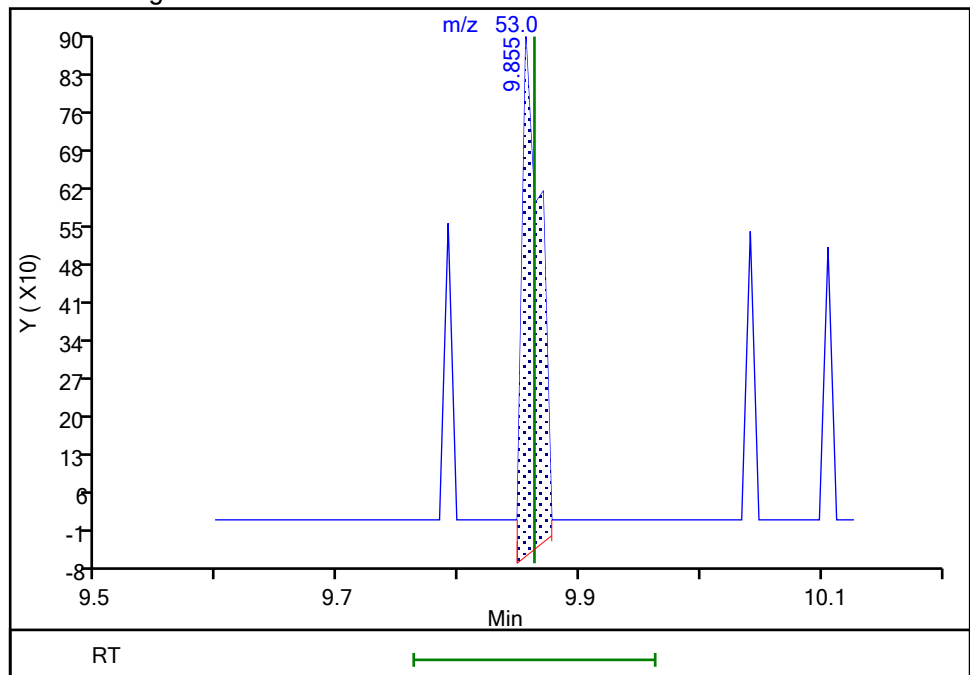
RT: 9.86

Area: 1008

Amount: 0.922794

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:07:46

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

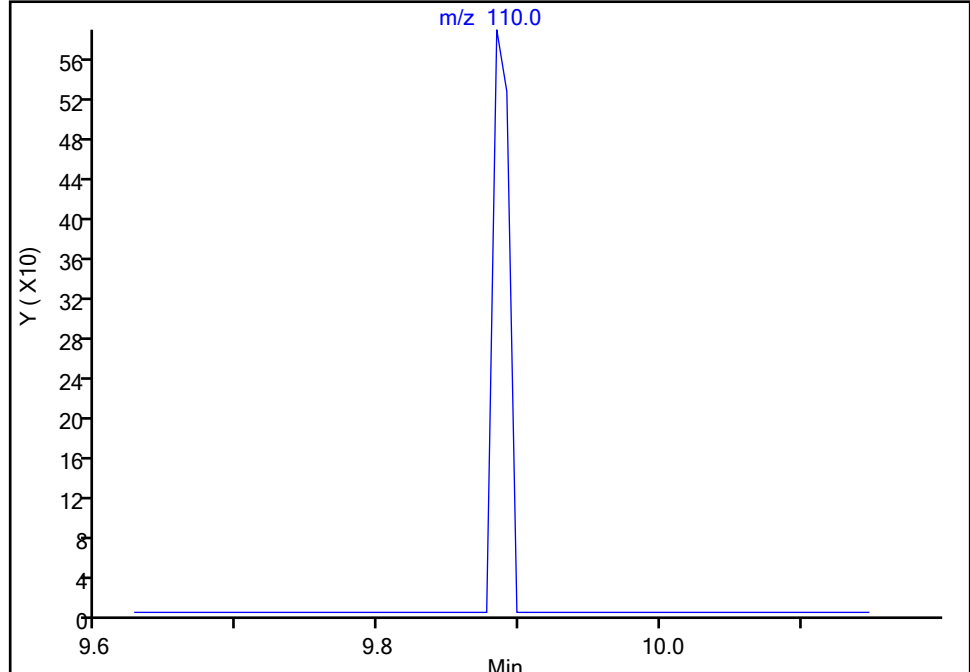
113 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

Not Detected

Expected RT: 9.89

Processing Integration Results



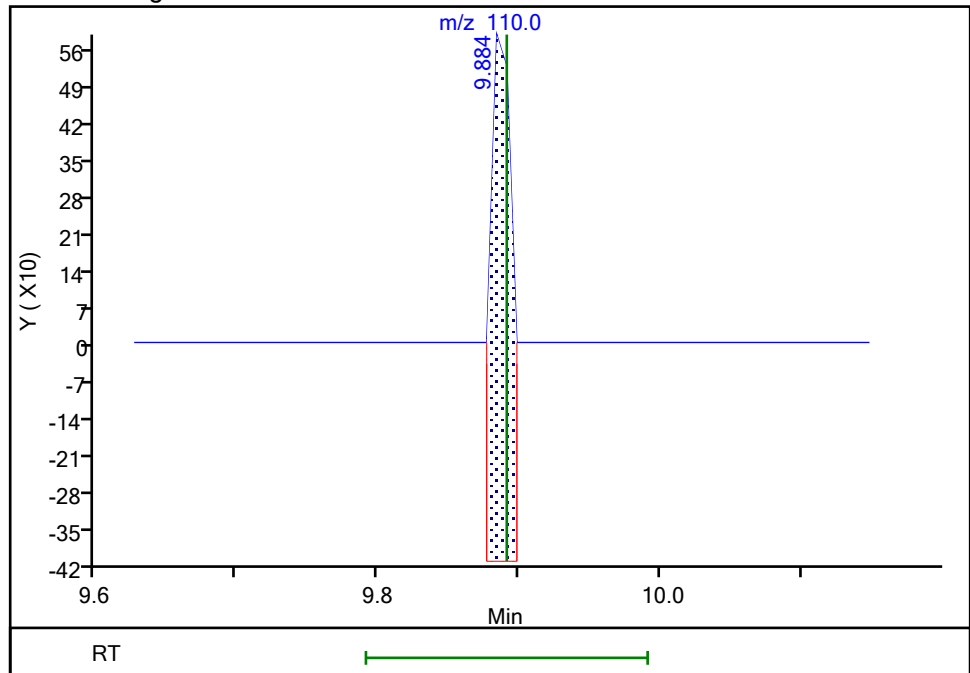
RT: 9.88

Area: 1187

Amount: 1.087675

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:00

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

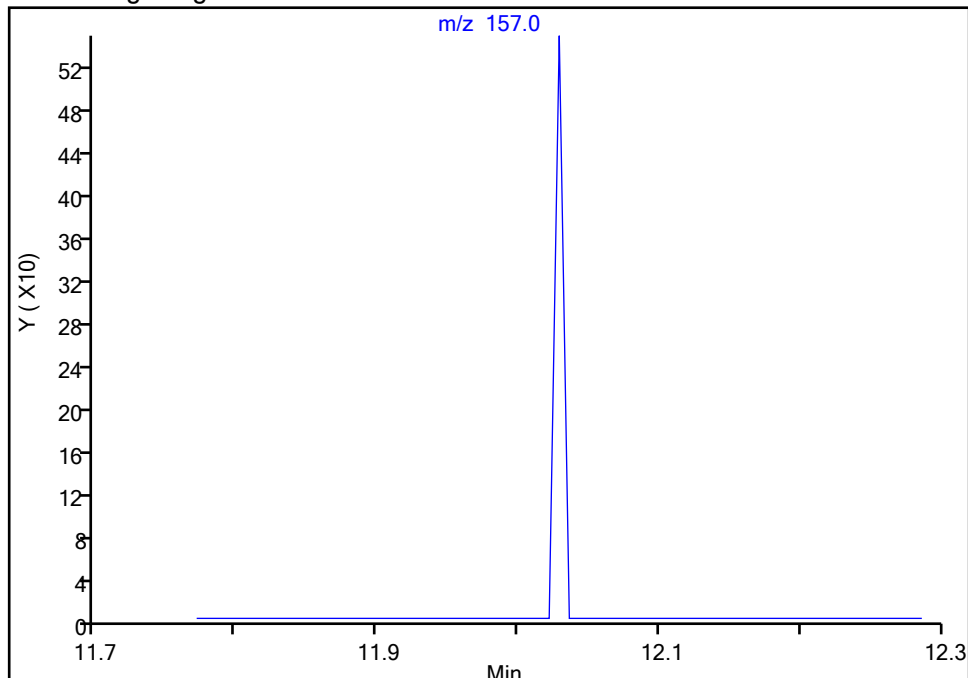
128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

Not Detected

Expected RT: 12.02

Processing Integration Results



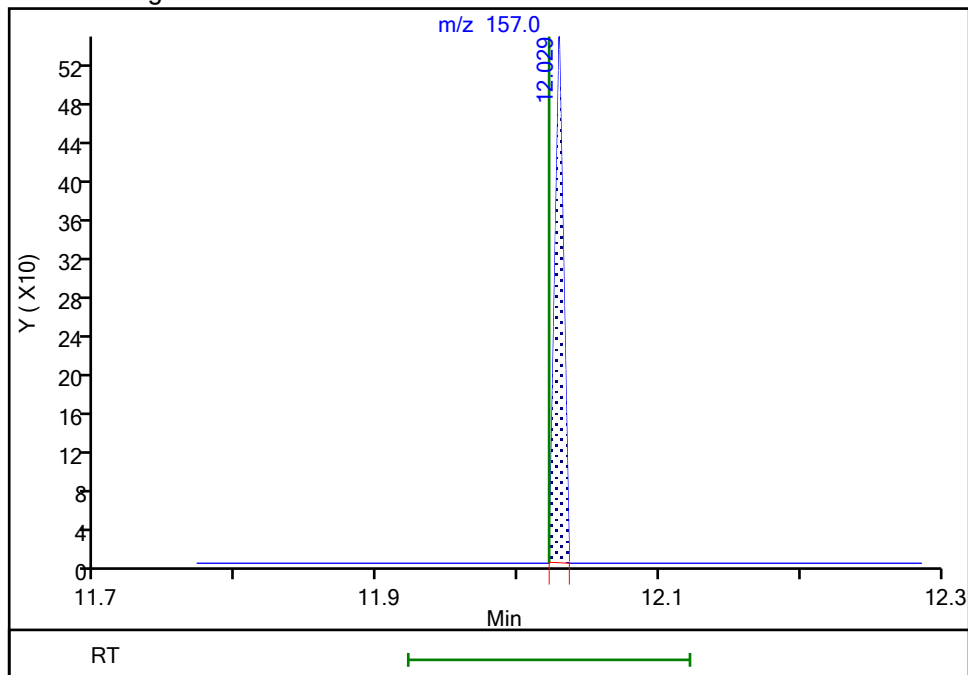
RT: 12.03

Area: 234

Amount: 1.021883

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:21

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

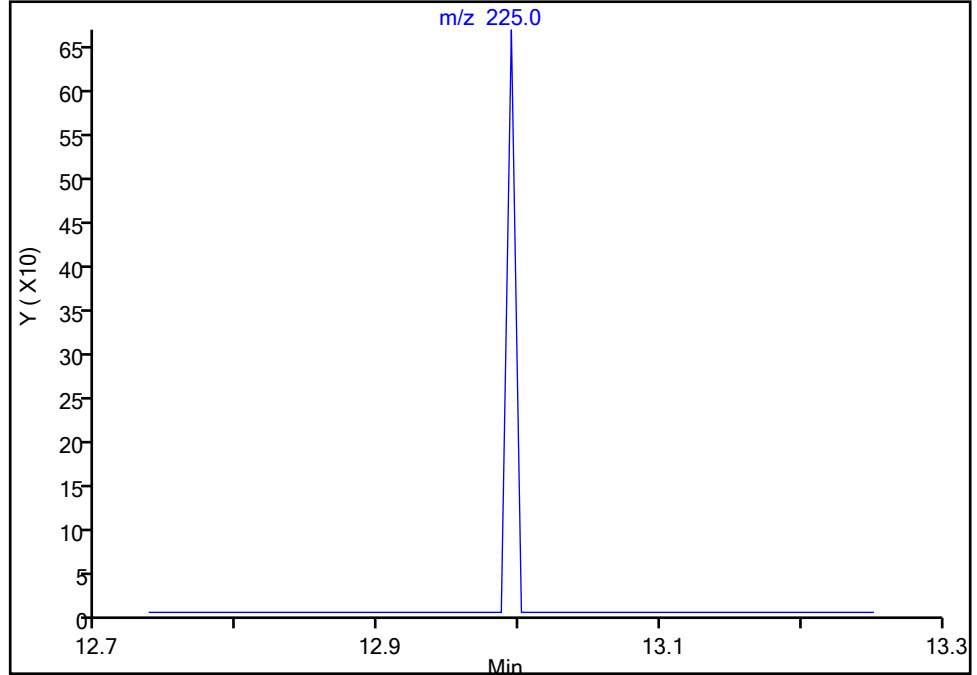
131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

Not Detected

Expected RT: 12.99

Processing Integration Results



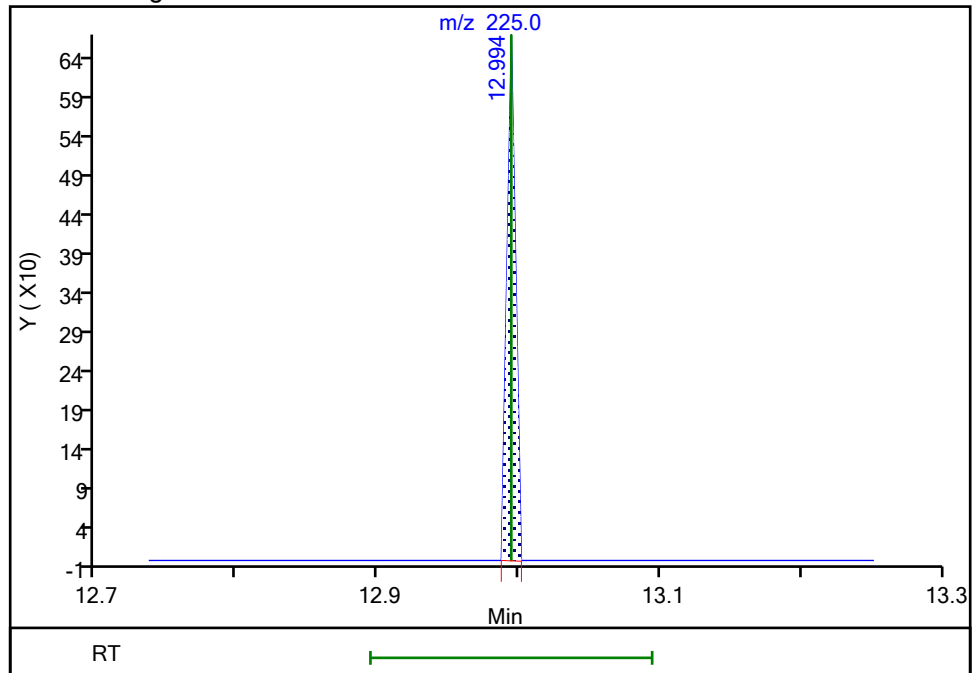
RT: 12.99

Area: 288

Amount: 0.965751

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:34

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

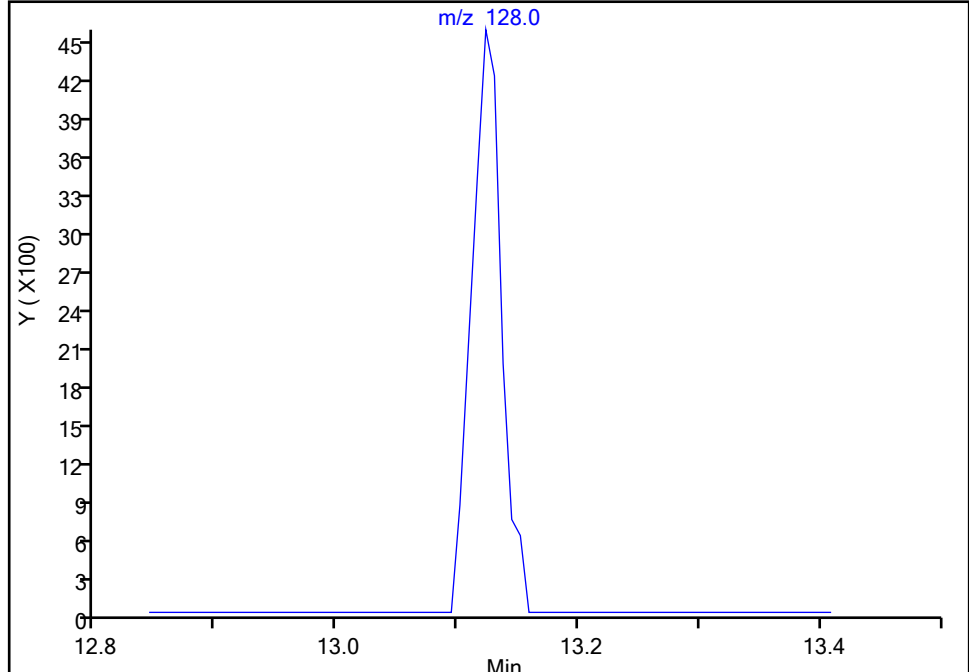
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

132 Naphthalene, CAS: 91-20-3

Signal: 1

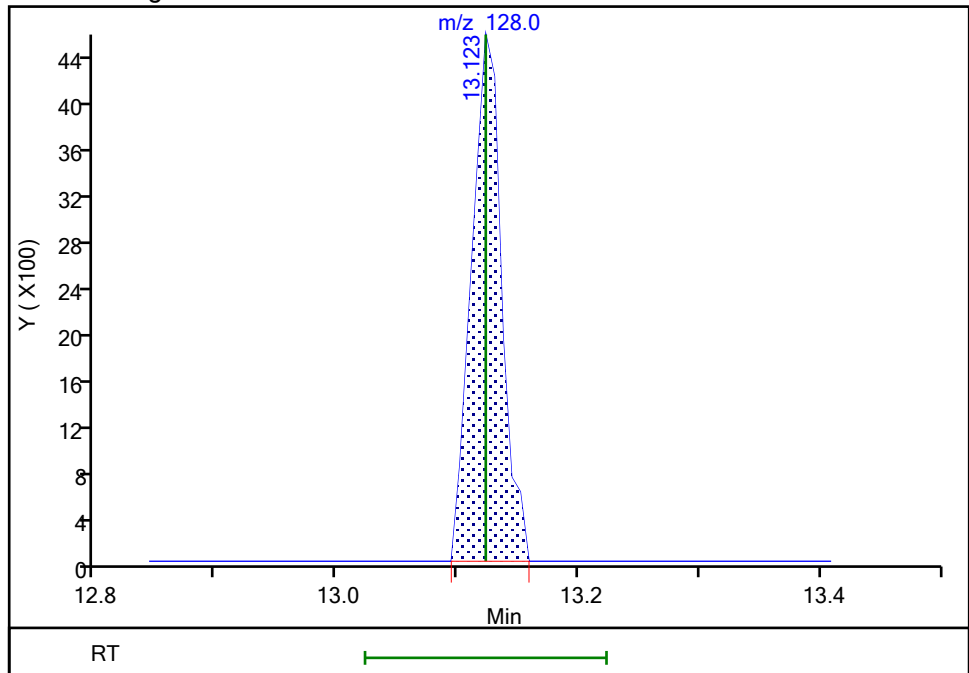
Not Detected
Expected RT: 13.12

Processing Integration Results



RT: 13.12
Area: 7932
Amount: 0.893686
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:43
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

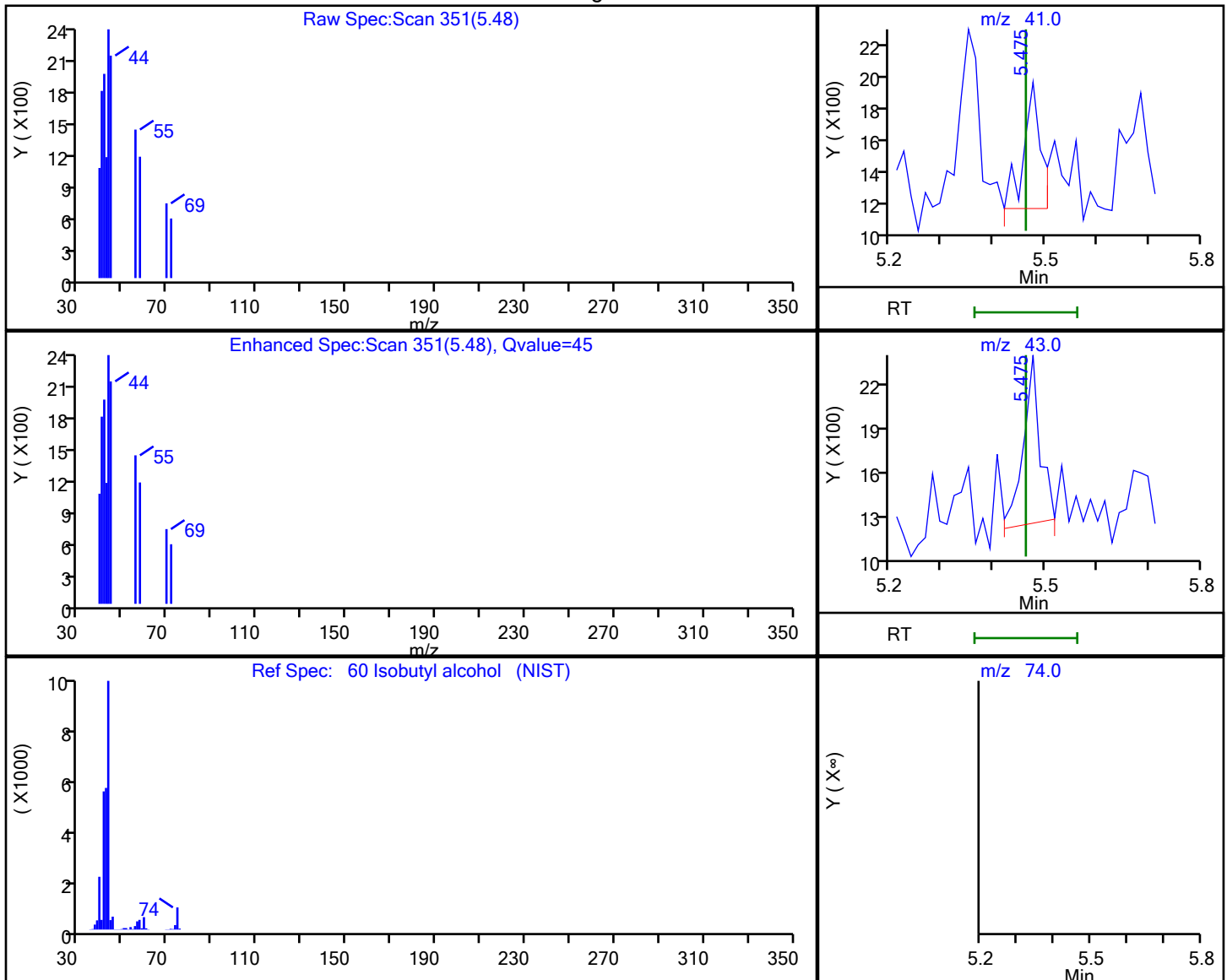
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

60 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
5.48	41.00	1765	19.674036
5.48	43.00	2424	
5.46	74.00	0	

Reviewer: seifertj, 05-Jun-2021 09:06:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2724.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 04-Jun-2021 14:33:30 ALS Bottle#: 13 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD020
 Misc. Info.: 280-0102067-016
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:28 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 14:53:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	729901	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	153463	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	242456	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	197983	50.0	51.2	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	263804	50.0	50.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	666453	50.0	50.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	267729	50.0	50.9	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	91	4813	2.00	1.55	a
12 Chloromethane	50	1.900	1.900	0.000	91	6207	2.00	1.96	
13 Vinyl chloride	62	1.998	1.998	0.000	95	4864	2.00	1.90	
15 Bromomethane	94	2.347	2.347	0.000	86	4150	2.00	2.11	
16 Chloroethane	64	2.459	2.459	0.000	92	3886	2.00	1.97	a
17 Dichlorofluoromethane	67	2.696	2.696	0.000	95	12181	2.00	1.84	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	96	7431	2.00	1.77	
20 Ethyl ether	59	3.003	3.003	0.000	84	3849	2.00	1.87	
22 Acrolein	56	3.143	3.143	0.000	93	13172	19.8	26.8	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	96	4703	2.00	2.23	
24 112TCTFE	151	3.241	3.255	-0.014	61	2294	2.00	1.65	
25 Acetone	43	3.283	3.269	0.014	99	10353	8.00	6.93	
26 Iodomethane	142	3.380	3.380	0.000	92	4158	2.00	1.82	
28 Carbon disulfide	76	3.450	3.450	0.000	99	12846	2.00	1.81	
30 Methyl acetate	43	3.576	3.576	0.000	70	7238	4.00	3.63	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	9065	2.00	2.14	
32 Methylene Chloride	84	3.716	3.716	0.000	96	6497	2.00	1.90	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	91	4555	20.0	17.9	
34 Acrylonitrile	53	3.911	3.911	0.000	100	19333	20.0	19.2	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	79	13534	2.00	1.82	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	92	5079	2.00	1.98	
37 Hexane	57	4.204	4.204	0.000	93	5710	2.00	2.20	
39 Vinyl acetate	43	4.344	4.344	0.000	99	21822	4.00	3.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	70	10140	2.00	2.05	
46 2-Butanone (MEK)	43	4.833	4.819	0.014	93	11915	8.00	7.23	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	73	8991	2.00	2.05	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	5653	2.00	2.01	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	92	8253	48.0	48.4	
54 Tetrahydrofuran	42	5.056	5.056	0.000	54	7039	4.00	3.07	
53 Chlorobromomethane	128	5.056	5.056	0.000	89	2285	2.00	2.25	
55 Chloroform	83	5.126	5.126	0.000	95	10862	2.00	2.12	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	88	9110	2.00	2.02	
57 Cyclohexane	56	5.350	5.350	0.000	89	10432	2.00	1.73	
58 1,1-Dichloropropene	75	5.419	5.419	0.000	85	6559	2.00	1.80	
59 Carbon tetrachloride	117	5.419	5.419	0.000	82	5514	2.00	1.66	
60 Isobutyl alcohol	41	5.475	5.461	0.014	49	5445	50.0	59.8	
63 Benzene	78	5.587	5.587	0.000	93	19222	2.00	1.90	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	96	8489	2.00	1.99	
66 n-Heptane	43	5.824	5.824	0.000	36	7610	2.00	2.18	
68 Trichloroethene	95	6.146	6.146	0.000	89	5806	2.00	2.04	
69 2-Pentanone	43	6.285	6.271	0.014	97	11280	6.40	5.75	
70 Methylcyclohexane	55	6.355	6.355	0.000	90	7839	2.00	1.80	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	93	5473	2.00	1.99	
73 1,4-Dioxane	88	6.425	6.425	0.000	7	580	40.0	40.0	Ma
74 Dibromomethane	93	6.453	6.453	0.000	56	3222	2.00	1.87	
75 Dichlorobromomethane	83	6.609	6.609	0.000	87	7304	2.00	1.94	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	80	2713	2.00	1.62	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	87	7337	2.00	1.77	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	97	15752	8.00	6.93	
82 Toluene	91	7.295	7.295	0.000	97	19016	2.00	1.89	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	91	7715	2.00	1.92	
85 Ethyl methacrylate	69	7.517	7.517	0.000	88	5320	2.00	1.74	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	89	4614	2.00	1.97	
89 Tetrachloroethene	164	7.760	7.767	-0.007	82	2450	2.00	1.54	
90 1,3-Dichloropropane	76	7.832	7.824	0.008	89	7473	2.00	1.92	
91 2-Hexanone	43	7.853	7.853	0.000	96	10548	8.00	7.37	
95 Chlorodibromomethane	129	8.032	8.032	0.000	83	4334	2.00	1.89	
96 Ethylene Dibromide	107	8.146	8.146	0.000	94	4399	2.00	1.99	
98 1-Chlorohexane	91	8.568	8.568	0.000	34	7378	1.60	1.59	
99 Chlorobenzene	112	8.597	8.604	-0.007	96	11939	2.00	1.91	
100 1,1,1,2-Tetrachloroethane	131	8.682	8.682	0.000	45	4140	2.00	1.87	
101 Ethylbenzene	106	8.682	8.682	0.000	99	6210	2.00	1.87	
102 m-Xylene & p-Xylene	106	8.811	8.804	0.007	97	8825	2.00	2.10	
103 o-Xylene	106	9.176	9.176	0.000	95	8136	2.00	2.08	
104 Styrene	104	9.197	9.197	0.000	90	13818	2.00	1.93	
106 Bromoform	173	9.383	9.383	0.000	82	2157	2.00	2.04	a
107 Isopropylbenzene	105	9.526	9.526	0.000	96	20761	2.00	1.96	
109 Cyclohexanone	55	9.619	9.626	-0.007	94	10716	60.0	62.3	
110 1,1,2,2-Tetrachloroethane	83	9.819	9.827	-0.008	90	7007	2.00	1.99	
111 Bromobenzene	156	9.855	9.855	0.000	94	4764	2.00	1.98	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	40	2163	2.00	2.04	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	80	1618	2.00	1.66	
114 N-Propylbenzene	120	9.941	9.941	0.000	98	5942	2.00	2.02	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	4501	2.00	1.87	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	18346	2.00	1.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.148	10.155	-0.007	98	4568	2.00	1.72	
118 tert-Butylbenzene	119	10.427	10.427	0.000	91	14882	2.00	1.92	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	98	18160	2.00	1.87	
120 sec-Butylbenzene	134	10.649	10.649	0.000	95	4259	2.00	2.23	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	92	9644	2.00	2.05	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	95	17787	2.00	1.85	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	9442	2.00	1.91	
125 n-Butylbenzene	91	11.207	11.207	0.000	97	18517	2.00	1.99	
127 1,2-Dichlorobenzene	146	11.228	11.235	-0.007	85	8846	2.00	2.00	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	61	778	2.00	1.90	Ma
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	86	5652	2.00	1.95	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	77	1453	2.00	2.11	a
132 Naphthalene	128	13.123	13.123	0.000	97	15708	2.00	1.83	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	87	4676	2.00	1.77	
S 149 1,2-Dichloroethene, Total (URS)	95				0		4.00	4.00	
S 150 1,2-Dichloroethene, Total	1				0		4.00	4.00	
S 151 Trihalomethanes, Total	1				0		8.00	7.99	
S 152 Total BTEX	1				0			9.84	
S 153 Xylenes, Total (URS)	1				0		4.00	4.18	
S 155 Xylenes, Total	106				0		4.00	4.18	
S 156 1,3-Dichloropropene, Total	1				0		4.00	3.68	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Gas A_00089

Amount Added: 0.40

Units: uL

MV-MegaMainA_00050

Amount Added: 1.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 05-Jun-2021 11:14:28

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD020

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

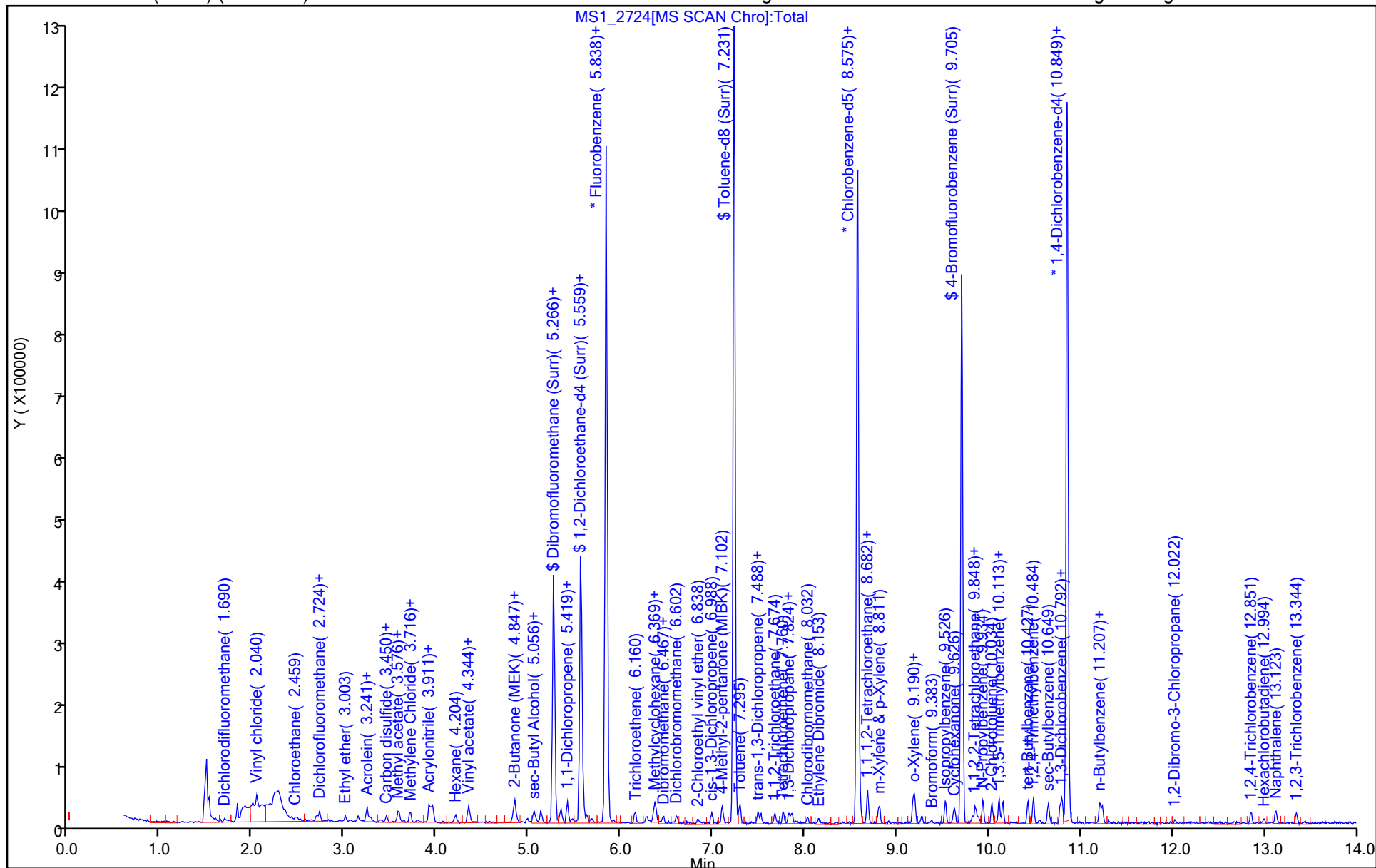
ALS Bottle#: 13

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

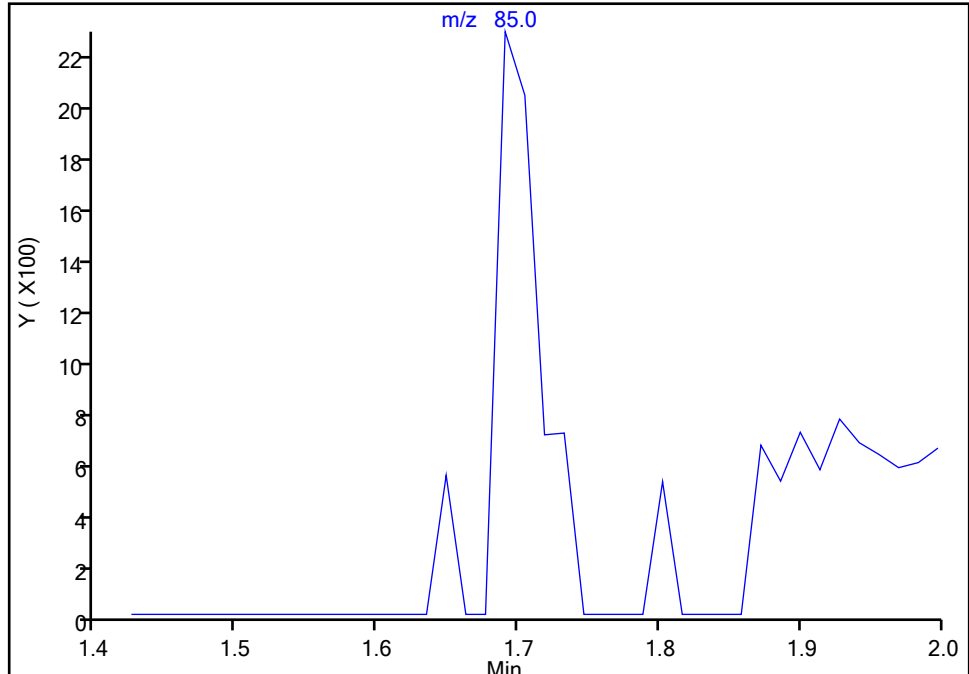
11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

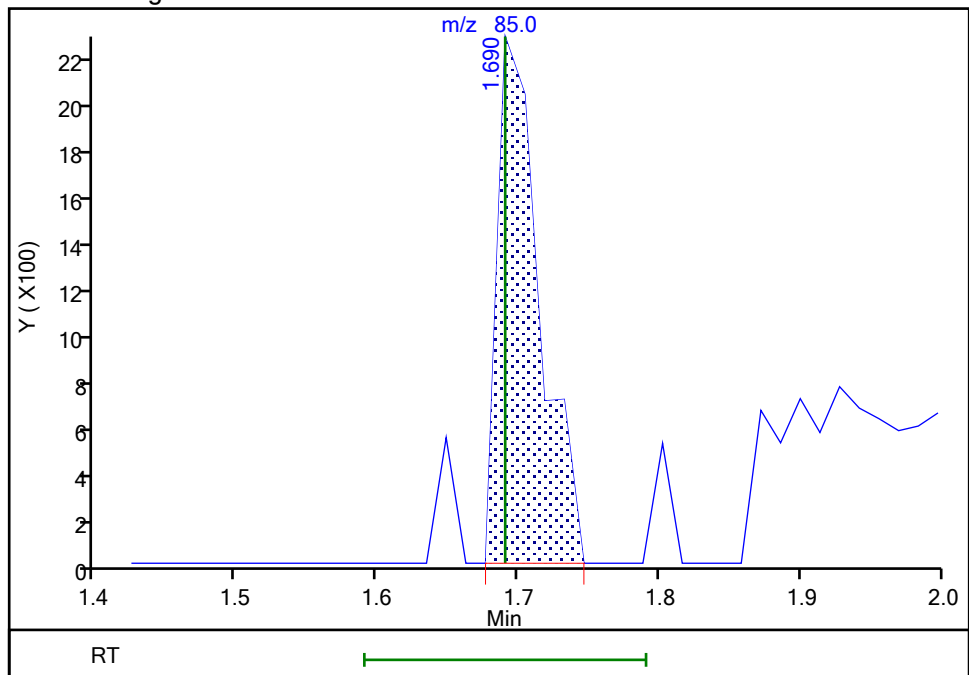
Not Detected

Expected RT: 1.69

Processing Integration Results



Manual Integration Results



RT: 1.69

Area: 4813

Amount: 1.548599

Amount Units: ug/l

Reviewer: seifertj, 05-Jun-2021 09:09:40

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

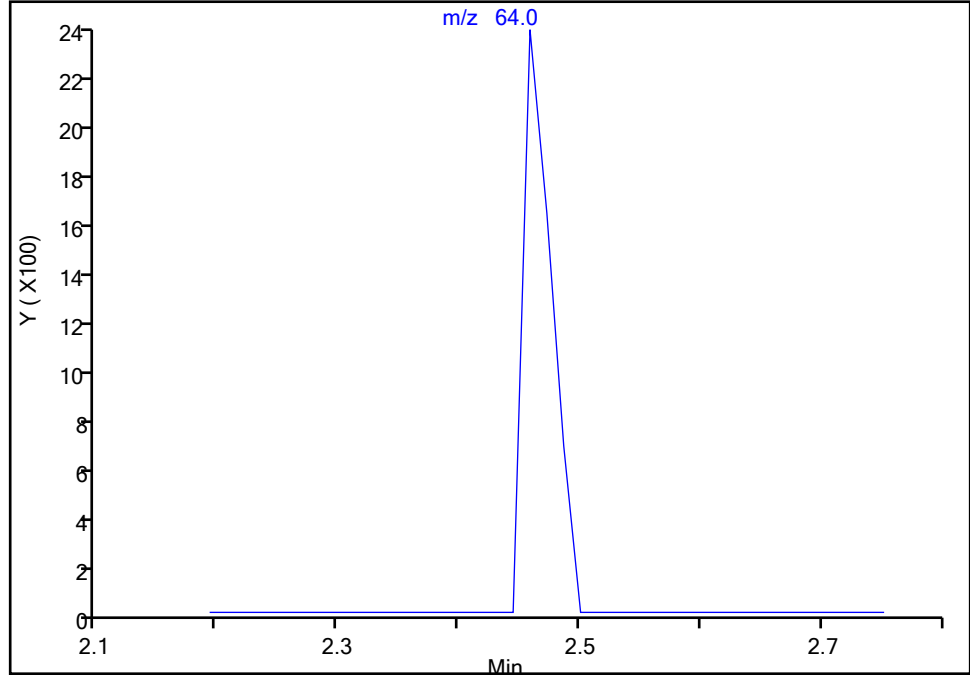
16 Chloroethane, CAS: 75-00-3

Signal: 1

Not Detected

Expected RT: 2.46

Processing Integration Results



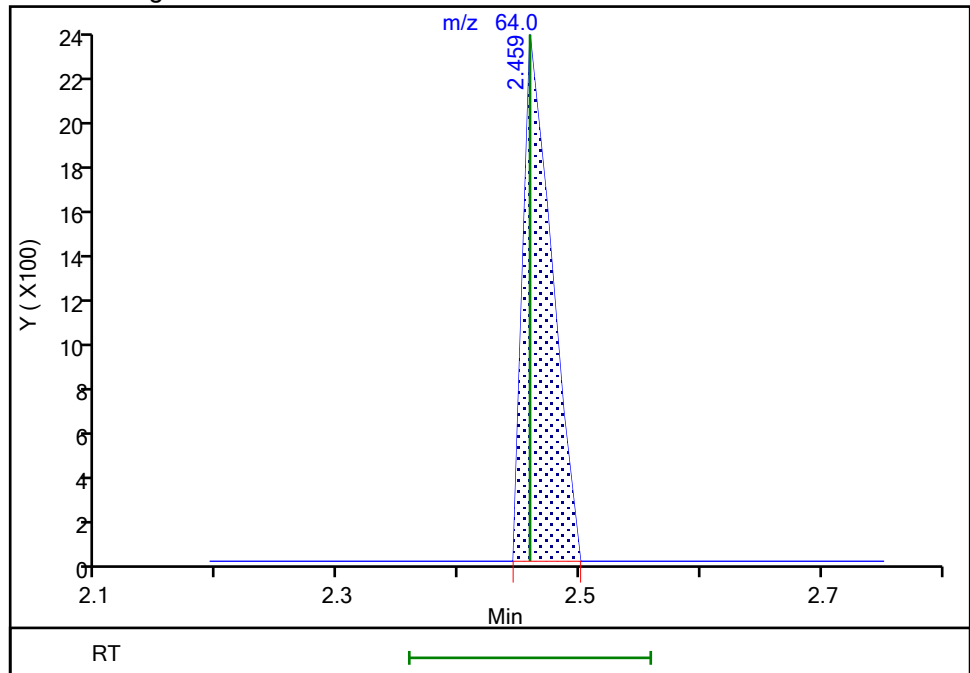
RT: 2.46

Area: 3886

Amount: 1.970059

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:09:50

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

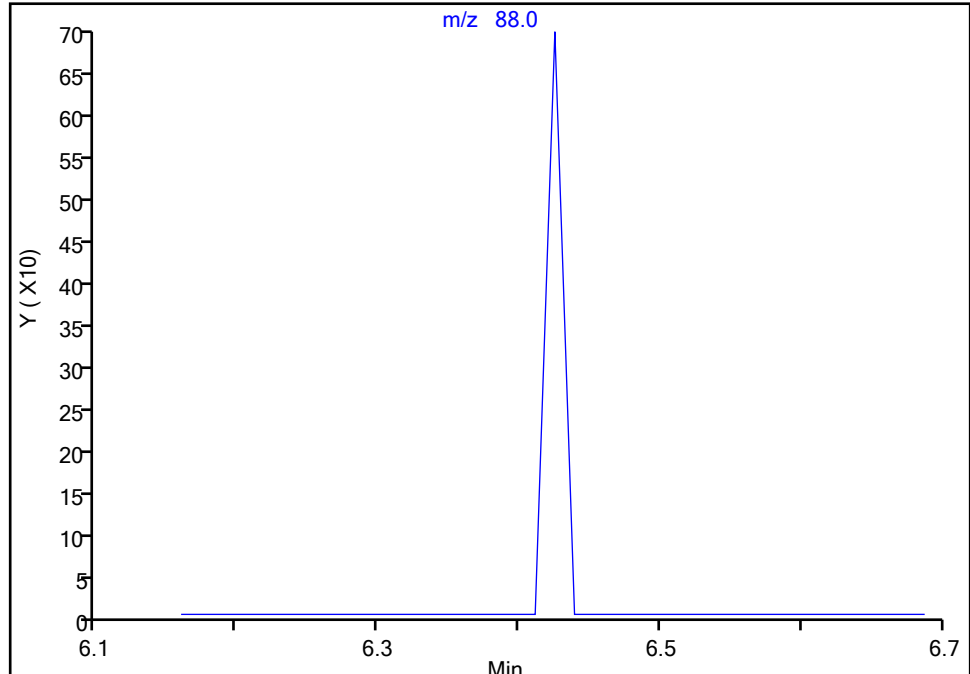
73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

Not Detected

Expected RT: 6.43

Processing Integration Results



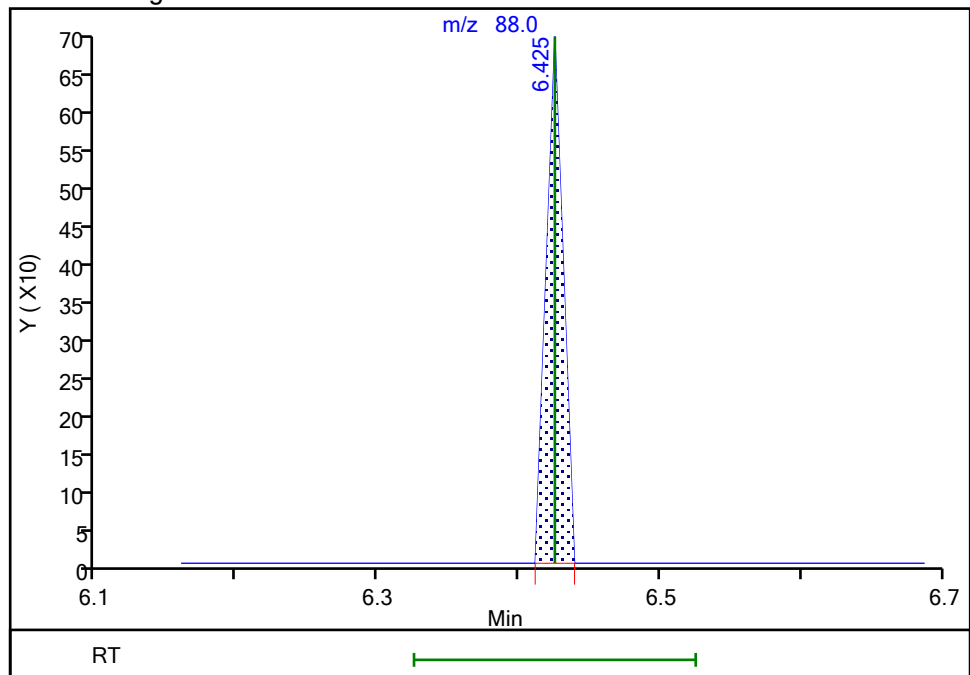
RT: 6.43

Area: 580

Amount: 40.036575

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:10:21

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

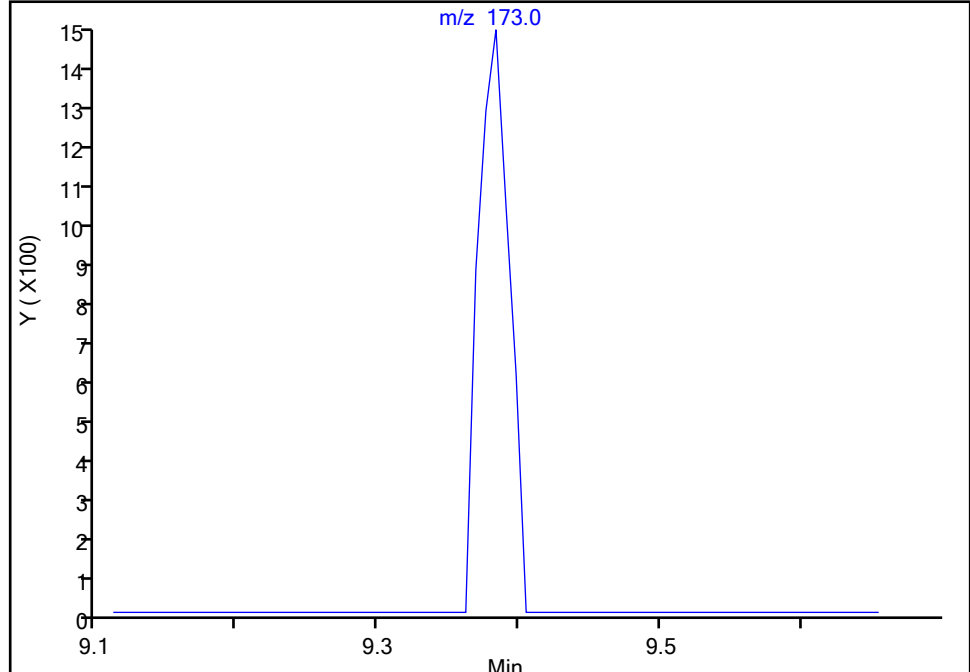
106 Bromoform, CAS: 75-25-2

Signal: 1

Not Detected

Expected RT: 9.38

Processing Integration Results



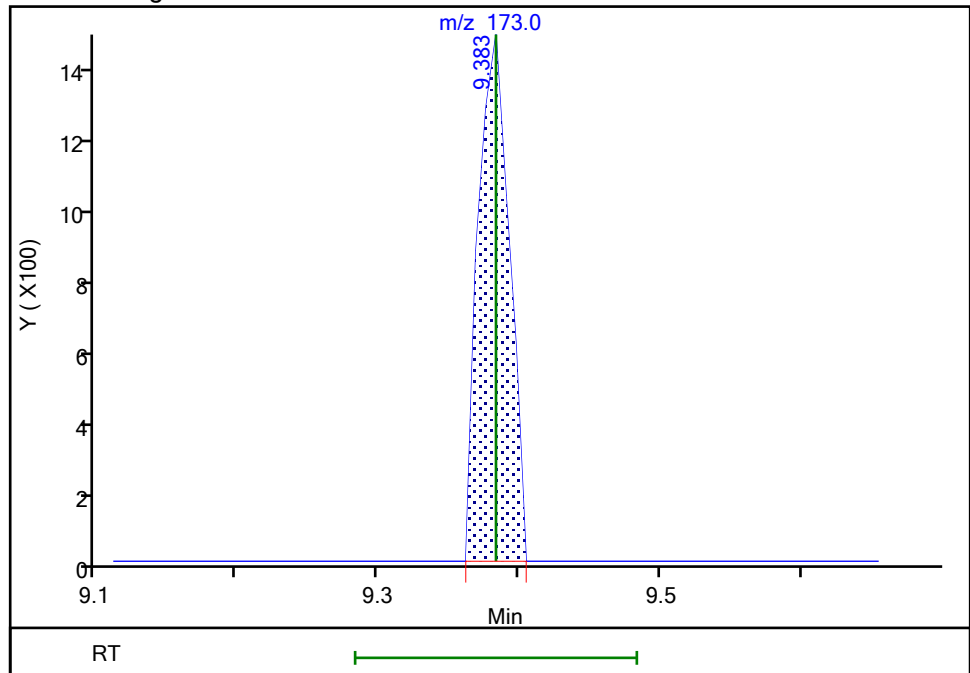
RT: 9.38

Area: 2157

Amount: 2.040934

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:10:34

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

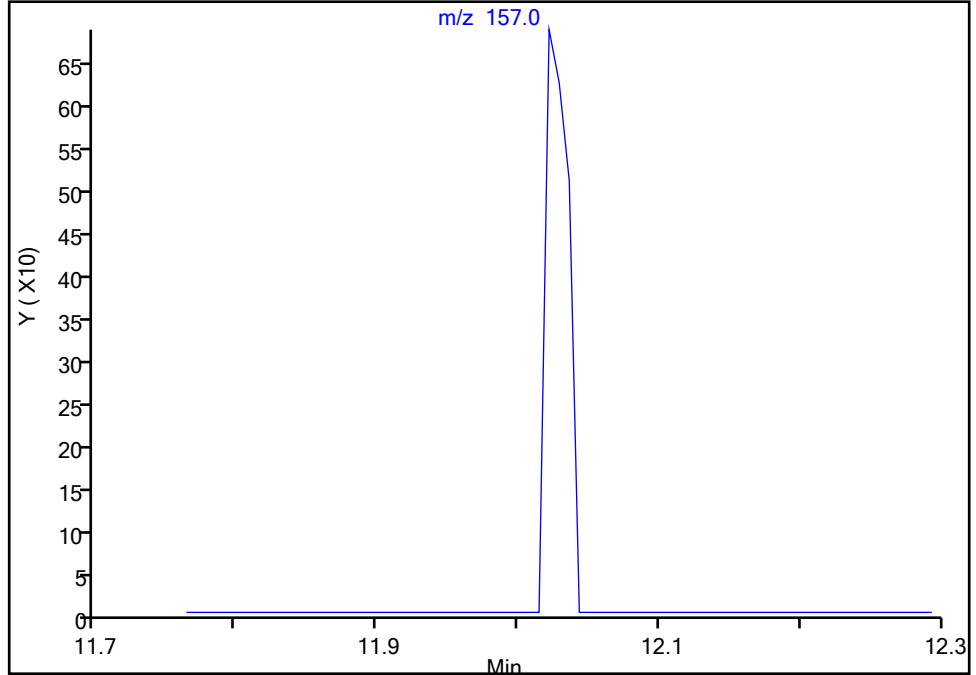
128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

Not Detected

Expected RT: 12.02

Processing Integration Results



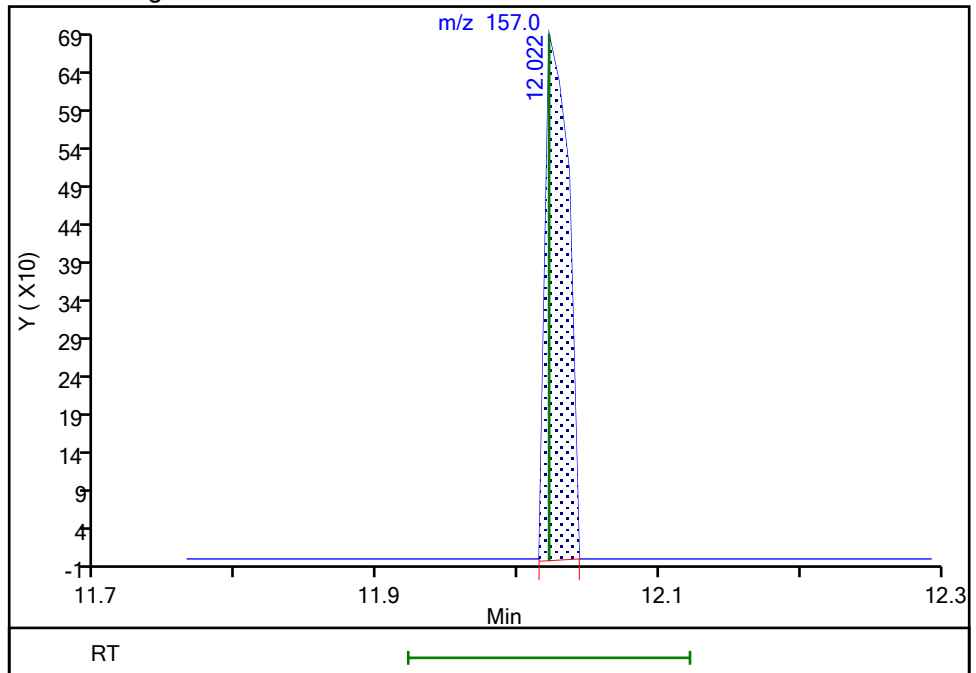
RT: 12.02

Area: 778

Amount: 1.895027

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:09:19

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

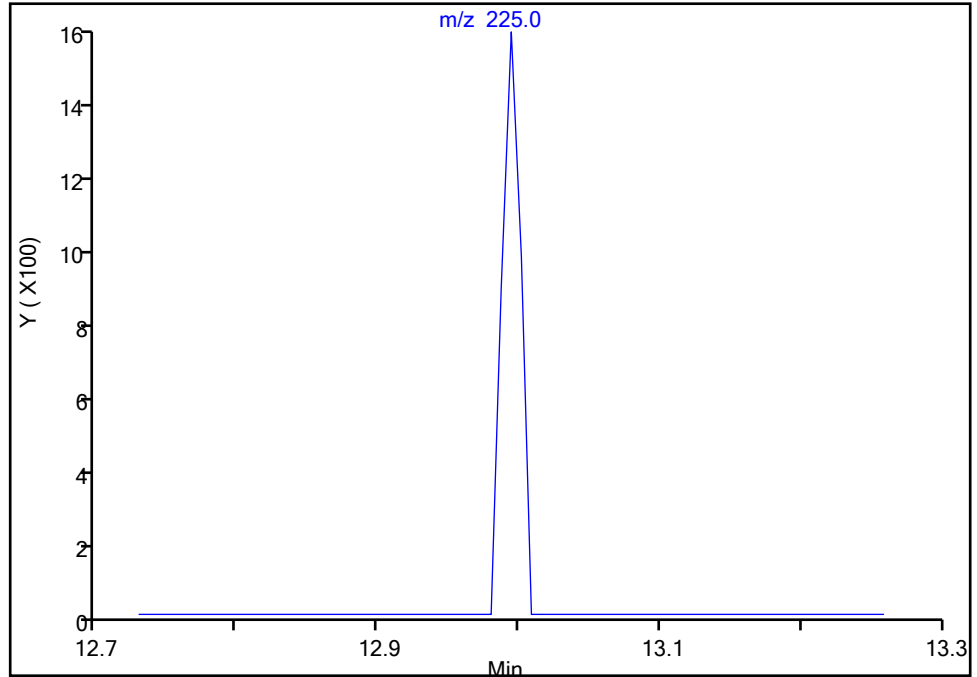
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

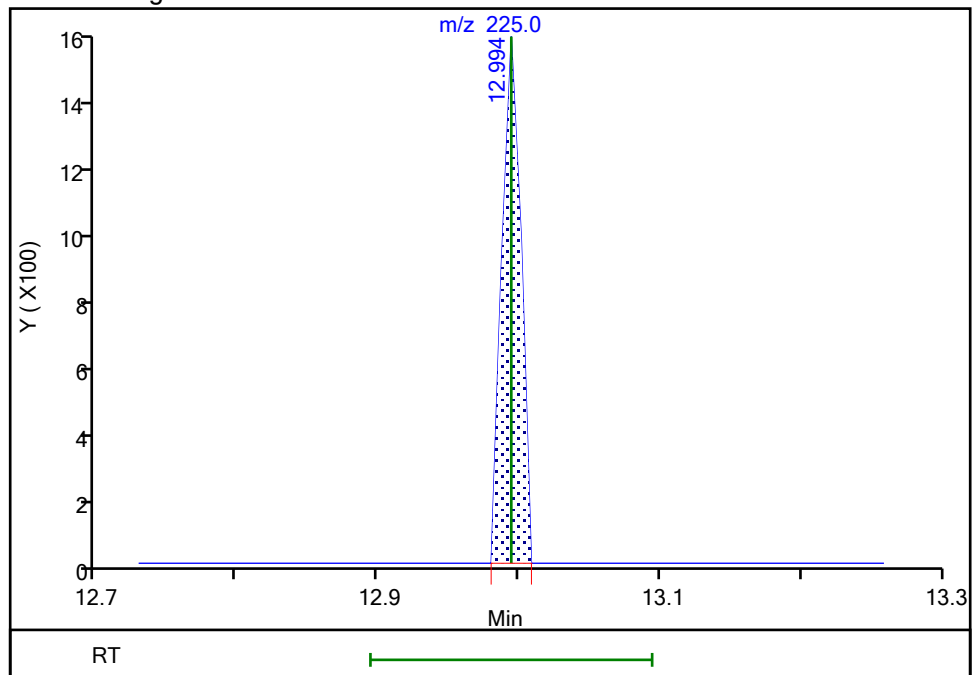
Not Detected
Expected RT: 12.99

Processing Integration Results



RT: 12.99
Area: 1453
Amount: 2.113842
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:09:05
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2726.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 04-Jun-2021 15:16:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Misc. Info.: 280-0102067-018
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:31 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 08:11:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	746498	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	158818	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	249122	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199938	50.0	50.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	268659	50.0	50.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	678886	50.0	49.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	272092	50.0	50.3	
11 Dichlorodifluoromethane	85	1.691	1.690	0.001	98	40935	10.0	12.3	
12 Chloromethane	50	1.914	1.900	0.014	99	36390	10.0	11.2	
13 Vinyl chloride	62	1.998	1.998	0.000	98	28798	10.0	11.0	
15 Bromomethane	94	2.347	2.347	0.000	95	22486	10.0	11.2	
16 Chloroethane	64	2.459	2.459	0.000	97	22577	10.0	11.2	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	60416	10.0	11.5	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	48588	10.0	11.3	
20 Ethyl ether	59	3.003	3.003	0.000	93	21225	10.0	10.1	
22 Acrolein	56	3.143	3.143	0.000	98	44500	98.8	104.3	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	23478	10.0	10.9	
24 112TCTFE	151	3.241	3.255	-0.014	95	15716	10.0	11.0	
25 Acetone	43	3.269	3.269	0.000	99	36311	40.0	37.9	
26 Iodomethane	142	3.381	3.380	0.001	99	30290	10.0	9.75	
28 Carbon disulfide	76	3.450	3.450	0.000	100	80765	10.0	11.1	
30 Methyl acetate	43	3.576	3.576	0.000	97	36989	20.0	18.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	47872	10.0	11.0	
32 Methylene Chloride	84	3.702	3.716	-0.014	97	30580	10.0	11.0	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	98	26461	100.0	101.7	
34 Acrylonitrile	53	3.911	3.911	0.000	97	103754	100.0	100.5	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	76215	10.0	10.0	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	26723	10.0	10.2	
37 Hexane	57	4.205	4.204	0.001	94	34832	10.0	10.8	
39 Vinyl acetate	43	4.344	4.344	0.000	98	124457	20.0	21.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	53370	10.0	10.5	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	56212	40.0	42.3	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	47969	10.0	10.7	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	29549	10.0	10.3	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	47182	240.0	228.6	
54 Tetrahydrofuran	42	5.057	5.056	0.001	86	20411	20.0	19.6	
53 Chlorobromomethane	128	5.057	5.056	0.001	96	13324	10.0	10.6	
55 Chloroform	83	5.126	5.126	0.000	98	54433	10.0	10.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	95	46977	10.0	10.2	
57 Cyclohexane	56	5.350	5.350	0.000	94	52233	10.0	10.8	
58 1,1-Dichloropropene	75	5.420	5.419	0.001	90	40352	10.0	10.8	
59 Carbon tetrachloride	117	5.420	5.419	0.001	85	37517	10.0	11.0	
60 Isobutyl alcohol	41	5.462	5.461	0.001	94	21152	250.0	227.3	
63 Benzene	78	5.587	5.587	0.000	97	107690	10.0	10.4	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	96	45534	10.0	10.5	
66 n-Heptane	43	5.825	5.824	0.001	95	34155	10.0	10.9	
68 Trichloroethene	95	6.146	6.146	0.000	94	27685	10.0	9.40	
69 2-Pentanone	43	6.272	6.271	0.001	98	60410	32.0	30.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	37693	10.0	10.1	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	30490	10.0	10.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	93	5826	200.0	200.2	
74 Dibromomethane	93	6.453	6.453	0.000	88	18955	10.0	10.8	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	38423	10.0	9.97	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	92	17861	10.0	10.4	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	44781	10.0	10.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	97	90316	40.0	38.8	
82 Toluene	91	7.296	7.295	0.001	97	106895	10.0	10.4	
84 trans-1,3-Dichloropropene	75	7.489	7.488	0.001	94	42952	10.0	10.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	33204	10.0	10.5	
87 1,1,2-Trichloroethane	97	7.675	7.674	0.000	95	22601	10.0	10.3	
89 Tetrachloroethene	164	7.767	7.767	0.000	91	17549	10.0	10.7	
90 1,3-Dichloropropane	76	7.825	7.824	0.001	90	40733	10.0	10.1	
91 2-Hexanone	43	7.853	7.853	0.000	99	64691	40.0	39.2	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	88	24851	10.0	10.5	
96 Ethylene Dibromide	107	8.146	8.146	0.000	95	22403	10.0	9.80	
98 1-Chlorohexane	91	8.561	8.568	-0.007	87	29616	8.00	8.27	
99 Chlorobenzene	112	8.604	8.604	0.000	93	66381	10.0	10.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.682	0.001	90	24212	10.0	10.6	
101 Ethylbenzene	106	8.683	8.682	0.001	99	36634	10.0	10.6	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	44784	10.0	10.3	
103 o-Xylene	106	9.176	9.176	0.000	99	41175	10.0	10.2	
104 Styrene	104	9.198	9.197	0.001	94	77181	10.0	10.4	
106 Bromoform	173	9.383	9.383	0.000	90	14898	10.0	10.1	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	117182	10.0	10.8	
109 Cyclohexanone	55	9.627	9.626	0.001	94	46603	300.0	261.9	
110 1,1,2,2-Tetrachloroethane	83	9.820	9.827	-0.007	94	31093	10.0	9.96	
111 Bromobenzene	156	9.855	9.855	0.000	96	25440	10.0	10.3	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	74	10802	10.0	9.93	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	85	8203	10.0	9.51	
114 N-Propylbenzene	120	9.934	9.941	-0.007	99	32197	10.0	10.6	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	26371	10.0	10.7	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	100834	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.155	0.001	99	27546	10.0	10.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	83762	10.0	10.5	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	99	104041	10.0	10.4	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	23738	10.0	10.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	92	50391	10.0	10.4	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	97	102178	10.0	10.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	95	50543	10.0	9.96	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	99478	10.0	10.4	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	89	47494	10.0	10.4	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	6381	10.0	10.5	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	29259	10.0	9.83	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	88	10553	10.0	10.7	
132 Naphthalene	128	13.123	13.123	0.000	98	93344	10.0	10.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.344	0.001	93	27863	10.0	10.3	
S 149 1,2-Dichloroethene, Total (URS)	93				0		20.0	20.5	
S 150 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 151 Trihalomethanes, Total	1				0		40.0	40.9	
S 152 Total BTEX	1				0			51.9	
S 153 Xylenes, Total (URS)	1				0		20.0	20.5	
S 155 Xylenes, Total	106				0		20.0	20.5	
S 156 1,3-Dichloropropene, Total	1				0		20.0	20.9	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 2.00

Units: uL

MV-MegaMainA_00050

Amount Added: 5.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2726.D

Injection Date: 04-Jun-2021 15:16:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD10

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

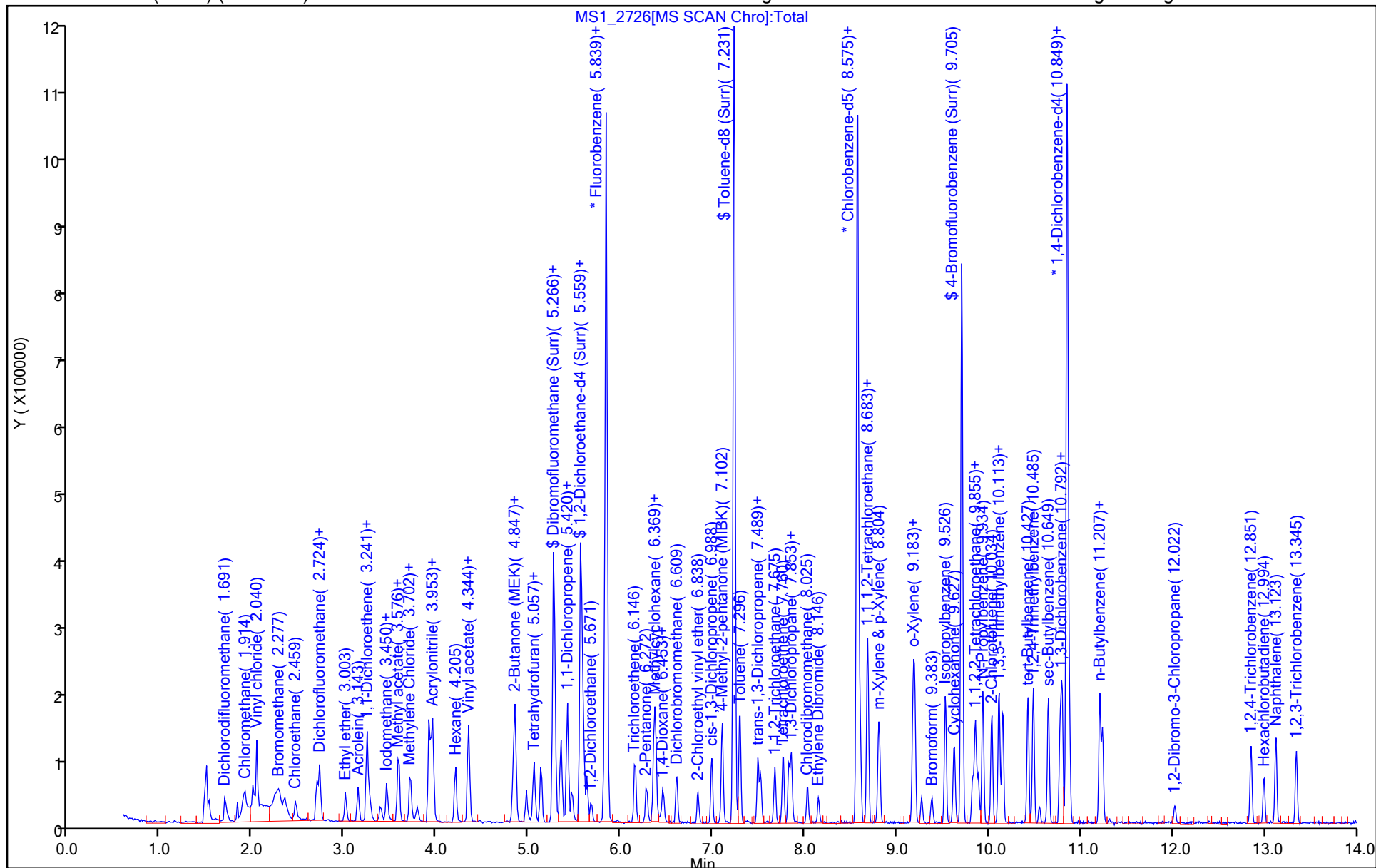
ALS Bottle#: 15

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2727.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 04-Jun-2021 15:37:30 ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS
 Misc. Info.: 280-0102067-019
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:34 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 08:09:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.838	0.000	97	769988	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	161871	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	257514	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199154	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	266131	50.0	48.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	704331	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	273340	50.0	48.9	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	176418	50.0	51.0	
12 Chloromethane	50	1.900	1.900	0.000	99	166165	50.0	49.7	
13 Vinyl chloride	62	1.998	1.998	0.000	100	141801	50.0	52.5	
15 Bromomethane	94	2.347	2.347	0.000	93	105022	50.0	50.5	
16 Chloroethane	64	2.459	2.459	0.000	99	108932	50.0	52.3	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	265332	50.0	51.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	231476	50.0	52.2	
20 Ethyl ether	59	3.003	3.003	0.000	93	111308	50.0	51.3	
22 Acrolein	56	3.143	3.143	0.000	98	210093	493.8	501.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	103963	50.0	46.8	
24 112TCTFE	151	3.255	3.255	0.000	94	74141	50.0	50.4	
25 Acetone	43	3.269	3.269	0.000	98	170768	200.0	193.3	
26 Iodomethane	142	3.380	3.380	0.000	99	168827	50.0	50.4	
28 Carbon disulfide	76	3.450	3.450	0.000	100	367379	50.0	49.1	
30 Methyl acetate	43	3.562	3.562	0.000	98	200777	100.0	95.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	218412	50.0	48.8	
32 Methylene Chloride	84	3.716	3.716	0.000	97	135869	50.0	49.6	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	133797	500.0	498.4	
34 Acrylonitrile	53	3.911	3.911	0.000	97	522237	500.0	490.6	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	402379	50.0	51.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	122215	50.0	45.2	
37 Hexane	57	4.204	4.204	0.000	94	159716	50.0	46.9	
39 Vinyl acetate	43	4.344	4.344	0.000	98	648475	100.0	107.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	258402	50.0	49.5	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	252081	200.0	192.3	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	90	216419	50.0	46.9	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	140988	50.0	47.6	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	250296	1200.0	1137.9	
54 Tetrahydrofuran	42	5.056	5.056	0.000	87	81383	100.0	92.7	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	65722	50.0	49.0	
55 Chloroform	83	5.126	5.126	0.000	98	256700	50.0	47.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	220241	50.0	46.2	
57 Cyclohexane	56	5.350	5.350	0.000	94	224931	50.0	47.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	192450	50.0	50.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	85	177897	50.0	50.7	
60 Isobutyl alcohol	41	5.461	5.461	0.000	94	107180	1250.0	1116.6	
63 Benzene	78	5.587	5.587	0.000	99	533232	50.0	50.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	225397	50.0	50.2	
66 n-Heptane	43	5.825	5.825	0.000	93	151151	50.0	48.2	
68 Trichloroethene	95	6.146	6.146	0.000	95	140987	50.0	47.0	
69 2-Pentanone	43	6.271	6.271	0.000	98	324899	160.0	157.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	177721	50.0	47.7	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	146601	50.0	50.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	98	31314	1000.0	950.9	
74 Dibromomethane	93	6.453	6.453	0.000	88	92021	50.0	50.7	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	188758	50.0	47.5	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	97660	50.0	55.1	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	231384	50.0	52.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	490067	200.0	204.3	
82 Toluene	91	7.295	7.295	0.000	97	522295	50.0	49.1	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	98	226226	50.0	53.2	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	159888	50.0	49.6	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	96	107076	50.0	48.0	
89 Tetrachloroethene	164	7.767	7.767	0.000	87	85583	50.0	51.1	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	210737	50.0	51.4	
91 2-Hexanone	43	7.853	7.853	0.000	97	331503	200.0	193.6	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	122044	50.0	50.4	
96 Ethylene Dibromide	107	8.146	8.146	0.000	99	116835	50.0	50.2	
98 1-Chlorohexane	91	8.561	8.561	0.000	93	134135	40.0	39.3	
99 Chlorobenzene	112	8.604	8.604	0.000	91	331478	50.0	50.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	120755	50.0	51.7	
101 Ethylbenzene	106	8.683	8.683	0.000	100	177275	50.0	50.5	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	217333	50.0	49.1	
103 o-Xylene	106	9.176	9.176	0.000	99	214199	50.0	51.8	
104 Styrene	104	9.197	9.197	0.000	94	379177	50.0	50.2	
106 Bromoform	173	9.383	9.383	0.000	89	76209	50.0	48.0	
107 Isopropylbenzene	105	9.526	9.526	0.000	97	560279	50.0	49.7	
109 Cyclohexanone	55	9.626	9.626	0.000	95	226441	1500.0	1248.6	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	152322	50.0	48.8	
111 Bromobenzene	156	9.855	9.855	0.000	98	130861	50.0	51.2	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	78	56519	50.0	50.3	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	43336	50.0	49.9	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	153038	50.0	48.9	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	131982	50.0	51.6	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	487963	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
117 4-Chlorotoluene	126	10.155	10.155	0.000	100	139315	50.0	49.5	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	397245	50.0	48.2	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	497917	50.0	48.3	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	115108	50.0	48.3	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	251268	50.0	50.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	497776	50.0	48.7	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	89	256844	50.0	49.0	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	472146	50.0	47.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	240782	50.0	51.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	71	31563	50.0	47.7	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	91	152525	50.0	49.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	50864	50.0	47.5	
132 Naphthalene	128	13.123	13.123	0.000	98	456812	50.0	50.0	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	93	142446	50.0	50.7	
S 149 1,2-Dichloroethene, Total (URS)	93				0		100.0	92.9	
S 150 1,2-Dichloroethene, Total	1				0		100.0	92.9	
S 151 Trihalomethanes, Total	1				0		200.0	193.4	
S 153 Xylenes, Total (URS)	1				0		100.0	100.9	
S 155 Xylenes, Total	106				0		100.0	100.9	
S 156 1,3-Dichloropropene, Total	1				0		100.0	106.1	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 10.00

Units: uL

MV-MegaMainA_00050

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2727.D

Injection Date: 04-Jun-2021 15:37:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: ICIS

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

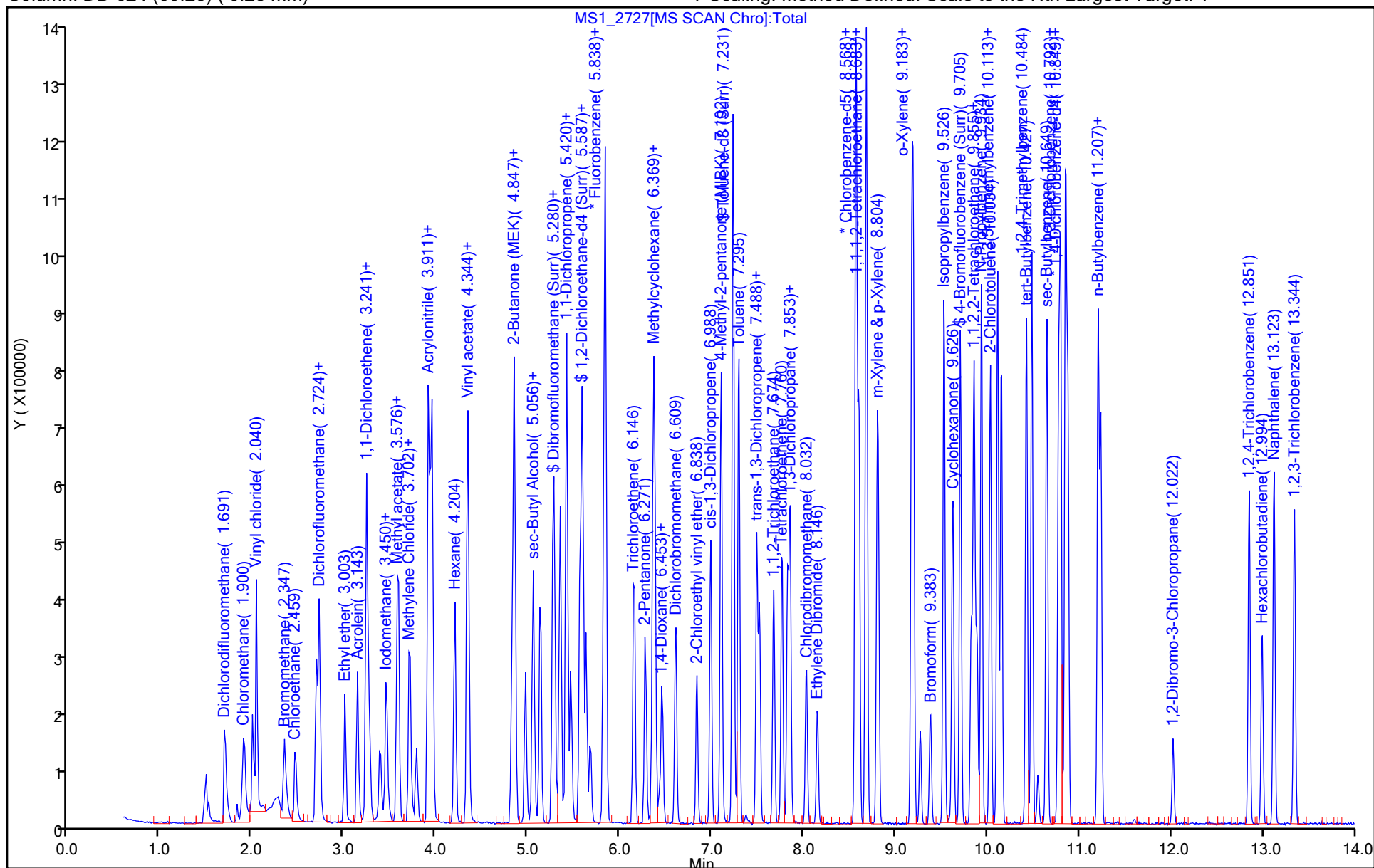
ALS Bottle#: 16

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2728.D
 Lims ID: STD75
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 04-Jun-2021 15:58:30 ALS Bottle#: 17 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD75
 Misc. Info.: 280-0102067-020
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 09:12:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	778921	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162105	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	257689	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	201488	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	100	274090	50.0	49.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	705195	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	280451	50.0	50.2	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	284607	75.0	81.3	
12 Chloromethane	50	1.900	1.900	0.000	99	260275	75.0	76.9	
13 Vinyl chloride	62	1.998	1.998	0.000	100	219368	75.0	80.3	
15 Bromomethane	94	2.333	2.333	0.000	94	153469	75.0	73.0	
16 Chloroethane	64	2.459	2.459	0.000	99	163644	75.0	77.7	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	406591	75.0	77.6	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	364532	75.0	81.2	
20 Ethyl ether	59	3.003	3.003	0.000	93	164162	75.0	74.8	
22 Acrolein	56	3.143	3.143	0.000	99	309474	740.6	733.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	159868	75.0	71.1	
24 112TCTFE	151	3.241	3.241	0.000	96	117548	75.0	79.0	
25 Acetone	43	3.269	3.269	0.000	98	291619	300.0	330.4	
26 Iodomethane	142	3.381	3.381	0.000	98	254607	75.0	74.8	
28 Carbon disulfide	76	3.450	3.450	0.000	100	561075	75.0	74.2	
30 Methyl acetate	43	3.562	3.562	0.000	98	327410	150.0	153.8	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	323120	75.0	71.3	
32 Methylene Chloride	84	3.702	3.702	0.000	97	202992	75.0	73.6	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	221885	750.0	817.1	
34 Acrylonitrile	53	3.911	3.911	0.000	98	824753	750.0	765.8	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	608637	75.0	76.7	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	184274	75.0	67.4	
37 Hexane	57	4.205	4.205	0.000	94	252996	75.0	73.9	
39 Vinyl acetate	43	4.330	4.330	0.000	98	941026	150.0	154.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	388591	75.0	73.6	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	402800	300.0	305.2	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	326634	75.0	69.9	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	211634	75.0	70.7	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	414351	1800.0	1856.2	
54 Tetrahydrofuran	42	5.057	5.057	0.000	87	137587	150.0	158.9	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	96812	75.0	71.1	
55 Chloroform	83	5.126	5.126	0.000	98	380346	75.0	69.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	330741	75.0	68.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	357975	75.0	74.5	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	301212	75.0	77.4	
59 Carbon tetrachloride	117	5.420	5.420	0.000	84	269121	75.0	75.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	181153	1875.0	1865.5	
63 Benzene	78	5.587	5.587	0.000	99	798115	75.0	74.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	327847	75.0	72.1	
66 n-Heptane	43	5.825	5.825	0.000	92	235218	75.0	74.4	
68 Trichloroethene	95	6.146	6.146	0.000	94	209925	75.0	69.8	
69 2-Pentanone	43	6.272	6.272	0.000	98	523443	240.0	250.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	280807	75.0	74.8	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	221164	75.0	75.5	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	51778	1500.0	1540.4	
74 Dibromomethane	93	6.453	6.453	0.000	88	141533	75.0	77.0	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	284099	75.0	70.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	146946	75.0	82.0	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	347569	75.0	79.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	769063	300.0	316.9	
82 Toluene	91	7.296	7.296	0.000	97	777134	75.0	72.3	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	333444	75.0	77.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	254008	75.0	78.7	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	96	165901	75.0	73.6	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	131552	75.0	78.4	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	321117	75.0	78.2	
91 2-Hexanone	43	7.853	7.853	0.000	98	536450	300.0	312.3	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	186804	75.0	77.1	
96 Ethylene Dibromide	107	8.146	8.146	0.000	97	180401	75.0	77.4	
98 1-Chlorohexane	91	8.561	8.561	0.000	93	202968	60.0	59.7	
99 Chlorobenzene	112	8.604	8.604	0.000	91	494335	75.0	74.7	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	181499	75.0	77.7	
101 Ethylbenzene	106	8.683	8.683	0.000	100	264323	75.0	75.2	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	327998	75.0	74.0	
103 o-Xylene	106	9.176	9.176	0.000	98	315393	75.0	76.2	
104 Styrene	104	9.198	9.198	0.000	93	564847	75.0	74.6	
106 Bromoform	173	9.383	9.383	0.000	90	118591	75.0	74.3	
107 Isopropylbenzene	105	9.526	9.526	0.000	97	858053	75.0	76.1	
109 Cyclohexanone	55	9.619	9.619	0.000	95	440233	2250.0	2424.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	232780	75.0	74.7	
111 Bromobenzene	156	9.855	9.855	0.000	97	196163	75.0	76.7	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	78	85012	75.0	75.6	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	68184	75.0	78.7	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	230236	75.0	73.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	197622	75.0	77.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	737280	75.0	73.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	207234	75.0	73.5	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	603080	75.0	73.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	756516	75.0	73.3	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	171771	75.0	71.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	376351	75.0	75.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	753987	75.0	73.7	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	387260	75.0	73.8	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	725430	75.0	73.5	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	361918	75.0	77.0	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	74	51111	75.0	76.8	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	237116	75.0	77.0	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	78775	75.0	73.2	
132 Naphthalene	128	13.123	13.123	0.000	98	718615	75.0	78.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	215935	75.0	76.9	
S 149 1,2-Dichloroethene, Total (URS)	93				0		150.0	138.1	
S 150 1,2-Dichloroethene, Total	1				0		150.0	138.1	
S 151 Trihalomethanes, Total	1				0		300.0	291.5	
S 152 Total BTEX	1				0			371.7	
S 153 Xylenes, Total (URS)	1				0		150.0	150.2	
S 155 Xylenes, Total	106				0		150.0	150.2	
S 156 1,3-Dichloropropene, Total	1				0		150.0	156.9	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 15.00

Units: uL

MV-MegaMainA_00050

Amount Added: 37.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2728.D

Injection Date: 04-Jun-2021 15:58:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD75

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

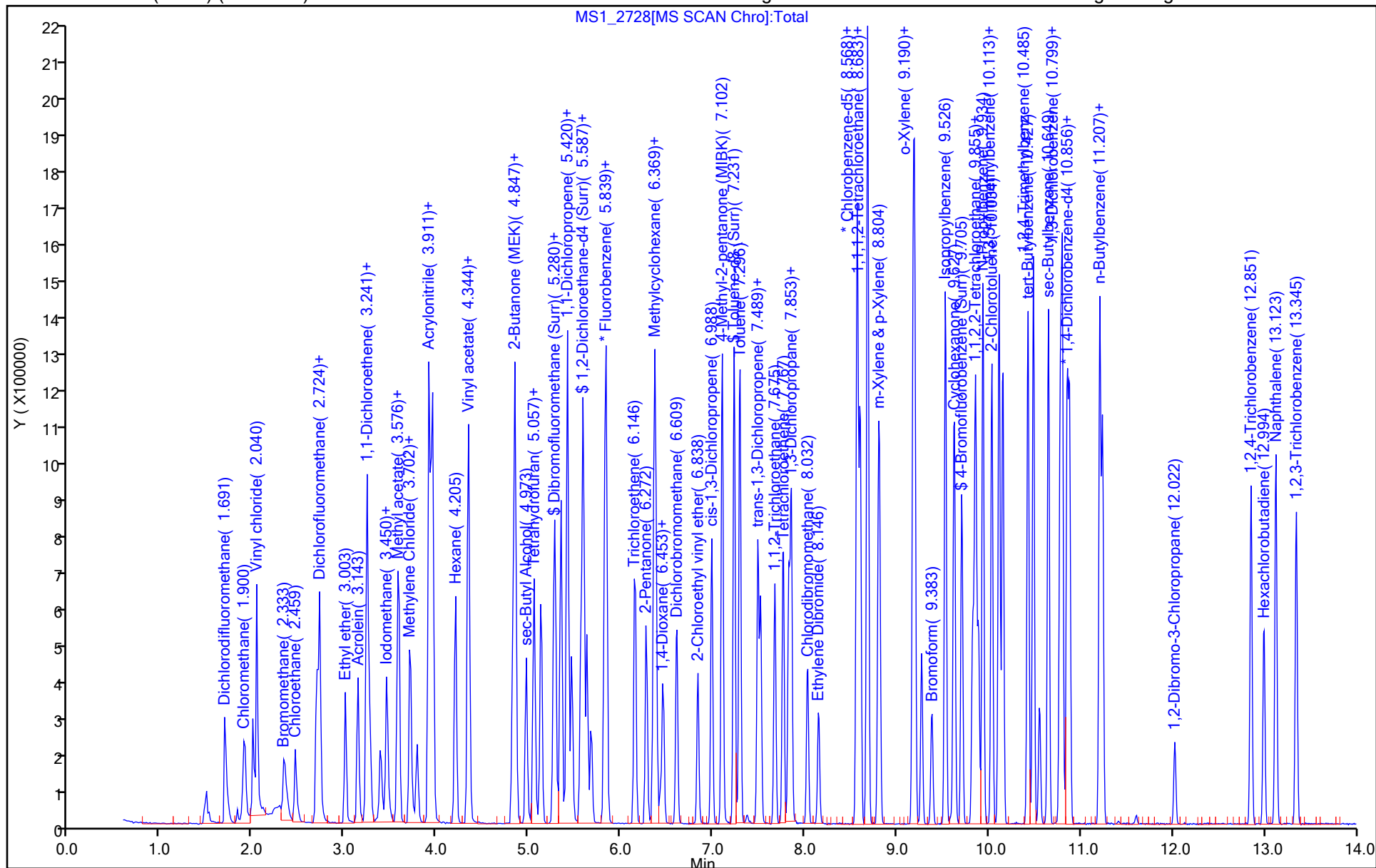
ALS Bottle#: 17

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2729.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 04-Jun-2021 16:20:30 ALS Bottle#: 18 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD100
 Misc. Info.: 280-0102067-021
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:40 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 08:48:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	770348	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	161409	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	97	257627	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199583	50.0	48.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	270692	50.0	49.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	703336	50.0	50.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	271979	50.0	48.6	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	98	341786	100.0	98.7	
12 Chloromethane	50	1.900	1.900	0.000	99	317305	100.0	94.8	
13 Vinyl chloride	62	1.998	1.998	0.000	100	271019	100.0	100.4	
15 Bromomethane	94	2.347	2.333	0.014	93	195406	100.0	94.0	
16 Chloroethane	64	2.459	2.459	0.000	98	201788	100.0	96.9	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	496647	100.0	95.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	448550	100.0	101.0	
20 Ethyl ether	59	3.003	3.003	0.000	93	219725	100.0	101.2	
22 Acrolein	56	3.143	3.143	0.000	98	398118	987.5	956.2	
24 112TCTFE	151	3.255	3.241	0.014	96	154610	100.0	105.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	210315	100.0	94.5	
25 Acetone	43	3.269	3.269	0.000	98	351099	400.0	403.5	
26 Iodomethane	142	3.381	3.381	0.000	99	344718	100.0	102.2	
28 Carbon disulfide	76	3.450	3.450	0.000	99	740012	100.0	98.9	
30 Methyl acetate	43	3.562	3.562	0.000	98	417578	200.0	198.3	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	426172	100.0	95.1	
32 Methylene Chloride	84	3.702	3.702	0.000	97	266563	100.0	97.9	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	99	291368	1000.0	1085.0	
34 Acrylonitrile	53	3.911	3.911	0.000	98	1060618	1000.0	995.8	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	813446	100.0	103.6	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	251645	100.0	93.1	
37 Hexane	57	4.205	4.205	0.000	94	331780	100.0	97.2	
39 Vinyl acetate	43	4.330	4.330	0.000	98	1263615	200.0	209.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	528150	100.0	101.1	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	514764	400.0	395.1	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	430208	100.0	93.1	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	280945	100.0	94.9	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	535348	2400.0	2422.1	
54 Tetrahydrofuran	42	5.057	5.057	0.000	86	165527	200.0	194.6	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	131412	100.0	97.4	
55 Chloroform	83	5.126	5.126	0.000	98	502179	100.0	92.7	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	441385	100.0	92.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	467867	100.0	98.6	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	396397	100.0	103.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	85	367905	100.0	104.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	92	237028	2500.0	2468.1	
63 Benzene	78	5.587	5.587	0.000	99	1075144	100.0	100.9	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	450298	100.0	100.2	
66 n-Heptane	43	5.825	5.825	0.000	92	304713	100.0	97.5	
68 Trichloroethene	95	6.146	6.146	0.000	94	283268	100.0	94.7	
69 2-Pentanone	43	6.272	6.272	0.000	98	681033	320.0	329.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	367688	100.0	99.2	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	301386	100.0	104.0	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	66461	2000.0	1992.7	
74 Dibromomethane	93	6.453	6.453	0.000	88	187746	100.0	103.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	385100	100.0	96.9	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	95	178538	100.0	100.7	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	464577	100.0	106.5	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	992438	400.0	413.5	
82 Toluene	91	7.296	7.296	0.000	97	1049392	100.0	98.7	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	99	444618	100.0	104.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	329168	100.0	102.4	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	95	217713	100.0	97.8	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	175087	100.0	104.8	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	417430	100.0	102.0	
91 2-Hexanone	43	7.853	7.853	0.000	98	688140	400.0	402.1	
95 Chlorodibromomethane	129	8.032	8.032	0.000	90	254169	100.0	105.4	
96 Ethylene Dibromide	107	8.146	8.146	0.000	97	236353	100.0	101.8	
98 1-Chlorohexane	91	8.561	8.561	0.000	94	269413	80.0	79.9	
99 Chlorobenzene	112	8.604	8.604	0.000	91	662703	100.0	100.6	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	93	248769	100.0	106.9	
101 Ethylbenzene	106	8.683	8.683	0.000	99	359882	100.0	102.8	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	443325	100.0	100.5	
103 o-Xylene	106	9.176	9.176	0.000	98	427099	100.0	103.6	
104 Styrene	104	9.198	9.198	0.000	94	758598	100.0	100.7	
106 Bromoform	173	9.383	9.383	0.000	89	162117	100.0	101.7	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	1146614	100.0	101.7	
109 Cyclohexanone	55	9.619	9.619	0.000	95	534760	3000.0	2957.2	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	306793	100.0	98.6	
111 Bromobenzene	156	9.855	9.855	0.000	97	263713	100.0	103.1	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	82	111621	100.0	99.3	
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	89	89319	100.0	103.2	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	313375	100.0	100.1	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	265995	100.0	103.9	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	985068	100.0	97.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	284037	100.0	100.8	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	800394	100.0	97.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	1020729	100.0	98.9	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	231170	100.0	96.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	511419	100.0	102.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	1010734	100.0	98.8	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	525253	100.0	100.1	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	954625	100.0	96.7	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	485254	100.0	103.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	74	65946	100.0	99.0	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	313667	100.0	101.9	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	104528	100.0	96.9	
132 Naphthalene	128	13.123	13.123	0.000	98	944344	100.0	103.4	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	92	286406	100.0	102.0	
S 149 1,2-Dichloroethene, Total (URS)	95				0		200.0	188.0	
S 150 1,2-Dichloroethene, Total	1				0		200.0	188.0	
S 151 Trihalomethanes, Total	1				0		400.0	396.7	
S 152 Total BTEX	1				0			506.4	
S 153 Xylenes, Total (URS)	1				0		200.0	204.1	
S 155 Xylenes, Total	106				0		200.0	204.1	
S 156 1,3-Dichloropropene, Total	1				0		200.0	211.1	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 20.00

Units: uL

MV-MegaMainA_00050

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2729.D

Injection Date: 04-Jun-2021 16:20:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD100

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

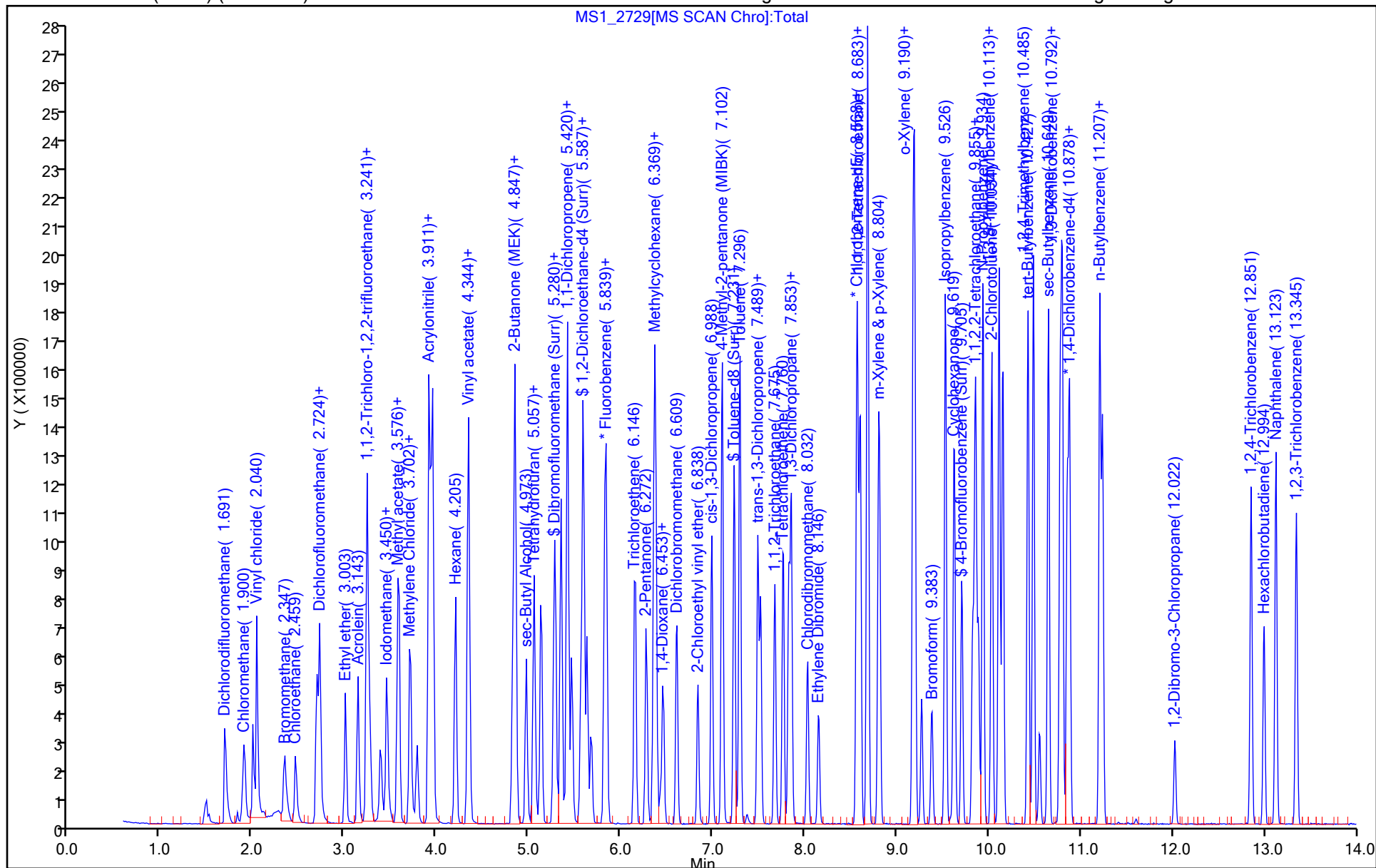
ALS Bottle#: 18

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2730.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 04-Jun-2021 16:41:30 ALS Bottle#: 19 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD200
 Misc. Info.: 280-0102067-022
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:43 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: petuninp

Date: 04-Jun-2021 17:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	783196	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.568	8.575	-0.007	90	169094	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	96	259778	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	205683	50.0	49.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	279300	50.0	50.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	722826	50.0	49.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	282862	50.0	50.2	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	677738	200.0	192.3	
12 Chloromethane	50	1.900	1.900	0.000	99	656518	200.0	193.0	
13 Vinyl chloride	62	1.998	1.998	0.000	100	549679	200.0	200.2	
15 Bromomethane	94	2.333	2.333	0.000	94	381898	200.0	180.6	
16 Chloroethane	64	2.459	2.459	0.000	99	410848	200.0	194.1	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	1017407	200.0	194.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	899290	200.0	199.2	
20 Ethyl ether	59	3.004	3.003	0.001	93	450987	200.0	204.3	
22 Acrolein	56	3.143	3.143	0.000	98	841506	1975.0	1995.3	
24 112TCTFE	151	3.241	3.241	0.000	98	329503	200.0	220.4	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	451141	200.0	199.5	
25 Acetone	43	3.269	3.269	0.000	98	732628	800.0	834.2	
26 Iodomethane	142	3.381	3.381	0.000	99	715491	200.0	208.2	
28 Carbon disulfide	76	3.450	3.450	0.000	99	1558994	200.0	204.9	
30 Methyl acetate	43	3.562	3.562	0.000	98	890400	400.0	416.0	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	833624	200.0	183.0	
32 Methylene Chloride	84	3.702	3.702	0.000	98	559662	200.0	202.8	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	604617	2000.0	2214.5	
34 Acrylonitrile	53	3.911	3.911	0.000	97	2157748	2000.0	1992.7	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	1664273	200.0	208.6	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	513885	200.0	187.1	
37 Hexane	57	4.205	4.205	0.000	94	702356	200.0	196.0	
39 Vinyl acetate	43	4.330	4.330	0.000	98	2509441	400.0	408.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	1068575	200.0	201.3	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	1085961	800.0	822.6	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	901541	200.0	192.0	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	585356	200.0	194.4	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	1133775	4800.0	5035.6	
54 Tetrahydrofuran	42	5.057	5.057	0.000	85	344648	400.0	404.7	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	269171	200.0	195.7	
55 Chloroform	83	5.126	5.126	0.000	99	1061208	200.0	192.7	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	940114	200.0	194.0	
57 Cyclohexane	56	5.350	5.350	0.000	94	980879	200.0	204.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	826072	200.0	211.1	
59 Carbon tetrachloride	117	5.420	5.420	0.000	87	773566	200.0	216.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	497289	5000.0	5093.2	
63 Benzene	78	5.587	5.587	0.000	99	2233092	200.0	206.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	935335	200.0	204.7	
66 n-Heptane	43	5.825	5.825	0.000	94	646535	200.0	204.0	
68 Trichloroethene	95	6.146	6.146	0.000	94	593715	200.0	189.4	
69 2-Pentanone	43	6.272	6.272	0.000	98	1416166	640.0	673.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	765192	200.0	203.4	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	611580	200.0	207.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	99	139700	4000.0	4096.5	
74 Dibromomethane	93	6.453	6.453	0.000	88	392807	200.0	212.7	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	790878	200.0	195.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	372671	200.0	206.8	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	962416	200.0	210.6	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.102	0.000	98	2075132	800.0	850.5	
82 Toluene	91	7.296	7.296	0.000	97	2216570	200.0	205.0	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	931126	200.0	215.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	684215	200.0	203.1	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.001	95	452414	200.0	200.1	
89 Tetrachloroethene	164	7.767	7.767	0.000	90	377868	200.0	215.9	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	873388	200.0	203.8	
91 2-Hexanone	43	7.853	7.853	0.000	97	1407897	800.0	784.5	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	539788	200.0	213.6	
96 Ethylene Dibromide	107	8.146	8.146	0.000	96	496186	200.0	204.0	
98 1-Chlorohexane	91	8.561	8.561	0.000	95	576421	160.0	163.9	
99 Chlorobenzene	112	8.604	8.604	0.000	91	1403932	200.0	203.3	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	517259	200.0	212.2	
101 Ethylbenzene	106	8.683	8.683	0.000	99	758836	200.0	206.9	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	928312	200.0	200.8	
103 o-Xylene	106	9.176	9.176	0.000	99	895286	200.0	207.4	
104 Styrene	104	9.198	9.198	0.000	93	1593996	200.0	201.9	
106 Bromoform	173	9.383	9.383	0.000	90	339679	200.0	202.9	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	2397490	200.0	211.0	
109 Cyclohexanone	55	9.627	9.619	0.008	95	891889	6000.0	4708.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	641786	200.0	205.0	
111 Bromobenzene	156	9.855	9.855	0.000	97	557639	200.0	216.2	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.862	0.000	82	239439	200.0	211.2	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	182772	200.0	209.8	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	655122	200.0	207.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	561245	200.0	217.4	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	2073344	200.0	204.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	100	590717	200.0	207.9	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	1703470	200.0	204.8	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	2109459	200.0	202.7	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	485251	200.0	200.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	1065476	200.0	211.5	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	2129213	200.0	206.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	1086868	200.0	205.4	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	1995762	200.0	200.6	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	1009176	200.0	212.9	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	136502	200.0	202.4	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	667214	200.0	215.1	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	220210	200.0	201.7	
132 Naphthalene	128	13.123	13.123	0.000	98	1942455	200.0	210.8	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	604902	200.0	213.6	
S 149 1,2-Dichloroethene, Total (URS)	93				0		400.0	381.5	
S 150 1,2-Dichloroethene, Total	1				0		400.0	381.5	
S 151 Trihalomethanes, Total	1				0		800.0	804.8	
S 152 Total BTEX	1				0			1026.1	
S 153 Xylenes, Total (URS)	1				0		400.0	408.2	
S 155 Xylenes, Total	106				0		400.0	408.2	
S 156 1,3-Dichloropropene, Total	1				0		400.0	426.0	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 40.00

Units: uL

MV-MegaMainA_00050

Amount Added: 100.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Injection Date: 04-Jun-2021 16:41:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD200

Worklist Smp#: 22

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

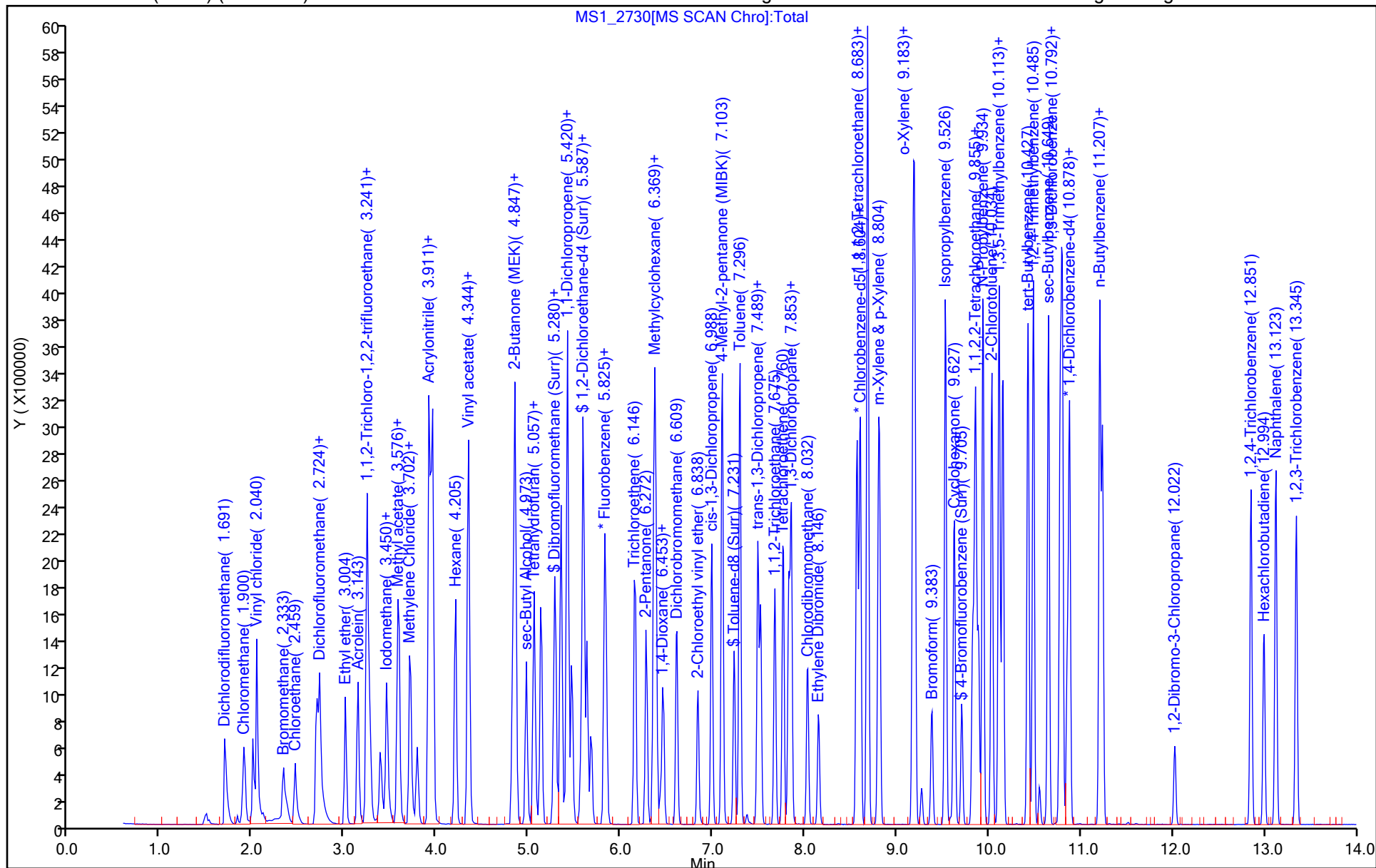
ALS Bottle#: 19

Method: AQ_VMS1_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



Calibration

/ Dichlorodifluoromethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

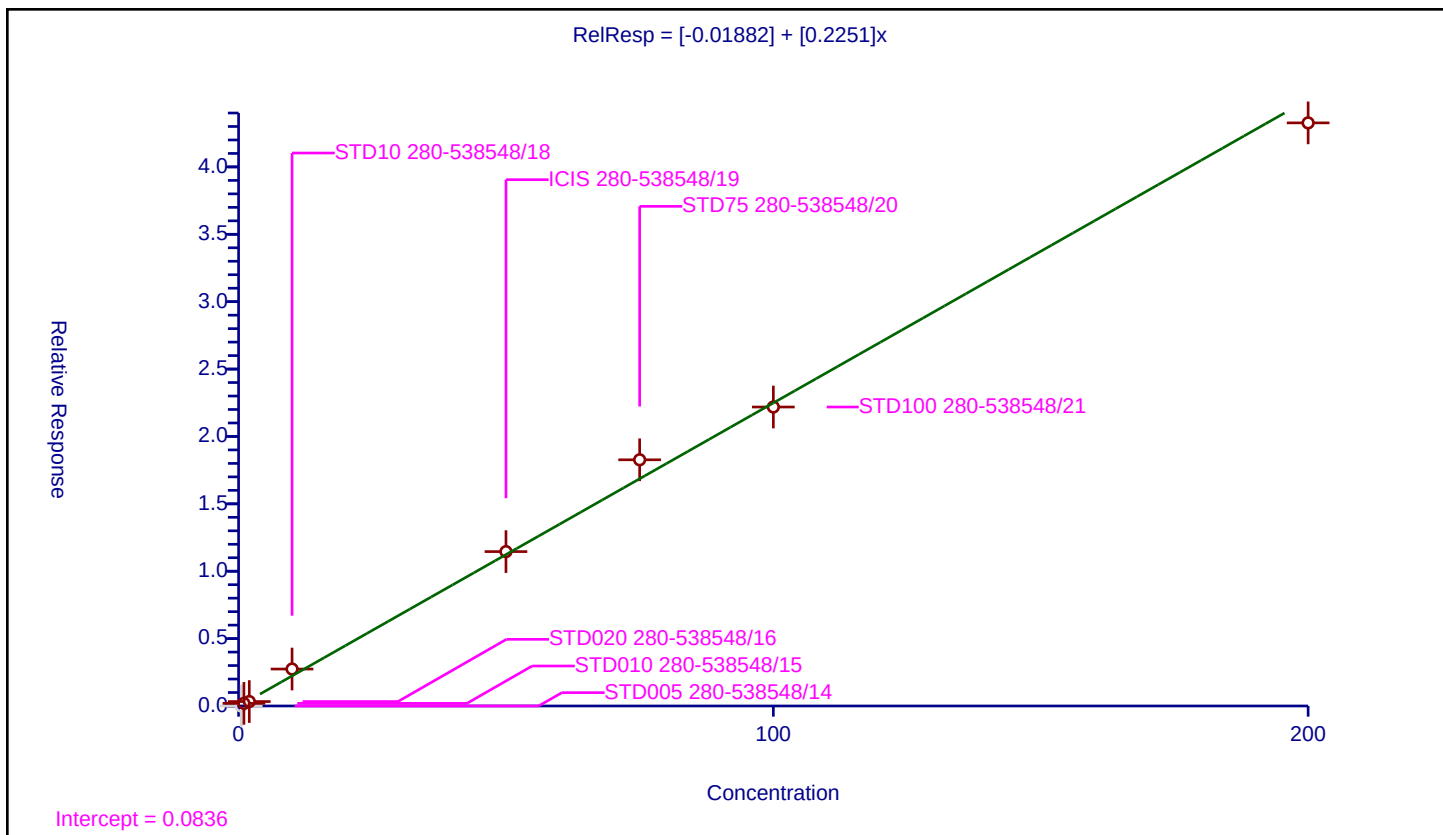
Curve Coefficients

Intercept: -0.01882
 Slope: 0.2251

Error Coefficients

Standard Error: 371000
 Relative Standard Error: 15.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.194453	50.0	745169.0	0.194453	Y
3	STD020 280-538548/16	2.0	0.329702	50.0	729901.0	0.164851	Y
4	STD10 280-538548/18	10.0	2.741802	50.0	746498.0	0.27418	Y
5	ICIS 280-538548/19	50.0	11.455893	50.0	769988.0	0.229118	Y
6	STD75 280-538548/20	75.0	18.269311	50.0	778921.0	0.243591	Y
7	STD100 280-538548/21	100.0	22.18387	50.0	770348.0	0.221839	Y
8	STD200 280-538548/22	200.0	43.267458	50.0	783196.0	0.216337	Y



Calibration

/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

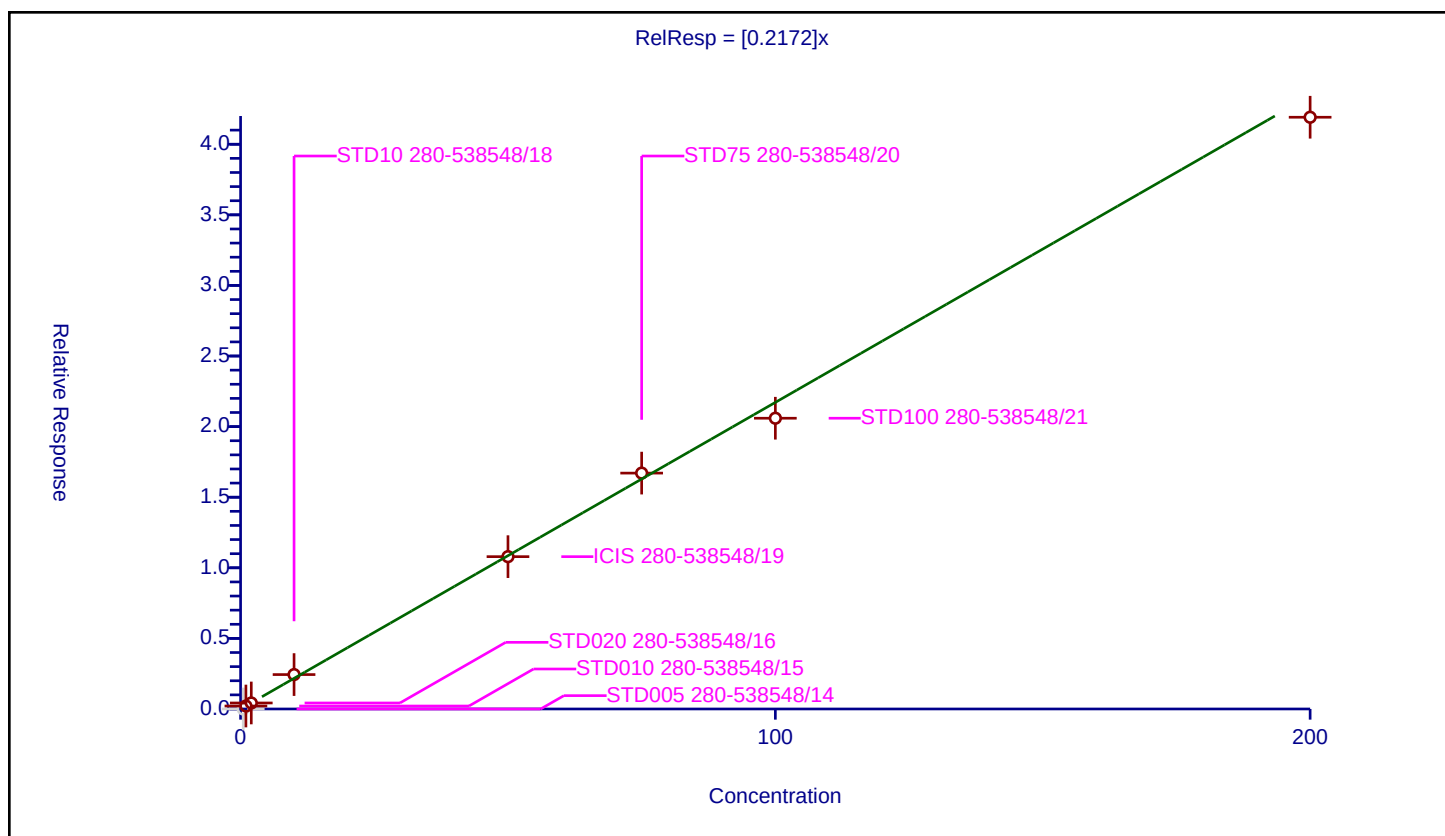
Curve Coefficients

Intercept: 0
 Slope: 0.2172

Error Coefficients

Standard Error: 324000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.209751	50.0	745169.0	0.209751	Y
3	STD020 280-538548/16	2.0	0.425195	50.0	729901.0	0.212597	Y
4	STD10 280-538548/18	10.0	2.437381	50.0	746498.0	0.243738	Y
5	ICIS 280-538548/19	50.0	10.790103	50.0	769988.0	0.215802	Y
6	STD75 280-538548/20	75.0	16.707407	50.0	778921.0	0.222765	Y
7	STD100 280-538548/21	100.0	20.594913	50.0	770348.0	0.205949	Y
8	STD200 280-538548/22	200.0	41.912752	50.0	783196.0	0.209564	Y



Calibration

/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

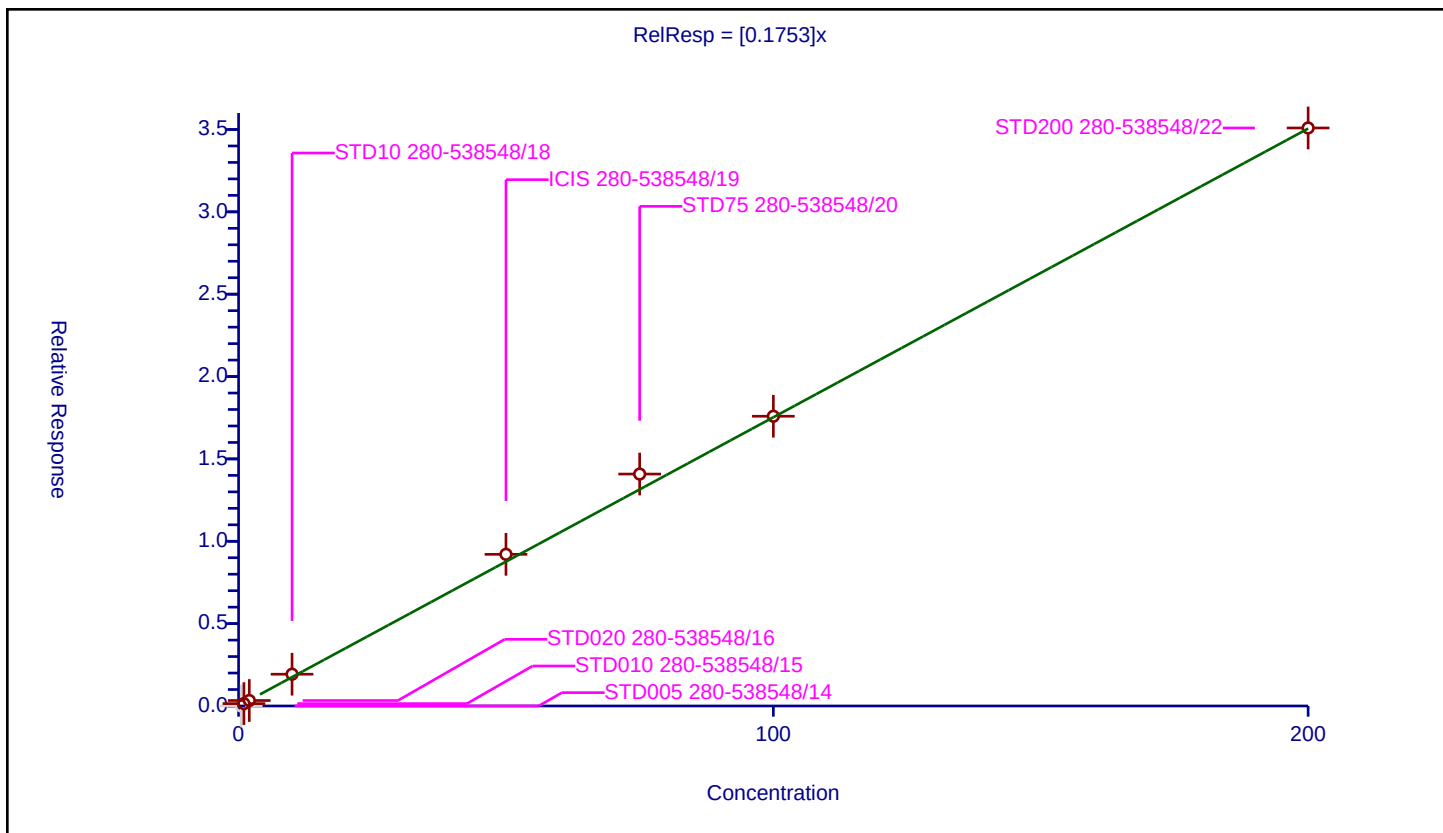
Curve Coefficients

Intercept: 0
 Slope: 0.1753

Error Coefficients

Standard Error: 272000
 Relative Standard Error: 9.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.144195	50.0	745169.0	0.144195	Y
3	STD020 280-538548/16	2.0	0.333196	50.0	729901.0	0.166598	Y
4	STD10 280-538548/18	10.0	1.928873	50.0	746498.0	0.192887	Y
5	ICIS 280-538548/19	50.0	9.208001	50.0	769988.0	0.18416	Y
6	STD75 280-538548/20	75.0	14.081531	50.0	778921.0	0.187754	Y
7	STD100 280-538548/21	100.0	17.590686	50.0	770348.0	0.175907	Y
8	STD200 280-538548/22	200.0	35.092046	50.0	783196.0	0.17546	Y



Calibration

/ Bromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

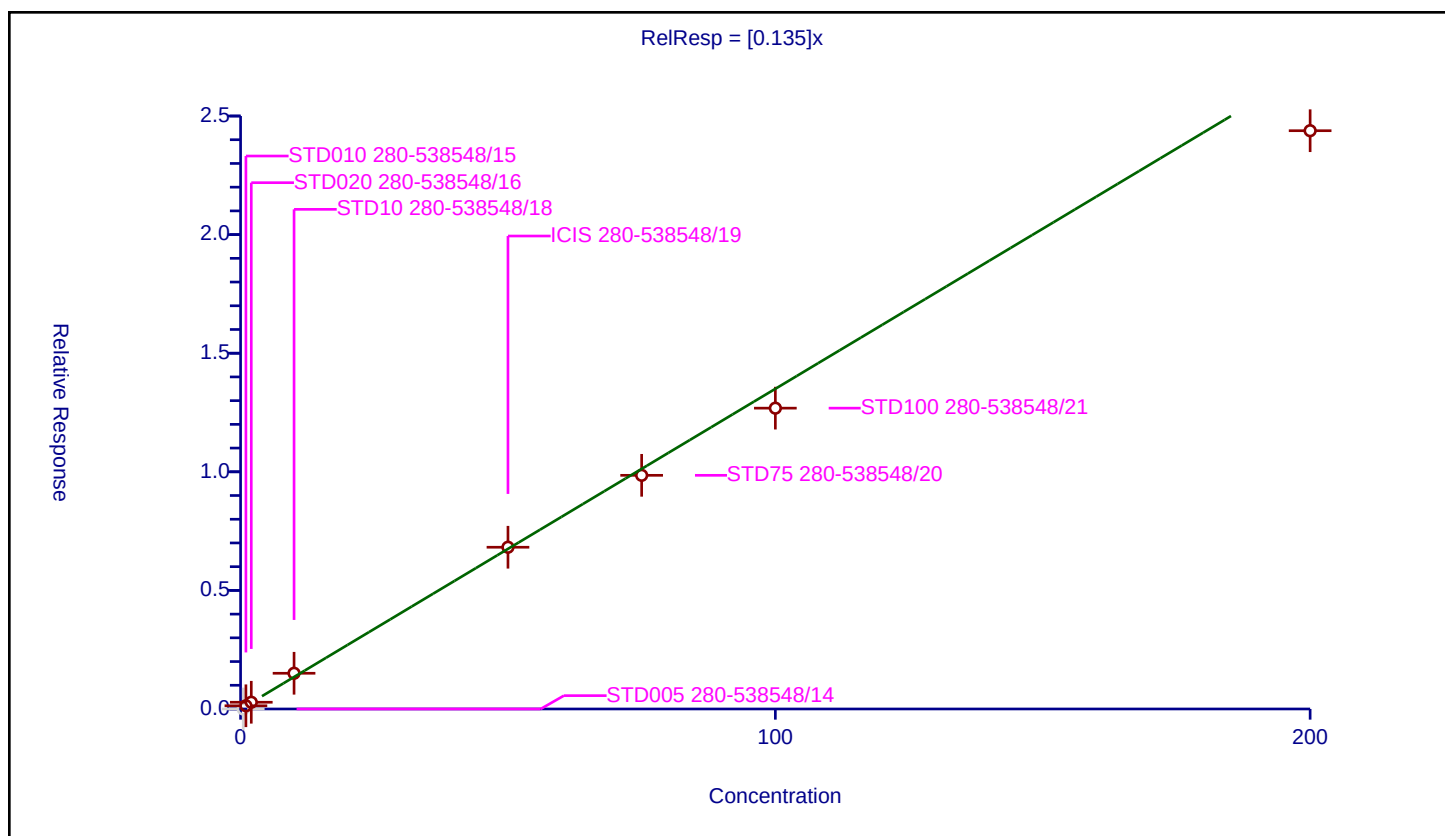
Curve Coefficients

Intercept: 0
 Slope: 0.135

Error Coefficients

Standard Error: 191000
 Relative Standard Error: 7.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.135674	50.0	745169.0	0.135674	Y
3	STD020 280-538548/16	2.0	0.284285	50.0	729901.0	0.142143	Y
4	STD10 280-538548/18	10.0	1.506099	50.0	746498.0	0.15061	Y
5	ICIS 280-538548/19	50.0	6.819717	50.0	769988.0	0.136394	Y
6	STD75 280-538548/20	75.0	9.851384	50.0	778921.0	0.131352	Y
7	STD100 280-538548/21	100.0	12.682969	50.0	770348.0	0.12683	Y
8	STD200 280-538548/22	200.0	24.380742	50.0	783196.0	0.121904	Y



Calibration

/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

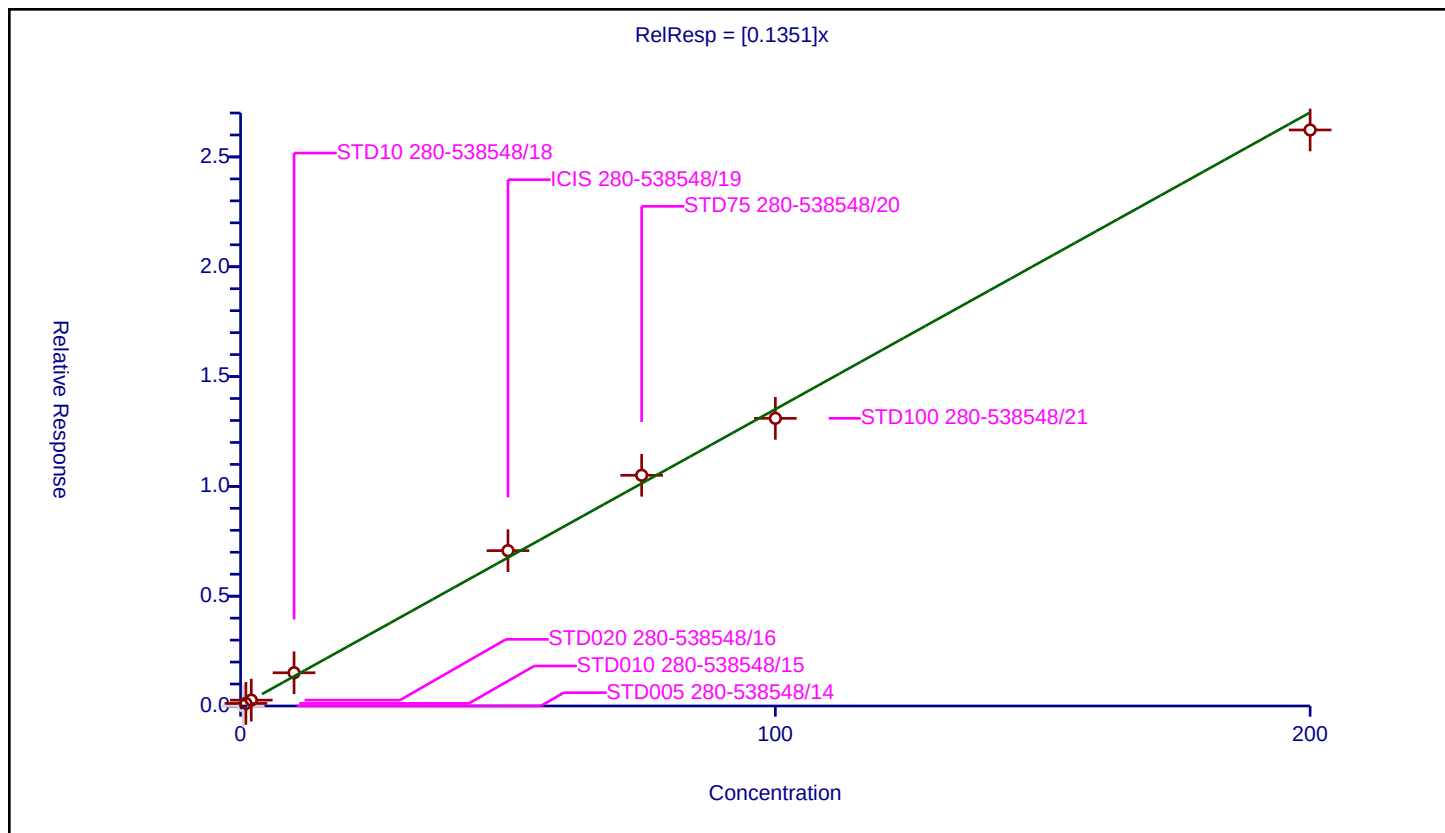
Curve Coefficients

Intercept: 0
 Slope: 0.1351

Error Coefficients

Standard Error: 204000
 Relative Standard Error: 7.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.117893	50.0	745169.0	0.117893	Y
3	STD020 280-538548/16	2.0	0.2662	50.0	729901.0	0.1331	Y
4	STD10 280-538548/18	10.0	1.512194	50.0	746498.0	0.151219	Y
5	ICIS 280-538548/19	50.0	7.073617	50.0	769988.0	0.141472	Y
6	STD75 280-538548/20	75.0	10.504531	50.0	778921.0	0.14006	Y
7	STD100 280-538548/21	100.0	13.097198	50.0	770348.0	0.130972	Y
8	STD200 280-538548/22	200.0	26.228939	50.0	783196.0	0.131145	Y



Calibration

/ Dichlorofluoromethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

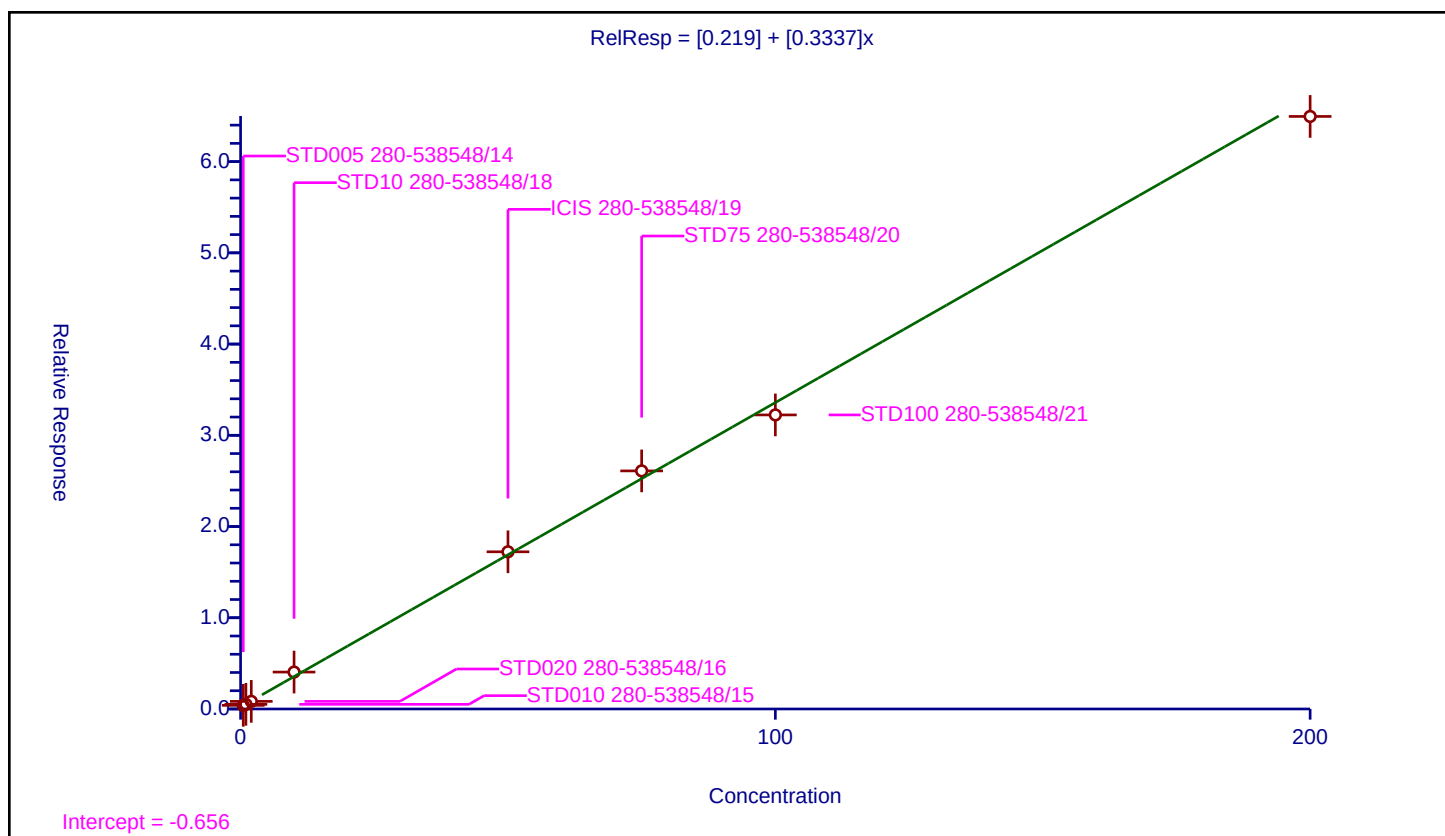
Curve Coefficients

Intercept: 0.219
 Slope: 0.3337

Error Coefficients

Standard Error: 504000
 Relative Standard Error: 9.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.398537	50.0	741336.0	0.797074	Y
2	STD010 280-538548/15	1.0	0.509951	50.0	745169.0	0.509951	Y
3	STD020 280-538548/16	2.0	0.834428	50.0	729901.0	0.417214	Y
4	STD10 280-538548/18	10.0	4.046628	50.0	746498.0	0.404663	Y
5	ICIS 280-538548/19	50.0	17.229619	50.0	769988.0	0.344592	Y
6	STD75 280-538548/20	75.0	26.09963	50.0	778921.0	0.347995	Y
7	STD100 280-538548/21	100.0	32.235237	50.0	770348.0	0.322352	Y
8	STD200 280-538548/22	200.0	64.95226	50.0	783196.0	0.324761	Y



Calibration

/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

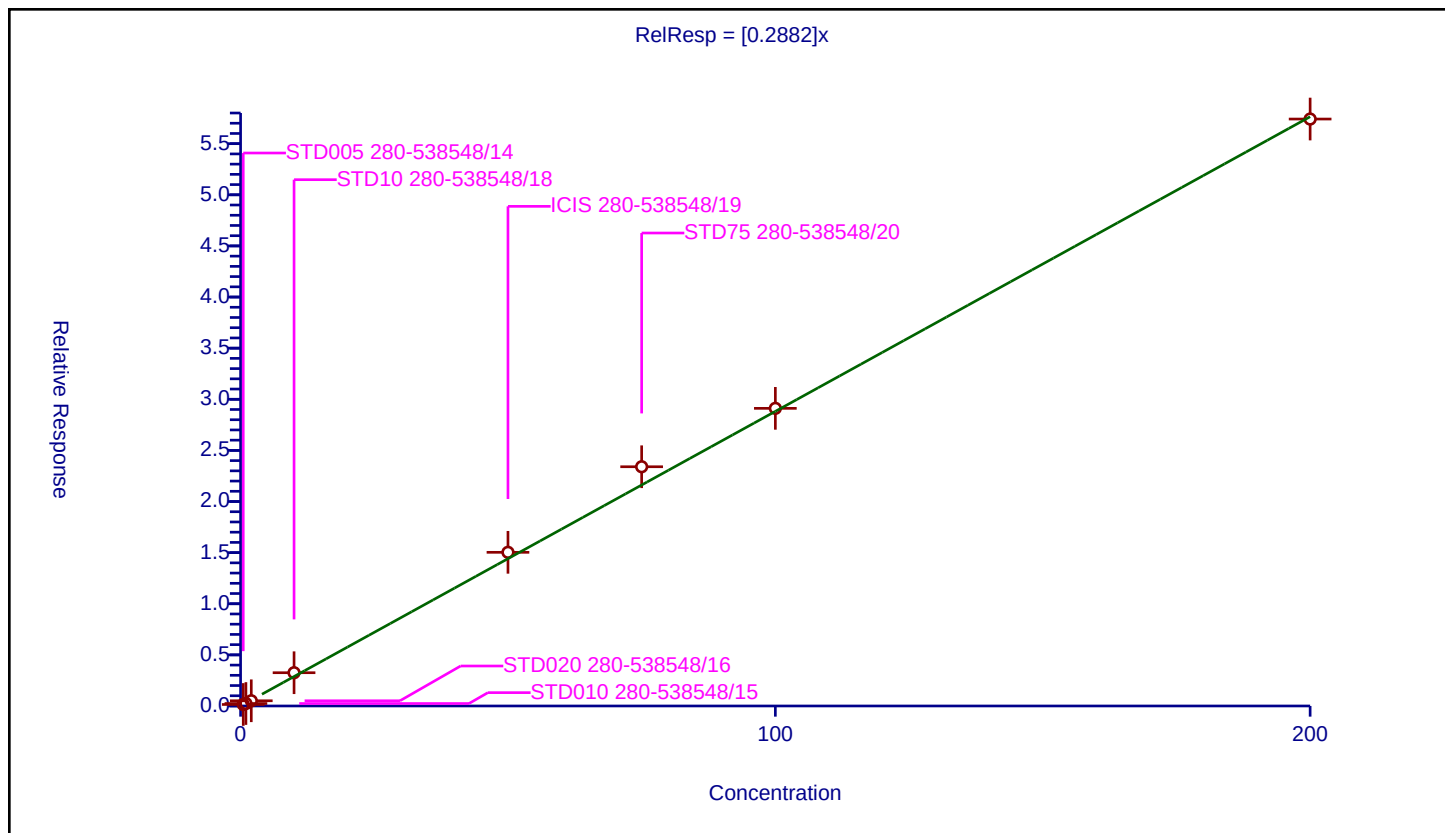
Curve Coefficients

Intercept: 0
 Slope: 0.2882

Error Coefficients

Standard Error: 414000
 Relative Standard Error: 9.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.146425	50.0	741336.0	0.29285	Y
2	STD010 280-538548/15	1.0	0.241891	50.0	745169.0	0.241891	Y
3	STD020 280-538548/16	2.0	0.509042	50.0	729901.0	0.254521	Y
4	STD10 280-538548/18	10.0	3.254396	50.0	746498.0	0.32544	Y
5	ICIS 280-538548/19	50.0	15.031143	50.0	769988.0	0.300623	Y
6	STD75 280-538548/20	75.0	23.399806	50.0	778921.0	0.311997	Y
7	STD100 280-538548/21	100.0	29.113466	50.0	770348.0	0.291135	Y
8	STD200 280-538548/22	200.0	57.411555	50.0	783196.0	0.287058	Y



Calibration

/ Ethyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

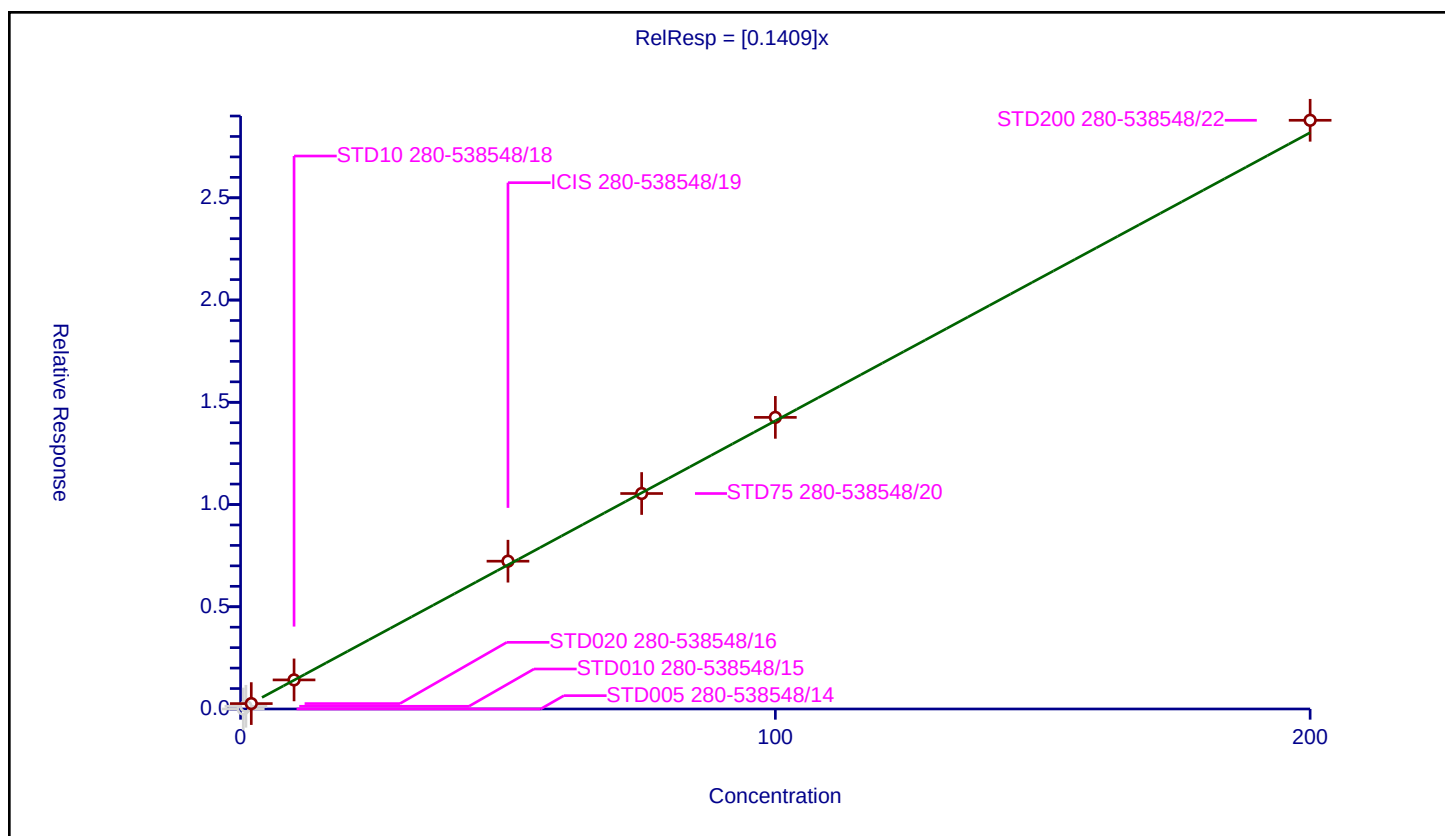
Curve Coefficients

Intercept: 0
Slope: 0.1409

Error Coefficients

Standard Error: 241000
Relative Standard Error: 3.3
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.132118	50.0	745169.0	0.132118	N
3	STD020 280-538548/16	2.0	0.263666	50.0	729901.0	0.131833	Y
4	STD10 280-538548/18	10.0	1.421638	50.0	746498.0	0.142164	Y
5	ICIS 280-538548/19	50.0	7.227905	50.0	769988.0	0.144558	Y
6	STD75 280-538548/20	75.0	10.537782	50.0	778921.0	0.140504	Y
7	STD100 280-538548/21	100.0	14.261412	50.0	770348.0	0.142614	Y
8	STD200 280-538548/22	200.0	28.791452	50.0	783196.0	0.143957	Y



Calibration

/ Acrolein

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

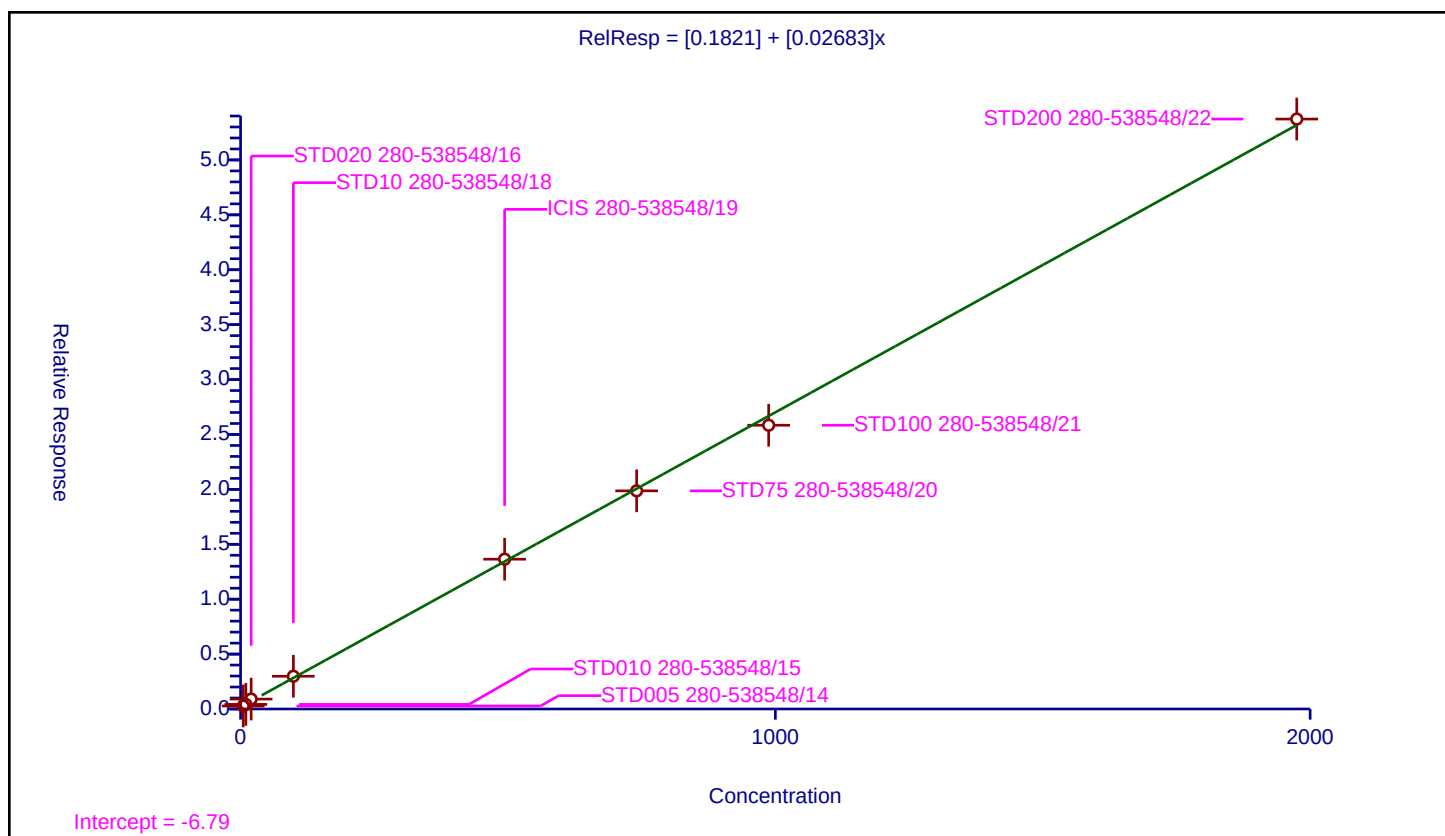
Curve Coefficients

Intercept: 0.1821
 Slope: 0.02683

Error Coefficients

Standard Error: 410000
 Relative Standard Error: 19.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	4.9375	0.275786	50.0	741336.0	0.055855	Y
2	STD010 280-538548/15	9.875	0.418764	50.0	745169.0	0.042406	Y
3	STD020 280-538548/16	19.75	0.902314	50.0	729901.0	0.045687	Y
4	STD10 280-538548/18	98.75	2.980584	50.0	746498.0	0.030183	Y
5	ICIS 280-538548/19	493.75	13.642615	50.0	769988.0	0.027631	Y
6	STD75 280-538548/20	740.625	19.865558	50.0	778921.0	0.026823	Y
7	STD100 280-538548/21	987.5	25.84014	50.0	770348.0	0.026167	Y
8	STD200 280-538548/22	1975.0	53.722568	50.0	783196.0	0.027201	Y



Calibration

/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

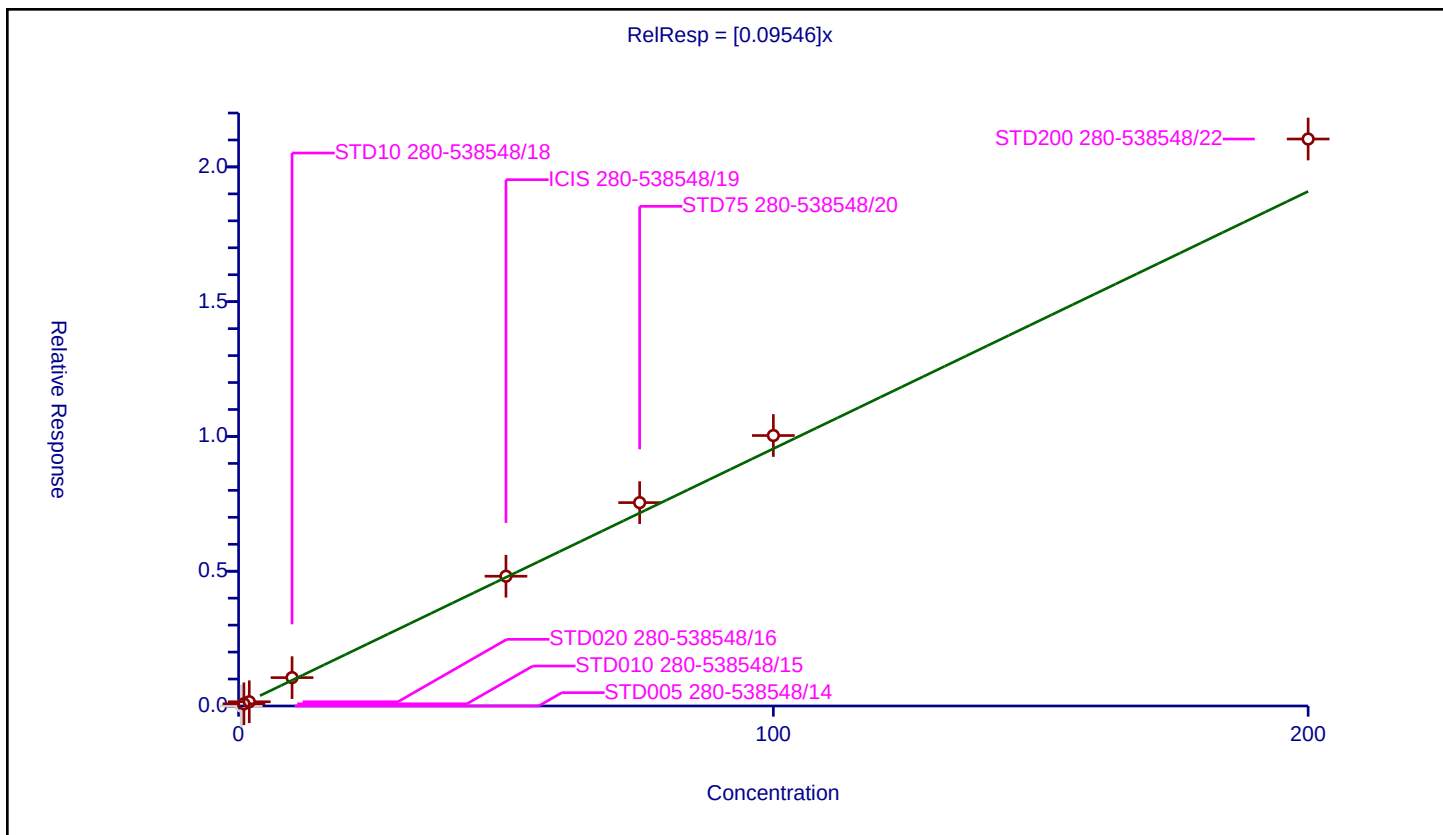
Curve Coefficients

Intercept: 0
 Slope: 0.09546

Error Coefficients

Standard Error: 159000
 Relative Standard Error: 11.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.081928	50.0	745169.0	0.081928	Y
3	STD020 280-538548/16	2.0	0.157145	50.0	729901.0	0.078572	Y
4	STD10 280-538548/18	10.0	1.052649	50.0	746498.0	0.105265	Y
5	ICIS 280-538548/19	50.0	4.814426	50.0	769988.0	0.096289	Y
6	STD75 280-538548/20	75.0	7.545566	50.0	778921.0	0.100608	Y
7	STD100 280-538548/21	100.0	10.035075	50.0	770348.0	0.100351	Y
8	STD200 280-538548/22	200.0	21.035794	50.0	783196.0	0.105179	Y



Calibration

/ 1,1-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

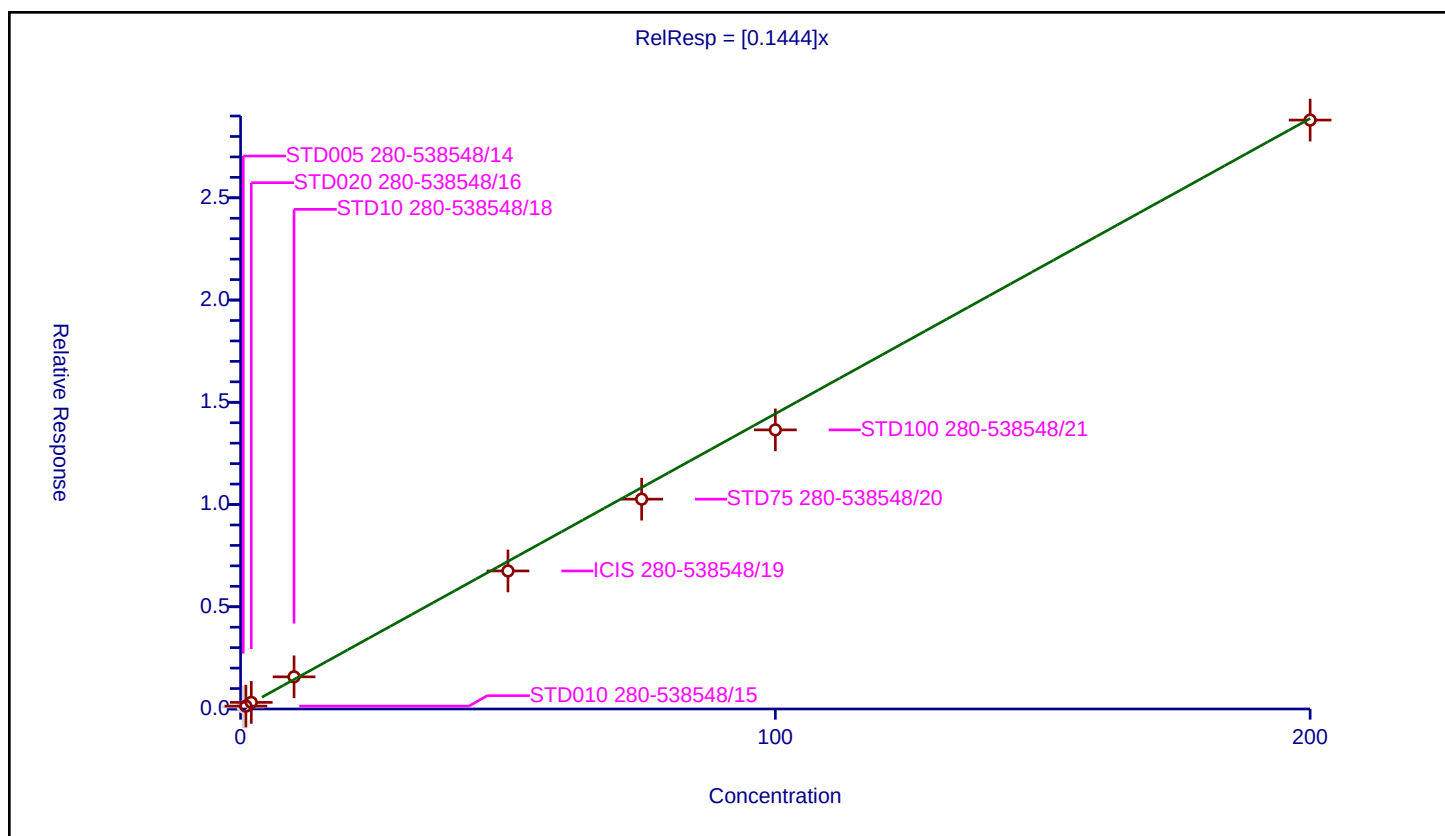
Curve Coefficients

Intercept: 0
Slope: 0.1444

Error Coefficients

Standard Error: 218000
Relative Standard Error: 7.3
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.101236	50.0	741336.0	0.202472	N
2	STD010 280-538548/15	1.0	0.140035	50.0	745169.0	0.140035	Y
3	STD020 280-538548/16	2.0	0.322167	50.0	729901.0	0.161083	Y
4	STD10 280-538548/18	10.0	1.572543	50.0	746498.0	0.157254	Y
5	ICIS 280-538548/19	50.0	6.750949	50.0	769988.0	0.135019	Y
6	STD75 280-538548/20	75.0	10.262145	50.0	778921.0	0.136829	Y
7	STD100 280-538548/21	100.0	13.650649	50.0	770348.0	0.136506	Y
8	STD200 280-538548/22	200.0	28.801283	50.0	783196.0	0.144006	Y



Calibration

/ Acetone

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

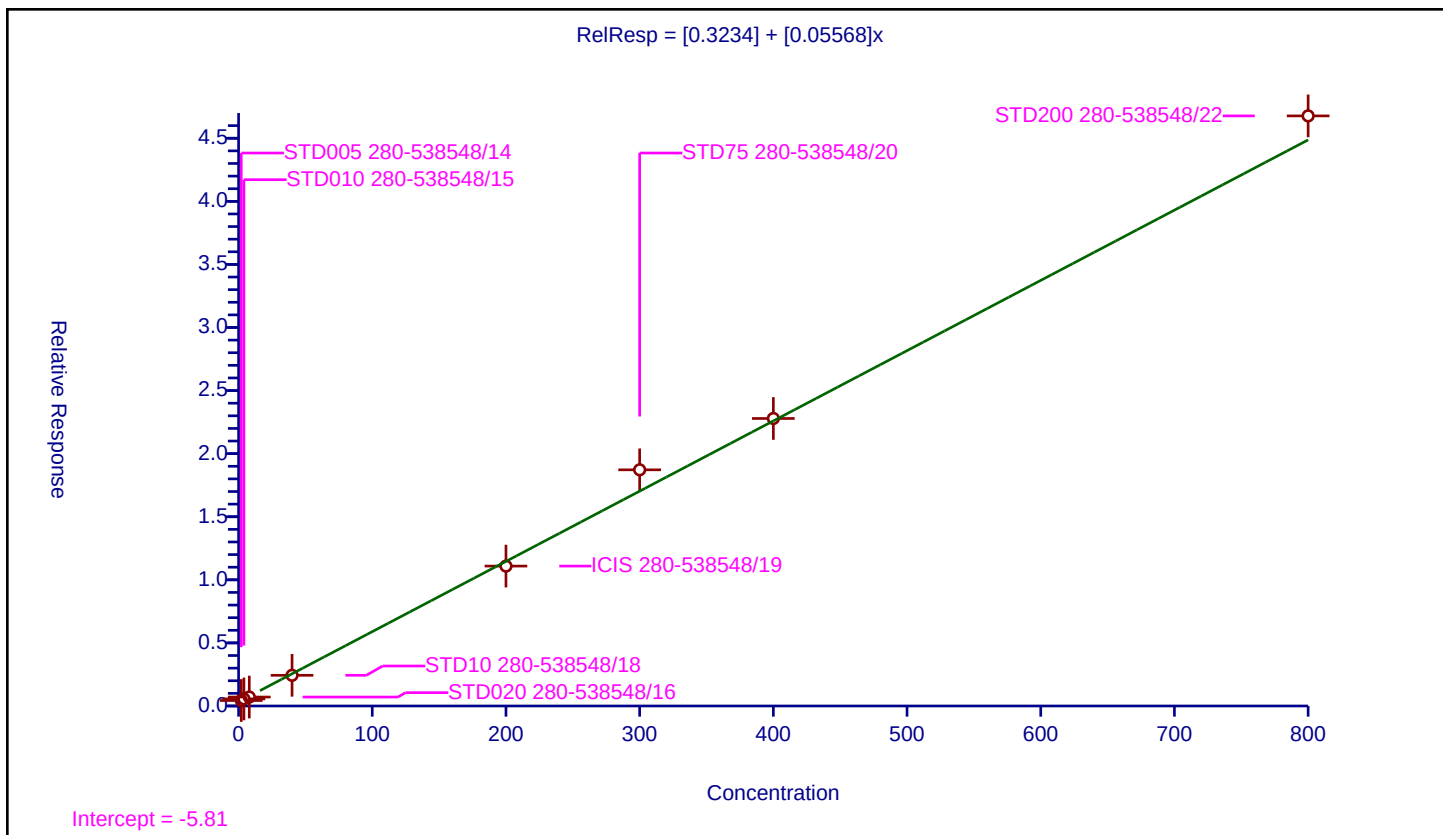
Curve Coefficients

Intercept: 0.3234
Slope: 0.05568

Error Coefficients

Standard Error: 360000
Relative Standard Error: 8.0
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.43516	50.0	741336.0	0.21758	Y
2	STD010 280-538548/15	4.0	0.560477	50.0	745169.0	0.140119	Y
3	STD020 280-538548/16	8.0	0.709206	50.0	729901.0	0.088651	Y
4	STD10 280-538548/18	40.0	2.43209	50.0	746498.0	0.060802	Y
5	ICIS 280-538548/19	200.0	11.089004	50.0	769988.0	0.055445	Y
6	STD75 280-538548/20	300.0	18.719421	50.0	778921.0	0.062398	Y
7	STD100 280-538548/21	400.0	22.788337	50.0	770348.0	0.056971	Y
8	STD200 280-538548/22	800.0	46.771689	50.0	783196.0	0.058465	Y



Calibration

/ Iodomethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

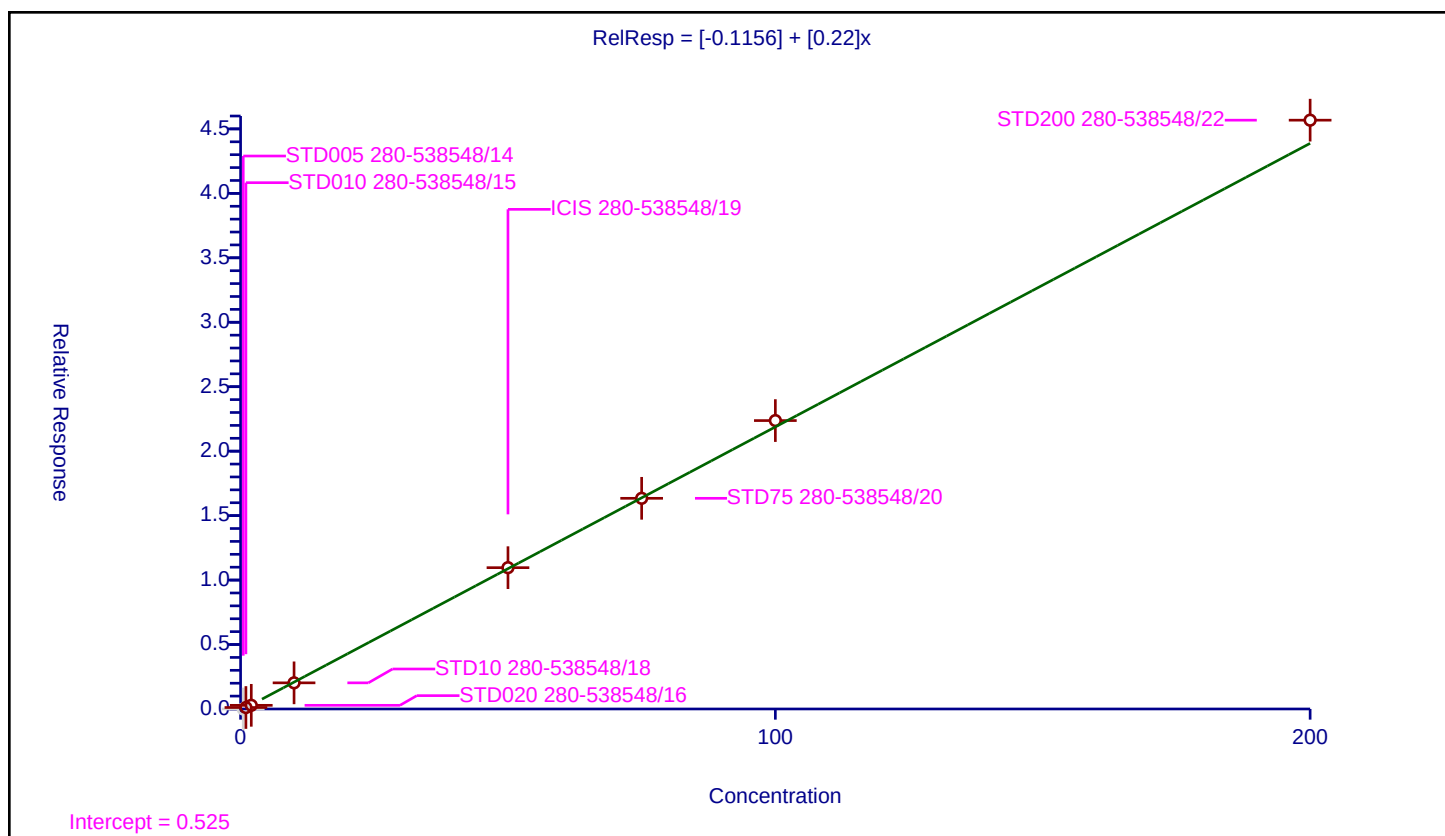
Curve Coefficients

Intercept: -0.1156
 Slope: 0.22

Error Coefficients

Standard Error: 381000
 Relative Standard Error: 5.1
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.114739	50.0	745169.0	0.114739	Y
3	STD020 280-538548/16	2.0	0.284833	50.0	729901.0	0.142417	Y
4	STD10 280-538548/18	10.0	2.028807	50.0	746498.0	0.202881	Y
5	ICIS 280-538548/19	50.0	10.962963	50.0	769988.0	0.219259	Y
6	STD75 280-538548/20	75.0	16.34357	50.0	778921.0	0.217914	Y
7	STD100 280-538548/21	100.0	22.374174	50.0	770348.0	0.223742	Y
8	STD200 280-538548/22	200.0	45.677646	50.0	783196.0	0.228388	Y



Calibration

/ Carbon disulfide

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

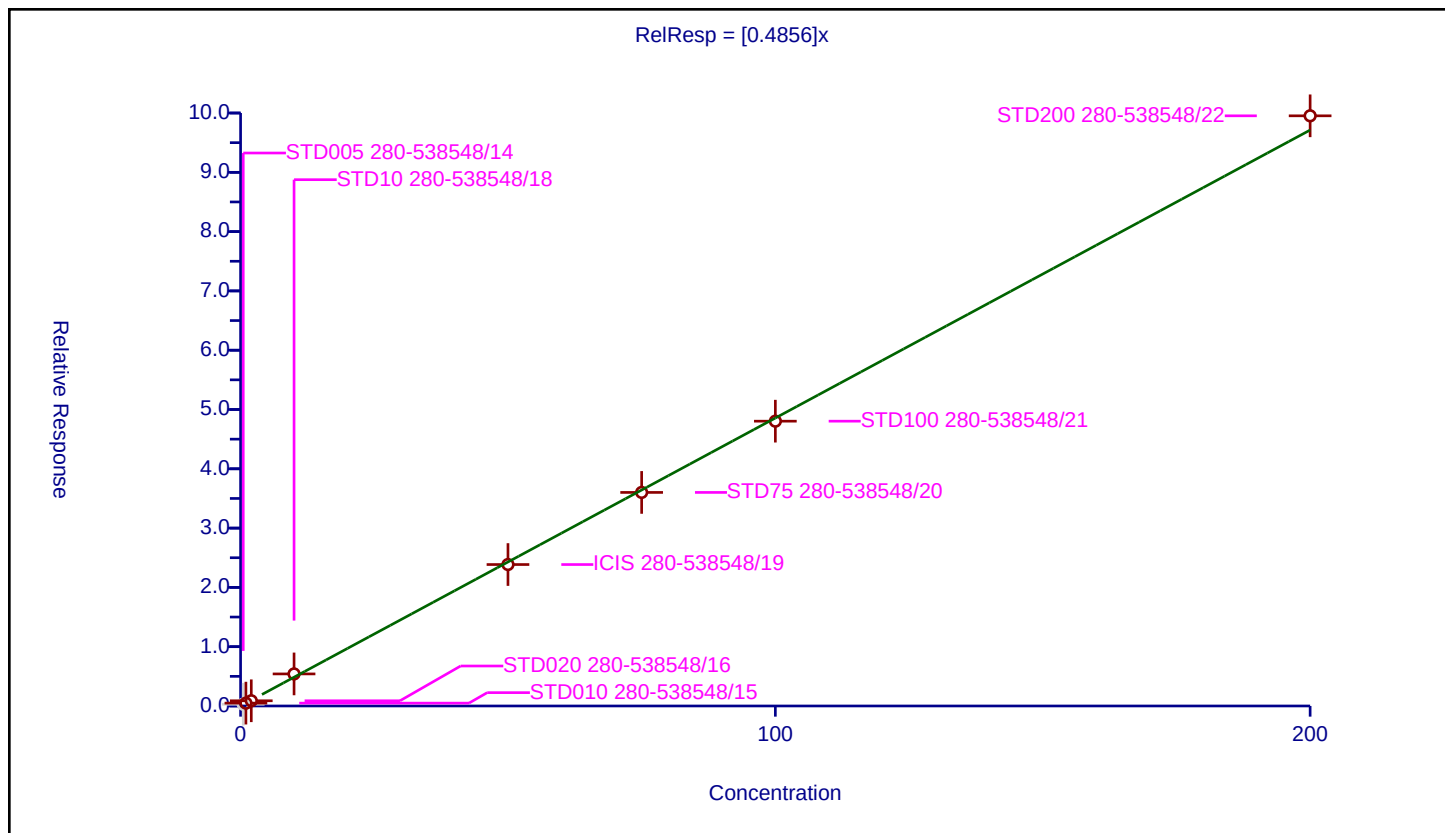
Curve Coefficients

Intercept: 0
Slope: 0.4856

Error Coefficients

Standard Error: 757000
Relative Standard Error: 6.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.296357	50.0	741336.0	0.592714	N
2	STD010 280-538548/15	1.0	0.483112	50.0	745169.0	0.483112	Y
3	STD020 280-538548/16	2.0	0.879982	50.0	729901.0	0.439991	Y
4	STD10 280-538548/18	10.0	5.409593	50.0	746498.0	0.540959	Y
5	ICIS 280-538548/19	50.0	23.856151	50.0	769988.0	0.477123	Y
6	STD75 280-538548/20	75.0	36.016169	50.0	778921.0	0.480216	Y
7	STD100 280-538548/21	100.0	48.03102	50.0	770348.0	0.48031	Y
8	STD200 280-538548/22	200.0	99.527704	50.0	783196.0	0.497639	Y



Calibration

/ Methyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

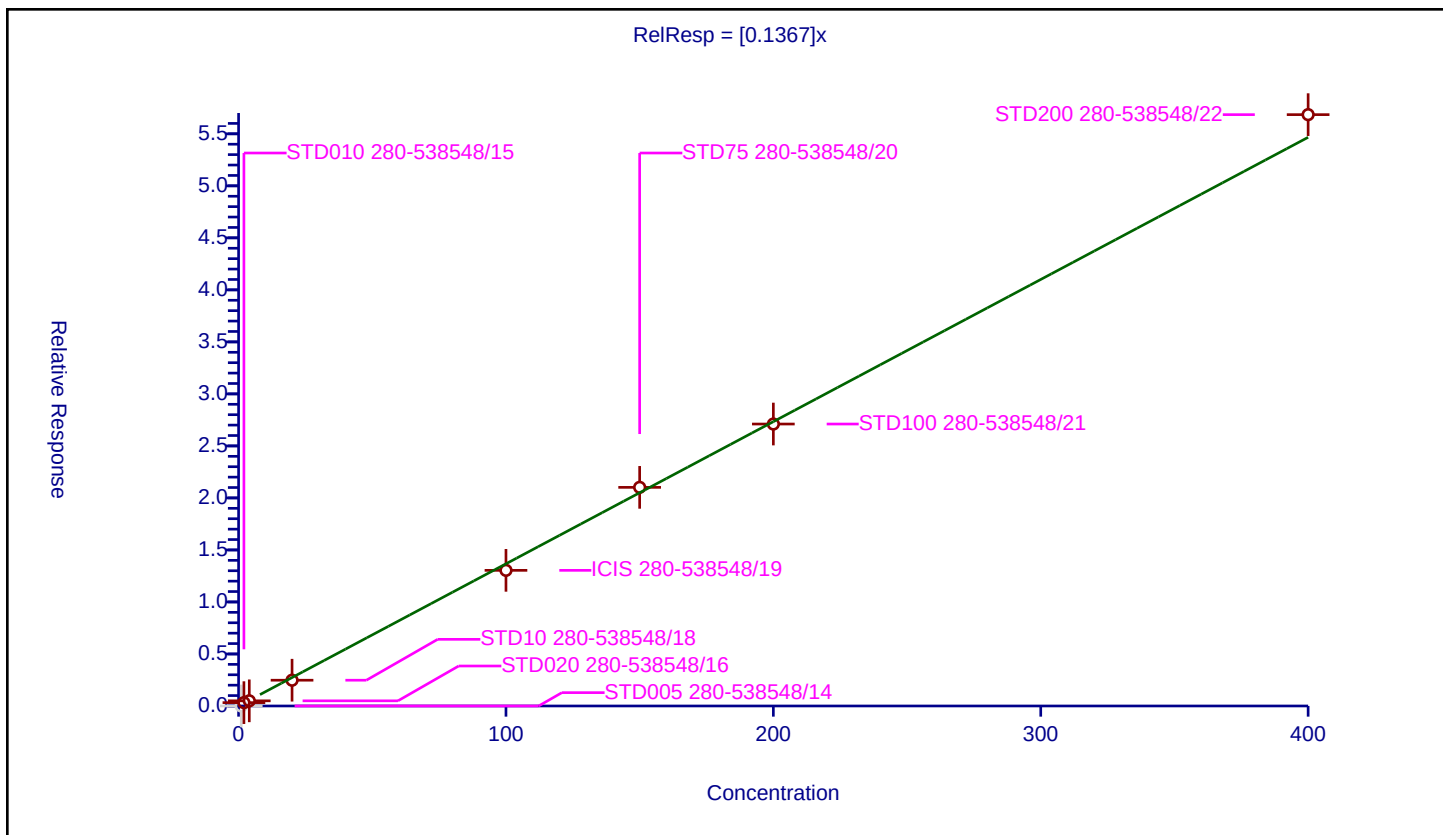
Curve Coefficients

Intercept: 0
 Slope: 0.1367

Error Coefficients

Standard Error: 431000
 Relative Standard Error: 9.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	2.0	0.321337	50.0	745169.0	0.160668	Y
3	STD020 280-538548/16	4.0	0.495821	50.0	729901.0	0.123955	Y
4	STD10 280-538548/18	20.0	2.477502	50.0	746498.0	0.123875	Y
5	ICIS 280-538548/19	100.0	13.037671	50.0	769988.0	0.130377	Y
6	STD75 280-538548/20	150.0	21.016894	50.0	778921.0	0.140113	Y
7	STD100 280-538548/21	200.0	27.103205	50.0	770348.0	0.135516	Y
8	STD200 280-538548/22	400.0	56.844008	50.0	783196.0	0.14211	Y



Calibration

/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

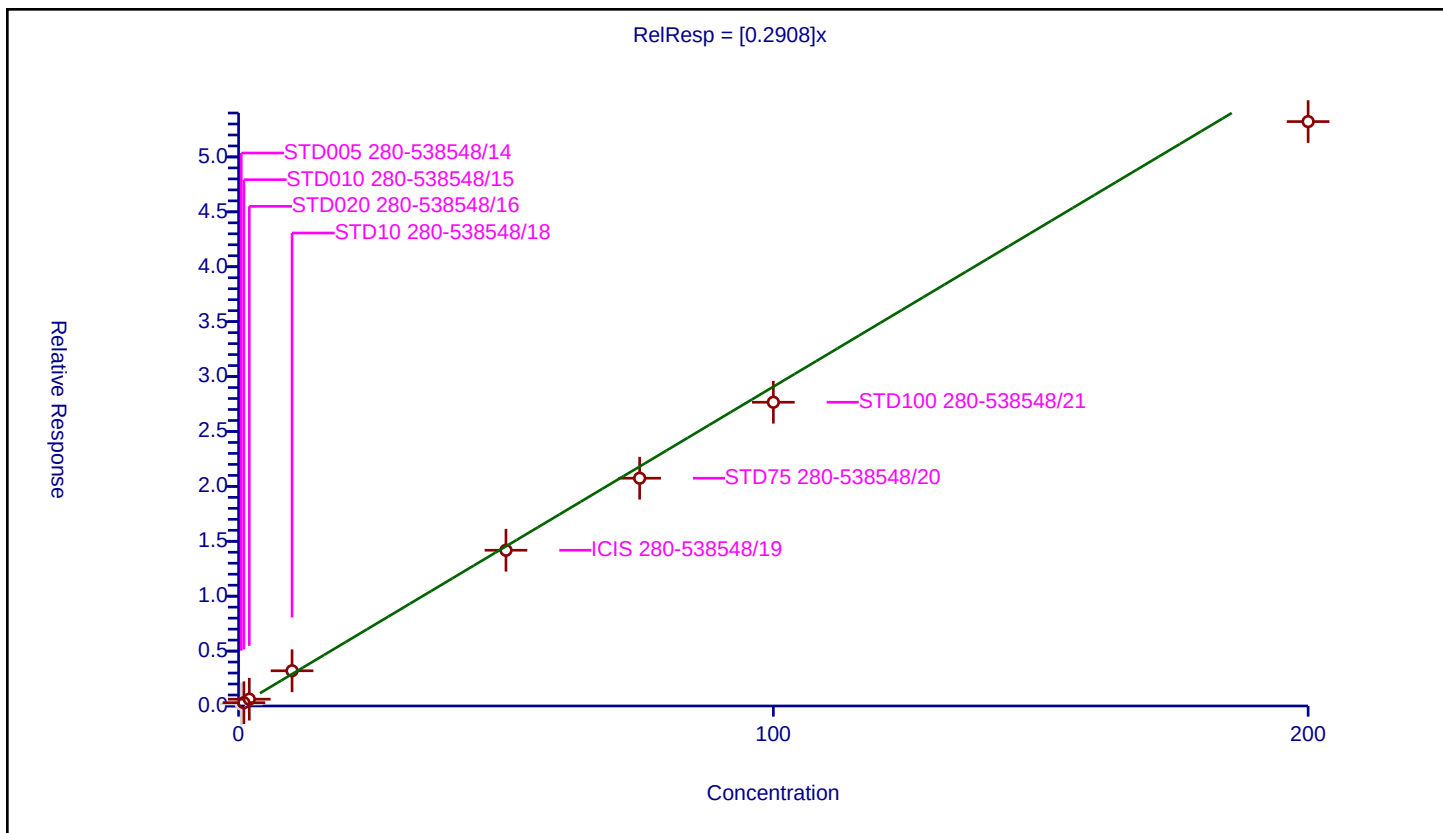
Curve Coefficients

Intercept: 0
 Slope: 0.2908

Error Coefficients

Standard Error: 415000
 Relative Standard Error: 7.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.181699	50.0	741336.0	0.363398	N
2	STD010 280-538548/15	1.0	0.301274	50.0	745169.0	0.301274	Y
3	STD020 280-538548/16	2.0	0.620975	50.0	729901.0	0.310487	Y
4	STD10 280-538548/18	10.0	3.206439	50.0	746498.0	0.320644	Y
5	ICIS 280-538548/19	50.0	14.182818	50.0	769988.0	0.283656	Y
6	STD75 280-538548/20	75.0	20.741513	50.0	778921.0	0.276554	Y
7	STD100 280-538548/21	100.0	27.661005	50.0	770348.0	0.27661	Y
8	STD200 280-538548/22	200.0	53.219373	50.0	783196.0	0.266097	Y



Calibration

/ Methylene Chloride

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

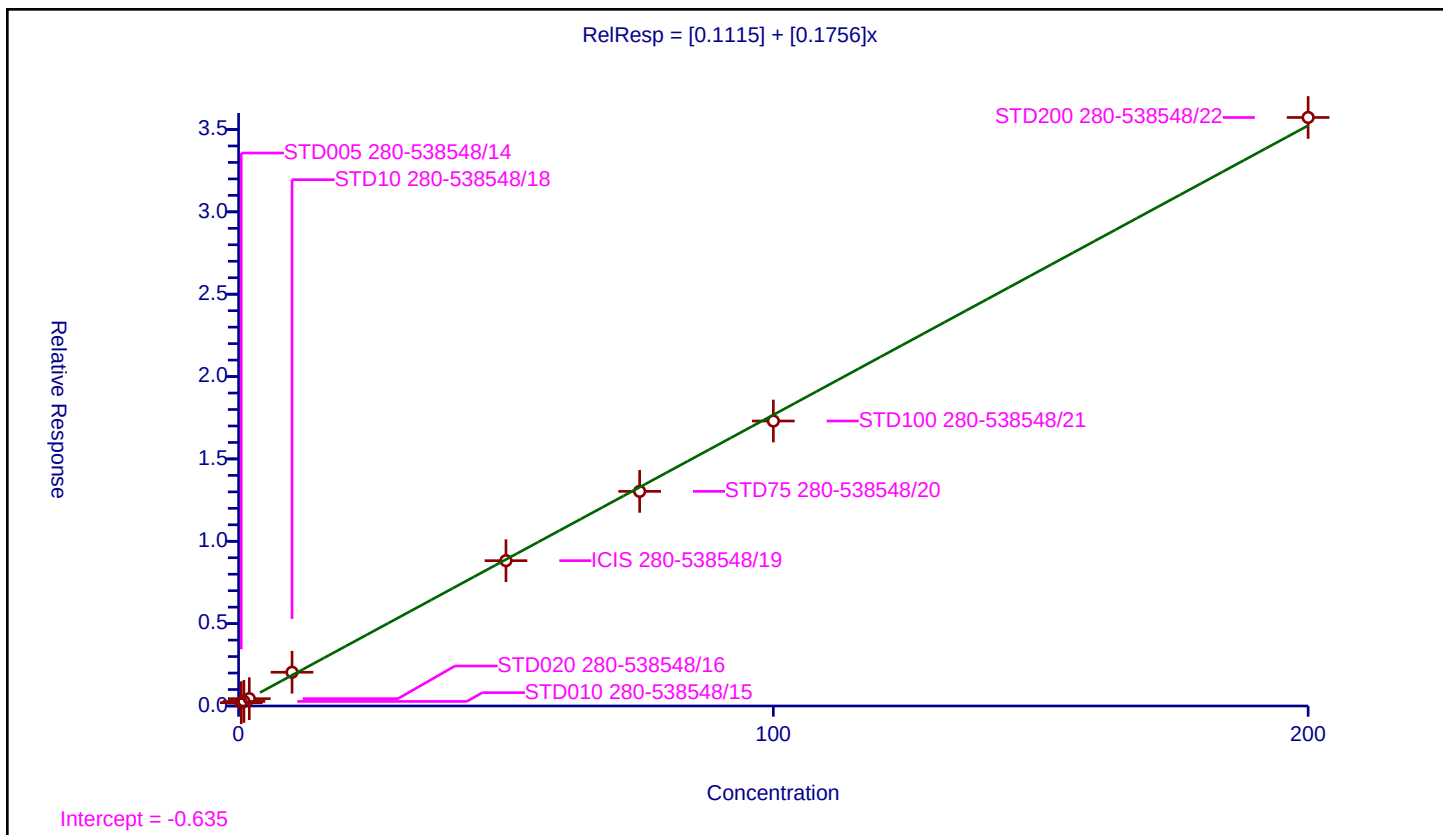
Curve Coefficients

Intercept: 0.1115
 Slope: 0.1756

Error Coefficients

Standard Error: 272000
 Relative Standard Error: 5.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.202203	50.0	741336.0	0.404405	Y
2	STD010 280-538548/15	1.0	0.278125	50.0	745169.0	0.278125	Y
3	STD020 280-538548/16	2.0	0.44506	50.0	729901.0	0.22253	Y
4	STD10 280-538548/18	10.0	2.048231	50.0	746498.0	0.204823	Y
5	ICIS 280-538548/19	50.0	8.8228	50.0	769988.0	0.176456	Y
6	STD75 280-538548/20	75.0	13.030333	50.0	778921.0	0.173738	Y
7	STD100 280-538548/21	100.0	17.301466	50.0	770348.0	0.173015	Y
8	STD200 280-538548/22	200.0	35.72937	50.0	783196.0	0.178647	Y



Calibration

/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

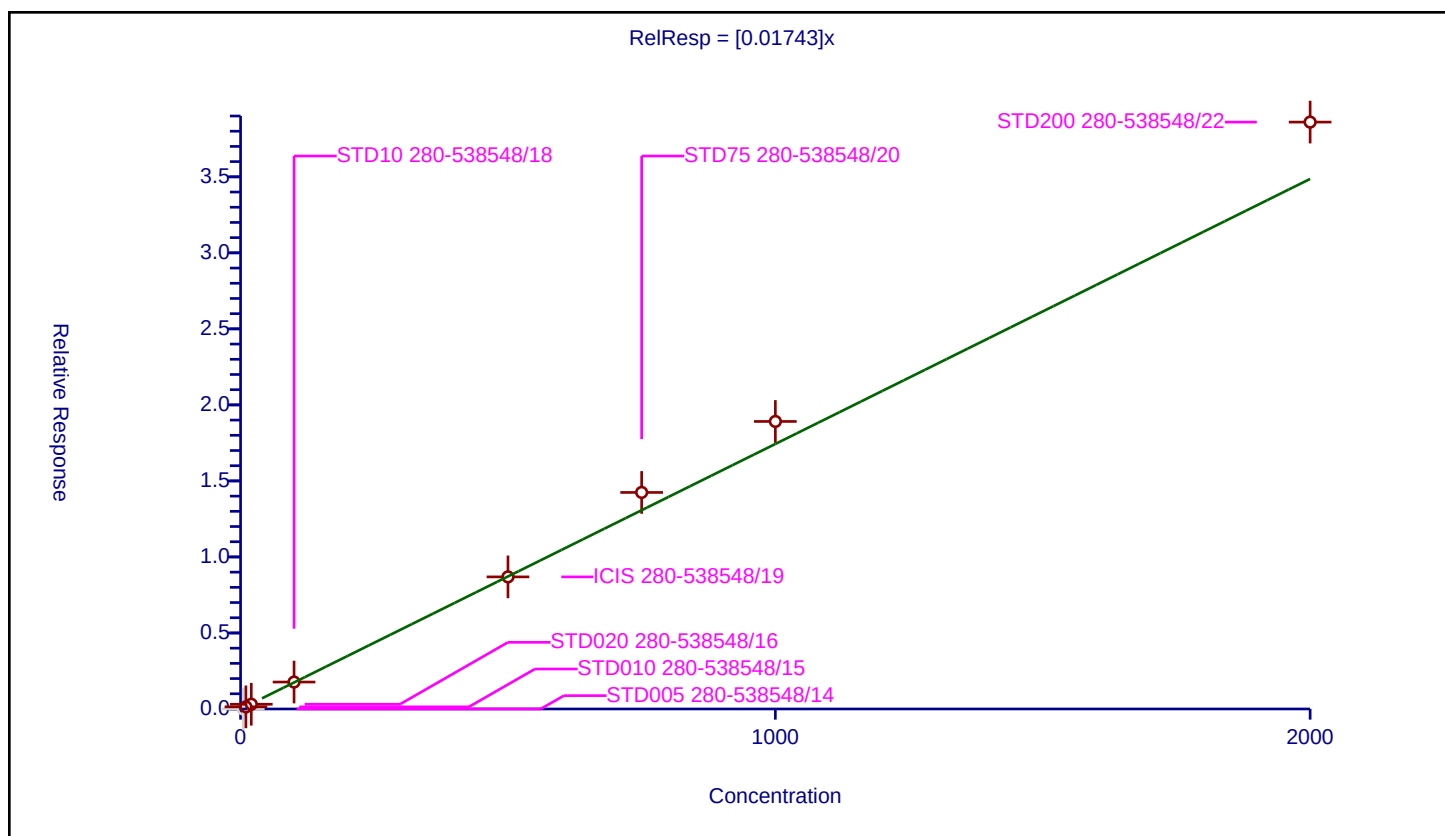
Curve Coefficients

Intercept: 0
 Slope: 0.01743

Error Coefficients

Standard Error: 294000
 Relative Standard Error: 11.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	5.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	10.0	0.141109	50.0	745169.0	0.014111	Y
3	STD020 280-538548/16	20.0	0.312029	50.0	729901.0	0.015601	Y
4	STD10 280-538548/18	100.0	1.772342	50.0	746498.0	0.017723	Y
5	ICIS 280-538548/19	500.0	8.688252	50.0	769988.0	0.017377	Y
6	STD75 280-538548/20	750.0	14.2431	50.0	778921.0	0.018991	Y
7	STD100 280-538548/21	1000.0	18.911453	50.0	770348.0	0.018911	Y
8	STD200 280-538548/22	2000.0	38.599342	50.0	783196.0	0.0193	Y



Calibration

/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

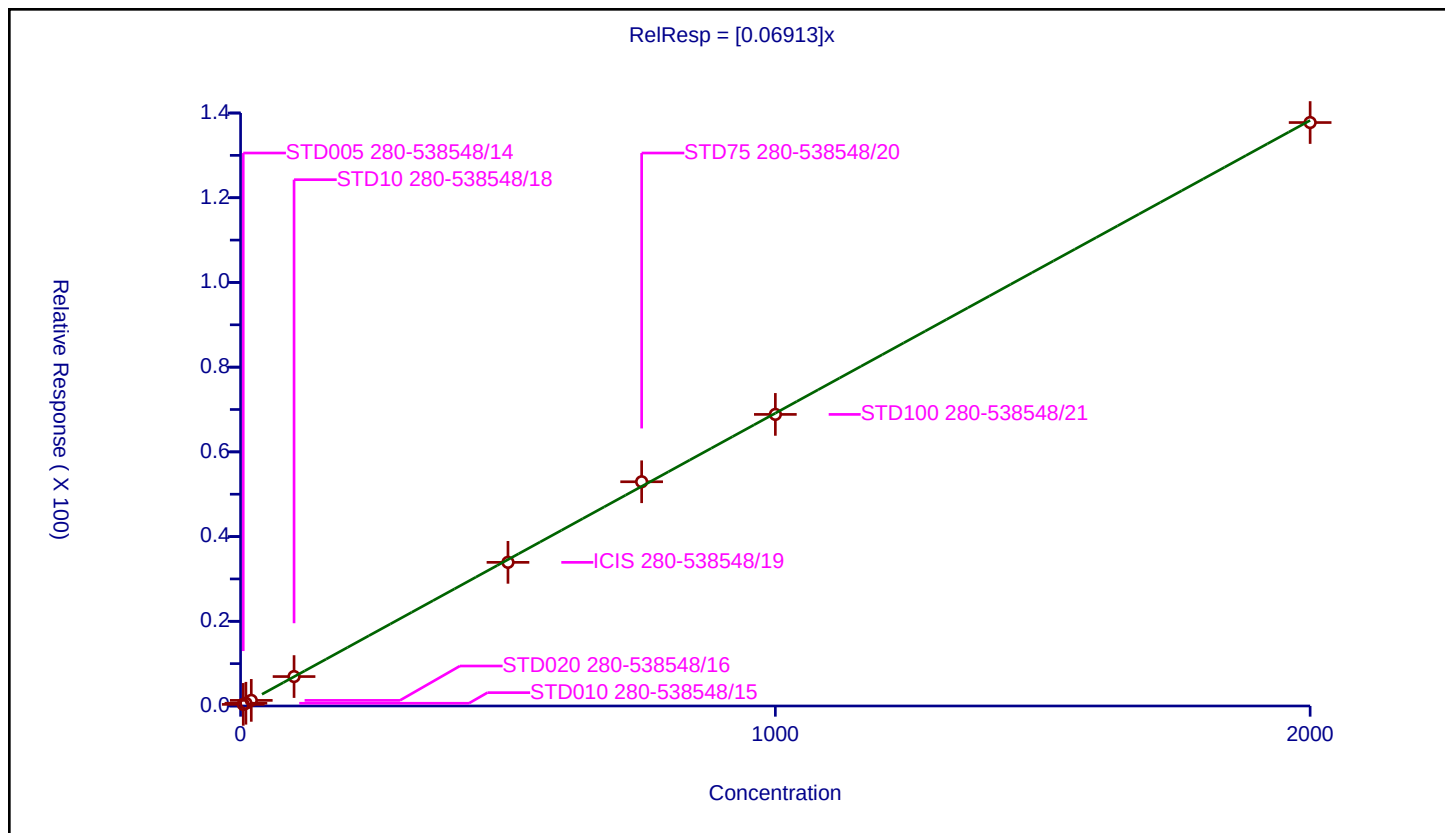
Curve Coefficients

Intercept: 0
 Slope: 0.06913

Error Coefficients

Standard Error: 982000
 Relative Standard Error: 5.3
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	5.0	0.383699	50.0	741336.0	0.07674	Y
2	STD010 280-538548/15	10.0	0.644485	50.0	745169.0	0.064448	Y
3	STD020 280-538548/16	20.0	1.324358	50.0	729901.0	0.066218	Y
4	STD10 280-538548/18	100.0	6.949382	50.0	746498.0	0.069494	Y
5	ICIS 280-538548/19	500.0	33.912022	50.0	769988.0	0.067824	Y
6	STD75 280-538548/20	750.0	52.942019	50.0	778921.0	0.070589	Y
7	STD100 280-538548/21	1000.0	68.840187	50.0	770348.0	0.06884	Y
8	STD200 280-538548/22	2000.0	137.752746	50.0	783196.0	0.068876	Y



Calibration

/ Methyl tert-butyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

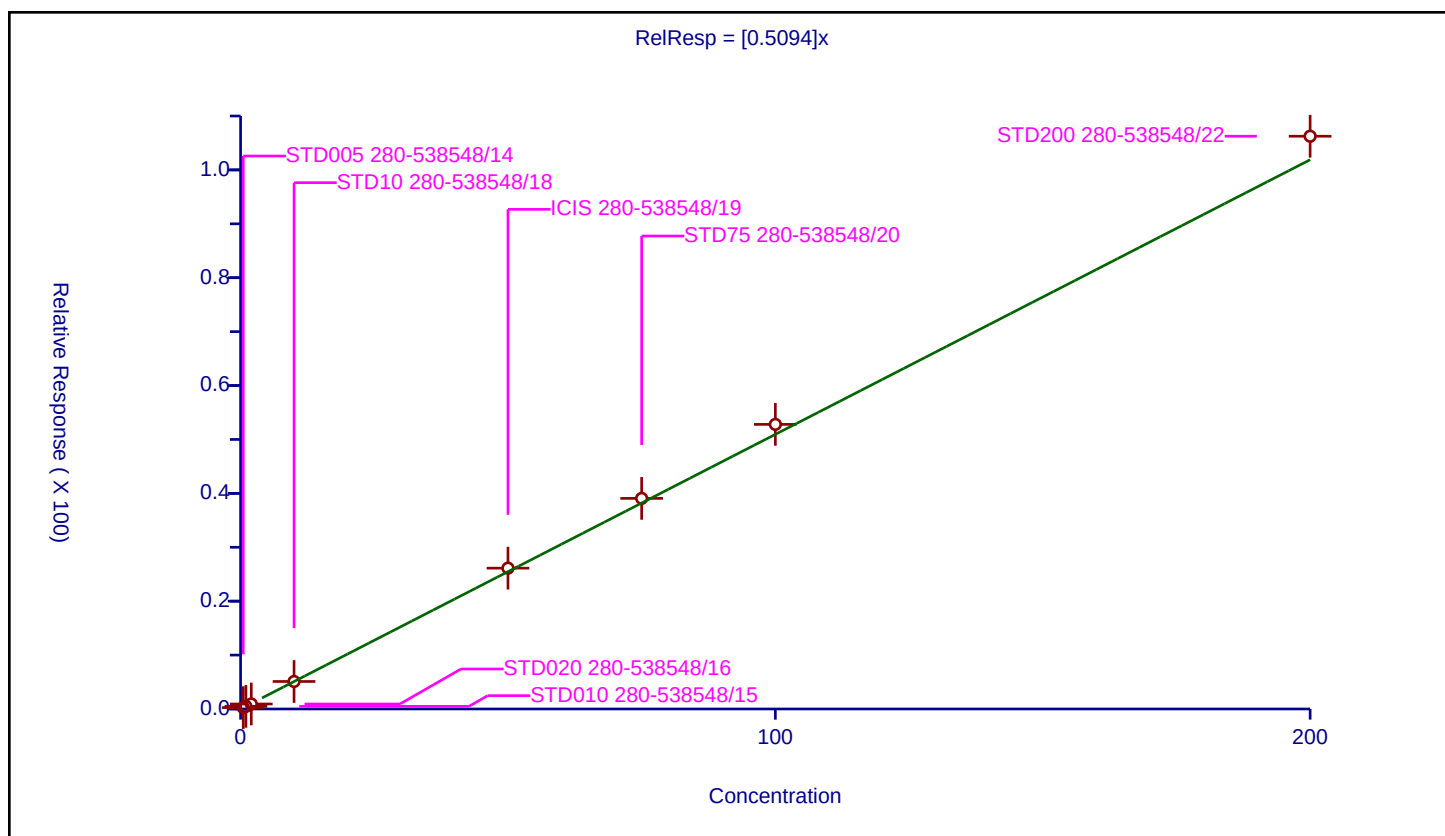
Curve Coefficients

Intercept: 0
 Slope: 0.5094

Error Coefficients

Standard Error: 753000
 Relative Standard Error: 4.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.256766	50.0	741336.0	0.513532	Y
2	STD010 280-538548/15	1.0	0.485125	50.0	745169.0	0.485125	Y
3	STD020 280-538548/16	2.0	0.927112	50.0	729901.0	0.463556	Y
4	STD10 280-538548/18	10.0	5.104836	50.0	746498.0	0.510484	Y
5	ICIS 280-538548/19	50.0	26.128914	50.0	769988.0	0.522578	Y
6	STD75 280-538548/20	75.0	39.069238	50.0	778921.0	0.520923	Y
7	STD100 280-538548/21	100.0	52.797307	50.0	770348.0	0.527973	Y
8	STD200 280-538548/22	200.0	106.248819	50.0	783196.0	0.531244	Y



Calibration

/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

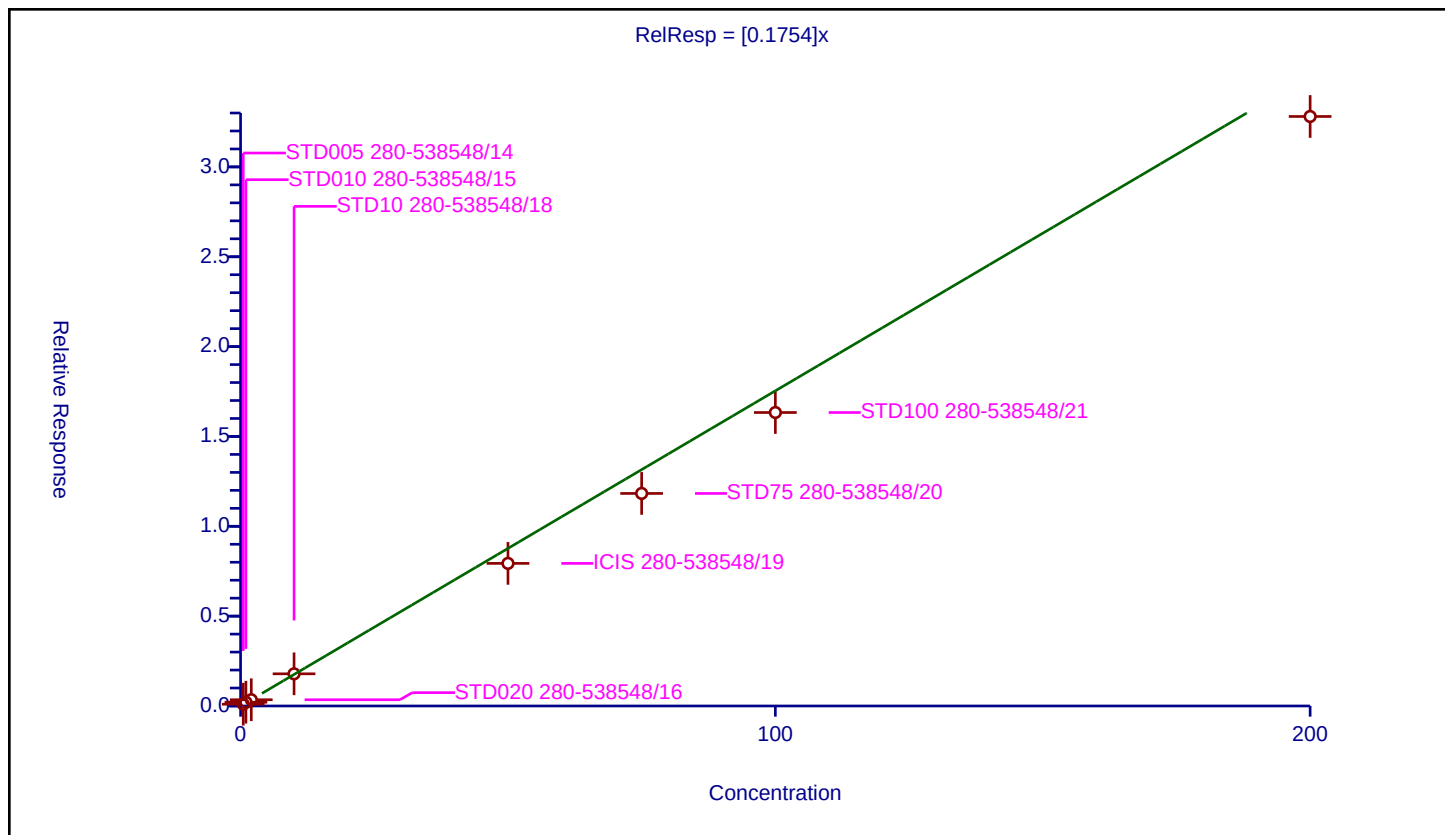
Curve Coefficients

Intercept: 0
 Slope: 0.1754

Error Coefficients

Standard Error: 232000
 Relative Standard Error: 10.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.098471	50.0	741336.0	0.196942	Y
2	STD010 280-538548/15	1.0	0.209416	50.0	745169.0	0.209416	Y
3	STD020 280-538548/16	2.0	0.347924	50.0	729901.0	0.173962	Y
4	STD10 280-538548/18	10.0	1.789891	50.0	746498.0	0.178989	Y
5	ICIS 280-538548/19	50.0	7.936163	50.0	769988.0	0.158723	Y
6	STD75 280-538548/20	75.0	11.828799	50.0	778921.0	0.157717	Y
7	STD100 280-538548/21	100.0	16.333203	50.0	770348.0	0.163332	Y
8	STD200 280-538548/22	200.0	32.806922	50.0	783196.0	0.164035	Y



Calibration

/ Hexane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

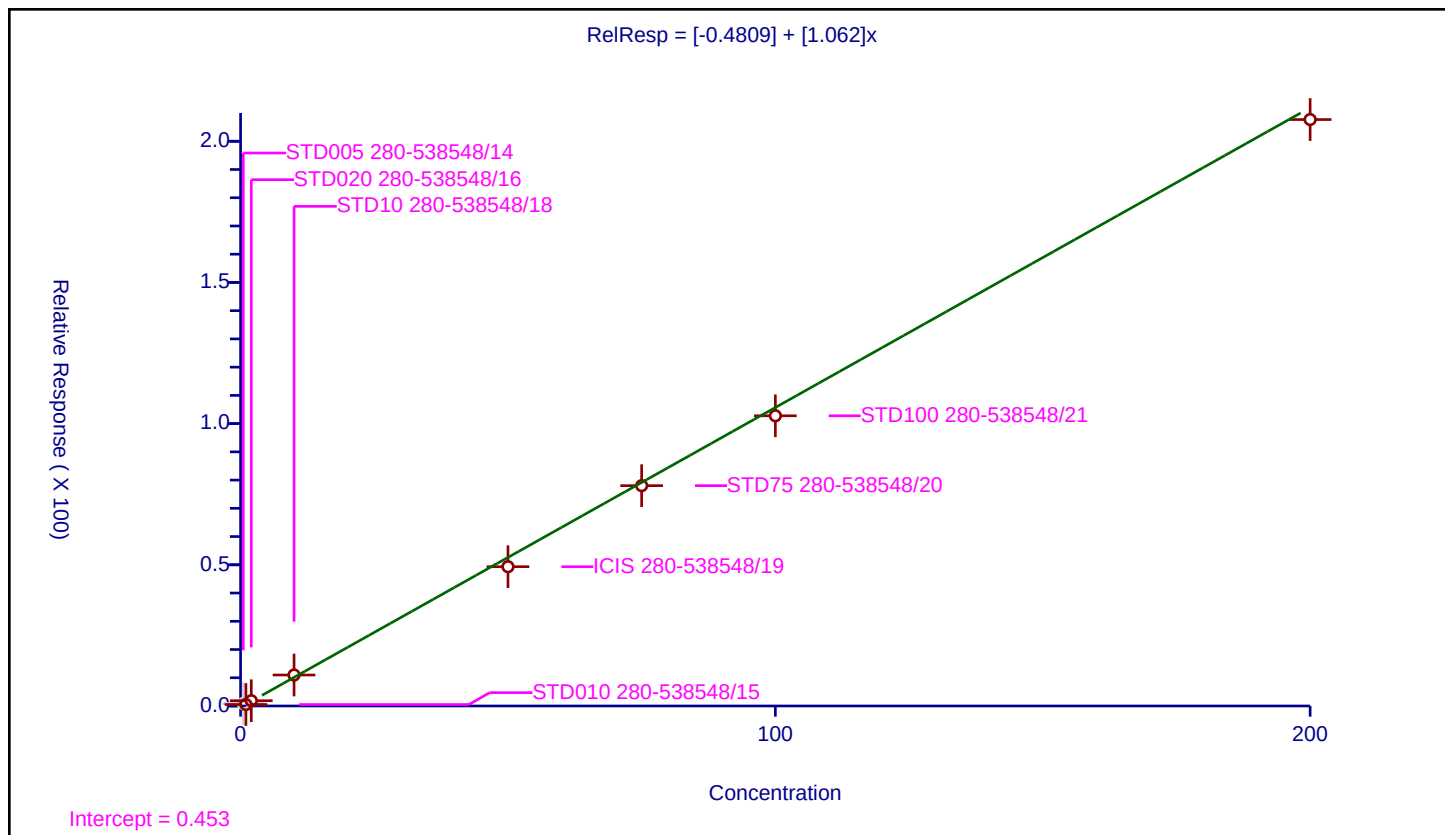
Curve Coefficients

Intercept: -0.4809
 Slope: 1.062

Error Coefficients

Standard Error: 372000
 Relative Standard Error: 7.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.858423	50.0	154877.0	1.716846	N
2	STD010 280-538548/15	1.0	0.520189	50.0	156866.0	0.520189	Y
3	STD020 280-538548/16	2.0	1.860383	50.0	153463.0	0.930192	Y
4	STD10 280-538548/18	10.0	10.966011	50.0	158818.0	1.096601	Y
5	ICIS 280-538548/19	50.0	49.334346	50.0	161871.0	0.986687	Y
6	STD75 280-538548/20	75.0	78.034607	50.0	162105.0	1.040461	Y
7	STD100 280-538548/21	100.0	102.776177	50.0	161409.0	1.027762	Y
8	STD200 280-538548/22	200.0	207.682118	50.0	169094.0	1.038411	Y



Calibration

/ Vinyl acetate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

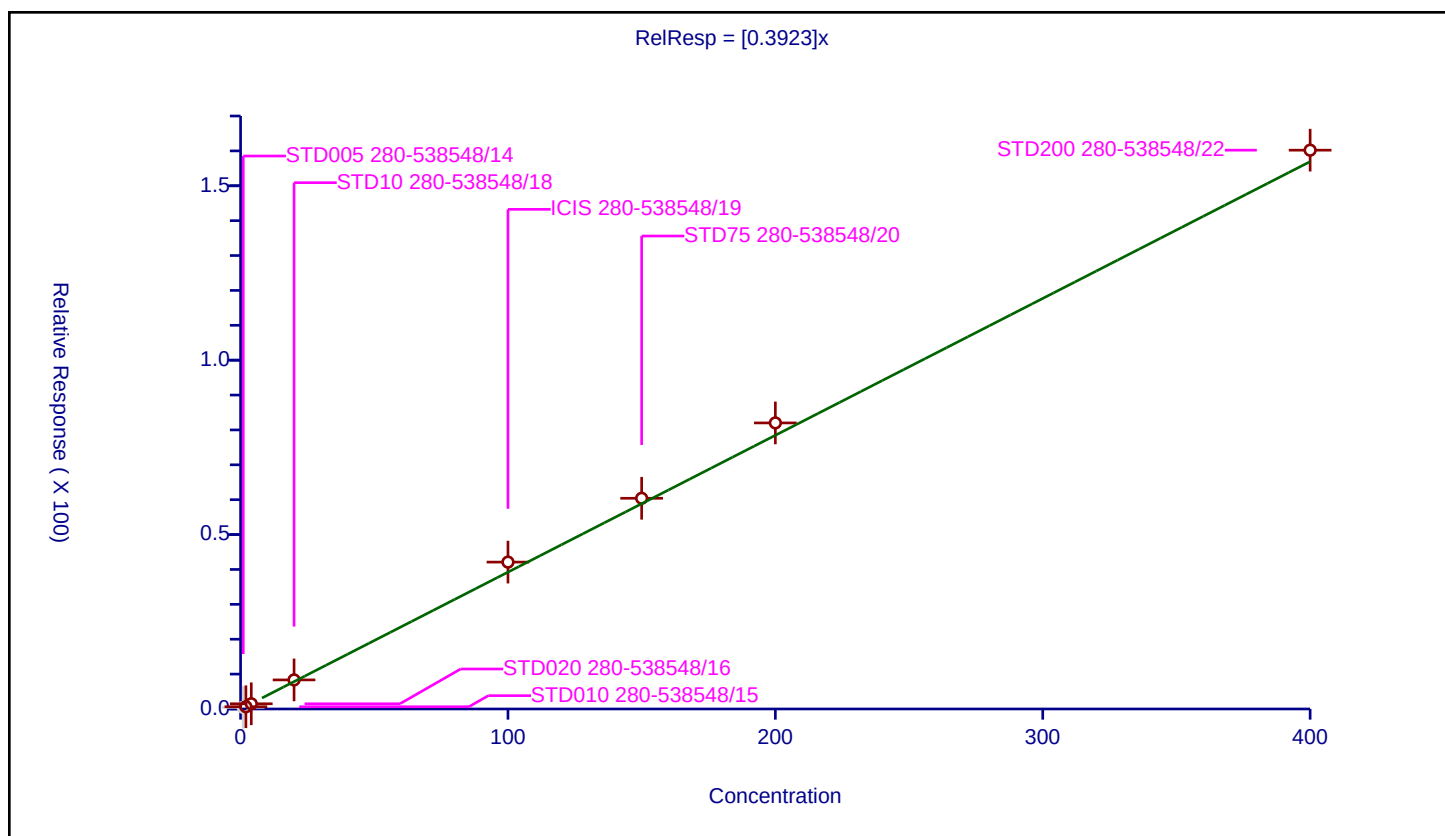
Curve Coefficients

Intercept: 0
Slope: 0.3923

Error Coefficients

Standard Error: 1240000
Relative Standard Error: 8.9
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.469288	50.0	741336.0	0.469288	N
2	STD010 280-538548/15	2.0	0.642673	50.0	745169.0	0.321337	Y
3	STD020 280-538548/16	4.0	1.49486	50.0	729901.0	0.373715	Y
4	STD10 280-538548/18	20.0	8.336057	50.0	746498.0	0.416803	Y
5	ICIS 280-538548/19	100.0	42.109422	50.0	769988.0	0.421094	Y
6	STD75 280-538548/20	150.0	60.405741	50.0	778921.0	0.402705	Y
7	STD100 280-538548/21	200.0	82.015855	50.0	770348.0	0.410079	Y
8	STD200 280-538548/22	400.0	160.205172	50.0	783196.0	0.400513	Y



Calibration

/ 1,1-Dichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

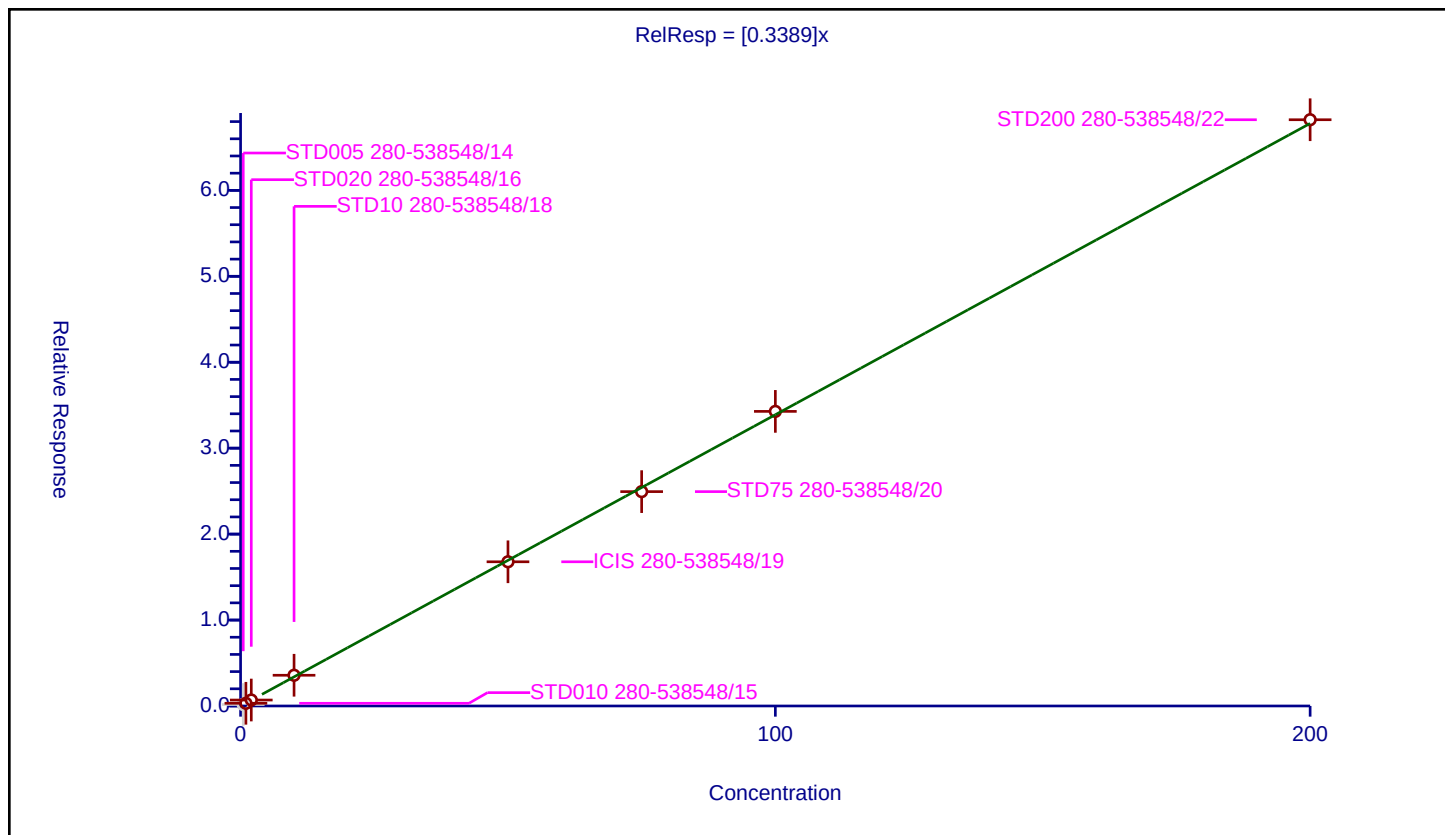
Curve Coefficients

Intercept: 0
Slope: 0.3389

Error Coefficients

Standard Error: 523000
Relative Standard Error: 3.9
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.170975	50.0	741336.0	0.34195	N
2	STD010 280-538548/15	1.0	0.3157	50.0	745169.0	0.3157	Y
3	STD020 280-538548/16	2.0	0.694615	50.0	729901.0	0.347307	Y
4	STD10 280-538548/18	10.0	3.574691	50.0	746498.0	0.357469	Y
5	ICIS 280-538548/19	50.0	16.779612	50.0	769988.0	0.335592	Y
6	STD75 280-538548/20	75.0	24.944186	50.0	778921.0	0.332589	Y
7	STD100 280-538548/21	100.0	34.279962	50.0	770348.0	0.3428	Y
8	STD200 280-538548/22	200.0	68.218875	50.0	783196.0	0.341094	Y



Calibration

/ 2-Butanone (MEK)

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

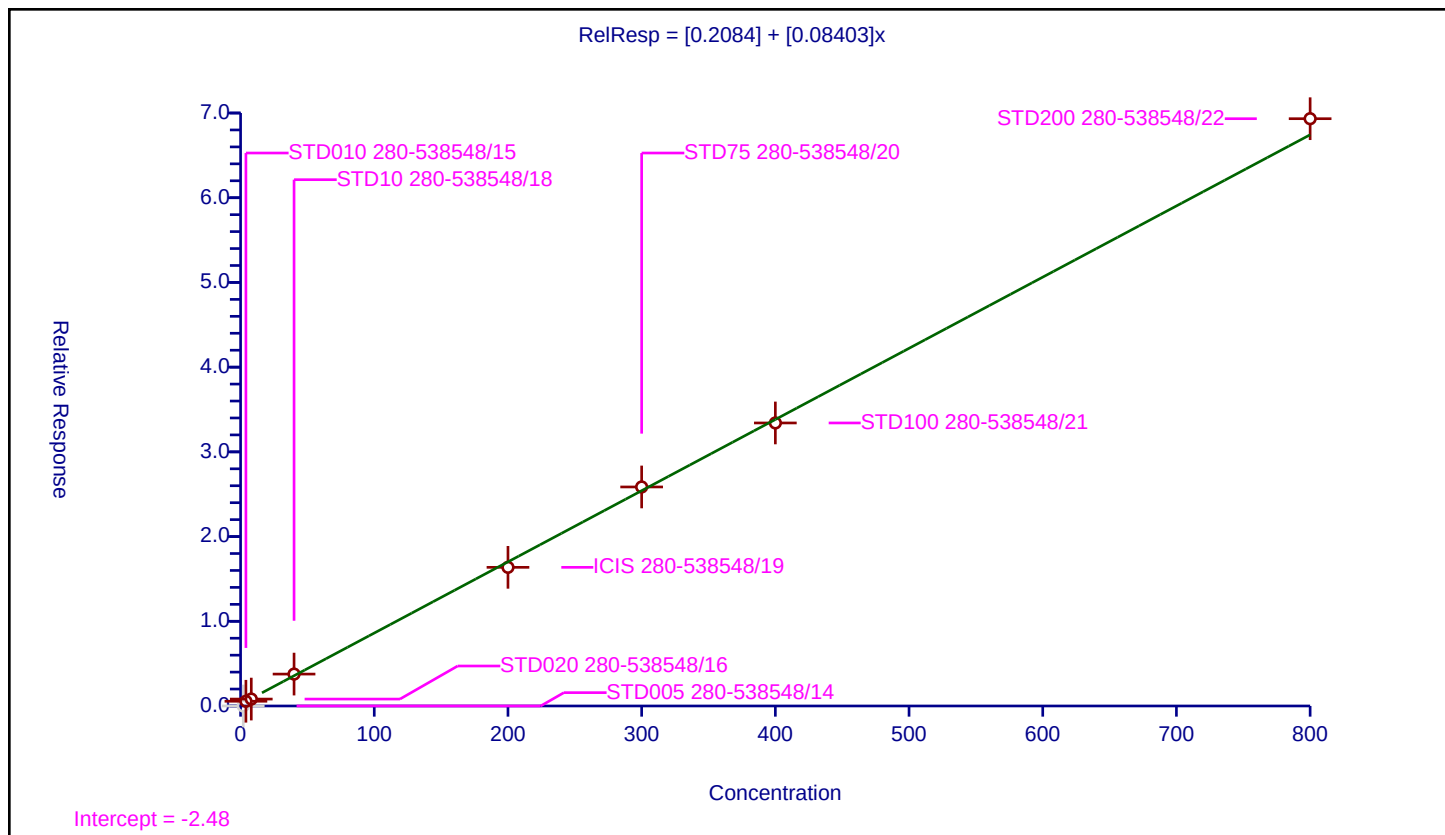
Curve Coefficients

Intercept: 0.2084
Slope: 0.08403

Error Coefficients

Standard Error: 578000
Relative Standard Error: 5.9
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	4.0	0.558867	50.0	745169.0	0.139717	Y
3	STD020 280-538548/16	8.0	0.816207	50.0	729901.0	0.102026	Y
4	STD10 280-538548/18	40.0	3.765047	50.0	746498.0	0.094126	Y
5	ICIS 280-538548/19	200.0	16.369151	50.0	769988.0	0.081846	Y
6	STD75 280-538548/20	300.0	25.856281	50.0	778921.0	0.086188	Y
7	STD100 280-538548/21	400.0	33.411134	50.0	770348.0	0.083528	Y
8	STD200 280-538548/22	800.0	69.328814	50.0	783196.0	0.086661	Y



Calibration

/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

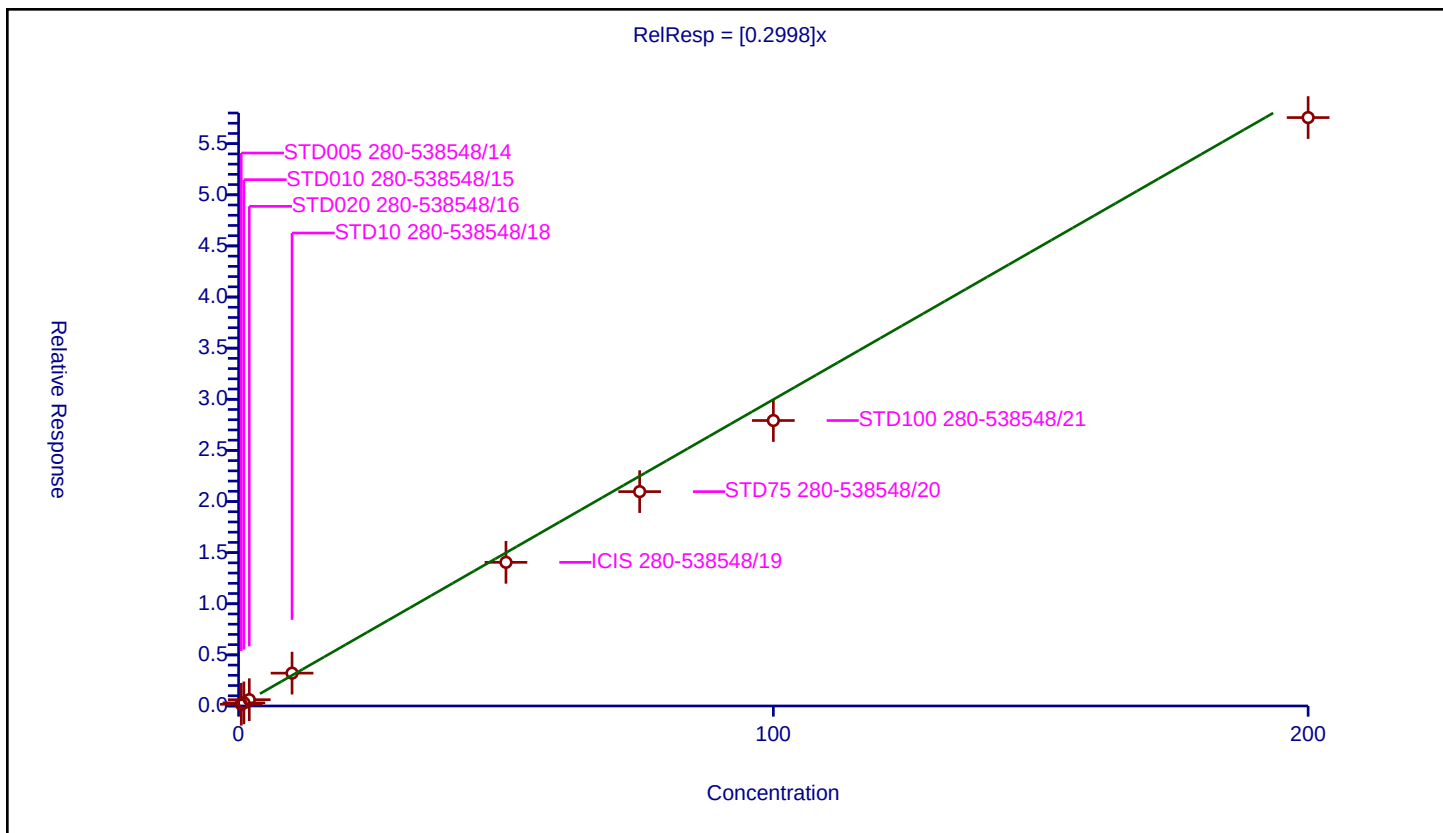
Curve Coefficients

Intercept: 0
 Slope: 0.2998

Error Coefficients

Standard Error: 406000
 Relative Standard Error: 7.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.168884	50.0	741336.0	0.337769	Y
2	STD010 280-538548/15	1.0	0.303689	50.0	745169.0	0.303689	Y
3	STD020 280-538548/16	2.0	0.615905	50.0	729901.0	0.307953	Y
4	STD10 280-538548/18	10.0	3.212936	50.0	746498.0	0.321294	Y
5	ICIS 280-538548/19	50.0	14.053401	50.0	769988.0	0.281068	Y
6	STD75 280-538548/20	75.0	20.967081	50.0	778921.0	0.279561	Y
7	STD100 280-538548/21	100.0	27.922965	50.0	770348.0	0.27923	Y
8	STD200 280-538548/22	200.0	57.555261	50.0	783196.0	0.287776	Y



Calibration

/ cis-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

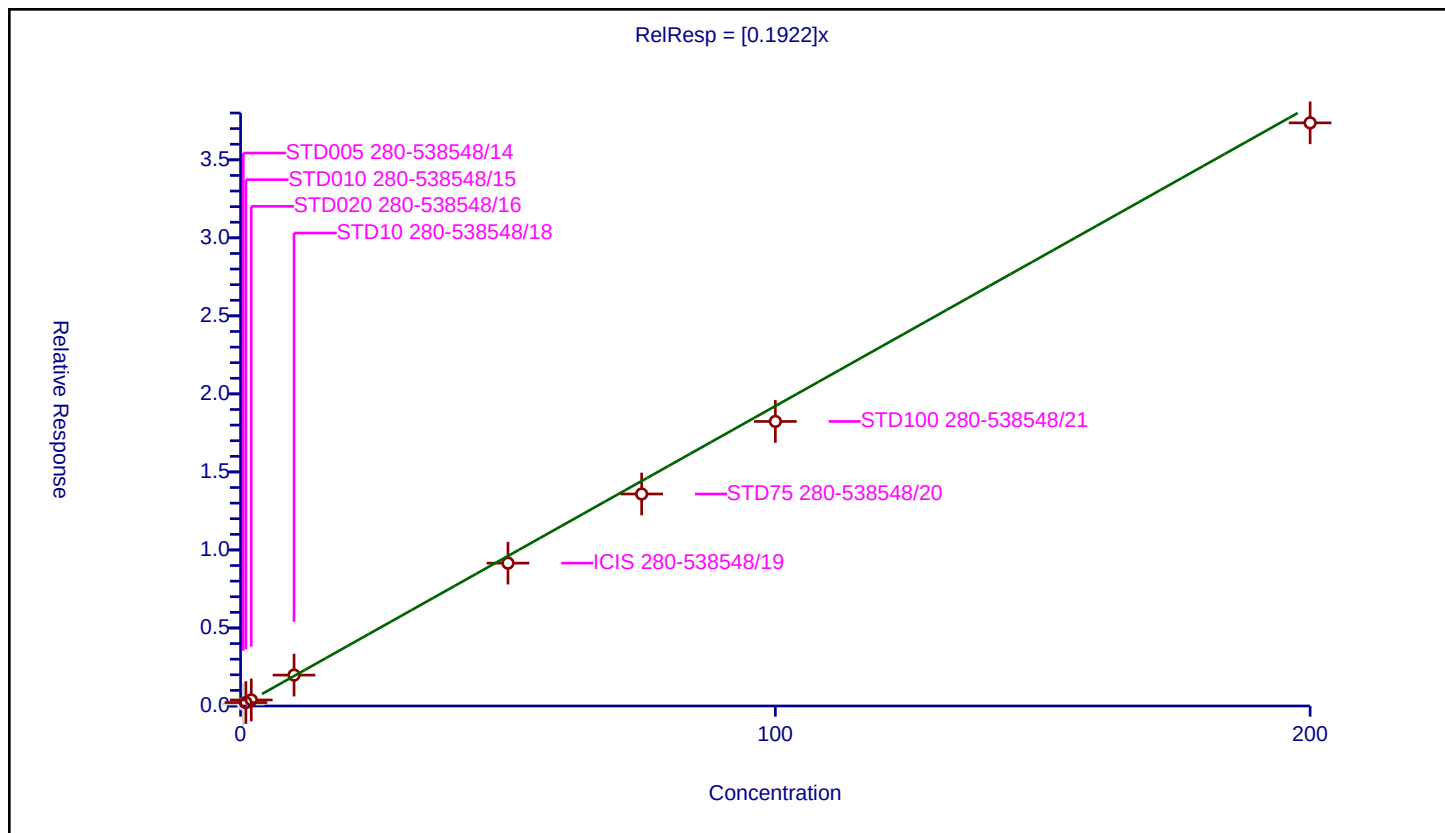
Curve Coefficients

Intercept: 0
 Slope: 0.1922

Error Coefficients

Standard Error: 285000
 Relative Standard Error: 7.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.124707	50.0	741336.0	0.249415	N
2	STD010 280-538548/15	1.0	0.220621	50.0	745169.0	0.220621	Y
3	STD020 280-538548/16	2.0	0.387244	50.0	729901.0	0.193622	Y
4	STD10 280-538548/18	10.0	1.979175	50.0	746498.0	0.197917	Y
5	ICIS 280-538548/19	50.0	9.155208	50.0	769988.0	0.183104	Y
6	STD75 280-538548/20	75.0	13.585075	50.0	778921.0	0.181134	Y
7	STD100 280-538548/21	100.0	18.234941	50.0	770348.0	0.182349	Y
8	STD200 280-538548/22	200.0	37.369701	50.0	783196.0	0.186849	Y



Calibration

/ sec-Butyl Alcohol

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

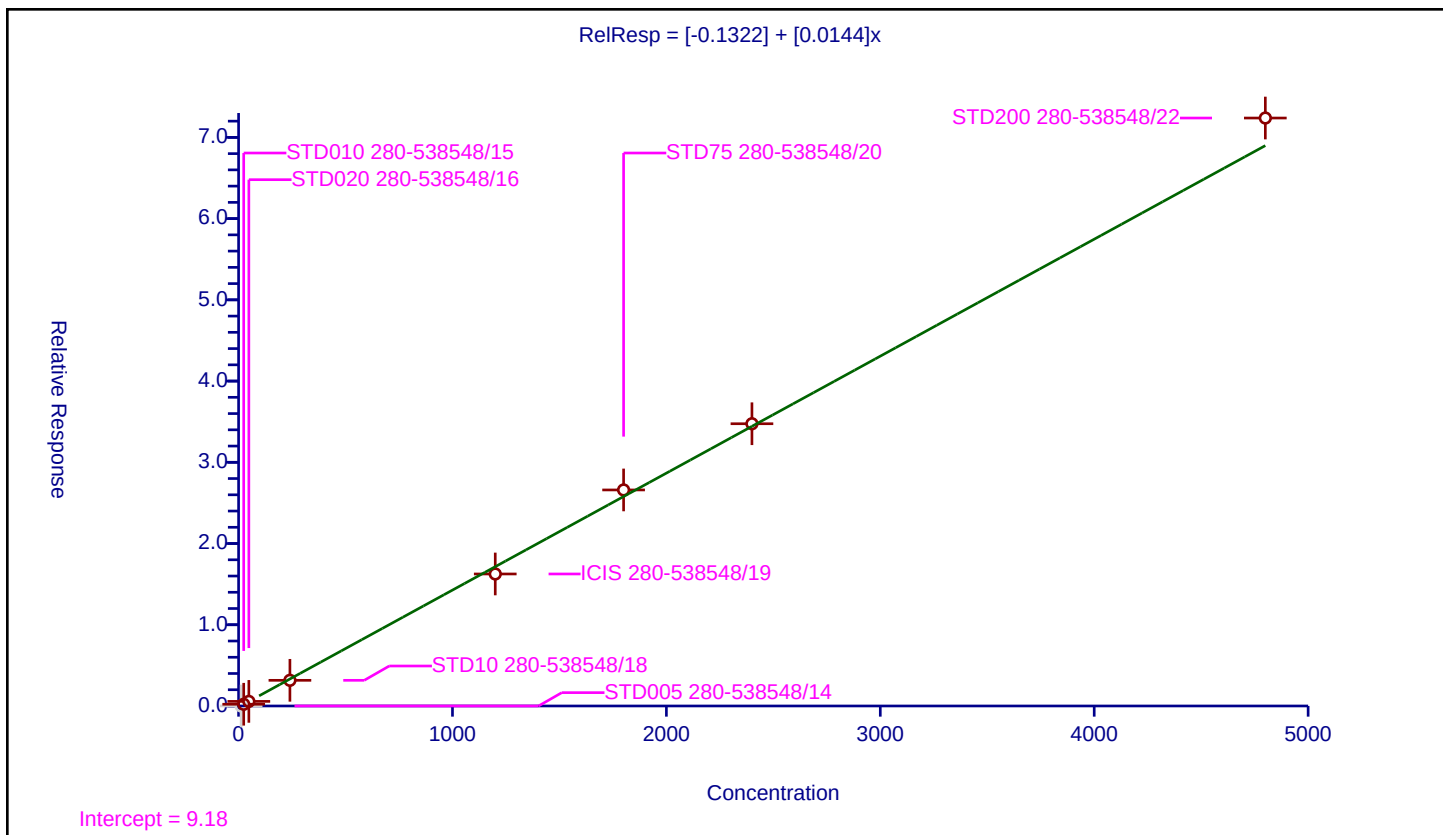
Curve Coefficients

Intercept: -0.1322
 Slope: 0.0144

Error Coefficients

Standard Error: 601000
 Relative Standard Error: 4.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	12.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	24.0	0.213576	50.0	745169.0	0.008899	Y
3	STD020 280-538548/16	48.0	0.565351	50.0	729901.0	0.011778	Y
4	STD10 280-538548/18	240.0	3.160223	50.0	746498.0	0.013168	Y
5	ICIS 280-538548/19	1200.0	16.25324	50.0	769988.0	0.013544	Y
6	STD75 280-538548/20	1800.0	26.597755	50.0	778921.0	0.014777	Y
7	STD100 280-538548/21	2400.0	34.747153	50.0	770348.0	0.014478	Y
8	STD200 280-538548/22	4800.0	72.381307	50.0	783196.0	0.015079	Y



Calibration

/ Chlorobromomethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

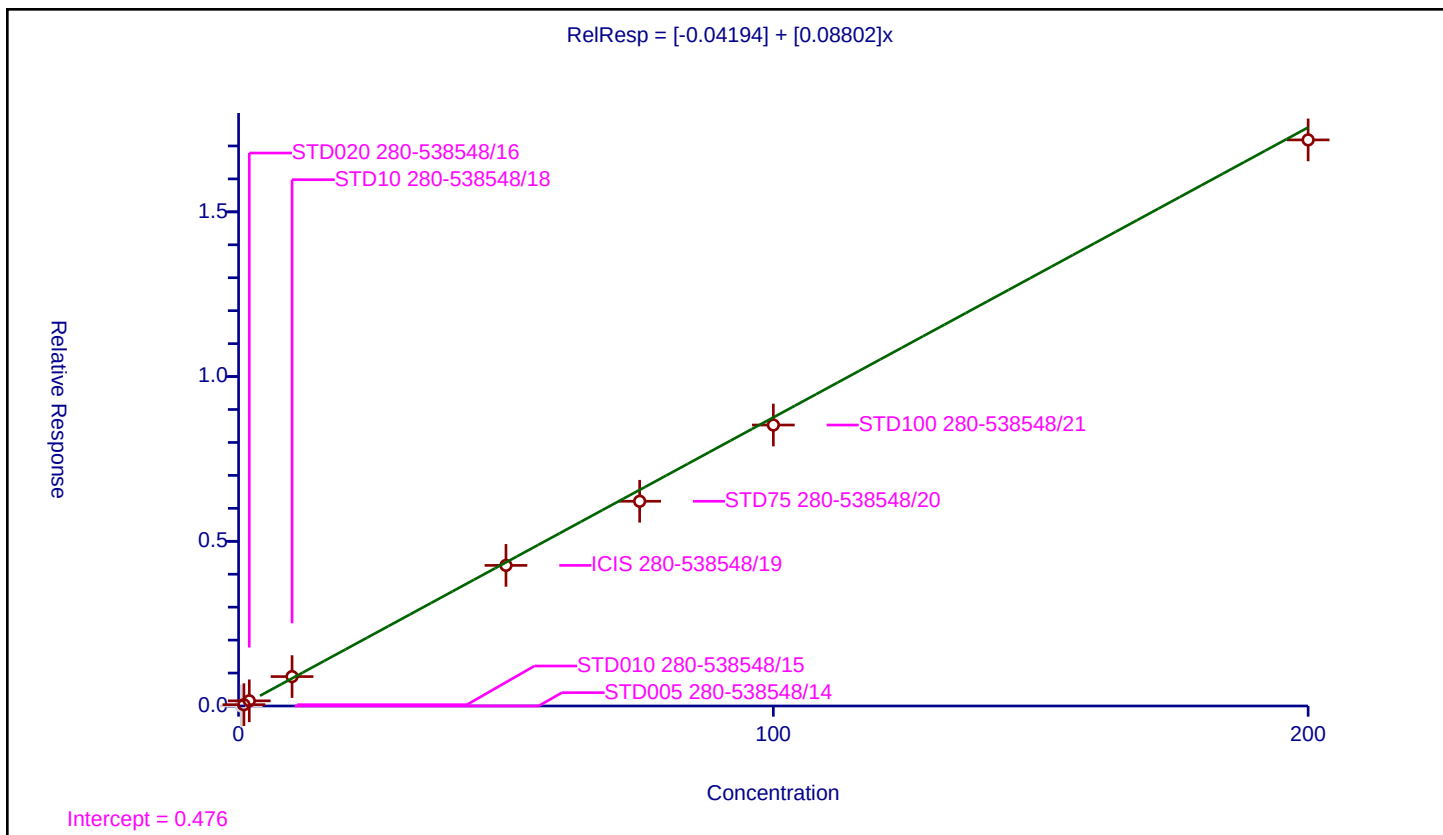
Curve Coefficients

Intercept: -0.04194
 Slope: 0.08802

Error Coefficients

Standard Error: 144000
 Relative Standard Error: 7.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.040058	50.0	745169.0	0.040058	Y
3	STD020 280-538548/16	2.0	0.156528	50.0	729901.0	0.078264	Y
4	STD10 280-538548/18	10.0	0.892434	50.0	746498.0	0.089243	Y
5	ICIS 280-538548/19	50.0	4.267729	50.0	769988.0	0.085355	Y
6	STD75 280-538548/20	75.0	6.214494	50.0	778921.0	0.08286	Y
7	STD100 280-538548/21	100.0	8.529392	50.0	770348.0	0.085294	Y
8	STD200 280-538548/22	200.0	17.18414	50.0	783196.0	0.085921	Y



Calibration

/ Tetrahydrofuran

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

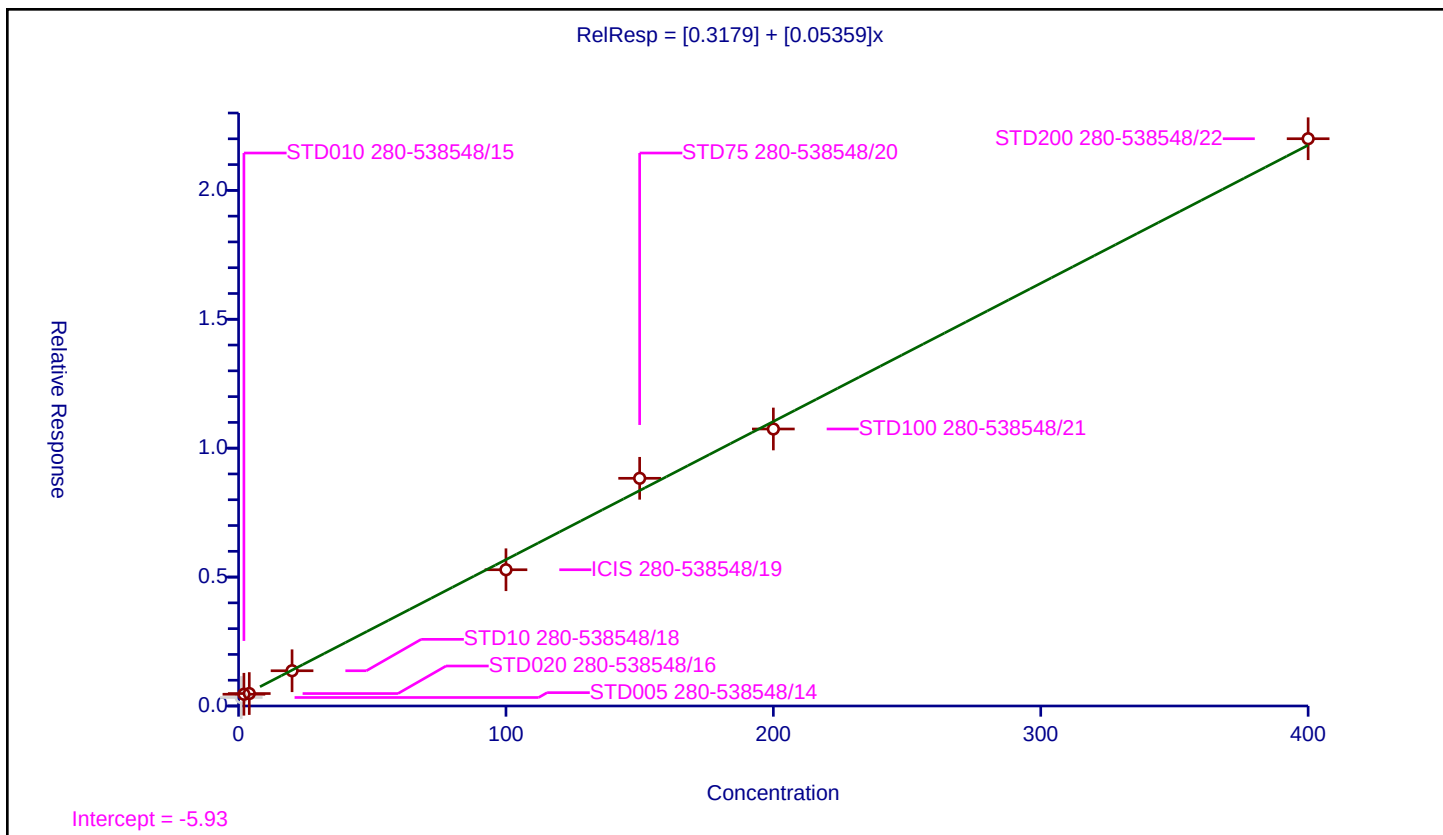
Curve Coefficients

Intercept: 0.3179
 Slope: 0.05359

Error Coefficients

Standard Error: 186000
 Relative Standard Error: 17.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.329203	50.0	741336.0	0.329203	N
2	STD010 280-538548/15	2.0	0.455467	50.0	745169.0	0.227734	Y
3	STD020 280-538548/16	4.0	0.482189	50.0	729901.0	0.120547	Y
4	STD10 280-538548/18	20.0	1.367117	50.0	746498.0	0.068356	Y
5	ICIS 280-538548/19	100.0	5.284693	50.0	769988.0	0.052847	Y
6	STD75 280-538548/20	150.0	8.831897	50.0	778921.0	0.058879	Y
7	STD100 280-538548/21	200.0	10.743651	50.0	770348.0	0.053718	Y
8	STD200 280-538548/22	400.0	22.002666	50.0	783196.0	0.055007	Y



Calibration

/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

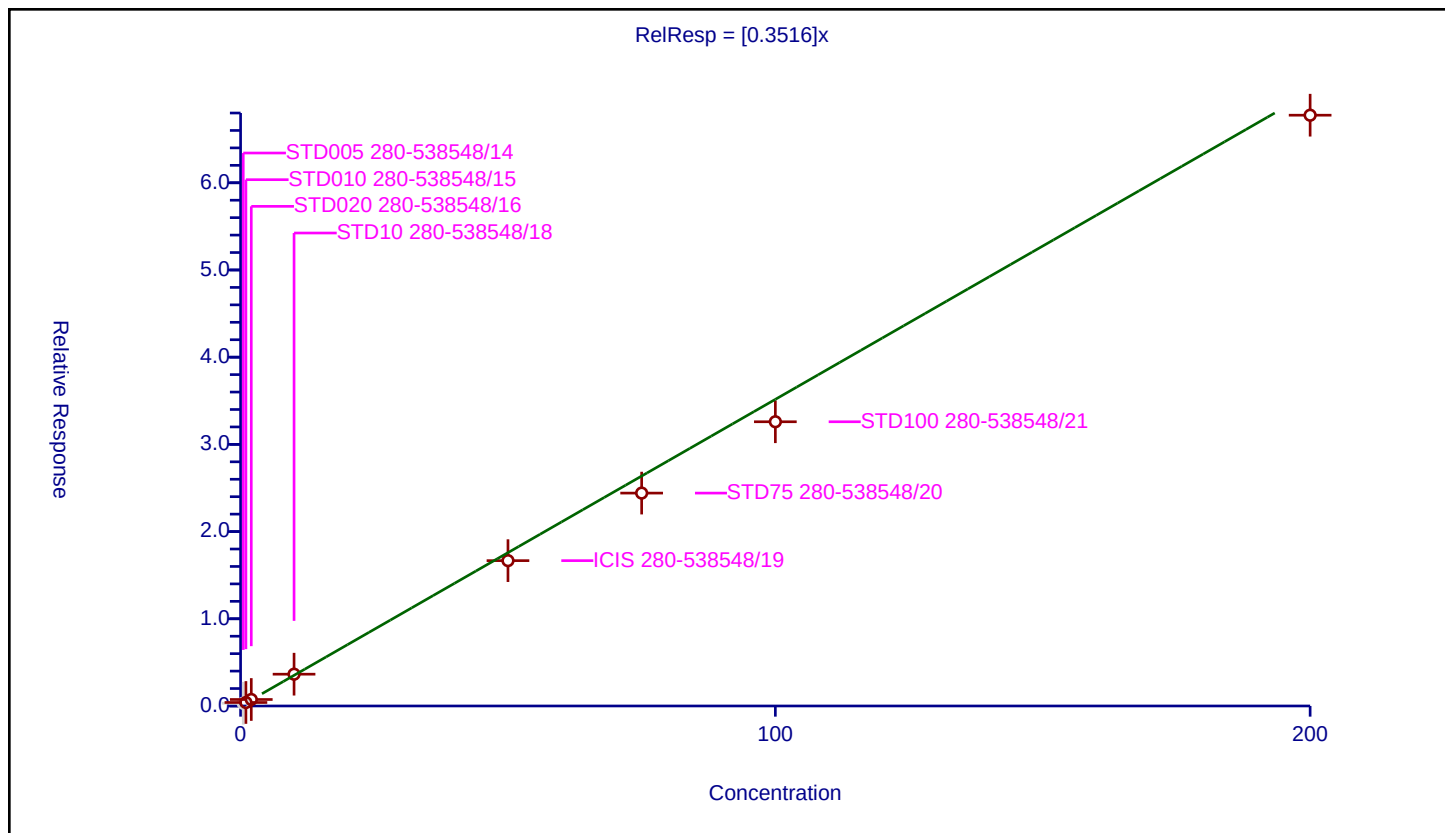
Curve Coefficients

Intercept: 0
 Slope: 0.3516

Error Coefficients

Standard Error: 515000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.314163	50.0	741336.0	0.628325	N
2	STD010 280-538548/15	1.0	0.401184	50.0	745169.0	0.401184	Y
3	STD020 280-538548/16	2.0	0.744074	50.0	729901.0	0.372037	Y
4	STD10 280-538548/18	10.0	3.645891	50.0	746498.0	0.364589	Y
5	ICIS 280-538548/19	50.0	16.669091	50.0	769988.0	0.333382	Y
6	STD75 280-538548/20	75.0	24.414928	50.0	778921.0	0.325532	Y
7	STD100 280-538548/21	100.0	32.594295	50.0	770348.0	0.325943	Y
8	STD200 280-538548/22	200.0	67.748558	50.0	783196.0	0.338743	Y



Calibration

/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

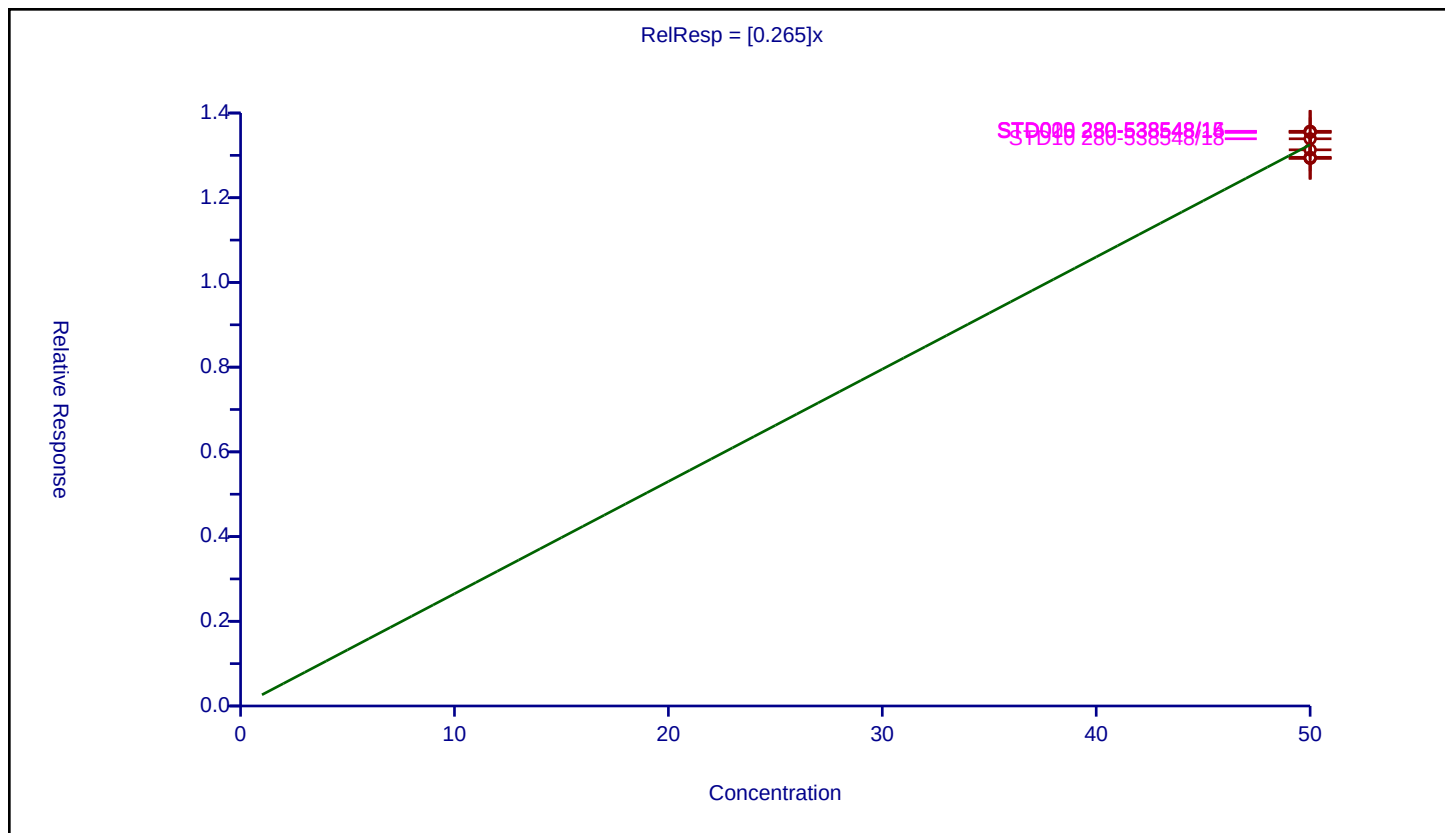
Curve Coefficients

Intercept: 0
 Slope: 0.265

Error Coefficients

Standard Error: 215000
 Relative Standard Error: 2.2
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	13.541903	50.0	741336.0	0.270838	Y
2	STD010 280-538548/15	50.0	13.568667	50.0	745169.0	0.271373	Y
3	STD020 280-538548/16	50.0	13.562319	50.0	729901.0	0.271246	Y
4	STD10 280-538548/18	50.0	13.39173	50.0	746498.0	0.267835	Y
5	ICIS 280-538548/19	50.0	12.932279	50.0	769988.0	0.258646	Y
6	STD75 280-538548/20	50.0	12.933789	50.0	778921.0	0.258676	Y
7	STD100 280-538548/21	50.0	12.95408	50.0	770348.0	0.259082	Y
8	STD200 280-538548/22	50.0	13.131004	50.0	783196.0	0.26262	Y



Calibration

/ 1,1,1-Trichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

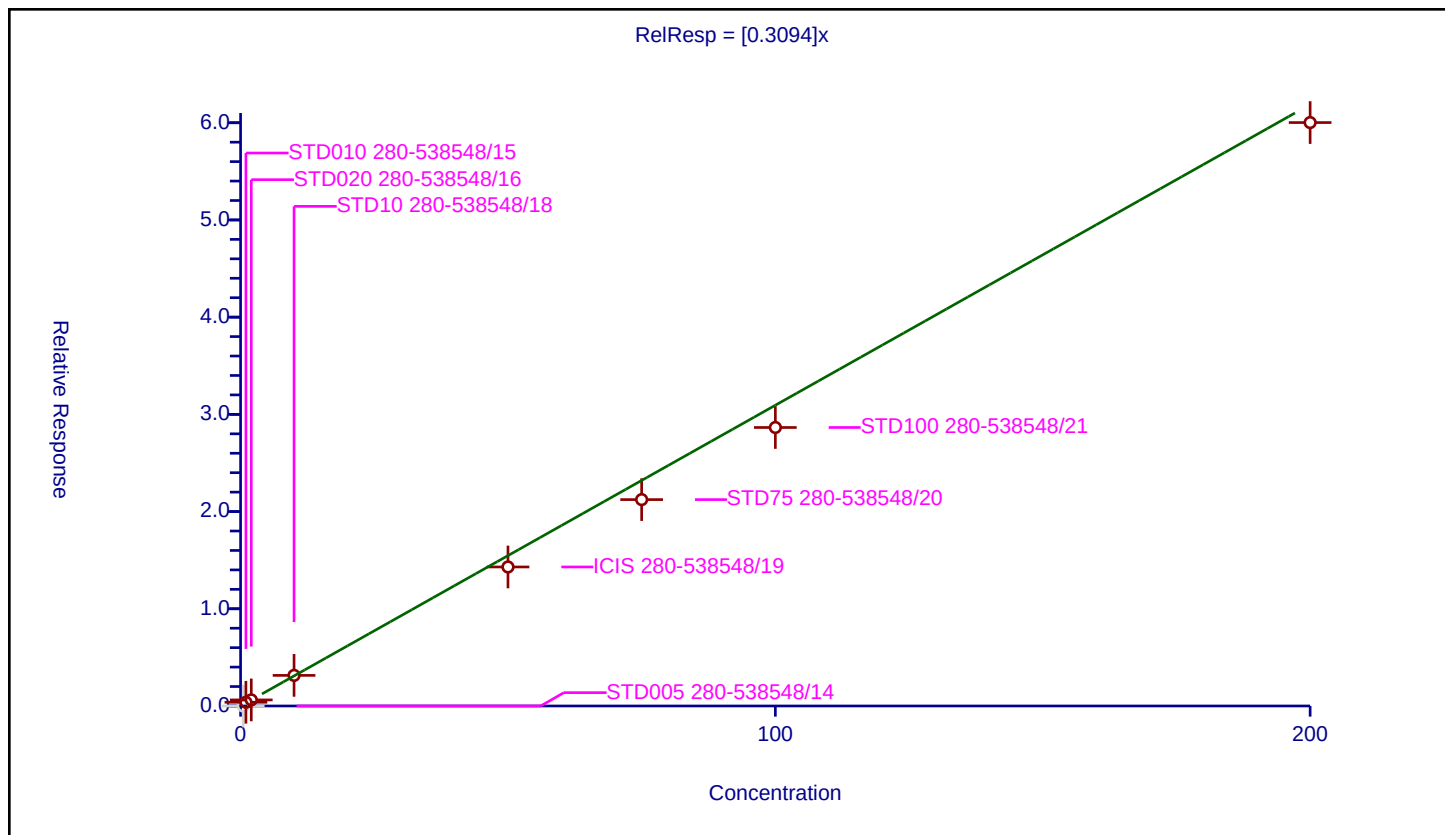
Curve Coefficients

Intercept: 0
Slope: 0.3094

Error Coefficients

Standard Error: 454000
Relative Standard Error: 11.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.383336	50.0	745169.0	0.383336	Y
3	STD020 280-538548/16	2.0	0.624057	50.0	729901.0	0.312029	Y
4	STD10 280-538548/18	10.0	3.146492	50.0	746498.0	0.314649	Y
5	ICIS 280-538548/19	50.0	14.301587	50.0	769988.0	0.286032	Y
6	STD75 280-538548/20	75.0	21.230715	50.0	778921.0	0.283076	Y
7	STD100 280-538548/21	100.0	28.648416	50.0	770348.0	0.286484	Y
8	STD200 280-538548/22	200.0	60.017799	50.0	783196.0	0.300089	Y



Calibration

/ Cyclohexane

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

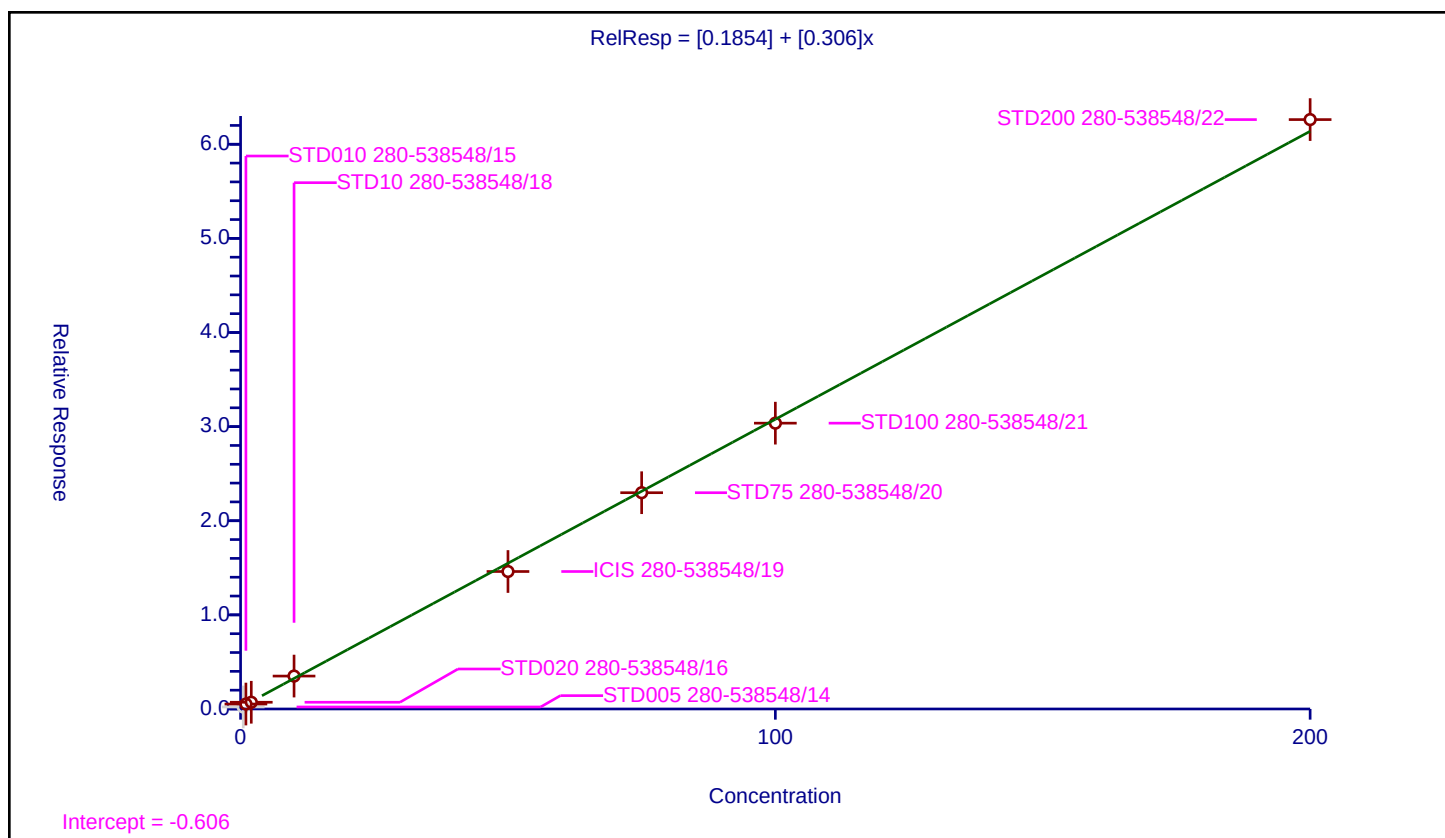
Curve Coefficients

Intercept: 0.1854
Slope: 0.306

Error Coefficients

Standard Error: 522000
Relative Standard Error: 9.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.215085	50.0	741336.0	0.430169	N
2	STD010 280-538548/15	1.0	0.524914	50.0	745169.0	0.524914	Y
3	STD020 280-538548/16	2.0	0.714617	50.0	729901.0	0.357309	Y
4	STD10 280-538548/18	10.0	3.498536	50.0	746498.0	0.349854	Y
5	ICIS 280-538548/19	50.0	14.606137	50.0	769988.0	0.292123	Y
6	STD75 280-538548/20	75.0	22.978903	50.0	778921.0	0.306385	Y
7	STD100 280-538548/21	100.0	30.36725	50.0	770348.0	0.303672	Y
8	STD200 280-538548/22	200.0	62.620276	50.0	783196.0	0.313101	Y



Calibration

/ 1,1-Dichloropropene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

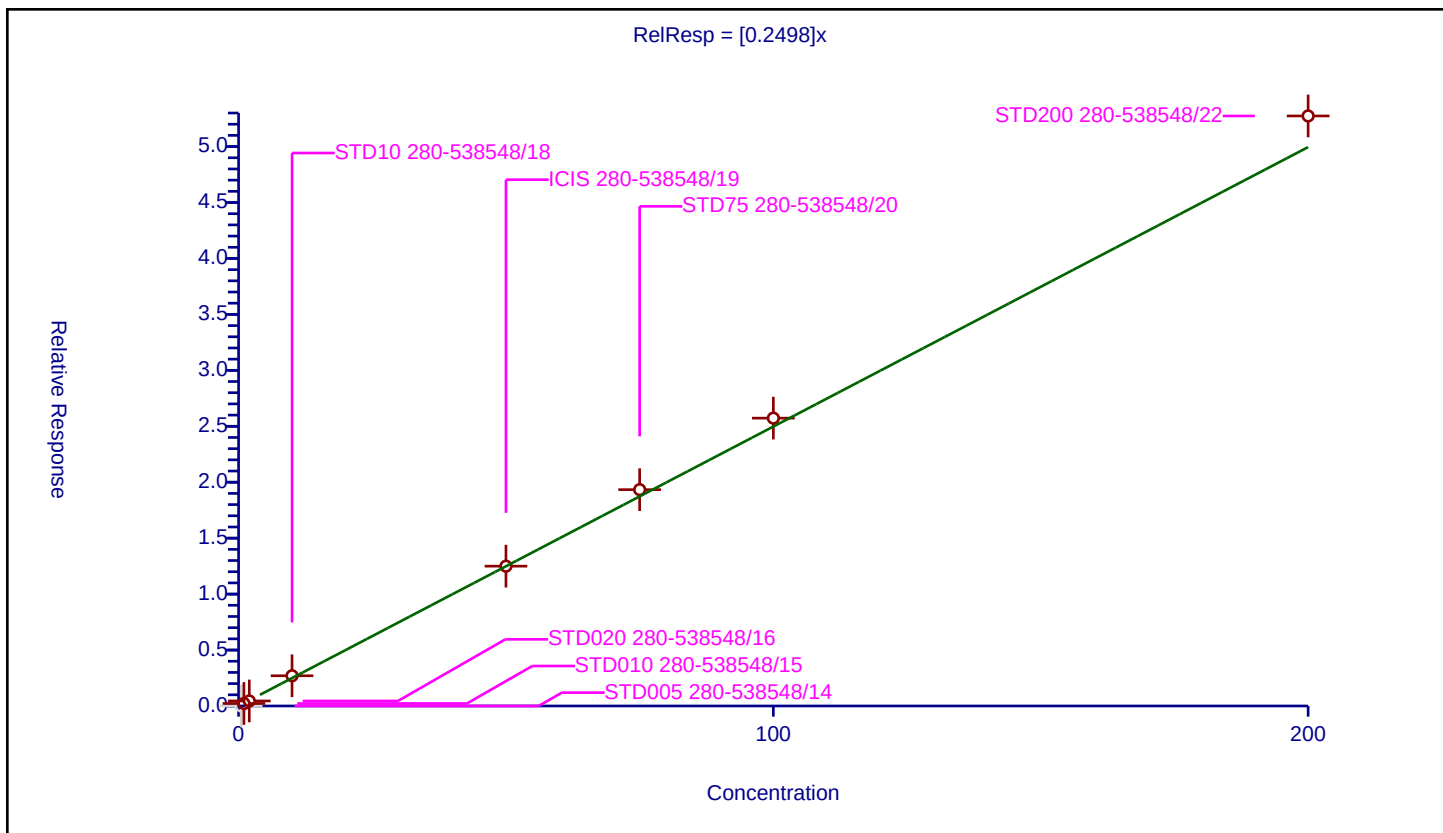
Curve Coefficients

Intercept: 0
Slope: 0.2498

Error Coefficients

Standard Error: 402000
Relative Standard Error: 7.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.224714	50.0	745169.0	0.224714	Y
3	STD020 280-538548/16	2.0	0.449308	50.0	729901.0	0.224654	Y
4	STD10 280-538548/18	10.0	2.702753	50.0	746498.0	0.270275	Y
5	ICIS 280-538548/19	50.0	12.496948	50.0	769988.0	0.249939	Y
6	STD75 280-538548/20	75.0	19.335209	50.0	778921.0	0.257803	Y
7	STD100 280-538548/21	100.0	25.728437	50.0	770348.0	0.257284	Y
8	STD200 280-538548/22	200.0	52.737246	50.0	783196.0	0.263686	Y



Calibration

/ Carbon tetrachloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

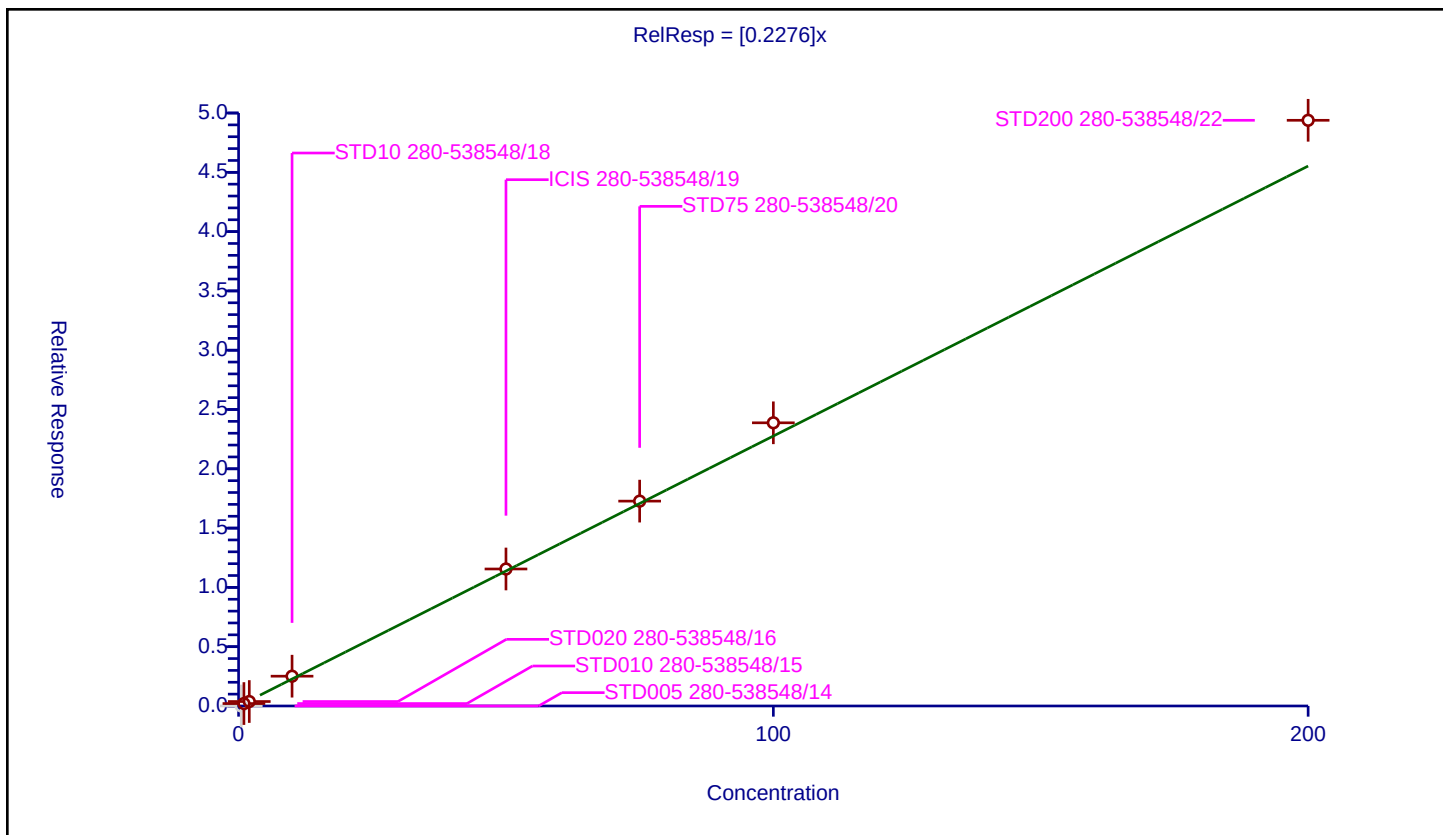
Curve Coefficients

Intercept: 0
 Slope: 0.2276

Error Coefficients

Standard Error: 374000
 Relative Standard Error: 9.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.206262	50.0	745169.0	0.206262	Y
3	STD020 280-538548/16	2.0	0.377722	50.0	729901.0	0.188861	Y
4	STD10 280-538548/18	10.0	2.512867	50.0	746498.0	0.251287	Y
5	ICIS 280-538548/19	50.0	11.551933	50.0	769988.0	0.231039	Y
6	STD75 280-538548/20	75.0	17.275244	50.0	778921.0	0.230337	Y
7	STD100 280-538548/21	100.0	23.879143	50.0	770348.0	0.238791	Y
8	STD200 280-538548/22	200.0	49.385211	50.0	783196.0	0.246926	Y



Calibration

/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

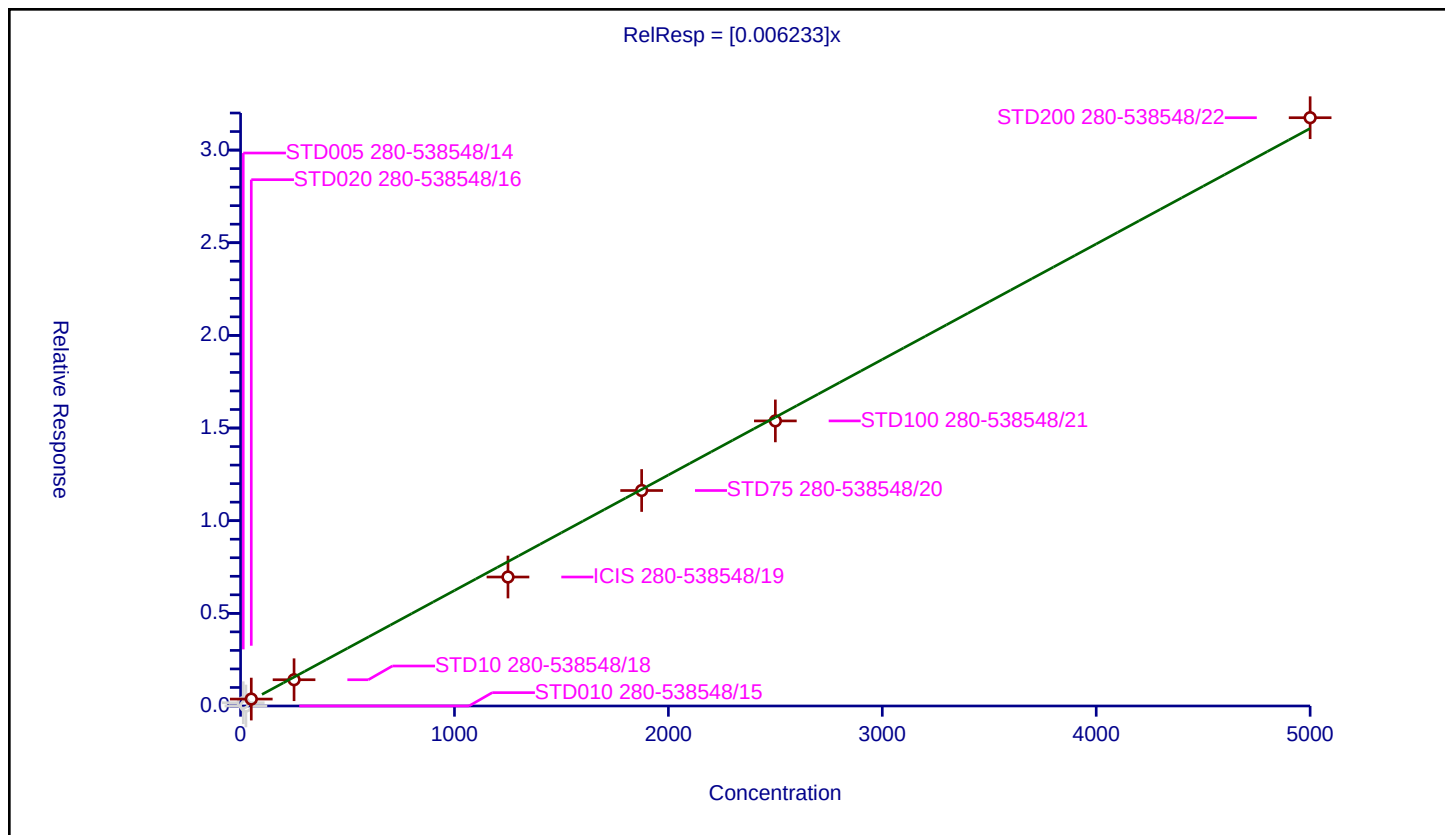
Curve Coefficients

Intercept: 0
 Slope: 0.006233

Error Coefficients

Standard Error: 264000
 Relative Standard Error: 10.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	12.5	0.176168	50.0	741336.0	0.014093	N
2	STD010 280-538548/15	25.0	0.0	50.0	745169.0	0.0	N
3	STD020 280-538548/16	50.0	0.372996	50.0	729901.0	0.00746	Y
4	STD10 280-538548/18	250.0	1.416749	50.0	746498.0	0.005667	Y
5	ICIS 280-538548/19	1250.0	6.959849	50.0	769988.0	0.005568	Y
6	STD75 280-538548/20	1875.0	11.628458	50.0	778921.0	0.006202	Y
7	STD100 280-538548/21	2500.0	15.384476	50.0	770348.0	0.006154	Y
8	STD200 280-538548/22	5000.0	31.747417	50.0	783196.0	0.006349	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

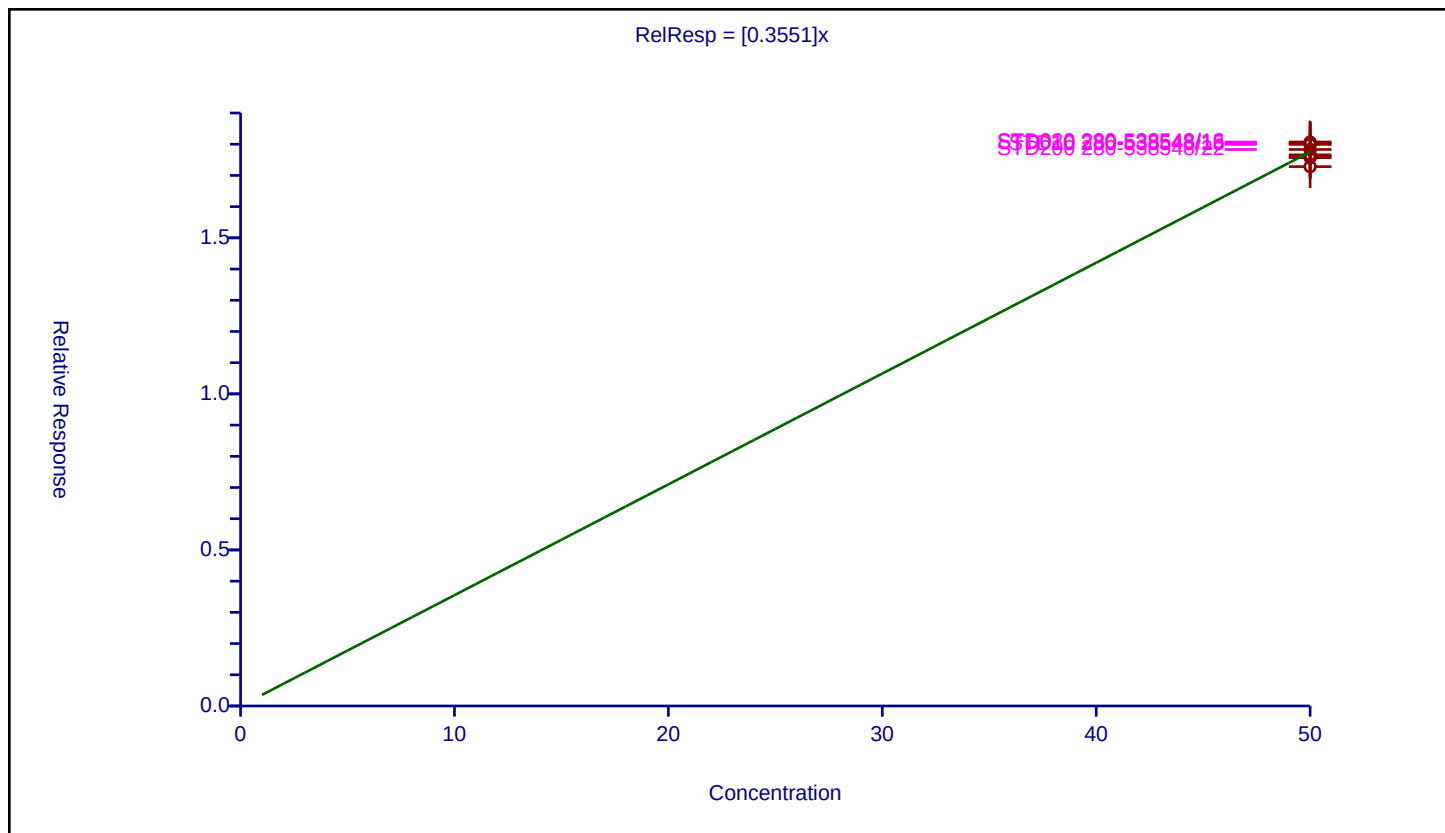
Curve Coefficients

Intercept: 0
 Slope: 0.3551

Error Coefficients

Standard Error: 288000
 Relative Standard Error: 1.5
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	17.660076	50.0	741336.0	0.353202	Y
2	STD010 280-538548/15	50.0	18.023361	50.0	745169.0	0.360467	Y
3	STD020 280-538548/16	50.0	18.071218	50.0	729901.0	0.361424	Y
4	STD10 280-538548/18	50.0	17.994623	50.0	746498.0	0.359892	Y
5	ICIS 280-538548/19	50.0	17.281503	50.0	769988.0	0.34563	Y
6	STD75 280-538548/20	50.0	17.59421	50.0	778921.0	0.351884	Y
7	STD100 280-538548/21	50.0	17.569462	50.0	770348.0	0.351389	Y
8	STD200 280-538548/22	50.0	17.830786	50.0	783196.0	0.356616	Y



Calibration

/ Benzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

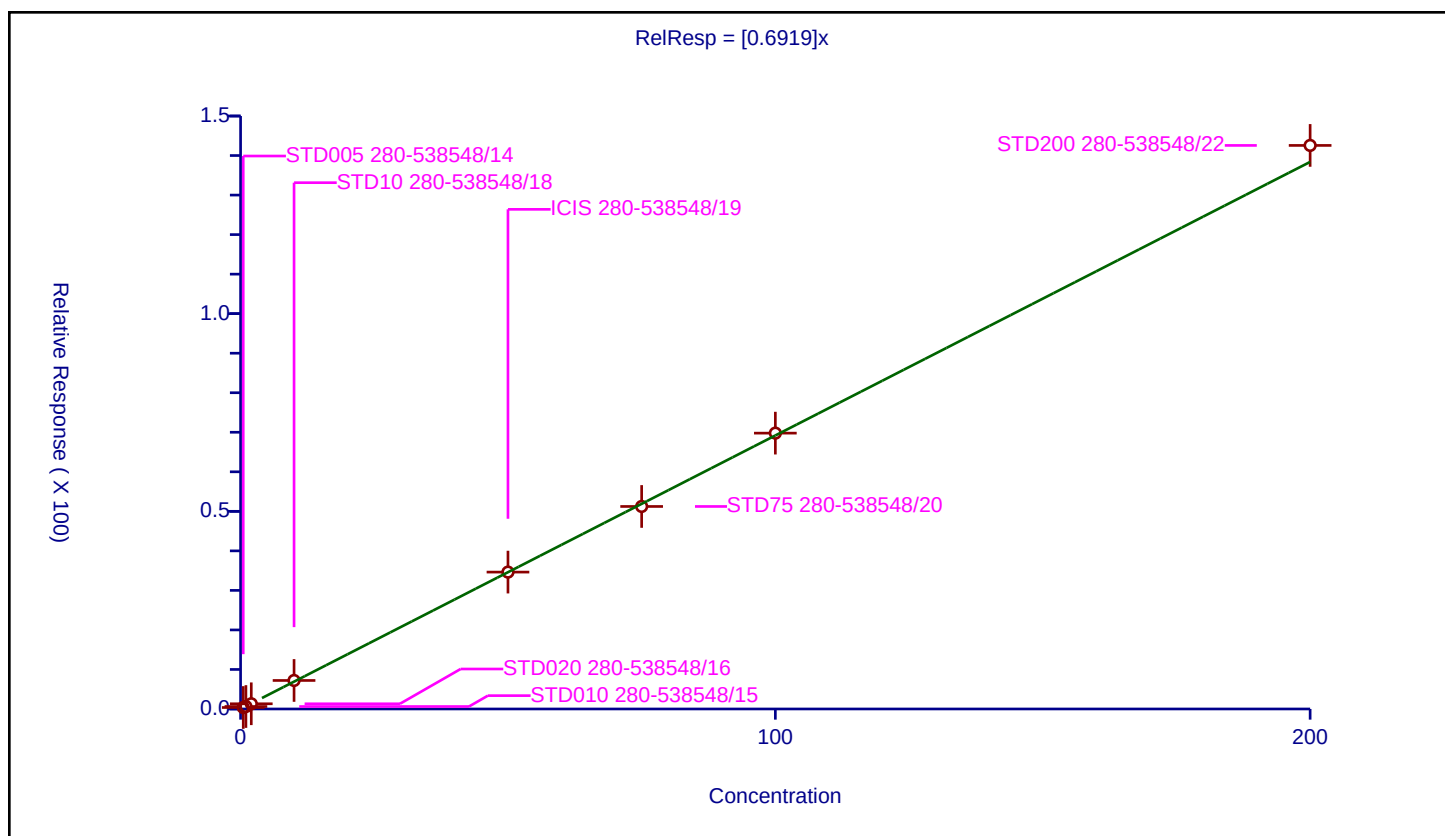
Curve Coefficients

Intercept: 0
Slope: 0.6919

Error Coefficients

Standard Error: 1010000
Relative Standard Error: 5.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.371154	50.0	741336.0	0.742308	Y
2	STD010 280-538548/15	1.0	0.627173	50.0	745169.0	0.627173	Y
3	STD020 280-538548/16	2.0	1.316754	50.0	729901.0	0.658377	Y
4	STD10 280-538548/18	10.0	7.213013	50.0	746498.0	0.721301	Y
5	ICIS 280-538548/19	50.0	34.625994	50.0	769988.0	0.69252	Y
6	STD75 280-538548/20	75.0	51.232089	50.0	778921.0	0.683095	Y
7	STD100 280-538548/21	100.0	69.783007	50.0	770348.0	0.69783	Y
8	STD200 280-538548/22	200.0	142.562781	50.0	783196.0	0.712814	Y



Calibration

/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

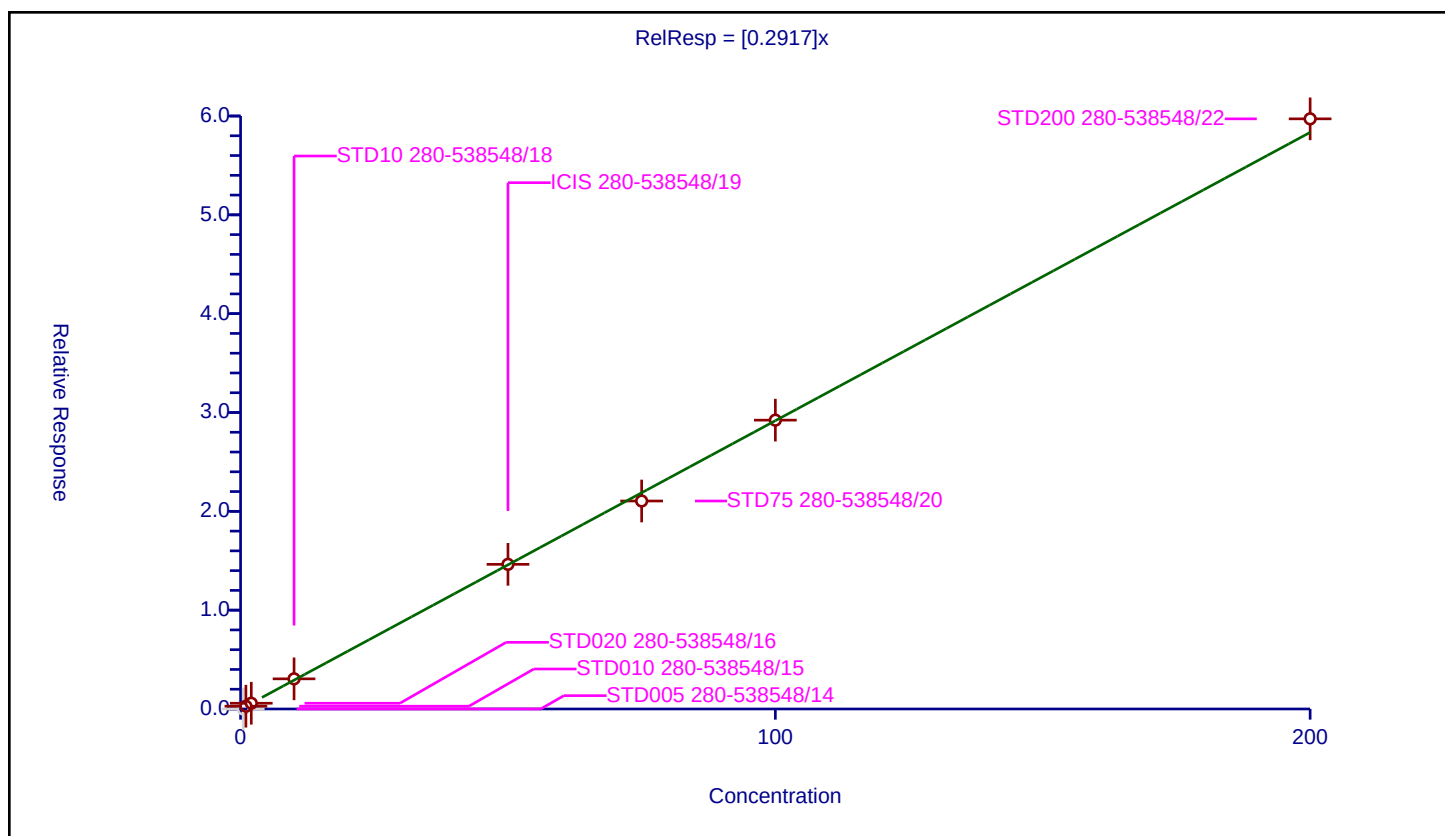
Curve Coefficients

Intercept: 0
 Slope: 0.2917

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 2.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.282084	50.0	745169.0	0.282084	Y
3	STD020 280-538548/16	2.0	0.581517	50.0	729901.0	0.290759	Y
4	STD10 280-538548/18	10.0	3.049841	50.0	746498.0	0.304984	Y
5	ICIS 280-538548/19	50.0	14.636397	50.0	769988.0	0.292728	Y
6	STD75 280-538548/20	75.0	21.044946	50.0	778921.0	0.280599	Y
7	STD100 280-538548/21	100.0	29.226921	50.0	770348.0	0.292269	Y
8	STD200 280-538548/22	200.0	59.712703	50.0	783196.0	0.298564	Y



Calibration

/ n-Heptane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

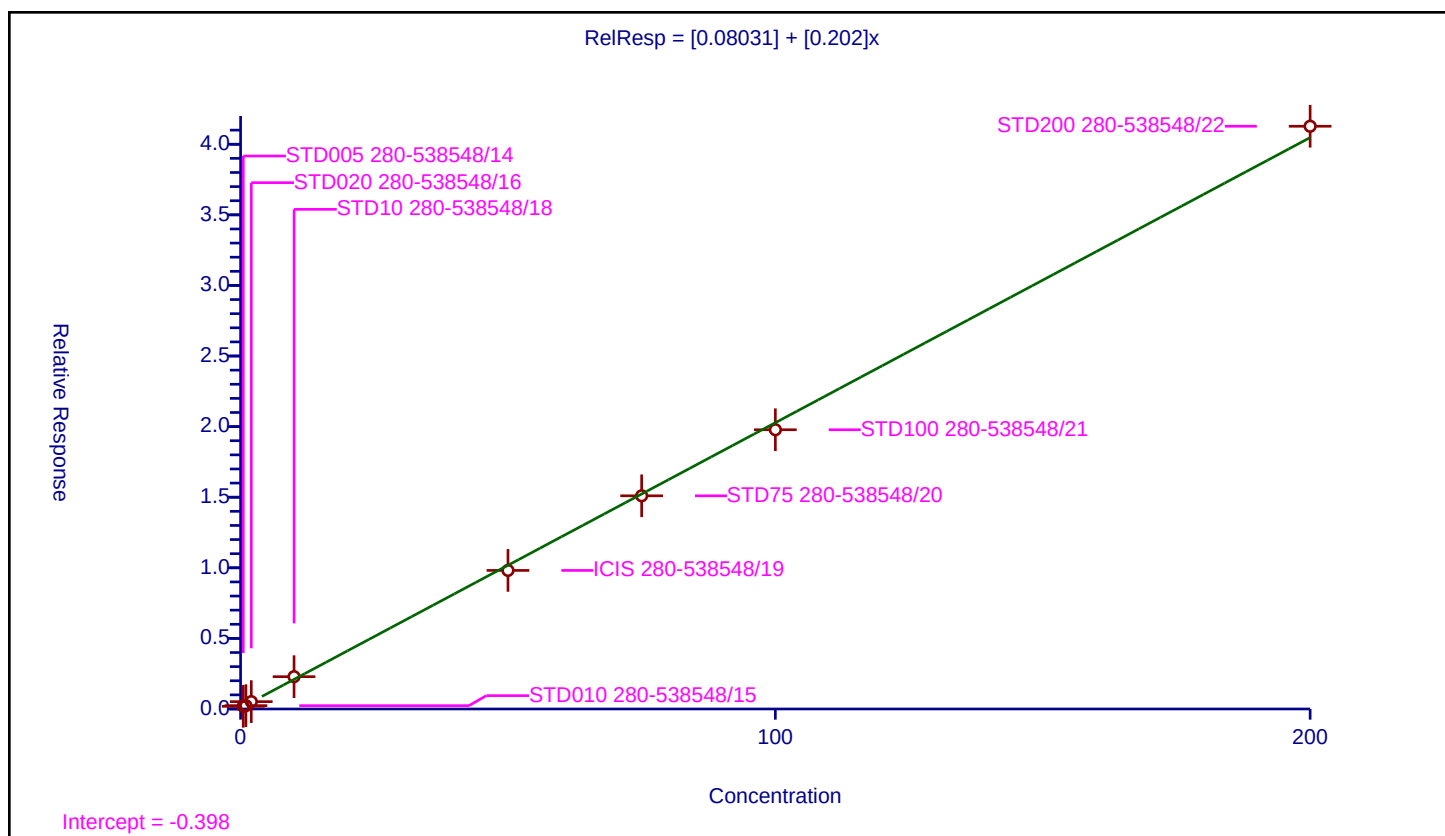
Curve Coefficients

Intercept: 0.08031
 Slope: 0.202

Error Coefficients

Standard Error: 314000
 Relative Standard Error: 11.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.189792	50.0	741336.0	0.379585	Y
2	STD010 280-538548/15	1.0	0.237933	50.0	745169.0	0.237933	Y
3	STD020 280-538548/16	2.0	0.521304	50.0	729901.0	0.260652	Y
4	STD10 280-538548/18	10.0	2.287682	50.0	746498.0	0.228768	Y
5	ICIS 280-538548/19	50.0	9.815153	50.0	769988.0	0.196303	Y
6	STD75 280-538548/20	75.0	15.098964	50.0	778921.0	0.20132	Y
7	STD100 280-538548/21	100.0	19.77762	50.0	770348.0	0.197776	Y
8	STD200 280-538548/22	200.0	41.275428	50.0	783196.0	0.206377	Y



Calibration

/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

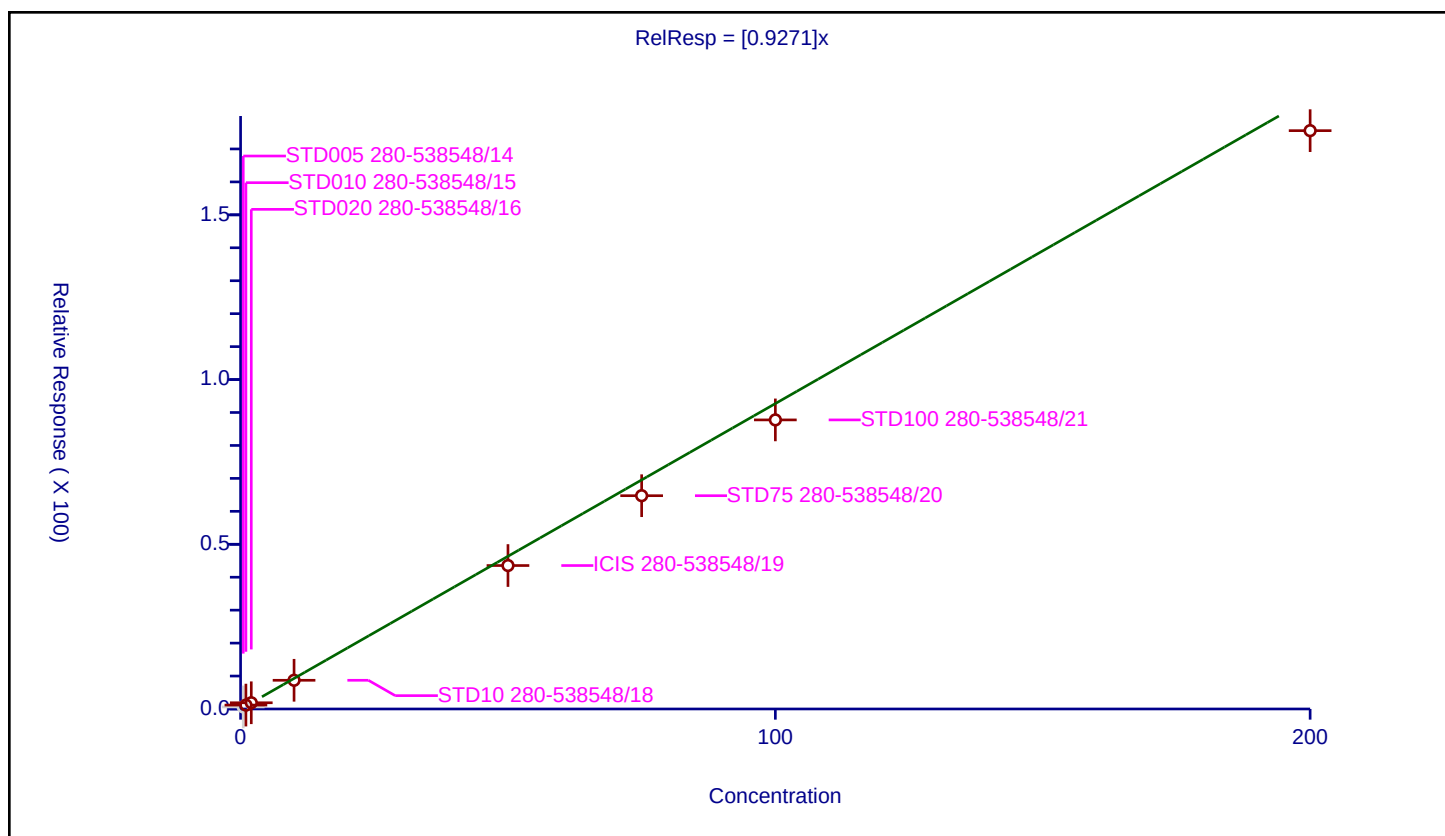
Curve Coefficients

Intercept: 0
 Slope: 0.9271

Error Coefficients

Standard Error: 288000
 Relative Standard Error: 12.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.631146	50.0	154877.0	1.262292	N
2	STD010 280-538548/15	1.0	1.182538	50.0	156866.0	1.182538	Y
3	STD020 280-538548/16	2.0	1.891661	50.0	153463.0	0.945831	Y
4	STD10 280-538548/18	10.0	8.715952	50.0	158818.0	0.871595	Y
5	ICIS 280-538548/19	50.0	43.549184	50.0	161871.0	0.870984	Y
6	STD75 280-538548/20	75.0	64.749699	50.0	162105.0	0.863329	Y
7	STD100 280-538548/21	100.0	87.748515	50.0	161409.0	0.877485	Y
8	STD200 280-538548/22	200.0	175.557678	50.0	169094.0	0.877788	Y



Calibration

/ 2-Pentanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

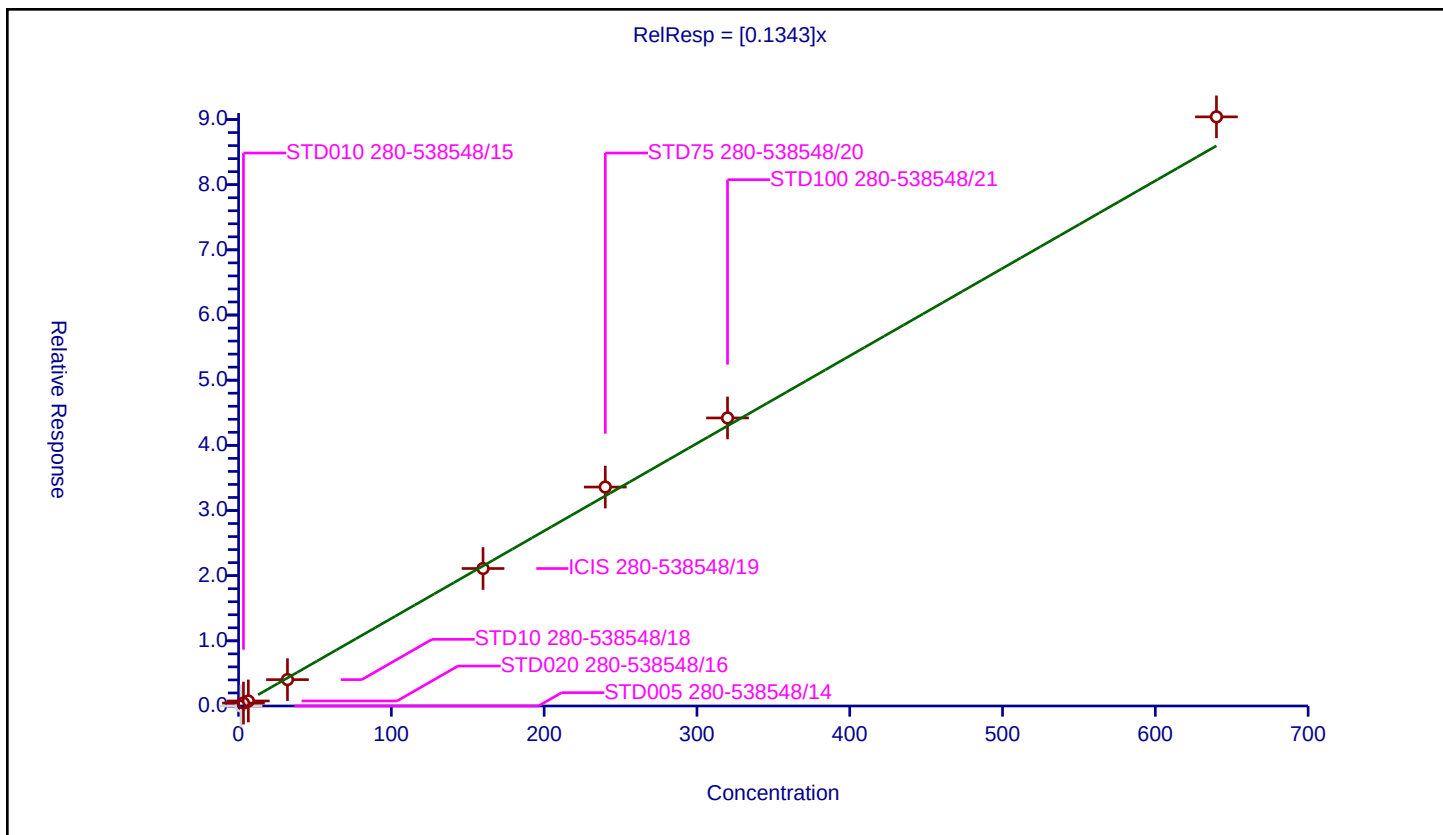
Curve Coefficients

Intercept: 0
Slope: 0.1343

Error Coefficients

Standard Error: 689000
Relative Standard Error: 6.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.6	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	3.2	0.453857	50.0	745169.0	0.14183	Y
3	STD020 280-538548/16	6.4	0.772708	50.0	729901.0	0.120736	Y
4	STD10 280-538548/18	32.0	4.046227	50.0	746498.0	0.126445	Y
5	ICIS 280-538548/19	160.0	21.097666	50.0	769988.0	0.13186	Y
6	STD75 280-538548/20	240.0	33.600519	50.0	778921.0	0.140002	Y
7	STD100 280-538548/21	320.0	44.202945	50.0	770348.0	0.138134	Y
8	STD200 280-538548/22	640.0	90.409425	50.0	783196.0	0.141265	Y



Calibration

/ Methylcyclohexane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

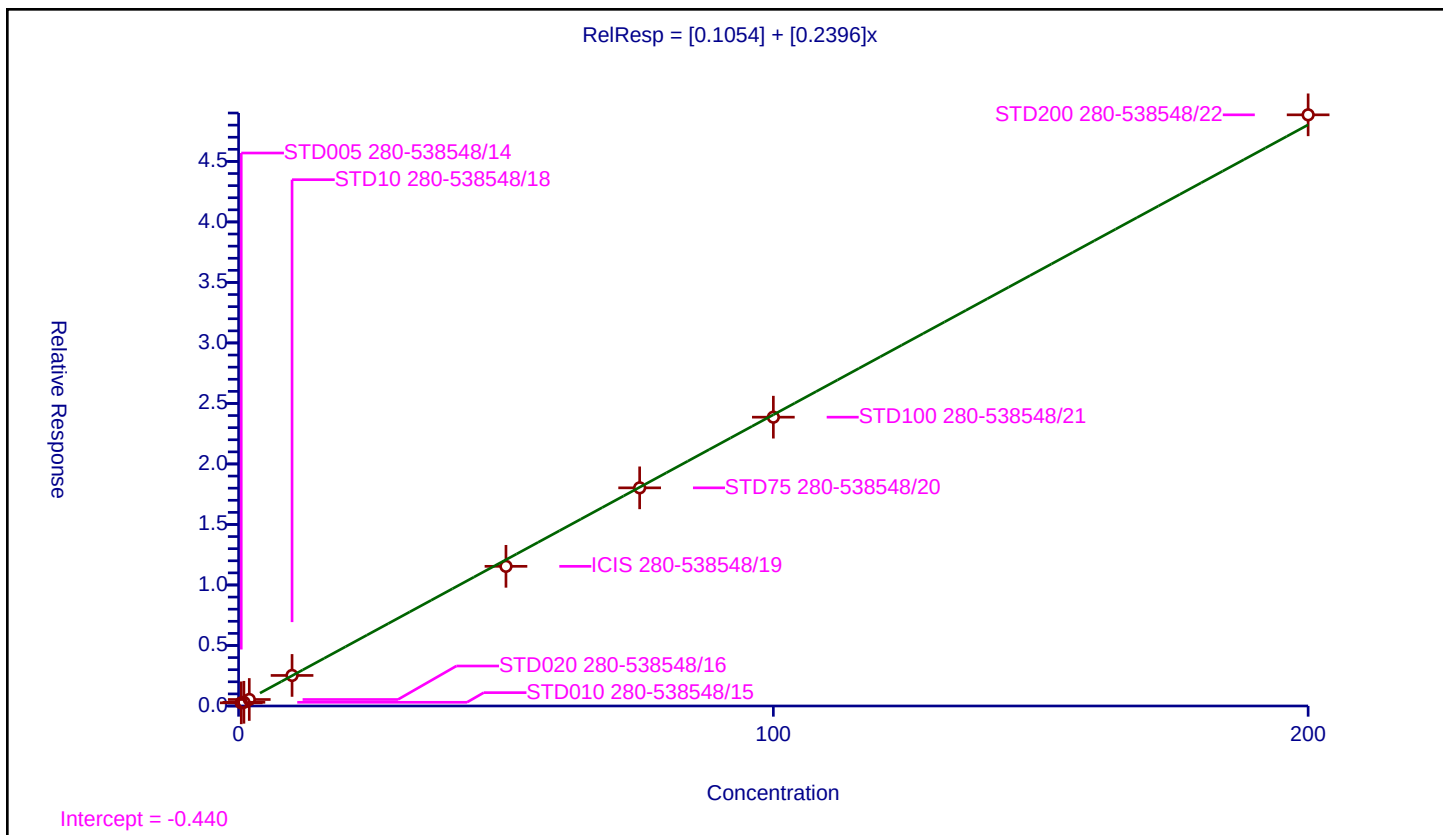
Curve Coefficients

Intercept: 0.1054
 Slope: 0.2396

Error Coefficients

Standard Error: 373000
 Relative Standard Error: 14.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.260476	50.0	741336.0	0.520951	Y
2	STD010 280-538548/15	1.0	0.305568	50.0	745169.0	0.305568	Y
3	STD020 280-538548/16	2.0	0.536991	50.0	729901.0	0.268495	Y
4	STD10 280-538548/18	10.0	2.524655	50.0	746498.0	0.252466	Y
5	ICIS 280-538548/19	50.0	11.540505	50.0	769988.0	0.23081	Y
6	STD75 280-538548/20	75.0	18.025384	50.0	778921.0	0.240338	Y
7	STD100 280-538548/21	100.0	23.865058	50.0	770348.0	0.238651	Y
8	STD200 280-538548/22	200.0	48.850607	50.0	783196.0	0.244253	Y



Calibration

/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

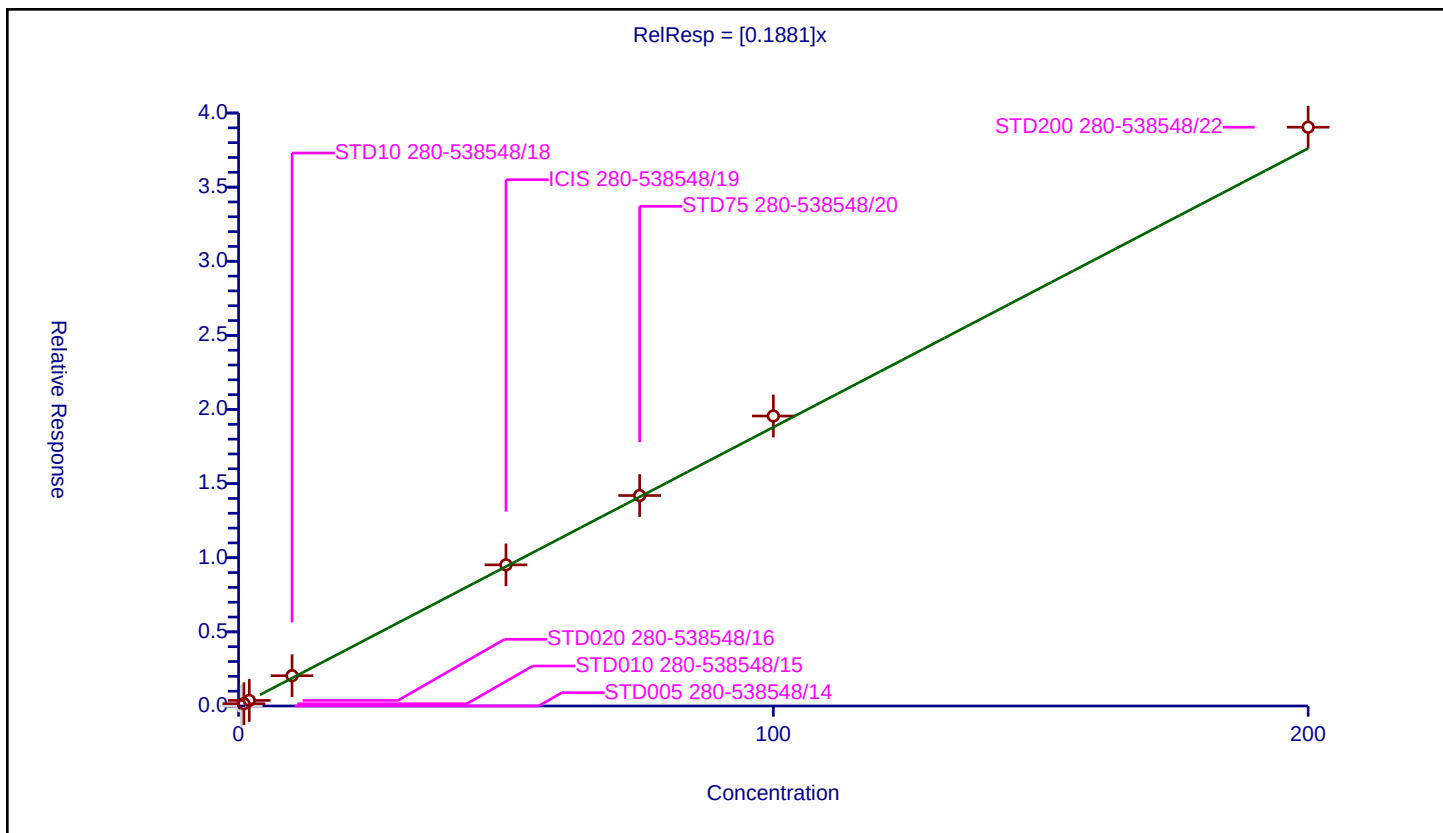
Curve Coefficients

Intercept: 0
 Slope: 0.1881

Error Coefficients

Standard Error: 299000
 Relative Standard Error: 8.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.15426	50.0	745169.0	0.15426	Y
3	STD020 280-538548/16	2.0	0.374914	50.0	729901.0	0.187457	Y
4	STD10 280-538548/18	10.0	2.042202	50.0	746498.0	0.20422	Y
5	ICIS 280-538548/19	50.0	9.519694	50.0	769988.0	0.190394	Y
6	STD75 280-538548/20	75.0	14.196818	50.0	778921.0	0.189291	Y
7	STD100 280-538548/21	100.0	19.561679	50.0	770348.0	0.195617	Y
8	STD200 280-538548/22	200.0	39.043866	50.0	783196.0	0.195219	Y



Calibration

/ 1,4-Dioxane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

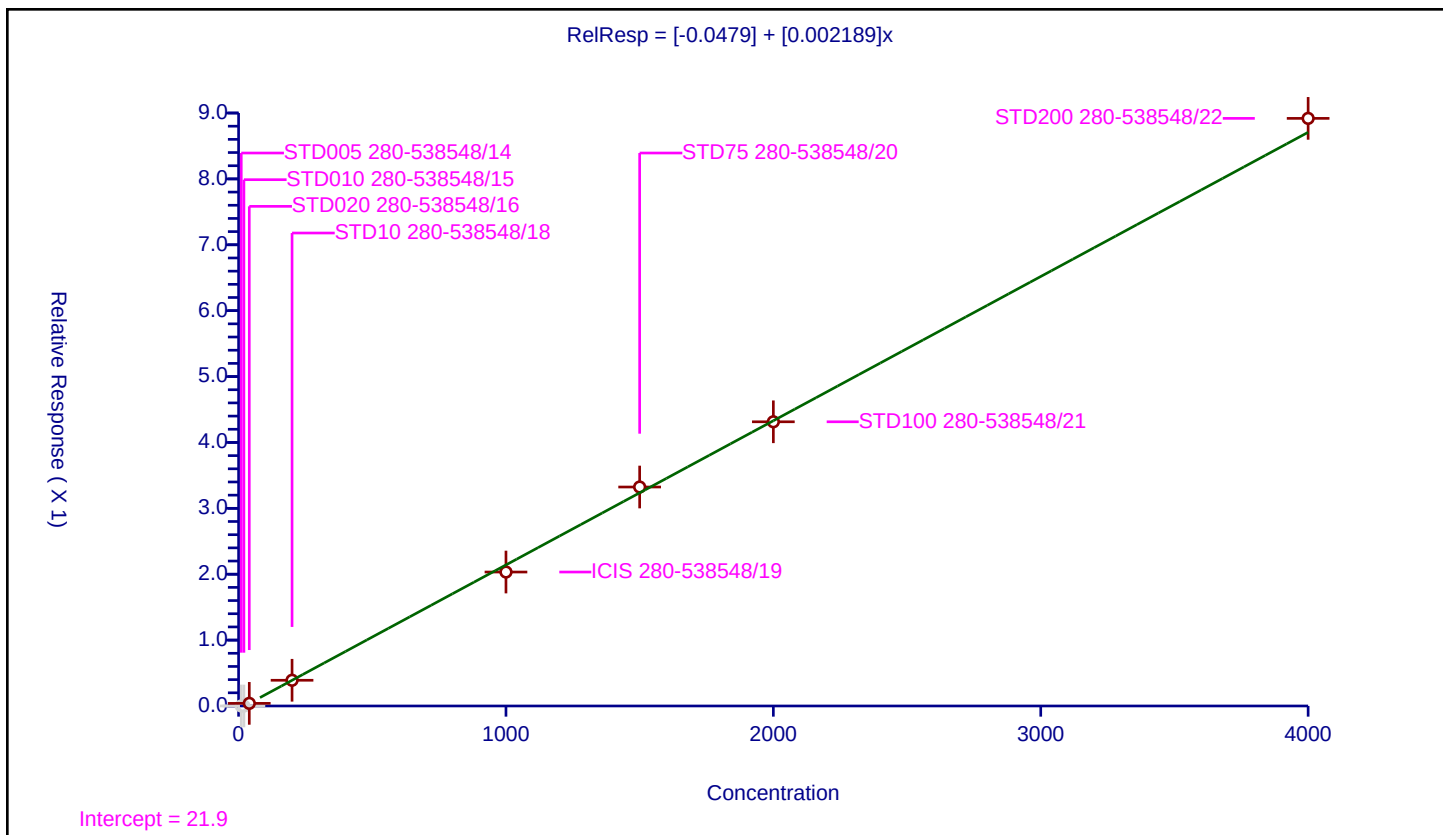
Curve Coefficients

Intercept: -0.0479
 Slope: 0.002189

Error Coefficients

Standard Error: 83100
 Relative Standard Error: 3.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	10.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	20.0	0.0	50.0	745169.0	0.0	N
3	STD020 280-538548/16	40.0	0.039731	50.0	729901.0	0.000993	Y
4	STD10 280-538548/18	200.0	0.390222	50.0	746498.0	0.001951	Y
5	ICIS 280-538548/19	1000.0	2.033408	50.0	769988.0	0.002033	Y
6	STD75 280-538548/20	1500.0	3.3237	50.0	778921.0	0.002216	Y
7	STD100 280-538548/21	2000.0	4.3137	50.0	770348.0	0.002157	Y
8	STD200 280-538548/22	4000.0	8.918585	50.0	783196.0	0.00223	Y



Calibration

/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

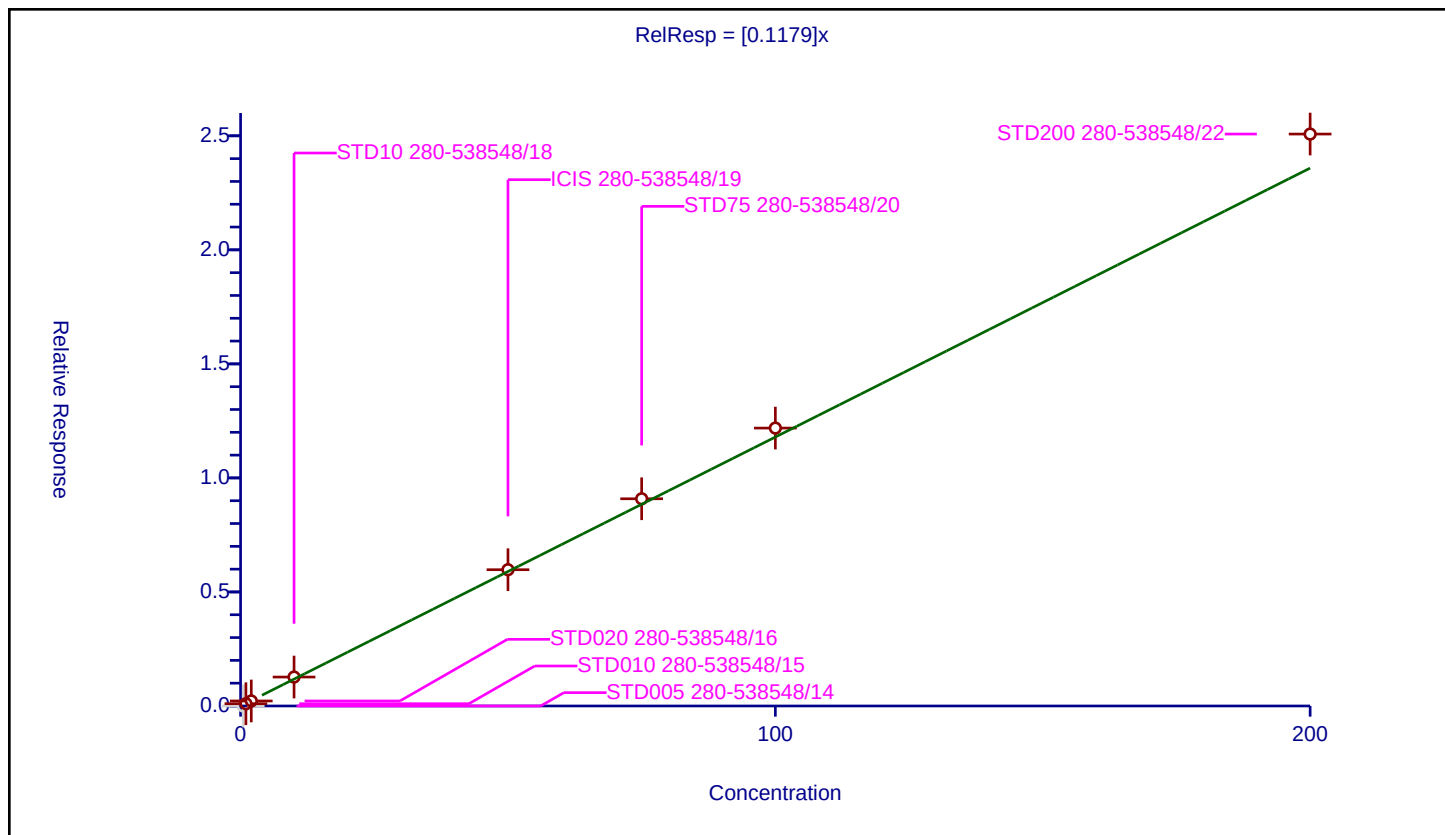
Curve Coefficients

Intercept: 0
 Slope: 0.1179

Error Coefficients

Standard Error: 191000
 Relative Standard Error: 8.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.100246	50.0	745169.0	0.100246	Y
3	STD020 280-538548/16	2.0	0.220715	50.0	729901.0	0.110357	Y
4	STD10 280-538548/18	10.0	1.269595	50.0	746498.0	0.126959	Y
5	ICIS 280-538548/19	50.0	5.975483	50.0	769988.0	0.11951	Y
6	STD75 280-538548/20	75.0	9.085196	50.0	778921.0	0.121136	Y
7	STD100 280-538548/21	100.0	12.185791	50.0	770348.0	0.121858	Y
8	STD200 280-538548/22	200.0	25.077184	50.0	783196.0	0.125386	Y



Calibration

/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

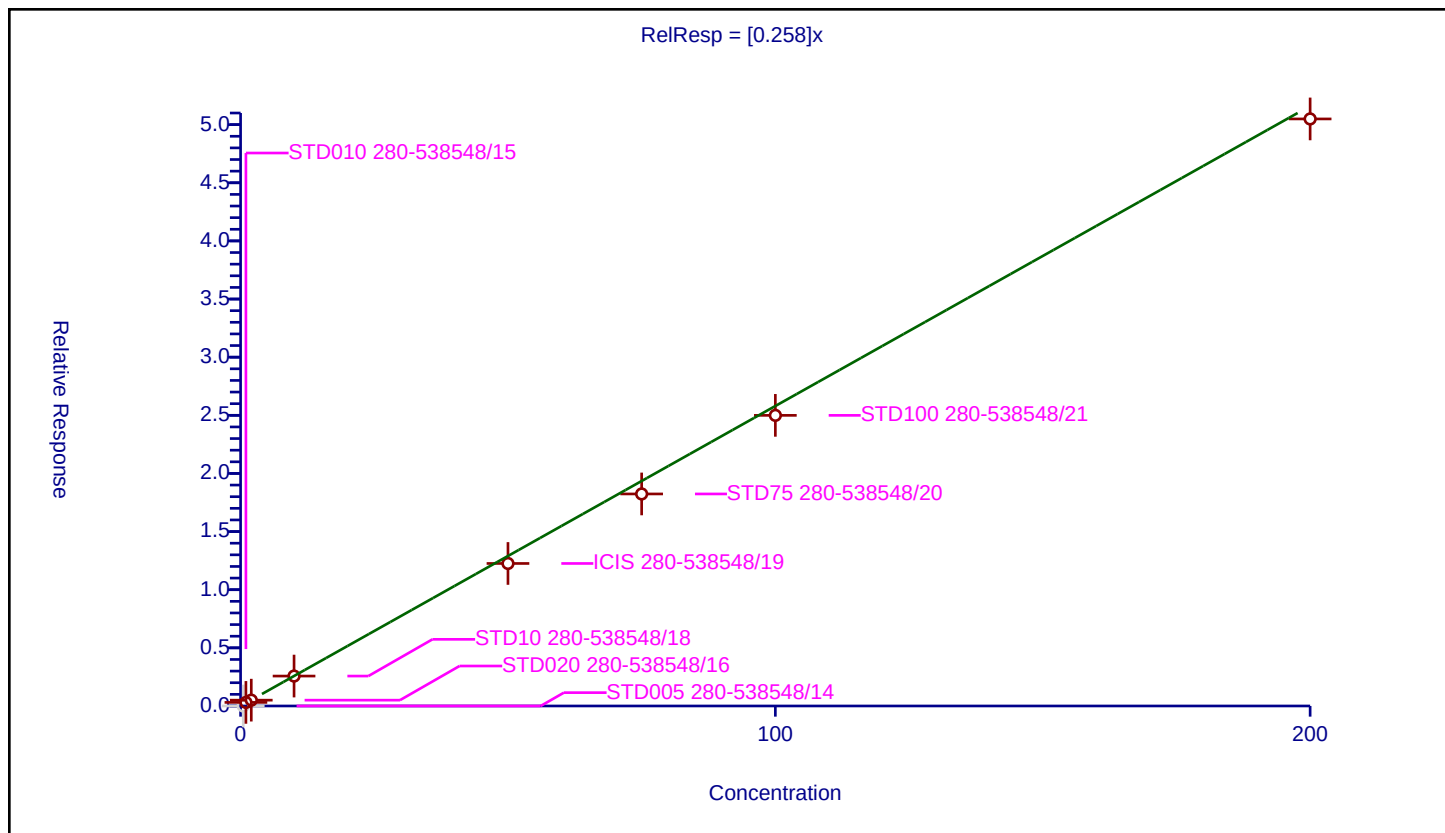
Curve Coefficients

Intercept: 0
 Slope: 0.258

Error Coefficients

Standard Error: 385000
 Relative Standard Error: 8.7
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.30785	50.0	745169.0	0.30785	Y
3	STD020 280-538548/16	2.0	0.500342	50.0	729901.0	0.250171	Y
4	STD10 280-538548/18	10.0	2.57355	50.0	746498.0	0.257355	Y
5	ICIS 280-538548/19	50.0	12.257204	50.0	769988.0	0.245144	Y
6	STD75 280-538548/20	75.0	18.236702	50.0	778921.0	0.243156	Y
7	STD100 280-538548/21	100.0	24.995197	50.0	770348.0	0.249952	Y
8	STD200 280-538548/22	200.0	50.490426	50.0	783196.0	0.252452	Y



Calibration

/ 2-Chloroethyl vinyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

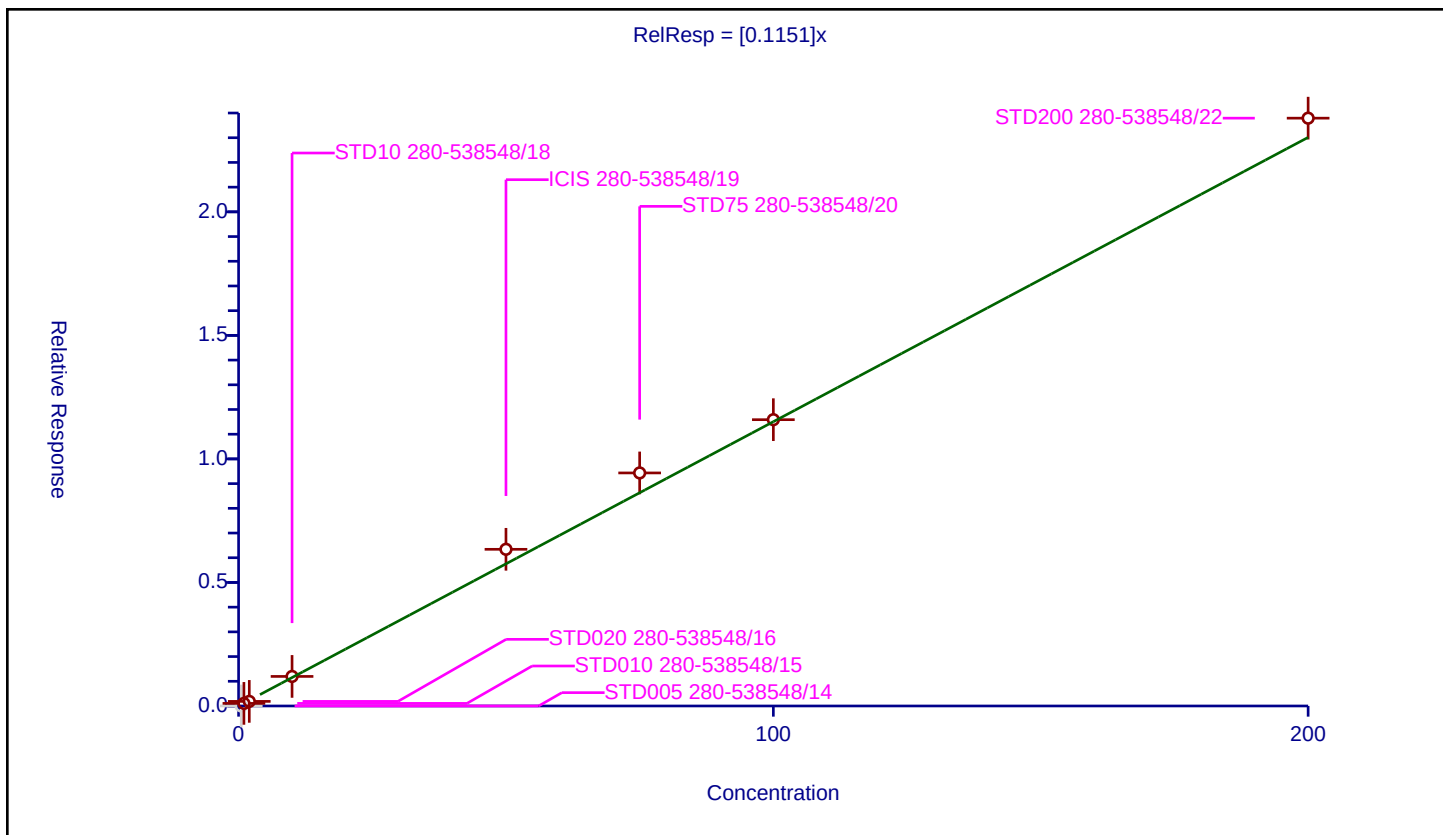
Curve Coefficients

Intercept: 0
 Slope: 0.1151

Error Coefficients

Standard Error: 184000
 Relative Standard Error: 10.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.105479	50.0	745169.0	0.105479	Y
3	STD020 280-538548/16	2.0	0.185847	50.0	729901.0	0.092924	Y
4	STD10 280-538548/18	10.0	1.196319	50.0	746498.0	0.119632	Y
5	ICIS 280-538548/19	50.0	6.341657	50.0	769988.0	0.126833	Y
6	STD75 280-538548/20	75.0	9.432664	50.0	778921.0	0.125769	Y
7	STD100 280-538548/21	100.0	11.588139	50.0	770348.0	0.115881	Y
8	STD200 280-538548/22	200.0	23.791682	50.0	783196.0	0.118958	Y



Calibration

/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

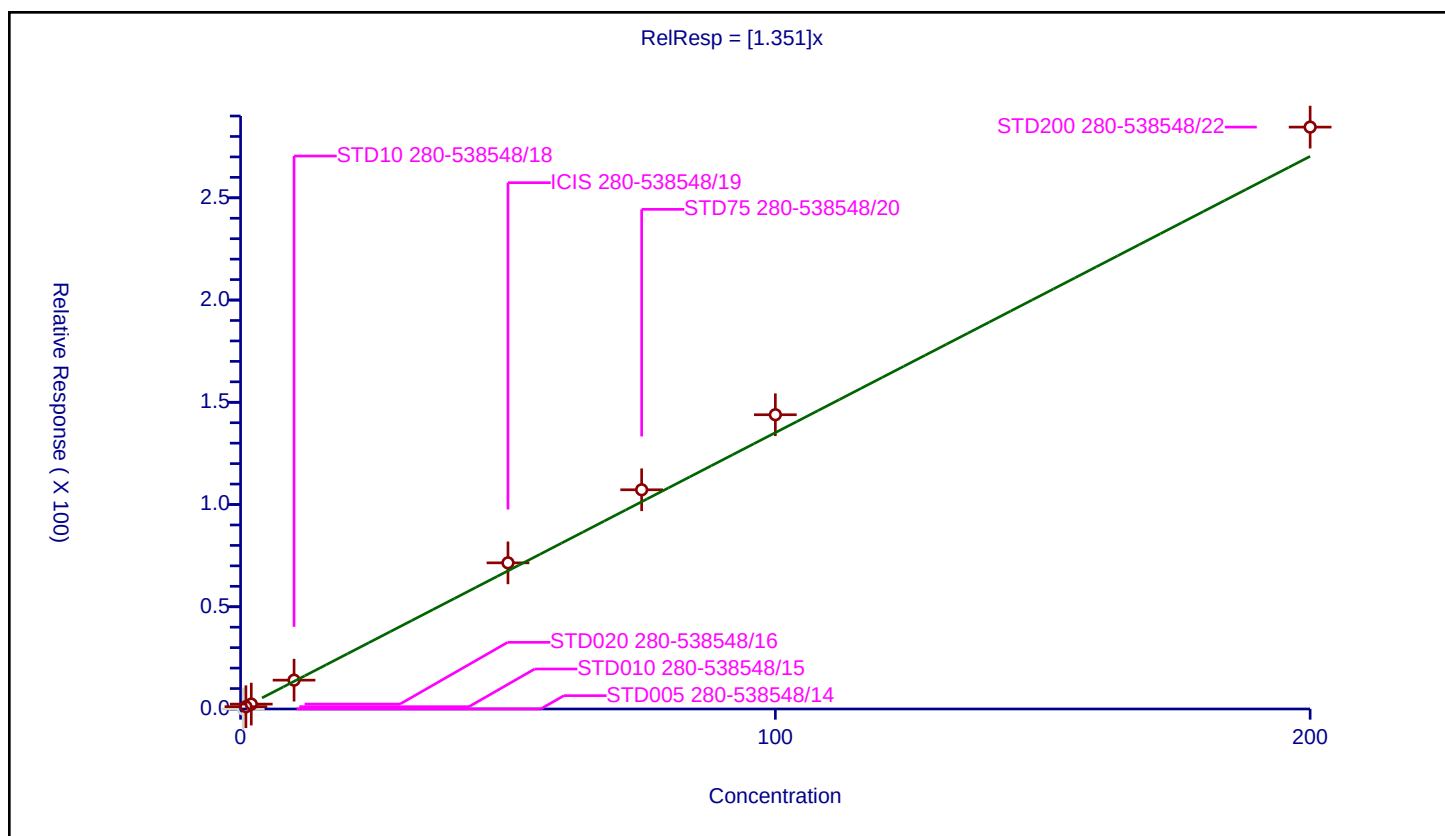
Curve Coefficients

Intercept: 0
 Slope: 1.351

Error Coefficients

Standard Error: 469000
 Relative Standard Error: 9.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.13377	50.0	156866.0	1.13377	Y
3	STD020 280-538548/16	2.0	2.390478	50.0	153463.0	1.195239	Y
4	STD10 280-538548/18	10.0	14.098213	50.0	158818.0	1.409821	Y
5	ICIS 280-538548/19	50.0	71.471727	50.0	161871.0	1.429435	Y
6	STD75 280-538548/20	75.0	107.204898	50.0	162105.0	1.429399	Y
7	STD100 280-538548/21	100.0	143.912979	50.0	161409.0	1.43913	Y
8	STD200 280-538548/22	200.0	284.580174	50.0	169094.0	1.422901	Y



Calibration

/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

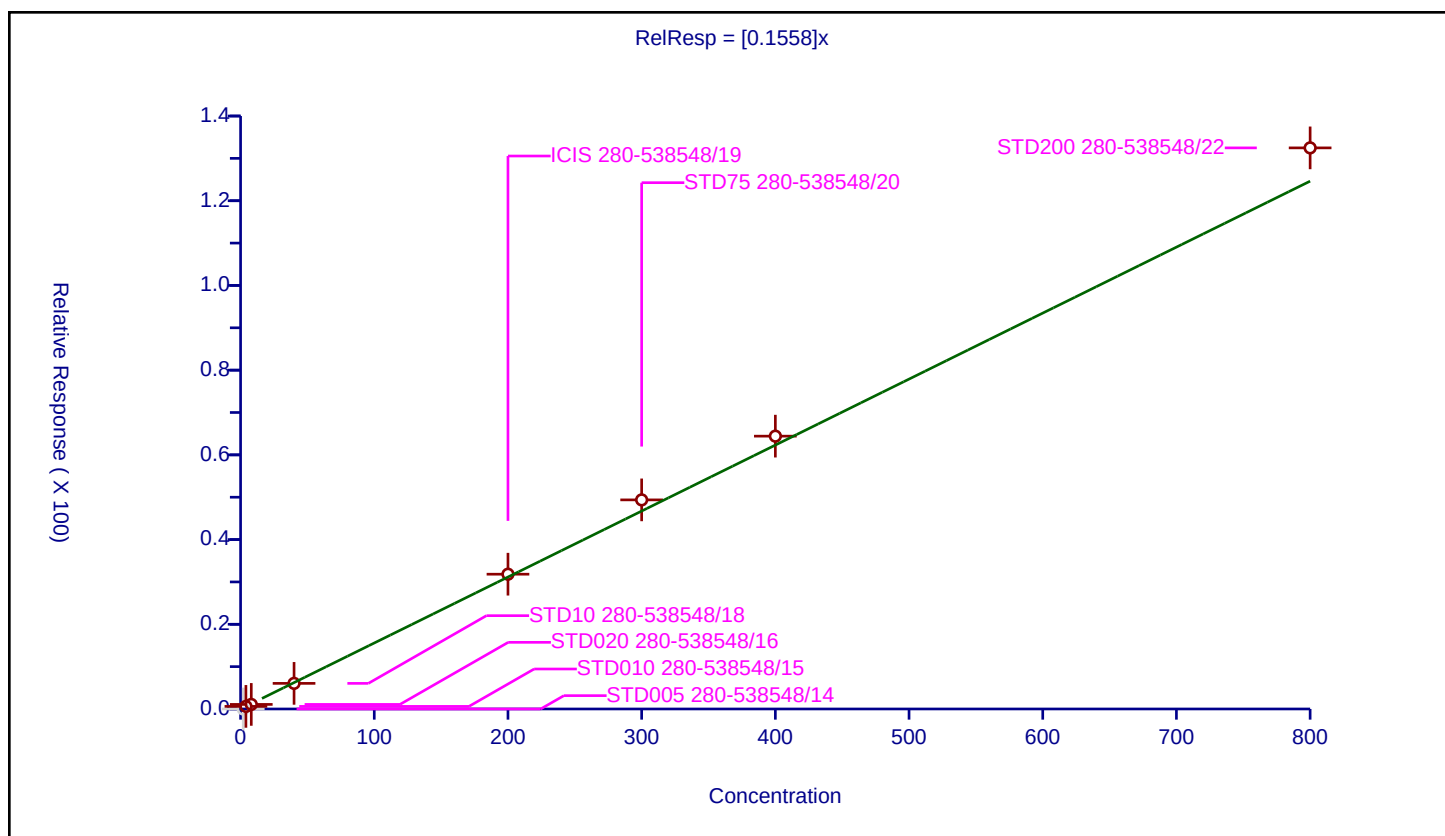
Curve Coefficients

Intercept: 0
 Slope: 0.1558

Error Coefficients

Standard Error: 1010000
 Relative Standard Error: 6.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	4.0	0.615968	50.0	745169.0	0.153992	Y
3	STD020 280-538548/16	8.0	1.07905	50.0	729901.0	0.134881	Y
4	STD10 280-538548/18	40.0	6.049313	50.0	746498.0	0.151233	Y
5	ICIS 280-538548/19	200.0	31.823028	50.0	769988.0	0.159115	Y
6	STD75 280-538548/20	300.0	49.367202	50.0	778921.0	0.164557	Y
7	STD100 280-538548/21	400.0	64.414914	50.0	770348.0	0.161037	Y
8	STD200 280-538548/22	800.0	132.47846	50.0	783196.0	0.165598	Y



Calibration

/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

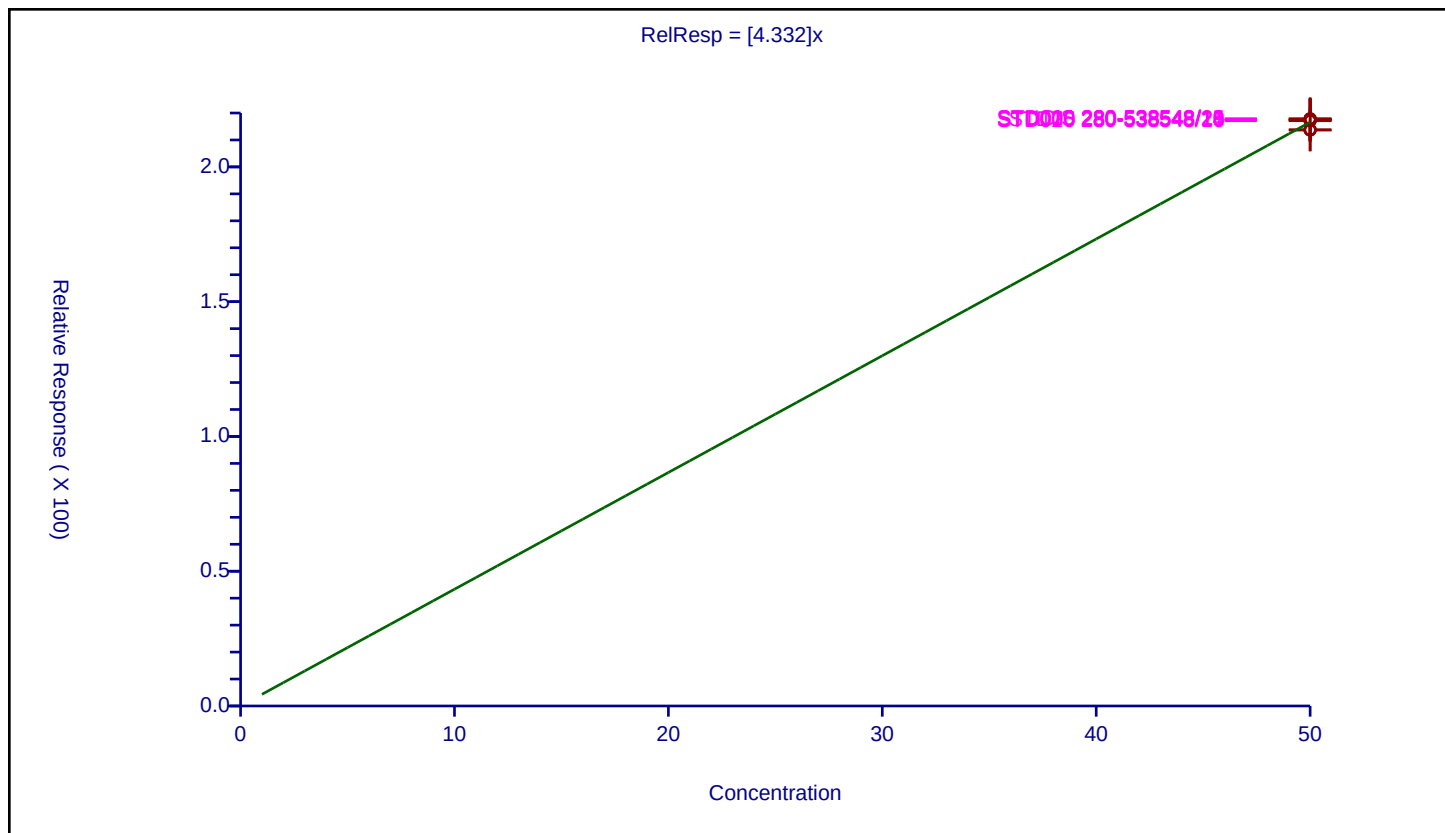
Curve Coefficients

Intercept: 0
 Slope: 4.332

Error Coefficients

Standard Error: 740000
 Relative Standard Error: 0.8
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	217.331818	50.0	154877.0	4.346636	Y
2	STD010 280-538548/15	50.0	217.721176	50.0	156866.0	4.354424	Y
3	STD020 280-538548/16	50.0	217.138007	50.0	153463.0	4.34276	Y
4	STD10 280-538548/18	50.0	213.730811	50.0	158818.0	4.274616	Y
5	ICIS 280-538548/19	50.0	217.559353	50.0	161871.0	4.351187	Y
6	STD75 280-538548/20	50.0	217.511798	50.0	162105.0	4.350236	Y
7	STD100 280-538548/21	50.0	217.873848	50.0	161409.0	4.357477	Y
8	STD200 280-538548/22	50.0	213.734964	50.0	169094.0	4.274699	Y



Calibration

/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

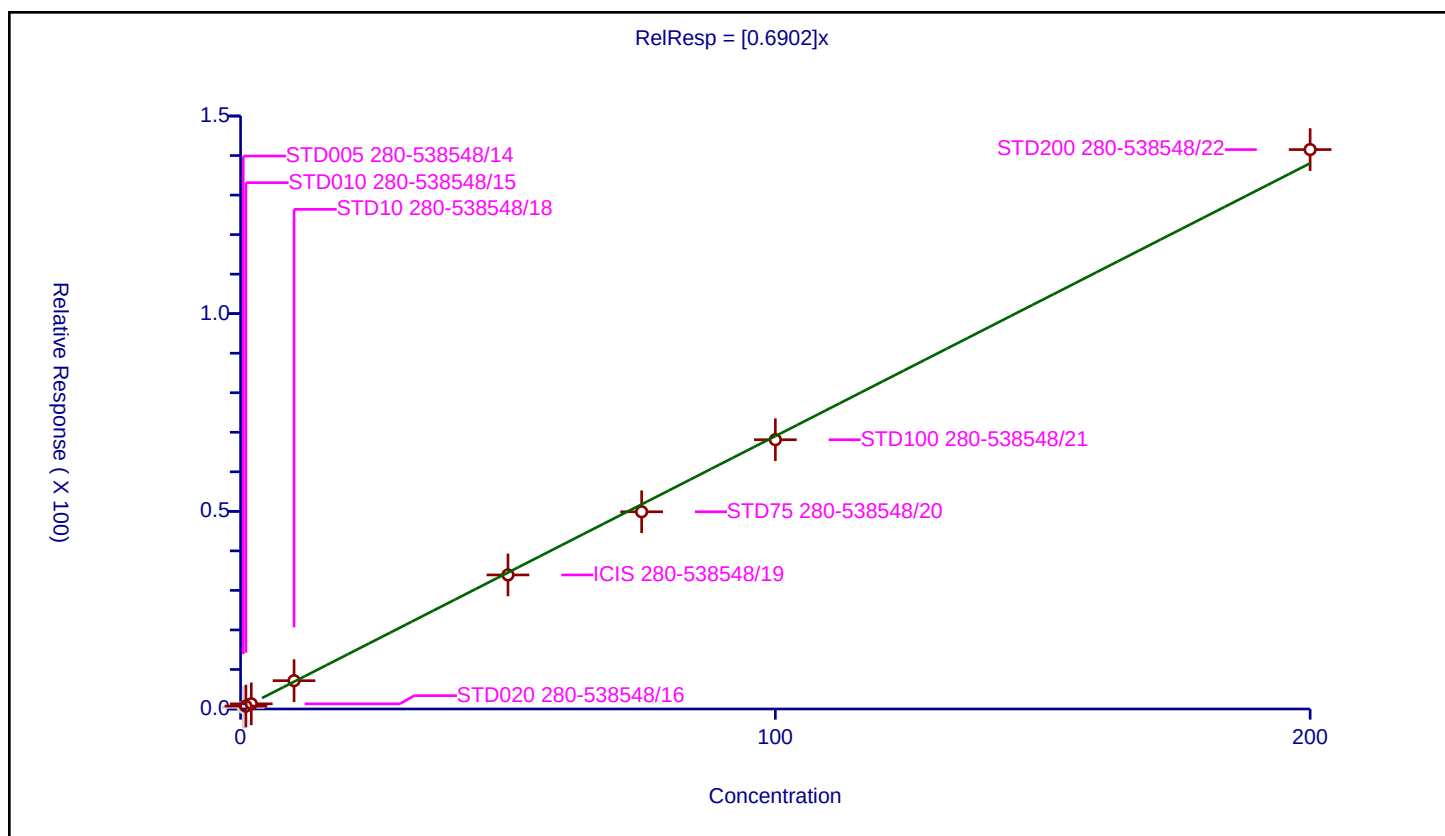
Curve Coefficients

Intercept: 0
 Slope: 0.6902

Error Coefficients

Standard Error: 1070000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.41061	50.0	741336.0	0.82122	N
2	STD010 280-538548/15	1.0	0.732116	50.0	745169.0	0.732116	Y
3	STD020 280-538548/16	2.0	1.302642	50.0	729901.0	0.651321	Y
4	STD10 280-538548/18	10.0	7.159765	50.0	746498.0	0.715976	Y
5	ICIS 280-538548/19	50.0	33.915788	50.0	769988.0	0.678316	Y
6	STD75 280-538548/20	75.0	49.88529	50.0	778921.0	0.665137	Y
7	STD100 280-538548/21	100.0	68.111555	50.0	770348.0	0.681116	Y
8	STD200 280-538548/22	200.0	141.508001	50.0	783196.0	0.70754	Y



Calibration

/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

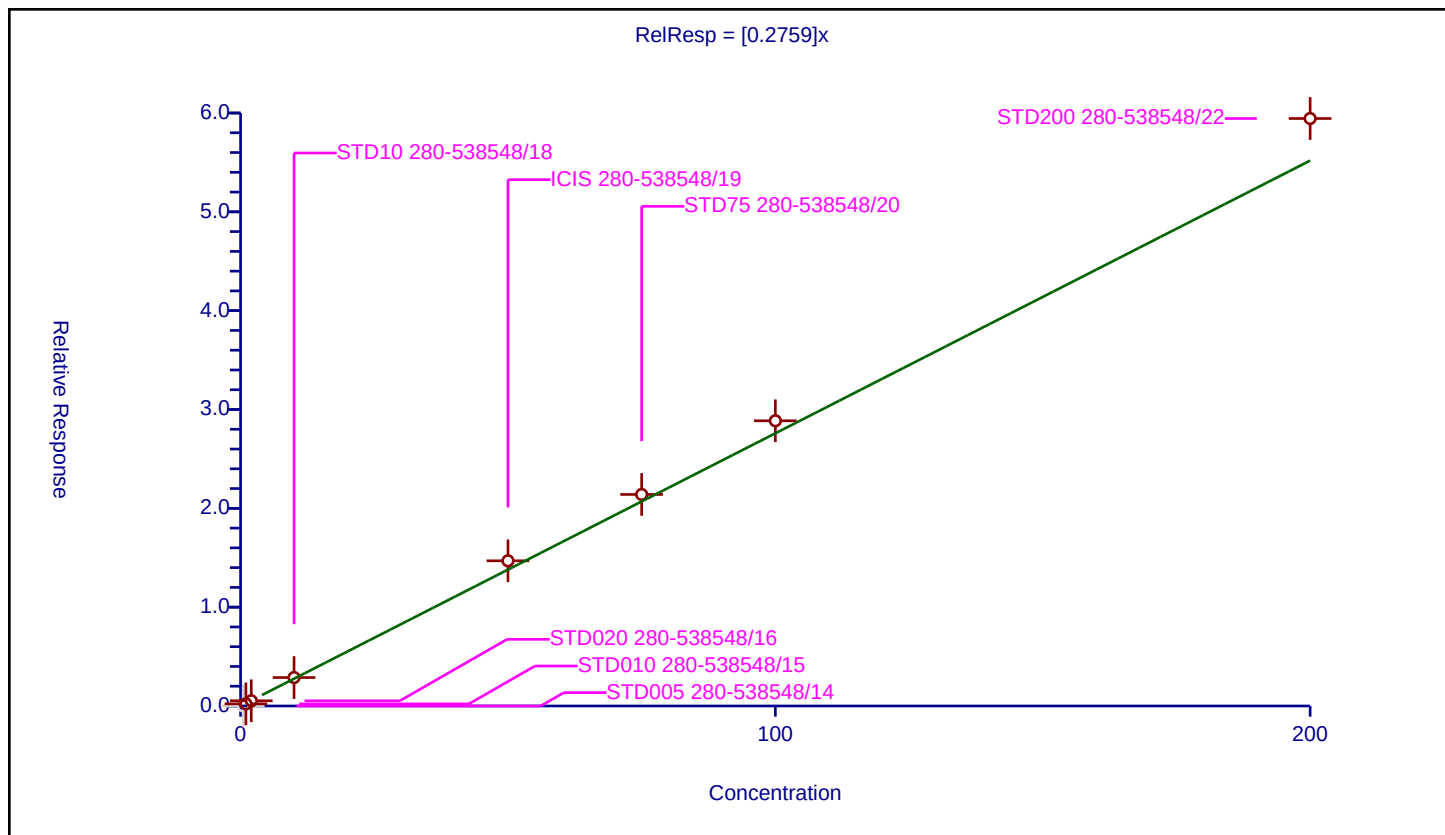
Curve Coefficients

Intercept: 0
 Slope: 0.2759

Error Coefficients

Standard Error: 453000
 Relative Standard Error: 10.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.214515	50.0	745169.0	0.214515	Y
3	STD020 280-538548/16	2.0	0.528496	50.0	729901.0	0.264248	Y
4	STD10 280-538548/18	10.0	2.8769	50.0	746498.0	0.28769	Y
5	ICIS 280-538548/19	50.0	14.690229	50.0	769988.0	0.293805	Y
6	STD75 280-538548/20	75.0	21.404225	50.0	778921.0	0.28539	Y
7	STD100 280-538548/21	100.0	28.858256	50.0	770348.0	0.288583	Y
8	STD200 280-538548/22	200.0	59.443996	50.0	783196.0	0.29722	Y



Calibration

/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

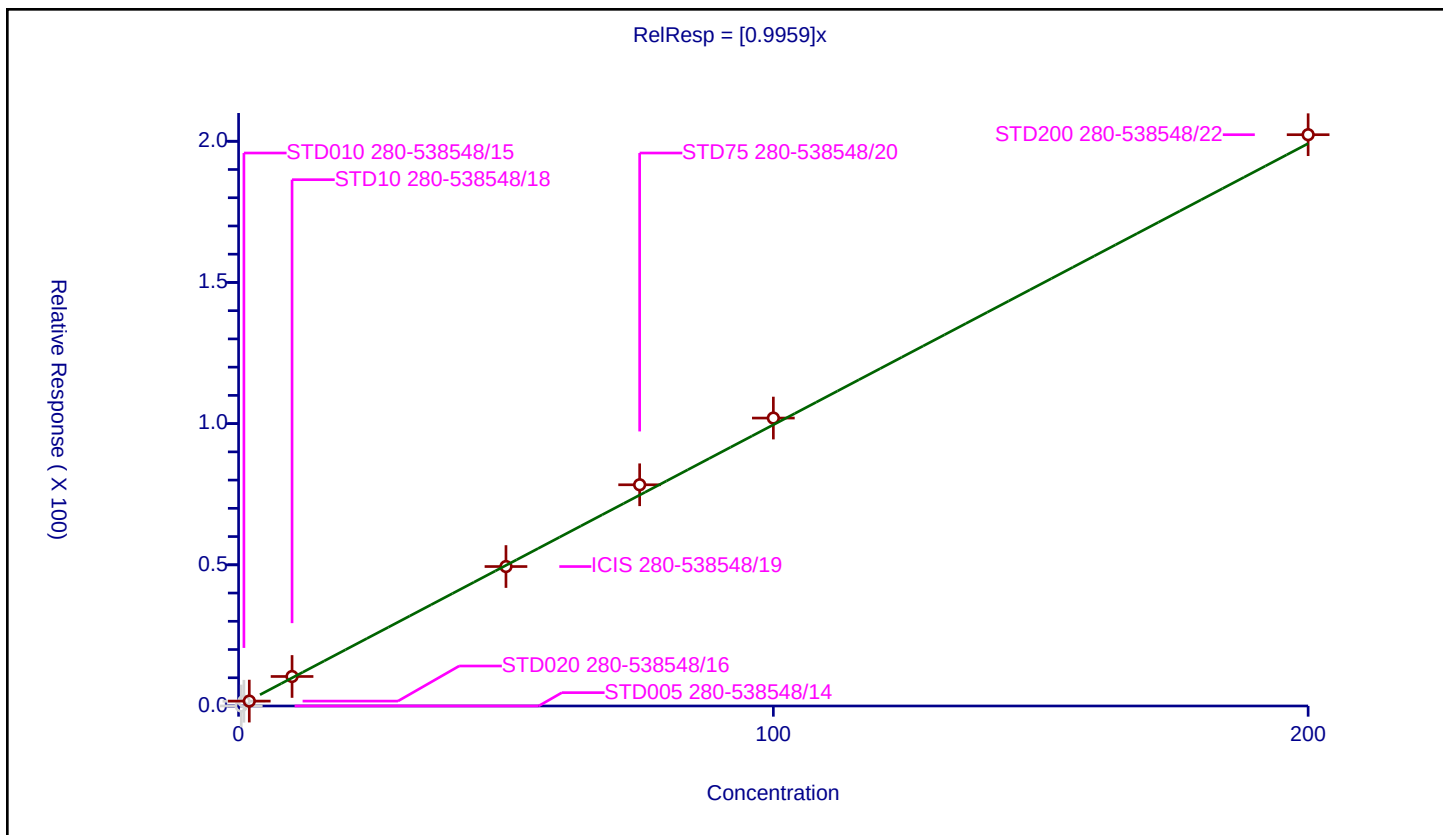
Curve Coefficients

Intercept: 0
 Slope: 0.9959

Error Coefficients

Standard Error: 365000
 Relative Standard Error: 6.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.673722	50.0	156866.0	1.673722	N
3	STD020 280-538548/16	2.0	1.733317	50.0	153463.0	0.866658	Y
4	STD10 280-538548/18	10.0	10.453475	50.0	158818.0	1.045348	Y
5	ICIS 280-538548/19	50.0	49.387475	50.0	161871.0	0.98775	Y
6	STD75 280-538548/20	75.0	78.346751	50.0	162105.0	1.044623	Y
7	STD100 280-538548/21	100.0	101.967053	50.0	161409.0	1.019671	Y
8	STD200 280-538548/22	200.0	202.317941	50.0	169094.0	1.01159	Y



Calibration

/ 1,1,2-Trichloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

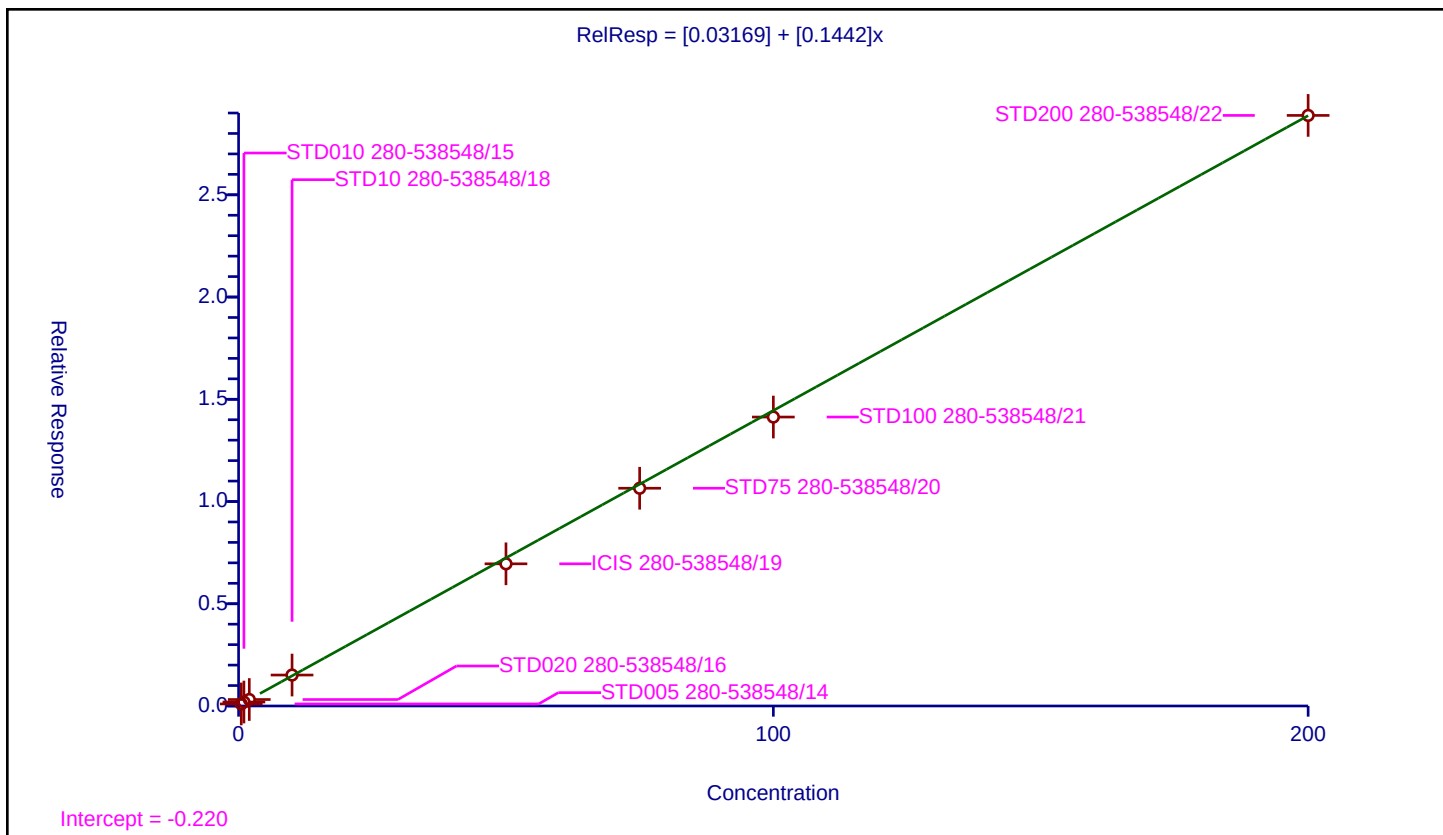
Curve Coefficients

Intercept: 0.03169
 Slope: 0.1442

Error Coefficients

Standard Error: 220000
 Relative Standard Error: 6.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.099415	50.0	741336.0	0.19883	Y
2	STD010 280-538548/15	1.0	0.194184	50.0	745169.0	0.194184	Y
3	STD020 280-538548/16	2.0	0.31607	50.0	729901.0	0.158035	Y
4	STD10 280-538548/18	10.0	1.513802	50.0	746498.0	0.15138	Y
5	ICIS 280-538548/19	50.0	6.953095	50.0	769988.0	0.139062	Y
6	STD75 280-538548/20	75.0	10.649411	50.0	778921.0	0.141992	Y
7	STD100 280-538548/21	100.0	14.130821	50.0	770348.0	0.141308	Y
8	STD200 280-538548/22	200.0	28.882553	50.0	783196.0	0.144413	Y



Calibration

/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

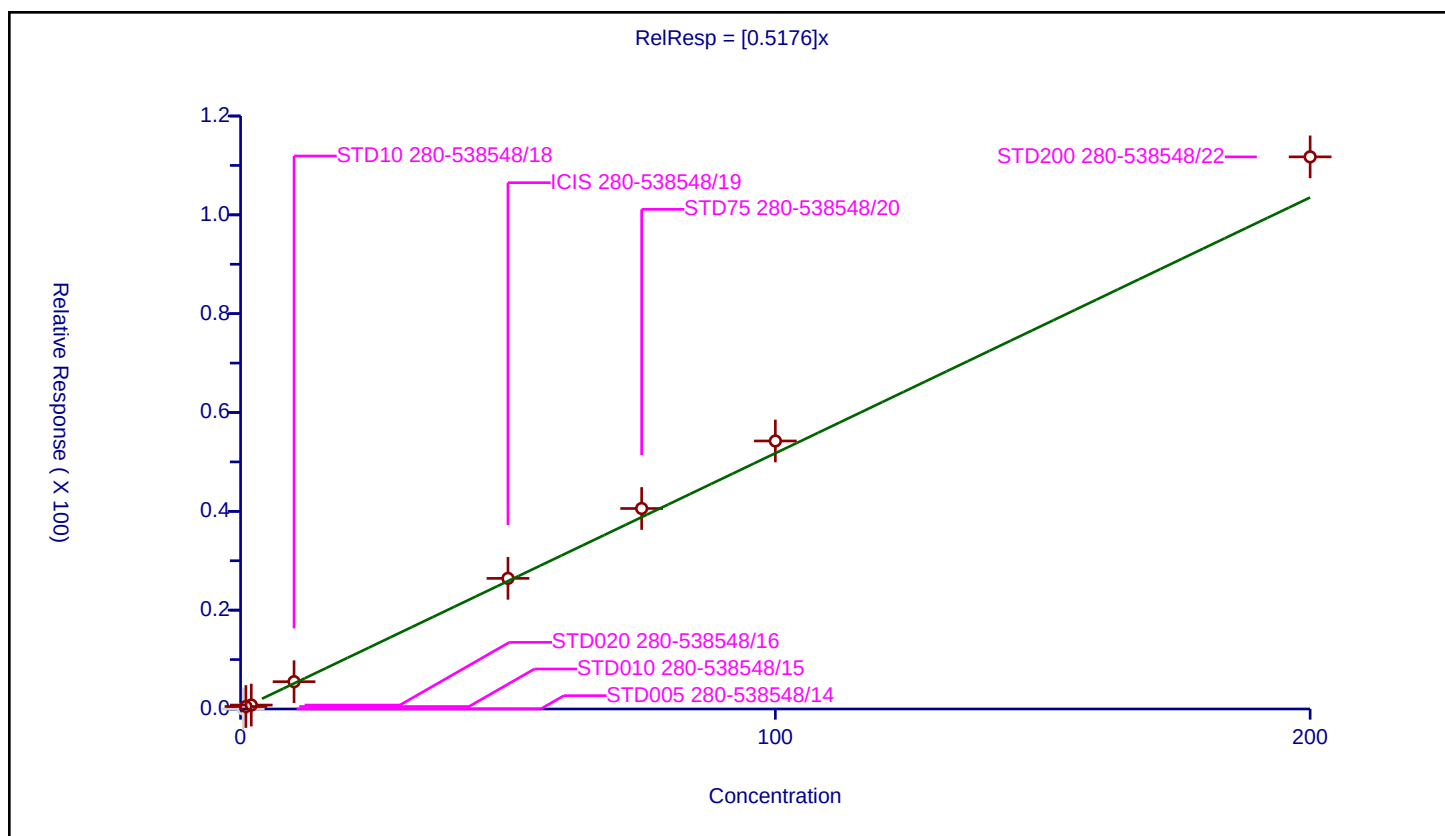
Curve Coefficients

Intercept: 0
 Slope: 0.5176

Error Coefficients

Standard Error: 182000
 Relative Standard Error: 10.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.500746	50.0	156866.0	0.500746	Y
3	STD020 280-538548/16	2.0	0.798238	50.0	153463.0	0.399119	Y
4	STD10 280-538548/18	10.0	5.524878	50.0	158818.0	0.552488	Y
5	ICIS 280-538548/19	50.0	26.435557	50.0	161871.0	0.528711	Y
6	STD75 280-538548/20	75.0	40.57617	50.0	162105.0	0.541016	Y
7	STD100 280-538548/21	100.0	54.237062	50.0	161409.0	0.542371	Y
8	STD200 280-538548/22	200.0	111.733119	50.0	169094.0	0.558666	Y



Calibration

/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

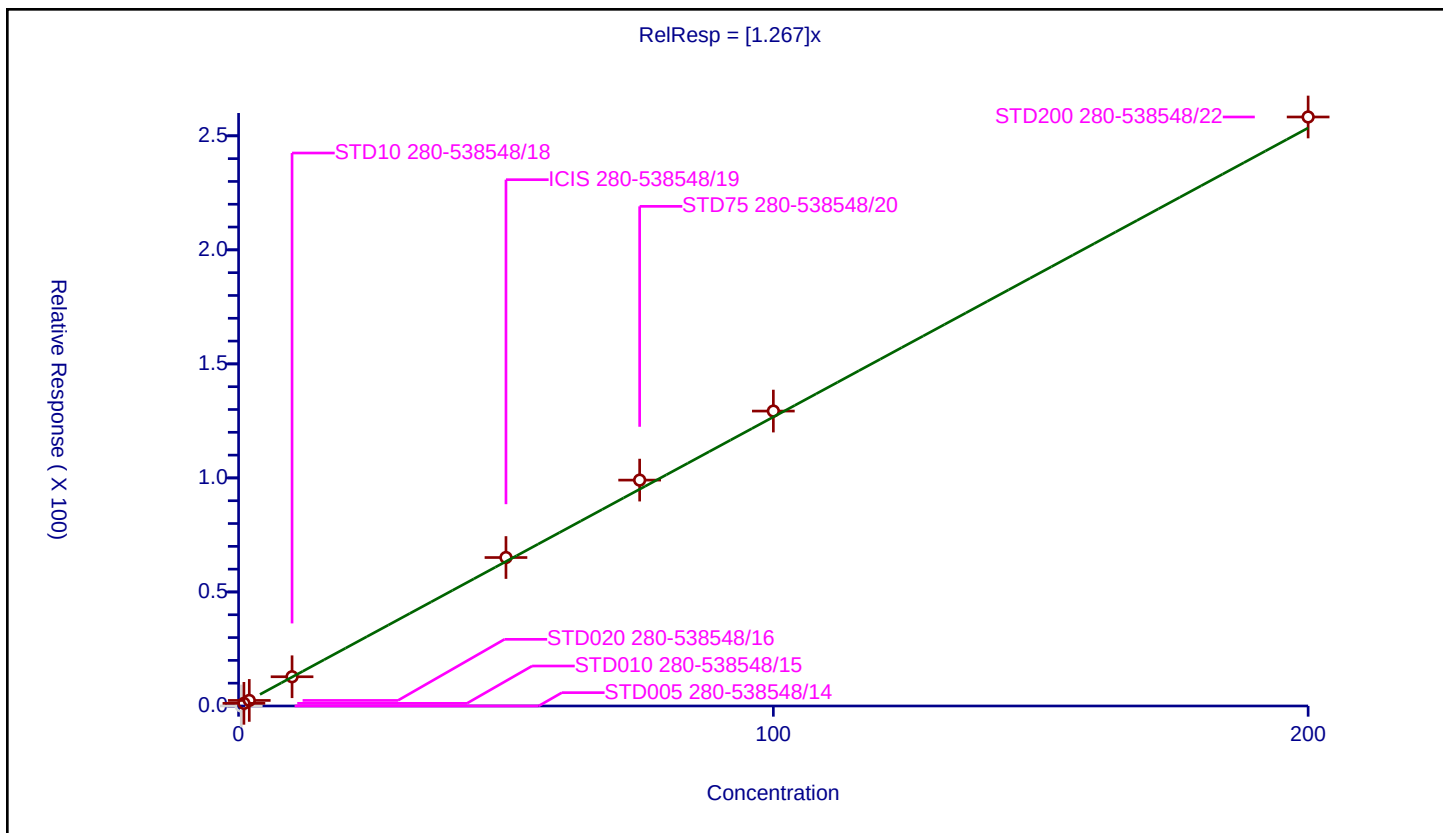
Curve Coefficients

Intercept: 0
 Slope: 1.267

Error Coefficients

Standard Error: 425000
 Relative Standard Error: 4.4
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.164051	50.0	156866.0	1.164051	Y
3	STD020 280-538548/16	2.0	2.434789	50.0	153463.0	1.217394	Y
4	STD10 280-538548/18	10.0	12.823798	50.0	158818.0	1.28238	Y
5	ICIS 280-538548/19	50.0	65.094118	50.0	161871.0	1.301882	Y
6	STD75 280-538548/20	75.0	99.045989	50.0	162105.0	1.320613	Y
7	STD100 280-538548/21	100.0	129.308155	50.0	161409.0	1.293082	Y
8	STD200 280-538548/22	200.0	258.255172	50.0	169094.0	1.291276	Y



Calibration

/ 2-Hexanone

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

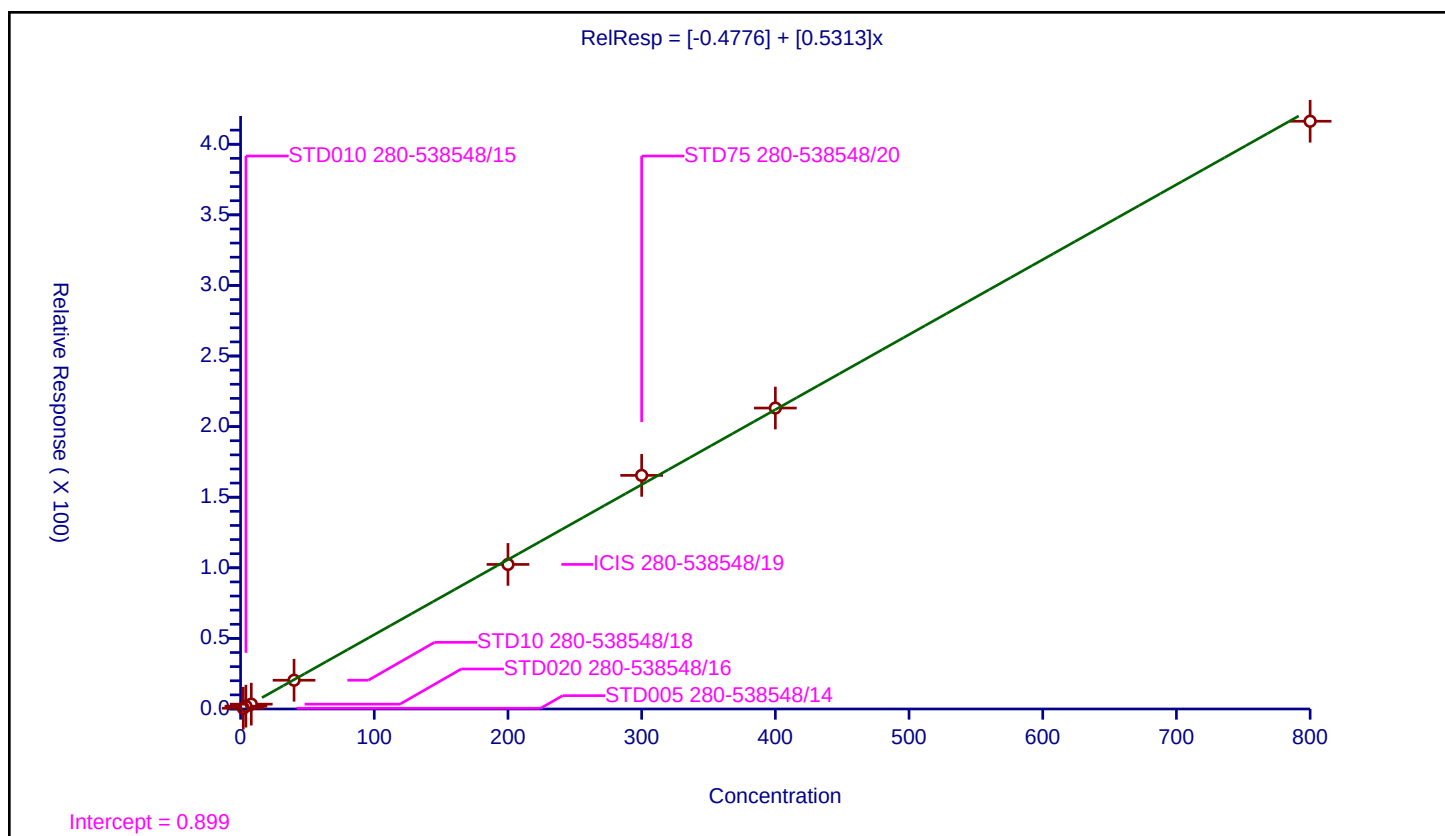
Curve Coefficients

Intercept: -0.4776
 Slope: 0.5313

Error Coefficients

Standard Error: 690000
 Relative Standard Error: 8.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.519767	50.0	154877.0	0.259884	Y
2	STD010 280-538548/15	4.0	1.99629	50.0	156866.0	0.499072	Y
3	STD020 280-538548/16	8.0	3.436659	50.0	153463.0	0.429582	Y
4	STD10 280-538548/18	40.0	20.366394	50.0	158818.0	0.50916	Y
5	ICIS 280-538548/19	200.0	102.397279	50.0	161871.0	0.511986	Y
6	STD75 280-538548/20	300.0	165.463743	50.0	162105.0	0.551546	Y
7	STD100 280-538548/21	400.0	213.166552	50.0	161409.0	0.532916	Y
8	STD200 280-538548/22	800.0	416.306019	50.0	169094.0	0.520383	Y



Calibration

/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

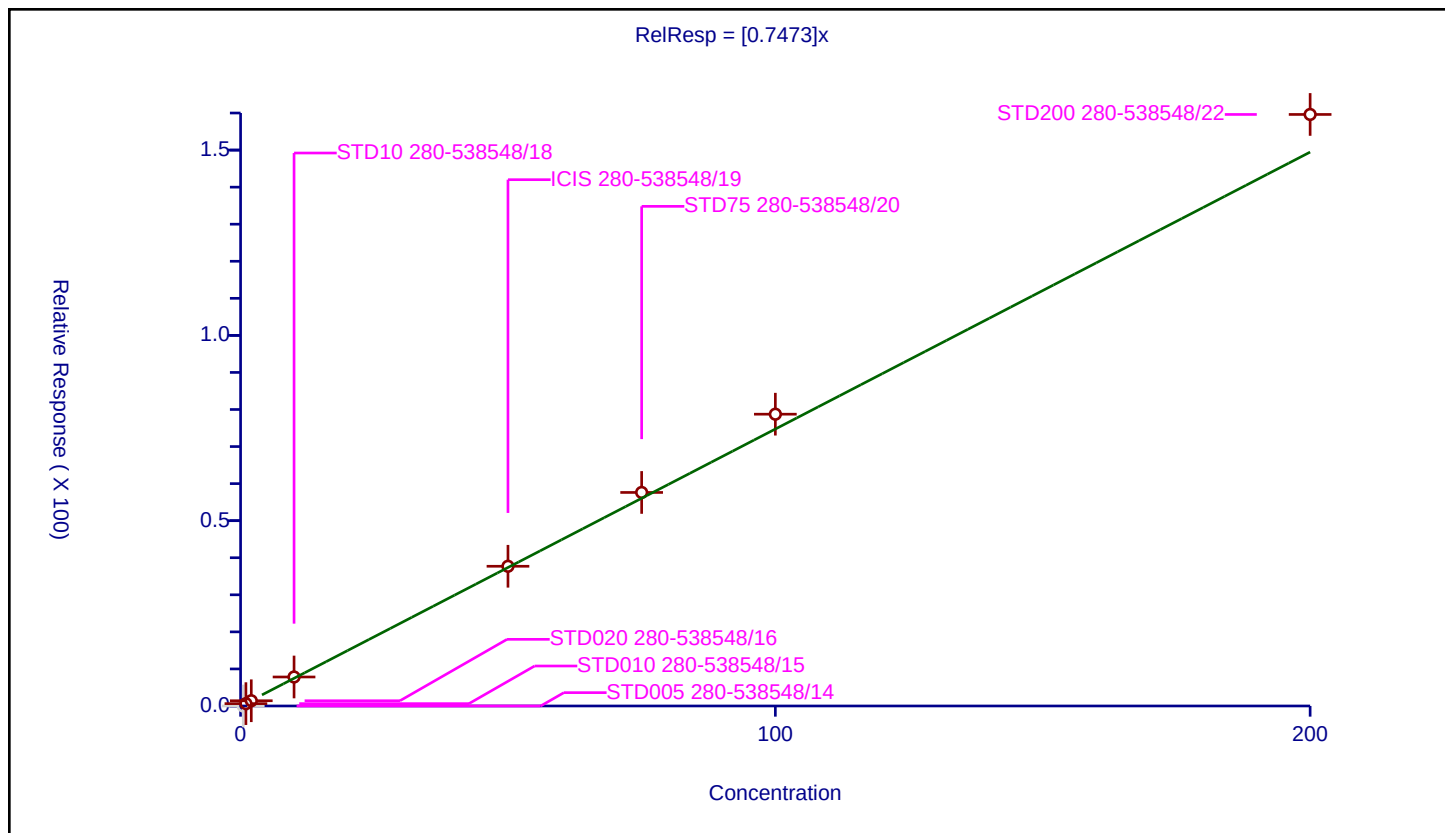
Curve Coefficients

Intercept: 0
 Slope: 0.7473

Error Coefficients

Standard Error: 260000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.634937	50.0	156866.0	0.634937	Y
3	STD020 280-538548/16	2.0	1.412067	50.0	153463.0	0.706033	Y
4	STD10 280-538548/18	10.0	7.823735	50.0	158818.0	0.782374	Y
5	ICIS 280-538548/19	50.0	37.69792	50.0	161871.0	0.753958	Y
6	STD75 280-538548/20	75.0	57.61821	50.0	162105.0	0.768243	Y
7	STD100 280-538548/21	100.0	78.734457	50.0	161409.0	0.787345	Y
8	STD200 280-538548/22	200.0	159.611814	50.0	169094.0	0.798059	Y



Calibration

/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

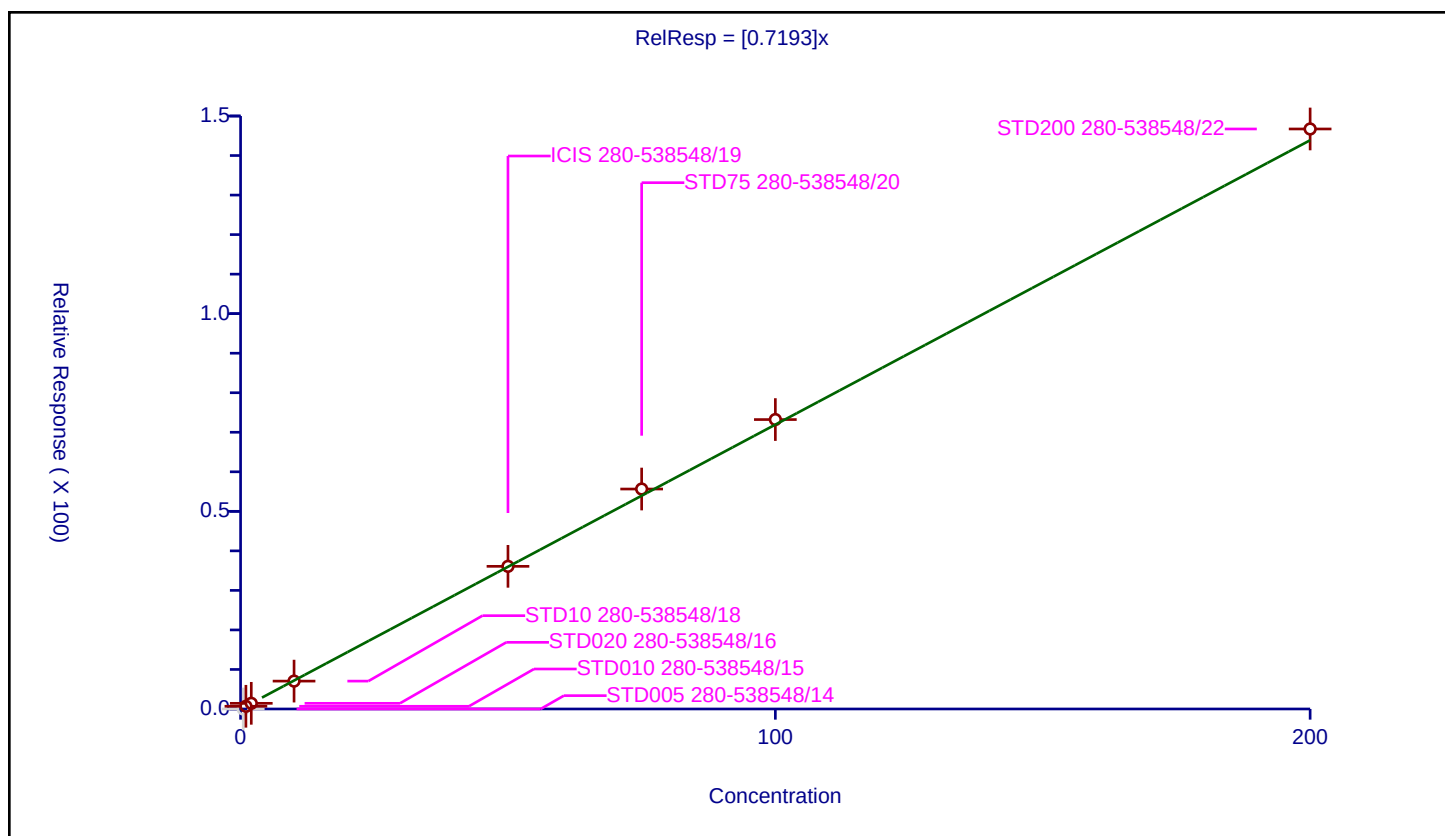
Curve Coefficients

Intercept: 0
 Slope: 0.7193

Error Coefficients

Standard Error: 241000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.684023	50.0	156866.0	0.684023	Y
3	STD020 280-538548/16	2.0	1.433244	50.0	153463.0	0.716622	Y
4	STD10 280-538548/18	10.0	7.053042	50.0	158818.0	0.705304	Y
5	ICIS 280-538548/19	50.0	36.088923	50.0	161871.0	0.721778	Y
6	STD75 280-538548/20	75.0	55.643256	50.0	162105.0	0.74191	Y
7	STD100 280-538548/21	100.0	73.215558	50.0	161409.0	0.732156	Y
8	STD200 280-538548/22	200.0	146.718985	50.0	169094.0	0.733595	Y



Calibration

/ 1-Chlorohexane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

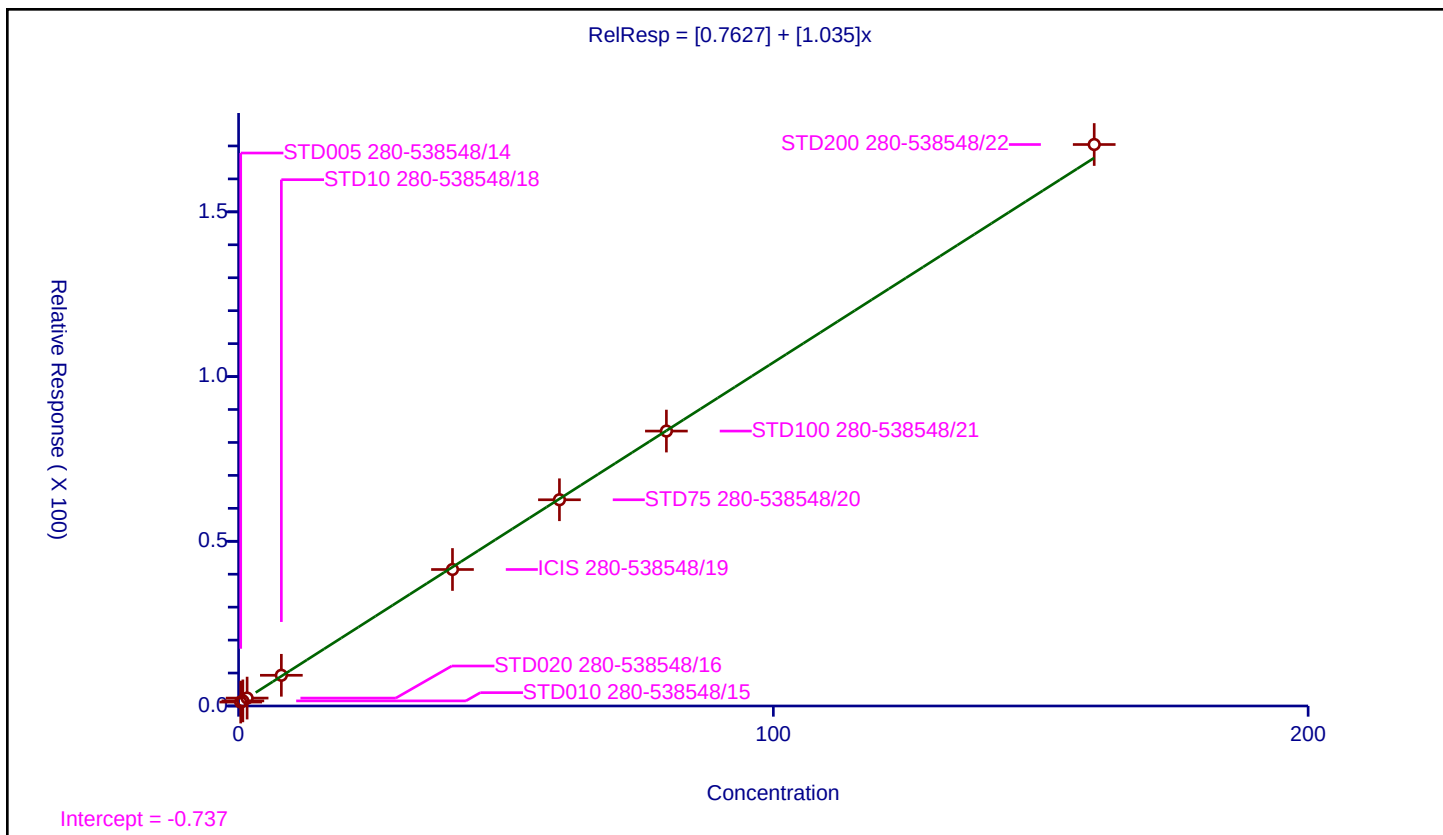
Curve Coefficients

Intercept: 0.7627
 Slope: 1.035

Error Coefficients

Standard Error: 278000
 Relative Standard Error: 3.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.4	1.18804	50.0	154877.0	2.970099	Y
2	STD010 280-538548/15	0.8	1.546543	50.0	156866.0	1.933179	Y
3	STD020 280-538548/16	1.6	2.403837	50.0	153463.0	1.502398	Y
4	STD10 280-538548/18	8.0	9.32388	50.0	158818.0	1.165485	Y
5	ICIS 280-538548/19	40.0	41.432684	50.0	161871.0	1.035817	Y
6	STD75 280-538548/20	60.0	62.603868	50.0	162105.0	1.043398	Y
7	STD100 280-538548/21	80.0	83.456623	50.0	161409.0	1.043208	Y
8	STD200 280-538548/22	160.0	170.443954	50.0	169094.0	1.065275	Y



Calibration

/ Chlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

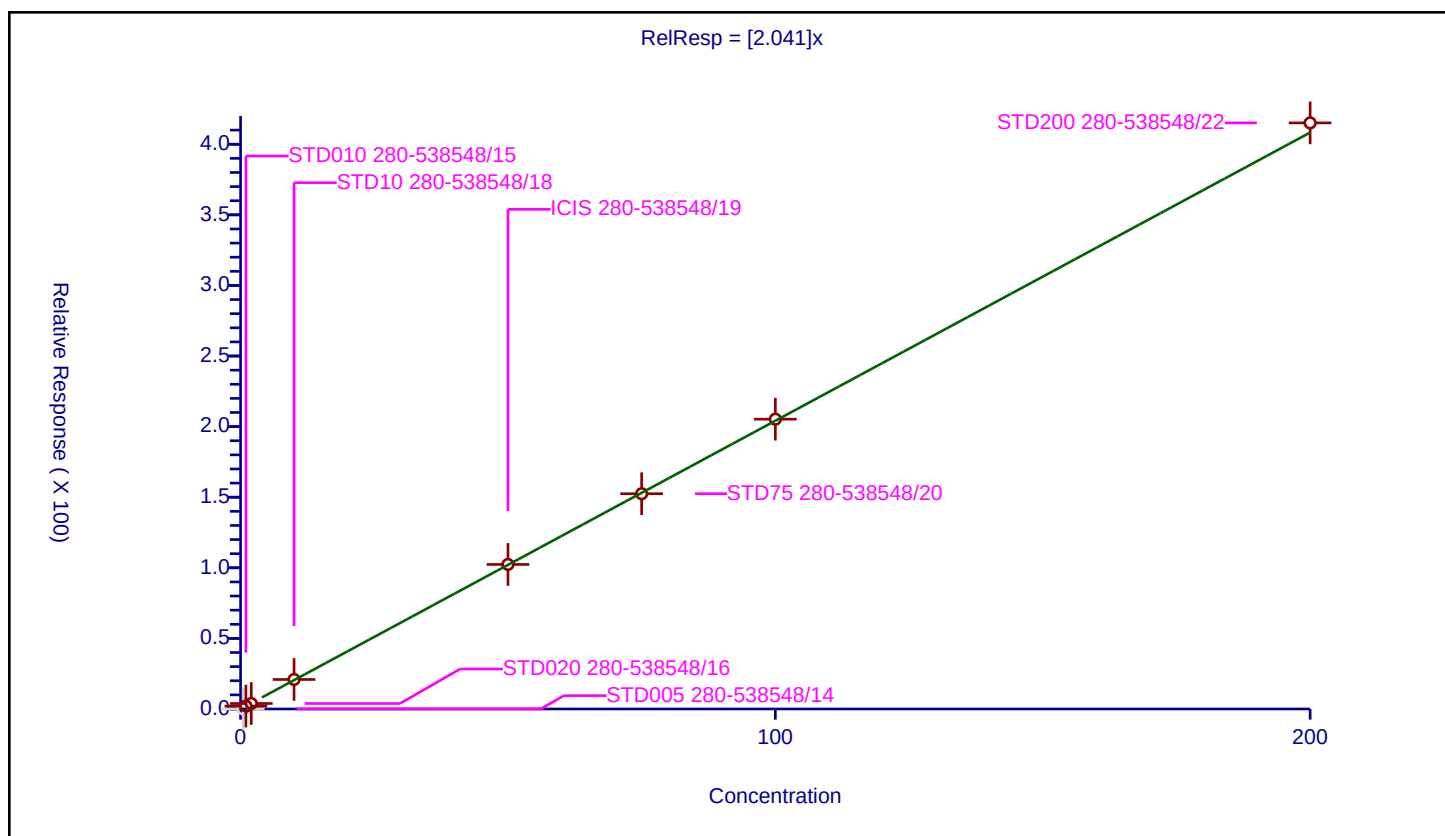
Curve Coefficients

Intercept: 0
Slope: 2.041

Error Coefficients

Standard Error: 679000
Relative Standard Error: 2.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	2.046333	50.0	156866.0	2.046333	Y
3	STD020 280-538548/16	2.0	3.889863	50.0	153463.0	1.944931	Y
4	STD10 280-538548/18	10.0	20.89845	50.0	158818.0	2.089845	Y
5	ICIS 280-538548/19	50.0	102.389557	50.0	161871.0	2.047791	Y
6	STD75 280-538548/20	75.0	152.473705	50.0	162105.0	2.032983	Y
7	STD100 280-538548/21	100.0	205.28688	50.0	161409.0	2.052869	Y
8	STD200 280-538548/22	200.0	415.133594	50.0	169094.0	2.075668	Y



Calibration

/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

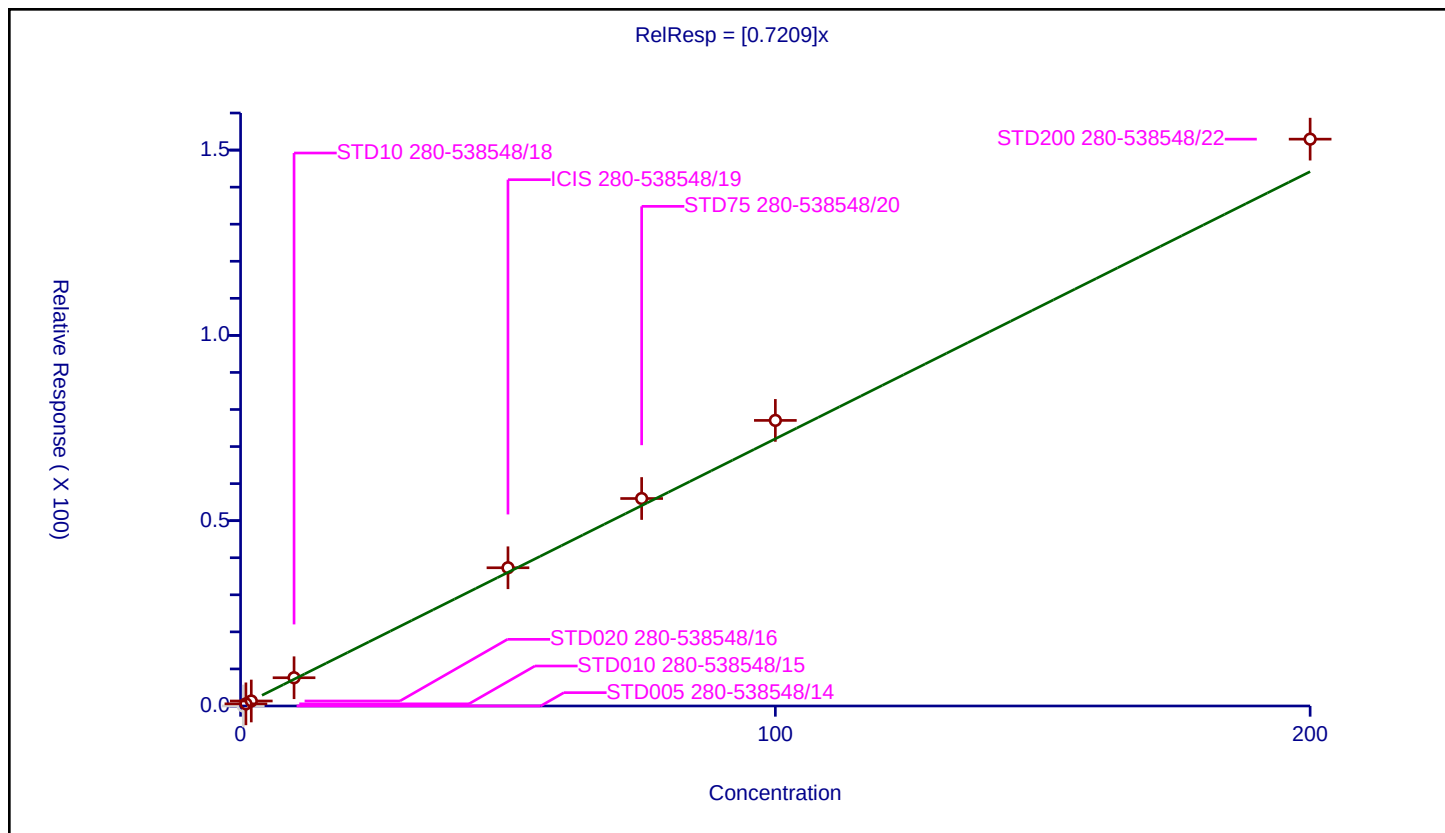
Curve Coefficients

Intercept: 0
 Slope: 0.7209

Error Coefficients

Standard Error: 251000
 Relative Standard Error: 9.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.582025	50.0	156866.0	0.582025	Y
3	STD020 280-538548/16	2.0	1.348859	50.0	153463.0	0.67443	Y
4	STD10 280-538548/18	10.0	7.622562	50.0	158818.0	0.762256	Y
5	ICIS 280-538548/19	50.0	37.299763	50.0	161871.0	0.745995	Y
6	STD75 280-538548/20	75.0	55.981925	50.0	162105.0	0.746426	Y
7	STD100 280-538548/21	100.0	77.061688	50.0	161409.0	0.770617	Y
8	STD200 280-538548/22	200.0	152.950134	50.0	169094.0	0.764751	Y



Calibration

/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

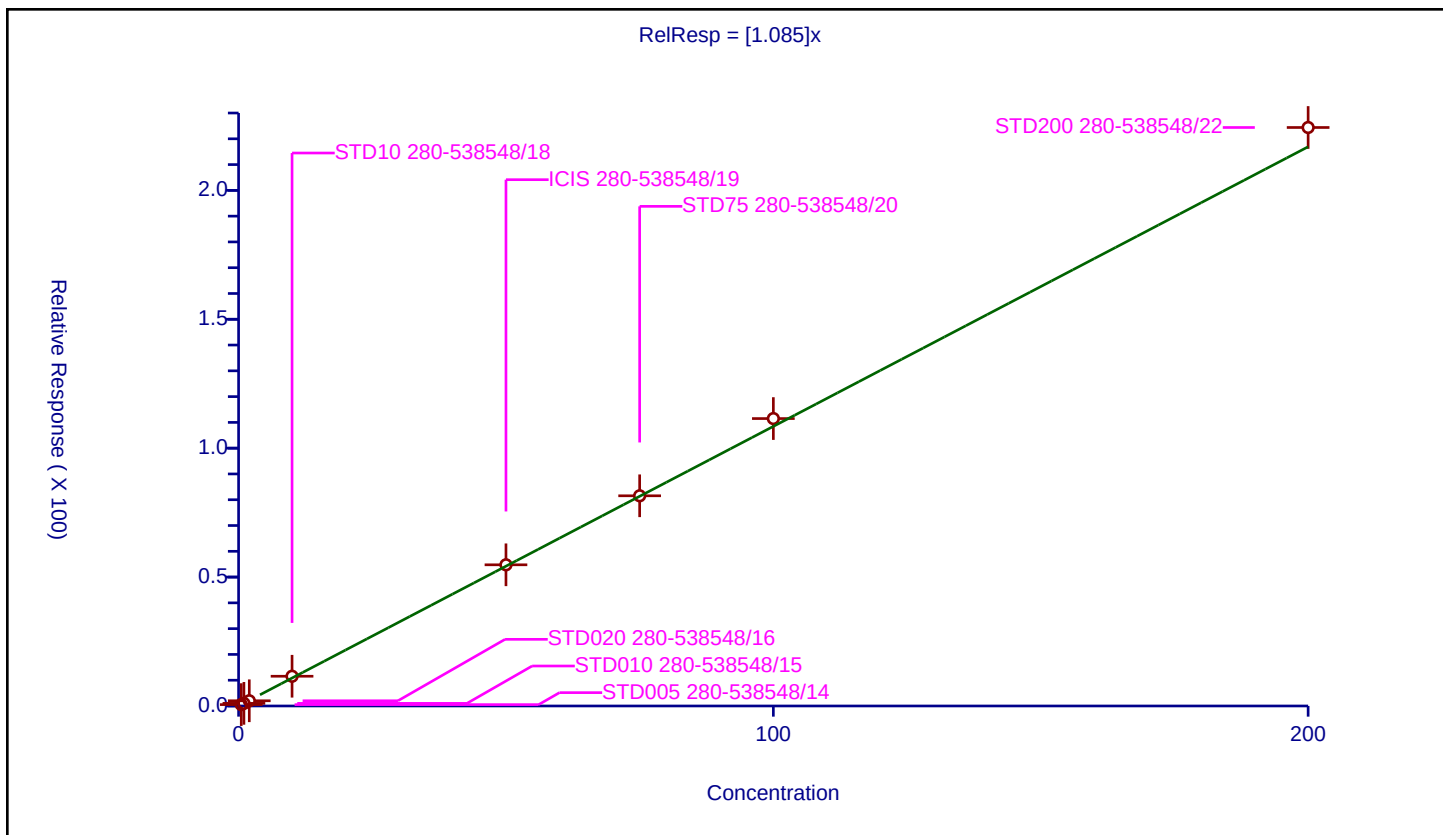
Curve Coefficients

Intercept: 0
 Slope: 1.085

Error Coefficients

Standard Error: 340000
 Relative Standard Error: 4.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.536555	50.0	154877.0	1.07311	Y
2	STD010 280-538548/15	1.0	1.019023	50.0	156866.0	1.019023	Y
3	STD020 280-538548/16	2.0	2.023289	50.0	153463.0	1.011645	Y
4	STD10 280-538548/18	10.0	11.533327	50.0	158818.0	1.153333	Y
5	ICIS 280-538548/19	50.0	54.75811	50.0	161871.0	1.095162	Y
6	STD75 280-538548/20	75.0	81.52833	50.0	162105.0	1.087044	Y
7	STD100 280-538548/21	100.0	111.481392	50.0	161409.0	1.114814	Y
8	STD200 280-538548/22	200.0	224.382888	50.0	169094.0	1.121914	Y



Calibration

/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

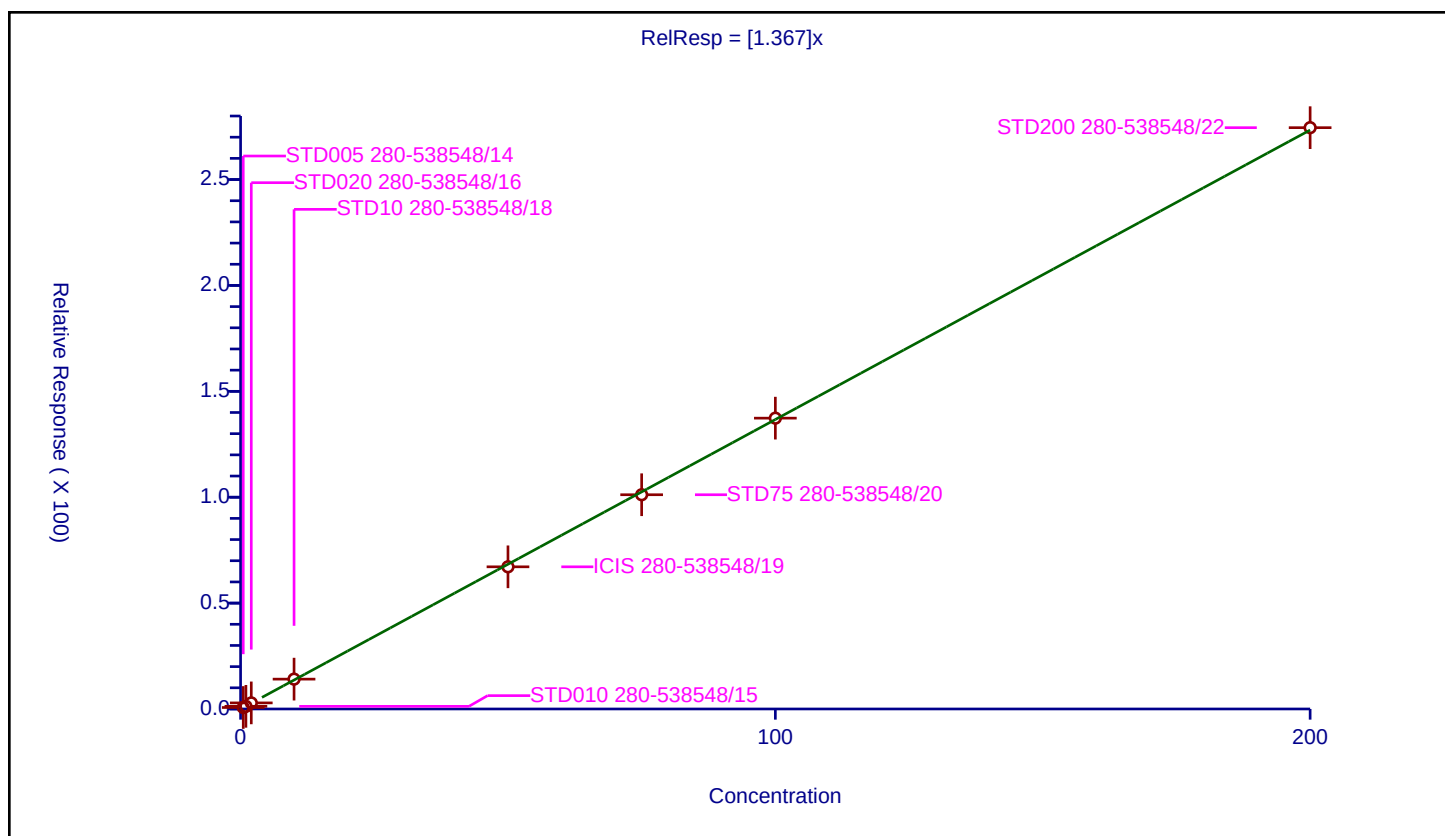
Curve Coefficients

Intercept: 0
 Slope: 1.367

Error Coefficients

Standard Error: 417000
 Relative Standard Error: 4.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.697328	50.0	154877.0	1.394655	Y
2	STD010 280-538548/15	1.0	1.25553	50.0	156866.0	1.25553	Y
3	STD020 280-538548/16	2.0	2.875286	50.0	153463.0	1.437643	Y
4	STD10 280-538548/18	10.0	14.099158	50.0	158818.0	1.409916	Y
5	ICIS 280-538548/19	50.0	67.131543	50.0	161871.0	1.342631	Y
6	STD75 280-538548/20	75.0	101.168379	50.0	162105.0	1.348912	Y
7	STD100 280-538548/21	100.0	137.329703	50.0	161409.0	1.373297	Y
8	STD200 280-538548/22	200.0	274.495843	50.0	169094.0	1.372479	Y



Calibration

/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

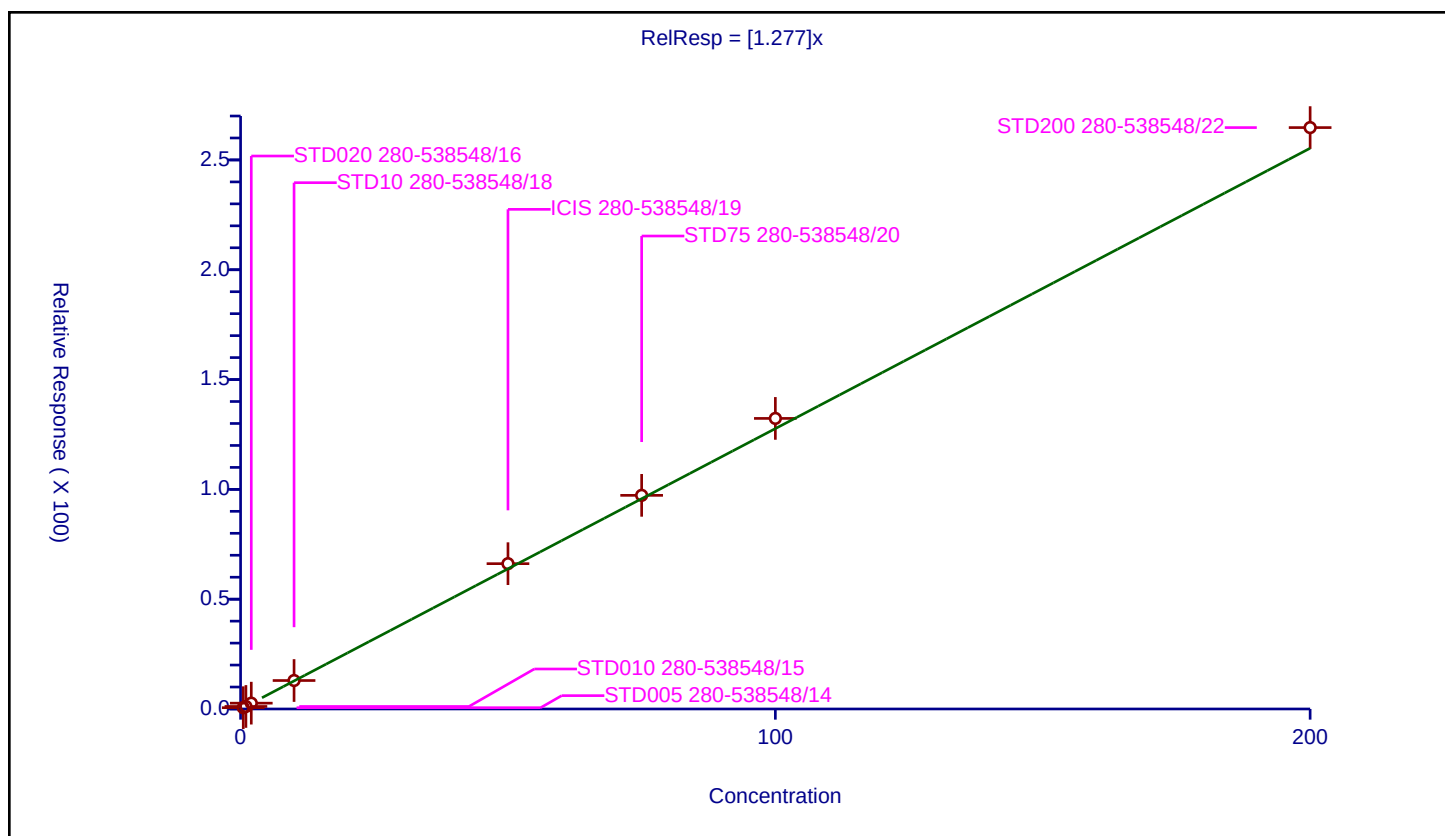
Curve Coefficients

Intercept: 0
 Slope: 1.277

Error Coefficients

Standard Error: 402000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.585626	50.0	154877.0	1.171252	Y
2	STD010 280-538548/15	1.0	1.153214	50.0	156866.0	1.153214	Y
3	STD020 280-538548/16	2.0	2.650802	50.0	153463.0	1.325401	Y
4	STD10 280-538548/18	10.0	12.962951	50.0	158818.0	1.296295	Y
5	ICIS 280-538548/19	50.0	66.163488	50.0	161871.0	1.32327	Y
6	STD75 280-538548/20	75.0	97.280466	50.0	162105.0	1.297073	Y
7	STD100 280-538548/21	100.0	132.303341	50.0	161409.0	1.323033	Y
8	STD200 280-538548/22	200.0	264.730268	50.0	169094.0	1.323651	Y



Calibration

/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

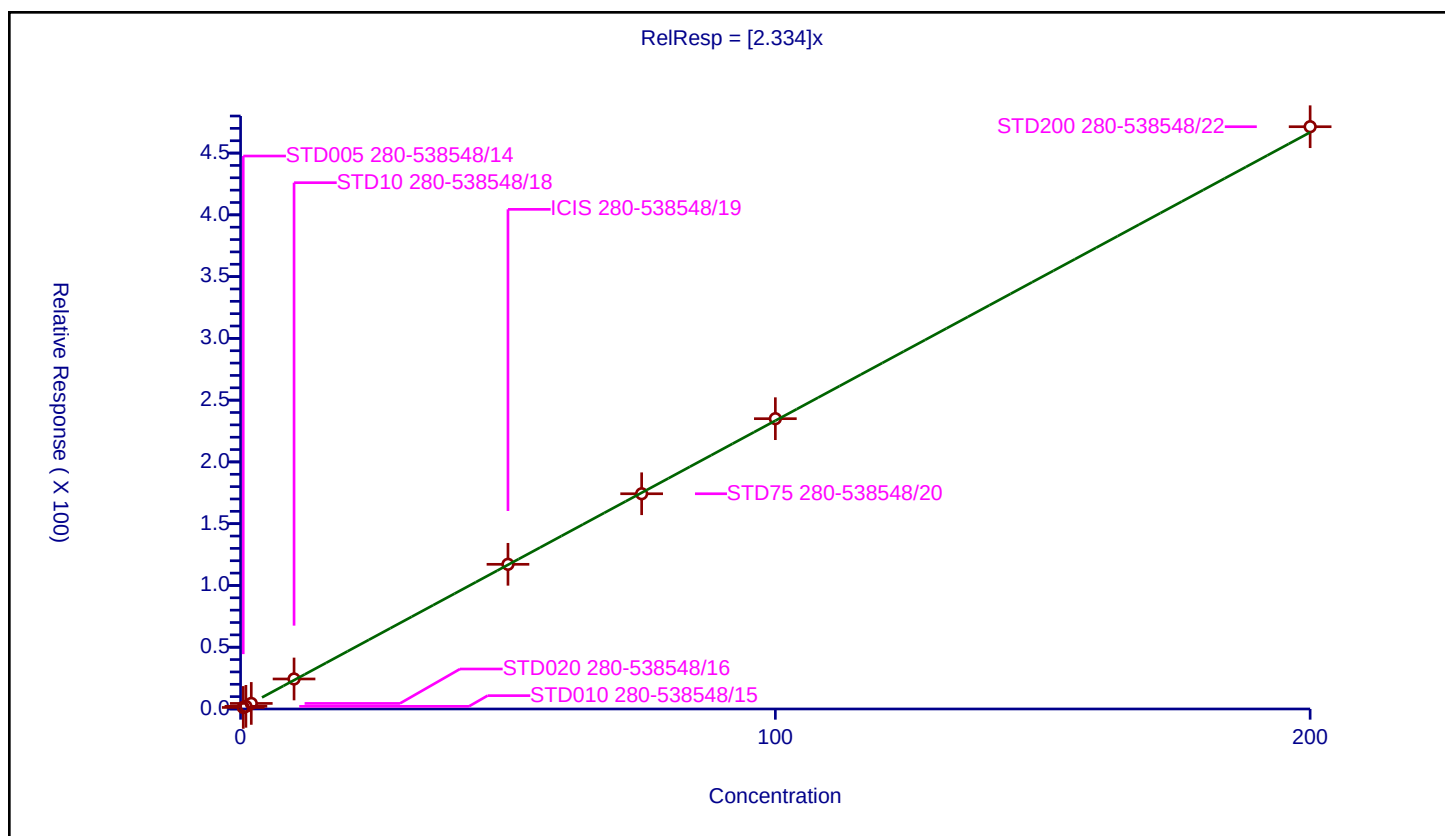
Curve Coefficients

Intercept: 0
 Slope: 2.334

Error Coefficients

Standard Error: 715000
 Relative Standard Error: 4.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.240662	50.0	154877.0	2.481324	Y
2	STD010 280-538548/15	1.0	2.137174	50.0	156866.0	2.137174	Y
3	STD020 280-538548/16	2.0	4.502062	50.0	153463.0	2.251031	Y
4	STD10 280-538548/18	10.0	24.298568	50.0	158818.0	2.429857	Y
5	ICIS 280-538548/19	50.0	117.123203	50.0	161871.0	2.342464	Y
6	STD75 280-538548/20	75.0	174.222572	50.0	162105.0	2.322968	Y
7	STD100 280-538548/21	100.0	234.992473	50.0	161409.0	2.349925	Y
8	STD200 280-538548/22	200.0	471.334287	50.0	169094.0	2.356671	Y



Calibration

/ Bromoform

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

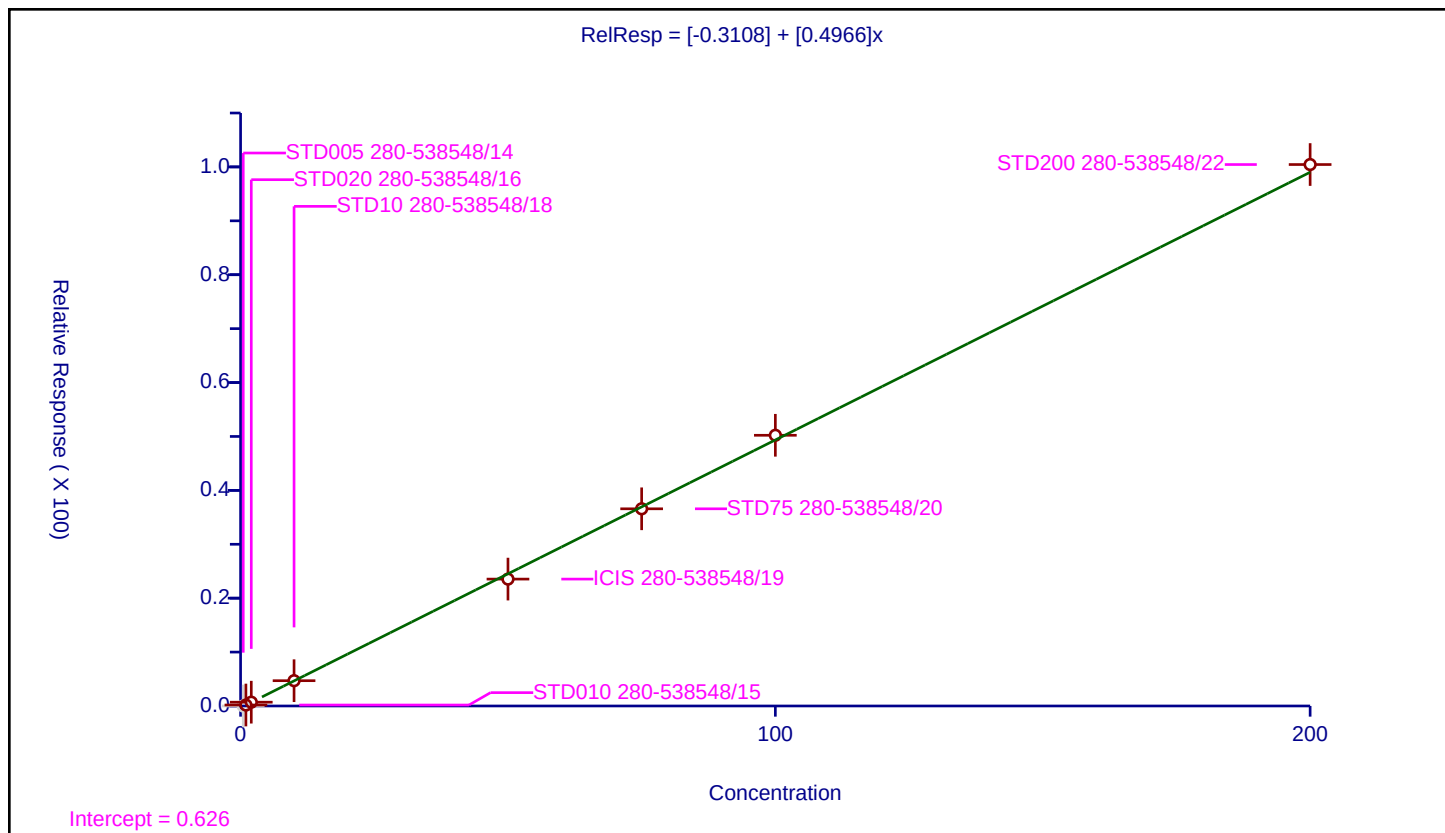
Curve Coefficients

Intercept: -0.3108
 Slope: 0.4966

Error Coefficients

Standard Error: 180000
 Relative Standard Error: 2.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.180727	50.0	156866.0	0.180727	Y
3	STD020 280-538548/16	2.0	0.702775	50.0	153463.0	0.351388	Y
4	STD10 280-538548/18	10.0	4.690274	50.0	158818.0	0.469027	Y
5	ICIS 280-538548/19	50.0	23.540041	50.0	161871.0	0.470801	Y
6	STD75 280-538548/20	75.0	36.578452	50.0	162105.0	0.487713	Y
7	STD100 280-538548/21	100.0	50.219319	50.0	161409.0	0.502193	Y
8	STD200 280-538548/22	200.0	100.440879	50.0	169094.0	0.502204	Y



Calibration

/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

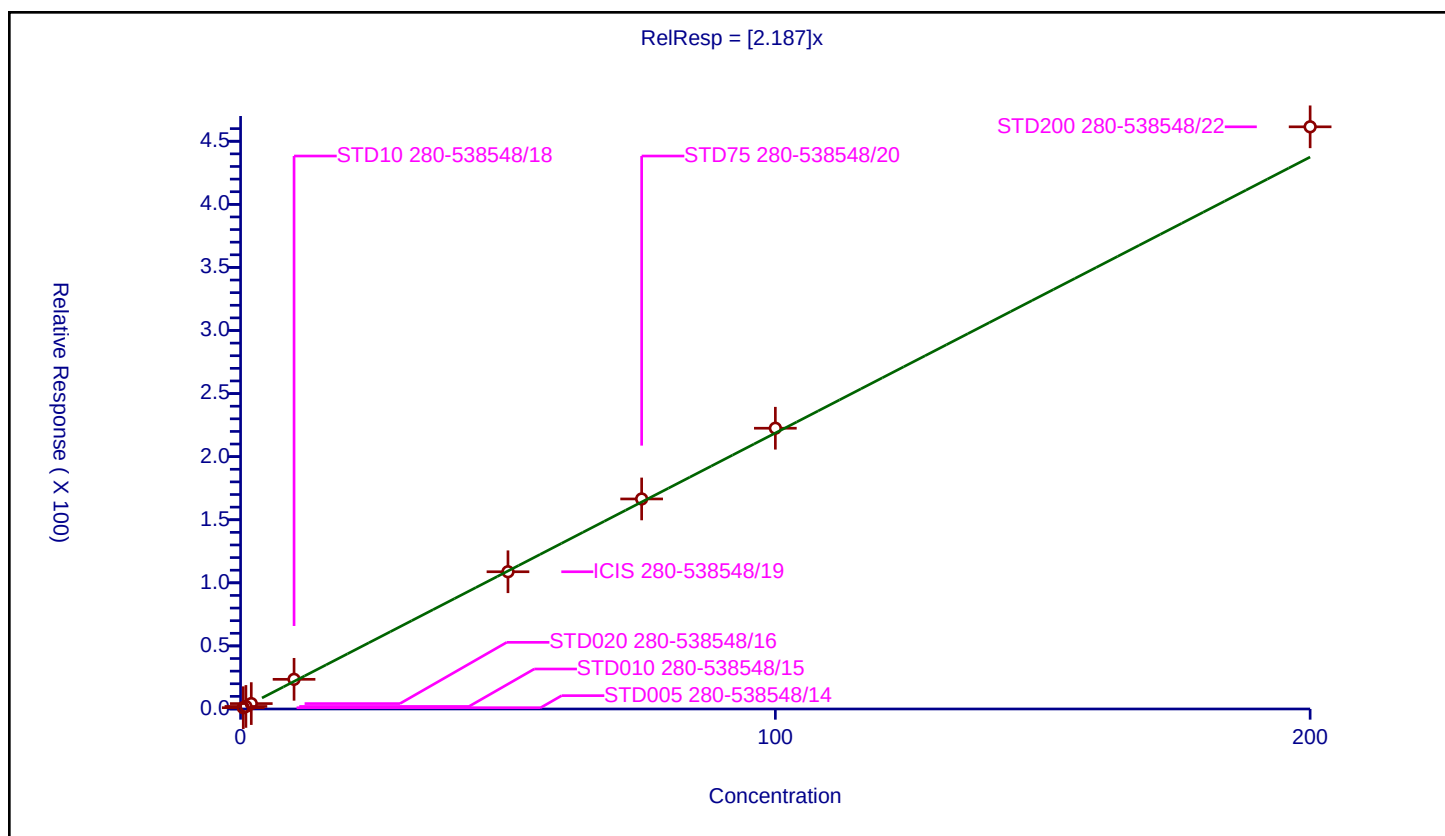
Curve Coefficients

Intercept: 0
 Slope: 2.187

Error Coefficients

Standard Error: 1080000
 Relative Standard Error: 5.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.029932	50.0	245453.0	2.059865	Y
2	STD010 280-538548/15	1.0	2.018125	50.0	250257.0	2.018125	Y
3	STD020 280-538548/16	2.0	4.281395	50.0	242456.0	2.140698	Y
4	STD10 280-538548/18	10.0	23.518999	50.0	249122.0	2.3519	Y
5	ICIS 280-538548/19	50.0	108.786124	50.0	257514.0	2.175722	Y
6	STD75 280-538548/20	75.0	166.490033	50.0	257689.0	2.219867	Y
7	STD100 280-538548/21	100.0	222.533741	50.0	257627.0	2.225337	Y
8	STD200 280-538548/22	200.0	461.449776	50.0	259778.0	2.307249	Y



Calibration

/ Cyclohexanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

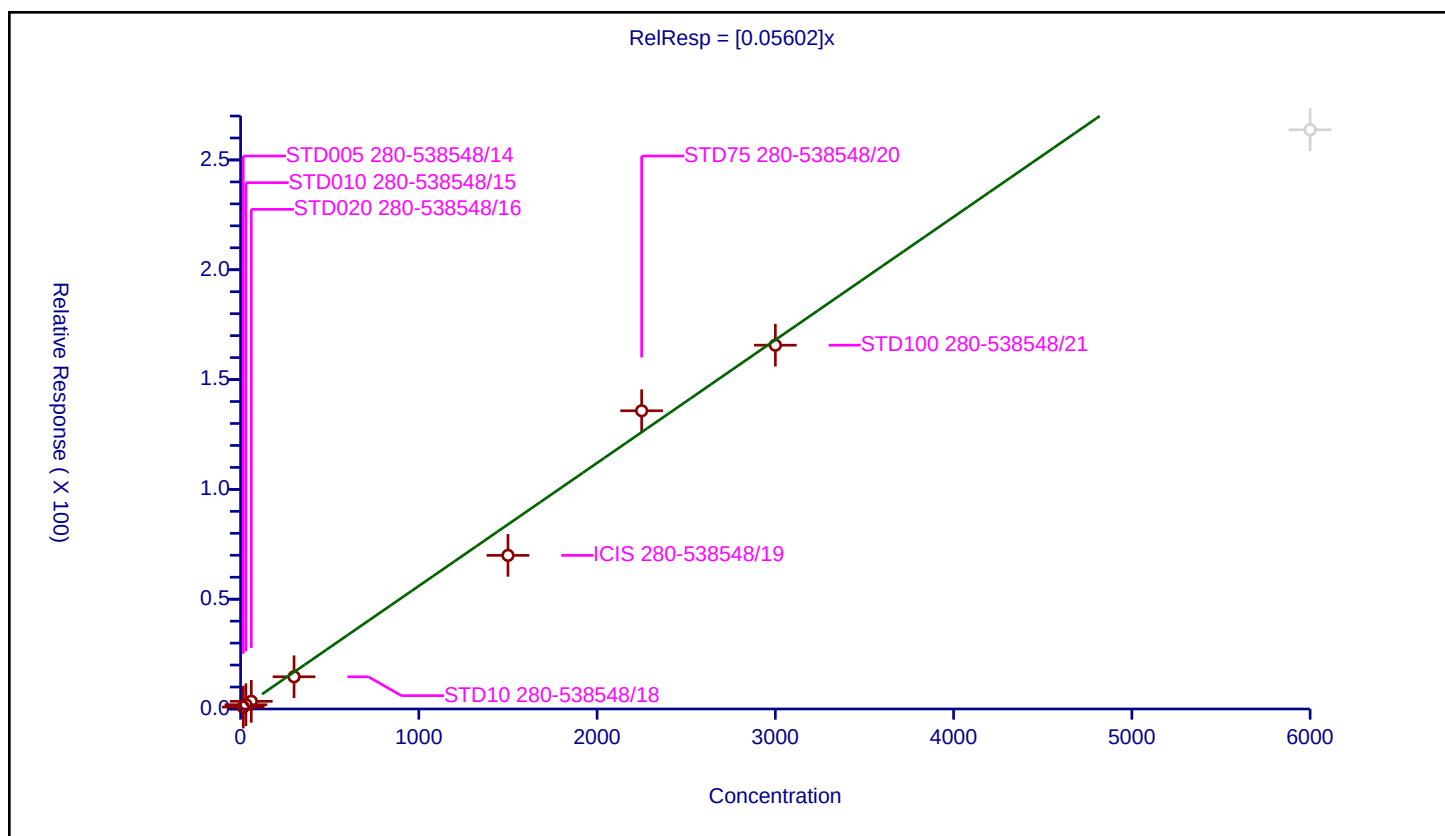
Curve Coefficients

Intercept: 0
Slope: 0.05602

Error Coefficients

Standard Error: 298000
Relative Standard Error: 11.4
Correlation Coefficient: 0.990
Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	15.0	0.870368	50.0	154877.0	0.058025	Y
2	STD010 280-538548/15	30.0	1.944016	50.0	156866.0	0.064801	Y
3	STD020 280-538548/16	60.0	3.491395	50.0	153463.0	0.05819	Y
4	STD10 280-538548/18	300.0	14.671826	50.0	158818.0	0.048906	Y
5	ICIS 280-538548/19	1500.0	69.944894	50.0	161871.0	0.04663	Y
6	STD75 280-538548/20	2250.0	135.786373	50.0	162105.0	0.060349	Y
7	STD100 280-538548/21	3000.0	165.653712	50.0	161409.0	0.055218	Y
8	STD200 280-538548/22	6000.0	263.725797	50.0	169094.0	0.043954	N



Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

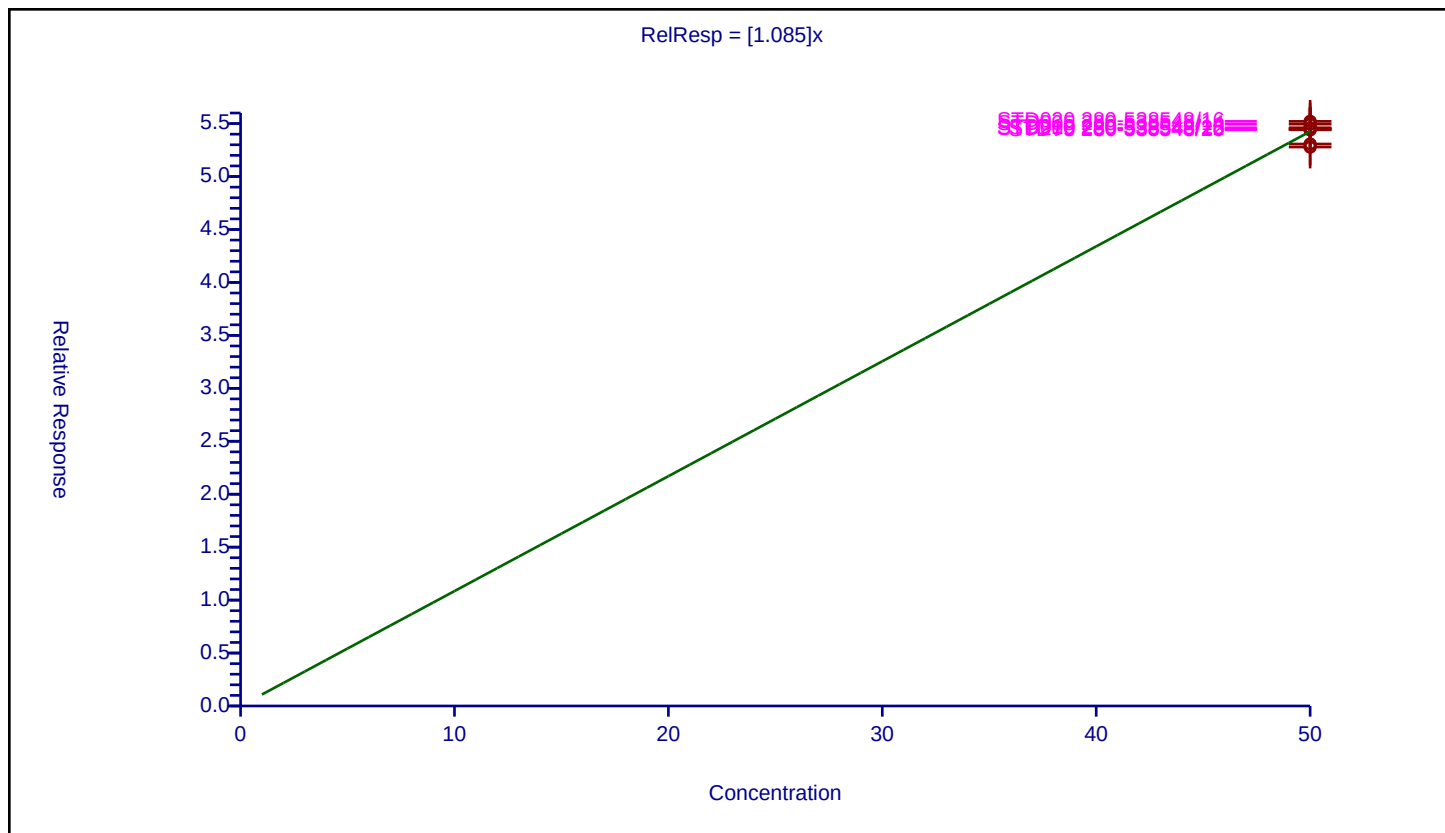
Curve Coefficients

Intercept: 0
 Slope: 1.085

Error Coefficients

Standard Error: 293000
 Relative Standard Error: 1.6
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	54.950031	50.0	245453.0	1.099001	Y
2	STD010 280-538548/15	50.0	54.539134	50.0	250257.0	1.090783	Y
3	STD020 280-538548/16	50.0	55.211873	50.0	242456.0	1.104237	Y
4	STD10 280-538548/18	50.0	54.610191	50.0	249122.0	1.092204	Y
5	ICIS 280-538548/19	50.0	53.072843	50.0	257514.0	1.061457	Y
6	STD75 280-538548/20	50.0	54.416564	50.0	257689.0	1.088331	Y
7	STD100 280-538548/21	50.0	52.785422	50.0	257627.0	1.055708	Y
8	STD200 280-538548/22	50.0	54.443024	50.0	259778.0	1.08886	Y



Calibration

/ 1,1,2,2-Tetrachloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

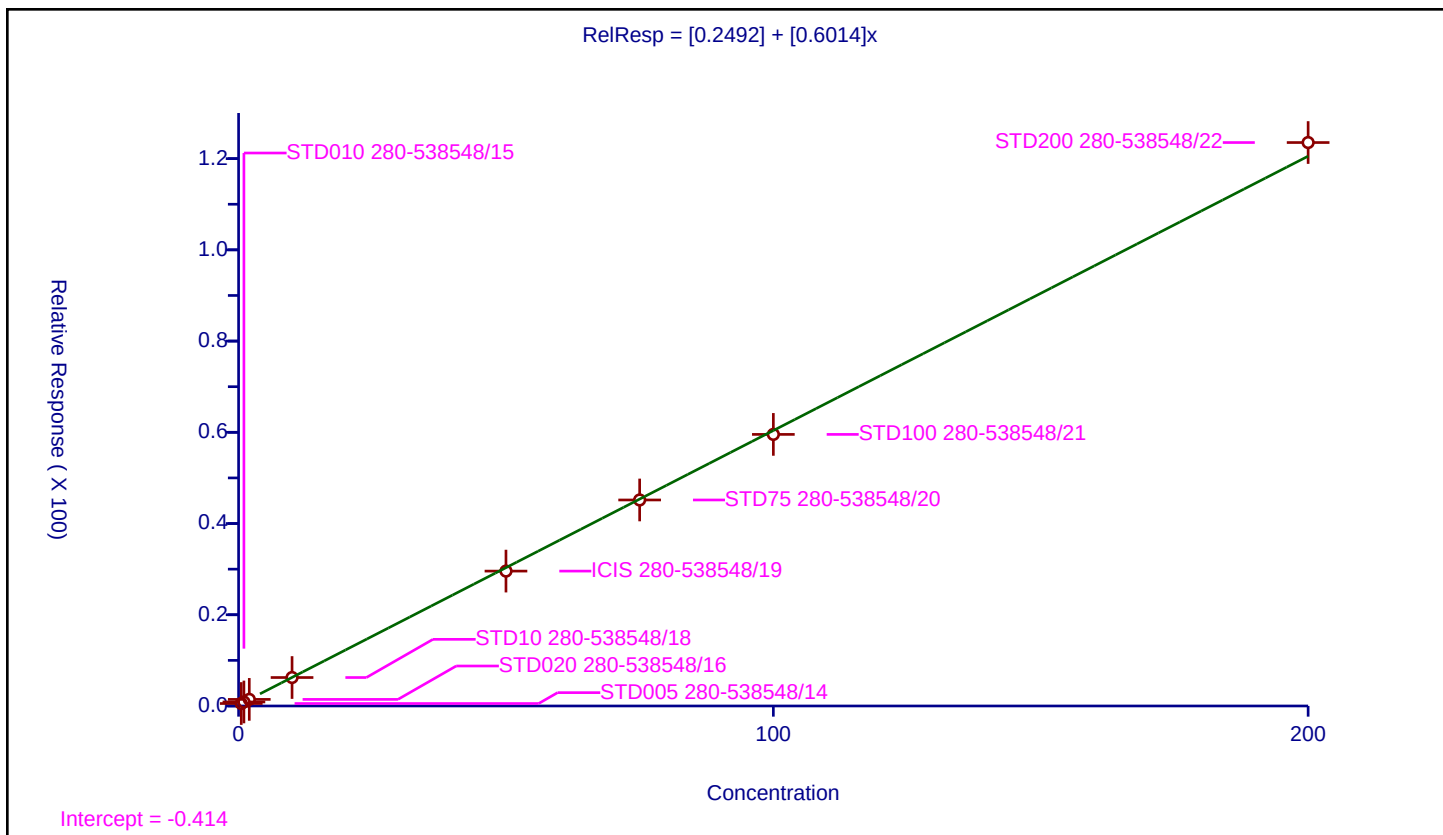
Curve Coefficients

Intercept: 0.2492
 Slope: 0.6014

Error Coefficients

Standard Error: 312000
 Relative Standard Error: 2.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.54267	50.0	245453.0	1.08534	Y
2	STD010 280-538548/15	1.0	0.881893	50.0	250257.0	0.881893	Y
3	STD020 280-538548/16	2.0	1.445004	50.0	242456.0	0.722502	Y
4	STD10 280-538548/18	10.0	6.240517	50.0	249122.0	0.624052	Y
5	ICIS 280-538548/19	50.0	29.575479	50.0	257514.0	0.59151	Y
6	STD75 280-538548/20	75.0	45.166848	50.0	257689.0	0.602225	Y
7	STD100 280-538548/21	100.0	59.54209	50.0	257627.0	0.595421	Y
8	STD200 280-538548/22	200.0	123.525857	50.0	259778.0	0.617629	Y



Calibration

/ Bromobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

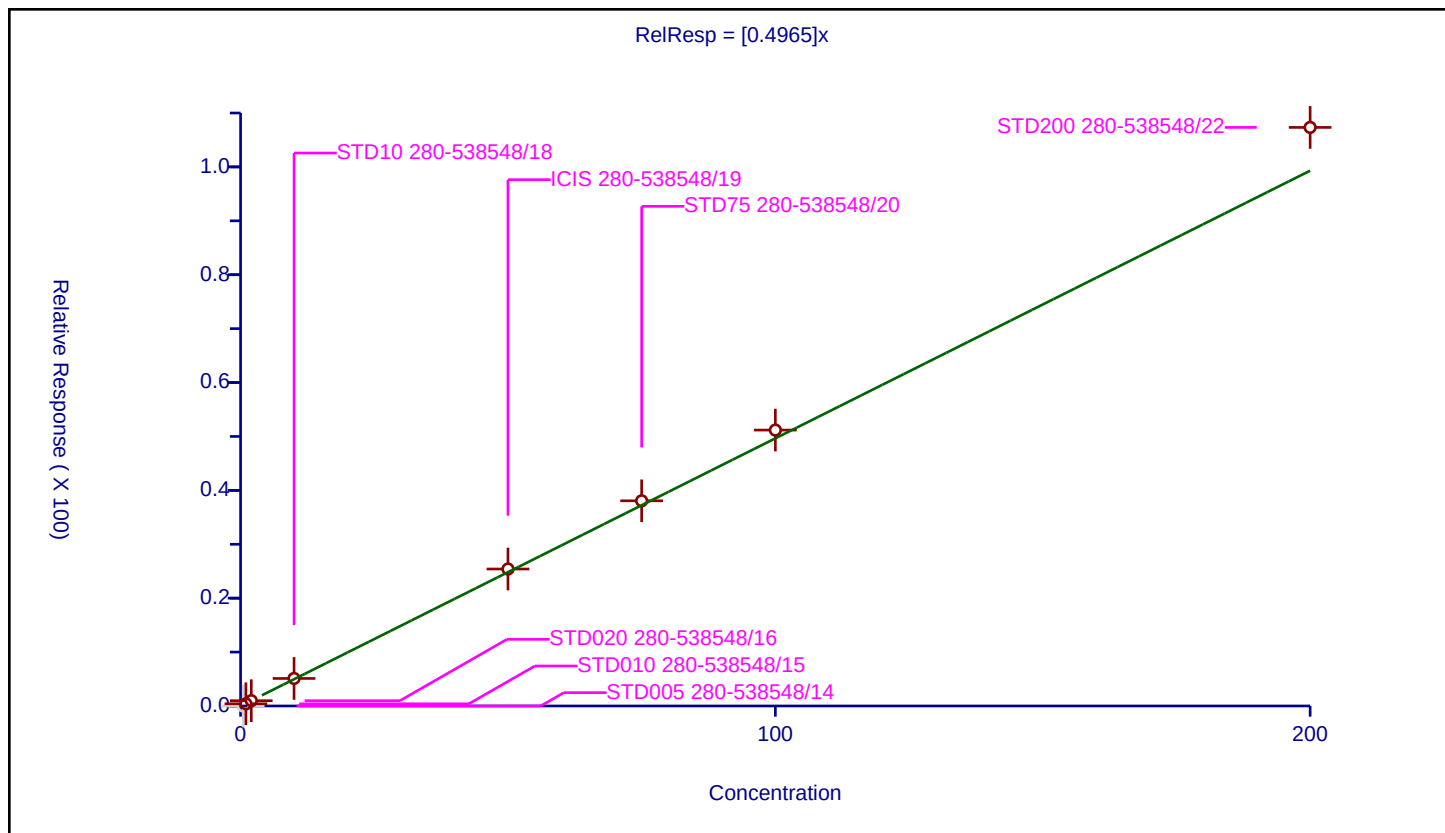
Curve Coefficients

Intercept: 0
 Slope: 0.4965

Error Coefficients

Standard Error: 270000
 Relative Standard Error: 8.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.409379	50.0	250257.0	0.409379	Y
3	STD020 280-538548/16	2.0	0.982446	50.0	242456.0	0.491223	Y
4	STD10 280-538548/18	10.0	5.105932	50.0	249122.0	0.510593	Y
5	ICIS 280-538548/19	50.0	25.408521	50.0	257514.0	0.50817	Y
6	STD75 280-538548/20	75.0	38.061966	50.0	257689.0	0.507493	Y
7	STD100 280-538548/21	100.0	51.181165	50.0	257627.0	0.511812	Y
8	STD200 280-538548/22	200.0	107.329912	50.0	259778.0	0.53665	Y



Calibration

/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

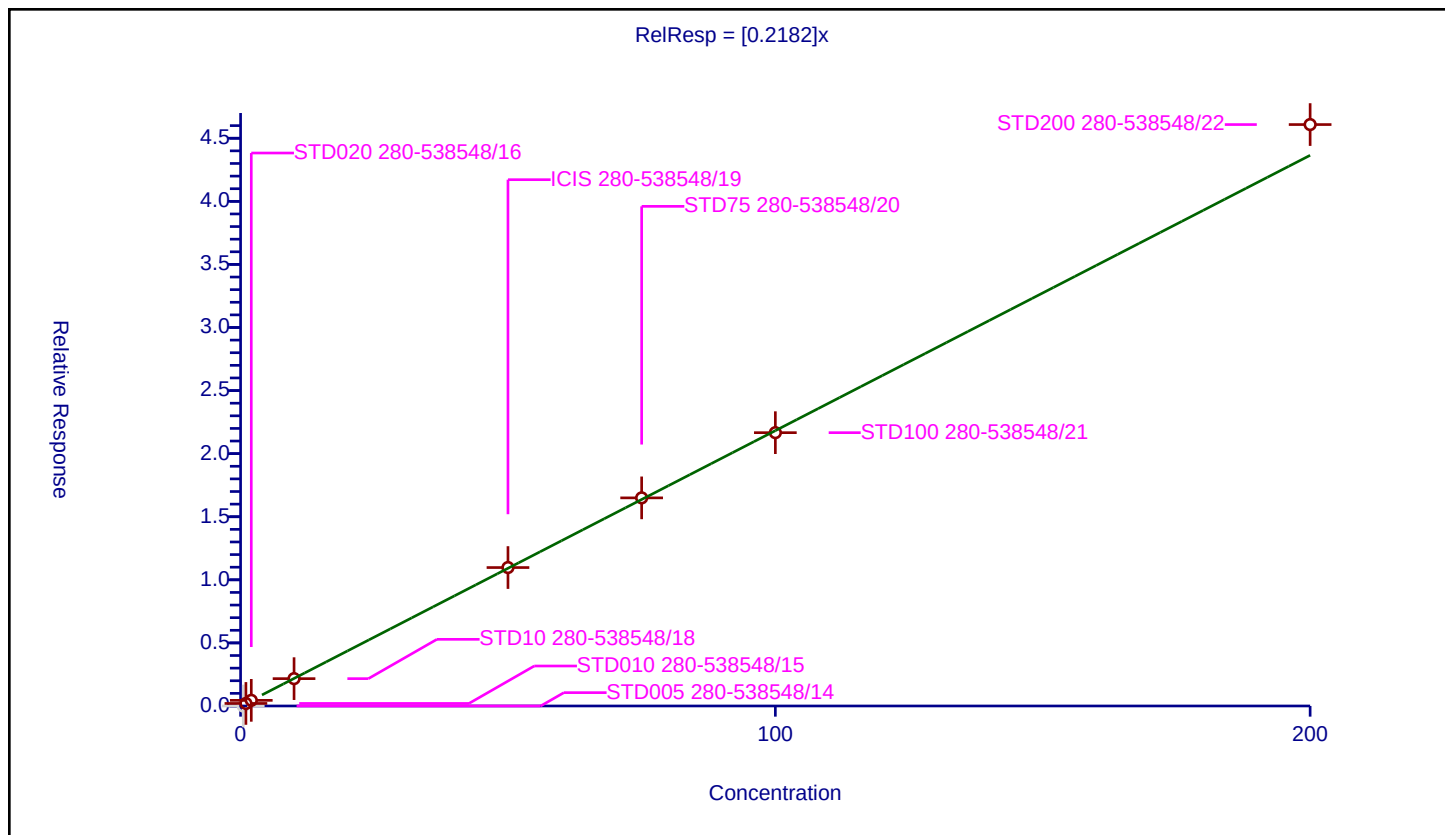
Curve Coefficients

Intercept: 0
 Slope: 0.2182

Error Coefficients

Standard Error: 116000
 Relative Standard Error: 4.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.201393	50.0	250257.0	0.201393	Y
3	STD020 280-538548/16	2.0	0.44606	50.0	242456.0	0.22303	Y
4	STD10 280-538548/18	10.0	2.168014	50.0	249122.0	0.216801	Y
5	ICIS 280-538548/19	50.0	10.973966	50.0	257514.0	0.219479	Y
6	STD75 280-538548/20	75.0	16.495077	50.0	257689.0	0.219934	Y
7	STD100 280-538548/21	100.0	21.663296	50.0	257627.0	0.216633	Y
8	STD200 280-538548/22	200.0	46.085311	50.0	259778.0	0.230427	Y



Calibration

/ 1,2,3-Trichloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

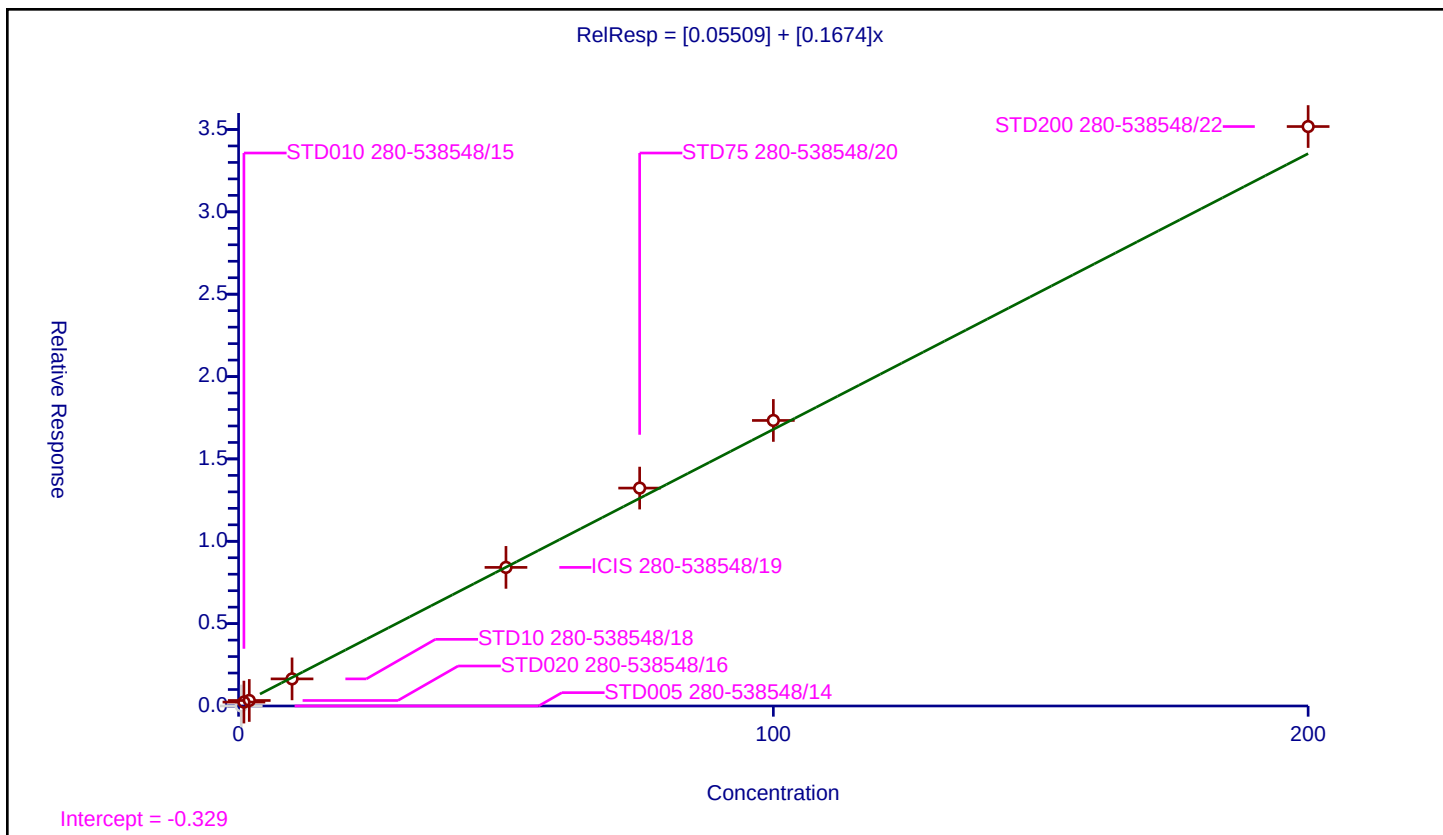
Curve Coefficients

Intercept: 0.05509
 Slope: 0.1674

Error Coefficients

Standard Error: 97900
 Relative Standard Error: 9.4
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.237156	50.0	250257.0	0.237156	Y
3	STD020 280-538548/16	2.0	0.333669	50.0	242456.0	0.166834	Y
4	STD10 280-538548/18	10.0	1.646382	50.0	249122.0	0.164638	Y
5	ICIS 280-538548/19	50.0	8.4143	50.0	257514.0	0.168286	Y
6	STD75 280-538548/20	75.0	13.229901	50.0	257689.0	0.176399	Y
7	STD100 280-538548/21	100.0	17.334945	50.0	257627.0	0.173349	Y
8	STD200 280-538548/22	200.0	35.178499	50.0	259778.0	0.175892	Y



Calibration

/ N-Propylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

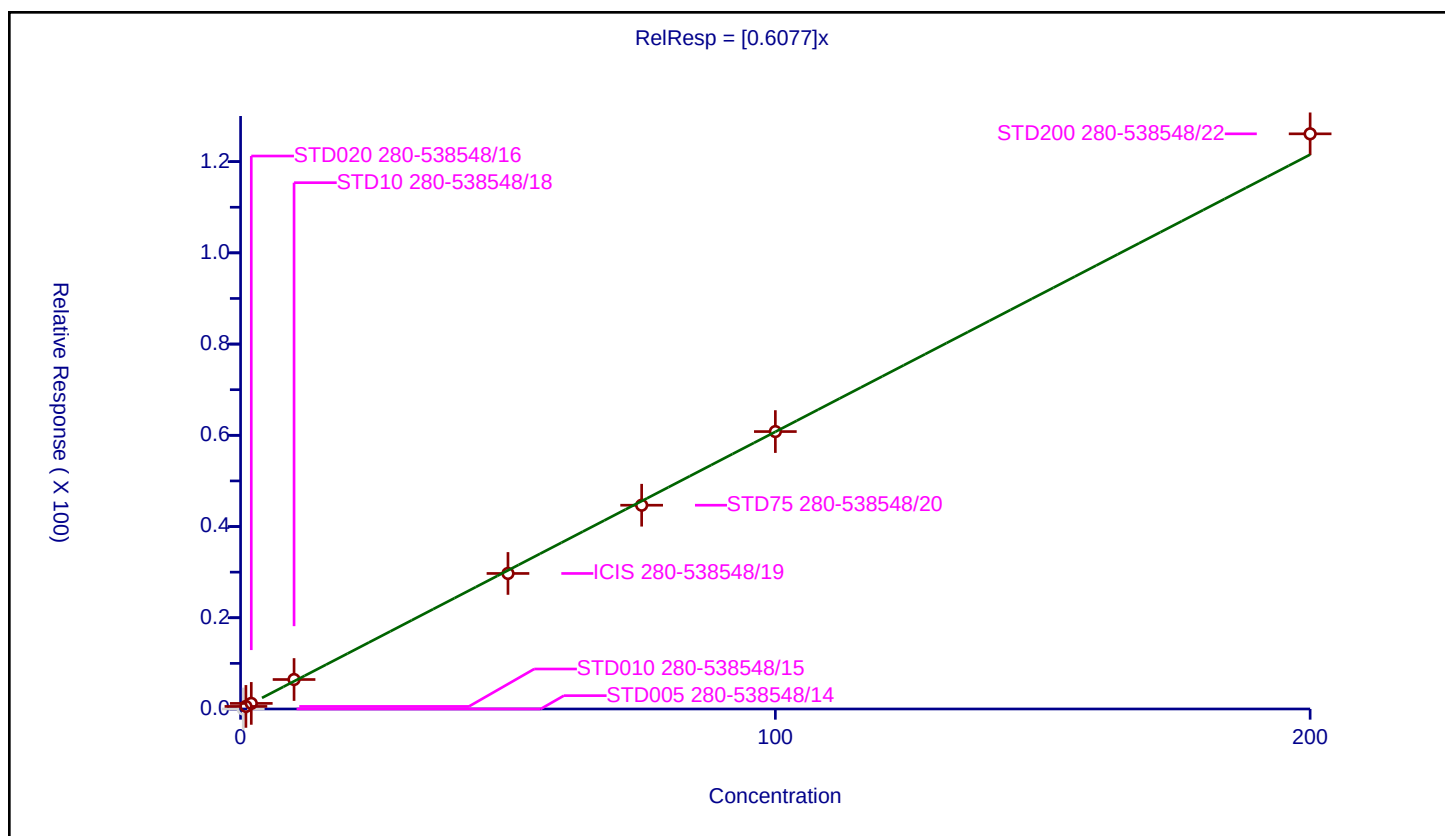
Curve Coefficients

Intercept: 0
Slope: 0.6077

Error Coefficients

Standard Error: 317000
Relative Standard Error: 4.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.566418	50.0	250257.0	0.566418	Y
3	STD020 280-538548/16	2.0	1.225377	50.0	242456.0	0.612688	Y
4	STD10 280-538548/18	10.0	6.462095	50.0	249122.0	0.646209	Y
5	ICIS 280-538548/19	50.0	29.714501	50.0	257514.0	0.59429	Y
6	STD75 280-538548/20	75.0	44.67323	50.0	257689.0	0.595643	Y
7	STD100 280-538548/21	100.0	60.819518	50.0	257627.0	0.608195	Y
8	STD200 280-538548/22	200.0	126.092664	50.0	259778.0	0.630463	Y



Calibration

/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

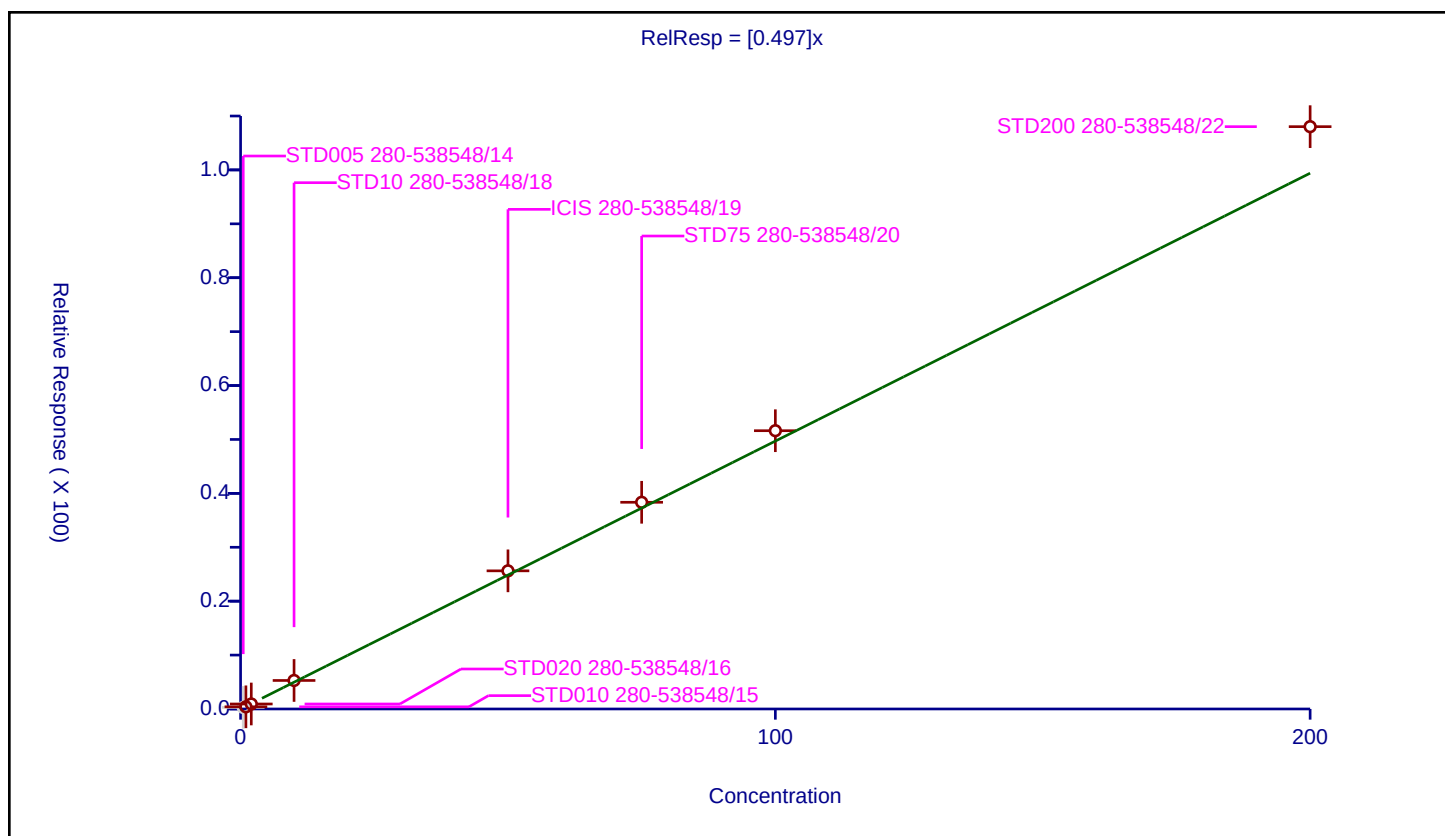
Curve Coefficients

Intercept: 0
 Slope: 0.497

Error Coefficients

Standard Error: 272000
 Relative Standard Error: 9.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.288039	50.0	245453.0	0.576078	N
2	STD010 280-538548/15	1.0	0.405183	50.0	250257.0	0.405183	Y
3	STD020 280-538548/16	2.0	0.92821	50.0	242456.0	0.464105	Y
4	STD10 280-538548/18	10.0	5.292788	50.0	249122.0	0.529279	Y
5	ICIS 280-538548/19	50.0	25.62618	50.0	257514.0	0.512524	Y
6	STD75 280-538548/20	75.0	38.345059	50.0	257689.0	0.511267	Y
7	STD100 280-538548/21	100.0	51.624053	50.0	257627.0	0.516241	Y
8	STD200 280-538548/22	200.0	108.023967	50.0	259778.0	0.54012	Y



Calibration

/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

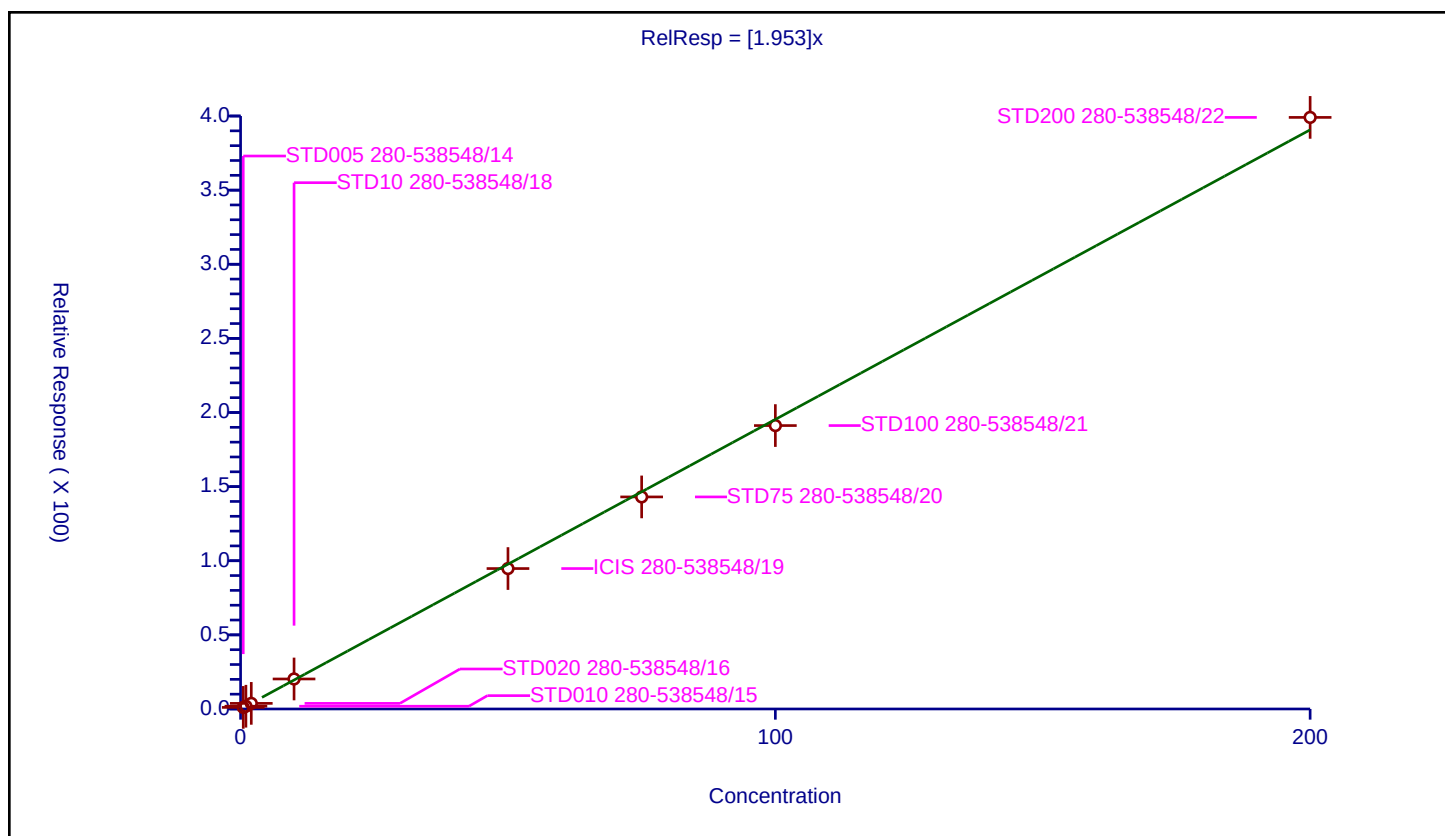
Curve Coefficients

Intercept: 0
 Slope: 1.953

Error Coefficients

Standard Error: 930000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.067414	50.0	245453.0	2.134828	Y
2	STD010 280-538548/15	1.0	1.86748	50.0	250257.0	1.86748	Y
3	STD020 280-538548/16	2.0	3.783367	50.0	242456.0	1.891683	Y
4	STD10 280-538548/18	10.0	20.237875	50.0	249122.0	2.023788	Y
5	ICIS 280-538548/19	50.0	94.744946	50.0	257514.0	1.894899	Y
6	STD75 280-538548/20	75.0	143.056165	50.0	257689.0	1.907416	Y
7	STD100 280-538548/21	100.0	191.181049	50.0	257627.0	1.91181	Y
8	STD200 280-538548/22	200.0	399.060736	50.0	259778.0	1.995304	Y



Calibration

/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

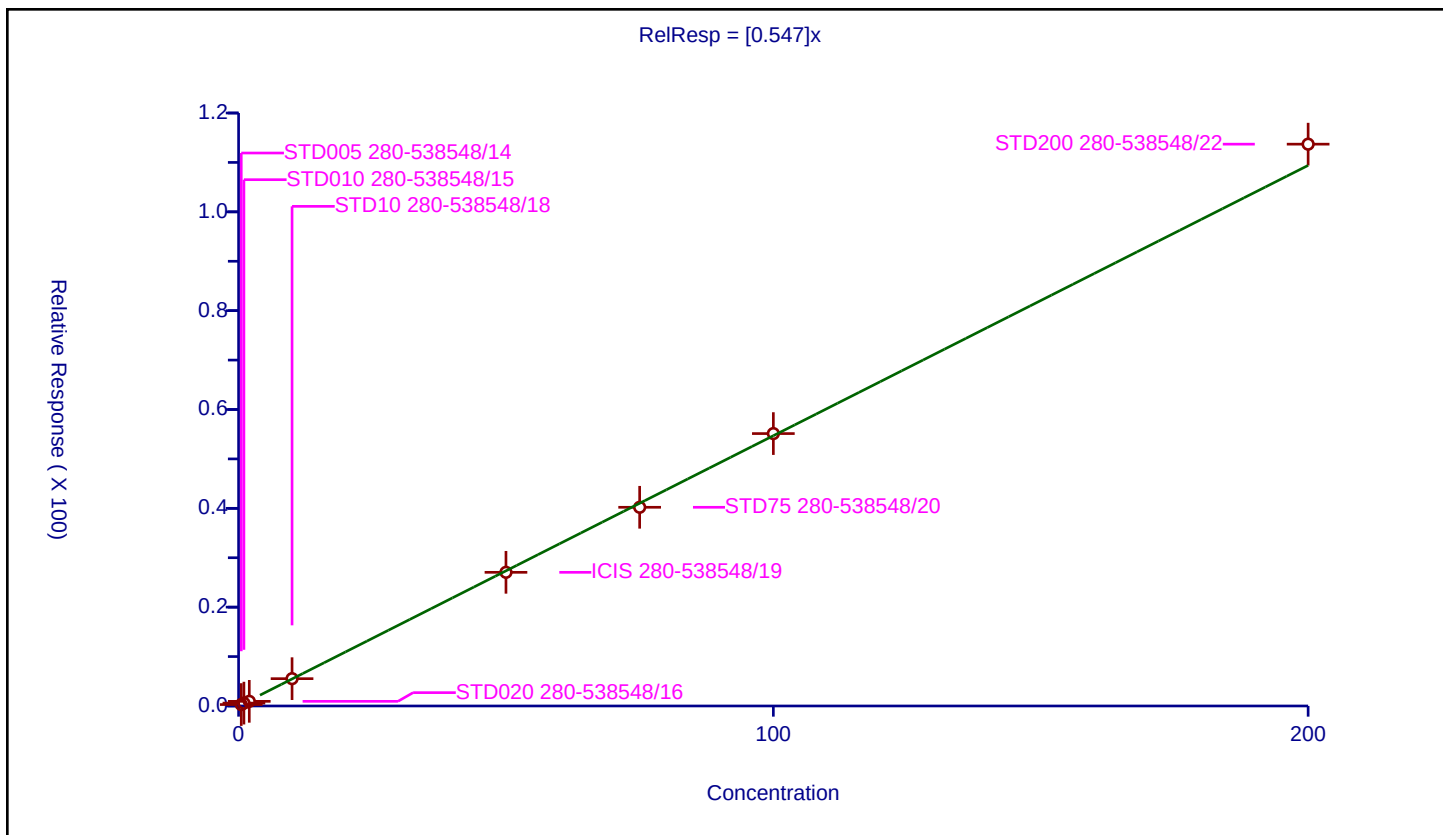
Curve Coefficients

Intercept: 0
 Slope: 0.547

Error Coefficients

Standard Error: 265000
 Relative Standard Error: 6.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.288446	50.0	245453.0	0.576893	Y
2	STD010 280-538548/15	1.0	0.578206	50.0	250257.0	0.578206	Y
3	STD020 280-538548/16	2.0	0.942027	50.0	242456.0	0.471013	Y
4	STD10 280-538548/18	10.0	5.528617	50.0	249122.0	0.552862	Y
5	ICIS 280-538548/19	50.0	27.049986	50.0	257514.0	0.541	Y
6	STD75 280-538548/20	75.0	40.210098	50.0	257689.0	0.536135	Y
7	STD100 280-538548/21	100.0	55.125627	50.0	257627.0	0.551256	Y
8	STD200 280-538548/22	200.0	113.696502	50.0	259778.0	0.568483	Y



Calibration

/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

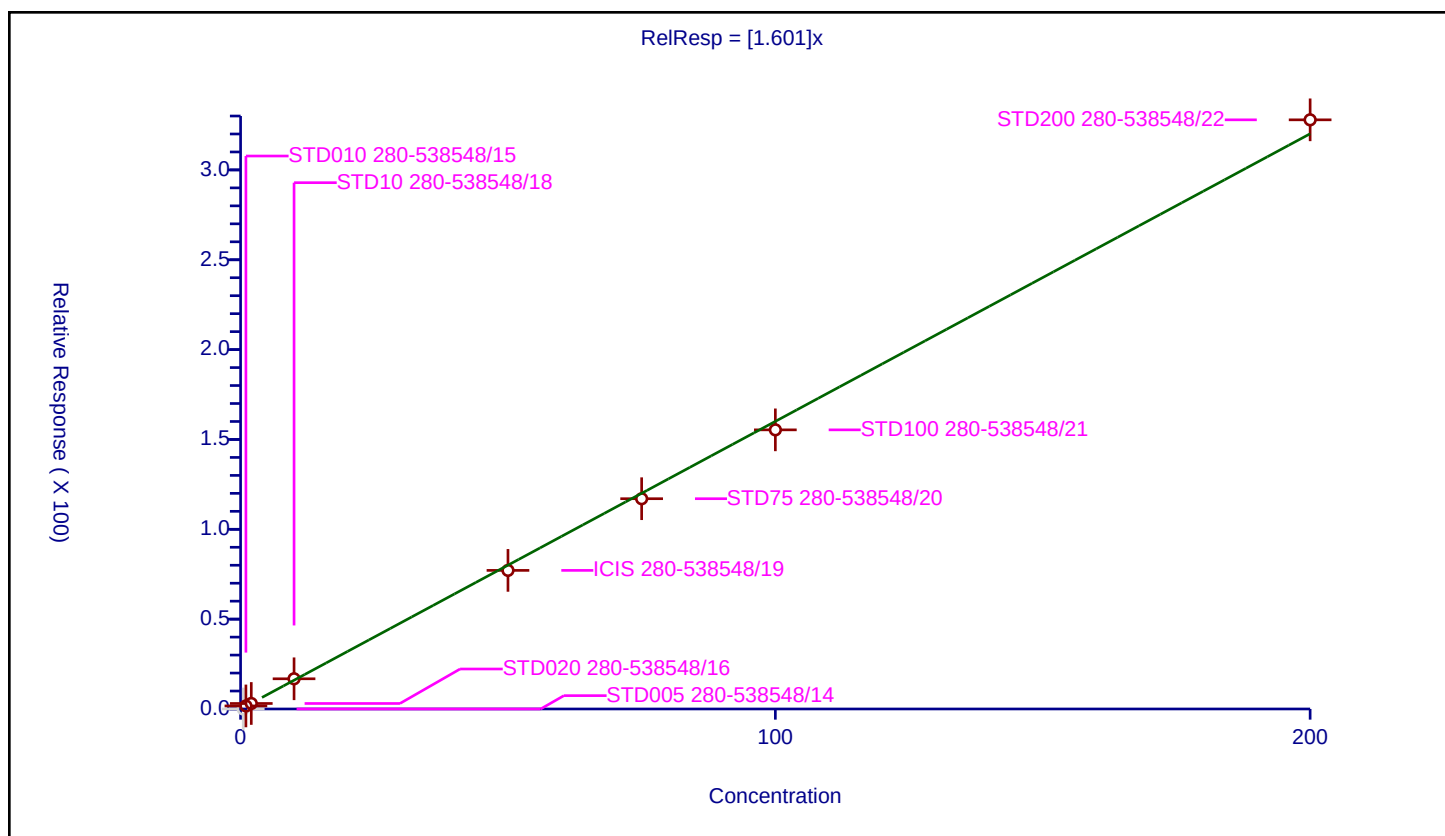
Curve Coefficients

Intercept: 0
 Slope: 1.601

Error Coefficients

Standard Error: 824000
 Relative Standard Error: 4.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	1.69286	50.0	250257.0	1.69286	Y
3	STD020 280-538548/16	2.0	3.06901	50.0	242456.0	1.534505	Y
4	STD10 280-538548/18	10.0	16.811442	50.0	249122.0	1.681144	Y
5	ICIS 280-538548/19	50.0	77.130758	50.0	257514.0	1.542615	Y
6	STD75 280-538548/20	75.0	117.017024	50.0	257689.0	1.560227	Y
7	STD100 280-538548/21	100.0	155.339697	50.0	257627.0	1.553397	Y
8	STD200 280-538548/22	200.0	327.870335	50.0	259778.0	1.639352	Y



Calibration

/ 1,2,4-Trimethylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

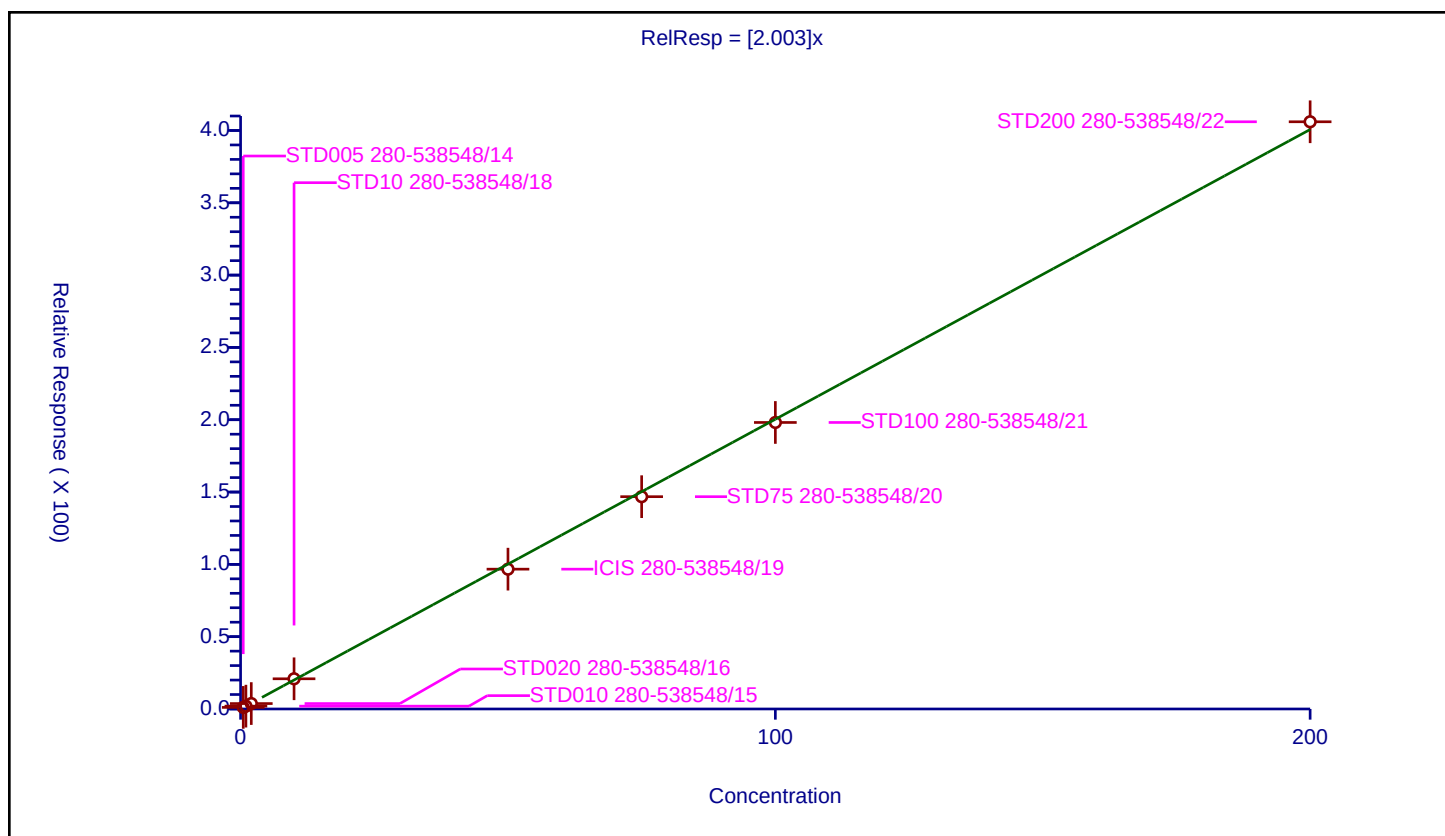
Curve Coefficients

Intercept: 0
Slope: 2.003

Error Coefficients

Standard Error: 950000
Relative Standard Error: 5.1
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.10184	50.0	245453.0	2.203681	Y
2	STD010 280-538548/15	1.0	1.960585	50.0	250257.0	1.960585	Y
3	STD020 280-538548/16	2.0	3.745009	50.0	242456.0	1.872505	Y
4	STD10 280-538548/18	10.0	20.881536	50.0	249122.0	2.088154	Y
5	ICIS 280-538548/19	50.0	96.677656	50.0	257514.0	1.933553	Y
6	STD75 280-538548/20	75.0	146.788571	50.0	257689.0	1.957181	Y
7	STD100 280-538548/21	100.0	198.102101	50.0	257627.0	1.981021	Y
8	STD200 280-538548/22	200.0	406.011864	50.0	259778.0	2.030059	Y



Calibration

/ sec-Butylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

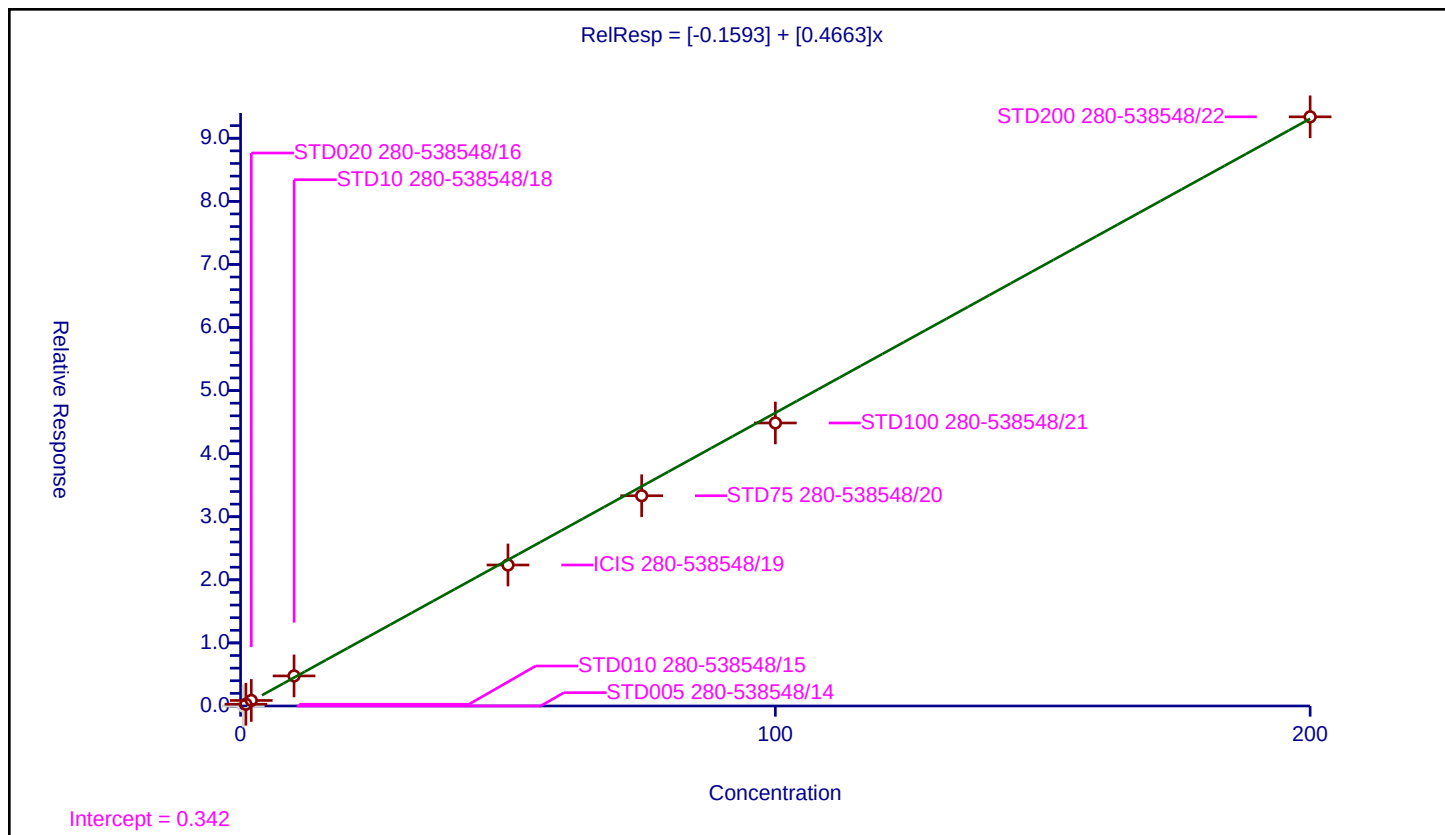
Curve Coefficients

Intercept: -0.1593
 Slope: 0.4663

Error Coefficients

Standard Error: 258000
 Relative Standard Error: 6.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.278913	50.0	250257.0	0.278913	Y
3	STD020 280-538548/16	2.0	0.878304	50.0	242456.0	0.439152	Y
4	STD10 280-538548/18	10.0	4.764332	50.0	249122.0	0.476433	Y
5	ICIS 280-538548/19	50.0	22.349853	50.0	257514.0	0.446997	Y
6	STD75 280-538548/20	75.0	33.329129	50.0	257689.0	0.444388	Y
7	STD100 280-538548/21	100.0	44.865251	50.0	257627.0	0.448653	Y
8	STD200 280-538548/22	200.0	93.397247	50.0	259778.0	0.466986	Y



Calibration

/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

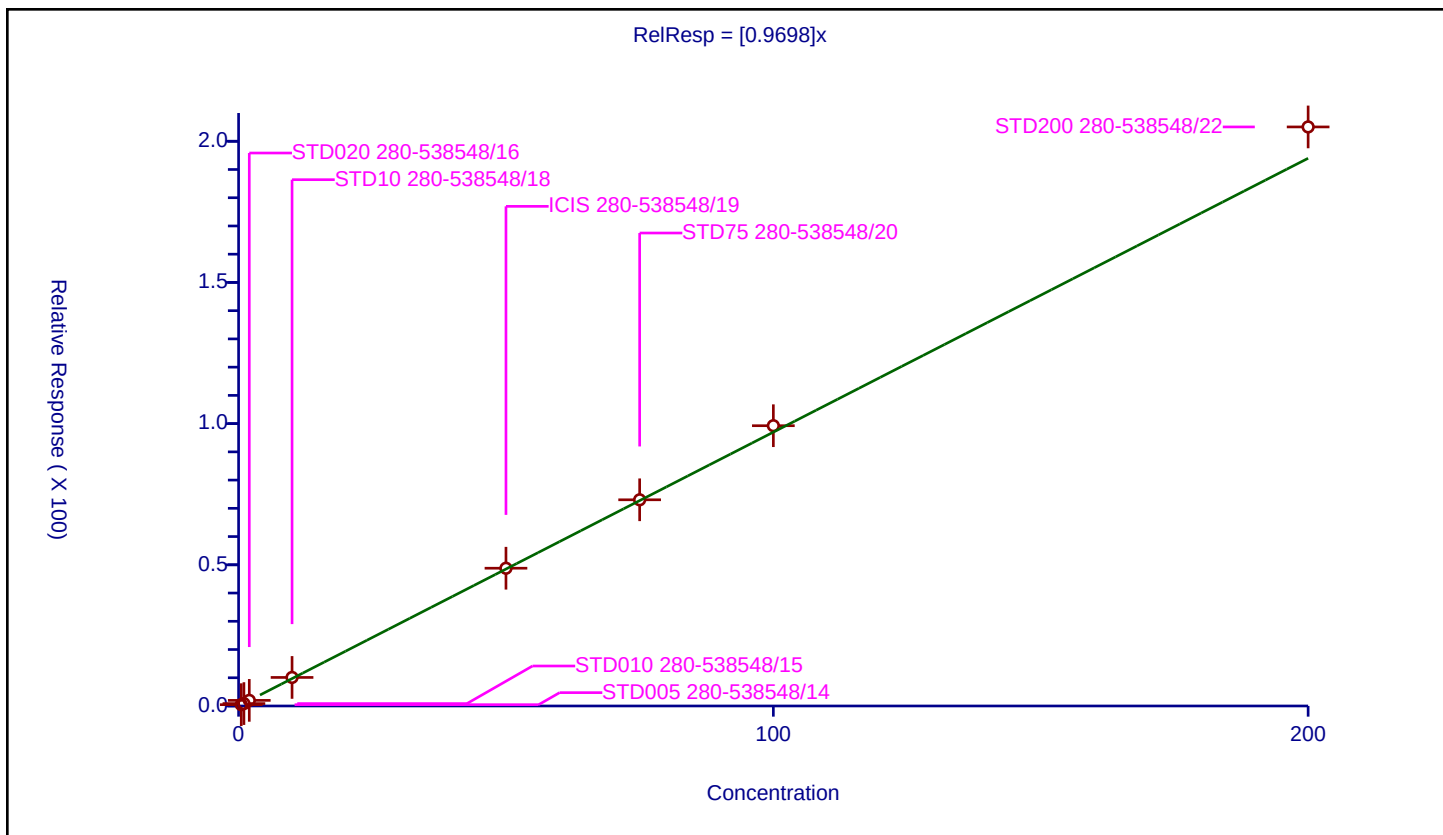
Curve Coefficients

Intercept: 0
 Slope: 0.9698

Error Coefficients

Standard Error: 479000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.464855	50.0	245453.0	0.92971	Y
2	STD010 280-538548/15	1.0	0.85592	50.0	250257.0	0.85592	Y
3	STD020 280-538548/16	2.0	1.988814	50.0	242456.0	0.994407	Y
4	STD10 280-538548/18	10.0	10.113719	50.0	249122.0	1.011372	Y
5	ICIS 280-538548/19	50.0	48.78725	50.0	257514.0	0.975745	Y
6	STD75 280-538548/20	75.0	73.024266	50.0	257689.0	0.973657	Y
7	STD100 280-538548/21	100.0	99.255707	50.0	257627.0	0.992557	Y
8	STD200 280-538548/22	200.0	205.074333	50.0	259778.0	1.025372	Y



Calibration

/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

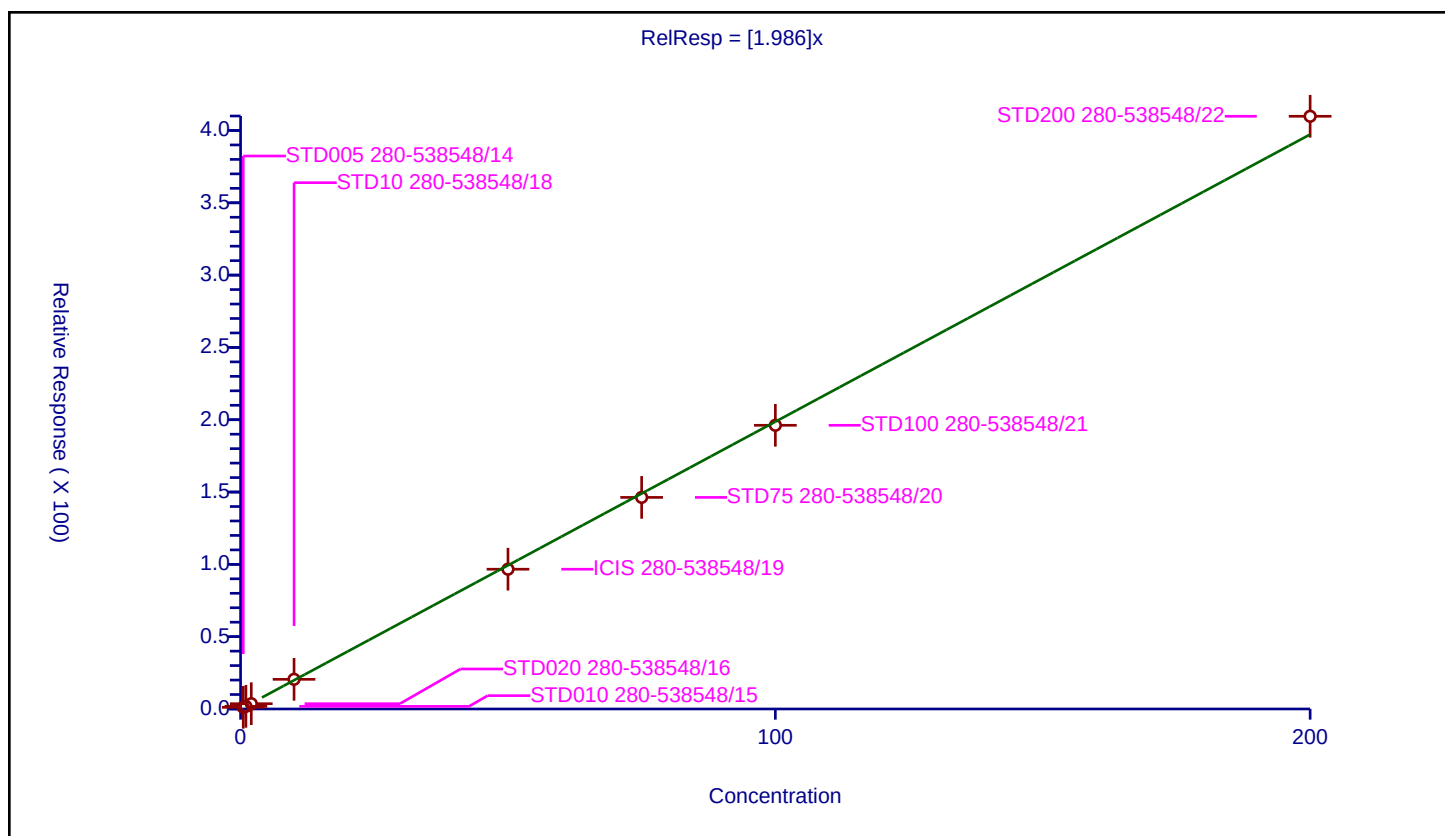
Curve Coefficients

Intercept: 0
 Slope: 1.986

Error Coefficients

Standard Error: 955000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.150933	50.0	245453.0	2.301866	Y
2	STD010 280-538548/15	1.0	1.80894	50.0	250257.0	1.80894	Y
3	STD020 280-538548/16	2.0	3.668088	50.0	242456.0	1.834044	Y
4	STD10 280-538548/18	10.0	20.507623	50.0	249122.0	2.050762	Y
5	ICIS 280-538548/19	50.0	96.650279	50.0	257514.0	1.933006	Y
6	STD75 280-538548/20	75.0	146.297863	50.0	257689.0	1.950638	Y
7	STD100 280-538548/21	100.0	196.162281	50.0	257627.0	1.961623	Y
8	STD200 280-538548/22	200.0	409.813957	50.0	259778.0	2.04907	Y



Calibration

/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

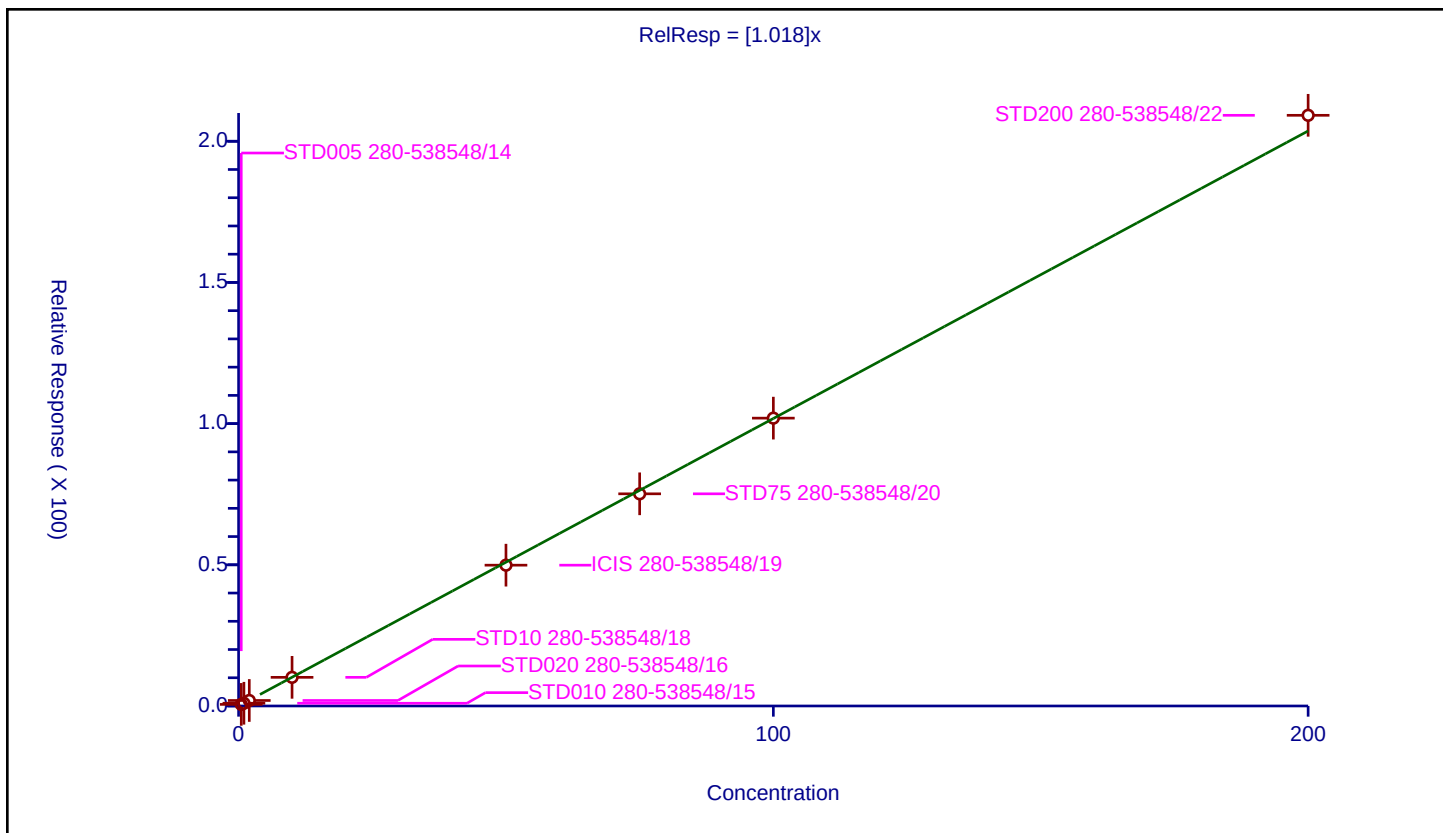
Curve Coefficients

Intercept: 0
 Slope: 1.018

Error Coefficients

Standard Error: 489000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.560392	50.0	245453.0	1.120785	Y
2	STD010 280-538548/15	1.0	0.9724	50.0	250257.0	0.9724	Y
3	STD020 280-538548/16	2.0	1.947157	50.0	242456.0	0.973579	Y
4	STD10 280-538548/18	10.0	10.144227	50.0	249122.0	1.014423	Y
5	ICIS 280-538548/19	50.0	49.86991	50.0	257514.0	0.997398	Y
6	STD75 280-538548/20	75.0	75.140964	50.0	257689.0	1.00188	Y
7	STD100 280-538548/21	100.0	101.940596	50.0	257627.0	1.019406	Y
8	STD200 280-538548/22	200.0	209.191694	50.0	259778.0	1.045958	Y



Calibration

/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

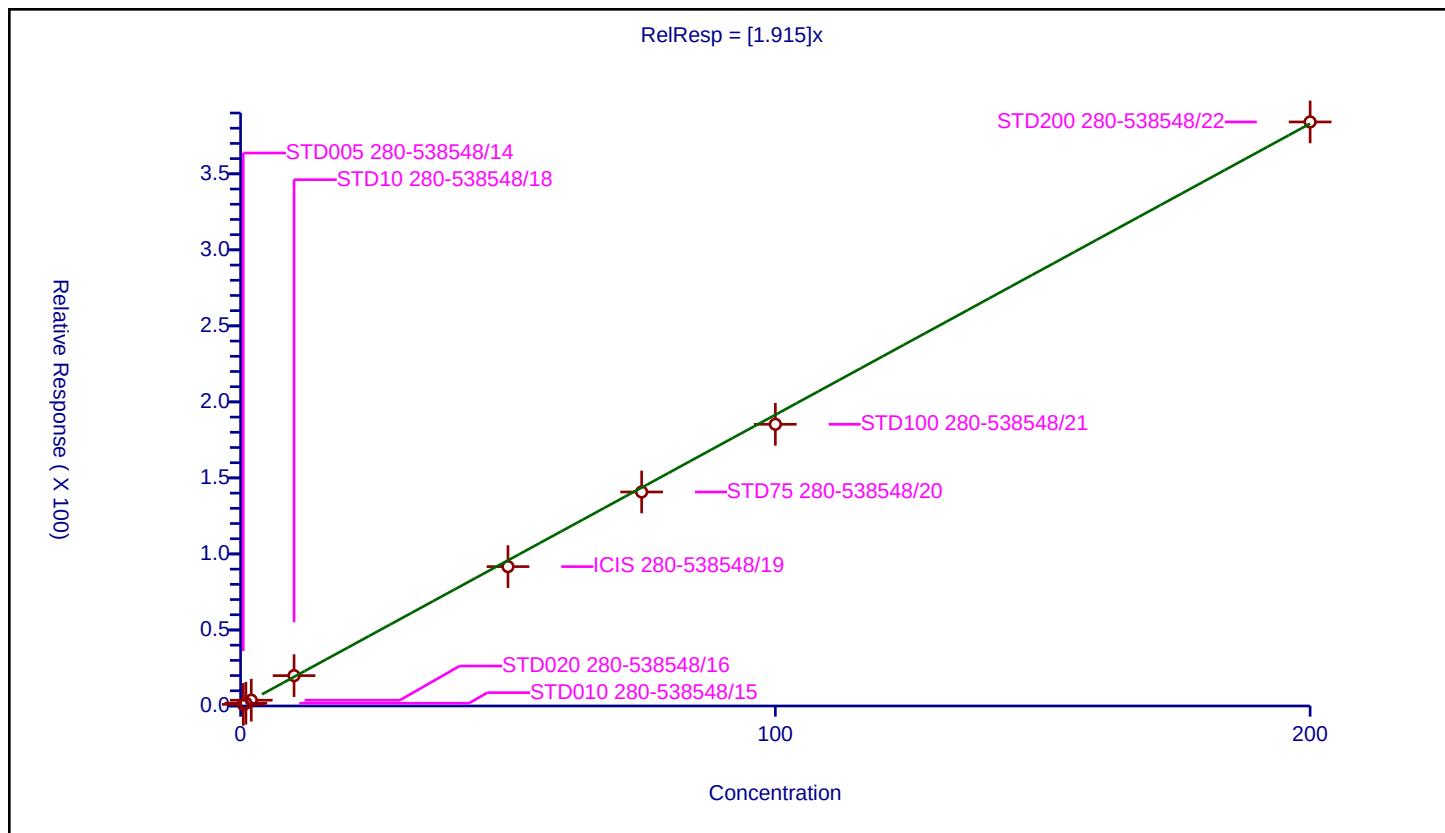
Curve Coefficients

Intercept: 0
 Slope: 1.915

Error Coefficients

Standard Error: 899000
 Relative Standard Error: 5.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.059062	50.0	245453.0	2.118124	Y
2	STD010 280-538548/15	1.0	1.813735	50.0	250257.0	1.813735	Y
3	STD020 280-538548/16	2.0	3.818631	50.0	242456.0	1.909316	Y
4	STD10 280-538548/18	10.0	19.96572	50.0	249122.0	1.996572	Y
5	ICIS 280-538548/19	50.0	91.673851	50.0	257514.0	1.833477	Y
6	STD75 280-538548/20	75.0	140.756881	50.0	257689.0	1.876758	Y
7	STD100 280-538548/21	100.0	185.2727	50.0	257627.0	1.852727	Y
8	STD200 280-538548/22	200.0	384.128371	50.0	259778.0	1.920642	Y



Calibration

/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

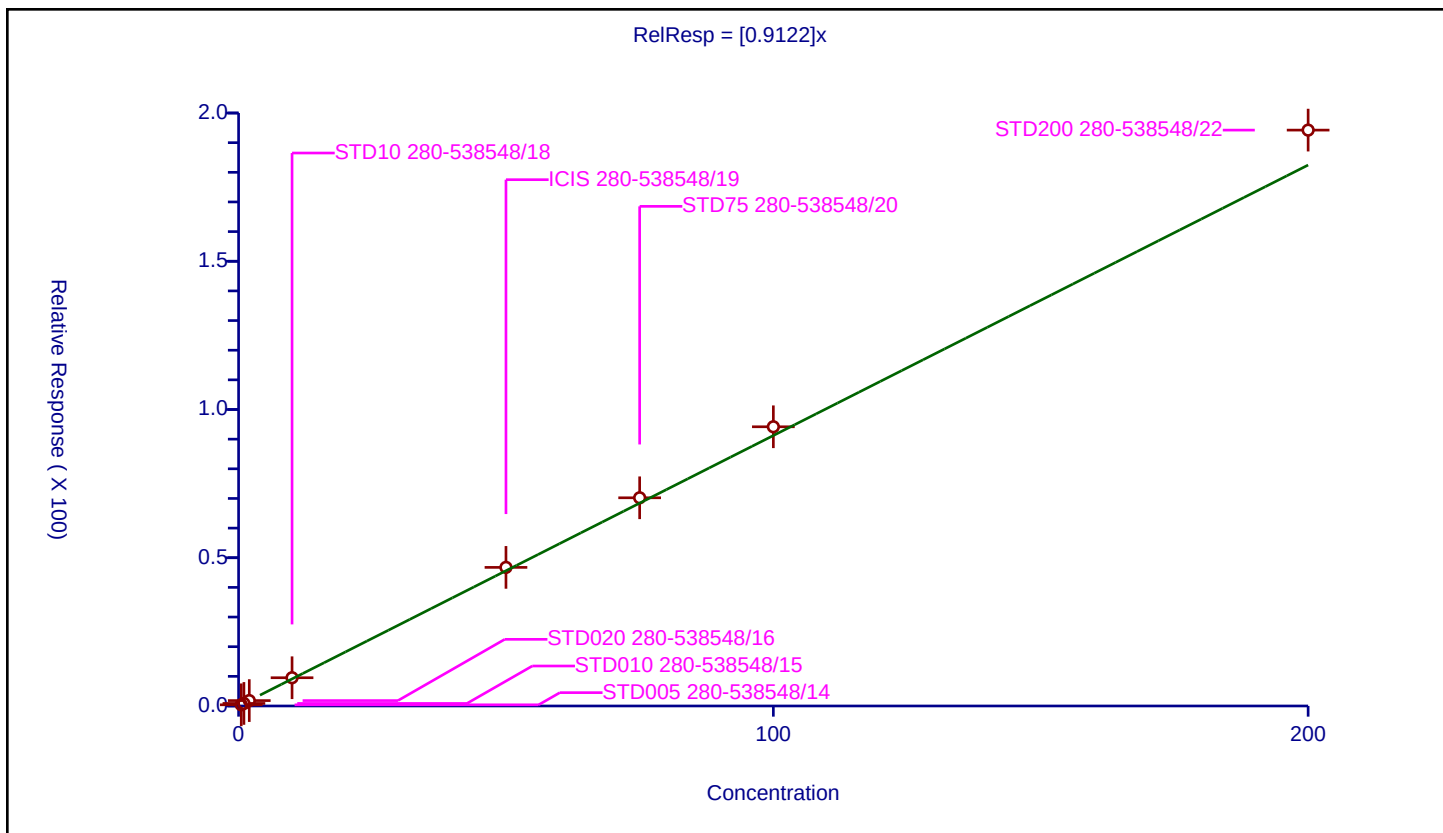
Curve Coefficients

Intercept: 0
 Slope: 0.9122

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 6.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.396206	50.0	245453.0	0.792412	Y
2	STD010 280-538548/15	1.0	0.85592	50.0	250257.0	0.85592	Y
3	STD020 280-538548/16	2.0	1.824249	50.0	242456.0	0.912124	Y
4	STD10 280-538548/18	10.0	9.532277	50.0	249122.0	0.953228	Y
5	ICIS 280-538548/19	50.0	46.751245	50.0	257514.0	0.935025	Y
6	STD75 280-538548/20	75.0	70.223797	50.0	257689.0	0.936317	Y
7	STD100 280-538548/21	100.0	94.177629	50.0	257627.0	0.941776	Y
8	STD200 280-538548/22	200.0	194.238157	50.0	259778.0	0.971191	Y



Calibration

/ 1,2-Dibromo-3-Chloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

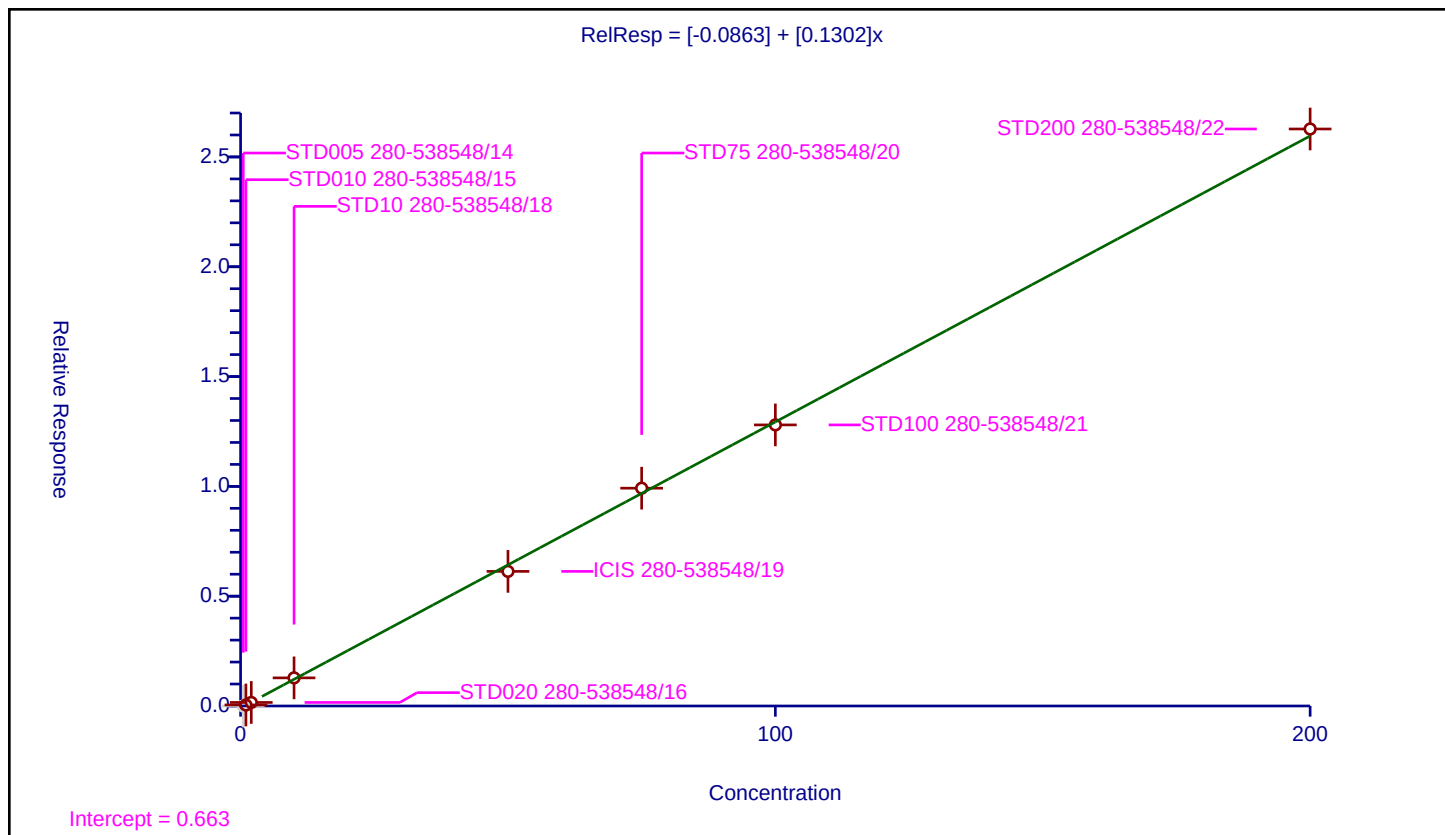
Curve Coefficients

Intercept: -0.0863
 Slope: 0.1302

Error Coefficients

Standard Error: 73000
 Relative Standard Error: 4.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.046752	50.0	250257.0	0.046752	Y
3	STD020 280-538548/16	2.0	0.160441	50.0	242456.0	0.080221	Y
4	STD10 280-538548/18	10.0	1.280698	50.0	249122.0	0.12807	Y
5	ICIS 280-538548/19	50.0	6.128405	50.0	257514.0	0.122568	Y
6	STD75 280-538548/20	75.0	9.917187	50.0	257689.0	0.132229	Y
7	STD100 280-538548/21	100.0	12.798736	50.0	257627.0	0.127987	Y
8	STD200 280-538548/22	200.0	26.272818	50.0	259778.0	0.131364	Y



Calibration

/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

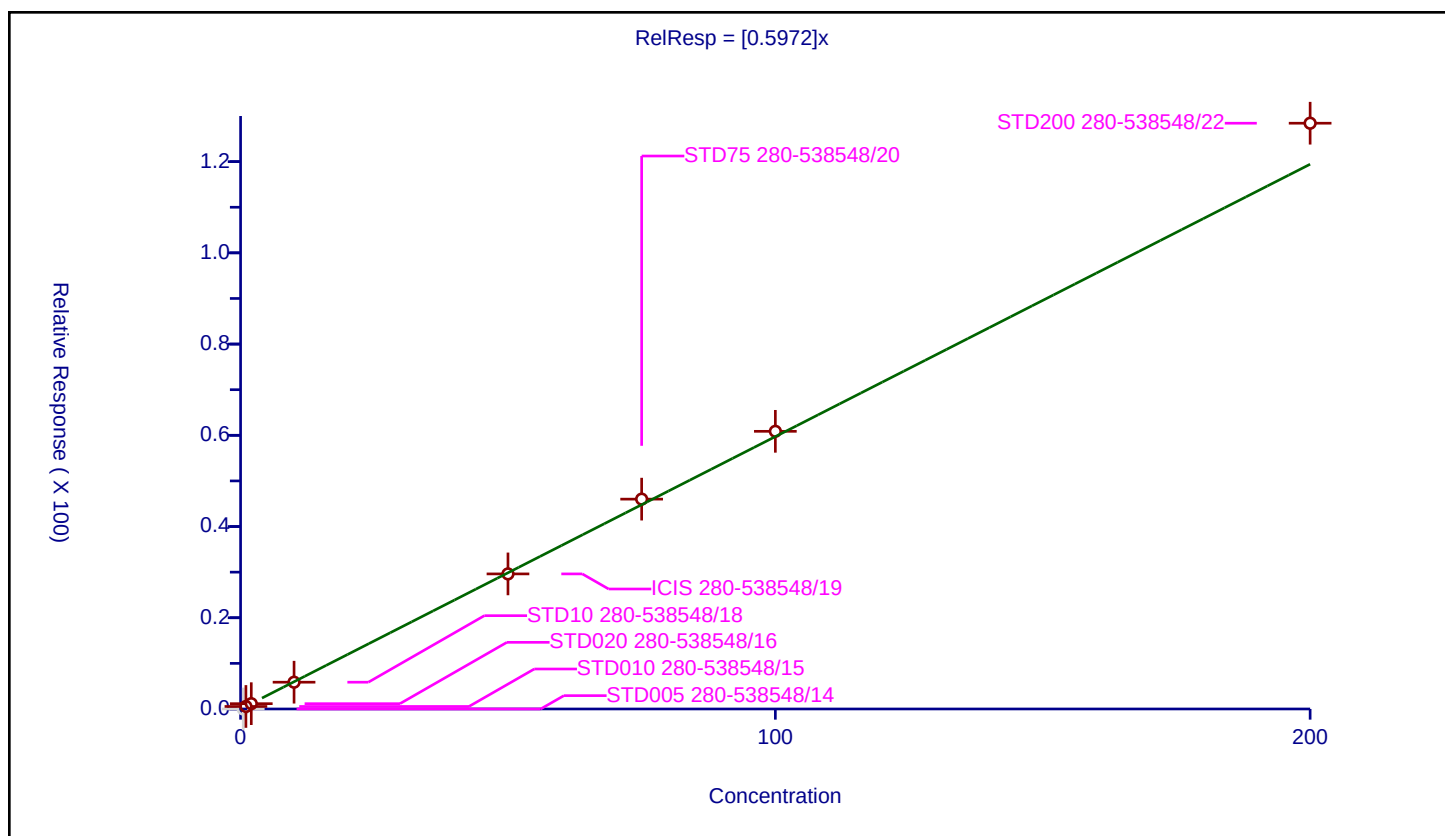
Curve Coefficients

Intercept: 0
 Slope: 0.5972

Error Coefficients

Standard Error: 322000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.553431	50.0	250257.0	0.553431	Y
3	STD020 280-538548/16	2.0	1.165572	50.0	242456.0	0.582786	Y
4	STD10 280-538548/18	10.0	5.872424	50.0	249122.0	0.587242	Y
5	ICIS 280-538548/19	50.0	29.614895	50.0	257514.0	0.592298	Y
6	STD75 280-538548/20	75.0	46.008173	50.0	257689.0	0.613442	Y
7	STD100 280-538548/21	100.0	60.876189	50.0	257627.0	0.608762	Y
8	STD200 280-538548/22	200.0	128.420036	50.0	259778.0	0.6421	Y



Calibration

/ Hexachlorobutadiene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

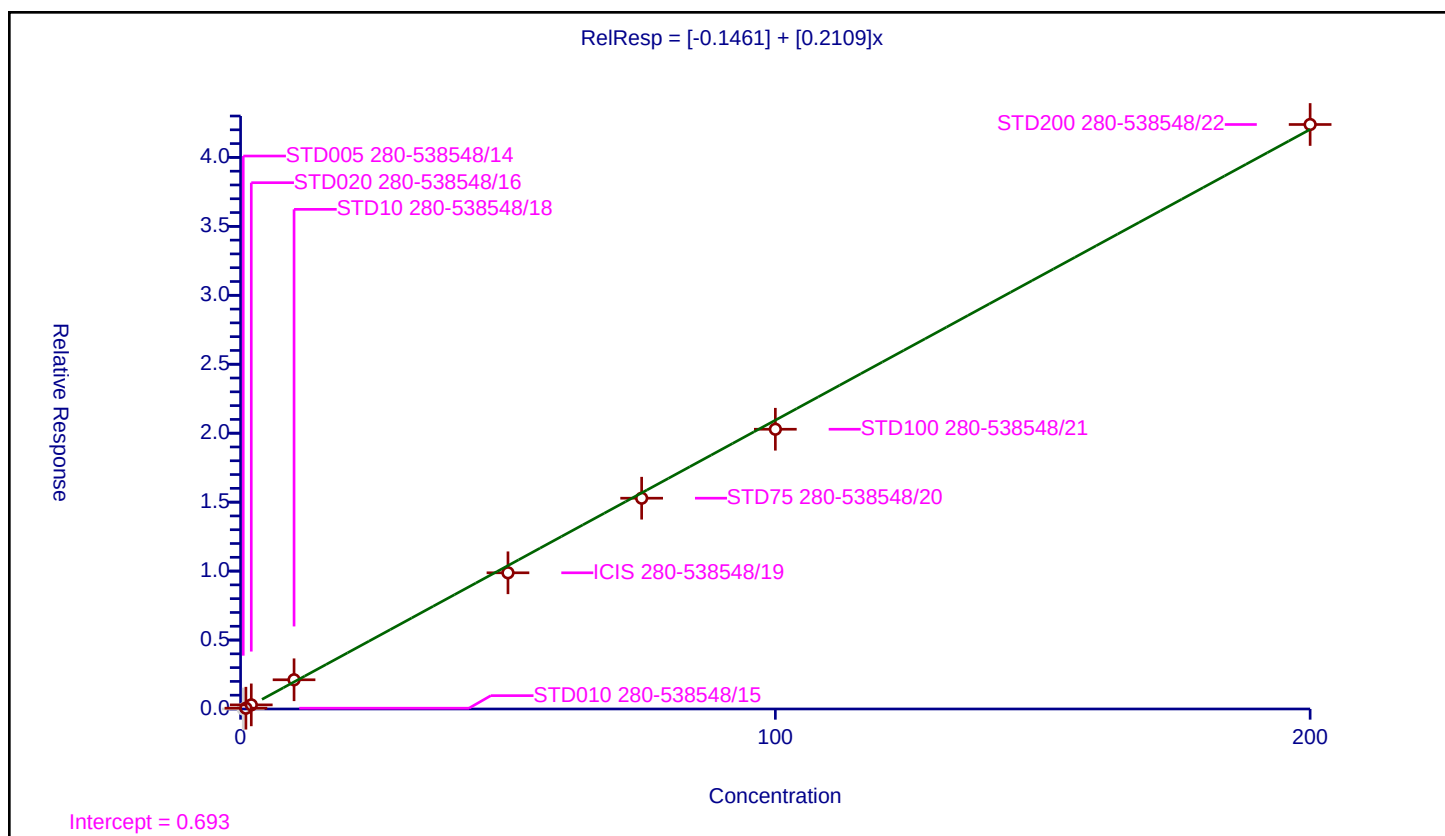
Curve Coefficients

Intercept: -0.1461
 Slope: 0.2109

Error Coefficients

Standard Error: 117000
 Relative Standard Error: 5.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.057541	50.0	250257.0	0.057541	Y
3	STD020 280-538548/16	2.0	0.299642	50.0	242456.0	0.149821	Y
4	STD10 280-538548/18	10.0	2.118039	50.0	249122.0	0.211804	Y
5	ICIS 280-538548/19	50.0	9.875968	50.0	257514.0	0.197519	Y
6	STD75 280-538548/20	75.0	15.284898	50.0	257689.0	0.203799	Y
7	STD100 280-538548/21	100.0	20.286694	50.0	257627.0	0.202867	Y
8	STD200 280-538548/22	200.0	42.384267	50.0	259778.0	0.211921	Y



Calibration

/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

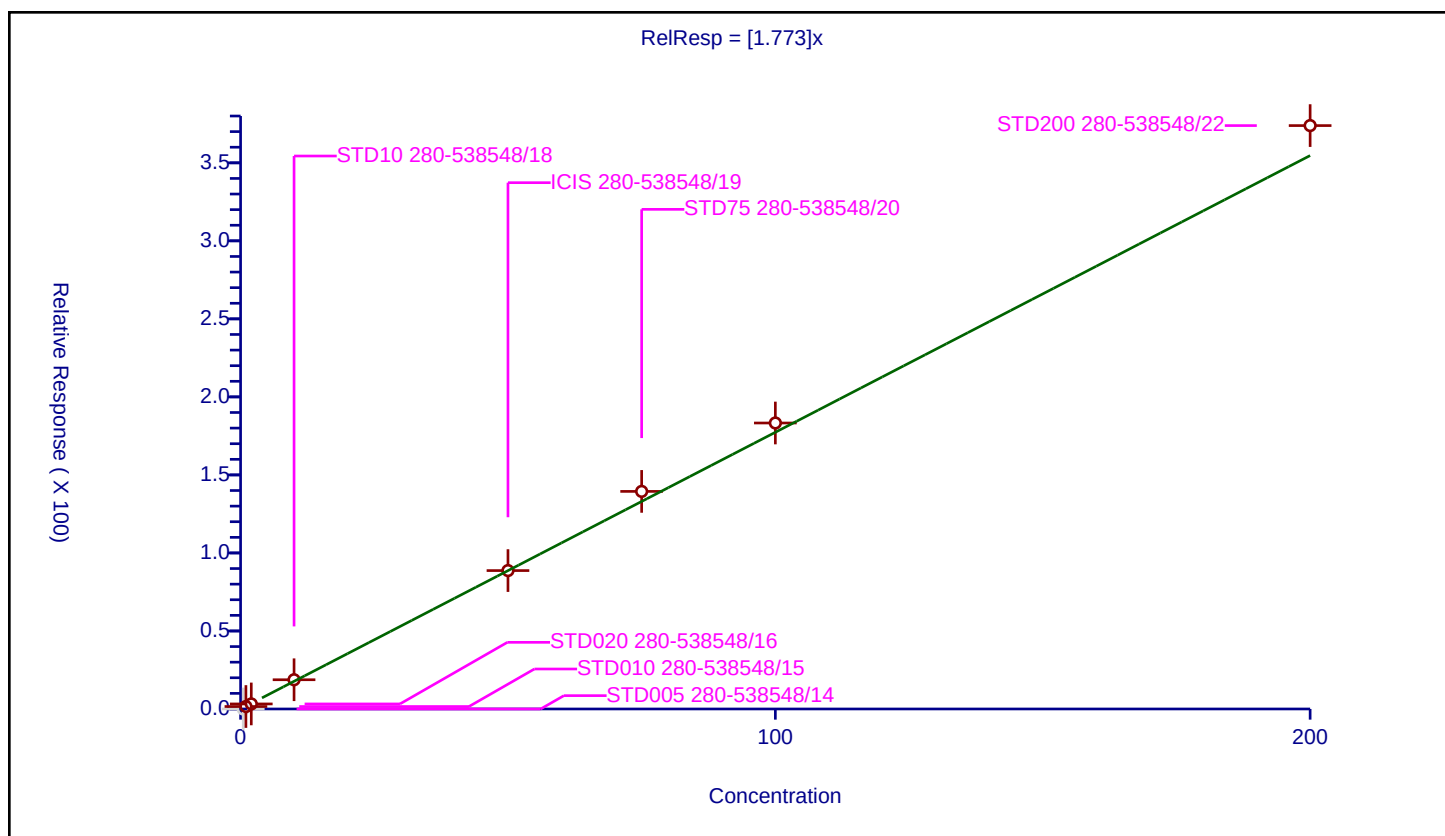
Curve Coefficients

Intercept: 0
 Slope: 1.773

Error Coefficients

Standard Error: 948000
 Relative Standard Error: 6.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	1.584771	50.0	250257.0	1.584771	Y
3	STD020 280-538548/16	2.0	3.239351	50.0	242456.0	1.619675	Y
4	STD10 280-538548/18	10.0	18.734596	50.0	249122.0	1.87346	Y
5	ICIS 280-538548/19	50.0	88.696537	50.0	257514.0	1.773931	Y
6	STD75 280-538548/20	75.0	139.434551	50.0	257689.0	1.859127	Y
7	STD100 280-538548/21	100.0	183.277374	50.0	257627.0	1.832774	Y
8	STD200 280-538548/22	200.0	373.868264	50.0	259778.0	1.869341	Y



Calibration

/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

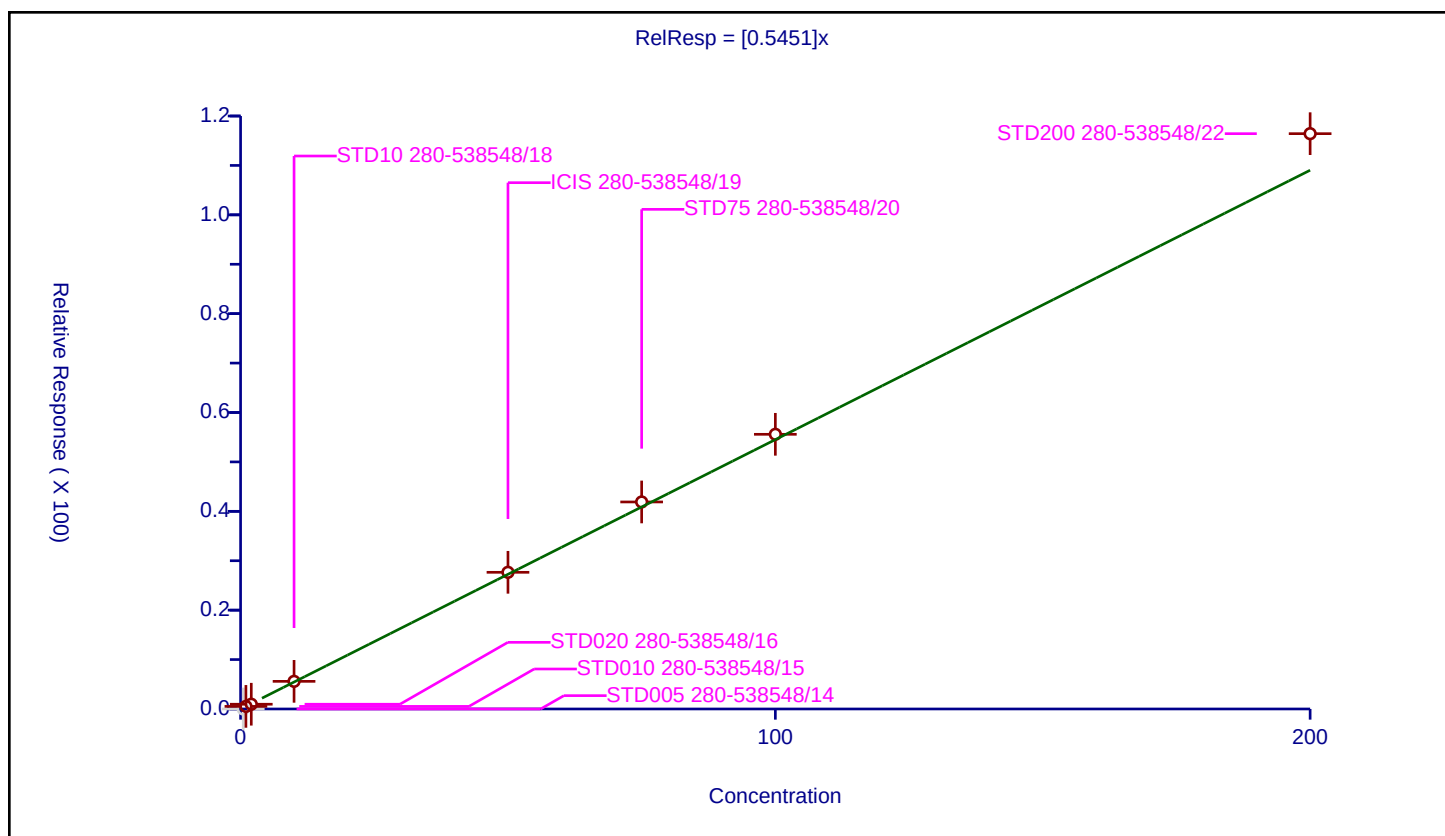
Curve Coefficients

Intercept: 0
 Slope: 0.5451

Error Coefficients

Standard Error: 293000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.52486	50.0	250257.0	0.52486	Y
3	STD020 280-538548/16	2.0	0.964299	50.0	242456.0	0.482149	Y
4	STD10 280-538548/18	10.0	5.59224	50.0	249122.0	0.559224	Y
5	ICIS 280-538548/19	50.0	27.657914	50.0	257514.0	0.553158	Y
6	STD75 280-538548/20	75.0	41.898374	50.0	257689.0	0.558645	Y
7	STD100 280-538548/21	100.0	55.585401	50.0	257627.0	0.555854	Y
8	STD200 280-538548/22	200.0	116.426718	50.0	259778.0	0.582134	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541263

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2021 13:13 Calibration End Date: 06/25/2021 15:32 Calibration ID: 54749

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-541263/15	P6265.D
Level 2	STD020 280-541263/16	P6266.D
Level 3	STD050 280-541263/17	P6267.D
Level 4	STD10 280-541263/18	P6268.D
Level 5	STD50 280-541263/19	P6269.D
Level 6	STD100 280-541263/20	P6270.D
Level 7	STD200 280-541263/21	P6271.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								
Ethanol	0.0044 0.0030	0.0040 0.0034	0.0035	0.0033	0.0030	Ave		0.003 5				14.6		15.0			
Propene oxide	0.0500 0.0339	0.0484 0.0255	0.0481	0.0484	0.0386	Qua	3.070 9	0.042 0	-0.000001						1.0000		0.9900
2-Propanol	0.0223 0.0165	0.0213 0.0179	0.0192	0.0178	0.0166	Ave		0.018 8				12.0		15.0			
Acetonitrile	0.0363 0.0311	0.0348 0.0332	0.0332	0.0336	0.0313	Ave		0.033 4				5.5		15.0			
Di-isopropyl ether (DIPE)	0.1964 0.1552	0.1660 0.1603	0.1677	0.1673	0.1568	Ave		0.167 1				8.3		15.0			
Chloroprene	0.3908 0.3002	0.2993 0.3038	0.2940	0.3015	0.2930	Ave		0.311 8				11.2		15.0			
Tert-butyl ethyl ether	0.7248 0.5965	0.6448 0.6002	0.6266	0.6367	0.5949	Ave		0.632 1				7.2		15.0			
Ethyl acetate	0.2214 0.1833	0.2446 0.1924	0.1989	0.2032	0.1877	Ave		0.204 5				10.6		15.0			
Propionitrile	0.0406 0.0354	0.0397 0.0374	0.0386	0.0394	0.0360	Ave		0.038 2				5.1		15.0			
Methacrylonitrile	0.1588 0.1277	0.1449 0.1231	0.1485	0.1478	0.1359	Ave		0.141 0				9.0		15.0			
n-Butanol	0.0085 0.0070	0.0078 0.0068	0.0067	0.0067	0.0067	Ave		0.007 2				9.7		15.0			
Tert-amyl methyl ether	0.6509 0.5582	0.6192 0.5672	0.5981	0.5980	0.5685	Ave		0.594 3				5.6		15.0			
Methyl methacrylate	0.0643 0.0596	0.0598 0.0625	0.0612	0.0639	0.0598	Ave		0.061 6				3.2		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.: 280-150245-1 Analy Batch No.: 541263

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2021 13:13 Calibration End Date: 06/25/2021 15:32 Calibration ID: 54749

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	0.0699 0.0525	0.0573 0.0578	0.0561	0.0543	0.0520	Ave		0.057 1				10.6		15.0			
Tetrahydrothiophene	0.2484 0.2311	0.2363 0.2439	0.2399	0.2421	0.2358	Ave		0.239 7				2.4		15.0			
cis-1,4-Dichloro-2-butene	0.1900 0.1830	0.1684 0.2027	0.1625	0.1734	0.1803	Ave		0.180 0				7.5		15.0			
1,2,3-Trimethylbenzene	2.3158 1.9044	1.9598 1.8352	1.8796	1.9500	1.8769	Ave		1.960 2				8.3		15.0			
1,3,5-Trichlorobenzene	0.5963 0.5188	0.4929 0.5238	0.4854	0.5088	0.4977	Ave		0.517 7				7.2		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.: 280-150245-1 Analy Batch No.: 541263

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2021 13:13 Calibration End Date: 06/25/2021 15:32 Calibration ID: 54749

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-541263/15	P6265.D
Level 2	STD020 280-541263/16	P6266.D
Level 3	STD050 280-541263/17	P6267.D
Level 4	STD10 280-541263/18	P6268.D
Level 5	STD50 280-541263/19	P6269.D
Level 6	STD100 280-541263/20	P6270.D
Level 7	STD200 280-541263/21	P6271.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
Ethanol	FB	Ave	7116 474677	12453 1080066	27559	51466	238220	60.0 6000	120 12000	300	600	3000
Propene oxide	FB	Qua	135267 9030350	252907 13662108	630625	1246558	5105355	100 10000	200 20000	500	1000	5000
2-Propanol	FB	Ave	6025 439864	11143 956404	25155	45828	219679	10.0 1000	20.0 2000	50.0	100	500
Acetonitrile	FB	Ave	9820 829896	18185 1776028	43507	86665	413715	10.0 1000	20.0 2000	50.0	100	500
Di-isopropyl ether (DIPE)	FB	Ave	5315 413694	8682 858467	21961	43130	207316	1.00 100	2.00 200	5.00	10.0	50.0
Chloroprene	FB	Ave	10574 800218	15651 1627379	38507	77709	387268	1.00 100	2.00 200	5.00	10.0	50.0
Tert-butyl ethyl ether	FB	Ave	19614 1590277	33717 3214941	82069	164106	786343	1.00 100	2.00 200	5.00	10.0	50.0
Ethyl acetate	FB	Ave	11980 977398	25582 2061506	52093	104728	496186	2.00 200	4.00 400	10.0	20.0	100
Propionitrile	FB	Ave	10977 944195	20774 2005600	50510	101617	476493	10.0 1000	20.0 2000	50.0	100	500
Methacrylonitrile	FB	Ave	42977 3404385	75795 6593479	194527	380953	1795856	10.0 1000	20.0 2000	50.0	100	500
n-Butanol	FB	Ave	5732 468374	10170 914727	21841	42980	223044	25.0 2500	50.0 5000	125	250	1250
Tert-amyl methyl ether	FB	Ave	17614 1488285	32378 3038200	78334	154124	751447	1.00 100	2.00 200	5.00	10.0	50.0
Methyl methacrylate	FB	Ave	3479 317949	6255 669255	16041	32953	158064	2.00 200	4.00 400	10.0	20.0	100
2-Nitropropane	FB	Ave	3785	5990	14708	27991	137522	2.00	4.00	10.0	20.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541263

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2021 13:13 Calibration End Date: 06/25/2021 15:32 Calibration ID: 54749

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
			280013	619216				200	400			
Tetrahydrothiophene	CBNZ d5	Ave	3249	5993	15594	30550	151245	2.00	4.00	10.0	20.0	100
			302996	646780				200	400			
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	3485	6145	14916	30465	162025	2.00	4.00	10.0	20.0	100
			329123	756820				200	400			
1,2,3-Trimethylbenzene	DCBd 4	Ave	21244	35750	86282	171332	843101	1.00	2.00	5.00	10.0	50.0
			1712025	3426141				100	200			
1,3,5-Trichlorobenzene	DCBd 4	Ave	5470	8991	22281	44704	223557	1.00	2.00	5.00	10.0	50.0
			466373	977875				100	200			

Curve Type Legend

Ave = Average ISTD

Qua = Quadratic ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6265.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 25-Jun-2021 13:13:30 ALS Bottle#: 1 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD01
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:30:53 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 25-Jun-2021 13:37:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1353027	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	89	326963	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	98	458667	50.0	50.0	
13 Ethylene oxide	43	2.040	2.029	0.011	99	23953	100.0	0	M
18 Ethanol	45	2.472	2.482	-0.010	99	7116	60.0	75.1	
20 Propene oxide	58	2.610	2.609	0.001	96	135267	100.0	45.9	a
25 Isopropyl alcohol	45	2.852	2.862	-0.010	99	6025	10.0	11.8	
28 Acetonitrile	41	2.979	2.968	0.011	99	9820	10.0	10.9	
40 Isopropyl ether	87	3.623	3.622	0.001	92	5315	1.00	1.18	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	93	10574	1.00	1.25	
43 Tert-butyl ethyl ether	59	3.876	3.875	0.001	98	19614	1.00	1.15	
46 Ethyl acetate	43	4.013	4.013	0.000	99	11980	2.00	2.16	
49 Propionitrile	54	4.045	4.044	0.001	99	10977	10.0	10.6	
51 Methacrylonitrile	41	4.161	4.160	0.001	91	42977	10.0	11.3	
63 n-Butanol	56	4.731	4.730	0.001	51	5732	25.0	29.5	
62 Tert-amyl methyl ether	73	4.731	4.730	0.001	88	17614	1.00	1.10	
71 Methyl methacrylate	100	5.364	5.363	0.001	88	3479	2.00	2.09	
75 2-Nitropropane	41	5.712	5.712	0.000	96	3785	2.00	2.45	
87 Tetrahydrothiophene	60	6.862	6.862	0.000	91	3249	2.00	2.07	
98 cis-1,4-Dichloro-2-butene	53	8.361	8.360	0.001	85	3485	2.00	2.11	
114 1,2,3-Trimethylbenzene	105	9.648	9.648	0.000	98	21244	1.00	1.18	
118 1,3,5-Trichlorobenzene	180	10.946	10.946	0.000	92	5470	1.00	1.15	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00052

Amount Added: 1.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6265.D

Injection Date: 25-Jun-2021 13:13:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD010

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

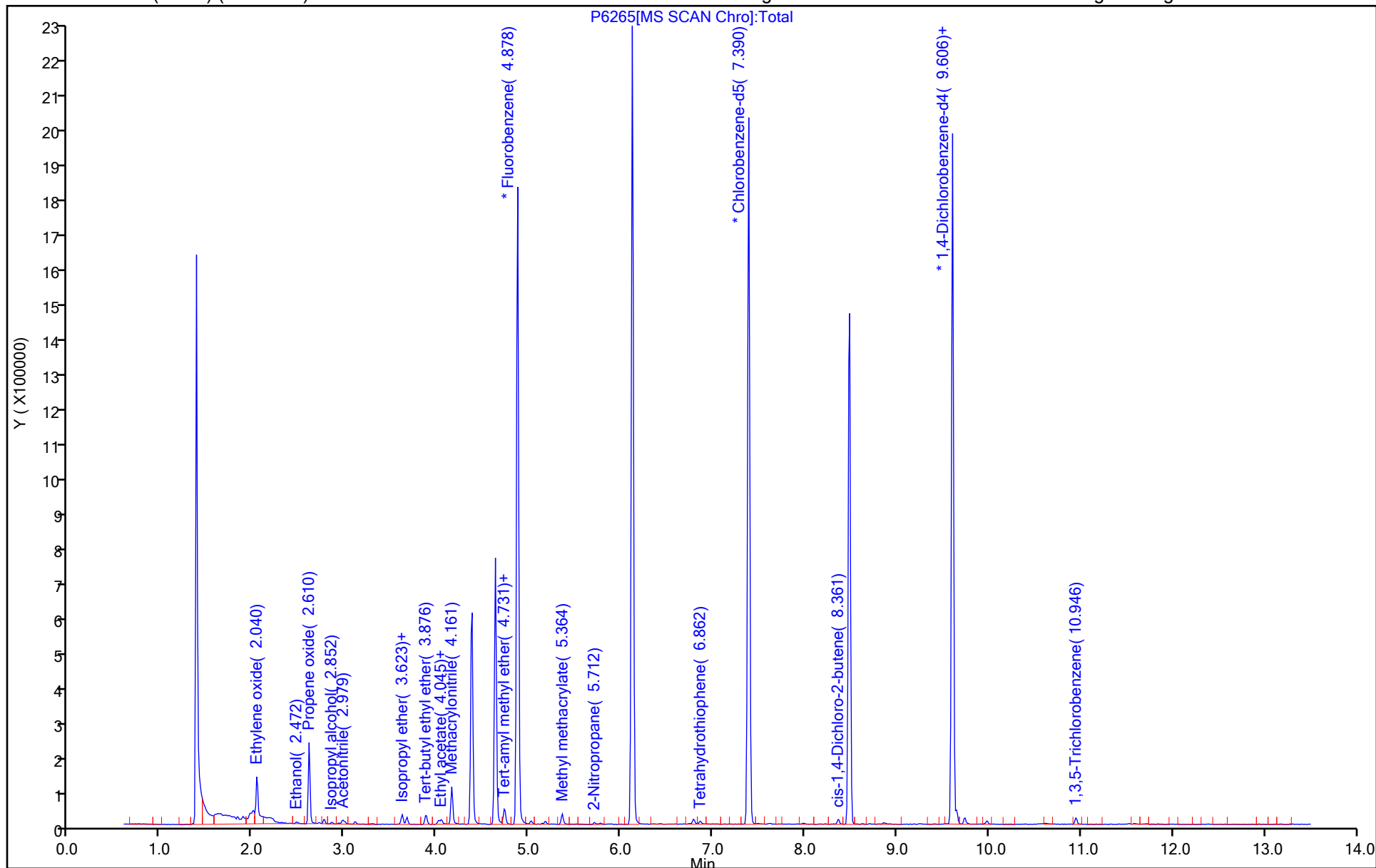
ALS Bottle#: 1

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



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6265.D

Injection Date: 25-Jun-2021 13:13:30

Instrument ID: VMS_P

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

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)

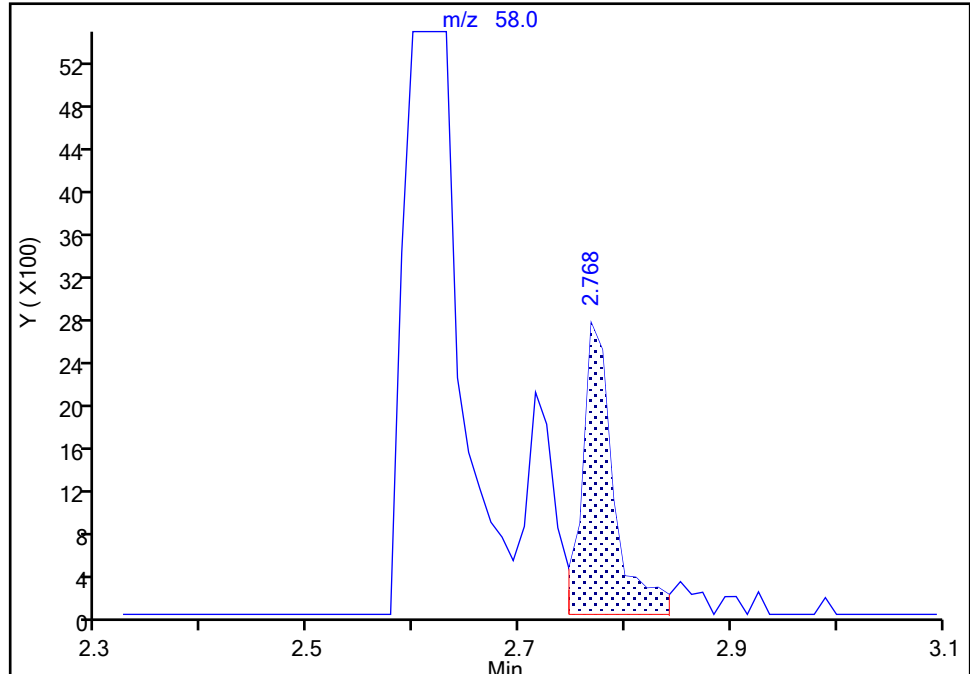
Detector: MS SCAN

20 Propene oxide, CAS: 75-56-9

Signal: 1

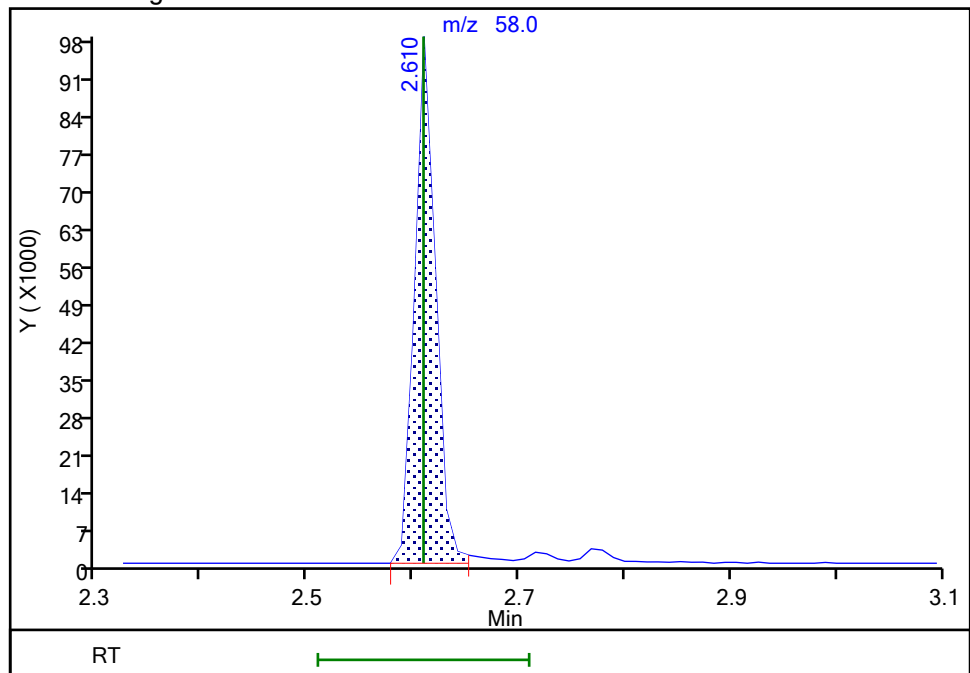
RT: 2.77
Area: 5631
Amount: 5.689240
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 135267
Amount: 45.901109
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 15:47:52

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6266.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 25-Jun-2021 13:36:30 ALS Bottle#: 2 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD02
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:30:55 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 25-Jun-2021 14:33:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.871	4.878	-0.007	98	1307275	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.393	7.389	0.004	95	317016	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.609	9.606	0.003	98	456048	50.0	50.0	
13 Ethylene oxide	43	2.032	2.029	0.003	99	38110	200.0	0	M
18 Ethanol	45	2.475	2.482	-0.007	98	12453	120.0	136.0	
20 Propene oxide	58	2.612	2.609	0.003	96	252907	200.0	157.6	a
25 Isopropyl alcohol	45	2.855	2.862	-0.007	99	11143	20.0	22.7	
28 Acetonitrile	41	2.971	2.968	0.003	99	18185	20.0	20.9	
40 Isopropyl ether	87	3.625	3.622	0.003	93	8682	2.00	1.99	
41 2-Chloro-1,3-butadiene	53	3.668	3.675	-0.007	93	15651	2.00	1.92	
43 Tert-butyl ethyl ether	59	3.879	3.875	0.004	99	33717	2.00	2.04	
46 Ethyl acetate	43	4.016	4.013	0.003	99	25582	4.00	4.78	
49 Propionitrile	54	4.048	4.044	0.004	98	20774	20.0	20.8	
51 Methacrylonitrile	41	4.164	4.160	0.004	91	75795	20.0	20.6	
63 n-Butanol	56	4.733	4.730	0.003	51	10170	50.0	54.2	
62 Tert-amyl methyl ether	73	4.733	4.730	0.003	89	32378	2.00	2.08	
71 Methyl methacrylate	100	5.367	5.363	0.004	88	6255	4.00	3.88	
75 2-Nitropropane	41	5.715	5.712	0.003	99	5990	4.00	4.01	
87 Tetrahydrothiophene	60	6.865	6.862	0.003	94	5993	4.00	3.94	
98 cis-1,4-Dichloro-2-butene	53	8.364	8.360	0.004	87	6145	4.00	3.74	
114 1,2,3-Trimethylbenzene	105	9.651	9.648	0.003	99	35750	2.00	2.00	
118 1,3,5-Trichlorobenzene	180	10.949	10.946	0.003	92	8991	2.00	1.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00052

Amount Added: 2.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 26-Jun-2021 12:30:55

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6266.D

Injection Date: 25-Jun-2021 13:36:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD020

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

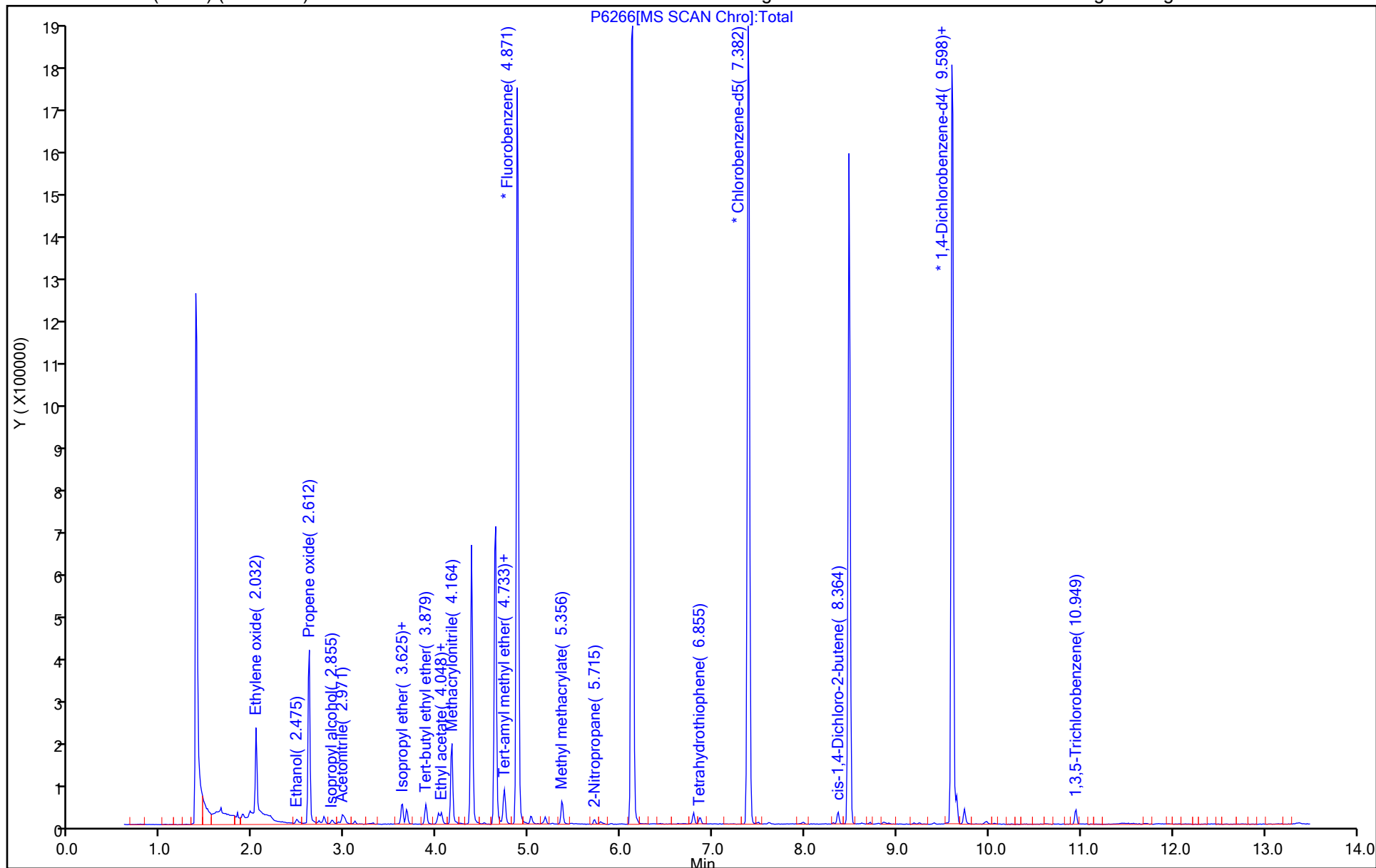
ALS Bottle#: 2

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\20210625-102689.b\6266.D

Injection Date: 25-Jun-2021 13:36:30

Instrument ID: VMS_P

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

2

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)

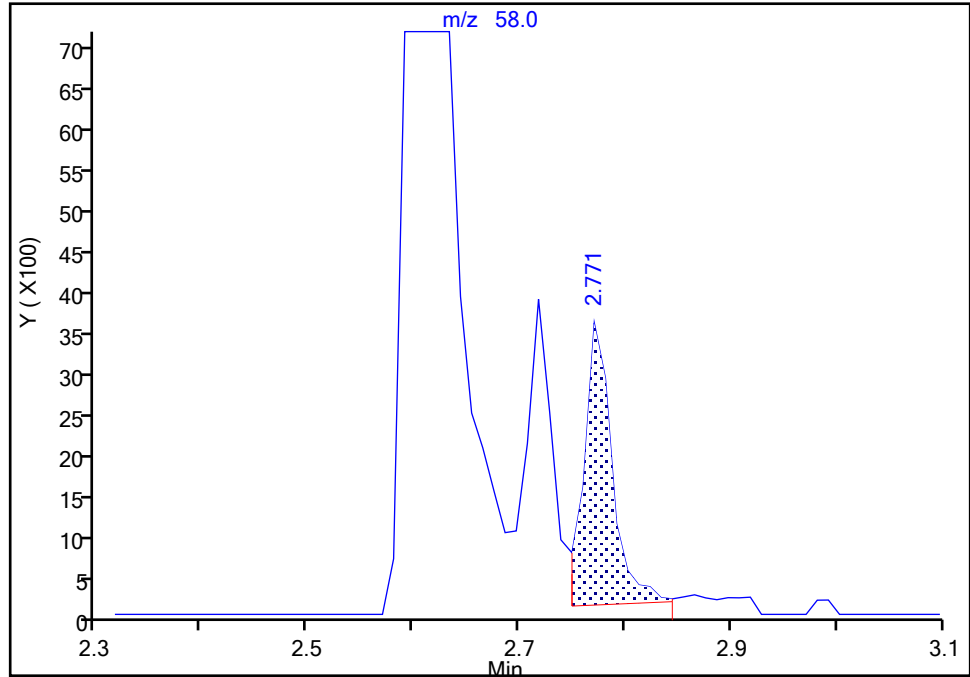
Detector: MS SCAN

20 Propene oxide, CAS: 75-56-9

Signal: 1

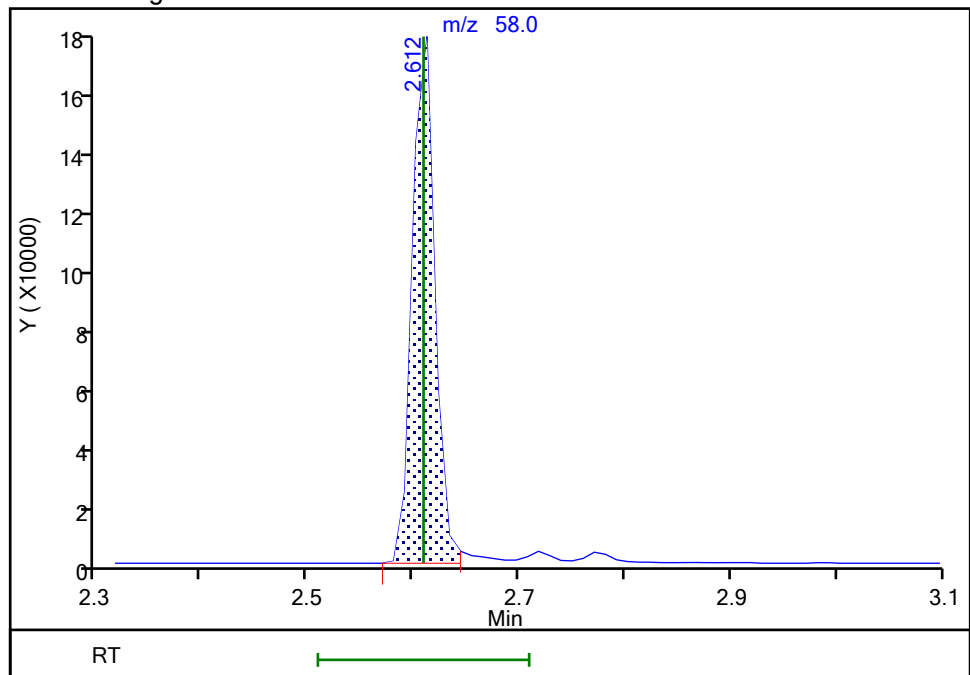
RT: 2.77
Area: 6485
Amount: 9.937697
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 252907
Amount: 157.5516
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 14:47:01

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6267.D
 Lims ID: STD050
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 25-Jun-2021 13:59:30 ALS Bottle#: 3 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD05
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:30:57 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 25-Jun-2021 14:34:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1309718	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	89	324945	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	98	459048	50.0	50.0	
13 Ethylene oxide	43	2.039	2.029	0.010	99	107620	500.0	0	M
18 Ethanol	45	2.472	2.482	-0.010	98	27559	300.0	300.4	
20 Propene oxide	58	2.609	2.609	0.000	96	630625	500.0	504.7	a
25 Isopropyl alcohol	45	2.852	2.862	-0.010	99	25155	50.0	51.1	
28 Acetonitrile	41	2.968	2.968	0.000	99	43507	50.0	49.8	
40 Isopropyl ether	87	3.622	3.622	0.000	93	21961	5.00	5.02	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	94	38507	5.00	4.71	
43 Tert-butyl ethyl ether	59	3.876	3.875	0.001	98	82069	5.00	4.96	
46 Ethyl acetate	43	4.013	4.013	0.000	99	52093	10.0	9.73	
49 Propionitrile	54	4.044	4.044	0.000	98	50510	50.0	50.5	
51 Methacrylonitrile	41	4.161	4.160	0.000	92	194527	50.0	52.7	
63 n-Butanol	56	4.730	4.730	0.000	49	21841	125.0	116.3	
62 Tert-amyl methyl ether	73	4.730	4.730	0.000	91	78334	5.00	5.03	
71 Methyl methacrylate	100	5.364	5.363	0.001	89	16041	10.0	9.94	
75 2-Nitropropane	41	5.712	5.712	0.000	96	14708	10.0	9.83	a
87 Tetrahydrothiophene	60	6.862	6.862	0.000	92	15594	10.0	10.0	
98 cis-1,4-Dichloro-2-butene	53	8.361	8.360	0.001	89	14916	10.0	9.02	
114 1,2,3-Trimethylbenzene	105	9.648	9.648	0.000	99	86282	5.00	4.79	
118 1,3,5-Trichlorobenzene	180	10.946	10.946	0.000	94	22281	5.00	4.69	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00052

Amount Added: 5.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6267.D

Injection Date: 25-Jun-2021 13:59:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD050

Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

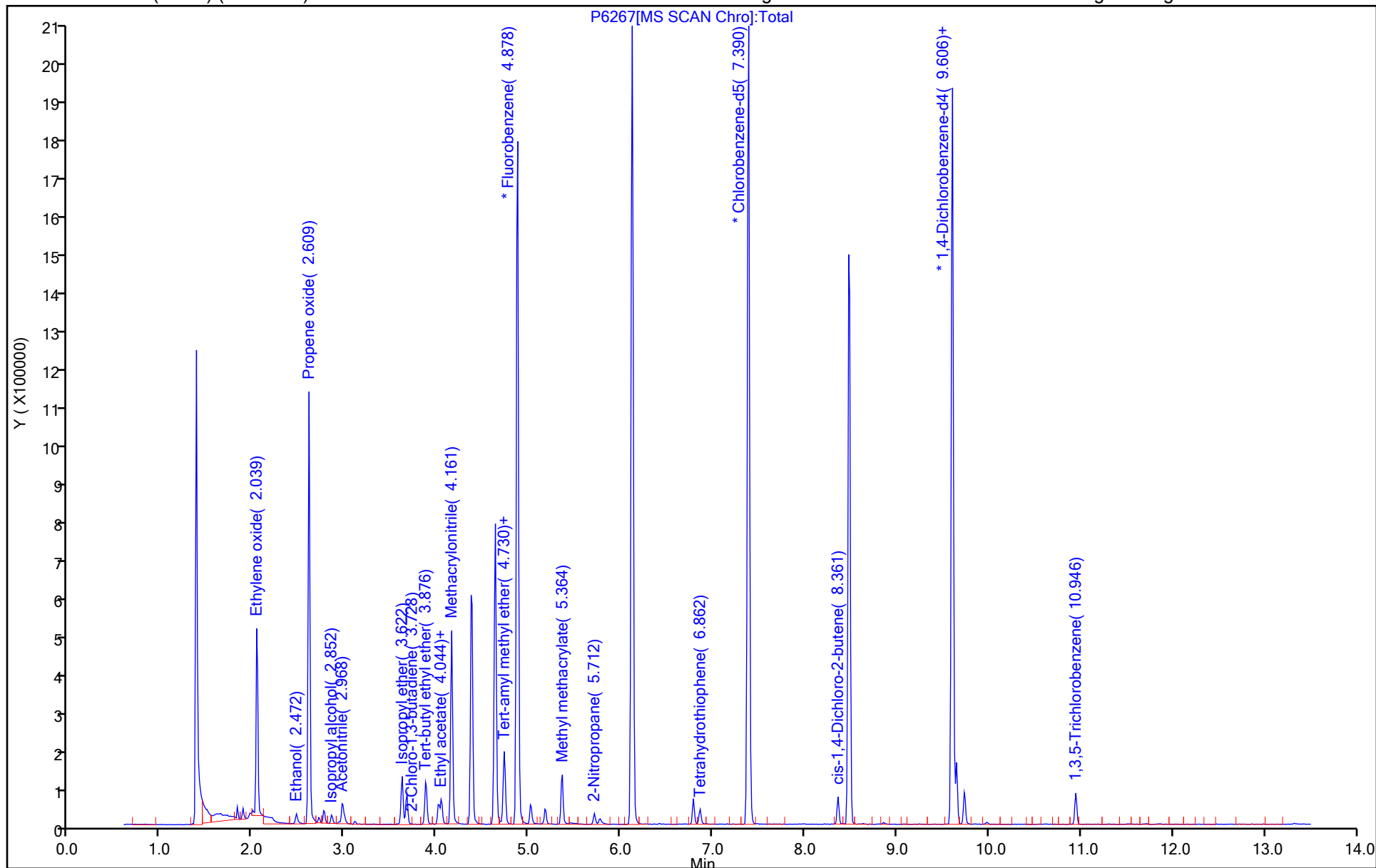
ALS Bottle#: 3

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\20210625-102689.b\6267.D

Injection Date: 25-Jun-2021 13:59:30

Instrument ID: VMS_P

Lims ID: STD050

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

3

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)

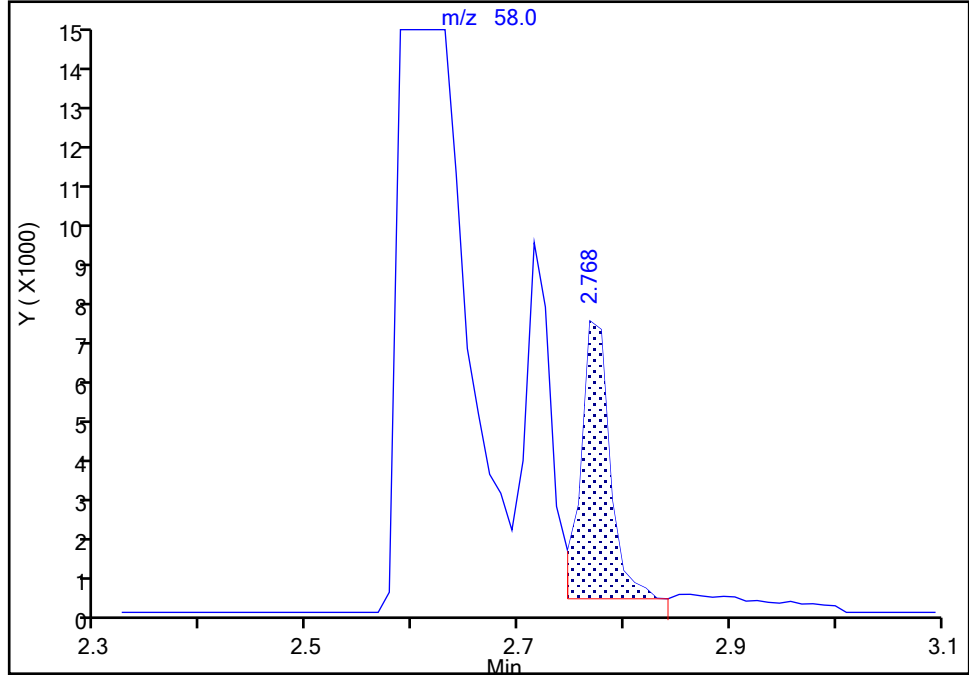
Detector: MS SCAN

20 Propene oxide, CAS: 75-56-9

Signal: 1

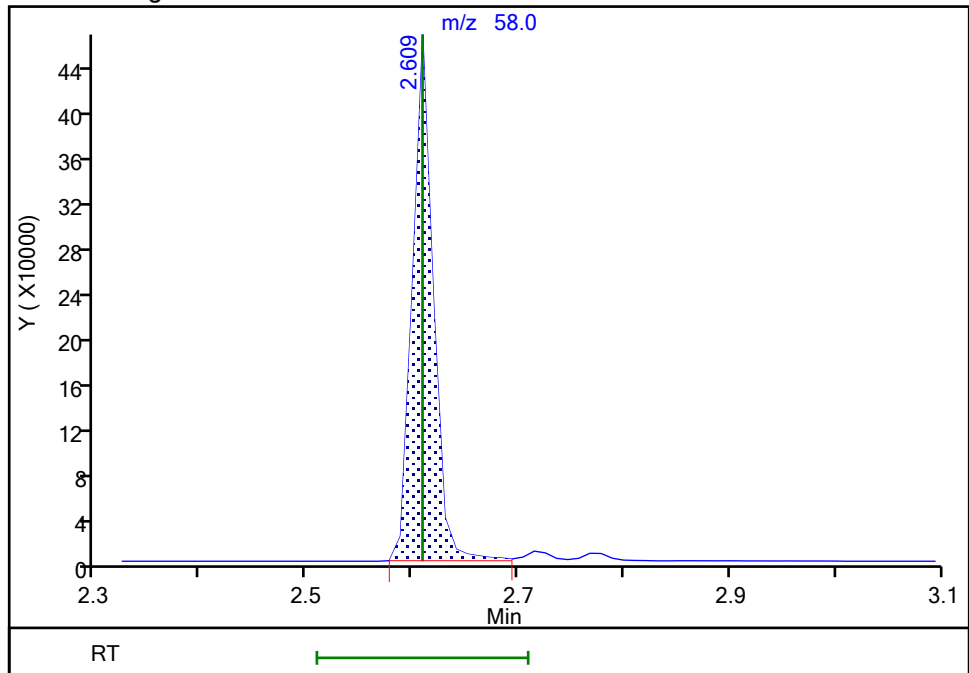
RT: 2.77
Area: 12852
Amount: 480.1693
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 630625
Amount: 504.7232
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 14:46:37

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6267.D

Injection Date: 25-Jun-2021 13:59:30

Instrument ID: VMS_P

Lims ID: STD050

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

3

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

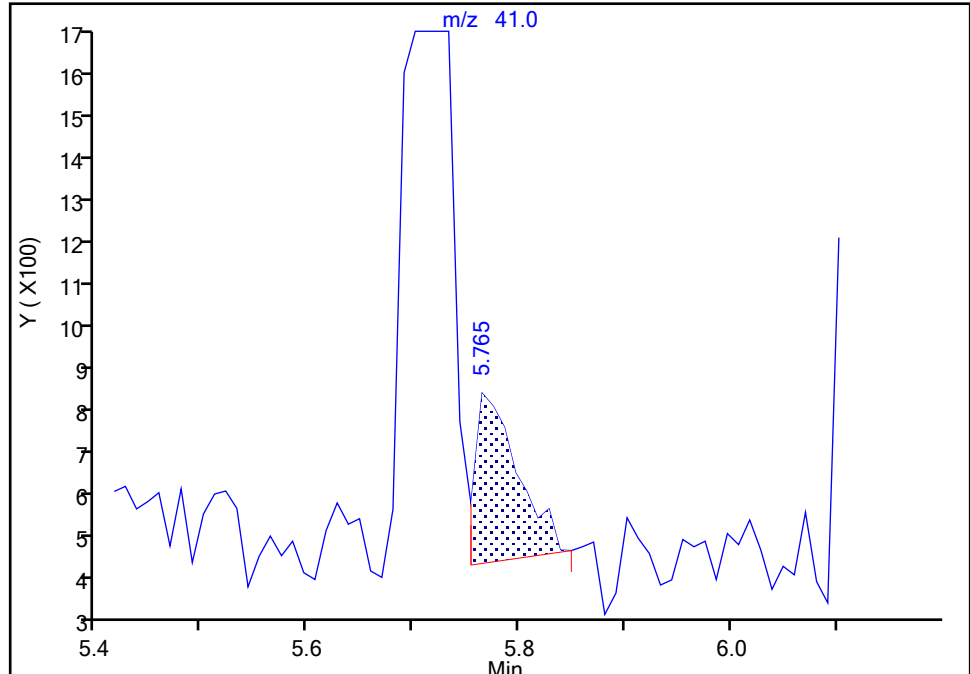
MS SCAN

75 2-Nitropropane, CAS: 79-46-9

Signal: 1

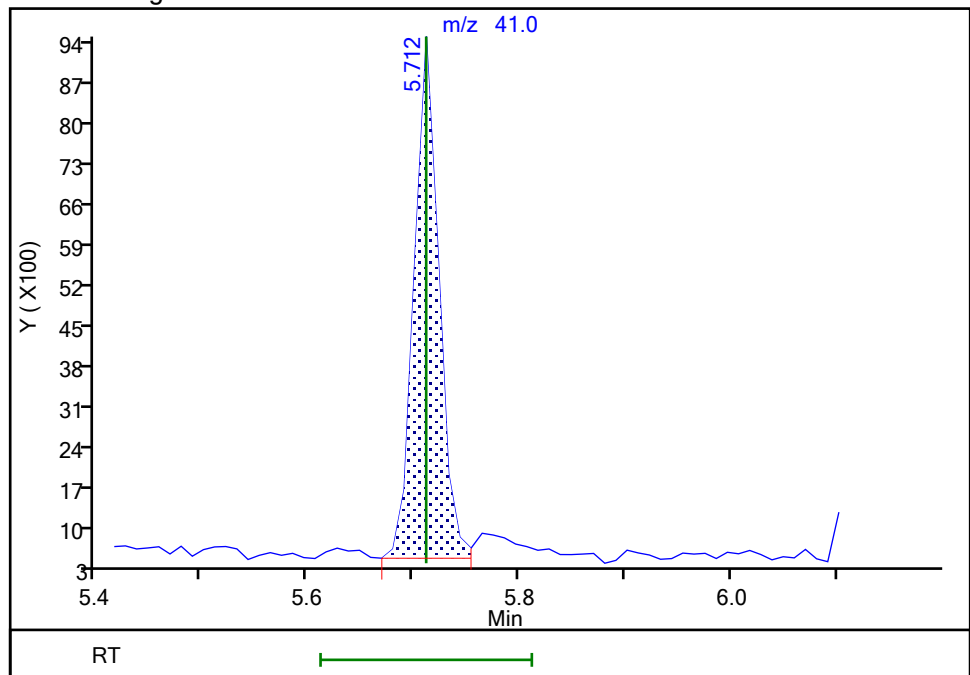
RT: 5.76
Area: 1124
Amount: 0.923771
Amount Units: ug/l

Processing Integration Results



RT: 5.71
Area: 14708
Amount: 9.826238
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 14:46:24

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6268.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 25-Jun-2021 14:22:30 ALS Bottle#: 4 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:30:59 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 25-Jun-2021 14:46:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.878	0.002	98	1288691	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.389	0.003	88	315490	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.606	0.002	98	439303	50.0	50.0	
13 Ethylene oxide	43	2.041	2.029	0.012	99	210893	1000.0	0	M
18 Ethanol	45	2.474	2.482	-0.008	99	51466	600.0	570.1	
20 Propene oxide	58	2.611	2.609	0.002	96	1246558	1000.0	1101.6	a
25 Isopropyl alcohol	45	2.854	2.862	-0.008	98	45828	100.0	94.6	
28 Acetonitrile	41	2.970	2.968	0.002	99	86665	100.0	100.8	
40 Isopropyl ether	87	3.624	3.622	0.002	93	43130	10.0	10.0	
41 2-Chloro-1,3-butadiene	53	3.666	3.675	-0.009	94	77709	10.0	9.67	
43 Tert-butyl ethyl ether	59	3.877	3.875	0.002	99	164106	10.0	10.1	
46 Ethyl acetate	43	4.015	4.013	0.002	99	104728	20.0	19.9	
49 Propionitrile	54	4.046	4.044	0.002	98	101617	100.0	103.3	
51 Methacrylonitrile	41	4.162	4.160	0.002	91	380953	100.0	104.9	
63 n-Butanol	56	4.732	4.730	0.002	50	42980	250.0	232.5	
62 Tert-amyl methyl ether	73	4.732	4.730	0.002	90	154124	10.0	10.1	
71 Methyl methacrylate	100	5.365	5.363	0.002	89	32953	20.0	20.8	
75 2-Nitropropane	41	5.714	5.712	0.002	97	27991	20.0	19.0	a
87 Tetrahydrothiophene	60	6.864	6.862	0.002	93	30550	20.0	20.2	
98 cis-1,4-Dichloro-2-butene	53	8.362	8.360	0.002	87	30465	20.0	19.3	
114 1,2,3-Trimethylbenzene	105	9.650	9.648	0.002	99	171332	10.0	9.95	
118 1,3,5-Trichlorobenzene	180	10.948	10.946	0.002	95	44704	10.0	9.83	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00052

Amount Added: 10.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 26-Jun-2021 12:30:59

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6268.D

Injection Date: 25-Jun-2021 14:22:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD10

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

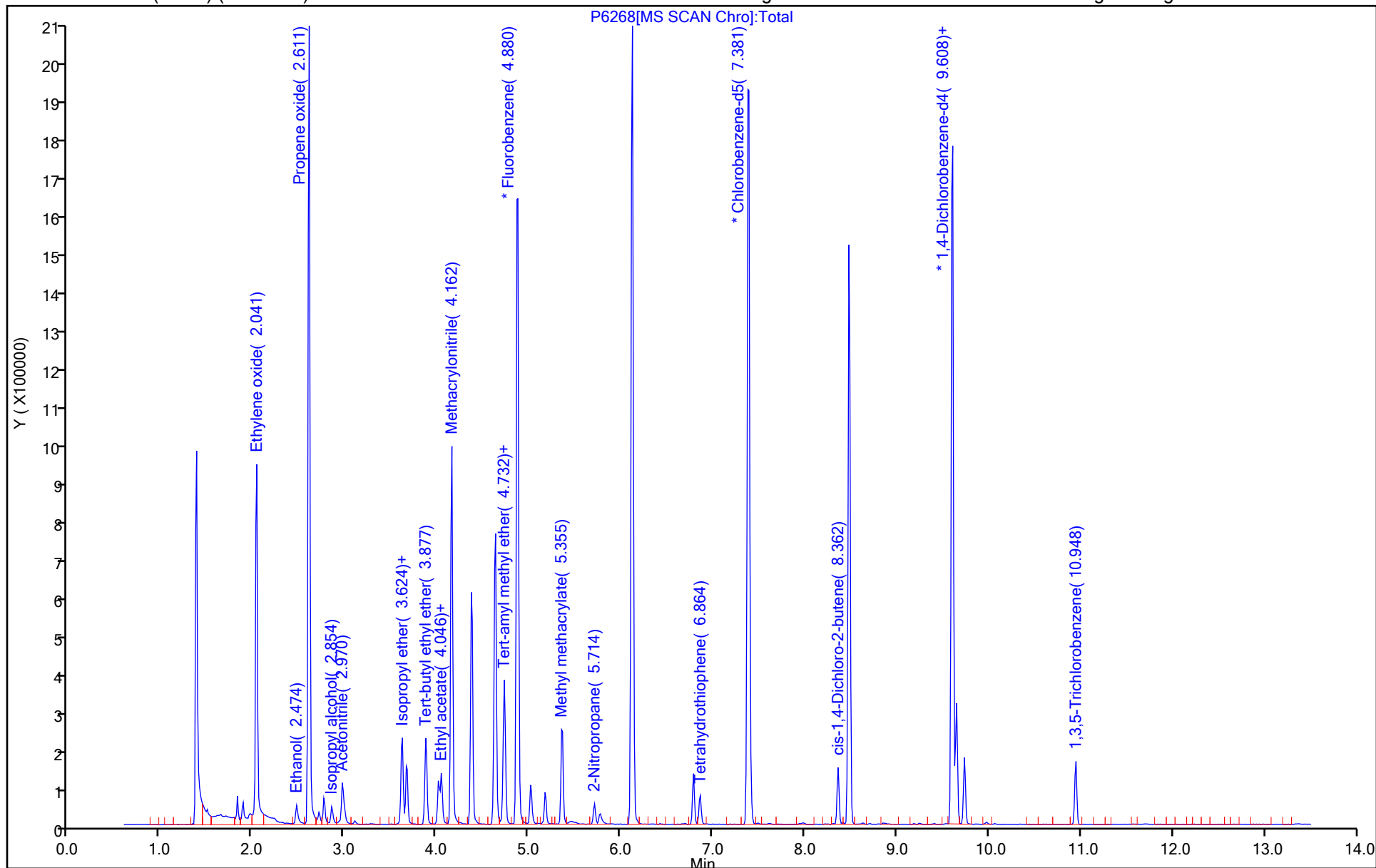
ALS Bottle#: 4

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6268.D

Injection Date: 25-Jun-2021 14:22:30

Instrument ID: VMS_P

Lims ID: STD10

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

4

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)

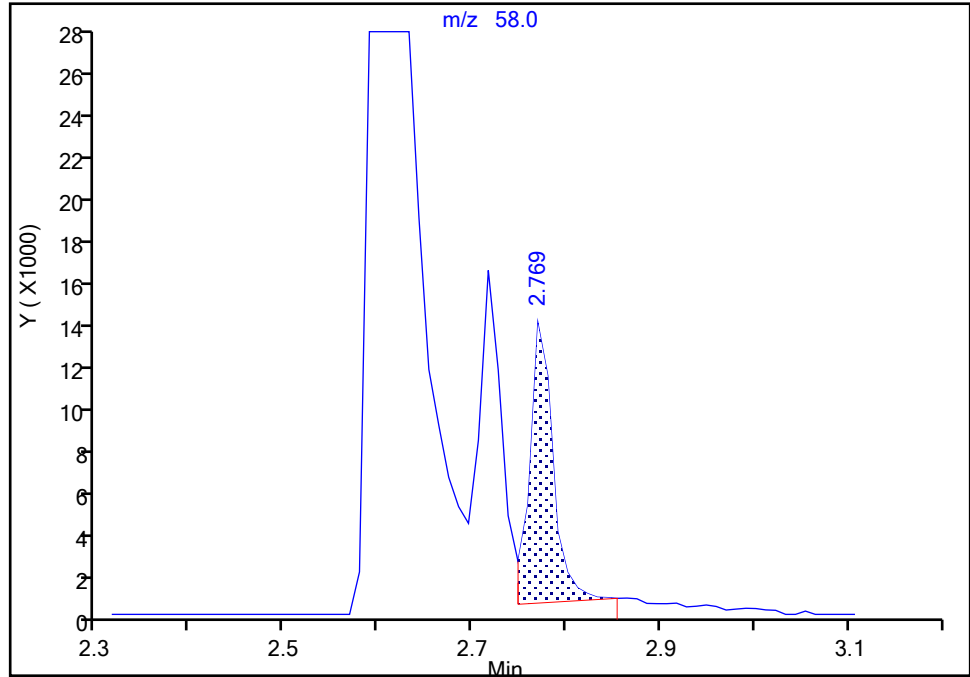
Detector: MS SCAN

20 Propene oxide, CAS: 75-56-9

Signal: 1

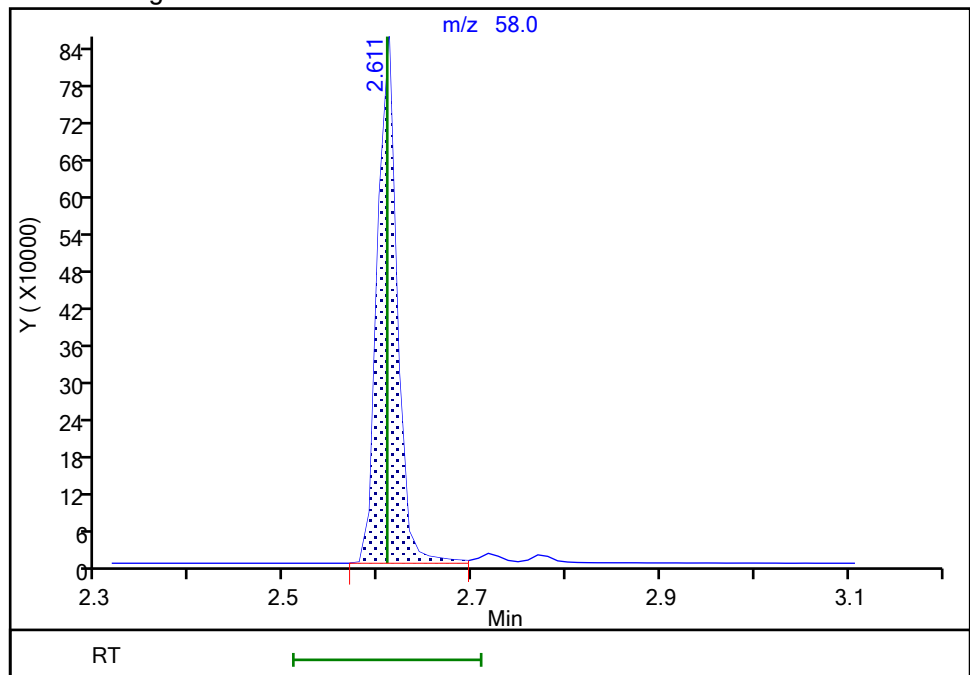
RT: 2.77
Area: 22946
Amount: 1024.8664
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 1246558
Amount: 1101.6122
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 14:45:42

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6268.D

Injection Date: 25-Jun-2021 14:22:30

Instrument ID: VMS_P

Lims ID: STD10

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

4

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)

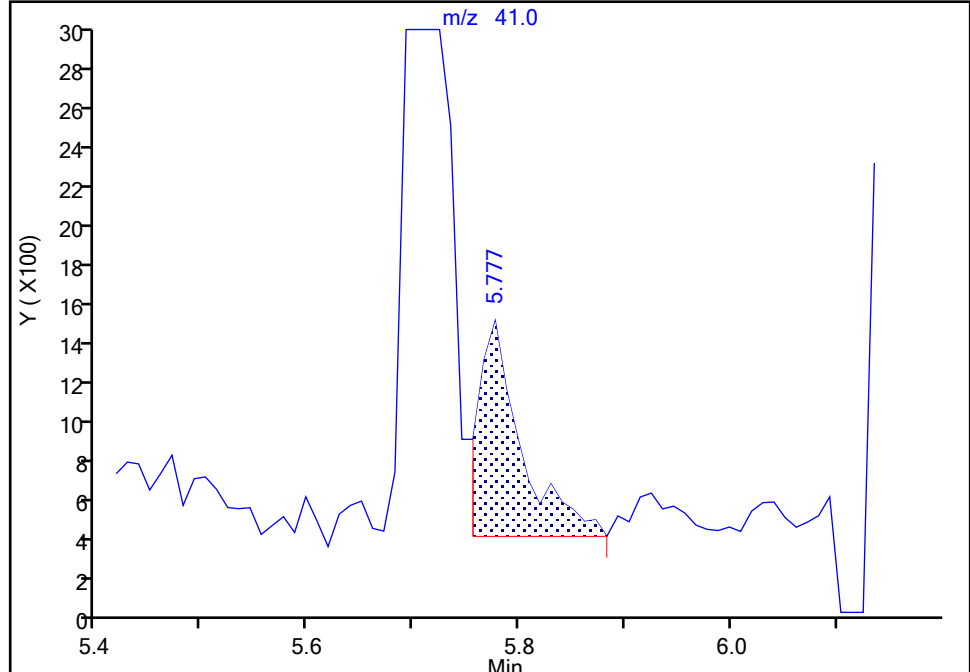
Detector: MS SCAN

75 2-Nitropropane, CAS: 79-46-9

Signal: 1

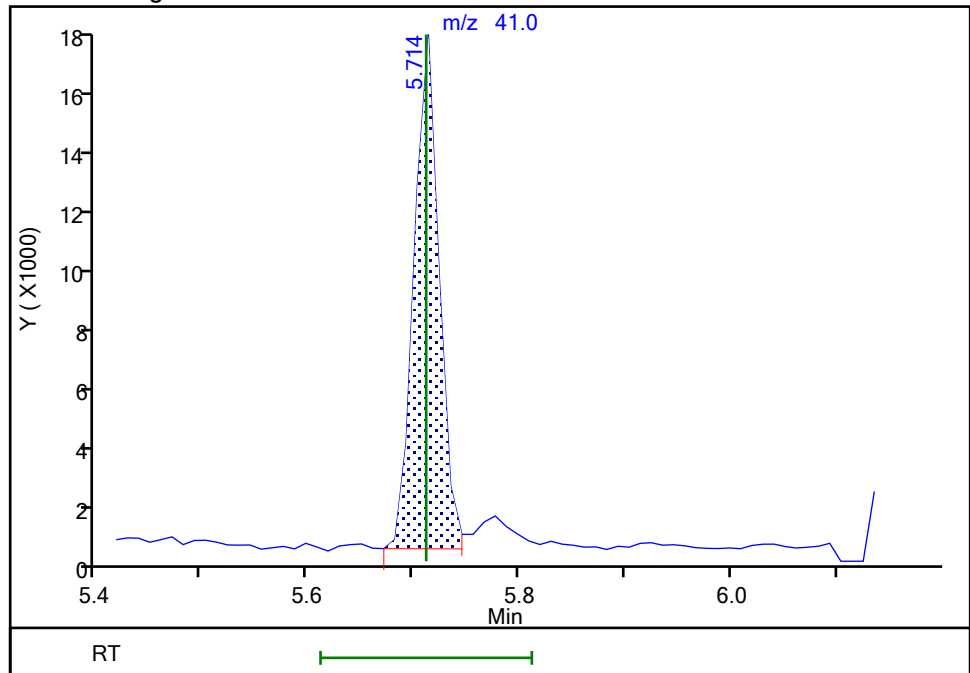
RT: 5.78
Area: 3143
Amount: 3.544934
Amount Units: ug/l

Processing Integration Results



RT: 5.71
Area: 27991
Amount: 19.005577
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 14:46:00

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6269.D
 Lims ID: STD50
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 25-Jun-2021 14:46:30 ALS Bottle#: 5 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD50
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:31:02 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 25-Jun-2021 15:45:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1321889	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	89	320705	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	98	449202	50.0	50.0	
13 Ethylene oxide	43	2.029	2.029	0.000	100	549210	5000.0	0	
18 Ethanol	45	2.482	2.482	0.000	99	238220	3000.0	2572.5	
20 Propene oxide	58	2.609	2.609	0.000	96	5105355	5000.0	5021.6	a
25 Isopropyl alcohol	45	2.862	2.862	0.000	99	219679	500.0	442.2	
28 Acetonitrile	41	2.968	2.968	0.000	99	413715	500.0	469.1	
40 Isopropyl ether	87	3.622	3.622	0.000	93	207316	50.0	46.9	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	93	387268	50.0	47.0	
43 Tert-butyl ethyl ether	59	3.875	3.875	0.000	98	786343	50.0	47.1	
46 Ethyl acetate	43	4.013	4.013	0.000	99	496186	100.0	91.8	
49 Propionitrile	54	4.044	4.044	0.000	98	476493	500.0	472.2	
51 Methacrylonitrile	41	4.160	4.160	0.000	91	1795856	500.0	481.9	
63 n-Butanol	56	4.730	4.730	0.000	51	223044	1250.0	1176.4	
62 Tert-amyl methyl ether	73	4.730	4.730	0.000	89	751447	50.0	47.8	
71 Methyl methacrylate	100	5.363	5.363	0.000	89	158064	100.0	97.1	
75 2-Nitropropane	41	5.712	5.712	0.000	98	137522	100.0	91.0	a
87 Tetrahydrothiophene	60	6.862	6.862	0.000	93	151245	100.0	98.4	
98 cis-1,4-Dichloro-2-butene	53	8.360	8.360	0.000	86	162025	100.0	100.2	
114 1,2,3-Trimethylbenzene	105	9.648	9.648	0.000	99	843101	50.0	47.9	
118 1,3,5-Trichlorobenzene	180	10.946	10.946	0.000	95	223557	50.0	48.1	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-Supp A_00052

Amount Added: 50.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6269.D

Injection Date: 25-Jun-2021 14:46:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD50

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

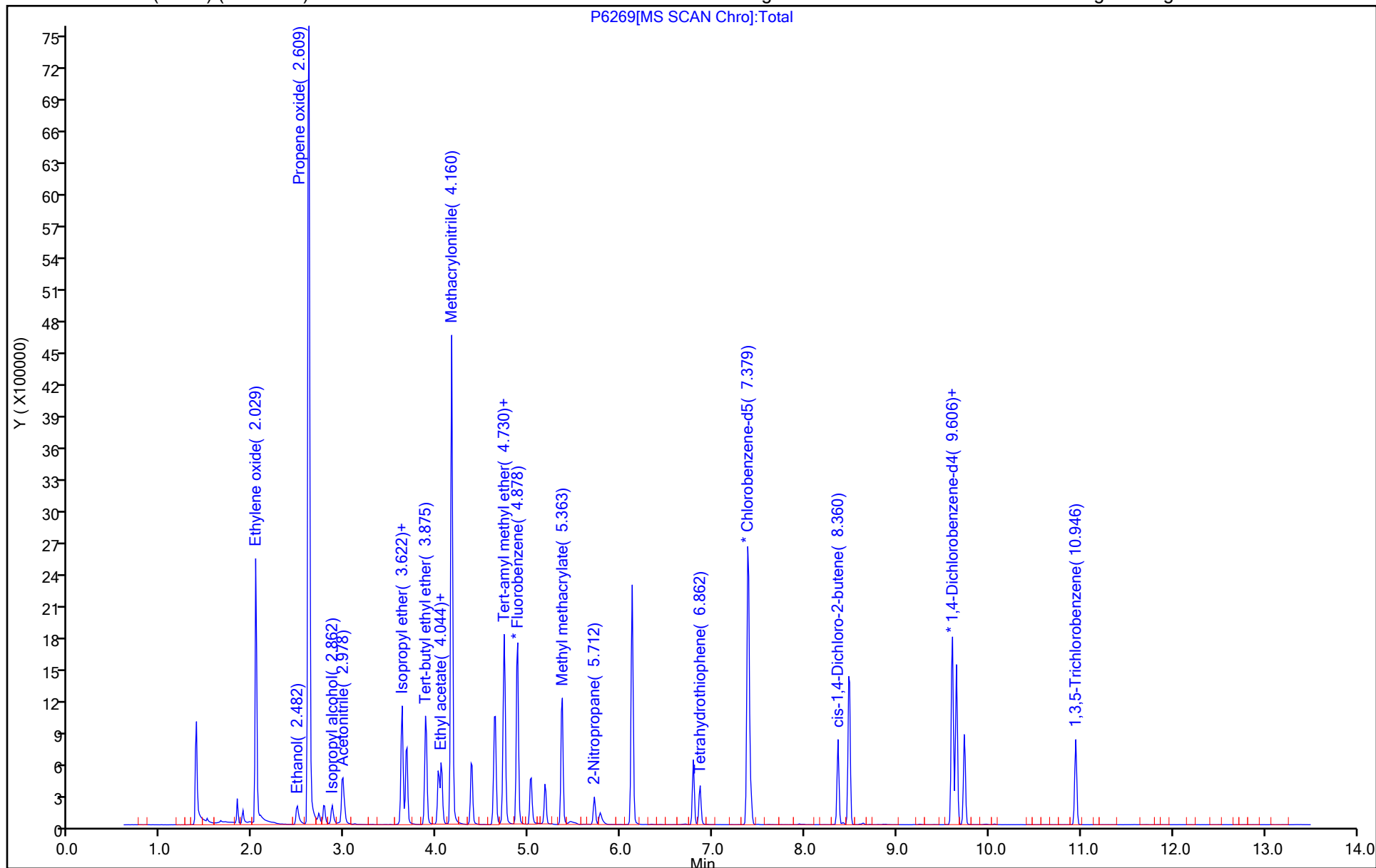
ALS Bottle#: 5

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6269.D

Injection Date: 25-Jun-2021 14:46:30

Instrument ID: VMS_P

Lims ID: STD50

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

5

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)

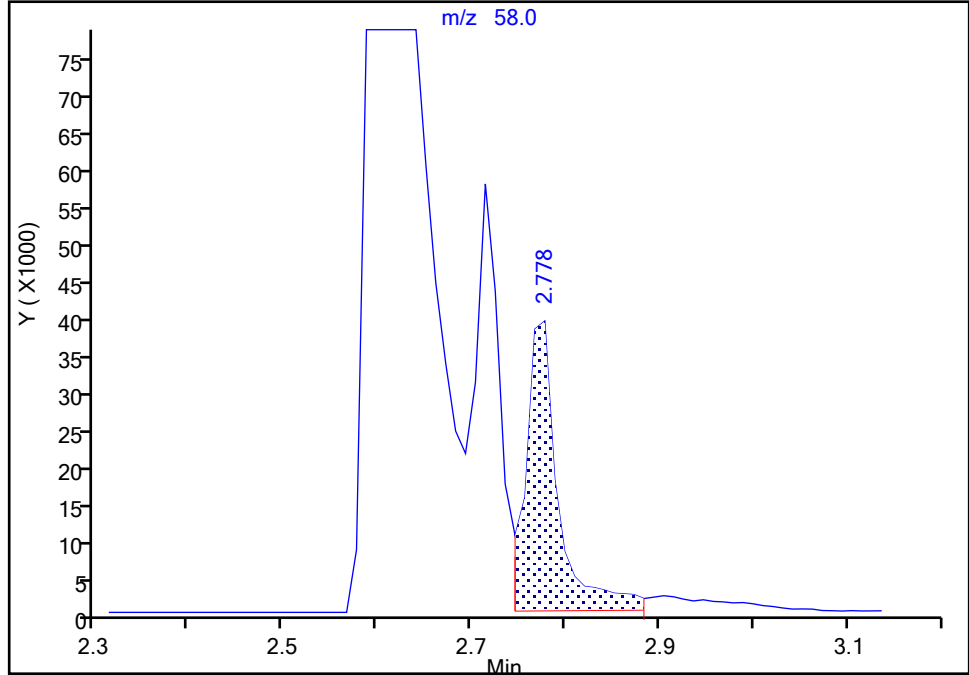
Detector: MS SCAN

20 Propene oxide, CAS: 75-56-9

Signal: 1

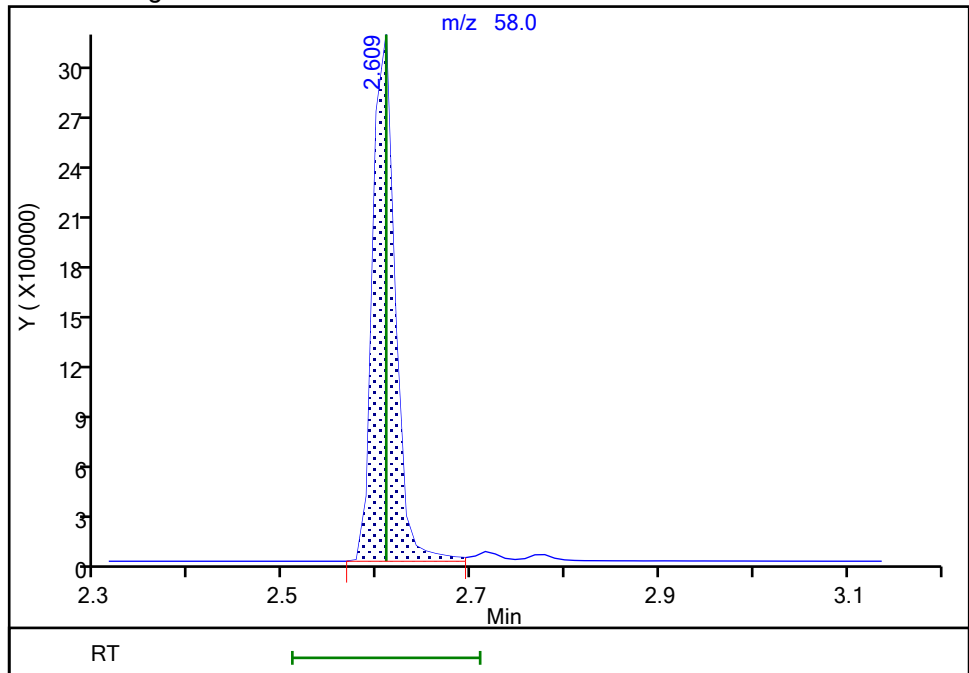
RT: 2.78
Area: 94579
Amount: 144.9594
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 5105355
Amount: 5021.5958
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 15:44:52

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6269.D

Injection Date: 25-Jun-2021 14:46:30

Instrument ID: VMS_P

Lims ID: STD50

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

5

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)

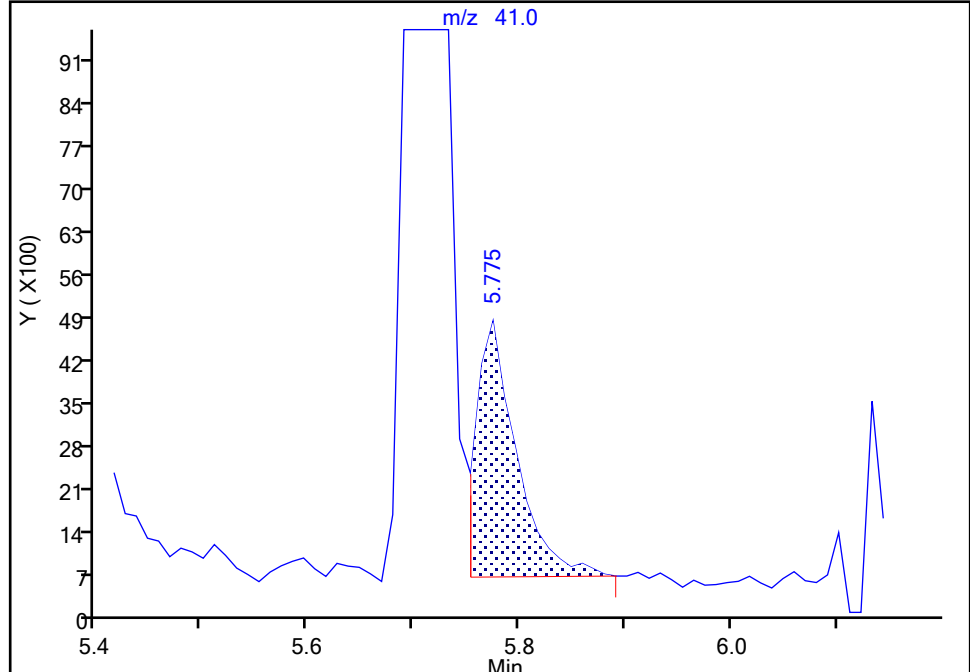
Detector: MS SCAN

75 2-Nitropropane, CAS: 79-46-9

Signal: 1

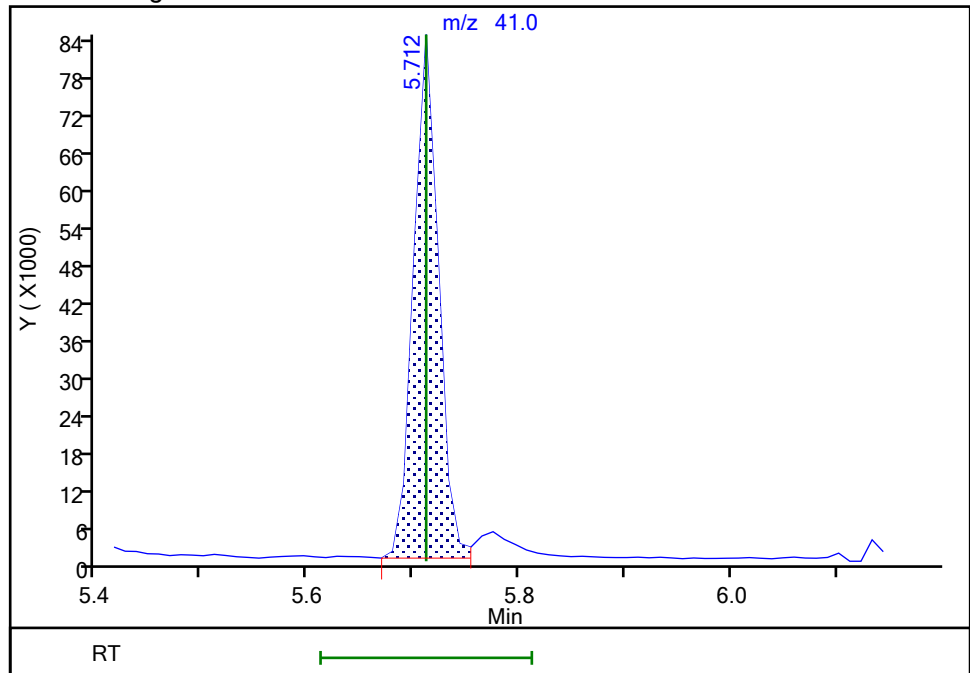
RT: 5.77
Area: 11147
Amount: 8.593198
Amount Units: ug/l

Processing Integration Results



RT: 5.71
Area: 137522
Amount: 91.030858
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 15:46:29

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6270.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 25-Jun-2021 15:09:30 ALS Bottle#: 6 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD100
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:31:04 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 25-Jun-2021 15:46:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1332992	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	89	327723	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	449499	50.0	50.0	
13 Ethylene oxide	43	2.029	2.029	0.000	100	661951	10000	0	
18 Ethanol	45	2.483	2.482	0.001	99	474677	6000.0	5083.3	
20 Propene oxide	58	2.599	2.609	-0.010	96	9030350	10000	9951.7	a
25 Isopropyl alcohol	45	2.863	2.862	0.001	98	439864	1000.0	878.0	
28 Acetonitrile	41	2.979	2.968	0.011	99	829896	1000.0	933.2	
40 Isopropyl ether	87	3.622	3.622	0.000	93	413694	100.0	92.9	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	94	800218	100.0	96.3	
43 Tert-butyl ethyl ether	59	3.876	3.875	0.001	98	1590277	100.0	94.4	
46 Ethyl acetate	43	4.013	4.013	0.000	99	977398	200.0	179.3	
49 Propionitrile	54	4.045	4.044	0.001	98	944195	1000.0	927.9	
51 Methacrylonitrile	41	4.161	4.160	0.001	90	3404385	1000.0	905.9	
63 n-Butanol	56	4.731	4.730	0.000	52	468374	2500.0	2449.8	
62 Tert-amyl methyl ether	73	4.731	4.730	0.000	88	1488285	100.0	93.9	
71 Methyl methacrylate	100	5.364	5.363	0.001	89	317949	200.0	193.6	
75 2-Nitropropane	41	5.712	5.712	0.000	99	280013	200.0	183.8	a
87 Tetrahydrothiophene	60	6.862	6.862	0.000	92	302996	200.0	192.9	
98 cis-1,4-Dichloro-2-butene	53	8.361	8.360	0.001	85	329123	200.0	203.3	
114 1,2,3-Trimethylbenzene	105	9.648	9.648	0.000	99	1712025	100.0	97.1	
118 1,3,5-Trichlorobenzene	180	10.946	10.946	0.000	95	466373	100.0	100.2	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-Supp A_00052

Amount Added: 100.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6270.D

Injection Date: 25-Jun-2021 15:09:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD100

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

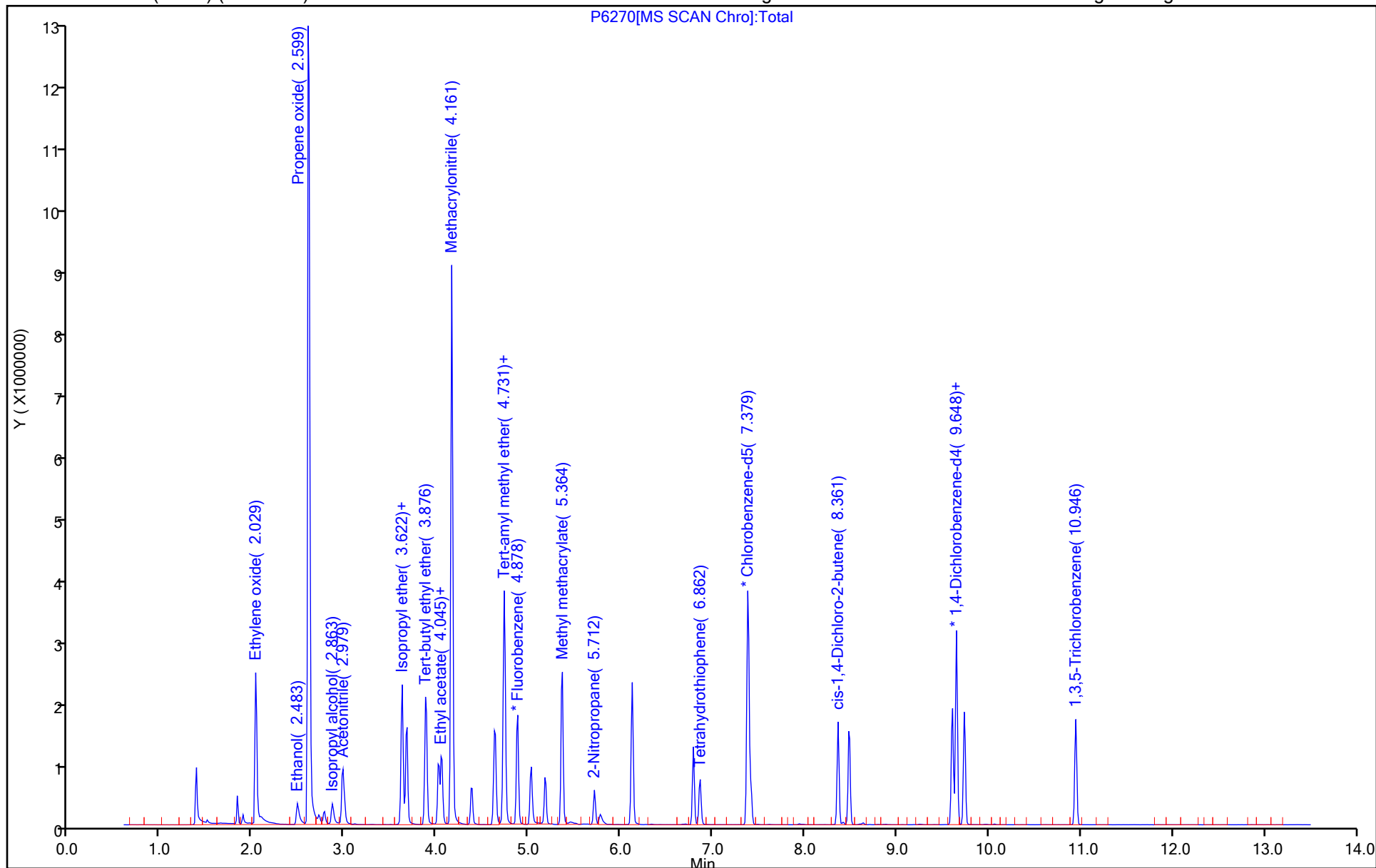
ALS Bottle#: 6

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6270.D

Injection Date: 25-Jun-2021 15:09:30

Instrument ID: VMS_P

Lims ID: STD100

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

6

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)

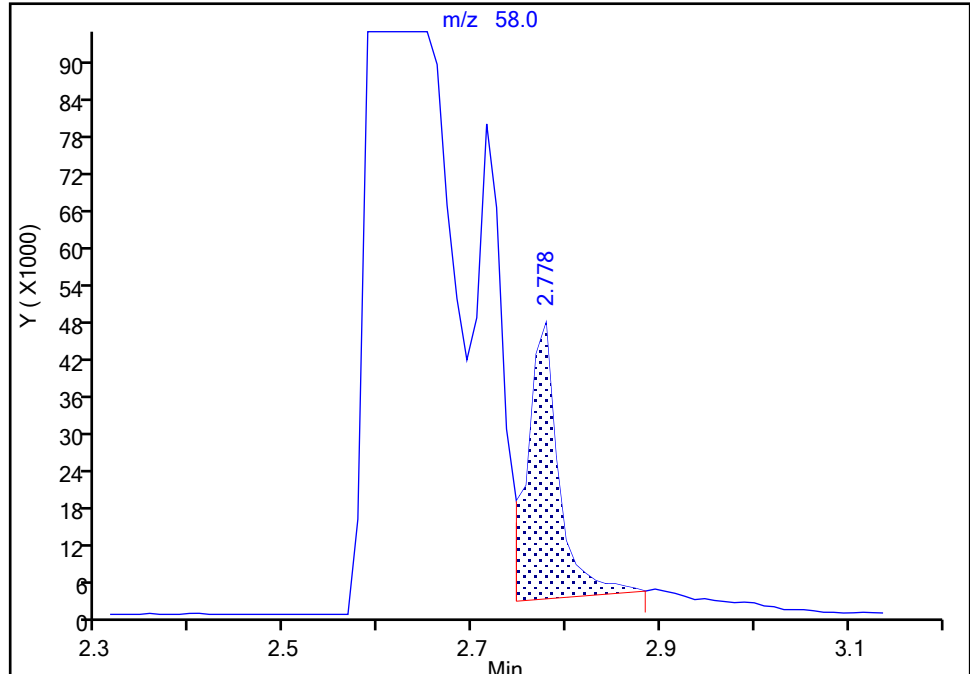
Detector: MS SCAN

20 Propene oxide, CAS: 75-56-9

Signal: 1

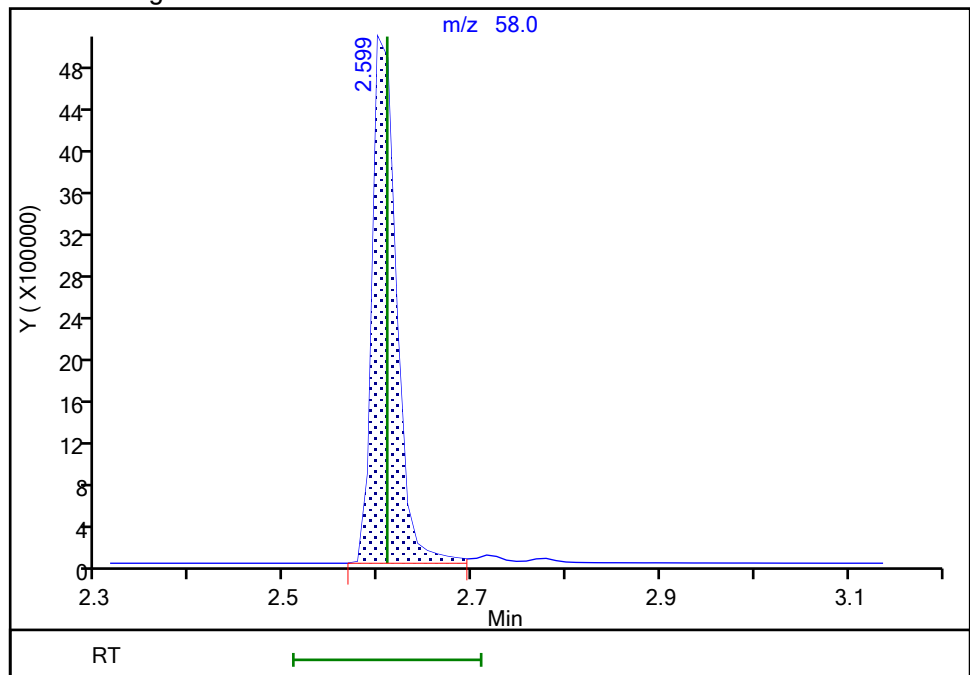
RT: 2.78
Area: 105559
Amount: 127.7396
Amount Units: ug/l

Processing Integration Results



RT: 2.60
Area: 9030350
Amount: 9951.6664
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 25-Jun-2021 15:45:15

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6271.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 25-Jun-2021 15:32:30 ALS Bottle#: 7 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD200
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub168
 Method: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 12:31:06 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

First Level Reviewer: seifertj

Date: 26-Jun-2021 12:16:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.878	-0.001	98	1339097	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	89	331421	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	466732	50.0	50.0	
13 Ethylene oxide	43	2.017	2.029	-0.012	99	708287	20000	0	M
18 Ethanol	45	2.492	2.482	0.010	99	1080066	12000	11514	
20 Propene oxide	58	2.608	2.609	-0.001	98	13662108	20000	20029	
25 Isopropyl alcohol	45	2.872	2.862	0.010	98	956404	2000.0	1900.5	
28 Acetonitrile	41	2.977	2.968	0.009	100	1776028	2000.0	1988.1	
40 Isopropyl ether	87	3.621	3.622	-0.001	93	858467	200.0	191.8	
41 2-Chloro-1,3-butadiene	53	3.663	3.675	-0.012	93	1627379	200.0	194.9	
43 Tert-butyl ethyl ether	59	3.874	3.875	-0.001	98	3214941	200.0	189.9	
46 Ethyl acetate	43	4.022	4.013	0.009	99	2061506	400.0	376.4	
49 Propionitrile	54	4.054	4.044	0.010	97	2005600	2000.0	1961.9	
51 Methacrylonitrile	41	4.159	4.160	-0.001	90	6593479	2000.0	1746.5	
63 n-Butanol	56	4.729	4.730	-0.001	52	914727	5000.0	4762.5	
62 Tert-amyl methyl ether	73	4.729	4.730	-0.001	89	3038200	200.0	190.9	
71 Methyl methacrylate	100	5.362	5.363	-0.001	89	669255	400.0	405.7	
75 2-Nitropropane	41	5.711	5.712	-0.001	99	619216	400.0	404.6	
87 Tetrahydrothiophene	60	6.861	6.862	-0.001	93	646780	400.0	407.1	
98 cis-1,4-Dichloro-2-butene	53	8.359	8.360	-0.001	85	756820	400.0	450.3	
114 1,2,3-Trimethylbenzene	105	9.647	9.648	-0.001	99	3426141	200.0	187.2	
118 1,3,5-Trichlorobenzene	180	10.945	10.946	-0.001	95	977875	200.0	202.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-Supp A_00052

Amount Added: 200.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6271.D

Injection Date: 25-Jun-2021 15:32:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD200

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

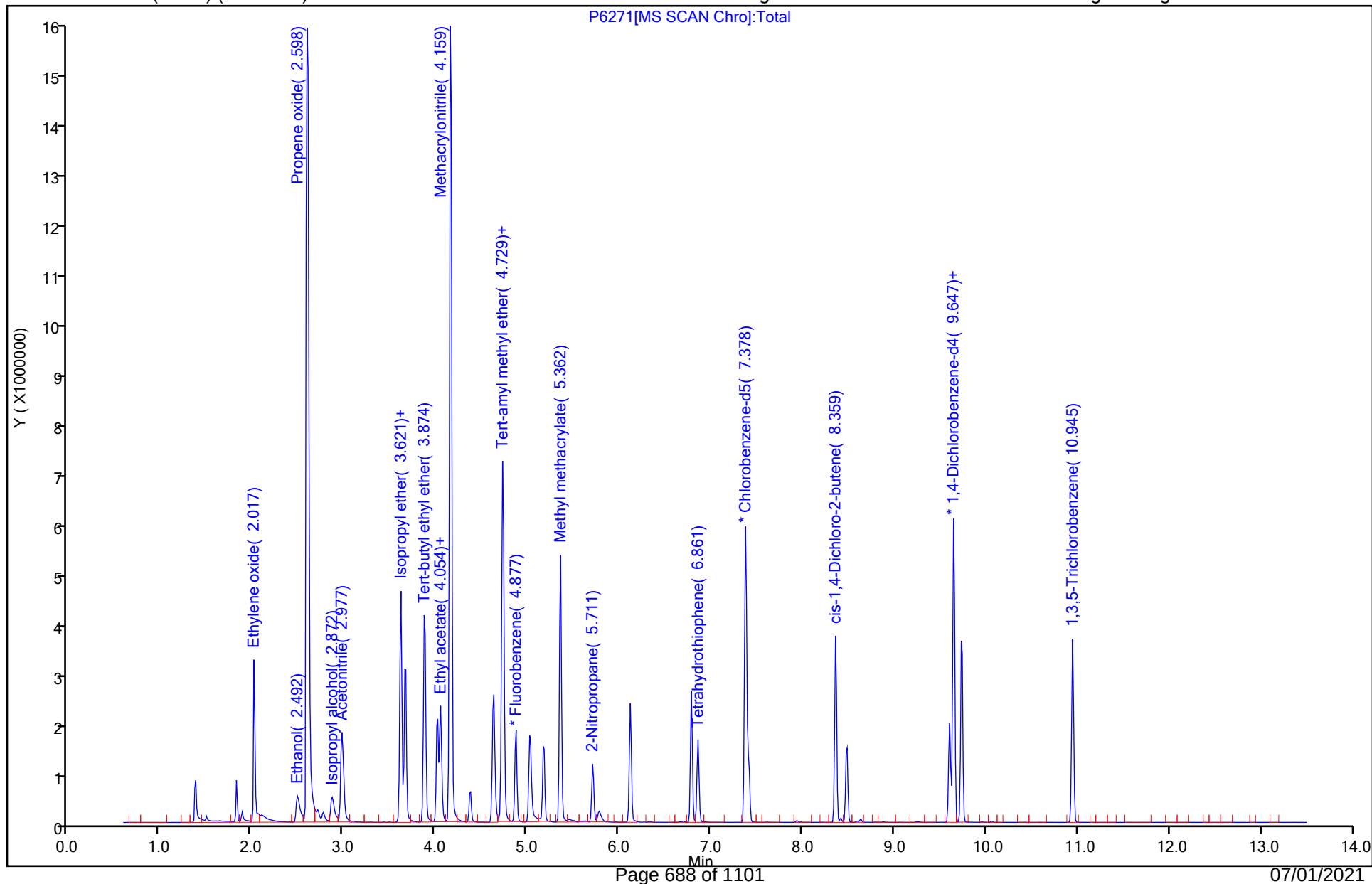
ALS Bottle#: 7

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



Calibration

/ Ethanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

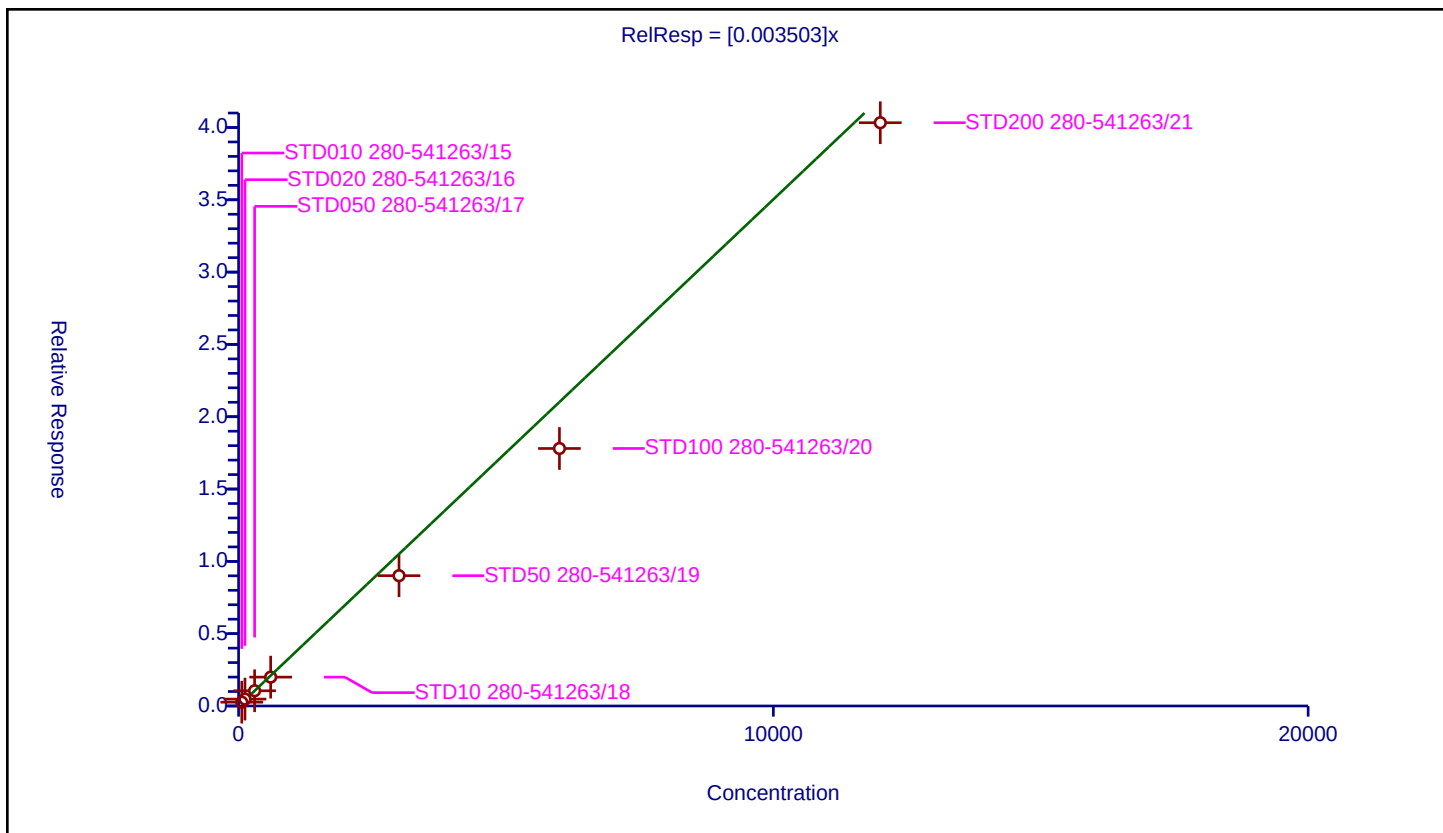
Curve Coefficients

Intercept: 0
 Slope: 0.003503

Error Coefficients

Standard Error: 492000
 Relative Standard Error: 14.6
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	60.0	0.262966	50.0	1353027.0	0.004383	Y
2	STD020 280-541263/16	120.0	0.476296	50.0	1307275.0	0.003969	Y
3	STD050 280-541263/17	300.0	1.052097	50.0	1309718.0	0.003507	Y
4	STD10 280-541263/18	600.0	1.996832	50.0	1288691.0	0.003328	Y
5	STD50 280-541263/19	3000.0	9.01059	50.0	1321889.0	0.003004	Y
6	STD100 280-541263/20	6000.0	17.804946	50.0	1332992.0	0.002967	Y
7	STD200 280-541263/21	12000.0	40.328147	50.0	1339097.0	0.003361	Y



Calibration

/ Propene oxide

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

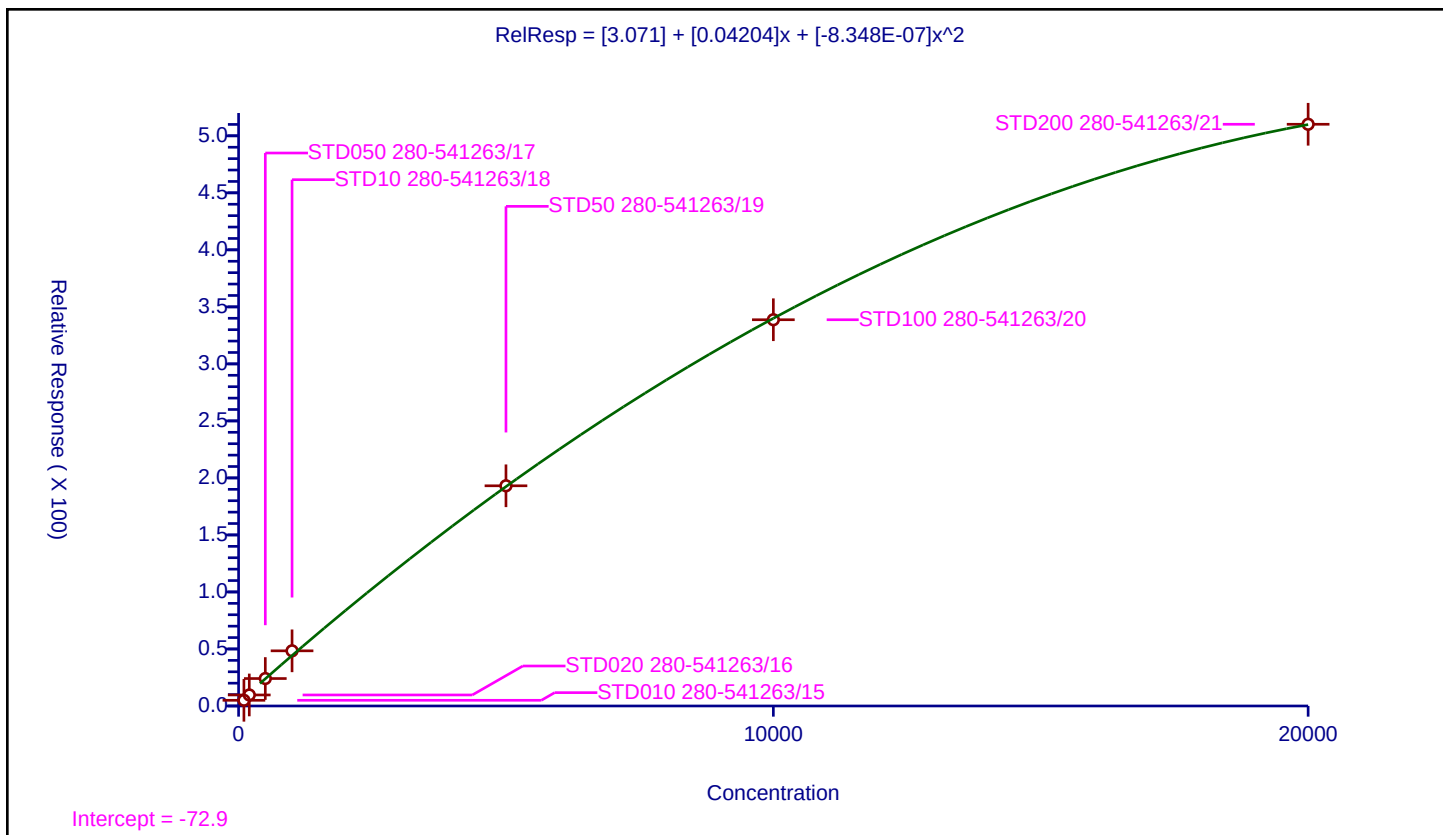
Curve Coefficients

Intercept: 3.071
 Slope: 0.04204
 Second Order: -8.348E-07

Error Coefficients

Standard Error: 8610000
 Relative Standard Error: 29.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	100.0	4.998681	50.0	1353027.0	0.049987	Y
2	STD020 280-541263/16	200.0	9.67306	50.0	1307275.0	0.048365	Y
3	STD050 280-541263/17	500.0	24.074839	50.0	1309718.0	0.04815	Y
4	STD10 280-541263/18	1000.0	48.365279	50.0	1288691.0	0.048365	Y
5	STD50 280-541263/19	5000.0	193.108309	50.0	1321889.0	0.038622	Y
6	STD100 280-541263/20	10000.0	338.724839	50.0	1332992.0	0.033872	Y
7	STD200 280-541263/21	20000.0	510.123912	50.0	1339097.0	0.025506	Y



Calibration

/ Isopropyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

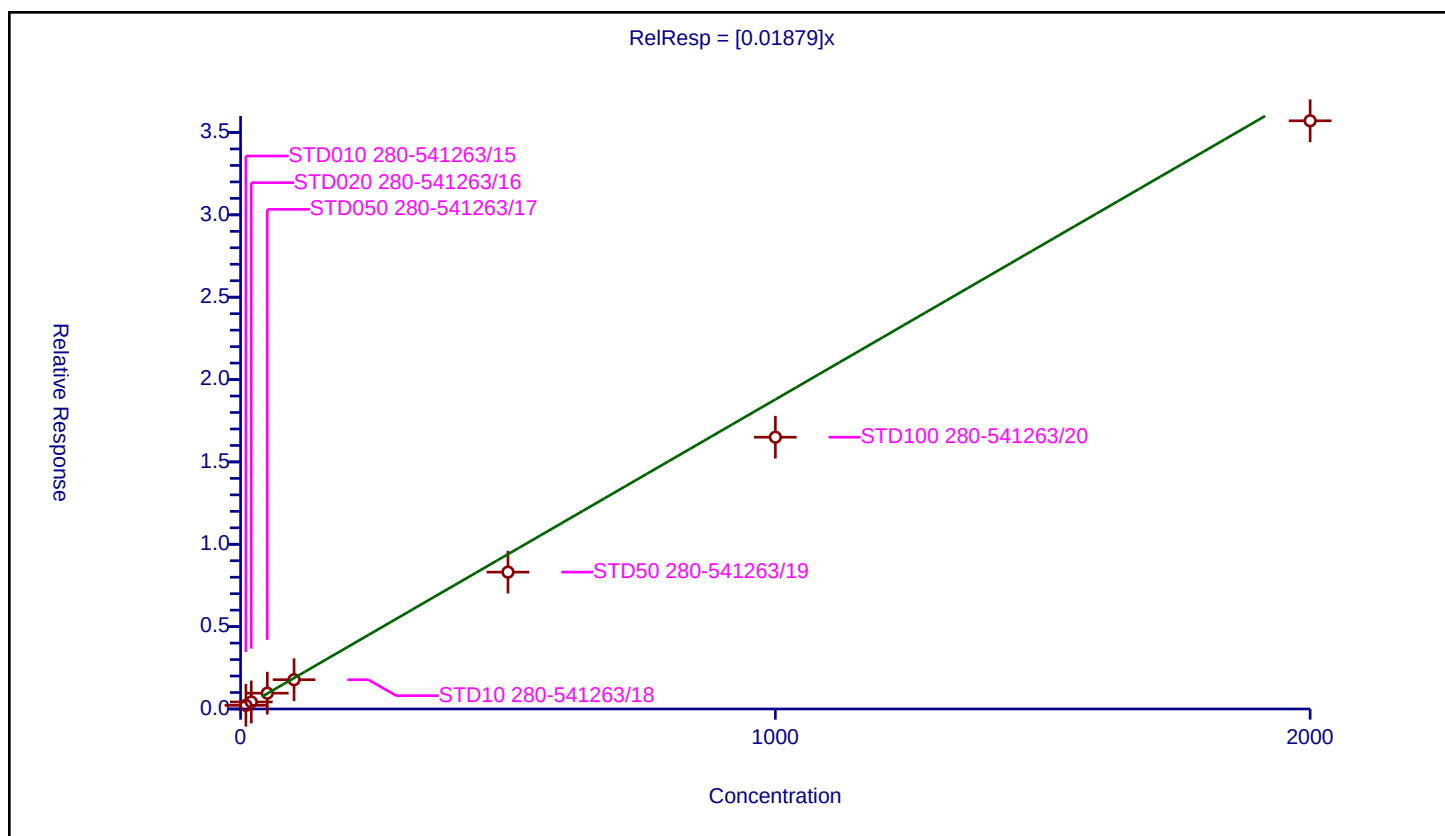
Curve Coefficients

Intercept: 0
 Slope: 0.01879

Error Coefficients

Standard Error: 440000
 Relative Standard Error: 12.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	10.0	0.222649	50.0	1353027.0	0.022265	Y
2	STD020 280-541263/16	20.0	0.426192	50.0	1307275.0	0.02131	Y
3	STD050 280-541263/17	50.0	0.960321	50.0	1309718.0	0.019206	Y
4	STD10 280-541263/18	100.0	1.778083	50.0	1288691.0	0.017781	Y
5	STD50 280-541263/19	500.0	8.309283	50.0	1321889.0	0.016619	Y
6	STD100 280-541263/20	1000.0	16.499124	50.0	1332992.0	0.016499	Y
7	STD200 280-541263/21	2000.0	35.710781	50.0	1339097.0	0.017855	Y



Calibration

/ Acetonitrile

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

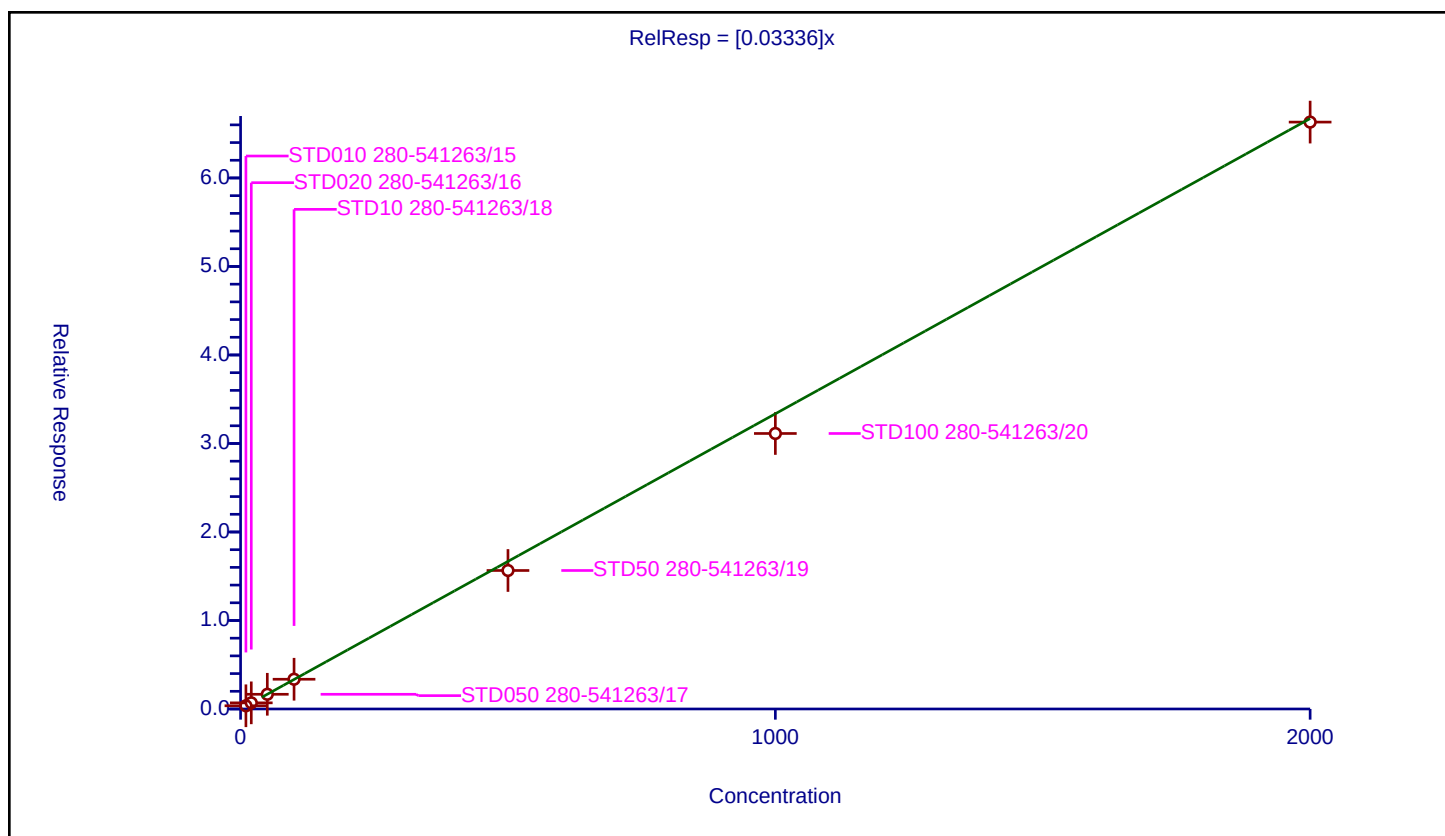
Curve Coefficients

Intercept: 0
Slope: 0.03336

Error Coefficients

Standard Error: 819000
Relative Standard Error: 5.5
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	10.0	0.36289	50.0	1353027.0	0.036289	Y
2	STD020 280-541263/16	20.0	0.695531	50.0	1307275.0	0.034777	Y
3	STD050 280-541263/17	50.0	1.66093	50.0	1309718.0	0.033219	Y
4	STD10 280-541263/18	100.0	3.362521	50.0	1288691.0	0.033625	Y
5	STD50 280-541263/19	500.0	15.648629	50.0	1321889.0	0.031297	Y
6	STD100 280-541263/20	1000.0	31.129069	50.0	1332992.0	0.031129	Y
7	STD200 280-541263/21	2000.0	66.314389	50.0	1339097.0	0.033157	Y



Calibration

/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

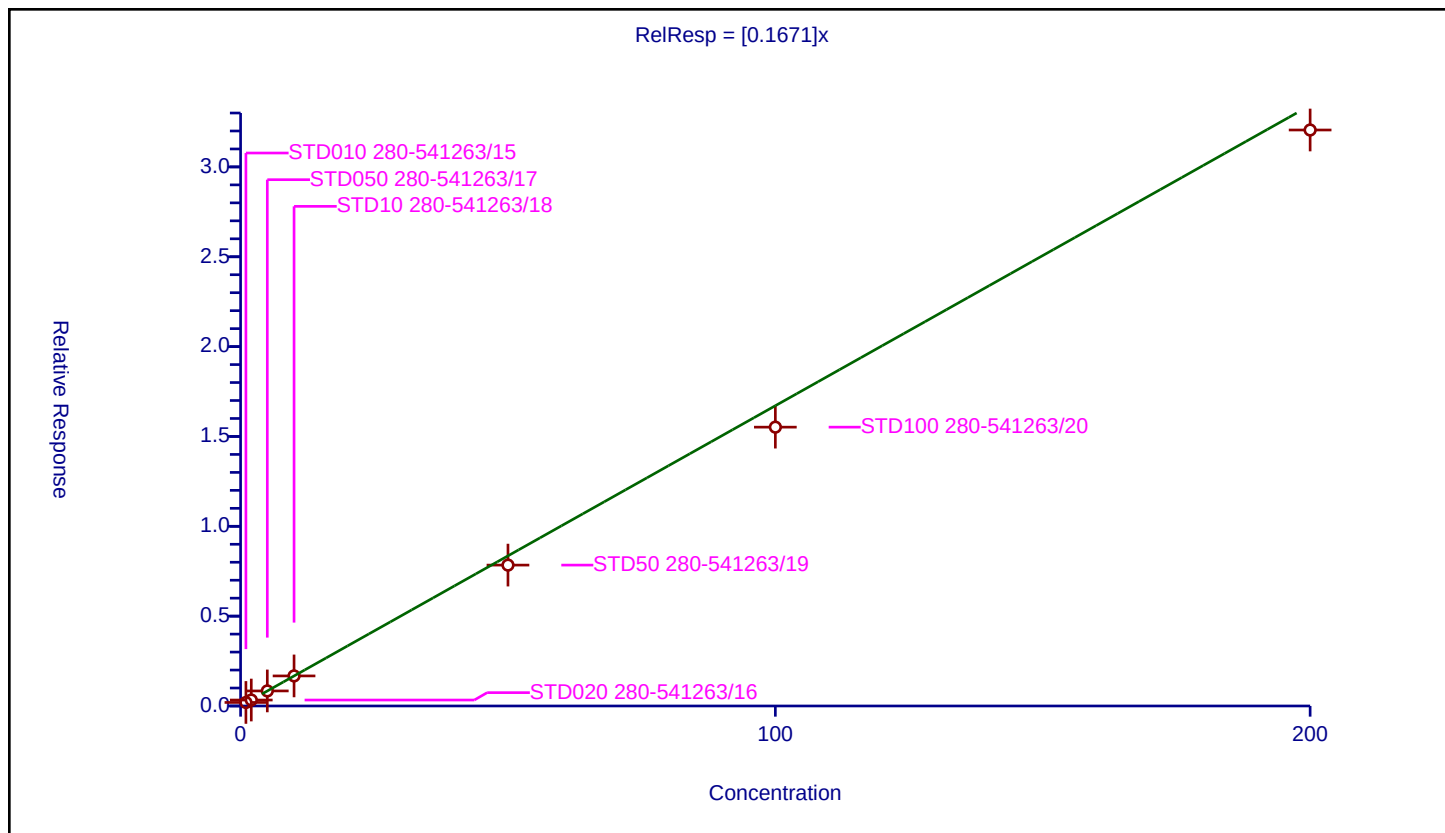
Curve Coefficients

Intercept: 0
 Slope: 0.1671

Error Coefficients

Standard Error: 399000
 Relative Standard Error: 8.3
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	1.0	0.196411	50.0	1353027.0	0.196411	Y
2	STD020 280-541263/16	2.0	0.332065	50.0	1307275.0	0.166032	Y
3	STD050 280-541263/17	5.0	0.838387	50.0	1309718.0	0.167677	Y
4	STD10 280-541263/18	10.0	1.673403	50.0	1288691.0	0.16734	Y
5	STD50 280-541263/19	50.0	7.841657	50.0	1321889.0	0.156833	Y
6	STD100 280-541263/20	100.0	15.517497	50.0	1332992.0	0.155175	Y
7	STD200 280-541263/21	200.0	32.053951	50.0	1339097.0	0.16027	Y



Calibration

/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

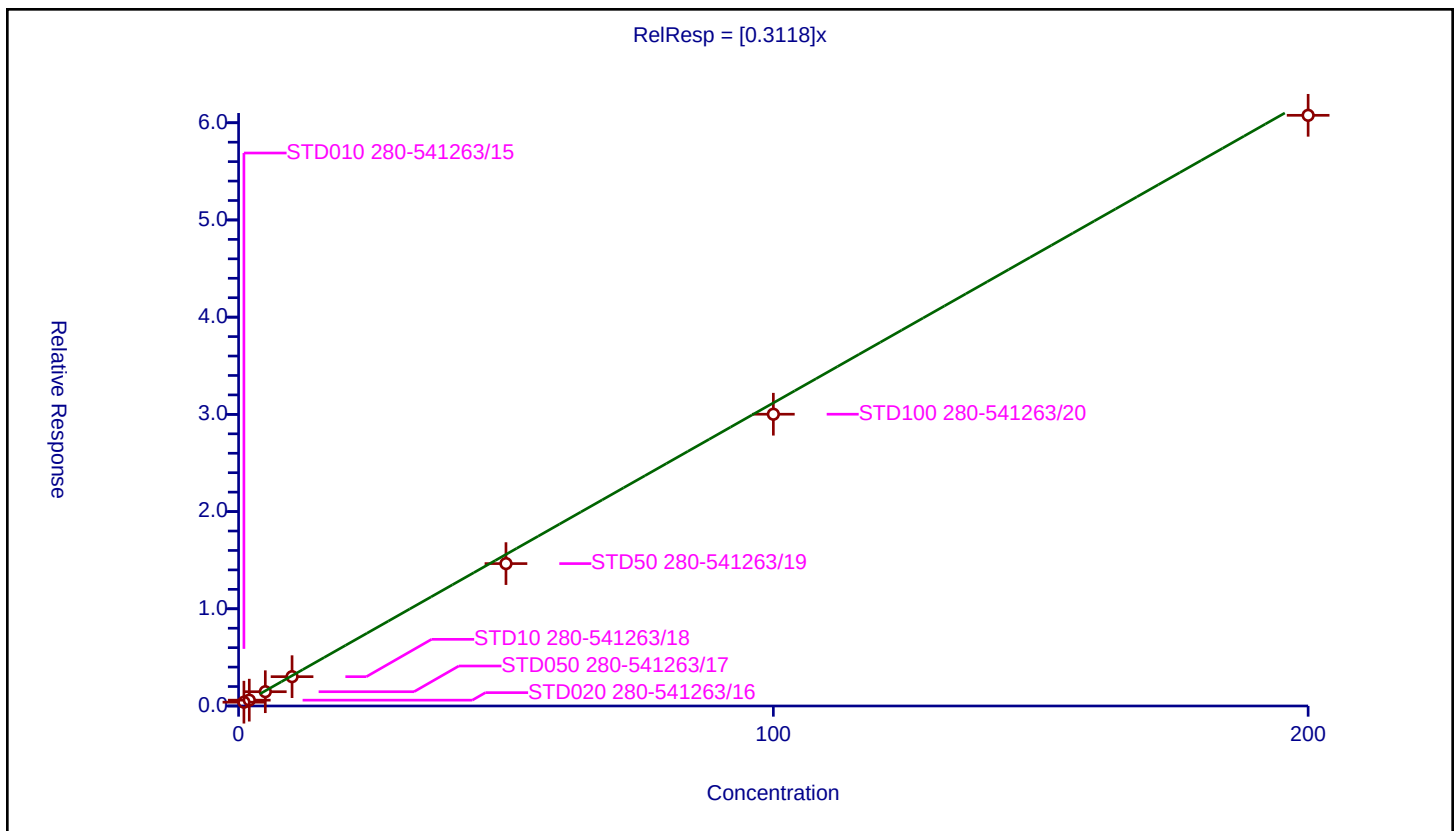
Curve Coefficients

Intercept: 0
 Slope: 0.3118

Error Coefficients

Standard Error: 758000
 Relative Standard Error: 11.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	1.0	0.390753	50.0	1353027.0	0.390753	Y
2	STD020 280-541263/16	2.0	0.598612	50.0	1307275.0	0.299306	Y
3	STD050 280-541263/17	5.0	1.470049	50.0	1309718.0	0.29401	Y
4	STD10 280-541263/18	10.0	3.015036	50.0	1288691.0	0.301504	Y
5	STD50 280-541263/19	50.0	14.64828	50.0	1321889.0	0.292966	Y
6	STD100 280-541263/20	100.0	30.015859	50.0	1332992.0	0.300159	Y
7	STD200 280-541263/21	200.0	60.764045	50.0	1339097.0	0.30382	Y



Calibration

/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

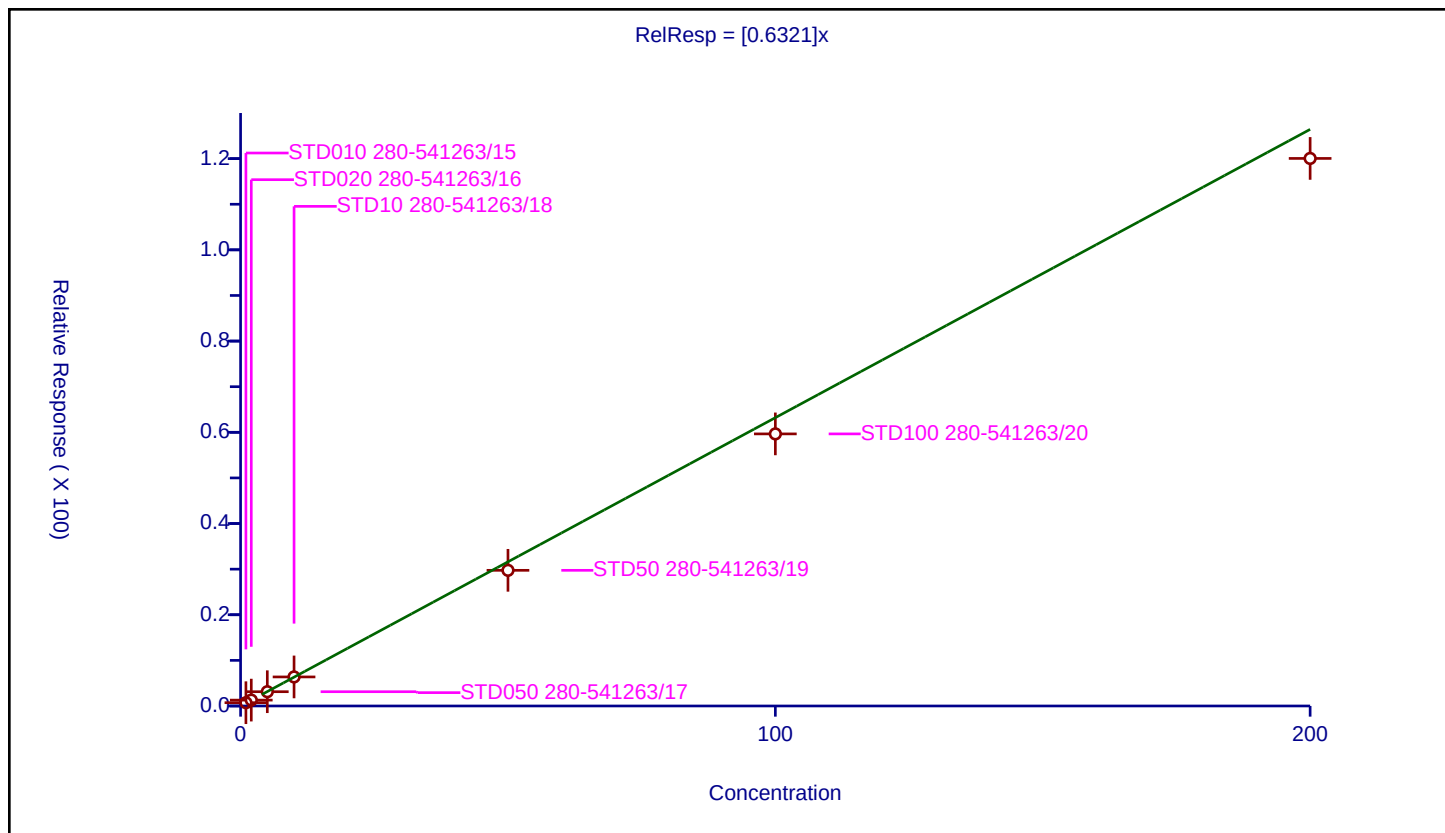
Curve Coefficients

Intercept: 0
 Slope: 0.6321

Error Coefficients

Standard Error: 1500000
 Relative Standard Error: 7.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	1.0	0.724819	50.0	1353027.0	0.724819	Y
2	STD020 280-541263/16	2.0	1.289591	50.0	1307275.0	0.644795	Y
3	STD050 280-541263/17	5.0	3.133079	50.0	1309718.0	0.626616	Y
4	STD10 280-541263/18	10.0	6.367159	50.0	1288691.0	0.636716	Y
5	STD50 280-541263/19	50.0	29.743155	50.0	1321889.0	0.594863	Y
6	STD100 280-541263/20	100.0	59.650658	50.0	1332992.0	0.596507	Y
7	STD200 280-541263/21	200.0	120.041379	50.0	1339097.0	0.600207	Y



Calibration

/ Ethyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

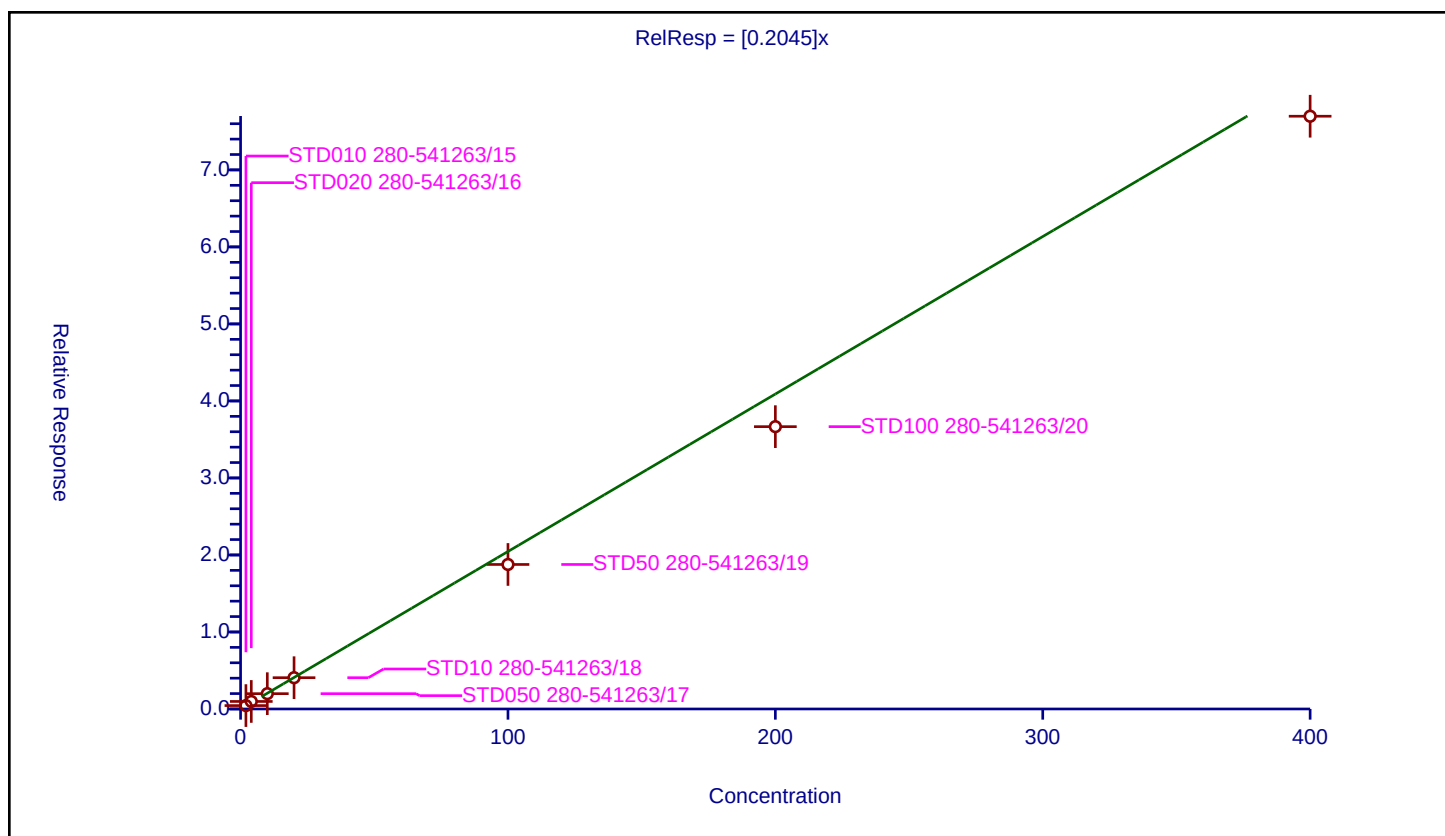
Curve Coefficients

Intercept: 0
 Slope: 0.2045

Error Coefficients

Standard Error: 954000
 Relative Standard Error: 10.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	2.0	0.442711	50.0	1353027.0	0.221356	Y
2	STD020 280-541263/16	4.0	0.978448	50.0	1307275.0	0.244612	Y
3	STD050 280-541263/17	10.0	1.988711	50.0	1309718.0	0.198871	Y
4	STD10 280-541263/18	20.0	4.063348	50.0	1288691.0	0.203167	Y
5	STD50 280-541263/19	100.0	18.768066	50.0	1321889.0	0.187681	Y
6	STD100 280-541263/20	200.0	36.66181	50.0	1332992.0	0.183309	Y
7	STD200 280-541263/21	400.0	76.973737	50.0	1339097.0	0.192434	Y



Calibration

/ Propionitrile

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

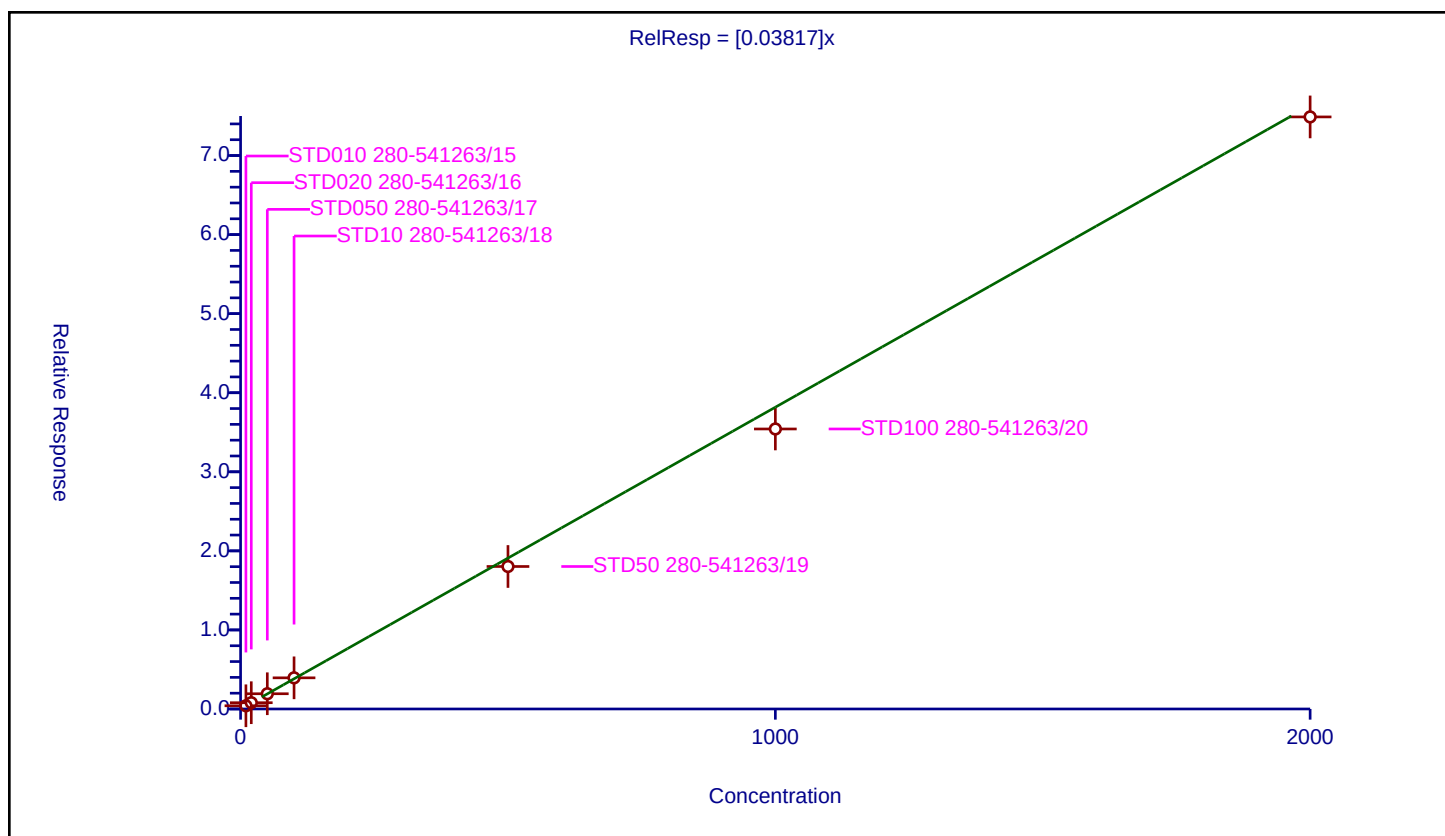
Curve Coefficients

Intercept: 0
Slope: 0.03817

Error Coefficients

Standard Error: 927000
Relative Standard Error: 5.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	10.0	0.405646	50.0	1353027.0	0.040565	Y
2	STD020 280-541263/16	20.0	0.794554	50.0	1307275.0	0.039728	Y
3	STD050 280-541263/17	50.0	1.928278	50.0	1309718.0	0.038566	Y
4	STD10 280-541263/18	100.0	3.942644	50.0	1288691.0	0.039426	Y
5	STD50 280-541263/19	500.0	18.023185	50.0	1321889.0	0.036046	Y
6	STD100 280-541263/20	1000.0	35.416379	50.0	1332992.0	0.035416	Y
7	STD200 280-541263/21	2000.0	74.886285	50.0	1339097.0	0.037443	Y



Calibration

/ Methacrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

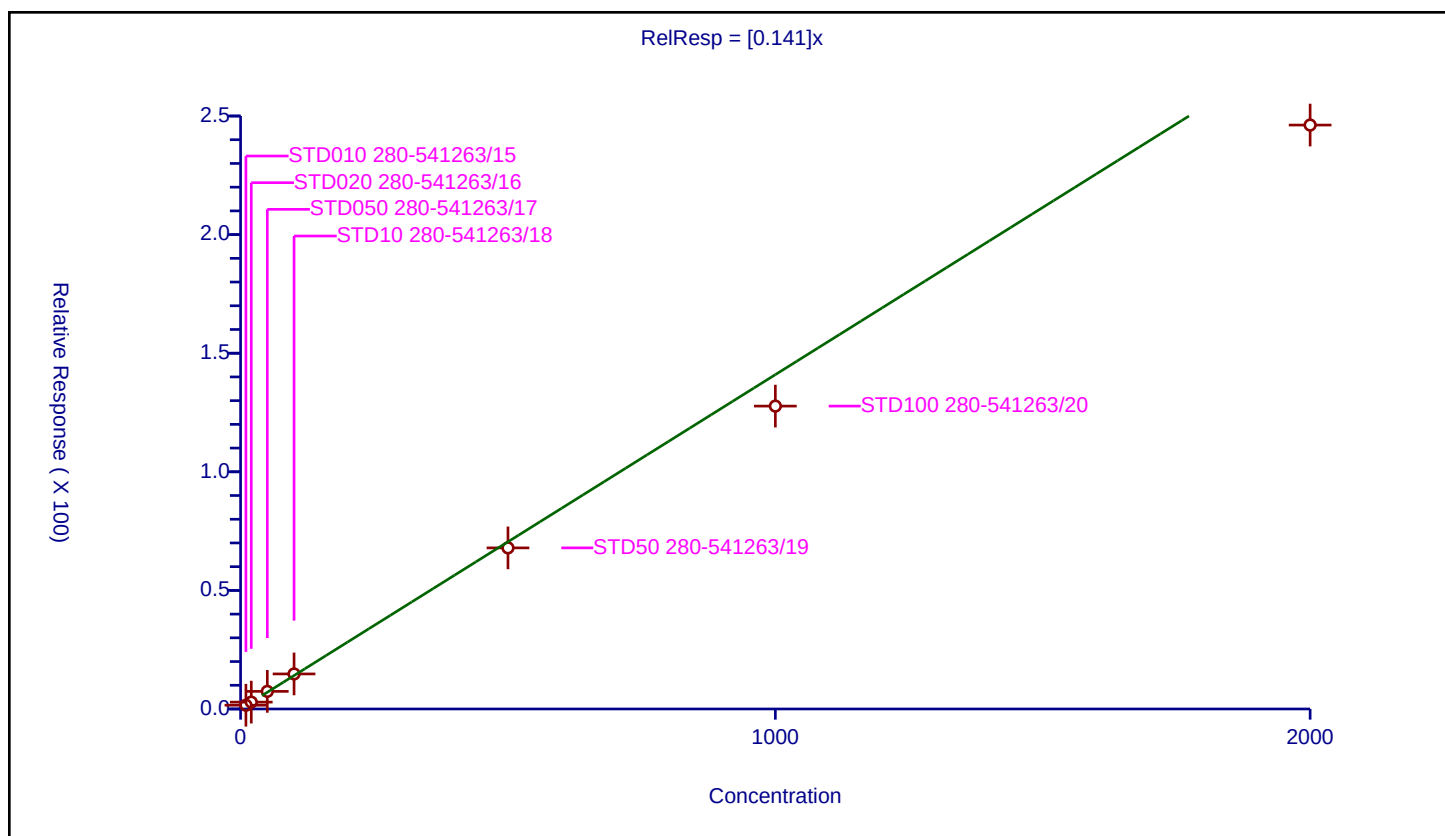
Curve Coefficients

Intercept: 0
 Slope: 0.141

Error Coefficients

Standard Error: 3120000
 Relative Standard Error: 9.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	10.0	1.58818	50.0	1353027.0	0.158818	Y
2	STD020 280-541263/16	20.0	2.898969	50.0	1307275.0	0.144948	Y
3	STD050 280-541263/17	50.0	7.426293	50.0	1309718.0	0.148526	Y
4	STD10 280-541263/18	100.0	14.780618	50.0	1288691.0	0.147806	Y
5	STD50 280-541263/19	500.0	67.92764	50.0	1321889.0	0.135855	Y
6	STD100 280-541263/20	1000.0	127.697128	50.0	1332992.0	0.127697	Y
7	STD200 280-541263/21	2000.0	246.191239	50.0	1339097.0	0.123096	Y



Calibration

/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

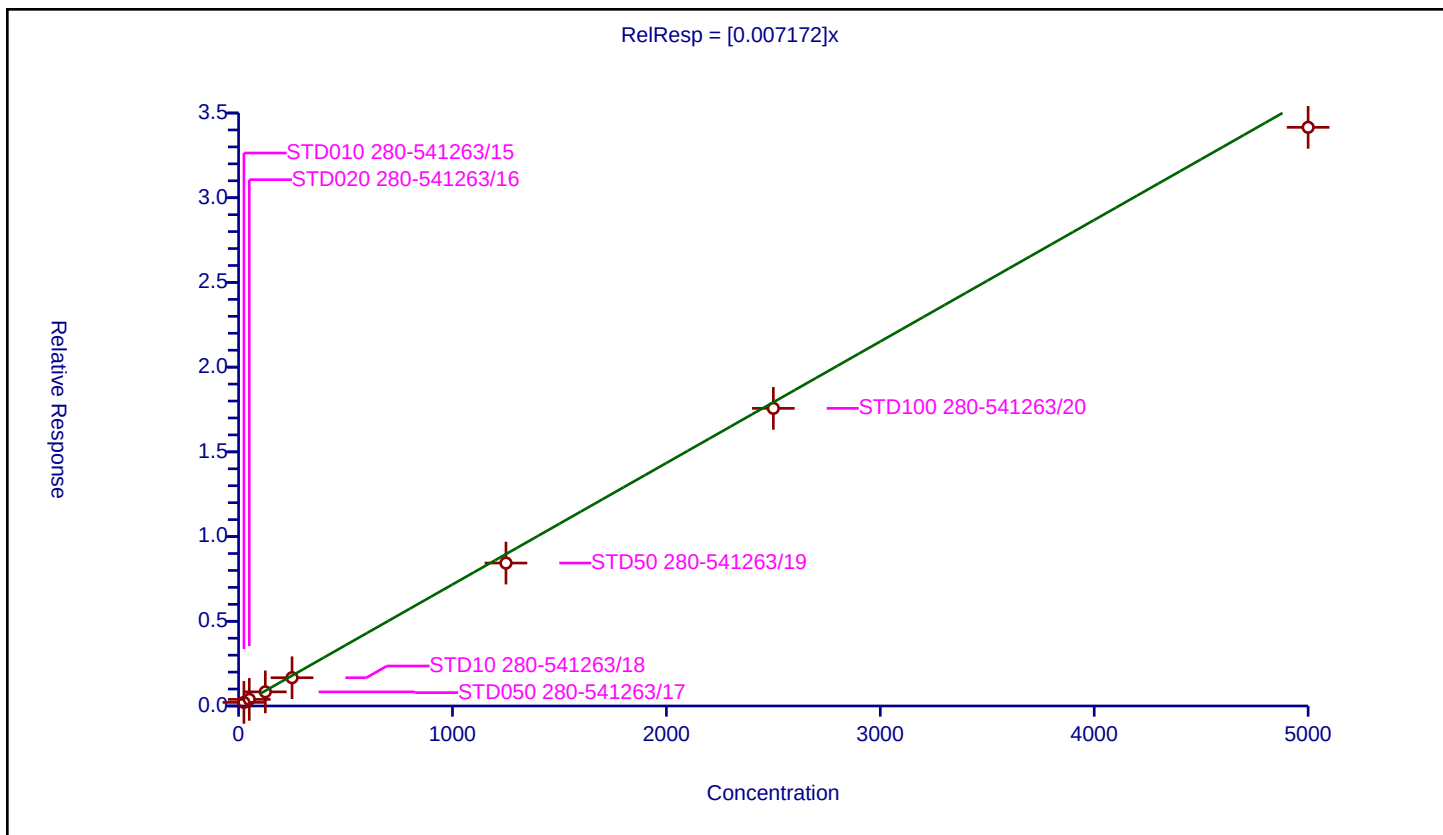
Curve Coefficients

Intercept: 0
 Slope: 0.007172

Error Coefficients

Standard Error: 430000
 Relative Standard Error: 9.7
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	25.0	0.211821	50.0	1353027.0	0.008473	Y
2	STD020 280-541263/16	50.0	0.388977	50.0	1307275.0	0.00778	Y
3	STD050 280-541263/17	125.0	0.833805	50.0	1309718.0	0.00667	Y
4	STD10 280-541263/18	250.0	1.667584	50.0	1288691.0	0.00667	Y
5	STD50 280-541263/19	1250.0	8.436563	50.0	1321889.0	0.006749	Y
6	STD100 280-541263/20	2500.0	17.568523	50.0	1332992.0	0.007027	Y
7	STD200 280-541263/21	5000.0	34.154621	50.0	1339097.0	0.006831	Y



Calibration

/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

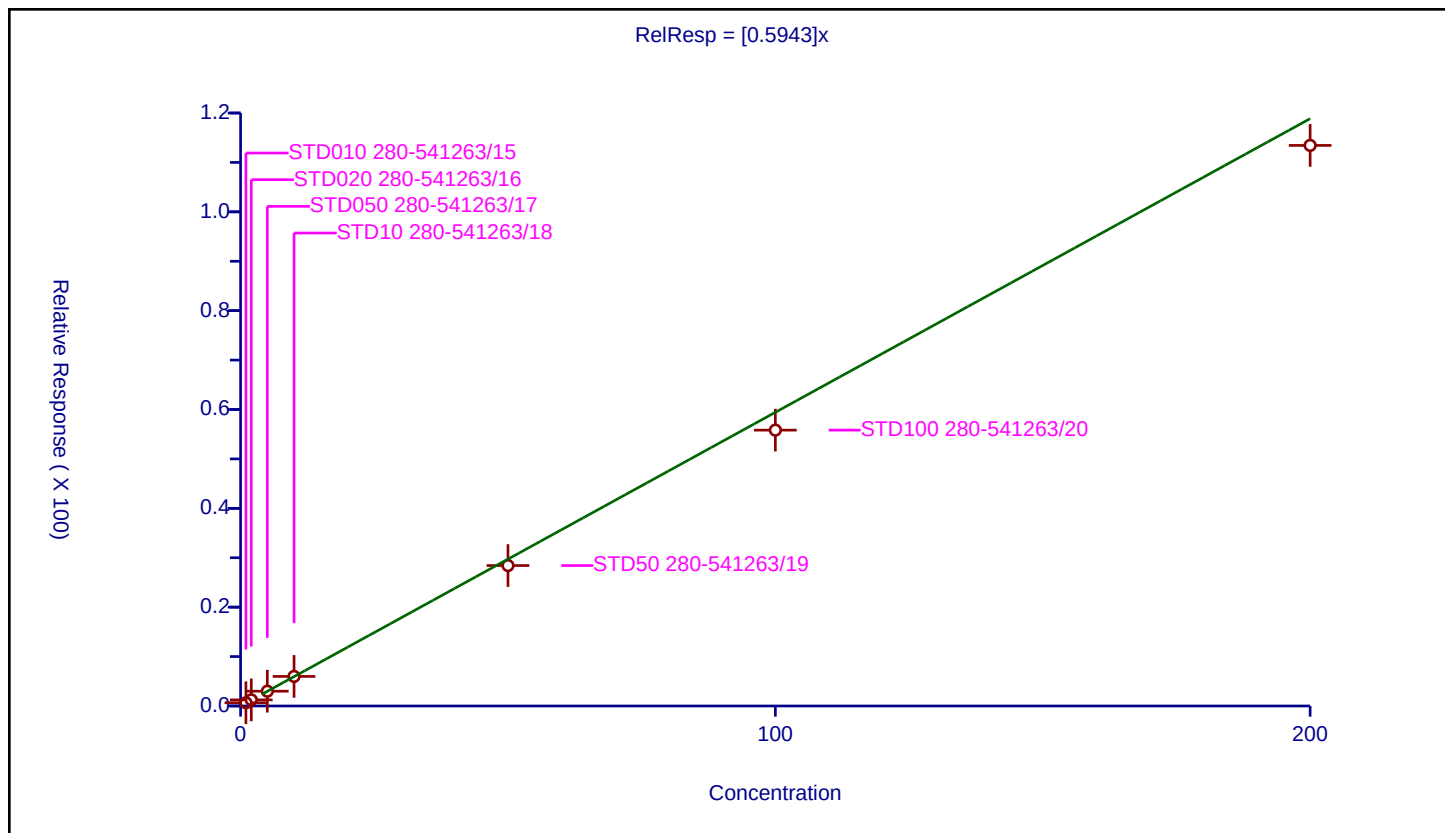
Curve Coefficients

Intercept: 0
 Slope: 0.5943

Error Coefficients

Standard Error: 1420000
 Relative Standard Error: 5.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	1.0	0.650911	50.0	1353027.0	0.650911	Y
2	STD020 280-541263/16	2.0	1.238378	50.0	1307275.0	0.619189	Y
3	STD050 280-541263/17	5.0	2.990491	50.0	1309718.0	0.598098	Y
4	STD10 280-541263/18	10.0	5.979866	50.0	1288691.0	0.597987	Y
5	STD50 280-541263/19	50.0	28.423226	50.0	1321889.0	0.568465	Y
6	STD100 280-541263/20	100.0	55.824979	50.0	1332992.0	0.55825	Y
7	STD200 280-541263/21	200.0	113.442118	50.0	1339097.0	0.567211	Y



Calibration

/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

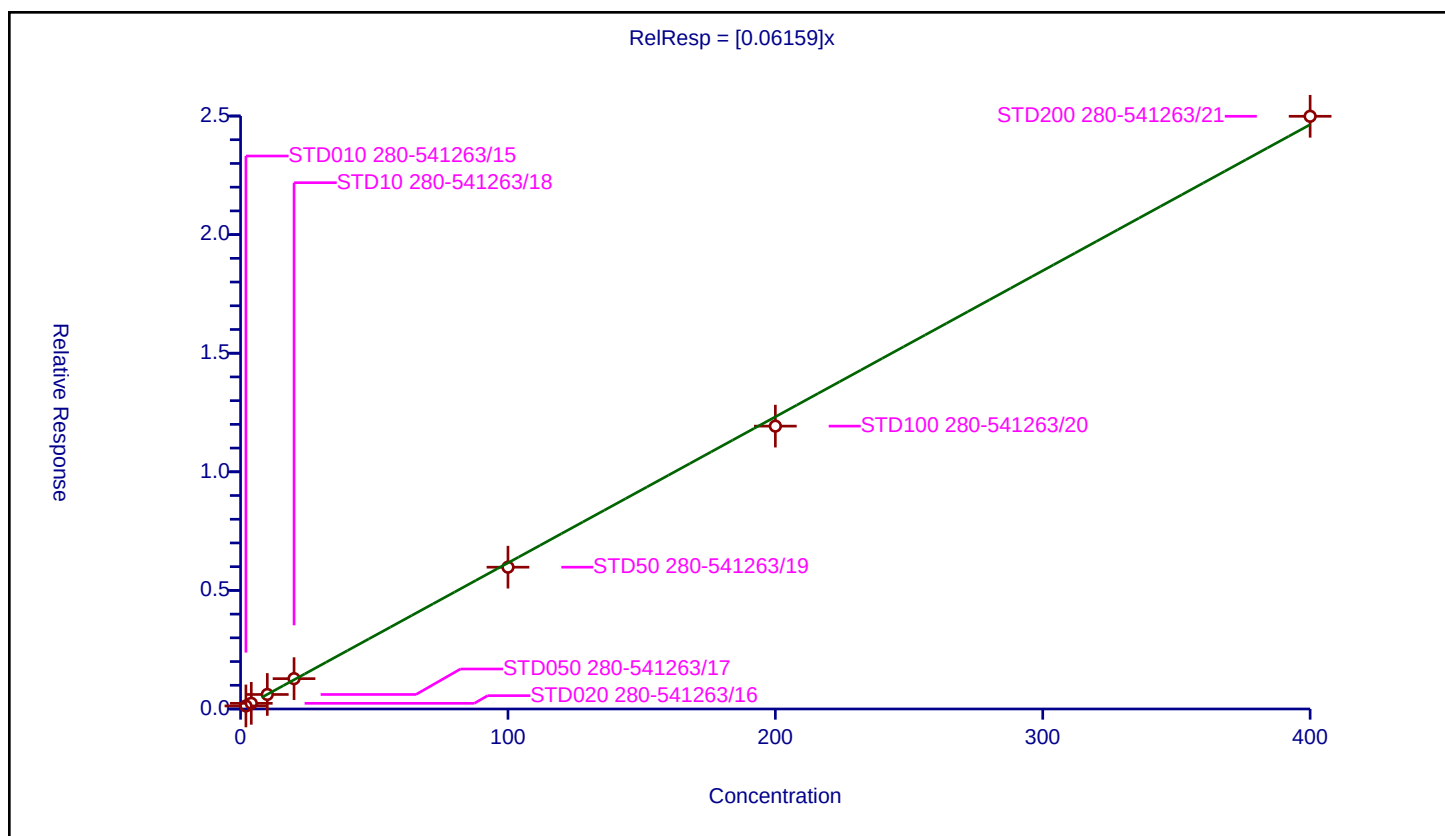
Curve Coefficients

Intercept: 0
 Slope: 0.06159

Error Coefficients

Standard Error: 310000
 Relative Standard Error: 3.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	2.0	0.128564	50.0	1353027.0	0.064282	Y
2	STD020 280-541263/16	4.0	0.239238	50.0	1307275.0	0.05981	Y
3	STD050 280-541263/17	10.0	0.612384	50.0	1309718.0	0.061238	Y
4	STD10 280-541263/18	20.0	1.278545	50.0	1288691.0	0.063927	Y
5	STD50 280-541263/19	100.0	5.978717	50.0	1321889.0	0.059787	Y
6	STD100 280-541263/20	200.0	11.926141	50.0	1332992.0	0.059631	Y
7	STD200 280-541263/21	400.0	24.989041	50.0	1339097.0	0.062473	Y



Calibration

/ 2-Nitropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

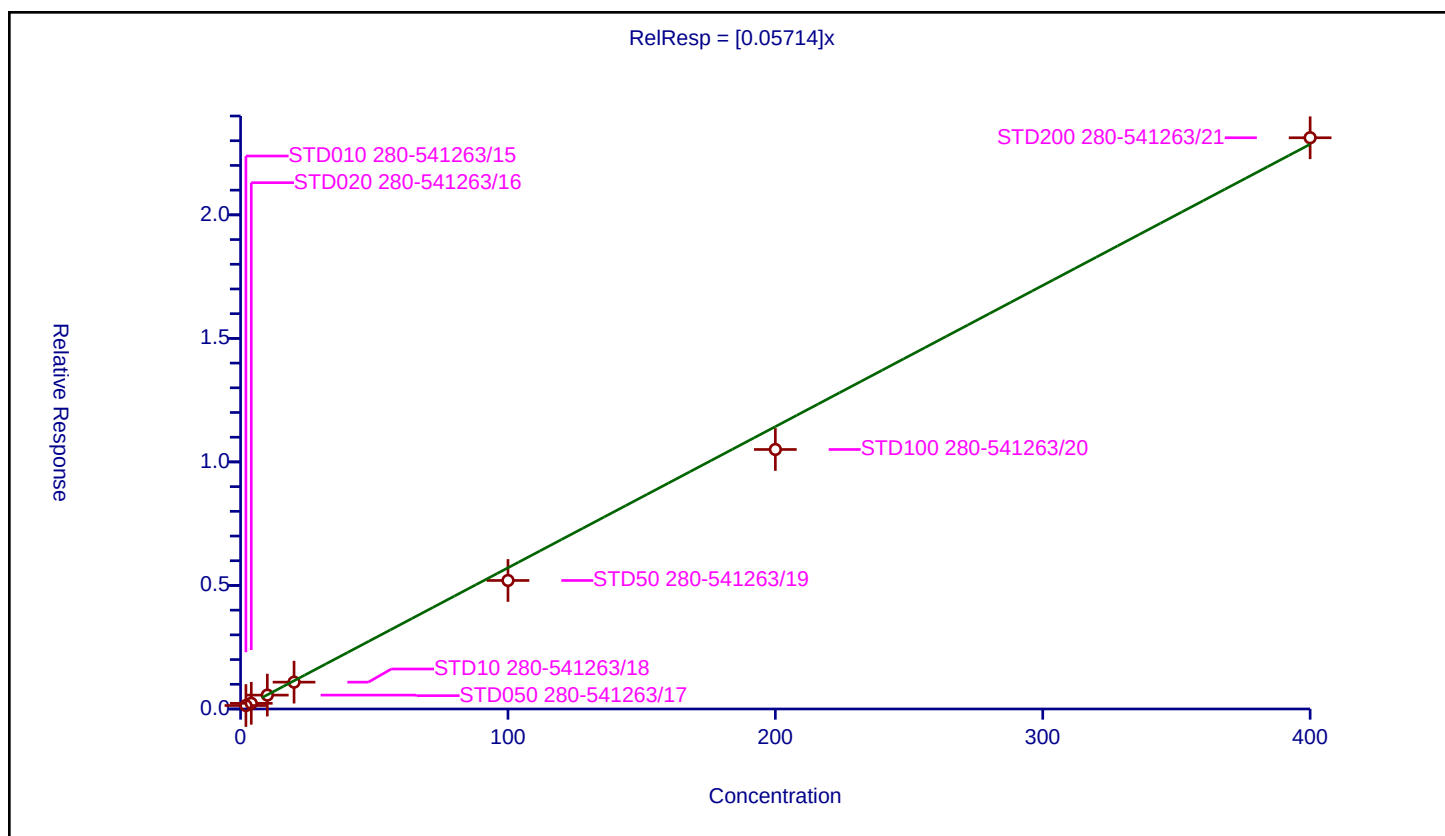
Curve Coefficients

Intercept: 0
Slope: 0.05714

Error Coefficients

Standard Error: 283000
Relative Standard Error: 10.6
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	2.0	0.139872	50.0	1353027.0	0.069936	Y
2	STD020 280-541263/16	4.0	0.229103	50.0	1307275.0	0.057276	Y
3	STD050 280-541263/17	10.0	0.561495	50.0	1309718.0	0.056149	Y
4	STD10 280-541263/18	20.0	1.086025	50.0	1288691.0	0.054301	Y
5	STD50 280-541263/19	100.0	5.201723	50.0	1321889.0	0.052017	Y
6	STD100 280-541263/20	200.0	10.503176	50.0	1332992.0	0.052516	Y
7	STD200 280-541263/21	400.0	23.120655	50.0	1339097.0	0.057802	Y



Calibration

/ Tetrahydrothiophene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

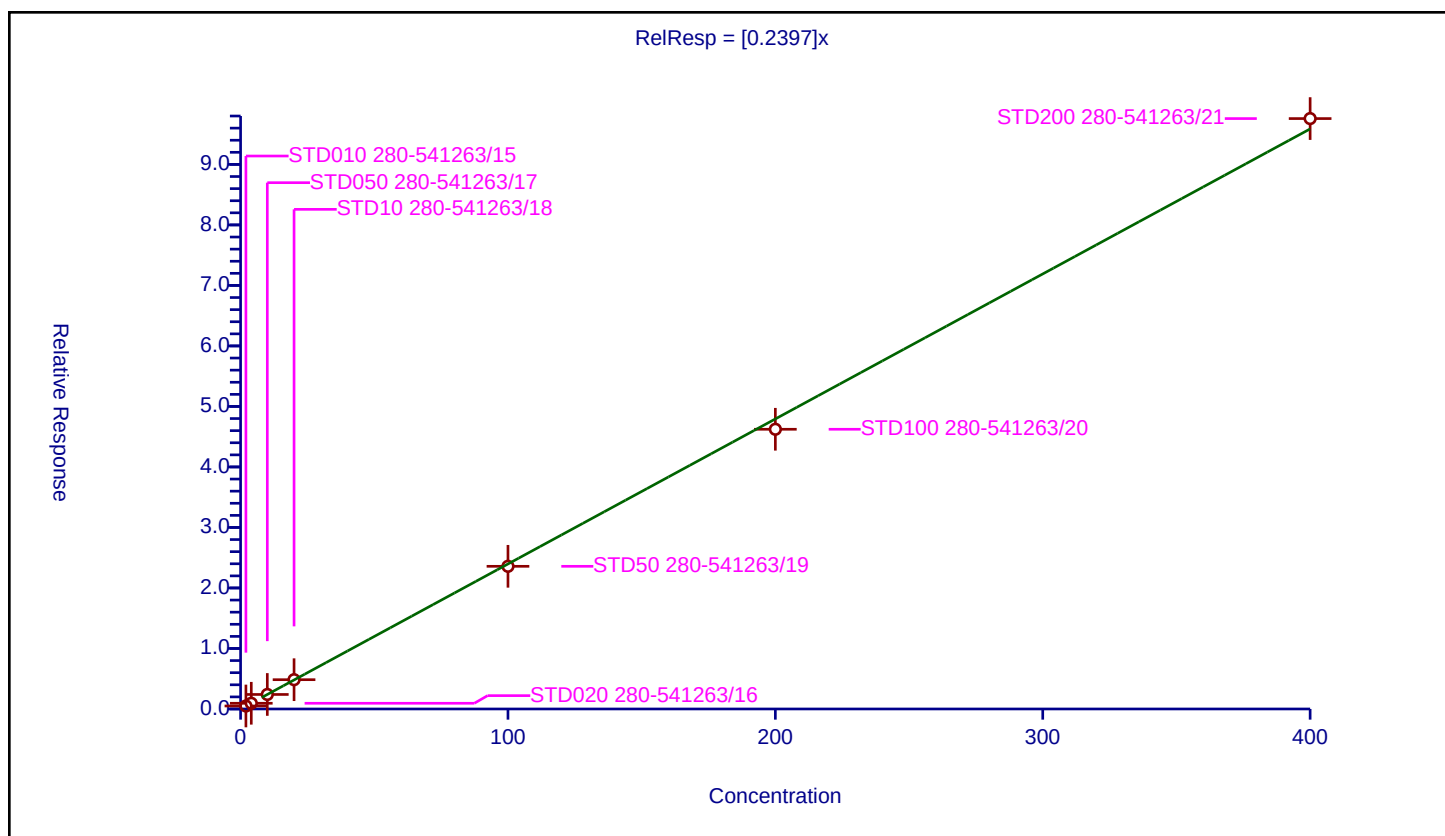
Curve Coefficients

Intercept: 0
Slope: 0.2397

Error Coefficients

Standard Error: 298000
Relative Standard Error: 2.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	2.0	0.496845	50.0	326963.0	0.248423	Y
2	STD020 280-541263/16	4.0	0.94522	50.0	317016.0	0.236305	Y
3	STD050 280-541263/17	10.0	2.399483	50.0	324945.0	0.239948	Y
4	STD10 280-541263/18	20.0	4.841675	50.0	315490.0	0.242084	Y
5	STD50 280-541263/19	100.0	23.580081	50.0	320705.0	0.235801	Y
6	STD100 280-541263/20	200.0	46.227454	50.0	327723.0	0.231137	Y
7	STD200 280-541263/21	400.0	97.576798	50.0	331421.0	0.243942	Y



Calibration

/ cis-1,4-Dichloro-2-butene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

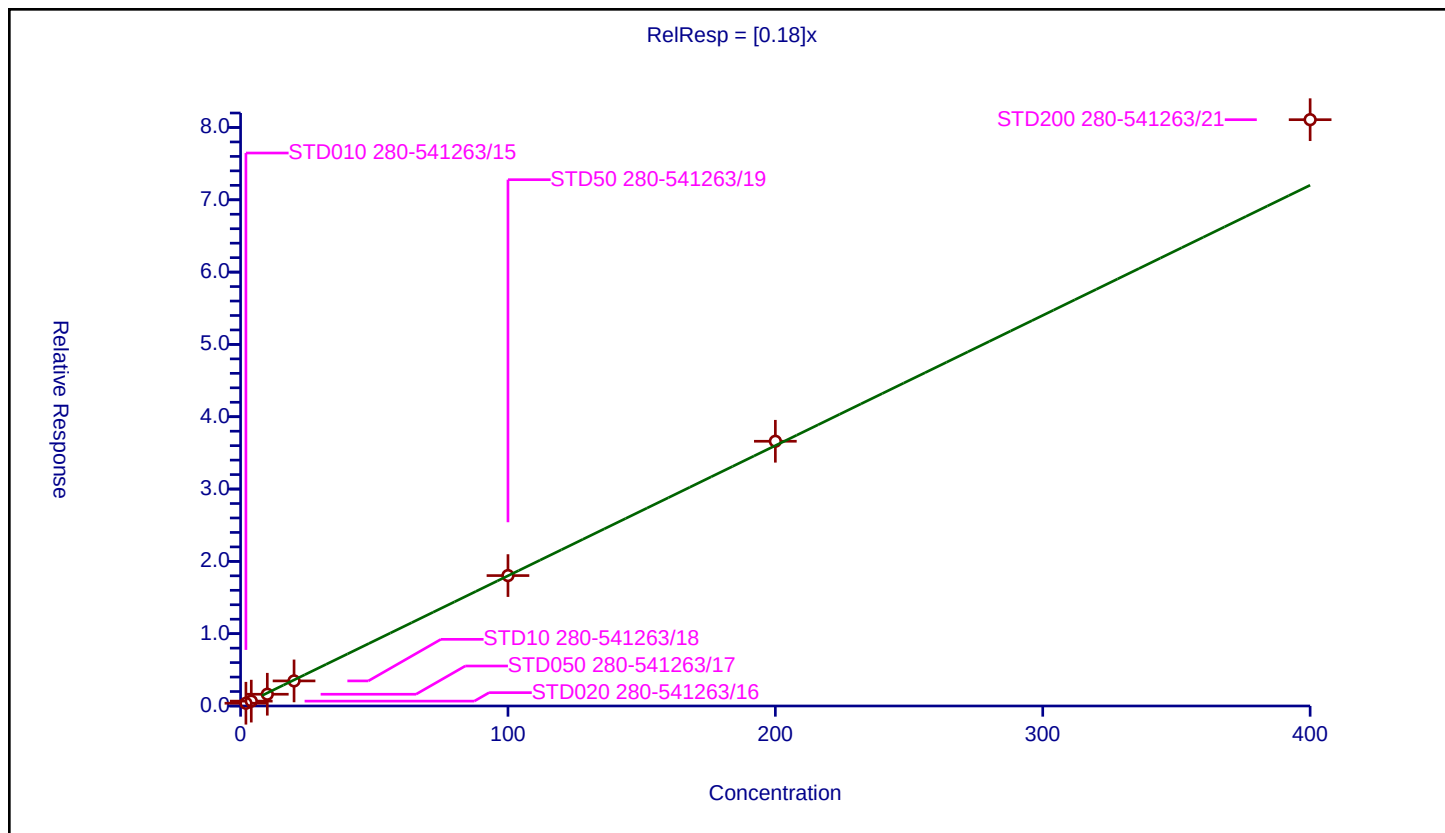
Curve Coefficients

Intercept: 0
Slope: 0.18

Error Coefficients

Standard Error: 344000
Relative Standard Error: 7.5
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	2.0	0.379905	50.0	458667.0	0.189953	Y
2	STD020 280-541263/16	4.0	0.673723	50.0	456048.0	0.168431	Y
3	STD050 280-541263/17	10.0	1.624667	50.0	459048.0	0.162467	Y
4	STD10 280-541263/18	20.0	3.467425	50.0	439303.0	0.173371	Y
5	STD50 280-541263/19	100.0	18.034759	50.0	449202.0	0.180348	Y
6	STD100 280-541263/20	200.0	36.609981	50.0	449499.0	0.18305	Y
7	STD200 280-541263/21	400.0	81.076506	50.0	466732.0	0.202691	Y



Calibration

/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

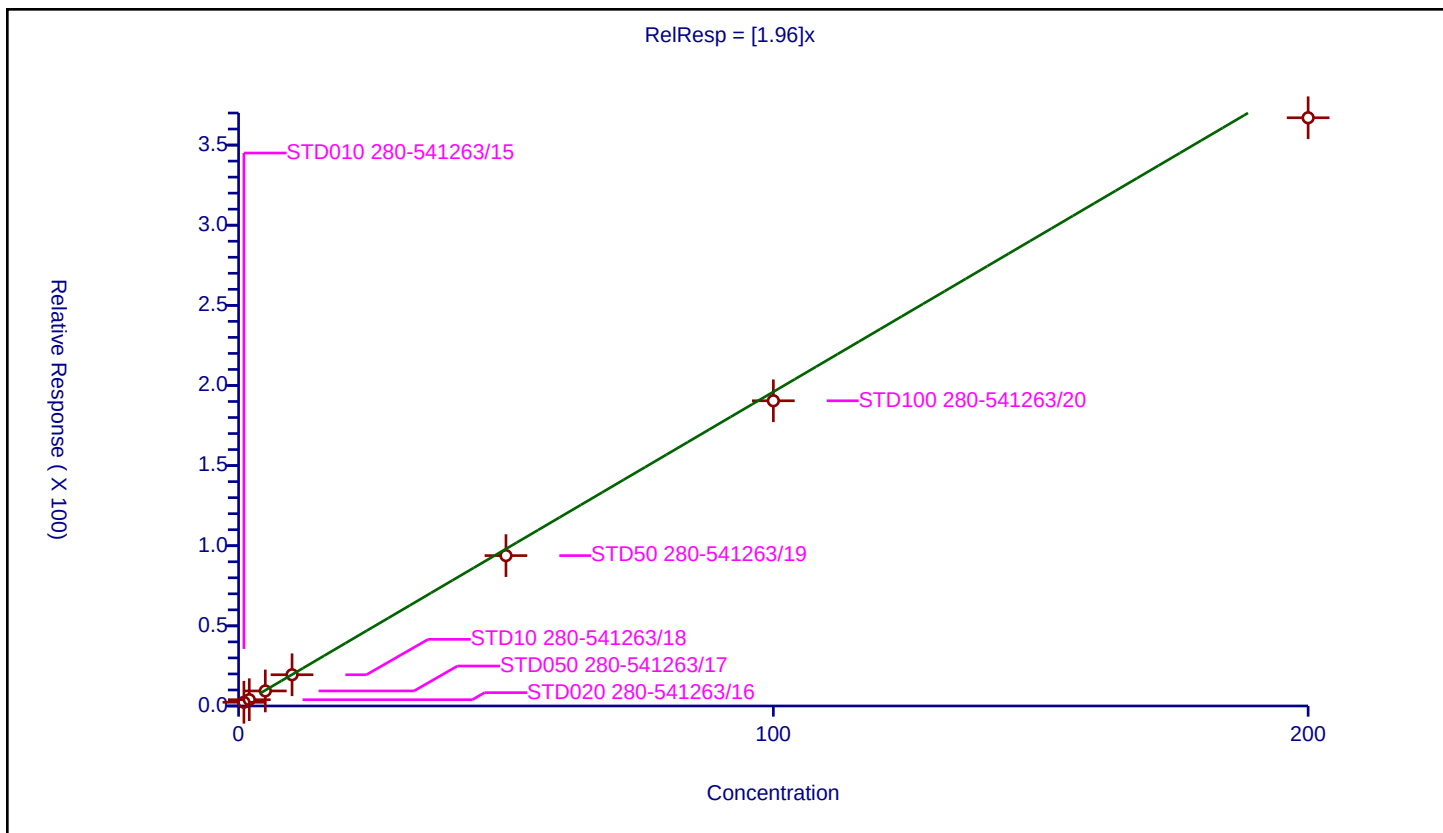
Curve Coefficients

Intercept: 0
 Slope: 1.96

Error Coefficients

Standard Error: 1600000
 Relative Standard Error: 8.3
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	1.0	2.315841	50.0	458667.0	2.315841	Y
2	STD020 280-541263/16	2.0	3.919544	50.0	456048.0	1.959772	Y
3	STD050 280-541263/17	5.0	9.397928	50.0	459048.0	1.879586	Y
4	STD10 280-541263/18	10.0	19.500436	50.0	439303.0	1.950044	Y
5	STD50 280-541263/19	50.0	93.844306	50.0	449202.0	1.876886	Y
6	STD100 280-541263/20	100.0	190.43702	50.0	449499.0	1.90437	Y
7	STD200 280-541263/21	200.0	367.035151	50.0	466732.0	1.835176	Y



Calibration

/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

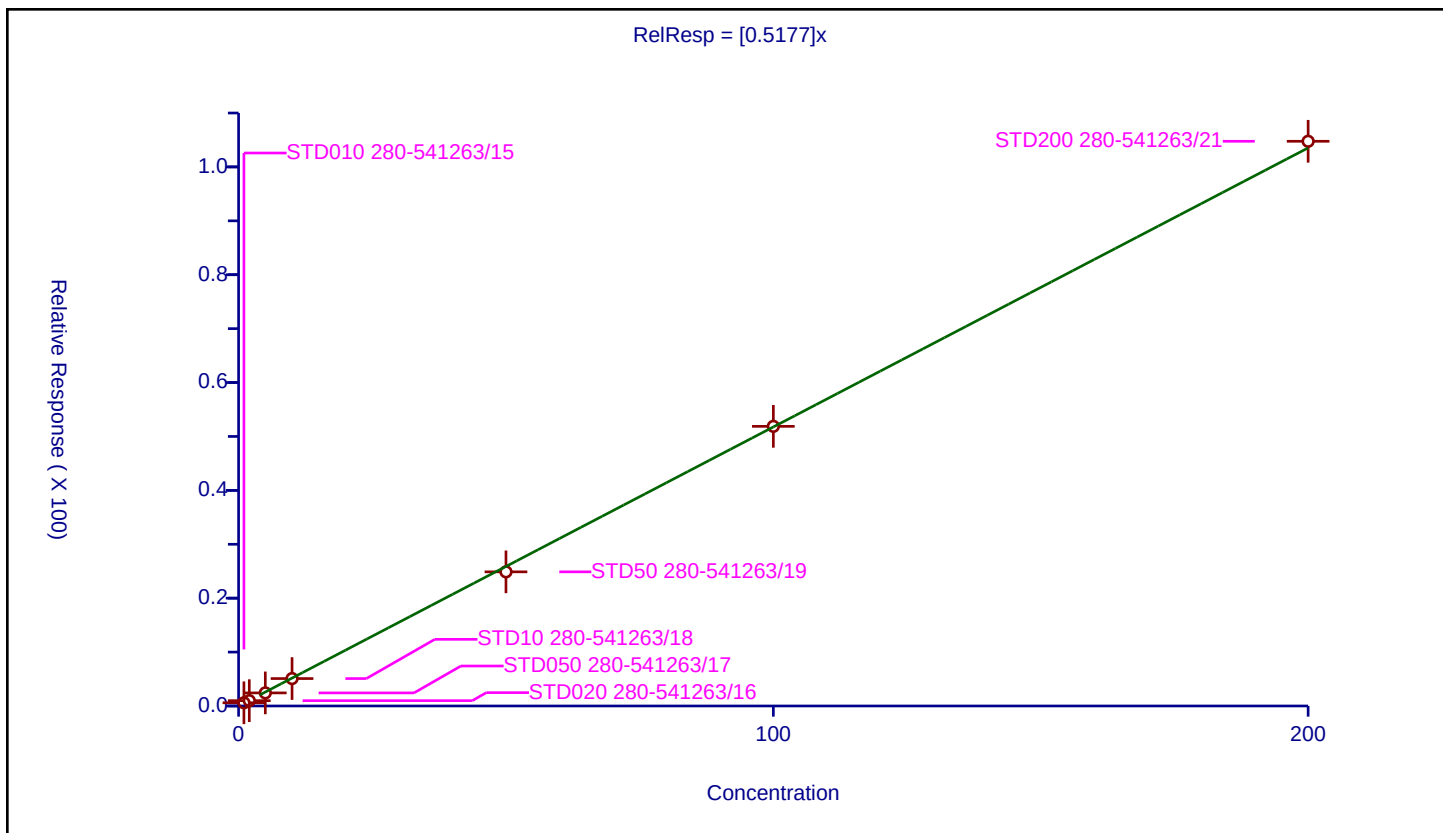
Curve Coefficients

Intercept: 0
 Slope: 0.5177

Error Coefficients

Standard Error: 452000
 Relative Standard Error: 7.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-541263/15	1.0	0.596293	50.0	458667.0	0.596293	Y
2	STD020 280-541263/16	2.0	0.985751	50.0	456048.0	0.492876	Y
3	STD050 280-541263/17	5.0	2.42687	50.0	459048.0	0.485374	Y
4	STD10 280-541263/18	10.0	5.08806	50.0	439303.0	0.508806	Y
5	STD50 280-541263/19	50.0	24.883794	50.0	449202.0	0.497676	Y
6	STD100 280-541263/20	100.0	51.876979	50.0	449499.0	0.51877	Y
7	STD200 280-541263/21	200.0	104.757655	50.0	466732.0	0.523788	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-541369/14	P6311.D
Level 2	STD010 280-541369/15	P6312.D
Level 3	STD020 280-541369/16	P6313.D
Level 4	STD050 280-541369/17	P6314.D
Level 5	STD10 280-541369/18	P6315.D
Level 6	ICIS 280-541369/19	P6316.D
Level 7	STD75 280-541369/20	P6317.D
Level 8	STD100 280-541369/21	P6318.D
Level 9	STD200 280-541369/22	P6319.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	+++++ 0.1605	0.1179 0.1786	0.1492 0.1653	0.1772 0.1700	0.2007	Ave		0.164 9				14.7		15.0			
Chloromethane	+++++ 0.1718	0.1954 0.1732	0.1903 0.1622	0.1858 0.1668	0.1969	Ave		0.180 3			0.1000	7.5		15.0			
Vinyl chloride	0.1937 0.1699	0.1526 0.1757	0.1780 0.1639	0.1757 0.1687	0.2027	Ave		0.175 6				8.6		30.0			
Bromomethane	+++++ 0.0921	0.2140 0.0924	0.1876 0.0883	0.1380 +++++	0.1173	Lin1	0.166 0	0.089 1							0.9970		0.9900
Chloroethane	+++++ 0.1074	0.1300 0.1066	0.1142 0.1016	0.1241 0.0953	0.1329	Ave		0.114 0				12.0		15.0			
Dichlorofluoromethane	0.3601 0.2993	0.2938 0.2970	0.3189 0.2795	0.3061 0.2870	0.3362	Ave		0.308 7				8.3		15.0			
Trichlorofluoromethane	0.2479 0.2317	0.2035 0.2478	0.2590 0.2306	0.2512 0.2374	0.2860	Ave		0.243 9				9.3		15.0			
Ethyl ether	0.1744 0.1548	0.1592 0.1459	0.1432 0.1524	0.1482 0.1464	0.1570	Ave		0.153 5				6.2		15.0			
Acrolein	+++++ 0.0330	0.0350 0.0309	0.0324 0.0309	0.0301 0.0308	0.0331	Ave		0.032 0				5.1		15.0			
1,1-Dichloroethene	+++++ 0.1322	0.1152 0.1282	0.1455 0.1445	0.1150 0.1493	0.1344	Ave		0.133 0				9.9		30.0			
Freon 113	0.1025 0.0930	0.0683 0.0918	0.1026 0.1044	0.0758 0.1087	0.0939	Ave		0.093 4				14.5		15.0			
Acetone	+++++ 0.0660	0.0733 0.0622	0.0713 0.0608	0.0620 0.0603	0.0678	Ave		0.065 5				7.6		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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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								
Iodomethane	++++ 0.2010	0.2129 0.1931	0.1642 0.2109	0.1360 0.2014	0.1550	Lin1	-0.07 4	0.201 5							0.9970		0.9900
Carbon disulfide	++++ 0.4476	0.5443 0.4206	0.5322 0.4730	0.4045 0.4886	0.4493	Ave		0.470 0				10.6		15.0			
Methyl acetate	++++ 0.1632	0.2160 0.1529	0.1862 0.1520	0.1586 0.1533	0.1664	Ave		0.168 6				13.1		15.0			
Allyl chloride	++++ 0.2472	0.2300 0.2392	0.2654 0.2450	0.2319 0.2461	0.2549	Ave		0.244 9				4.8		15.0			
Methylene Chloride	++++ 0.1823	0.2493 0.1681	0.2142 0.1811	0.1787 0.1780	0.1827	Ave		0.191 8				14.0		15.0			
Tert-butyl alcohol (2-methyl-2-propanol)	++++ 0.0256	0.0256 0.0246	0.0255 0.0240	0.0242 0.0233	0.0261	Ave		0.024 9				4.0		15.0			
Acrylonitrile	++++ 0.0873	0.0886 0.0814	0.0869 0.0804	0.0833 0.0762	0.0881	Ave		0.084 0				5.3		15.0			
Methyl tert-butyl ether	++++ 0.5879	0.5418 0.5531	0.5559 0.5659	0.5670 0.5472	0.5840	Ave		0.562 8				3.0		15.0			
trans-1,2-Dichloroethene	++++ 0.1645	0.1676 0.1550	0.1731 0.1701	0.1437 0.1714	0.1640	Ave		0.163 7				6.0		15.0			
Hexane	++++ 0.9209	0.7464 0.8825	1.0756 0.9741	0.7271 1.0246	0.9280	Ave		0.909 9				13.5		15.0			
Vinyl acetate	++++ 0.4538	0.4424 0.4196	0.4479 0.4209	0.4459 0.4052	0.4710	Ave		0.438 3				4.9		15.0			
1,1-Dichloroethane	0.3381 0.3237	0.2979 0.3000	0.3426 0.3280	0.2957 0.3265	0.3177	Ave		0.318 9		0.1000		5.5		15.0			
2-Butanone (MEK)	++++ 0.1061	0.1132 0.1002	0.1112 0.0979	0.1018 0.0952	0.1111	Ave		0.104 6				6.5		15.0			
cis-1,2-Dichloroethene	++++ 0.1900	0.1922 0.1755	0.1915 0.1931	0.1796 0.1907	0.1893	Ave		0.187 7				3.5		15.0			
2,2-Dichloropropane	0.2764 0.2724	0.2446 0.2536	0.2728 0.2837	0.2342 0.2879	0.2645	Ave		0.265 6				6.8		15.0			
sec-Butyl Alcohol	++++ 0.0254	0.0259 0.0248	0.0260 0.0235	0.0251 0.0238	0.0259	Ave		0.025 1				3.9		15.0			
Chlorobromomethane	++++ 0.0908	0.0951 0.0816	0.0895 0.0854	0.0833 0.0820	0.0890	Ave		0.087 1				5.5		15.0			
Tetrahydrofuran	++++ 0.0691	0.0731 0.0659	0.0820 0.0645	0.0651 0.0641	0.0708	Ave		0.069 3				8.7		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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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								
Chloroform	0.3439 0.3200	0.3158 0.2958	0.3234 0.3220	0.2924 0.3189	0.3147	Ave		0.316 3				4.8		30.0			
1,1,1-Trichloroethane	0.2744 0.2673	0.2335 0.2496	0.2741 0.2766	0.2235 0.2827	0.2570	Ave		0.259 9				7.9		15.0			
Cyclohexane	0.2974 0.2758	0.2312 0.2659	0.3189 0.3003	0.2186 0.3087	0.2739	Ave		0.276 7				12.4		15.0			
1,1-Dichloropropene	0.2809 0.2452	0.2176 0.2276	0.2620 0.2536	0.2062 0.2547	0.2406	Ave		0.243 2				9.5		15.0			
Carbon tetrachloride	0.1910 0.2054	0.1728 0.1961	0.2110 0.2210	0.1637 0.2276	0.1956	Ave		0.198 2				10.6		15.0			
Isobutyl alcohol	++++ 0.0082	0.0076 0.0078	0.0075 0.0075	0.0075 0.0074	0.0082	Ave		0.007 7				4.2		15.0			
Benzene	0.7876 0.7315	0.6886 0.6729	0.7612 0.7289	0.6668 0.7175	0.7280	Ave		0.720 3				5.5		15.0			
1,2-Dichloroethane	++++ 0.2746	0.3076 0.2562	0.2880 0.2690	0.2682 0.2616	0.2743	Ave		0.274 9				5.9		15.0			
n-Heptane	++++ 0.1786	0.2077 0.1755	0.2239 0.1872	0.1514 0.1943	0.1770	Ave		0.187 0				11.8		15.0			
Trichloroethene	++++ 0.8007	0.7866 0.7368	0.8541 0.8155	0.7168 0.8446	0.7747	Ave		0.791 2				6.1		15.0			
2-Pentanone	0.2508 0.2220	0.2152 0.2174	0.2297 0.2074	0.2240 0.2031	0.2320	Ave		0.222 4				6.4		15.0			
Methylcyclohexane	++++ 0.2072	0.1879 0.2005	0.2366 0.2208	0.1659 0.2266	0.2053	Ave		0.206 3				10.9		15.0			
1,2-Dichloropropane	0.2135 0.1952	0.1834 0.1807	0.1996 0.1923	0.1845 0.1886	0.1915	Ave		0.192 1				5.2		30.0			
1,4-Dioxane	++++ 0.0031	0.0030 0.0029	0.0028 0.0028	0.0027 0.0027	0.0031	Ave		0.002 9				5.1		15.0			
Dibromomethane	++++ 0.1241	0.1238 0.1190	0.1211 0.1220	0.1184 0.1204	0.1235	Ave		0.121 5				1.8		15.0			
Dichlorobromomethane	0.2433 0.2490	0.2225 0.2322	0.2316 0.2484	0.2188 0.2461	0.2292	Ave		0.235 7				4.8		15.0			
2-Chloroethyl vinyl ether	++++ 0.1484	0.1412 0.1408	0.1444 0.1320	0.1420 0.1353	0.1527	Ave		0.142 1				4.7		15.0			
cis-1,3-Dichloropropene	++++ 1.4256	1.3512 1.3168	1.3293 1.3997	1.2997 1.4159	1.3689	Ave		1.363 4				3.5		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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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								
4-Methyl-2-pentanone (MIBK)	++++ 0.2186	0.1982 0.2034	0.2045 0.2006	0.2008 0.1889	0.2190	Ave		0.204 3				5.0		15.0			
Toluene	0.8765 0.7764	0.7783 0.7169	0.8285 0.7771	0.7151 0.7657	0.7647	Ave		0.777 7				6.5		30.0			
trans-1,3-Dichloropropene	++++ 0.3050	0.2954 0.2841	0.2775 0.2971	0.2683 0.2927	0.2811	Ave		0.287 6				4.2		15.0			
Ethyl methacrylate	++++ 1.3153	1.2619 1.2371	1.2120 1.2455	1.2071 1.2447	1.3037	Ave		1.253 4				3.1		15.0			
1,1,2-Trichloroethane	++++ 0.1673	0.1529 0.1570	0.1640 0.1624	0.1578 0.1561	0.1653	Ave		0.160 4				3.2		15.0			
Tetrachloroethene	++++ 0.5380	0.4668 0.5016	0.5836 0.5548	0.4577 0.5789	0.5172	Ave		0.524 8				9.1		15.0			
1,3-Dichloropropane	++++ 1.4052	1.2893 1.2915	1.3890 1.3413	1.3417 1.3194	1.3761	Ave		1.344 2				3.2		15.0			
2-Hexanone	++++ 0.6933	0.7040 0.6510	0.6742 0.6385	0.6471 0.6227	0.7013	Ave		0.666 5				4.6		15.0			
Chlorodibromomethane	0.7601 0.7361	0.6473 0.7072	0.6627 0.7408	0.6238 0.7557	0.6773	Ave		0.701 2				7.2		15.0			
1,2-Dibromoethane	++++ 0.8150	0.7571 0.7548	0.7796 0.7754	0.7687 0.7743	0.7966	Ave		0.777 7				2.6		15.0			
1-Chlorohexane	++++ 1.3417	1.5616 1.3729	1.7959 1.3307	1.1816 1.4817	1.3879	Ave		1.431 8				12.9		15.0			
Chlorobenzene	++++ 2.1329	2.2932 1.9568	2.2110 2.1020	1.9892 2.0888	2.0927	Ave		2.108 3			0.3000	5.2		15.0			
1,1,1,2-Tetrachloroethane	0.7595 0.7356	0.6406 0.6834	0.6623 0.7353	0.6488 0.7345	0.6928	Ave		0.699 2				6.2		15.0			
Ethylbenzene	++++ 1.1581	1.1070 1.0748	1.2379 1.1539	1.0427 1.1719	1.1639	Ave		1.138 8				5.4		30.0			
m-Xylene & p-Xylene	++++ 1.4299	1.4134 1.3143	1.4974 1.4170	1.2766 1.4367	1.3765	Ave		1.395 2				5.1		15.0			
o-Xylene	++++ 1.3797	1.3231 1.2636	1.4029 1.3631	1.2724 1.3614	1.3549	Ave		1.340 1				3.7		15.0			
Styrene	++++ 2.4619	2.3126 2.2684	2.3957 2.4089	2.2454 2.3810	2.3424	Ave		2.352 0				3.1		15.0			
Bromoform	0.4369 0.4596	0.3376 0.4447	0.3548 0.4664	0.3582 0.4855	0.3907	Ave		0.414 9			0.1000	13.3		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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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								
Isopropylbenzene	++++ 2.4527	2.3128 2.2958	2.6692 2.4436	2.1772 2.4665	2.4032	Ave		2.402 6				6.1		15.0			
Cyclohexanone	++++ 0.0399	0.0416 0.0377	0.0421 0.0355	0.0401 0.0368	0.0406	Ave		0.039 3				6.0		15.0			
1,1,2,2-Tetrachloroethane	++++ 0.7650	0.7697 0.7239	0.7648 0.7171	0.7286 0.7158	0.7712	Ave		0.744 5			0.3000	3.4		15.0			
Bromobenzene	++++ 0.5882	0.6325 0.5586	0.5733 0.5792	0.5605 0.5870	0.5877	Ave		0.583 4				4.0		15.0			
trans-1,4-Dichloro-2-butene	++++ 0.2168	0.2294 0.2105	0.2013 0.2100	0.1822 0.2238	0.2011	Ave		0.209 4				7.1		15.0			
1,2,3-Trichloropropane	++++ 0.2302	0.2337 0.2190	0.2275 0.2148	0.2119 0.2175	0.2313	Ave		0.223 2				3.8		15.0			
N-Propylbenzene	++++ 0.6378	0.6343 0.6119	0.7163 0.6470	0.5846 0.6636	0.6293	Ave		0.640 6				6.0		15.0			
2-Chlorotoluene	++++ 0.5595	0.5969 0.5322	0.5856 0.5638	0.5298 0.5662	0.5522	Ave		0.560 8				4.2		15.0			
1,3,5-Trimethylbenzene	++++ 2.0019	1.9996 1.8607	2.1330 1.9743	1.7764 1.9522	1.9631	Ave		1.957 6				5.4		15.0			
4-Chlorotoluene	++++ 0.5906	0.6256 0.5601	0.6197 0.5889	0.5550 0.5908	0.6116	Ave		0.592 8				4.4		15.0			
tert-Butylbenzene	++++ 1.5800	1.6338 1.4794	1.7077 1.5715	1.3832 1.5778	1.5713	Ave		1.563 1				6.2		15.0			
1,2,4-Trimethylbenzene	++++ 2.0420	2.1281 1.9196	2.1210 2.0182	1.8857 1.9847	2.0161	Ave		2.014 4				4.3		15.0			
sec-Butylbenzene	++++ 0.4456	0.4291 0.4249	0.4615 0.4496	0.3790 0.4544	0.4462	Ave		0.436 3				6.0		15.0			
1,3-Dichlorobenzene	++++ 1.0463	1.1750 0.9803	1.0480 1.0250	0.9819 1.0204	1.0212	Ave		1.037 3				5.9		15.0			
4-Isopropyltoluene	++++ 1.9214	1.9068 1.7877	2.0190 1.8919	1.6539 1.8796	1.8545	Ave		1.864 4				5.7		15.0			
1,4-Dichlorobenzene	++++ 1.0733	1.2697 1.0076	1.1890 1.0609	1.0377 1.0442	1.0710	Ave		1.094 2				8.1		15.0			
n-Butylbenzene	++++ 1.7449	1.8121 1.6557	1.8841 1.7367	1.5137 1.6994	1.6512	Ave		1.712 2				6.5		15.0			
1,2-Dichlorobenzene	++++ 1.0056	1.1108 0.9526	1.0384 0.9905	0.9558 0.9599	0.9797	Ave		0.999 2				5.4		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
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1,2-Dibromo-3-Chloropropane	++++ 0.1425	0.1280 0.1385	0.1207 0.1374	0.1189 0.1425	0.1289	Ave		0.132 2				7.1		15.0			
1,2,4-Trichlorobenzene	++++ 0.5426	0.6756 0.5111	0.5803 0.5155	0.5037 0.4634	0.5185	Ave		0.538 8				12.0		15.0			
Hexachlorobutadiene	++++ 0.1762	0.1991 0.1663	0.2117 0.1756	0.1575 0.1594	0.1663	Ave		0.176 5				10.9		15.0			
Naphthalene	++++ 1.9098	2.3675 1.8218	1.9759 1.7864	1.7622 1.6829	1.8541	Ave		1.895 1				11.1		15.0			
1,2,3-Trichlorobenzene	++++ 0.4944	0.6866 0.4555	0.5420 0.4597	0.4603 0.4115	0.4782	Lin2	0.227 4	0.446 0							0.9950		0.9900
Dibromofluoromethane (Surr)	0.2418 0.2443	0.2419 0.2452	0.2409 0.2477	0.2425 0.2462	0.2444	Ave		0.243 9				0.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3063 0.3066	0.3086 0.3095	0.3058 0.3124	0.3102 0.3111	0.3154	Ave		0.309 5				1.0		15.0			
Toluene-d8 (Surr)	4.2963 4.2893	4.3004 4.2390	4.3605 4.2629	4.3093 4.3561	4.3255	Ave		4.304 4				0.9		15.0			
4-Bromofluorobenzene (Surr)	1.1721 1.1274	1.1482 1.1413	1.1499 1.1439	1.1492 1.1485	1.1441	Ave		1.147 2				1.0		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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-541369/14	P6311.D
Level 2	STD010 280-541369/15	P6312.D
Level 3	STD020 280-541369/16	P6313.D
Level 4	STD050 280-541369/17	P6314.D
Level 5	STD10 280-541369/18	P6315.D
Level 6	ICIS 280-541369/19	P6316.D
Level 7	STD75 280-541369/20	P6317.D
Level 8	STD100 280-541369/21	P6318.D
Level 9	STD200 280-541369/22	P6319.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	+++++ 278648	4037 480157	10086 593412	29911 1229430	67660	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Ave	+++++ 298318	6688 465536	12860 582249	31371 1206456	66365	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	3352 294993	5225 472195	12027 588242	29667 1220412	68335	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Lin1	+++++ 159911	7325 248267	12679 316851	23301 +++++	39552	+++++ 50.0	1.00 75.0	2.00 100	5.00 +++++	10.0
Chloroethane	FB	Ave	+++++ 186555	4450 286567	7716 364785	20949 689256	44815	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	6233 519703	10058 798353	21551 1003243	51683 2075773	113337	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	4291 402429	6967 666026	17500 827769	42406 1716996	96403	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	3019 268824	5449 392107	9680 547045	25023 1058864	52919	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	+++++ 566055	11821 820774	21654 1095638	50123 2197736	110201	+++++ 494	9.88 741	19.8 988	49.4 1975	98.8
1,1-Dichloroethene	FB	Ave	+++++ 229661	3943 344620	9831 518725	19422 1079543	45320	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Freon 113	FB	Ave	1774 161543	2337 246681	6936 374677	12806 786251	31647	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Ave	+++++ 458301	10038 668414	19284 872596	41848 1745331	91492	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
Iodomethane	FB	Lin1	+++++ 7287	7287	11099	22953	52239	+++++ 1.00	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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
			349093	519019	757052	1456651		50.0	75.0	100	200	
Carbon disulfide	FB	Ave	++++ 777323	18633 1130534	35967 1697978	68289 3534331	151458	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methyl acetate	FB	Ave	++++ 566714	14786 822115	25166 1091432	53569 2218319	112206	++++ 100	2.00 150	4.00 200	10.0 400	20.0
Allyl chloride	FB	Ave	++++ 429295	7872 643024	17933 879432	39155 1780026	85922	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Ave	++++ 316541	8535 451734	14479 650194	30172 1287644	61596	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tert-butyl alcohol (2-methyl-2-propanol)	FB	Ave	++++ 444650	8770 662562	17207 859946	40809 1682123	88074	++++ 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	++++ 1515579	30319 2189200	58737 2885462	140679 5514227	297023	++++ 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	++++ 1021033	18547 1486665	37570 2031457	95722 3957537	196888	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	++++ 285644	5738 416647	11695 610689	24268 1239651	55284	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Ave	++++ 357204	5669 533211	16105 787055	27268 1626078	69808	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	++++ 1576359	30291 2255713	60536 3021471	150564 5862228	317560	++++ 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	5852 562174	10198 806326	23154 1177252	49930 2361915	107104	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	++++ 737154	15500 1077116	30055 1405379	68716 2755222	149801	++++ 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	++++ 329933	6581 471745	12943 693007	30326 1379106	63832	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Ave	4783 472997	8374 681588	18438 1018425	39539 2082696	89179	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	++++ 1060367	21292 1600078	42200 2023433	101747 4123632	209805	++++ 1200	24.0 1800	48.0 2400	120 4800	240
Chlorobromomethane	FB	Ave	++++ 157728	3256 219321	6047 306696	14070 593407	29991	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	++++	5008	11081	21999	47735	++++	2.00	4.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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
			239974	354452	462731	927640		100	150	200	400	
Chloroform	FB	Ave	5952 555709	10810 795207	21856 1155825	49370 2306713	106091	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	4749 464279	7993 670821	18523 993007	37742 2044651	86648	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	5147 479051	7913 714764	21550 1078151	36903 2232580	92336	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	4862 425770	7449 611704	17704 910343	34815 1842562	81121	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	3305 356635	5916 527148	14261 793468	27639 1646407	65925	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isobutyl alcohol	FB	Ave	++++ 356471	6471 526843	12663 670642	31805 1336083	68892	++++ 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	13631 1270385	23572 1808760	51444 2616504	112583 5189712	245410	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Ave	++++ 476866	10531 688791	19466 965471	45284 1892357	92466	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Heptane	FB	Ave	++++ 310204	7110 471729	15133 671940	25562 1405078	59686	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	CBNZ d5	Ave	++++ 310591	5974 445178	12788 658901	26882 1340393	58277	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	13890 1233557	23576 1869963	49668 2381980	121022 4701675	250251	1.60 160	3.20 240	6.40 320	16.0 640	32.0
Methylcyclohexane	FB	Ave	++++ 359800	6433 538976	15988 792783	28006 1638915	69197	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	3695 338981	6277 485696	13487 690371	31150 1363826	64558	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	++++ 105947	2024 153970	3803 200129	9122 389455	20709	++++ 1000	20.0 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	++++ 215600	4237 319906	8184 437968	19988 870686	41647	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorobromomethane	FB	Ave	4211 432394	7617 624121	15653 891809	36935 1779873	77285	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	++++ 257734	4835 378353	9760 473792	23969 978451	51464	++++ 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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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
cis-1,3-Dichloropropene	CBNZ d5	Ave	++++ 552987	10262 795629	19904 1130929	48743 2246945	102975	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	++++ 1518248	27143 2186643	55277 2880679	135611 5466120	295341	++++ 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	15170 1348277	26642 1927045	55991 2789498	120728 5538271	257801	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Ave	++++ 529641	10111 763789	18755 1066369	45297 2116822	94769	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Ave	++++ 510198	9584 747479	18148 1006352	45271 1975355	98072	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	++++ 290577	5235 422150	11081 582843	26646 1129065	55713	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Ave	++++ 208701	3545 303078	8738 448220	17165 918674	38904	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Ave	++++ 545059	9792 780382	20797 1083742	50316 2093869	103517	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Ave	++++ 1075778	21386 1573341	40381 2063641	97075 3952601	211013	++++ 200	4.00 300	8.00 400	20.0 800	40.0
Chlorodibromomethane	CBNZ d5	Ave	2905 285550	4916 427336	9922 598536	23395 1199297	50952	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromoethane	CBNZ d5	Ave	++++ 316127	5750 456074	11673 626475	28829 1228842	59929	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Ave	++++ 416356	9488 663630	21512 860156	35452 1881090	83527	++++ 40.0	0.800 60.0	1.60 80.0	4.00 160	8.00
Chlorobenzene	CBNZ d5	Ave	++++ 827370	17417 1182372	33105 1698360	74599 3314864	157425	++++ 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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2903	4865	9917	24332	52118	0.500	1.00	2.00	5.00	10.0
			285354	412905	594071	1165627		50.0	75.0	100	200	
Ethylbenzene	CBNZ d5	Ave	++++	8408	18535	39106	87554	++++	1.00	2.00	5.00	10.0
			449239	649454	932331	1859740		50.0	75.0	100	200	
m-Xylene & p-Xylene	CBNZ d5	Ave	++++	10735	22421	47876	103546	++++	1.00	2.00	5.00	10.0
			554673	794124	1144886	2279994		50.0	75.0	100	200	
o-Xylene	CBNZ d5	Ave	++++	10049	21006	47720	101924	++++	1.00	2.00	5.00	10.0
			535170	763480	1101339	2160528		50.0	75.0	100	200	
Styrene	CBNZ d5	Ave	++++	17564	35871	84207	176214	++++	1.00	2.00	5.00	10.0
			954964	1370630	1946311	3778548		50.0	75.0	100	200	
Bromoform	CBNZ d5	Ave	1670	2564	5313	13433	29394	0.500	1.00	2.00	5.00	10.0
			178278	268703	376868	770501		50.0	75.0	100	200	
Isopropylbenzene	DCBd 4	Ave	++++	23953	54596	113279	251095	++++	1.00	2.00	5.00	10.0
			1347790	1931027	2776559	5422495		50.0	75.0	100	200	
Cyclohexanone	CBNZ d5	Ave	++++	12642	25226	60137	122055	++++	40.0	80.0	200	400
			619024	911574	1147581	2338315		2000	3000	4000	8000	
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	++++	7971	15644	37911	80581	++++	1.00	2.00	5.00	10.0
			420396	608874	814789	1573657		50.0	75.0	100	200	
Bromobenzene	DCBd 4	Ave	++++	6551	11726	29160	61402	++++	1.00	2.00	5.00	10.0
			323200	469858	658158	1290421		50.0	75.0	100	200	
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	++++	2376	4118	9479	21011	++++	1.00	2.00	5.00	10.0
			119159	177089	238603	492067		50.0	75.0	100	200	
1,2,3-Trichloropropane	DCBd 4	Ave	++++	2420	4653	11024	24164	++++	1.00	2.00	5.00	10.0
			126520	184208	244081	478079		50.0	75.0	100	200	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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
N-Propylbenzene	DCBd 4	Ave	++++ 350470	6569 514683	14652 735172	30418 1458869	65748	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chlorotoluene	DCBd 4	Ave	++++ 307464	6182 447643	11978 640584	27564 1244668	57692	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	++++ 1100042	20709 1565050	43628 2243314	92424 4291773	205111	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Chlorotoluene	DCBd 4	Ave	++++ 324530	6479 471128	12676 669094	28875 1298780	63898	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
tert-Butylbenzene	DCBd 4	Ave	++++ 868192	16921 1244361	34929 1785632	71969 3468766	164177	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	++++ 1122092	22040 1614642	43383 2293209	98112 4363200	210648	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butylbenzene	DCBd 4	Ave	++++ 244878	4444 357435	9439 510807	19718 999026	46620	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	++++ 574954	12169 824583	21436 1164622	51087 2243343	106695	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Isopropyltoluene	DCBd 4	Ave	++++ 1055830	19748 1503666	41297 2149696	86054 4132242	193760	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	++++ 589804	13150 847556	24319 1205459	53989 2295582	111903	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Butylbenzene	DCBd 4	Ave	++++ 958812	18767 1392630	38538 1973315	78756 3735949	172523	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	++++ 552552	11504 801266	21240 1125451	49729 2110173	102365	++++ 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.: 280-150245-1 Analy Batch No.: 541369

SDG No.: _____

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/26/2021 15:46 Calibration End Date: 06/26/2021 18:50 Calibration ID: 54820

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-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++	1326	2469	6184	13464	+++++	1.00	2.00	5.00	10.0
			78284	116467	156146	313188		50.0	75.0	100	200	
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++	6997	11869	26209	54170	+++++	1.00	2.00	5.00	10.0
			298143	429878	585782	1018760		50.0	75.0	100	200	
Hexachlorobutadiene	DCBd 4	Ave	+++++	2062	4331	8197	17372	+++++	1.00	2.00	5.00	10.0
			96839	139868	199506	350419		50.0	75.0	100	200	
Naphthalene	DCBd 4	Ave	+++++	24519	40415	91688	193720	+++++	1.00	2.00	5.00	10.0
			1049445	1532344	2029810	3699669		50.0	75.0	100	200	
1,2,3-Trichlorobenzene	DCBd 4	Lin2	+++++	7111	11087	23950	49961	+++++	1.00	2.00	5.00	10.0
			271664	383149	522383	904593		50.0	75.0	100	200	
Dibromofluoromethane (Surr)	FB	Ave	418485	414050	407034	409345	411977	50.0	50.0	50.0	50.0	50.0
			424244	439478	444652	445106		50.0	50.0	50.0	50.0	
1,2-Dichloroethane-d4 (Surr)	FB	Ave	530071	528267	516592	523714	531588	50.0	50.0	50.0	50.0	50.0
			532541	554551	560794	562492		50.0	50.0	50.0	50.0	
Toluene-d8 (Surr)	CBNZ d5	Ave	1642072	1633080	1632245	1616108	1626976	50.0	50.0	50.0	50.0	50.0
			1663808	1707568	1722130	1728272		50.0	50.0	50.0	50.0	
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	610063	594563	588004	597938	597717	50.0	50.0	50.0	50.0	50.0
			619520	639965	649867	631206		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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6311.D
 Lims ID: STD005
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 26-Jun-2021 15:46:30 ALS Bottle#: 13 Worklist Smp#: 14
 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\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:44:25 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 26-Jun-2021 16:32:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.879	0.001	98	1730684	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.391	0.001	90	382204	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.607	0.001	98	520466	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	91	418485	50.0	49.6	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	98	530071	50.0	49.5	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1642072	50.0	49.9	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	82	610063	50.0	51.1	
10 Dichlorodifluoromethane	85	1.535	1.534	0.001	97	2436	0.5000	0.4267	a
11 Chloromethane	50	1.704	1.703	0.001	98	5007	0.5000	0.8024	
12 Vinyl chloride	62	1.799	1.798	0.001	98	3352	0.5000	0.5513	a
14 Bromomethane	94	2.062	2.051	0.011	97	6790	0.5000	0.3384	M
15 Chloroethane	64	2.157	2.146	0.011	94	4213	0.5000	1.07	a
16 Dichlorofluoromethane	67	2.326	2.326	0.000	95	6233	0.5000	0.5834	
17 Trichlorofluoromethane	101	2.358	2.357	0.001	96	4291	0.5000	0.5083	
19 Ethyl ether	59	2.569	2.568	0.001	90	3019	0.5000	0.5682	
21 Acrolein	56	2.675	2.674	0.000	99	9225	4.94	8.32	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.759	2.748	0.011	73	1774	0.5000	0.5485	
22 1,1-Dichloroethene	96	2.748	2.748	0.000	97	2846	0.5000	0.6180	
24 Acetone	43	2.769	2.769	0.000	99	11206	2.00	4.95	
26 Iodomethane	142	2.875	2.874	0.001	99	9095	0.5000	1.67	
27 Carbon disulfide	76	2.928	2.927	0.001	99	17496	0.5000	1.08	
29 Methyl acetate	43	3.002	2.990	0.012	98	14325	1.00	2.45	
30 3-Chloro-1-propene	41	3.012	3.011	0.001	88	5108	0.5000	0.6025	
31 Methylene Chloride	84	3.107	3.106	0.001	94	6020	0.5000	0.9067	
32 2-Methyl-2-propanol	59	3.149	3.159	-0.010	99	7703	5.00	8.95	
33 Acrylonitrile	53	3.265	3.265	0.000	97	25311	5.00	8.70	
34 Methyl tert-butyl ether	73	3.287	3.286	0.001	94	11724	0.5000	0.6018	
35 trans-1,2-Dichloroethene	96	3.308	3.307	0.001	94	3760	0.5000	0.6637	
36 Hexane	57	3.498	3.497	0.001	90	4760	0.5000	0.6844	
38 Vinyl acetate	43	3.603	3.602	0.001	98	20548	1.00	1.35	
39 1,1-Dichloroethane	63	3.624	3.613	0.011	95	5852	0.5000	0.5301	

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	4.004	4.003	0.001	99	15000	2.00	4.14	
47 cis-1,2-Dichloroethene	96	4.025	4.025	0.000	88	3935	0.5000	0.6055	
48 2,2-Dichloropropane	77	4.036	4.035	0.001	86	4783	0.5000	0.5203	a
50 sec-Butyl Alcohol	45	4.110	4.109	0.001	98	12087	12.0	13.9	
53 Chlorobromomethane	128	4.205	4.204	0.001	96	2112	0.5000	0.7005	
52 Tetrahydrofuran	42	4.205	4.204	0.001	82	4908	1.00	2.05	
54 Chloroform	83	4.257	4.257	0.000	95	5952	0.5000	0.5436	
55 1,1,1-Trichloroethane	97	4.395	4.394	0.001	98	4749	0.5000	0.5280	
56 Cyclohexane	56	4.458	4.457	0.001	91	5147	0.5000	0.5373	
57 1,1-Dichloropropene	75	4.511	4.510	0.001	94	4862	0.5000	0.5777	
59 Carbon tetrachloride	117	4.511	4.520	-0.009	68	3305	0.5000	0.4816	
58 Isobutyl alcohol	41	4.532	4.531	0.001	92	5738	12.5	21.5	
60 Benzene	78	4.658	4.658	0.000	93	13631	0.5000	0.5467	
61 1,2-Dichloroethane	62	4.690	4.689	0.001	94	7084	0.5000	0.7444	a
66 n-Heptane	43	4.848	4.848	0.000	74	6467	0.5000	1.00	
67 Trichloroethene	95	5.154	5.154	0.000	94	3933	0.5000	0.6503	
68 2-Pentanone	43	5.249	5.249	0.000	98	13890	1.60	1.80	
69 Methylcyclohexane	55	5.344	5.344	0.000	93	4223	0.5000	0.5913	
70 1,2-Dichloropropane	63	5.355	5.354	0.001	93	3695	0.5000	0.5556	
72 1,4-Dioxane	88	5.397	5.396	0.001	93	2548	10.0	25.7	
73 Dibromomethane	93	5.429	5.428	0.001	83	3094	0.5000	0.7354	
74 Dichlorobromomethane	83	5.545	5.544	0.001	97	4211	0.5000	0.5162	
76 2-Chloroethyl vinyl ether	63	5.745	5.755	-0.010	92	3208	0.5000	0.6523	
77 cis-1,3-Dichloropropene	75	5.893	5.892	0.001	92	6607	0.5000	0.6340	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.998	0.001	96	20117	2.00	2.85	
79 Toluene	91	6.178	6.177	0.001	99	15170	0.5000	0.5636	
80 trans-1,3-Dichloropropene	75	6.357	6.357	0.000	91	6952	0.5000	0.6982	
81 Ethyl methacrylate	69	6.379	6.378	0.001	88	6494	0.5000	0.6778	
82 1,1,2-Trichloroethane	97	6.526	6.536	-0.010	89	3548	0.5000	0.6392	
83 Tetrachloroethene	164	6.621	6.621	0.001	89	2456	0.5000	0.6122	
84 1,3-Dichloropropane	76	6.674	6.673	0.001	88	6297	0.5000	0.6128	
85 2-Hexanone	43	6.695	6.694	0.001	98	15392	2.00	3.02	
86 Chlorodibromomethane	129	6.875	6.863	0.012	87	2905	0.5000	0.5420	
88 Ethylene Dibromide	107	6.991	6.979	0.012	93	3986	0.5000	0.6705	
89 1-Chlorohexane	91	7.381	7.380	0.001	44	7263	0.4000	0.6636	
90 Chlorobenzene	112	7.413	7.412	0.001	91	10530	0.5000	0.6534	
91 1,1,1,2-Tetrachloroethane	131	7.487	7.486	0.001	73	2903	0.5000	0.5432	
92 Ethylbenzene	106	7.497	7.496	0.001	99	5531	0.5000	0.6354	
93 m-Xylene & p-Xylene	106	7.613	7.612	0.001	99	7025	0.5000	0.6587	
94 o-Xylene	106	7.972	7.971	0.001	97	6770	0.5000	0.6609	
95 Styrene	104	7.983	7.982	0.001	93	12210	0.5000	0.6791	
96 Bromoform	173	8.162	8.161	0.001	86	1670	0.5000	0.5265	a
97 Isopropylbenzene	105	8.310	8.309	0.001	97	17174	0.5000	0.6867	
99 Cyclohexanone	55	8.394	8.404	-0.010	93	15440	20.0	51.4	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.594	0.001	95	5829	0.5000	0.7521	
101 Bromobenzene	156	8.626	8.626	0.000	96	4877	0.5000	0.8031	
102 trans-1,4-Dichloro-2-butene	53	8.637	8.636	0.001	47	2093	0.5000	0.9602	M
103 1,2,3-Trichloropropane	110	8.658	8.657	0.001	84	1748	0.5000	0.7523	
104 N-Propylbenzene	120	8.711	8.710	0.001	99	5119	0.5000	0.7677	
105 2-Chlorotoluene	126	8.806	8.805	0.001	95	3932	0.5000	0.6736	
106 1,3,5-Trimethylbenzene	105	8.880	8.879	0.001	93	15709	0.5000	0.7709	
107 4-Chlorotoluene	126	8.911	8.921	-0.010	98	4729	0.5000	0.7664	

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	9.186	9.185	0.001	93	12640	0.5000	0.7769	
109 1,2,4-Trimethylbenzene	105	9.249	9.248	0.001	98	17012	0.5000	0.8113	
110 sec-Butylbenzene	134	9.407	9.406	0.001	95	3249	0.5000	0.7154	
111 1,3-Dichlorobenzene	146	9.534	9.533	0.001	94	9612	0.5000	0.8902	
112 4-Isopropyltoluene	119	9.555	9.554	0.001	96	16645	0.5000	0.8577	
113 1,4-Dichlorobenzene	146	9.629	9.628	0.001	89	10816	0.5000	0.9496	
115 n-Butylbenzene	91	9.956	9.955	0.001	97	18800	0.5000	1.05	
116 1,2-Dichlorobenzene	146	9.977	9.976	0.001	92	9084	0.5000	0.8734	
117 1,2-Dibromo-3-Chloropropane	157	10.758	10.757	0.001	79	1389	0.5000	1.01	
119 1,2,4-Trichlorobenzene	180	11.581	11.580	0.001	93	9212	0.5000	1.64	
120 Hexachlorobutadiene	225	11.718	11.718	0.000	89	3030	0.5000	1.65	
121 Naphthalene	128	11.845	11.844	0.001	97	35332	0.5000	1.79	
122 1,2,3-Trichlorobenzene	180	12.067	12.066	0.000	93	9159	0.5000	1.46	
S 139 1,2-Dichloroethene, Total (URS)	95				0		1.00	1.27	
S 142 Xylenes, Total	106				0		1.00	1.32	
S 140 Trihalomethanes, Total	1				0		2.00	2.13	
S 143 Xylenes, Total (URS)	1				0		1.00	1.32	
S 146 Total BTEX	1				0			3.07	
S 145 1,3-Dichloropropene, Total	1				0		1.00	1.33	
S 144 1,2-Dichloroethene, Total	1				0		1.00	1.27	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 0.25

Units: uL

MV-Gas A_00091

Amount Added: 0.10

Units: uL

MV-Main add A_00001

Amount Added: 0.25

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Jun-2021 10:44:25

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD005

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

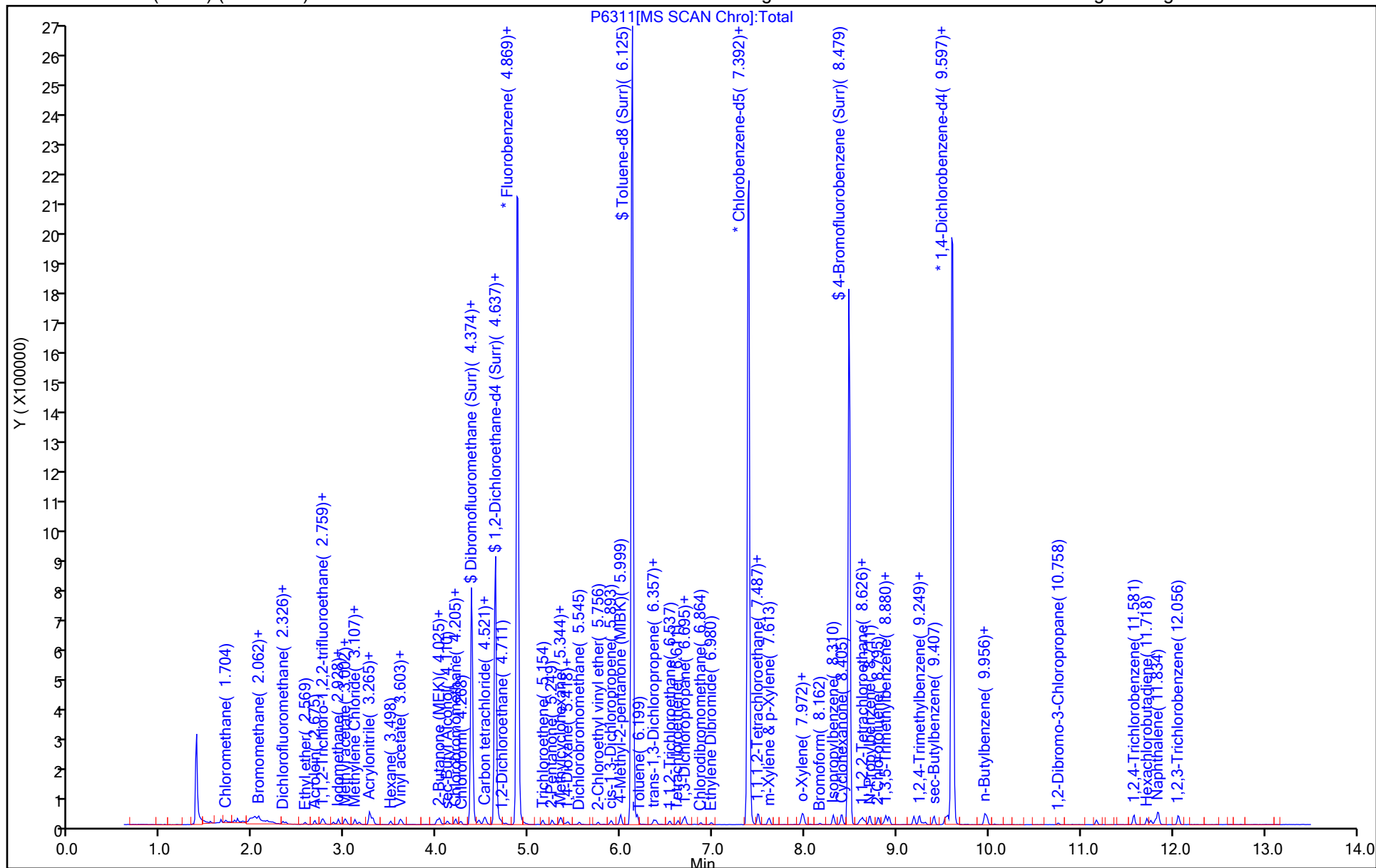
ALS Bottle#: 13

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

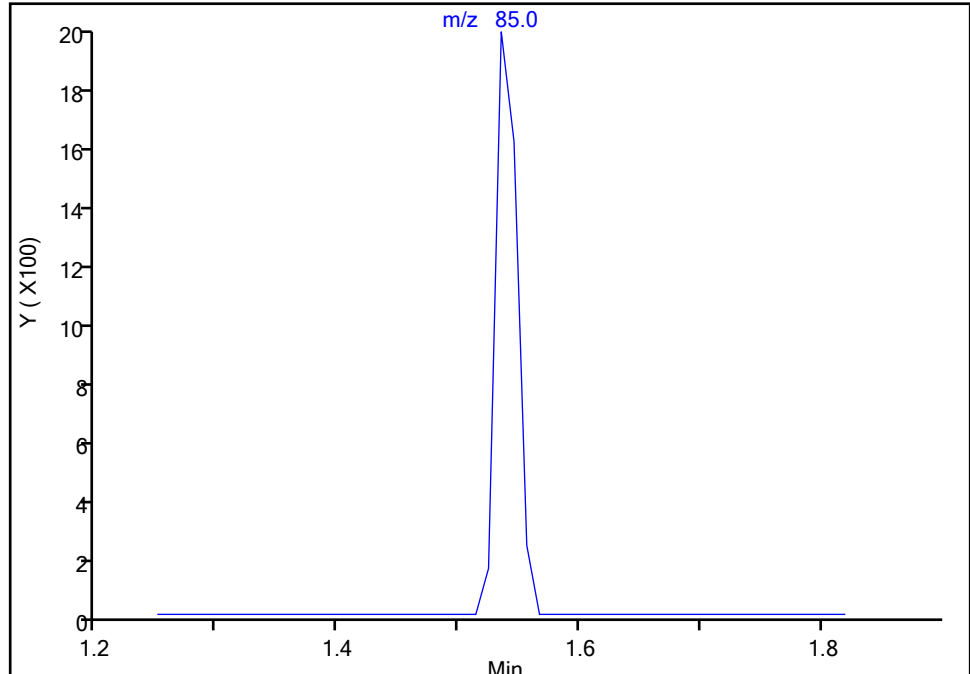
10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

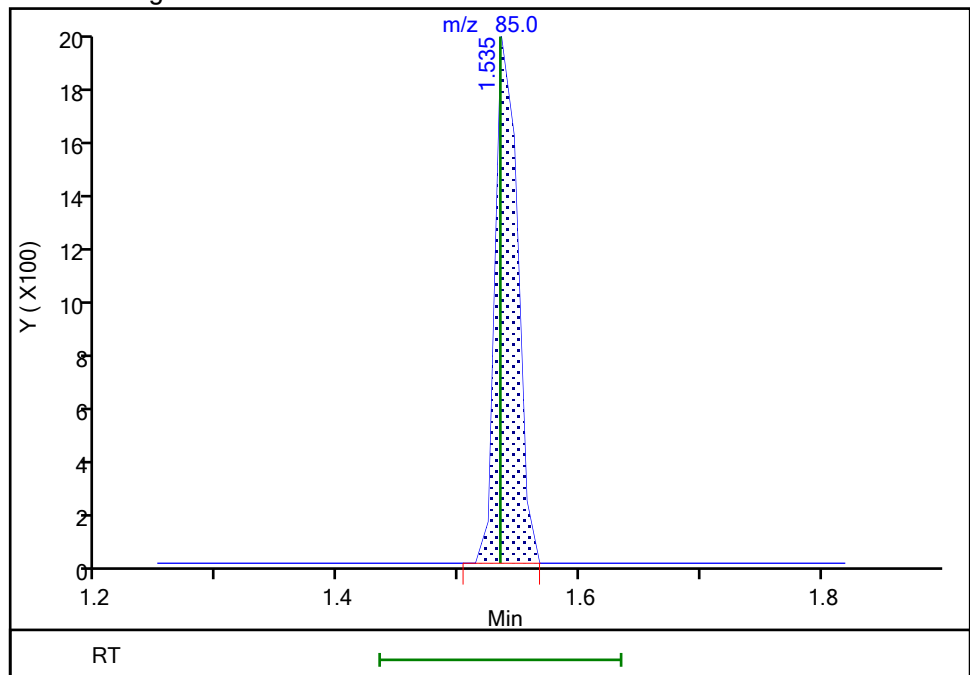
Not Detected

Expected RT: 1.53

Processing Integration Results



Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:38:06

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

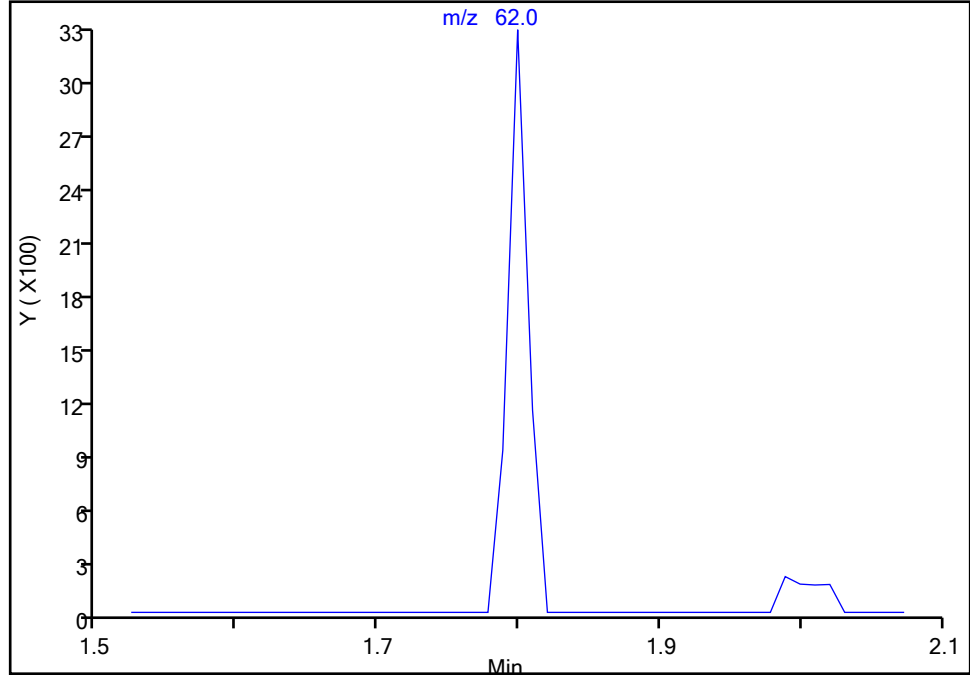
12 Vinyl chloride, CAS: 75-01-4

Signal: 1

Not Detected

Expected RT: 1.80

Processing Integration Results



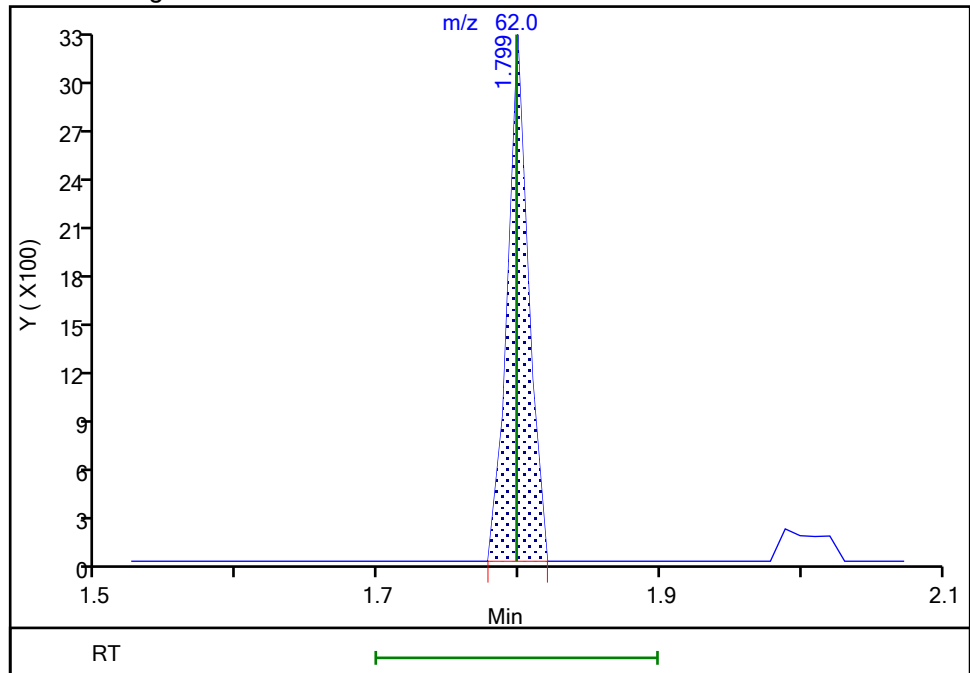
RT: 1.80

Area: 3352

Amount: 0.551334

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:38:11

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

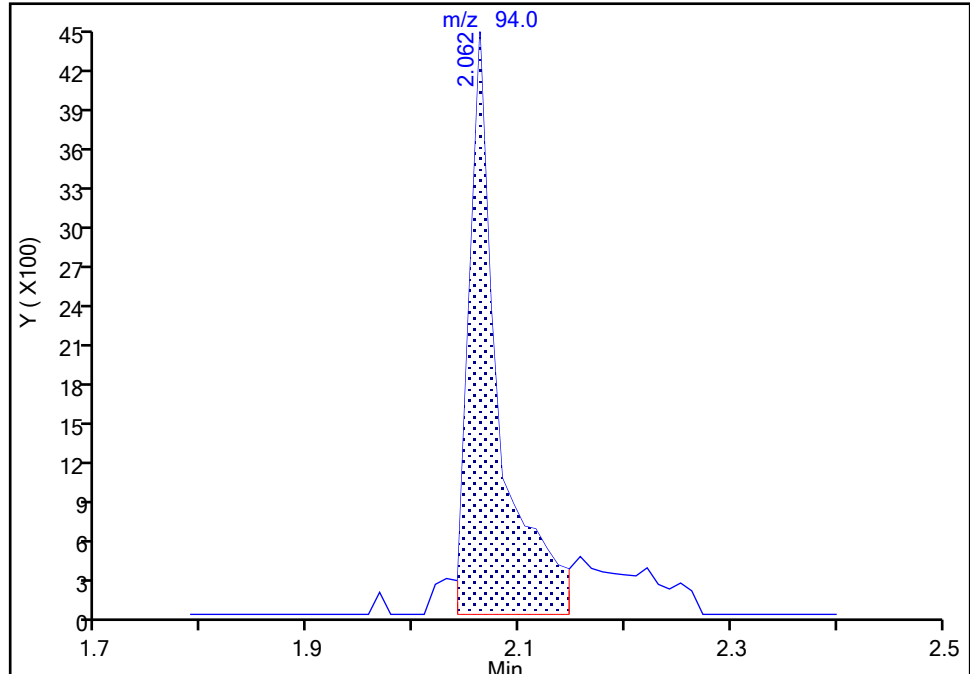
MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

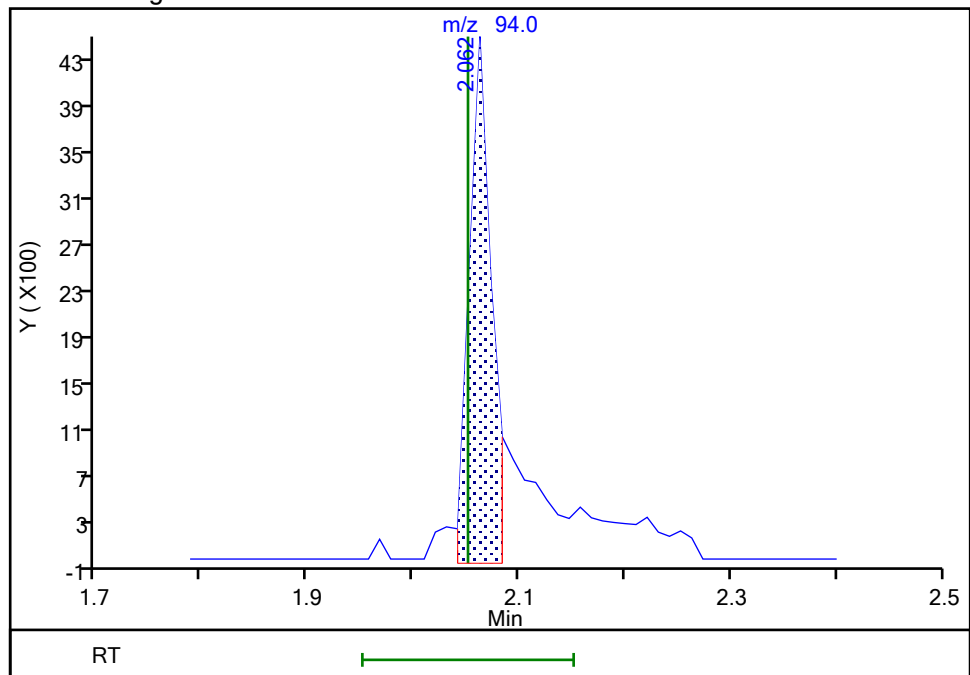
RT: 2.06
Area: 8842
Amount: 1.003867
Amount Units: ug/l

Processing Integration Results



RT: 2.06
Area: 6790
Amount: 0.338415
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 28-Jun-2021 07:27:54

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

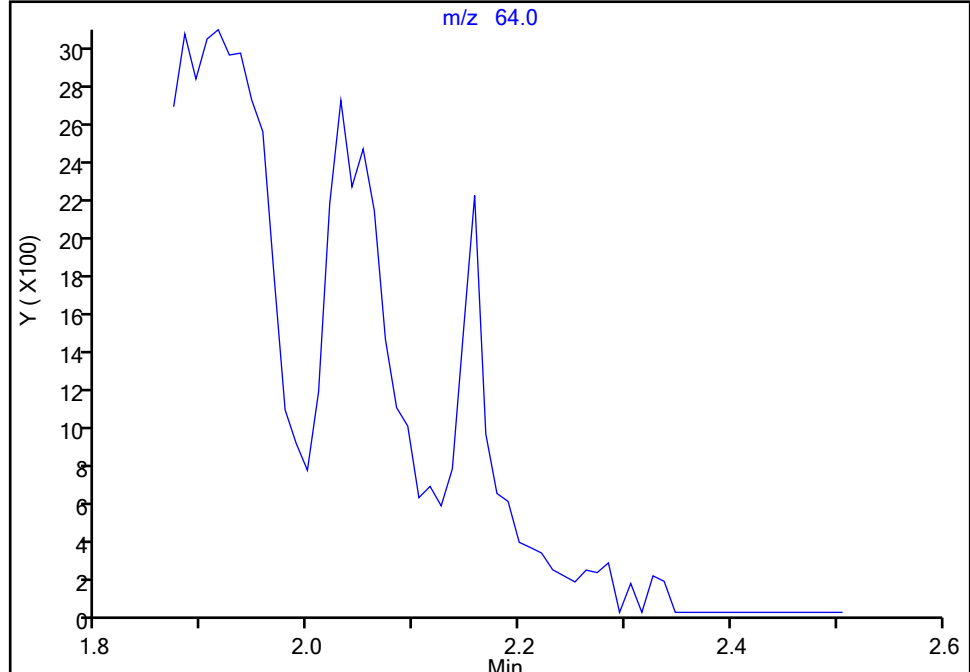
15 Chloroethane, CAS: 75-00-3

Signal: 1

Not Detected

Expected RT: 2.15

Processing Integration Results



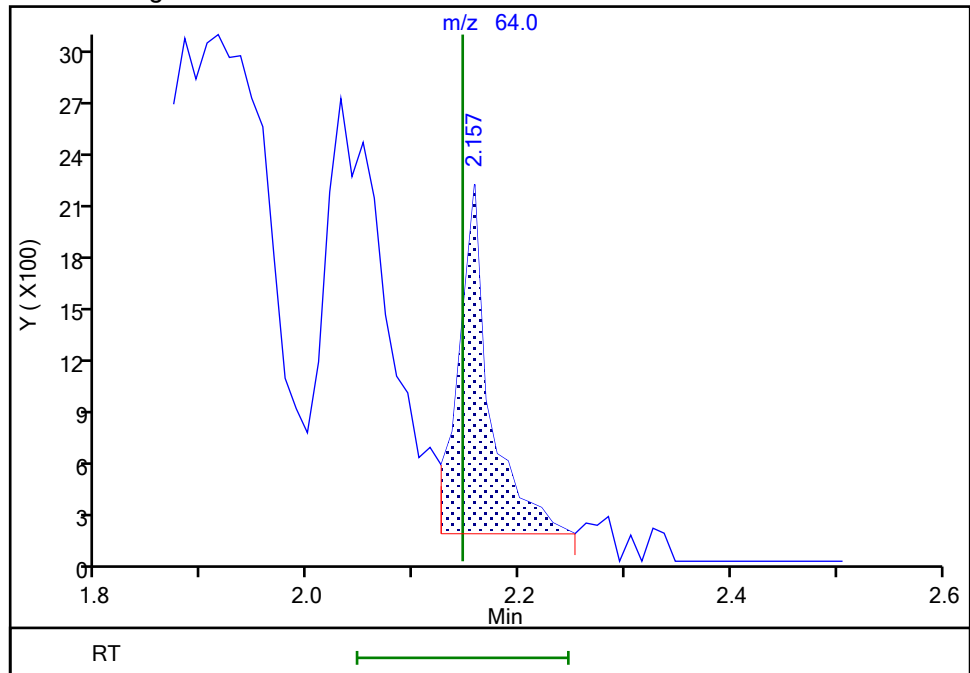
RT: 2.16

Area: 4213

Amount: 1.067525

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:38:17

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

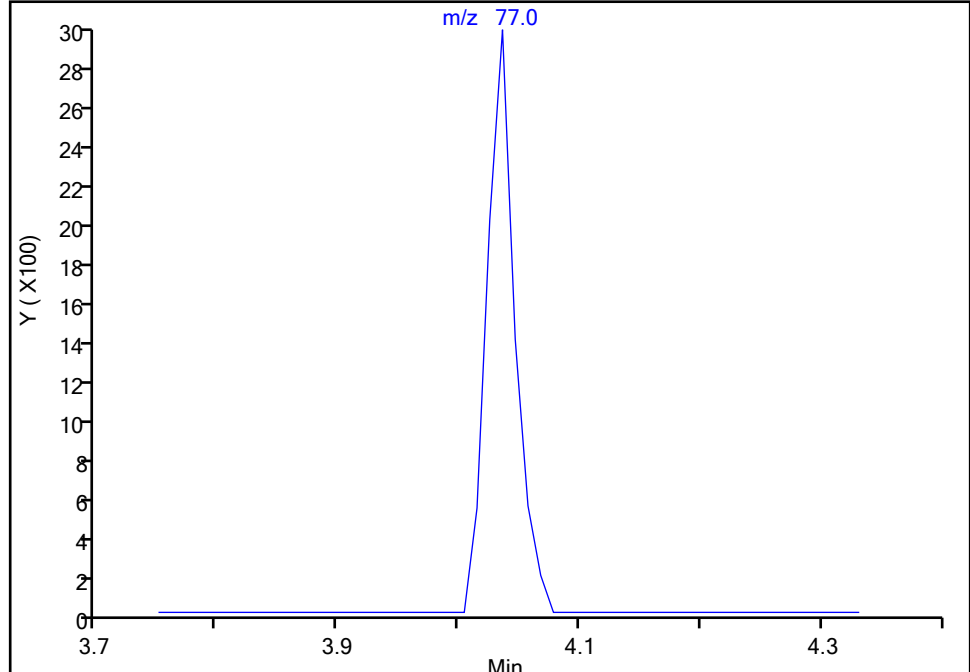
48 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

Not Detected

Expected RT: 4.04

Processing Integration Results



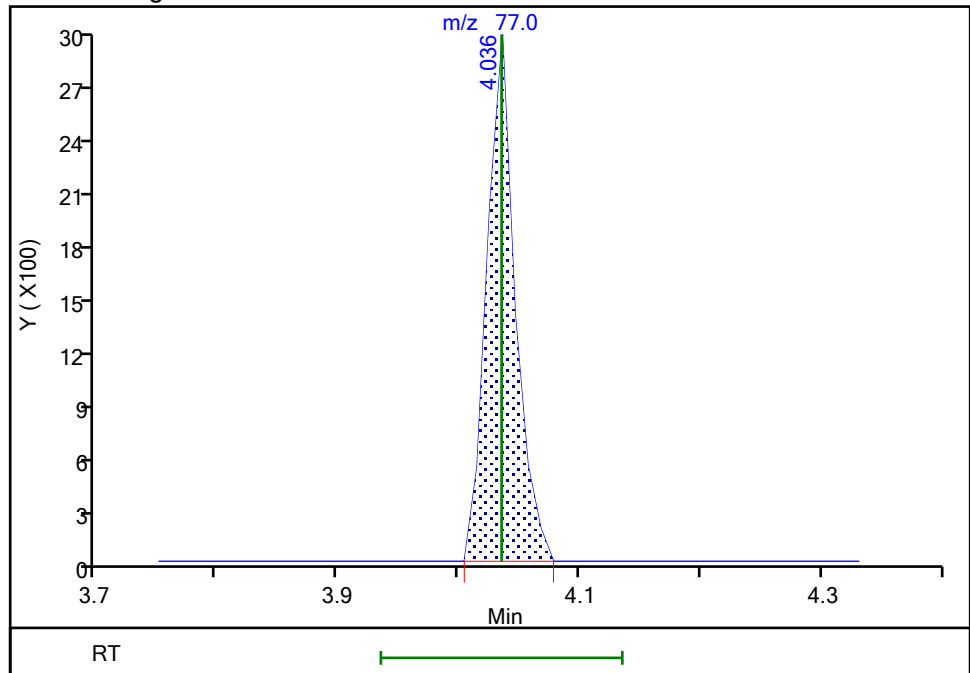
RT: 4.04

Area: 4783

Amount: 0.520327

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:38:31

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

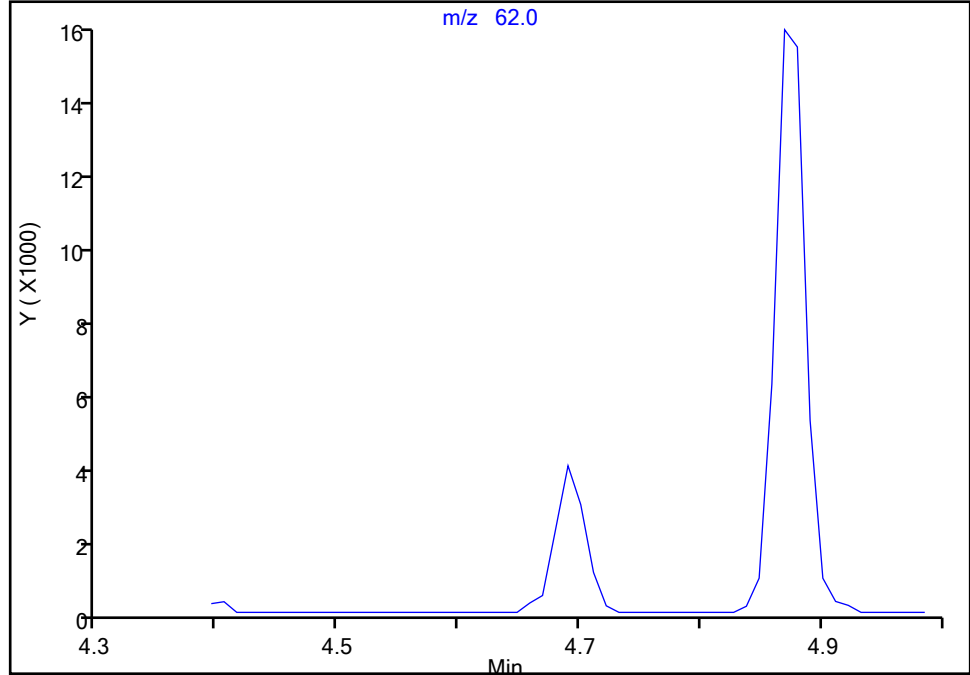
61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

Not Detected

Expected RT: 4.69

Processing Integration Results



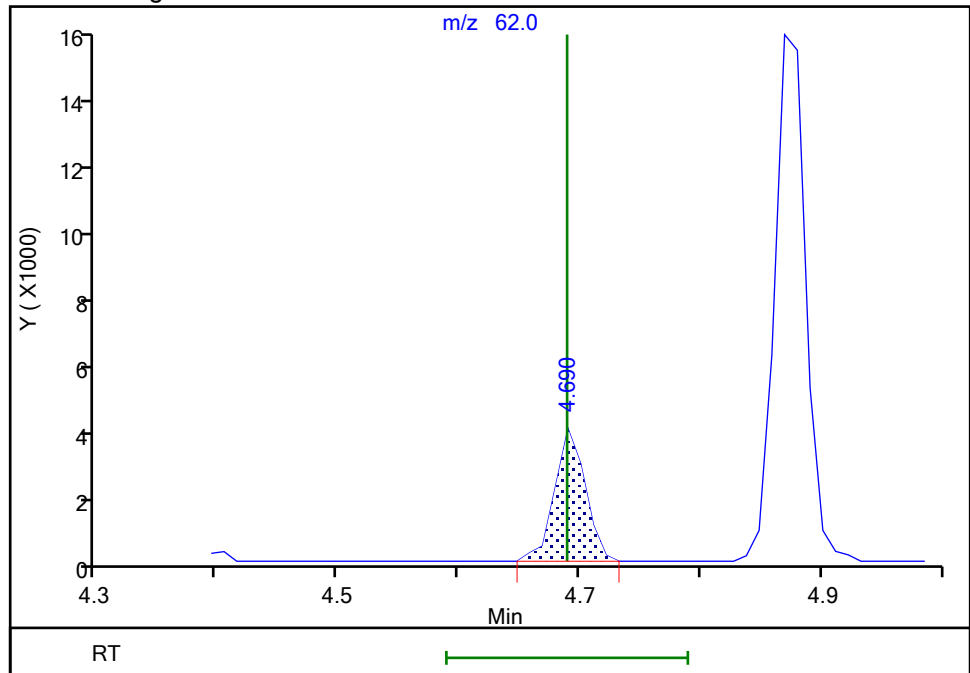
RT: 4.69

Area: 7084

Amount: 0.744354

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:38:41

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

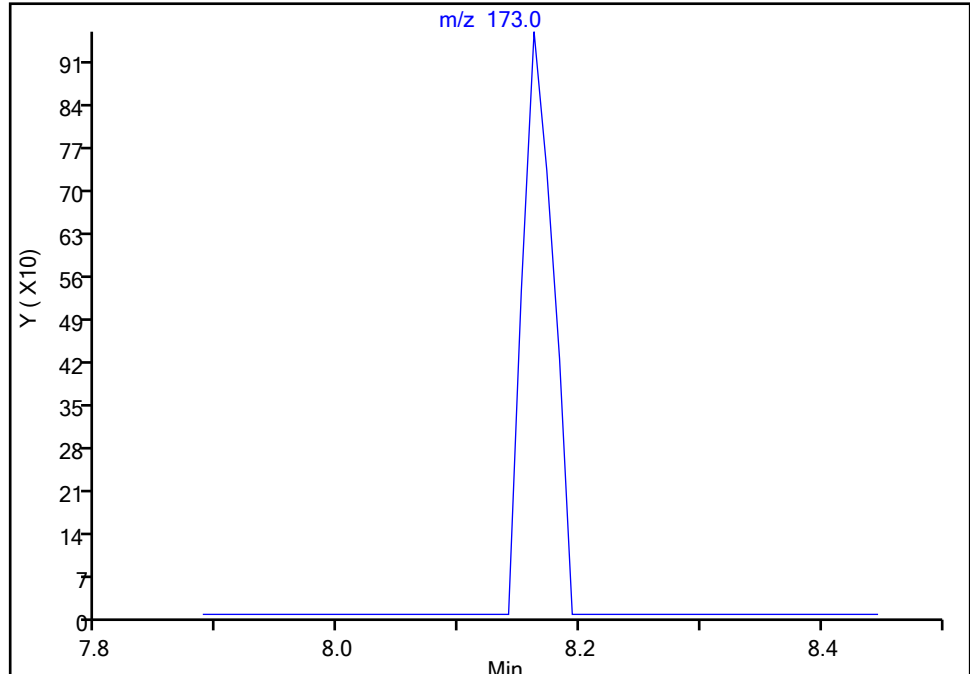
96 Bromoform, CAS: 75-25-2

Signal: 1

Not Detected

Expected RT: 8.16

Processing Integration Results



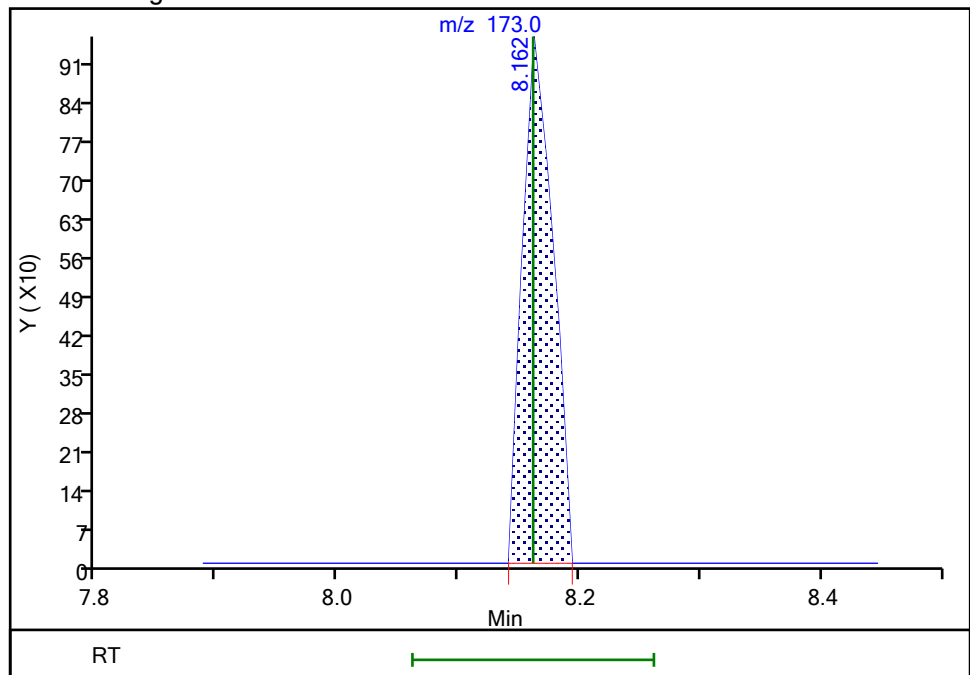
RT: 8.16

Area: 1670

Amount: 0.526496

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:38:54

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6311.D

Injection Date: 26-Jun-2021 15:46:30

Instrument ID: VMS_P

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

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

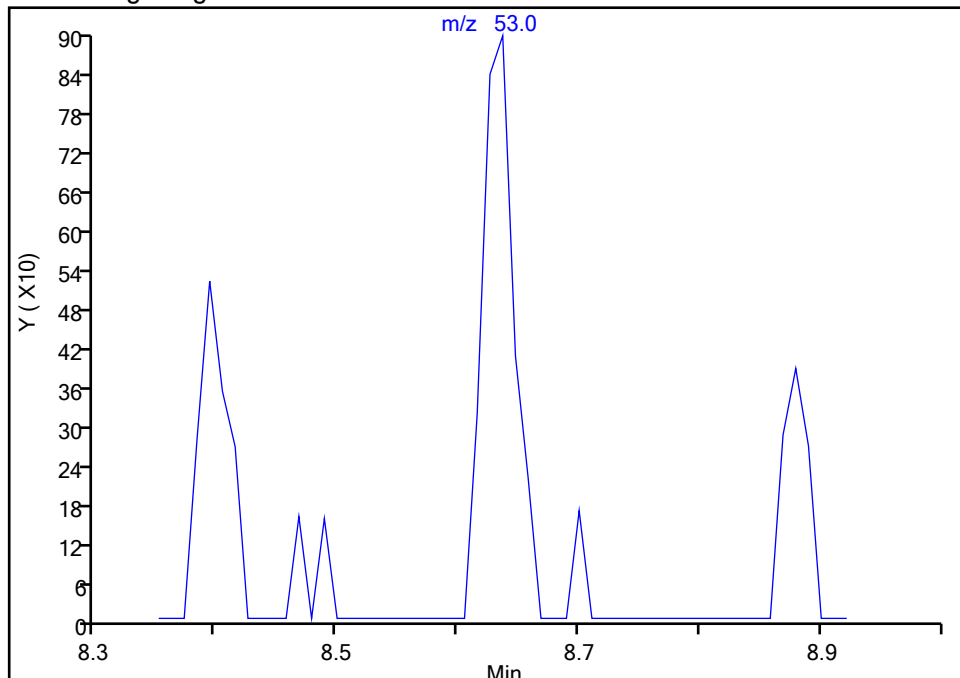
102 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

Not Detected

Expected RT: 8.64

Processing Integration Results



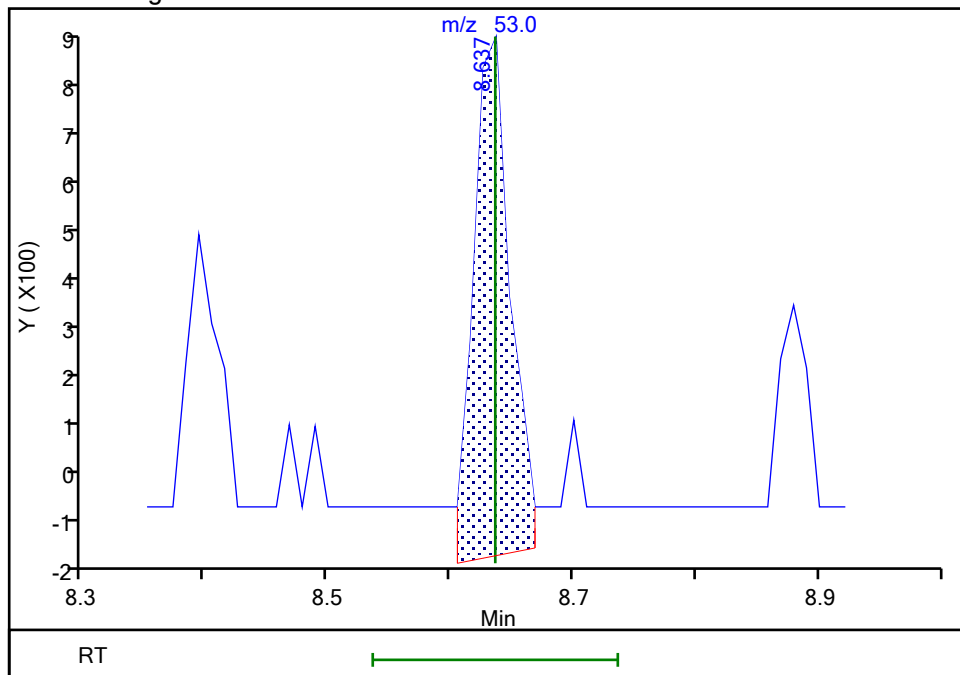
RT: 8.64

Area: 2093

Amount: 0.960199

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:39:11

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6312.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 26-Jun-2021 16:09:30 ALS Bottle#: 14 Worklist Smp#: 15
 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\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:44:31 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 26-Jun-2021 16:34:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.879	0.001	98	1711633	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.391	7.391	0.000	88	379748	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.607	9.607	0.000	98	517828	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.373	4.373	0.000	92	414050	50.0	49.6	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	98	528267	50.0	49.9	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1633080	50.0	50.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.478	8.478	0.000	83	594563	50.0	50.0	
10 Dichlorodifluoromethane	85	1.545	1.534	0.011	98	4037	1.00	0.7150	Ma
11 Chloromethane	50	1.703	1.703	0.000	97	6688	1.00	1.08	
12 Vinyl chloride	62	1.798	1.798	0.000	97	5225	1.00	0.8690	
14 Bromomethane	94	2.073	2.051	0.022	93	7325	1.00	0.5384	M
15 Chloroethane	64	2.157	2.146	0.011	98	4450	1.00	1.14	
16 Dichlorofluoromethane	67	2.326	2.326	0.000	98	10058	1.00	0.9519	
17 Trichlorofluoromethane	101	2.358	2.357	0.001	97	6967	1.00	0.8345	
19 Ethyl ether	59	2.569	2.568	0.001	89	5449	1.00	1.04	
21 Acrolein	56	2.674	2.674	0.000	97	11821	9.88	10.8	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.759	2.748	0.011	68	2337	1.00	0.7306	
22 1,1-Dichloroethene	96	2.748	2.748	0.000	97	3943	1.00	0.8658	
24 Acetone	43	2.769	2.769	0.000	100	10038	4.00	4.48	
26 Iodomethane	142	2.875	2.874	0.001	99	7287	1.00	1.43	M
27 Carbon disulfide	76	2.927	2.927	0.000	100	18633	1.00	1.16	
29 Methyl acetate	43	2.991	2.990	0.001	97	14786	2.00	2.56	
30 3-Chloro-1-propene	41	3.012	3.011	0.001	87	7872	1.00	0.9388	
31 Methylene Chloride	84	3.107	3.106	0.001	93	8535	1.00	1.30	
32 2-Methyl-2-propanol	59	3.160	3.159	0.001	99	8770	10.0	10.3	
33 Acrylonitrile	53	3.265	3.265	0.000	96	30319	10.0	10.5	
34 Methyl tert-butyl ether	73	3.286	3.286	0.000	96	18547	1.00	0.9626	
35 trans-1,2-Dichloroethene	96	3.307	3.307	0.000	97	5738	1.00	1.02	
36 Hexane	57	3.497	3.497	0.000	95	5669	1.00	0.8203	
38 Vinyl acetate	43	3.603	3.602	0.001	98	30291	2.00	2.02	
39 1,1-Dichloroethane	63	3.624	3.613	0.011	97	10198	1.00	0.9341	

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	4.004	4.003	0.001	99	15500	4.00	4.33	
47 cis-1,2-Dichloroethene	96	4.025	4.025	0.000	87	6581	1.00	1.02	
48 2,2-Dichloropropane	77	4.035	4.035	0.000	89	8374	1.00	0.9211	
50 sec-Butyl Alcohol	45	4.109	4.109	0.000	99	21292	24.0	24.8	
53 Chlorobromomethane	128	4.204	4.204	0.000	96	3256	1.00	1.09	
52 Tetrahydrofuran	42	4.204	4.204	0.000	85	5008	2.00	2.11	
54 Chloroform	83	4.257	4.257	0.000	96	10810	1.00	1.00	
55 1,1,1-Trichloroethane	97	4.405	4.394	0.011	96	7993	1.00	0.8985	
56 Cyclohexane	56	4.458	4.457	0.001	90	7913	1.00	0.8353	
57 1,1-Dichloropropene	75	4.510	4.510	0.000	93	7449	1.00	0.8949	
59 Carbon tetrachloride	117	4.521	4.520	0.001	94	5916	1.00	0.8717	
58 Isobutyl alcohol	41	4.531	4.531	0.000	93	6471	25.0	24.5	
60 Benzene	78	4.658	4.658	0.000	96	23572	1.00	0.9559	
61 1,2-Dichloroethane	62	4.690	4.689	0.001	96	10531	1.00	1.12	a
66 n-Heptane	43	4.848	4.848	0.000	78	7110	1.00	1.11	
67 Trichloroethene	95	5.154	5.154	0.000	95	5974	1.00	0.99	
68 2-Pentanone	43	5.249	5.249	0.000	99	23576	3.20	3.10	
69 Methylcyclohexane	55	5.333	5.344	-0.011	89	6433	1.00	0.9107	
70 1,2-Dichloropropane	63	5.355	5.354	0.001	85	6277	1.00	0.9544	
72 1,4-Dioxane	88	5.386	5.396	-0.010	91	2024	20.0	20.6	
73 Dibromomethane	93	5.428	5.428	0.000	89	4237	1.00	1.02	
74 Dichlorobromomethane	83	5.544	5.544	0.000	97	7617	1.00	0.9441	
76 2-Chloroethyl vinyl ether	63	5.756	5.755	0.001	94	4835	1.00	0.99	
77 cis-1,3-Dichloropropene	75	5.893	5.892	0.001	94	10262	1.00	0.99	
78 4-Methyl-2-pentanone (MIBK)	43	5.998	5.998	0.000	96	27143	4.00	3.88	
79 Toluene	91	6.178	6.177	0.001	97	26642	1.00	1.00	
80 trans-1,3-Dichloropropene	75	6.357	6.357	0.000	96	10111	1.00	1.03	
81 Ethyl methacrylate	69	6.378	6.378	0.000	89	9584	1.00	1.01	
82 1,1,2-Trichloroethane	97	6.536	6.536	0.000	92	5235	1.00	0.9537	
83 Tetrachloroethene	164	6.621	6.621	0.001	90	3545	1.00	0.8894	
84 1,3-Dichloropropane	76	6.674	6.673	0.001	93	9792	1.00	0.9592	
85 2-Hexanone	43	6.695	6.694	0.001	97	21386	4.00	4.22	
86 Chlorodibromomethane	129	6.874	6.863	0.011	89	4916	1.00	0.9231	
88 Ethylene Dibromide	107	6.980	6.979	0.001	95	5750	1.00	0.9735	
89 1-Chlorohexane	91	7.381	7.380	0.001	51	9488	0.8000	0.8725	
90 Chlorobenzene	112	7.412	7.412	0.000	94	17417	1.00	1.09	
91 1,1,1,2-Tetrachloroethane	131	7.486	7.486	0.000	87	4865	1.00	0.9161	
92 Ethylbenzene	106	7.497	7.496	0.001	99	8408	1.00	0.9721	
93 m-Xylene & p-Xylene	106	7.613	7.612	0.001	99	10735	1.00	1.01	
94 o-Xylene	106	7.972	7.971	0.001	98	10049	1.00	0.9873	
95 Styrene	104	7.982	7.982	0.000	91	17564	1.00	0.9832	
96 Bromoform	173	8.162	8.161	0.001	88	2564	1.00	0.8136	
97 Isopropylbenzene	105	8.309	8.309	0.000	98	23953	1.00	0.9626	
99 Cyclohexanone	55	8.404	8.404	0.000	93	12642	40.0	42.4	
100 1,1,2,2-Tetrachloroethane	83	8.594	8.594	0.000	94	7971	1.00	1.03	
101 Bromobenzene	156	8.626	8.626	0.000	97	6551	1.00	1.08	
102 trans-1,4-Dichloro-2-butene	53	8.636	8.636	0.000	59	2376	1.00	1.10	M
103 1,2,3-Trichloropropane	110	8.658	8.657	0.001	82	2420	1.00	1.05	
104 N-Propylbenzene	120	8.710	8.710	0.000	99	6569	1.00	0.99	
105 2-Chlorotoluene	126	8.795	8.805	-0.010	95	6182	1.00	1.06	
106 1,3,5-Trimethylbenzene	105	8.879	8.879	0.000	94	20709	1.00	1.02	
107 4-Chlorotoluene	126	8.921	8.921	0.000	98	6479	1.00	1.06	

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	9.185	9.185	0.000	92	16921	1.00	1.05	
109 1,2,4-Trimethylbenzene	105	9.249	9.248	0.001	97	22040	1.00	1.06	
110 sec-Butylbenzene	134	9.407	9.406	0.001	95	4444	1.00	0.9835	
111 1,3-Dichlorobenzene	146	9.523	9.533	-0.010	95	12169	1.00	1.13	
112 4-Isopropyltoluene	119	9.555	9.554	0.001	95	19748	1.00	1.02	
113 1,4-Dichlorobenzene	146	9.628	9.628	0.000	88	13150	1.00	1.16	
115 n-Butylbenzene	91	9.956	9.955	0.001	99	18767	1.00	1.06	
116 1,2-Dichlorobenzene	146	9.977	9.976	0.001	95	11504	1.00	1.11	
117 1,2-Dibromo-3-Chloropropane	157	10.758	10.757	0.001	74	1326	1.00	0.9688	
119 1,2,4-Trichlorobenzene	180	11.581	11.580	0.001	92	6997	1.00	1.25	
120 Hexachlorobutadiene	225	11.718	11.718	0.000	86	2062	1.00	1.13	
121 Naphthalene	128	11.845	11.844	0.000	98	24519	1.00	1.25	
122 1,2,3-Trichlorobenzene	180	12.066	12.066	0.000	93	7111	1.00	1.03	
S 139 1,2-Dichloroethene, Total (URS)	95				0		2.00	2.05	
S 142 Xylenes, Total	106				0		2.00	2.00	
S 140 Trihalomethanes, Total	1				0		4.00	3.68	
S 143 Xylenes, Total (URS)	1				0		2.00	2.00	
S 146 Total BTEX	1				0			4.93	
S 145 1,3-Dichloropropene, Total	1				0		2.00	2.02	
S 144 1,2-Dichloroethene, Total	1				0		2.00	2.05	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 0.50

Units: uL

MV-Gas A_00091

Amount Added: 0.20

Units: uL

MV-Main add A_00001

Amount Added: 0.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6312.D

Injection Date: 26-Jun-2021 16:09:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD010

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

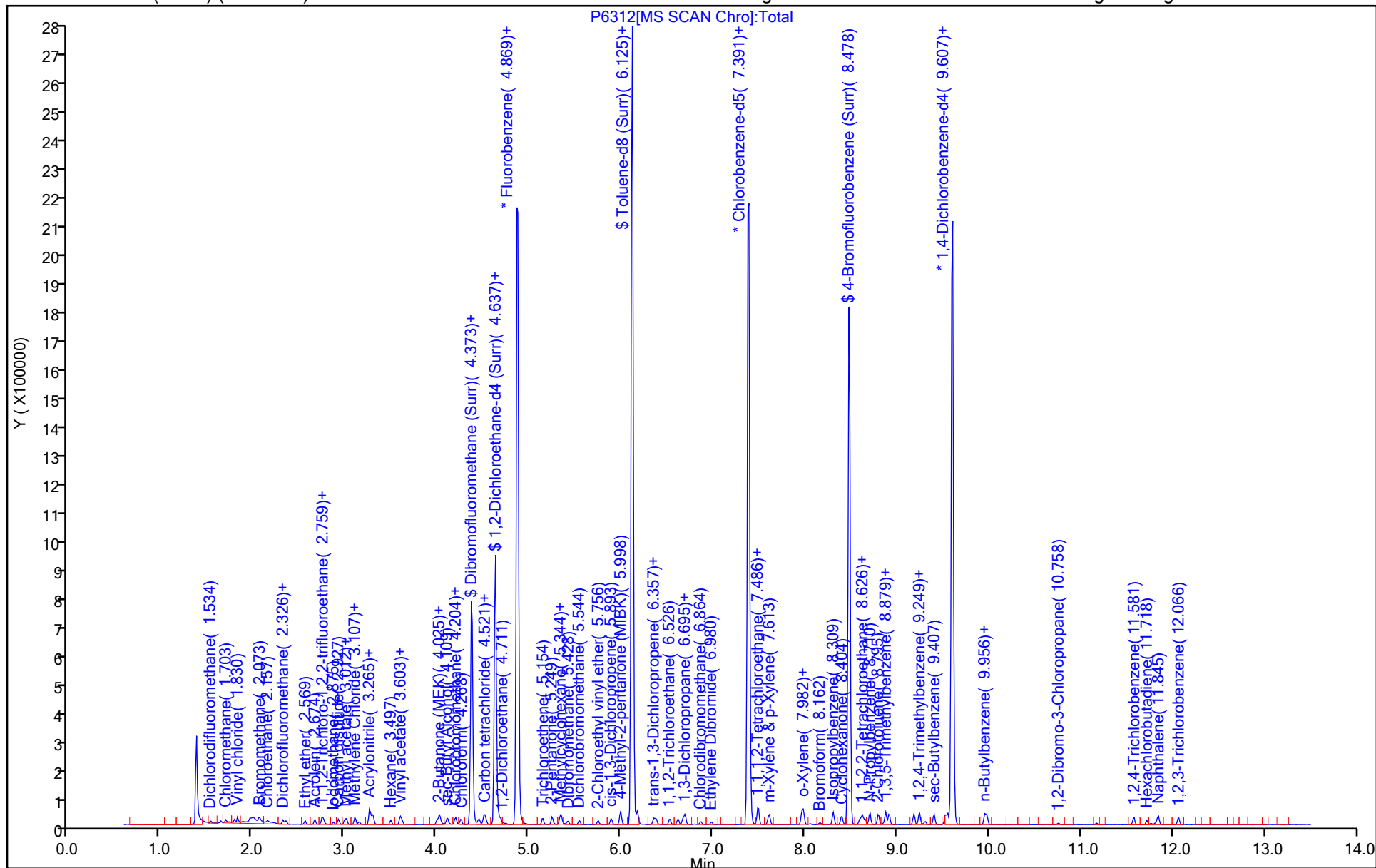
ALS Bottle#: 14

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6312.D

Injection Date: 26-Jun-2021 16:09:30

Instrument ID: VMS_P

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

14

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

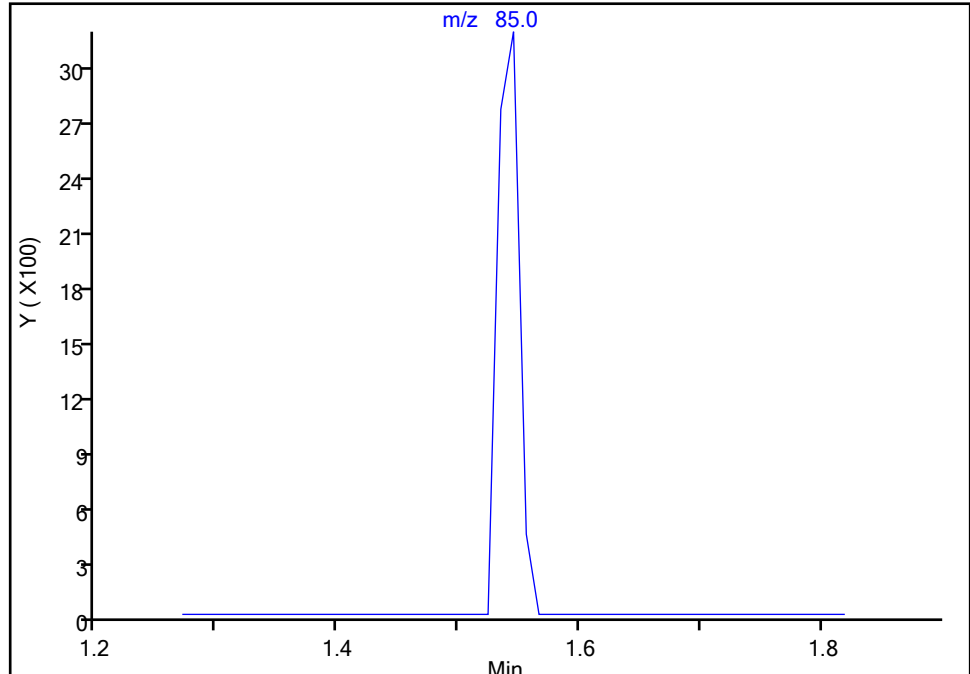
10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

Not Detected

Expected RT: 1.53

Processing Integration Results



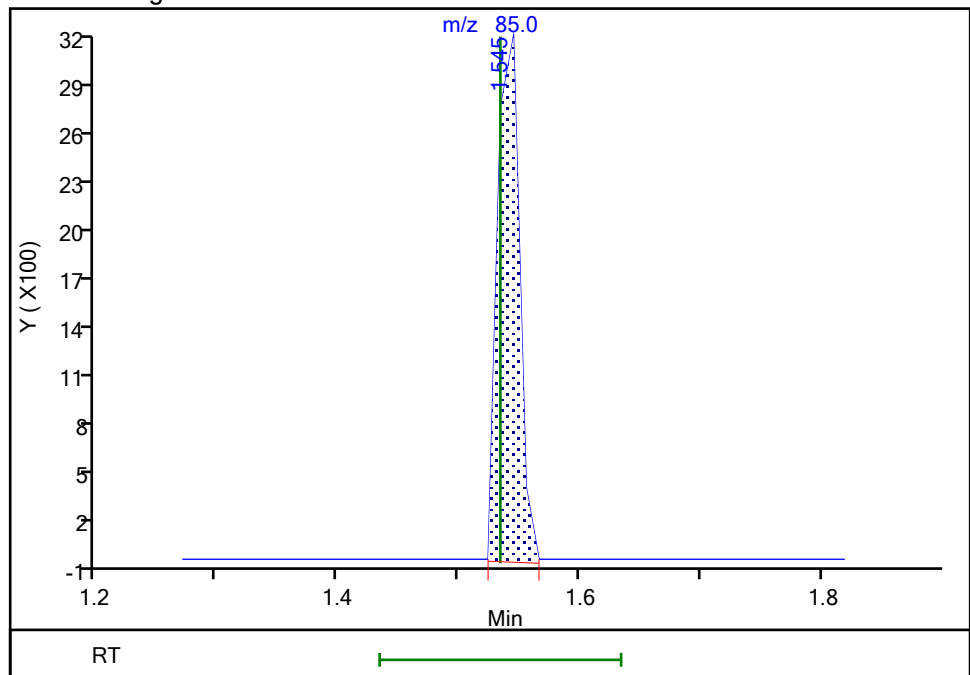
RT: 1.54

Area: 4037

Amount: 0.715042

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:39:52

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6312.D

Injection Date: 26-Jun-2021 16:09:30

Instrument ID: VMS_P

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

14

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

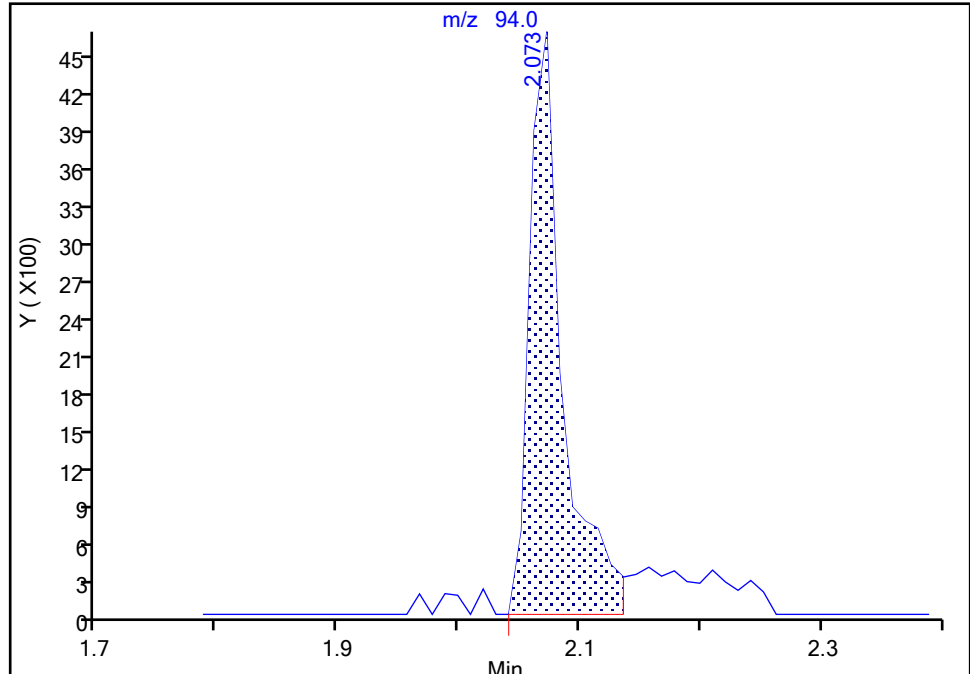
MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

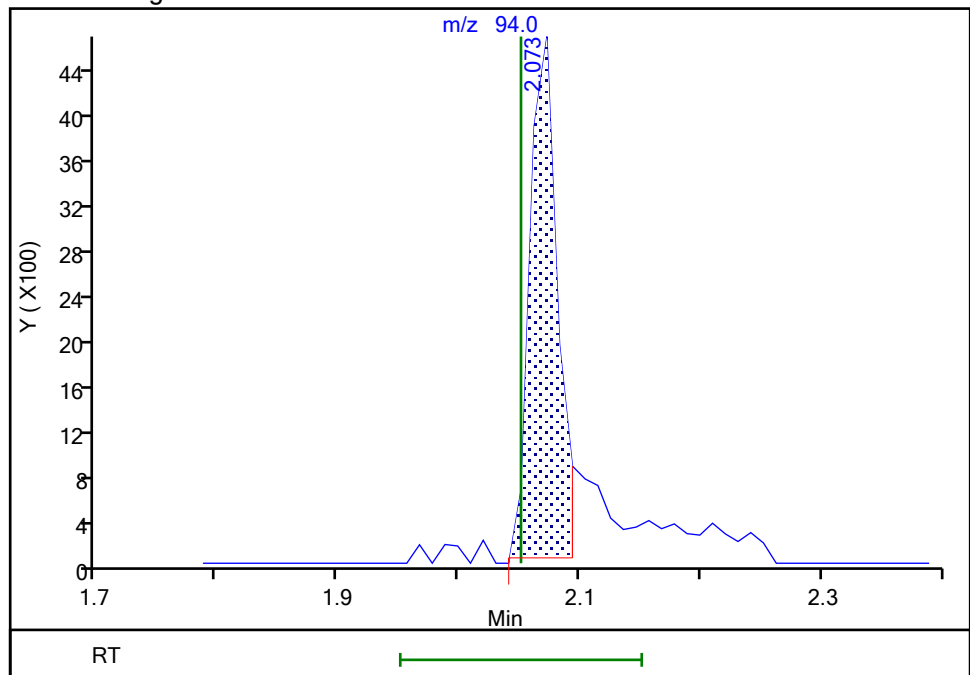
RT: 2.07
Area: 8838
Amount: 0.932228
Amount Units: ug/l

Processing Integration Results



RT: 2.07
Area: 7325
Amount: 0.538352
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 28-Jun-2021 07:27:23

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6312.D

Injection Date: 26-Jun-2021 16:09:30

Instrument ID: VMS_P

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 14

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)

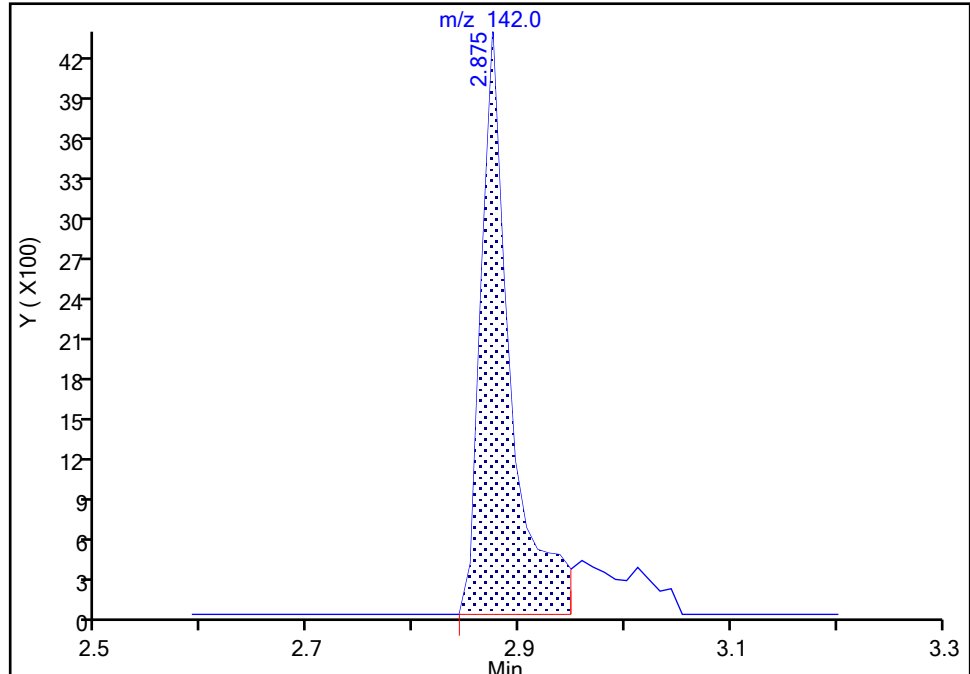
Detector: MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

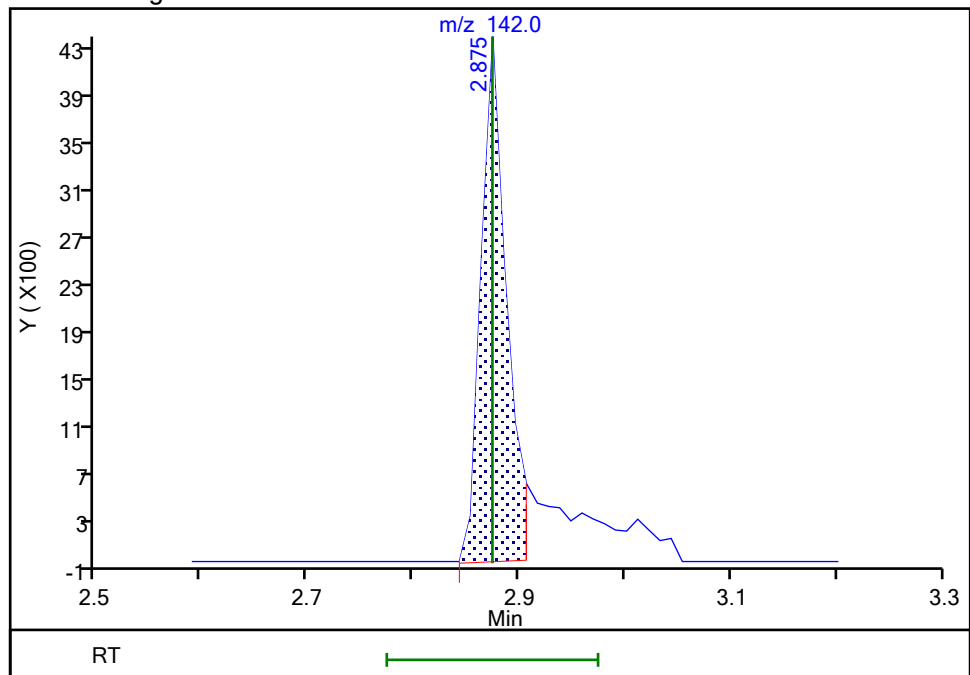
RT: 2.87
Area: 8361
Amount: 1.428697
Amount Units: ug/l

Processing Integration Results



RT: 2.87
Area: 7287
Amount: 1.425944
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 28-Jun-2021 07:29:44

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins TestAmerica, Denver

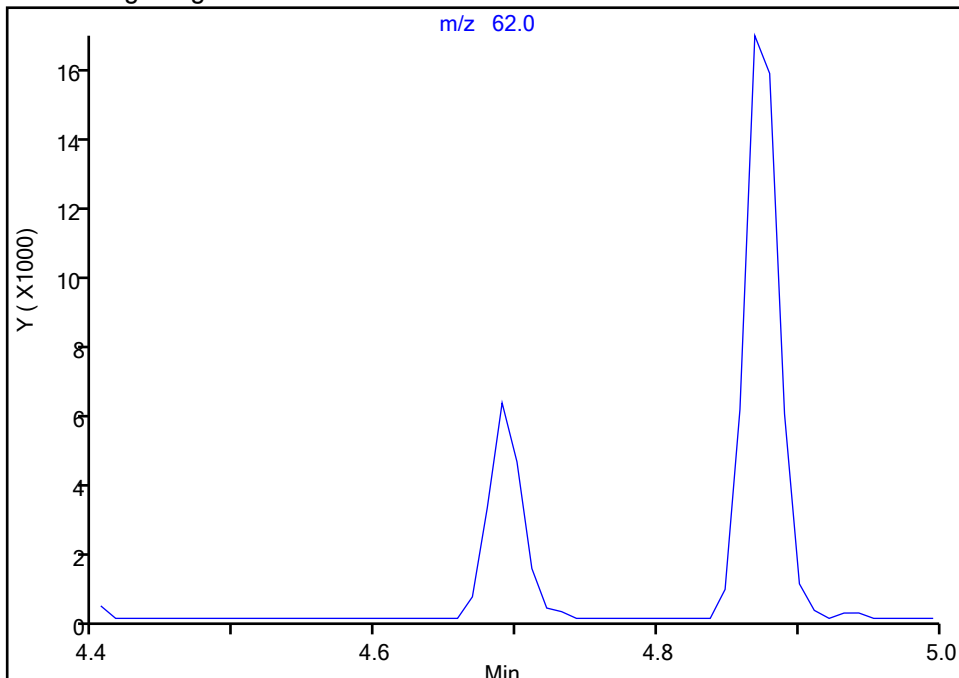
Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6312.D
Injection Date: 26-Jun-2021 16:09:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

61 1,2-Dichloroethane, CAS: 107-06-2

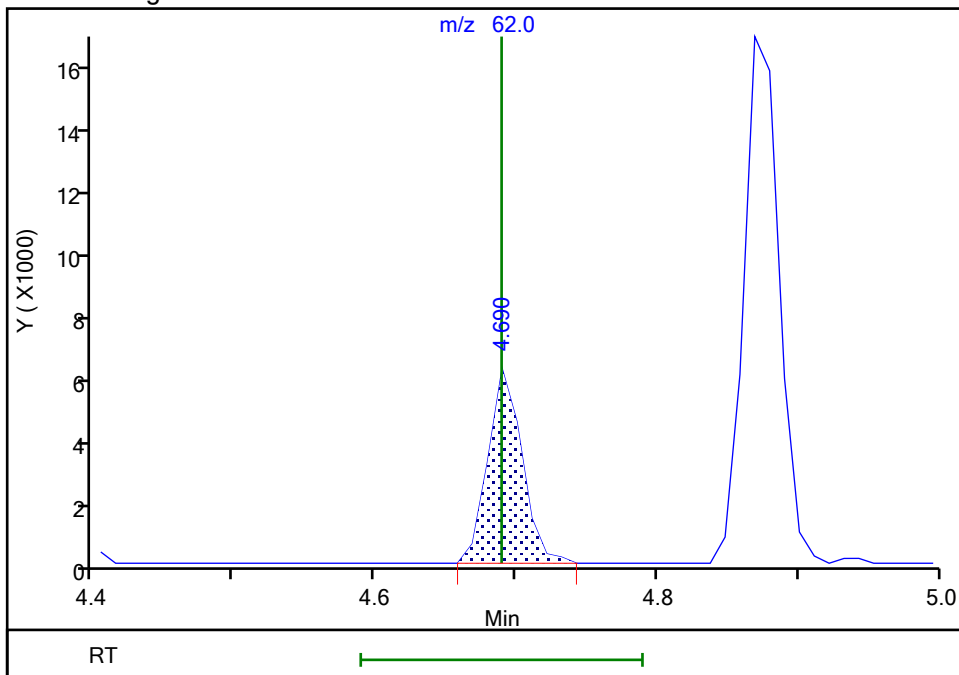
Signal: 1

Not Detected
Expected RT: 4.69

Processing Integration Results



Manual Integration Results



RT: 4.69
Area: 10531
Amount: 1.118864
Amount Units: ug/l

Reviewer: seifertj, 26-Jun-2021 16:40:09
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6312.D

Injection Date: 26-Jun-2021 16:09:30

Instrument ID: VMS_P

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

14

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

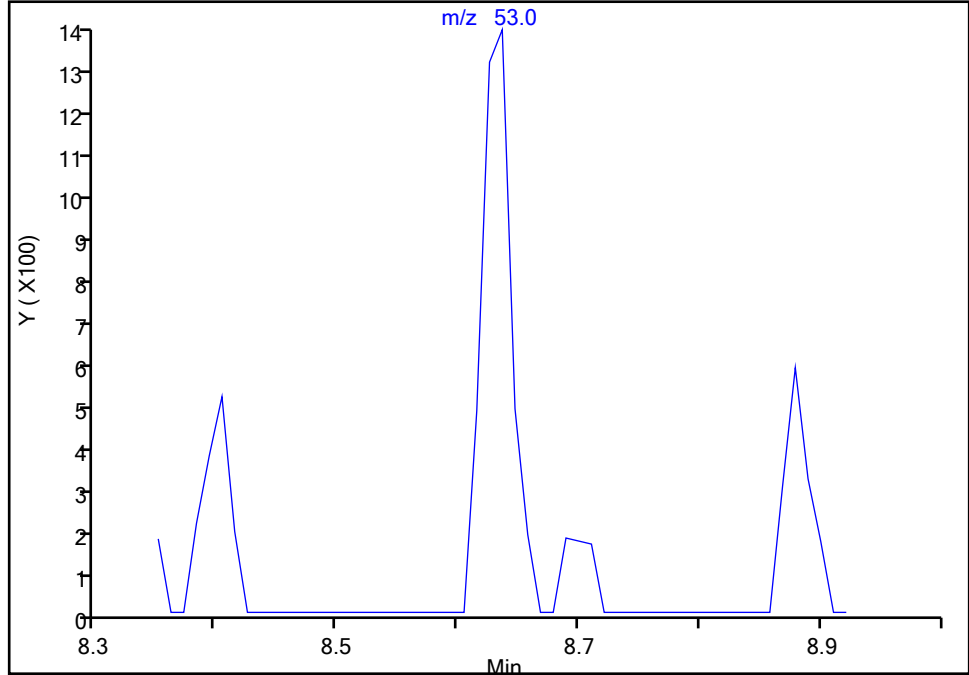
102 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

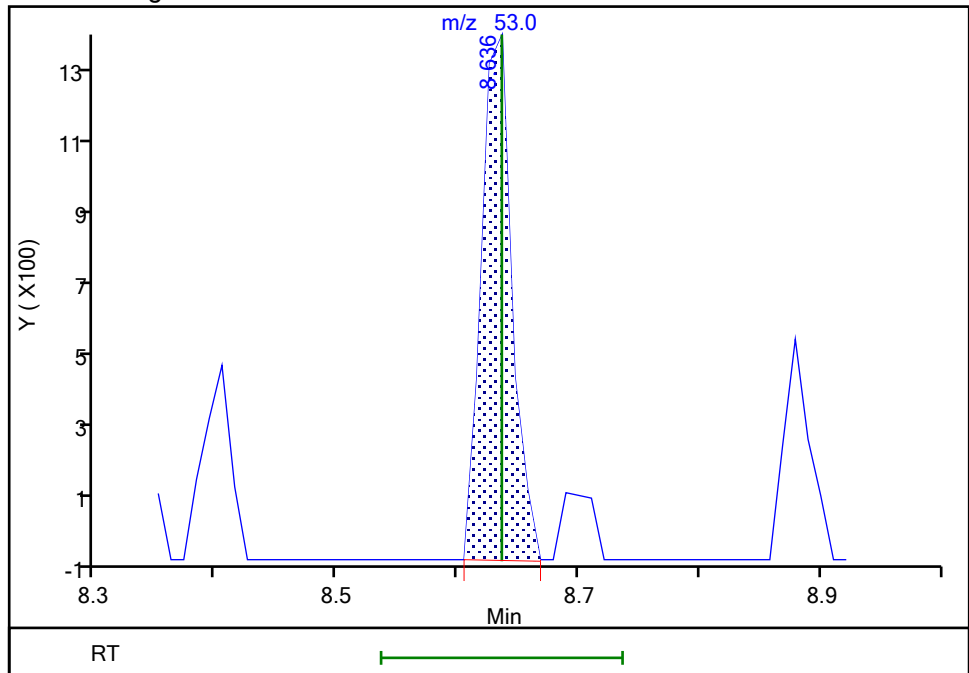
Not Detected

Expected RT: 8.64

Processing Integration Results



Manual Integration Results



RT: 8.64

Area: 2376

Amount: 1.095584

Amount Units: ug/l

Reviewer: seifertj, 26-Jun-2021 16:40:35

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6313.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 26-Jun-2021 16:32:30 ALS Bottle#: 15 Worklist Smp#: 16
 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\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:44:36 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 26-Jun-2021 16:49:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.879	-0.002	98	1689508	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.391	-0.002	90	374327	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.607	-0.002	98	511348	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.381	4.373	0.008	91	407034	50.0	49.4	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	516592	50.0	49.4	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1632245	50.0	50.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	82	588004	50.0	50.1	
10 Dichlorodifluoromethane	85	1.543	1.534	0.009	99	10086	2.00	1.81	a
11 Chloromethane	50	1.701	1.703	-0.002	98	12860	2.00	2.11	
12 Vinyl chloride	62	1.796	1.798	-0.002	97	12027	2.00	2.03	
14 Bromomethane	94	2.070	2.051	0.019	93	12679	2.00	2.35	
15 Chloroethane	64	2.155	2.146	0.009	99	7716	2.00	2.00	
16 Dichlorofluoromethane	67	2.324	2.326	-0.002	99	21551	2.00	2.07	
17 Trichlorofluoromethane	101	2.355	2.357	-0.002	98	17500	2.00	2.12	
19 Ethyl ether	59	2.566	2.568	-0.002	91	9680	2.00	1.87	
21 Acrolein	56	2.672	2.674	-0.002	99	21654	19.8	20.0	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.756	2.748	0.008	69	6936	2.00	2.20	
22 1,1-Dichloroethene	96	2.756	2.748	0.008	96	9831	2.00	2.19	
24 Acetone	43	2.767	2.769	-0.002	100	19284	8.00	8.72	
26 Iodomethane	142	2.872	2.874	-0.002	98	11099	2.00	2.00	M
27 Carbon disulfide	76	2.925	2.927	-0.002	100	35967	2.00	2.26	
29 Methyl acetate	43	2.999	2.990	0.009	97	25166	4.00	4.42	
30 3-Chloro-1-propene	41	3.020	3.011	0.009	89	17933	2.00	2.17	
31 Methylene Chloride	84	3.104	3.106	-0.002	92	14479	2.00	2.23	
32 2-Methyl-2-propanol	59	3.157	3.159	-0.002	98	17207	20.0	20.5	
33 Acrylonitrile	53	3.263	3.265	-0.002	98	58737	20.0	20.7	
34 Methyl tert-butyl ether	73	3.294	3.286	0.008	95	37570	2.00	1.98	
35 trans-1,2-Dichloroethene	96	3.305	3.307	-0.002	97	11695	2.00	2.11	
36 Hexane	57	3.495	3.497	-0.002	92	16105	2.00	2.36	
38 Vinyl acetate	43	3.600	3.602	-0.002	98	60536	4.00	4.09	
39 1,1-Dichloroethane	63	3.622	3.613	0.009	98	23154	2.00	2.15	

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	4.001	4.003	-0.002	100	30055	8.00	8.51	
47 cis-1,2-Dichloroethene	96	4.023	4.025	-0.002	88	12943	2.00	2.04	
48 2,2-Dichloropropane	77	4.033	4.035	-0.002	89	18438	2.00	2.05	
50 sec-Butyl Alcohol	45	4.107	4.109	-0.002	98	42200	48.0	49.8	
53 Chlorobromomethane	128	4.202	4.204	-0.002	97	6047	2.00	2.05	
52 Tetrahydrofuran	42	4.213	4.204	0.008	89	11081	4.00	4.73	
54 Chloroform	83	4.265	4.257	0.008	94	21856	2.00	2.04	
55 1,1,1-Trichloroethane	97	4.402	4.394	0.008	98	18523	2.00	2.11	
56 Cyclohexane	56	4.455	4.457	-0.002	92	21550	2.00	2.30	
57 1,1-Dichloropropene	75	4.508	4.510	-0.002	93	17704	2.00	2.15	
59 Carbon tetrachloride	117	4.519	4.520	-0.001	85	14261	2.00	2.13	
58 Isobutyl alcohol	41	4.529	4.531	-0.002	97	12663	50.0	48.6	
60 Benzene	78	4.666	4.658	0.008	96	51444	2.00	2.11	
61 1,2-Dichloroethane	62	4.687	4.689	-0.002	98	19466	2.00	2.10	
66 n-Heptane	43	4.856	4.848	0.008	92	15133	2.00	2.40	
67 Trichloroethene	95	5.152	5.154	-0.002	94	12788	2.00	2.16	
68 2-Pentanone	43	5.247	5.249	-0.002	99	49668	6.40	6.61	
69 Methylcyclohexane	55	5.342	5.344	-0.002	92	15988	2.00	2.29	
70 1,2-Dichloropropane	63	5.352	5.354	-0.002	92	13487	2.00	2.08	
72 1,4-Dioxane	88	5.394	5.396	-0.002	96	3803	40.0	39.3	
73 Dibromomethane	93	5.426	5.428	-0.002	89	8184	2.00	1.99	
74 Dichlorobromomethane	83	5.553	5.544	0.009	98	15653	2.00	1.97	
76 2-Chloroethyl vinyl ether	63	5.753	5.755	-0.002	93	9760	2.00	2.03	
77 cis-1,3-Dichloropropene	75	5.890	5.892	-0.002	94	19904	2.00	1.95	
78 4-Methyl-2-pentanone (MIBK)	43	5.996	5.998	-0.002	96	55277	8.00	8.01	
79 Toluene	91	6.175	6.177	-0.002	98	55991	2.00	2.13	
80 trans-1,3-Dichloropropene	75	6.355	6.357	-0.002	96	18755	2.00	1.93	
81 Ethyl methacrylate	69	6.386	6.378	0.008	92	18148	2.00	1.93	
82 1,1,2-Trichloroethane	97	6.534	6.536	-0.002	94	11081	2.00	2.05	
83 Tetrachloroethene	164	6.619	6.621	-0.001	85	8738	2.00	2.22	
84 1,3-Dichloropropane	76	6.671	6.673	-0.002	90	20797	2.00	2.07	
85 2-Hexanone	43	6.692	6.694	-0.002	96	40381	8.00	8.09	
86 Chlorodibromomethane	129	6.872	6.863	0.009	90	9922	2.00	1.89	
88 Ethylene Dibromide	107	6.988	6.979	0.009	99	11673	2.00	2.00	
89 1-Chlorohexane	91	7.378	7.380	-0.002	84	21512	1.60	2.01	
90 Chlorobenzene	112	7.410	7.412	-0.002	96	33105	2.00	2.10	
91 1,1,1,2-Tetrachloroethane	131	7.494	7.486	0.008	92	9917	2.00	1.89	
92 Ethylbenzene	106	7.494	7.496	-0.002	99	18535	2.00	2.17	
93 m-Xylene & p-Xylene	106	7.611	7.612	-0.001	100	22421	2.00	2.15	
94 o-Xylene	106	7.969	7.971	-0.002	97	21006	2.00	2.09	
95 Styrene	104	7.990	7.982	0.008	95	35871	2.00	2.04	
96 Bromoform	173	8.170	8.161	0.009	91	5313	2.00	1.71	
97 Isopropylbenzene	105	8.307	8.309	-0.002	96	54596	2.00	2.22	
99 Cyclohexanone	55	8.402	8.404	-0.002	93	25226	80.0	85.8	
100 1,1,2,2-Tetrachloroethane	83	8.592	8.594	-0.002	96	15644	2.00	2.05	
101 Bromobenzene	156	8.624	8.626	-0.002	98	11726	2.00	1.97	
102 trans-1,4-Dichloro-2-butene	53	8.634	8.636	-0.002	80	4118	2.00	1.92	
103 1,2,3-Trichloropropane	110	8.655	8.657	-0.002	86	4653	2.00	2.04	
104 N-Propylbenzene	120	8.708	8.710	-0.002	99	14652	2.00	2.24	
105 2-Chlorotoluene	126	8.803	8.805	-0.002	95	11978	2.00	2.09	
106 1,3,5-Trimethylbenzene	105	8.877	8.879	-0.002	92	43628	2.00	2.18	
107 4-Chlorotoluene	126	8.919	8.921	-0.002	98	12676	2.00	2.09	

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	9.183	9.185	-0.002	92	34929	2.00	2.19	
109 1,2,4-Trimethylbenzene	105	9.246	9.248	-0.002	98	43383	2.00	2.11	
110 sec-Butylbenzene	134	9.404	9.406	-0.002	95	9439	2.00	2.12	
111 1,3-Dichlorobenzene	146	9.531	9.533	-0.002	96	21436	2.00	2.02	
112 4-Isopropyltoluene	119	9.552	9.554	-0.002	97	41297	2.00	2.17	
113 1,4-Dichlorobenzene	146	9.626	9.628	-0.002	94	24319	2.00	2.17	
115 n-Butylbenzene	91	9.953	9.955	-0.002	98	38538	2.00	2.20	
116 1,2-Dichlorobenzene	146	9.985	9.976	0.009	94	21240	2.00	2.08	
117 1,2-Dibromo-3-Chloropropane	157	10.755	10.757	-0.002	72	2469	2.00	1.83	
119 1,2,4-Trichlorobenzene	180	11.578	11.580	-0.002	92	11869	2.00	2.15	
120 Hexachlorobutadiene	225	11.726	11.718	0.008	91	4331	2.00	2.40	
121 Naphthalene	128	11.842	11.844	-0.002	97	40415	2.00	2.09	
122 1,2,3-Trichlorobenzene	180	12.064	12.066	-0.002	94	11087	2.00	1.92	
S 139 1,2-Dichloroethene, Total (URS)	95				0		4.00	4.15	
S 142 Xylenes, Total	106				0		4.00	4.24	
S 140 Trihalomethanes, Total	1				0		8.00	7.61	
S 143 Xylenes, Total (URS)	1				0		4.00	4.24	
S 146 Total BTEX	1				0			10.7	
S 145 1,3-Dichloropropene, Total	1				0		4.00	3.88	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.15	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 1.00

Units: uL

MV-Gas A_00091

Amount Added: 0.40

Units: uL

MV-Main add A_00001

Amount Added: 1.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6313.D

Injection Date: 26-Jun-2021 16:32:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD020

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

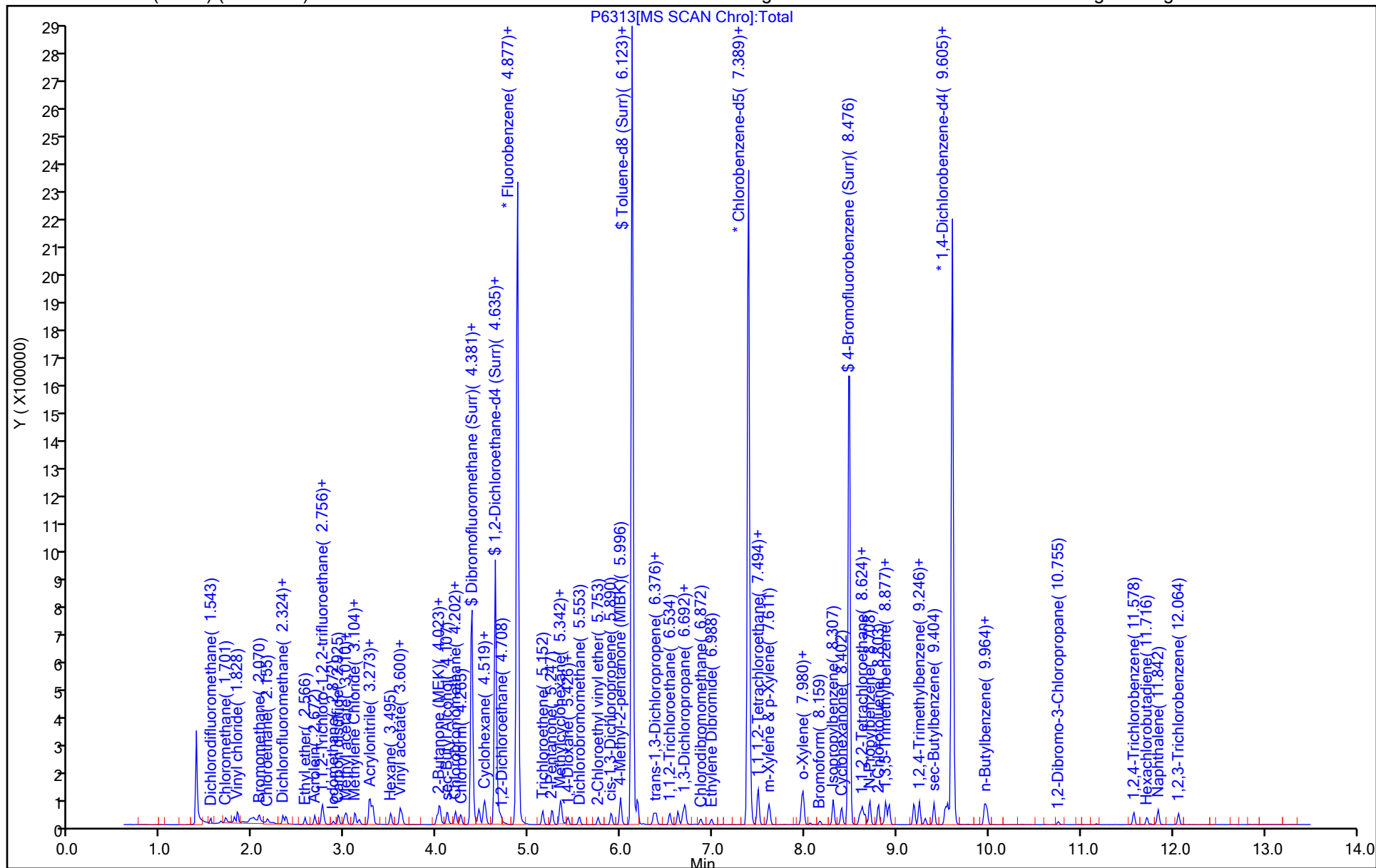
ALS Bottle#: 15

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6313.D

Injection Date: 26-Jun-2021 16:32:30

Instrument ID: VMS_P

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

15

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

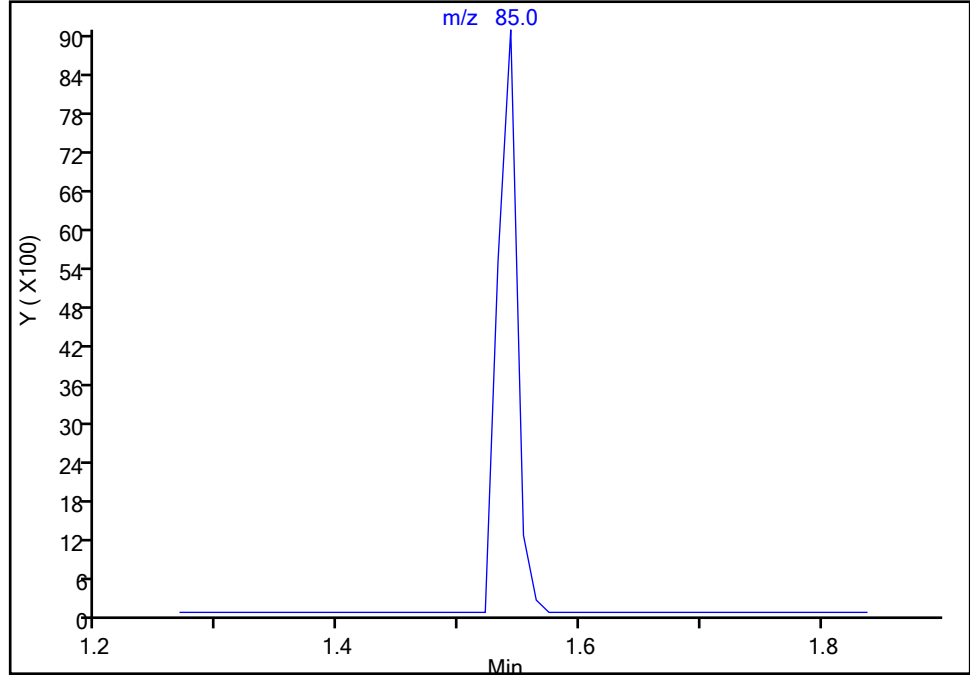
10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

Not Detected

Expected RT: 1.53

Processing Integration Results



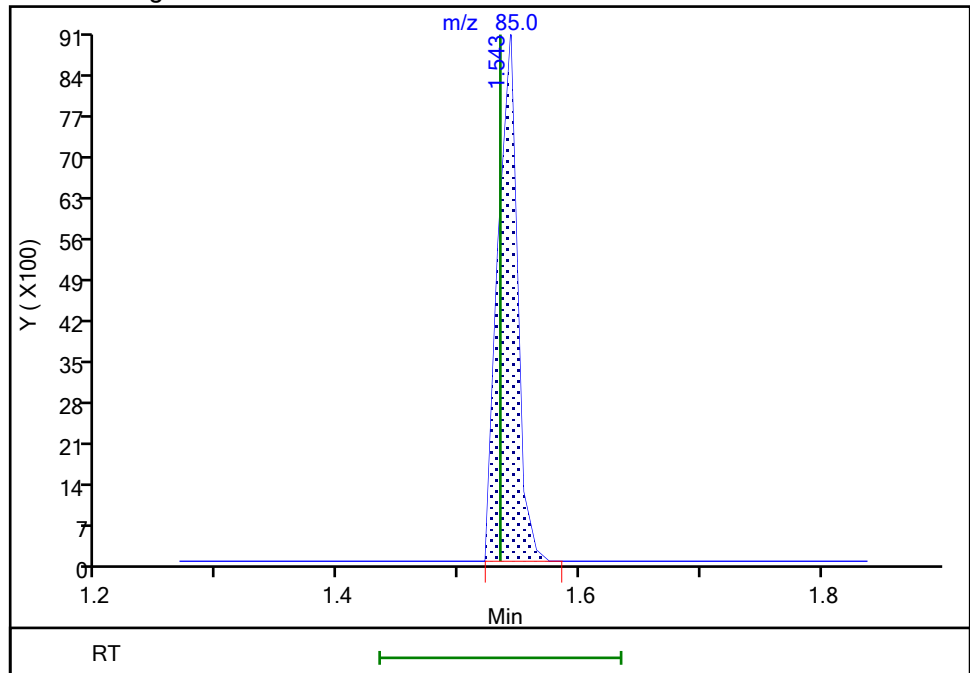
RT: 1.54

Area: 10086

Amount: 1.809849

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 26-Jun-2021 16:48:17

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6313.D

Injection Date: 26-Jun-2021 16:32:30

Instrument ID: VMS_P

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

15

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

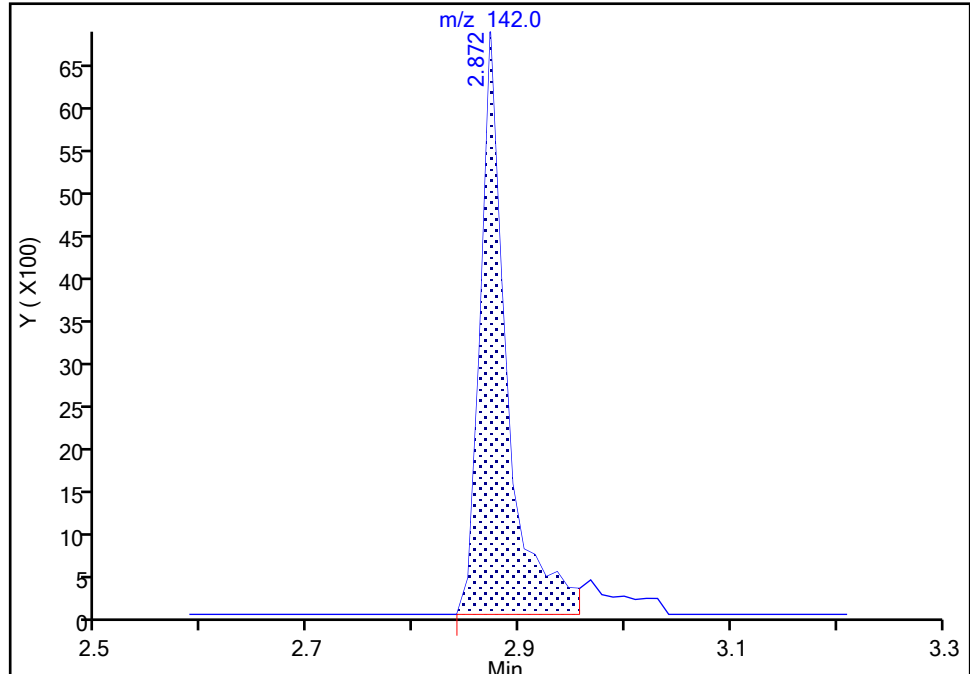
MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

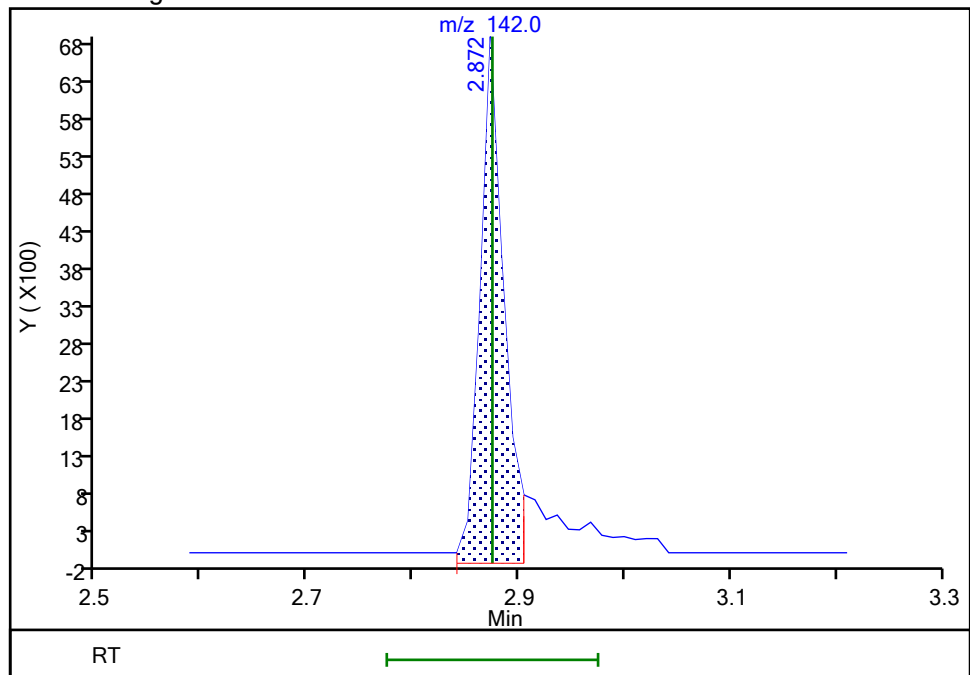
RT: 2.87
Area: 11912
Amount: 1.881160
Amount Units: ug/l

Processing Integration Results



RT: 2.87
Area: 11099
Amount: 1.999637
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 28-Jun-2021 07:30:04

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6314.D
 Lims ID: STD050
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 26-Jun-2021 16:55:30 ALS Bottle#: 16 Worklist Smp#: 17
 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\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:44:42 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 28-Jun-2021 09:24:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.879	-0.002	98	1688341	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.391	-0.002	89	375028	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.607	-0.002	98	520296	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.381	4.373	0.008	91	409345	50.0	49.7	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	523714	50.0	50.1	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1616108	50.0	50.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	82	597938	50.0	50.1	
10 Dichlorodifluoromethane	85	1.543	1.534	0.009	100	29911	5.00	5.37	
11 Chloromethane	50	1.701	1.703	-0.002	100	31371	5.00	5.15	
12 Vinyl chloride	62	1.796	1.798	-0.002	99	29667	5.00	5.00	
14 Bromomethane	94	2.070	2.051	0.019	94	23301	5.00	5.88	
15 Chloroethane	64	2.155	2.146	0.009	98	20949	5.00	5.44	
16 Dichlorofluoromethane	67	2.324	2.326	-0.002	99	51683	5.00	4.96	
17 Trichlorofluoromethane	101	2.355	2.357	-0.002	98	42406	5.00	5.15	
19 Ethyl ether	59	2.566	2.568	-0.002	91	25023	5.00	4.83	
21 Acrolein	56	2.672	2.674	-0.002	98	50123	49.4	46.4	
23 1,1,2-Trichloro-1,2,2-trifluoro	151	2.756	2.748	0.008	68	12806	5.00	4.06	
22 1,1-Dichloroethene	96	2.756	2.748	0.008	97	19422	5.00	4.32	
24 Acetone	43	2.767	2.769	-0.002	100	41848	20.0	18.9	
26 Iodomethane	142	2.872	2.874	-0.002	99	22953	5.00	3.74	
27 Carbon disulfide	76	2.925	2.927	-0.002	100	68289	5.00	4.30	
29 Methyl acetate	43	2.999	2.990	0.009	98	53569	10.0	9.41	
30 3-Chloro-1-propene	41	3.020	3.011	0.009	89	39155	5.00	4.73	
31 Methylene Chloride	84	3.115	3.106	0.009	92	30172	5.00	4.66	
32 2-Methyl-2-propanol	59	3.157	3.159	-0.002	99	40809	50.0	48.6	
33 Acrylonitrile	53	3.263	3.265	-0.002	99	140679	50.0	49.6	
34 Methyl tert-butyl ether	73	3.295	3.286	0.008	95	95722	5.00	5.04	
35 trans-1,2-Dichloroethene	96	3.305	3.307	-0.002	95	24268	5.00	4.39	
36 Hexane	57	3.495	3.497	-0.002	94	27268	5.00	4.00	
38 Vinyl acetate	43	3.601	3.602	-0.001	98	150564	10.0	10.2	
39 1,1-Dichloroethane	63	3.622	3.613	0.009	96	49930	5.00	4.64	

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	4.002	4.003	-0.001	99	68716	20.0	19.5	
47 cis-1,2-Dichloroethene	96	4.023	4.025	-0.002	86	30326	5.00	4.78	
48 2,2-Dichloropropane	77	4.033	4.035	-0.002	89	39539	5.00	4.41	
50 sec-Butyl Alcohol	45	4.107	4.109	-0.002	99	101747	120.0	120.3	
53 Chlorobromomethane	128	4.202	4.204	-0.002	97	14070	5.00	4.78	
52 Tetrahydrofuran	42	4.202	4.204	-0.002	84	21999	10.0	9.40	
54 Chloroform	83	4.265	4.257	0.008	95	49370	5.00	4.62	
55 1,1,1-Trichloroethane	97	4.403	4.394	0.009	97	37742	5.00	4.30	
56 Cyclohexane	56	4.455	4.457	-0.002	90	36903	5.00	3.95	
57 1,1-Dichloropropene	75	4.508	4.510	-0.002	93	34815	5.00	4.24	
59 Carbon tetrachloride	117	4.519	4.520	-0.001	92	27639	5.00	4.13	
58 Isobutyl alcohol	41	4.529	4.531	-0.002	92	31805	125.0	122.2	
60 Benzene	78	4.666	4.658	0.008	97	112583	5.00	4.63	
61 1,2-Dichloroethane	62	4.687	4.689	-0.002	97	45284	5.00	4.88	
66 n-Heptane	43	4.846	4.848	-0.002	89	25562	5.00	4.05	
67 Trichloroethene	95	5.152	5.154	-0.002	95	26882	5.00	4.53	
68 2-Pentanone	43	5.247	5.249	-0.002	99	121022	16.0	16.1	
69 Methylcyclohexane	55	5.342	5.344	-0.002	92	28006	5.00	4.02	
70 1,2-Dichloropropane	63	5.352	5.354	-0.002	94	31150	5.00	4.80	
72 1,4-Dioxane	88	5.395	5.396	-0.001	95	9122	100.0	94.2	
73 Dibromomethane	93	5.426	5.428	-0.002	90	19988	5.00	4.87	
74 Dichlorobromomethane	83	5.553	5.544	0.009	97	36935	5.00	4.64	
76 2-Chloroethyl vinyl ether	63	5.753	5.755	-0.002	94	23969	5.00	5.00	
77 cis-1,3-Dichloropropene	75	5.891	5.892	-0.002	94	48743	5.00	4.77	
78 4-Methyl-2-pentanone (MIBK)	43	5.996	5.998	-0.002	97	135611	20.0	19.7	
79 Toluene	91	6.186	6.177	0.009	97	120728	5.00	4.60	
80 trans-1,3-Dichloropropene	75	6.355	6.357	-0.002	96	45297	5.00	4.66	
81 Ethyl methacrylate	69	6.386	6.378	0.008	88	45271	5.00	4.82	
82 1,1,2-Trichloroethane	97	6.534	6.536	-0.002	92	26646	5.00	4.92	
83 Tetrachloroethene	164	6.619	6.621	-0.001	90	17165	5.00	4.36	
84 1,3-Dichloropropane	76	6.671	6.673	-0.002	97	50316	5.00	4.99	
85 2-Hexanone	43	6.693	6.694	-0.001	97	97075	20.0	19.4	
86 Chlorodibromomethane	129	6.872	6.863	0.009	90	23395	5.00	4.45	
88 Ethylene Dibromide	107	6.988	6.979	0.009	98	28829	5.00	4.94	
89 1-Chlorohexane	91	7.378	7.380	-0.002	89	35452	4.00	3.30	
90 Chlorobenzene	112	7.410	7.412	-0.002	94	74599	5.00	4.72	
91 1,1,1,2-Tetrachloroethane	131	7.484	7.486	-0.002	91	24332	5.00	4.64	
92 Ethylbenzene	106	7.495	7.496	-0.001	99	39106	5.00	4.58	
93 m-Xylene & p-Xylene	106	7.611	7.612	-0.001	100	47876	5.00	4.57	
94 o-Xylene	106	7.969	7.971	-0.002	96	47720	5.00	4.75	
95 Styrene	104	7.991	7.982	0.008	95	84207	5.00	4.77	
96 Bromoform	173	8.170	8.161	0.009	91	13433	5.00	4.32	
97 Isopropylbenzene	105	8.307	8.309	-0.002	97	113279	5.00	4.53	
99 Cyclohexanone	55	8.402	8.404	-0.002	94	60137	200.0	204.1	
100 1,1,2,2-Tetrachloroethane	83	8.592	8.594	-0.002	95	37911	5.00	4.89	
101 Bromobenzene	156	8.624	8.626	-0.002	97	29160	5.00	4.80	
102 trans-1,4-Dichloro-2-butene	53	8.634	8.636	-0.002	80	9479	5.00	4.35	
103 1,2,3-Trichloropropane	110	8.655	8.657	-0.002	86	11024	5.00	4.75	
104 N-Propylbenzene	120	8.708	8.710	-0.002	99	30418	5.00	4.56	
105 2-Chlorotoluene	126	8.803	8.805	-0.002	95	27564	5.00	4.72	
106 1,3,5-Trimethylbenzene	105	8.877	8.879	-0.002	92	92424	5.00	4.54	
107 4-Chlorotoluene	126	8.919	8.921	-0.002	98	28875	5.00	4.68	

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	9.183	9.185	-0.002	92	71969	5.00	4.42	
109 1,2,4-Trimethylbenzene	105	9.246	9.248	-0.002	98	98112	5.00	4.68	
110 sec-Butylbenzene	134	9.405	9.406	-0.001	95	19718	5.00	4.34	
111 1,3-Dichlorobenzene	146	9.531	9.533	-0.002	96	51087	5.00	4.73	
112 4-Isopropyltoluene	119	9.552	9.554	-0.002	96	86054	5.00	4.44	
113 1,4-Dichlorobenzene	146	9.626	9.628	-0.002	91	53989	5.00	4.74	
115 n-Butylbenzene	91	9.953	9.955	-0.002	98	78756	5.00	4.42	
116 1,2-Dichlorobenzene	146	9.985	9.976	0.009	95	49729	5.00	4.78	
117 1,2-Dibromo-3-Chloropropane	157	10.755	10.757	-0.002	84	6184	5.00	4.50	
119 1,2,4-Trichlorobenzene	180	11.578	11.580	-0.002	93	26209	5.00	4.67	
120 Hexachlorobutadiene	225	11.726	11.718	0.008	92	8197	5.00	4.46	
121 Naphthalene	128	11.842	11.844	-0.002	98	91688	5.00	4.65	
122 1,2,3-Trichlorobenzene	180	12.064	12.066	-0.002	93	23950	5.00	4.65	
S 139 1,2-Dichloroethene, Total (URS)	95				0		10.0	9.17	
S 142 Xylenes, Total	106				0		10.0	9.32	
S 140 Trihalomethanes, Total	1				0		20.0	18.0	
S 143 Xylenes, Total (URS)	1				0		10.0	9.32	
S 146 Total BTEX	1				0			23.1	
S 145 1,3-Dichloropropene, Total	1				0		10.0	9.43	
S 144 1,2-Dichloroethene, Total	1				0		10.0	9.17	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052	Amount Added: 2.50	Units: uL	
MV-Gas A_00091	Amount Added: 1.00	Units: uL	
MV-Main add A_00001	Amount Added: 2.50	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 28-Jun-2021 10:44:42

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6314.D

Injection Date: 26-Jun-2021 16:55:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD050

Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

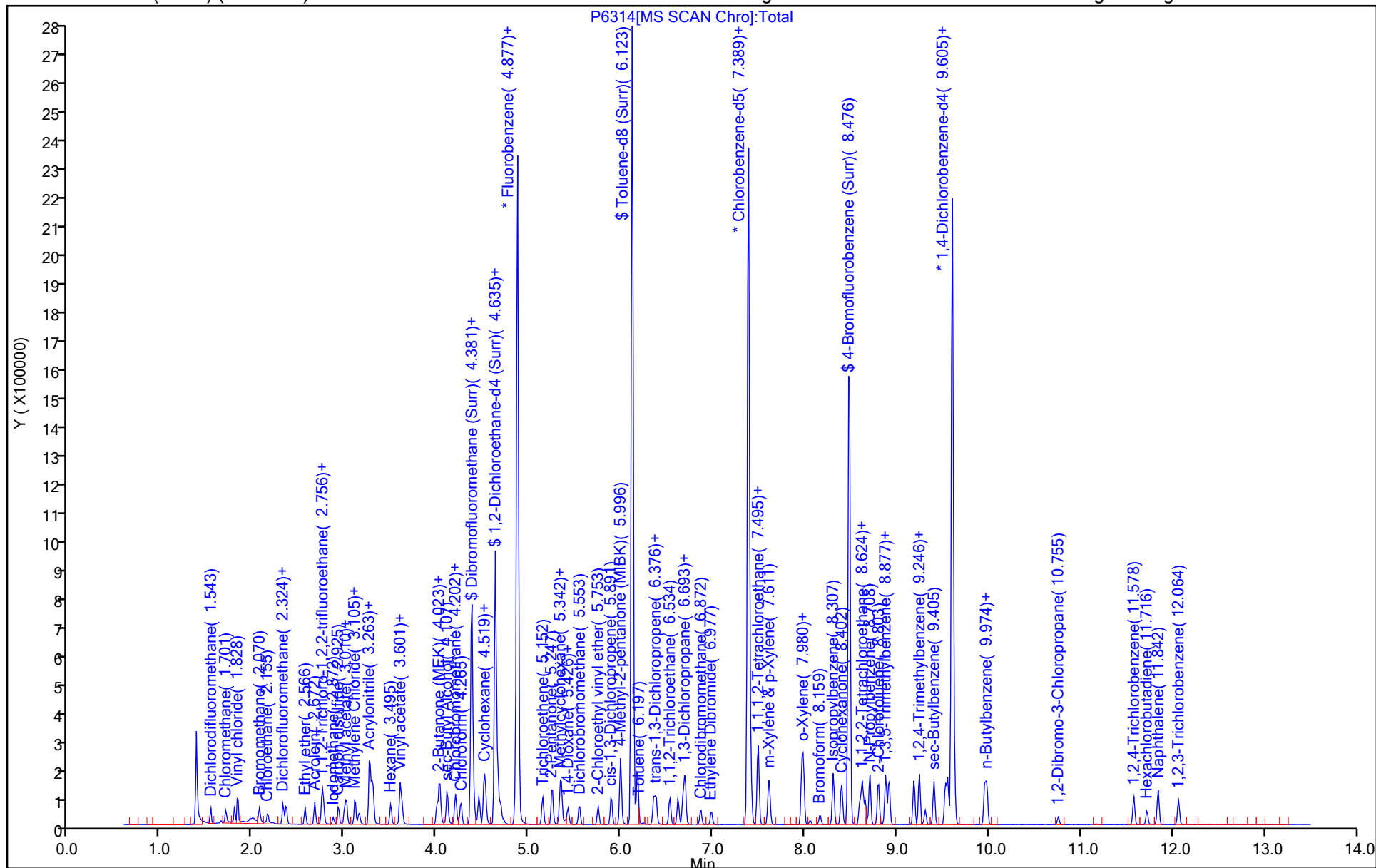
ALS Bottle#: 16

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: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6315.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 26-Jun-2021 17:18:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Misc. Info.: 280-0102712-018
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub175
 Method: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:44:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 28-Jun-2021 07:26:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.870	4.870	0.000	98	1685610	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.392	0.000	89	376134	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.608	0.000	98	522415	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.374	0.000	91	411977	50.0	50.1	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.638	4.638	0.000	98	531588	50.0	50.9	
\$ 6 Toluene-d8 (Surr)	98	6.126	6.126	0.000	94	1626976	50.0	50.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.479	0.000	81	597717	50.0	49.9	
10 Dichlorodifluoromethane	85	1.535	1.535	0.000	99	67660	10.0	12.2	
11 Chloromethane	50	1.704	1.704	0.000	99	66365	10.0	10.9	
12 Vinyl chloride	62	1.799	1.799	0.000	100	68335	10.0	11.5	
14 Bromomethane	94	2.063	2.063	0.000	91	39552	10.0	11.3	M
15 Chloroethane	64	2.158	2.158	0.000	100	44815	10.0	11.7	
16 Dichlorofluoromethane	67	2.327	2.327	0.000	99	113337	10.0	10.9	
17 Trichlorofluoromethane	101	2.359	2.359	0.000	98	96403	10.0	11.7	
19 Ethyl ether	59	2.559	2.559	0.000	91	52919	10.0	10.2	
21 Acrolein	56	2.665	2.665	0.000	100	110201	98.8	102.1	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.749	2.749	0.000	71	31647	10.0	10.0	
22 1,1-Dichloroethene	96	2.749	2.749	0.000	96	45320	10.0	10.1	
24 Acetone	43	2.770	2.770	0.000	100	91492	40.0	41.5	
26 Iodomethane	142	2.865	2.865	0.000	99	52239	10.0	8.06	M
27 Carbon disulfide	76	2.928	2.928	0.000	100	151458	10.0	9.56	
29 Methyl acetate	43	2.992	2.992	0.000	98	112206	20.0	19.7	
30 3-Chloro-1-propene	41	3.013	3.013	0.000	90	85922	10.0	10.4	
31 Methylene Chloride	84	3.108	3.108	0.000	93	61596	10.0	9.53	
32 2-Methyl-2-propanol	59	3.150	3.150	0.000	99	88074	100.0	105.1	
33 Acrylonitrile	53	3.266	3.266	0.000	98	297023	100.0	104.8	
34 Methyl tert-butyl ether	73	3.287	3.287	0.000	96	196888	10.0	10.4	
35 trans-1,2-Dichloroethene	96	3.308	3.308	0.000	97	55284	10.0	10.0	
36 Hexane	57	3.498	3.498	0.000	93	69808	10.0	10.2	
38 Vinyl acetate	43	3.593	3.593	0.000	98	317560	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 1,1-Dichloroethane	63	3.614	3.614	0.000	97	107104	10.0	9.96	
44 2-Butanone (MEK)	43	3.994	3.994	0.000	100	149801	40.0	42.5	
47 cis-1,2-Dichloroethene	96	4.026	4.026	0.000	88	63832	10.0	10.1	
48 2,2-Dichloropropane	77	4.036	4.036	0.000	88	89179	10.0	9.96	
50 sec-Butyl Alcohol	45	4.110	4.110	0.000	98	209805	240.0	248.4	
53 Chlorobromomethane	128	4.195	4.195	0.000	97	29991	10.0	10.2	
52 Tetrahydrofuran	42	4.205	4.205	0.000	87	47735	20.0	20.4	
54 Chloroform	83	4.258	4.258	0.000	96	106091	10.0	9.95	
55 1,1,1-Trichloroethane	97	4.395	4.395	0.000	99	86648	10.0	9.89	
56 Cyclohexane	56	4.459	4.459	0.000	91	92336	10.0	9.90	
57 1,1-Dichloropropene	75	4.511	4.511	0.000	93	81121	10.0	9.90	
59 Carbon tetrachloride	117	4.511	4.511	0.000	93	65925	10.0	9.86	
58 Isobutyl alcohol	41	4.532	4.532	0.000	94	68892	250.0	265.1	
60 Benzene	78	4.659	4.659	0.000	98	245410	10.0	10.1	
61 1,2-Dichloroethane	62	4.691	4.691	0.000	98	92466	10.0	9.98	
66 n-Heptane	43	4.849	4.849	0.000	91	59686	10.0	9.47	
67 Trichloroethene	95	5.145	5.145	0.000	96	58277	10.0	9.79	
68 2-Pentanone	43	5.250	5.250	0.000	99	250251	32.0	33.4	
69 Methylcyclohexane	55	5.334	5.334	0.000	93	69197	10.0	9.95	
70 1,2-Dichloropropane	63	5.356	5.356	0.000	94	64558	10.0	9.97	
72 1,4-Dioxane	88	5.398	5.398	0.000	95	20709	200.0	214.3	
73 Dibromomethane	93	5.419	5.419	0.000	90	41647	10.0	10.2	
74 Dichlorobromomethane	83	5.546	5.546	0.000	98	77285	10.0	9.73	
76 2-Chloroethyl vinyl ether	63	5.746	5.746	0.000	93	51464	10.0	10.7	
77 cis-1,3-Dichloropropene	75	5.894	5.894	0.000	94	102975	10.0	10.0	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.999	0.000	97	295341	40.0	42.9	
79 Toluene	91	6.179	6.179	0.000	97	257801	10.0	9.83	
80 trans-1,3-Dichloropropene	75	6.358	6.358	0.000	98	94769	10.0	9.77	
81 Ethyl methacrylate	69	6.379	6.379	0.000	87	98072	10.0	10.4	
82 1,1,2-Trichloroethane	97	6.538	6.538	0.000	94	55713	10.0	10.3	
83 Tetrachloroethene	164	6.622	6.622	0.000	93	38904	10.0	9.85	
84 1,3-Dichloropropane	76	6.675	6.675	0.000	92	103517	10.0	10.2	
85 2-Hexanone	43	6.696	6.696	0.000	97	211013	40.0	42.1	
86 Chlorodibromomethane	129	6.865	6.865	0.000	90	50952	10.0	9.66	
88 Ethylene Dibromide	107	6.981	6.981	0.000	97	59929	10.0	10.2	
89 1-Chlorohexane	91	7.382	7.382	0.000	94	83527	8.00	7.76	
90 Chlorobenzene	112	7.413	7.413	0.000	93	157425	10.0	9.93	
91 1,1,1,2-Tetrachloroethane	131	7.487	7.487	0.000	91	52118	10.0	9.91	
92 Ethylbenzene	106	7.498	7.498	0.000	99	87554	10.0	10.2	
93 m-Xylene & p-Xylene	106	7.614	7.614	0.000	100	103546	10.0	9.87	
94 o-Xylene	106	7.973	7.973	0.000	97	101924	10.0	10.1	
95 Styrene	104	7.983	7.983	0.000	94	176214	10.0	9.96	
96 Bromoform	173	8.163	8.163	0.000	90	29394	10.0	9.42	
97 Isopropylbenzene	105	8.310	8.310	0.000	97	251095	10.0	10.0	
99 Cyclohexanone	55	8.395	8.395	0.000	93	122055	400.0	412.9	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.595	0.000	95	80581	10.0	10.4	
101 Bromobenzene	156	8.627	8.627	0.000	98	61402	10.0	10.1	
102 trans-1,4-Dichloro-2-butene	53	8.627	8.627	0.000	79	21011	10.0	9.60	
103 1,2,3-Trichloropropane	110	8.659	8.659	0.000	85	24164	10.0	10.4	
104 N-Propylbenzene	120	8.711	8.711	0.000	99	65748	10.0	9.82	
105 2-Chlorotoluene	126	8.796	8.796	0.000	95	57692	10.0	9.85	
106 1,3,5-Trimethylbenzene	105	8.880	8.880	0.000	93	205111	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Chlorotoluene	126	8.912	8.912	0.000	98	63898	10.0	10.3	
108 tert-Butylbenzene	119	9.186	9.186	0.000	92	164177	10.0	10.1	
109 1,2,4-Trimethylbenzene	105	9.239	9.239	0.000	98	210648	10.0	10.0	
110 sec-Butylbenzene	134	9.408	9.408	0.000	95	46620	10.0	10.2	
111 1,3-Dichlorobenzene	146	9.524	9.524	0.000	95	106695	10.0	9.84	
112 4-Isopropyltoluene	119	9.556	9.556	0.000	96	193760	10.0	9.95	
113 1,4-Dichlorobenzene	146	9.629	9.629	0.000	93	111903	10.0	9.79	
115 n-Butylbenzene	91	9.957	9.957	0.000	98	172523	10.0	9.64	
116 1,2-Dichlorobenzene	146	9.978	9.978	0.000	94	102365	10.0	9.81	
117 1,2-Dibromo-3-Chloropropane	157	10.759	10.759	0.000	75	13464	10.0	9.75	
119 1,2,4-Trichlorobenzene	180	11.582	11.582	0.000	94	54170	10.0	9.62	
120 Hexachlorobutadiene	225	11.719	11.719	0.000	91	17372	10.0	9.42	
121 Naphthalene	128	11.846	11.846	0.000	98	193720	10.0	9.78	
122 1,2,3-Trichlorobenzene	180	12.067	12.067	0.000	94	49961	10.0	10.2	
S 139 1,2-Dichloroethene, Total (URS)	95				0		20.0	20.1	
S 142 Xylenes, Total	106				0		20.0	20.0	
S 140 Trihalomethanes, Total	1				0		40.0	38.8	
S 143 Xylenes, Total (URS)	1				0		20.0	20.0	
S 146 Total BTEX	1				0			50.1	
S 145 1,3-Dichloropropene, Total	1				0		20.0	19.8	
S 144 1,2-Dichloroethene, Total	1				0		20.0	20.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 2.00

Units: uL

MV-Main add A_00001

Amount Added: 5.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6315.D

Injection Date: 26-Jun-2021 17:18:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD10

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

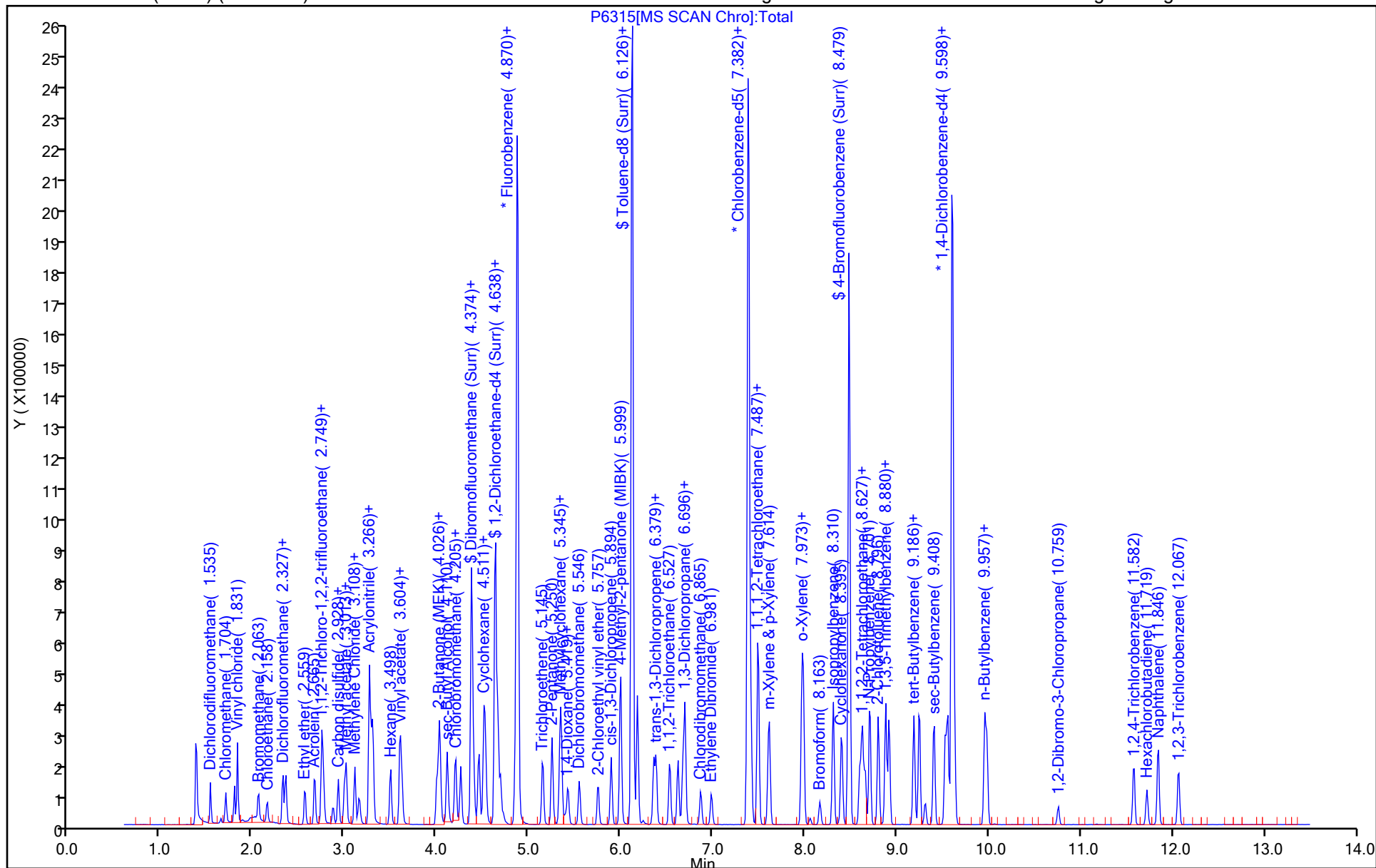
ALS Bottle#: 17

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

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6315.D

Injection Date: 26-Jun-2021 17:18:30

Instrument ID: VMS_P

Lims ID: STD10

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

17

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

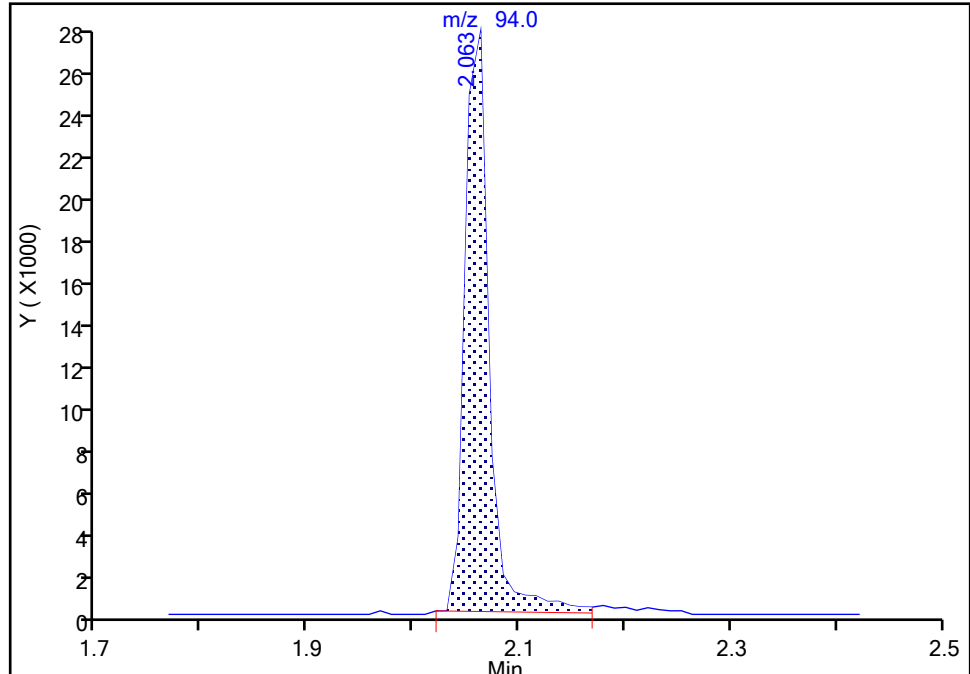
MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

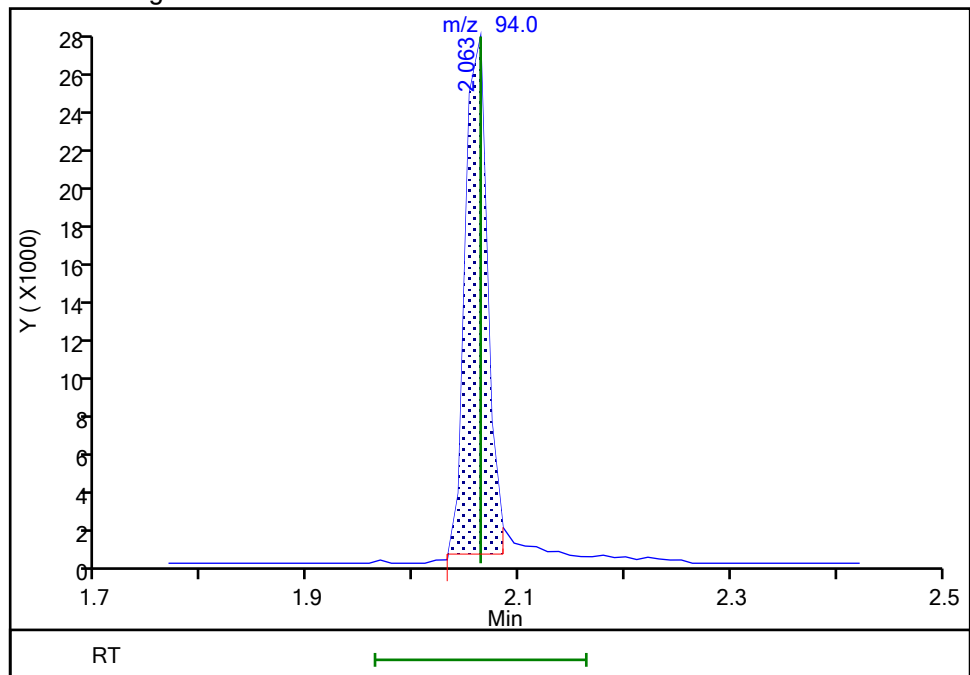
RT: 2.06
Area: 43643
Amount: 12.346506
Amount Units: ug/l

Processing Integration Results



RT: 2.06
Area: 39552
Amount: 11.305931
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 28-Jun-2021 07:26:52

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6315.D

Injection Date: 26-Jun-2021 17:18:30

Instrument ID: VMS_P

Lims ID: STD10

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 17

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)

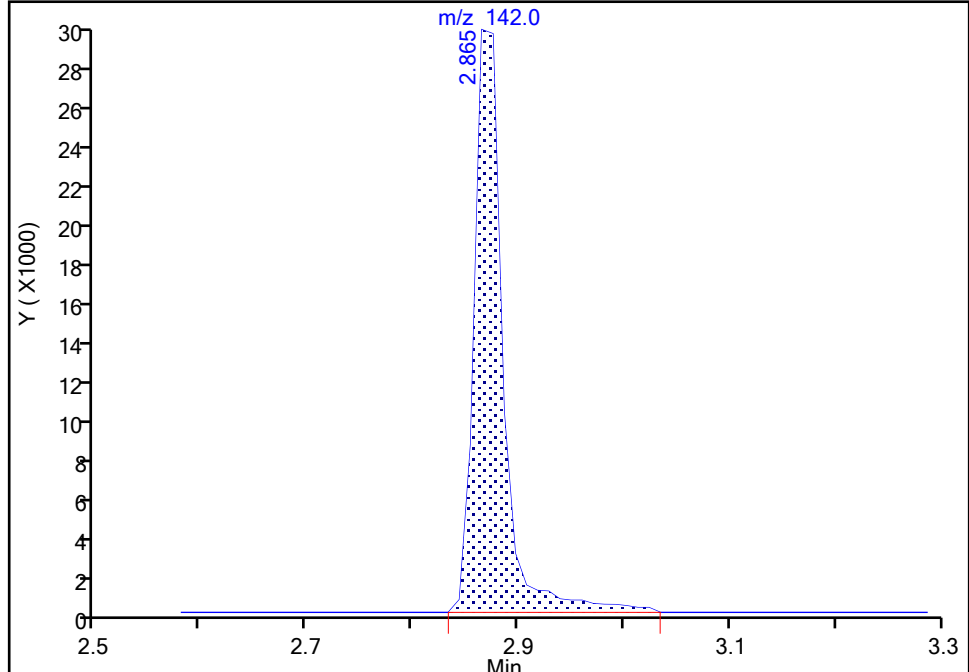
Detector: MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

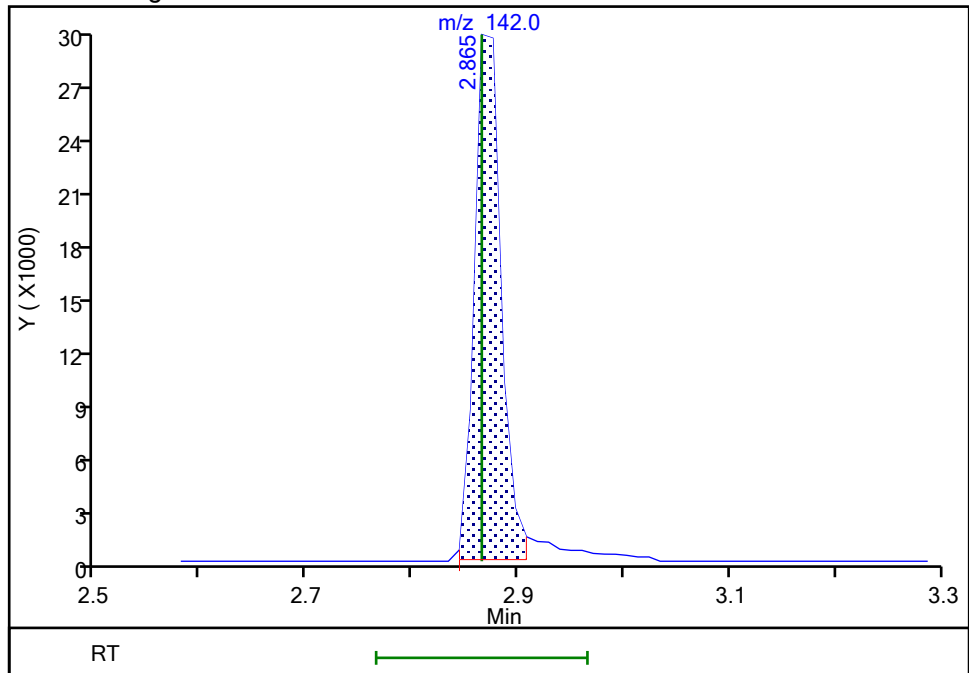
RT: 2.87
Area: 56545
Amount: 9.022718
Amount Units: ug/l

Processing Integration Results



RT: 2.87
Area: 52239
Amount: 8.059506
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 28-Jun-2021 07:30:25

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6316.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 26-Jun-2021 17:41:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS
 Misc. Info.: 280-0102712-019
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub175
 Method: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:44:54 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 28-Jun-2021 07:26:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.879	4.879	0.000	99	1736664	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.391	7.391	0.000	89	387900	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.607	9.607	0.000	97	549502	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.373	4.373	0.000	92	424244	50.0	50.1	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	98	532541	50.0	49.5	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1663808	50.0	49.8	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.478	8.478	0.000	82	619520	50.0	49.1	
10 Dichlorodifluoromethane	85	1.534	1.534	0.000	100	278648	50.0	48.6	
11 Chloromethane	50	1.703	1.703	0.000	99	298318	50.0	47.6	
12 Vinyl chloride	62	1.798	1.798	0.000	99	294993	50.0	48.4	
14 Bromomethane	94	2.051	2.051	0.000	93	159911	50.0	49.8	
15 Chloroethane	64	2.146	2.146	0.000	99	186555	50.0	47.1	
16 Dichlorofluoromethane	67	2.326	2.326	0.000	99	519703	50.0	48.5	
17 Trichlorofluoromethane	101	2.357	2.357	0.000	99	402429	50.0	47.5	
19 Ethyl ether	59	2.568	2.568	0.000	91	268824	50.0	50.4	
21 Acrolein	56	2.674	2.674	0.000	100	566055	493.8	508.9	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.748	2.748	0.000	71	161543	50.0	49.8	
22 1,1-Dichloroethene	96	2.748	2.748	0.000	96	229661	50.0	49.7	
24 Acetone	43	2.769	2.769	0.000	100	458301	200.0	201.6	
26 Iodomethane	142	2.874	2.874	0.000	100	349093	50.0	50.2	
27 Carbon disulfide	76	2.927	2.927	0.000	100	777323	50.0	47.6	
29 Methyl acetate	43	2.990	2.990	0.000	98	566714	100.0	96.8	
30 3-Chloro-1-propene	41	3.011	3.011	0.000	89	429295	50.0	50.5	
31 Methylene Chloride	84	3.106	3.106	0.000	92	316541	50.0	47.5	
32 2-Methyl-2-propanol	59	3.159	3.159	0.000	99	444650	500.0	515.1	
33 Acrylonitrile	53	3.265	3.265	0.000	98	1515579	500.0	519.3	
34 Methyl tert-butyl ether	73	3.286	3.286	0.000	96	1021033	50.0	52.2	
35 trans-1,2-Dichloroethene	96	3.307	3.307	0.000	97	285644	50.0	50.2	
36 Hexane	57	3.497	3.497	0.000	92	357204	50.0	50.6	
38 Vinyl acetate	43	3.602	3.602	0.000	98	1576359	100.0	103.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 1,1-Dichloroethane	63	3.613	3.613	0.000	97	562174	50.0	50.8	
44 2-Butanone (MEK)	43	4.003	4.003	0.000	100	737154	200.0	202.9	
47 cis-1,2-Dichloroethene	96	4.025	4.025	0.000	87	329933	50.0	50.6	
48 2,2-Dichloropropane	77	4.035	4.035	0.000	89	472997	50.0	51.3	
50 sec-Butyl Alcohol	45	4.109	4.109	0.000	99	1060367	1200.0	1218.4	
53 Chlorobromomethane	128	4.204	4.204	0.000	97	157728	50.0	52.1	
52 Tetrahydrofuran	42	4.204	4.204	0.000	86	239974	100.0	99.6	
54 Chloroform	83	4.257	4.257	0.000	96	555709	50.0	50.6	
55 1,1,1-Trichloroethane	97	4.394	4.394	0.000	98	464279	50.0	51.4	
56 Cyclohexane	56	4.457	4.457	0.000	92	479051	50.0	49.8	
59 Carbon tetrachloride	117	4.520	4.520	0.000	96	356635	50.0	51.8	
57 1,1-Dichloropropene	75	4.510	4.510	0.000	95	425770	50.0	50.4	
58 Isobutyl alcohol	41	4.531	4.531	0.000	93	356471	1250.0	1331.2	
60 Benzene	78	4.658	4.658	0.000	98	1270385	50.0	50.8	
61 1,2-Dichloroethane	62	4.689	4.689	0.000	98	476866	50.0	49.9	
66 n-Heptane	43	4.848	4.848	0.000	92	310204	50.0	47.8	
67 Trichloroethene	95	5.154	5.154	0.000	96	310591	50.0	50.6	
68 2-Pentanone	43	5.249	5.249	0.000	99	1233557	160.0	159.7	
69 Methylcyclohexane	55	5.344	5.344	0.000	93	359800	50.0	50.2	
70 1,2-Dichloropropane	63	5.354	5.354	0.000	94	338981	50.0	50.8	
72 1,4-Dioxane	88	5.396	5.396	0.000	94	105947	1000.0	1063.9	
73 Dibromomethane	93	5.428	5.428	0.000	91	215600	50.0	51.1	
74 Dichlorobromomethane	83	5.544	5.544	0.000	98	432394	50.0	52.8	
76 2-Chloroethyl vinyl ether	63	5.755	5.755	0.000	93	257734	50.0	52.2	
77 cis-1,3-Dichloropropene	75	5.892	5.892	0.000	94	552987	50.0	52.3	
78 4-Methyl-2-pentanone (MIBK)	43	5.998	5.998	0.000	97	1518248	200.0	214.0	
79 Toluene	91	6.177	6.177	0.000	97	1348277	50.0	49.9	
80 trans-1,3-Dichloropropene	75	6.357	6.357	0.000	97	529641	50.0	53.0	
81 Ethyl methacrylate	69	6.378	6.378	0.000	88	510198	50.0	52.5	
82 1,1,2-Trichloroethane	97	6.536	6.536	0.000	94	290577	50.0	52.2	
83 Tetrachloroethene	164	6.621	6.621	0.000	91	208701	50.0	51.3	
84 1,3-Dichloropropane	76	6.673	6.673	0.000	97	545059	50.0	52.3	
85 2-Hexanone	43	6.694	6.694	0.000	96	1075778	200.0	208.1	
86 Chlorodibromomethane	129	6.863	6.863	0.000	90	285550	50.0	52.5	
88 Ethylene Dibromide	107	6.979	6.979	0.000	98	316127	50.0	52.4	
89 1-Chlorohexane	91	7.380	7.380	0.000	98	416356	40.0	37.5	
90 Chlorobenzene	112	7.412	7.412	0.000	92	827370	50.0	50.6	
91 1,1,1,2-Tetrachloroethane	131	7.486	7.486	0.000	91	285354	50.0	52.6	
92 Ethylbenzene	106	7.496	7.496	0.000	99	449239	50.0	50.8	
93 m-Xylene & p-Xylene	106	7.612	7.612	0.000	100	554673	50.0	51.2	
94 o-Xylene	106	7.971	7.971	0.000	98	535170	50.0	51.5	
95 Styrene	104	7.982	7.982	0.000	94	954964	50.0	52.3	
96 Bromoform	173	8.161	8.161	0.000	91	178278	50.0	55.4	
97 Isopropylbenzene	105	8.309	8.309	0.000	97	1347790	50.0	51.0	
99 Cyclohexanone	55	8.404	8.404	0.000	93	619024	2000.0	2030.7	
100 1,1,2,2-Tetrachloroethane	83	8.594	8.594	0.000	95	420396	50.0	51.4	
101 Bromobenzene	156	8.626	8.626	0.000	98	323200	50.0	50.4	
102 trans-1,4-Dichloro-2-butene	53	8.636	8.636	0.000	88	119159	50.0	51.8	
103 1,2,3-Trichloropropane	110	8.657	8.657	0.000	85	126520	50.0	51.6	
104 N-Propylbenzene	120	8.710	8.710	0.000	99	350470	50.0	49.8	
105 2-Chlorotoluene	126	8.805	8.805	0.000	95	307464	50.0	49.9	
106 1,3,5-Trimethylbenzene	105	8.879	8.879	0.000	93	1100042	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
107 4-Chlorotoluene	126	8.921	8.921	0.000	98	324530	50.0	49.8	
108 tert-Butylbenzene	119	9.185	9.185	0.000	92	868192	50.0	50.5	
109 1,2,4-Trimethylbenzene	105	9.248	9.248	0.000	98	1122092	50.0	50.7	
110 sec-Butylbenzene	134	9.406	9.406	0.000	95	244878	50.0	51.1	
111 1,3-Dichlorobenzene	146	9.533	9.533	0.000	96	574954	50.0	50.4	
112 4-Isopropyltoluene	119	9.554	9.554	0.000	96	1055830	50.0	51.5	
113 1,4-Dichlorobenzene	146	9.628	9.628	0.000	95	589804	50.0	49.0	
115 n-Butylbenzene	91	9.955	9.955	0.000	98	958812	50.0	51.0	
116 1,2-Dichlorobenzene	146	9.976	9.976	0.000	94	552552	50.0	50.3	
117 1,2-Dibromo-3-Chloropropane	157	10.757	10.757	0.000	78	78284	50.0	53.9	
119 1,2,4-Trichlorobenzene	180	11.580	11.580	0.000	93	298143	50.0	50.3	
120 Hexachlorobutadiene	225	11.718	11.718	0.000	91	96839	50.0	49.9	
121 Naphthalene	128	11.844	11.844	0.000	98	1049445	50.0	50.4	
122 1,2,3-Trichlorobenzene	180	12.066	12.066	0.000	94	271664	50.0	54.9	
S 139 1,2-Dichloroethene, Total (URS)	95				0		100.0	100.8	
S 142 Xylenes, Total	106				0		100.0	102.7	
S 140 Trihalomethanes, Total	1				0		200.0	211.3	
S 143 Xylenes, Total (URS)	1				0		100.0	102.7	
S 145 1,3-Dichloropropene, Total	1				0		100.0	105.3	
S 144 1,2-Dichloroethene, Total	1				0		100.0	100.8	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052
 MV-Gas A_00091
 MV-Main add A_00001
 mv-IS_SS_00018

Amount Added: 25.00
 Amount Added: 10.00
 Amount Added: 25.00
 Amount Added: 5.00

Units: uL
 Units: uL
 Units: uL
 Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6316.D

Injection Date: 26-Jun-2021 17:41:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: ICIS

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

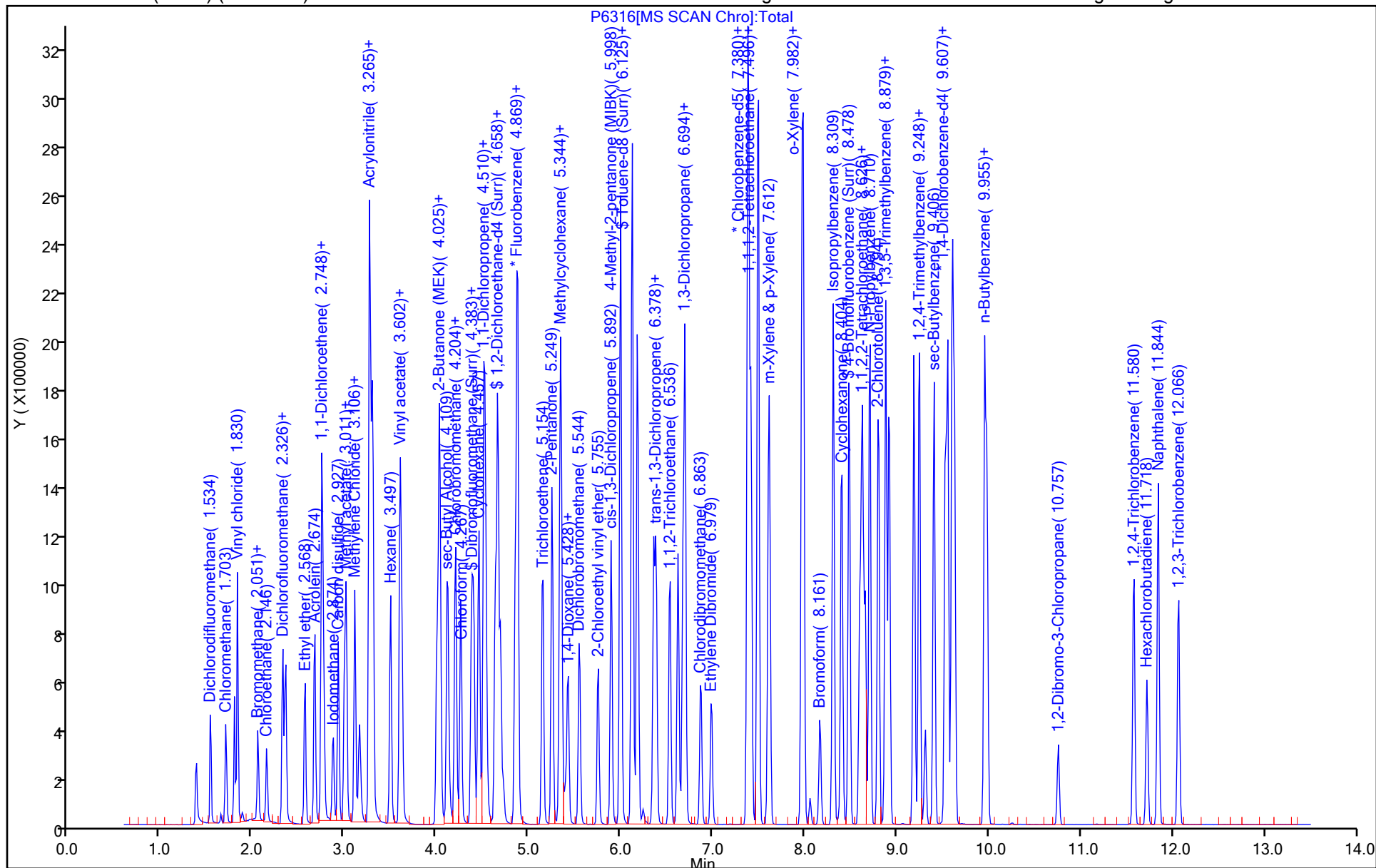
ALS Bottle#: 18

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6317.D
 Lims ID: STD75
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 26-Jun-2021 18:04:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD75
 Misc. Info.: 280-0102712-020
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub175
 Method: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:45:01 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 28-Jun-2021 09:26:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.879	0.001	99	1791999	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.391	0.001	89	402819	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.607	0.001	97	560752	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	91	439478	50.0	50.3	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	98	554551	50.0	50.0	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1707568	50.0	49.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	81	639965	50.0	49.7	
10 Dichlorodifluoromethane	85	1.535	1.534	0.001	99	480157	75.0	81.2	
11 Chloromethane	50	1.704	1.703	0.001	100	465536	75.0	72.0	
12 Vinyl chloride	62	1.799	1.798	0.001	99	472195	75.0	75.0	
14 Bromomethane	94	2.052	2.051	0.001	93	248267	75.0	75.9	
15 Chloroethane	64	2.147	2.146	0.001	99	286567	75.0	70.1	
16 Dichlorofluoromethane	67	2.326	2.326	0.000	99	798353	75.0	72.2	
17 Trichlorofluoromethane	101	2.358	2.357	0.001	99	666026	75.0	76.2	
19 Ethyl ether	59	2.569	2.568	0.001	91	392107	75.0	71.3	
21 Acrolein	56	2.675	2.674	0.001	100	820774	740.6	715.1	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.748	2.748	0.000	72	246681	75.0	73.7	
22 1,1-Dichloroethene	96	2.748	2.748	0.000	97	344620	75.0	72.3	
24 Acetone	43	2.769	2.769	0.000	100	668414	300.0	284.9	
26 Iodomethane	142	2.875	2.874	0.001	100	519019	75.0	72.2	
27 Carbon disulfide	76	2.928	2.927	0.001	100	1130534	75.0	67.1	
29 Methyl acetate	43	2.991	2.990	0.001	98	822115	150.0	136.1	
30 3-Chloro-1-propene	41	3.012	3.011	0.001	89	643024	75.0	73.2	
31 Methylene Chloride	84	3.107	3.106	0.001	93	451734	75.0	65.7	
32 2-Methyl-2-propanol	59	3.160	3.159	0.001	99	662562	750.0	743.8	
33 Acrylonitrile	53	3.265	3.265	0.000	98	2189200	750.0	726.9	
34 Methyl tert-butyl ether	73	3.287	3.286	0.001	95	1486665	75.0	73.7	
35 trans-1,2-Dichloroethene	96	3.308	3.307	0.001	97	416647	75.0	71.0	
36 Hexane	57	3.498	3.497	0.001	93	533211	75.0	72.7	
38 Vinyl acetate	43	3.603	3.602	0.001	98	2255713	150.0	143.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 1,1-Dichloroethane	63	3.614	3.613	0.001	98	806326	75.0	70.5	
44 2-Butanone (MEK)	43	3.994	4.003	-0.009	99	1077116	300.0	287.4	
47 cis-1,2-Dichloroethene	96	4.025	4.025	0.000	87	471745	75.0	70.1	
48 2,2-Dichloropropane	77	4.036	4.035	0.001	90	681588	75.0	71.6	
50 sec-Butyl Alcohol	45	4.110	4.109	0.001	99	1600078	1800.0	1781.7	
52 Tetrahydrofuran	42	4.205	4.204	0.001	86	354452	150.0	142.6	
53 Chlorobromomethane	128	4.205	4.204	0.001	97	219321	75.0	70.3	
54 Chloroform	83	4.257	4.257	0.000	97	795207	75.0	70.1	
55 1,1,1-Trichloroethane	97	4.395	4.394	0.001	98	670821	75.0	72.0	
56 Cyclohexane	56	4.458	4.457	0.001	92	714764	75.0	72.1	
57 1,1-Dichloropropene	75	4.511	4.510	0.001	94	611704	75.0	70.2	
59 Carbon tetrachloride	117	4.521	4.520	0.001	97	527148	75.0	74.2	
58 Isobutyl alcohol	41	4.532	4.531	0.001	94	526843	1875.0	1906.7	
60 Benzene	78	4.658	4.658	0.000	98	1808760	75.0	70.1	
61 1,2-Dichloroethane	62	4.690	4.689	0.001	98	688791	75.0	69.9	
66 n-Heptane	43	4.848	4.848	0.000	91	471729	75.0	70.4	
67 Trichloroethene	95	5.144	5.154	-0.010	96	445178	75.0	69.8	
68 2-Pentanone	43	5.249	5.249	0.000	99	1869963	240.0	234.6	
69 Methylcyclohexane	55	5.334	5.344	-0.010	93	538976	75.0	72.9	
70 1,2-Dichloropropane	63	5.355	5.354	0.001	93	485696	75.0	70.5	
72 1,4-Dioxane	88	5.397	5.396	0.001	94	153970	1500.0	1498.4	
73 Dibromomethane	93	5.418	5.428	-0.010	90	319906	75.0	73.4	
74 Dichlorobromomethane	83	5.545	5.544	0.001	98	624121	75.0	73.9	
76 2-Chloroethyl vinyl ether	63	5.756	5.755	0.001	93	378353	75.0	74.3	
77 cis-1,3-Dichloropropene	75	5.893	5.892	0.001	94	795629	75.0	72.4	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.998	0.001	97	2186643	300.0	298.7	
79 Toluene	91	6.178	6.177	0.001	97	1927045	75.0	69.1	
80 trans-1,3-Dichloropropene	75	6.357	6.357	0.000	98	763789	75.0	74.1	
81 Ethyl methacrylate	69	6.379	6.378	0.001	88	747479	75.0	74.0	
82 1,1,2-Trichloroethane	97	6.537	6.536	0.001	94	422150	75.0	73.5	
83 Tetrachloroethene	164	6.621	6.621	0.001	91	303078	75.0	71.7	
84 1,3-Dichloropropane	76	6.674	6.673	0.001	94	780382	75.0	72.1	
85 2-Hexanone	43	6.695	6.694	0.001	96	1573341	300.0	293.0	
86 Chlorodibromomethane	129	6.864	6.863	0.001	89	427336	75.0	75.6	
88 Ethylene Dibromide	107	6.980	6.979	0.001	98	456074	75.0	72.8	
89 1-Chlorohexane	91	7.381	7.380	0.001	98	663630	60.0	57.5	
90 Chlorobenzene	112	7.413	7.412	0.001	91	1182372	75.0	69.6	
91 1,1,1,2-Tetrachloroethane	131	7.487	7.486	0.001	92	412905	75.0	73.3	
92 Ethylbenzene	106	7.497	7.496	0.001	99	649454	75.0	70.8	
93 m-Xylene & p-Xylene	106	7.613	7.612	0.001	100	794124	75.0	70.6	
94 o-Xylene	106	7.972	7.971	0.001	98	763480	75.0	70.7	
95 Styrene	104	7.983	7.982	0.001	93	1370630	75.0	72.3	
96 Bromoform	173	8.162	8.161	0.001	91	268703	75.0	80.4	
97 Isopropylbenzene	105	8.310	8.309	0.001	97	1931027	75.0	71.7	
99 Cyclohexanone	55	8.394	8.404	-0.010	93	911574	3000.0	2879.7	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.594	0.001	95	608874	75.0	72.9	
101 Bromobenzene	156	8.626	8.626	0.000	98	469858	75.0	71.8	
102 trans-1,4-Dichloro-2-butene	53	8.637	8.636	0.001	86	177089	75.0	75.4	
103 1,2,3-Trichloropropane	110	8.658	8.657	0.001	85	184208	75.0	73.6	
104 N-Propylbenzene	120	8.711	8.710	0.001	99	514683	75.0	71.6	
105 2-Chlorotoluene	126	8.795	8.805	-0.010	95	447643	75.0	71.2	
106 1,3,5-Trimethylbenzene	105	8.880	8.879	0.001	93	1565050	75.0	71.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Chlorotoluene	126	8.922	8.921	0.001	98	471128	75.0	70.9	
108 tert-Butylbenzene	119	9.186	9.185	0.001	92	1244361	75.0	71.0	
109 1,2,4-Trimethylbenzene	105	9.249	9.248	0.001	98	1614642	75.0	71.5	
110 sec-Butylbenzene	134	9.407	9.406	0.001	95	357435	75.0	73.1	
111 1,3-Dichlorobenzene	146	9.523	9.533	-0.010	96	824583	75.0	70.9	
112 4-Isopropyltoluene	119	9.555	9.554	0.001	96	1503666	75.0	71.9	
113 1,4-Dichlorobenzene	146	9.629	9.628	0.001	95	847556	75.0	69.1	
115 n-Butylbenzene	91	9.956	9.955	0.001	98	1392630	75.0	72.5	
116 1,2-Dichlorobenzene	146	9.977	9.976	0.001	94	801266	75.0	71.5	
117 1,2-Dibromo-3-Chloropropane	157	10.758	10.757	0.001	78	116467	75.0	78.6	
119 1,2,4-Trichlorobenzene	180	11.581	11.580	0.001	94	429878	75.0	71.1	
120 Hexachlorobutadiene	225	11.718	11.718	0.000	92	139868	75.0	70.7	
121 Naphthalene	128	11.845	11.844	0.001	98	1532344	75.0	72.1	
122 1,2,3-Trichlorobenzene	180	12.067	12.066	0.000	94	383149	75.0	76.1	
S 139 1,2-Dichloroethene, Total (URS)	93				0		150.0	141.1	
S 142 Xylenes, Total	106				0		150.0	141.4	
S 140 Trihalomethanes, Total	1				0		300.0	300.1	
S 143 Xylenes, Total (URS)	1				0		150.0	141.4	
S 146 Total BTEX	1				0			351.4	
S 145 1,3-Dichloropropene, Total	1				0		150.0	146.5	
S 144 1,2-Dichloroethene, Total	1				0		150.0	141.1	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052

Amount Added: 37.50

Units: uL

MV-Gas A_00091

Amount Added: 15.00

Units: uL

MV-Main add A_00001

Amount Added: 37.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6317.D

Injection Date: 26-Jun-2021 18:04:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD75

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

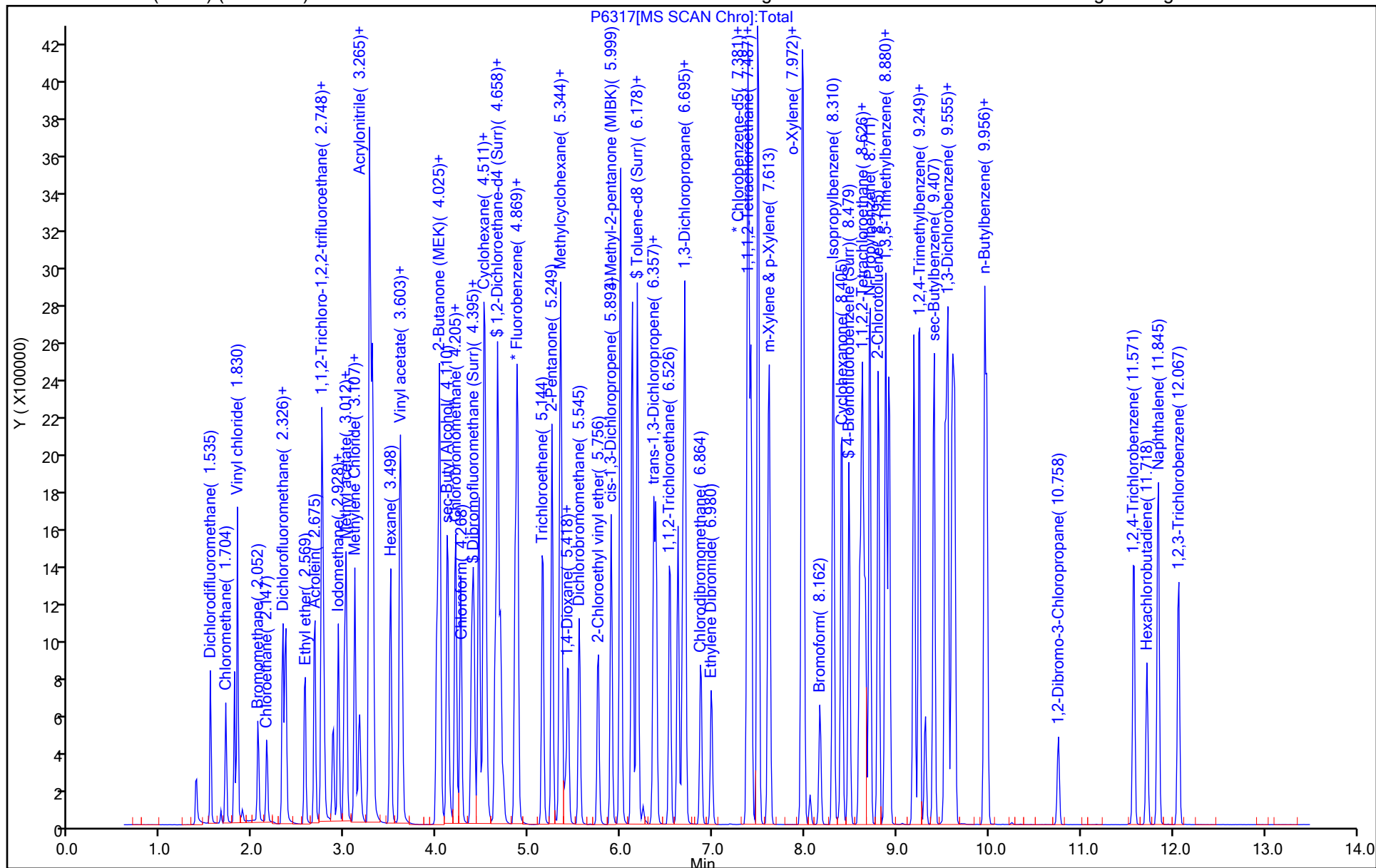
ALS Bottle#: 19

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
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6318.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 26-Jun-2021 18:27:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD100
 Misc. Info.: 280-0102712-021
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub175
 Method: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:45:07 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 28-Jun-2021 09:27:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.879	0.001	98	1794857	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.391	0.001	88	403981	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.607	0.001	96	568131	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	92	444652	50.0	50.8	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.638	4.637	0.001	98	560794	50.0	50.5	
\$ 6 Toluene-d8 (Surr)	98	6.126	6.125	0.001	94	1722130	50.0	49.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	83	649867	50.0	49.9	
10 Dichlorodifluoromethane	85	1.535	1.534	0.001	99	593412	100.0	100.2	
11 Chloromethane	50	1.704	1.703	0.001	99	582249	100.0	90.0	
12 Vinyl chloride	62	1.799	1.798	0.001	100	588242	100.0	93.3	
14 Bromomethane	94	2.052	2.051	0.001	93	316851	100.0	97.2	
15 Chloroethane	64	2.147	2.146	0.001	99	364785	100.0	89.1	
16 Dichlorofluoromethane	67	2.327	2.326	0.001	99	1003243	100.0	90.5	
17 Trichlorofluoromethane	101	2.358	2.357	0.001	99	827769	100.0	94.5	
19 Ethyl ether	59	2.569	2.568	0.001	91	547045	100.0	99.3	
21 Acrolein	56	2.675	2.674	0.001	99	1095638	987.5	953.1	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.749	2.748	0.001	72	374677	100.0	111.7	
22 1,1-Dichloroethene	96	2.749	2.748	0.001	97	518725	100.0	108.6	
24 Acetone	43	2.770	2.769	0.001	100	872596	400.0	371.3	
26 Iodomethane	142	2.865	2.874	-0.009	100	757052	100.0	105.0	
27 Carbon disulfide	76	2.928	2.927	0.001	100	1697978	100.0	100.6	
29 Methyl acetate	43	2.991	2.990	0.001	98	1091432	200.0	180.4	
30 3-Chloro-1-propene	41	3.013	3.011	0.002	89	879432	100.0	100.0	
31 Methylene Chloride	84	3.108	3.106	0.002	93	650194	100.0	94.4	
32 2-Methyl-2-propanol	59	3.160	3.159	0.001	99	859946	1000.0	963.8	
33 Acrylonitrile	53	3.266	3.265	0.001	98	2885462	1000.0	956.6	
34 Methyl tert-butyl ether	73	3.287	3.286	0.001	96	2031457	100.0	100.5	
35 trans-1,2-Dichloroethene	96	3.308	3.307	0.001	97	610689	100.0	103.9	
36 Hexane	57	3.498	3.497	0.001	93	787055	100.0	107.1	
38 Vinyl acetate	43	3.593	3.602	-0.009	98	3021471	200.0	192.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 1,1-Dichloroethane	63	3.614	3.613	0.001	97	1177252	100.0	102.8	
44 2-Butanone (MEK)	43	3.994	4.003	-0.009	99	1405379	400.0	374.4	
47 cis-1,2-Dichloroethene	96	4.026	4.025	0.001	87	693007	100.0	102.8	
48 2,2-Dichloropropane	77	4.036	4.035	0.001	89	1018425	100.0	106.8	
50 sec-Butyl Alcohol	45	4.110	4.109	0.001	99	2023433	2400.0	2249.5	
52 Tetrahydrofuran	42	4.205	4.204	0.001	86	462731	200.0	185.9	
53 Chlorobromomethane	128	4.194	4.204	-0.010	98	306696	100.0	98.1	
54 Chloroform	83	4.258	4.257	0.001	96	1155825	100.0	101.8	
55 1,1,1-Trichloroethane	97	4.395	4.394	0.001	98	993007	100.0	106.5	
56 Cyclohexane	56	4.458	4.457	0.001	92	1078151	100.0	108.5	
57 1,1-Dichloropropene	75	4.511	4.510	0.001	95	910343	100.0	104.3	
59 Carbon tetrachloride	117	4.522	4.520	0.002	96	793468	100.0	111.5	
58 Isobutyl alcohol	41	4.532	4.531	0.001	94	670642	2500.0	2423.2	
60 Benzene	78	4.659	4.658	0.001	97	2616504	100.0	101.2	
61 1,2-Dichloroethane	62	4.690	4.689	0.001	97	965471	100.0	97.8	
66 n-Heptane	43	4.849	4.848	0.001	91	671940	100.0	100.1	
67 Trichloroethene	95	5.144	5.154	-0.010	96	658901	100.0	103.1	
68 2-Pentanone	43	5.250	5.249	0.001	99	2381980	320.0	298.4	
69 Methylcyclohexane	55	5.334	5.344	-0.010	93	792783	100.0	107.0	
70 1,2-Dichloropropane	63	5.355	5.354	0.001	94	690371	100.0	100.1	
72 1,4-Dioxane	88	5.397	5.396	0.001	94	200129	2000.0	1944.5	
73 Dibromomethane	93	5.419	5.428	-0.009	92	437968	100.0	100.4	
74 Dichlorobromomethane	83	5.545	5.544	0.001	98	891809	100.0	105.4	
76 2-Chloroethyl vinyl ether	63	5.756	5.755	0.001	93	473792	100.0	92.9	
77 cis-1,3-Dichloropropene	75	5.893	5.892	0.001	94	1130929	100.0	102.7	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.998	0.001	97	2880679	400.0	392.9	
79 Toluene	91	6.178	6.177	0.001	98	2789498	100.0	99.9	
80 trans-1,3-Dichloropropene	75	6.358	6.357	0.001	96	1066369	100.0	103.3	
81 Ethyl methacrylate	69	6.379	6.378	0.001	88	1006352	100.0	99.4	
82 1,1,2-Trichloroethane	97	6.527	6.536	-0.009	93	582843	100.0	101.3	
83 Tetrachloroethene	164	6.622	6.621	0.002	92	448220	100.0	105.7	
84 1,3-Dichloropropane	76	6.674	6.673	0.001	96	1083742	100.0	99.8	
85 2-Hexanone	43	6.695	6.694	0.001	96	2063641	400.0	383.2	
86 Chlorodibromomethane	129	6.864	6.863	0.001	90	598536	100.0	105.6	
88 Ethylene Dibromide	107	6.980	6.979	0.001	98	626475	100.0	99.7	
89 1-Chlorohexane	91	7.381	7.380	0.001	98	860156	80.0	74.4	
90 Chlorobenzene	112	7.413	7.412	0.001	92	1698360	100.0	99.7	
91 1,1,1,2-Tetrachloroethane	131	7.487	7.486	0.001	92	594071	100.0	105.2	
92 Ethylbenzene	106	7.497	7.496	0.001	99	932331	100.0	101.3	
93 m-Xylene & p-Xylene	106	7.614	7.612	0.002	100	1144886	100.0	101.6	
94 o-Xylene	106	7.972	7.971	0.001	98	1101339	100.0	101.7	
95 Styrene	104	7.983	7.982	0.001	94	1946311	100.0	102.4	
96 Bromoform	173	8.162	8.161	0.001	92	376868	100.0	112.4	
97 Isopropylbenzene	105	8.310	8.309	0.001	97	2776559	100.0	101.7	
99 Cyclohexanone	55	8.394	8.404	-0.010	94	1147581	4000.0	3614.8	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.594	0.001	96	814789	100.0	96.3	
101 Bromobenzene	156	8.627	8.626	0.001	98	658158	100.0	99.3	
102 trans-1,4-Dichloro-2-butene	53	8.637	8.636	0.001	85	238603	100.0	100.3	
103 1,2,3-Trichloropropane	110	8.658	8.657	0.001	84	244081	100.0	96.2	
104 N-Propylbenzene	120	8.711	8.710	0.001	99	735172	100.0	101.0	
105 2-Chlorotoluene	126	8.795	8.805	-0.010	95	640584	100.0	100.5	
106 1,3,5-Trimethylbenzene	105	8.880	8.879	0.001	93	2243314	100.0	100.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Chlorotoluene	126	8.912	8.921	-0.009	98	669094	100.0	99.3	
108 tert-Butylbenzene	119	9.186	9.185	0.001	92	1785632	100.0	100.5	
109 1,2,4-Trimethylbenzene	105	9.249	9.248	0.001	98	2293209	100.0	100.2	
110 sec-Butylbenzene	134	9.408	9.406	0.002	95	510807	100.0	103.0	
111 1,3-Dichlorobenzene	146	9.524	9.533	-0.009	96	1164622	100.0	98.8	
112 4-Isopropyltoluene	119	9.555	9.554	0.001	96	2149696	100.0	101.5	
113 1,4-Dichlorobenzene	146	9.629	9.628	0.001	92	1205459	100.0	97.0	
115 n-Butylbenzene	91	9.956	9.955	0.001	98	1973315	100.0	101.4	
116 1,2-Dichlorobenzene	146	9.977	9.976	0.001	94	1125451	100.0	99.1	
117 1,2-Dibromo-3-Chloropropane	157	10.758	10.757	0.001	79	156146	100.0	104.0	
119 1,2,4-Trichlorobenzene	180	11.581	11.580	0.001	94	585782	100.0	95.7	
120 Hexachlorobutadiene	225	11.719	11.718	0.001	93	199506	100.0	99.5	
121 Naphthalene	128	11.845	11.844	0.001	98	2029810	100.0	94.3	
122 1,2,3-Trichlorobenzene	180	12.067	12.066	0.001	94	522383	100.0	102.6	
S 139 1,2-Dichloroethene, Total (URS)	95				0		200.0	206.8	
S 142 Xylenes, Total	106				0		200.0	203.3	
S 140 Trihalomethanes, Total	1				0		400.0	425.3	
S 143 Xylenes, Total (URS)	1				0		200.0	203.3	
S 146 Total BTEX	1				0			505.7	
S 145 1,3-Dichloropropene, Total	1				0		200.0	205.9	
S 144 1,2-Dichloroethene, Total	1				0		200.0	206.8	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052

Amount Added: 50.00

Units: uL

MV-Gas A_00091

Amount Added: 20.00

Units: uL

MV-Main add A_00001

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6318.D

Injection Date: 26-Jun-2021 18:27:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD100

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

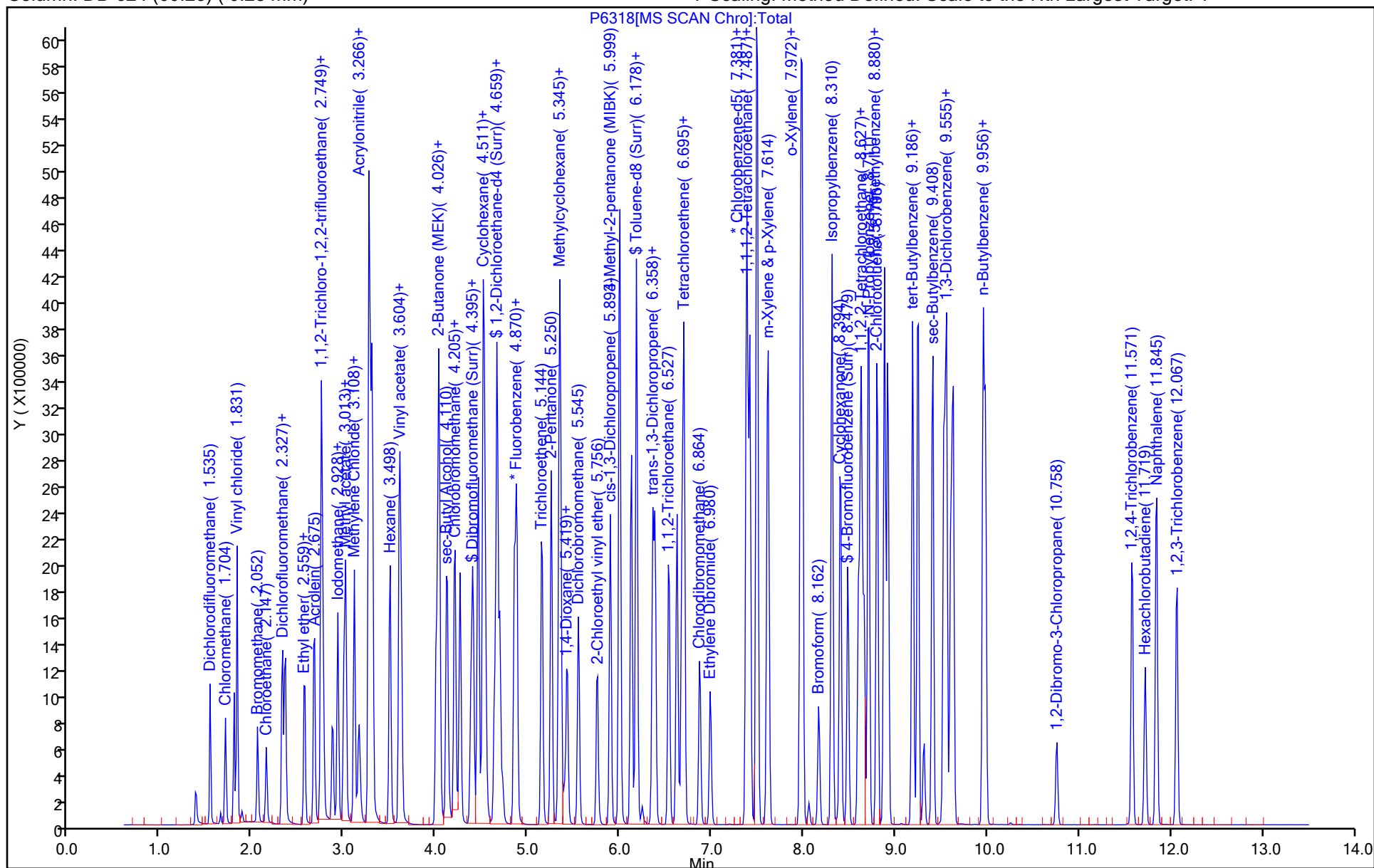
ALS Bottle#: 20

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 26-Jun-2021 18:50:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD200
 Misc. Info.: 280-0102712-022
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist: chrom-AQ_VMSP_8260*sub175
 Method: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:45:13 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

First Level Reviewer: seifertj

Date: 28-Jun-2021 07:55:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.869	4.879	-0.010	98	1808234	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.391	0.001	89	396747	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.607	0.001	96	549605	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	92	445106	50.0	50.5	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	98	562492	50.0	50.2	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1728272	50.0	50.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	83	631206	50.0	50.1	
10 Dichlorodifluoromethane	85	1.535	1.534	0.001	100	1229430	200.0	206.1	
11 Chloromethane	50	1.704	1.703	0.001	99	1206456	200.0	185.0	
12 Vinyl chloride	62	1.799	1.798	0.001	99	1220412	200.0	192.1	
14 Bromomethane	94	2.041	2.051	-0.010	91	105300	200.0	30.8	
15 Chloroethane	64	2.136	2.146	-0.010	99	689256	200.0	167.2	
16 Dichlorofluoromethane	67	2.316	2.326	-0.010	99	2075773	200.0	186.0	
17 Trichlorofluoromethane	101	2.347	2.357	-0.010	99	1716996	200.0	194.7	
19 Ethyl ether	59	2.558	2.568	-0.010	92	1058864	200.0	190.7	
21 Acrolein	56	2.675	2.674	0.000	99	2197736	1975.0	1897.7	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.748	2.748	0.000	71	786251	200.0	232.7	
22 1,1-Dichloroethene	96	2.748	2.748	0.000	98	1079543	200.0	224.4	
24 Acetone	43	2.769	2.769	0.000	100	1745331	800.0	737.2	
26 Iodomethane	142	2.864	2.874	-0.010	100	1456651	200.0	200.3	
27 Carbon disulfide	76	2.928	2.927	0.001	100	3534331	200.0	207.9	
29 Methyl acetate	43	2.991	2.990	0.001	98	2218319	400.0	363.9	
30 3-Chloro-1-propene	41	3.012	3.011	0.001	89	1780026	200.0	200.9	
31 Methylene Chloride	84	3.107	3.106	0.001	93	1287644	200.0	185.6	
32 2-Methyl-2-propanol	59	3.181	3.159	0.022	99	1682123	2000.0	1871.4	
33 Acrylonitrile	53	3.265	3.265	0.000	97	5514227	2000.0	1814.5	
34 Methyl tert-butyl ether	73	3.287	3.286	0.001	96	3957537	200.0	194.4	
35 trans-1,2-Dichloroethene	96	3.308	3.307	0.001	97	1239651	200.0	209.4	
36 Hexane	57	3.498	3.497	0.001	93	1626078	200.0	225.2	
38 Vinyl acetate	43	3.593	3.602	-0.009	99	5862228	400.0	369.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 1,1-Dichloroethane	63	3.614	3.613	0.001	97	2361915	200.0	204.8	
44 2-Butanone (MEK)	43	4.004	4.003	0.001	99	2755222	800.0	728.5	
47 cis-1,2-Dichloroethene	96	4.025	4.025	0.000	87	1379106	200.0	203.1	
48 2,2-Dichloropropane	77	4.036	4.035	0.001	89	2082696	200.0	216.9	
50 sec-Butyl Alcohol	45	4.131	4.109	0.022	99	4123632	4800.0	4550.5	
52 Tetrahydrofuran	42	4.205	4.204	0.001	86	927640	400.0	369.9	
53 Chlorobromomethane	128	4.194	4.204	-0.010	97	593407	200.0	188.4	
54 Chloroform	83	4.257	4.257	0.000	97	2306713	200.0	201.6	
55 1,1,1-Trichloroethane	97	4.395	4.394	0.001	98	2044651	200.0	217.6	
56 Cyclohexane	56	4.458	4.457	0.001	91	2232580	200.0	223.1	
57 1,1-Dichloropropene	75	4.511	4.510	0.001	94	1842562	200.0	209.5	
59 Carbon tetrachloride	117	4.511	4.520	-0.009	98	1646407	200.0	229.6	
58 Isobutyl alcohol	41	4.542	4.531	0.011	93	1336083	5000.0	4791.9	
60 Benzene	78	4.658	4.658	0.000	97	5189712	200.0	199.2	
61 1,2-Dichloroethane	62	4.690	4.689	0.001	97	1892357	200.0	190.3	
66 n-Heptane	43	4.848	4.848	0.000	91	1405078	200.0	207.8	
67 Trichloroethene	95	5.144	5.154	-0.010	96	1340393	200.0	213.5	
68 2-Pentanone	43	5.249	5.249	0.000	98	4701675	640.0	584.6	
69 Methylcyclohexane	55	5.334	5.344	-0.010	93	1638915	200.0	219.6	
70 1,2-Dichloropropane	63	5.355	5.354	0.001	93	1363826	200.0	196.3	
72 1,4-Dioxane	88	5.408	5.396	0.012	95	389455	4000.0	3756.0	
73 Dibromomethane	93	5.418	5.428	-0.010	91	870686	200.0	198.1	
74 Dichlorobromomethane	83	5.545	5.544	0.001	98	1779873	200.0	208.8	
76 2-Chloroethyl vinyl ether	63	5.756	5.755	0.001	93	978451	200.0	190.4	
77 cis-1,3-Dichloropropene	75	5.893	5.892	0.001	93	2246945	200.0	207.7	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.998	0.001	96	5466120	800.0	740.0	
79 Toluene	91	6.178	6.177	0.001	98	5538271	200.0	196.9	
80 trans-1,3-Dichloropropene	75	6.357	6.357	0.000	97	2116822	200.0	203.5	
81 Ethyl methacrylate	69	6.379	6.378	0.001	88	1975355	200.0	198.6	
82 1,1,2-Trichloroethane	97	6.537	6.536	0.001	94	1129065	200.0	194.7	
83 Tetrachloroethene	164	6.621	6.621	0.001	91	918674	200.0	220.6	
84 1,3-Dichloropropane	76	6.674	6.673	0.001	95	2093869	200.0	196.3	
85 2-Hexanone	43	6.695	6.694	0.001	95	3952601	800.0	747.4	
86 Chlorodibromomethane	129	6.864	6.863	0.001	90	1199297	200.0	215.5	
88 Ethylene Dibromide	107	6.980	6.979	0.001	97	1228842	200.0	199.1	
89 1-Chlorohexane	91	7.381	7.380	0.001	98	1881090	160.0	165.6	
90 Chlorobenzene	112	7.413	7.412	0.001	91	3314864	200.0	198.1	
91 1,1,1,2-Tetrachloroethane	131	7.487	7.486	0.001	92	1165627	200.0	210.1	
92 Ethylbenzene	106	7.497	7.496	0.001	99	1859740	200.0	205.8	
93 m-Xylene & p-Xylene	106	7.613	7.612	0.001	100	2279994	200.0	205.9	
94 o-Xylene	106	7.972	7.971	0.001	98	2160528	200.0	203.2	
95 Styrene	104	7.983	7.982	0.001	93	3778548	200.0	202.5	
96 Bromoform	173	8.162	8.161	0.001	92	770501	200.0	234.0	
97 Isopropylbenzene	105	8.310	8.309	0.001	97	5422495	200.0	205.3	
99 Cyclohexanone	55	8.405	8.404	0.001	93	2338315	8000.0	7499.8	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.594	0.001	96	1573657	200.0	192.3	
101 Bromobenzene	156	8.626	8.626	0.000	98	1290421	200.0	201.2	
102 trans-1,4-Dichloro-2-butene	53	8.637	8.636	0.001	82	492067	200.0	213.8	
103 1,2,3-Trichloropropane	110	8.658	8.657	0.001	83	478079	200.0	194.8	
104 N-Propylbenzene	120	8.711	8.710	0.001	99	1458869	200.0	207.2	
105 2-Chlorotoluene	126	8.806	8.805	0.001	95	1244668	200.0	201.9	
106 1,3,5-Trimethylbenzene	105	8.880	8.879	0.001	93	4291773	200.0	199.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Chlorotoluene	126	8.922	8.921	0.001	98	1298780	200.0	199.3	
108 tert-Butylbenzene	119	9.186	9.185	0.001	92	3468766	200.0	201.9	
109 1,2,4-Trimethylbenzene	105	9.249	9.248	0.001	98	4363200	200.0	197.0	
110 sec-Butylbenzene	134	9.407	9.406	0.001	95	999026	200.0	208.3	
111 1,3-Dichlorobenzene	146	9.534	9.533	0.001	97	2243343	200.0	196.8	
112 4-Isopropyltoluene	119	9.555	9.554	0.001	96	4132242	200.0	201.6	
113 1,4-Dichlorobenzene	146	9.629	9.628	0.001	91	2295582	200.0	190.9	
115 n-Butylbenzene	91	9.956	9.955	0.001	98	3735949	200.0	198.5	
116 1,2-Dichlorobenzene	146	9.977	9.976	0.001	94	2110173	200.0	192.1	
117 1,2-Dibromo-3-Chloropropane	157	10.758	10.757	0.001	78	313188	200.0	215.6	
119 1,2,4-Trichlorobenzene	180	11.581	11.580	0.001	93	1018760	200.0	172.0	
120 Hexachlorobutadiene	225	11.718	11.718	0.000	92	350419	200.0	180.6	
121 Naphthalene	128	11.845	11.844	0.001	98	3699669	200.0	177.6	
122 1,2,3-Trichlorobenzene	180	12.066	12.066	0.000	94	904593	200.0	184.0	
S 139 1,2-Dichloroethene, Total (URS)	95				0		400.0	412.5	
S 142 Xylenes, Total	106				0		400.0	409.1	
S 140 Trihalomethanes, Total	1				0		800.0	860.0	
S 143 Xylenes, Total (URS)	1				0		400.0	409.1	
S 146 Total BTEX	1				0			1011.1	
S 145 1,3-Dichloropropene, Total	1				0		400.0	411.2	
S 144 1,2-Dichloroethene, Total	1				0		400.0	412.5	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052

Amount Added: 100.00

Units: uL

MV-Gas A_00091

Amount Added: 40.00

Units: uL

MV-Main add A_00001

Amount Added: 100.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6319.D

Injection Date: 26-Jun-2021 18:50:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: STD200

Worklist Smp#: 22

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

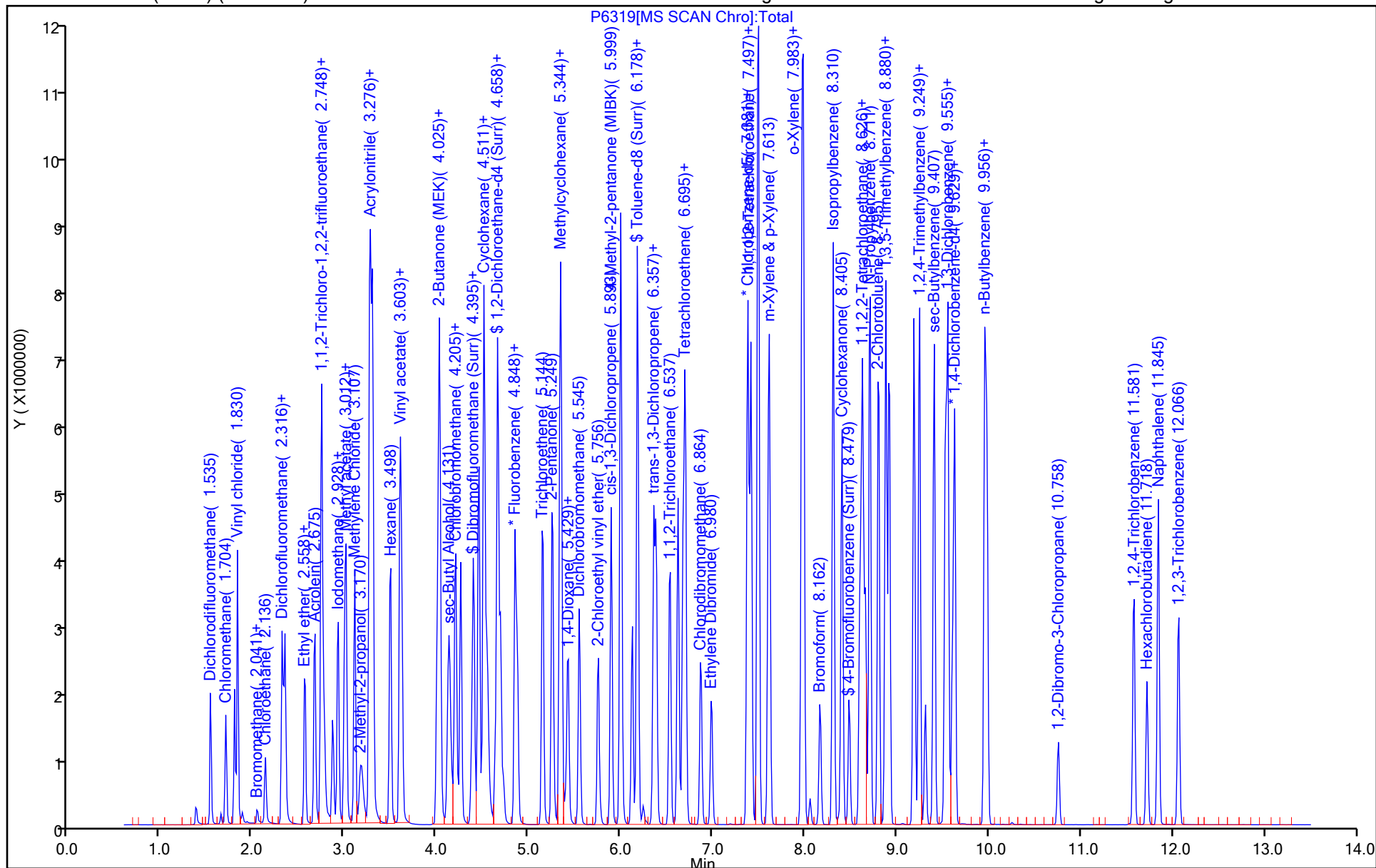
ALS Bottle#: 21

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



Calibration

/ Dichlorodifluoromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

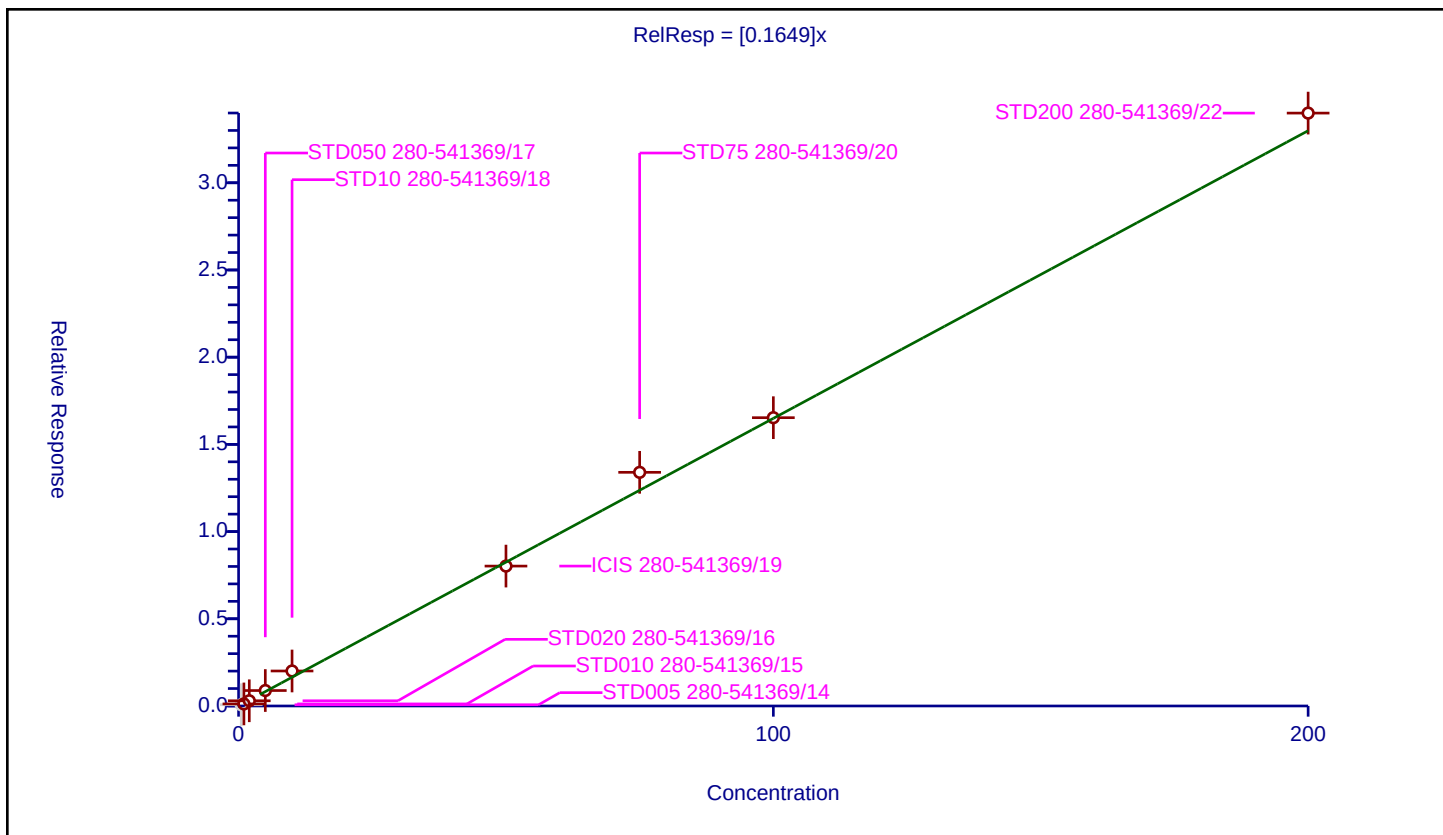
Curve Coefficients

Intercept: 0
Slope: 0.1649

Error Coefficients

Standard Error: 558000
Relative Standard Error: 14.7
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.070377	50.0	1730684.0	0.140754	N
2	STD010 280-541369/15	1.0	0.117928	50.0	1711633.0	0.117928	Y
3	STD020 280-541369/16	2.0	0.298489	50.0	1689508.0	0.149245	Y
4	STD050 280-541369/17	5.0	0.88581	50.0	1688341.0	0.177162	Y
5	STD10 280-541369/18	10.0	2.006989	50.0	1685610.0	0.200699	Y
6	ICIS 280-541369/19	50.0	8.022508	50.0	1736664.0	0.16045	Y
7	STD75 280-541369/20	75.0	13.397245	50.0	1791999.0	0.17863	Y
8	STD100 280-541369/21	100.0	16.530899	50.0	1794857.0	0.165309	Y
9	STD200 280-541369/22	200.0	33.995324	50.0	1808234.0	0.169977	Y



Calibration

/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

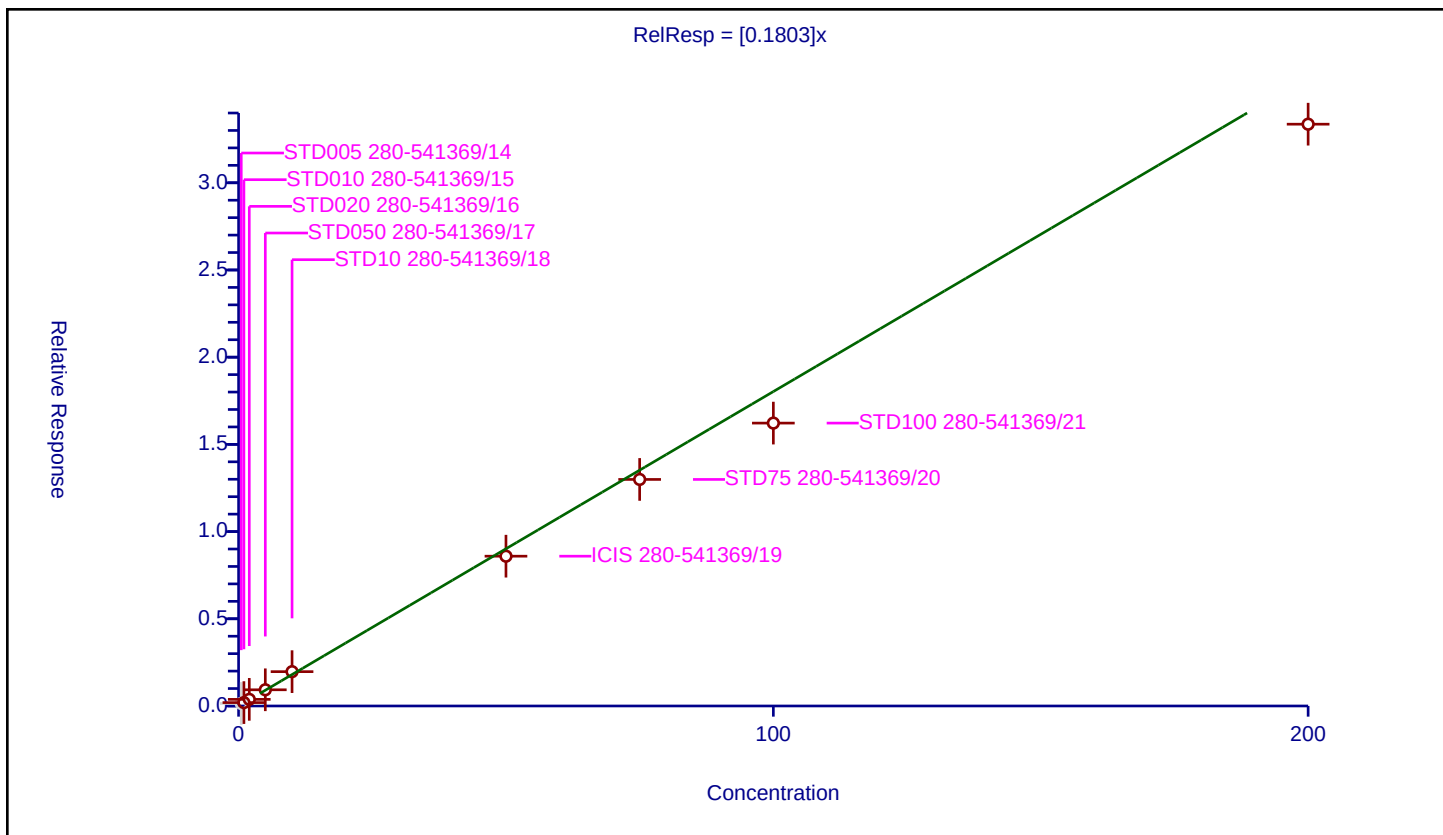
Curve Coefficients

Intercept: 0
 Slope: 0.1803

Error Coefficients

Standard Error: 548000
 Relative Standard Error: 7.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.144654	50.0	1730684.0	0.289308	N
2	STD010 280-541369/15	1.0	0.195369	50.0	1711633.0	0.195369	Y
3	STD020 280-541369/16	2.0	0.380584	50.0	1689508.0	0.190292	Y
4	STD050 280-541369/17	5.0	0.929048	50.0	1688341.0	0.18581	Y
5	STD10 280-541369/18	10.0	1.968575	50.0	1685610.0	0.196858	Y
6	ICIS 280-541369/19	50.0	8.588823	50.0	1736664.0	0.171776	Y
7	STD75 280-541369/20	75.0	12.989293	50.0	1791999.0	0.173191	Y
8	STD100 280-541369/21	100.0	16.219927	50.0	1794857.0	0.162199	Y
9	STD200 280-541369/22	200.0	33.360063	50.0	1808234.0	0.1668	Y



Calibration

/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

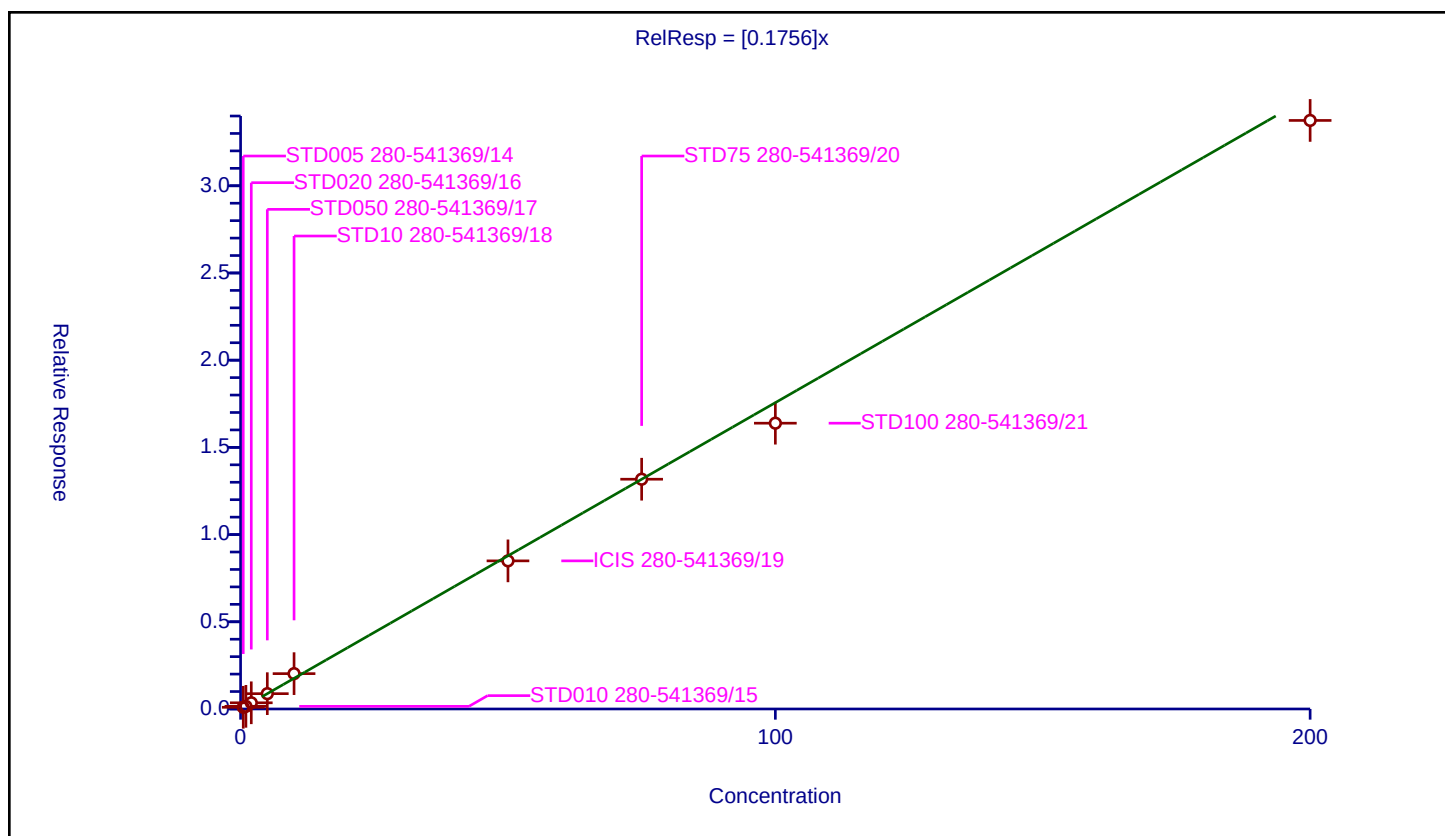
Curve Coefficients

Intercept: 0
 Slope: 0.1756

Error Coefficients

Standard Error: 519000
 Relative Standard Error: 8.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.09684	50.0	1730684.0	0.193681	Y
2	STD010 280-541369/15	1.0	0.152632	50.0	1711633.0	0.152632	Y
3	STD020 280-541369/16	2.0	0.355932	50.0	1689508.0	0.177966	Y
4	STD050 280-541369/17	5.0	0.878584	50.0	1688341.0	0.175717	Y
5	STD10 280-541369/18	10.0	2.027011	50.0	1685610.0	0.202701	Y
6	ICIS 280-541369/19	50.0	8.493094	50.0	1736664.0	0.169862	Y
7	STD75 280-541369/20	75.0	13.175091	50.0	1791999.0	0.175668	Y
8	STD100 280-541369/21	100.0	16.386877	50.0	1794857.0	0.163869	Y
9	STD200 280-541369/22	200.0	33.745964	50.0	1808234.0	0.16873	Y



Calibration

/ Bromomethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

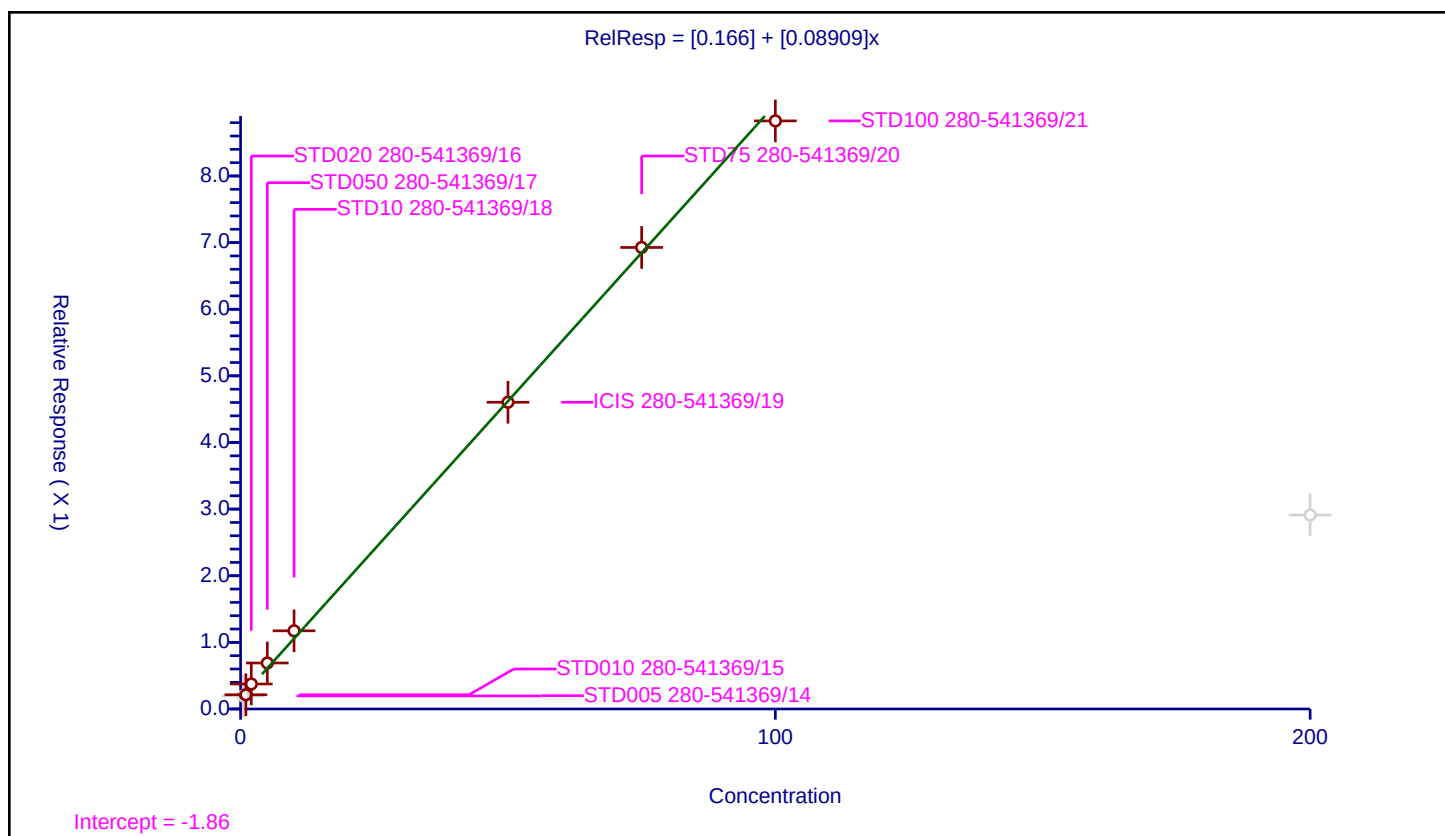
Curve Coefficients

Intercept: 0.166
 Slope: 0.08909

Error Coefficients

Standard Error: 195000
 Relative Standard Error: 24.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.196165	50.0	1730684.0	0.39233	N
2	STD010 280-541369/15	1.0	0.213977	50.0	1711633.0	0.213977	Y
3	STD020 280-541369/16	2.0	0.375228	50.0	1689508.0	0.187614	Y
4	STD050 280-541369/17	5.0	0.690056	50.0	1688341.0	0.138011	Y
5	STD10 280-541369/18	10.0	1.173225	50.0	1685610.0	0.117323	Y
6	ICIS 280-541369/19	50.0	4.603971	50.0	1736664.0	0.092079	Y
7	STD75 280-541369/20	75.0	6.927096	50.0	1791999.0	0.092361	Y
8	STD100 280-541369/21	100.0	8.826636	50.0	1794857.0	0.088266	Y
9	STD200 280-541369/22	200.0	2.911681	50.0	1808234.0	0.014558	N



Calibration

/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

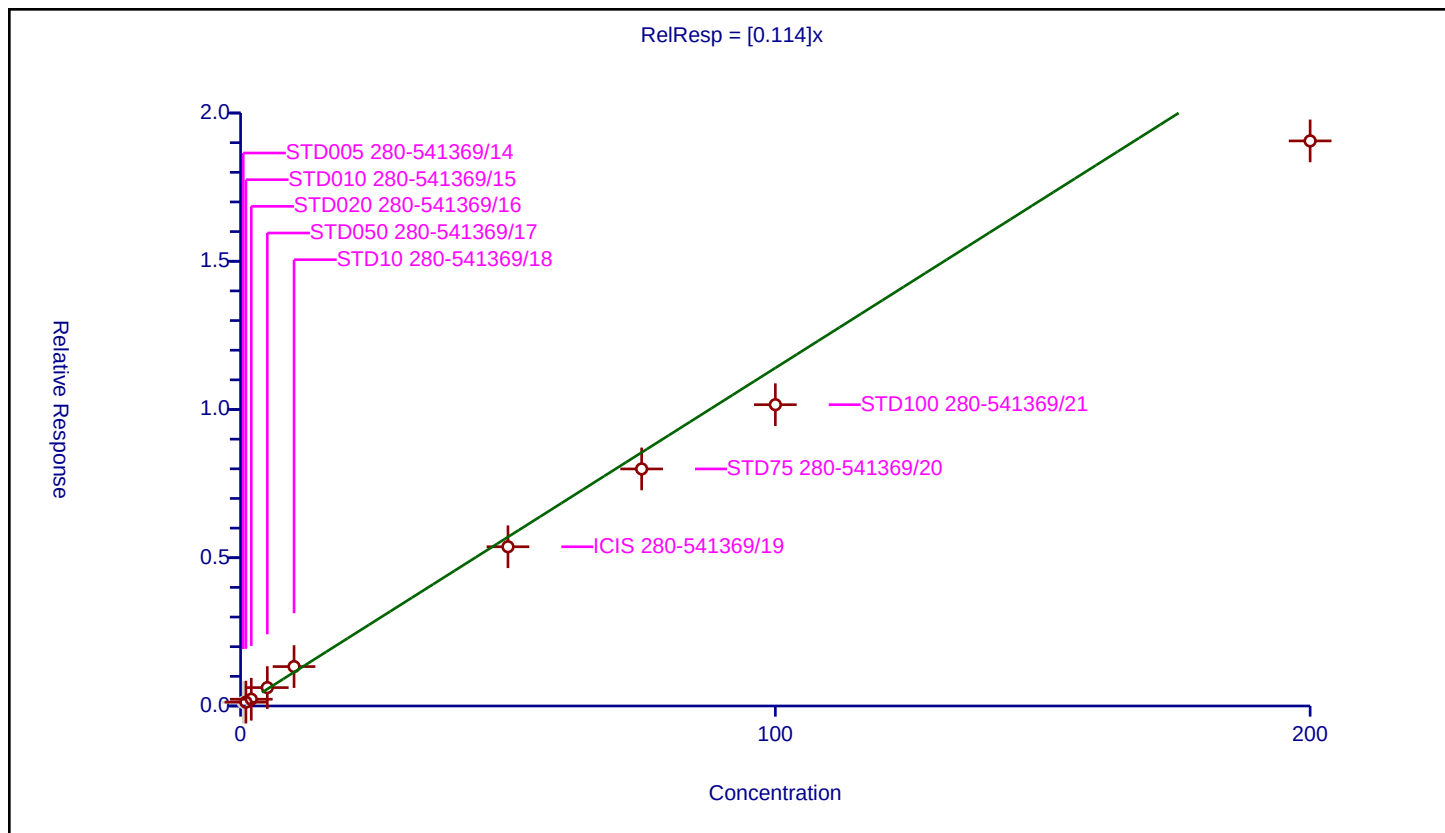
Curve Coefficients

Intercept: 0
 Slope: 0.114

Error Coefficients

Standard Error: 322000
 Relative Standard Error: 12.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.121715	50.0	1730684.0	0.24343	N
2	STD010 280-541369/15	1.0	0.129993	50.0	1711633.0	0.129993	Y
3	STD020 280-541369/16	2.0	0.228351	50.0	1689508.0	0.114175	Y
4	STD050 280-541369/17	5.0	0.620402	50.0	1688341.0	0.12408	Y
5	STD10 280-541369/18	10.0	1.329341	50.0	1685610.0	0.132934	Y
6	ICIS 280-541369/19	50.0	5.371074	50.0	1736664.0	0.107421	Y
7	STD75 280-541369/20	75.0	7.995735	50.0	1791999.0	0.10661	Y
8	STD100 280-541369/21	100.0	10.161952	50.0	1794857.0	0.10162	Y
9	STD200 280-541369/22	200.0	19.058817	50.0	1808234.0	0.095294	Y



Calibration

/ Dichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

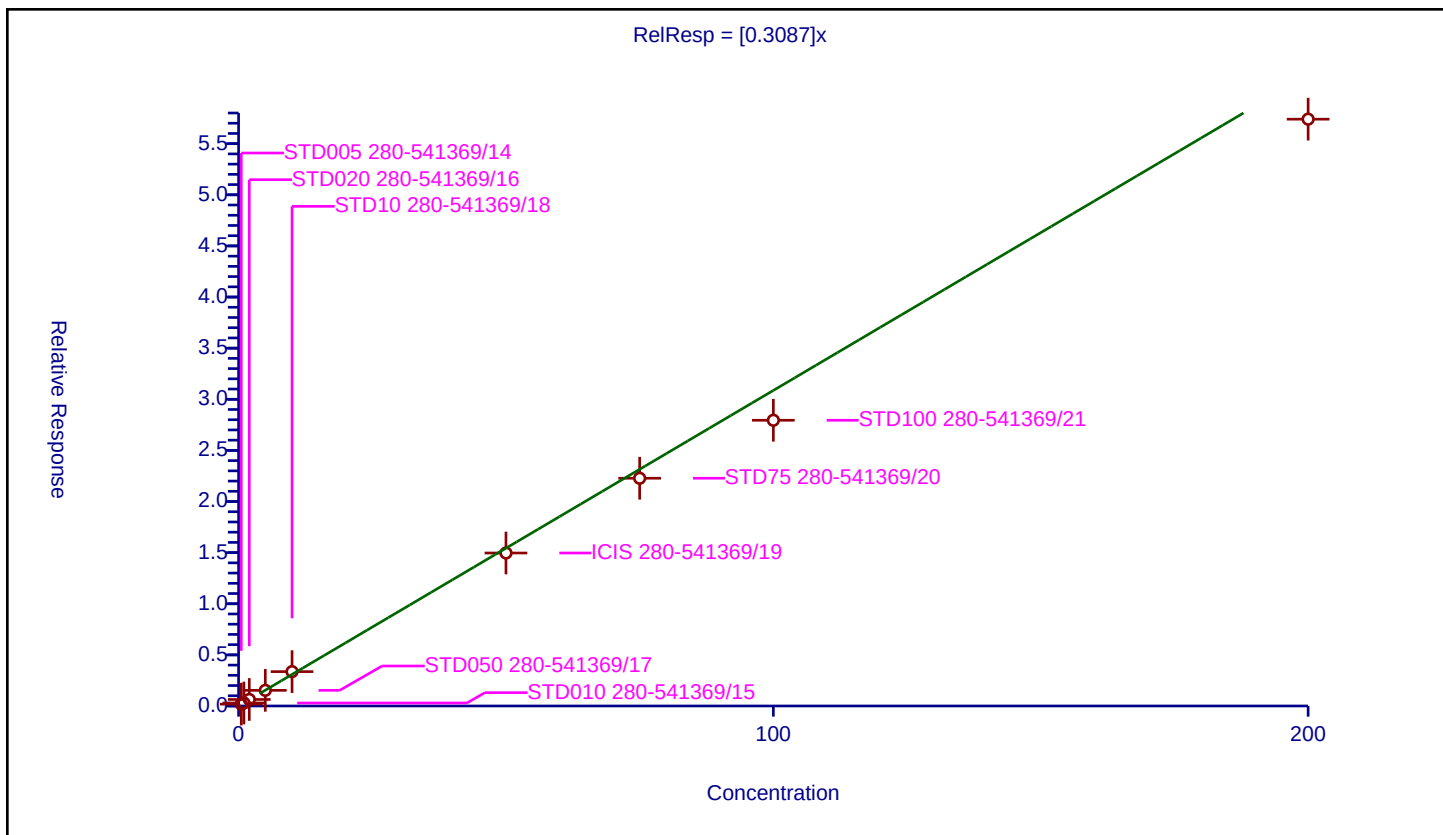
Curve Coefficients

Intercept: 0
 Slope: 0.3087

Error Coefficients

Standard Error: 883000
 Relative Standard Error: 8.3
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.180073	50.0	1730684.0	0.360147	Y
2	STD010 280-541369/15	1.0	0.293813	50.0	1711633.0	0.293813	Y
3	STD020 280-541369/16	2.0	0.637789	50.0	1689508.0	0.318895	Y
4	STD050 280-541369/17	5.0	1.530585	50.0	1688341.0	0.306117	Y
5	STD10 280-541369/18	10.0	3.361899	50.0	1685610.0	0.33619	Y
6	ICIS 280-541369/19	50.0	14.962681	50.0	1736664.0	0.299254	Y
7	STD75 280-541369/20	75.0	22.275487	50.0	1791999.0	0.297006	Y
8	STD100 280-541369/21	100.0	27.947714	50.0	1794857.0	0.279477	Y
9	STD200 280-541369/22	200.0	57.397798	50.0	1808234.0	0.286989	Y



Calibration

/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

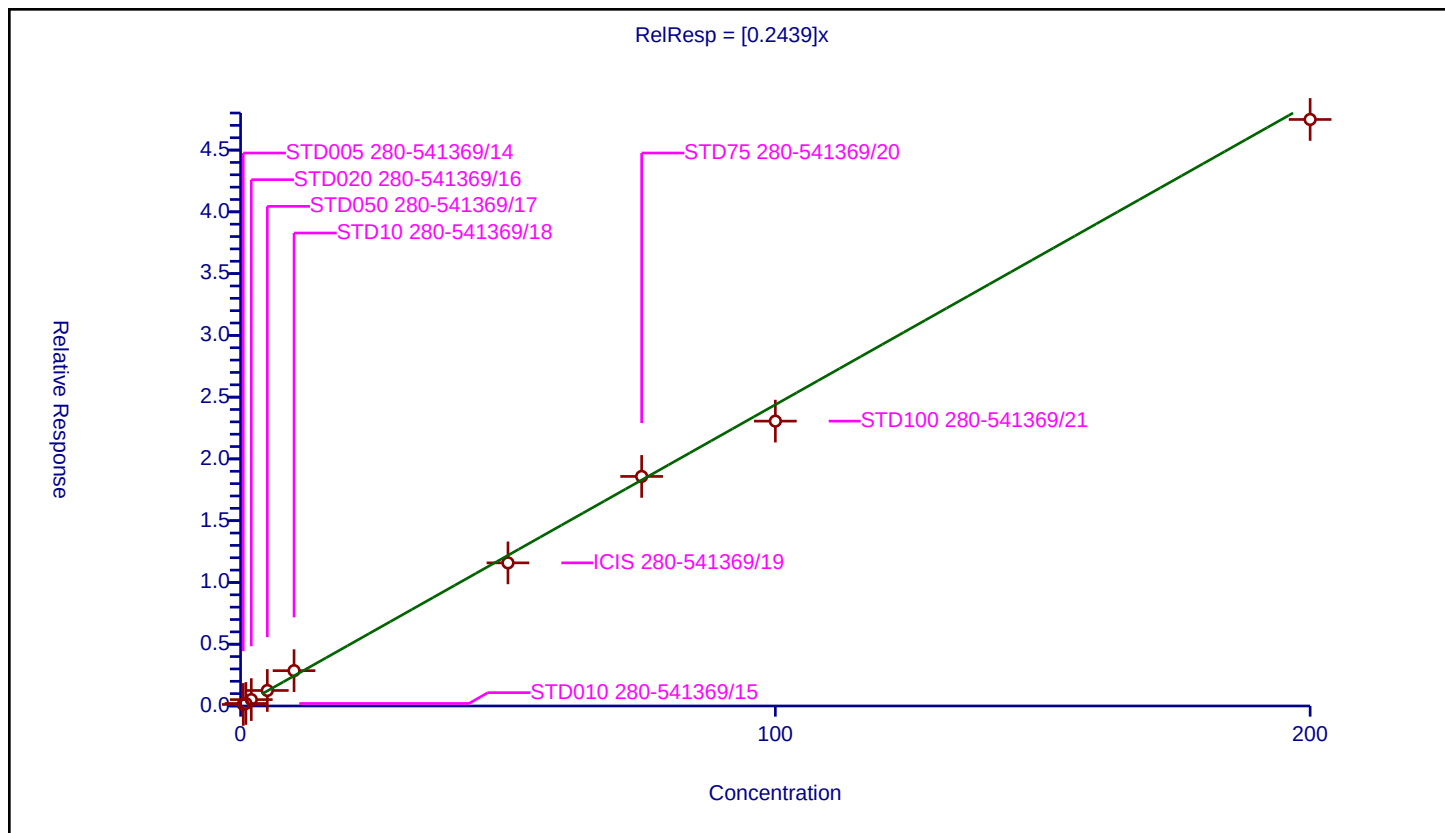
Curve Coefficients

Intercept: 0
 Slope: 0.2439

Error Coefficients

Standard Error: 729000
 Relative Standard Error: 9.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.123968	50.0	1730684.0	0.247937	Y
2	STD010 280-541369/15	1.0	0.203519	50.0	1711633.0	0.203519	Y
3	STD020 280-541369/16	2.0	0.517902	50.0	1689508.0	0.258951	Y
4	STD050 280-541369/17	5.0	1.255848	50.0	1688341.0	0.25117	Y
5	STD10 280-541369/18	10.0	2.859588	50.0	1685610.0	0.285959	Y
6	ICIS 280-541369/19	50.0	11.586265	50.0	1736664.0	0.231725	Y
7	STD75 280-541369/20	75.0	18.583325	50.0	1791999.0	0.247778	Y
8	STD100 280-541369/21	100.0	23.059469	50.0	1794857.0	0.230595	Y
9	STD200 280-541369/22	200.0	47.477152	50.0	1808234.0	0.237386	Y



Calibration

/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

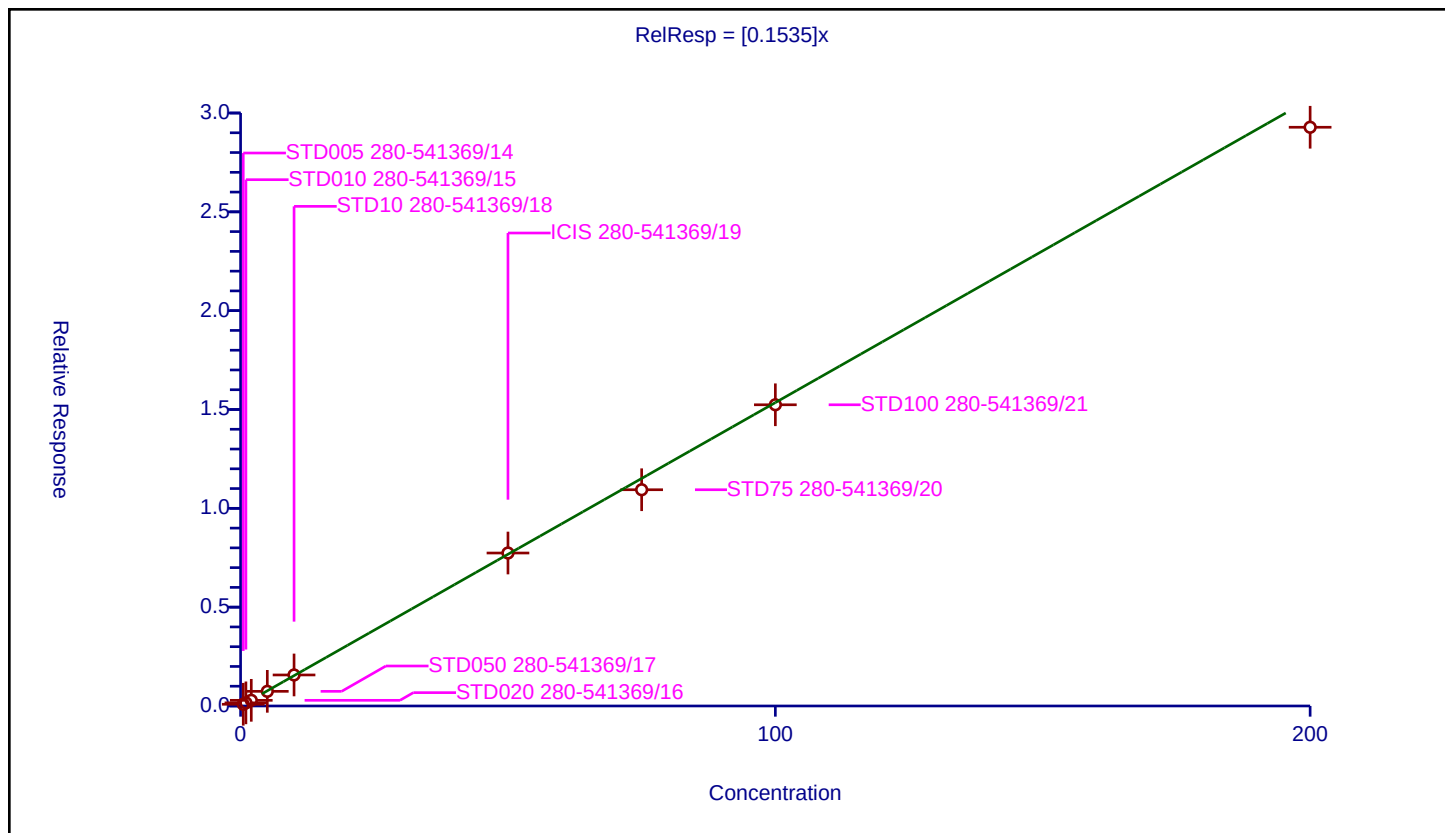
Curve Coefficients

Intercept: 0
 Slope: 0.1535

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 6.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.08722	50.0	1730684.0	0.17444	Y
2	STD010 280-541369/15	1.0	0.159175	50.0	1711633.0	0.159175	Y
3	STD020 280-541369/16	2.0	0.286474	50.0	1689508.0	0.143237	Y
4	STD050 280-541369/17	5.0	0.741053	50.0	1688341.0	0.148211	Y
5	STD10 280-541369/18	10.0	1.569728	50.0	1685610.0	0.156973	Y
6	ICIS 280-541369/19	50.0	7.739666	50.0	1736664.0	0.154793	Y
7	STD75 280-541369/20	75.0	10.940492	50.0	1791999.0	0.145873	Y
8	STD100 280-541369/21	100.0	15.239236	50.0	1794857.0	0.152392	Y
9	STD200 280-541369/22	200.0	29.278954	50.0	1808234.0	0.146395	Y



Calibration

/ Acrolein

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

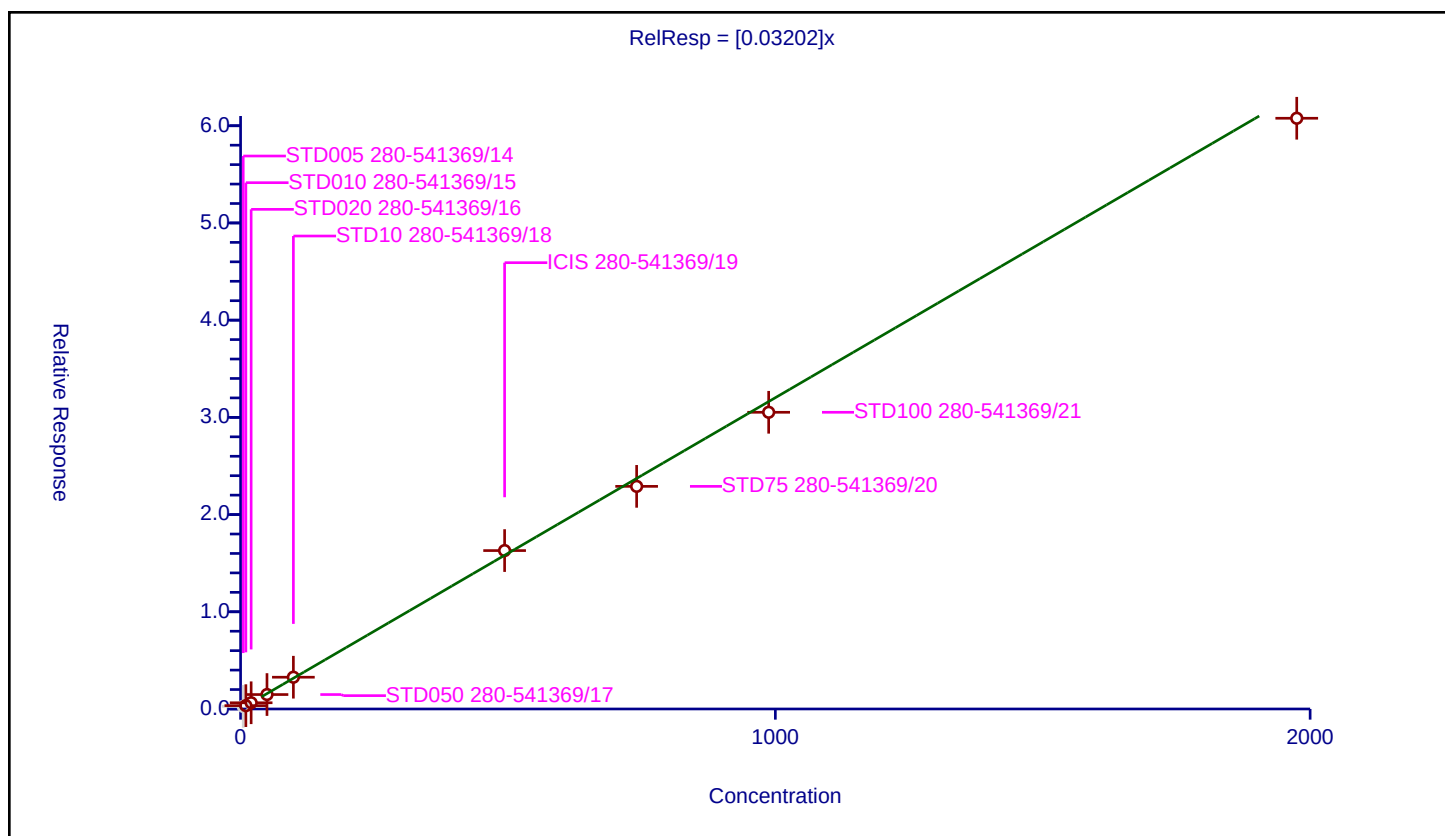
Curve Coefficients

Intercept: 0
Slope: 0.03202

Error Coefficients

Standard Error: 1000000
Relative Standard Error: 5.1
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	4.9375	0.266513	50.0	1730684.0	0.053977	N
2	STD010 280-541369/15	9.875	0.345314	50.0	1711633.0	0.034968	Y
3	STD020 280-541369/16	19.75	0.640837	50.0	1689508.0	0.032447	Y
4	STD050 280-541369/17	49.375	1.484386	50.0	1688341.0	0.030064	Y
5	STD10 280-541369/18	98.75	3.268876	50.0	1685610.0	0.033103	Y
6	ICIS 280-541369/19	493.75	16.297194	50.0	1736664.0	0.033007	Y
7	STD75 280-541369/20	740.625	22.901073	50.0	1791999.0	0.030921	Y
8	STD100 280-541369/21	987.5	30.521596	50.0	1794857.0	0.030908	Y
9	STD200 280-541369/22	1975.0	60.770232	50.0	1808234.0	0.03077	Y



Calibration

/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

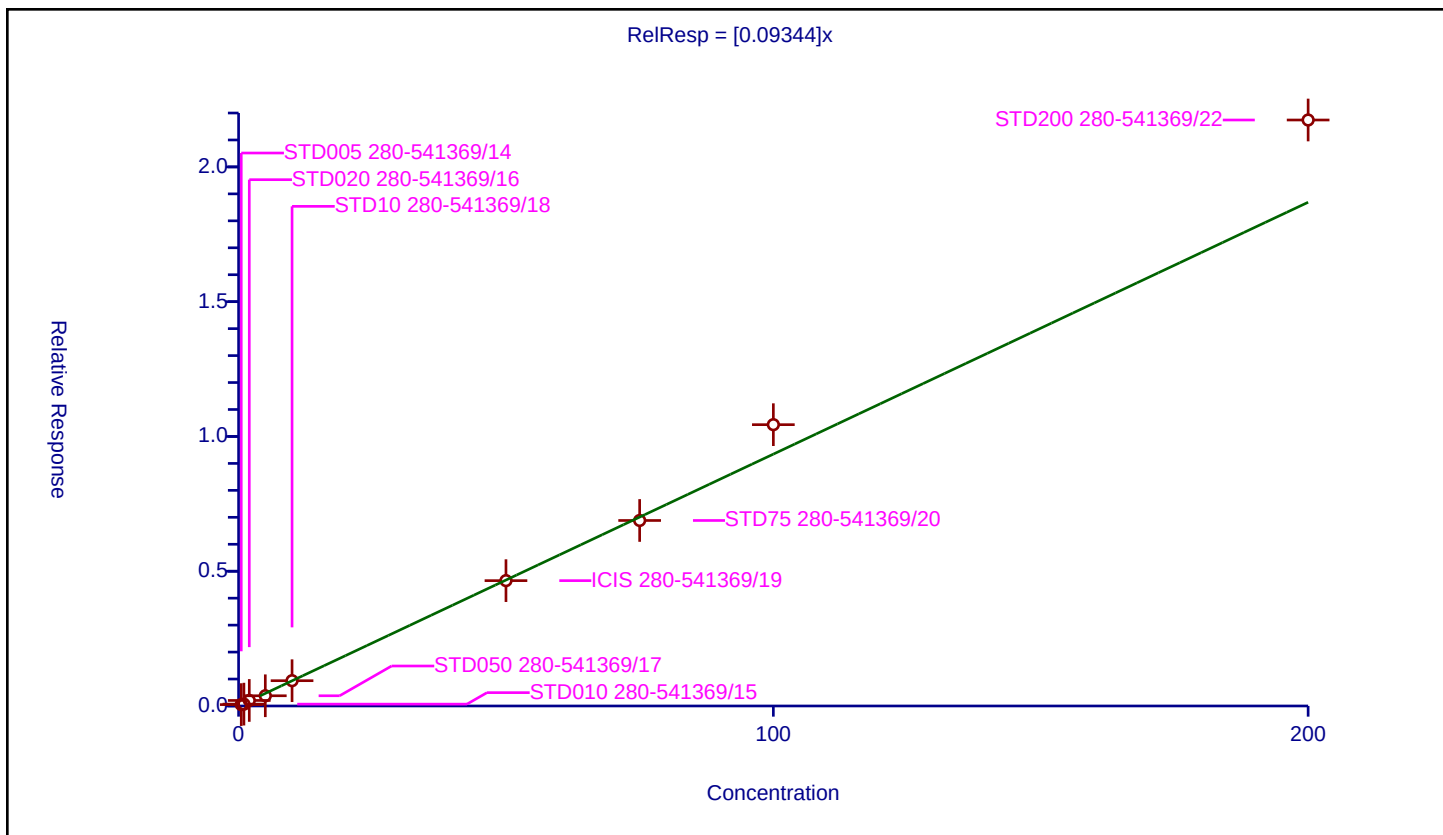
Curve Coefficients

Intercept: 0
 Slope: 0.09344

Error Coefficients

Standard Error: 325000
 Relative Standard Error: 14.5
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.051251	50.0	1730684.0	0.102503	Y
2	STD010 280-541369/15	1.0	0.068268	50.0	1711633.0	0.068268	Y
3	STD020 280-541369/16	2.0	0.205267	50.0	1689508.0	0.102633	Y
4	STD050 280-541369/17	5.0	0.379248	50.0	1688341.0	0.07585	Y
5	STD10 280-541369/18	10.0	0.93874	50.0	1685610.0	0.093874	Y
6	ICIS 280-541369/19	50.0	4.650957	50.0	1736664.0	0.093019	Y
7	STD75 280-541369/20	75.0	6.882844	50.0	1791999.0	0.091771	Y
8	STD100 280-541369/21	100.0	10.437517	50.0	1794857.0	0.104375	Y
9	STD200 280-541369/22	200.0	21.740853	50.0	1808234.0	0.108704	Y



Calibration

/ 1,1-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

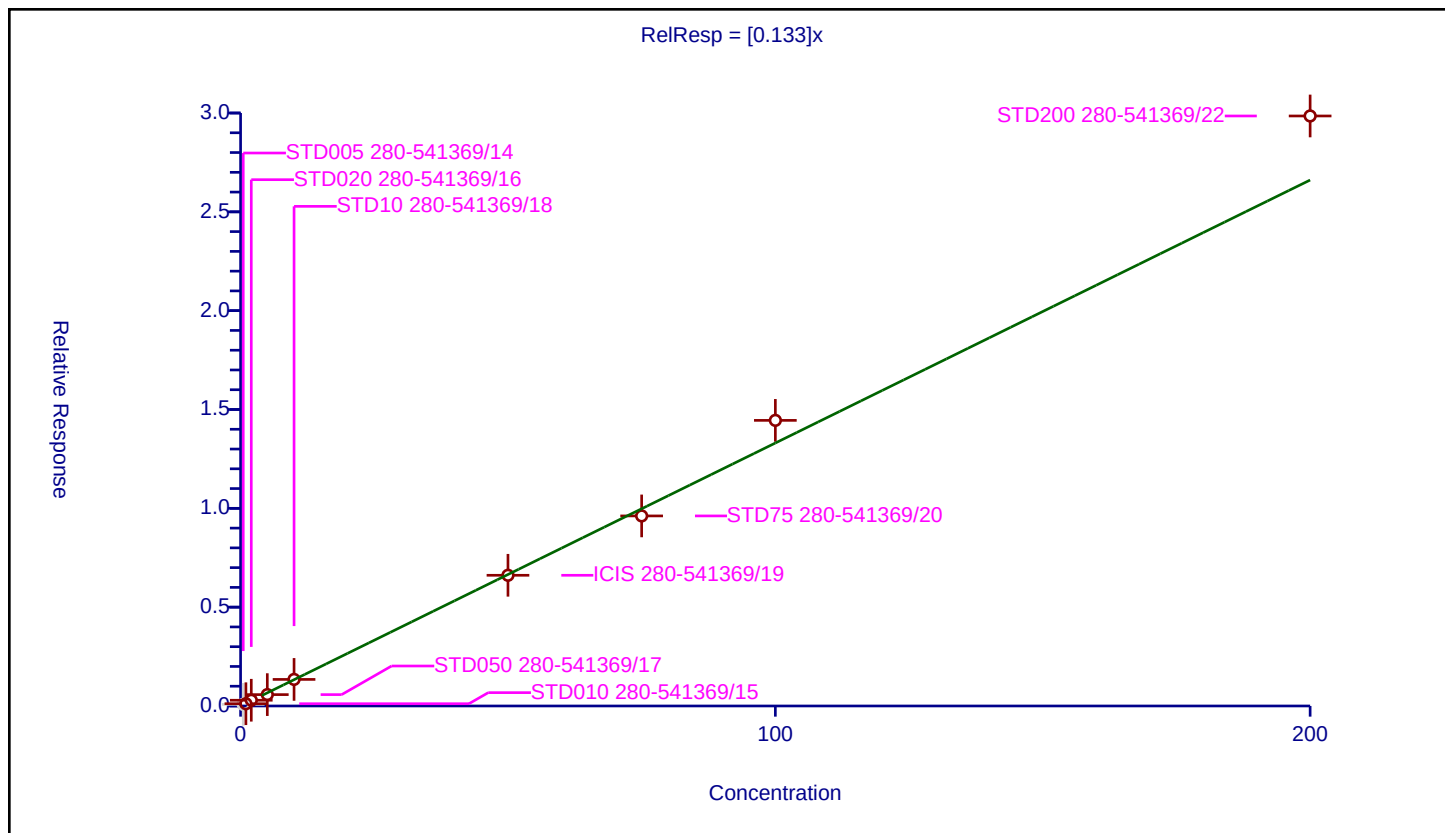
Curve Coefficients

Intercept: 0
 Slope: 0.133

Error Coefficients

Standard Error: 479000
 Relative Standard Error: 9.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.082222	50.0	1730684.0	0.164444	N
2	STD010 280-541369/15	1.0	0.115182	50.0	1711633.0	0.115182	Y
3	STD020 280-541369/16	2.0	0.290943	50.0	1689508.0	0.145471	Y
4	STD050 280-541369/17	5.0	0.57518	50.0	1688341.0	0.115036	Y
5	STD10 280-541369/18	10.0	1.34432	50.0	1685610.0	0.134432	Y
6	ICIS 280-541369/19	50.0	6.612131	50.0	1736664.0	0.132243	Y
7	STD75 280-541369/20	75.0	9.615519	50.0	1791999.0	0.128207	Y
8	STD100 280-541369/21	100.0	14.450316	50.0	1794857.0	0.144503	Y
9	STD200 280-541369/22	200.0	29.850755	50.0	1808234.0	0.149254	Y



Calibration

/ Acetone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

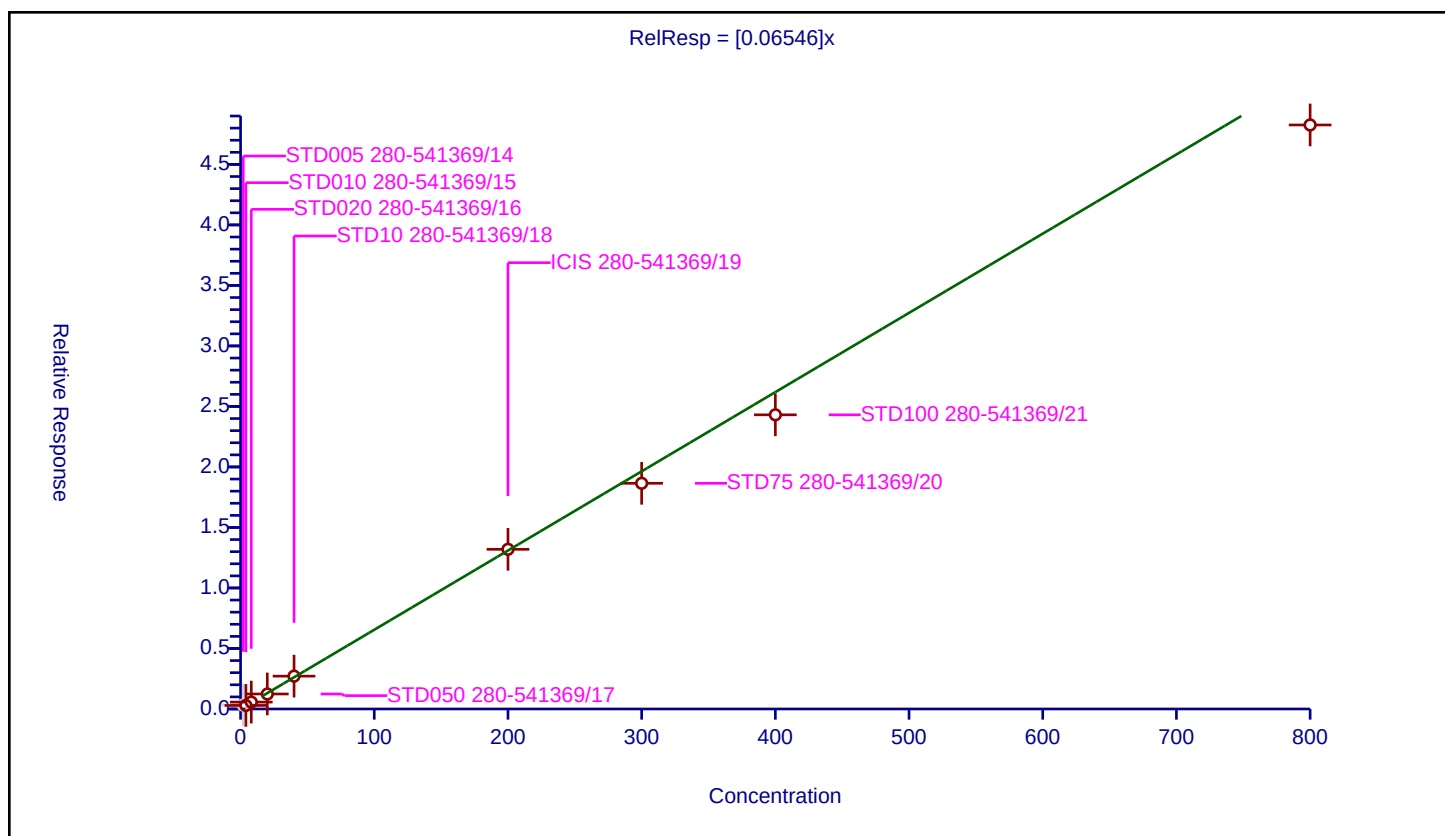
Curve Coefficients

Intercept: 0
 Slope: 0.06546

Error Coefficients

Standard Error: 800000
 Relative Standard Error: 7.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	2.0	0.323745	50.0	1730684.0	0.161872	N
2	STD010 280-541369/15	4.0	0.293229	50.0	1711633.0	0.073307	Y
3	STD020 280-541369/16	8.0	0.570699	50.0	1689508.0	0.071337	Y
4	STD050 280-541369/17	20.0	1.239323	50.0	1688341.0	0.061966	Y
5	STD10 280-541369/18	40.0	2.713914	50.0	1685610.0	0.067848	Y
6	ICIS 280-541369/19	200.0	13.194867	50.0	1736664.0	0.065974	Y
7	STD75 280-541369/20	300.0	18.649955	50.0	1791999.0	0.062167	Y
8	STD100 280-541369/21	400.0	24.308232	50.0	1794857.0	0.060771	Y
9	STD200 280-541369/22	800.0	48.260651	50.0	1808234.0	0.060326	Y



Calibration

/ Iodomethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

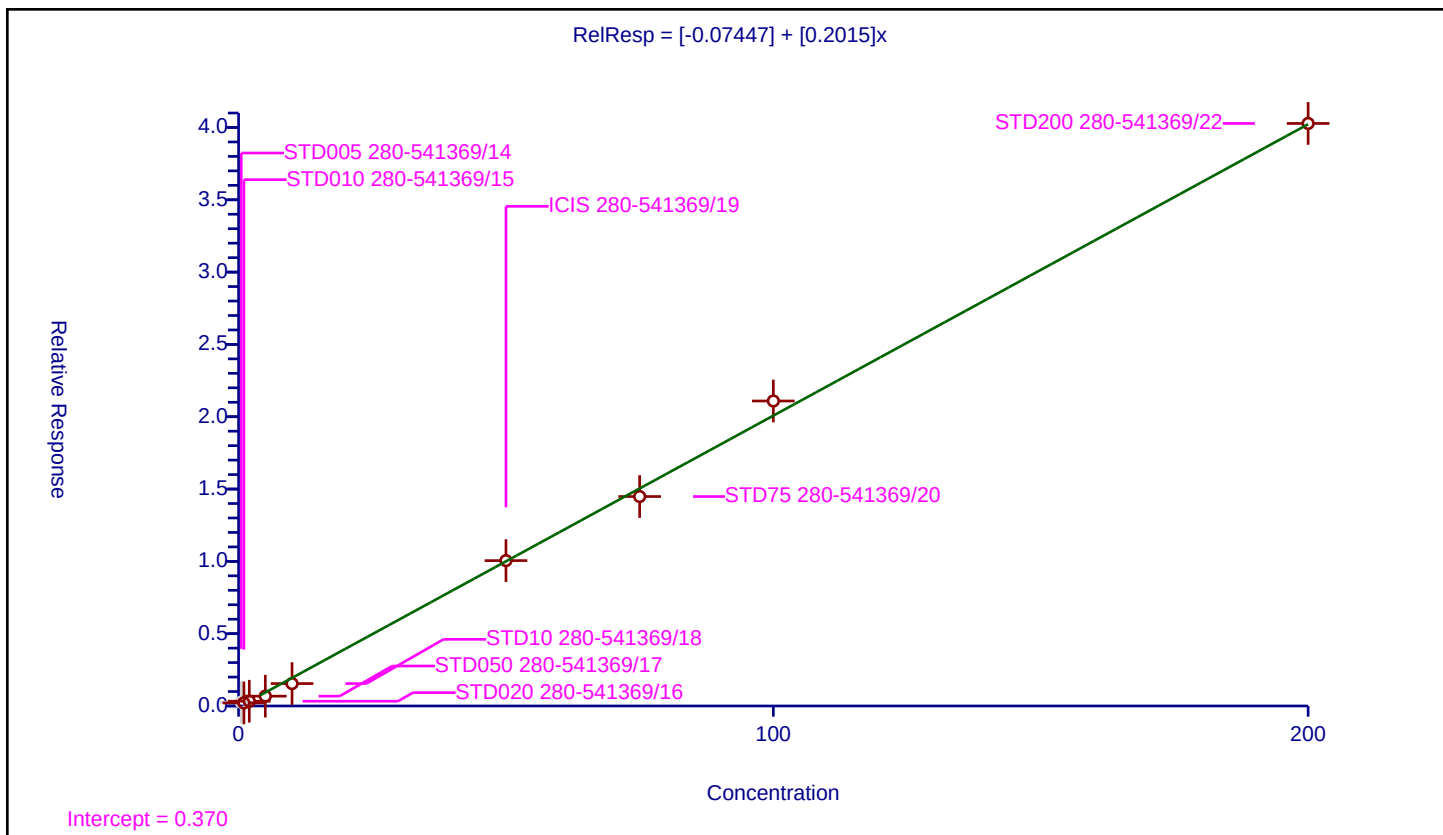
Curve Coefficients

Intercept: -0.07447
 Slope: 0.2015

Error Coefficients

Standard Error: 718000
 Relative Standard Error: 21.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.262757	50.0	1730684.0	0.525515	N
2	STD010 280-541369/15	1.0	0.212867	50.0	1711633.0	0.212867	Y
3	STD020 280-541369/16	2.0	0.328468	50.0	1689508.0	0.164234	Y
4	STD050 280-541369/17	5.0	0.67975	50.0	1688341.0	0.13595	Y
5	STD10 280-541369/18	10.0	1.549558	50.0	1685610.0	0.154956	Y
6	ICIS 280-541369/19	50.0	10.050678	50.0	1736664.0	0.201014	Y
7	STD75 280-541369/20	75.0	14.481565	50.0	1791999.0	0.193088	Y
8	STD100 280-541369/21	100.0	21.08948	50.0	1794857.0	0.210895	Y
9	STD200 280-541369/22	200.0	40.278277	50.0	1808234.0	0.201391	Y



Calibration

/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

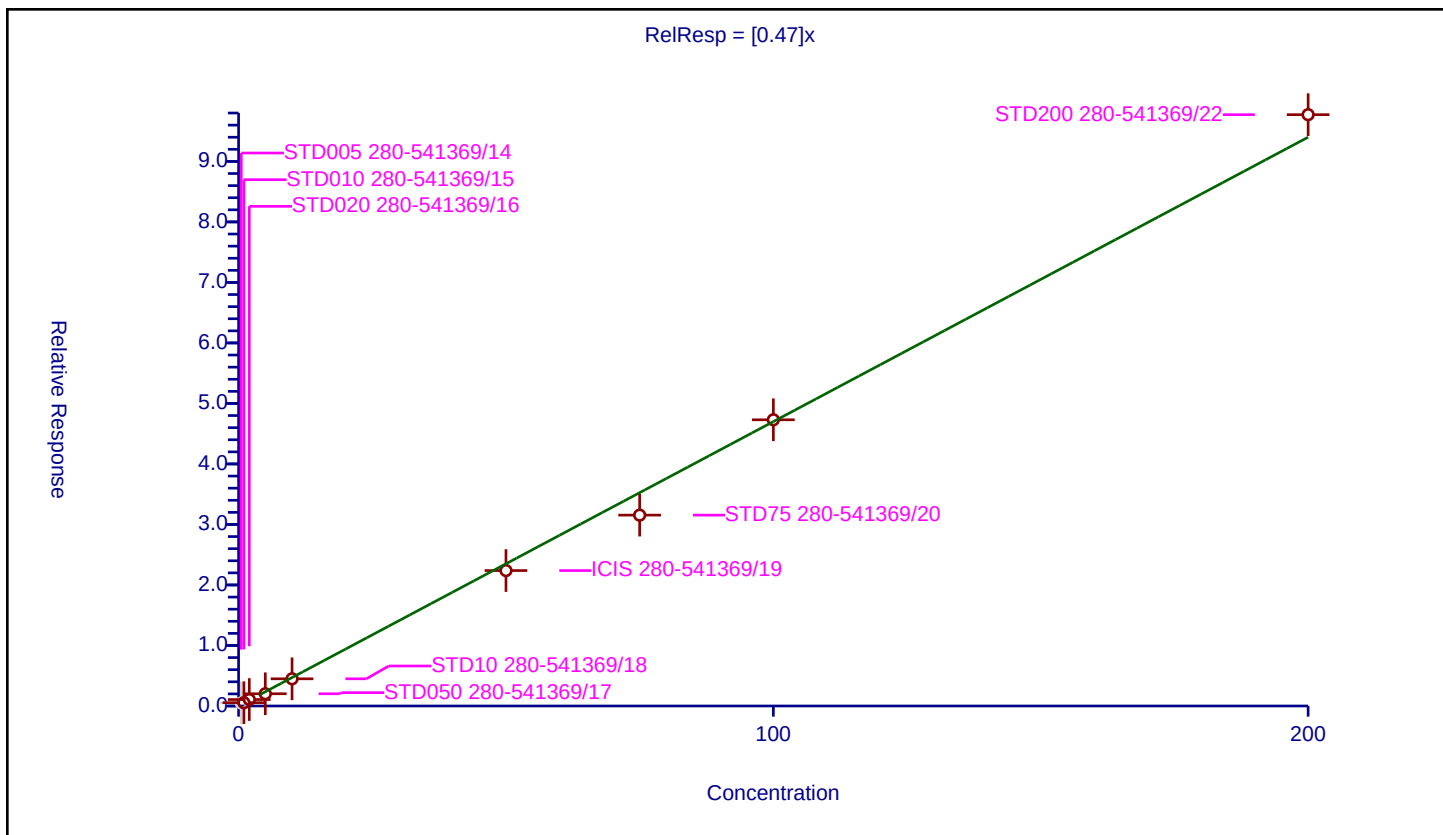
Curve Coefficients

Intercept: 0
 Slope: 0.47

Error Coefficients

Standard Error: 1570000
 Relative Standard Error: 10.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.505465	50.0	1730684.0	1.01093	N
2	STD010 280-541369/15	1.0	0.544305	50.0	1711633.0	0.544305	Y
3	STD020 280-541369/16	2.0	1.064422	50.0	1689508.0	0.532211	Y
4	STD050 280-541369/17	5.0	2.02237	50.0	1688341.0	0.404474	Y
5	STD10 280-541369/18	10.0	4.492676	50.0	1685610.0	0.449268	Y
6	ICIS 280-541369/19	50.0	22.379775	50.0	1736664.0	0.447596	Y
7	STD75 280-541369/20	75.0	31.543935	50.0	1791999.0	0.420586	Y
8	STD100 280-541369/21	100.0	47.301206	50.0	1794857.0	0.473012	Y
9	STD200 280-541369/22	200.0	97.728806	50.0	1808234.0	0.488644	Y



Calibration

/ Methyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

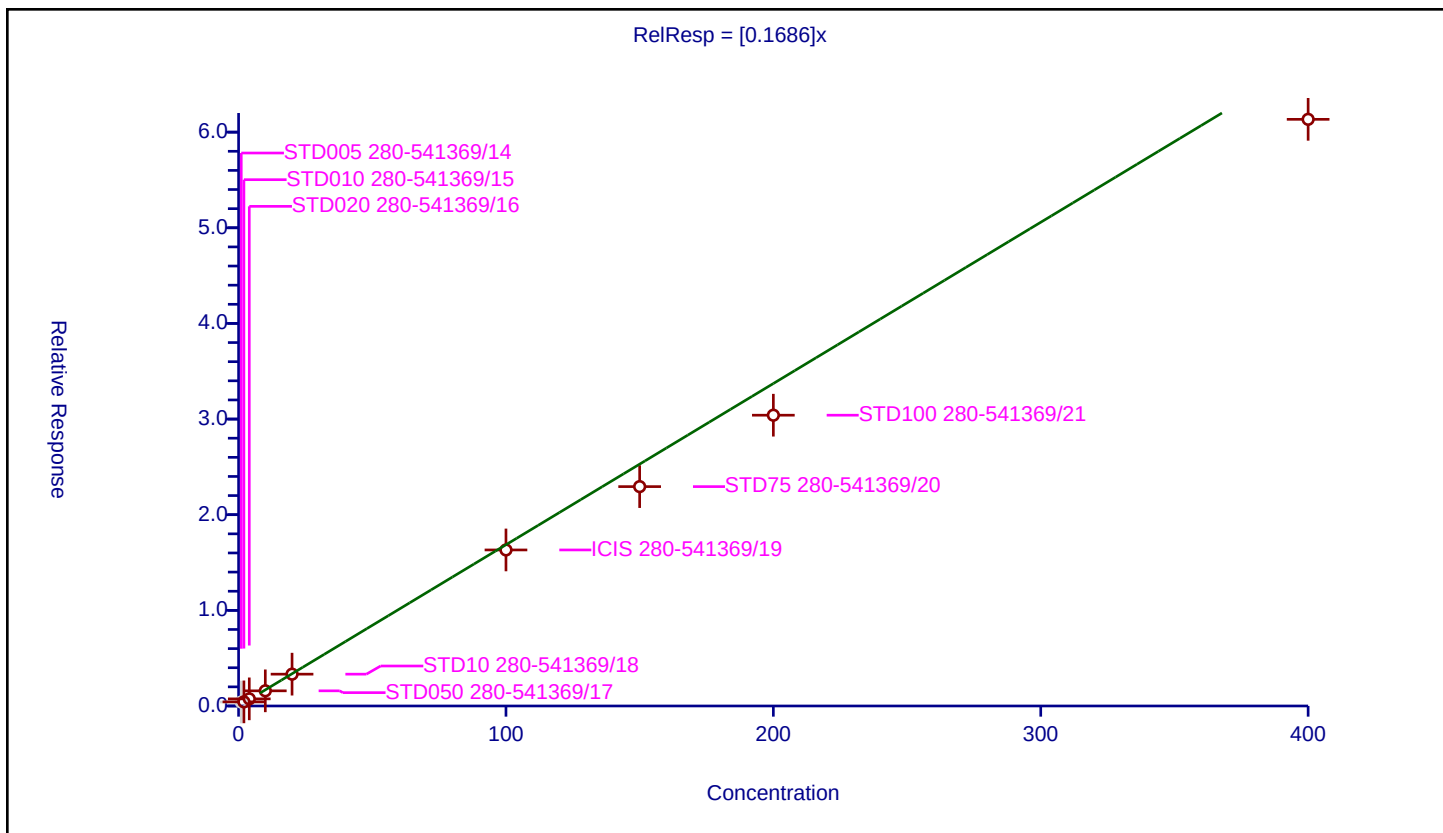
Curve Coefficients

Intercept: 0
 Slope: 0.1686

Error Coefficients

Standard Error: 1010000
 Relative Standard Error: 13.1
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	1.0	0.413854	50.0	1730684.0	0.413854	N
2	STD010 280-541369/15	2.0	0.431927	50.0	1711633.0	0.215963	Y
3	STD020 280-541369/16	4.0	0.744773	50.0	1689508.0	0.186193	Y
4	STD050 280-541369/17	10.0	1.586439	50.0	1688341.0	0.158644	Y
5	STD10 280-541369/18	20.0	3.32835	50.0	1685610.0	0.166417	Y
6	ICIS 280-541369/19	100.0	16.316167	50.0	1736664.0	0.163162	Y
7	STD75 280-541369/20	150.0	22.938489	50.0	1791999.0	0.152923	Y
8	STD100 280-541369/21	200.0	30.404428	50.0	1794857.0	0.152022	Y
9	STD200 280-541369/22	400.0	61.339379	50.0	1808234.0	0.153348	Y



Calibration

/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

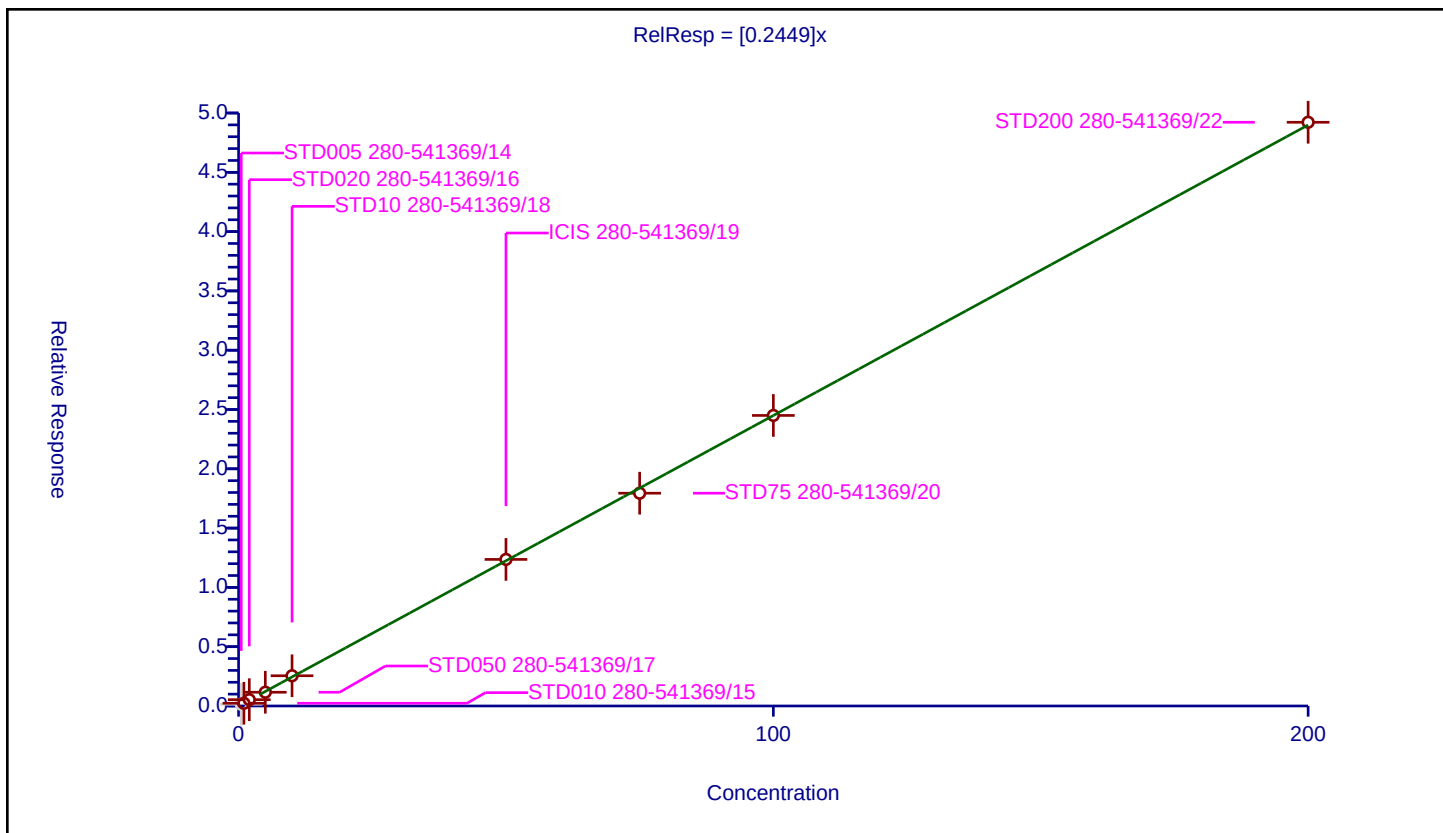
Curve Coefficients

Intercept: 0
 Slope: 0.2449

Error Coefficients

Standard Error: 806000
 Relative Standard Error: 4.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.147572	50.0	1730684.0	0.295143	N
2	STD010 280-541369/15	1.0	0.229956	50.0	1711633.0	0.229956	Y
3	STD020 280-541369/16	2.0	0.530717	50.0	1689508.0	0.265358	Y
4	STD050 280-541369/17	5.0	1.15957	50.0	1688341.0	0.231914	Y
5	STD10 280-541369/18	10.0	2.548692	50.0	1685610.0	0.254869	Y
6	ICIS 280-541369/19	50.0	12.35976	50.0	1736664.0	0.247195	Y
7	STD75 280-541369/20	75.0	17.941528	50.0	1791999.0	0.23922	Y
8	STD100 280-541369/21	100.0	24.498665	50.0	1794857.0	0.244987	Y
9	STD200 280-541369/22	200.0	49.220012	50.0	1808234.0	0.2461	Y



Calibration

/ Methylene Chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

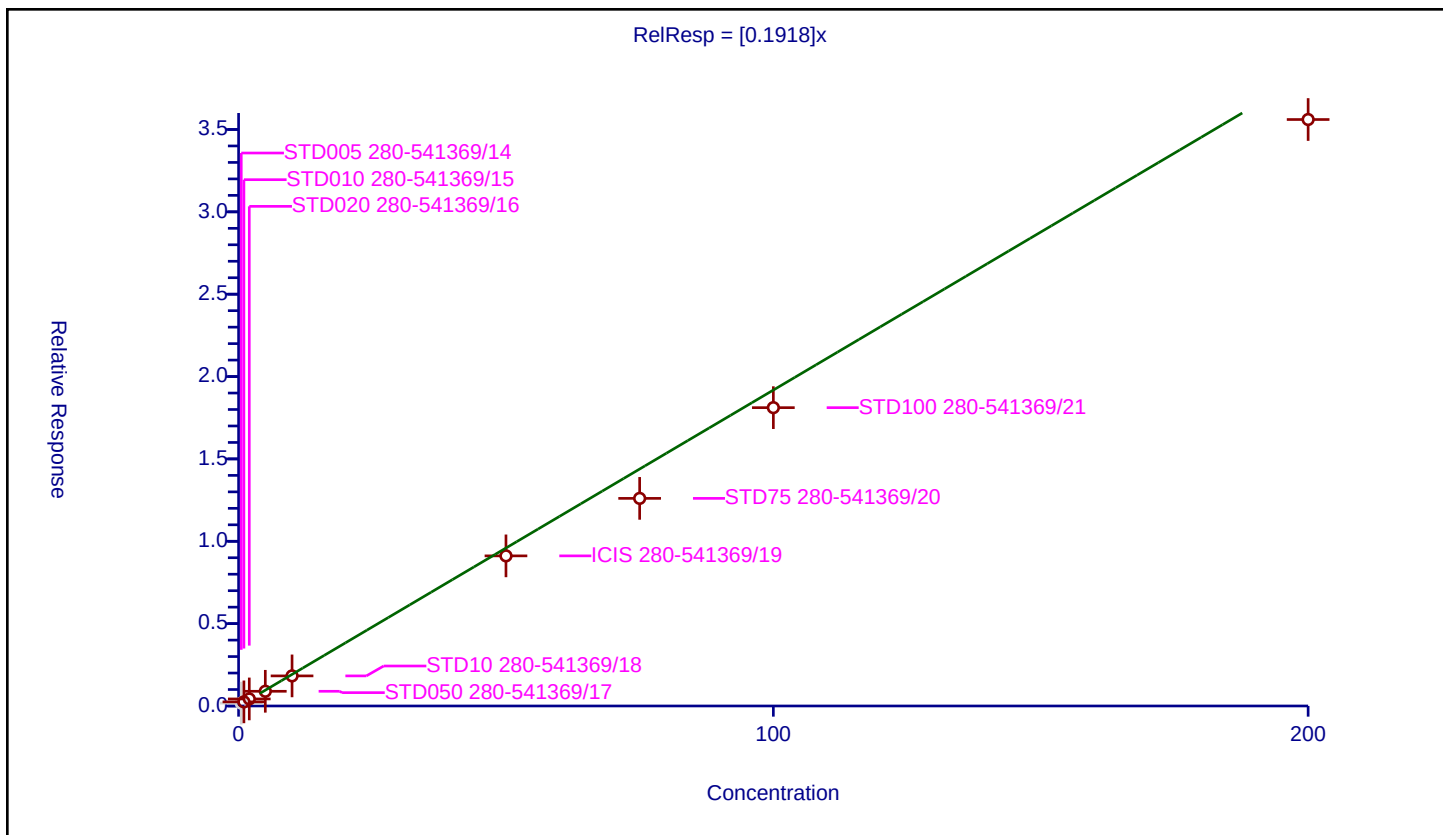
Curve Coefficients

Intercept: 0
 Slope: 0.1918

Error Coefficients

Standard Error: 584000
 Relative Standard Error: 14.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.17392	50.0	1730684.0	0.347839	N
2	STD010 280-541369/15	1.0	0.249323	50.0	1711633.0	0.249323	Y
3	STD020 280-541369/16	2.0	0.428498	50.0	1689508.0	0.214249	Y
4	STD050 280-541369/17	5.0	0.89354	50.0	1688341.0	0.178708	Y
5	STD10 280-541369/18	10.0	1.827113	50.0	1685610.0	0.182711	Y
6	ICIS 280-541369/19	50.0	9.113478	50.0	1736664.0	0.18227	Y
7	STD75 280-541369/20	75.0	12.604192	50.0	1791999.0	0.168056	Y
8	STD100 280-541369/21	100.0	18.112696	50.0	1794857.0	0.181127	Y
9	STD200 280-541369/22	200.0	35.605016	50.0	1808234.0	0.178025	Y



Calibration

/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

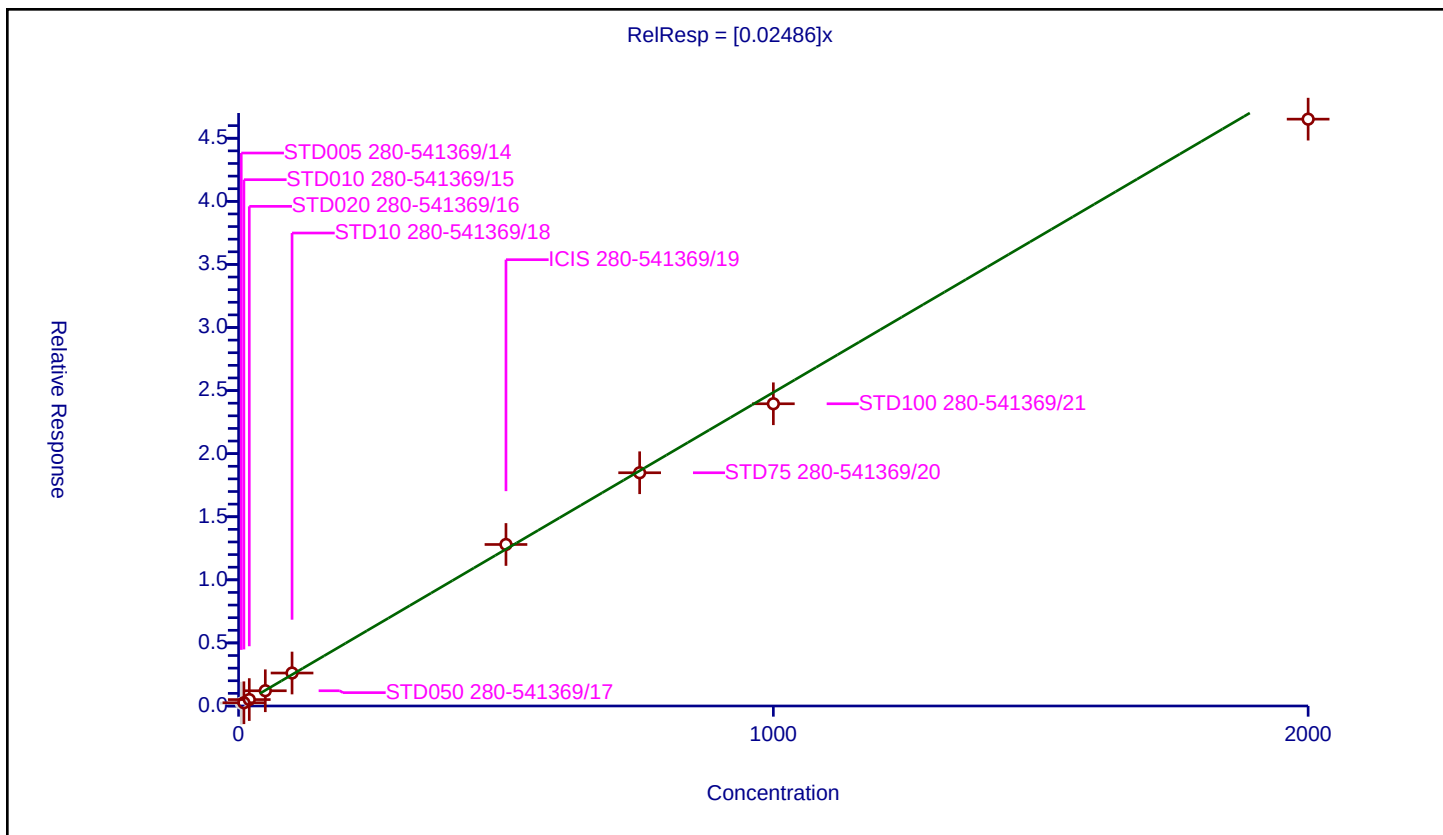
Curve Coefficients

Intercept: 0
 Slope: 0.02486

Error Coefficients

Standard Error: 776000
 Relative Standard Error: 4.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	5.0	0.222542	50.0	1730684.0	0.044508	N
2	STD010 280-541369/15	10.0	0.256188	50.0	1711633.0	0.025619	Y
3	STD020 280-541369/16	20.0	0.509231	50.0	1689508.0	0.025462	Y
4	STD050 280-541369/17	50.0	1.208553	50.0	1688341.0	0.024171	Y
5	STD10 280-541369/18	100.0	2.612526	50.0	1685610.0	0.026125	Y
6	ICIS 280-541369/19	500.0	12.801843	50.0	1736664.0	0.025604	Y
7	STD75 280-541369/20	750.0	18.486673	50.0	1791999.0	0.024649	Y
8	STD100 280-541369/21	1000.0	23.955836	50.0	1794857.0	0.023956	Y
9	STD200 280-541369/22	2000.0	46.512868	50.0	1808234.0	0.023256	Y



Calibration

/ Acrylonitrile

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

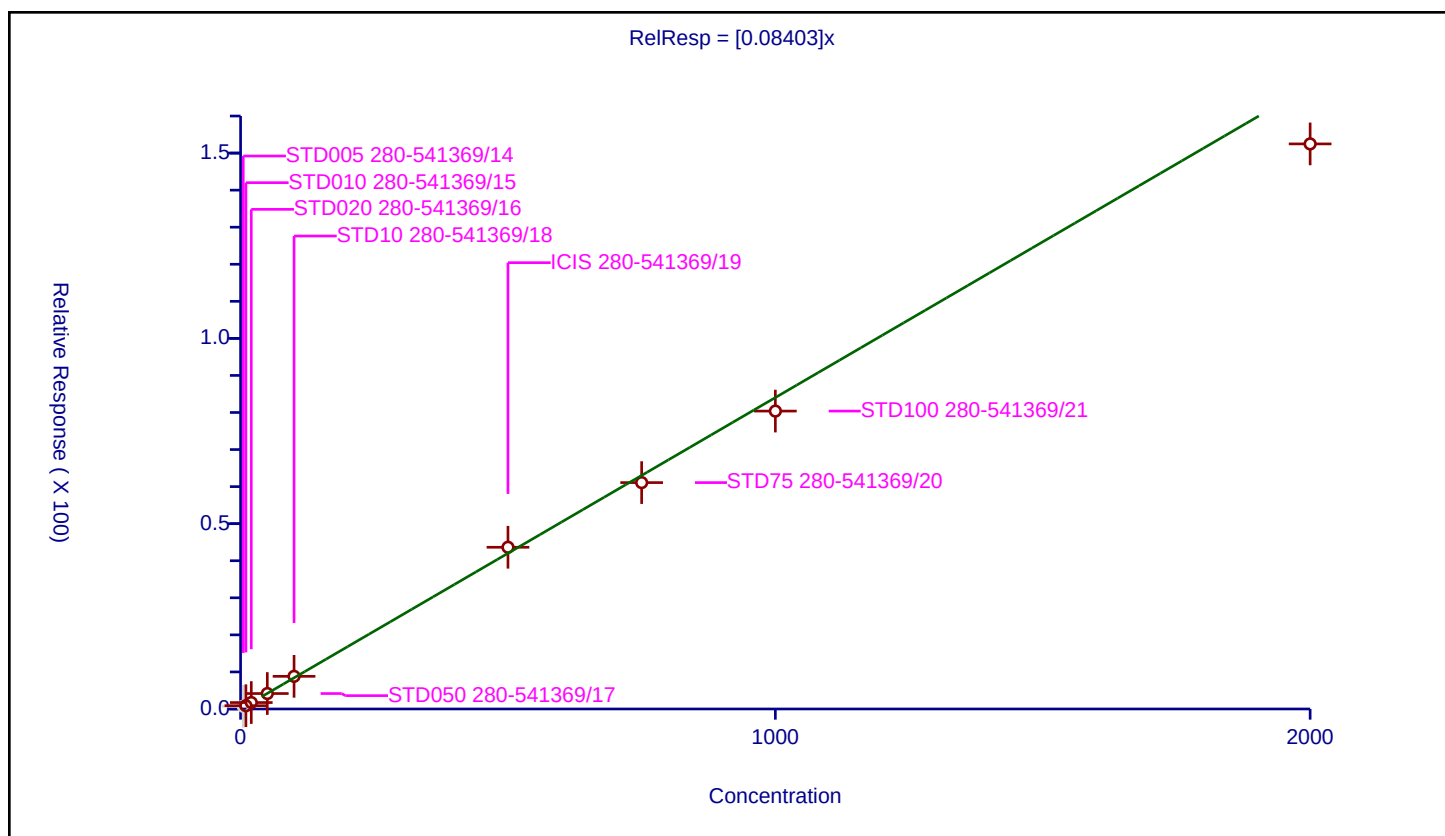
Curve Coefficients

Intercept: 0
Slope: 0.08403

Error Coefficients

Standard Error: 2560000
Relative Standard Error: 5.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	5.0	0.731243	50.0	1730684.0	0.146249	N
2	STD010 280-541369/15	10.0	0.885675	50.0	1711633.0	0.088567	Y
3	STD020 280-541369/16	20.0	1.738287	50.0	1689508.0	0.086914	Y
4	STD050 280-541369/17	50.0	4.16619	50.0	1688341.0	0.083324	Y
5	STD10 280-541369/18	100.0	8.810549	50.0	1685610.0	0.088105	Y
6	ICIS 280-541369/19	500.0	43.634779	50.0	1736664.0	0.08727	Y
7	STD75 280-541369/20	750.0	61.082623	50.0	1791999.0	0.081443	Y
8	STD100 280-541369/21	1000.0	80.38139	50.0	1794857.0	0.080381	Y
9	STD200 280-541369/22	2000.0	152.475482	50.0	1808234.0	0.076238	Y



Calibration

/ Methyl tert-butyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

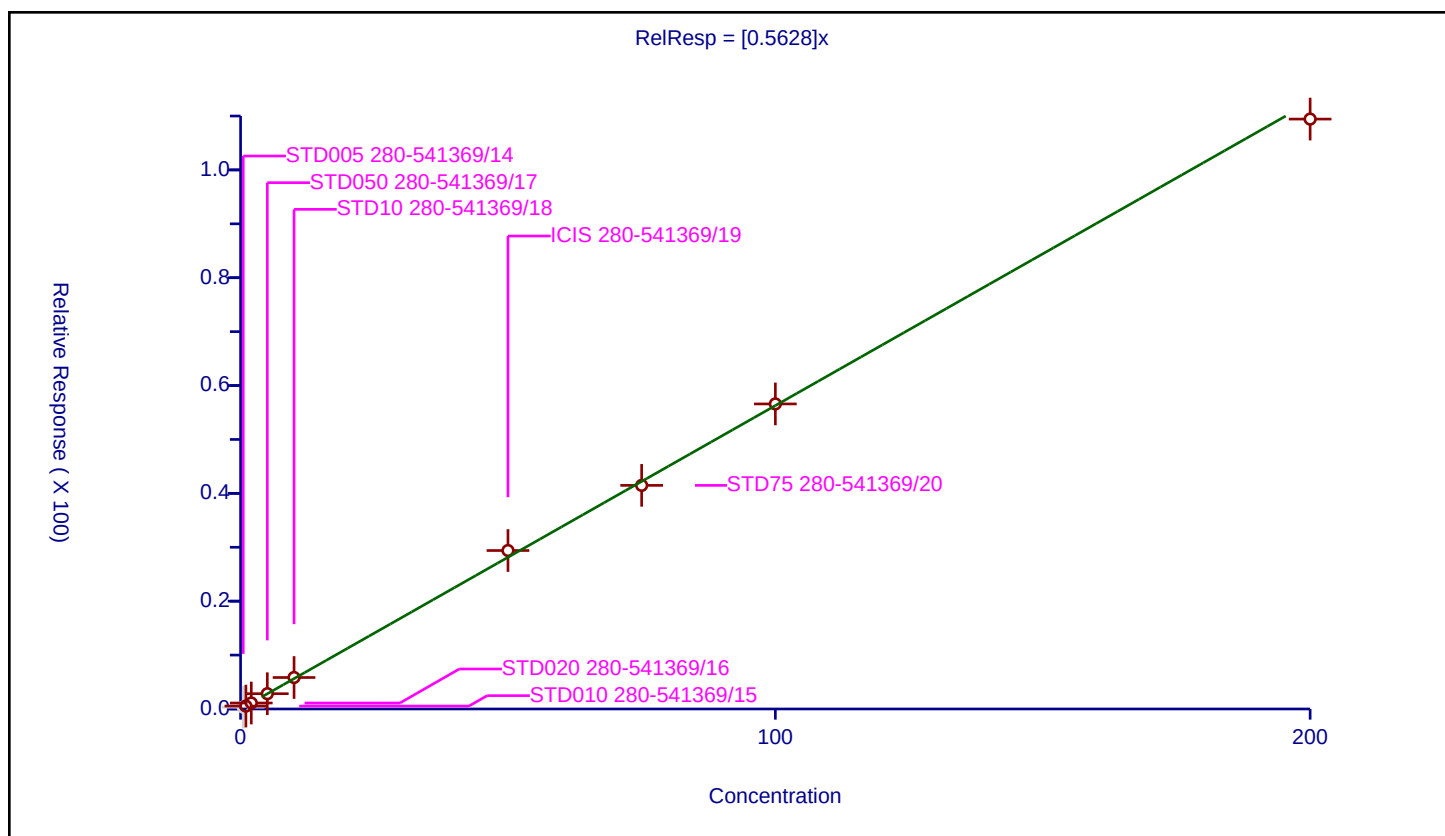
Curve Coefficients

Intercept: 0
 Slope: 0.5628

Error Coefficients

Standard Error: 1820000
 Relative Standard Error: 3.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.33871	50.0	1730684.0	0.67742	N
2	STD010 280-541369/15	1.0	0.541793	50.0	1711633.0	0.541793	Y
3	STD020 280-541369/16	2.0	1.111862	50.0	1689508.0	0.555931	Y
4	STD050 280-541369/17	5.0	2.834795	50.0	1688341.0	0.566959	Y
5	STD10 280-541369/18	10.0	5.84026	50.0	1685610.0	0.584026	Y
6	ICIS 280-541369/19	50.0	29.396389	50.0	1736664.0	0.587928	Y
7	STD75 280-541369/20	75.0	41.480631	50.0	1791999.0	0.553075	Y
8	STD100 280-541369/21	100.0	56.591054	50.0	1794857.0	0.565911	Y
9	STD200 280-541369/22	200.0	109.430997	50.0	1808234.0	0.547155	Y



Calibration

/ trans-1,2-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

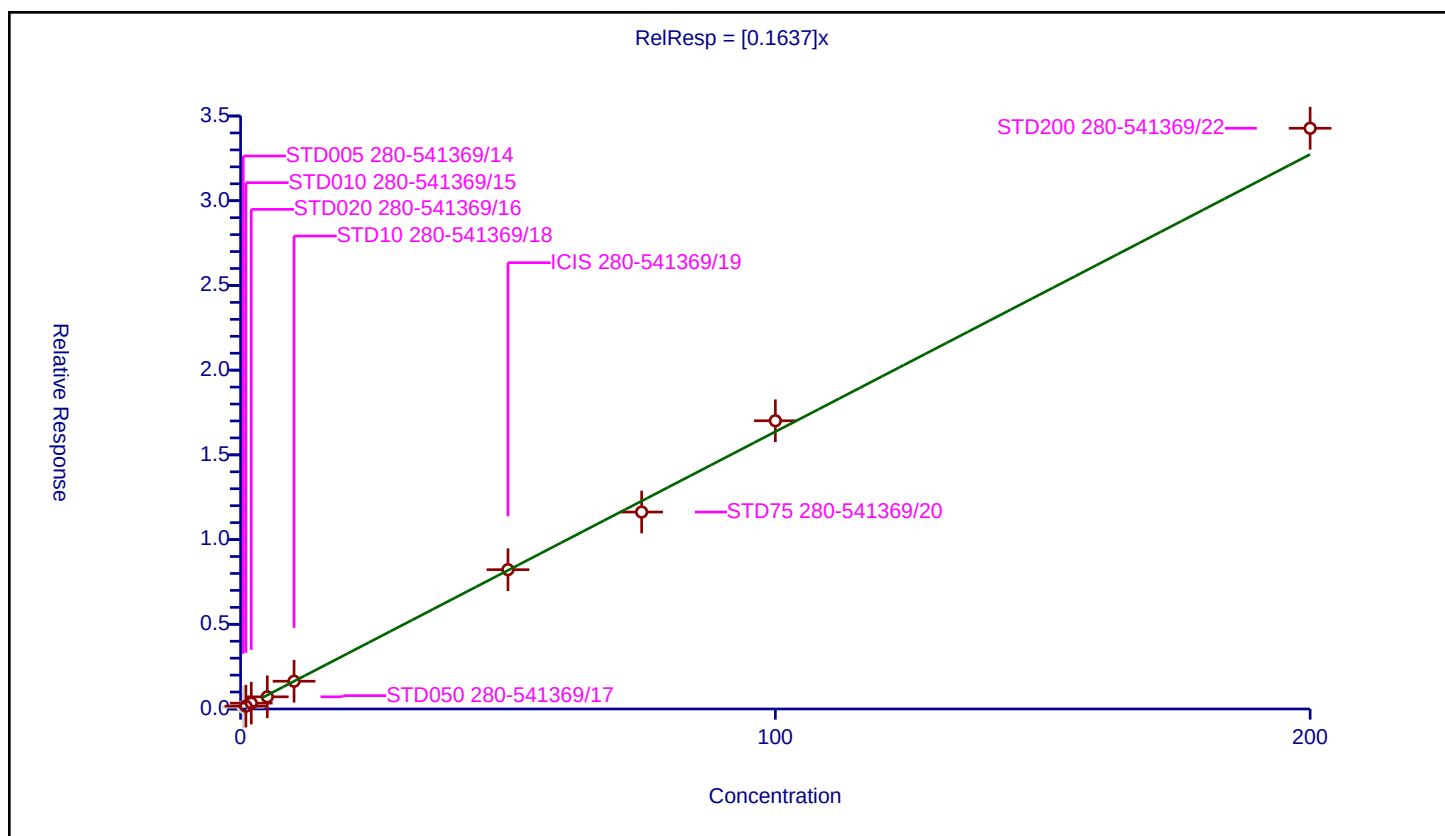
Curve Coefficients

Intercept: 0
Slope: 0.1637

Error Coefficients

Standard Error: 557000
Relative Standard Error: 6.0
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.108628	50.0	1730684.0	0.217255	N
2	STD010 280-541369/15	1.0	0.167618	50.0	1711633.0	0.167618	Y
3	STD020 280-541369/16	2.0	0.346107	50.0	1689508.0	0.173053	Y
4	STD050 280-541369/17	5.0	0.718694	50.0	1688341.0	0.143739	Y
5	STD10 280-541369/18	10.0	1.639881	50.0	1685610.0	0.163988	Y
6	ICIS 280-541369/19	50.0	8.223928	50.0	1736664.0	0.164479	Y
7	STD75 280-541369/20	75.0	11.625202	50.0	1791999.0	0.155003	Y
8	STD100 280-541369/21	100.0	17.012191	50.0	1794857.0	0.170122	Y
9	STD200 280-541369/22	200.0	34.277947	50.0	1808234.0	0.17139	Y



Calibration

/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

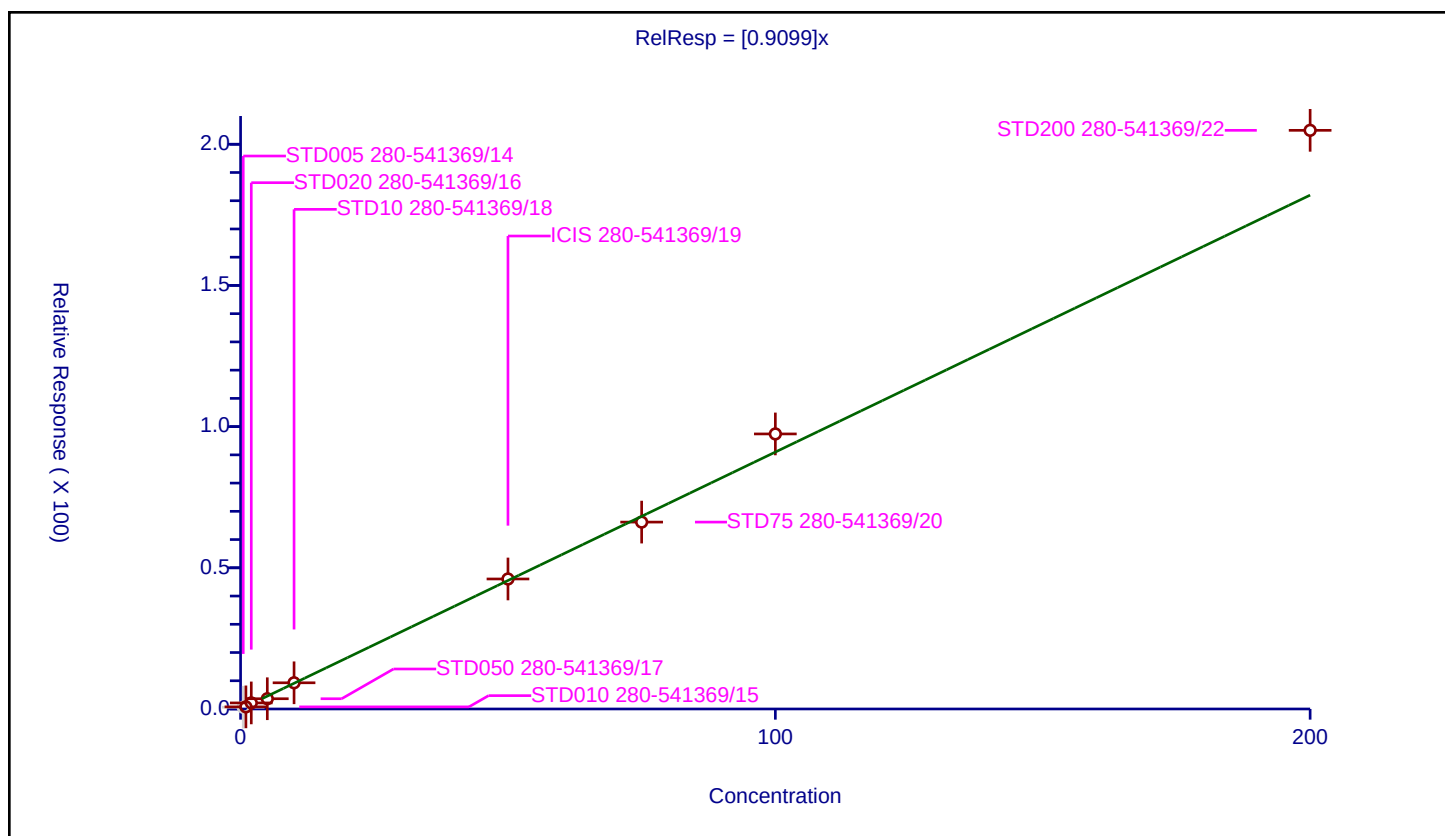
Curve Coefficients

Intercept: 0
 Slope: 0.9099

Error Coefficients

Standard Error: 725000
 Relative Standard Error: 13.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.622704	50.0	382204.0	1.245408	N
2	STD010 280-541369/15	1.0	0.746416	50.0	379748.0	0.746416	Y
3	STD020 280-541369/16	2.0	2.151194	50.0	374327.0	1.075597	Y
4	STD050 280-541369/17	5.0	3.635462	50.0	375028.0	0.727092	Y
5	STD10 280-541369/18	10.0	9.279672	50.0	376134.0	0.927967	Y
6	ICIS 280-541369/19	50.0	46.04331	50.0	387900.0	0.920866	Y
7	STD75 280-541369/20	75.0	66.184937	50.0	402819.0	0.882466	Y
8	STD100 280-541369/21	100.0	97.412378	50.0	403981.0	0.974124	Y
9	STD200 280-541369/22	200.0	204.926313	50.0	396747.0	1.024632	Y



Calibration

/ Vinyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

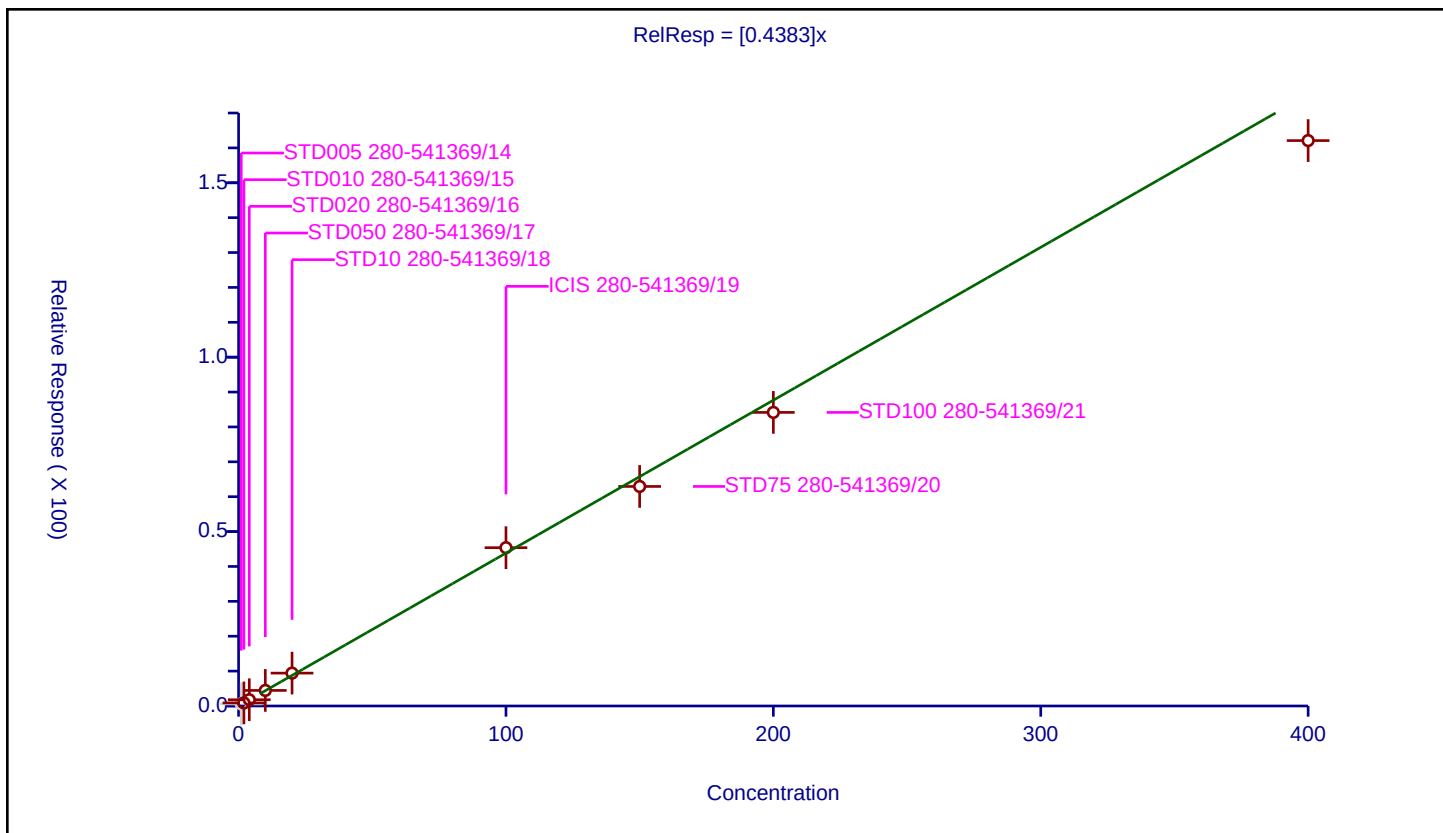
Curve Coefficients

Intercept: 0
 Slope: 0.4383

Error Coefficients

Standard Error: 2700000
 Relative Standard Error: 4.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	1.0	0.593638	50.0	1730684.0	0.593638	N
2	STD010 280-541369/15	2.0	0.884857	50.0	1711633.0	0.442428	Y
3	STD020 280-541369/16	4.0	1.791527	50.0	1689508.0	0.447882	Y
4	STD050 280-541369/17	10.0	4.458933	50.0	1688341.0	0.445893	Y
5	STD10 280-541369/18	20.0	9.419735	50.0	1685610.0	0.470987	Y
6	ICIS 280-541369/19	100.0	45.384686	50.0	1736664.0	0.453847	Y
7	STD75 280-541369/20	150.0	62.938456	50.0	1791999.0	0.41959	Y
8	STD100 280-541369/21	200.0	84.170243	50.0	1794857.0	0.420851	Y
9	STD200 280-541369/22	400.0	162.098158	50.0	1808234.0	0.405245	Y



Calibration

/ 1,1-Dichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

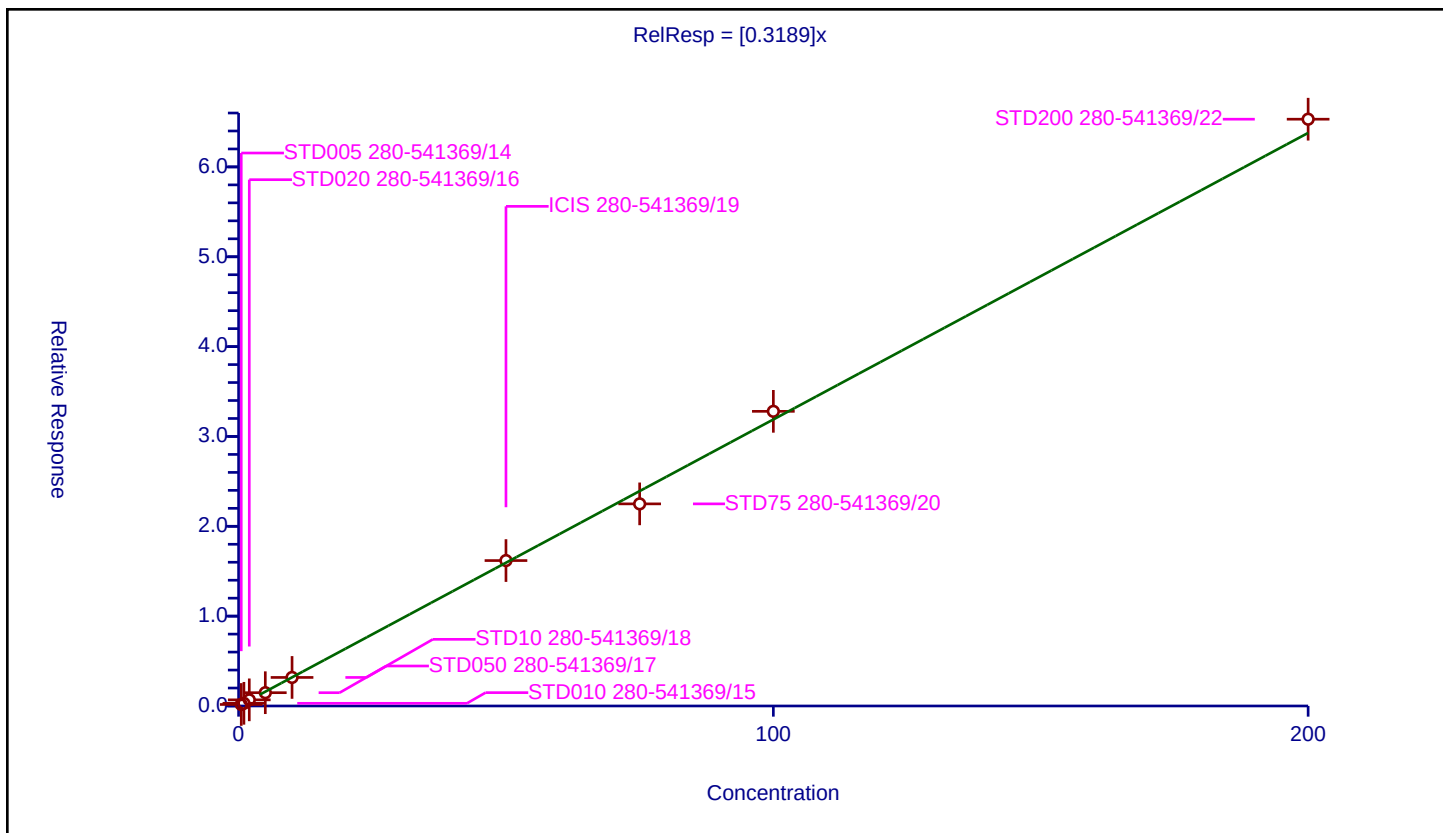
Curve Coefficients

Intercept: 0
Slope: 0.3189

Error Coefficients

Standard Error: 997000
Relative Standard Error: 5.5
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.169066	50.0	1730684.0	0.338132	Y
2	STD010 280-541369/15	1.0	0.297903	50.0	1711633.0	0.297903	Y
3	STD020 280-541369/16	2.0	0.685229	50.0	1689508.0	0.342615	Y
4	STD050 280-541369/17	5.0	1.47867	50.0	1688341.0	0.295734	Y
5	STD10 280-541369/18	10.0	3.17701	50.0	1685610.0	0.317701	Y
6	ICIS 280-541369/19	50.0	16.185457	50.0	1736664.0	0.323709	Y
7	STD75 280-541369/20	75.0	22.497948	50.0	1791999.0	0.299973	Y
8	STD100 280-541369/21	100.0	32.795147	50.0	1794857.0	0.327951	Y
9	STD200 280-541369/22	200.0	65.309993	50.0	1808234.0	0.32655	Y



Calibration

/ 2-Butanone (MEK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

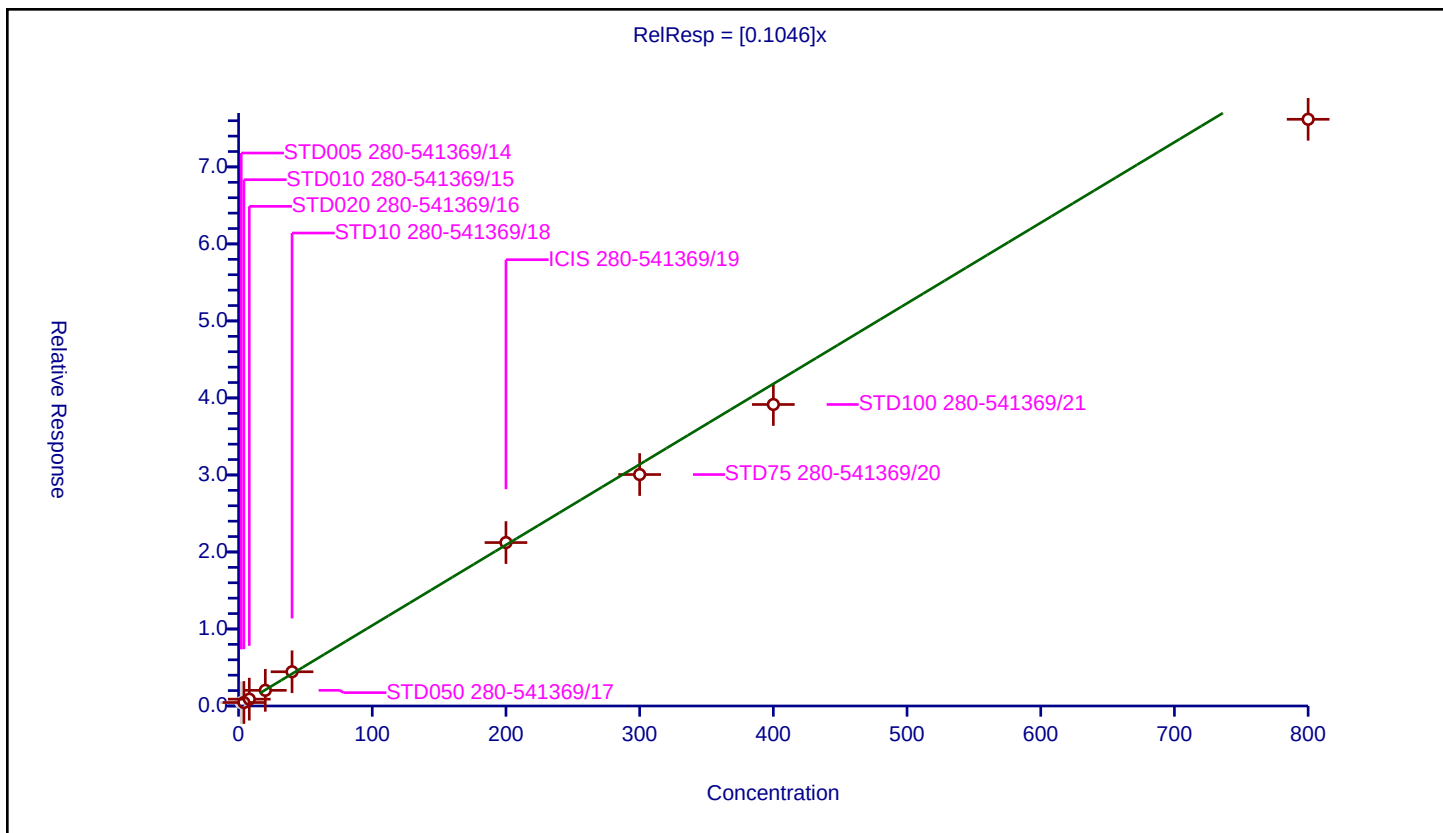
Curve Coefficients

Intercept: 0
 Slope: 0.1046

Error Coefficients

Standard Error: 1270000
 Relative Standard Error: 6.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	2.0	0.433355	50.0	1730684.0	0.216677	N
2	STD010 280-541369/15	4.0	0.452784	50.0	1711633.0	0.113196	Y
3	STD020 280-541369/16	8.0	0.88946	50.0	1689508.0	0.111183	Y
4	STD050 280-541369/17	20.0	2.035015	50.0	1688341.0	0.101751	Y
5	STD10 280-541369/18	40.0	4.443525	50.0	1685610.0	0.111088	Y
6	ICIS 280-541369/19	200.0	21.223276	50.0	1736664.0	0.106116	Y
7	STD75 280-541369/20	300.0	30.053477	50.0	1791999.0	0.100178	Y
8	STD100 280-541369/21	400.0	39.150166	50.0	1794857.0	0.097875	Y
9	STD200 280-541369/22	800.0	76.185438	50.0	1808234.0	0.095232	Y



Calibration

/ cis-1,2-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

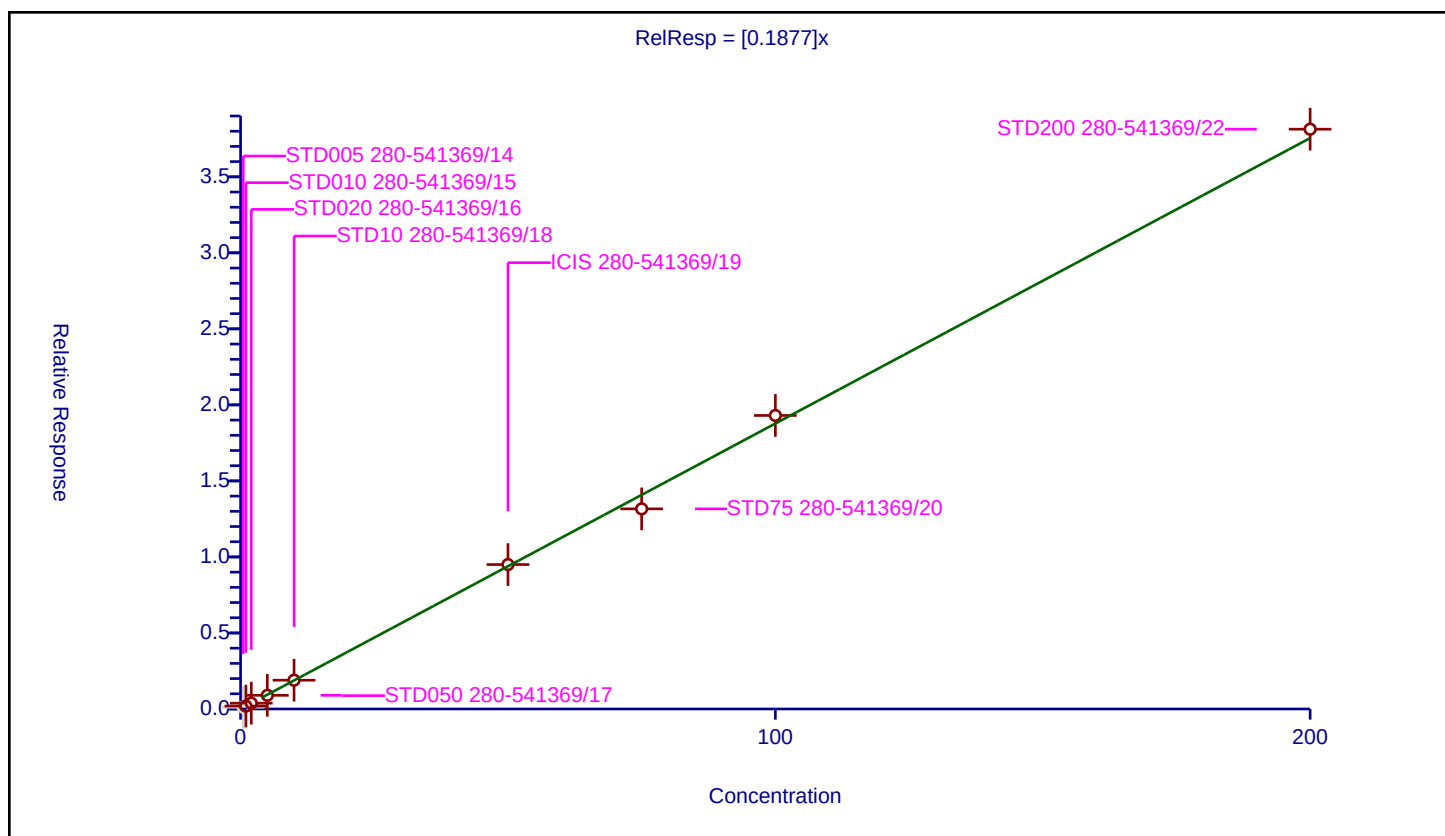
Curve Coefficients

Intercept: 0
Slope: 0.1877

Error Coefficients

Standard Error: 623000
Relative Standard Error: 3.5
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.113683	50.0	1730684.0	0.227367	N
2	STD010 280-541369/15	1.0	0.192243	50.0	1711633.0	0.192243	Y
3	STD020 280-541369/16	2.0	0.383041	50.0	1689508.0	0.19152	Y
4	STD050 280-541369/17	5.0	0.898101	50.0	1688341.0	0.17962	Y
5	STD10 280-541369/18	10.0	1.893439	50.0	1685610.0	0.189344	Y
6	ICIS 280-541369/19	50.0	9.499045	50.0	1736664.0	0.189981	Y
7	STD75 280-541369/20	75.0	13.162535	50.0	1791999.0	0.1755	Y
8	STD100 280-541369/21	100.0	19.305354	50.0	1794857.0	0.193054	Y
9	STD200 280-541369/22	200.0	38.134058	50.0	1808234.0	0.19067	Y



Calibration

/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

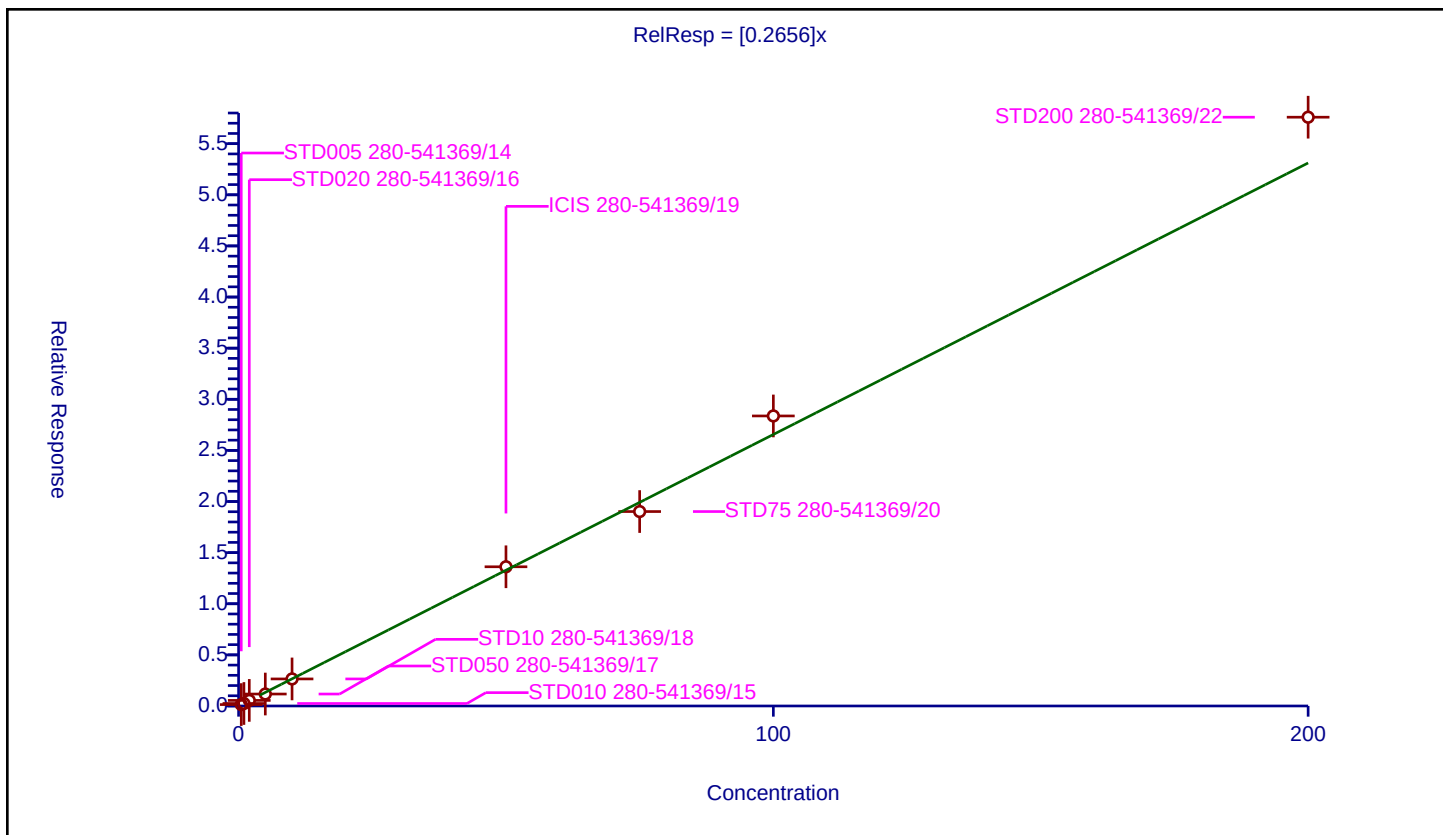
Curve Coefficients

Intercept: 0
 Slope: 0.2656

Error Coefficients

Standard Error: 871000
 Relative Standard Error: 6.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.138182	50.0	1730684.0	0.276365	Y
2	STD010 280-541369/15	1.0	0.24462	50.0	1711633.0	0.24462	Y
3	STD020 280-541369/16	2.0	0.545662	50.0	1689508.0	0.272831	Y
4	STD050 280-541369/17	5.0	1.170942	50.0	1688341.0	0.234188	Y
5	STD10 280-541369/18	10.0	2.645303	50.0	1685610.0	0.26453	Y
6	ICIS 280-541369/19	50.0	13.617977	50.0	1736664.0	0.27236	Y
7	STD75 280-541369/20	75.0	19.017533	50.0	1791999.0	0.253567	Y
8	STD100 280-541369/21	100.0	28.370645	50.0	1794857.0	0.283706	Y
9	STD200 280-541369/22	200.0	57.589228	50.0	1808234.0	0.287946	Y



Calibration

/ sec-Butyl Alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

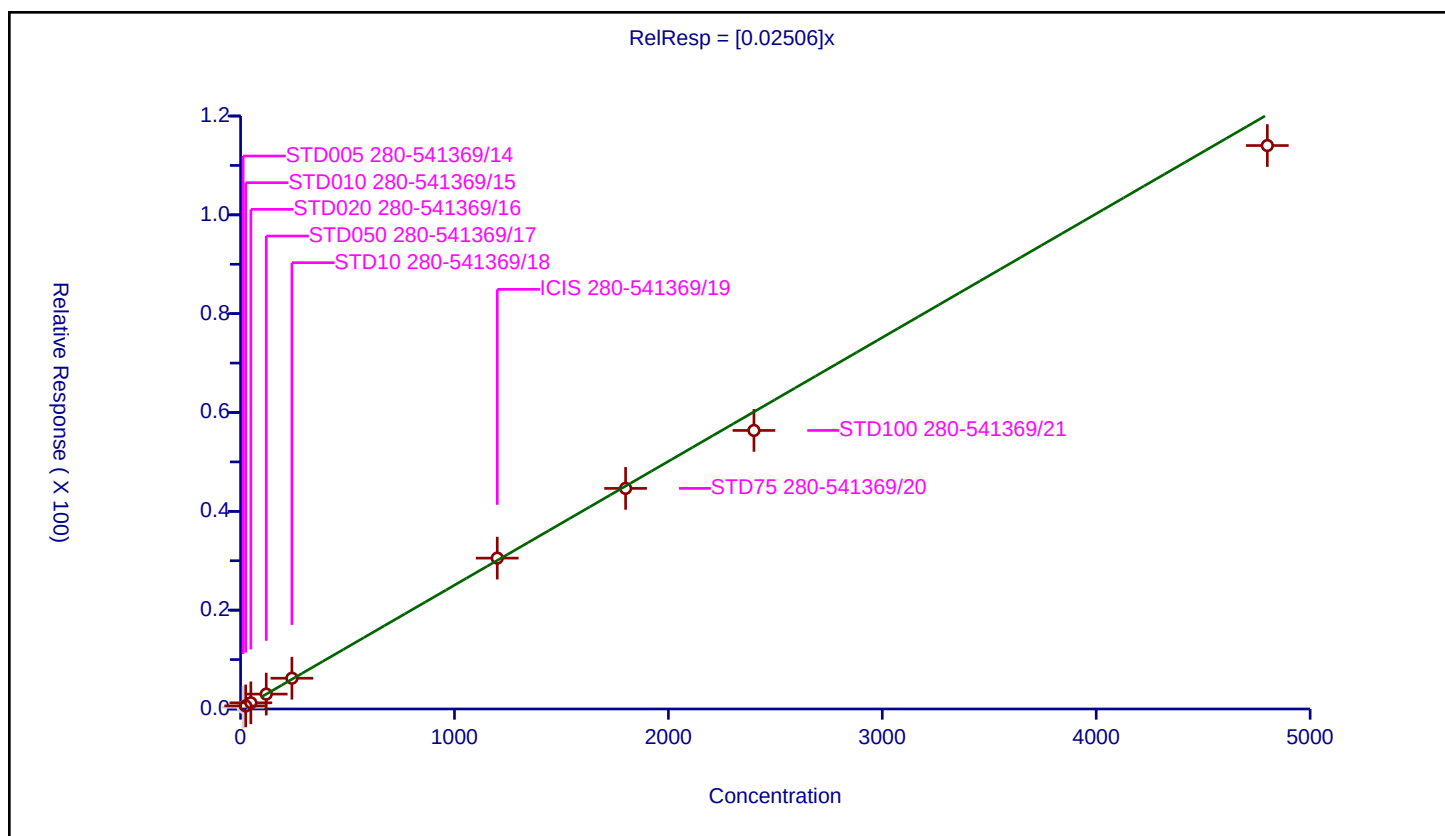
Curve Coefficients

Intercept: 0
 Slope: 0.02506

Error Coefficients

Standard Error: 1880000
 Relative Standard Error: 3.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	12.0	0.349197	50.0	1730684.0	0.0291	N
2	STD010 280-541369/15	24.0	0.621979	50.0	1711633.0	0.025916	Y
3	STD020 280-541369/16	48.0	1.248884	50.0	1689508.0	0.026018	Y
4	STD050 280-541369/17	120.0	3.013224	50.0	1688341.0	0.02511	Y
5	STD10 280-541369/18	240.0	6.223415	50.0	1685610.0	0.025931	Y
6	ICIS 280-541369/19	1200.0	30.528847	50.0	1736664.0	0.025441	Y
7	STD75 280-541369/20	1800.0	44.645058	50.0	1791999.0	0.024803	Y
8	STD100 280-541369/21	2400.0	56.367527	50.0	1794857.0	0.023486	Y
9	STD200 280-541369/22	4800.0	114.023738	50.0	1808234.0	0.023755	Y



Calibration

/ Chlorobromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

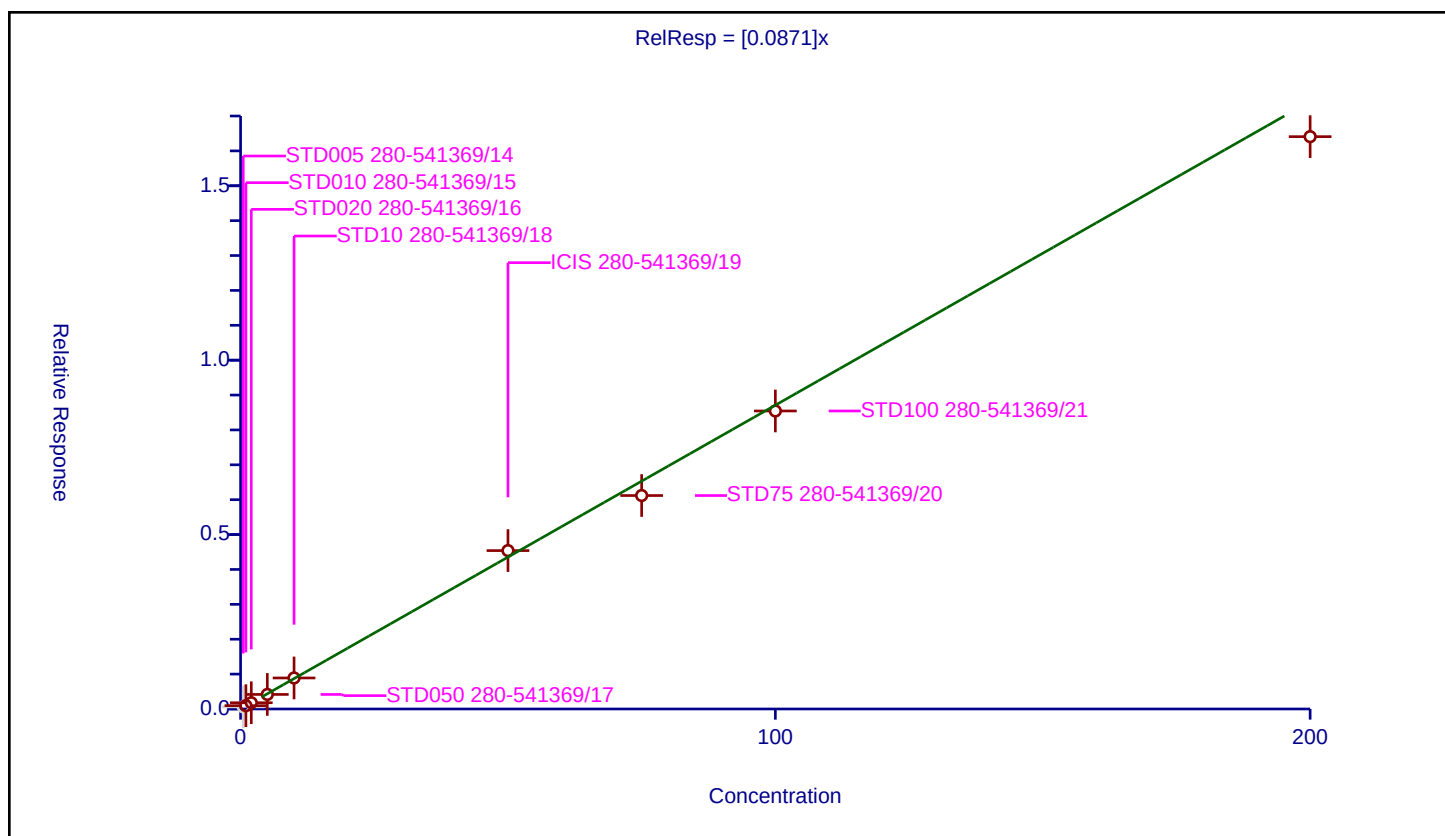
Curve Coefficients

Intercept: 0
Slope: 0.0871

Error Coefficients

Standard Error: 273000
Relative Standard Error: 5.5
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.061016	50.0	1730684.0	0.122033	N
2	STD010 280-541369/15	1.0	0.095114	50.0	1711633.0	0.095114	Y
3	STD020 280-541369/16	2.0	0.178957	50.0	1689508.0	0.089479	Y
4	STD050 280-541369/17	5.0	0.416681	50.0	1688341.0	0.083336	Y
5	STD10 280-541369/18	10.0	0.889619	50.0	1685610.0	0.088962	Y
6	ICIS 280-541369/19	50.0	4.54112	50.0	1736664.0	0.090822	Y
7	STD75 280-541369/20	75.0	6.119451	50.0	1791999.0	0.081593	Y
8	STD100 280-541369/21	100.0	8.543745	50.0	1794857.0	0.085437	Y
9	STD200 280-541369/22	200.0	16.408468	50.0	1808234.0	0.082042	Y



Calibration

/ Tetrahydrofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

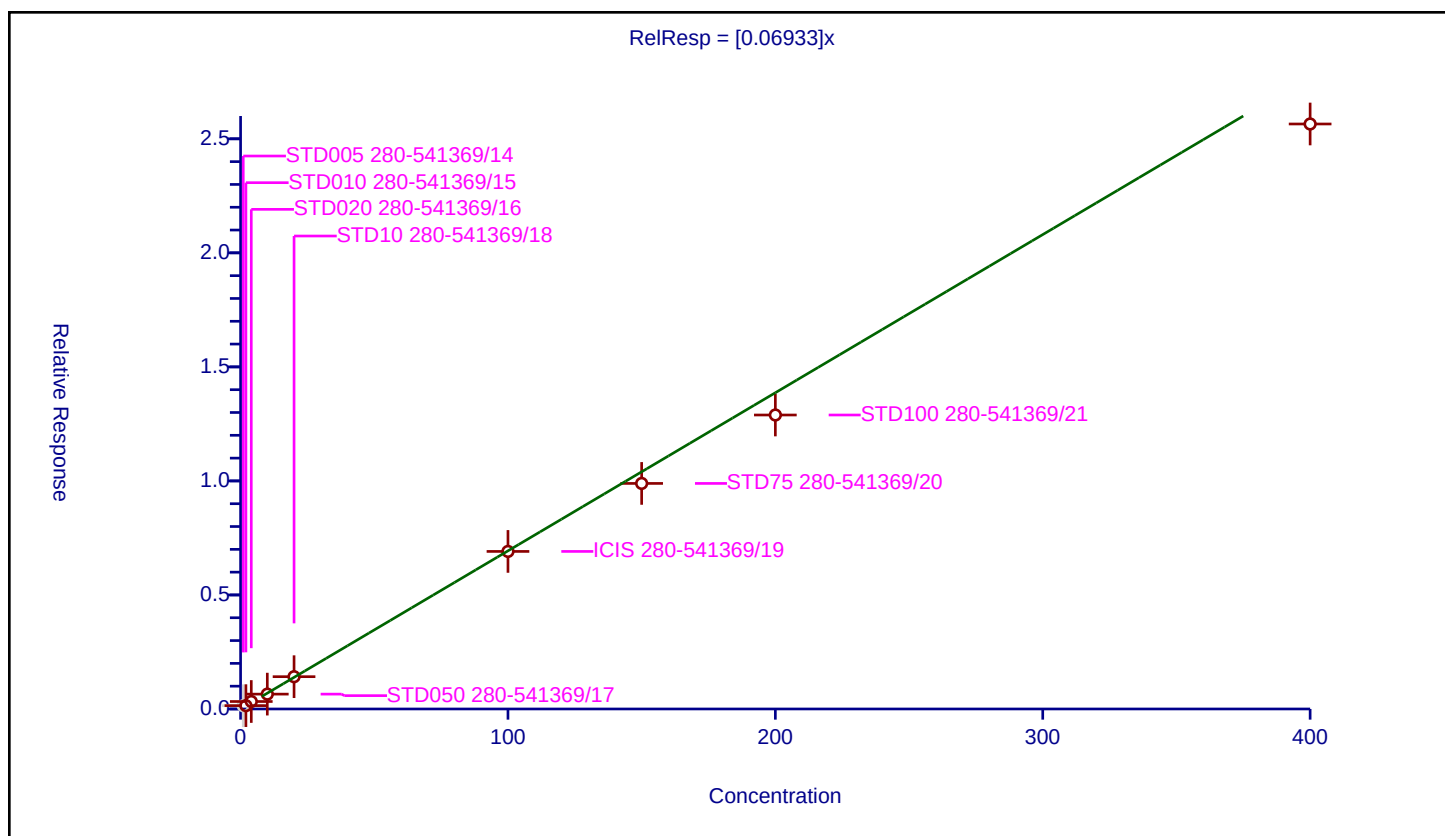
Curve Coefficients

Intercept: 0
 Slope: 0.06933

Error Coefficients

Standard Error: 424000
 Relative Standard Error: 8.7
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	1.0	0.141794	50.0	1730684.0	0.141794	N
2	STD010 280-541369/15	2.0	0.146293	50.0	1711633.0	0.073147	Y
3	STD020 280-541369/16	4.0	0.327936	50.0	1689508.0	0.081984	Y
4	STD050 280-541369/17	10.0	0.651498	50.0	1688341.0	0.06515	Y
5	STD10 280-541369/18	20.0	1.415956	50.0	1685610.0	0.070798	Y
6	ICIS 280-541369/19	100.0	6.909051	50.0	1736664.0	0.069091	Y
7	STD75 280-541369/20	150.0	9.889849	50.0	1791999.0	0.065932	Y
8	STD100 280-541369/21	200.0	12.89047	50.0	1794857.0	0.064452	Y
9	STD200 280-541369/22	400.0	25.650441	50.0	1808234.0	0.064126	Y



Calibration

/ Chloroform

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

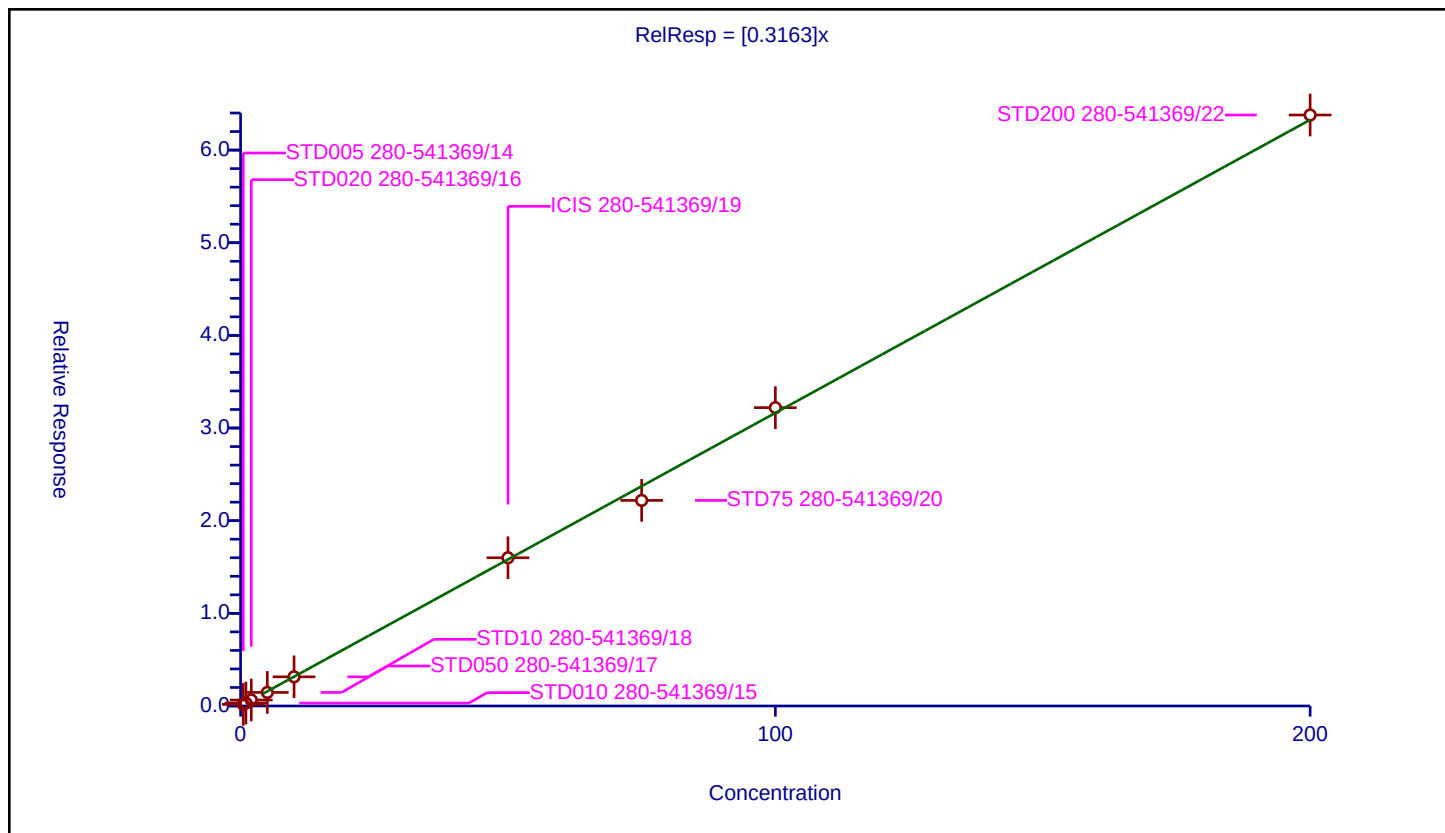
Curve Coefficients

Intercept: 0
Slope: 0.3163

Error Coefficients

Standard Error: 975000
Relative Standard Error: 4.8
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.171955	50.0	1730684.0	0.34391	Y
2	STD010 280-541369/15	1.0	0.31578	50.0	1711633.0	0.31578	Y
3	STD020 280-541369/16	2.0	0.646816	50.0	1689508.0	0.323408	Y
4	STD050 280-541369/17	5.0	1.462086	50.0	1688341.0	0.292417	Y
5	STD10 280-541369/18	10.0	3.146962	50.0	1685610.0	0.314696	Y
6	ICIS 280-541369/19	50.0	15.999324	50.0	1736664.0	0.319986	Y
7	STD75 280-541369/20	75.0	22.187708	50.0	1791999.0	0.295836	Y
8	STD100 280-541369/21	100.0	32.198248	50.0	1794857.0	0.321982	Y
9	STD200 280-541369/22	200.0	63.783587	50.0	1808234.0	0.318918	Y



Calibration

/ Dibromofluoromethane (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

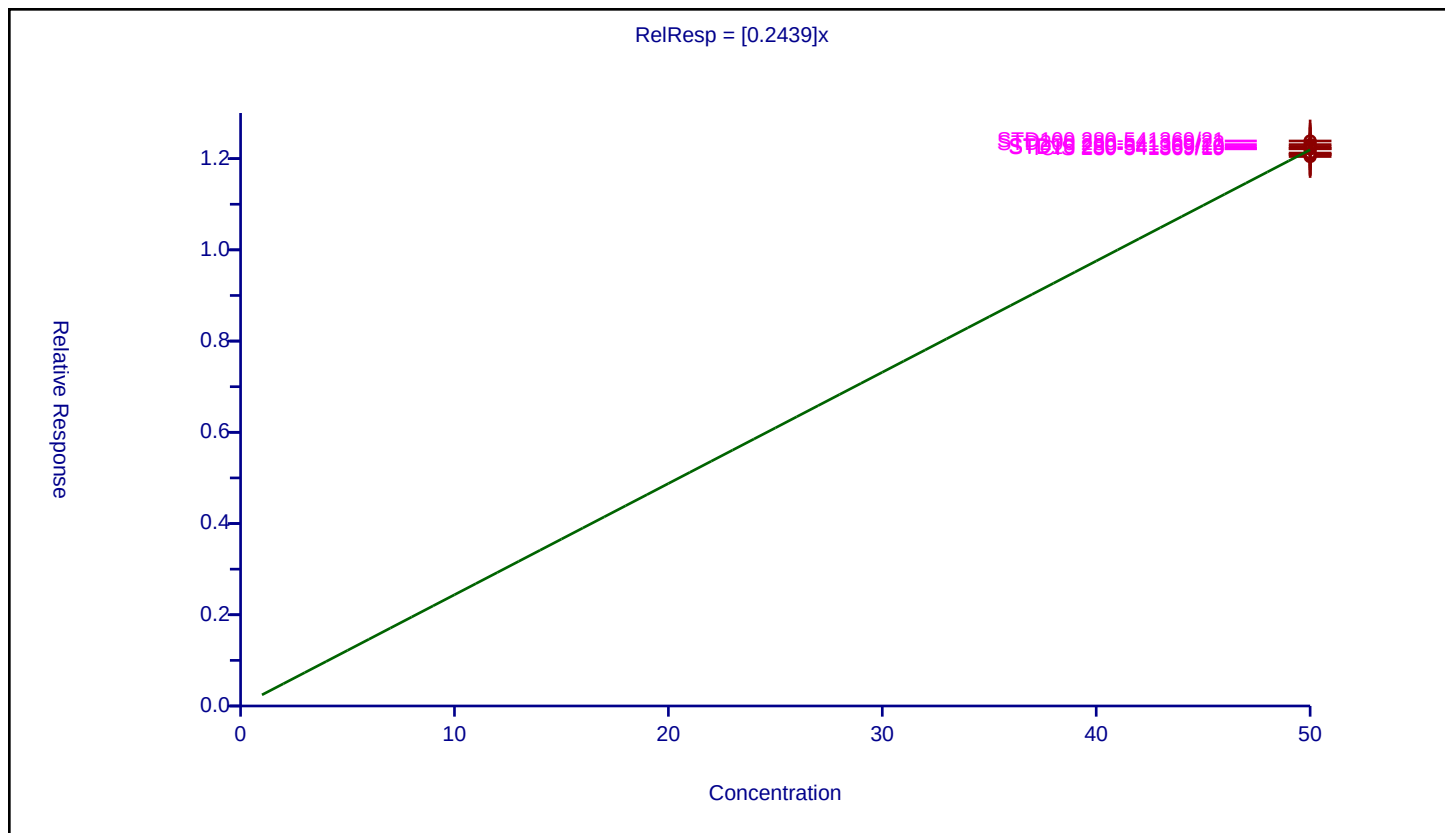
Curve Coefficients

Intercept: 0
Slope: 0.2439

Error Coefficients

Standard Error: 450000
Relative Standard Error: 0.9
Correlation Coefficient: 0
Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	50.0	12.090162	50.0	1730684.0	0.241803	Y
2	STD010 280-541369/15	50.0	12.095175	50.0	1711633.0	0.241903	Y
3	STD020 280-541369/16	50.0	12.045933	50.0	1689508.0	0.240919	Y
4	STD050 280-541369/17	50.0	12.122699	50.0	1688341.0	0.242454	Y
5	STD10 280-541369/18	50.0	12.220413	50.0	1685610.0	0.244408	Y
6	ICIS 280-541369/19	50.0	12.214337	50.0	1736664.0	0.244287	Y
7	STD75 280-541369/20	50.0	12.262228	50.0	1791999.0	0.245245	Y
8	STD100 280-541369/21	50.0	12.386836	50.0	1794857.0	0.247737	Y
9	STD200 280-541369/22	50.0	12.307754	50.0	1808234.0	0.246155	Y



Calibration

/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

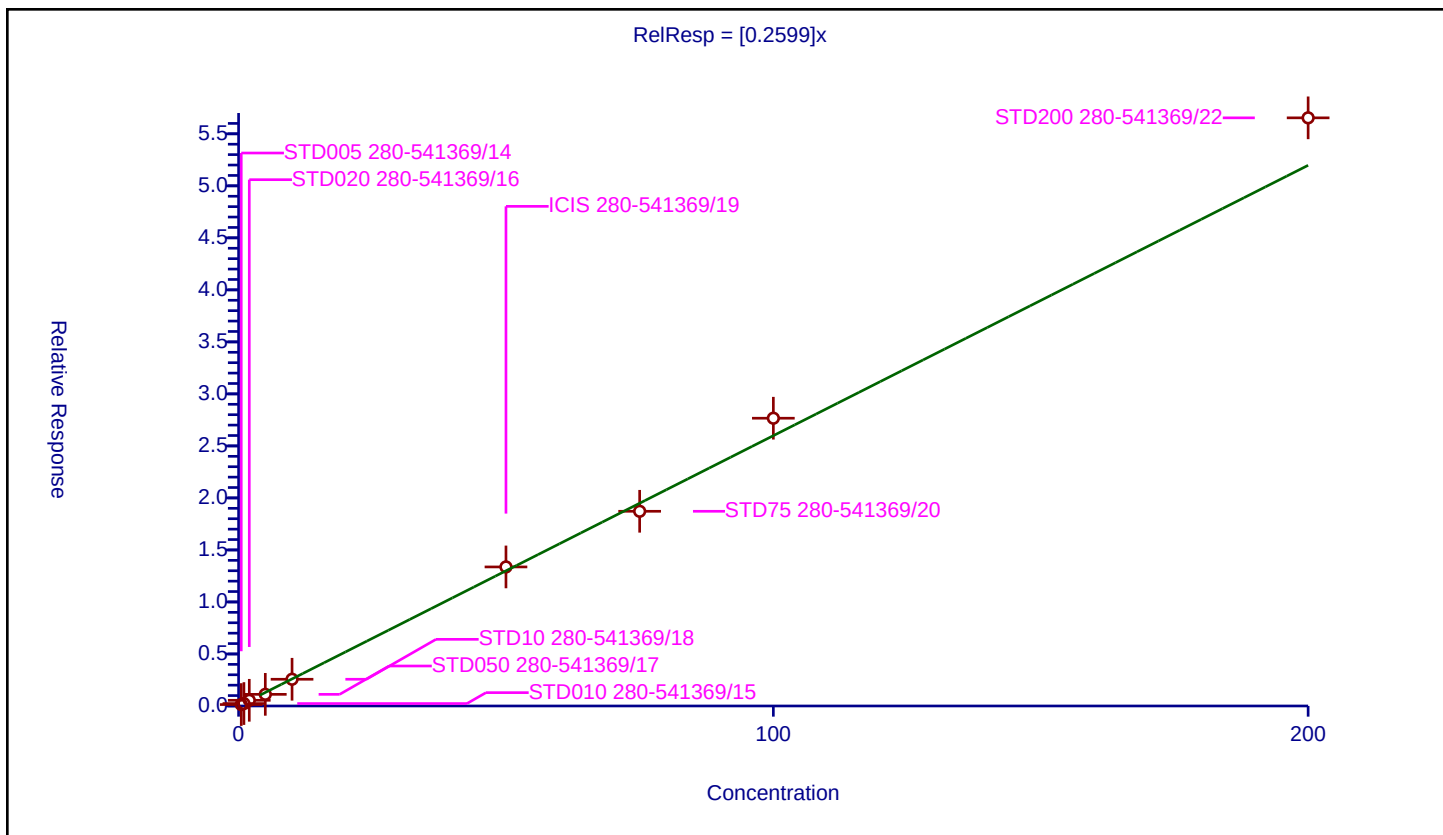
Curve Coefficients

Intercept: 0
 Slope: 0.2599

Error Coefficients

Standard Error: 854000
 Relative Standard Error: 7.9
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.1372	50.0	1730684.0	0.2744	Y
2	STD010 280-541369/15	1.0	0.23349	50.0	1711633.0	0.23349	Y
3	STD020 280-541369/16	2.0	0.548177	50.0	1689508.0	0.274089	Y
4	STD050 280-541369/17	5.0	1.117724	50.0	1688341.0	0.223545	Y
5	STD10 280-541369/18	10.0	2.570227	50.0	1685610.0	0.257023	Y
6	ICIS 280-541369/19	50.0	13.366978	50.0	1736664.0	0.26734	Y
7	STD75 280-541369/20	75.0	18.717114	50.0	1791999.0	0.249562	Y
8	STD100 280-541369/21	100.0	27.662566	50.0	1794857.0	0.276626	Y
9	STD200 280-541369/22	200.0	56.537235	50.0	1808234.0	0.282686	Y



Calibration

/ Cyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

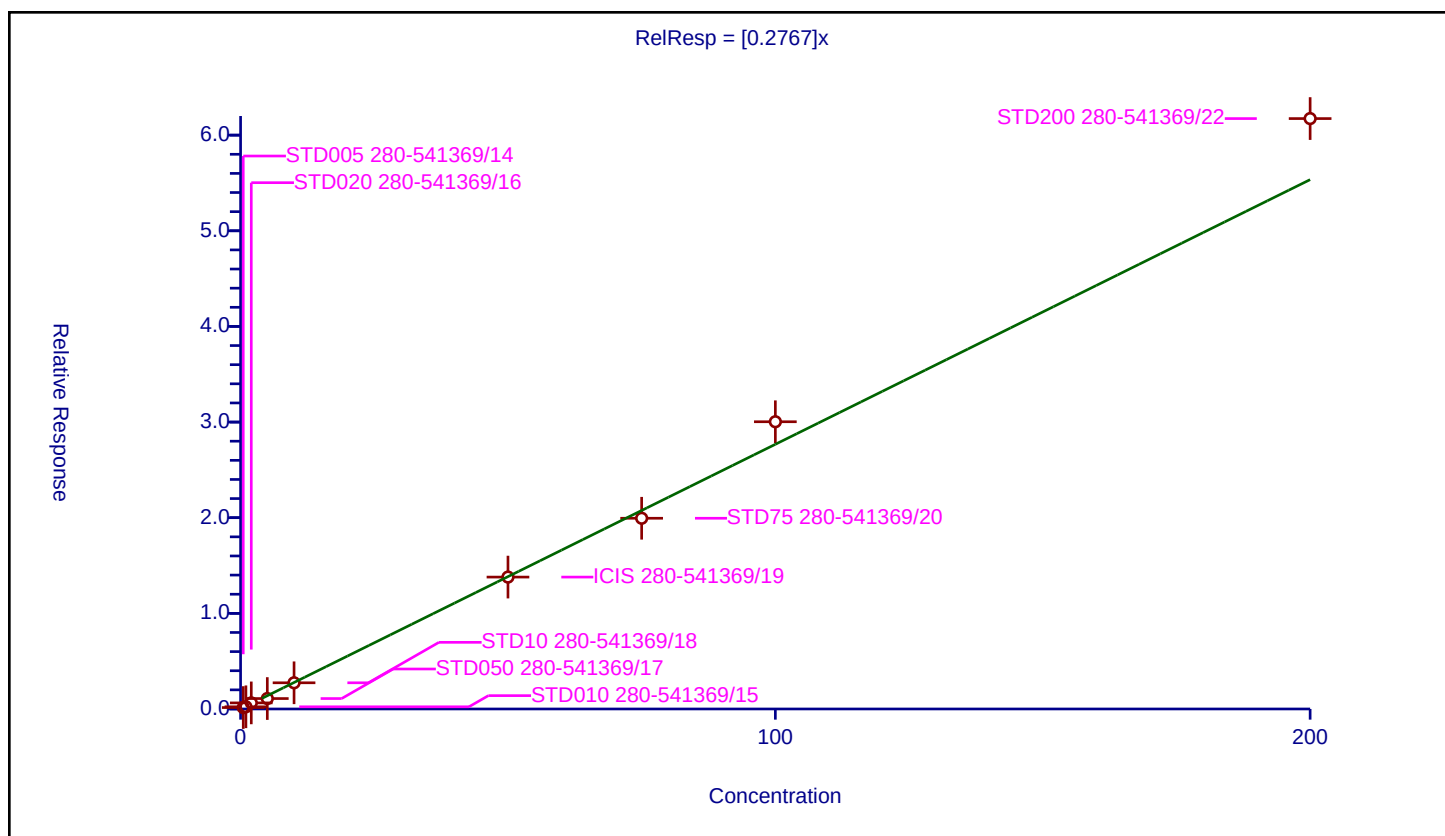
Curve Coefficients

Intercept: 0
Slope: 0.2767

Error Coefficients

Standard Error: 929000
Relative Standard Error: 12.4
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.148698	50.0	1730684.0	0.297397	Y
2	STD010 280-541369/15	1.0	0.231154	50.0	1711633.0	0.231154	Y
3	STD020 280-541369/16	2.0	0.63776	50.0	1689508.0	0.31888	Y
4	STD050 280-541369/17	5.0	1.092878	50.0	1688341.0	0.218576	Y
5	STD10 280-541369/18	10.0	2.738949	50.0	1685610.0	0.273895	Y
6	ICIS 280-541369/19	50.0	13.792276	50.0	1736664.0	0.275846	Y
7	STD75 280-541369/20	75.0	19.943203	50.0	1791999.0	0.265909	Y
8	STD100 280-541369/21	100.0	30.034454	50.0	1794857.0	0.300345	Y
9	STD200 280-541369/22	200.0	61.733714	50.0	1808234.0	0.308669	Y



Calibration

/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

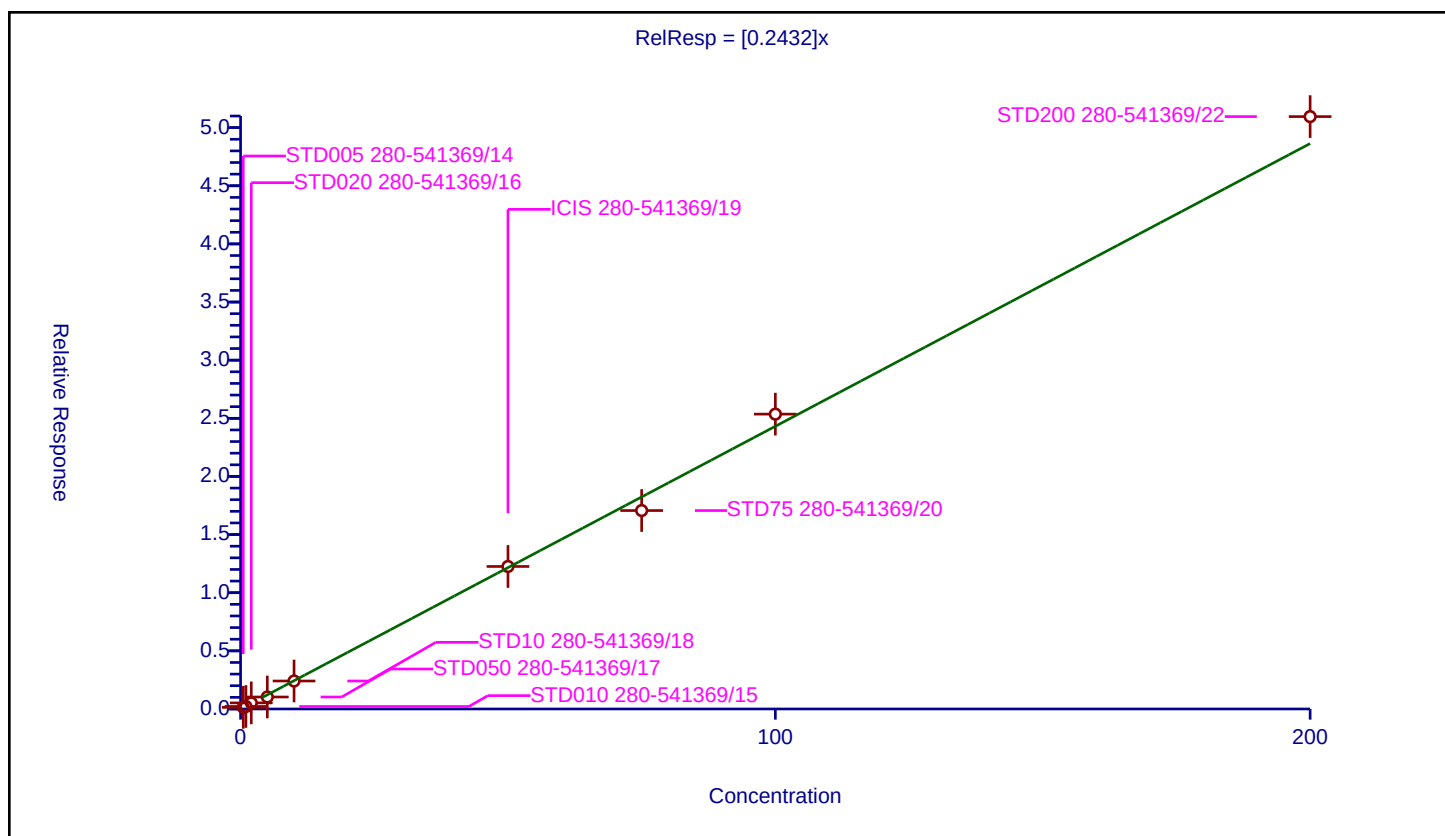
Curve Coefficients

Intercept: 0
 Slope: 0.2432

Error Coefficients

Standard Error: 774000
 Relative Standard Error: 9.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.140465	50.0	1730684.0	0.280929	Y
2	STD010 280-541369/15	1.0	0.217599	50.0	1711633.0	0.217599	Y
3	STD020 280-541369/16	2.0	0.52394	50.0	1689508.0	0.26197	Y
4	STD050 280-541369/17	5.0	1.031042	50.0	1688341.0	0.206208	Y
5	STD10 280-541369/18	10.0	2.40628	50.0	1685610.0	0.240628	Y
6	ICIS 280-541369/19	50.0	12.258272	50.0	1736664.0	0.245165	Y
7	STD75 280-541369/20	75.0	17.067643	50.0	1791999.0	0.227569	Y
8	STD100 280-541369/21	100.0	25.359764	50.0	1794857.0	0.253598	Y
9	STD200 280-541369/22	200.0	50.949213	50.0	1808234.0	0.254746	Y



Calibration

/ Carbon tetrachloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

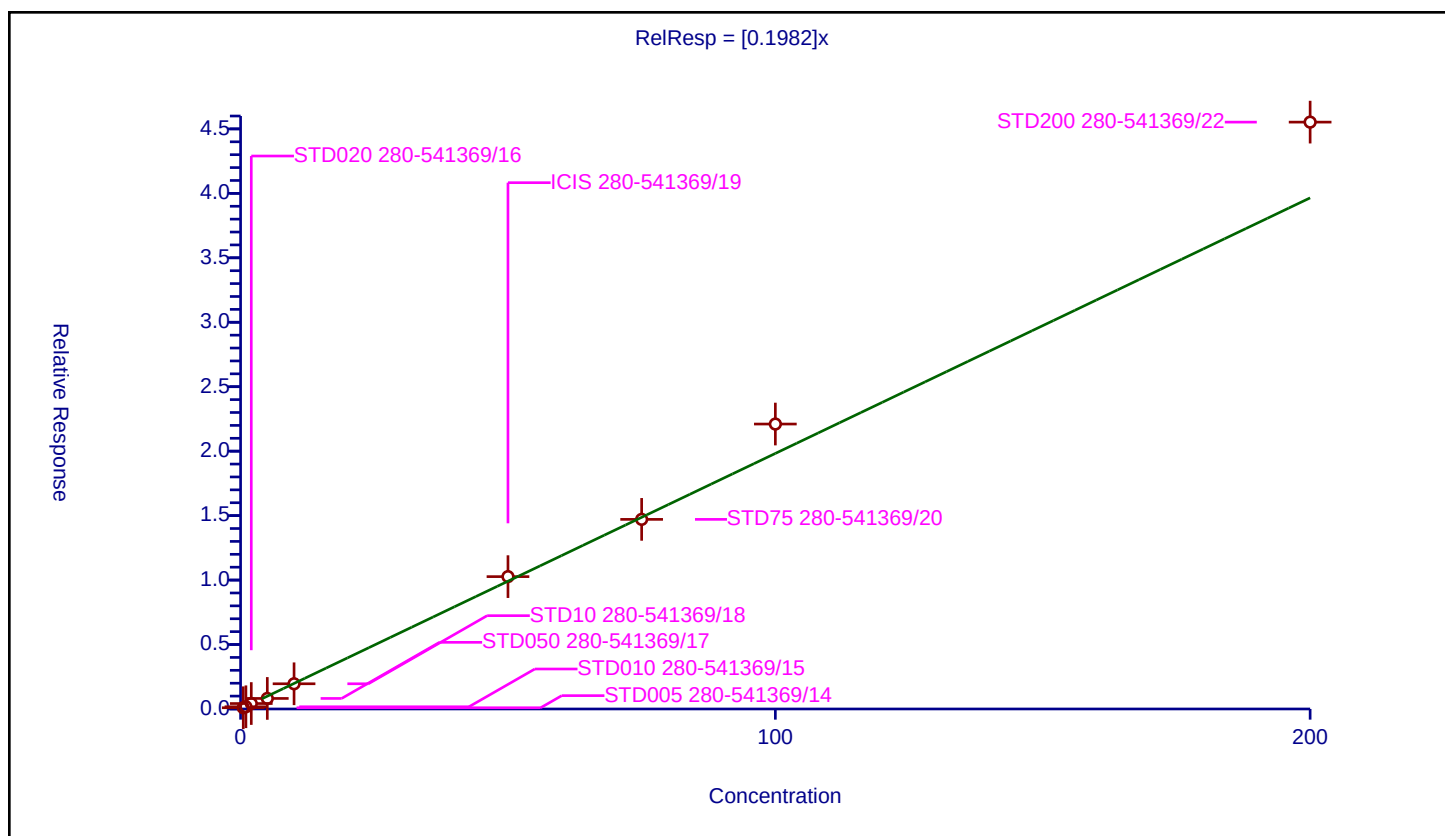
Curve Coefficients

Intercept: 0
 Slope: 0.1982

Error Coefficients

Standard Error: 685000
 Relative Standard Error: 10.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.095482	50.0	1730684.0	0.190965	Y
2	STD010 280-541369/15	1.0	0.172817	50.0	1711633.0	0.172817	Y
3	STD020 280-541369/16	2.0	0.422046	50.0	1689508.0	0.211023	Y
4	STD050 280-541369/17	5.0	0.818525	50.0	1688341.0	0.163705	Y
5	STD10 280-541369/18	10.0	1.955524	50.0	1685610.0	0.195552	Y
6	ICIS 280-541369/19	50.0	10.267818	50.0	1736664.0	0.205356	Y
7	STD75 280-541369/20	75.0	14.708379	50.0	1791999.0	0.196112	Y
8	STD100 280-541369/21	100.0	22.103934	50.0	1794857.0	0.221039	Y
9	STD200 280-541369/22	200.0	45.525275	50.0	1808234.0	0.227626	Y



Calibration

/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

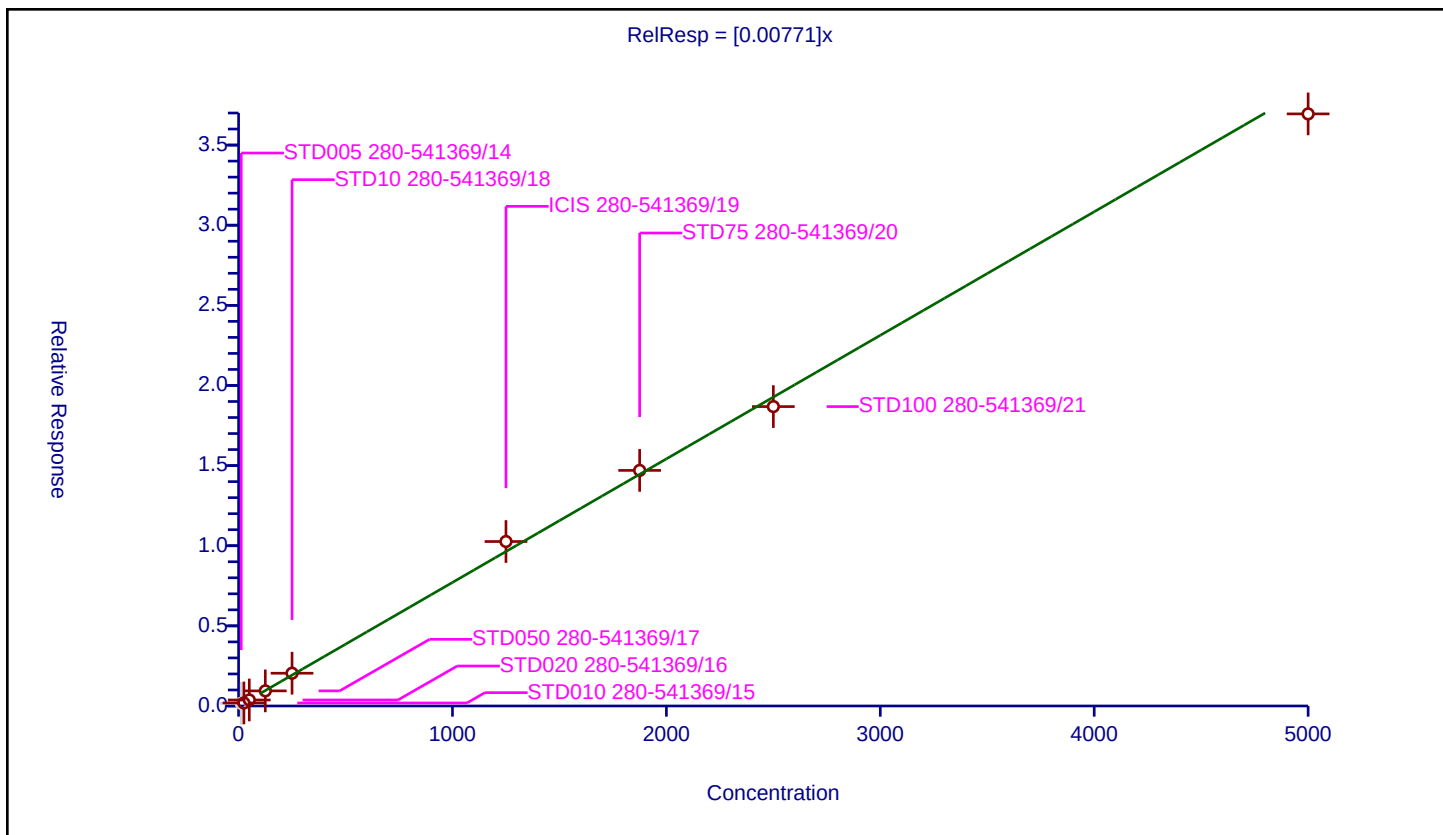
Curve Coefficients

Intercept: 0
 Slope: 0.00771

Error Coefficients

Standard Error: 615000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	12.5	0.165773	50.0	1730684.0	0.013262	N
2	STD010 280-541369/15	25.0	0.18903	50.0	1711633.0	0.007561	Y
3	STD020 280-541369/16	50.0	0.374754	50.0	1689508.0	0.007495	Y
4	STD050 280-541369/17	125.0	0.941901	50.0	1688341.0	0.007535	Y
5	STD10 280-541369/18	250.0	2.043533	50.0	1685610.0	0.008174	Y
6	ICIS 280-541369/19	1250.0	10.263096	50.0	1736664.0	0.00821	Y
7	STD75 280-541369/20	1875.0	14.699869	50.0	1791999.0	0.00784	Y
8	STD100 280-541369/21	2500.0	18.682324	50.0	1794857.0	0.007473	Y
9	STD200 280-541369/22	5000.0	36.944416	50.0	1808234.0	0.007389	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

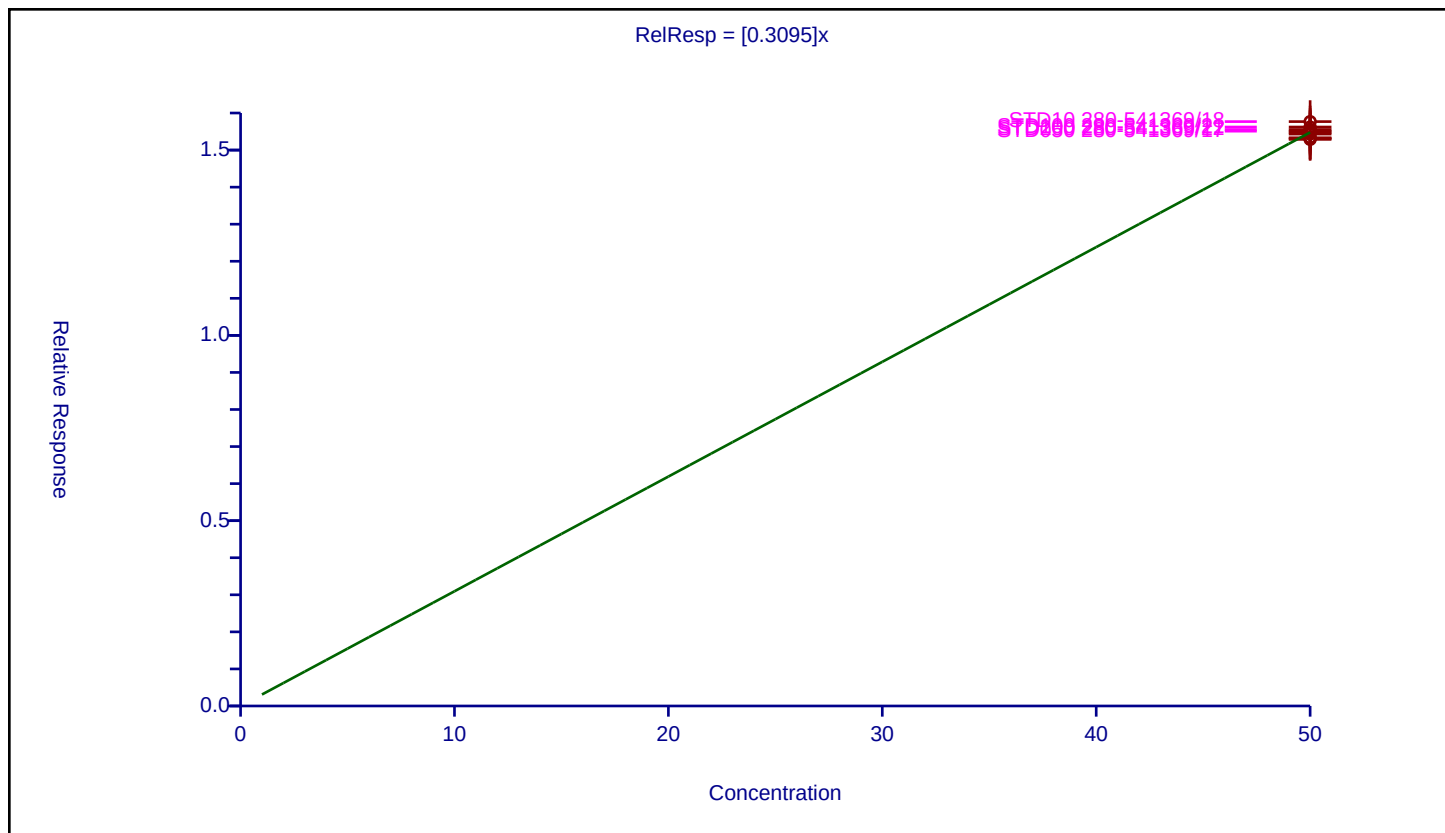
Curve Coefficients

Intercept: 0
 Slope: 0.3095

Error Coefficients

Standard Error: 571000
 Relative Standard Error: 1.0
 Correlation Coefficient: 0.00000000000000000000
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	50.0	15.313916	50.0	1730684.0	0.306278	Y
2	STD010 280-541369/15	50.0	15.431667	50.0	1711633.0	0.308633	Y
3	STD020 280-541369/16	50.0	15.288238	50.0	1689508.0	0.305765	Y
4	STD050 280-541369/17	50.0	15.509722	50.0	1688341.0	0.310194	Y
5	STD10 280-541369/18	50.0	15.768416	50.0	1685610.0	0.315368	Y
6	ICIS 280-541369/19	50.0	15.332298	50.0	1736664.0	0.306646	Y
7	STD75 280-541369/20	50.0	15.472972	50.0	1791999.0	0.309459	Y
8	STD100 280-541369/21	50.0	15.622247	50.0	1794857.0	0.312445	Y
9	STD200 280-541369/22	50.0	15.553629	50.0	1808234.0	0.311073	Y



Calibration

/ Benzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

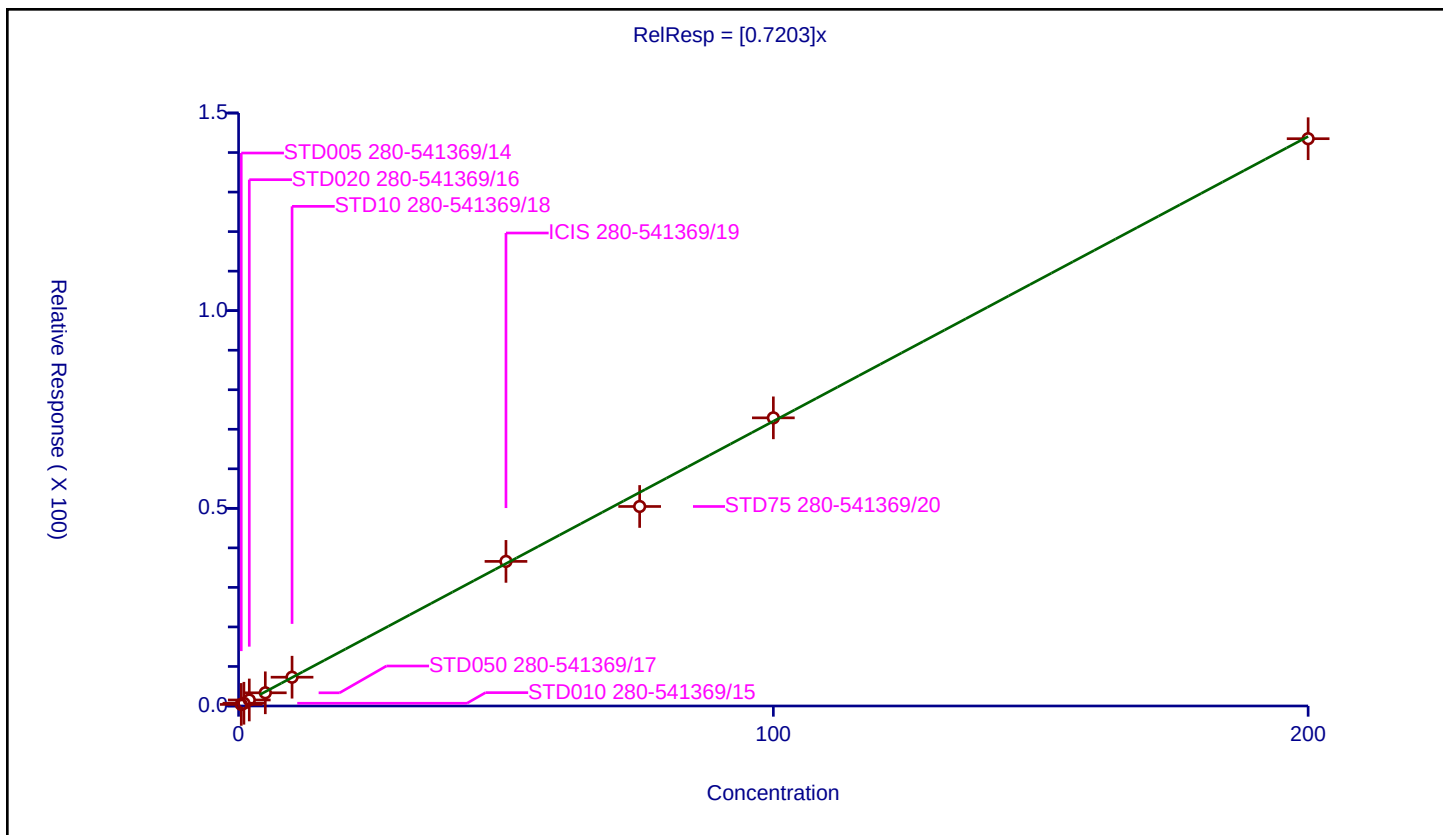
Curve Coefficients

Intercept: 0
 Slope: 0.7203

Error Coefficients

Standard Error: 2200000
 Relative Standard Error: 5.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.393804	50.0	1730684.0	0.787608	Y
2	STD010 280-541369/15	1.0	0.688582	50.0	1711633.0	0.688582	Y
3	STD020 280-541369/16	2.0	1.522455	50.0	1689508.0	0.761228	Y
4	STD050 280-541369/17	5.0	3.334131	50.0	1688341.0	0.666826	Y
5	STD10 280-541369/18	10.0	7.279561	50.0	1685610.0	0.727956	Y
6	ICIS 280-541369/19	50.0	36.57544	50.0	1736664.0	0.731509	Y
7	STD75 280-541369/20	75.0	50.467662	50.0	1791999.0	0.672902	Y
8	STD100 280-541369/21	100.0	72.888927	50.0	1794857.0	0.728889	Y
9	STD200 280-541369/22	200.0	143.502224	50.0	1808234.0	0.717511	Y



Calibration

/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

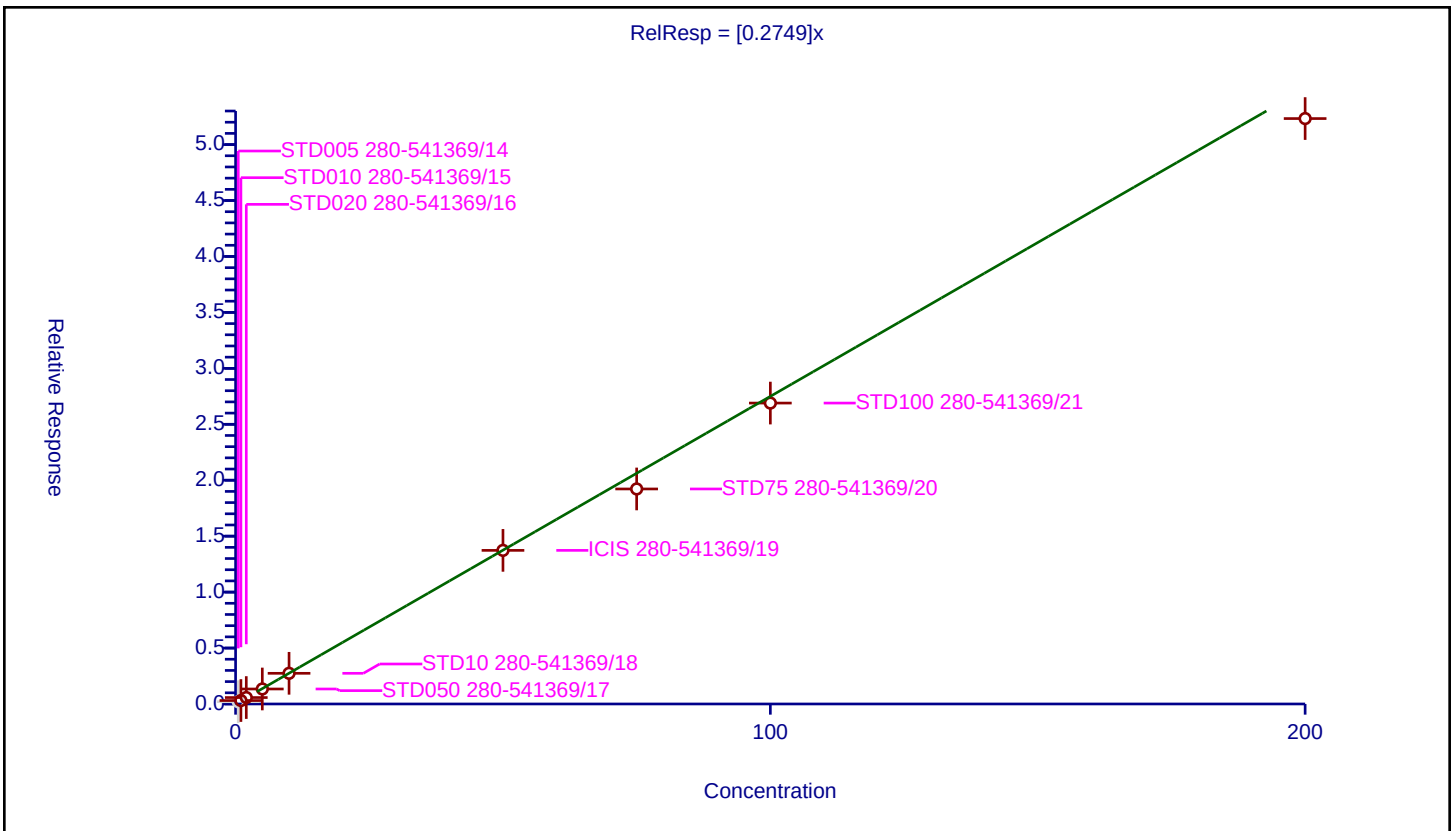
Curve Coefficients

Intercept: 0
 Slope: 0.2749

Error Coefficients

Standard Error: 864000
 Relative Standard Error: 5.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.204659	50.0	1730684.0	0.409318	N
2	STD010 280-541369/15	1.0	0.30763	50.0	1711633.0	0.30763	Y
3	STD020 280-541369/16	2.0	0.576085	50.0	1689508.0	0.288042	Y
4	STD050 280-541369/17	5.0	1.34108	50.0	1688341.0	0.268216	Y
5	STD10 280-541369/18	10.0	2.742805	50.0	1685610.0	0.274281	Y
6	ICIS 280-541369/19	50.0	13.729368	50.0	1736664.0	0.274587	Y
7	STD75 280-541369/20	75.0	19.21851	50.0	1791999.0	0.256247	Y
8	STD100 280-541369/21	100.0	26.895485	50.0	1794857.0	0.268955	Y
9	STD200 280-541369/22	200.0	52.326109	50.0	1808234.0	0.261631	Y



Calibration

/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

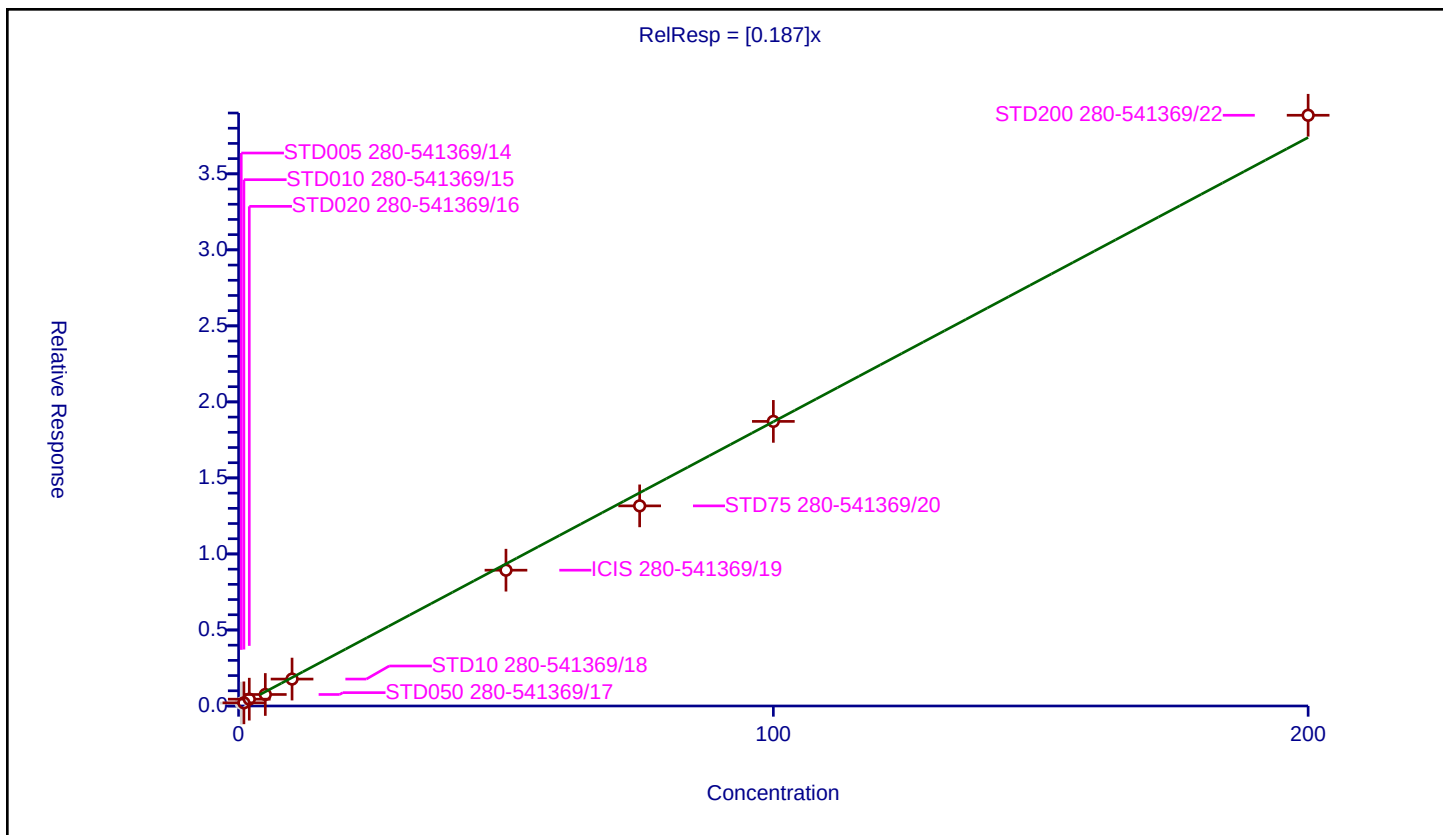
Curve Coefficients

Intercept: 0
 Slope: 0.187

Error Coefficients

Standard Error: 627000
 Relative Standard Error: 11.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.186834	50.0	1730684.0	0.373667	N
2	STD010 280-541369/15	1.0	0.207696	50.0	1711633.0	0.207696	Y
3	STD020 280-541369/16	2.0	0.447852	50.0	1689508.0	0.223926	Y
4	STD050 280-541369/17	5.0	0.757015	50.0	1688341.0	0.151403	Y
5	STD10 280-541369/18	10.0	1.770457	50.0	1685610.0	0.177046	Y
6	ICIS 280-541369/19	50.0	8.931031	50.0	1736664.0	0.178621	Y
7	STD75 280-541369/20	75.0	13.162089	50.0	1791999.0	0.175495	Y
8	STD100 280-541369/21	100.0	18.718483	50.0	1794857.0	0.187185	Y
9	STD200 280-541369/22	200.0	38.852217	50.0	1808234.0	0.194261	Y



Calibration

/ Trichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

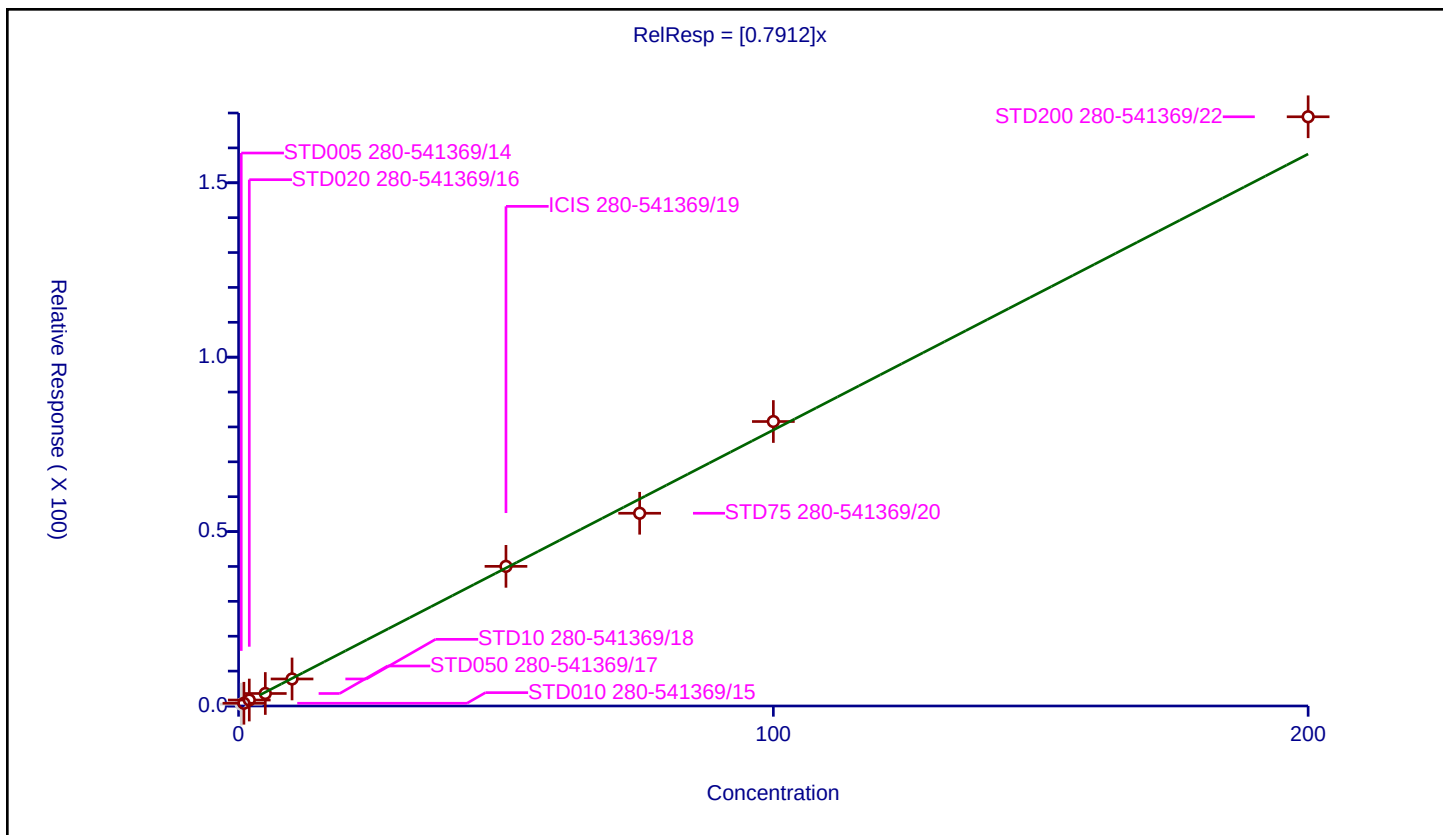
Curve Coefficients

Intercept: 0
Slope: 0.7912

Error Coefficients

Standard Error: 601000
Relative Standard Error: 6.1
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.514516	50.0	382204.0	1.029032	N
2	STD010 280-541369/15	1.0	0.786574	50.0	379748.0	0.786574	Y
3	STD020 280-541369/16	2.0	1.708132	50.0	374327.0	0.854066	Y
4	STD050 280-541369/17	5.0	3.583999	50.0	375028.0	0.7168	Y
5	STD10 280-541369/18	10.0	7.74684	50.0	376134.0	0.774684	Y
6	ICIS 280-541369/19	50.0	40.034932	50.0	387900.0	0.800699	Y
7	STD75 280-541369/20	75.0	55.257821	50.0	402819.0	0.736771	Y
8	STD100 280-541369/21	100.0	81.550989	50.0	403981.0	0.81551	Y
9	STD200 280-541369/22	200.0	168.92289	50.0	396747.0	0.844614	Y



Calibration

/ 2-Pentanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

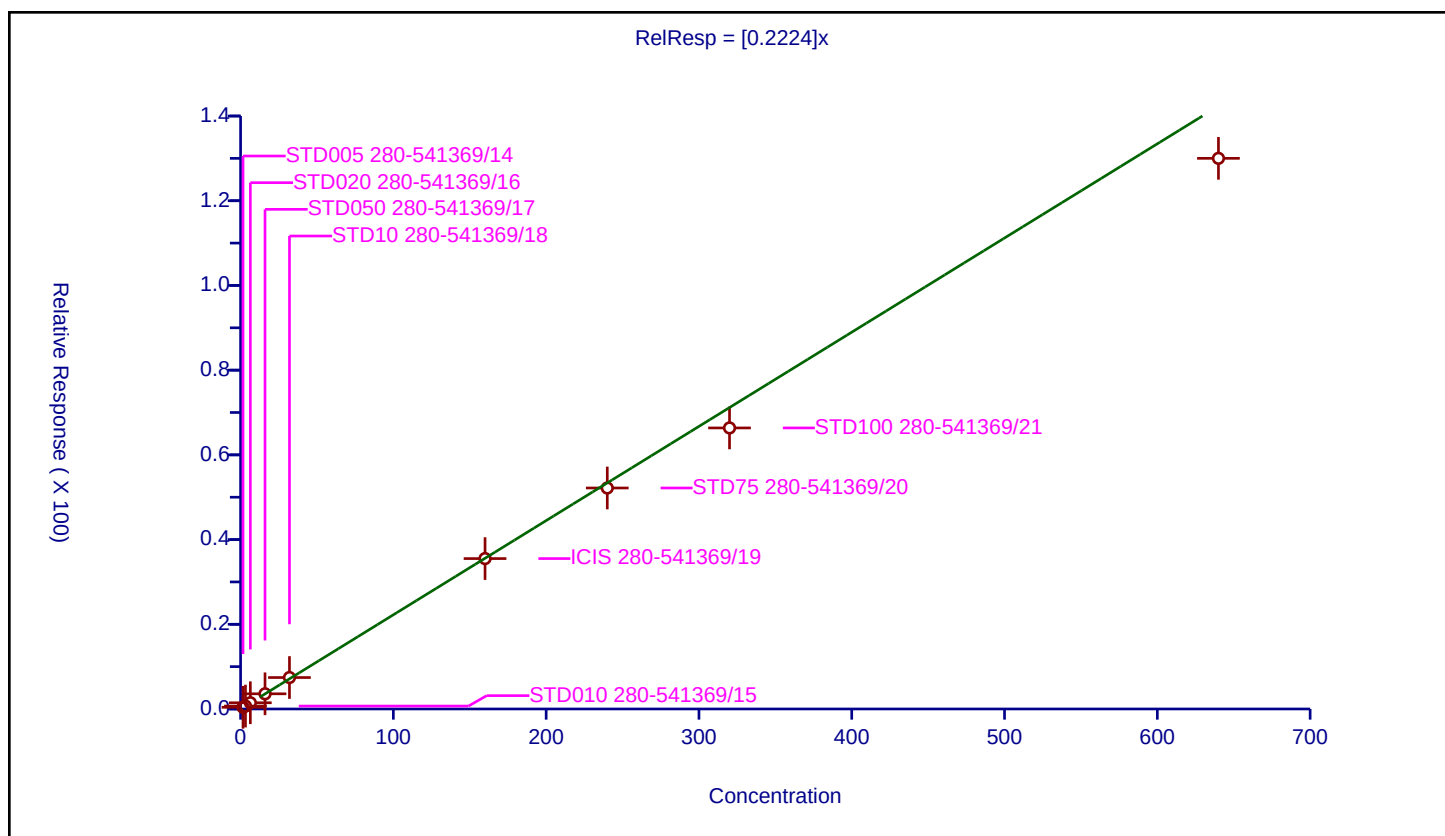
Curve Coefficients

Intercept: 0
 Slope: 0.2224

Error Coefficients

Standard Error: 2030000
 Relative Standard Error: 6.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	1.6	0.401286	50.0	1730684.0	0.250804	Y
2	STD010 280-541369/15	3.2	0.688699	50.0	1711633.0	0.215218	Y
3	STD020 280-541369/16	6.4	1.469895	50.0	1689508.0	0.229671	Y
4	STD050 280-541369/17	16.0	3.584051	50.0	1688341.0	0.224003	Y
5	STD10 280-541369/18	32.0	7.423158	50.0	1685610.0	0.231974	Y
6	ICIS 280-541369/19	160.0	35.515131	50.0	1736664.0	0.22197	Y
7	STD75 280-541369/20	240.0	52.175336	50.0	1791999.0	0.217397	Y
8	STD100 280-541369/21	320.0	66.355704	50.0	1794857.0	0.207362	Y
9	STD200 280-541369/22	640.0	130.007372	50.0	1808234.0	0.203137	Y



Calibration

/ Methylcyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

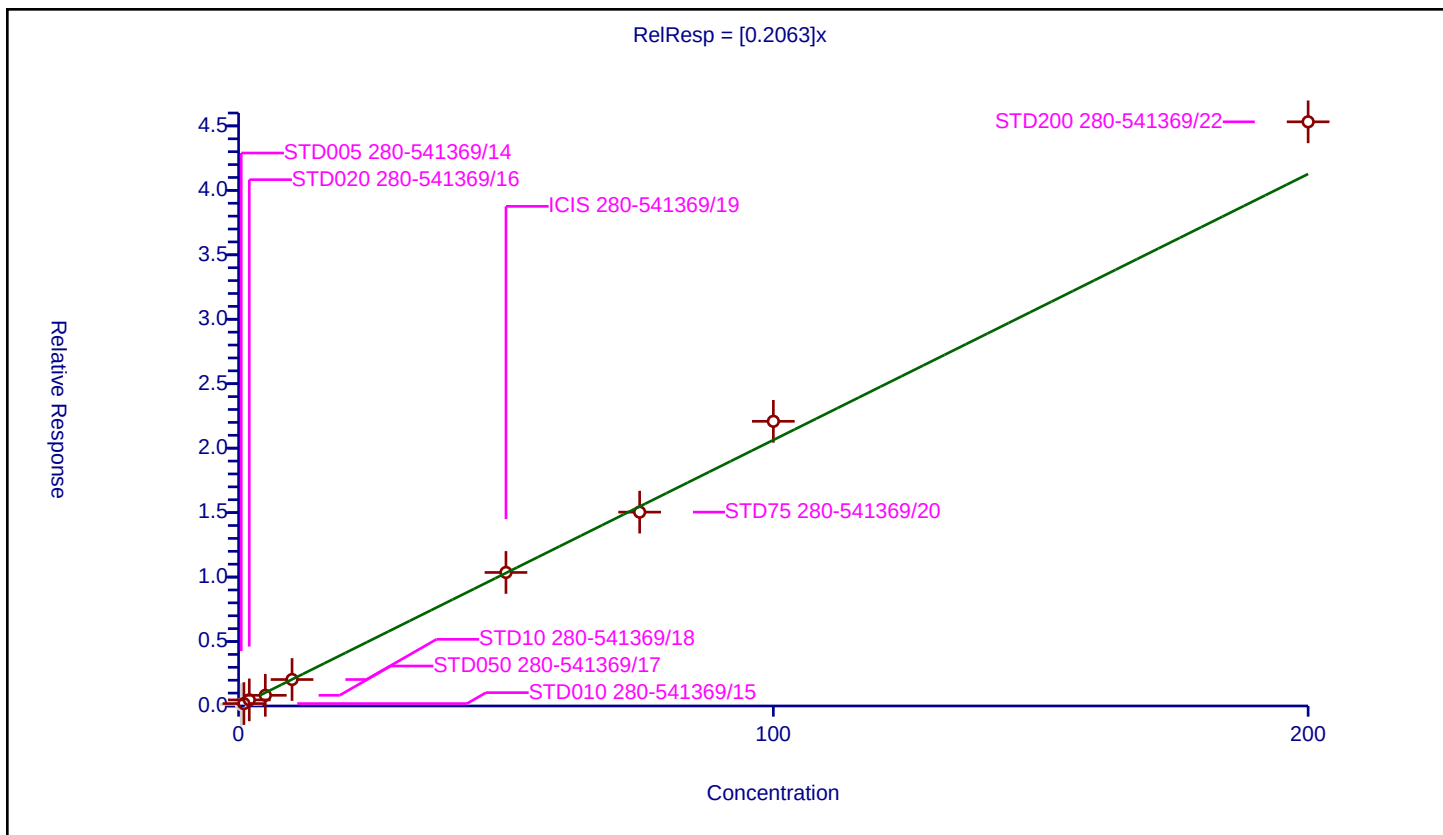
Curve Coefficients

Intercept: 0
Slope: 0.2063

Error Coefficients

Standard Error: 731000
Relative Standard Error: 10.9
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.122004	50.0	1730684.0	0.244008	N
2	STD010 280-541369/15	1.0	0.18792	50.0	1711633.0	0.18792	Y
3	STD020 280-541369/16	2.0	0.473155	50.0	1689508.0	0.236578	Y
4	STD050 280-541369/17	5.0	0.829394	50.0	1688341.0	0.165879	Y
5	STD10 280-541369/18	10.0	2.05258	50.0	1685610.0	0.205258	Y
6	ICIS 280-541369/19	50.0	10.358941	50.0	1736664.0	0.207179	Y
7	STD75 280-541369/20	75.0	15.038401	50.0	1791999.0	0.200512	Y
8	STD100 280-541369/21	100.0	22.084851	50.0	1794857.0	0.220849	Y
9	STD200 280-541369/22	200.0	45.318111	50.0	1808234.0	0.226591	Y



Calibration

/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

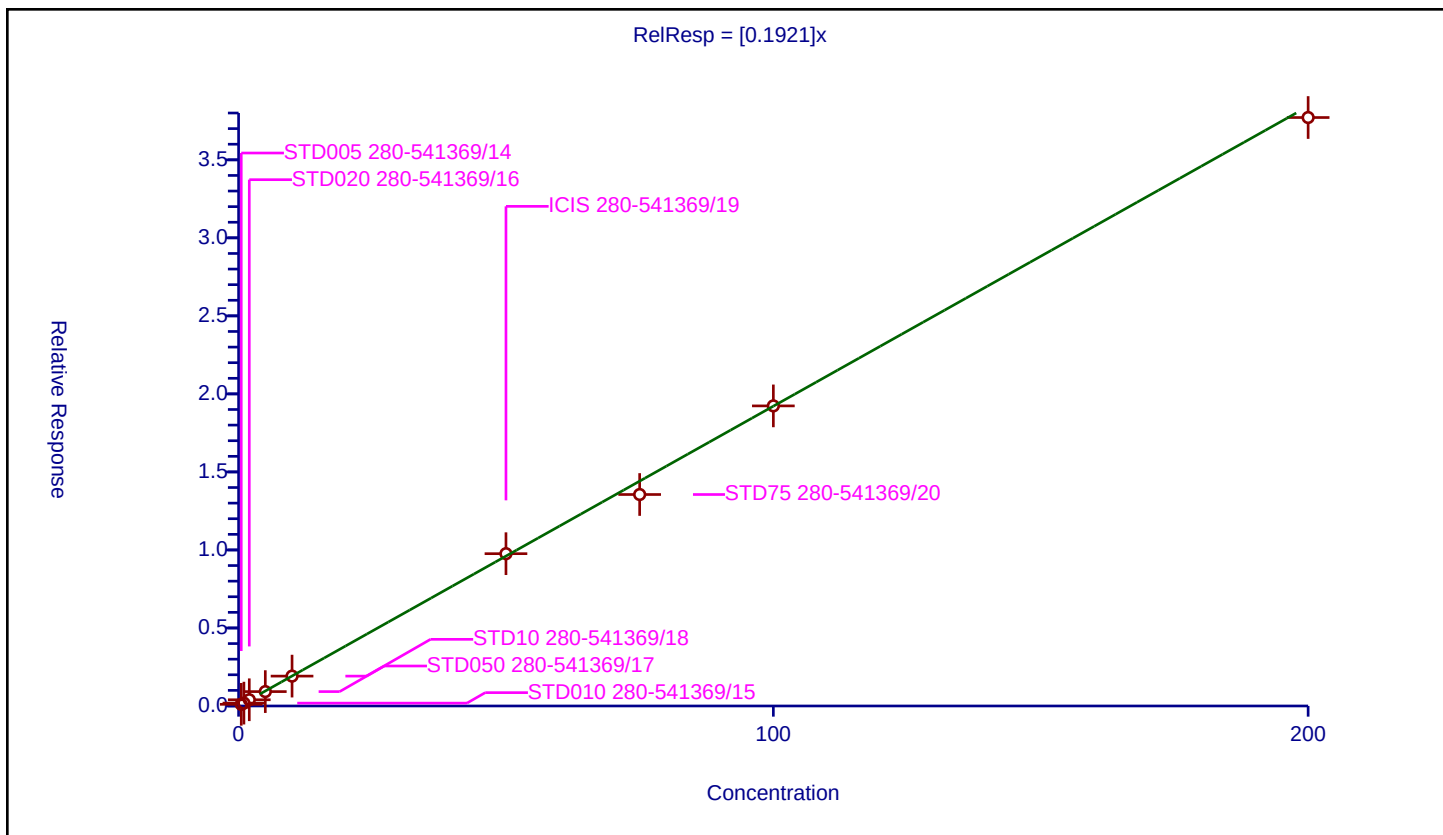
Curve Coefficients

Intercept: 0
 Slope: 0.1921

Error Coefficients

Standard Error: 580000
 Relative Standard Error: 5.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.10675	50.0	1730684.0	0.213499	Y
2	STD010 280-541369/15	1.0	0.183363	50.0	1711633.0	0.183363	Y
3	STD020 280-541369/16	2.0	0.39914	50.0	1689508.0	0.19957	Y
4	STD050 280-541369/17	5.0	0.922503	50.0	1688341.0	0.184501	Y
5	STD10 280-541369/18	10.0	1.914974	50.0	1685610.0	0.191497	Y
6	ICIS 280-541369/19	50.0	9.759545	50.0	1736664.0	0.195191	Y
7	STD75 280-541369/20	75.0	13.551793	50.0	1791999.0	0.180691	Y
8	STD100 280-541369/21	100.0	19.231922	50.0	1794857.0	0.192319	Y
9	STD200 280-541369/22	200.0	37.711546	50.0	1808234.0	0.188558	Y



Calibration

/ 1,4-Dioxane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

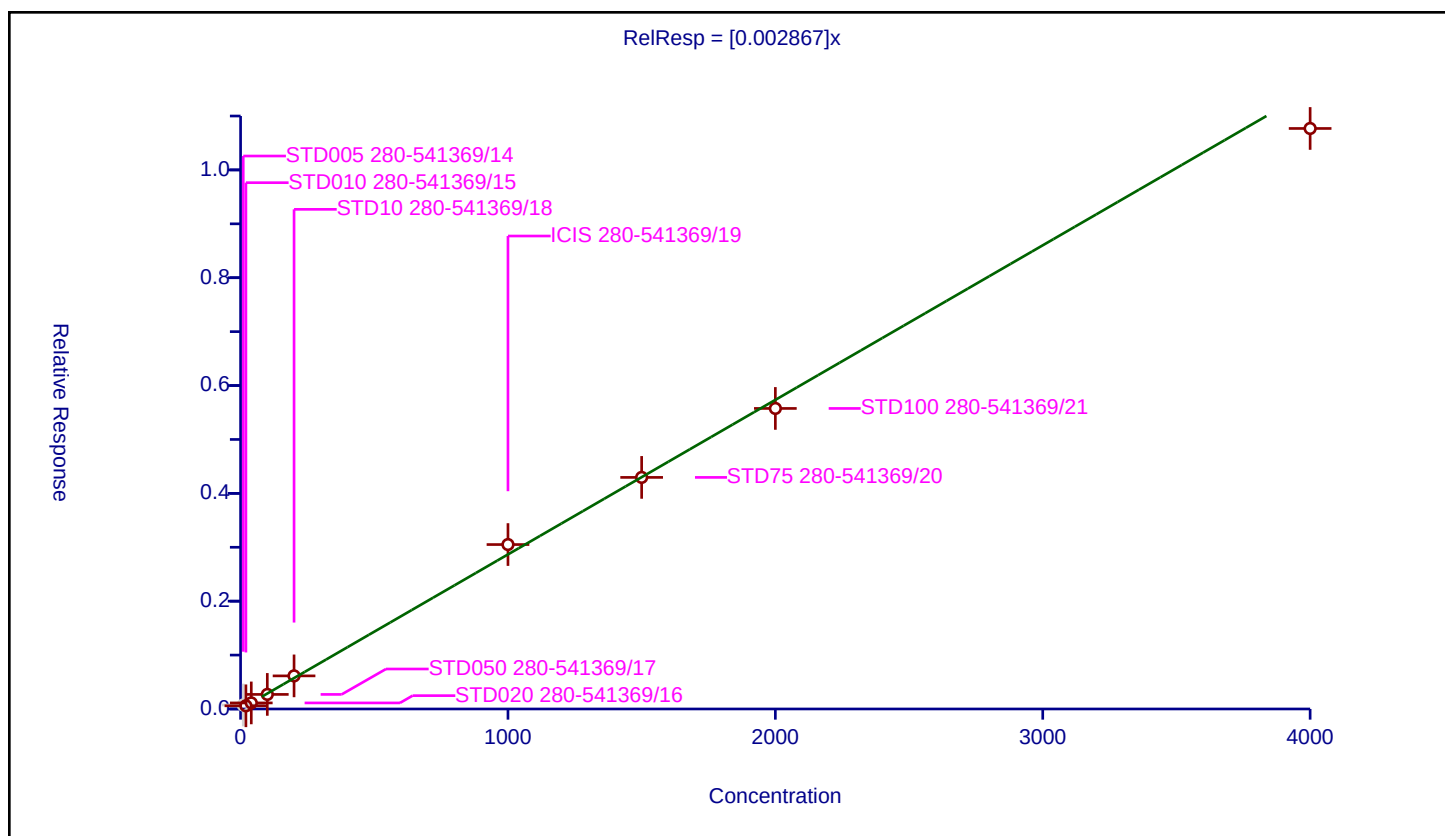
Curve Coefficients

Intercept: 0
Slope: 0.002867

Error Coefficients

Standard Error: 180000
Relative Standard Error: 5.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	10.0	0.073613	50.0	1730684.0	0.007361	N
2	STD010 280-541369/15	20.0	0.059125	50.0	1711633.0	0.002956	Y
3	STD020 280-541369/16	40.0	0.112548	50.0	1689508.0	0.002814	Y
4	STD050 280-541369/17	100.0	0.270147	50.0	1688341.0	0.002701	Y
5	STD10 280-541369/18	200.0	0.614288	50.0	1685610.0	0.003071	Y
6	ICIS 280-541369/19	1000.0	3.050302	50.0	1736664.0	0.00305	Y
7	STD75 280-541369/20	1500.0	4.29604	50.0	1791999.0	0.002864	Y
8	STD100 280-541369/21	2000.0	5.575068	50.0	1794857.0	0.002788	Y
9	STD200 280-541369/22	4000.0	10.768933	50.0	1808234.0	0.002692	Y



Calibration

/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

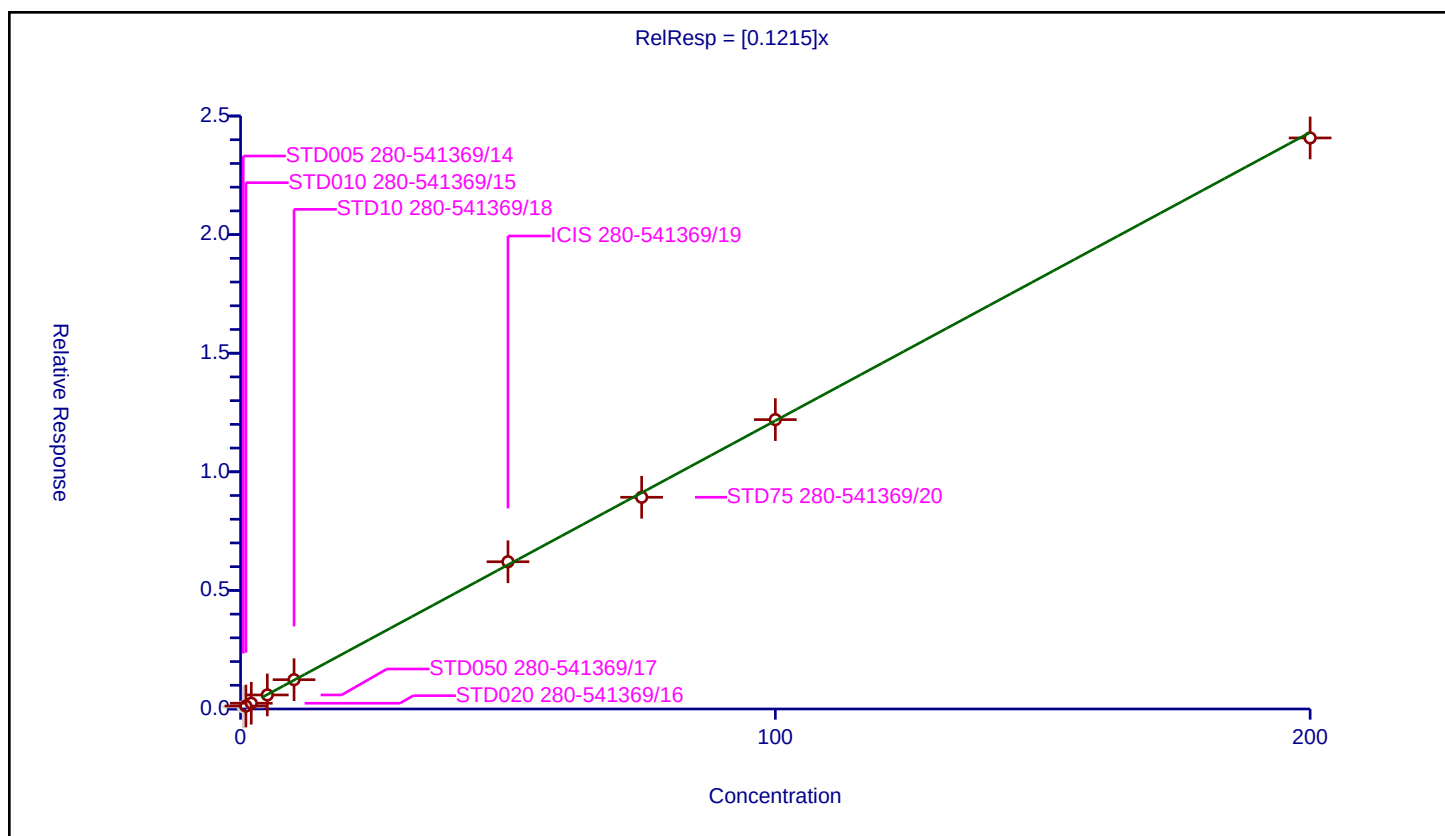
Curve Coefficients

Intercept: 0
 Slope: 0.1215

Error Coefficients

Standard Error: 397000
 Relative Standard Error: 1.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.089387	50.0	1730684.0	0.178773	N
2	STD010 280-541369/15	1.0	0.123771	50.0	1711633.0	0.123771	Y
3	STD020 280-541369/16	2.0	0.242201	50.0	1689508.0	0.1211	Y
4	STD050 280-541369/17	5.0	0.591942	50.0	1688341.0	0.118388	Y
5	STD10 280-541369/18	10.0	1.235369	50.0	1685610.0	0.123537	Y
6	ICIS 280-541369/19	50.0	6.207303	50.0	1736664.0	0.124146	Y
7	STD75 280-541369/20	75.0	8.925954	50.0	1791999.0	0.119013	Y
8	STD100 280-541369/21	100.0	12.200638	50.0	1794857.0	0.122006	Y
9	STD200 280-541369/22	200.0	24.07559	50.0	1808234.0	0.120378	Y



Calibration

/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

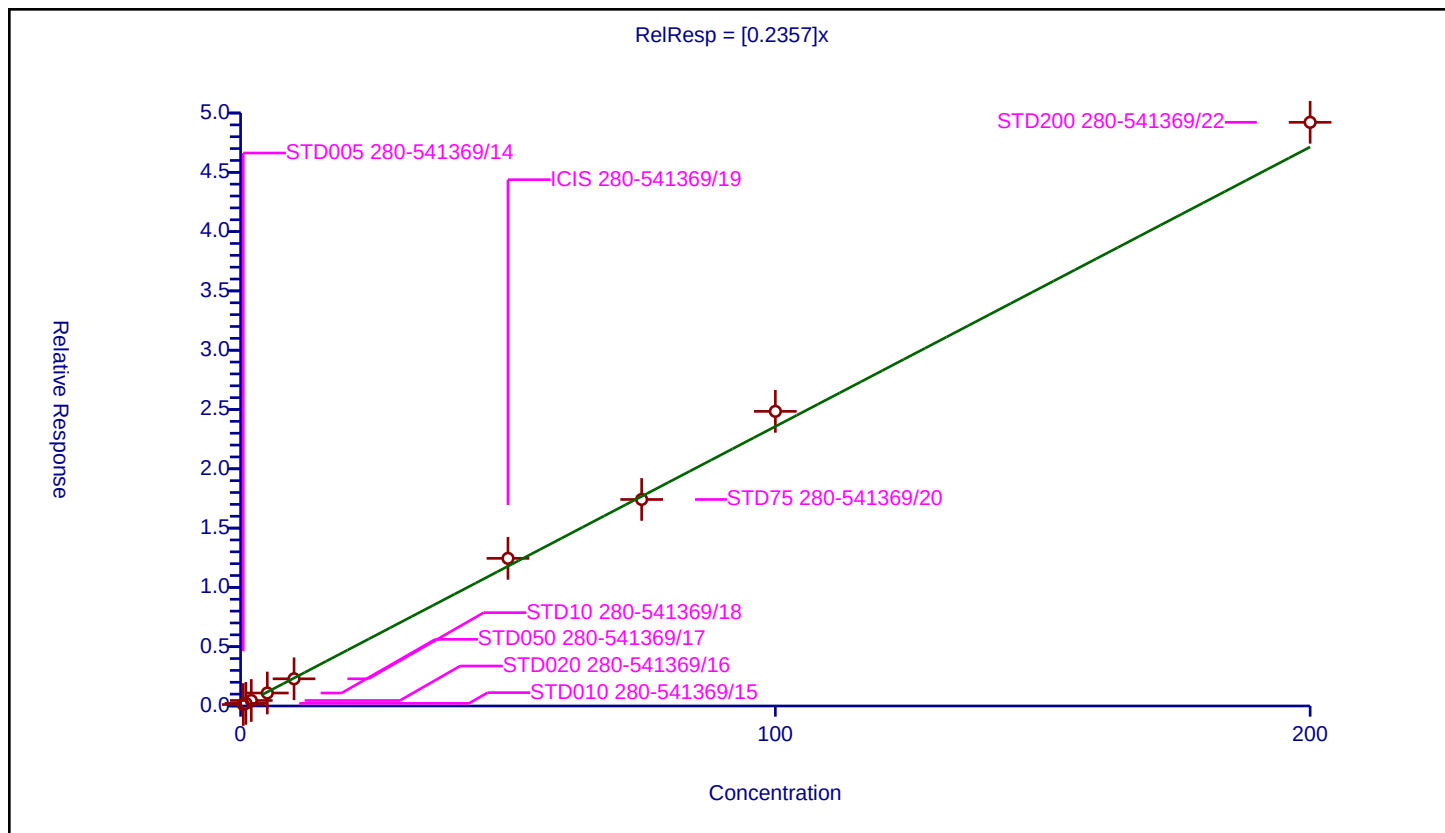
Curve Coefficients

Intercept: 0
 Slope: 0.2357

Error Coefficients

Standard Error: 754000
 Relative Standard Error: 4.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.121657	50.0	1730684.0	0.243314	Y
2	STD010 280-541369/15	1.0	0.222507	50.0	1711633.0	0.222507	Y
3	STD020 280-541369/16	2.0	0.463241	50.0	1689508.0	0.231621	Y
4	STD050 280-541369/17	5.0	1.093825	50.0	1688341.0	0.218765	Y
5	STD10 280-541369/18	10.0	2.292494	50.0	1685610.0	0.229249	Y
6	ICIS 280-541369/19	50.0	12.448983	50.0	1736664.0	0.24898	Y
7	STD75 280-541369/20	75.0	17.4141	50.0	1791999.0	0.232188	Y
8	STD100 280-541369/21	100.0	24.843455	50.0	1794857.0	0.248435	Y
9	STD200 280-541369/22	200.0	49.215782	50.0	1808234.0	0.246079	Y



Calibration

/ 2-Chloroethyl vinyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

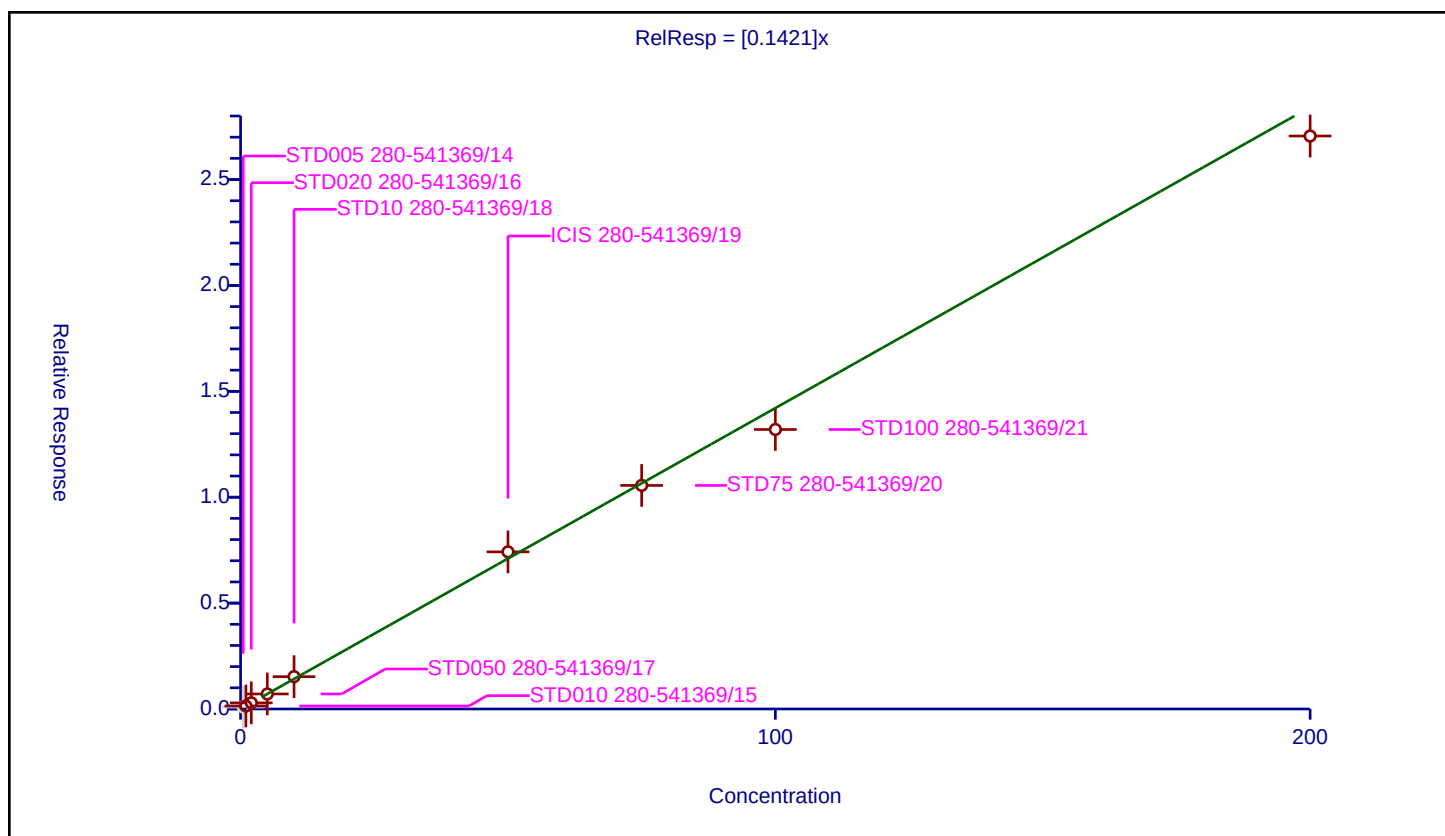
Curve Coefficients

Intercept: 0
 Slope: 0.1421

Error Coefficients

Standard Error: 446000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.09268	50.0	1730684.0	0.18536	N
2	STD010 280-541369/15	1.0	0.141239	50.0	1711633.0	0.141239	Y
3	STD020 280-541369/16	2.0	0.288841	50.0	1689508.0	0.144421	Y
4	STD050 280-541369/17	5.0	0.709839	50.0	1688341.0	0.141968	Y
5	STD10 280-541369/18	10.0	1.526569	50.0	1685610.0	0.152657	Y
6	ICIS 280-541369/19	50.0	7.420376	50.0	1736664.0	0.148408	Y
7	STD75 280-541369/20	75.0	10.55673	50.0	1791999.0	0.140756	Y
8	STD100 280-541369/21	100.0	13.1986	50.0	1794857.0	0.131986	Y
9	STD200 280-541369/22	200.0	27.055431	50.0	1808234.0	0.135277	Y



Calibration

/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

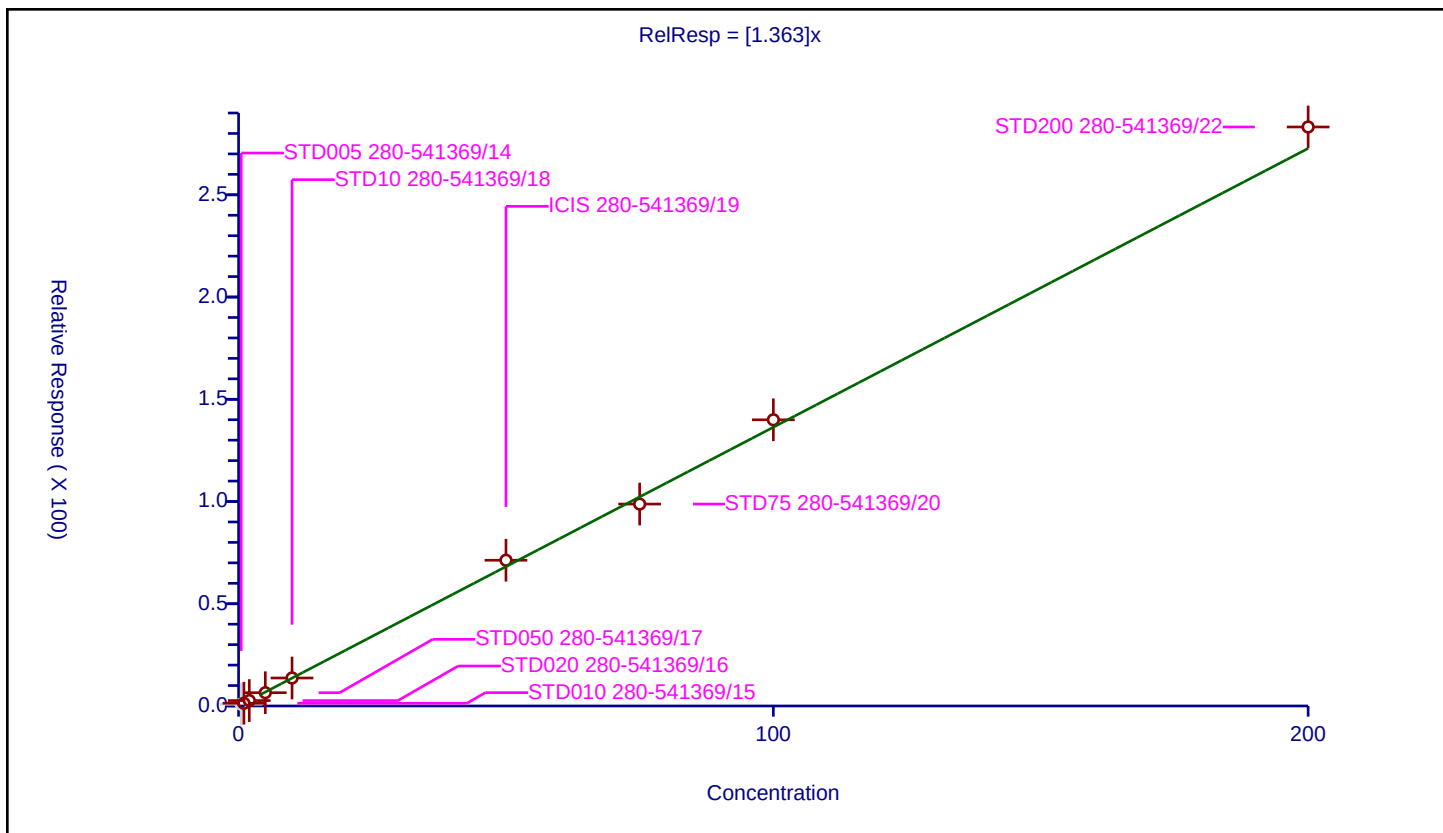
Curve Coefficients

Intercept: 0
 Slope: 1.363

Error Coefficients

Standard Error: 1020000
 Relative Standard Error: 3.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.864329	50.0	382204.0	1.728658	N
2	STD010 280-541369/15	1.0	1.351159	50.0	379748.0	1.351159	Y
3	STD020 280-541369/16	2.0	2.658638	50.0	374327.0	1.329319	Y
4	STD050 280-541369/17	5.0	6.498581	50.0	375028.0	1.299716	Y
5	STD10 280-541369/18	10.0	13.688606	50.0	376134.0	1.368861	Y
6	ICIS 280-541369/19	50.0	71.279582	50.0	387900.0	1.425592	Y
7	STD75 280-541369/20	75.0	98.757631	50.0	402819.0	1.316768	Y
8	STD100 280-541369/21	100.0	139.973043	50.0	403981.0	1.39973	Y
9	STD200 280-541369/22	200.0	283.171013	50.0	396747.0	1.415855	Y



Calibration

/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

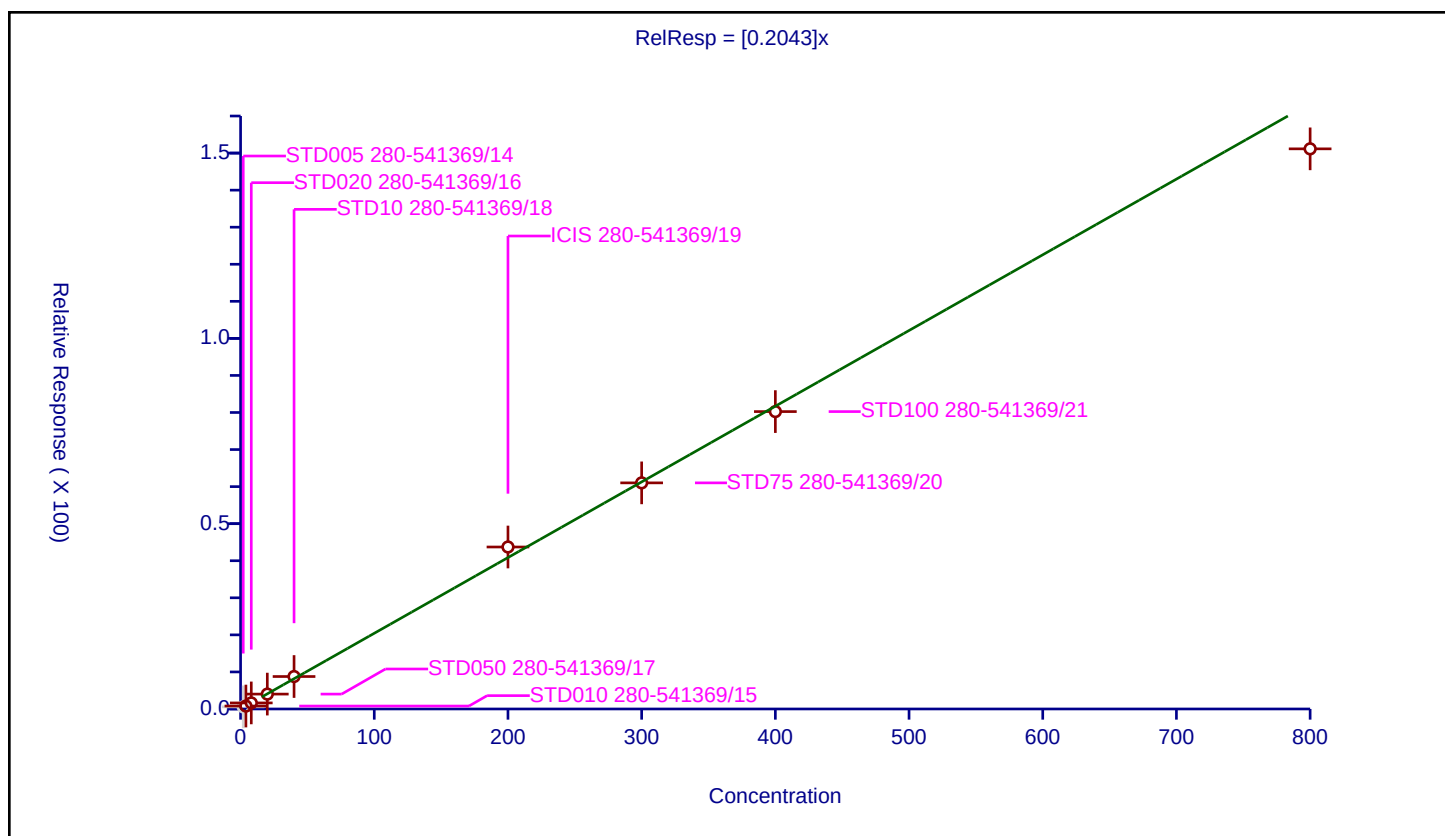
Curve Coefficients

Intercept: 0
Slope: 0.2043

Error Coefficients

Standard Error: 2550000
Relative Standard Error: 5.0
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	2.0	0.581186	50.0	1730684.0	0.290593	N
2	STD010 280-541369/15	4.0	0.792898	50.0	1711633.0	0.198224	Y
3	STD020 280-541369/16	8.0	1.63589	50.0	1689508.0	0.204486	Y
4	STD050 280-541369/17	20.0	4.016102	50.0	1688341.0	0.200805	Y
5	STD10 280-541369/18	40.0	8.760656	50.0	1685610.0	0.219016	Y
6	ICIS 280-541369/19	200.0	43.711622	50.0	1736664.0	0.218558	Y
7	STD75 280-541369/20	300.0	61.011278	50.0	1791999.0	0.203371	Y
8	STD100 280-541369/21	400.0	80.248148	50.0	1794857.0	0.20062	Y
9	STD200 280-541369/22	800.0	151.145261	50.0	1808234.0	0.188932	Y



Calibration

/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

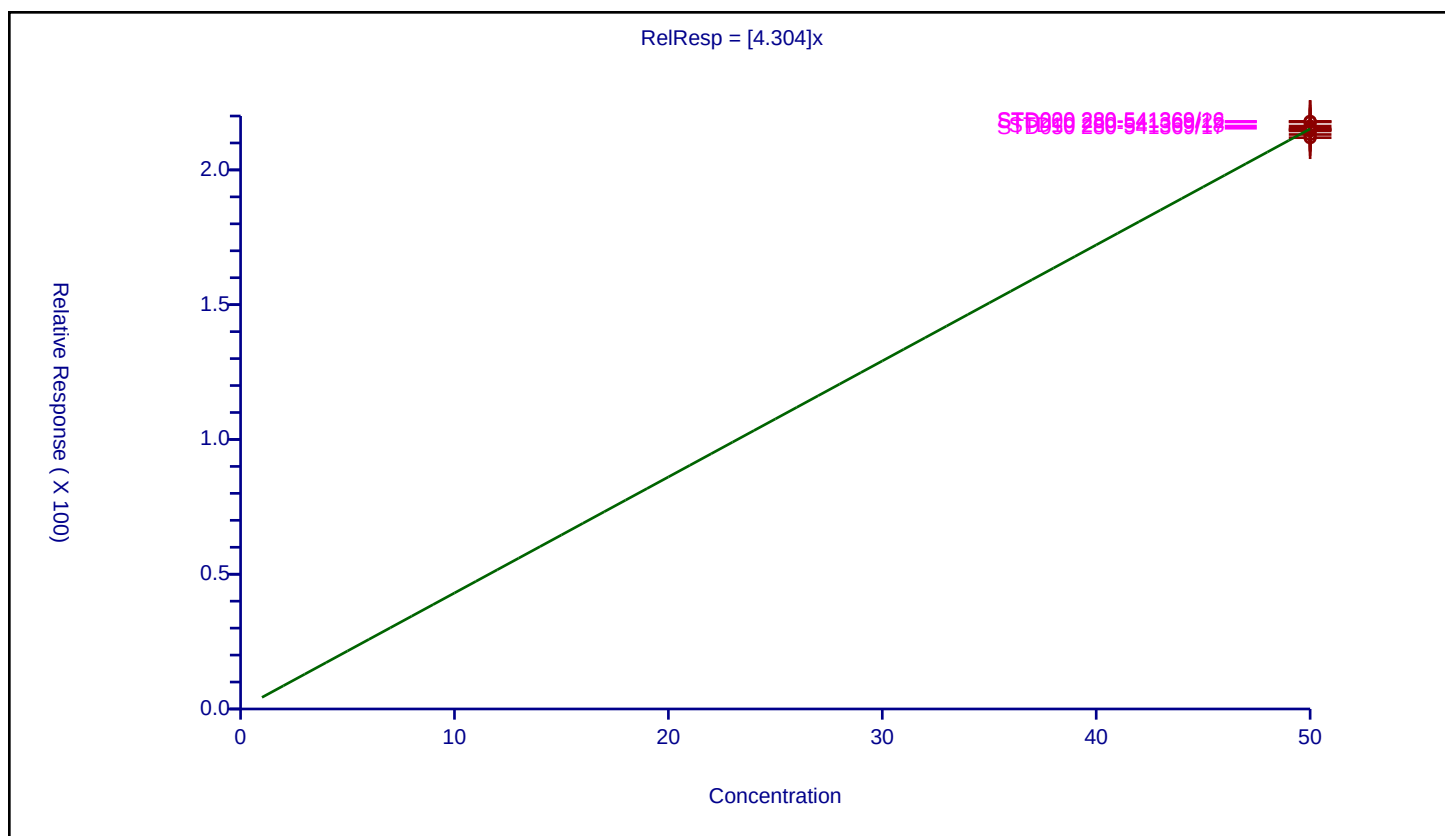
Curve Coefficients

Intercept: 0
 Slope: 4.304

Error Coefficients

Standard Error: 1760000
 Relative Standard Error: 0.9
 Correlation Coefficient: 0.00000000000000000000
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	50.0	214.816171	50.0	382204.0	4.296323	Y
2	STD010 280-541369/15	50.0	215.021541	50.0	379748.0	4.300431	Y
3	STD020 280-541369/16	50.0	218.023947	50.0	374327.0	4.360479	Y
4	STD050 280-541369/17	50.0	215.464979	50.0	375028.0	4.3093	Y
5	STD10 280-541369/18	50.0	216.276114	50.0	376134.0	4.325522	Y
6	ICIS 280-541369/19	50.0	214.463522	50.0	387900.0	4.28927	Y
7	STD75 280-541369/20	50.0	211.952266	50.0	402819.0	4.239045	Y
8	STD100 280-541369/21	50.0	213.144925	50.0	403981.0	4.262899	Y
9	STD200 280-541369/22	50.0	217.805302	50.0	396747.0	4.356106	Y



Calibration

/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

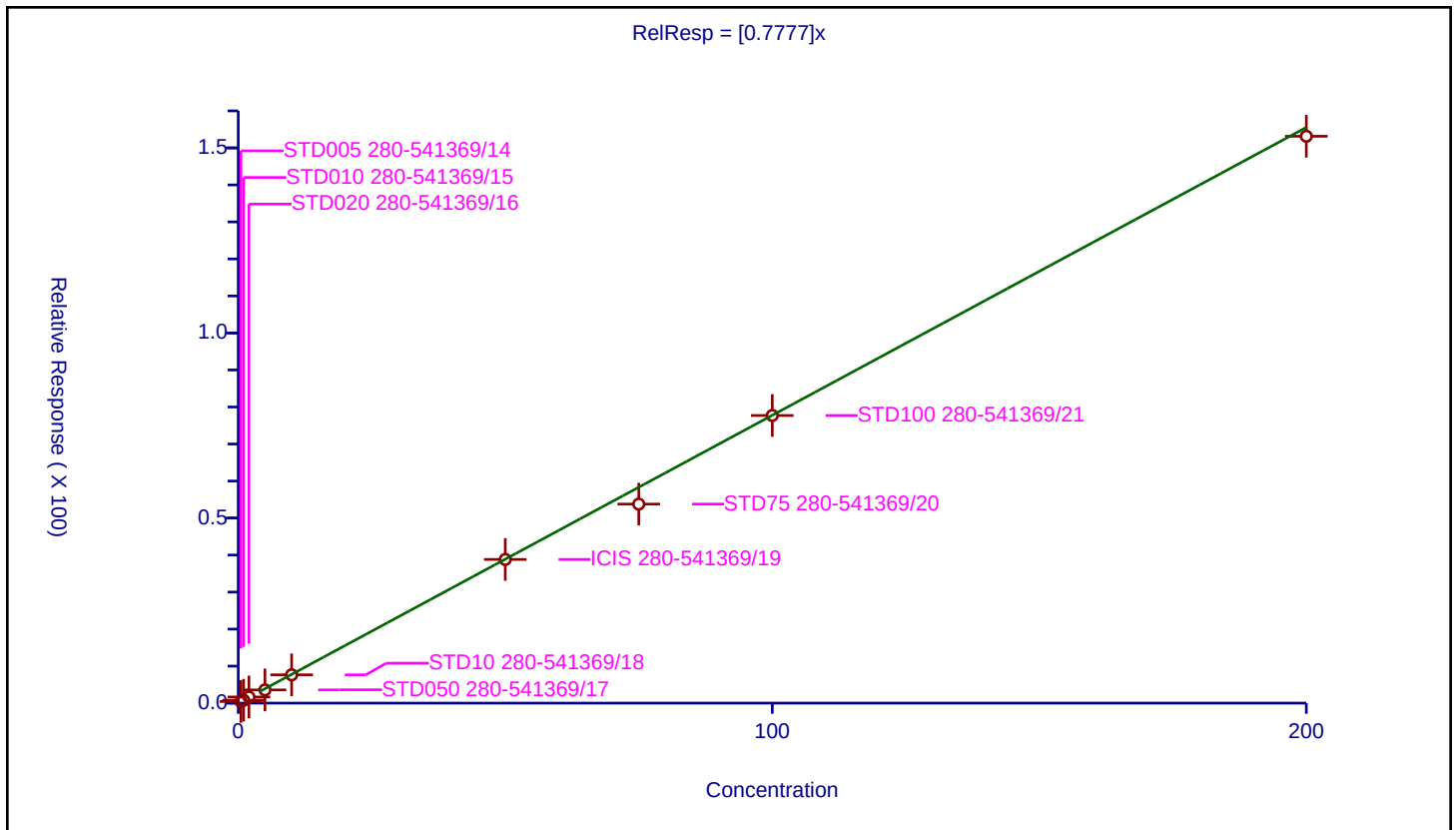
Curve Coefficients

Intercept: 0
 Slope: 0.7777

Error Coefficients

Standard Error: 2350000
 Relative Standard Error: 6.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.438266	50.0	1730684.0	0.876532	Y
2	STD010 280-541369/15	1.0	0.778263	50.0	1711633.0	0.778263	Y
3	STD020 280-541369/16	2.0	1.657021	50.0	1689508.0	0.82851	Y
4	STD050 280-541369/17	5.0	3.575344	50.0	1688341.0	0.715069	Y
5	STD10 280-541369/18	10.0	7.647113	50.0	1685610.0	0.764711	Y
6	ICIS 280-541369/19	50.0	38.818015	50.0	1736664.0	0.77636	Y
7	STD75 280-541369/20	75.0	53.768027	50.0	1791999.0	0.716907	Y
8	STD100 280-541369/21	100.0	77.708085	50.0	1794857.0	0.777081	Y
9	STD200 280-541369/22	200.0	153.140329	50.0	1808234.0	0.765702	Y



Calibration

/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

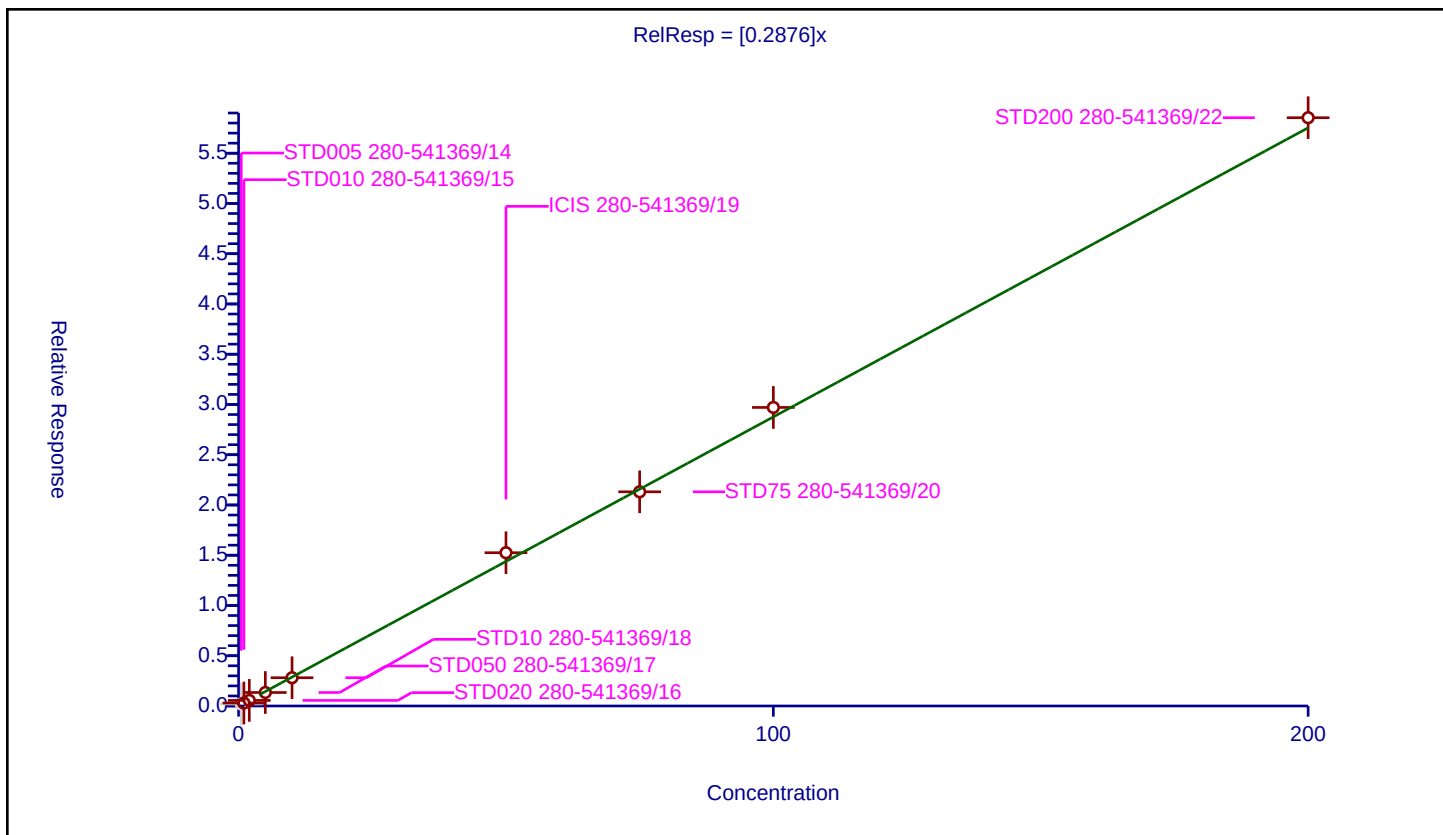
Curve Coefficients

Intercept: 0
 Slope: 0.2876

Error Coefficients

Standard Error: 963000
 Relative Standard Error: 4.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.200845	50.0	1730684.0	0.401691	N
2	STD010 280-541369/15	1.0	0.295361	50.0	1711633.0	0.295361	Y
3	STD020 280-541369/16	2.0	0.555043	50.0	1689508.0	0.277522	Y
4	STD050 280-541369/17	5.0	1.341465	50.0	1688341.0	0.268293	Y
5	STD10 280-541369/18	10.0	2.811119	50.0	1685610.0	0.281112	Y
6	ICIS 280-541369/19	50.0	15.248805	50.0	1736664.0	0.304976	Y
7	STD75 280-541369/20	75.0	21.311089	50.0	1791999.0	0.284148	Y
8	STD100 280-541369/21	100.0	29.706238	50.0	1794857.0	0.297062	Y
9	STD200 280-541369/22	200.0	58.532856	50.0	1808234.0	0.292664	Y



Calibration

/ Ethyl methacrylate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

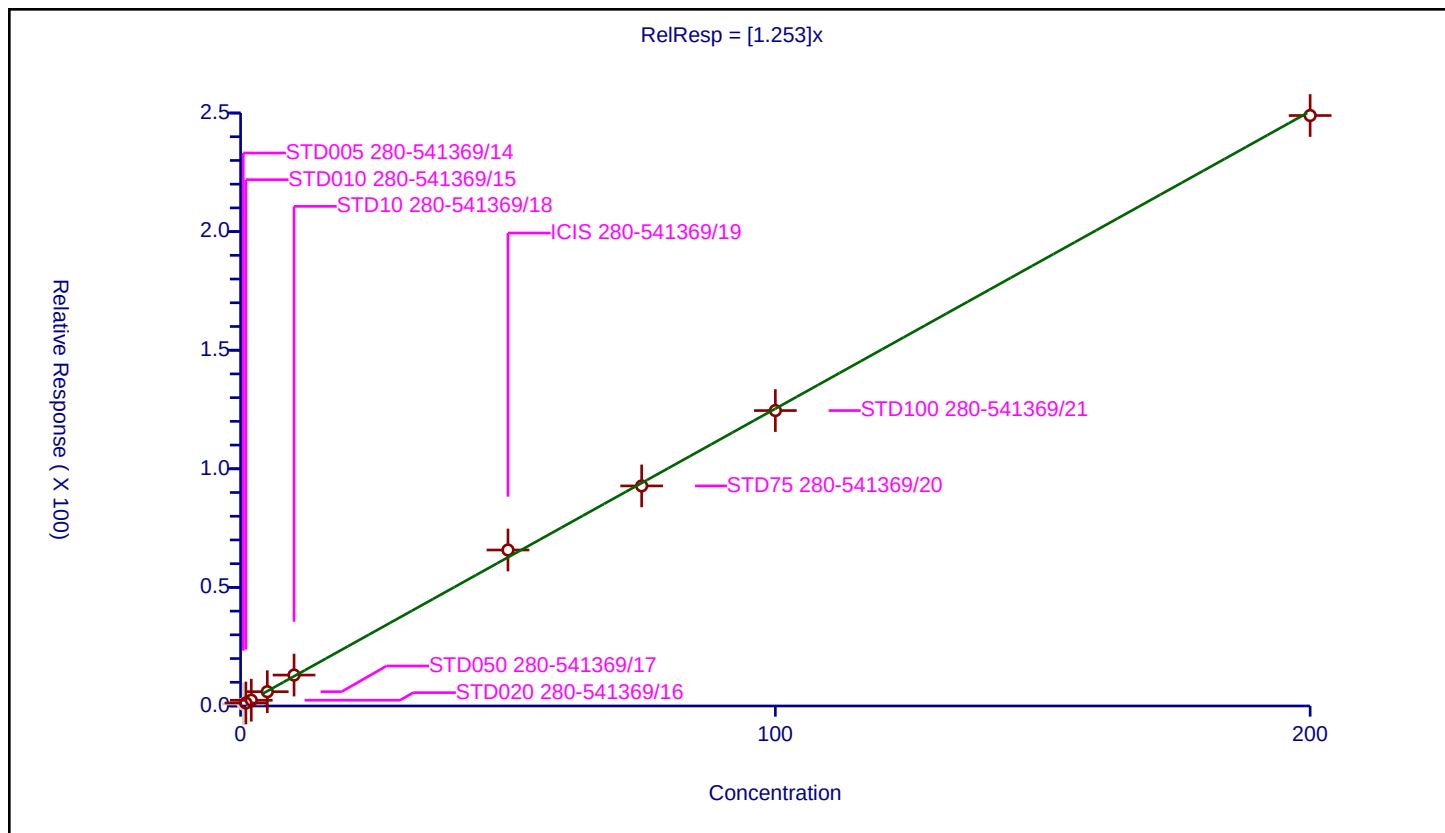
Curve Coefficients

Intercept: 0
Slope: 1.253

Error Coefficients

Standard Error: 906000
Relative Standard Error: 3.1
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.849546	50.0	382204.0	1.699093	N
2	STD010 280-541369/15	1.0	1.261889	50.0	379748.0	1.261889	Y
3	STD020 280-541369/16	2.0	2.424084	50.0	374327.0	1.212042	Y
4	STD050 280-541369/17	5.0	6.035683	50.0	375028.0	1.207137	Y
5	STD10 280-541369/18	10.0	13.036843	50.0	376134.0	1.303684	Y
6	ICIS 280-541369/19	50.0	65.764114	50.0	387900.0	1.315282	Y
7	STD75 280-541369/20	75.0	92.781001	50.0	402819.0	1.23708	Y
8	STD100 280-541369/21	100.0	124.554373	50.0	403981.0	1.245544	Y
9	STD200 280-541369/22	200.0	248.943911	50.0	396747.0	1.24472	Y



Calibration

/ 1,1,2-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

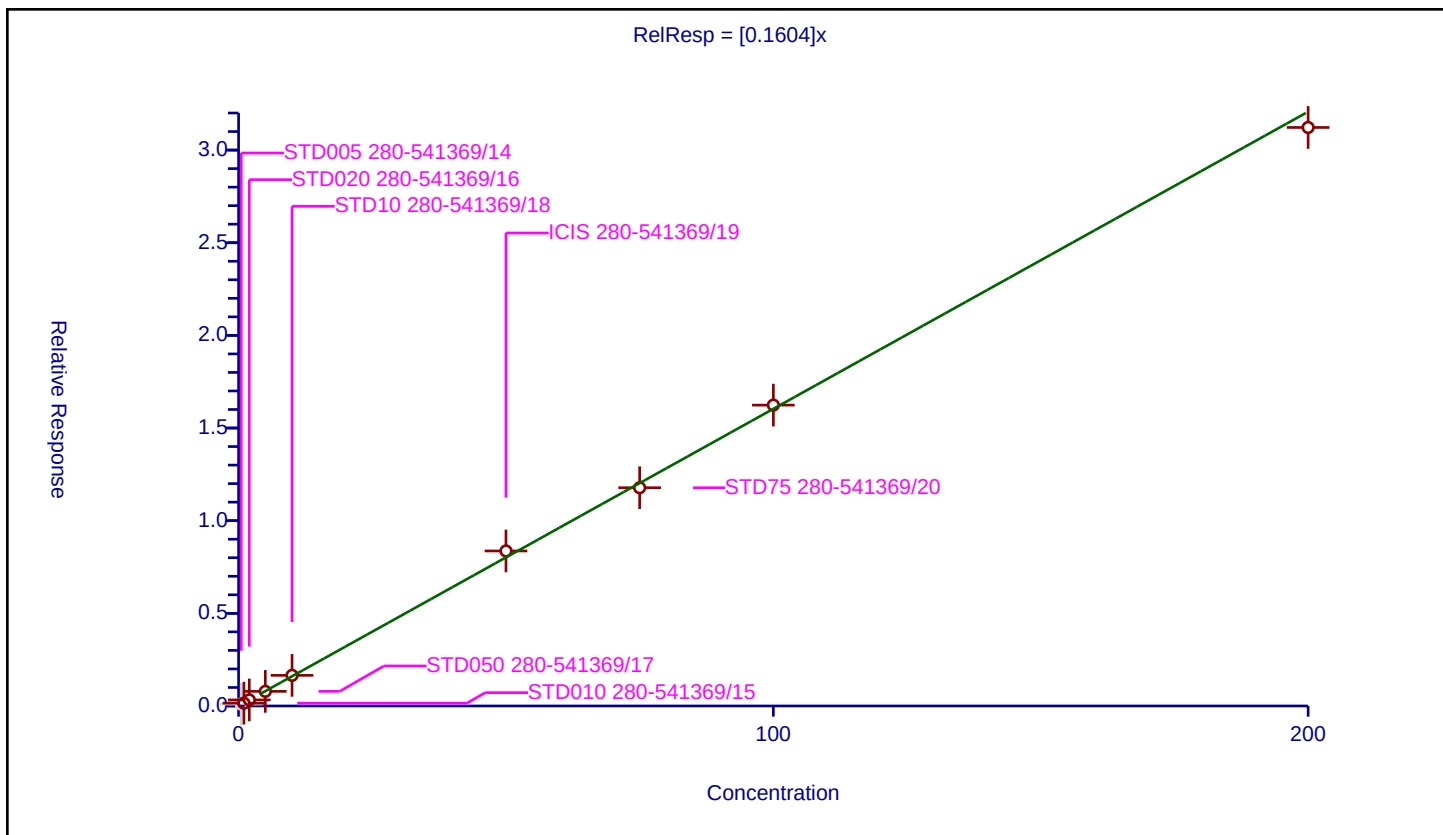
Curve Coefficients

Intercept: 0
 Slope: 0.1604

Error Coefficients

Standard Error: 518000
 Relative Standard Error: 3.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.102503	50.0	1730684.0	0.205006	N
2	STD010 280-541369/15	1.0	0.152924	50.0	1711633.0	0.152924	Y
3	STD020 280-541369/16	2.0	0.327936	50.0	1689508.0	0.163968	Y
4	STD050 280-541369/17	5.0	0.789118	50.0	1688341.0	0.157824	Y
5	STD10 280-541369/18	10.0	1.652606	50.0	1685610.0	0.165261	Y
6	ICIS 280-541369/19	50.0	8.365953	50.0	1736664.0	0.167319	Y
7	STD75 280-541369/20	75.0	11.778745	50.0	1791999.0	0.15705	Y
8	STD100 280-541369/21	100.0	16.236475	50.0	1794857.0	0.162365	Y
9	STD200 280-541369/22	200.0	31.220102	50.0	1808234.0	0.156101	Y



Calibration

/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

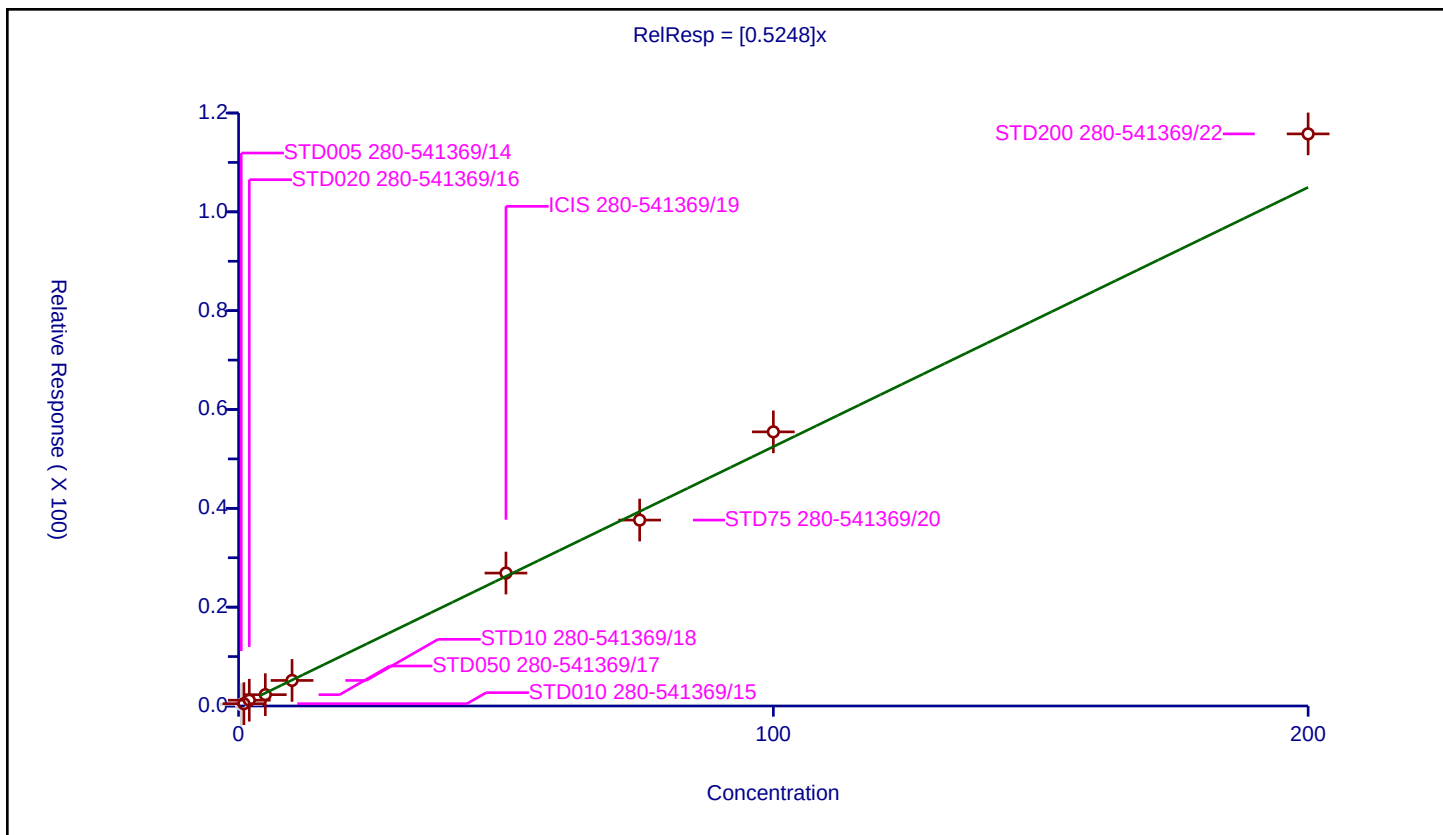
Curve Coefficients

Intercept: 0
 Slope: 0.5248

Error Coefficients

Standard Error: 411000
 Relative Standard Error: 9.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.321294	50.0	382204.0	0.642589	N
2	STD010 280-541369/15	1.0	0.466757	50.0	379748.0	0.466757	Y
3	STD020 280-541369/16	2.0	1.167161	50.0	374327.0	0.583581	Y
4	STD050 280-541369/17	5.0	2.288496	50.0	375028.0	0.457699	Y
5	STD10 280-541369/18	10.0	5.171561	50.0	376134.0	0.517156	Y
6	ICIS 280-541369/19	50.0	26.901392	50.0	387900.0	0.538028	Y
7	STD75 280-541369/20	75.0	37.619626	50.0	402819.0	0.501595	Y
8	STD100 280-541369/21	100.0	55.475381	50.0	403981.0	0.554754	Y
9	STD200 280-541369/22	200.0	115.775797	50.0	396747.0	0.578879	Y



Calibration

/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

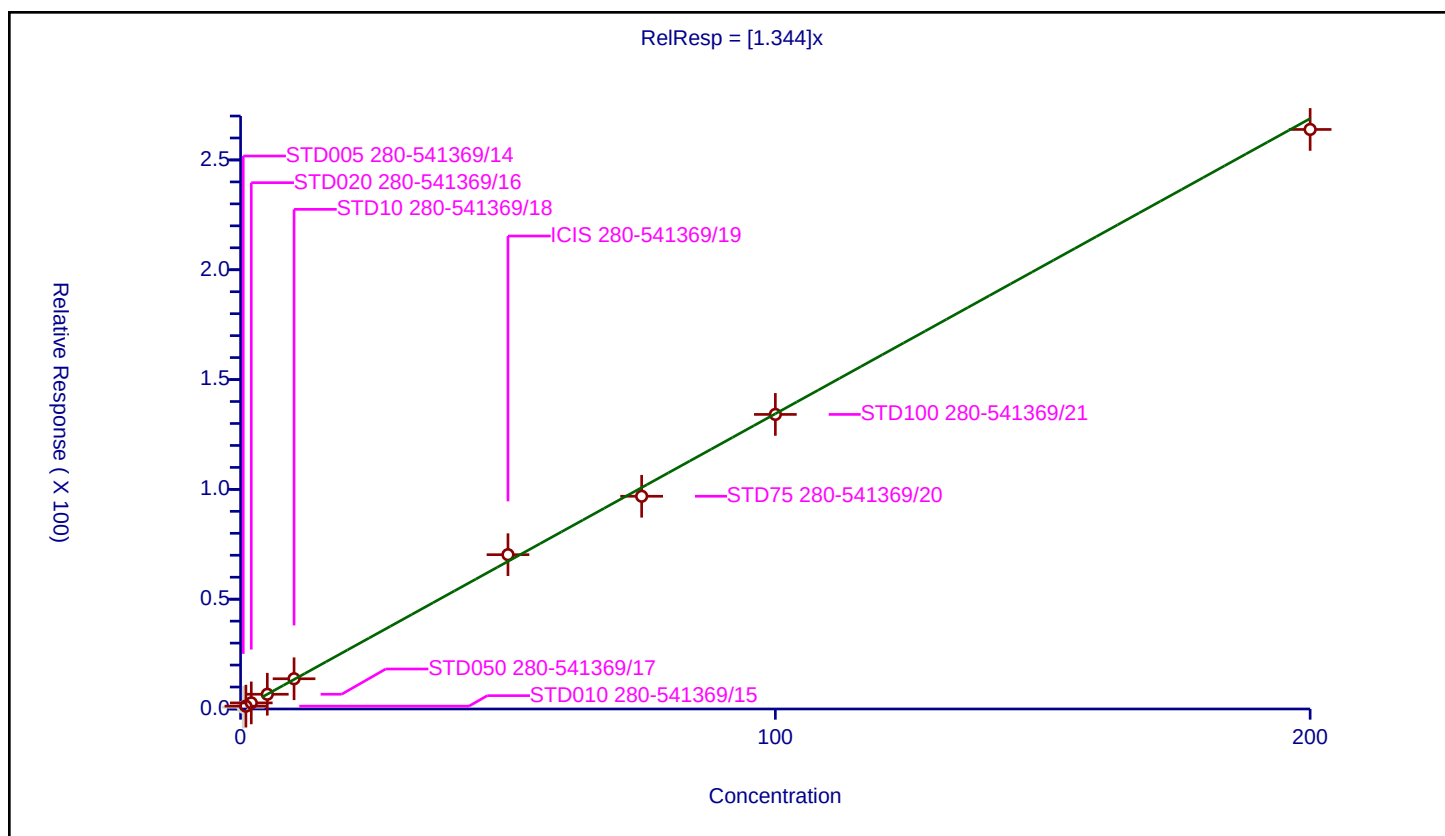
Curve Coefficients

Intercept: 0
 Slope: 1.344

Error Coefficients

Standard Error: 962000
 Relative Standard Error: 3.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.823775	50.0	382204.0	1.647549	N
2	STD010 280-541369/15	1.0	1.289276	50.0	379748.0	1.289276	Y
3	STD020 280-541369/16	2.0	2.777919	50.0	374327.0	1.388959	Y
4	STD050 280-541369/17	5.0	6.708299	50.0	375028.0	1.34166	Y
5	STD10 280-541369/18	10.0	13.760654	50.0	376134.0	1.376065	Y
6	ICIS 280-541369/19	50.0	70.25767	50.0	387900.0	1.405153	Y
7	STD75 280-541369/20	75.0	96.865093	50.0	402819.0	1.291535	Y
8	STD100 280-541369/21	100.0	134.132793	50.0	403981.0	1.341328	Y
9	STD200 280-541369/22	200.0	263.879626	50.0	396747.0	1.319398	Y



Calibration

/ 2-Hexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

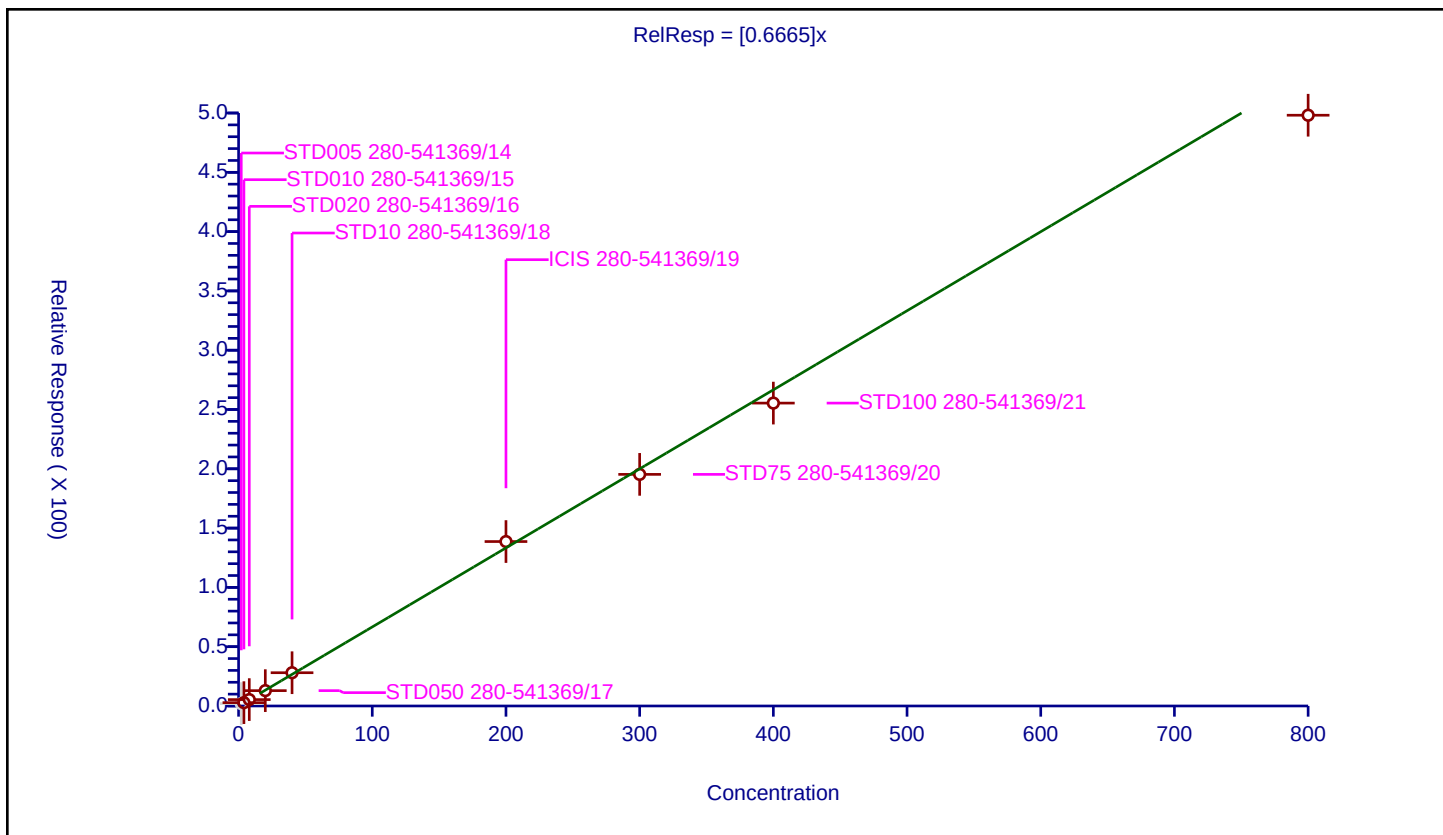
Curve Coefficients

Intercept: 0
 Slope: 0.6665

Error Coefficients

Standard Error: 1830000
 Relative Standard Error: 4.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	2.0	2.013584	50.0	382204.0	1.006792	N
2	STD010 280-541369/15	4.0	2.815815	50.0	379748.0	0.703954	Y
3	STD020 280-541369/16	8.0	5.393813	50.0	374327.0	0.674227	Y
4	STD050 280-541369/17	20.0	12.942367	50.0	375028.0	0.647118	Y
5	STD10 280-541369/18	40.0	28.050243	50.0	376134.0	0.701256	Y
6	ICIS 280-541369/19	200.0	138.666924	50.0	387900.0	0.693335	Y
7	STD75 280-541369/20	300.0	195.291309	50.0	402819.0	0.650971	Y
8	STD100 280-541369/21	400.0	255.413126	50.0	403981.0	0.638533	Y
9	STD200 280-541369/22	800.0	498.126136	50.0	396747.0	0.622658	Y



Calibration

/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

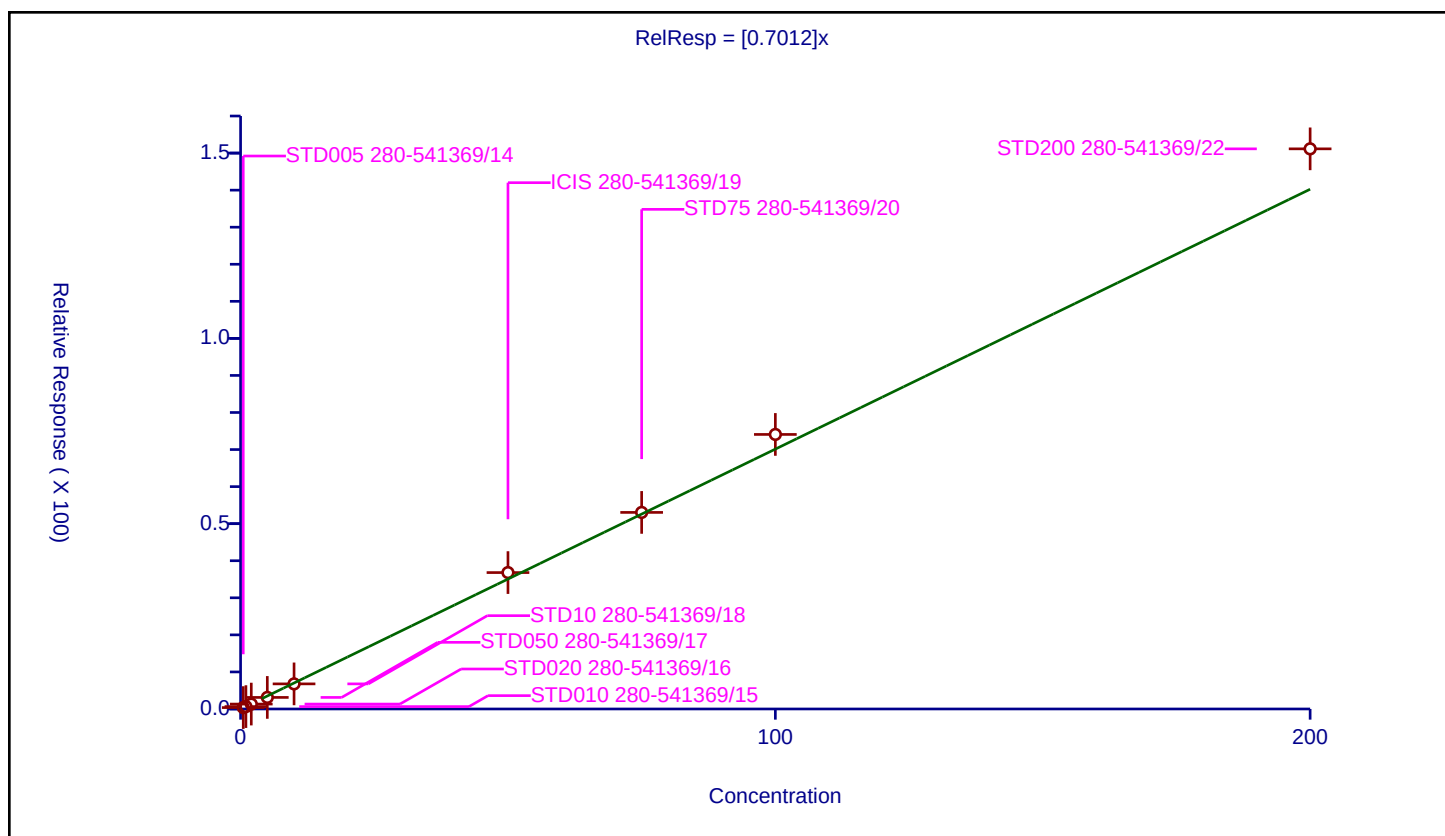
Curve Coefficients

Intercept: 0
 Slope: 0.7012

Error Coefficients

Standard Error: 508000
 Relative Standard Error: 7.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.380033	50.0	382204.0	0.760065	Y
2	STD010 280-541369/15	1.0	0.647271	50.0	379748.0	0.647271	Y
3	STD020 280-541369/16	2.0	1.325312	50.0	374327.0	0.662656	Y
4	STD050 280-541369/17	5.0	3.1191	50.0	375028.0	0.62382	Y
5	STD10 280-541369/18	10.0	6.773118	50.0	376134.0	0.677312	Y
6	ICIS 280-541369/19	50.0	36.807167	50.0	387900.0	0.736143	Y
7	STD75 280-541369/20	75.0	53.043178	50.0	402819.0	0.707242	Y
8	STD100 280-541369/21	100.0	74.079722	50.0	403981.0	0.740797	Y
9	STD200 280-541369/22	200.0	151.141281	50.0	396747.0	0.755706	Y



Calibration

/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

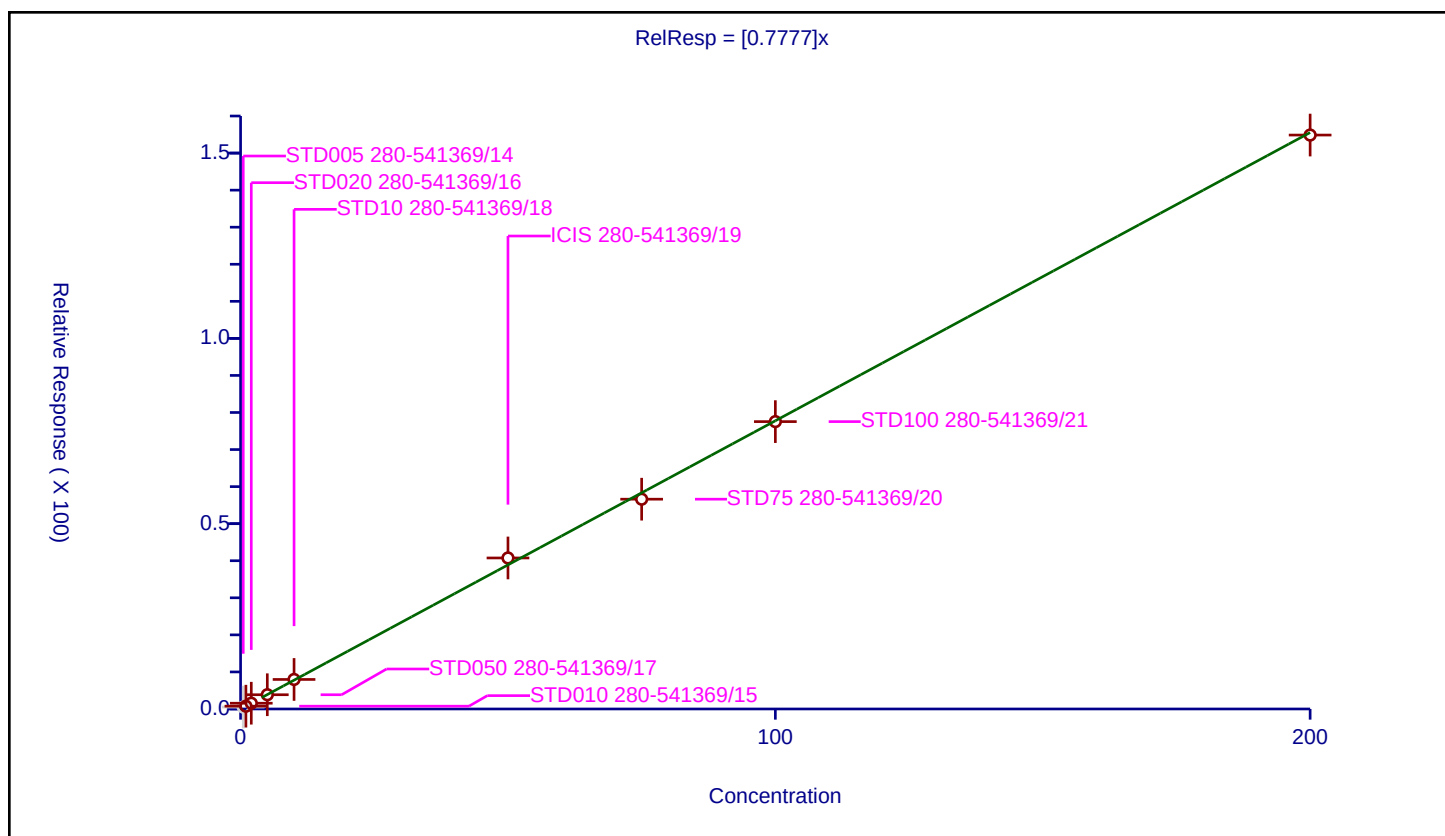
Curve Coefficients

Intercept: 0
 Slope: 0.7777

Error Coefficients

Standard Error: 562000
 Relative Standard Error: 2.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.521449	50.0	382204.0	1.042899	N
2	STD010 280-541369/15	1.0	0.757081	50.0	379748.0	0.757081	Y
3	STD020 280-541369/16	2.0	1.559198	50.0	374327.0	0.779599	Y
4	STD050 280-541369/17	5.0	3.84358	50.0	375028.0	0.768716	Y
5	STD10 280-541369/18	10.0	7.966443	50.0	376134.0	0.796644	Y
6	ICIS 280-541369/19	50.0	40.748518	50.0	387900.0	0.81497	Y
7	STD75 280-541369/20	75.0	56.610289	50.0	402819.0	0.754804	Y
8	STD100 280-541369/21	100.0	77.537681	50.0	403981.0	0.775377	Y
9	STD200 280-541369/22	200.0	154.864687	50.0	396747.0	0.774323	Y



Calibration

/ 1-Chlorohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

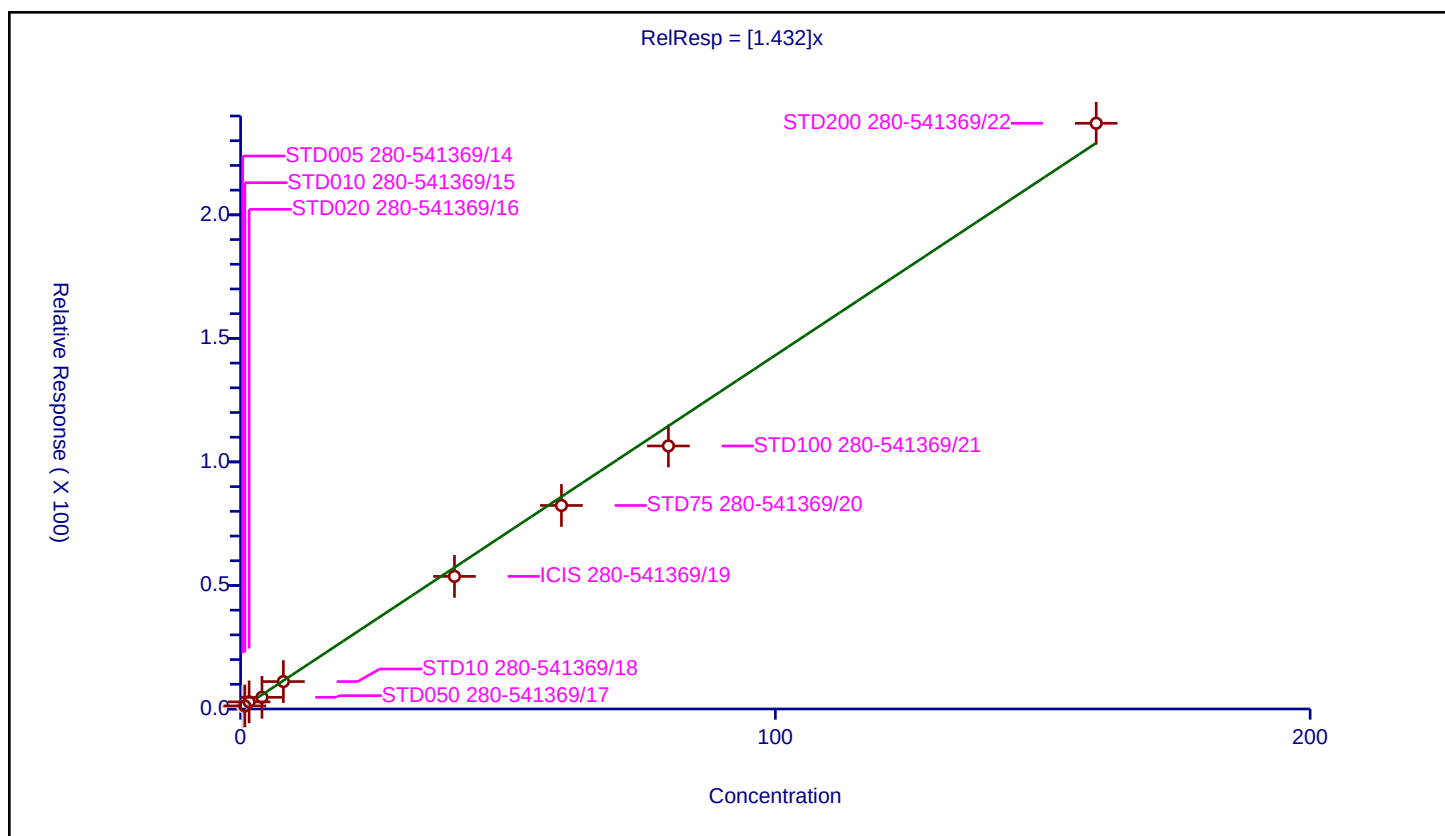
Curve Coefficients

Intercept: 0
 Slope: 1.432

Error Coefficients

Standard Error: 837000
 Relative Standard Error: 12.9
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.4	0.950147	50.0	382204.0	2.375368	N
2	STD010 280-541369/15	0.8	1.24925	50.0	379748.0	1.561562	Y
3	STD020 280-541369/16	1.6	2.873424	50.0	374327.0	1.79589	Y
4	STD050 280-541369/17	4.0	4.72658	50.0	375028.0	1.181645	Y
5	STD10 280-541369/18	8.0	11.103357	50.0	376134.0	1.38792	Y
6	ICIS 280-541369/19	40.0	53.667956	50.0	387900.0	1.341699	Y
7	STD75 280-541369/20	60.0	82.373225	50.0	402819.0	1.372887	Y
8	STD100 280-541369/21	80.0	106.459957	50.0	403981.0	1.330749	Y
9	STD200 280-541369/22	160.0	237.064174	50.0	396747.0	1.481651	Y



Calibration

/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

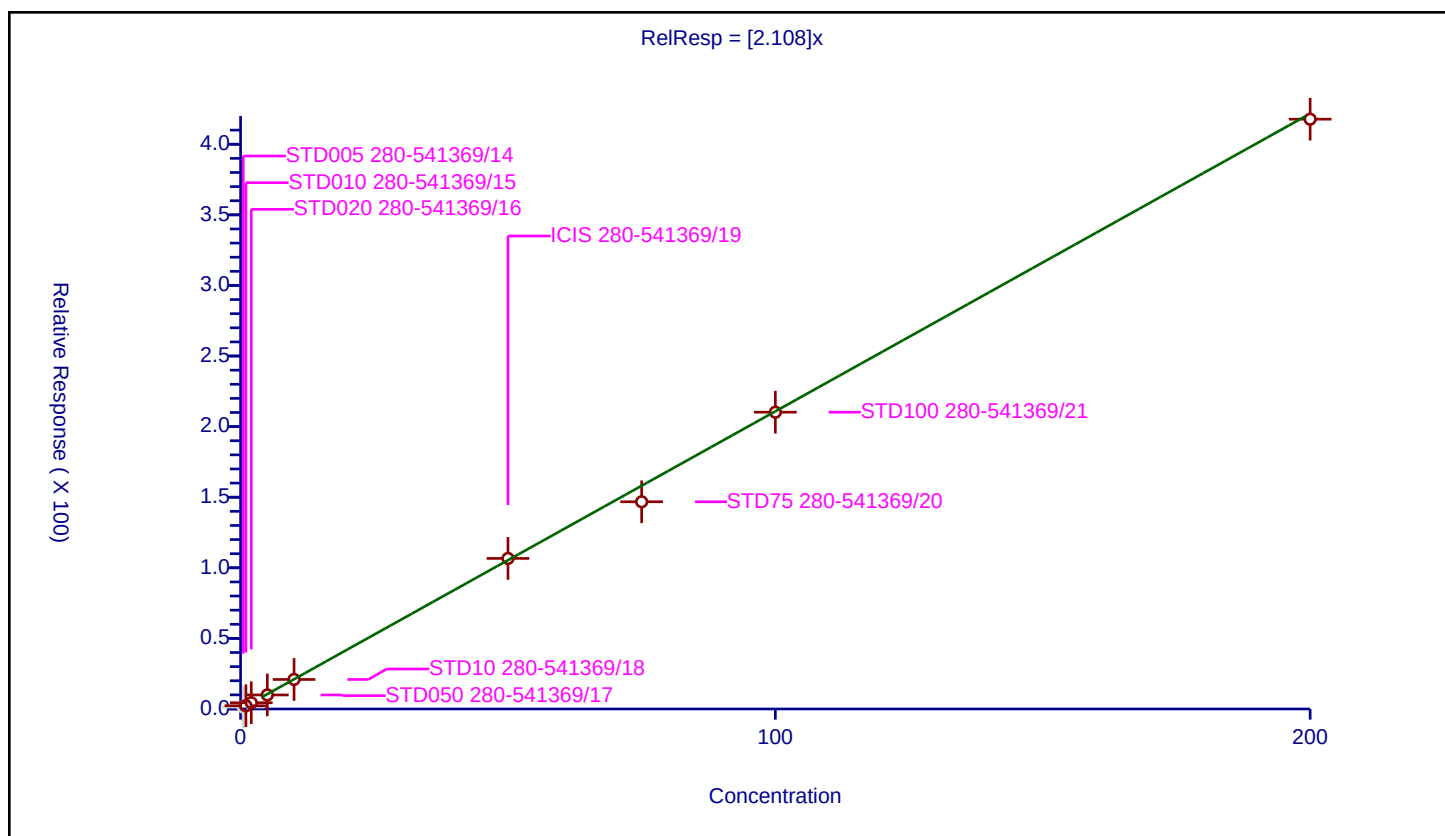
Curve Coefficients

Intercept: 0
 Slope: 2.108

Error Coefficients

Standard Error: 1510000
 Relative Standard Error: 5.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.377537	50.0	382204.0	2.755073	N
2	STD010 280-541369/15	1.0	2.293231	50.0	379748.0	2.293231	Y
3	STD020 280-541369/16	2.0	4.421936	50.0	374327.0	2.210968	Y
4	STD050 280-541369/17	5.0	9.945791	50.0	375028.0	1.989158	Y
5	STD10 280-541369/18	10.0	20.926718	50.0	376134.0	2.092672	Y
6	ICIS 280-541369/19	50.0	106.647332	50.0	387900.0	2.132947	Y
7	STD75 280-541369/20	75.0	146.762193	50.0	402819.0	1.956829	Y
8	STD100 280-541369/21	100.0	210.202955	50.0	403981.0	2.10203	Y
9	STD200 280-541369/22	200.0	417.755396	50.0	396747.0	2.088777	Y



Calibration

/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

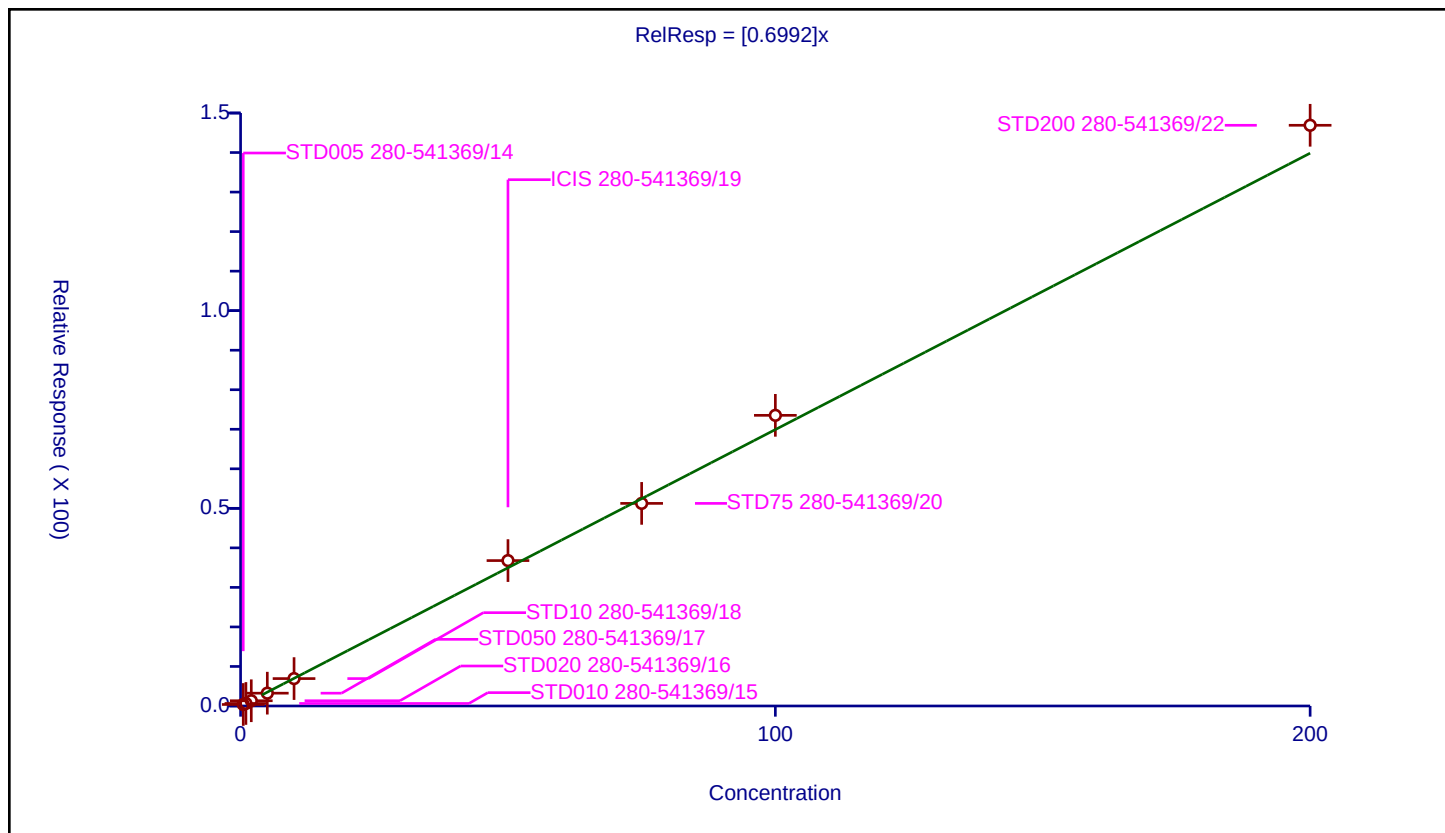
Curve Coefficients

Intercept: 0
Slope: 0.6992

Error Coefficients

Standard Error: 496000
Relative Standard Error: 6.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.379771	50.0	382204.0	0.759542	Y
2	STD010 280-541369/15	1.0	0.640556	50.0	379748.0	0.640556	Y
3	STD020 280-541369/16	2.0	1.324644	50.0	374327.0	0.662322	Y
4	STD050 280-541369/17	5.0	3.244024	50.0	375028.0	0.648805	Y
5	STD10 280-541369/18	10.0	6.928116	50.0	376134.0	0.692812	Y
6	ICIS 280-541369/19	50.0	36.781903	50.0	387900.0	0.735638	Y
7	STD75 280-541369/20	75.0	51.251927	50.0	402819.0	0.683359	Y
8	STD100 280-541369/21	100.0	73.527097	50.0	403981.0	0.735271	Y
9	STD200 280-541369/22	200.0	146.898023	50.0	396747.0	0.73449	Y



Calibration

/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

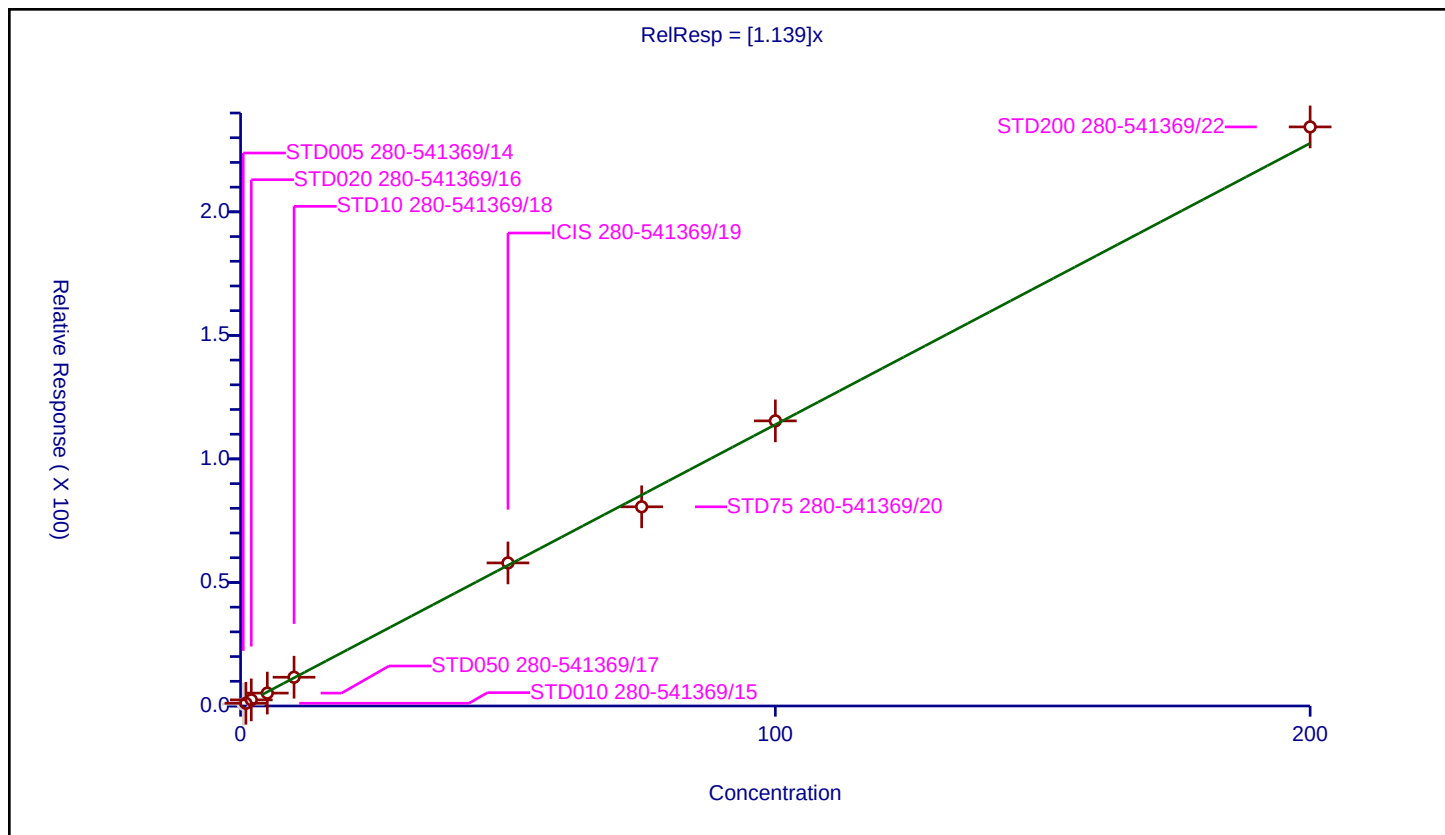
Curve Coefficients

Intercept: 0
 Slope: 1.139

Error Coefficients

Standard Error: 842000
 Relative Standard Error: 5.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.723566	50.0	382204.0	1.447133	N
2	STD010 280-541369/15	1.0	1.10705	50.0	379748.0	1.10705	Y
3	STD020 280-541369/16	2.0	2.475777	50.0	374327.0	1.237888	Y
4	STD050 280-541369/17	5.0	5.213744	50.0	375028.0	1.042749	Y
5	STD10 280-541369/18	10.0	11.638671	50.0	376134.0	1.163867	Y
6	ICIS 280-541369/19	50.0	57.906548	50.0	387900.0	1.158131	Y
7	STD75 280-541369/20	75.0	80.613625	50.0	402819.0	1.074848	Y
8	STD100 280-541369/21	100.0	115.392927	50.0	403981.0	1.153929	Y
9	STD200 280-541369/22	200.0	234.373543	50.0	396747.0	1.171868	Y



Calibration

/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

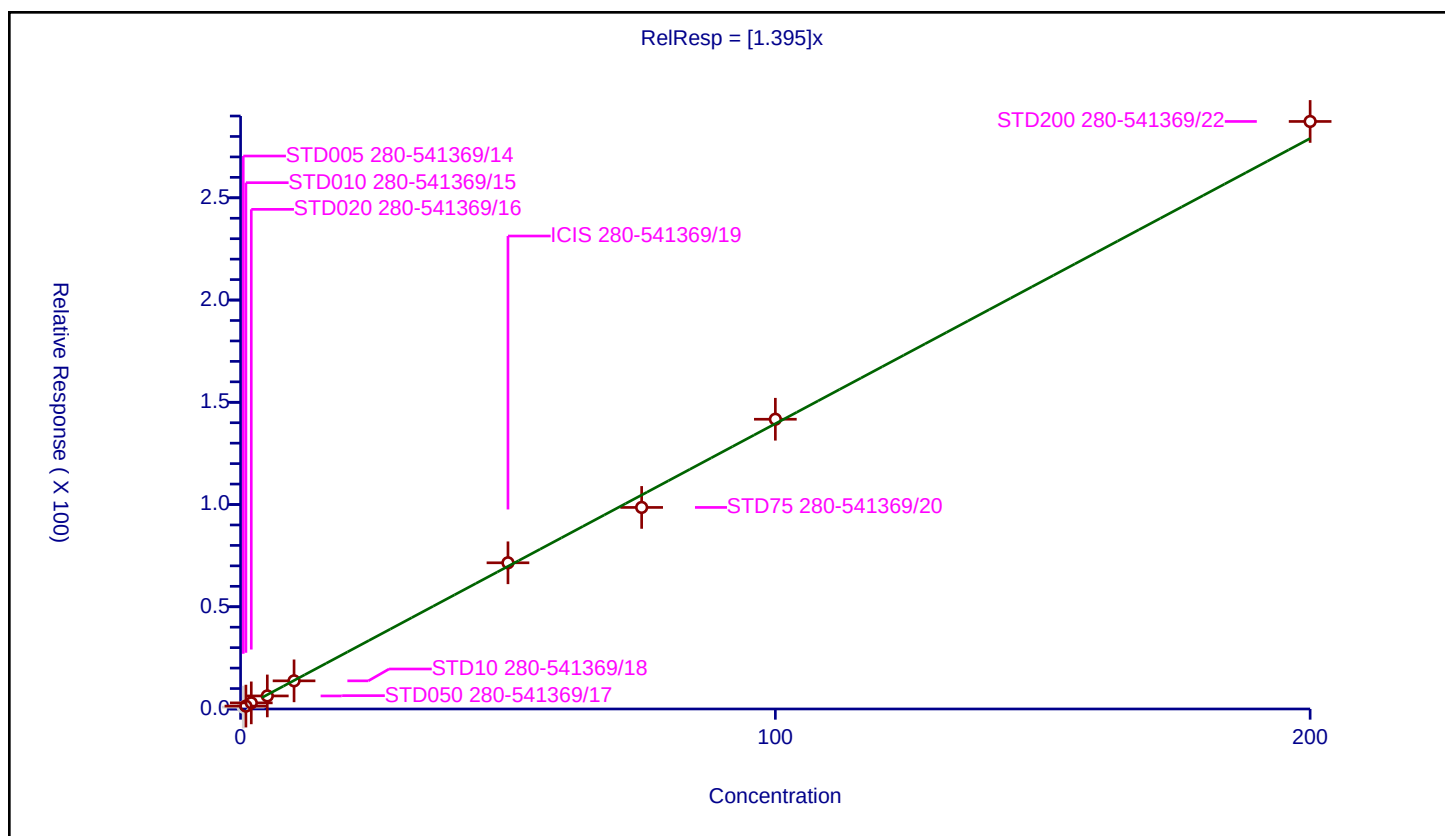
Curve Coefficients

Intercept: 0
 Slope: 1.395

Error Coefficients

Standard Error: 1030000
 Relative Standard Error: 5.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.919012	50.0	382204.0	1.838024	N
2	STD010 280-541369/15	1.0	1.413437	50.0	379748.0	1.413437	Y
3	STD020 280-541369/16	2.0	2.994841	50.0	374327.0	1.497421	Y
4	STD050 280-541369/17	5.0	6.38299	50.0	375028.0	1.276598	Y
5	STD10 280-541369/18	10.0	13.764509	50.0	376134.0	1.376451	Y
6	ICIS 280-541369/19	50.0	71.496906	50.0	387900.0	1.429938	Y
7	STD75 280-541369/20	75.0	98.570822	50.0	402819.0	1.314278	Y
8	STD100 280-541369/21	100.0	141.700476	50.0	403981.0	1.417005	Y
9	STD200 280-541369/22	200.0	287.33601	50.0	396747.0	1.43668	Y



Calibration

/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

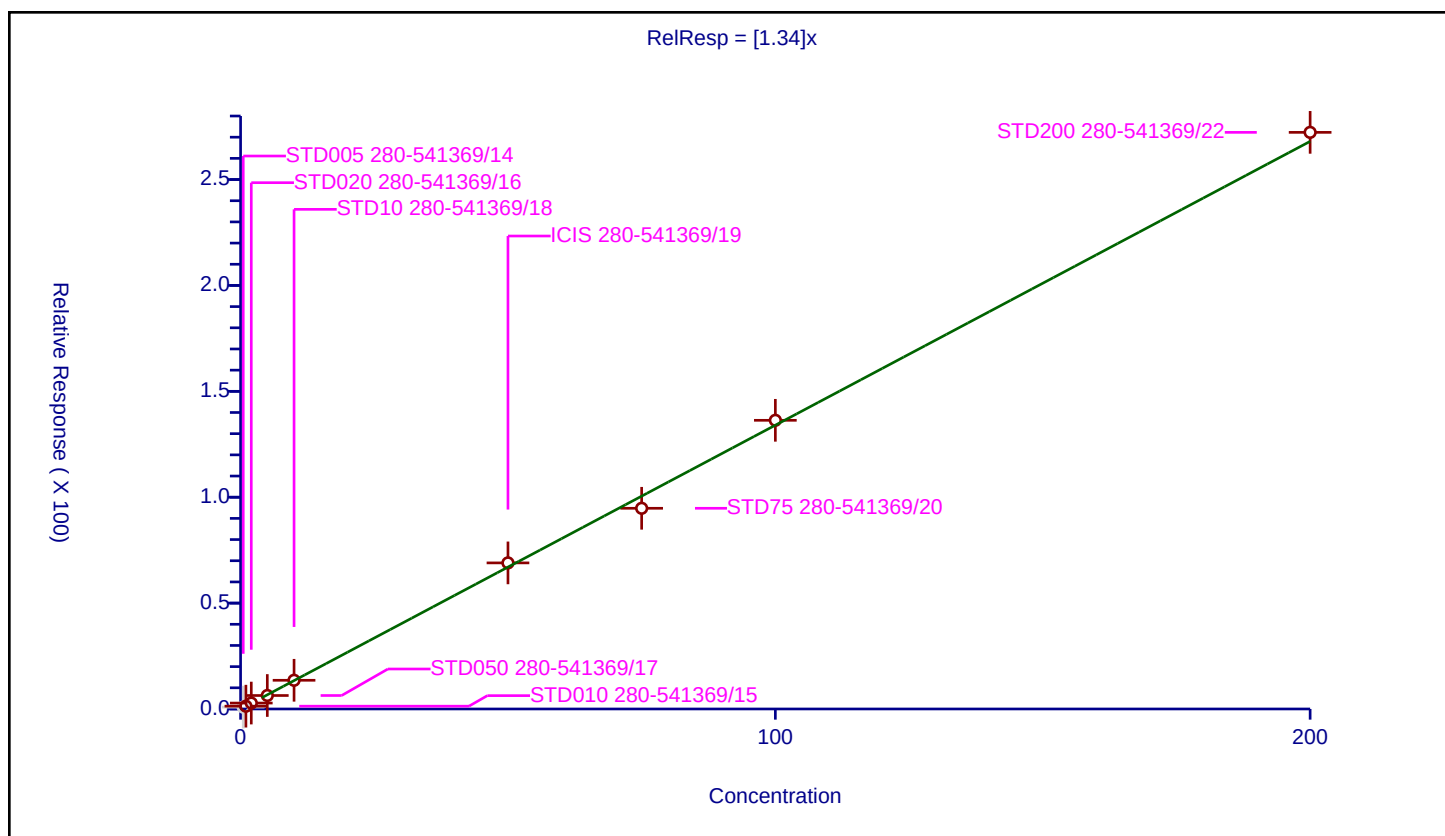
Curve Coefficients

Intercept: 0
 Slope: 1.34

Error Coefficients

Standard Error: 983000
 Relative Standard Error: 3.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.885653	50.0	382204.0	1.771305	N
2	STD010 280-541369/15	1.0	1.323114	50.0	379748.0	1.323114	Y
3	STD020 280-541369/16	2.0	2.805836	50.0	374327.0	1.402918	Y
4	STD050 280-541369/17	5.0	6.362192	50.0	375028.0	1.272438	Y
5	STD10 280-541369/18	10.0	13.548895	50.0	376134.0	1.354889	Y
6	ICIS 280-541369/19	50.0	68.982985	50.0	387900.0	1.37966	Y
7	STD75 280-541369/20	75.0	94.767129	50.0	402819.0	1.263562	Y
8	STD100 280-541369/21	100.0	136.310742	50.0	403981.0	1.363107	Y
9	STD200 280-541369/22	200.0	272.28032	50.0	396747.0	1.361402	Y



Calibration

/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

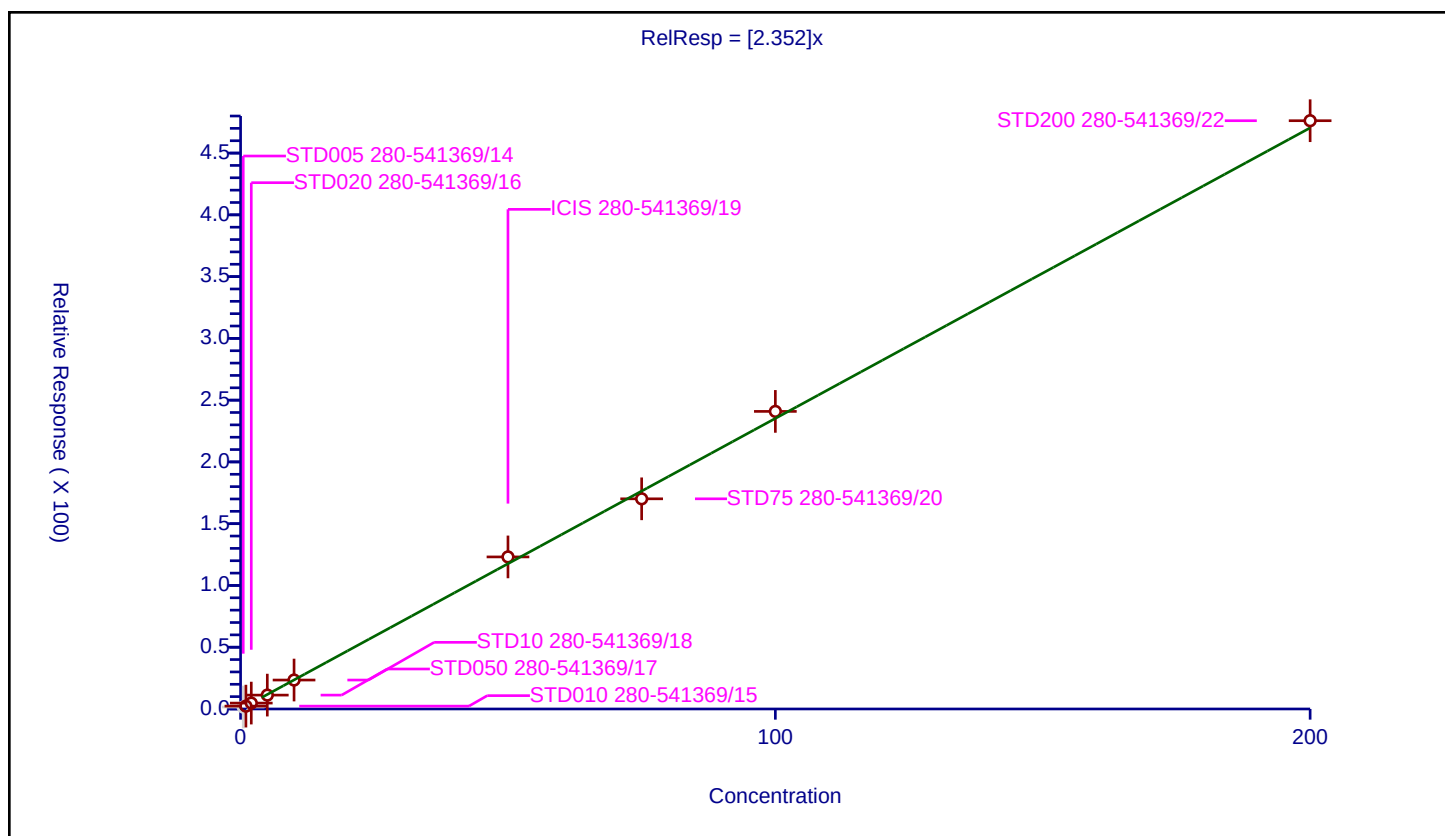
Curve Coefficients

Intercept: 0
 Slope: 2.352

Error Coefficients

Standard Error: 1730000
 Relative Standard Error: 3.1
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.597315	50.0	382204.0	3.194629	N
2	STD010 280-541369/15	1.0	2.312586	50.0	379748.0	2.312586	Y
3	STD020 280-541369/16	2.0	4.791399	50.0	374327.0	2.395699	Y
4	STD050 280-541369/17	5.0	11.226762	50.0	375028.0	2.245352	Y
5	STD10 280-541369/18	10.0	23.424365	50.0	376134.0	2.342436	Y
6	ICIS 280-541369/19	50.0	123.094096	50.0	387900.0	2.461882	Y
7	STD75 280-541369/20	75.0	170.129761	50.0	402819.0	2.268397	Y
8	STD100 280-541369/21	100.0	240.891403	50.0	403981.0	2.408914	Y
9	STD200 280-541369/22	200.0	476.191124	50.0	396747.0	2.380956	Y



Calibration

/ Bromoform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

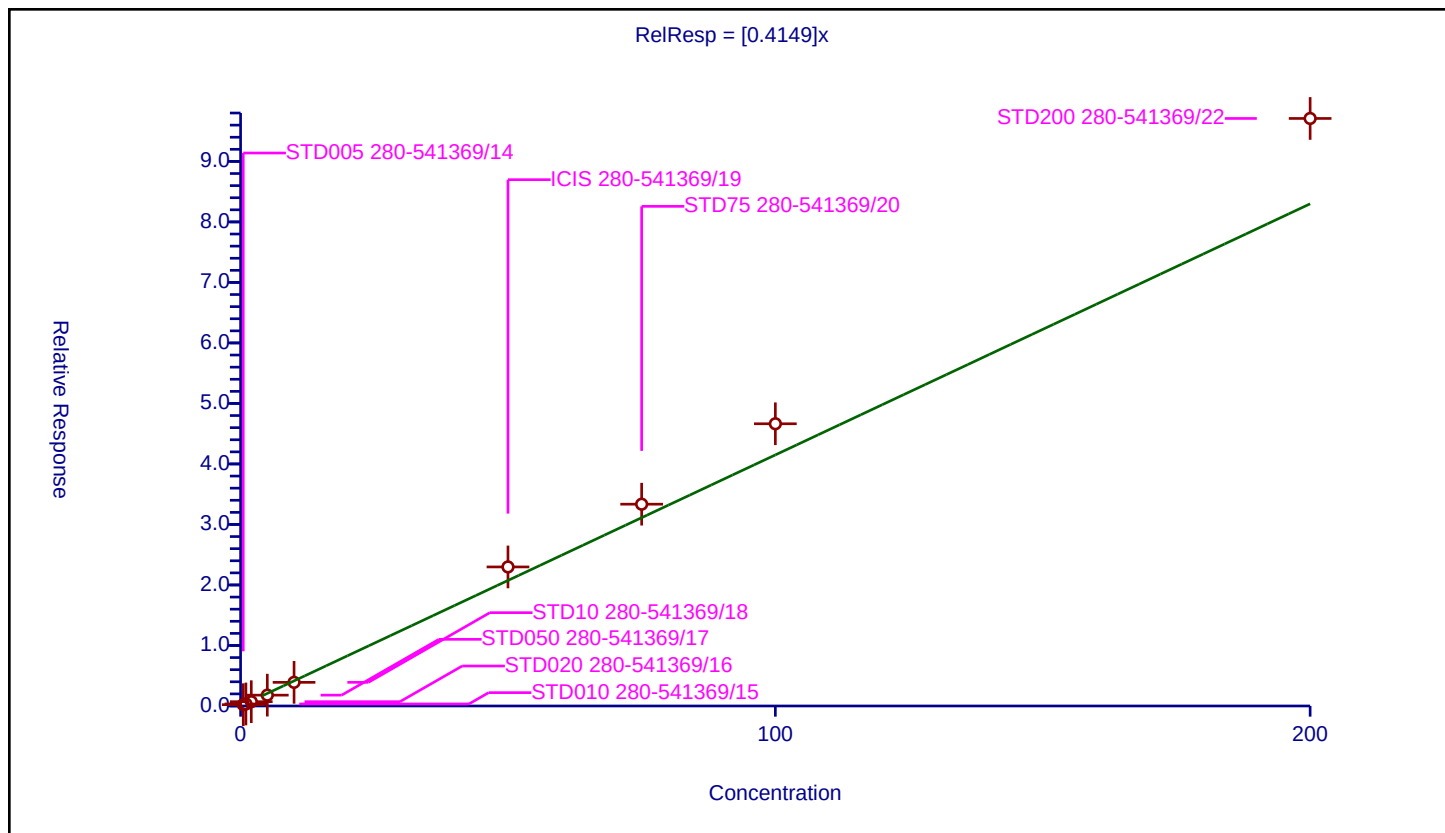
Curve Coefficients

Intercept: 0
 Slope: 0.4149

Error Coefficients

Standard Error: 324000
 Relative Standard Error: 13.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.21847	50.0	382204.0	0.436939	Y
2	STD010 280-541369/15	1.0	0.337592	50.0	379748.0	0.337592	Y
3	STD020 280-541369/16	2.0	0.709674	50.0	374327.0	0.354837	Y
4	STD050 280-541369/17	5.0	1.790933	50.0	375028.0	0.358187	Y
5	STD10 280-541369/18	10.0	3.907384	50.0	376134.0	0.390738	Y
6	ICIS 280-541369/19	50.0	22.979892	50.0	387900.0	0.459598	Y
7	STD75 280-541369/20	75.0	33.352821	50.0	402819.0	0.444704	Y
8	STD100 280-541369/21	100.0	46.644273	50.0	403981.0	0.466443	Y
9	STD200 280-541369/22	200.0	97.10231	50.0	396747.0	0.485512	Y



Calibration

/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

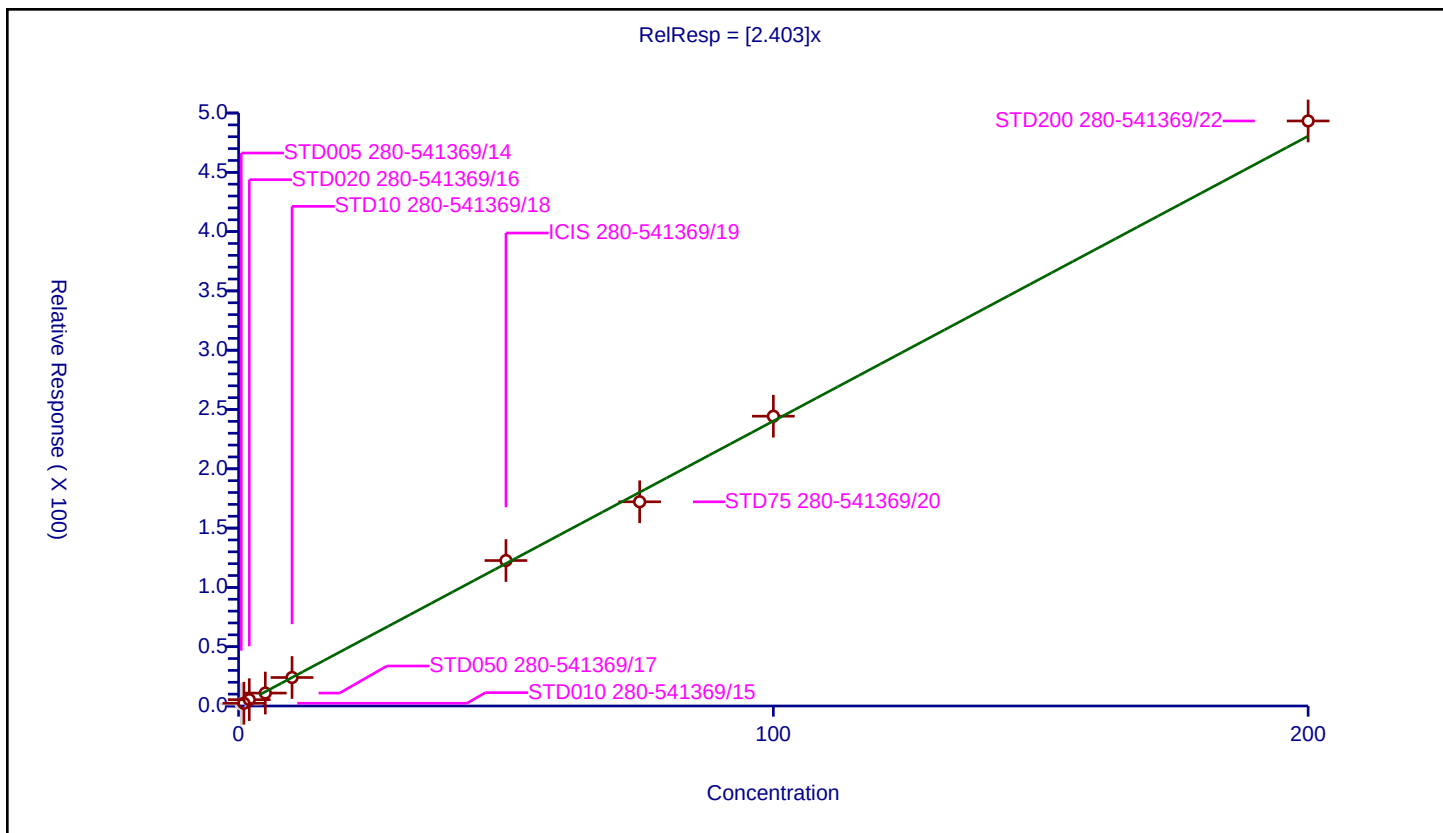
Curve Coefficients

Intercept: 0
 Slope: 2.403

Error Coefficients

Standard Error: 2470000
 Relative Standard Error: 6.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.649868	50.0	520466.0	3.299735	N
2	STD010 280-541369/15	1.0	2.312834	50.0	517828.0	2.312834	Y
3	STD020 280-541369/16	2.0	5.338439	50.0	511348.0	2.669219	Y
4	STD050 280-541369/17	5.0	10.886015	50.0	520296.0	2.177203	Y
5	STD10 280-541369/18	10.0	24.032139	50.0	522415.0	2.403214	Y
6	ICIS 280-541369/19	50.0	122.637406	50.0	549502.0	2.452748	Y
7	STD75 280-541369/20	75.0	172.181909	50.0	560752.0	2.295759	Y
8	STD100 280-541369/21	100.0	244.359047	50.0	568131.0	2.44359	Y
9	STD200 280-541369/22	200.0	493.308376	50.0	549605.0	2.466542	Y



Calibration

/ Cyclohexanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

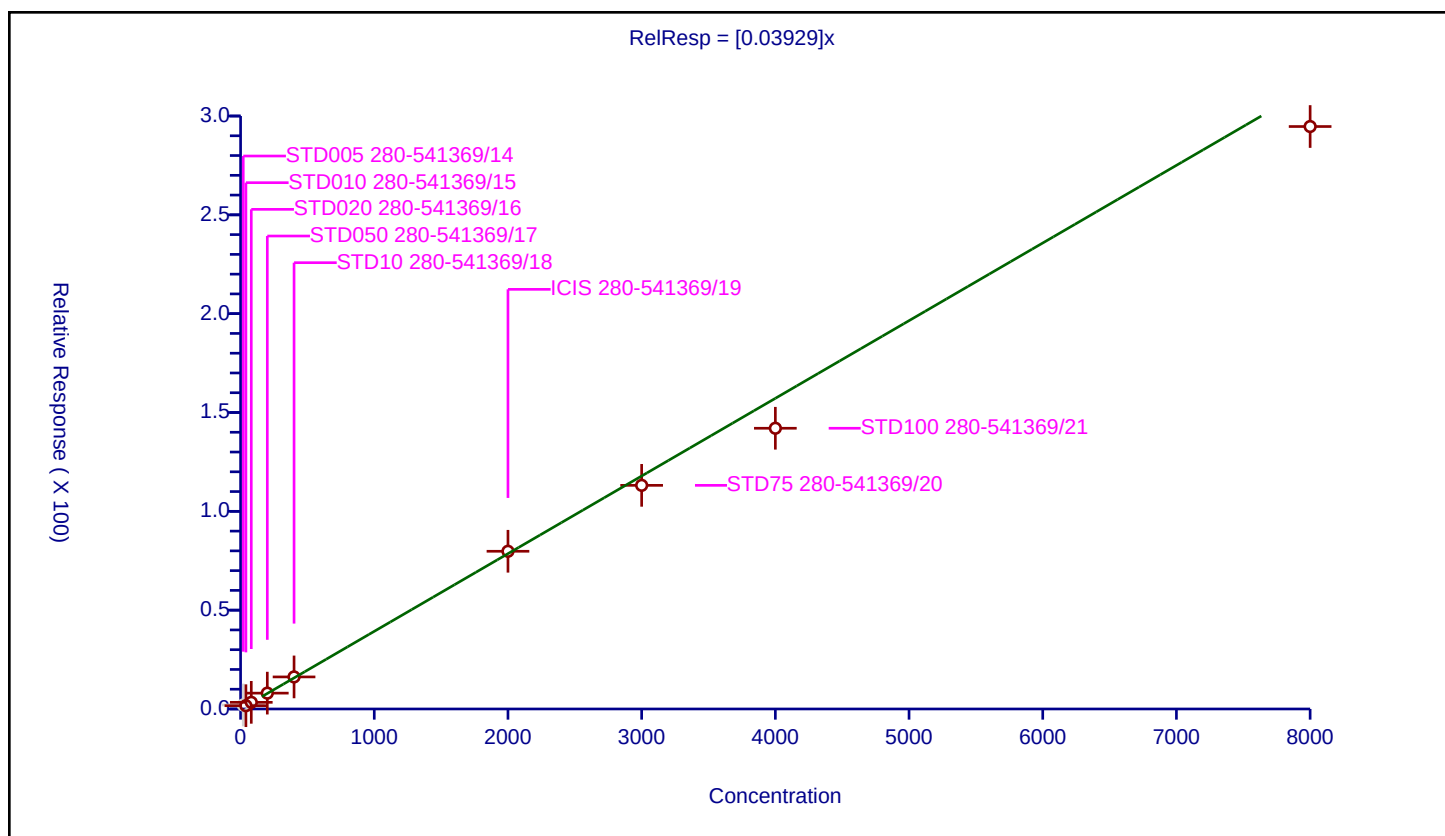
Curve Coefficients

Intercept: 0
Slope: 0.03929

Error Coefficients

Standard Error: 1070000
Relative Standard Error: 6.0
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	20.0	2.019864	50.0	382204.0	0.100993	N
2	STD010 280-541369/15	40.0	1.664525	50.0	379748.0	0.041613	Y
3	STD020 280-541369/16	80.0	3.369514	50.0	374327.0	0.042119	Y
4	STD050 280-541369/17	200.0	8.017668	50.0	375028.0	0.040088	Y
5	STD10 280-541369/18	400.0	16.224936	50.0	376134.0	0.040562	Y
6	ICIS 280-541369/19	2000.0	79.791699	50.0	387900.0	0.039896	Y
7	STD75 280-541369/20	3000.0	113.14933	50.0	402819.0	0.037716	Y
8	STD100 280-541369/21	4000.0	142.034031	50.0	403981.0	0.035509	Y
9	STD200 280-541369/22	8000.0	294.685908	50.0	396747.0	0.036836	Y



Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

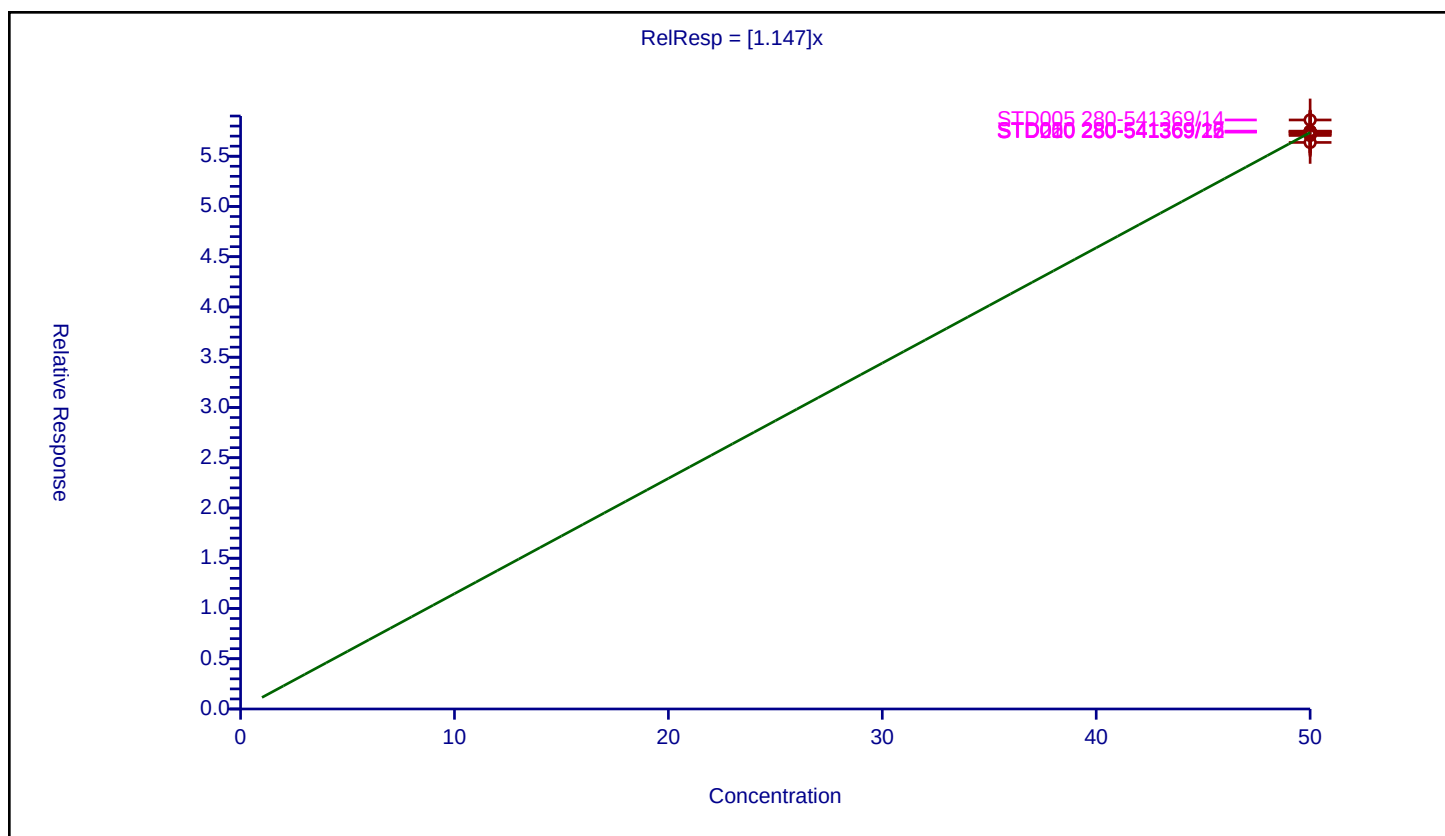
Curve Coefficients

Intercept: 0
Slope: 1.147

Error Coefficients

Standard Error: 652000
Relative Standard Error: 1.0
Correlation Coefficient: 0.00000000000000000000
Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	50.0	58.607383	50.0	520466.0	1.172148	Y
2	STD010 280-541369/15	50.0	57.409314	50.0	517828.0	1.148186	Y
3	STD020 280-541369/16	50.0	57.495483	50.0	511348.0	1.14991	Y
4	STD050 280-541369/17	50.0	57.46133	50.0	520296.0	1.149227	Y
5	STD10 280-541369/18	50.0	57.207105	50.0	522415.0	1.144142	Y
6	ICIS 280-541369/19	50.0	56.371041	50.0	549502.0	1.127421	Y
7	STD75 280-541369/20	50.0	57.063105	50.0	560752.0	1.141262	Y
8	STD100 280-541369/21	50.0	57.193411	50.0	568131.0	1.143868	Y
9	STD200 280-541369/22	50.0	57.423604	50.0	549605.0	1.148472	Y



Calibration

/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

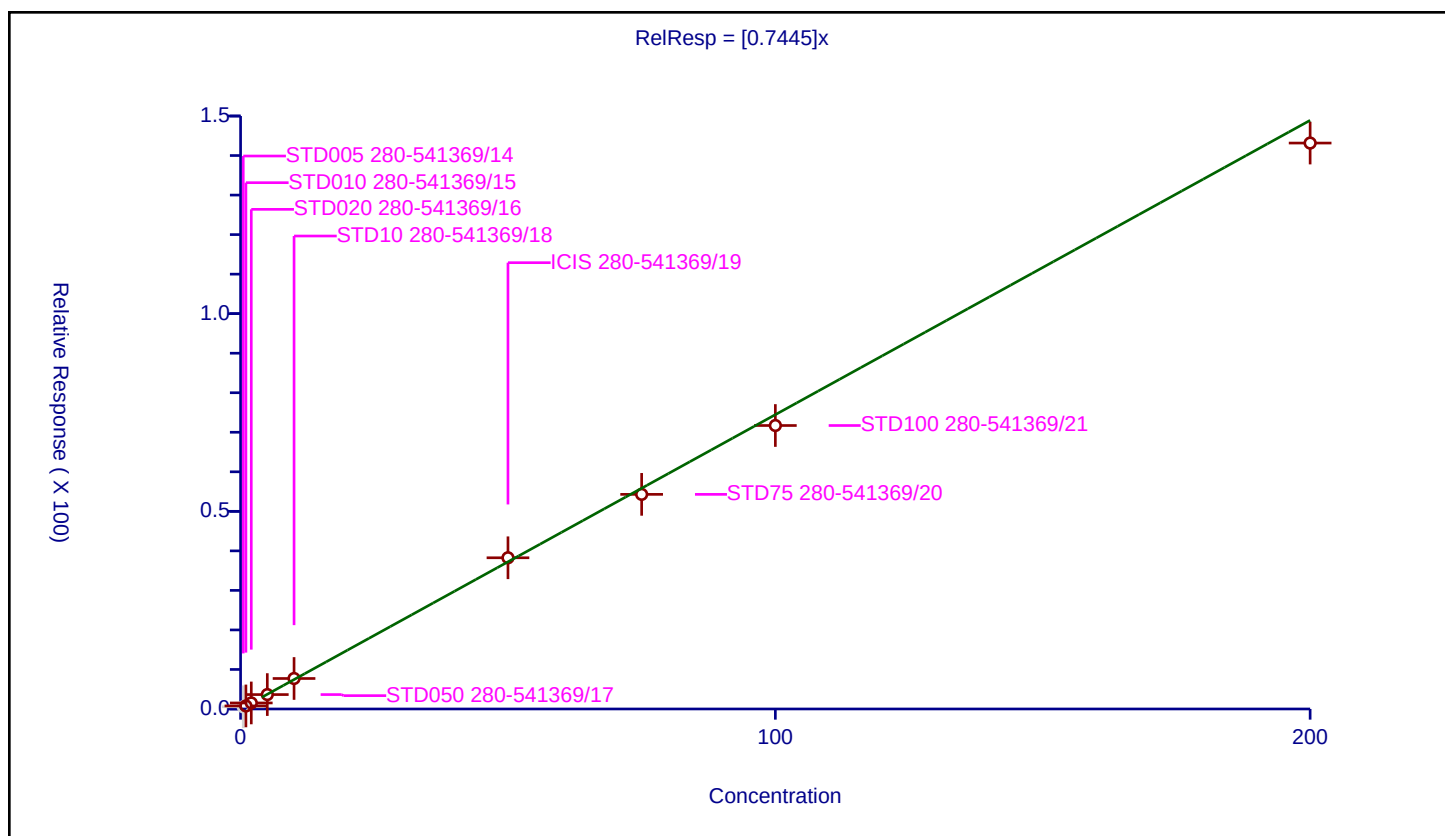
Curve Coefficients

Intercept: 0
Slope: 0.7445

Error Coefficients

Standard Error: 727000
Relative Standard Error: 3.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.559979	50.0	520466.0	1.119958	N
2	STD010 280-541369/15	1.0	0.769657	50.0	517828.0	0.769657	Y
3	STD020 280-541369/16	2.0	1.529682	50.0	511348.0	0.764841	Y
4	STD050 280-541369/17	5.0	3.643215	50.0	520296.0	0.728643	Y
5	STD10 280-541369/18	10.0	7.712355	50.0	522415.0	0.771236	Y
6	ICIS 280-541369/19	50.0	38.252454	50.0	549502.0	0.765049	Y
7	STD75 280-541369/20	75.0	54.290845	50.0	560752.0	0.723878	Y
8	STD100 280-541369/21	100.0	71.707846	50.0	568131.0	0.717078	Y
9	STD200 280-541369/22	200.0	143.162544	50.0	549605.0	0.715813	Y



Calibration

/ Bromobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

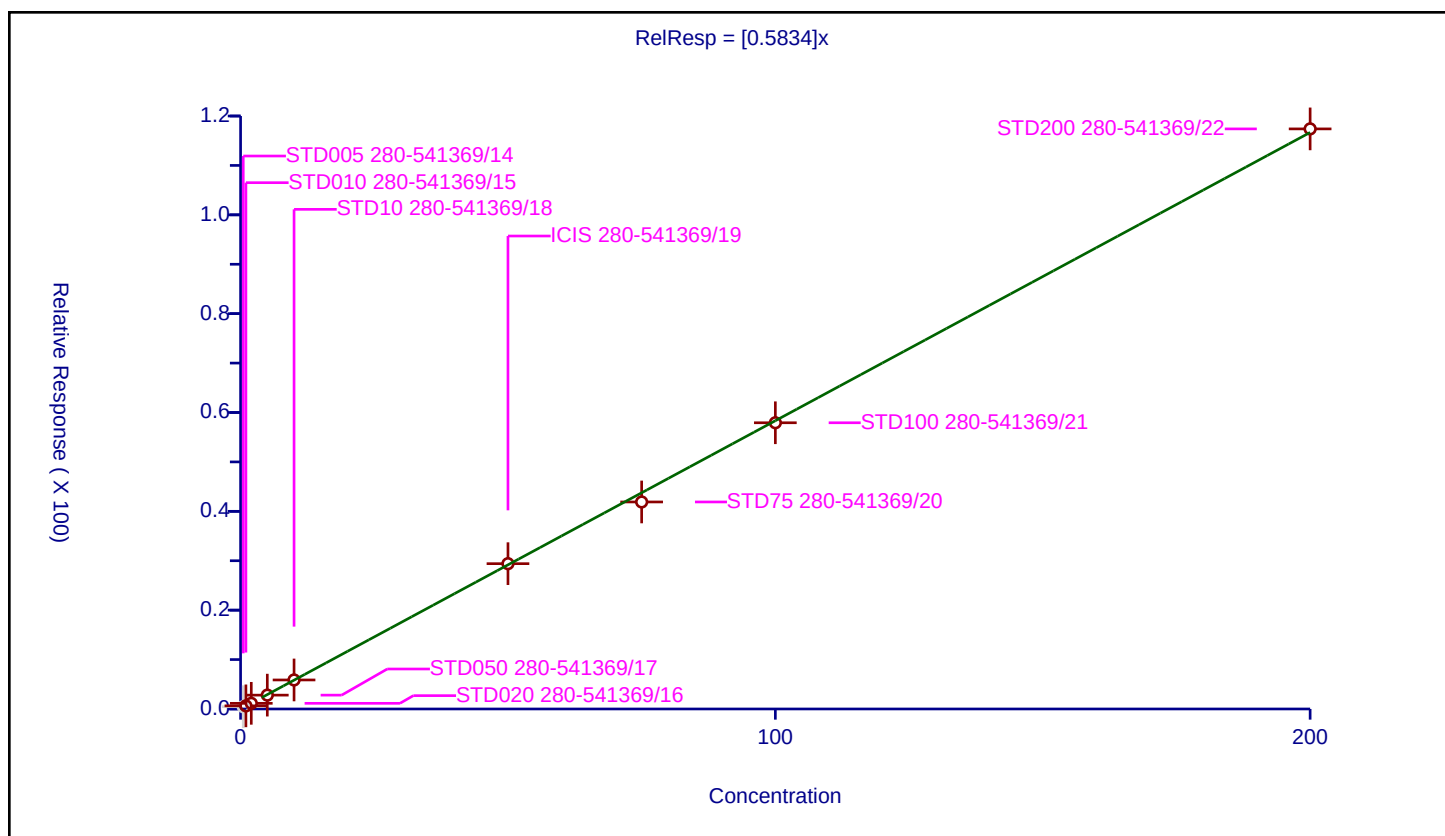
Curve Coefficients

Intercept: 0
Slope: 0.5834

Error Coefficients

Standard Error: 589000
Relative Standard Error: 4.0
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.468522	50.0	520466.0	0.937045	N
2	STD010 280-541369/15	1.0	0.632546	50.0	517828.0	0.632546	Y
3	STD020 280-541369/16	2.0	1.146577	50.0	511348.0	0.573289	Y
4	STD050 280-541369/17	5.0	2.802251	50.0	520296.0	0.56045	Y
5	STD10 280-541369/18	10.0	5.876745	50.0	522415.0	0.587675	Y
6	ICIS 280-541369/19	50.0	29.408446	50.0	549502.0	0.588169	Y
7	STD75 280-541369/20	75.0	41.895348	50.0	560752.0	0.558605	Y
8	STD100 280-541369/21	100.0	57.923085	50.0	568131.0	0.579231	Y
9	STD200 280-541369/22	200.0	117.395311	50.0	549605.0	0.586977	Y



Calibration

/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

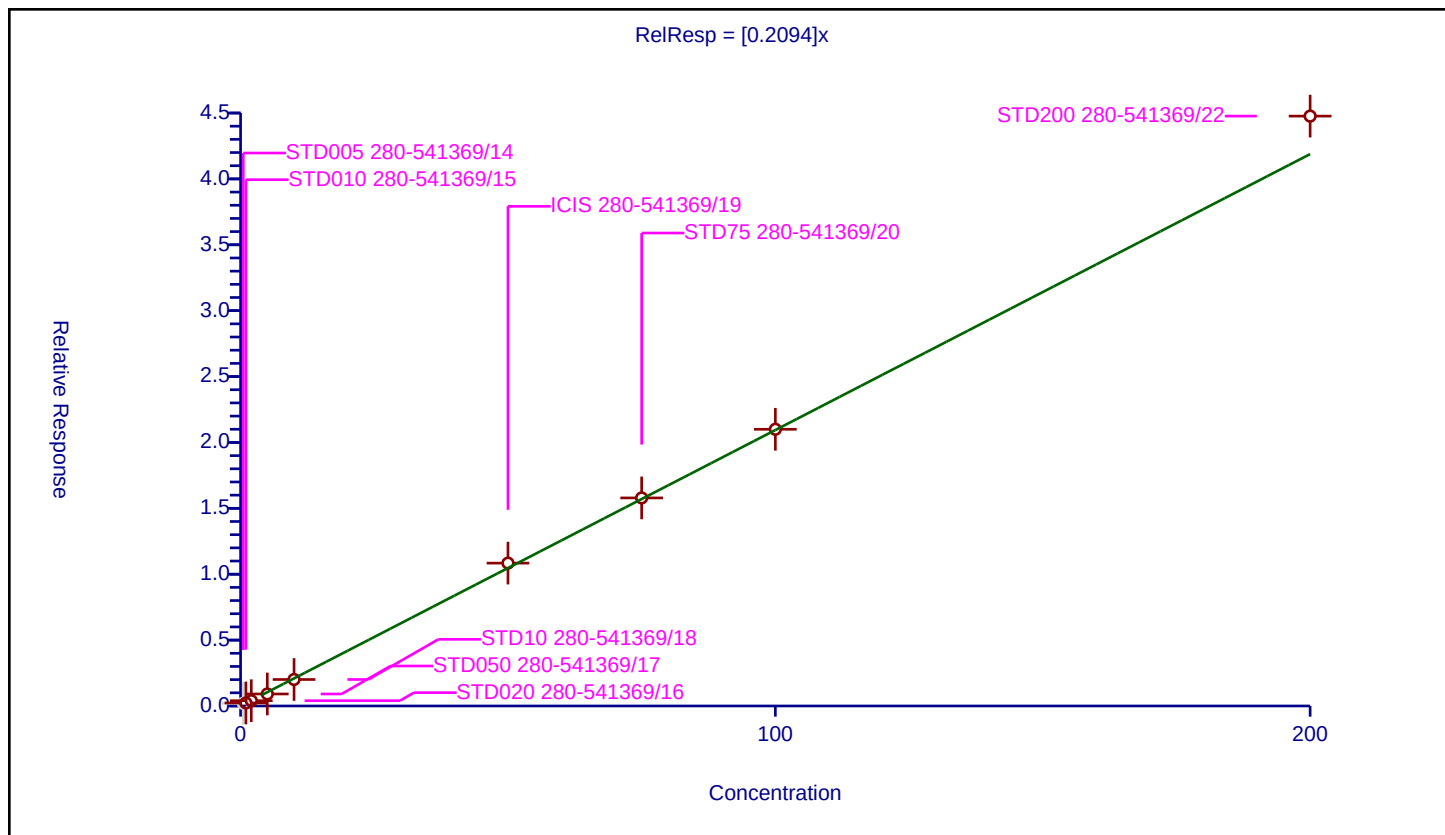
Curve Coefficients

Intercept: 0
 Slope: 0.2094

Error Coefficients

Standard Error: 222000
 Relative Standard Error: 7.1
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.20107	50.0	520466.0	0.40214	N
2	STD010 280-541369/15	1.0	0.22942	50.0	517828.0	0.22942	Y
3	STD020 280-541369/16	2.0	0.402661	50.0	511348.0	0.201331	Y
4	STD050 280-541369/17	5.0	0.910924	50.0	520296.0	0.182185	Y
5	STD10 280-541369/18	10.0	2.010949	50.0	522415.0	0.201095	Y
6	ICIS 280-541369/19	50.0	10.842454	50.0	549502.0	0.216849	Y
7	STD75 280-541369/20	75.0	15.790314	50.0	560752.0	0.210538	Y
8	STD100 280-541369/21	100.0	20.998942	50.0	568131.0	0.209989	Y
9	STD200 280-541369/22	200.0	44.765513	50.0	549605.0	0.223828	Y



Calibration

/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

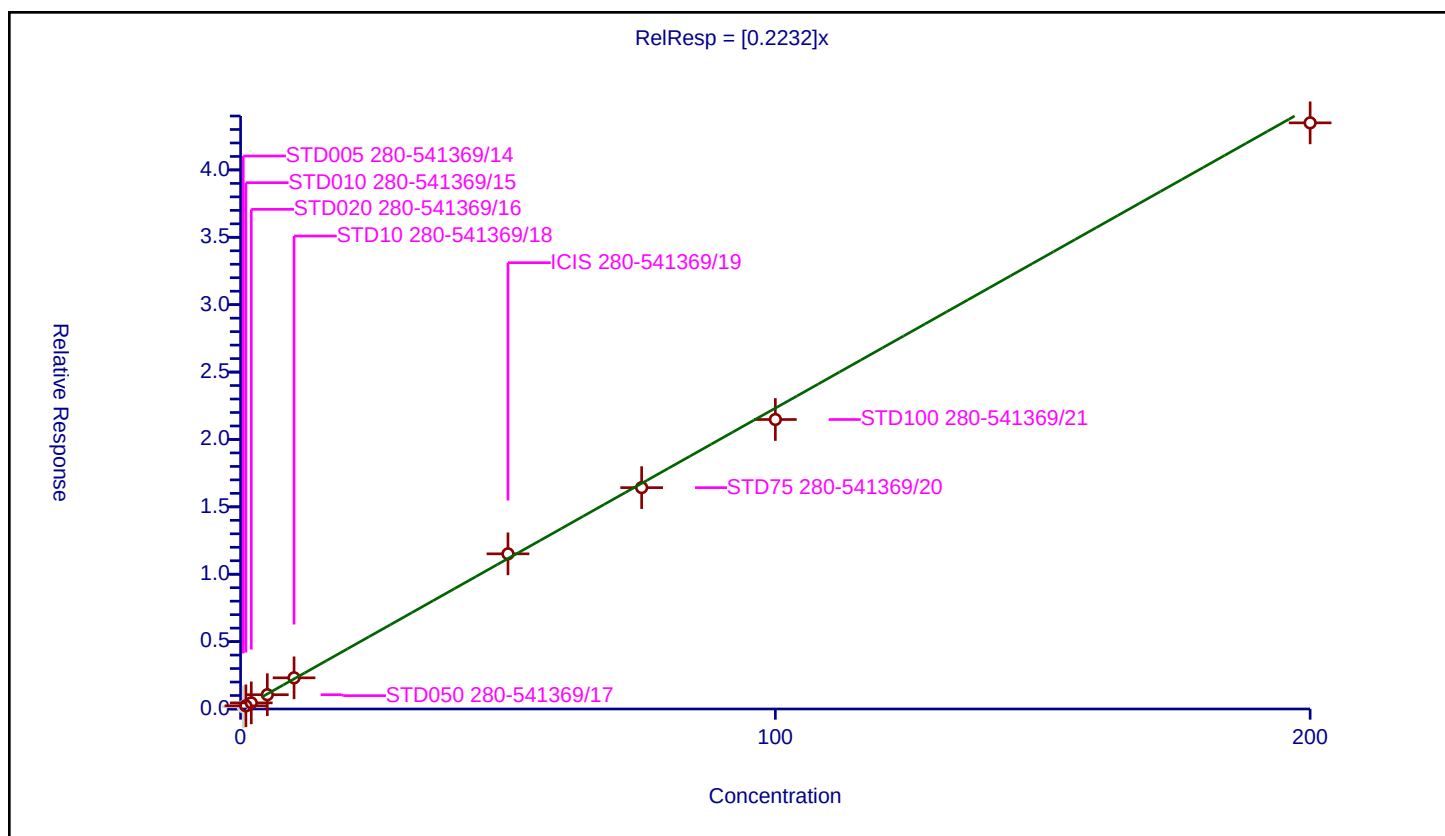
Curve Coefficients

Intercept: 0
 Slope: 0.2232

Error Coefficients

Standard Error: 220000
 Relative Standard Error: 3.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.167926	50.0	520466.0	0.335853	N
2	STD010 280-541369/15	1.0	0.233668	50.0	517828.0	0.233668	Y
3	STD020 280-541369/16	2.0	0.454974	50.0	511348.0	0.227487	Y
4	STD050 280-541369/17	5.0	1.059397	50.0	520296.0	0.211879	Y
5	STD10 280-541369/18	10.0	2.312721	50.0	522415.0	0.231272	Y
6	ICIS 280-541369/19	50.0	11.512242	50.0	549502.0	0.230245	Y
7	STD75 280-541369/20	75.0	16.425086	50.0	560752.0	0.219001	Y
8	STD100 280-541369/21	100.0	21.481049	50.0	568131.0	0.21481	Y
9	STD200 280-541369/22	200.0	43.492963	50.0	549605.0	0.217465	Y



Calibration

/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

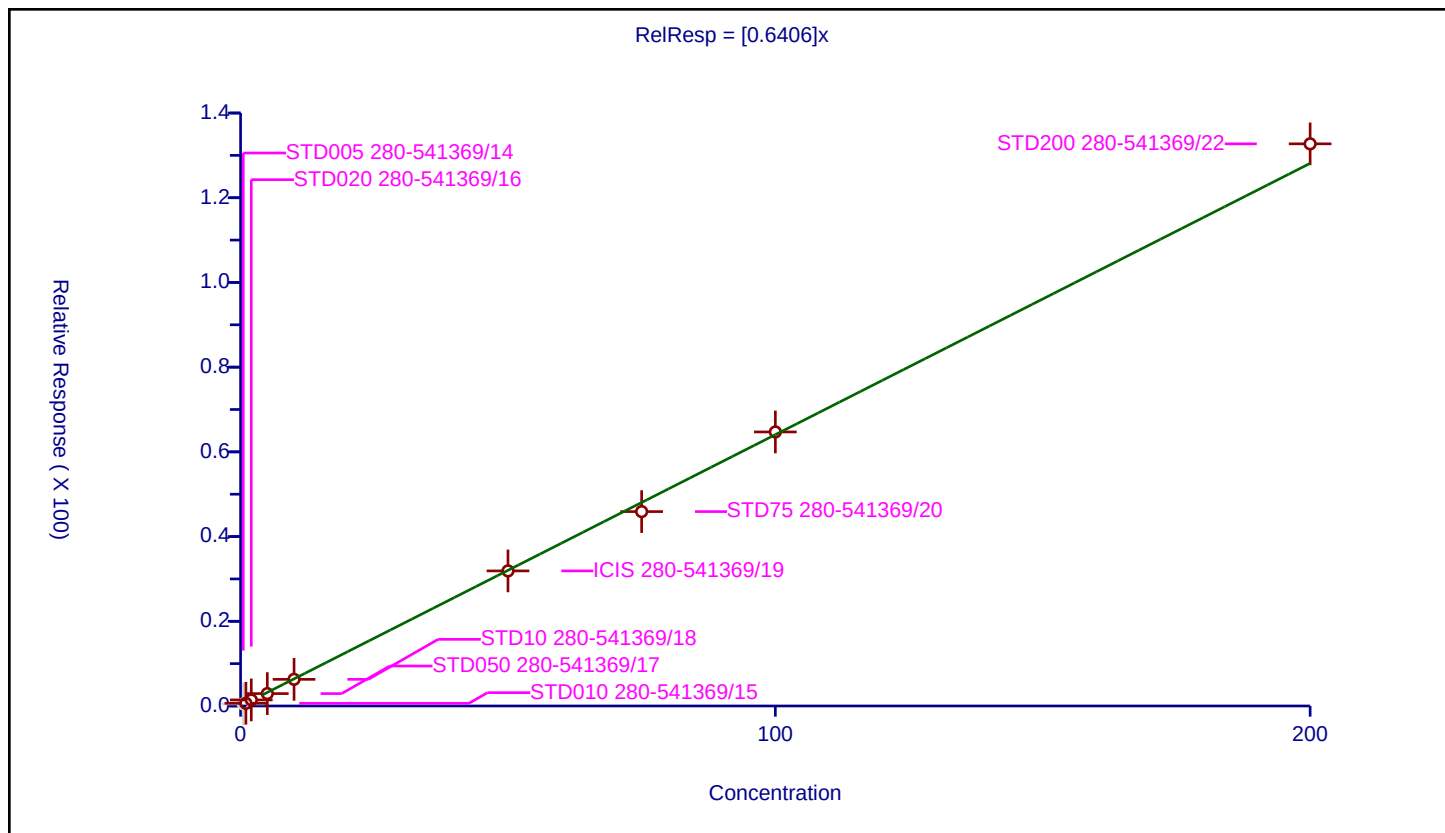
Curve Coefficients

Intercept: 0
 Slope: 0.6406

Error Coefficients

Standard Error: 661000
 Relative Standard Error: 6.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.491771	50.0	520466.0	0.983542	N
2	STD010 280-541369/15	1.0	0.634284	50.0	517828.0	0.634284	Y
3	STD020 280-541369/16	2.0	1.432684	50.0	511348.0	0.716342	Y
4	STD050 280-541369/17	5.0	2.923144	50.0	520296.0	0.584629	Y
5	STD10 280-541369/18	10.0	6.292698	50.0	522415.0	0.62927	Y
6	ICIS 280-541369/19	50.0	31.889784	50.0	549502.0	0.637796	Y
7	STD75 280-541369/20	75.0	45.892213	50.0	560752.0	0.611896	Y
8	STD100 280-541369/21	100.0	64.700923	50.0	568131.0	0.647009	Y
9	STD200 280-541369/22	200.0	132.719771	50.0	549605.0	0.663599	Y



Calibration

/ 2-Chlorotoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

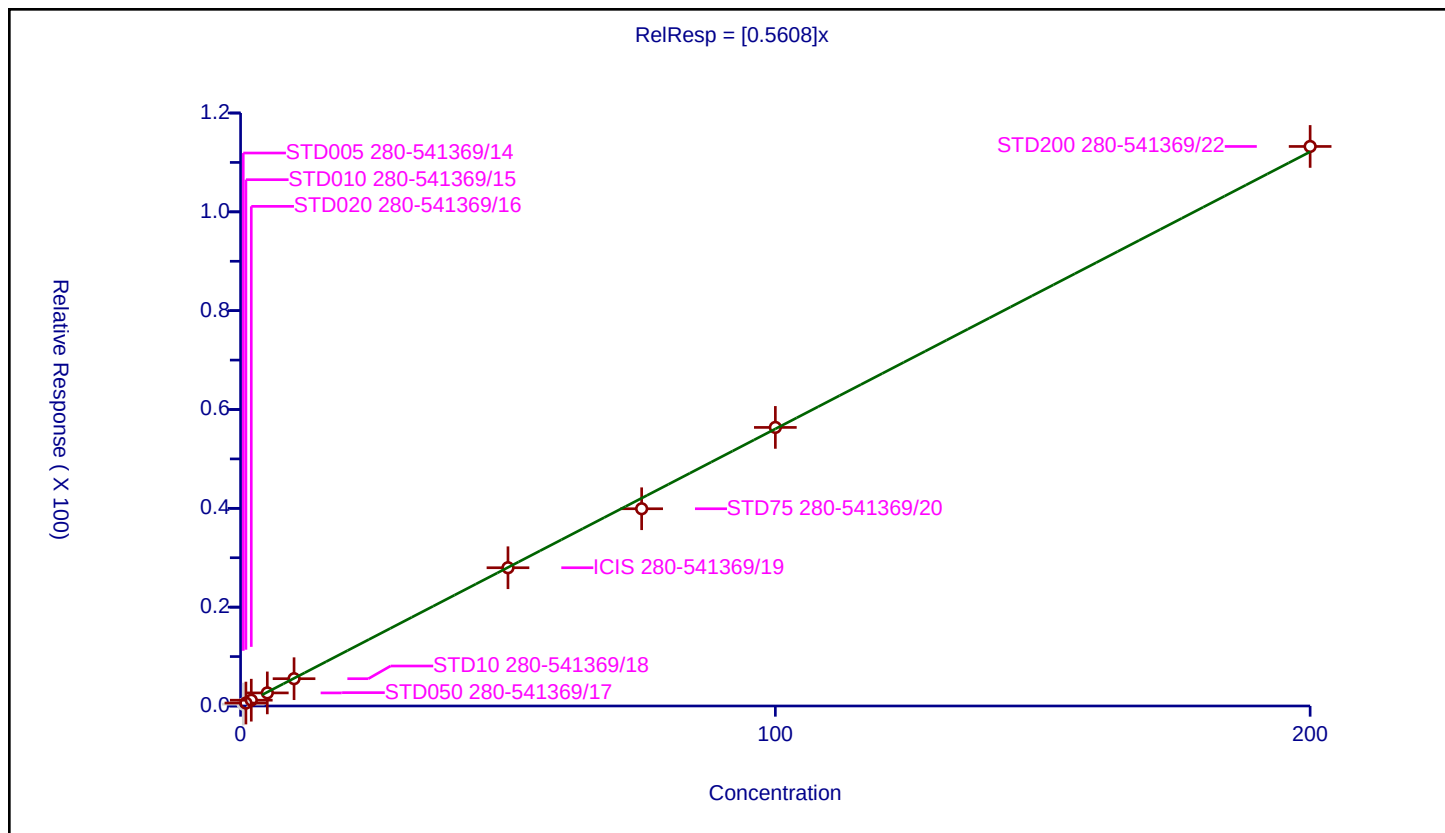
Curve Coefficients

Intercept: 0
Slope: 0.5608

Error Coefficients

Standard Error: 568000
Relative Standard Error: 4.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.377738	50.0	520466.0	0.755477	N
2	STD010 280-541369/15	1.0	0.596916	50.0	517828.0	0.596916	Y
3	STD020 280-541369/16	2.0	1.171218	50.0	511348.0	0.585609	Y
4	STD050 280-541369/17	5.0	2.648877	50.0	520296.0	0.529775	Y
5	STD10 280-541369/18	10.0	5.521664	50.0	522415.0	0.552166	Y
6	ICIS 280-541369/19	50.0	27.976604	50.0	549502.0	0.559532	Y
7	STD75 280-541369/20	75.0	39.914525	50.0	560752.0	0.532194	Y
8	STD100 280-541369/21	100.0	56.376434	50.0	568131.0	0.563764	Y
9	STD200 280-541369/22	200.0	113.232958	50.0	549605.0	0.566165	Y



Calibration

/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

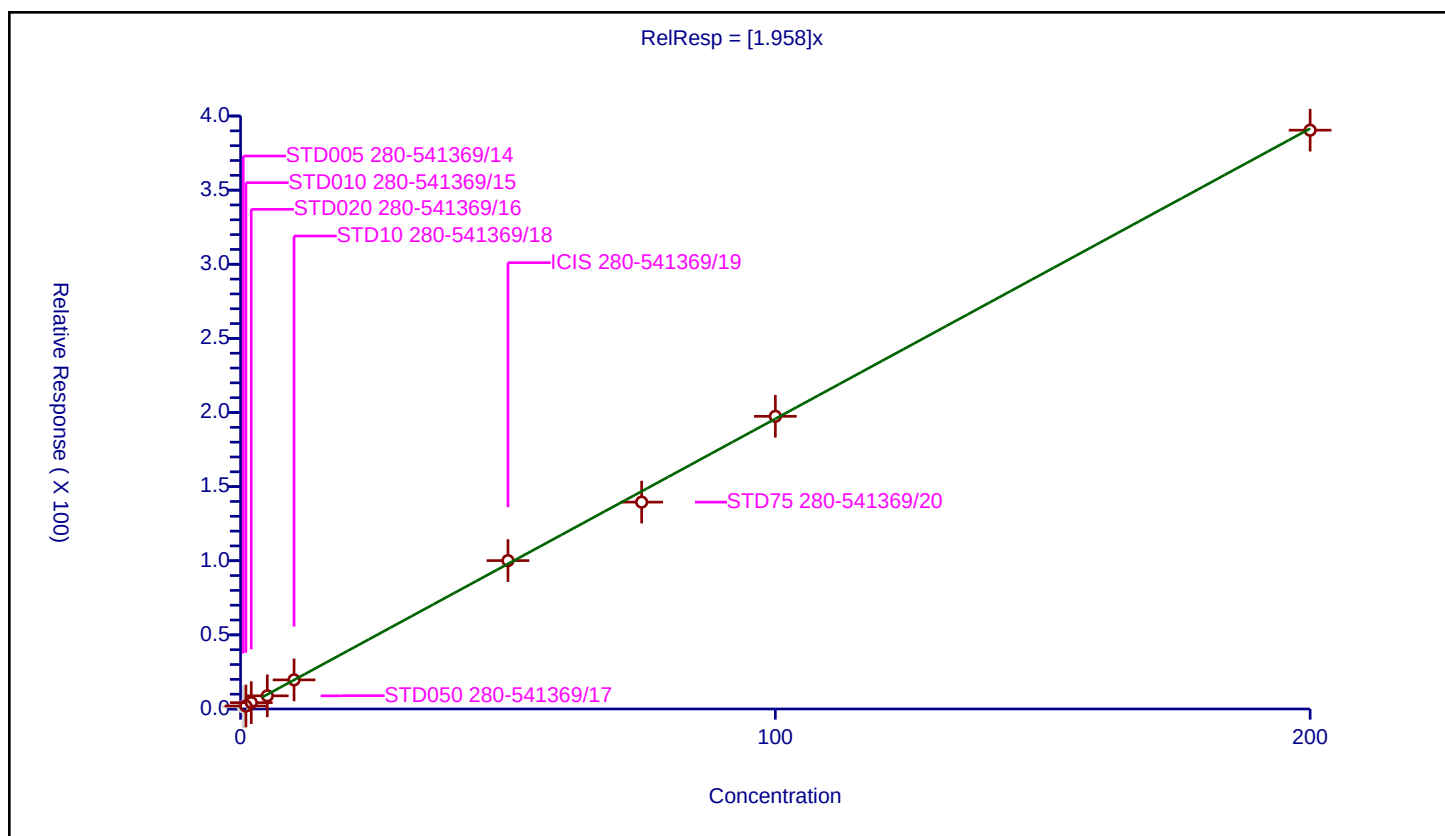
Curve Coefficients

Intercept: 0
 Slope: 1.958

Error Coefficients

Standard Error: 1970000
 Relative Standard Error: 5.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.509128	50.0	520466.0	3.018257	N
2	STD010 280-541369/15	1.0	1.999602	50.0	517828.0	1.999602	Y
3	STD020 280-541369/16	2.0	4.265979	50.0	511348.0	2.13299	Y
4	STD050 280-541369/17	5.0	8.881867	50.0	520296.0	1.776373	Y
5	STD10 280-541369/18	10.0	19.63104	50.0	522415.0	1.963104	Y
6	ICIS 280-541369/19	50.0	100.094449	50.0	549502.0	2.001889	Y
7	STD75 280-541369/20	75.0	139.549212	50.0	560752.0	1.860656	Y
8	STD100 280-541369/21	100.0	197.42929	50.0	568131.0	1.974293	Y
9	STD200 280-541369/22	200.0	390.44159	50.0	549605.0	1.952208	Y



Calibration

/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

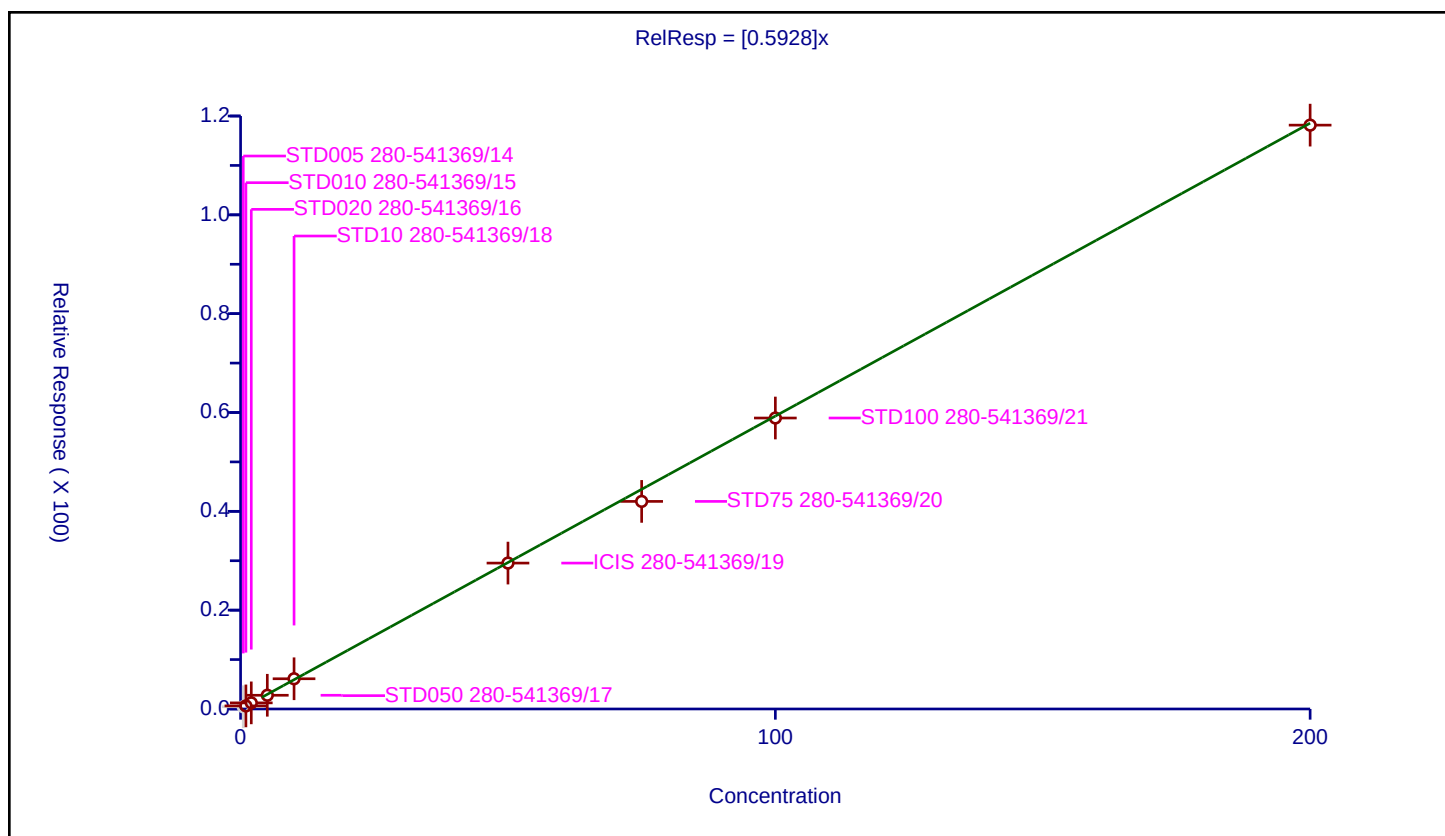
Curve Coefficients

Intercept: 0
 Slope: 0.5928

Error Coefficients

Standard Error: 594000
 Relative Standard Error: 4.4
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.454304	50.0	520466.0	0.908609	N
2	STD010 280-541369/15	1.0	0.625594	50.0	517828.0	0.625594	Y
3	STD020 280-541369/16	2.0	1.239469	50.0	511348.0	0.619735	Y
4	STD050 280-541369/17	5.0	2.774863	50.0	520296.0	0.554973	Y
5	STD10 280-541369/18	10.0	6.115636	50.0	522415.0	0.611564	Y
6	ICIS 280-541369/19	50.0	29.529465	50.0	549502.0	0.590589	Y
7	STD75 280-541369/20	75.0	42.008588	50.0	560752.0	0.560115	Y
8	STD100 280-541369/21	100.0	58.885539	50.0	568131.0	0.588855	Y
9	STD200 280-541369/22	200.0	118.155766	50.0	549605.0	0.590779	Y



Calibration

/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

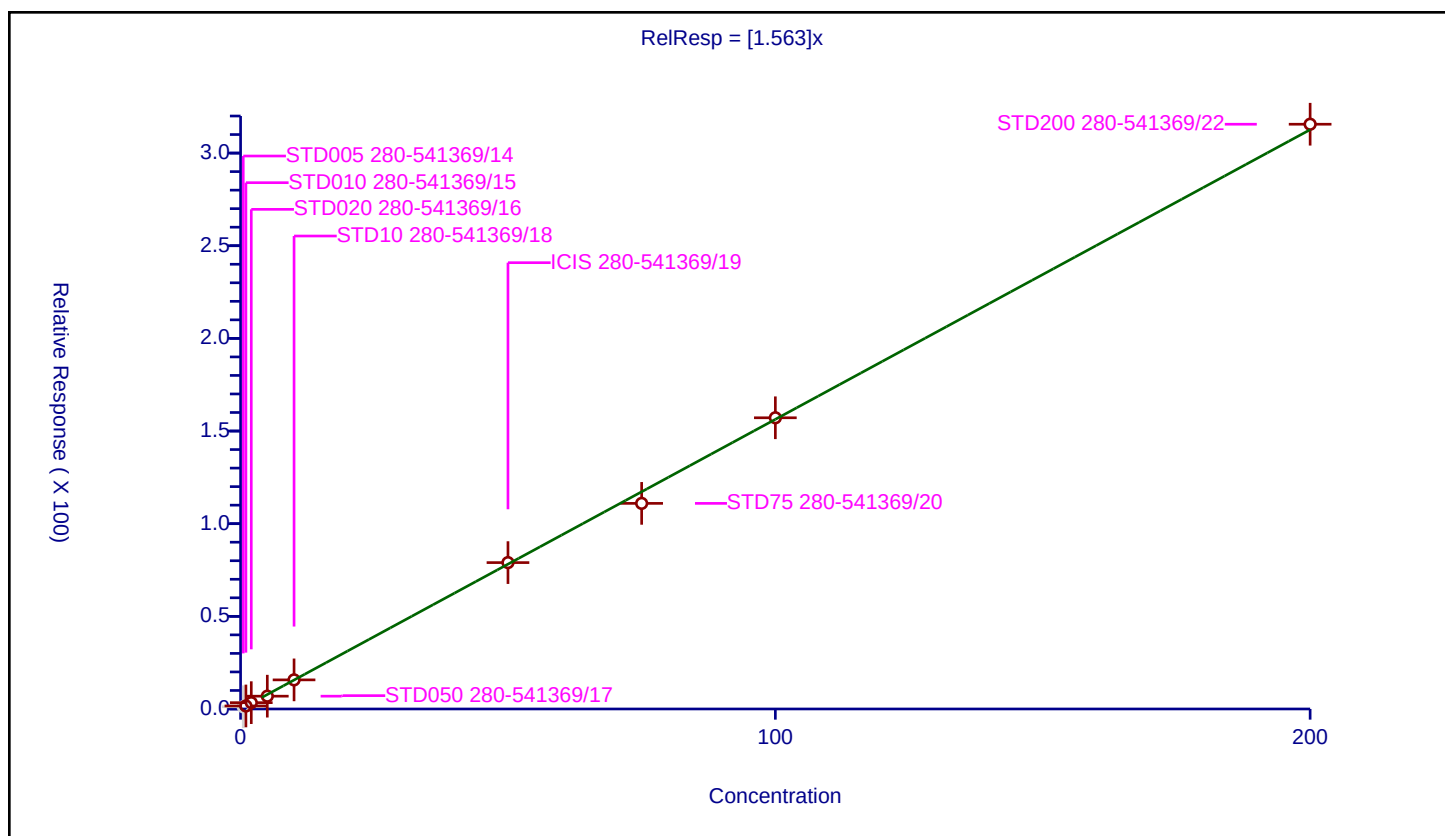
Curve Coefficients

Intercept: 0
 Slope: 1.563

Error Coefficients

Standard Error: 1580000
 Relative Standard Error: 6.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.214296	50.0	520466.0	2.428593	N
2	STD010 280-541369/15	1.0	1.633844	50.0	517828.0	1.633844	Y
3	STD020 280-541369/16	2.0	3.415384	50.0	511348.0	1.707692	Y
4	STD050 280-541369/17	5.0	6.916159	50.0	520296.0	1.383232	Y
5	STD10 280-541369/18	10.0	15.713274	50.0	522415.0	1.571327	Y
6	ICIS 280-541369/19	50.0	78.998075	50.0	549502.0	1.579961	Y
7	STD75 280-541369/20	75.0	110.954664	50.0	560752.0	1.479396	Y
8	STD100 280-541369/21	100.0	157.149671	50.0	568131.0	1.571497	Y
9	STD200 280-541369/22	200.0	315.569	50.0	549605.0	1.577845	Y



Calibration

/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

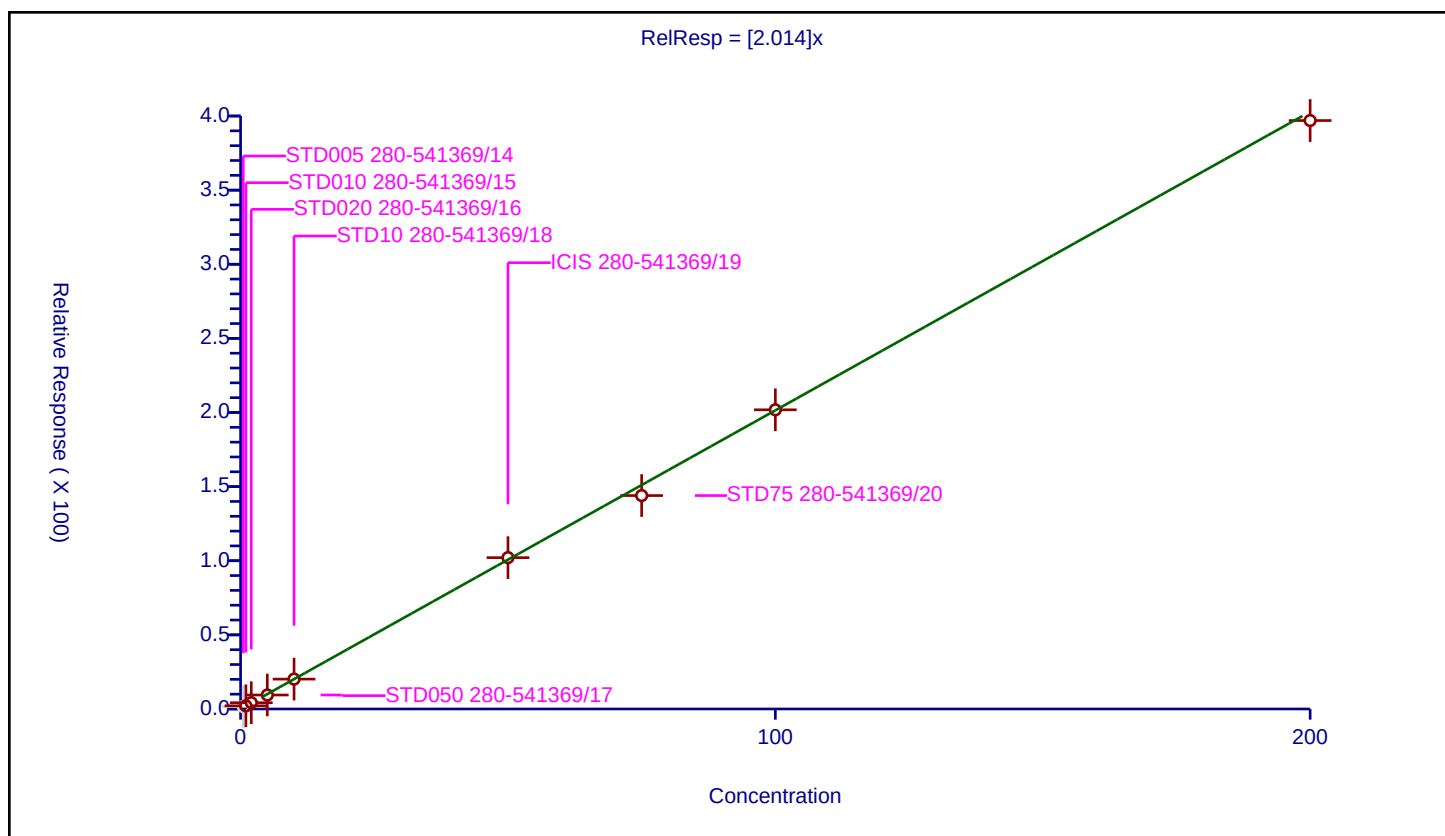
Curve Coefficients

Intercept: 0
 Slope: 2.014

Error Coefficients

Standard Error: 2010000
 Relative Standard Error: 4.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.634305	50.0	520466.0	3.268609	N
2	STD010 280-541369/15	1.0	2.12812	50.0	517828.0	2.12812	Y
3	STD020 280-541369/16	2.0	4.242023	50.0	511348.0	2.121012	Y
4	STD050 280-541369/17	5.0	9.428479	50.0	520296.0	1.885696	Y
5	STD10 280-541369/18	10.0	20.160983	50.0	522415.0	2.016098	Y
6	ICIS 280-541369/19	50.0	102.100811	50.0	549502.0	2.042016	Y
7	STD75 280-541369/20	75.0	143.971132	50.0	560752.0	1.919615	Y
8	STD100 280-541369/21	100.0	201.820443	50.0	568131.0	2.018204	Y
9	STD200 280-541369/22	200.0	396.93962	50.0	549605.0	1.984698	Y



Calibration

/ sec-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

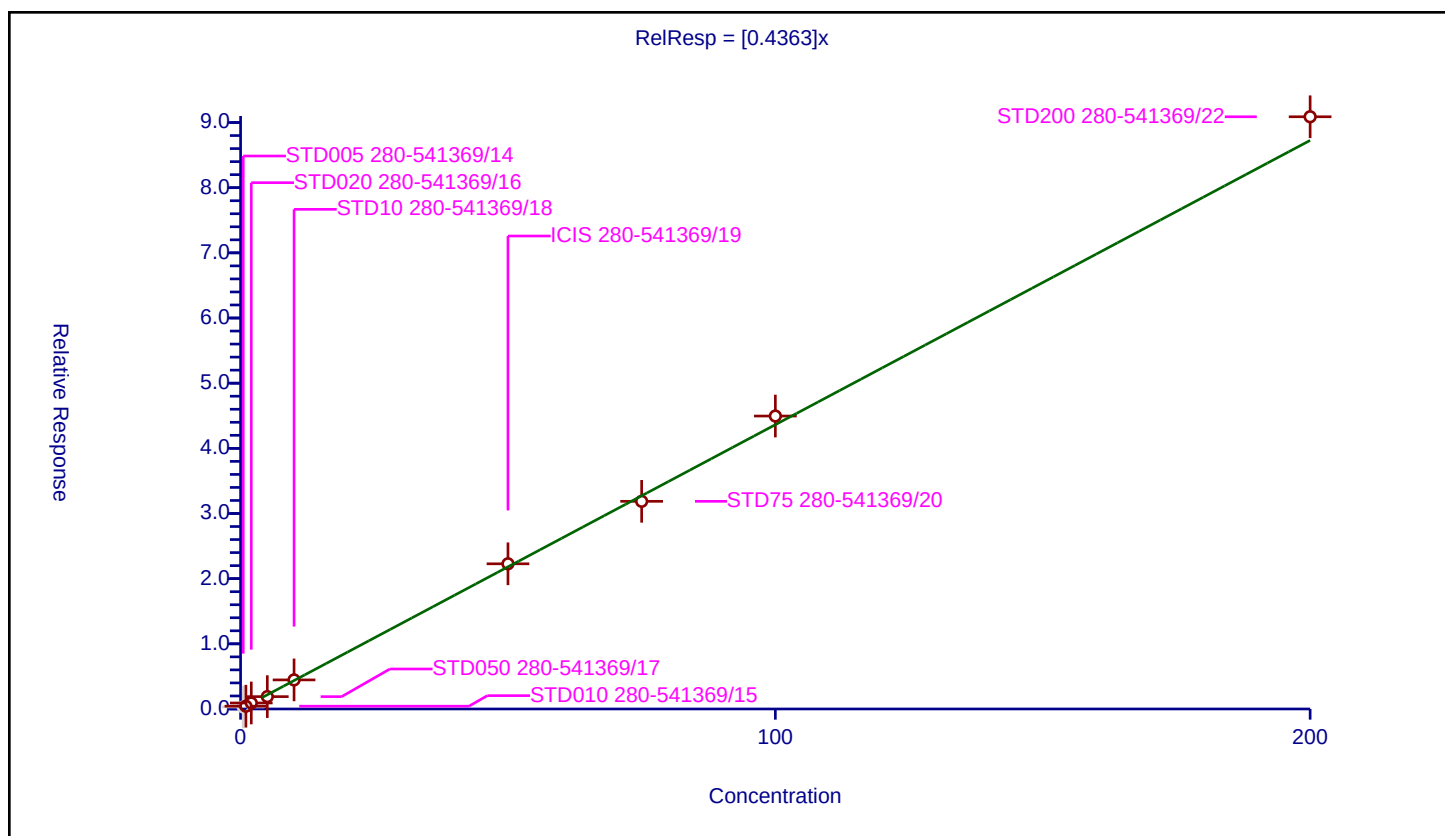
Curve Coefficients

Intercept: 0
 Slope: 0.4363

Error Coefficients

Standard Error: 455000
 Relative Standard Error: 6.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.312124	50.0	520466.0	0.624248	N
2	STD010 280-541369/15	1.0	0.4291	50.0	517828.0	0.4291	Y
3	STD020 280-541369/16	2.0	0.922953	50.0	511348.0	0.461476	Y
4	STD050 280-541369/17	5.0	1.894883	50.0	520296.0	0.378977	Y
5	STD10 280-541369/18	10.0	4.46197	50.0	522415.0	0.446197	Y
6	ICIS 280-541369/19	50.0	22.281812	50.0	549502.0	0.445636	Y
7	STD75 280-541369/20	75.0	31.871041	50.0	560752.0	0.424947	Y
8	STD100 280-541369/21	100.0	44.955037	50.0	568131.0	0.44955	Y
9	STD200 280-541369/22	200.0	90.885818	50.0	549605.0	0.454429	Y



Calibration

/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

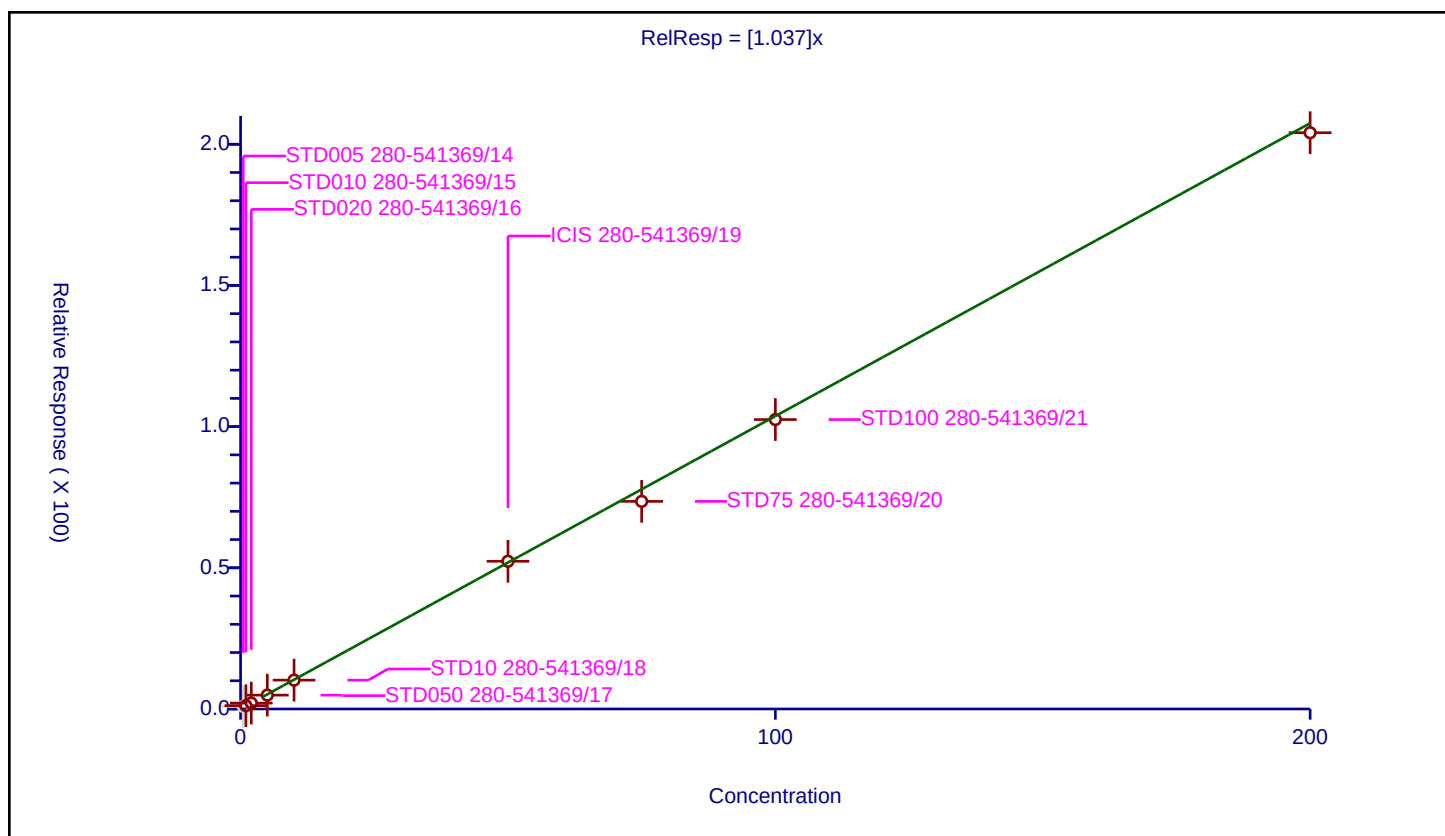
Curve Coefficients

Intercept: 0
 Slope: 1.037

Error Coefficients

Standard Error: 1030000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.923403	50.0	520466.0	1.846807	N
2	STD010 280-541369/15	1.0	1.175004	50.0	517828.0	1.175004	Y
3	STD020 280-541369/16	2.0	2.096029	50.0	511348.0	1.048014	Y
4	STD050 280-541369/17	5.0	4.909417	50.0	520296.0	0.981883	Y
5	STD10 280-541369/18	10.0	10.211709	50.0	522415.0	1.021171	Y
6	ICIS 280-541369/19	50.0	52.315915	50.0	549502.0	1.046318	Y
7	STD75 280-541369/20	75.0	73.524749	50.0	560752.0	0.98033	Y
8	STD100 280-541369/21	100.0	102.495903	50.0	568131.0	1.024959	Y
9	STD200 280-541369/22	200.0	204.086844	50.0	549605.0	1.020434	Y



Calibration

/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

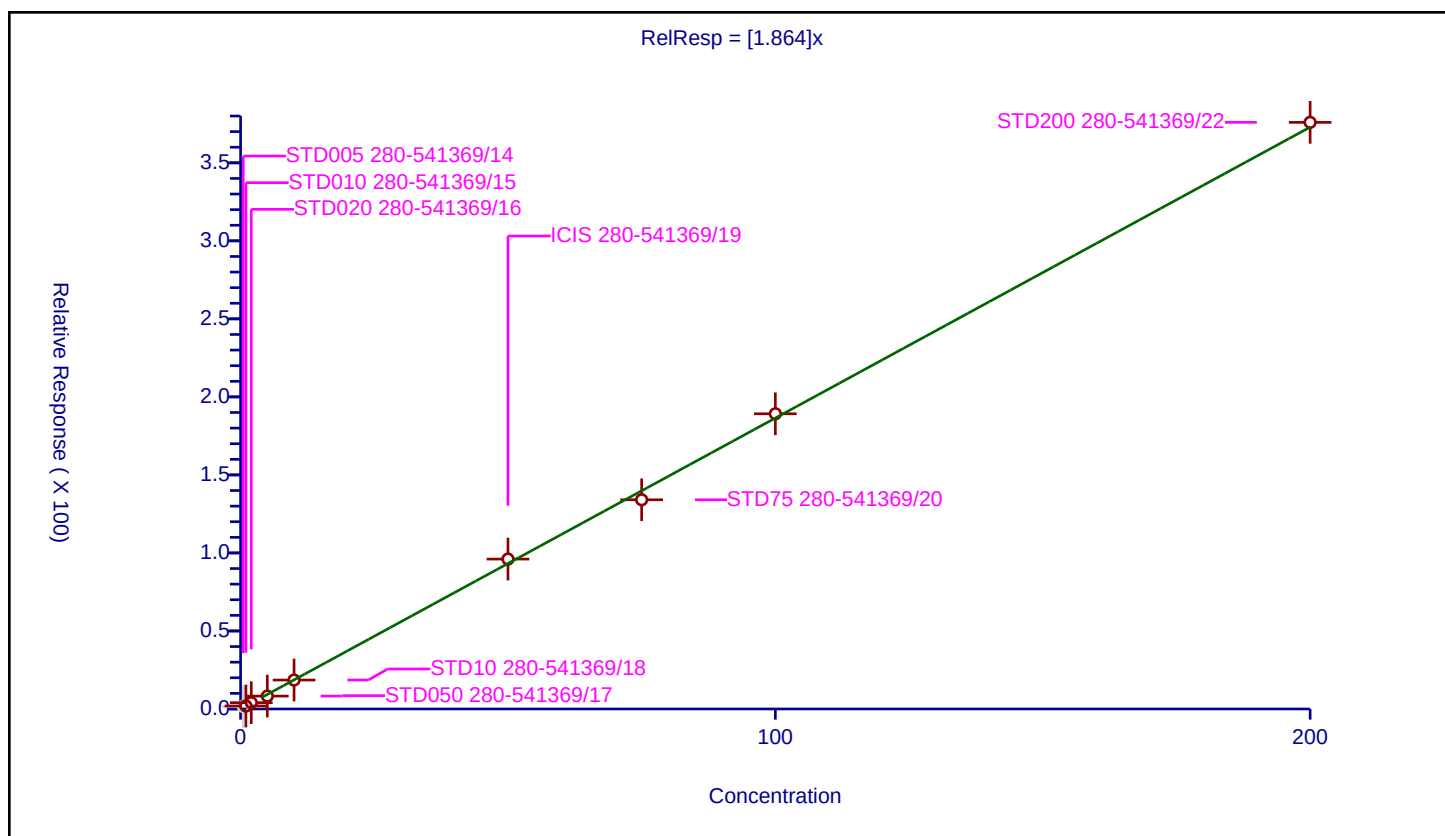
Curve Coefficients

Intercept: 0
 Slope: 1.864

Error Coefficients

Standard Error: 1890000
 Relative Standard Error: 5.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.599048	50.0	520466.0	3.198096	N
2	STD010 280-541369/15	1.0	1.906811	50.0	517828.0	1.906811	Y
3	STD020 280-541369/16	2.0	4.038052	50.0	511348.0	2.019026	Y
4	STD050 280-541369/17	5.0	8.269716	50.0	520296.0	1.653943	Y
5	STD10 280-541369/18	10.0	18.544644	50.0	522415.0	1.854464	Y
6	ICIS 280-541369/19	50.0	96.071534	50.0	549502.0	1.921431	Y
7	STD75 280-541369/20	75.0	134.075848	50.0	560752.0	1.787678	Y
8	STD100 280-541369/21	100.0	189.190169	50.0	568131.0	1.891902	Y
9	STD200 280-541369/22	200.0	375.928349	50.0	549605.0	1.879642	Y



Calibration

/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

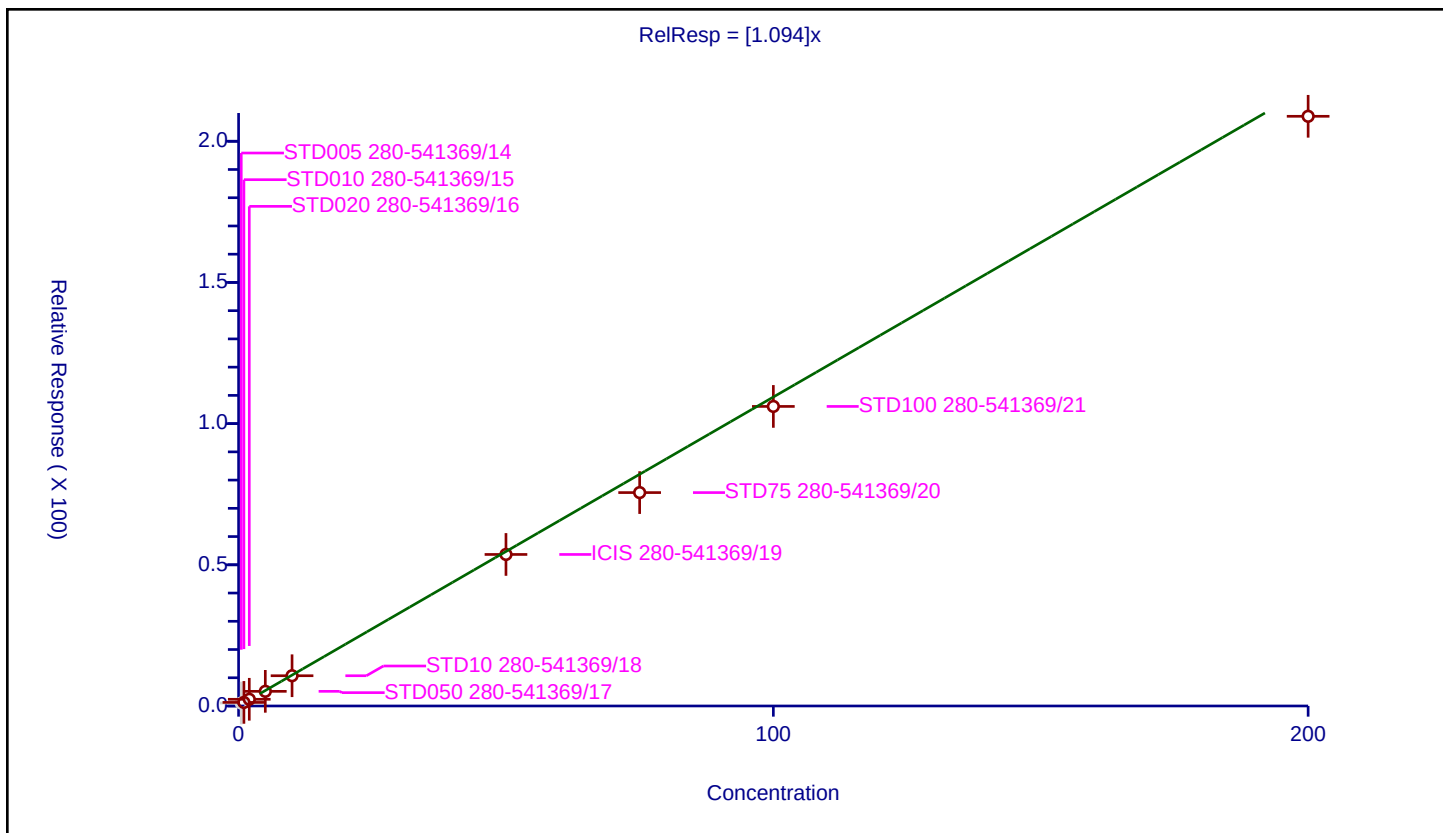
Curve Coefficients

Intercept: 0
 Slope: 1.094

Error Coefficients

Standard Error: 1060000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.039069	50.0	520466.0	2.078138	N
2	STD010 280-541369/15	1.0	1.269727	50.0	517828.0	1.269727	Y
3	STD020 280-541369/16	2.0	2.37793	50.0	511348.0	1.188965	Y
4	STD050 280-541369/17	5.0	5.188297	50.0	520296.0	1.037659	Y
5	STD10 280-541369/18	10.0	10.710163	50.0	522415.0	1.071016	Y
6	ICIS 280-541369/19	50.0	53.667139	50.0	549502.0	1.073343	Y
7	STD75 280-541369/20	75.0	75.573159	50.0	560752.0	1.007642	Y
8	STD100 280-541369/21	100.0	106.089881	50.0	568131.0	1.060899	Y
9	STD200 280-541369/22	200.0	208.839257	50.0	549605.0	1.044196	Y



Calibration

/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

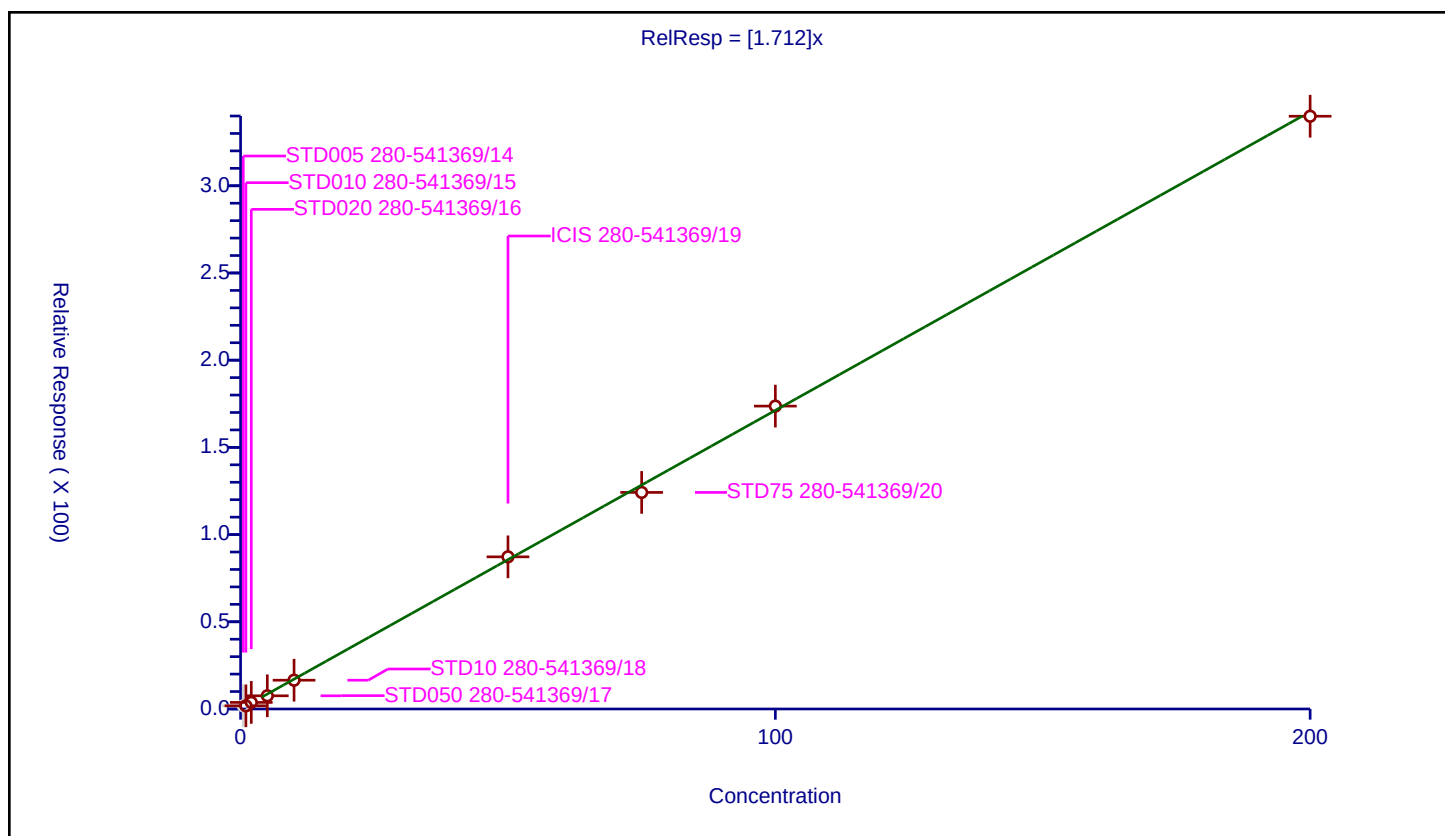
Curve Coefficients

Intercept: 0
 Slope: 1.712

Error Coefficients

Standard Error: 1720000
 Relative Standard Error: 6.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	1.806074	50.0	520466.0	3.612148	N
2	STD010 280-541369/15	1.0	1.812088	50.0	517828.0	1.812088	Y
3	STD020 280-541369/16	2.0	3.768275	50.0	511348.0	1.884138	Y
4	STD050 280-541369/17	5.0	7.568384	50.0	520296.0	1.513677	Y
5	STD10 280-541369/18	10.0	16.512064	50.0	522415.0	1.651206	Y
6	ICIS 280-541369/19	50.0	87.243722	50.0	549502.0	1.744874	Y
7	STD75 280-541369/20	75.0	124.175215	50.0	560752.0	1.65567	Y
8	STD100 280-541369/21	100.0	173.667253	50.0	568131.0	1.736673	Y
9	STD200 280-541369/22	200.0	339.87582	50.0	549605.0	1.699379	Y



Calibration

/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

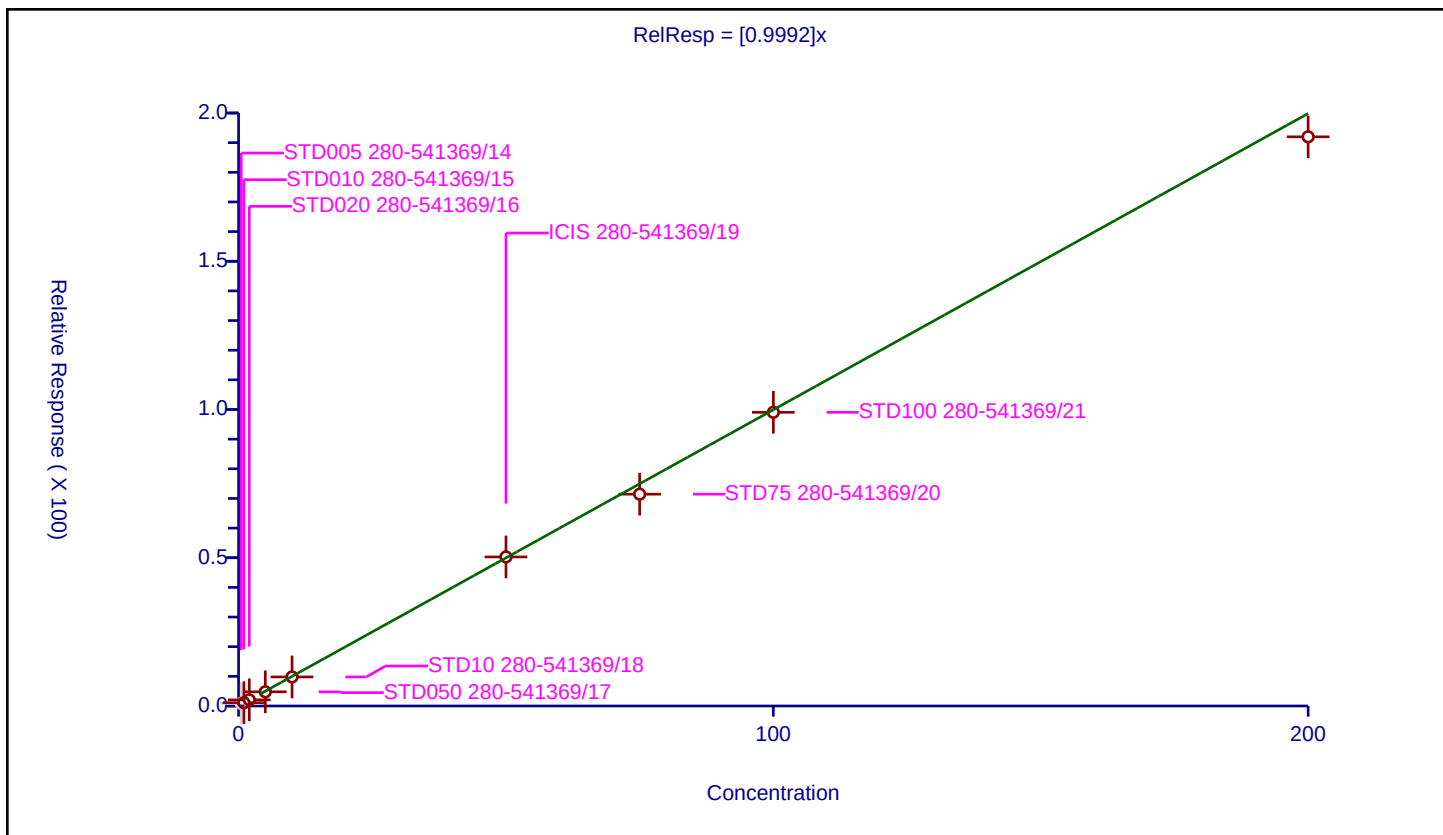
Curve Coefficients

Intercept: 0
 Slope: 0.9992

Error Coefficients

Standard Error: 977000
 Relative Standard Error: 5.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.872679	50.0	520466.0	1.745359	N
2	STD010 280-541369/15	1.0	1.110794	50.0	517828.0	1.110794	Y
3	STD020 280-541369/16	2.0	2.076864	50.0	511348.0	1.038432	Y
4	STD050 280-541369/17	5.0	4.778914	50.0	520296.0	0.955783	Y
5	STD10 280-541369/18	10.0	9.797288	50.0	522415.0	0.979729	Y
6	ICIS 280-541369/19	50.0	50.277524	50.0	549502.0	1.00555	Y
7	STD75 280-541369/20	75.0	71.445666	50.0	560752.0	0.952609	Y
8	STD100 280-541369/21	100.0	99.048547	50.0	568131.0	0.990485	Y
9	STD200 280-541369/22	200.0	191.97178	50.0	549605.0	0.959859	Y



Calibration

/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

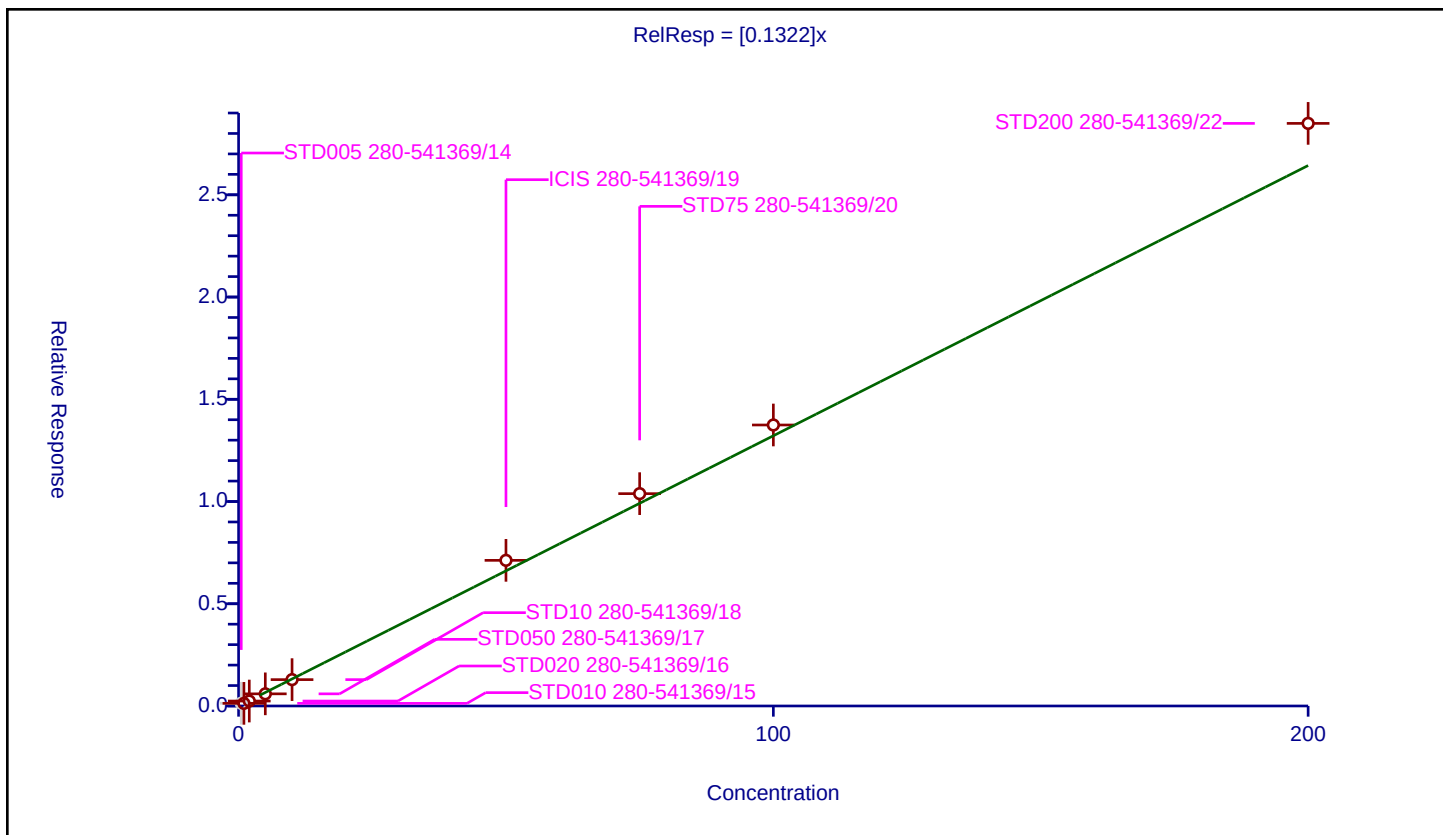
Curve Coefficients

Intercept: 0
 Slope: 0.1322

Error Coefficients

Standard Error: 143000
 Relative Standard Error: 7.1
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.133438	50.0	520466.0	0.266876	N
2	STD010 280-541369/15	1.0	0.128035	50.0	517828.0	0.128035	Y
3	STD020 280-541369/16	2.0	0.241421	50.0	511348.0	0.12071	Y
4	STD050 280-541369/17	5.0	0.594277	50.0	520296.0	0.118855	Y
5	STD10 280-541369/18	10.0	1.288631	50.0	522415.0	0.128863	Y
6	ICIS 280-541369/19	50.0	7.123177	50.0	549502.0	0.142464	Y
7	STD75 280-541369/20	75.0	10.384894	50.0	560752.0	0.138465	Y
8	STD100 280-541369/21	100.0	13.742077	50.0	568131.0	0.137421	Y
9	STD200 280-541369/22	200.0	28.492099	50.0	549605.0	0.14246	Y



Calibration

/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

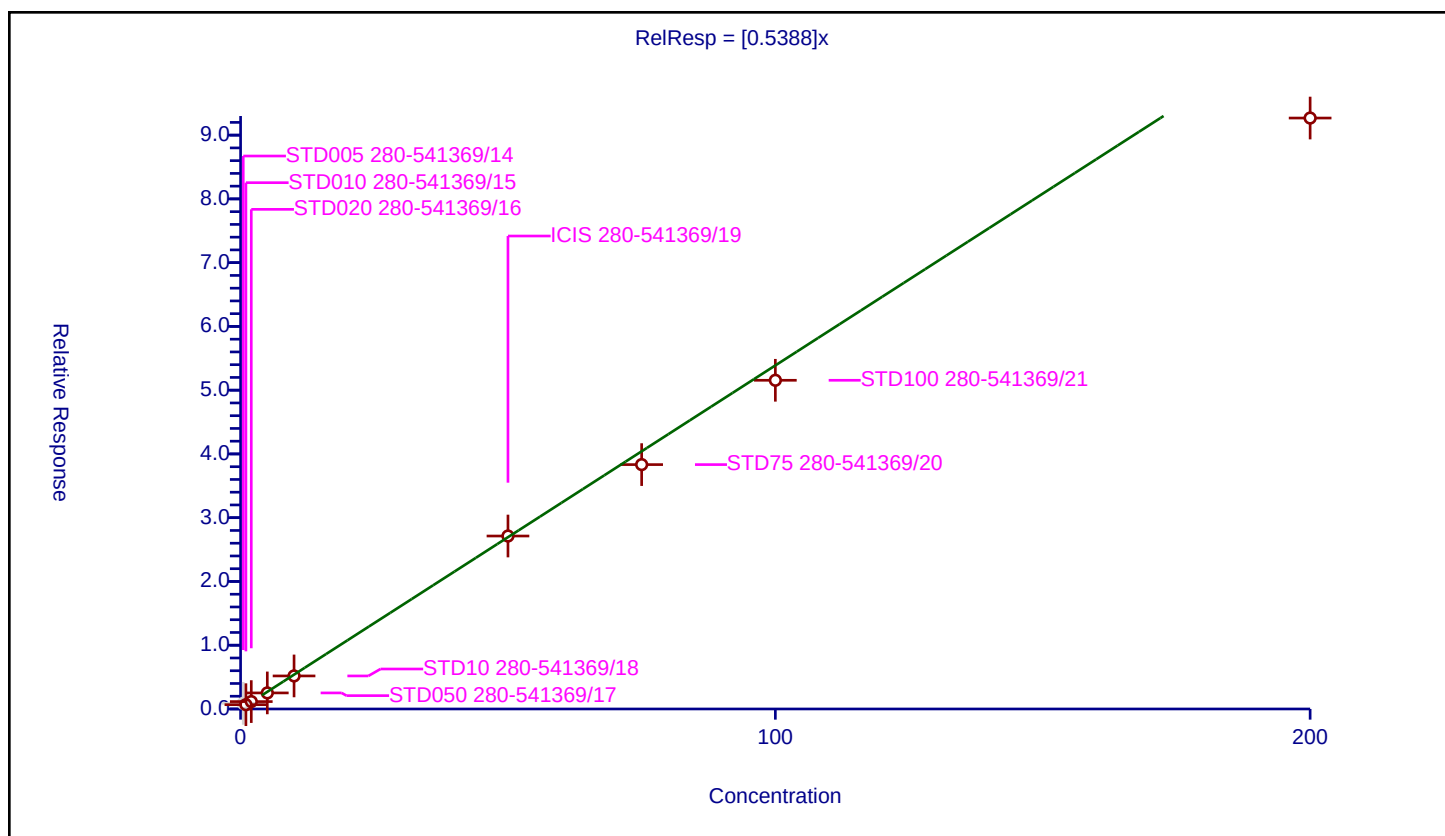
Curve Coefficients

Intercept: 0
 Slope: 0.5388

Error Coefficients

Standard Error: 487000
 Relative Standard Error: 12.0
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.884976	50.0	520466.0	1.769952	N
2	STD010 280-541369/15	1.0	0.67561	50.0	517828.0	0.67561	Y
3	STD020 280-541369/16	2.0	1.16056	50.0	511348.0	0.58028	Y
4	STD050 280-541369/17	5.0	2.518662	50.0	520296.0	0.503732	Y
5	STD10 280-541369/18	10.0	5.184575	50.0	522415.0	0.518458	Y
6	ICIS 280-541369/19	50.0	27.128473	50.0	549502.0	0.542569	Y
7	STD75 280-541369/20	75.0	38.330492	50.0	560752.0	0.511073	Y
8	STD100 280-541369/21	100.0	51.553427	50.0	568131.0	0.515534	Y
9	STD200 280-541369/22	200.0	92.681107	50.0	549605.0	0.463406	Y



Calibration

/ Hexachlorobutadiene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

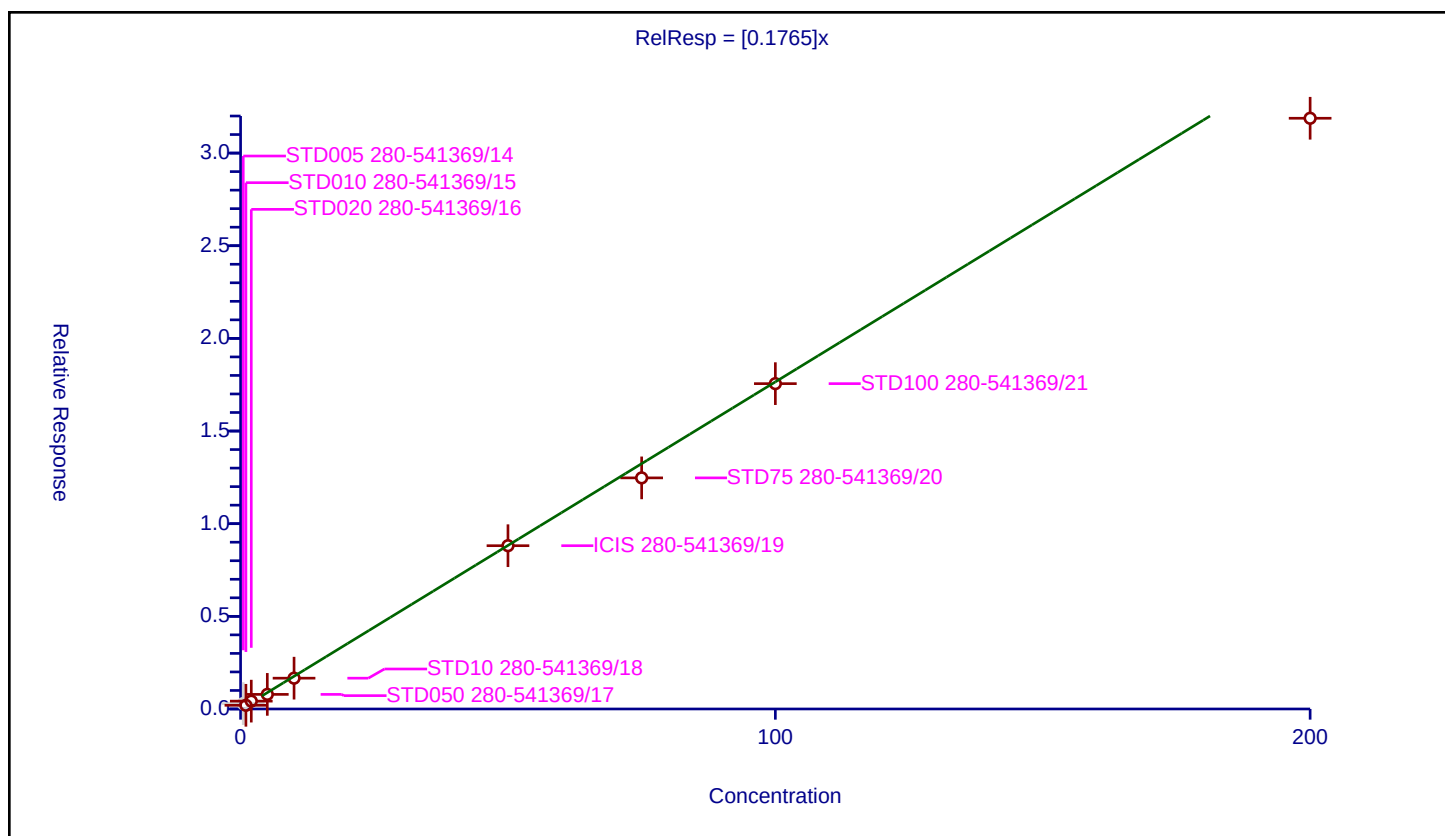
Curve Coefficients

Intercept: 0
Slope: 0.1765

Error Coefficients

Standard Error: 166000
Relative Standard Error: 10.9
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.291085	50.0	520466.0	0.582171	N
2	STD010 280-541369/15	1.0	0.199101	50.0	517828.0	0.199101	Y
3	STD020 280-541369/16	2.0	0.423489	50.0	511348.0	0.211744	Y
4	STD050 280-541369/17	5.0	0.787725	50.0	520296.0	0.157545	Y
5	STD10 280-541369/18	10.0	1.662663	50.0	522415.0	0.166266	Y
6	ICIS 280-541369/19	50.0	8.811524	50.0	549502.0	0.17623	Y
7	STD75 280-541369/20	75.0	12.471467	50.0	560752.0	0.166286	Y
8	STD100 280-541369/21	100.0	17.558098	50.0	568131.0	0.175581	Y
9	STD200 280-541369/22	200.0	31.879168	50.0	549605.0	0.159396	Y



Calibration

/ Naphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

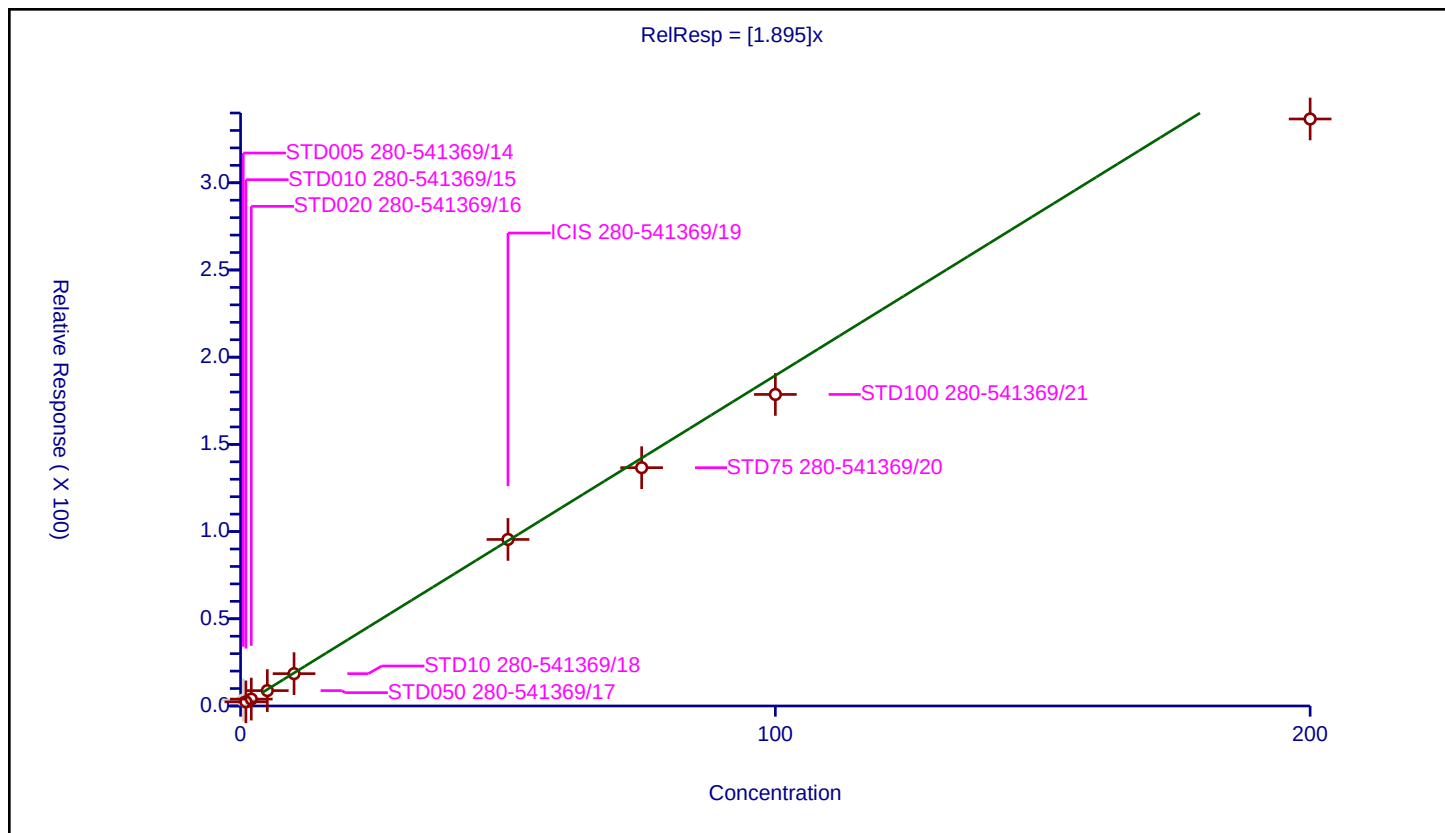
Curve Coefficients

Intercept: 0
Slope: 1.895

Error Coefficients

Standard Error: 1740000
Relative Standard Error: 11.1
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	3.394266	50.0	520466.0	6.788532	N
2	STD010 280-541369/15	1.0	2.367485	50.0	517828.0	2.367485	Y
3	STD020 280-541369/16	2.0	3.95181	50.0	511348.0	1.975905	Y
4	STD050 280-541369/17	5.0	8.811138	50.0	520296.0	1.762228	Y
5	STD10 280-541369/18	10.0	18.540815	50.0	522415.0	1.854082	Y
6	ICIS 280-541369/19	50.0	95.490553	50.0	549502.0	1.909811	Y
7	STD75 280-541369/20	75.0	136.63295	50.0	560752.0	1.821773	Y
8	STD100 280-541369/21	100.0	178.639257	50.0	568131.0	1.786393	Y
9	STD200 280-541369/22	200.0	336.575268	50.0	549605.0	1.682876	Y



Calibration

/ 1,2,3-Trichlorobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

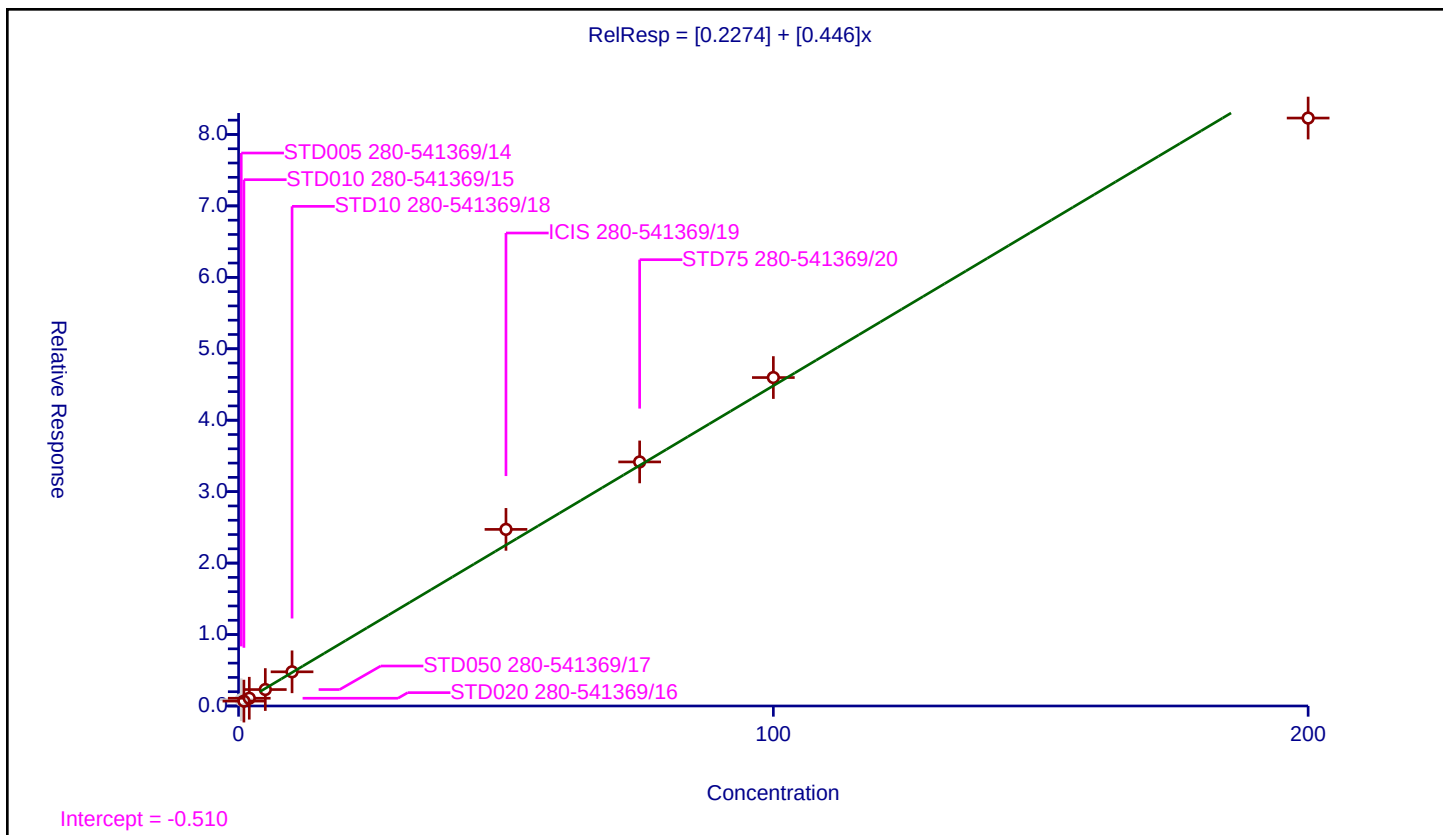
Curve Coefficients

Intercept: 0.2274
 Slope: 0.446

Error Coefficients

Standard Error: 468000
 Relative Standard Error: 6.4
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-541369/14	0.5	0.879885	50.0	520466.0	1.759769	N
2	STD010 280-541369/15	1.0	0.686618	50.0	517828.0	0.686618	Y
3	STD020 280-541369/16	2.0	1.084095	50.0	511348.0	0.542048	Y
4	STD050 280-541369/17	5.0	2.301574	50.0	520296.0	0.460315	Y
5	STD10 280-541369/18	10.0	4.781735	50.0	522415.0	0.478173	Y
6	ICIS 280-541369/19	50.0	24.719109	50.0	549502.0	0.494382	Y
7	STD75 280-541369/20	75.0	34.163855	50.0	560752.0	0.455518	Y
8	STD100 280-541369/21	100.0	45.973816	50.0	568131.0	0.459738	Y
9	STD200 280-541369/22	200.0	82.29483	50.0	549605.0	0.411474	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: ICV 280-538548/32 Calibration Date: 06/04/2021 13:29
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 10:18
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 12:47
 Lab File ID: MS1_2721.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		0.0092		5000	5000	0.0	55.0
Ethanol	Lin1		0.0029		3040	2250	35.1	55.0
Propene oxide	Ave	0.0299	0.0313		5230	5000	4.7	
2-Propanol	Ave	0.0111	0.0106		478	500	-4.5	55.0
Acetonitrile	Lin2		0.0238		505	500	1.1	55.0
Di-isopropyl ether (DIPE)	Ave	0.1328	0.1376		51.8	50.0	3.7	35.0
Chloroprene	Ave	0.3106	0.2917		47.0	50.0	-6.1	35.0
Tert-butyl ethyl ether	Ave	0.5083	0.5277		51.9	50.0	3.8	35.0
Ethyl acetate	Ave	0.1300	0.1495		115	100	15.0	55.0
Propionitrile	Lin2		0.0237		514	500	2.7	55.0
Methacrylonitrile	Lin2		0.1010		536	500	7.1	55.0
Tert-amyl methyl ether	Ave	0.4421	0.4478		50.6	50.0	1.3	35.0
n-Butanol	Ave	0.0041	0.0040		1210	1250	-3.4	55.0
Methyl methacrylate	Ave	0.0386	0.0410		106	100	6.2	35.0
2-Nitropropane	Lin2		0.0480		114	100	13.8	55.0
Tetrahydrothiophene	Ave	0.2160	0.2036		94.2	100	-5.8	55.0
cis-1,4-Dichloro-2-butene	Ave	0.2443	0.2352		96.3	100	-3.7	55.0
1,2,3-Trimethylbenzene	Ave	1.901	1.952		51.4	50.0	2.7	35.0
1,3,5-Trichlorobenzene	Ave	0.5817	0.5884		50.6	50.0	1.1	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2721.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 04-Jun-2021 13:29:30 ALS Bottle#: 10 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0102067-032
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:26:36 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 11:26:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	768839	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	157682	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	253861	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	708893	5000.0	5002.8	
19 Ethanol	45	2.892	2.892	0.000	100	101239	2250.0	3039.8	
21 Propene oxide	58	3.059	3.059	0.000	87	2403731	5000.0	5232.6	
27 Isopropyl alcohol	45	3.395	3.395	0.000	99	81153	500.0	477.5	
29 Acetonitrile	41	3.534	3.534	0.000	99	182643	500.0	505.5	
41 Isopropyl ether	87	4.372	4.372	0.000	92	105799	50.0	51.8	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	224271	50.0	47.0	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	405746	50.0	51.9	
47 Ethyl acetate	43	4.847	4.847	0.000	100	229858	100.0	115.0	
50 Propionitrile	54	4.875	4.875	0.000	98	182407	500.0	513.7	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	776542	500.0	535.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	344296	50.0	50.6	
67 n-Butanol	56	6.034	6.034	0.000	90	75952	1250.0	1206.9	
72 Methyl methacrylate	100	6.397	6.397	0.000	90	62993	100.0	106.2	
76 2-Nitropropane	41	6.788	6.788	0.000	98	73781	100.0	113.8	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	64194	100.0	94.2	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	119427	100.0	96.3	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	495658	50.0	51.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	92	149369	50.0	50.6	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00033

Amount Added: 50.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:26:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2721.D

Injection Date: 04-Jun-2021 13:29:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: ICV

Worklist Smp#: 32

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

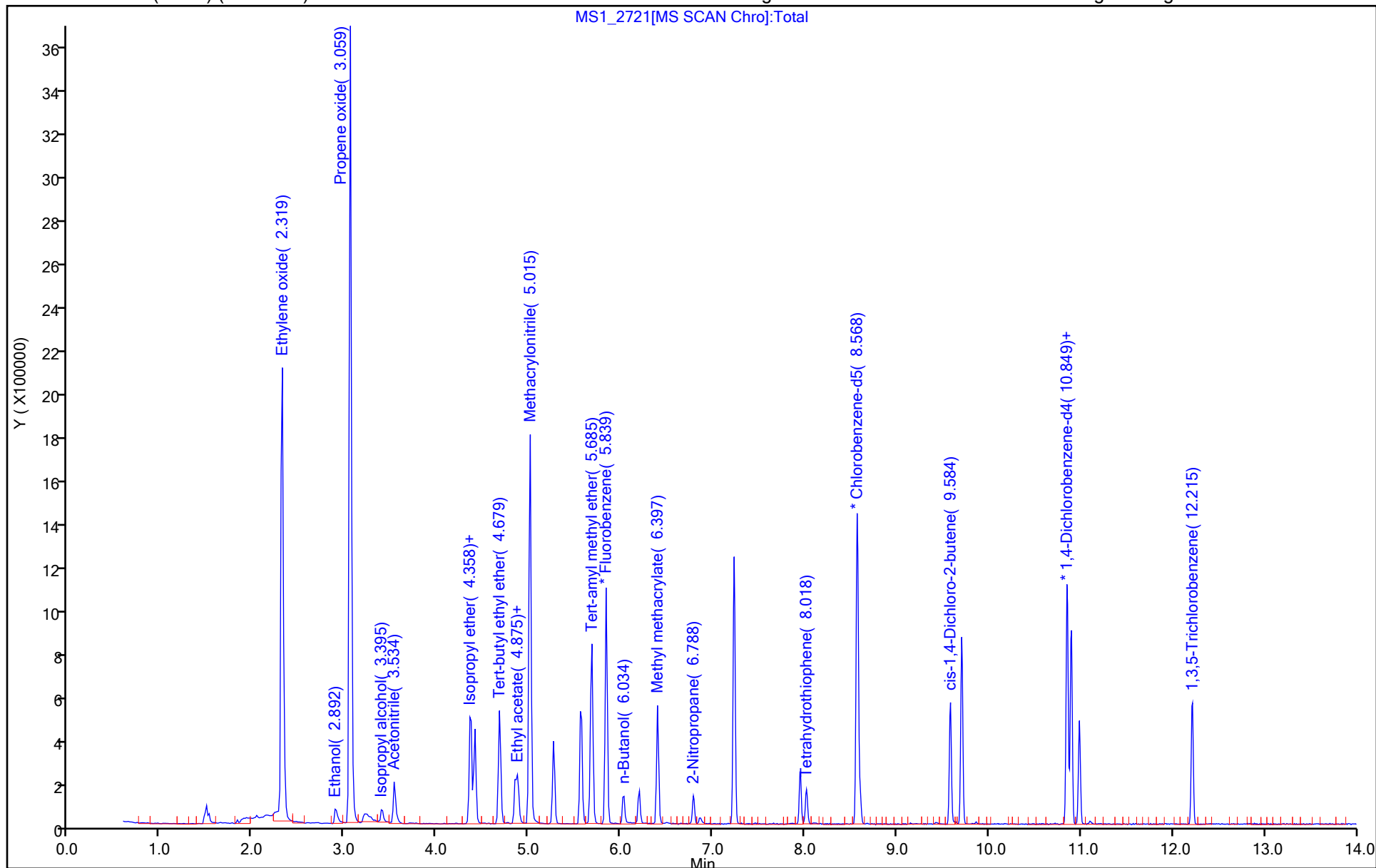
ALS Bottle#: 10

Method: AQ_VMS1_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.: 280-150245-1

SDG No.: _____

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	Lin1		0.1839		40.9	50.0	-18.1	55.0
Chloromethane	Ave	0.2172	0.1840	0.1000	42.4	50.0	-15.3	35.0
Vinyl chloride	Ave	0.1753	0.1664		47.5	50.0	-5.1	35.0
Bromomethane	Ave	0.1350	0.1342		49.7	50.0	-0.6	35.0
Chloroethane	Ave	0.1351	0.1265		46.8	50.0	-6.4	35.0
Dichlorofluoromethane	Lin2		0.3306		48.9	50.0	-2.2	55.0
Trichlorofluoromethane	Ave	0.2882	0.2597		45.1	50.0	-9.9	50.0
Ethyl ether	Ave	0.1409	0.1402		49.7	50.0	-0.5	35.0
Acrolein	Lin1		0.0314		571	494	15.7	55.0
1,1-Dichloroethene	Ave	0.1444	0.1267		43.9	50.0	-12.3	35.0
Freon 113	Ave	0.0955	0.0904		47.4	50.0	-5.2	55.0
Acetone	Lin2		0.0539		188	200	-6.1	55.0
Iodomethane	Lin2		0.1811		41.7	50.0	-16.6	35.0
Carbon disulfide	Ave	0.4856	0.4422		45.5	50.0	-8.9	55.0
Methyl acetate	Ave	0.1367	0.1317		96.4	100	-3.6	55.0
Allyl chloride	Ave	0.2908	0.2719		46.8	50.0	-6.5	35.0
Methylene Chloride	Lin2		0.1699		47.7	50.0	-4.5	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0174	0.0179		514	500	2.7	55.0
Acrylonitrile	Ave	0.0691	0.0690		499	500	-0.2	55.0
Methyl tert-butyl ether	Ave	0.5094	0.5122		50.3	50.0	0.5	35.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1487		42.4	50.0	-15.2	35.0
Hexane	Lin2		0.9001		42.8	50.0	-14.3	35.0
1,1-Dichloroethane	Ave	0.3389	0.3134	0.1000	46.2	50.0	-7.5	35.0
Vinyl acetate	Ave	0.3923	0.4035		103	100	2.9	55.0
2-Butanone (MEK)	Lin2		0.0811		191	200	-4.7	55.0
2,2-Dichloropropane	Ave	0.2998	0.2601		43.4	50.0	-13.2	35.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1726		44.9	50.0	-10.2	35.0
sec-Butyl Alcohol	Lin2		0.0139		1160	1200	-3.0	55.0
Chlorobromomethane	Lin2		0.0813		46.6	50.0	-6.7	35.0
Tetrahydrofuran	Lin1		0.0545		95.7	100	-4.3	55.0
Chloroform	Ave	0.3516	0.3117		44.3	50.0	-11.4	35.0
1,1,1-Trichloroethane	Ave	0.3094	0.2518		40.7	50.0	-18.6	35.0
Cyclohexane	Lin1		0.2634		42.4	50.0	-15.1	35.0
1,1-Dichloropropene	Ave	0.2498	0.2249		45.0	50.0	-10.0	35.0
Carbon tetrachloride	Ave	0.2276	0.2062		45.3	50.0	-9.4	35.0
Isobutyl alcohol	Ave	0.0062	0.0056		1120	1250	-10.5	55.0
Benzene	Ave	0.6919	0.6544		47.3	50.0	-5.4	35.0
1,2-Dichloroethane	Ave	0.2917	0.2813		48.2	50.0	-3.6	35.0
n-Heptane	Lin1		0.1729		42.4	50.0	-15.2	50.0
Trichloroethene	Ave	0.9271	0.8137		43.9	50.0	-12.2	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	0.1343	0.1311		156	160	-2.4	55.0
Methylcyclohexane	Lin1		0.2034		42.0	50.0	-16.0	35.0
1,2-Dichloropropane	Ave	0.1881	0.1840		48.9	50.0	-2.2	35.0
1,4-Dioxane	Lin2		0.0022		1020	1000	1.9	55.0
Dibromomethane	Ave	0.1179	0.1171		49.6	50.0	-0.7	35.0
Dichlorobromomethane	Ave	0.2580	0.2306		44.7	50.0	-10.6	35.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.1209		52.5	50.0	5.1	55.0
cis-1,3-Dichloropropene	Ave	1.351	1.357		50.2	50.0	0.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1554		200	200	-0.2	55.0
Toluene	Ave	0.6902	0.6210		45.0	50.0	-10.0	35.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2779		50.4	50.0	0.7	35.0
Ethyl methacrylate	Ave	0.996	1.064		53.4	50.0	6.9	35.0
1,1,2-Trichloroethane	Lin2		0.1407		48.6	50.0	-2.9	35.0
Tetrachloroethene	Ave	0.5176	0.5006		48.4	50.0	-3.3	35.0
1,3-Dichloropropane	Ave	1.267	1.282		50.6	50.0	1.1	35.0
2-Hexanone	Lin2		0.5219		197	200	-1.3	55.0
Chlorodibromomethane	Ave	0.7473	0.7821		52.3	50.0	4.7	35.0
1,2-Dibromoethane	Ave	0.7193	0.7102		49.4	50.0	-1.3	35.0
1-Chlorohexane	Lin2		0.9422		35.7	40.0	-10.8	35.0
Chlorobenzene	Ave	2.041	1.949	0.3000	47.7	50.0	-4.5	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.7015		48.7	50.0	-2.7	35.0
Ethylbenzene	Ave	1.085	1.040		47.9	50.0	-4.1	35.0
m-Xylene & p-Xylene	Ave	1.367	1.278		46.7	50.0	-6.5	35.0
o-Xylene	Ave	1.277	1.278		50.1	50.0	0.1	35.0
Styrene	Ave	2.334	2.277		48.8	50.0	-2.4	35.0
Bromoform	Lin2		0.4720	0.1000	48.1	50.0	-3.7	35.0
Isopropylbenzene	Ave	2.187	1.997		45.7	50.0	-8.7	35.0
Cyclohexanone	Ave	0.0560	0.0315		1130	2000	-43.7*	35.0
1,1,2,2-Tetrachloroethane	Lin2		0.6010	0.3000	49.6	50.0	-0.9	35.0
Bromobenzene	Ave	0.4965	0.4947		49.8	50.0	-0.4	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.2228		51.0	50.0	2.1	55.0
1,2,3-Trichloropropane	Lin2		0.1702		50.5	50.0	1.0	35.0
N-Propylbenzene	Ave	0.6077	0.5410		44.5	50.0	-11.0	35.0
2-Chlorotoluene	Ave	0.4970	0.4793		48.2	50.0	-3.5	35.0
1,3,5-Trimethylbenzene	Ave	1.953	1.810		46.3	50.0	-7.3	35.0
4-Chlorotoluene	Ave	0.5470	0.5046		46.1	50.0	-7.7	35.0
tert-Butylbenzene	Ave	1.601	1.458		45.5	50.0	-8.9	35.0
1,2,4-Trimethylbenzene	Ave	2.003	1.851		46.2	50.0	-7.6	35.0
sec-Butylbenzene	Lin2		0.4150		44.8	50.0	-10.3	35.0
1,3-Dichlorobenzene	Ave	0.9698	0.9324		48.1	50.0	-3.9	35.0
4-Isopropyltoluene	Ave	1.986	1.809		45.5	50.0	-8.9	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41
 Lab File ID: MS1_2732.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	1.018	0.9868		48.5	50.0	-3.1	35.0
n-Butylbenzene	Ave	1.915	1.721		44.9	50.0	-10.1	35.0
1,2-Dichlorobenzene	Ave	0.9122	0.9043		49.6	50.0	-0.9	35.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1188		46.3	50.0	-7.4	55.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5757		48.2	50.0	-3.6	35.0
Hexachlorobutadiene	Lin2		0.1871		45.1	50.0	-9.9	35.0
Naphthalene	Ave	1.773	1.793		50.6	50.0	1.1	35.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.5360		49.2	50.0	-1.7	35.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2619		49.4	50.0	-1.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3483		49.0	50.0	-1.9	35.0
Toluene-d8 (Surr)	Ave	4.332	4.397		50.8	50.0	1.5	35.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.073		49.4	50.0	-1.1	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2732.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 04-Jun-2021 17:24:30 ALS Bottle#: 21 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0102067-023
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:42:23 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 11:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.838	0.000	97	749174	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	154032	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	248786	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	196215	50.0	49.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	260905	50.0	49.0	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	677298	50.0	50.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	266969	50.0	49.4	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	98	137806	50.0	40.9	
12 Chloromethane	50	1.900	1.900	0.000	99	137830	50.0	42.4	
13 Vinyl chloride	62	1.998	1.998	0.000	100	124637	50.0	47.5	
15 Bromomethane	94	2.347	2.347	0.000	93	100513	50.0	49.7	
16 Chloroethane	64	2.459	2.459	0.000	98	94749	50.0	46.8	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	247680	50.0	48.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	194553	50.0	45.1	
20 Ethyl ether	59	3.003	3.003	0.000	93	105050	50.0	49.7	
22 Acrolein	56	3.143	3.143	0.000	98	232479	493.8	571.4	a
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	94893	50.0	43.9	
24 112TCTFE	151	3.255	3.255	0.000	95	67761	50.0	47.4	
25 Acetone	43	3.269	3.269	0.000	98	161480	200.0	187.7	
26 Iodomethane	142	3.380	3.380	0.000	98	135641	50.0	41.7	
28 Carbon disulfide	76	3.450	3.450	0.000	99	331299	50.0	45.5	
30 Methyl acetate	43	3.576	3.576	0.000	98	197354	100.0	96.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	203702	50.0	46.8	
32 Methylene Chloride	84	3.716	3.716	0.000	97	127274	50.0	47.7	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	134139	500.0	513.6	
34 Acrylonitrile	53	3.911	3.911	0.000	97	516763	500.0	498.9	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	383730	50.0	50.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	111423	50.0	42.4	
37 Hexane	57	4.204	4.204	0.000	94	138643	50.0	42.8	
39 Vinyl acetate	43	4.344	4.344	0.000	98	604607	100.0	102.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	234818	50.0	46.2	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	243087	200.0	190.6	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	194894	50.0	43.4	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	129274	50.0	44.9	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	249046	1200.0	1163.4	
54 Tetrahydrofuran	42	5.056	5.056	0.000	87	81589	100.0	95.7	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	60892	50.0	46.6	
55 Chloroform	83	5.126	5.126	0.000	98	233531	50.0	44.3	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	188632	50.0	40.7	
57 Cyclohexane	56	5.350	5.350	0.000	94	197345	50.0	42.4	
58 1,1-Dichloropropene	75	5.419	5.419	0.000	91	168483	50.0	45.0	
59 Carbon tetrachloride	117	5.419	5.419	0.000	84	154474	50.0	45.3	
60 Isobutyl alcohol	41	5.461	5.461	0.000	94	104463	1250.0	1118.5	
63 Benzene	78	5.587	5.587	0.000	99	490289	50.0	47.3	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	210764	50.0	48.2	
66 n-Heptane	43	5.824	5.824	0.000	93	129529	50.0	42.4	
68 Trichloroethene	95	6.146	6.146	0.000	93	125331	50.0	43.9	
69 2-Pentanone	43	6.271	6.271	0.000	98	314197	160.0	156.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	152377	50.0	42.0	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	137831	50.0	48.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	32705	1000.0	1019.1	
74 Dibromomethane	93	6.453	6.453	0.000	89	87722	50.0	49.6	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	172789	50.0	44.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	90576	50.0	52.5	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	208971	50.0	50.2	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	465669	200.0	199.5	
82 Toluene	91	7.295	7.295	0.000	97	465232	50.0	45.0	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	99	208177	50.0	50.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	163928	50.0	53.4	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	95	105406	50.0	48.6	
89 Tetrachloroethene	164	7.767	7.767	0.000	86	77111	50.0	48.4	
90 1,3-Dichloropropane	76	7.824	7.824	0.000	95	197428	50.0	50.6	
91 2-Hexanone	43	7.853	7.853	0.000	99	321572	200.0	197.4	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	120461	50.0	52.3	
96 Ethylene Dibromide	107	8.146	8.146	0.000	96	109392	50.0	49.4	
98 1-Chlorohexane	91	8.568	8.568	0.000	94	116109	40.0	35.7	
99 Chlorobenzene	112	8.604	8.604	0.000	90	300182	50.0	47.7	
100 1,1,1,2-Tetrachloroethane	131	8.682	8.682	0.000	91	108061	50.0	48.7	
101 Ethylbenzene	106	8.682	8.682	0.000	99	160135	50.0	47.9	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	196849	50.0	46.7	
103 o-Xylene	106	9.176	9.176	0.000	99	196851	50.0	50.1	
104 Styrene	104	9.197	9.197	0.000	95	350770	50.0	48.8	
106 Bromoform	173	9.383	9.383	0.000	89	72696	50.0	48.1	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	496911	50.0	45.7	
109 Cyclohexanone	55	9.626	9.626	0.000	95	194155	2000.0	1125.1	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	149523	50.0	49.6	
111 Bromobenzene	156	9.855	9.855	0.000	96	123063	50.0	49.8	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	74	55427	50.0	51.0	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	42332	50.0	50.5	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	134588	50.0	44.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	119253	50.0	48.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	450332	50.0	46.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	99	125546	50.0	46.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	362761	50.0	45.5	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	460459	50.0	46.2	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	103236	50.0	44.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	231970	50.0	48.1	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	450072	50.0	45.5	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	245500	50.0	48.5	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	428125	50.0	44.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	224969	50.0	49.6	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	75	29554	50.0	46.3	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	143218	50.0	48.2	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	46558	50.0	45.1	
132 Naphthalene	128	13.123	13.123	0.000	98	446124	50.0	50.6	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	92	133359	50.0	49.2	
S 149 1,2-Dichloroethene, Total (URS)	93				0		100.0	87.3	
S 150 1,2-Dichloroethene, Total	1				0		100.0	87.3	
S 151 Trihalomethanes, Total	1				0		200.0	189.5	
S 152 Total BTEX	1				0			237.0	
S 153 Xylenes, Total (URS)	1				0		100.0	96.8	
S 155 Xylenes, Total	106				0		100.0	96.8	
S 156 1,3-Dichloropropene, Total	1				0		100.0	100.5	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-Gas B_00091	Amount Added: 10.00	Units: uL	
MV-MegaMain B_00047	Amount Added: 25.00	Units: uL	
Acrolein_B_00005	Amount Added: 25.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2732.D

Injection Date: 04-Jun-2021 17:24:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: ICV

Worklist Smp#: 23

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

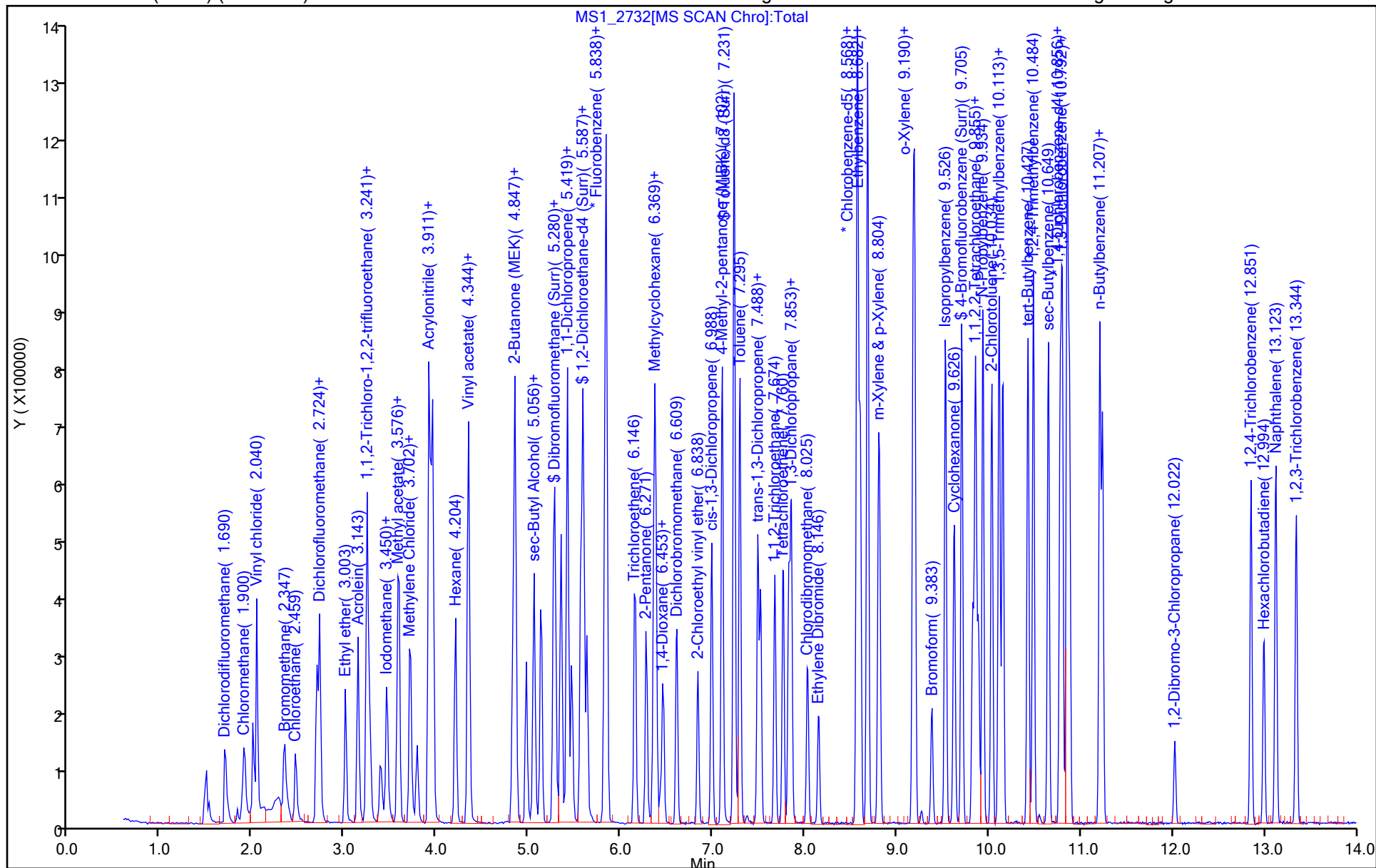
ALS Bottle#: 21

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2732.D

Injection Date: 04-Jun-2021 17:24:30

Instrument ID: VMS_MS1

Lims ID: ICV

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 21

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

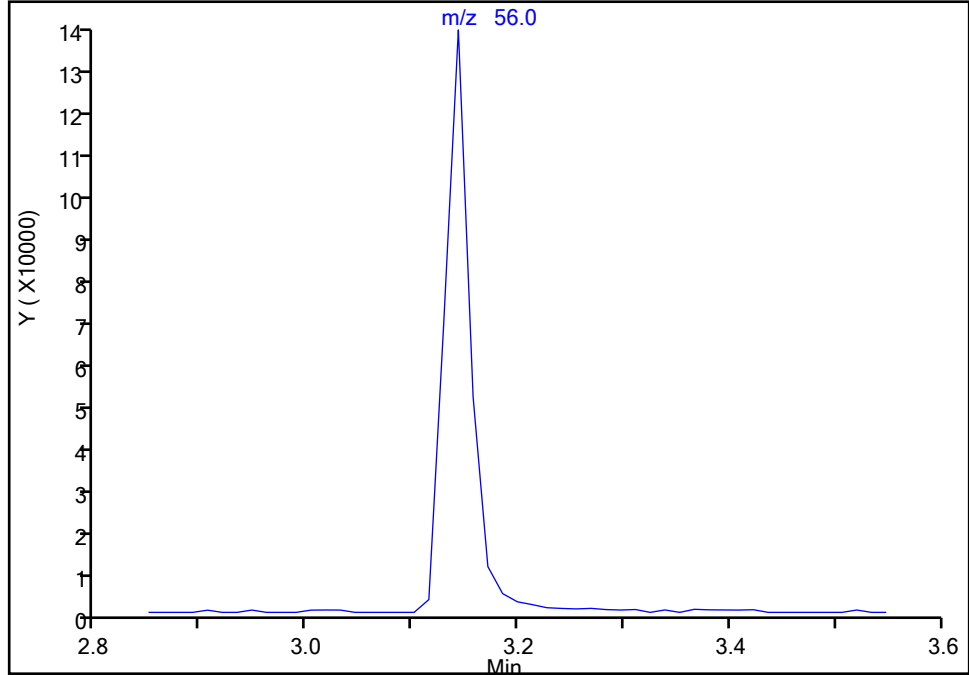
[22 Acrolein, CAS: 107-02-8](#)

Signal: 1

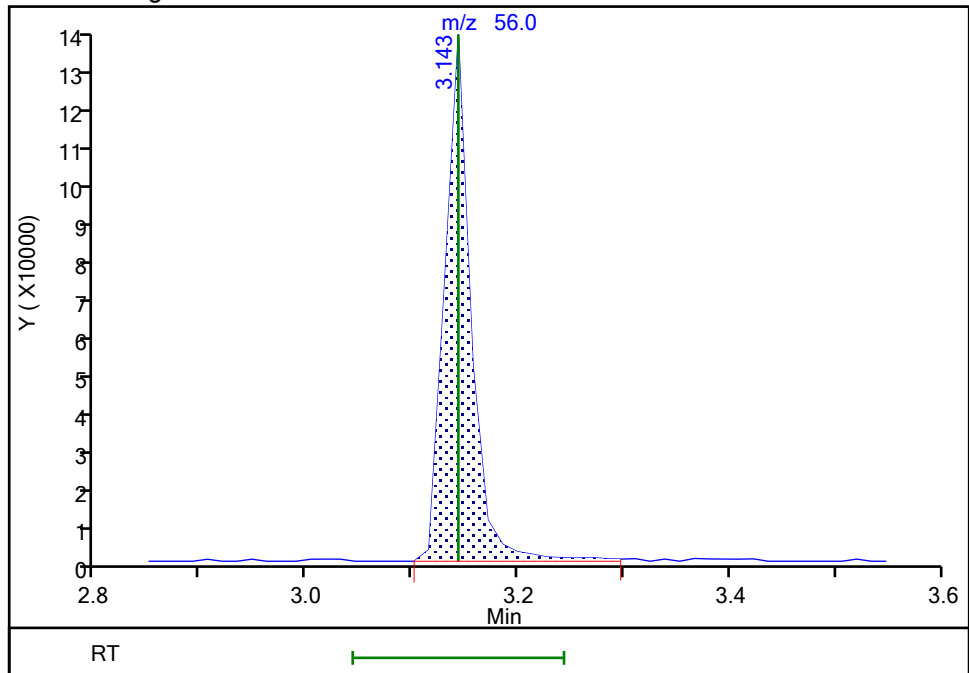
Not Detected

Expected RT: 3.14

Processing Integration Results



Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 11:42:07

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Lab Sample ID: CCV 280-541786/2 Calibration Date: 06/29/2021 21:12

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_3851.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	Lin1		0.2126		47.3	50.0	-5.4	50.0
Chloromethane	Ave	0.2172	0.2050	0.1000	47.2	50.0	-5.6	35.0
Vinyl chloride	Ave	0.1753	0.2045		58.3	50.0	16.7	20.0
Bromomethane	Ave	0.1350	0.1275		47.2	50.0	-5.5	35.0
Chloroethane	Ave	0.1351	0.1320		48.9	50.0	-2.3	35.0
Dichlorofluoromethane	Lin2		0.3385		50.1	50.0	0.1	50.0
Trichlorofluoromethane	Ave	0.2882	0.2928		50.8	50.0	1.6	50.0
Ethyl ether	Ave	0.1409	0.1324		47.0	50.0	-6.1	35.0
Acrolein	Lin1		0.0235		425	494	-13.9	50.0
1,1-Dichloroethene	Ave	0.1444	0.1399		48.4	50.0	-3.1	20.0
Freon 113	Ave	0.0955	0.1097		57.5	50.0	14.9	50.0
Acetone	Lin2		0.0461		160	200	-20.0	50.0
Iodomethane	Lin2		0.1932		44.4	50.0	-11.1	35.0
Carbon disulfide	Ave	0.4856	0.4635		47.7	50.0	-4.6	50.0
Methyl acetate	Ave	0.1367	0.1122		82.1	100	-17.9	50.0
Allyl chloride	Ave	0.2908	0.2885		49.6	50.0	-0.8	35.0
Methylene Chloride	Lin2		0.1751		49.2	50.0	-1.5	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0174	0.0130		374	500	-25.2	50.0
Acrylonitrile	Ave	0.0691	0.0611		442	500	-11.6	50.0
Methyl tert-butyl ether	Ave	0.5094	0.4604		45.2	50.0	-9.6	35.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1594		45.4	50.0	-9.1	35.0
Hexane	Lin2		1.106		52.5	50.0	5.1	35.0
1,1-Dichloroethane	Ave	0.3389	0.3230	0.1000	47.7	50.0	-4.7	35.0
Vinyl acetate	Ave	0.3923	0.3685		93.9	100	-6.1	50.0
2-Butanone (MEK)	Lin2		0.0673		158	200	-21.2	50.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1781		46.3	50.0	-7.3	35.0
2,2-Dichloropropane	Ave	0.2998	0.2829		47.2	50.0	-5.6	35.0
Chlorobromomethane	Lin2		0.0821		47.1	50.0	-5.7	35.0
Tetrahydrofuran	Lin1		0.0453		78.6	100	-21.4	50.0
Chloroform	Ave	0.3516	0.3163		45.0	50.0	-10.0	20.0
1,1,1-Trichloroethane	Ave	0.3094	0.2663		43.0	50.0	-13.9	35.0
Cyclohexane	Lin1		0.3051		49.3	50.0	-1.5	35.0
1,1-Dichloropropene	Ave	0.2498	0.2431		48.7	50.0	-2.7	35.0
Carbon tetrachloride	Ave	0.2276	0.2050		45.0	50.0	-9.9	35.0
Isobutyl alcohol	Ave	0.0062	0.0046		915	1250	-26.8	50.0
Benzene	Ave	0.6919	0.6786		49.0	50.0	-1.9	35.0
1,2-Dichloroethane	Ave	0.2917	0.2703		46.3	50.0	-7.3	35.0
n-Heptane	Lin1		0.2263		55.6	50.0	11.2	50.0
Trichloroethene	Ave	0.9271	0.8003		43.2	50.0	-13.7	35.0
Methylcyclohexane	Lin1		0.2501		51.7	50.0	3.5	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Lab Sample ID: CCV 280-541786/2 Calibration Date: 06/29/2021 21:12

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_3851.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
1,2-Dichloropropane	Ave	0.1881	0.1803		47.9	50.0	-4.1	20.0
1,4-Dioxane	Lin2		0.0018		831	1000	-16.9	50.0
Dibromomethane	Ave	0.1179	0.1104		46.8	50.0	-6.4	35.0
Dichlorobromomethane	Ave	0.2580	0.2266		43.9	50.0	-12.2	35.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.0989		43.0	50.0	-14.0	50.0
cis-1,3-Dichloropropene	Ave	1.351	1.277		47.2	50.0	-5.5	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1400		180	200	-10.1	50.0
Toluene	Ave	0.6902	0.6693		48.5	50.0	-3.0	20.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2537		46.0	50.0	-8.1	35.0
Ethyl methacrylate	Ave	0.996	0.8731		43.8	50.0	-12.3	35.0
1,1,2-Trichloroethane	Lin2		0.1302		44.9	50.0	-10.1	35.0
Tetrachloroethene	Ave	0.5176	0.5627		54.4	50.0	8.7	35.0
1,3-Dichloropropane	Ave	1.267	1.202		47.4	50.0	-5.1	35.0
2-Hexanone	Lin2		0.4364		165	200	-17.4	50.0
Chlorodibromomethane	Ave	0.7473	0.6604		44.2	50.0	-11.6	35.0
1,2-Dibromoethane	Ave	0.7193	0.6696		46.5	50.0	-6.9	35.0
Chlorobenzene	Ave	2.041	1.988	0.3000	48.7	50.0	-2.6	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.6746		46.8	50.0	-6.4	35.0
Ethylbenzene	Ave	1.085	1.097		50.6	50.0	1.2	20.0
m-Xylene & p-Xylene	Ave	1.367	1.377		50.4	50.0	0.7	35.0
o-Xylene	Ave	1.277	1.293		50.6	50.0	1.3	35.0
Styrene	Ave	2.334	2.283		48.9	50.0	-2.2	35.0
Bromoform	Lin2		0.3772	0.1000	38.6	50.0	-22.8	35.0
Isopropylbenzene	Ave	2.187	2.159		49.4	50.0	-1.3	35.0
Cyclohexanone	Ave	0.0560	0.0323		1150	2000	-42.4	50.0
1,1,2,2-Tetrachloroethane	Lin2		0.4952	0.3000	40.8	50.0	-18.5	35.0
Bromobenzene	Ave	0.4965	0.5020		50.6	50.0	1.1	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.1606		36.8	50.0	-26.4	50.0
1,2,3-Trichloropropane	Lin2		0.1456		43.2	50.0	-13.7	35.0
N-Propylbenzene	Ave	0.6077	0.5807		47.8	50.0	-4.4	35.0
2-Chlorotoluene	Ave	0.4970	0.5084		51.2	50.0	2.3	35.0
1,3,5-Trimethylbenzene	Ave	1.953	1.876		48.0	50.0	-3.9	35.0
4-Chlorotoluene	Ave	0.5470	0.5172		47.3	50.0	-5.4	35.0
tert-Butylbenzene	Ave	1.601	1.529		47.8	50.0	-4.5	35.0
1,2,4-Trimethylbenzene	Ave	2.003	1.933		48.2	50.0	-3.5	35.0
sec-Butylbenzene	Lin2		0.4285		46.3	50.0	-7.4	35.0
1,3-Dichlorobenzene	Ave	0.9698	0.9793		50.5	50.0	1.0	35.0
4-Isopropyltoluene	Ave	1.986	1.899		47.8	50.0	-4.4	35.0
1,4-Dichlorobenzene	Ave	1.018	0.9909		48.7	50.0	-2.7	35.0
n-Butylbenzene	Ave	1.915	1.798		46.9	50.0	-6.1	35.0
1,2-Dichlorobenzene	Ave	0.9122	0.9203		50.4	50.0	0.9	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: CCV 280-541786/2 Calibration Date: 06/29/2021 21:12
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41
 Lab File ID: MS1_3851.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
1,2-Dibromo-3-Chloropropane	Lin2		0.0893		35.0	50.0	-30.1	50.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5923		49.6	50.0	-0.8	35.0
Hexachlorobutadiene	Lin2		0.2143		51.5	50.0	3.0	35.0
Naphthalene	Ave	1.773	1.448		40.8	50.0	-18.4	35.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.5012		46.0	50.0	-8.1	35.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2488		46.9	50.0	-6.1	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3394		47.8	50.0	-4.4	35.0
Toluene-d8 (Surr)	Ave	4.332	4.321		49.9	50.0	-0.3	35.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.034		47.6	50.0	-4.7	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3851.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 29-Jun-2021 21:12:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub171
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:07:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	768238	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	89	162612	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	262909	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	92	191144	50.0	46.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	260760	50.0	47.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	702577	50.0	49.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	271812	50.0	47.6	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	163328	50.0	47.3	
12 Chloromethane	50	1.914	1.914	0.000	98	157469	50.0	47.2	
13 Vinyl chloride	62	1.998	1.998	0.000	98	157141	50.0	58.3	
15 Bromomethane	94	2.361	2.361	0.000	94	97973	50.0	47.2	
16 Chloroethane	64	2.473	2.473	0.000	99	101431	50.0	48.9	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	260062	50.0	50.1	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	100	224955	50.0	50.8	
20 Ethyl ether	59	3.004	3.004	0.000	94	101709	50.0	47.0	
22 Acrolein	56	3.143	3.143	0.000	97	178059	493.8	425.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	97	107470	50.0	48.4	
24 112TCTFE	151	3.255	3.255	0.000	94	84292	50.0	57.5	
25 Acetone	43	3.269	3.269	0.000	98	141816	200.0	160.0	
26 Iodomethane	142	3.395	3.395	0.000	99	148390	50.0	44.4	
28 Carbon disulfide	76	3.464	3.464	0.000	100	356088	50.0	47.7	
30 Methyl acetate	43	3.576	3.576	0.000	99	172351	100.0	82.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	221661	50.0	49.6	
32 Methylene Chloride	84	3.716	3.716	0.000	96	134552	50.0	49.2	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	100157	500.0	374.0	
34 Acrylonitrile	53	3.911	3.911	0.000	98	469614	500.0	442.1	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	353704	50.0	45.2	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	96	122430	50.0	45.4	
37 Hexane	57	4.205	4.205	0.000	94	179869	50.0	52.5	
39 Vinyl acetate	43	4.344	4.344	0.000	98	566250	100.0	93.9	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	96	248156	50.0	47.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	206805	200.0	157.7	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	86	136845	50.0	46.3	
49 2,2-Dichloropropane	77	4.861	4.861	0.000	90	217312	50.0	47.2	
54 Tetrahydrofuran	42	5.057	5.057	0.000	85	69569	100.0	78.6	
53 Chlorobromomethane	128	5.057	5.057	0.000	97	63109	50.0	47.1	
55 Chloroform	83	5.140	5.140	0.000	97	242987	50.0	45.0	
56 1,1,1-Trichloroethane	97	5.294	5.294	0.000	97	204548	50.0	43.0	
57 Cyclohexane	56	5.350	5.350	0.000	95	234405	50.0	49.3	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	186768	50.0	48.7	
59 Carbon tetrachloride	117	5.420	5.420	0.000	82	157493	50.0	45.0	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	87678	1250.0	915.5	
63 Benzene	78	5.587	5.587	0.000	99	521296	50.0	49.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	207659	50.0	46.3	
66 n-Heptane	43	5.825	5.825	0.000	94	173840	50.0	55.6	
68 Trichloroethene	95	6.160	6.160	0.000	96	130135	50.0	43.2	
70 Methylcyclohexane	55	6.369	6.369	0.000	96	192117	50.0	51.7	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	138487	50.0	47.9	
73 1,4-Dioxane	88	6.439	6.439	0.000	95	27196	1000.0	830.6	
74 Dibromomethane	93	6.453	6.453	0.000	91	84828	50.0	46.8	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	174109	50.0	43.9	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	95	75980	50.0	43.0	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	207644	50.0	47.2	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.103	0.000	99	430184	200.0	179.7	
82 Toluene	91	7.296	7.296	0.000	97	514145	50.0	48.5	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	96	194872	50.0	46.0	
85 Ethyl methacrylate	69	7.524	7.524	0.000	90	141969	50.0	43.8	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	95	100053	50.0	44.9	
89 Tetrachloroethene	164	7.768	7.768	0.000	93	91504	50.0	54.4	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	195477	50.0	47.4	
91 2-Hexanone	43	7.853	7.853	0.000	97	283874	200.0	165.2	
95 Chlorodibromomethane	129	8.032	8.032	0.000	90	107383	50.0	44.2	
96 Ethylene Dibromide	107	8.154	8.154	0.000	97	108892	50.0	46.5	
99 Chlorobenzene	112	8.604	8.604	0.000	89	323332	50.0	48.7	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	109700	50.0	46.8	
101 Ethylbenzene	106	8.690	8.690	0.000	99	178442	50.0	50.6	
102 m-Xylene & p-Xylene	106	8.811	8.811	0.000	99	223874	50.0	50.4	
103 o-Xylene	106	9.176	9.176	0.000	98	210197	50.0	50.6	
104 Styrene	104	9.198	9.198	0.000	93	371244	50.0	48.9	
106 Bromoform	173	9.383	9.383	0.000	91	61338	50.0	38.6	
107 Isopropylbenzene	105	9.534	9.534	0.000	97	567601	50.0	49.4	
109 Cyclohexanone	55	9.627	9.627	0.000	95	209970	2000.0	1152.5	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	95	130195	50.0	40.8	
111 Bromobenzene	156	9.855	9.855	0.000	97	131989	50.0	50.6	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.863	0.000	70	42229	50.0	36.8	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	38272	50.0	43.2	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	152682	50.0	47.8	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	133664	50.0	51.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	493299	50.0	48.0	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	135985	50.0	47.3	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	401882	50.0	47.8	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	508144	50.0	48.2	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	112662	50.0	46.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	96	257460	50.0	50.5	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	499355	50.0	47.8	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	94	260504	50.0	48.7	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	472781	50.0	46.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	94	241956	50.0	50.4	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	75	23481	50.0	35.0	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	93	155723	50.0	49.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	93	56354	50.0	51.5	
132 Naphthalene	128	13.123	13.123	0.000	98	380661	50.0	40.8	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	131767	50.0	46.0	
S 149 1,2-Dichloroethene, Total (URS)	95				0		100.0	91.8	
S 150 1,2-Dichloroethene, Total	1				0		100.0	91.8	
S 151 Trihalomethanes, Total	1				0		200.0	171.7	
S 153 Xylenes, Total (URS)	1				0		100.0	101.0	
S 155 Xylenes, Total	106				0		100.0	101.0	
S 156 1,3-Dichloropropene, Total	1				0		100.0	93.2	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00091

Amount Added: 10.00

Units: uL

MV-MegaMainA_00052

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3851.D

Injection Date: 29-Jun-2021 21:12:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

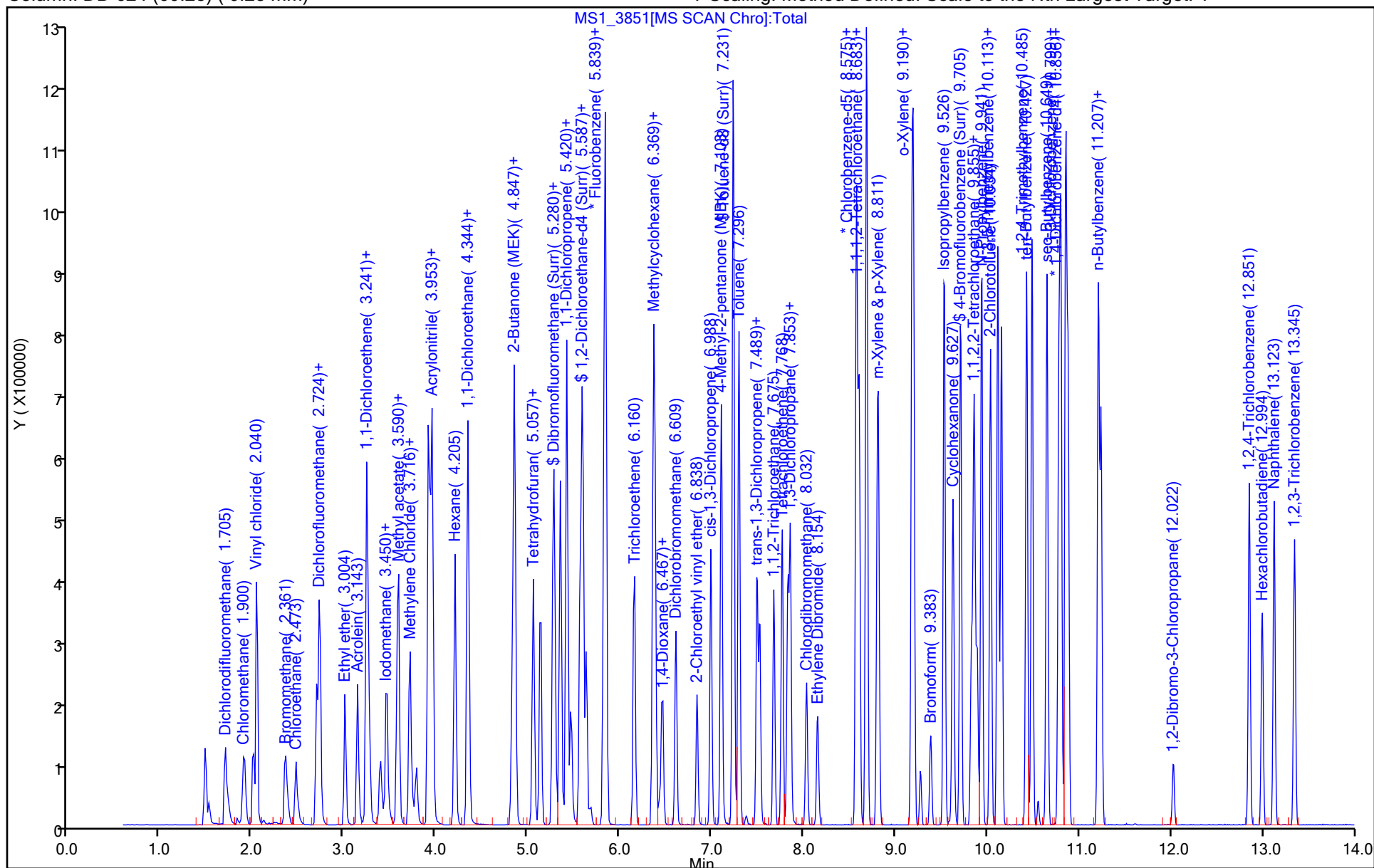
ALS Bottle#: 1

Method: AQ_VMS1_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.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: CCV 280-541786/3 Calibration Date: 06/29/2021 21:33
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 10:18
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 12:47
 Lab File ID: MS1_3852.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		0.0103		5640	5000	12.8	50.0
Ethanol	Lin1		0.0020		2770	3000	-7.6	50.0
Propene oxide	Ave	0.0299	0.0317		5310	5000	6.2	50.0
2-Propanol	Ave	0.0111	0.0091		413	500	-17.3	50.0
Acetonitrile	Lin2		0.0238		505	500	1.1	50.0
Di-isopropyl ether (DIPE)	Ave	0.1328	0.1426		53.7	50.0	7.4	35.0
Chloroprene	Ave	0.3106	0.3213		51.7	50.0	3.4	35.0
Tert-butyl ethyl ether	Ave	0.5083	0.5301		52.1	50.0	4.3	35.0
Ethyl acetate	Ave	0.1300	0.1433		110	100	10.2	50.0
Propionitrile	Lin2		0.0230		497	500	-0.6	50.0
Methacrylonitrile	Lin2		0.0993		526	500	5.3	50.0
Tert-amyl methyl ether	Ave	0.4421	0.4328		48.9	50.0	-2.1	35.0
n-Butanol	Ave	0.0041	0.0033		1020	1250	-18.7	50.0
Methyl methacrylate	Ave	0.0386	0.0408		106	100	5.8	35.0
2-Nitropropane	Lin2		0.0279		64.1	100	-35.9	50.0
Tetrahydrothiophene	Ave	0.2160	0.1370		63.4	100	-36.6	50.0
cis-1,4-Dichloro-2-butene	Ave	0.2443	0.1731		70.9	100	-29.1	50.0
1,2,3-Trimethylbenzene	Ave	1.901	1.914		50.3	50.0	0.7	35.0
1,3,5-Trichlorobenzene	Ave	0.5817	0.6582		56.6	50.0	13.1	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3852.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 29-Jun-2021 21:33:30 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_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:07:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	742862	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	161912	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	266090	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	762921	5000.0	5639.2	
19 Ethanol	45	2.892	2.892	0.000	98	89340	3000.0	2772.8	
21 Propene oxide	58	3.059	3.059	0.000	84	2356461	5000.0	5309.1	
27 Isopropyl alcohol	45	3.395	3.395	0.000	97	67890	500.0	413.5	
29 Acetonitrile	41	3.534	3.534	0.000	99	176464	500.0	505.4	
41 Isopropyl ether	87	4.372	4.372	0.000	93	105900	50.0	53.7	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	238645	50.0	51.7	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	393812	50.0	52.1	
47 Ethyl acetate	43	4.847	4.847	0.000	100	212967	100.0	110.2	
50 Propionitrile	54	4.875	4.875	0.000	98	170699	500.0	497.2	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	737335	500.0	526.4	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	79	321515	50.0	48.9	
67 n-Butanol	56	6.034	6.034	0.000	93	61777	1250.0	1016.0	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	60644	100.0	105.8	
76 2-Nitropropane	41	6.795	6.795	0.000	95	41502	100.0	64.1	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	44368	100.0	63.4	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	88	92110	100.0	70.9	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	509242	50.0	50.3	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	175131	50.0	56.6	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00051

Amount Added: 50.00

Units: uL

Report Date: 30-Jun-2021 11:08:39

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3852.D

Injection Date: 29-Jun-2021 21:33:30

Instrument ID: VMS_MS1

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_VMS1_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.: 280-150245-1

SDG No.: _____

Lab Sample ID: ICV 280-541369/30 Calibration Date: 06/26/2021 19:36

Instrument ID: VMS_P Calib Start Date: 06/26/2021 15:46

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/26/2021 18:50

Lab File ID: P6321A.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	0.1535	0.1512		49.2	50.0	-1.5	35.0
Acrolein	Ave	0.0320	0.0290		447	494	-9.4	55.0
1,1-Dichloroethene	Ave	0.1330	0.1397		52.5	50.0	5.0	35.0
Freon 113	Ave	0.0934	0.0937		50.1	50.0	0.3	55.0
Acetone	Ave	0.0655	0.0610		186	200	-6.8	55.0
Iodomethane	Lin1		0.2032		50.8	50.0	1.6	35.0
Carbon disulfide	Ave	0.4700	0.4712		50.1	50.0	0.2	55.0
Methyl acetate	Ave	0.1686	0.1566		92.9	100	-7.1	55.0
Allyl chloride	Ave	0.2449	0.2566		52.4	50.0	4.8	35.0
Methylene Chloride	Ave	0.1918	0.1747		45.5	50.0	-8.9	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0249	0.0241		486	500	-2.9	55.0
Acrylonitrile	Ave	0.0840	0.0829		493	500	-1.4	55.0
Methyl tert-butyl ether	Ave	0.5628	0.5731		50.9	50.0	1.8	35.0
trans-1,2-Dichloroethene	Ave	0.1637	0.1651		50.4	50.0	0.9	35.0
Hexane	Ave	0.9099	0.8666		47.6	50.0	-4.8	35.0
Vinyl acetate	Ave	0.4383	0.4231		96.5	100	-3.5	55.0
1,1-Dichloroethane	Ave	0.3189	0.3118	0.1000	48.9	50.0	-2.2	35.0
2-Butanone (MEK)	Ave	0.1046	0.0991		190	200	-5.2	55.0
cis-1,2-Dichloroethene	Ave	0.1877	0.1876		50.0	50.0	-0.0	35.0
2,2-Dichloropropane	Ave	0.2656	0.2502		47.1	50.0	-5.8	35.0
sec-Butyl Alcohol	Ave	0.0251	0.0182		873	1200	-27.2	
Chlorobromomethane	Ave	0.0871	0.0879		50.5	50.0	0.9	35.0
Tetrahydrofuran	Ave	0.0693	0.0653		94.2	100	-5.8	55.0
Chloroform	Ave	0.3163	0.3115		49.2	50.0	-1.5	35.0
1,1,1-Trichloroethane	Ave	0.2599	0.2587		49.8	50.0	-0.4	35.0
Cyclohexane	Ave	0.2767	0.2720		49.1	50.0	-1.7	35.0
1,1-Dichloropropene	Ave	0.2432	0.2348		48.3	50.0	-3.4	35.0
Carbon tetrachloride	Ave	0.1982	0.2042		51.5	50.0	3.0	35.0
Isobutyl alcohol	Ave	0.0077	0.0077		1250	1250	0.1	55.0
Benzene	Ave	0.7203	0.7180		49.8	50.0	-0.3	35.0
1,2-Dichloroethane	Ave	0.2749	0.2683		48.8	50.0	-2.4	35.0
n-Heptane	Ave	0.1870	0.1578		42.2	50.0	-15.6	50.0
Trichloroethene	Ave	0.7912	0.7896		49.9	50.0	-0.2	35.0
2-Pentanone	Ave	0.2224	0.1638		118	160	-26.3	55.0
Methylcyclohexane	Ave	0.2063	0.1976		47.9	50.0	-4.2	35.0
1,2-Dichloropropane	Ave	0.1921	0.1897		49.4	50.0	-1.3	35.0
1,4-Dioxane	Ave	0.0029	0.0028		988	1000	-1.2	55.0
Dibromomethane	Ave	0.1215	0.1231		50.6	50.0	1.3	35.0
Dichlorobromomethane	Ave	0.2357	0.2409		51.1	50.0	2.2	35.0
cis-1,3-Dichloropropene	Ave	1.363	1.347		49.4	50.0	-1.2	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: ICV 280-541369/30 Calibration Date: 06/26/2021 19:36
 Instrument ID: VMS_P Calib Start Date: 06/26/2021 15:46
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/26/2021 18:50
 Lab File ID: P6321A.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)	Ave	0.2043	0.2046		200	200	0.2	55.0
Toluene	Ave	0.7777	0.7536		48.5	50.0	-3.1	35.0
trans-1,3-Dichloropropene	Ave	0.2876	0.2895		50.3	50.0	0.7	35.0
Ethyl methacrylate	Ave	1.253	1.279		51.0	50.0	2.0	35.0
1,1,2-Trichloroethane	Ave	0.1604	0.1649		51.4	50.0	2.8	35.0
Tetrachloroethene	Ave	0.5248	0.5267		50.2	50.0	0.4	35.0
1,3-Dichloropropane	Ave	1.344	1.347		50.1	50.0	0.2	35.0
2-Hexanone	Ave	0.6665	0.6520		196	200	-2.2	55.0
Chlorodibromomethane	Ave	0.7012	0.7366		52.5	50.0	5.0	35.0
1,2-Dibromoethane	Ave	0.7777	0.7854		50.5	50.0	1.0	35.0
1-Chlorohexane	Ave	1.432	0.9788		27.3	40.0	-31.6	35.0
Chlorobenzene	Ave	2.108	2.063	0.3000	48.9	50.0	-2.1	35.0
1,1,1,2-Tetrachloroethane	Ave	0.6992	0.7114		50.9	50.0	1.8	35.0
Ethylbenzene	Ave	1.139	1.117		49.0	50.0	-1.9	35.0
m-Xylene & p-Xylene	Ave	1.395	1.378		49.4	50.0	-1.2	35.0
o-Xylene	Ave	1.340	1.346		50.2	50.0	0.4	35.0
Styrene	Ave	2.352	2.384		50.7	50.0	1.4	35.0
Bromoform	Ave	0.4149	0.4523	0.1000	54.5	50.0	9.0	35.0
Isopropylbenzene	Ave	2.403	2.351		48.9	50.0	-2.2	35.0
Cyclohexanone	Ave	0.0393	0.0524		2670	2000	33.3	35.0
1,1,2,2-Tetrachloroethane	Ave	0.7445	0.7382	0.3000	49.6	50.0	-0.8	35.0
Bromobenzene	Ave	0.5834	0.5705		48.9	50.0	-2.2	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2094	0.2060		49.2	50.0	-1.6	55.0
1,2,3-Trichloropropane	Ave	0.2232	0.2219		49.7	50.0	-0.6	35.0
N-Propylbenzene	Ave	0.6406	0.6197		48.4	50.0	-3.3	35.0
2-Chlorotoluene	Ave	0.5608	0.5379		48.0	50.0	-4.1	35.0
1,3,5-Trimethylbenzene	Ave	1.958	1.917		49.0	50.0	-2.1	35.0
4-Chlorotoluene	Ave	0.5928	0.5682		47.9	50.0	-4.2	35.0
tert-Butylbenzene	Ave	1.563	1.540		49.3	50.0	-1.5	35.0
1,2,4-Trimethylbenzene	Ave	2.014	1.997		49.6	50.0	-0.8	35.0
sec-Butylbenzene	Ave	0.4363	0.4321		49.5	50.0	-1.0	35.0
1,3-Dichlorobenzene	Ave	1.037	1.011		48.7	50.0	-2.5	35.0
4-Isopropyltoluene	Ave	1.864	1.835		49.2	50.0	-1.6	35.0
1,4-Dichlorobenzene	Ave	1.094	1.045		47.7	50.0	-4.5	35.0
n-Butylbenzene	Ave	1.712	1.670		48.8	50.0	-2.4	35.0
1,2-Dichlorobenzene	Ave	0.999	0.9646		48.3	50.0	-3.5	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1322	0.1297		49.1	50.0	-1.9	55.0
1,2,4-Trichlorobenzene	Ave	0.5388	0.5216		48.4	50.0	-3.2	35.0
Hexachlorobutadiene	Ave	0.1765	0.1734		49.1	50.0	-1.8	35.0
Naphthalene	Ave	1.895	1.833		48.4	50.0	-3.3	35.0
1,2,3-Trichlorobenzene	Lin2		0.4702		52.2	50.0	4.4	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: ICV 280-541369/30 Calibration Date: 06/26/2021 19:36
 Instrument ID: VMS_P Calib Start Date: 06/26/2021 15:46
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/26/2021 18:50
 Lab File ID: P6321A.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	0.2439	0.2445		50.1	50.0	0.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3095	0.3131		50.6	50.0	1.2	35.0
Toluene-d8 (Surr)	Ave	4.304	4.299		49.9	50.0	-0.1	35.0
4-Bromofluorobenzene (Surr)	Ave	1.147	1.127		49.1	50.0	-1.8	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6321A.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 26-Jun-2021 19:36:30 ALS Bottle#: 23 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0102712-023
 Operator ID: SEIFERTJ Instrument ID: VMS_P
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:08:36 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	99	1746109	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.390	0.000	89	388046	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	98	551048	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.372	4.373	-0.001	92	426888	50.0	50.1	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	546785	50.0	50.6	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1668138	50.0	49.9	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.477	8.478	-0.001	82	620860	50.0	49.1	
19 Ethyl ether	59	2.567	2.568	-0.001	91	263940	50.0	49.2	
21 Acrolein	56	2.673	2.674	-0.001	99	500369	493.8	447.4	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.757	2.748	0.009	70	163650	50.0	50.1	
22 1,1-Dichloroethene	96	2.757	2.748	0.009	99	243904	50.0	52.5	
24 Acetone	43	2.768	2.769	-0.001	100	426141	200.0	186.4	
26 Iodomethane	142	2.873	2.874	-0.001	100	354755	50.0	50.8	
27 Carbon disulfide	76	2.926	2.927	-0.001	100	822692	50.0	50.1	
29 Methyl acetate	43	2.989	2.990	-0.001	98	547023	100.0	92.9	
30 3-Chloro-1-propene	41	3.010	3.011	-0.001	90	448133	50.0	52.4	
31 Methylene Chloride	84	3.105	3.106	-0.001	92	305036	50.0	45.5	
32 2-Methyl-2-propanol	59	3.158	3.159	-0.001	99	421439	500.0	485.5	
33 Acrylonitrile	53	3.264	3.265	-0.001	98	1447210	500.0	493.2	
34 Methyl tert-butyl ether	73	3.295	3.286	0.009	95	1000683	50.0	50.9	
35 trans-1,2-Dichloroethene	96	3.306	3.307	-0.001	97	288276	50.0	50.4	
36 Hexane	57	3.496	3.497	-0.001	92	336300	50.0	47.6	
38 Vinyl acetate	43	3.601	3.602	-0.001	98	1477690	100.0	96.5	
39 1,1-Dichloroethane	63	3.622	3.613	0.009	97	544483	50.0	48.9	
44 2-Butanone (MEK)	43	4.002	4.003	-0.001	99	692325	200.0	189.6	
47 cis-1,2-Dichloroethene	96	4.023	4.025	-0.002	87	327586	50.0	50.0	
48 2,2-Dichloropropane	77	4.034	4.035	-0.001	88	436927	50.0	47.1	
50 sec-Butyl Alcohol	45	4.108	4.109	-0.001	99	764068	1200.0	873.2	
52 Tetrahydrofuran	42	4.203	4.204	-0.001	86	228139	100.0	94.2	
53 Chlorobromomethane	128	4.203	4.204	-0.001	98	153471	50.0	50.5	
54 Chloroform	83	4.256	4.257	-0.001	97	543871	50.0	49.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
55 1,1,1-Trichloroethane	97	4.403	4.394	0.009	98	451788	50.0	49.8	
56 Cyclohexane	56	4.456	4.457	-0.001	91	474892	50.0	49.1	
57 1,1-Dichloropropene	75	4.509	4.510	-0.001	93	409948	50.0	48.3	
59 Carbon tetrachloride	117	4.519	4.520	-0.001	96	356611	50.0	51.5	
58 Isobutyl alcohol	41	4.530	4.531	-0.001	94	336872	1250.0	1251.2	
60 Benzene	78	4.667	4.658	0.009	98	1253620	50.0	49.8	
61 1,2-Dichloroethane	62	4.688	4.689	-0.001	98	468558	50.0	48.8	
66 n-Heptane	43	4.847	4.848	-0.001	90	275492	50.0	42.2	
67 Trichloroethene	95	5.153	5.154	-0.001	96	306383	50.0	49.9	
68 2-Pentanone	43	5.248	5.249	-0.001	99	915291	160.0	117.9	
69 Methylcyclohexane	55	5.343	5.344	-0.002	92	345099	50.0	47.9	
70 1,2-Dichloropropane	63	5.353	5.354	-0.001	94	331188	50.0	49.4	
72 1,4-Dioxane	88	5.395	5.396	-0.001	93	98899	1000.0	987.7	
73 Dibromomethane	93	5.427	5.428	-0.001	90	214924	50.0	50.6	
74 Dichlorobromomethane	83	5.543	5.544	-0.001	99	420618	50.0	51.1	
77 cis-1,3-Dichloropropene	75	5.891	5.892	-0.001	94	522771	50.0	49.4	
78 4-Methyl-2-pentanone (MIBK)	43	5.997	5.998	-0.001	97	1429168	200.0	200.4	
79 Toluene	91	6.176	6.177	-0.001	97	1315855	50.0	48.5	
80 trans-1,3-Dichloropropene	75	6.356	6.357	-0.001	97	505523	50.0	50.3	
81 Ethyl methacrylate	69	6.387	6.378	0.009	88	496151	50.0	51.0	
82 1,1,2-Trichloroethane	97	6.535	6.536	-0.001	94	287912	50.0	51.4	
83 Tetrachloroethene	164	6.619	6.621	-0.001	90	204390	50.0	50.2	
84 1,3-Dichloropropane	76	6.672	6.673	-0.001	97	522709	50.0	50.1	
85 2-Hexanone	43	6.693	6.694	-0.001	96	1012085	200.0	195.7	
86 Chlorodibromomethane	129	6.873	6.863	0.010	90	285827	50.0	52.5	
88 Ethylene Dibromide	107	6.978	6.979	-0.001	97	304764	50.0	50.5	
89 1-Chlorohexane	91	7.379	7.380	-0.001	96	303844	40.0	27.3	
90 Chlorobenzene	112	7.411	7.412	-0.001	92	800708	50.0	48.9	
91 1,1,1,2-Tetrachloroethane	131	7.495	7.486	0.009	93	276074	50.0	50.9	
92 Ethylbenzene	106	7.495	7.496	-0.001	99	433456	50.0	49.0	
93 m-Xylene & p-Xylene	106	7.611	7.612	-0.001	100	534728	50.0	49.4	
94 o-Xylene	106	7.970	7.971	-0.001	96	522139	50.0	50.2	
95 Styrene	104	7.991	7.982	0.009	94	925123	50.0	50.7	
96 Bromoform	173	8.171	8.161	0.010	92	175508	50.0	54.5	
97 Isopropylbenzene	105	8.308	8.309	-0.001	97	1295379	50.0	48.9	
99 Cyclohexanone	55	8.403	8.404	-0.001	93	812723	2000.0	2665.1	
100 1,1,2,2-Tetrachloroethane	83	8.593	8.594	-0.001	95	406792	50.0	49.6	
101 Bromobenzene	156	8.624	8.626	-0.002	98	314354	50.0	48.9	
102 trans-1,4-Dichloro-2-butene	53	8.635	8.636	-0.001	82	113502	50.0	49.2	
103 1,2,3-Trichloropropane	110	8.656	8.657	-0.001	85	122253	50.0	49.7	
104 N-Propylbenzene	120	8.709	8.710	-0.001	99	341479	50.0	48.4	
105 2-Chlorotoluene	126	8.804	8.805	-0.001	95	296428	50.0	48.0	
106 1,3,5-Trimethylbenzene	105	8.878	8.879	-0.001	93	1056401	50.0	49.0	
107 4-Chlorotoluene	126	8.920	8.921	-0.001	98	313087	50.0	47.9	
108 tert-Butylbenzene	119	9.184	9.185	-0.001	92	848809	50.0	49.3	
109 1,2,4-Trimethylbenzene	105	9.247	9.248	-0.001	98	1100655	50.0	49.6	
110 sec-Butylbenzene	134	9.405	9.406	-0.001	95	238116	50.0	49.5	
111 1,3-Dichlorobenzene	146	9.532	9.533	-0.001	96	557157	50.0	48.7	
112 4-Isopropyltoluene	119	9.553	9.554	-0.001	96	1011405	50.0	49.2	
113 1,4-Dichlorobenzene	146	9.627	9.628	-0.001	91	575797	50.0	47.7	
115 n-Butylbenzene	91	9.954	9.955	-0.001	98	920492	50.0	48.8	
116 1,2-Dichlorobenzene	146	9.975	9.976	-0.001	95	531529	50.0	48.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 1,2-Dibromo-3-Chloropropane	157	10.756	10.757	-0.001	78	71457	50.0	49.1	
119 1,2,4-Trichlorobenzene	180	11.579	11.580	-0.001	93	287448	50.0	48.4	
120 Hexachlorobutadiene	225	11.727	11.718	0.009	93	95542	50.0	49.1	
121 Naphthalene	128	11.843	11.844	-0.001	98	1010147	50.0	48.4	
122 1,2,3-Trichlorobenzene	180	12.065	12.066	-0.001	94	259095	50.0	52.2	
S 139 1,2-Dichloroethene, Total (URS)	95				0		100.0	100.4	
S 142 Xylenes, Total	106				0		100.0	99.6	
S 140 Trihalomethanes, Total	1				0		200.0	207.4	
S 143 Xylenes, Total (URS)	1				0		100.0	99.6	
S 145 1,3-Dichloropropene, Total	1				0		100.0	99.7	
S 144 1,2-Dichloroethene, Total	1				0		100.0	100.4	

Reagents:

MV-MegaMain B_00049

Amount Added: 25.00

Units: uL

Acrolein_B_00006

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6321A.D

Injection Date: 26-Jun-2021 19:36:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: ICV

Worklist Smp#: 30

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

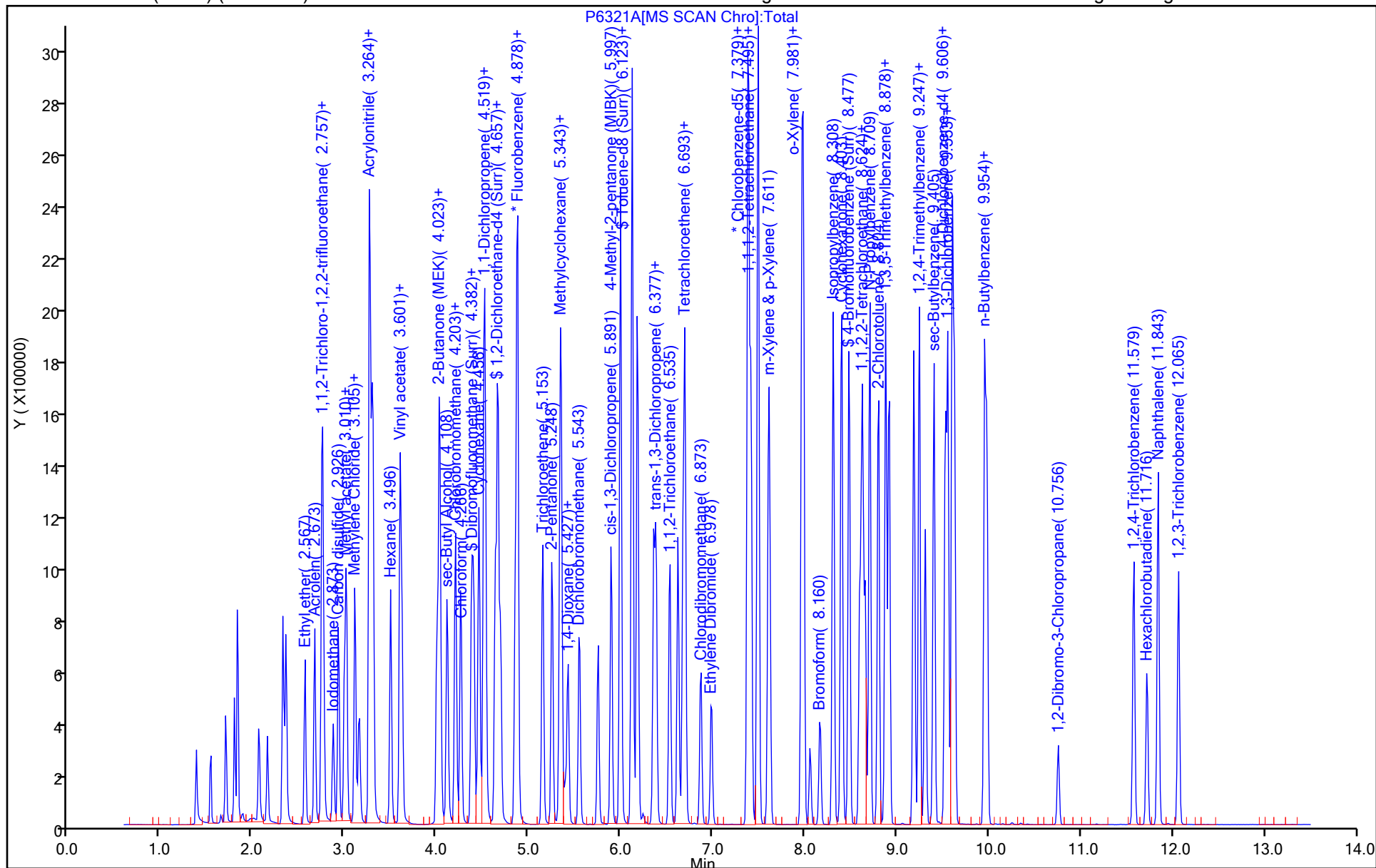
ALS Bottle#: 23

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Lab Sample ID: CCV 280-541784/2 Calibration Date: 06/29/2021 21:12

Instrument ID: VMS_P Calib Start Date: 06/26/2021 15:46

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/26/2021 18:50

Lab File ID: P6394.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	0.1649	0.2072		62.8	50.0	25.6	50.0
Chloromethane	Ave	0.1803	0.1779	0.1000	49.3	50.0	-1.3	35.0
Vinyl chloride	Ave	0.1756	0.1879		53.5	50.0	7.0	20.0
Bromomethane	Lin1		0.1072		58.3	50.0	16.6	35.0
Chloroethane	Ave	0.1140	0.1197		52.5	50.0	5.0	35.0
Dichlorofluoromethane	Ave	0.3087	0.3177		51.5	50.0	2.9	50.0
Trichlorofluoromethane	Ave	0.2439	0.2764		56.7	50.0	13.3	50.0
Ethyl ether	Ave	0.1535	0.1434		46.7	50.0	-6.6	35.0
Acrolein	Ave	0.0320	0.0308		474	494	-3.9	50.0
1,1-Dichloroethene	Ave	0.1330	0.1411		53.0	50.0	6.0	20.0
Freon 113	Ave	0.0934	0.1027		54.9	50.0	9.9	50.0
Acetone	Ave	0.0655	0.0620		189	200	-5.3	50.0
Iodomethane	Lin1		0.2061		51.5	50.0	3.0	35.0
Carbon disulfide	Ave	0.4700	0.4332		46.1	50.0	-7.8	50.0
Methyl acetate	Ave	0.1686	0.1503		89.2	100	-10.8	50.0
Allyl chloride	Ave	0.2449	0.2416		49.3	50.0	-1.4	35.0
Methylene Chloride	Ave	0.1918	0.1777		46.3	50.0	-7.3	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0249	0.0251		506	500	1.2	50.0
Acrylonitrile	Ave	0.0840	0.0807		480	500	-4.0	50.0
Methyl tert-butyl ether	Ave	0.5628	0.5721		50.8	50.0	1.6	35.0
trans-1,2-Dichloroethene	Ave	0.1637	0.1653		50.5	50.0	1.0	35.0
Hexane	Ave	0.9099	0.9013		49.5	50.0	-0.9	35.0
Vinyl acetate	Ave	0.4383	0.4378		99.9	100	-0.1	50.0
1,1-Dichloroethane	Ave	0.3189	0.3165	0.1000	49.6	50.0	-0.8	35.0
2-Butanone (MEK)	Ave	0.1046	0.0978		187	200	-6.5	50.0
cis-1,2-Dichloroethene	Ave	0.1877	0.1887		50.3	50.0	0.5	35.0
2,2-Dichloropropane	Ave	0.2656	0.2793		52.6	50.0	5.2	35.0
Chlorobromomethane	Ave	0.0871	0.0896		51.5	50.0	2.9	35.0
Tetrahydrofuran	Ave	0.0693	0.0640		92.3	100	-7.7	50.0
Chloroform	Ave	0.3163	0.3148		49.8	50.0	-0.5	20.0
1,1,1-Trichloroethane	Ave	0.2599	0.2721		52.4	50.0	4.7	35.0
Cyclohexane	Ave	0.2767	0.2800		50.6	50.0	1.2	35.0
1,1-Dichloropropene	Ave	0.2432	0.2488		51.2	50.0	2.3	35.0
Carbon tetrachloride	Ave	0.1982	0.2169		54.7	50.0	9.4	35.0
Isobutyl alcohol	Ave	0.0077	0.0078		1260	1250	0.9	50.0
Benzene	Ave	0.7203	0.7172		49.8	50.0	-0.4	35.0
1,2-Dichloroethane	Ave	0.2749	0.2625		47.7	50.0	-4.5	35.0
n-Heptane	Ave	0.1870	0.1790		47.9	50.0	-4.3	50.0
Trichloroethene	Ave	0.7912	0.8014		50.6	50.0	1.3	35.0
Methylcyclohexane	Ave	0.2063	0.2109		51.1	50.0	2.2	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Lab Sample ID: CCV 280-541784/2 Calibration Date: 06/29/2021 21:12

Instrument ID: VMS_P Calib Start Date: 06/26/2021 15:46

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/26/2021 18:50

Lab File ID: P6394.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
1,2-Dichloropropane	Ave	0.1921	0.1871		48.7	50.0	-2.6	20.0
1,4-Dioxane	Ave	0.0029	0.0029		997	1000	-0.3	50.0
Dibromomethane	Ave	0.1215	0.1209		49.7	50.0	-0.6	35.0
Dichlorobromomethane	Ave	0.2357	0.2412		51.2	50.0	2.3	35.0
2-Chloroethyl vinyl ether	Ave	0.1421	0.1416		49.8	50.0	-0.3	50.0
cis-1,3-Dichloropropene	Ave	1.363	1.355		49.7	50.0	-0.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2043	0.2009		197	200	-1.6	50.0
Toluene	Ave	0.7777	0.7660		49.3	50.0	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.2876	0.2837		49.3	50.0	-1.4	35.0
Ethyl methacrylate	Ave	1.253	1.222		48.7	50.0	-2.5	35.0
1,1,2-Trichloroethane	Ave	0.1604	0.1619		50.5	50.0	1.0	35.0
Tetrachloroethene	Ave	0.5248	0.5657		53.9	50.0	7.8	35.0
1,3-Dichloropropane	Ave	1.344	1.324		49.3	50.0	-1.5	35.0
2-Hexanone	Ave	0.6665	0.6429		193	200	-3.5	50.0
Chlorodibromomethane	Ave	0.7012	0.7289		52.0	50.0	3.9	35.0
1,2-Dibromoethane	Ave	0.7777	0.7855		50.5	50.0	1.0	35.0
Chlorobenzene	Ave	2.108	2.083	0.3000	49.4	50.0	-1.2	35.0
1,1,1,2-Tetrachloroethane	Ave	0.6992	0.7259		51.9	50.0	3.8	35.0
Ethylbenzene	Ave	1.139	1.156		50.7	50.0	1.5	20.0
m-Xylene & p-Xylene	Ave	1.395	1.401		50.2	50.0	0.4	35.0
o-Xylene	Ave	1.340	1.362		50.8	50.0	1.6	35.0
Styrene	Ave	2.352	2.404		51.1	50.0	2.2	35.0
Bromoform	Ave	0.4149	0.4515	0.1000	54.4	50.0	8.8	35.0
Isopropylbenzene	Ave	2.403	2.346		48.8	50.0	-2.4	35.0
Cyclohexanone	Ave	0.0393	0.0456		2320	2000	15.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7445	0.6979	0.3000	46.9	50.0	-6.3	35.0
Bromobenzene	Ave	0.5834	0.5689		48.8	50.0	-2.5	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2094	0.1668		39.8	50.0	-20.3	50.0
1,2,3-Trichloropropane	Ave	0.2232	0.2132		47.8	50.0	-4.5	35.0
N-Propylbenzene	Ave	0.6406	0.6289		49.1	50.0	-1.8	35.0
2-Chlorotoluene	Ave	0.5608	0.5461		48.7	50.0	-2.6	35.0
1,3,5-Trimethylbenzene	Ave	1.958	1.895		48.4	50.0	-3.2	35.0
4-Chlorotoluene	Ave	0.5928	0.5679		47.9	50.0	-4.2	35.0
tert-Butylbenzene	Ave	1.563	1.533		49.0	50.0	-1.9	35.0
1,2,4-Trimethylbenzene	Ave	2.014	1.938		48.1	50.0	-3.8	35.0
sec-Butylbenzene	Ave	0.4363	0.4487		51.4	50.0	2.8	35.0
1,3-Dichlorobenzene	Ave	1.037	1.008		48.6	50.0	-2.8	35.0
4-Isopropyltoluene	Ave	1.864	1.866		50.0	50.0	0.0	35.0
1,4-Dichlorobenzene	Ave	1.094	1.037		47.4	50.0	-5.2	35.0
n-Butylbenzene	Ave	1.712	1.677		49.0	50.0	-2.1	35.0
1,2-Dichlorobenzene	Ave	0.999	0.9427		47.2	50.0	-5.6	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: CCV 280-541784/2 Calibration Date: 06/29/2021 21:12
 Instrument ID: VMS_P Calib Start Date: 06/26/2021 15:46
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/26/2021 18:50
 Lab File ID: P6394.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
1,2-Dibromo-3-Chloropropane	Ave	0.1322	0.1317		49.8	50.0	-0.3	50.0
1,2,4-Trichlorobenzene	Ave	0.5388	0.5207		48.3	50.0	-3.4	35.0
Hexachlorobutadiene	Ave	0.1765	0.1824		51.7	50.0	3.3	35.0
Naphthalene	Ave	1.895	1.725		45.5	50.0	-9.0	35.0
1,2,3-Trichlorobenzene	Lin2		0.4711		52.3	50.0	4.6	35.0
Dibromofluoromethane (Surr)	Ave	0.2439	0.2466		50.6	50.0	1.1	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3095	0.3035		49.0	50.0	-1.9	35.0
Toluene-d8 (Surr)	Ave	4.304	4.270		49.6	50.0	-0.8	35.0
4-Bromofluorobenzene (Surr)	Ave	1.147	1.084		47.2	50.0	-5.5	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6394.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 29-Jun-2021 21:12:30 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*sub184
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:09 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: ornelasg

Date: 30-Jun-2021 11:14:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.880	4.880	0.000	98	1524273	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.392	0.000	88	339568	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.608	0.000	96	497762	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.373	4.373	0.000	92	375944	50.0	50.6	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.637	4.637	0.000	99	462689	50.0	49.0	
\$ 6 Toluene-d8 (Surr)	98	6.125	6.125	0.000	94	1449877	50.0	49.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.478	8.478	0.000	85	539476	50.0	47.2	
10 Dichlorodifluoromethane	85	1.535	1.535	0.000	100	315836	50.0	62.8	
11 Chloromethane	50	1.704	1.704	0.000	99	271221	50.0	49.3	
12 Vinyl chloride	62	1.799	1.799	0.000	99	286343	50.0	53.5	
14 Bromomethane	94	2.073	2.073	0.000	93	163438	50.0	58.3	
15 Chloroethane	64	2.157	2.157	0.000	99	182529	50.0	52.5	
16 Dichlorofluoromethane	67	2.326	2.326	0.000	99	484321	50.0	51.5	
17 Trichlorofluoromethane	101	2.358	2.358	0.000	99	421371	50.0	56.7	
19 Ethyl ether	59	2.569	2.569	0.000	90	218569	50.0	46.7	
21 Acrolein	56	2.674	2.674	0.000	99	463068	493.8	474.3	
22 1,1-Dichloroethene	96	2.748	2.748	0.000	98	215028	50.0	53.0	
23 1,1,2-Trichloro-1,2,2-trifluoro	151	2.759	2.759	0.000	74	156467	50.0	54.9	
24 Acetone	43	2.769	2.769	0.000	100	377782	200.0	189.3	
26 Iodomethane	142	2.875	2.875	0.000	100	314086	50.0	51.5	
27 Carbon disulfide	76	2.928	2.928	0.000	100	660362	50.0	46.1	
29 Methyl acetate	43	2.991	2.991	0.000	98	458201	100.0	89.2	
30 3-Chloro-1-propene	41	3.012	3.012	0.000	89	368312	50.0	49.3	
31 Methylene Chloride	84	3.107	3.107	0.000	91	270880	50.0	46.3	
32 2-Methyl-2-propanol	59	3.149	3.149	0.000	99	383248	500.0	505.8	
33 Acrylonitrile	53	3.265	3.265	0.000	97	1229327	500.0	479.9	
34 Methyl tert-butyl ether	73	3.297	3.297	0.000	95	872018	50.0	50.8	
35 trans-1,2-Dichloroethene	96	3.308	3.308	0.000	97	251992	50.0	50.5	
36 Hexane	57	3.498	3.498	0.000	92	306060	50.0	49.5	
38 Vinyl acetate	43	3.603	3.603	0.000	98	1334607	100.0	99.9	
39 1,1-Dichloroethane	63	3.624	3.624	0.000	97	482386	50.0	49.6	

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	4.004	4.004	0.000	99	596463	200.0	187.1	
47 cis-1,2-Dichloroethene	96	4.025	4.025	0.000	87	287662	50.0	50.3	
48 2,2-Dichloropropane	77	4.036	4.036	0.000	89	425734	50.0	52.6	
52 Tetrahydrofuran	42	4.205	4.205	0.000	85	195128	100.0	92.3	
53 Chlorobromomethane	128	4.205	4.205	0.000	96	136638	50.0	51.5	
54 Chloroform	83	4.257	4.257	0.000	96	479916	50.0	49.8	
55 1,1,1-Trichloroethane	97	4.405	4.405	0.000	98	414830	50.0	52.4	
56 Cyclohexane	56	4.458	4.458	0.000	91	426786	50.0	50.6	
57 1,1-Dichloropropene	75	4.511	4.511	0.000	94	379196	50.0	51.2	
59 Carbon tetrachloride	117	4.521	4.521	0.000	97	330685	50.0	54.7	
58 Isobutyl alcohol	41	4.532	4.532	0.000	93	296431	1250.0	1261.2	
60 Benzene	78	4.658	4.658	0.000	97	1093228	50.0	49.8	
61 1,2-Dichloroethane	62	4.690	4.690	0.000	98	400150	50.0	47.7	
66 n-Heptane	43	4.848	4.848	0.000	89	272817	50.0	47.9	
67 Trichloroethene	95	5.154	5.154	0.000	97	272127	50.0	50.6	
69 Methylcyclohexane	55	5.344	5.344	0.000	92	321514	50.0	51.1	
70 1,2-Dichloropropane	63	5.355	5.355	0.000	95	285266	50.0	48.7	
72 1,4-Dioxane	88	5.397	5.397	0.000	93	87142	1000.0	997.0	
73 Dibromomethane	93	5.429	5.429	0.000	91	184244	50.0	49.7	
74 Dichlorobromomethane	83	5.545	5.545	0.000	98	367641	50.0	51.2	
76 2-Chloroethyl vinyl ether	63	5.756	5.756	0.000	93	215912	50.0	49.8	
77 cis-1,3-Dichloropropene	75	5.893	5.893	0.000	94	460067	50.0	49.7	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.999	0.000	96	1224900	200.0	196.7	
79 Toluene	91	6.178	6.178	0.000	97	1167641	50.0	49.3	
80 trans-1,3-Dichloropropene	75	6.357	6.357	0.000	96	432487	50.0	49.3	
81 Ethyl methacrylate	69	6.389	6.389	0.000	88	414888	50.0	48.7	
82 1,1,2-Trichloroethane	97	6.537	6.537	0.000	93	246777	50.0	50.5	
83 Tetrachloroethene	164	6.621	6.621	0.000	91	192106	50.0	53.9	
84 1,3-Dichloropropane	76	6.674	6.674	0.000	97	449641	50.0	49.3	
85 2-Hexanone	43	6.695	6.695	0.000	95	873181	200.0	192.9	
86 Chlorodibromomethane	129	6.874	6.874	0.000	89	247518	50.0	52.0	
88 Ethylene Dibromide	107	6.991	6.991	0.000	98	266731	50.0	50.5	
90 Chlorobenzene	112	7.413	7.413	0.000	92	707382	50.0	49.4	
91 1,1,1,2-Tetrachloroethane	131	7.486	7.486	0.000	93	246497	50.0	51.9	
92 Ethylbenzene	106	7.497	7.497	0.000	99	392468	50.0	50.7	
93 m-Xylene & p-Xylene	106	7.613	7.613	0.000	100	475597	50.0	50.2	
94 o-Xylene	106	7.972	7.972	0.000	98	462425	50.0	50.8	
95 Styrene	104	7.982	7.982	0.000	94	816283	50.0	51.1	
96 Bromoform	173	8.172	8.172	0.000	92	153305	50.0	54.4	
97 Isopropylbenzene	105	8.310	8.310	0.000	97	1167791	50.0	48.8	
99 Cyclohexanone	55	8.405	8.405	0.000	93	618709	2000.0	2318.6	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.595	0.000	96	347370	50.0	46.9	
101 Bromobenzene	156	8.626	8.626	0.000	98	283181	50.0	48.8	
102 trans-1,4-Dichloro-2-butene	53	8.637	8.637	0.000	83	83024	50.0	39.8	
103 1,2,3-Trichloropropane	110	8.658	8.658	0.000	84	106126	50.0	47.8	
104 N-Propylbenzene	120	8.711	8.711	0.000	99	313033	50.0	49.1	
105 2-Chlorotoluene	126	8.806	8.806	0.000	95	271849	50.0	48.7	
106 1,3,5-Trimethylbenzene	105	8.879	8.879	0.000	93	943291	50.0	48.4	
107 4-Chlorotoluene	126	8.922	8.922	0.000	98	282662	50.0	47.9	
108 tert-Butylbenzene	119	9.186	9.186	0.000	92	763173	50.0	49.0	
109 1,2,4-Trimethylbenzene	105	9.249	9.249	0.000	98	964655	50.0	48.1	
110 sec-Butylbenzene	134	9.407	9.407	0.000	95	223328	50.0	51.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,3-Dichlorobenzene	146	9.534	9.534	0.000	97	501906	50.0	48.6	
112 4-Isopropyltoluene	119	9.555	9.555	0.000	96	928642	50.0	50.0	
113 1,4-Dichlorobenzene	146	9.629	9.629	0.000	93	516050	50.0	47.4	
115 n-Butylbenzene	91	9.956	9.956	0.000	98	834655	50.0	49.0	
116 1,2-Dichlorobenzene	146	9.977	9.977	0.000	95	469261	50.0	47.2	
117 1,2-Dibromo-3-Chloropropane	157	10.758	10.758	0.000	79	65556	50.0	49.8	
119 1,2,4-Trichlorobenzene	180	11.581	11.581	0.000	94	259191	50.0	48.3	
120 Hexachlorobutadiene	225	11.729	11.729	0.000	94	90767	50.0	51.7	
121 Naphthalene	128	11.845	11.845	0.000	98	858510	50.0	45.5	
122 1,2,3-Trichlorobenzene	180	12.066	12.066	0.000	94	234515	50.0	52.3	
S 139 1,2-Dichloroethene, Total (URS)	99				0		100.0	100.8	
S 142 Xylenes, Total	106				0		100.0	101.0	
S 140 Trihalomethanes, Total	1				0		200.0	207.3	
S 143 Xylenes, Total (URS)	1				0		100.0	101.0	
S 145 1,3-Dichloropropene, Total	1				0		100.0	99.0	
S 144 1,2-Dichloroethene, Total	1				0		100.0	100.8	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

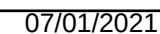
Run Reagent

Chrom Revision: 2.3 13-May-2021 07:57:40

Worklist Smp#: 2

ALS Bottle#: 1

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.: 280-150245-1
SDG No.: _____
Lab Sample ID: CCV 280-541784/3 Calibration Date: 06/29/2021 21:35
Instrument ID: VMS_P Calib Start Date: 02/23/2021 15:58
GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 02/23/2021 18:40
Lab File ID: P6395.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		0.0071			5000	-100.0*	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6395.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 29-Jun-2021 21:35:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: ornelasg

Date: 30-Jun-2021 10:53:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1510845	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	89	341927	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	467347	50.0	50.0	
13 Ethylene oxide	43	2.039	2.039	0.000	100	1074479	5000.0	0	
18 Ethanol	45	2.472	2.472	0.000	100	247031	3000.0	2334.0	
20 Propene oxide	58	2.609	2.609	0.000	96	5241114	5000.0	4445.7	
25 Isopropyl alcohol	45	2.852	2.852	0.000	98	236115	500.0	415.8	
28 Acetonitrile	41	2.968	2.968	0.000	99	435519	500.0	432.1	
40 Isopropyl ether	87	3.622	3.622	0.000	92	233364	50.0	46.2	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	93	442680	50.0	47.0	
43 Tert-butyl ethyl ether	59	3.875	3.875	0.000	98	861935	50.0	45.1	
46 Ethyl acetate	43	4.013	4.013	0.000	99	624150	100.0	101.0	
49 Propionitrile	54	4.044	4.044	0.000	99	515181	500.0	446.7	
51 Methacrylonitrile	41	4.160	4.160	0.000	90	1926232	500.0	452.2	
63 n-Butanol	56	4.730	4.730	0.000	52	265884	1250.0	1227.0	
62 Tert-amyl methyl ether	73	4.730	4.730	0.000	89	829453	50.0	46.2	
71 Methyl methacrylate	100	5.363	5.363	0.000	87	177204	100.0	95.2	
75 2-Nitropropane	41	5.712	5.712	0.000	99	163185	100.0	94.5	
87 Tetrahydrothiophene	60	6.862	6.862	0.000	92	123441	100.0	75.3	
98 cis-1,4-Dichloro-2-butene	53	8.360	8.360	0.000	86	164873	100.0	98.0	
114 1,2,3-Trimethylbenzene	105	9.648	9.648	0.000	99	960239	50.0	52.4	
118 1,3,5-Trichlorobenzene	180	10.946	10.946	0.000	96	278054	50.0	57.5	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00050

Amount Added: 50.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6395.D

Injection Date: 29-Jun-2021 21:35:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: CCV

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

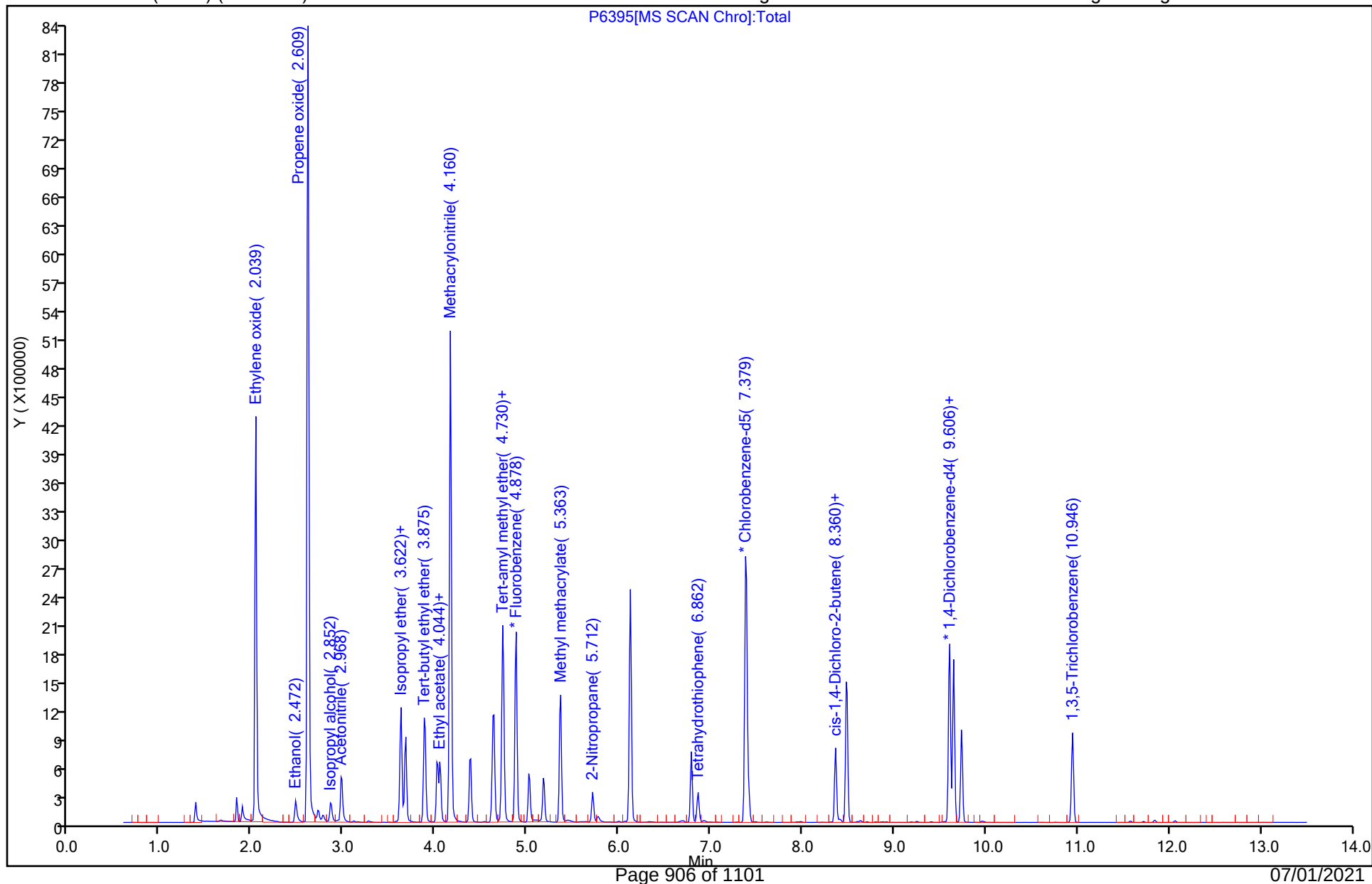
ALS Bottle#: 2

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.: 280-150245-1
 SDG No.: _____
 Lab Sample ID: CCV 280-541784/3 Calibration Date: 06/29/2021 21:35
 Instrument ID: VMS_P Calib Start Date: 06/25/2021 13:13
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/25/2021 15:32
 Lab File ID: P6395.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	Ave	0.0035	0.0027		2330	3000	-22.2	50.0
Propene oxide	Qua		0.0347		4450	5000	-11.1	50.0
2-Propanol	Ave	0.0188	0.0156		416	500	-16.8	50.0
Acetonitrile	Ave	0.0334	0.0288		432	500	-13.6	50.0
Di-isopropyl ether (DIPE)	Ave	0.1671	0.1545		46.2	50.0	-7.6	35.0
Chloroprene	Ave	0.3118	0.2930		47.0	50.0	-6.0	35.0
Tert-butyl ethyl ether	Ave	0.6321	0.5705		45.1	50.0	-9.7	35.0
Ethyl acetate	Ave	0.2045	0.2066		101	100	1.0	50.0
Propionitrile	Ave	0.0382	0.0341		447	500	-10.7	50.0
Methacrylonitrile	Ave	0.1410	0.1275		452	500	-9.6	50.0
n-Butanol	Ave	0.0072	0.0070		1230	1250	-1.8	50.0
Tert-amyl methyl ether	Ave	0.5943	0.5490		46.2	50.0	-7.6	35.0
Methyl methacrylate	Ave	0.0616	0.0586		95.2	100	-4.8	35.0
2-Nitropropane	Ave	0.0571	0.0540		94.5	100	-5.5	50.0
Tetrahydrothiophene	Ave	0.2397	0.1805		75.3	100	-24.7	50.0
cis-1,4-Dichloro-2-butene	Ave	0.1800	0.1764		98.0	100	-2.0	50.0
1,2,3-Trimethylbenzene	Ave	1.960	2.055		52.4	50.0	4.8	35.0
1,3,5-Trichlorobenzene	Ave	0.5177	0.5950		57.5	50.0	14.9	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6395.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 29-Jun-2021 21:35:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: ornelasg

Date: 30-Jun-2021 10:53:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1510845	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	89	341927	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	467347	50.0	50.0	
13 Ethylene oxide	43	2.039	2.039	0.000	100	1074479	5000.0	0	
18 Ethanol	45	2.472	2.472	0.000	100	247031	3000.0	2334.0	
20 Propene oxide	58	2.609	2.609	0.000	96	5241114	5000.0	4445.7	
25 Isopropyl alcohol	45	2.852	2.852	0.000	98	236115	500.0	415.8	
28 Acetonitrile	41	2.968	2.968	0.000	99	435519	500.0	432.1	
40 Isopropyl ether	87	3.622	3.622	0.000	92	233364	50.0	46.2	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	93	442680	50.0	47.0	
43 Tert-butyl ethyl ether	59	3.875	3.875	0.000	98	861935	50.0	45.1	
46 Ethyl acetate	43	4.013	4.013	0.000	99	624150	100.0	101.0	
49 Propionitrile	54	4.044	4.044	0.000	99	515181	500.0	446.7	
51 Methacrylonitrile	41	4.160	4.160	0.000	90	1926232	500.0	452.2	
63 n-Butanol	56	4.730	4.730	0.000	52	265884	1250.0	1227.0	
62 Tert-amyl methyl ether	73	4.730	4.730	0.000	89	829453	50.0	46.2	
71 Methyl methacrylate	100	5.363	5.363	0.000	87	177204	100.0	95.2	
75 2-Nitropropane	41	5.712	5.712	0.000	99	163185	100.0	94.5	
87 Tetrahydrothiophene	60	6.862	6.862	0.000	92	123441	100.0	75.3	
98 cis-1,4-Dichloro-2-butene	53	8.360	8.360	0.000	86	164873	100.0	98.0	
114 1,2,3-Trimethylbenzene	105	9.648	9.648	0.000	99	960239	50.0	52.4	
118 1,3,5-Trichlorobenzene	180	10.946	10.946	0.000	96	278054	50.0	57.5	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00050

Amount Added: 50.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6395.D

Injection Date: 29-Jun-2021 21:35:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: CCV

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

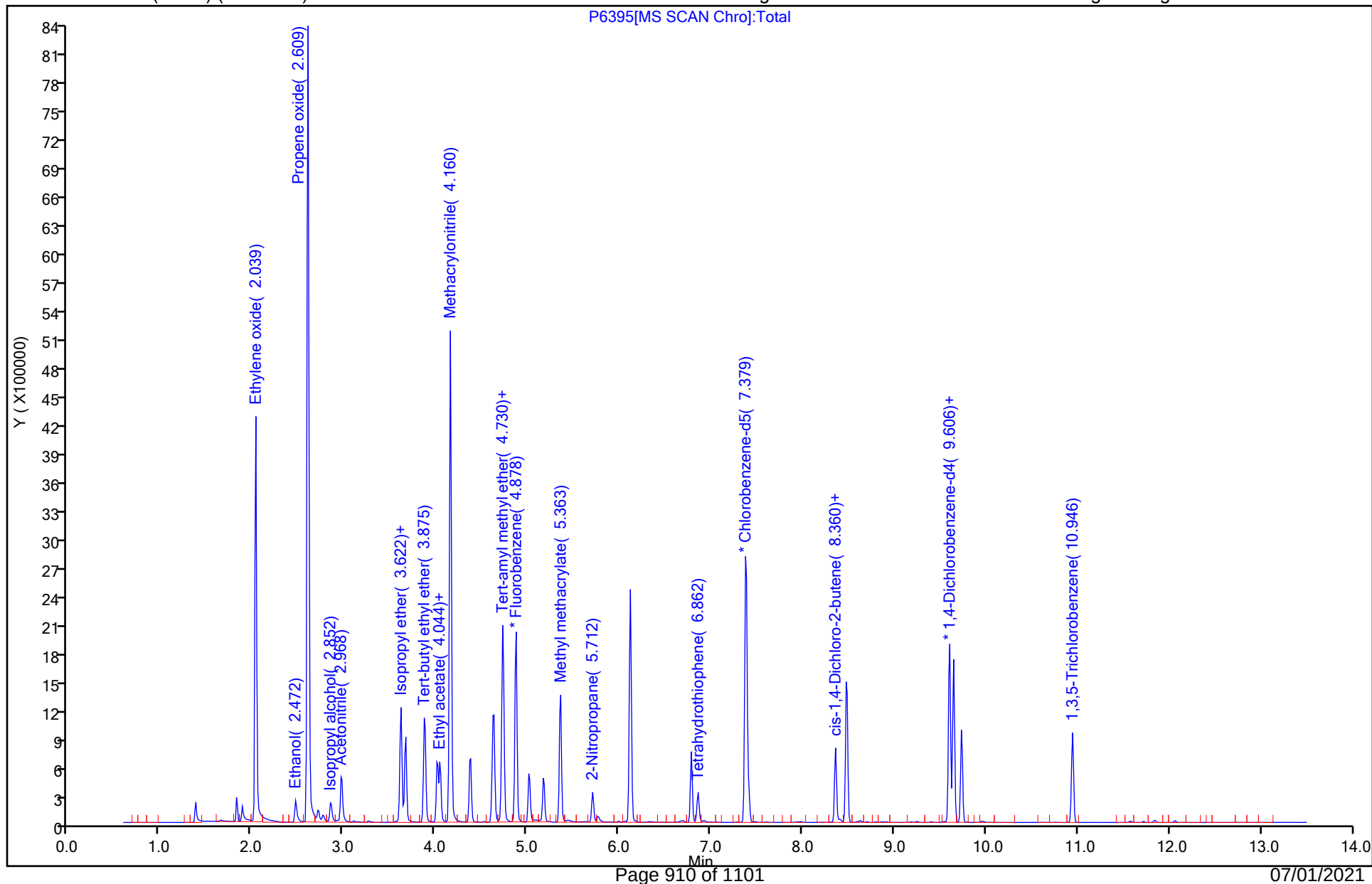
ALS Bottle#: 2

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: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 04-Jun-2021 09:51:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 10:10:29 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 10:07:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 10 BFB	95	3.579	3.579	0.000	0	285505	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D

Injection Date: 04-Jun-2021 09:51:30

Instrument ID: VMS_MS1

Lims ID: BFB

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

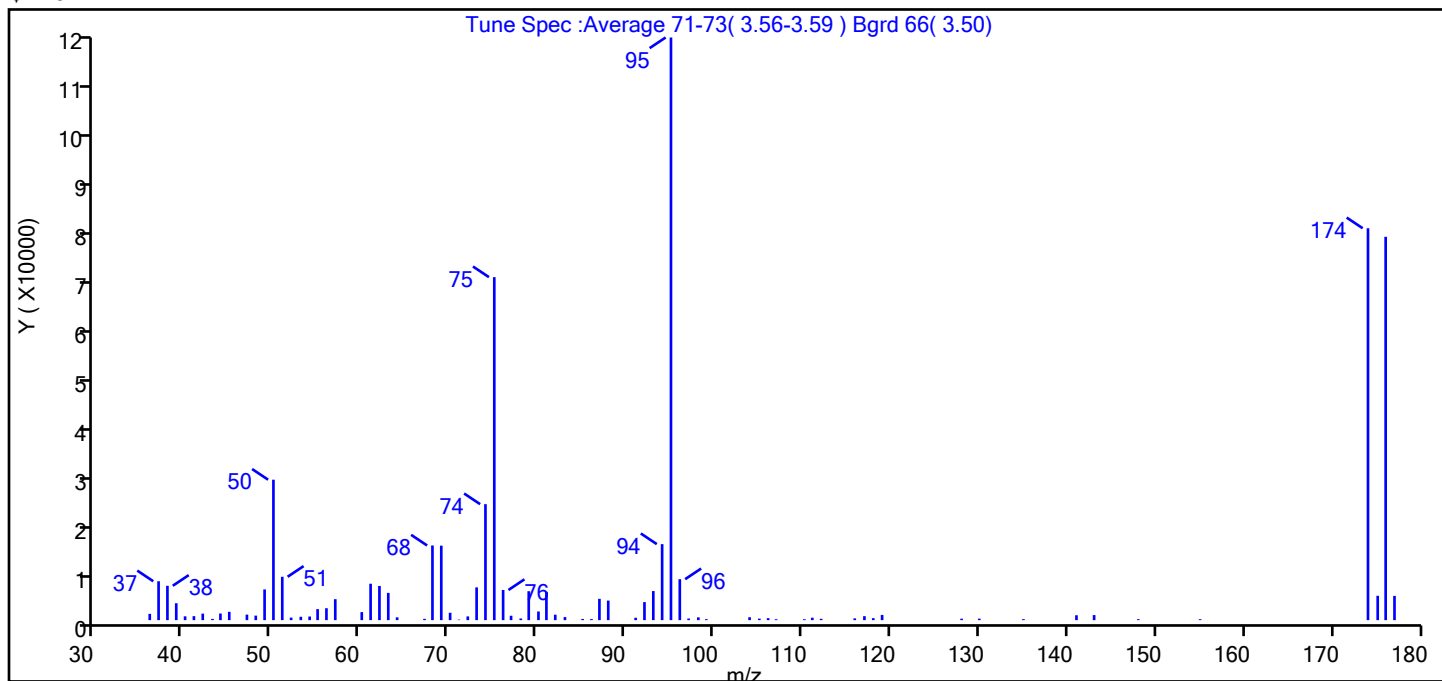
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.1
75	30 to 60% of m/z 95	58.9
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	67.3
175	5 to 9% of m/z 174	4.2 (6.2)
176	Greater than 95% but less than 101% of m/z 174	65.8 (97.8)
177	5 to 9% of m/z 176	4.2 (6.3)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D\AQ_VMS1_8260.rslt\spectra.o
Injection Date: 04-Jun-2021 09:51:30
Spectrum: Tune Spec :Average 71-73(3.56-3.59) Bgrd 66(3.50)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1192	57.00	3972	81.00	5340	110.00	177
37.00	7372	60.00	1526	82.00	1030	111.00	460
38.00	6514	61.00	6904	83.00	586	112.00	256
39.00	3207	62.00	6480	85.00	221	116.00	336
40.00	725	63.00	5163	86.00	201	117.00	755
41.00	757	64.00	539	87.00	4038	118.00	377
42.00	1236	67.00	246	88.00	3708	119.00	988
43.00	235	68.00	14151	91.00	454	128.00	278
44.00	1257	69.00	14121	92.00	3418	130.00	283
45.00	1577	70.00	1398	93.00	5513	135.00	191
47.00	1049	71.00	98	94.00	14409	141.00	929
48.00	859	72.00	707	95.00	110448	143.00	962
49.00	5820	73.00	6213	96.00	7764	148.00	180
50.00	26624	74.00	21984	97.00	308	155.00	178
51.00	8219	75.00	65016	98.00	531	174.00	74288
52.00	483	76.00	5715	99.00	187	175.00	4611
53.00	643	77.00	833	104.00	556	176.00	72664
54.00	691	78.00	315	105.00	284	177.00	4592
55.00	2093	79.00	5485	106.00	378		
56.00	2260	80.00	1640	107.00	175		

Report Date: 05-Jun-2021 10:10:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2711.D

Injection Date: 04-Jun-2021 09:51:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

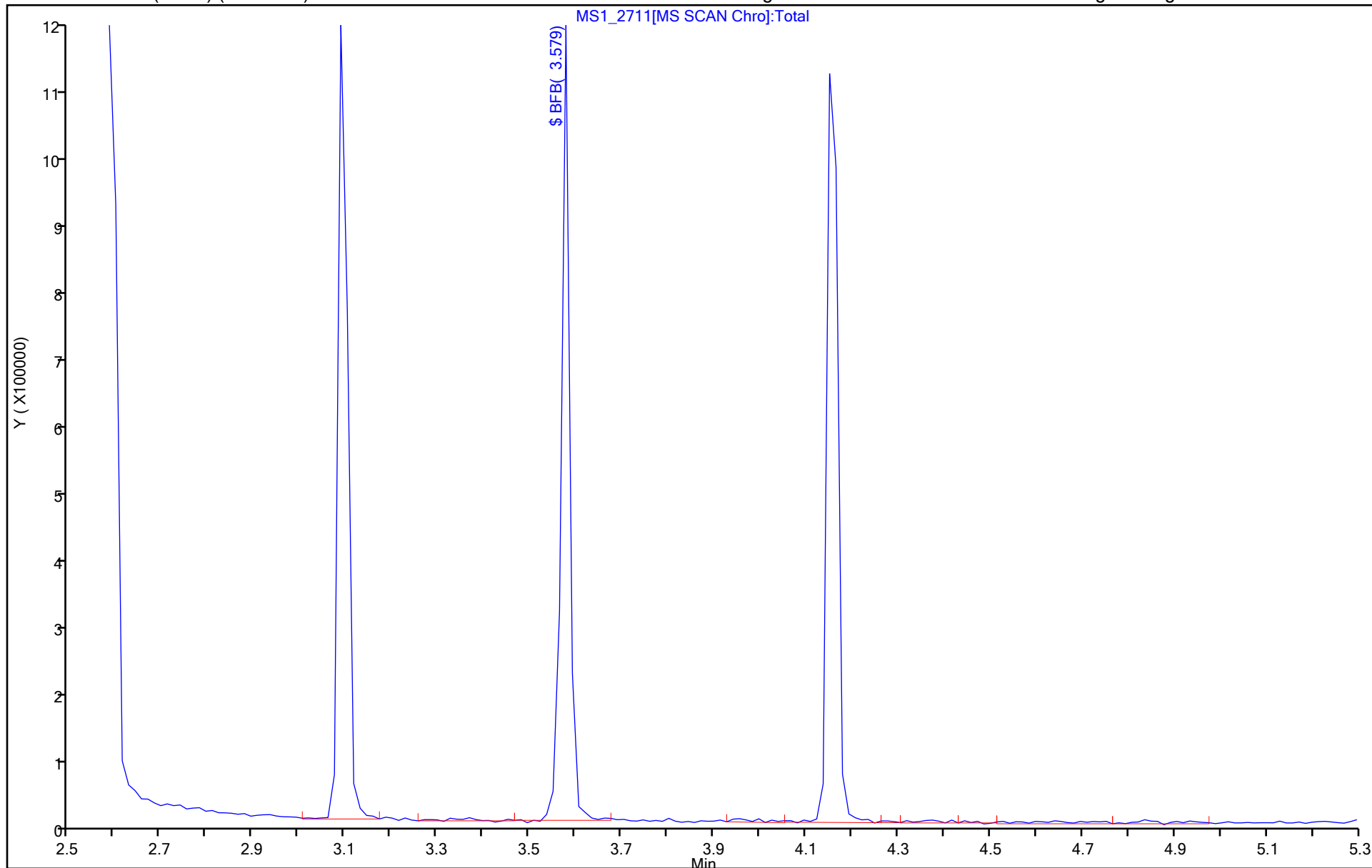
ALS Bottle#: 100

Method: AQ_VMS1_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_MS1\20210629-102809.b\MS1_3850.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 29-Jun-2021 20:49:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:35 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 10 BFB	95	3.579	3.579	0.000	0	280345	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3850.D

Injection Date: 29-Jun-2021 20:49:30

Instrument ID: VMS_MS1

Lims ID: BFB

Client ID:

Operator ID: PETUNINP

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

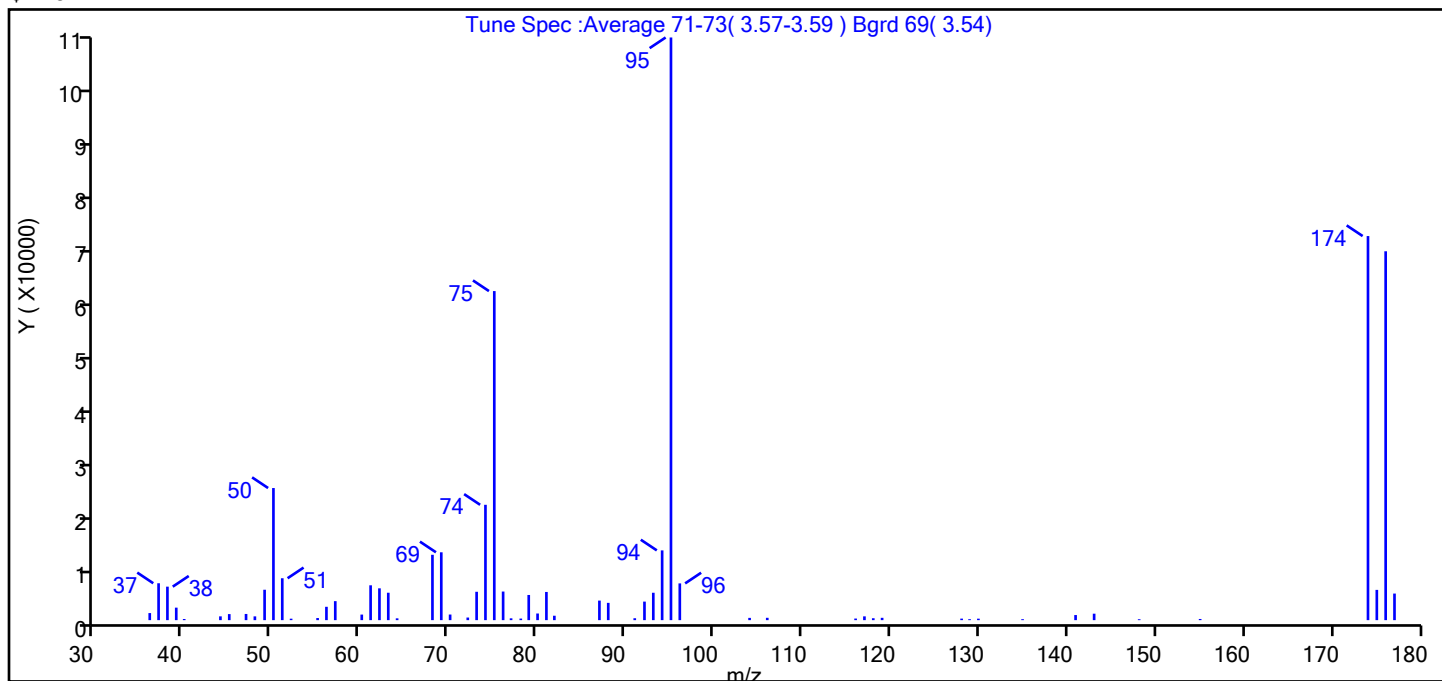
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.7
75	30 to 60% of m/z 95	56.5
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.9
175	5 to 9% of m/z 174	5.2 (7.9)
176	Greater than 95% but less than 101% of m/z 174	63.3 (96.0)
177	5 to 9% of m/z 176	4.6 (7.2)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3850.D\AQ_VMS1_8260.rslt\spectra.o
Injection Date: 29-Jun-2021 20:49:30
Spectrum: Tune Spec :Average 71-73(3.57-3.59) Bgrd 69(3.54)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 61

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1322	60.00	1042	80.00	1242	119.00	436
37.00	6903	61.00	6520	81.00	5274	128.00	286
38.00	6267	62.00	5953	82.00	826	129.00	179
39.00	2339	63.00	5129	87.00	3658	130.00	276
40.00	213	64.00	338	88.00	3233	135.00	179
44.00	710	68.00	12230	91.00	357	141.00	954
45.00	1131	69.00	12697	92.00	3469	143.00	1208
47.00	1157	70.00	1051	93.00	5126	148.00	168
48.00	706	72.00	487	94.00	13053	155.00	217
49.00	5689	73.00	5307	95.00	109032	174.00	71872
50.00	24720	74.00	21584	96.00	6876	175.00	5662
51.00	7840	75.00	61576	104.00	424	176.00	69024
52.00	273	76.00	5352	106.00	438	177.00	4974
55.00	395	77.00	340	116.00	299		
56.00	2498	78.00	295	117.00	708		
57.00	3554	79.00	4709	118.00	358		

Report Date: 30-Jun-2021 11:08:36

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\VMS1_3850.D

Injection Date: 29-Jun-2021 20:49:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

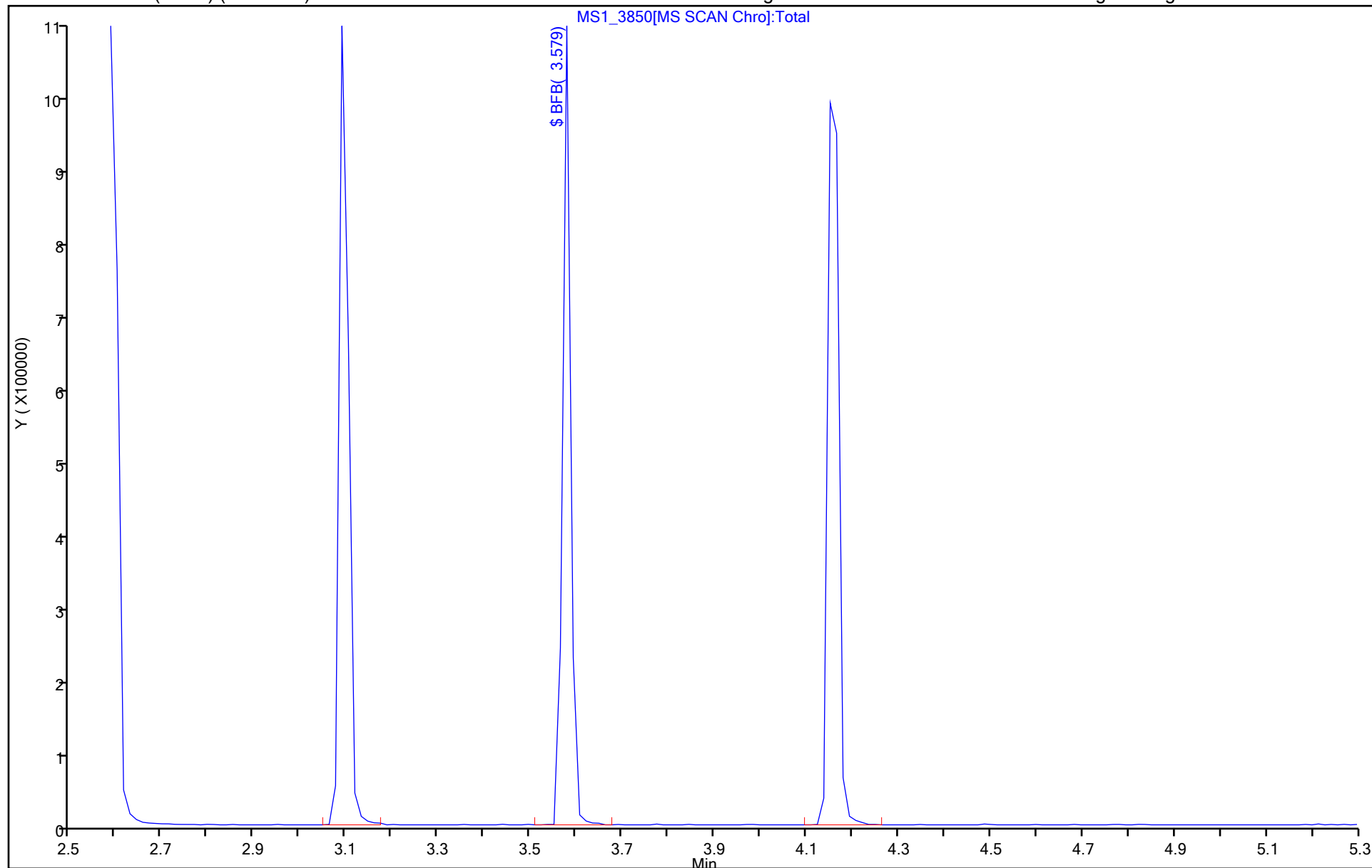
ALS Bottle#: 100

Method: AQ_VMS1_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\20210625-102689.b\IP6264.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 25-Jun-2021 12:39:30 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: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 26-Jun-2021 13:15:52 Calib Date: 25-Jun-2021 19:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\IP6282.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1671

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 9 BFB	95	3.391	3.391	0.000	0	472350	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 2.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6264.D

Injection Date: 25-Jun-2021 12:39:30

Instrument ID: VMS_P

Lims ID: BFB

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

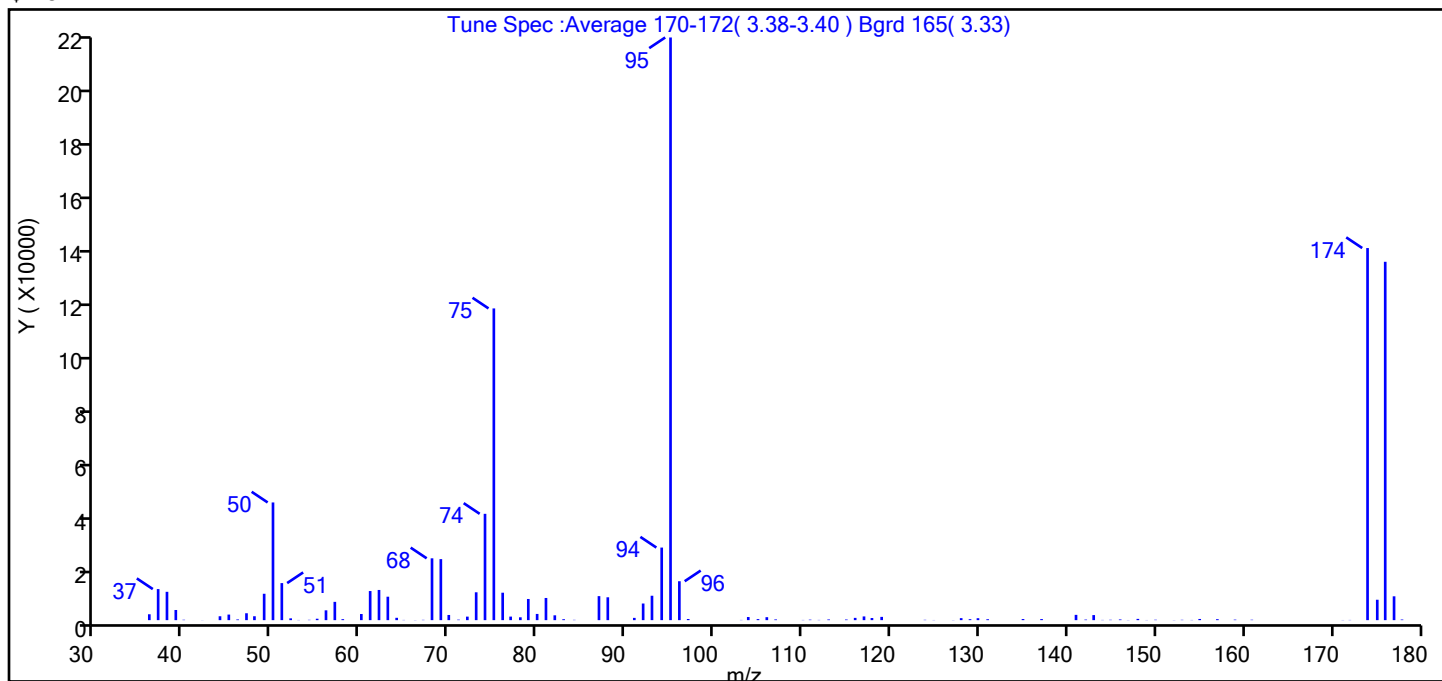
Dil. Factor: 1.0000

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	20.2
75	30 to 60% of m/z 95	53.5
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	63.9
175	5 to 9% of m/z 174	3.5 (5.5)
176	Greater than 95% but less than 101% of m/z 174	61.5 (96.3)
177	5 to 9% of m/z 176	4.1 (6.7)

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\6264.D\AQ_VMSP_8260.rsl\spectra.d
 Injection Date: 25-Jun-2021 12:39:30
 Spectrum: Tune Spec :Average 170-172(3.38-3.40) Bgrd 165(3.33)
 Base Peak: 95.05
 Minimum % Base Peak: 0
 Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2218	64.00	881	94.00	27376	137.00	401
37.00	11716	65.00	80	95.00	219776	141.00	1990
38.00	10686	66.00	51	96.00	14675	142.00	213
39.00	3829	67.00	113	97.00	430	143.00	1907
40.00	145	68.00	23320	103.00	77	144.00	85
41.00	6	69.00	23016	104.00	1175	145.00	138
42.00	33	70.00	1952	105.00	396	146.00	261
44.00	1469	71.00	191	106.00	1116	147.00	57
45.00	2100	72.00	1327	107.00	270	148.00	472
46.00	265	73.00	10509	110.00	76	149.00	60
47.00	2599	74.00	40104	111.00	187	150.00	154
48.00	1468	75.00	117576	112.00	86	152.00	55
49.00	9950	76.00	10349	113.00	257	153.00	127
50.00	44392	77.00	1339	115.00	240	154.00	72
51.00	13974	78.00	1076	116.00	856	155.00	441
52.00	677	79.00	7981	117.00	1398	157.00	355
53.00	69	80.00	2342	118.00	802	159.00	194
54.00	125	81.00	8362	119.00	1229	161.00	156
55.00	532	82.00	1820	124.00	124	171.00	59
56.00	3704	83.00	353	125.00	61	172.00	78
57.00	6898	84.00	114	127.00	51	174.00	140352
58.00	368	87.00	9056	128.00	752	175.00	7693
60.00	2314	88.00	8622	129.00	361	176.00	135168
61.00	10976	91.00	855	130.00	726	177.00	8990
62.00	11384	92.00	6273	131.00	340	178.00	232
63.00	8843	93.00	9206	135.00	416		

Report Date: 26-Jun-2021 13:15:53

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210625-102689.b\P6264.D

Injection Date: 25-Jun-2021 12:39:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

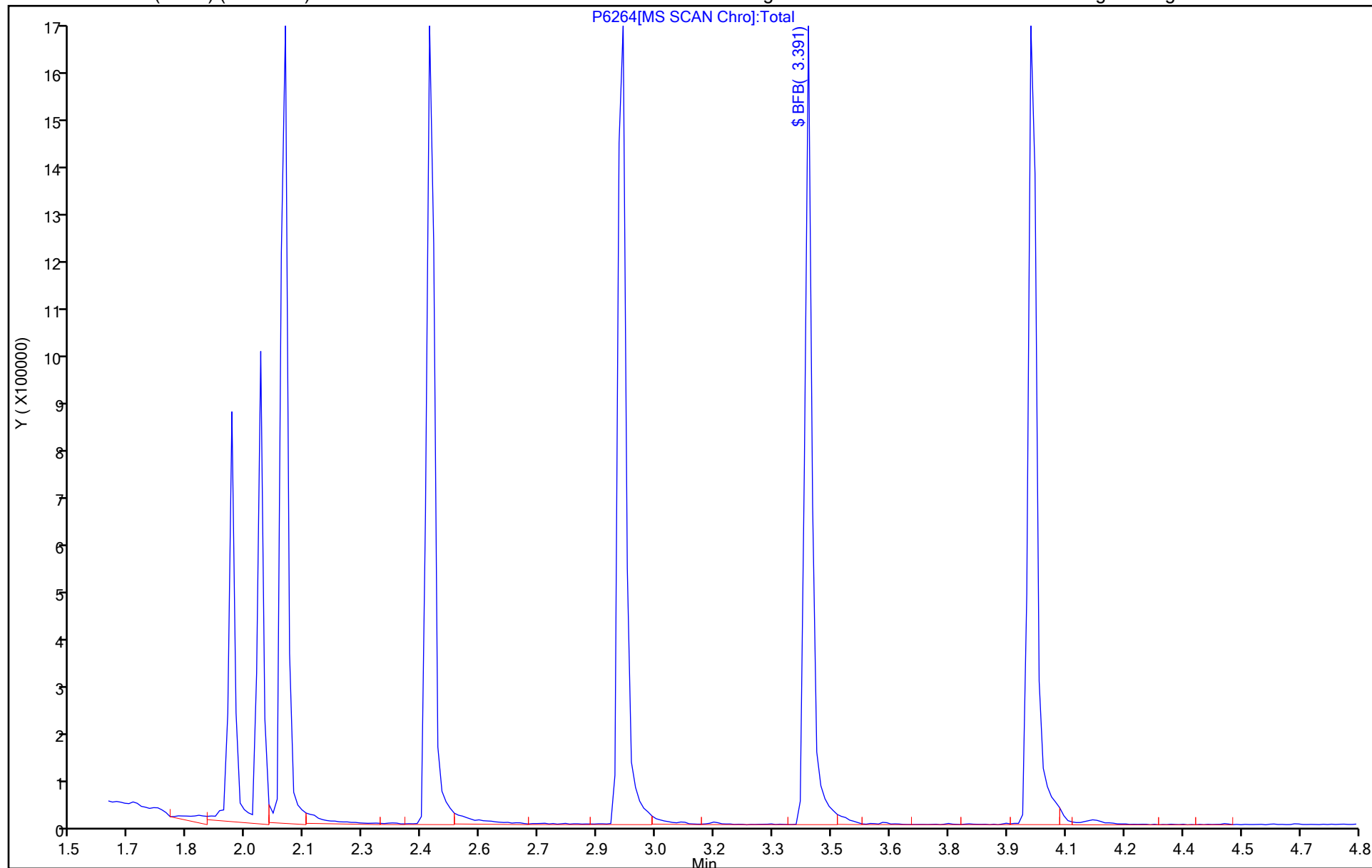
ALS Bottle#: 100

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\20210626-102712.b\IP6298.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 26-Jun-2021 10:40:30 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: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 28-Jun-2021 10:49:28 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1677

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 9 BFB	95	3.387	3.387	0.000	74	499453	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 2.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6298.D

Injection Date: 26-Jun-2021 10:40:30

Instrument ID: VMS_P

Lims ID: BFB

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

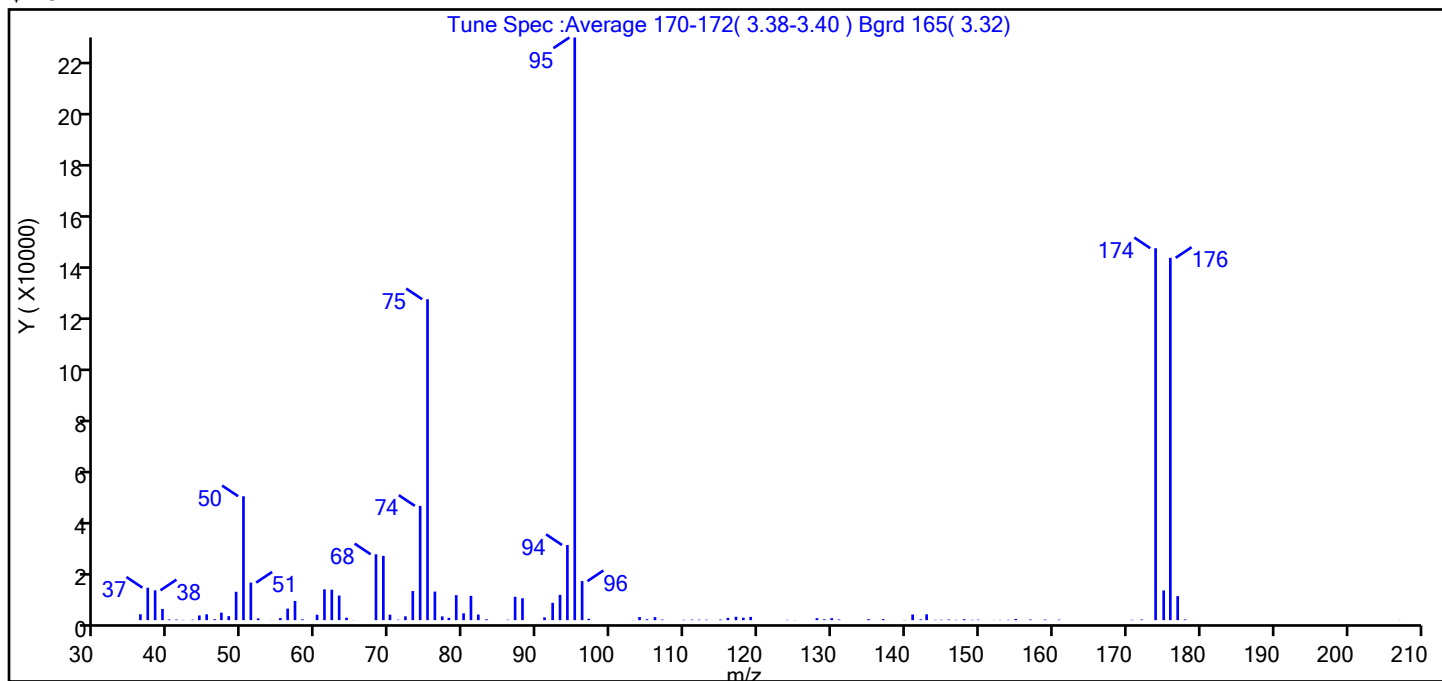
Dil. Factor: 1.0000

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	21.3
75	30 to 60% of m/z 95	55.1
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	63.8
175	5 to 9% of m/z 174	5.1 (8.0)
176	Greater than 95% but less than 101% of m/z 174	62.2 (97.4)
177	5 to 9% of m/z 176	4.1 (6.6)

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6298.D\AQ_VMSP_8260.rsl\spectra.d
Injection Date: 26-Jun-2021 10:40:30
Spectrum: Tune Spec :Average 170-172(3.38-3.40) Bgrd 165(3.32)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2308	64.00	958	96.00	15320	142.00	308
37.00	12745	65.00	52	97.00	534	143.00	2294
38.00	11709	68.00	25864	103.00	65	144.00	150
39.00	4399	69.00	25240	104.00	1242	145.00	176
40.00	291	70.00	2144	105.00	355	146.00	259
41.00	221	71.00	177	106.00	1178	147.00	135
42.00	118	72.00	1503	107.00	223	148.00	396
43.00	192	73.00	11431	110.00	154	149.00	137
44.00	1826	74.00	44880	111.00	221	150.00	192
45.00	2287	75.00	126016	112.00	200	152.00	74
46.00	363	76.00	11220	113.00	186	153.00	100
47.00	2946	77.00	1464	115.00	256	154.00	154
48.00	1563	78.00	912	116.00	867	155.00	469
49.00	11133	79.00	9822	117.00	1332	157.00	255
50.00	48648	80.00	2692	118.00	962	159.00	230
51.00	14740	81.00	9543	119.00	1281	161.00	211
52.00	689	82.00	2197	124.00	129	171.00	120
54.00	52	83.00	339	125.00	54	171.00	67
55.00	808	86.00	171	128.00	787	172.00	249
56.00	4531	87.00	9178	129.00	326	174.00	146048
57.00	7540	88.00	8601	130.00	787	175.00	11667
58.00	306	91.00	1089	131.00	281	176.00	142272
60.00	2115	92.00	6798	135.00	408	177.00	9428
61.00	12086	93.00	9921	137.00	412	178.00	276
62.00	11948	94.00	29504	140.00	88	207.00	51
63.00	9652	95.00	228800	141.00	2222		

Report Date: 28-Jun-2021 10:49:28

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\P6298.D

Injection Date: 26-Jun-2021 10:40:30

Instrument ID: VMS_P

Operator ID: SEIFERTJ

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

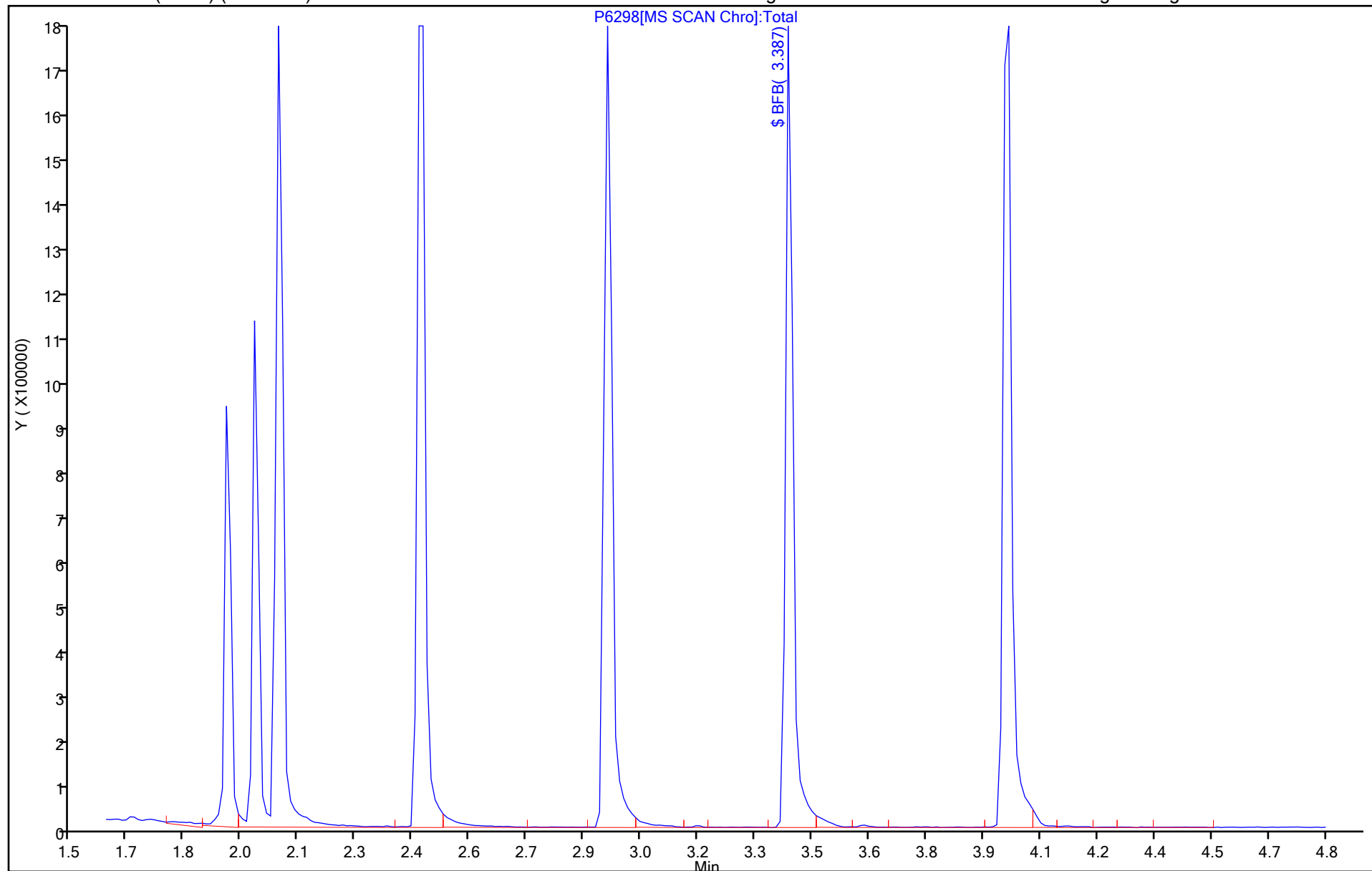
ALS Bottle#: 100

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\20210629-102808.b\IP6393.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 29-Jun-2021 20:49:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:07 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 9 BFB	95	3.389	3.389	0.000	79	447158	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 2.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6393.D

Injection Date: 29-Jun-2021 20:49:30

Instrument ID: VMS_P

Lims ID: BFB

Client ID:

Operator ID: PETUNINP

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

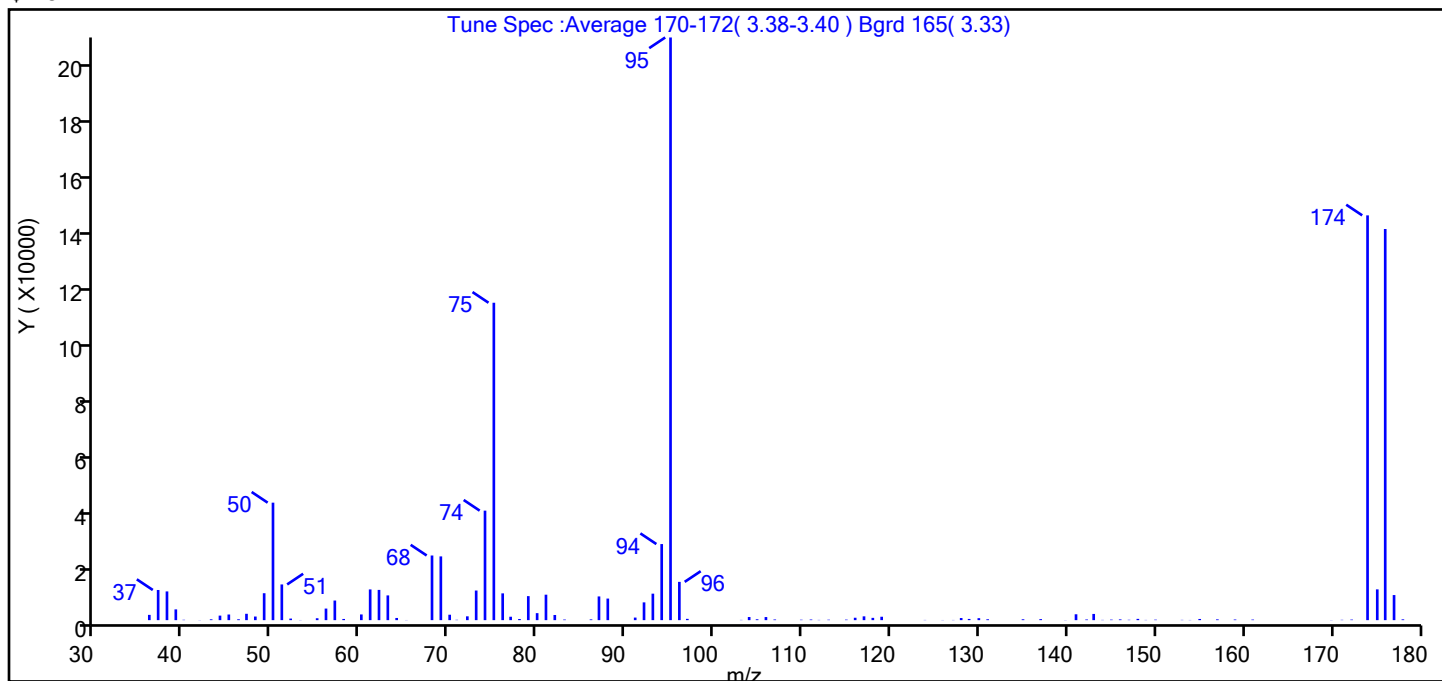
Dil. Factor: 1.0000

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	20.2
75	30 to 60% of m/z 95	54.5
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	69.5
175	5 to 9% of m/z 174	5.3 (7.6)
176	Greater than 95% but less than 101% of m/z 174	67.1 (96.6)
177	5 to 9% of m/z 176	4.3 (6.4)

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6393.D\AQ_VMSP_8260.rsl\spectra.d
Injection Date: 29-Jun-2021 20:49:30
Spectrum: Tune Spec :Average 170-172(3.38-3.40) Bgrd 165(3.33)
Base Peak: 95.05
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1880	65.00	55	97.00	460	142.00	237
37.00	10752	68.00	23048	103.00	85	143.00	2215
38.00	10242	69.00	22728	104.00	1113	144.00	91
39.00	3839	70.00	1933	105.00	312	145.00	187
40.00	127	71.00	120	106.00	1103	146.00	266
42.00	50	72.00	1362	107.00	237	147.00	129
43.00	295	73.00	10560	110.00	151	148.00	451
44.00	1614	74.00	39040	111.00	225	149.00	79
45.00	2009	75.00	113168	112.00	84	150.00	172
46.00	312	76.00	9548	113.00	160	153.00	97
47.00	2265	77.00	1217	115.00	188	154.00	65
48.00	1287	78.00	404	116.00	856	155.00	417
49.00	9597	79.00	8564	117.00	1355	157.00	277
50.00	41888	80.00	2496	118.00	816	159.00	225
51.00	12730	81.00	9076	119.00	1211	161.00	203
52.00	559	82.00	1837	124.00	74	170.00	51
53.00	54	83.00	213	126.00	56	171.00	114
55.00	676	86.00	269	127.00	69	172.00	198
56.00	4127	87.00	8453	128.00	751	174.00	144320
57.00	6992	88.00	7692	129.00	428	175.00	10972
58.00	422	91.00	914	130.00	700	176.00	139456
60.00	2033	92.00	6336	131.00	311	177.00	8944
61.00	10951	93.00	9441	135.00	306	178.00	283
62.00	10782	94.00	27128	137.00	363		
63.00	8820	95.00	207744	140.00	51		
64.00	777	96.00	13648	141.00	2096		

Report Date: 30-Jun-2021 11:38:08

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6393.D

Injection Date: 29-Jun-2021 20:49:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

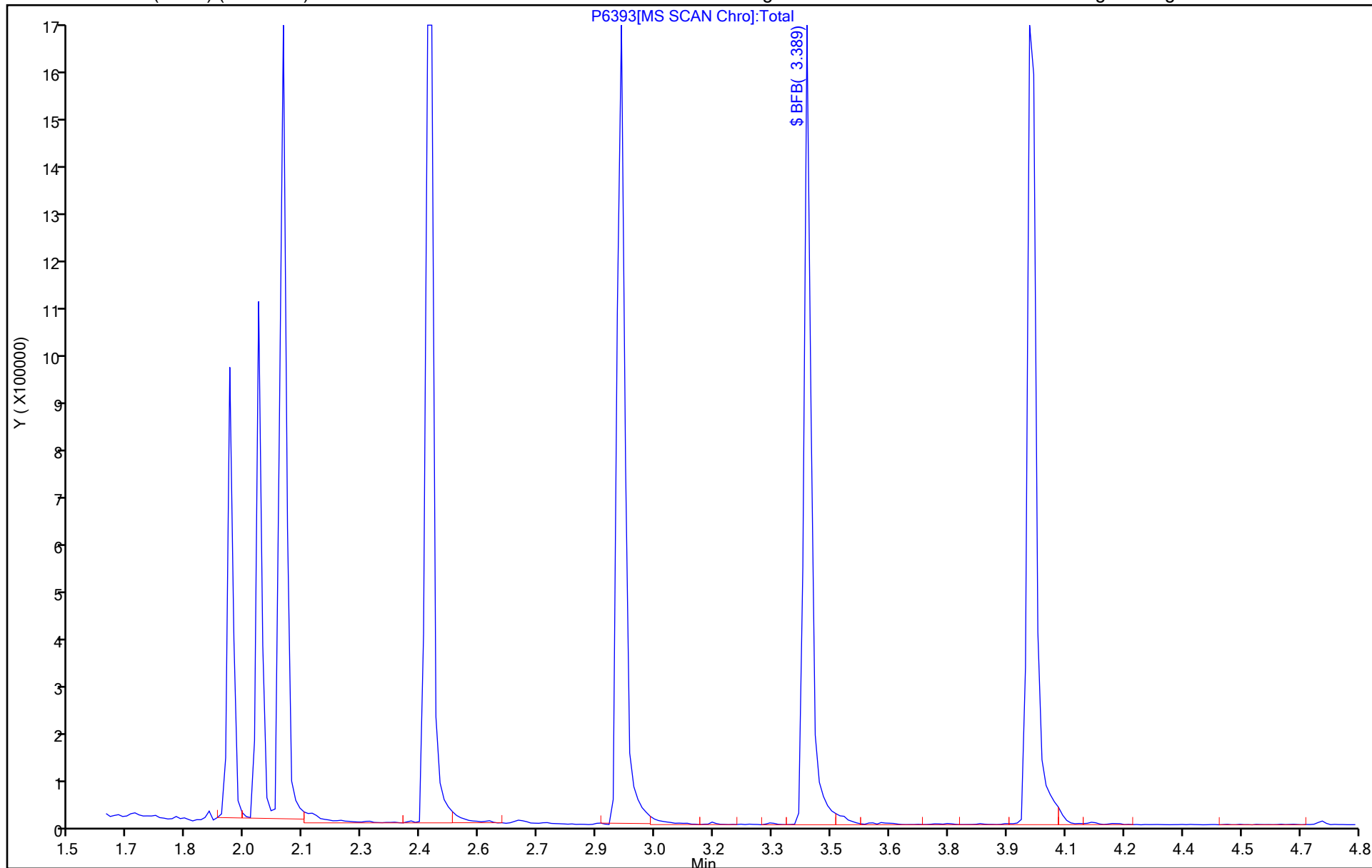
ALS Bottle#: 100

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.: 280-150245-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 280-541784/9

Matrix: Water Lab File ID: P6401.D

Analysis Method: 8260B Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 23:53

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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.76	J	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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-541784/9
 Matrix: Water Lab File ID: P6401.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 23:53
 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.: 541784 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)	98		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)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\IP6401.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 29-Jun-2021 23:53:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:24:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1438060	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	325899	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	453084	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.382	4.373	0.009	92	350700	50.0	50.0	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	438141	50.0	49.2	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1385033	50.0	49.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	84	498524	50.0	48.0	
\$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 9 BFB	95		3.389					ND	
10 Dichlorodifluoromethane	85		1.535					ND	
11 Chloromethane	50		1.704					ND	
12 Vinyl chloride	62		1.799					ND	
13 Ethylene oxide	43		2.039					ND	7
14 Bromomethane	94		2.073					ND	7
15 Chloroethane	64		2.157					ND	
16 Dichlorofluoromethane	67		2.326					ND	
17 Trichlorofluoromethane	101		2.358					ND	
18 Ethanol	45		2.472					ND	
19 Ethyl ether	59		2.569					ND	
20 Propene oxide	58		2.609					ND	7
21 Acrolein	56		2.674					ND	
22 1,1-Dichloroethene	96		2.748					ND	
23 1,1,2-Trichloro-1,2,2-trifluoro	151		2.759					ND	
24 Acetone	43	2.767	2.769	-0.002	97	5195		2.76	
25 Isopropyl alcohol	45		2.852					ND	
26 Iodomethane	142		2.875					ND	
27 Carbon disulfide	76		2.928					ND	U
28 Acetonitrile	41		2.968					ND	U
29 Methyl acetate	43		2.991					ND	
30 3-Chloro-1-propene	41		3.012					ND	
31 Methylene Chloride	84	3.116	3.107	0.009	92	3024		0.5482	
32 2-Methyl-2-propanol	59		3.149					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		3.265					ND	
34 Methyl tert-butyl ether	73		3.297					ND	
35 trans-1,2-Dichloroethene	96		3.308					ND	
36 Hexane	57		3.498					ND	
38 Vinyl acetate	43		3.603					ND	
40 Isopropyl ether	87		3.622					ND	
39 1,1-Dichloroethane	63		3.624					ND	
41 2-Chloro-1,3-butadiene	53		3.675					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
43 Tert-butyl ethyl ether	59		3.875					ND	
44 2-Butanone (MEK)	43		4.004					ND	
46 Ethyl acetate	43		4.013					ND	
47 cis-1,2-Dichloroethene	96		4.025					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
48 2,2-Dichloropropane	77		4.036					ND	
49 Propionitrile	54		4.044					ND	
50 sec-Butyl Alcohol	45		4.109					ND	
51 Methacrylonitrile	41		4.160					ND	
52 Tetrahydrofuran	42		4.205					ND	
53 Chlorobromomethane	128		4.205					ND	
54 Chloroform	83		4.257					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
55 1,1,1-Trichloroethane	97		4.405					ND	
56 Cyclohexane	56		4.458					ND	
57 1,1-Dichloropropene	75		4.511					ND	
59 Carbon tetrachloride	117		4.521					ND	
58 Isobutyl alcohol	41		4.532					ND	U
60 Benzene	78		4.658					ND	
61 1,2-Dichloroethane	62		4.690					ND	
63 n-Butanol	56		4.730					ND	
62 Tert-amyl methyl ether	73		4.730					ND	
66 n-Heptane	43		4.848					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		5.154					ND	
68 2-Pentanone	43		5.249					ND	
69 Methylcyclohexane	55		5.344					ND	
70 1,2-Dichloropropane	63		5.355					ND	
71 Methyl methacrylate	100		5.363					ND	
72 1,4-Dioxane	88		5.397					ND	
73 Dibromomethane	93		5.429					ND	
74 Dichlorobromomethane	83		5.545					ND	
75 2-Nitropropane	41		5.712					ND	
76 2-Chloroethyl vinyl ether	63		5.756					ND	
77 cis-1,3-Dichloropropene	75		5.893					ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999					ND	
79 Toluene	91		6.178					ND	
80 trans-1,3-Dichloropropene	75		6.357					ND	
81 Ethyl methacrylate	69		6.389					ND	
82 1,1,2-Trichloroethane	97		6.537					ND	
83 Tetrachloroethene	164		6.621					ND	
84 1,3-Dichloropropane	76		6.674					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		6.695					ND	
87 Tetrahydrothiophene	60		6.862					ND	
86 Chlorodibromomethane	129		6.874					ND	
88 Ethylene Dibromide	107		6.991					ND	
89 1-Chlorohexane	91		7.380					ND	U
90 Chlorobenzene	112		7.413					ND	
91 1,1,1,2-Tetrachloroethane	131		7.486					ND	
92 Ethylbenzene	106		7.497					ND	
93 m-Xylene & p-Xylene	106		7.613					ND	
94 o-Xylene	106		7.972					ND	
95 Styrene	104		7.982					ND	
96 Bromoform	173		8.172					ND	
97 Isopropylbenzene	105		8.310					ND	
98 cis-1,4-Dichloro-2-butene	53		8.360					ND	
99 Cyclohexanone	55		8.405					ND	U
100 1,1,2,2-Tetrachloroethane	83		8.595					ND	
101 Bromobenzene	156		8.626					ND	
102 trans-1,4-Dichloro-2-butene	53		8.637					ND	
103 1,2,3-Trichloropropane	110		8.658					ND	
104 N-Propylbenzene	120		8.711					ND	
105 2-Chlorotoluene	126		8.806					ND	
106 1,3,5-Trimethylbenzene	105		8.879					ND	
107 4-Chlorotoluene	126		8.922					ND	
108 tert-Butylbenzene	119		9.186					ND	
127 Pentachloroethane	167		9.225					ND	
109 1,2,4-Trimethylbenzene	105		9.249					ND	
110 sec-Butylbenzene	134		9.407					ND	
111 1,3-Dichlorobenzene	146		9.534					ND	U
112 4-Isopropyltoluene	119		9.555					ND	
113 1,4-Dichlorobenzene	146		9.629					ND	U
114 1,2,3-Trimethylbenzene	105		9.648					ND	
115 n-Butylbenzene	91		9.956					ND	
116 1,2-Dichlorobenzene	146		9.977					ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758					ND	
118 1,3,5-Trichlorobenzene	180		10.946					ND	
119 1,2,4-Trichlorobenzene	180		11.581					ND	
120 Hexachlorobutadiene	225		11.729					ND	
121 Naphthalene	128		11.845					ND	
122 1,2,3-Trichlorobenzene	180		12.066					ND	
136 1-Chlorohexane TIC	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
125 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
S 139 1,2-Dichloroethene, Total (URS)	95		2.000					ND	7
S 142 Xylenes, Total	106		0.000					ND	7
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000					ND	7
S 143 Xylenes, Total (URS)	1		0.000					ND	7
S 146 Total BTEX	1		0.000					ND	7
S 145 1,3-Dichloropropene, Total	1		0.000					ND	7
S 144 1,2-Dichloroethene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:38:20

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

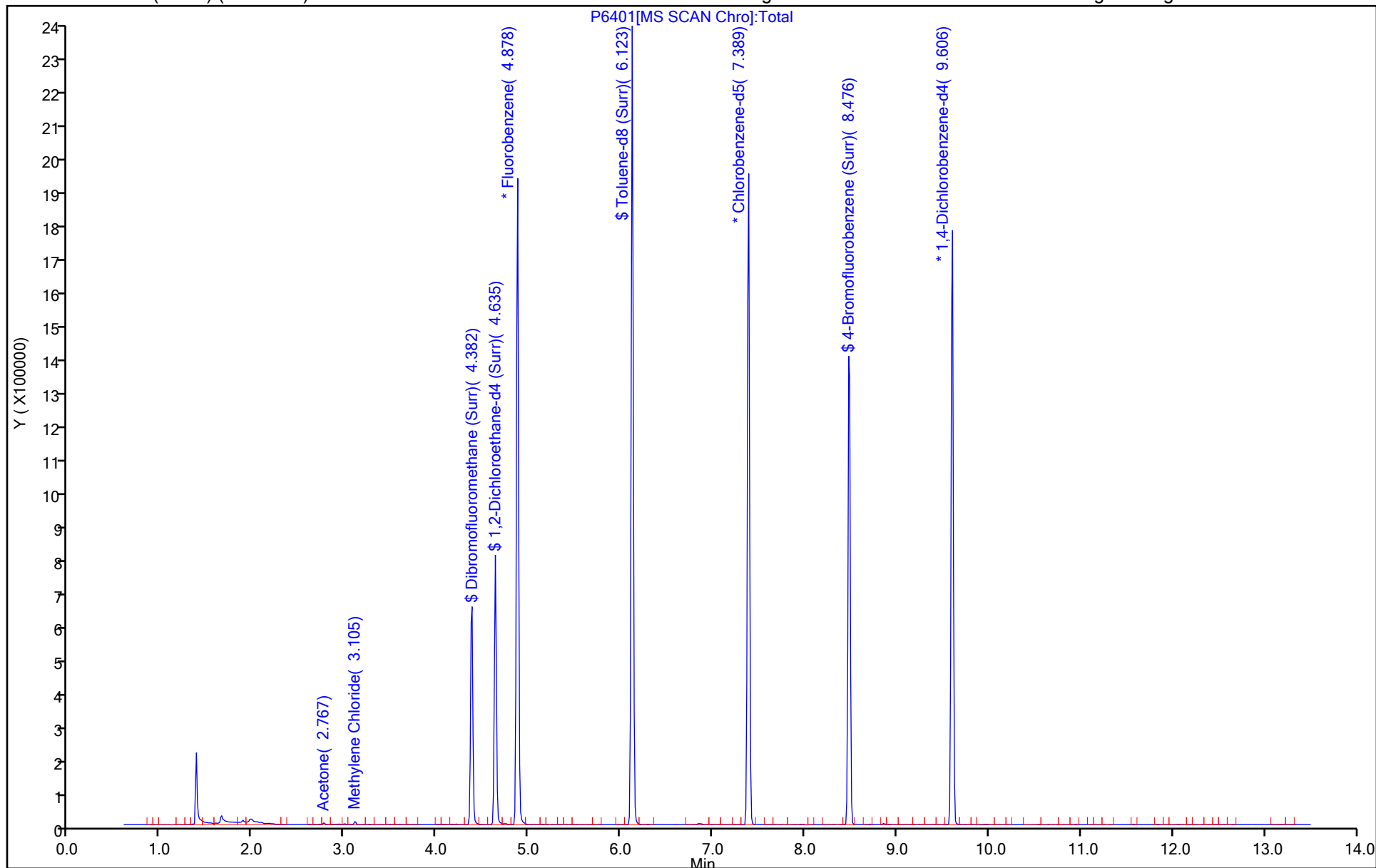
ALS Bottle#: 8

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\20210629-102808.b\IP6401.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 29-Jun-2021 23:53:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:24:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.0	100.00
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.2	98.43
\$ 6 Toluene-d8 (Surr)	50.0	49.4	98.73
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.0	95.91

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Lims ID: MB

Client ID:

Operator ID: PETUNINP

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

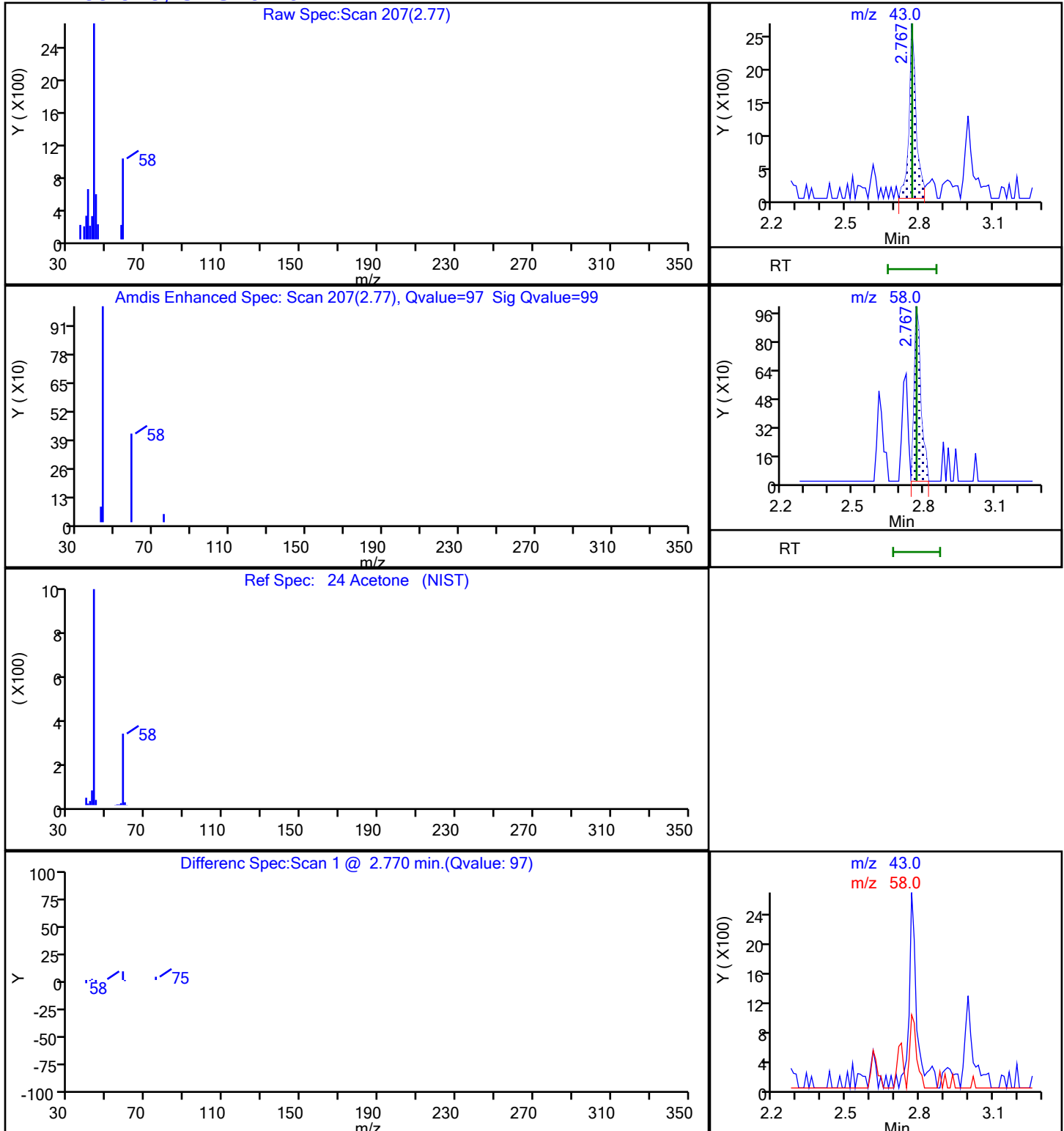
Dil. Factor: 1.0000

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\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Lims ID: MB

Client ID:

Operator ID: PETUNINP

ALS Bottle#:

8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSP_8260

Limit Group:

MSV - 8260B Water and Solid

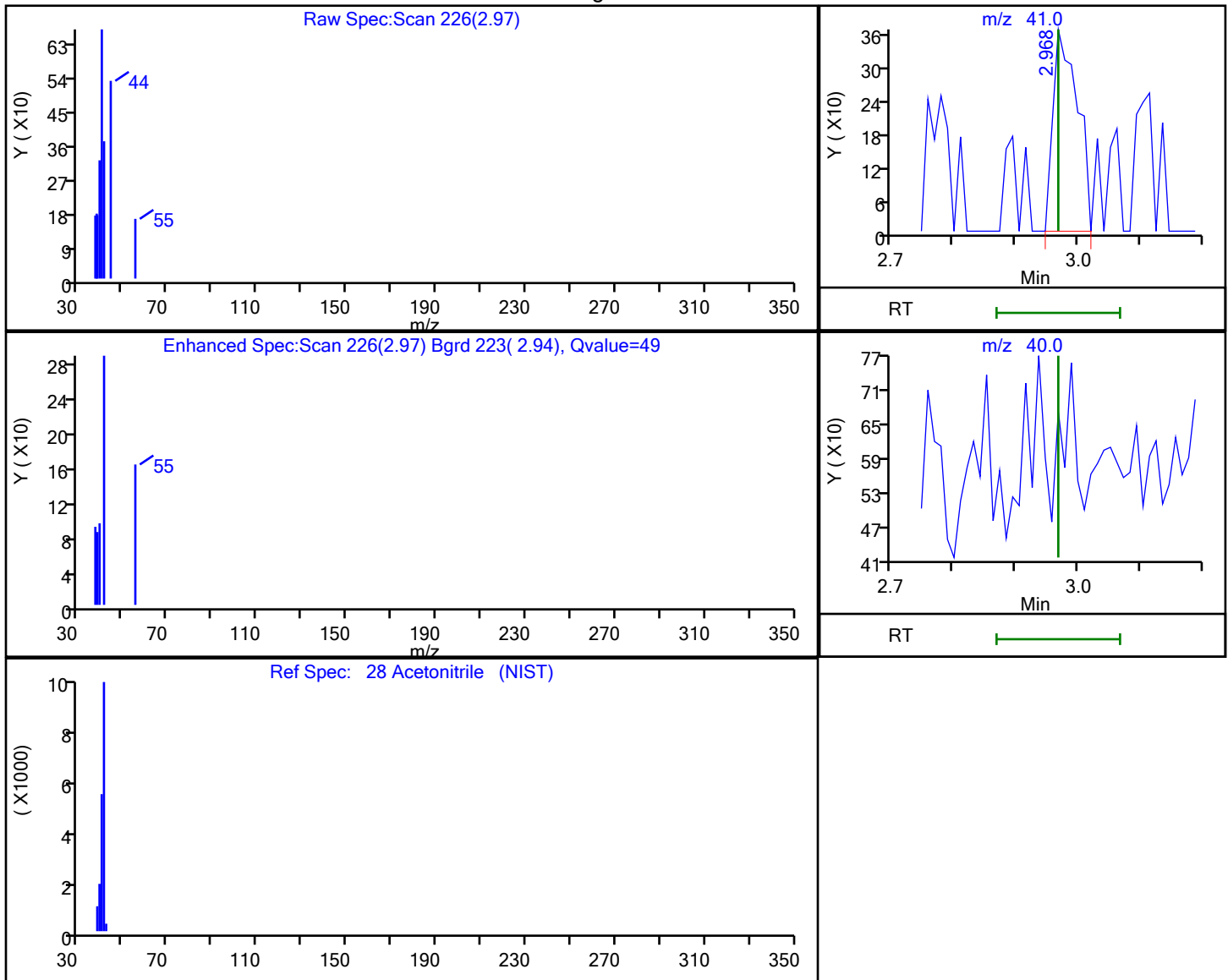
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

28 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
2.97	41.00	1010	1.052783
2.97	40.00	0	

Reviewer: seifertj, 30-Jun-2021 11:23:43

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Lims ID: MB

Client ID:

Operator ID: PETUNINP

ALS Bottle#:

8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSP_8260

Limit Group:

MSV - 8260B Water and Solid

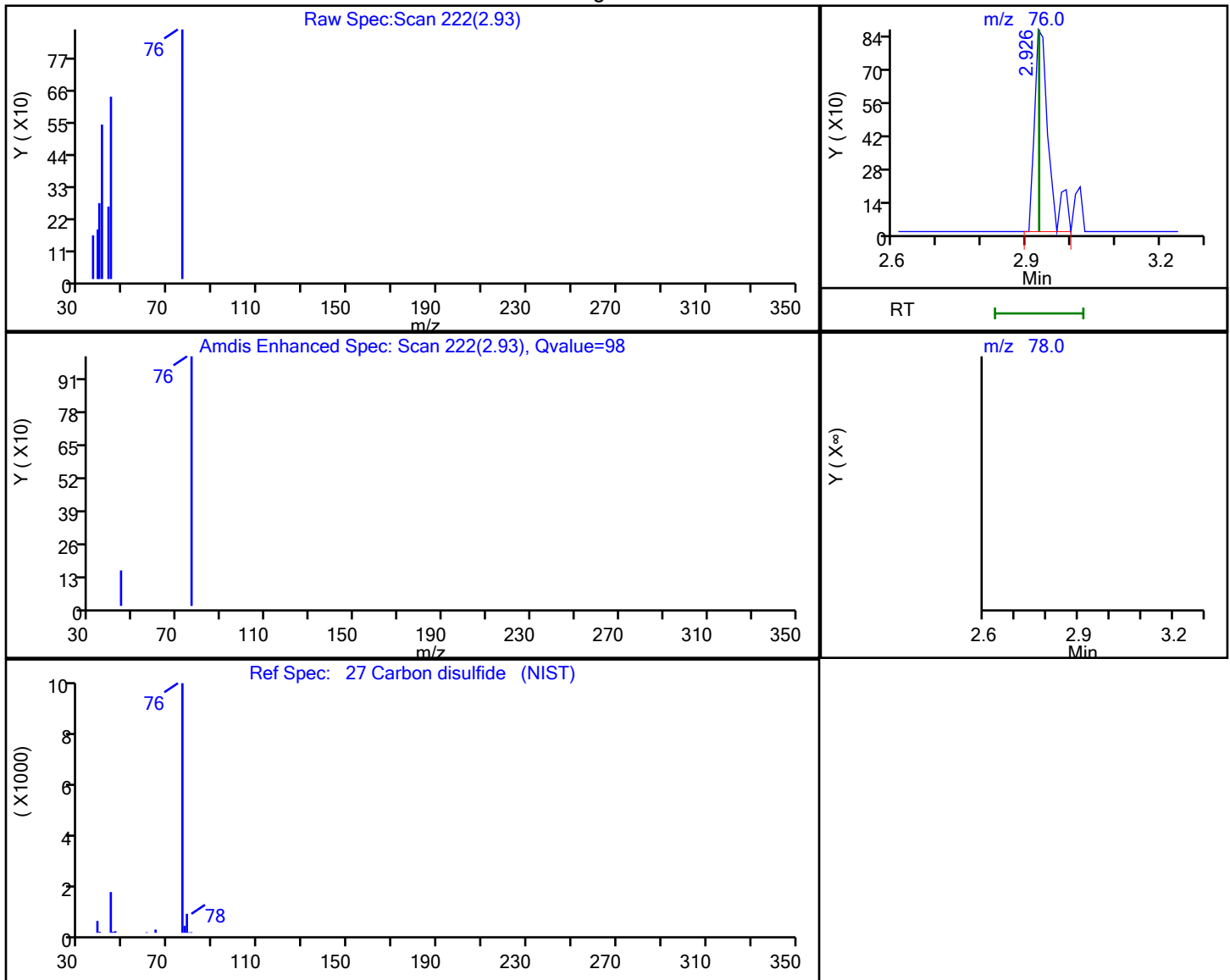
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
2.93	76.00	1934	0.143067
2.93	78.00	0	

Reviewer: seifertj, 30-Jun-2021 11:23:41

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Lims ID: MB

Client ID:

Operator ID: PETUNINP

ALS Bottle#:

8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSP_8260

Limit Group:

MSV - 8260B Water and Solid

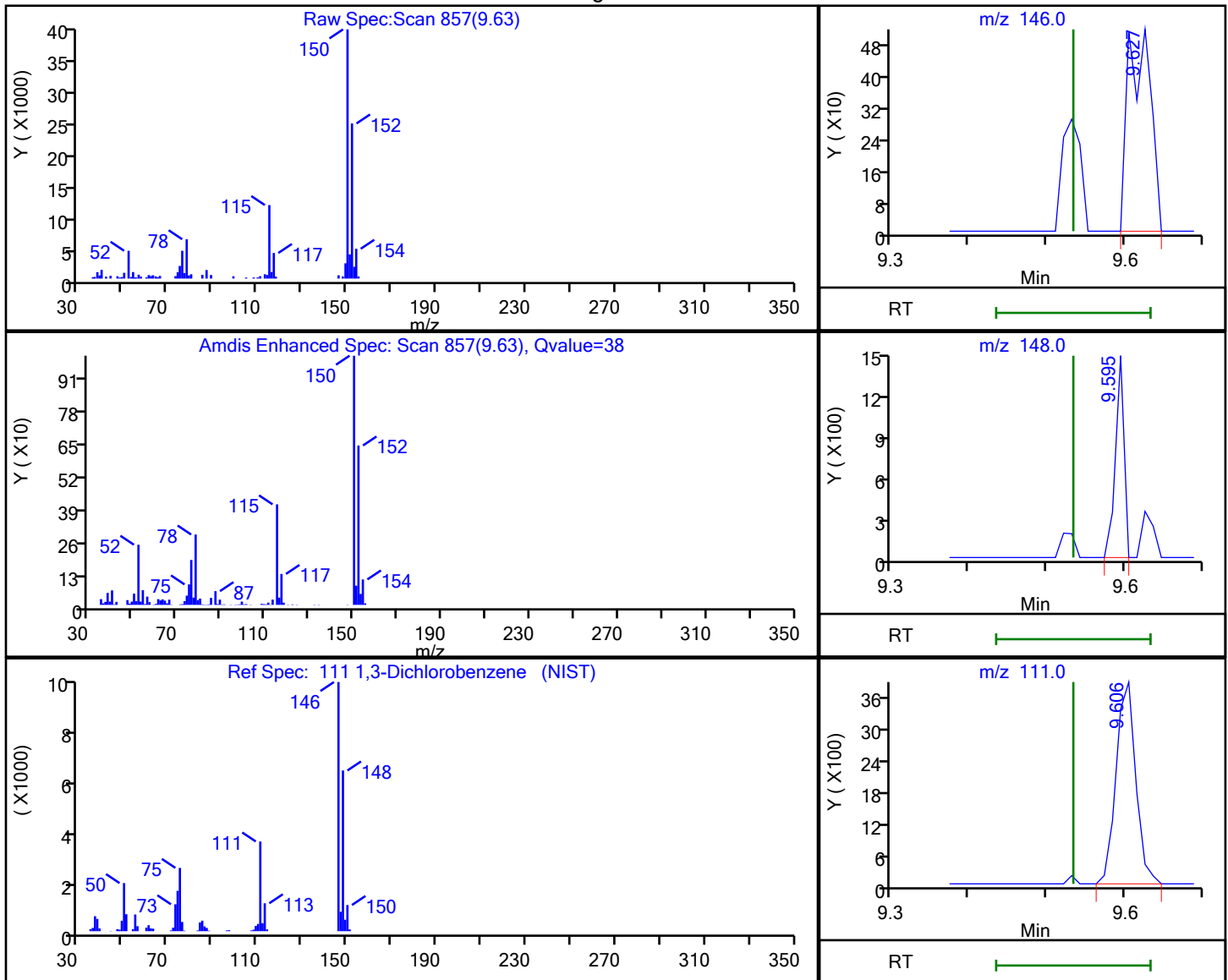
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

111 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
9.63	146.00	1040	0.110646
9.59	148.00	1105	
9.61	111.00	6764	

Reviewer: seifertj, 30-Jun-2021 11:24:00

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Lims ID: MB

Client ID:

Operator ID: PETUNINP

ALS Bottle#:

8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSP_8260

Limit Group:

MSV - 8260B Water and Solid

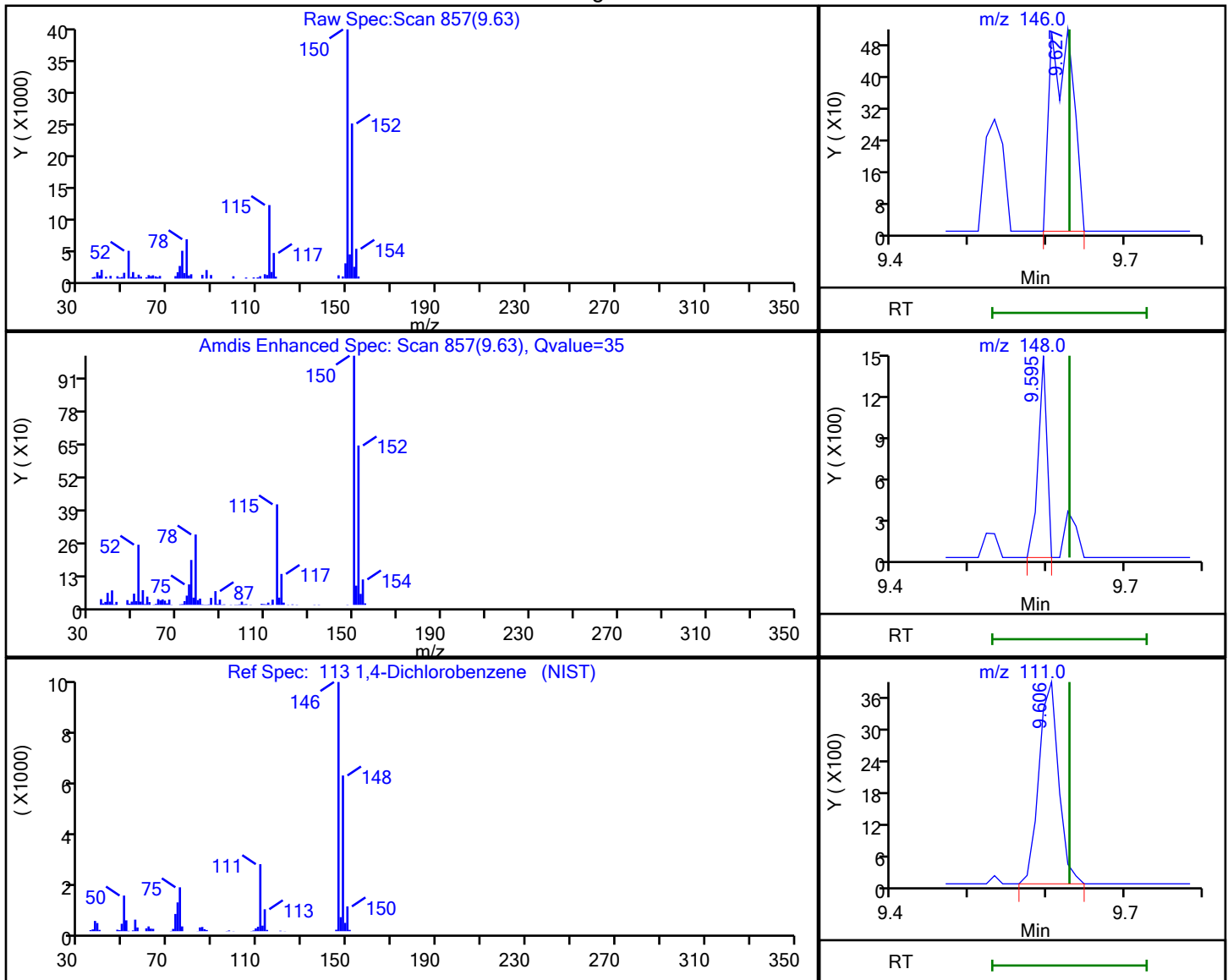
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
9.63	146.00	1040	0.104890
9.59	148.00	1105	
9.61	111.00	6764	

Reviewer: seifertj, 30-Jun-2021 11:24:03

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6401.D

Injection Date: 29-Jun-2021 23:53:30

Instrument ID: VMS_P

Lims ID: MB

Client ID:

Operator ID: PETUNINP

ALS Bottle#:

8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSP_8260

Limit Group:

MSV - 8260B Water and Solid

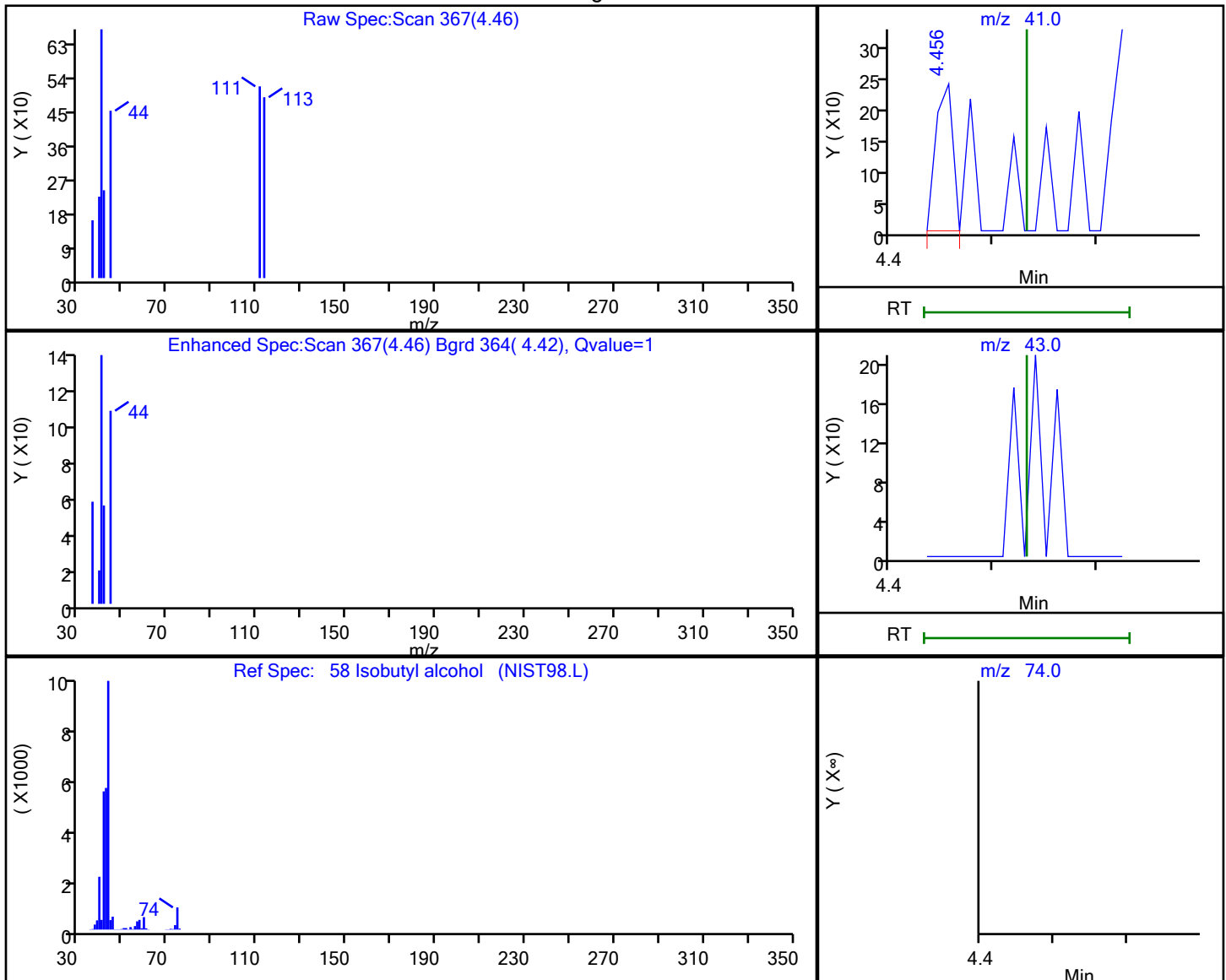
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

58 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
4.46	41.00	268	1.208617
4.53	43.00	0	
4.53	74.00	0	

Reviewer: seifertj, 30-Jun-2021 11:23:49

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.: 280-150245-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 280-541786/9

Matrix: Water Lab File ID: MS1_3858.D

Analysis Method: 8260B Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 23:41

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.: 541786 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.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-541786/9
 Matrix: Water Lab File ID: MS1_3858.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 23:41
 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.: 541786 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)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3858.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 29-Jun-2021 23:41:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	721241	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	159672	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	268574	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	186577	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	245152	50.0	47.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	678822	50.0	49.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	273689	50.0	47.0	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95		3.579					ND	
11 Dichlorodifluoromethane	85		1.705					ND	
12 Chloromethane	50		1.914					ND	
13 Vinyl chloride	62		1.998					ND	
14 Ethylene oxide	43		2.319					ND	7
15 Bromomethane	94		2.361					ND	
16 Chloroethane	64		2.473					ND	
17 Dichlorofluoromethane	67		2.696					ND	
18 Trichlorofluoromethane	101		2.724					ND	
19 Ethanol	45		2.892					ND	
20 Ethyl ether	59		3.004					ND	
21 Propene oxide	58		3.059					ND	
22 Acrolein	56		3.143					ND	
23 1,1-Dichloroethene	96		3.241					ND	
24 112TCTFE	151		3.255					ND	
25 Acetone	43		3.269					ND	
27 Isopropyl alcohol	45		3.395					ND	
26 Iodomethane	142		3.395					ND	
28 Carbon disulfide	76		3.464					ND	
29 Acetonitrile	41		3.534					ND	
30 Methyl acetate	43		3.576					ND	
31 3-Chloro-1-propene	41		3.590					ND	
32 Methylene Chloride	84		3.716					ND	
33 2-Methyl-2-propanol	59		3.786					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Acrylonitrile	53		3.911					ND	
35 Methyl tert-butyl ether	73		3.939					ND	
36 trans-1,2-Dichloroethene	96		3.953					ND	
37 Hexane	57		4.205					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43		4.344					ND	
40 1,1-Dichloroethane	63		4.344					ND	
41 Isopropyl ether	87		4.372					ND	
42 2-Chloro-1,3-butadiene	53		4.414					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.679					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.819					ND	
47 Ethyl acetate	43		4.847					ND	
48 cis-1,2-Dichloroethene	96		4.847					ND	
49 2,2-Dichloropropane	77		4.861					ND	
50 Propionitrile	54		4.875					ND	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41		5.015					ND	
54 Tetrahydrofuran	42		5.057					ND	
53 Chlorobromomethane	128		5.057					ND	
55 Chloroform	83		5.140					ND	
56 1,1,1-Trichloroethane	97		5.294					ND	
57 Cyclohexane	56		5.350					ND	
58 1,1-Dichloropropene	75		5.420					ND	
59 Carbon tetrachloride	117		5.420					ND	
60 Isobutyl alcohol	41		5.462					ND	
61 1,2-Dichloro-1,1,2-trifluoroethane	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroethane	83		5.533					ND	
63 Benzene	78		5.587					ND	
64 1,2-Dichloroethane	62		5.629					ND	
65 Tert-amyl methyl ether	73		5.685					ND	
66 n-Heptane	43		5.825					ND	
67 n-Butanol	56		6.034					ND	
68 Trichloroethene	95		6.160					ND	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55		6.369					ND	
71 1,2-Dichloropropane	63		6.383					ND	
72 Methyl methacrylate	100		6.397					ND	
73 1,4-Dioxane	88		6.439					ND	
74 Dibromomethane	93		6.453					ND	
75 Dichlorobromomethane	83		6.609					ND	
76 2-Nitropropane	41		6.795					ND	
77 2-Chloroethyl vinyl ether	63		6.838					ND	
78 cis-1,3-Dichloropropene	75		6.988					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103					ND	
80 2,2-Dimethylpentane	57		7.251					ND	
81 2,4-Dimethylpentane	43		7.293					ND	
82 Toluene	91		7.296					ND	
84 trans-1,3-Dichloropropene	75		7.489					ND	
83 2,2,3-Trimethylbutane	57		7.502					ND	
85 Ethyl methacrylate	69		7.524					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 1,1,2-Trichloroethane	97		7.675					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164		7.768					ND	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76		7.825					ND	
91 2-Hexanone	43		7.853					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
92 3-Methylhexane	43		7.949					ND	
94 Tetrahydrothiophene	60		8.018					ND	
95 Chlorodibromomethane	129		8.032					ND	
96 Ethylene Dibromide	107		8.154					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.568					ND	
99 Chlorobenzene	112		8.604					ND	
100 1,1,1,2-Tetrachloroethane	131		8.683					ND	
101 Ethylbenzene	106		8.690					ND	
102 m-Xylene & p-Xylene	106		8.811					ND	
103 o-Xylene	106		9.176					ND	
104 Styrene	104		9.198					ND	
106 Bromoform	173		9.383					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.534					ND	
108 cis-1,4-Dichloro-2-butene	53		9.584					ND	
109 Cyclohexanone	55		9.627					ND	
110 1,1,2,2-Tetrachloroethane	83		9.827					ND	
111 Bromobenzene	156		9.855					ND	
112 trans-1,4-Dichloro-2-butene	53		9.863					ND	
113 1,2,3-Trichloropropane	110		9.891					ND	
114 N-Propylbenzene	120		9.934					ND	
115 2-Chlorotoluene	126		10.034					ND	
116 1,3,5-Trimethylbenzene	105		10.113					ND	
117 4-Chlorotoluene	126		10.156					ND	
118 tert-Butylbenzene	119		10.427					ND	
119 1,2,4-Trimethylbenzene	105		10.485					ND	
120 sec-Butylbenzene	134		10.649					ND	
121 1,3-Dichlorobenzene	146		10.778					ND	
122 4-Isopropyltoluene	119		10.799					ND	
123 1,4-Dichlorobenzene	146		10.878					ND	
124 1,2,3-Trimethylbenzene	105		10.899					ND	
125 n-Butylbenzene	91		11.207					ND	
127 1,2-Dichlorobenzene	146		11.235					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022					ND	
129 1,3,5-Trichlorobenzene	180		12.215					ND	
130 1,2,4-Trichlorobenzene	180		12.851					ND	
131 Hexachlorobutadiene	225		12.994					ND	
132 Naphthalene	128		13.123					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180		13.345					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000					ND	
136 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
144 1-Chlorohexane TIC	1		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
146 t-Amyl alcohol	1		0.000					ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
141 4-Chlorobenzotrifluoride	1		0.000					ND	
135 Pentachloroethane TIC	1		0.000					ND	
145 Ethyl acrylate	55		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95		2.000					ND	7
S 150 1,2-Dichloroethene, Total	1		0.000					ND	7
S 151 Trihalomethanes, Total	1		0.000					ND	7
S 152 Total BTEX	1		0.000					ND	7
S 153 Xylenes, Total (URS)	1		0.000					ND	7
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106		0.000					ND	7
S 156 1,3-Dichloropropene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:47

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3858.D

Injection Date: 29-Jun-2021 23:41:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

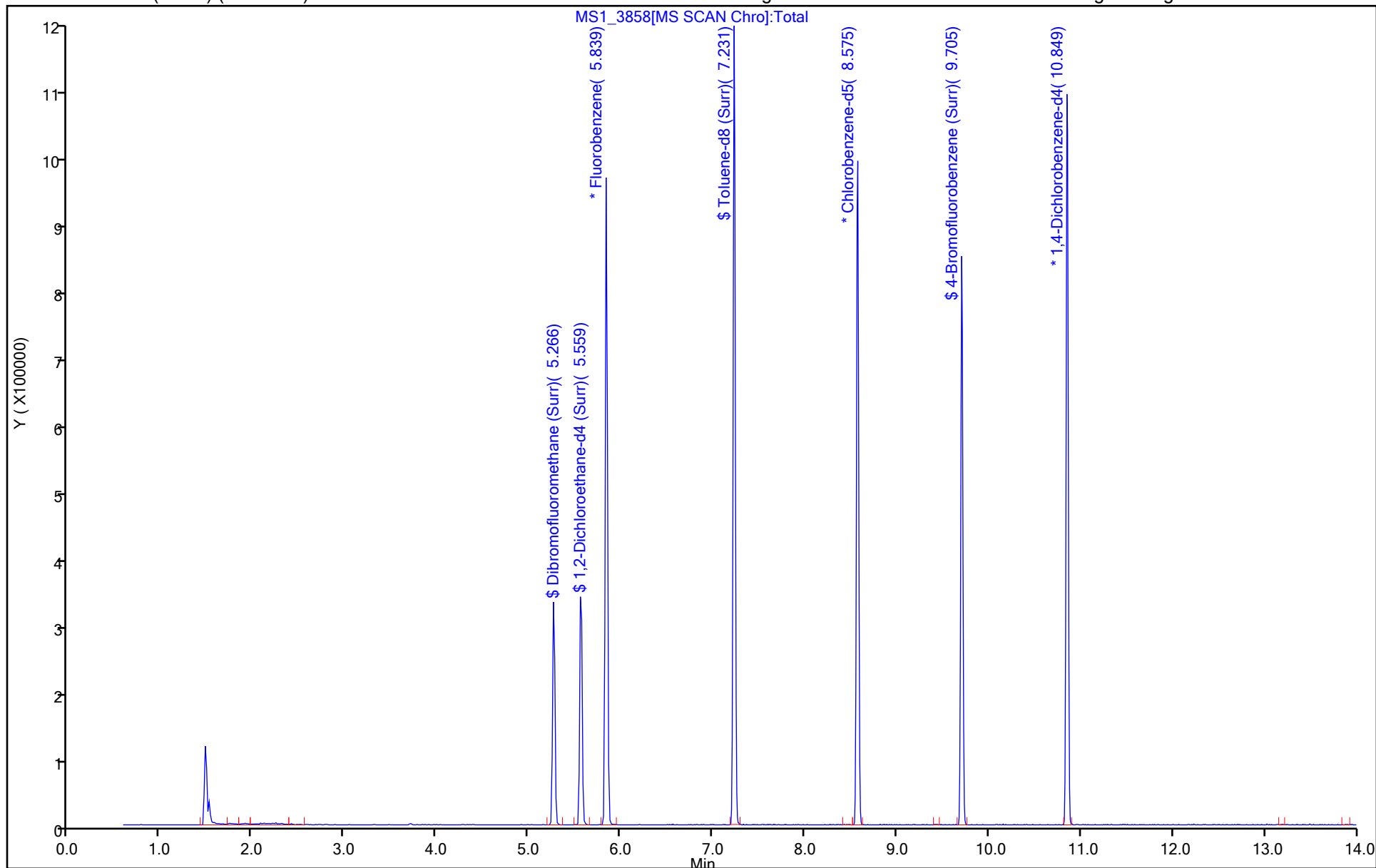
ALS Bottle#: 8

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3858.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 29-Jun-2021 23:41:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.60
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.9	95.73
\$ 7 Toluene-d8 (Surr)	50.0	49.1	98.15
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.0	93.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-541784/4

Matrix: Water Lab File ID: P6396.D

Analysis Method: 8260B Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 21:58

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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	98.7		10	1.9
107-02-8	Acrolein	239		20	2.8
107-13-1	Acrylonitrile	247		20	1.4
71-43-2	Benzene	25.9		1.0	0.16
74-97-5	Chlorobromomethane	26.3		1.0	0.10
75-27-4	Dichlorobromomethane	26.2		1.0	0.17
75-25-2	Bromoform	26.5		1.0	0.46
74-83-9	Bromomethane	31.2		2.0	0.21
78-93-3	2-Butanone (MEK)	98.0		6.0	2.0
75-15-0	Carbon disulfide	23.7		2.0	0.17
56-23-5	Carbon tetrachloride	28.8		1.0	0.19
108-90-7	Chlorobenzene	25.7		1.0	0.17
124-48-1	Chlorodibromomethane	25.6		1.0	0.17
75-00-3	Chloroethane	25.8		2.0	0.41
67-66-3	Chloroform	25.6		1.0	0.16
74-87-3	Chloromethane	24.2		2.0	0.30
107-05-1	Allyl chloride	25.0		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	25.7		5.0	0.47
74-95-3	Dibromomethane	26.1		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.1		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.3		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.5		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	20.6		3.0	0.80
75-71-8	Dichlorodifluoromethane	30.7		2.0	0.31
75-34-3	1,1-Dichloroethane	25.6		1.0	0.22
107-06-2	1,2-Dichloroethane	24.8		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	26.3		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	26.5		1.0	0.15
75-35-4	1,1-Dichloroethene	27.3		1.0	0.23
78-87-5	1,2-Dichloropropane	25.1		1.0	0.18
142-28-9	1,3-Dichloropropane	25.2		1.0	0.090
594-20-7	2,2-Dichloropropane	27.4		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	24.9		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	25.3		3.0	0.19
563-58-6	1,1-Dichloropropene	26.7		1.0	0.19
100-41-4	Ethylbenzene	26.5		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-541784/4
 Matrix: Water Lab File ID: P6396.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 21:58
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	24.8		3.0	0.86
591-78-6	2-Hexanone	98.6		5.0	1.7
74-88-4	Iodomethane	26.1		1.0	0.23
78-83-1	Isobutyl alcohol	621		110	37
75-09-2	Methylene Chloride	23.8		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	102		5.0	0.98
100-42-5	Styrene	25.9		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	26.4		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	24.9		1.0	0.21
127-18-4	Tetrachloroethene	27.8		1.0	0.20
108-88-3	Toluene	25.9		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.7		1.0	0.21
71-55-6	1,1,1-Trichloroethane	27.2		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.8		1.0	0.27
79-01-6	Trichloroethene	26.0		1.0	0.16
75-69-4	Trichlorofluoromethane	28.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	25.2		2.5	0.33
108-05-4	Vinyl acetate	50.5		3.0	0.94
75-01-4	Vinyl chloride	26.3		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	26.0		2.0	0.15
95-47-6	o-Xylene	26.0		1.0	0.19
1330-20-7	Xylenes, Total	52.0		2.0	0.19
106-93-4	1,2-Dibromoethane	25.4		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)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\VP6396.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 21:58:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:23:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.879	4.878	0.001	98	1480918	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.391	7.389	0.002	88	334309	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.607	9.606	0.001	97	477502	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.373	4.373	-0.001	92	362409	50.0	50.2	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.636	4.637	-0.001	97	456162	50.0	49.8	
\$ 6 Toluene-d8 (Surr)	98	6.124	6.125	-0.001	94	1425244	50.0	49.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.478	8.478	0.000	86	520898	50.0	47.5	
10 Dichlorodifluoromethane	85	1.544	1.535	0.009	100	149902	25.0	30.7	
11 Chloromethane	50	1.703	1.704	-0.001	99	129036	25.0	24.2	
12 Vinyl chloride	62	1.798	1.799	-0.001	99	136585	25.0	26.3	
14 Bromomethane	94	2.061	2.073	-0.012	94	87151	25.0	31.2	
15 Chloroethane	64	2.156	2.157	-0.001	99	87290	25.0	25.8	
16 Dichlorofluoromethane	67	2.325	2.326	-0.001	99	233323	25.0	25.5	
17 Trichlorofluoromethane	101	2.357	2.358	-0.001	99	206220	25.0	28.5	
19 Ethyl ether	59	2.568	2.569	-0.001	89	109351	25.0	24.1	
21 Acrolein	56	2.674	2.674	0.000	100	226547	246.9	238.9	
22 1,1-Dichloroethene	96	2.758	2.748	0.010	98	107501	25.0	27.3	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.758	2.759	-0.001	74	81311	25.0	29.4	
24 Acetone	43	2.768	2.769	-0.001	100	191461	100.0	98.7	
26 Iodomethane	142	2.874	2.875	-0.001	100	153752	25.0	26.1	
27 Carbon disulfide	76	2.927	2.928	-0.001	100	330521	25.0	23.7	
29 Methyl acetate	43	2.990	2.991	-0.001	98	231103	50.0	46.3	
30 3-Chloro-1-propene	41	3.011	3.012	-0.001	89	181145	25.0	25.0	
31 Methylene Chloride	84	3.106	3.107	-0.001	93	134989	25.0	23.8	
32 2-Methyl-2-propanol	59	3.159	3.149	0.010	99	185164	250.0	251.5	
33 Acrylonitrile	53	3.264	3.265	-0.001	98	613615	250.0	246.5	
34 Methyl tert-butyl ether	73	3.296	3.297	-0.001	95	426712	25.0	25.6	
35 trans-1,2-Dichloroethene	96	3.307	3.308	-0.001	97	128493	25.0	26.5	
36 Hexane	57	3.497	3.498	-0.001	92	154632	25.0	25.4	
38 Vinyl acetate	43	3.602	3.603	-0.001	98	655149	50.0	50.5	
39 1,1-Dichloroethane	63	3.623	3.624	-0.001	97	242021	25.0	25.6	
44 2-Butanone (MEK)	43	4.003	4.004	-0.001	99	303638	100.0	98.0	

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	4.024	4.025	-0.001	87	146069	25.0	26.3	
48 2,2-Dichloropropane	77	4.035	4.036	-0.001	89	215842	25.0	27.4	
52 Tetrahydrofuran	42	4.204	4.205	-0.001	86	96391	50.0	46.9	
53 Chlorobromomethane	128	4.204	4.205	-0.001	97	67746	25.0	26.3	
54 Chloroform	83	4.256	4.257	-0.001	96	239424	25.0	25.6	
55 1,1,1-Trichloroethane	97	4.404	4.405	-0.001	98	209484	25.0	27.2	
56 Cyclohexane	56	4.457	4.458	-0.001	91	218942	25.0	26.7	
57 1,1-Dichloropropene	75	4.510	4.511	-0.001	94	191967	25.0	26.7	
59 Carbon tetrachloride	117	4.520	4.521	-0.001	94	169102	25.0	28.8	
58 Isobutyl alcohol	41	4.531	4.532	-0.001	94	141910	625.0	621.5	
60 Benzene	78	4.657	4.658	-0.001	97	552205	25.0	25.9	
61 1,2-Dichloroethane	62	4.689	4.690	-0.001	98	202001	25.0	24.8	
66 n-Heptane	43	4.847	4.848	-0.001	90	141271	25.0	25.5	
67 Trichloroethene	95	5.153	5.154	-0.001	97	137657	25.0	26.0	
69 Methylcyclohexane	55	5.343	5.344	-0.001	92	167298	25.0	27.4	
70 1,2-Dichloropropane	63	5.354	5.355	-0.001	95	142776	25.0	25.1	
72 1,4-Dioxane	88	5.396	5.397	-0.001	94	44330	500.0	522.0	
73 Dibromomethane	93	5.428	5.429	-0.001	91	93850	25.0	26.1	
74 Dichlorobromomethane	83	5.544	5.545	-0.001	99	182788	25.0	26.2	
76 2-Chloroethyl vinyl ether	63	5.755	5.756	-0.001	93	105891	25.0	25.2	
77 cis-1,3-Dichloropropene	75	5.892	5.893	-0.001	94	226560	25.0	24.9	
78 4-Methyl-2-pentanone (MIBK)	43	5.998	5.999	-0.001	96	617487	100.0	102.1	
79 Toluene	91	6.177	6.178	-0.001	97	596125	25.0	25.9	
80 trans-1,3-Dichloropropene	75	6.356	6.357	-0.001	96	215707	25.0	25.3	
81 Ethyl methacrylate	69	6.388	6.389	-0.001	87	208087	25.0	24.8	
82 1,1,2-Trichloroethane	97	6.536	6.537	-0.001	94	122333	25.0	25.8	
83 Tetrachloroethene	164	6.620	6.621	-0.001	90	97447	25.0	27.8	
84 1,3-Dichloropropane	76	6.673	6.674	-0.001	97	226513	25.0	25.2	
85 2-Hexanone	43	6.694	6.695	-0.001	95	439499	100.0	98.6	
86 Chlorodibromomethane	129	6.874	6.874	0.000	89	120078	25.0	25.6	
88 Ethylene Dibromide	107	6.979	6.991	-0.011	97	131934	25.0	25.4	
90 Chlorobenzene	112	7.412	7.413	-0.001	92	362638	25.0	25.7	
91 1,1,1,2-Tetrachloroethane	131	7.486	7.486	0.000	92	123542	25.0	26.4	
92 Ethylbenzene	106	7.496	7.497	-0.001	99	201402	25.0	26.5	
93 m-Xylene & p-Xylene	106	7.612	7.613	-0.001	100	242543	25.0	26.0	
94 o-Xylene	106	7.971	7.972	-0.001	98	233079	25.0	26.0	
95 Styrene	104	7.982	7.982	0.000	94	407392	25.0	25.9	
96 Bromoform	173	8.161	8.172	-0.011	92	73579	25.0	26.5	
97 Isopropylbenzene	105	8.309	8.310	-0.001	97	604118	25.0	26.3	
99 Cyclohexanone	55	8.404	8.405	-0.001	92	311698	1000.0	1186.4	
100 1,1,2,2-Tetrachloroethane	83	8.594	8.595	-0.001	96	176718	25.0	24.9	
101 Bromobenzene	156	8.625	8.626	-0.001	97	143336	25.0	25.7	
102 trans-1,4-Dichloro-2-butene	53	8.636	8.637	-0.001	81	41126	25.0	20.6	
103 1,2,3-Trichloropropane	110	8.657	8.658	-0.001	88	53655	25.0	25.2	
104 N-Propylbenzene	120	8.710	8.711	-0.001	99	158300	25.0	25.9	
105 2-Chlorotoluene	126	8.805	8.806	-0.001	96	138234	25.0	25.8	
106 1,3,5-Trimethylbenzene	105	8.879	8.879	0.000	93	483106	25.0	25.8	
107 4-Chlorotoluene	126	8.921	8.922	-0.001	98	144092	25.0	25.5	
108 tert-Butylbenzene	119	9.185	9.186	-0.001	92	389627	25.0	26.1	
109 1,2,4-Trimethylbenzene	105	9.248	9.249	-0.001	98	490764	25.0	25.5	
110 sec-Butylbenzene	134	9.406	9.407	-0.001	95	111304	25.0	26.7	
111 1,3-Dichlorobenzene	146	9.533	9.534	-0.001	97	250243	25.0	25.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	9.554	9.555	-0.001	96	464194	25.0	26.1	
113 1,4-Dichlorobenzene	146	9.628	9.629	-0.001	94	256237	25.0	24.5	
115 n-Butylbenzene	91	9.955	9.956	-0.001	98	425654	25.0	26.0	
116 1,2-Dichlorobenzene	146	9.976	9.977	-0.001	95	239121	25.0	25.1	
117 1,2-Dibromo-3-Chloropropane	157	10.757	10.758	-0.001	79	32485	25.0	25.7	
119 1,2,4-Trichlorobenzene	180	11.580	11.581	-0.001	94	127052	25.0	24.7	
120 Hexachlorobutadiene	225	11.717	11.729	-0.012	93	46757	25.0	27.7	
121 Naphthalene	128	11.844	11.845	-0.001	98	428705	25.0	23.7	
122 1,2,3-Trichlorobenzene	180	12.066	12.066	0.000	94	116273	25.0	26.8	
S 139 1,2-Dichloroethene, Total (URS)	95				0		50.0	52.8	
S 142 Xylenes, Total	106				0		50.0	52.0	
S 140 Trihalomethanes, Total	1				0		100.0	103.9	
S 143 Xylenes, Total (URS)	1				0		50.0	52.0	
S 145 1,3-Dichloropropene, Total	1				0		50.0	50.2	
S 144 1,2-Dichloroethene, Total	1				0		50.0	52.8	

Reagents:

MV-MegaMainA_00052	Amount Added: 25.00	Units: uL	
MV-Gas A_00091	Amount Added: 10.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6396.D

Injection Date: 29-Jun-2021 21:58:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

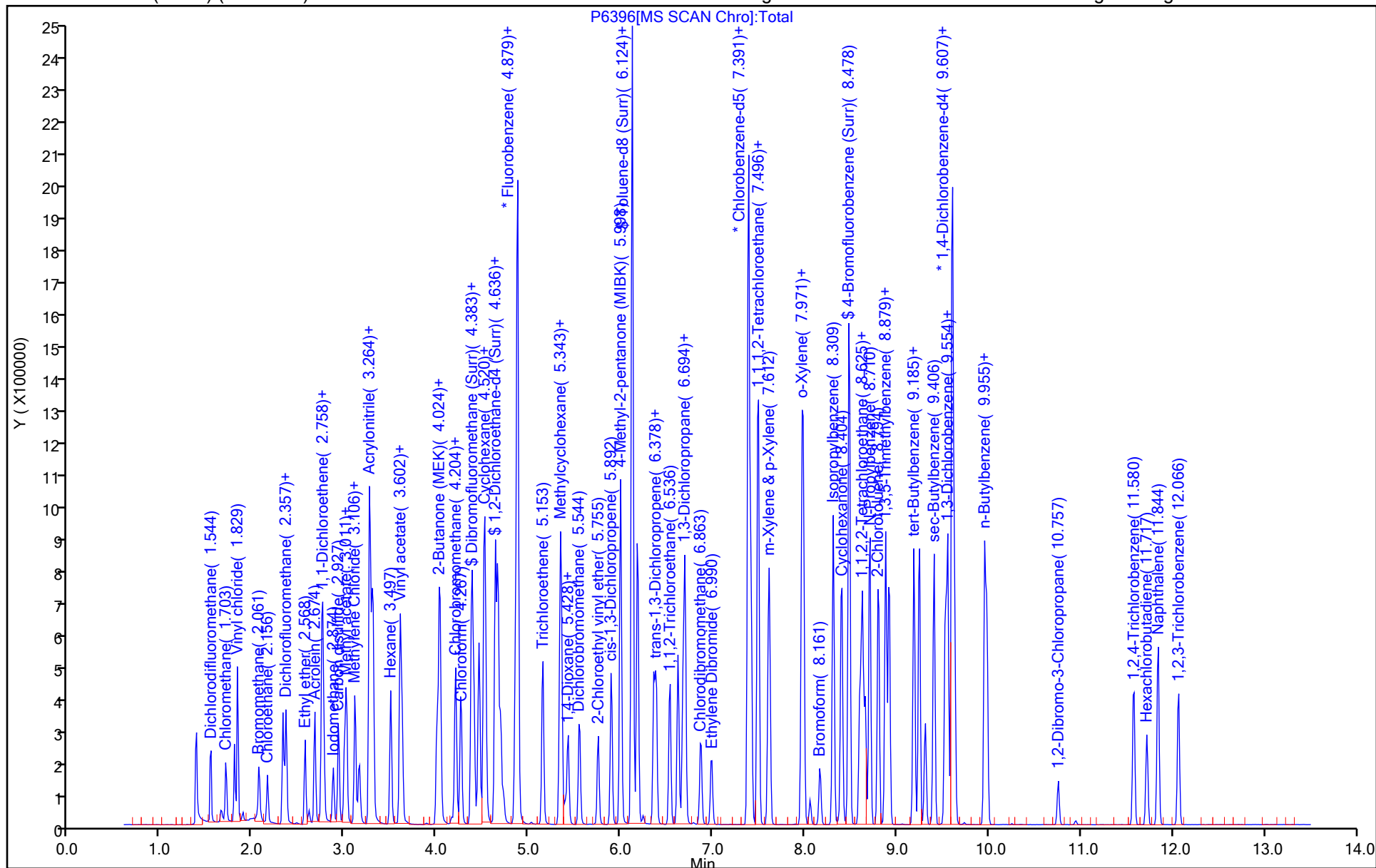
ALS Bottle#: 3

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\20210629-102808.b\IP6396.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 21:58:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:23:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.34
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.8	99.51
\$ 6 Toluene-d8 (Surr)	50.0	49.5	99.04
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.5	95.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-541784/6
 Matrix: Water Lab File ID: P6398.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:44
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	205		30	9.6
126-99-8	Chloroprene	23.9		1.0	0.21
126-98-7	Methacrylonitrile	220		10	1.6
80-62-6	Methyl methacrylate	46.8		4.0	1.1
107-12-0	Propionitrile	215		20	3.7

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)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6398.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 22:44:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.879	4.878	0.001	98	1477381	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	89	330701	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	465914	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.372	4.373	-0.001	92	362295	50.0	50.3	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.636	4.637	-0.001	98	448404	50.0	49.0	
\$ 6 Toluene-d8 (Surr)	98	6.124	6.125	-0.001	94	1397168	50.0	49.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.477	8.478	-0.001	84	509975	50.0	47.7	
13 Ethylene oxide	43		2.039				2500.0	ND	7
18 Ethanol	45	2.473	2.472	0.001	99	114556	1500.0	1106.9	
20 Propene oxide	58	2.610	2.609	0.001	96	2597720	2500.0	2106.5	
25 Isopropyl alcohol	45	2.853	2.852	0.001	98	104696	250.0	188.6	
28 Acetonitrile	41	2.969	2.968	0.001	99	202062	250.0	205.0	
40 Isopropyl ether	87	3.623	3.622	0.001	92	113024	25.0	22.9	
41 2-Chloro-1,3-butadiene	53	3.676	3.675	0.001	93	220151	25.0	23.9	
43 Tert-butyl ethyl ether	59	3.876	3.875	0.001	98	415048	25.0	22.2	
46 Ethyl acetate	43	4.013	4.013	0.000	99	290891	50.0	48.1	
49 Propionitrile	54	4.045	4.044	0.001	99	241927	250.0	214.5	
51 Methacrylonitrile	41	4.161	4.160	0.001	90	918262	250.0	220.5	
63 n-Butanol	56	4.731	4.730	0.001	52	127500	625.0	601.7	
62 Tert-amyl methyl ether	73	4.731	4.730	0.001	88	395564	25.0	22.5	
71 Methyl methacrylate	100	5.364	5.363	0.001	88	85115	50.0	46.8	
75 2-Nitropropane	41	5.712	5.712	0.000	100	70088	50.0	41.5	
87 Tetrahydrothiophene	60	6.863	6.862	0.001	92	57651	50.0	36.4	
98 cis-1,4-Dichloro-2-butene	53	8.361	8.360	0.001	87	76716	50.0	45.7	
114 1,2,3-Trimethylbenzene	105	9.649	9.648	0.001	99	478269	25.0	26.2	
118 1,3,5-Trichlorobenzene	180	10.947	10.946	0.001	96	135145	25.0	28.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MV-Supp B_00034

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:38:17

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6398.D

Injection Date: 29-Jun-2021 22:44:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: LCS

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

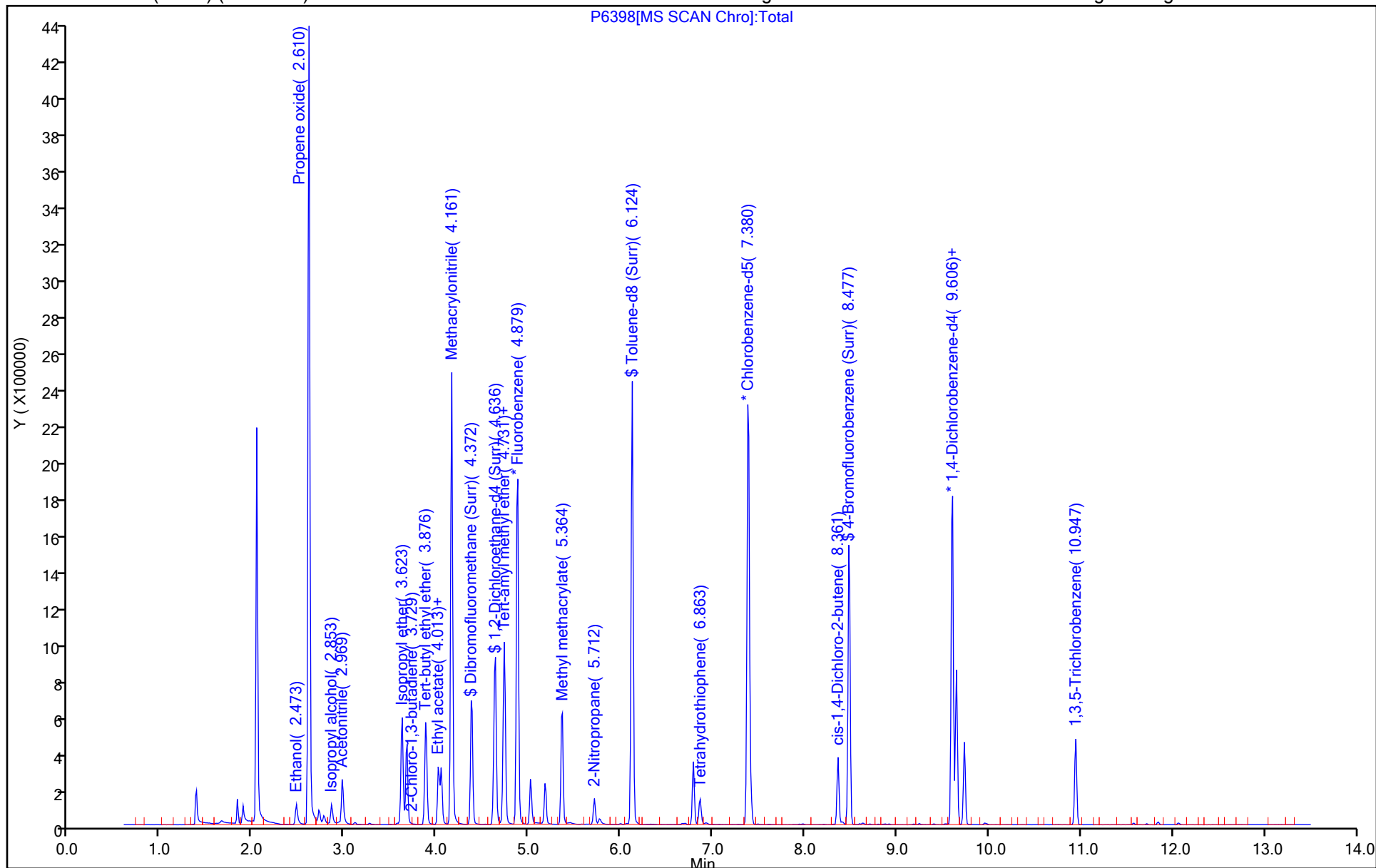
ALS Bottle#: 5

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\20210629-102808.b\IP6398.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 22:44:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.3	100.55
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.0	98.05
\$ 6 Toluene-d8 (Surr)	50.0	49.1	98.15
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-541786/4
 Matrix: Water Lab File ID: MS1_3853.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 21:55
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	82.0		10	1.9
107-02-8	Acrolein	217		20	2.8
107-13-1	Acrylonitrile	231		20	1.4
71-43-2	Benzene	26.4		1.0	0.16
74-97-5	Chlorobromomethane	25.0		1.0	0.10
75-27-4	Dichlorobromomethane	21.6		1.0	0.17
75-25-2	Bromoform	19.4		1.0	0.46
74-83-9	Bromomethane	25.3		2.0	0.21
78-93-3	2-Butanone (MEK)	81.1		6.0	2.0
75-15-0	Carbon disulfide	24.4		2.0	0.17
56-23-5	Carbon tetrachloride	23.0		1.0	0.19
108-90-7	Chlorobenzene	24.3		1.0	0.17
124-48-1	Chlorodibromomethane	21.3		1.0	0.17
75-00-3	Chloroethane	25.6		2.0	0.41
67-66-3	Chloroform	25.0		1.0	0.16
74-87-3	Chloromethane	25.1		2.0	0.30
107-05-1	Allyl chloride	24.9		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	16.9		5.0	0.47
74-95-3	Dibromomethane	24.8		1.0	0.17
95-50-1	1,2-Dichlorobenzene	27.1		1.0	0.15
541-73-1	1,3-Dichlorobenzene	26.6		1.0	0.13
106-46-7	1,4-Dichlorobenzene	25.5		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	19.1		3.0	0.80
75-71-8	Dichlorodifluoromethane	24.3		2.0	0.31
75-34-3	1,1-Dichloroethane	24.9		1.0	0.22
107-06-2	1,2-Dichloroethane	24.7		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.2		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.2		1.0	0.15
75-35-4	1,1-Dichloroethene	26.3		1.0	0.23
78-87-5	1,2-Dichloropropane	24.7		1.0	0.18
142-28-9	1,3-Dichloropropane	23.9		1.0	0.090
594-20-7	2,2-Dichloropropane	24.7		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.9		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.2		3.0	0.19
563-58-6	1,1-Dichloropropene	26.5		1.0	0.19
100-41-4	Ethylbenzene	25.0		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-541786/4
 Matrix: Water Lab File ID: MS1_3853.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 21:55
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	22.0		3.0	0.86
591-78-6	2-Hexanone	87.2		5.0	1.7
74-88-4	Iodomethane	24.6		1.0	0.23
78-83-1	Isobutyl alcohol	447		110	37
75-09-2	Methylene Chloride	25.7		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	93.2		5.0	0.98
100-42-5	Styrene	24.8		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.7		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	20.3		1.0	0.21
127-18-4	Tetrachloroethene	28.9		1.0	0.20
108-88-3	Toluene	25.8		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.8		1.0	0.21
71-55-6	1,1,1-Trichloroethane	23.1		1.0	0.16
79-00-5	1,1,2-Trichloroethane	23.2		1.0	0.27
79-01-6	Trichloroethene	23.4		1.0	0.16
75-69-4	Trichlorofluoromethane	27.1		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.2		2.5	0.33
108-05-4	Vinyl acetate	47.3		3.0	0.94
75-01-4	Vinyl chloride	30.0		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	25.3		2.0	0.15
95-47-6	o-Xylene	25.9		1.0	0.19
1330-20-7	Xylenes, Total	51.2		2.0	0.19
106-93-4	1,2-Dibromoethane	24.2		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)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3853.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 21:55:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:10:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	734265	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	161086	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	255897	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	192580	50.0	49.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	251455	50.0	48.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	684112	50.0	49.0	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	268870	50.0	48.4	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	80021	25.0	24.3	
12 Chloromethane	50	1.914	1.914	0.000	99	80098	25.0	25.1	
13 Vinyl chloride	62	1.998	1.998	0.000	99	77140	25.0	30.0	
15 Bromomethane	94	2.361	2.361	0.000	93	50233	25.0	25.3	
16 Chloroethane	64	2.473	2.473	0.000	99	50862	25.0	25.6	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	131961	25.0	26.3	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	114673	25.0	27.1	
20 Ethyl ether	59	3.003	3.004	-0.001	94	50081	25.0	24.2	
22 Acrolein	56	3.143	3.143	0.000	99	88204	246.9	217.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	96	55839	25.0	26.3	
24 112TCTFE	151	3.255	3.255	0.000	93	41051	25.0	29.3	
25 Acetone	43	3.269	3.269	0.000	99	71814	100.0	82.0	
26 Iodomethane	142	3.395	3.395	0.000	99	77847	25.0	24.6	
28 Carbon disulfide	76	3.450	3.464	-0.014	100	174233	25.0	24.4	
30 Methyl acetate	43	3.576	3.576	0.000	98	83877	50.0	41.8	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	106297	25.0	24.9	
32 Methylene Chloride	84	3.716	3.716	0.000	95	67848	25.0	25.7	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	97	47398	250.0	185.2	
34 Acrylonitrile	53	3.911	3.911	0.000	98	234156	250.0	230.7	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	175063	25.0	23.4	
36 trans-1,2-Dichloroethene	96	3.967	3.953	0.014	96	62433	25.0	24.2	
37 Hexane	57	4.205	4.205	0.000	95	86523	25.0	25.7	
39 Vinyl acetate	43	4.344	4.344	0.000	98	272547	50.0	47.3	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	96	124038	25.0	24.9	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	103133	100.0	81.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	86	68372	25.0	24.2	
49 2,2-Dichloropropane	77	4.861	4.861	0.000	90	108943	25.0	24.7	
54 Tetrahydrofuran	42	5.057	5.057	-0.001	86	35031	50.0	38.6	
53 Chlorobromomethane	128	5.057	5.057	-0.001	97	31685	25.0	25.0	
55 Chloroform	83	5.140	5.140	0.000	95	129351	25.0	25.0	
56 1,1,1-Trichloroethane	97	5.294	5.294	0.000	97	105115	25.0	23.1	
57 Cyclohexane	56	5.350	5.350	0.000	95	115650	25.0	25.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	97137	25.0	26.5	
59 Carbon tetrachloride	117	5.420	5.420	0.000	83	76948	25.0	23.0	
60 Isobutyl alcohol	41	5.462	5.462	0.000	92	40958	625.0	447.4	
63 Benzene	78	5.587	5.587	0.000	98	268485	25.0	26.4	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	105668	25.0	24.7	
66 n-Heptane	43	5.825	5.825	0.000	93	86099	25.0	28.6	
68 Trichloroethene	95	6.160	6.160	0.000	94	69825	25.0	23.4	
70 Methylcyclohexane	55	6.355	6.369	-0.014	95	95912	25.0	26.8	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	88	68333	25.0	24.7	
73 1,4-Dioxane	88	6.425	6.439	-0.014	97	14563	500.0	474.9	
74 Dibromomethane	93	6.453	6.453	0.000	89	42959	25.0	24.8	
75 Dichlorobromomethane	83	6.609	6.609	0.000	98	81869	25.0	21.6	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	92	37597	25.0	22.2	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	99732	25.0	22.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.103	-0.001	98	213179	100.0	93.2	
82 Toluene	91	7.296	7.296	0.000	96	261169	25.0	25.8	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	93859	25.0	23.2	
85 Ethyl methacrylate	69	7.517	7.524	-0.007	91	70544	25.0	22.0	
87 1,1,2-Trichloroethane	97	7.674	7.675	-0.001	94	49549	25.0	23.2	
89 Tetrachloroethene	164	7.767	7.768	-0.001	92	48223	25.0	28.9	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	96	97556	25.0	23.9	
91 2-Hexanone	43	7.853	7.853	0.000	98	147643	100.0	87.2	
95 Chlorodibromomethane	129	8.032	8.032	0.000	91	51391	25.0	21.3	
96 Ethylene Dibromide	107	8.146	8.154	-0.008	96	56164	25.0	24.2	
99 Chlorobenzene	112	8.604	8.604	0.000	91	160038	25.0	24.3	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	88	55061	25.0	23.7	
101 Ethylbenzene	106	8.690	8.690	0.000	100	87432	25.0	25.0	
102 m-Xylene & p-Xylene	106	8.804	8.811	-0.007	99	111214	25.0	25.3	
103 o-Xylene	106	9.176	9.176	0.000	98	106537	25.0	25.9	
104 Styrene	104	9.197	9.198	-0.001	92	186131	25.0	24.8	
106 Bromoform	173	9.383	9.383	0.000	91	30003	25.0	19.4	
107 Isopropylbenzene	105	9.526	9.534	-0.008	97	290246	25.0	25.9	
109 Cyclohexanone	55	9.619	9.627	-0.008	96	110558	1000.0	612.6	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	63713	25.0	20.3	
111 Bromobenzene	156	9.855	9.855	0.000	98	65862	25.0	25.9	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.863	-0.001	73	21374	25.0	19.1	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	86	20145	25.0	23.2	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	82047	25.0	26.4	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	65157	25.0	25.6	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	255306	25.0	25.5	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	72628	25.0	25.9	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	209202	25.0	25.5	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	252743	25.0	24.7	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	57927	25.0	24.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	96	132226	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
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	257551	25.0	25.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	132981	25.0	25.5	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	245786	25.0	25.1	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	95	126724	25.0	27.1	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	10846	25.0	16.9	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	94	75933	25.0	24.8	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	93	28789	25.0	27.4	
132 Naphthalene	128	13.123	13.123	0.000	97	192276	25.0	21.2	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	65676	25.0	23.5	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	48.5	
S 150 1,2-Dichloroethene, Total	1				0		50.0	48.5	
S 151 Trihalomethanes, Total	1				0		100.0	87.4	
S 153 Xylenes, Total (URS)	1				0		50.0	51.2	
S 155 Xylenes, Total	106				0		50.0	51.2	
S 156 1,3-Dichloropropene, Total	1				0		50.0	46.1	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:40

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3853.D

Injection Date: 29-Jun-2021 21:55:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

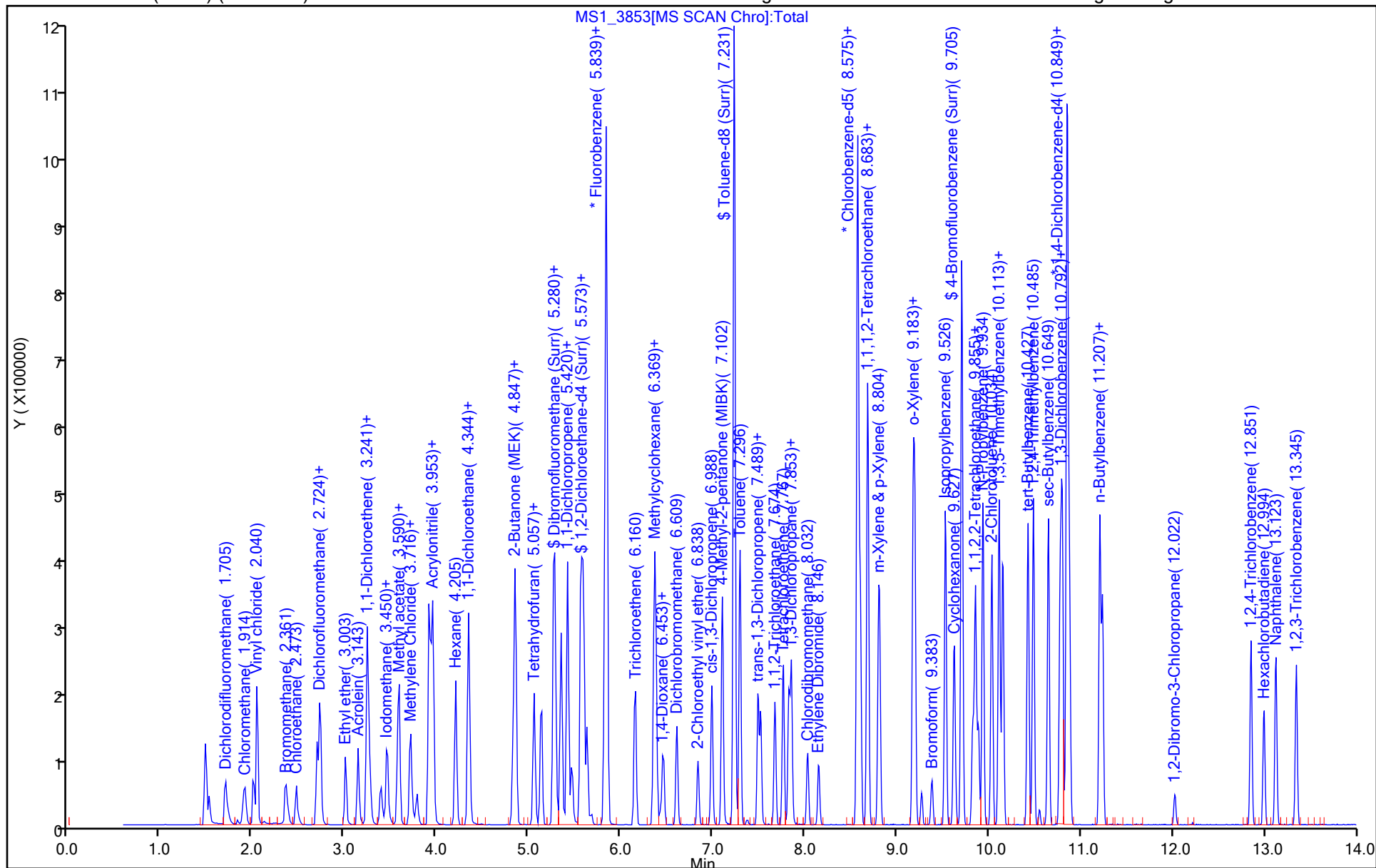
ALS Bottle#: 3

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3853.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 21:55:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:10:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.5	98.96
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.2	96.45
\$ 7 Toluene-d8 (Surr)	50.0	49.0	98.05
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.4	96.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-541786/6
 Matrix: Water Lab File ID: MS1_3855.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:37
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	235		30	9.6
126-99-8	Chloroprene	24.6		1.0	0.21
126-98-7	Methacrylonitrile	247		10	1.6
80-62-6	Methyl methacrylate	47.7		4.0	1.1
107-12-0	Propionitrile	231		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)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	91		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3855.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 22:37:30 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_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	739735	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	158583	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	262363	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	191320	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	250020	50.0	47.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	669218	50.0	48.7	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	83	260173	50.0	45.7	
14 Ethylene oxide	43	2.319	2.319	0.000	100	368406	2500.0	2568.6	
19 Ethanol	45	2.906	2.892	0.014	99	43882	1500.0	1347.3	
21 Propene oxide	58	3.059	3.059	0.000	84	1104016	2500.0	2497.8	
27 Isopropyl alcohol	45	3.394	3.395	-0.001	97	31954	250.0	195.4	
29 Acetonitrile	41	3.534	3.534	0.000	99	82769	250.0	235.2	
41 Isopropyl ether	87	4.372	4.372	0.000	93	48266	25.0	24.6	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	112852	25.0	24.6	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	184580	25.0	24.5	
47 Ethyl acetate	43	4.847	4.847	0.000	100	100231	50.0	52.1	
50 Propionitrile	54	4.875	4.875	0.000	99	80516	250.0	230.8	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	347585	250.0	246.8	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	83	154585	25.0	23.6	
67 n-Butanol	56	6.034	6.034	0.000	92	24762	625.0	409.0	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	27212	50.0	47.7	
76 2-Nitropropane	41	6.795	6.795	0.000	93	18031	50.0	25.1	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	21924	50.0	32.0	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	89	41544	50.0	32.4	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	249093	25.0	25.0	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	80277	25.0	26.3	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00034

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:44

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3855.D

Injection Date: 29-Jun-2021 22:37:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCS

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

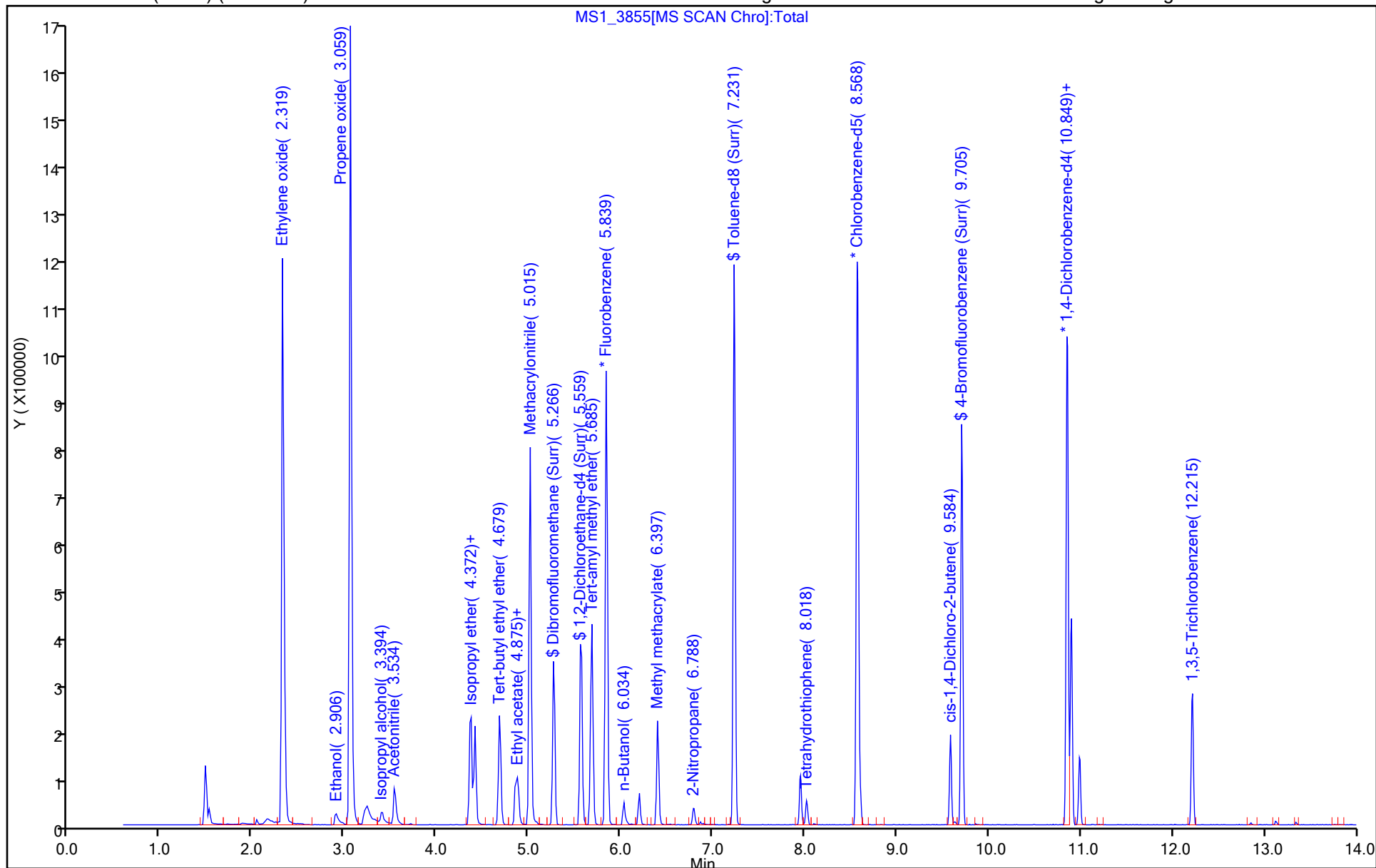
ALS Bottle#: 5

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3855.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Jun-2021 22:37:30 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_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.58
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.19
\$ 7 Toluene-d8 (Surr)	50.0	48.7	97.43
\$ 8 4-Bromofluorobenzene (Surr)	50.0	45.7	91.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-541784/5
 Matrix: Water Lab File ID: P6397.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:21
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	95.8		10	1.9
107-02-8	Acrolein	238		20	2.8
107-13-1	Acrylonitrile	243		20	1.4
71-43-2	Benzene	25.5		1.0	0.16
74-97-5	Chlorobromomethane	26.2		1.0	0.10
75-27-4	Dichlorobromomethane	25.7		1.0	0.17
75-25-2	Bromoform	26.7		1.0	0.46
74-83-9	Bromomethane	29.4		2.0	0.21
78-93-3	2-Butanone (MEK)	94.5		6.0	2.0
75-15-0	Carbon disulfide	23.2		2.0	0.17
56-23-5	Carbon tetrachloride	27.5		1.0	0.19
108-90-7	Chlorobenzene	25.0		1.0	0.17
124-48-1	Chlorodibromomethane	25.4		1.0	0.17
75-00-3	Chloroethane	25.9		2.0	0.41
67-66-3	Chloroform	25.3		1.0	0.16
74-87-3	Chloromethane	23.4		2.0	0.30
107-05-1	Allyl chloride	23.5		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	24.5		5.0	0.47
74-95-3	Dibromomethane	25.8		1.0	0.17
95-50-1	1,2-Dichlorobenzene	24.2		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.5		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	19.1		3.0	0.80
75-71-8	Dichlorodifluoromethane	30.3		2.0	0.31
75-34-3	1,1-Dichloroethane	25.2		1.0	0.22
107-06-2	1,2-Dichloroethane	24.4		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	25.6		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	26.2		1.0	0.15
75-35-4	1,1-Dichloroethene	26.2		1.0	0.23
78-87-5	1,2-Dichloropropane	24.5		1.0	0.18
142-28-9	1,3-Dichloropropane	24.6		1.0	0.090
594-20-7	2,2-Dichloropropane	27.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	24.3		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.9		3.0	0.19
563-58-6	1,1-Dichloropropene	26.0		1.0	0.19
100-41-4	Ethylbenzene	25.4		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-541784/5
 Matrix: Water Lab File ID: P6397.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:21
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	24.3		3.0	0.86
591-78-6	2-Hexanone	96.8		5.0	1.7
74-88-4	Iodomethane	26.3		1.0	0.23
78-83-1	Isobutyl alcohol	623		110	37
75-09-2	Methylene Chloride	23.5		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	99.9		5.0	0.98
100-42-5	Styrene	25.3		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	25.6		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	23.8		1.0	0.21
127-18-4	Tetrachloroethene	26.9		1.0	0.20
108-88-3	Toluene	25.5		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.3		1.0	0.21
71-55-6	1,1,1-Trichloroethane	26.6		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.7		1.0	0.27
79-01-6	Trichloroethene	25.6		1.0	0.16
75-69-4	Trichlorofluoromethane	27.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	24.2		2.5	0.33
108-05-4	Vinyl acetate	51.1		3.0	0.94
75-01-4	Vinyl chloride	25.3		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	25.0		2.0	0.15
95-47-6	o-Xylene	25.1		1.0	0.19
1330-20-7	Xylenes, Total	50.1		2.0	0.19
106-93-4	1,2-Dibromoethane	24.7		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)	99		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_P\20210629-102808.b\6397.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 22:21:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1454342	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	88	330842	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	97	480352	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.372	4.373	-0.001	91	362411	50.0	51.1	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	97	447035	50.0	49.7	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1414076	50.0	49.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.477	8.478	-0.001	85	522679	50.0	47.4	
10 Dichlorodifluoromethane	85	1.533	1.535	-0.002	100	145368	25.0	30.3	
11 Chloromethane	50	1.702	1.704	-0.002	99	122624	25.0	23.4	
12 Vinyl chloride	62	1.797	1.799	-0.002	99	129372	25.0	25.3	
14 Bromomethane	94	2.061	2.073	-0.012	93	80964	25.0	29.4	
15 Chloroethane	64	2.156	2.157	-0.001	99	85858	25.0	25.9	
16 Dichlorofluoromethane	67	2.324	2.326	-0.002	99	222511	25.0	24.8	
17 Trichlorofluoromethane	101	2.356	2.358	-0.002	100	195266	25.0	27.5	
19 Ethyl ether	59	2.567	2.569	-0.002	90	110209	25.0	24.7	
21 Acrolein	56	2.673	2.674	-0.001	99	221239	246.9	237.5	
22 1,1-Dichloroethene	96	2.746	2.748	-0.002	98	101254	25.0	26.2	
23 1,1,2-Trichloro-1,2,2-trifluoro	151	2.757	2.759	-0.002	74	77105	25.0	28.4	
24 Acetone	43	2.768	2.769	-0.001	100	182336	100.0	95.8	
26 Iodomethane	142	2.873	2.875	-0.002	99	152038	25.0	26.3	
27 Carbon disulfide	76	2.926	2.928	-0.002	100	317508	25.0	23.2	
29 Methyl acetate	43	2.989	2.991	-0.002	98	226144	50.0	46.1	
30 3-Chloro-1-propene	41	3.010	3.012	-0.002	88	167684	25.0	23.5	
31 Methylene Chloride	84	3.105	3.107	-0.002	91	131359	25.0	23.5	
32 2-Methyl-2-propanol	59	3.158	3.149	0.009	99	179169	250.0	247.8	
33 Acrylonitrile	53	3.264	3.265	-0.001	98	594706	250.0	243.3	
34 Methyl tert-butyl ether	73	3.295	3.297	-0.002	95	418455	25.0	25.6	
35 trans-1,2-Dichloroethene	96	3.306	3.308	-0.002	98	124908	25.0	26.2	
36 Hexane	57	3.496	3.498	-0.002	91	148776	25.0	24.7	
38 Vinyl acetate	43	3.601	3.603	-0.002	98	651432	50.0	51.1	
39 1,1-Dichloroethane	63	3.622	3.624	-0.002	97	233567	25.0	25.2	
44 2-Butanone (MEK)	43	4.002	4.004	-0.002	99	287536	100.0	94.5	
47 cis-1,2-Dichloroethene	96	4.023	4.025	-0.002	87	140008	25.0	25.6	

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	4.034	4.036	-0.002	88	208412	25.0	27.0	
52 Tetrahydrofuran	42	4.203	4.205	-0.002	85	93411	50.0	46.3	
53 Chlorobromomethane	128	4.203	4.205	-0.002	97	66331	25.0	26.2	
54 Chloroform	83	4.256	4.257	-0.001	96	233011	25.0	25.3	
55 1,1,1-Trichloroethane	97	4.403	4.405	-0.002	98	201105	25.0	26.6	
56 Cyclohexane	56	4.456	4.458	-0.002	91	207773	25.0	25.8	
57 1,1-Dichloropropene	75	4.509	4.511	-0.002	94	183540	25.0	26.0	
59 Carbon tetrachloride	117	4.519	4.521	-0.002	96	158423	25.0	27.5	
58 Isobutyl alcohol	41	4.530	4.532	-0.002	94	139604	625.0	622.5	
60 Benzene	78	4.667	4.658	0.009	97	535233	25.0	25.5	
61 1,2-Dichloroethane	62	4.688	4.690	-0.002	97	194996	25.0	24.4	
66 n-Heptane	43	4.846	4.848	-0.002	91	133914	25.0	24.6	
67 Trichloroethene	95	5.153	5.154	-0.002	96	134210	25.0	25.6	
69 Methylcyclohexane	55	5.342	5.344	-0.002	91	158775	25.0	26.5	
70 1,2-Dichloropropane	63	5.353	5.355	-0.002	94	136681	25.0	24.5	
72 1,4-Dioxane	88	5.395	5.397	-0.002	92	44437	500.0	532.8	
73 Dibromomethane	93	5.427	5.429	-0.002	91	91108	25.0	25.8	
74 Dichlorobromomethane	83	5.543	5.545	-0.002	99	176252	25.0	25.7	
76 2-Chloroethyl vinyl ether	63	5.754	5.756	-0.002	92	102735	25.0	24.9	
77 cis-1,3-Dichloropropene	75	5.891	5.893	-0.002	94	219103	25.0	24.3	
78 4-Methyl-2-pentanone (MIBK)	43	5.997	5.999	-0.002	97	593420	100.0	99.9	
79 Toluene	91	6.176	6.178	-0.002	98	576774	25.0	25.5	
80 trans-1,3-Dichloropropene	75	6.356	6.357	-0.001	96	208689	25.0	24.9	
81 Ethyl methacrylate	69	6.377	6.389	-0.012	88	201651	25.0	24.3	
82 1,1,2-Trichloroethane	97	6.535	6.537	-0.002	94	120044	25.0	25.7	
83 Tetrachloroethene	164	6.619	6.621	-0.002	91	93321	25.0	26.9	
84 1,3-Dichloropropane	76	6.672	6.674	-0.002	96	218769	25.0	24.6	
85 2-Hexanone	43	6.693	6.695	-0.002	95	427004	100.0	96.8	
86 Chlorodibromomethane	129	6.873	6.874	-0.001	90	117820	25.0	25.4	
88 Ethylene Dibromide	107	6.978	6.991	-0.012	97	127222	25.0	24.7	
90 Chlorobenzene	112	7.411	7.413	-0.002	91	348462	25.0	25.0	
91 1,1,1,2-Tetrachloroethane	131	7.485	7.486	-0.001	92	118397	25.0	25.6	
92 Ethylbenzene	106	7.495	7.497	-0.002	99	191497	25.0	25.4	
93 m-Xylene & p-Xylene	106	7.611	7.613	-0.002	100	230861	25.0	25.0	
94 o-Xylene	106	7.970	7.972	-0.002	96	222716	25.0	25.1	
95 Styrene	104	7.981	7.982	-0.001	94	394317	25.0	25.3	
96 Bromoform	173	8.160	8.172	-0.012	91	73242	25.0	26.7	
97 Isopropylbenzene	105	8.308	8.310	-0.002	97	573386	25.0	24.8	
99 Cyclohexanone	55	8.403	8.405	-0.002	93	304879	1000.0	1172.6	
100 1,1,2,2-Tetrachloroethane	83	8.593	8.595	-0.002	95	170517	25.0	23.8	
101 Bromobenzene	156	8.624	8.626	-0.002	98	138242	25.0	24.7	
102 trans-1,4-Dichloro-2-butene	53	8.635	8.637	-0.002	80	38329	25.0	19.1	
103 1,2,3-Trichloropropane	110	8.656	8.658	-0.002	85	51859	25.0	24.2	
104 N-Propylbenzene	120	8.709	8.711	-0.002	99	154145	25.0	25.0	
105 2-Chlorotoluene	126	8.804	8.806	-0.002	96	135889	25.0	25.2	
106 1,3,5-Trimethylbenzene	105	8.878	8.879	-0.001	93	469712	25.0	25.0	
107 4-Chlorotoluene	126	8.920	8.922	-0.002	98	138757	25.0	24.4	
108 tert-Butylbenzene	119	9.184	9.186	-0.002	93	383024	25.0	25.5	
109 1,2,4-Trimethylbenzene	105	9.247	9.249	-0.002	98	469375	25.0	24.3	
110 sec-Butylbenzene	134	9.405	9.407	-0.002	95	109317	25.0	26.1	
111 1,3-Dichlorobenzene	146	9.532	9.534	-0.002	97	243923	25.0	24.5	
112 4-Isopropyltoluene	119	9.553	9.555	-0.002	96	451065	25.0	25.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
113 1,4-Dichlorobenzene	146	9.627	9.629	-0.002	95	250625	25.0	23.8	
115 n-Butylbenzene	91	9.954	9.956	-0.002	98	414032	25.0	25.2	
116 1,2-Dichlorobenzene	146	9.975	9.977	-0.002	95	232402	25.0	24.2	
117 1,2-Dibromo-3-Chloropropane	157	10.756	10.758	-0.002	79	31070	25.0	24.5	
119 1,2,4-Trichlorobenzene	180	11.579	11.581	-0.002	94	126044	25.0	24.3	
120 Hexachlorobutadiene	225	11.716	11.729	-0.013	92	44274	25.0	26.1	
121 Naphthalene	128	11.843	11.845	-0.002	98	426740	25.0	23.4	
122 1,2,3-Trichlorobenzene	180	12.065	12.066	-0.001	94	114319	25.0	26.2	
S 139 1,2-Dichloroethene, Total (URS)	95				0		50.0	51.9	
S 142 Xylenes, Total	106				0		50.0	50.1	
S 140 Trihalomethanes, Total	1				0		100.0	103.1	
S 143 Xylenes, Total (URS)	1				0		50.0	50.1	
S 145 1,3-Dichloropropene, Total	1				0		50.0	49.2	
S 144 1,2-Dichloroethene, Total	1				0		50.0	51.9	

Reagents:

MV-MegaMainA_00052	Amount Added: 25.00	Units: uL	
MV-Gas A_00091	Amount Added: 10.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6397.D

Injection Date: 29-Jun-2021 22:21:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

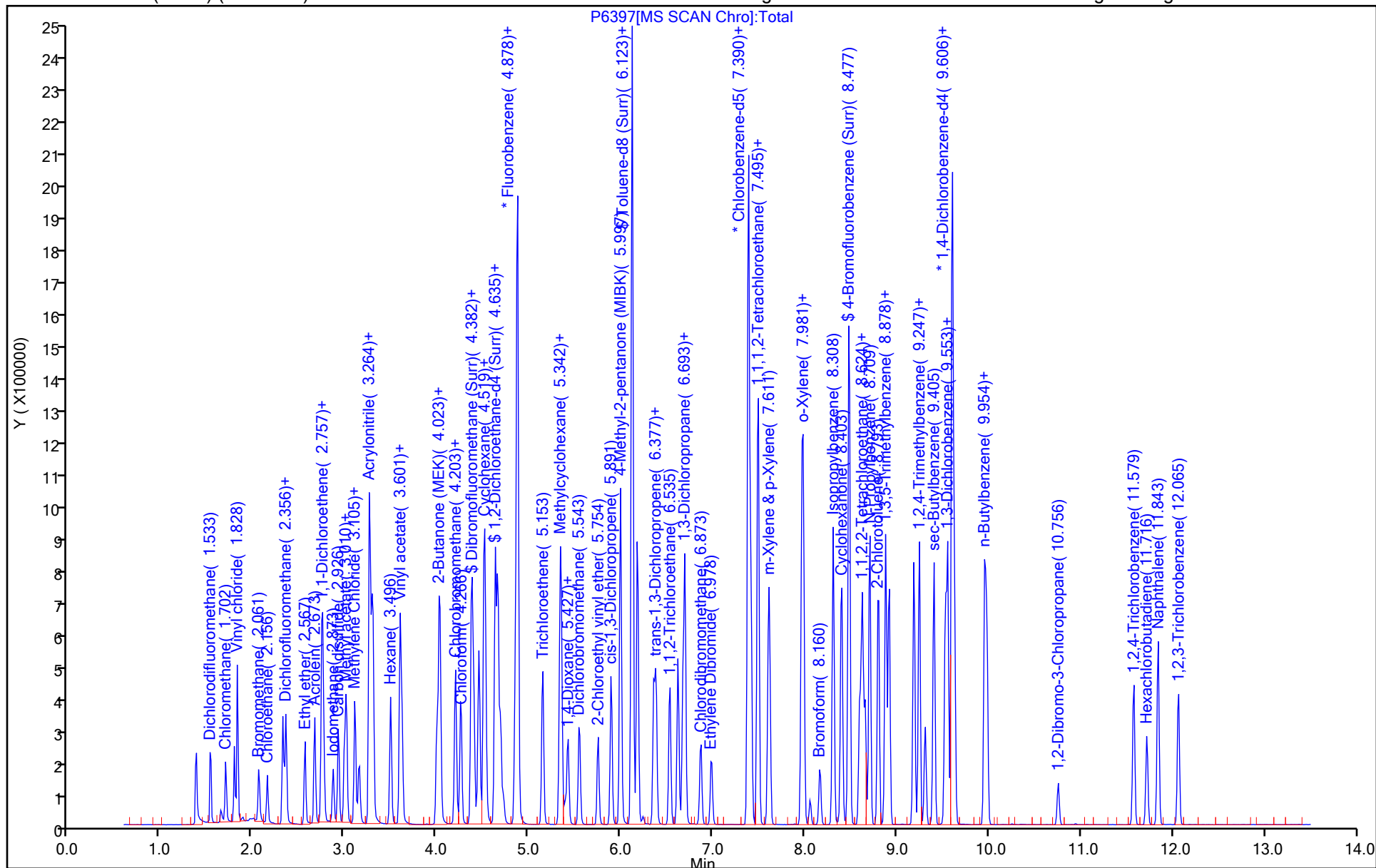
ALS Bottle#: 4

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\20210629-102808.b\IP6397.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 22:21:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	51.1	102.18
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.7	99.30
\$ 6 Toluene-d8 (Surr)	50.0	49.6	99.30
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.4	94.85

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-541784/7
 Matrix: Water Lab File ID: P6399.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	202		30	9.6
126-99-8	Chloroprene	23.6		1.0	0.21
126-98-7	Methacrylonitrile	217		10	1.6
80-62-6	Methyl methacrylate	47.4		4.0	1.1
107-12-0	Propionitrile	211		20	3.7

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)	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\20210629-102808.b\VP6399.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 23:07:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\VP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.877	4.878	-0.001	98	1487592	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	89	335384	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	463713	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.381	4.373	0.008	92	362101	50.0	49.9	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.634	4.637	-0.003	99	457288	50.0	49.7	
\$ 6 Toluene-d8 (Surr)	98	6.122	6.125	-0.003	94	1414338	50.0	49.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	84	513796	50.0	48.3	
13 Ethylene oxide	43		2.039				2500.0	ND	7
18 Ethanol	45	2.471	2.472	-0.001	99	118692	1500.0	1139.0	
20 Propene oxide	58	2.608	2.609	-0.001	96	2707801	2500.0	2187.1	
25 Isopropyl alcohol	45	2.851	2.852	-0.001	98	108128	250.0	193.4	
28 Acetonitrile	41	2.978	2.968	0.010	99	200213	250.0	201.7	
40 Isopropyl ether	87	3.621	3.622	-0.001	92	114396	25.0	23.0	
41 2-Chloro-1,3-butadiene	53	3.674	3.675	-0.001	93	218715	25.0	23.6	
43 Tert-butyl ethyl ether	59	3.875	3.875	0.000	98	418903	25.0	22.3	
46 Ethyl acetate	43	4.022	4.013	0.009	99	293941	50.0	48.3	
49 Propionitrile	54	4.043	4.044	-0.001	99	240064	250.0	211.4	
51 Methacrylonitrile	41	4.159	4.160	-0.001	90	911873	250.0	217.4	
63 n-Butanol	56	4.729	4.730	-0.001	52	127315	625.0	596.7	
62 Tert-amyl methyl ether	73	4.729	4.730	-0.001	89	400602	25.0	22.7	
71 Methyl methacrylate	100	5.363	5.363	-0.001	88	86850	50.0	47.4	
75 2-Nitropropane	41	5.711	5.712	-0.001	99	70944	50.0	41.7	
87 Tetrahydrothiophene	60	6.861	6.862	-0.001	92	58582	50.0	36.4	
98 cis-1,4-Dichloro-2-butene	53	8.360	8.360	0.000	88	75406	50.0	45.2	
114 1,2,3-Trimethylbenzene	105	9.647	9.648	-0.001	99	476347	25.0	26.2	
118 1,3,5-Trichlorobenzene	180	10.945	10.946	-0.001	95	135197	25.0	28.2	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MV-Supp B_00034

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6399.D

Injection Date: 29-Jun-2021 23:07:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: LCSD

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

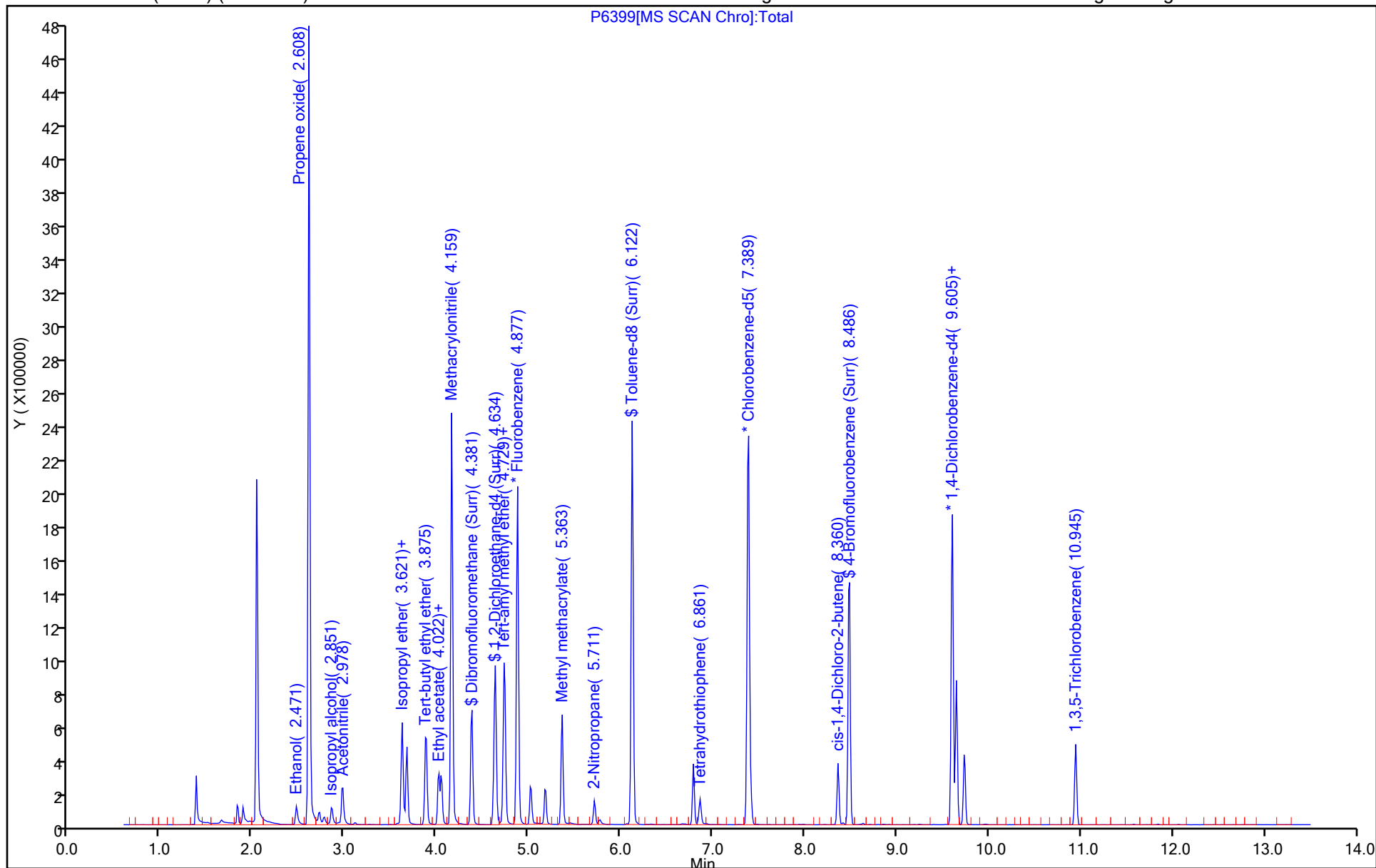
ALS Bottle#: 6

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\20210629-102808.b\IP6399.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 23:07:30 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\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:38:11 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.81
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.7	99.31
\$ 6 Toluene-d8 (Surr)	50.0	49.0	97.97
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.3	96.58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-541786/5
 Matrix: Water Lab File ID: MS1_3854.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:16
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	75.0		10	1.9
107-02-8	Acrolein	199		20	2.8
107-13-1	Acrylonitrile	214		20	1.4
71-43-2	Benzene	24.5		1.0	0.16
74-97-5	Chlorobromomethane	22.9		1.0	0.10
75-27-4	Dichlorobromomethane	21.0		1.0	0.17
75-25-2	Bromoform	18.3		1.0	0.46
74-83-9	Bromomethane	23.6		2.0	0.21
78-93-3	2-Butanone (MEK)	76.8		6.0	2.0
75-15-0	Carbon disulfide	22.6		2.0	0.17
56-23-5	Carbon tetrachloride	21.6		1.0	0.19
108-90-7	Chlorobenzene	24.6		1.0	0.17
124-48-1	Chlorodibromomethane	20.7		1.0	0.17
75-00-3	Chloroethane	23.3		2.0	0.41
67-66-3	Chloroform	22.5		1.0	0.16
74-87-3	Chloromethane	22.5		2.0	0.30
107-05-1	Allyl chloride	24.6		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	17.5		5.0	0.47
74-95-3	Dibromomethane	23.2		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.0		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.2		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	17.7		3.0	0.80
75-71-8	Dichlorodifluoromethane	22.3		2.0	0.31
75-34-3	1,1-Dichloroethane	22.9		1.0	0.22
107-06-2	1,2-Dichloroethane	24.3		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.6		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	21.7		1.0	0.15
75-35-4	1,1-Dichloroethene	23.4		1.0	0.23
78-87-5	1,2-Dichloropropane	23.9		1.0	0.18
142-28-9	1,3-Dichloropropane	23.3		1.0	0.090
594-20-7	2,2-Dichloropropane	23.1		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	23.1		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	21.6		3.0	0.19
563-58-6	1,1-Dichloropropene	23.7		1.0	0.19
100-41-4	Ethylbenzene	24.3		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-541786/5
 Matrix: Water Lab File ID: MS1_3854.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:16
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	22.4		3.0	0.86
591-78-6	2-Hexanone	81.7		5.0	1.7
74-88-4	Iodomethane	22.9		1.0	0.23
78-83-1	Isobutyl alcohol	439		110	37
75-09-2	Methylene Chloride	24.1		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	88.7		5.0	0.98
100-42-5	Styrene	25.3		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.2		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	20.0		1.0	0.21
127-18-4	Tetrachloroethene	27.5		1.0	0.20
108-88-3	Toluene	24.2		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.6		1.0	0.21
71-55-6	1,1,1-Trichloroethane	21.6		1.0	0.16
79-00-5	1,1,2-Trichloroethane	21.7		1.0	0.27
79-01-6	Trichloroethene	23.0		1.0	0.16
75-69-4	Trichlorofluoromethane	25.3		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.0		2.5	0.33
108-05-4	Vinyl acetate	45.8		3.0	0.94
75-01-4	Vinyl chloride	27.4		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.2		2.0	0.15
95-47-6	o-Xylene	26.1		1.0	0.19
1330-20-7	Xylenes, Total	50.3		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)	97		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)	96		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3854.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 22:16:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	766100	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	89	162537	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	268161	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	195789	50.0	48.2	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	264147	50.0	48.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	703308	50.0	49.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	83	281161	50.0	48.3	
11 Dichlorodifluoromethane	85	1.705	1.705	-0.001	99	76690	25.0	22.3	
12 Chloromethane	50	1.900	1.914	-0.014	99	75023	25.0	22.5	
13 Vinyl chloride	62	1.998	1.998	0.000	98	73602	25.0	27.4	
15 Bromomethane	94	2.361	2.361	0.000	92	48891	25.0	23.6	
16 Chloroethane	64	2.473	2.473	0.000	98	48210	25.0	23.3	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	98	124395	25.0	23.7	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	111916	25.0	25.3	
20 Ethyl ether	59	3.003	3.004	-0.001	93	51080	25.0	23.7	
22 Acrolein	56	3.143	3.143	0.000	99	84801	246.9	199.5	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	94	51816	25.0	23.4	
24 112TCTFE	151	3.255	3.255	0.000	92	40366	25.0	27.6	
25 Acetone	43	3.269	3.269	0.000	97	68982	100.0	75.0	
26 Iodomethane	142	3.394	3.395	-0.001	99	75285	25.0	22.9	
28 Carbon disulfide	76	3.450	3.464	-0.014	100	167999	25.0	22.6	
30 Methyl acetate	43	3.576	3.576	0.000	99	81843	50.0	39.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	89	109743	25.0	24.6	
32 Methylene Chloride	84	3.716	3.716	0.000	97	66626	25.0	24.1	
33 2-Methyl-2-propanol	59	3.785	3.786	-0.001	98	51238	250.0	191.9	
34 Acrylonitrile	53	3.911	3.911	0.000	96	226722	250.0	214.1	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	96	177375	25.0	22.7	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	95	58368	25.0	21.7	
37 Hexane	57	4.204	4.205	-0.001	95	83635	25.0	24.7	
39 Vinyl acetate	43	4.344	4.344	0.000	98	275056	50.0	45.8	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	118833	25.0	22.9	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	102010	100.0	76.8	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	66694	25.0	22.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
49 2,2-Dichloropropane	77	4.861	4.861	0.000	92	106180	25.0	23.1	
54 Tetrahydrofuran	42	5.056	5.057	-0.001	87	34955	50.0	36.6	
53 Chlorobromomethane	128	5.056	5.057	-0.001	96	30207	25.0	22.9	
55 Chloroform	83	5.126	5.140	-0.014	96	121029	25.0	22.5	
56 1,1,1-Trichloroethane	97	5.280	5.294	-0.014	97	102296	25.0	21.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	114326	25.0	23.8	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	92	90513	25.0	23.7	
59 Carbon tetrachloride	117	5.420	5.420	0.000	81	75432	25.0	21.6	
60 Isobutyl alcohol	41	5.461	5.462	-0.001	92	41897	625.0	438.7	
63 Benzene	78	5.587	5.587	0.000	97	259566	25.0	24.5	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	108612	25.0	24.3	
66 n-Heptane	43	5.825	5.825	0.000	92	81396	25.0	25.9	
68 Trichloroethene	95	6.160	6.160	0.000	95	69460	25.0	23.0	
70 Methylcyclohexane	55	6.369	6.369	0.000	95	87161	25.0	23.3	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	68930	25.0	23.9	
73 1,4-Dioxane	88	6.425	6.439	-0.014	93	14632	500.0	458.2	
74 Dibromomethane	93	6.453	6.453	0.000	93	42005	25.0	23.2	
75 Dichlorobromomethane	83	6.609	6.609	0.000	98	82925	25.0	21.0	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	92	36484	25.0	20.7	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	93	101333	25.0	23.1	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.103	-0.001	99	211761	100.0	88.7	
82 Toluene	91	7.295	7.296	-0.001	98	255815	25.0	24.2	
84 trans-1,3-Dichloropropene	75	7.488	7.489	-0.001	93	91248	25.0	21.6	
85 Ethyl methacrylate	69	7.517	7.524	-0.007	92	72620	25.0	22.4	
87 1,1,2-Trichloroethane	97	7.674	7.675	-0.001	95	48361	25.0	21.7	
89 Tetrachloroethene	164	7.767	7.768	-0.001	93	46350	25.0	27.5	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	96002	25.0	23.3	
91 2-Hexanone	43	7.853	7.853	0.000	96	139519	100.0	81.7	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	50280	25.0	20.7	
96 Ethylene Dibromide	107	8.153	8.154	-0.001	99	56245	25.0	24.1	
99 Chlorobenzene	112	8.604	8.604	0.000	92	163059	25.0	24.6	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	54343	25.0	23.2	
101 Ethylbenzene	106	8.690	8.690	0.000	99	85811	25.0	24.3	
102 m-Xylene & p-Xylene	106	8.811	8.811	0.000	99	107499	25.0	24.2	
103 o-Xylene	106	9.176	9.176	0.000	98	108461	25.0	26.1	
104 Styrene	104	9.197	9.198	-0.001	95	191706	25.0	25.3	
106 Bromoform	173	9.383	9.383	0.000	89	28482	25.0	18.3	
107 Isopropylbenzene	105	9.526	9.534	-0.008	97	279975	25.0	23.9	
109 Cyclohexanone	55	9.626	9.627	-0.001	96	105711	1000.0	580.5	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	65890	25.0	20.0	
111 Bromobenzene	156	9.855	9.855	0.000	98	67007	25.0	25.2	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.863	-0.001	74	20725	25.0	17.7	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	87	20952	25.0	23.0	
114 N-Propylbenzene	120	9.941	9.934	0.007	99	80980	25.0	24.8	
115 2-Chlorotoluene	126	10.034	10.034	0.000	95	69286	25.0	26.0	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	243058	25.0	23.2	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	70363	25.0	24.0	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	204717	25.0	23.8	
119 1,2,4-Trimethylbenzene	105	10.484	10.485	-0.001	99	253696	25.0	23.6	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	59969	25.0	24.3	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	96	131061	25.0	25.2	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	252113	25.0	23.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	94	131353	25.0	24.1	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	229292	25.0	22.3	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	94	122214	25.0	25.0	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	11764	25.0	17.5	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	93	78626	25.0	24.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	94	29930	25.0	27.2	
132 Naphthalene	128	13.123	13.123	0.000	98	194031	25.0	20.4	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	68329	25.0	23.4	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	44.4	
S 150 1,2-Dichloroethene, Total	1				0		50.0	44.4	
S 151 Trihalomethanes, Total	1				0		100.0	82.4	
S 153 Xylenes, Total (URS)	1				0		50.0	50.3	
S 155 Xylenes, Total	106				0		50.0	50.3	
S 156 1,3-Dichloropropene, Total	1				0		50.0	44.7	

Reagents:

MV-MegaMainA_00052	Amount Added: 25.00	Units: uL	
MV-Gas A_00091	Amount Added: 10.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3854.D

Injection Date: 29-Jun-2021 22:16:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

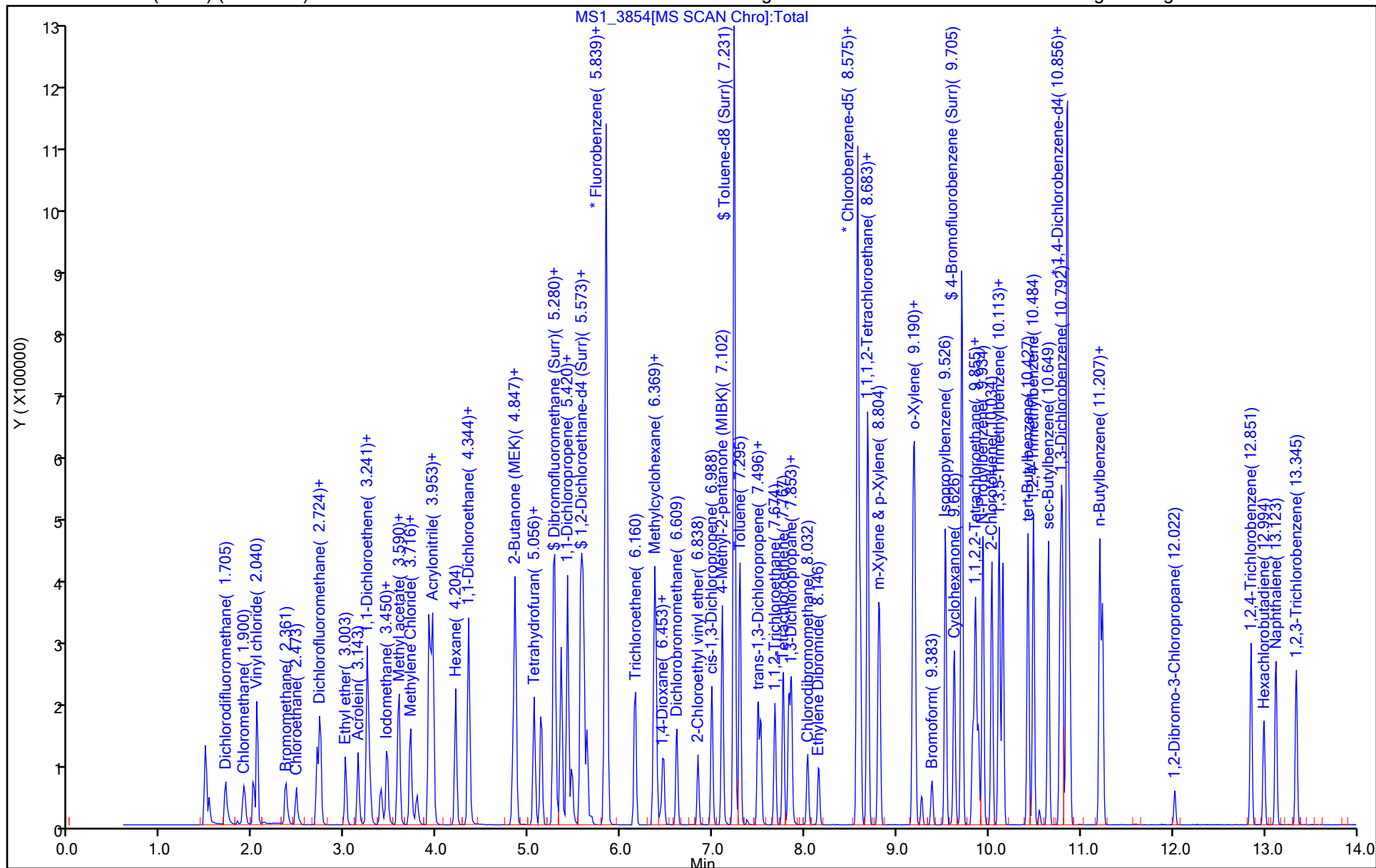
ALS Bottle#: 4

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3854.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 22:16:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.2	96.43
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.11
\$ 7 Toluene-d8 (Surr)	50.0	49.9	99.90
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.3	96.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-541786/7
 Matrix: Water Lab File ID: MS1_3856.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 06/29/2021 22:58
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	241		30	9.6
126-99-8	Chloroprene	24.0		1.0	0.21
126-98-7	Methacrylonitrile	261		10	1.6
80-62-6	Methyl methacrylate	49.6		4.0	1.1
107-12-0	Propionitrile	231		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		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)	96		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3856.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 22:58:30 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_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	741437	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	162174	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260114	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	188805	50.0	48.0	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	245054	50.0	46.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	671127	50.0	47.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	271389	50.0	48.1	
14 Ethylene oxide	43	2.319	2.319	0.000	100	372792	2500.0	2594.9	
19 Ethanol	45	2.906	2.892	0.014	98	42947	1500.0	1314.6	
21 Propene oxide	58	3.059	3.059	0.000	84	1116173	2500.0	2519.5	
27 Isopropyl alcohol	45	3.395	3.395	-0.001	97	31225	250.0	190.5	
29 Acetonitrile	41	3.534	3.534	0.000	100	84800	250.0	240.6	
41 Isopropyl ether	87	4.372	4.372	0.000	93	46917	25.0	23.8	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	110572	25.0	24.0	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	180371	25.0	23.9	
47 Ethyl acetate	43	4.847	4.847	0.000	99	99770	50.0	51.7	
50 Propionitrile	54	4.875	4.875	0.000	98	80829	250.0	231.2	
52 Methacrylonitrile	41	5.015	5.015	0.000	95	367670	250.0	260.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	81	151210	25.0	23.1	
67 n-Butanol	56	6.034	6.034	0.000	95	26505	625.0	436.7	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	28354	50.0	49.6	
76 2-Nitropropane	41	6.788	6.795	-0.007	91	17185	50.0	23.6	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	21828	50.0	31.2	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	87	39724	50.0	31.3	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	241678	25.0	24.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	80761	25.0	26.7	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00034

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:46

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3856.D

Injection Date: 29-Jun-2021 22:58:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCSD

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

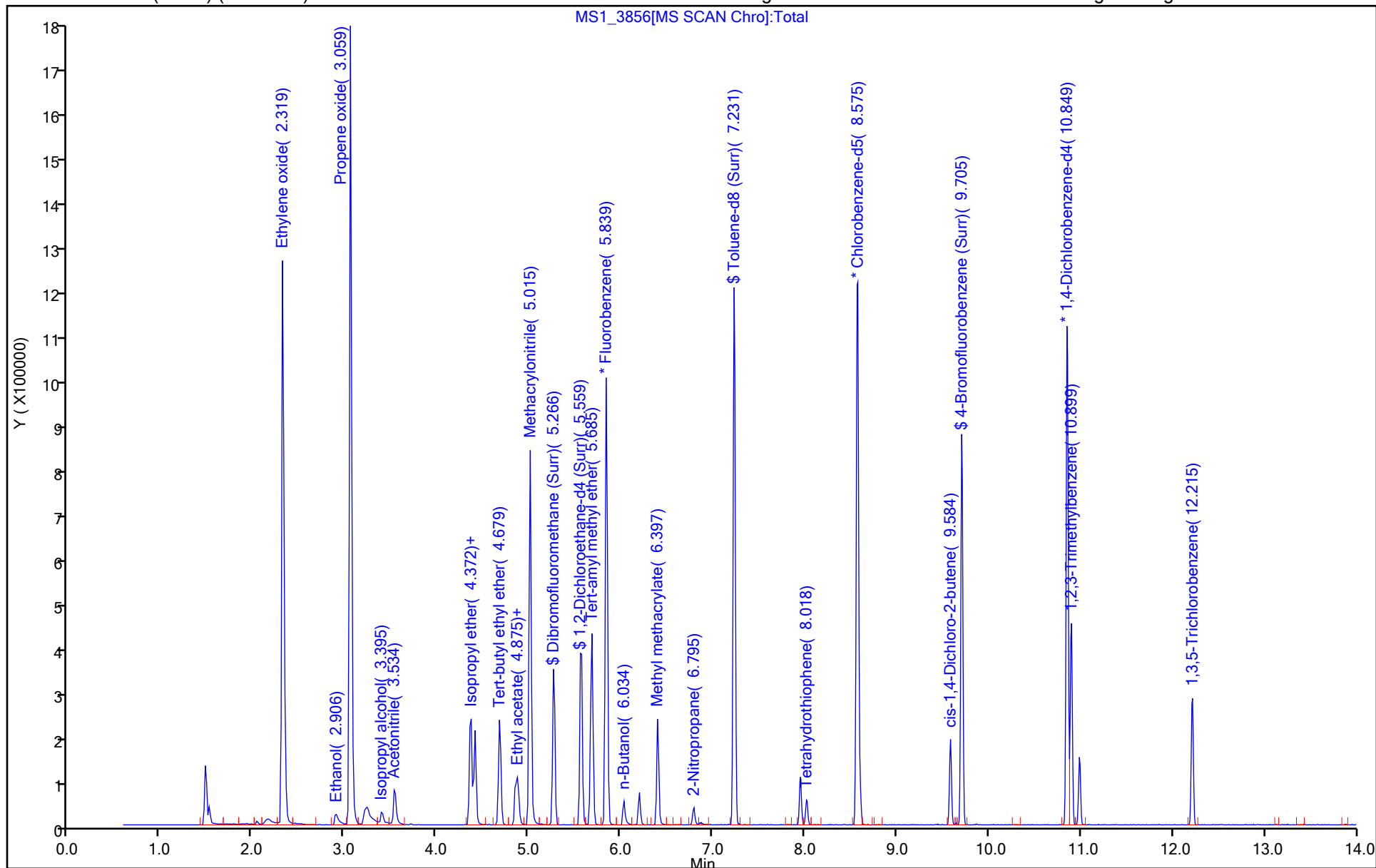
ALS Bottle#: 6

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3856.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Jun-2021 22:58:30 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_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:08:38 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.0	96.08
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	93.09
\$ 7 Toluene-d8 (Surr)	50.0	47.8	95.54
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.1	96.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>PA-1-20210622 MS</u>	Lab Sample ID: <u>280-150245-10 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6419.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/22/2021 15:05</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 06:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	85.4		10	1.9
107-02-8	Acrolein	229		20	2.8
107-13-1	Acrylonitrile	230		20	1.4
71-43-2	Benzene	25.8		1.0	0.16
74-97-5	Chlorobromomethane	26.3		1.0	0.10
75-27-4	Dichlorobromomethane	25.2		1.0	0.17
75-25-2	Bromoform	24.0		1.0	0.46
74-83-9	Bromomethane	26.9		2.0	0.21
78-93-3	2-Butanone (MEK)	88.0		6.0	2.0
75-15-0	Carbon disulfide	23.1		2.0	0.17
56-23-5	Carbon tetrachloride	28.2		1.0	0.19
108-90-7	Chlorobenzene	25.4		1.0	0.17
124-48-1	Chlorodibromomethane	24.5		1.0	0.17
75-00-3	Chloroethane	26.7		2.0	0.41
67-66-3	Chloroform	25.4		1.0	0.16
74-87-3	Chloromethane	25.0		2.0	0.30
107-05-1	Allyl chloride	23.9		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	22.1		5.0	0.47
74-95-3	Dibromomethane	25.3		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.9		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.1		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	17.2		3.0	0.80
75-71-8	Dichlorodifluoromethane	32.1		2.0	0.31
75-34-3	1,1-Dichloroethane	25.1		1.0	0.22
107-06-2	1,2-Dichloroethane	24.0		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	25.9		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	26.4		1.0	0.15
75-35-4	1,1-Dichloroethene	27.0		1.0	0.23
78-87-5	1,2-Dichloropropane	24.6		1.0	0.18
142-28-9	1,3-Dichloropropane	24.8		1.0	0.090
594-20-7	2,2-Dichloropropane	24.9		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	24.0		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.3		3.0	0.19
563-58-6	1,1-Dichloropropene	26.9		1.0	0.19
100-41-4	Ethylbenzene	26.2		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>PA-1-20210622 MS</u>	Lab Sample ID: <u>280-150245-10 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6419.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/22/2021 15:05</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 06:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	23.7		3.0	0.86
591-78-6	2-Hexanone	90.2		5.0	1.7
74-88-4	Iodomethane	24.1		1.0	0.23
78-83-1	Isobutyl alcohol	560		110	37
75-09-2	Methylene Chloride	23.4		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	93.3		5.0	0.98
100-42-5	Styrene	25.9		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	26.0		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	22.4		1.0	0.21
127-18-4	Tetrachloroethene	28.2		1.0	0.20
108-88-3	Toluene	25.8		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	22.8		1.0	0.21
71-55-6	1,1,1-Trichloroethane	27.7		1.0	0.16
79-00-5	1,1,2-Trichloroethane	25.5		1.0	0.27
79-01-6	Trichloroethene	27.8		1.0	0.16
75-69-4	Trichlorofluoromethane	30.0		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.0		2.5	0.33
108-05-4	Vinyl acetate	45.1		3.0	0.94
75-01-4	Vinyl chloride	27.3		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	26.1		2.0	0.15
95-47-6	o-Xylene	25.9		1.0	0.19
1330-20-7	Xylenes, Total	52.0		2.0	0.19
106-93-4	1,2-Dibromoethane	24.7		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-127
2037-26-5	Toluene-d8 (Surr)	99		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_P\20210629-102808.b\IP6419.D
 Lims ID: 280-150245-A-10 MS
 Client ID: PA-1-20210622
 Sample Type: MS
 Inject. Date: 30-Jun-2021 06:46:30 ALS Bottle#: 26 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-10 MS pH<2
 Misc. Info.: 280-0102808-030
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:35:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	99	1408601	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.390	7.389	0.001	88	317952	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.606	9.606	0.000	96	471683	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.372	4.373	-0.001	91	345010	50.0	50.2	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.636	4.637	-0.001	97	424686	50.0	48.7	
\$ 6 Toluene-d8 (Surr)	98	6.124	6.125	-0.001	94	1357581	50.0	49.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.477	8.478	-0.001	85	496647	50.0	45.9	
\$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 9 BFB	95	3.306	3.389	-0.082	0	4917		NR	
10 Dichlorodifluoromethane	85	1.533	1.535	-0.002	100	149244	25.0	32.1	
11 Chloromethane	50	1.702	1.704	-0.002	99	127114	25.0	25.0	
12 Vinyl chloride	62	1.797	1.799	-0.002	99	135174	25.0	27.3	
13 Ethylene oxide	43		2.039					ND	7
14 Bromomethane	94	2.071	2.073	-0.002	93	72135	25.0	26.9	
15 Chloroethane	64	2.156	2.157	-0.001	99	85799	25.0	26.7	
16 Dichlorofluoromethane	67	2.325	2.326	-0.001	98	229545	25.0	26.4	
17 Trichlorofluoromethane	101	2.356	2.358	-0.002	99	206283	25.0	30.0	
18 Ethanol	45		2.472					ND	
19 Ethyl ether	59	2.567	2.569	-0.002	91	103508	25.0	23.9	
20 Propene oxide	58		2.609					ND	7
21 Acrolein	56	2.673	2.674	-0.001	99	206354	246.9	228.7	
22 1,1-Dichloroethene	96	2.757	2.748	0.009	97	101045	25.0	27.0	
23 1,1,2-Trichloro-1,2,2-trifluoro	151	2.757	2.759	-0.002	73	75185	25.0	28.6	
24 Acetone	43	2.768	2.769	-0.001	100	157471	100.0	85.4	
25 Isopropyl alcohol	45		2.852					ND	
26 Iodomethane	142	2.873	2.875	-0.002	100	134659	25.0	24.1	
27 Carbon disulfide	76	2.926	2.928	-0.002	100	305687	25.0	23.1	
28 Acetonitrile	41		2.968					ND	
29 Methyl acetate	43	2.990	2.991	-0.001	97	186753	50.0	39.3	
30 3-Chloro-1-propene	41	3.011	3.012	-0.001	88	164853	25.0	23.9	
31 Methylene Chloride	84	3.106	3.107	-0.001	91	126653	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
32 2-Methyl-2-propanol	59	3.148	3.149	-0.001	99	155456	250.0	222.0	
33 Acrylonitrile	53	3.264	3.265	-0.001	97	545001	250.0	230.2	
34 Methyl tert-butyl ether	73	3.296	3.297	-0.001	95	388748	25.0	24.5	
35 trans-1,2-Dichloroethene	96	3.306	3.308	-0.002	98	121840	25.0	26.4	
36 Hexane	57	3.496	3.498	-0.002	92	130482	25.0	22.6	
38 Vinyl acetate	43	3.602	3.603	-0.001	98	556548	50.0	45.1	
40 Isopropyl ether	87	3.612	3.622	-0.010	31	6258		1.33	
39 1,1-Dichloroethane	63	3.623	3.624	-0.001	97	225274	25.0	25.1	
41 2-Chloro-1,3-butadiene	53		3.675					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
43 Tert-butyl ethyl ether	59		3.875					ND	
44 2-Butanone (MEK)	43	4.003	4.004	-0.001	99	259256	100.0	88.0	
46 Ethyl acetate	43		4.013					ND	
47 cis-1,2-Dichloroethene	96	4.024	4.025	-0.001	86	137135	25.0	25.9	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
48 2,2-Dichloropropane	77	4.034	4.036	-0.002	88	186444	25.0	24.9	
49 Propionitrile	54		4.044					ND	
50 sec-Butyl Alcohol	45		4.109					ND	
51 Methacrylonitrile	41		4.160					ND	
52 Tetrahydrofuran	42	4.203	4.205	-0.002	84	85552	50.0	43.8	
53 Chlorobromomethane	128	4.203	4.205	-0.002	95	64528	25.0	26.3	
54 Chloroform	83	4.256	4.257	-0.001	96	226510	25.0	25.4	
45 2-Chloro-1,1,1-Trifluoroethane	118	4.256	4.307	-0.050	25	3642		NC	
55 1,1,1-Trichloroethane	97	4.404	4.405	-0.001	98	202585	25.0	27.7	
56 Cyclohexane	56	4.456	4.458	-0.002	90	199496	25.0	25.6	
57 1,1-Dichloropropene	75	4.509	4.511	-0.002	95	184427	25.0	26.9	
59 Carbon tetrachloride	117	4.520	4.521	-0.001	97	157610	25.0	28.2	
58 Isobutyl alcohol	41	4.530	4.532	-0.002	95	121545	625.0	559.6	
60 Benzene	78	4.667	4.658	0.009	95	524277	25.0	25.8	
61 1,2-Dichloroethane	62	4.689	4.690	-0.001	97	185782	25.0	24.0	
63 n-Butanol	56		4.730					ND	
62 Tert-amyl methyl ether	73		4.730					ND	
66 n-Heptane	43	4.847	4.848	-0.001	89	114565	25.0	21.8	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83	5.153	5.131	0.023	44	1999		NC	
67 Trichloroethene	95	5.153	5.154	-0.001	96	139670	25.0	27.8	
68 2-Pentanone	43		5.249					ND	
69 Methylcyclohexane	55	5.343	5.344	-0.001	91	149812	25.0	25.8	
70 1,2-Dichloropropane	63	5.353	5.355	-0.002	94	133339	25.0	24.6	
71 Methyl methacrylate	100		5.363					ND	
72 1,4-Dioxane	88	5.396	5.397	-0.001	92	39339	500.0	487.0	
73 Dibromomethane	93	5.427	5.429	-0.002	92	86622	25.0	25.3	
74 Dichlorobromomethane	83	5.543	5.545	-0.002	98	167131	25.0	25.2	
75 2-Nitropropane	41		5.712					ND	
76 2-Chloroethyl vinyl ether	63		5.756				ND	ND	
77 cis-1,3-Dichloropropene	75	5.892	5.893	-0.001	95	207651	25.0	24.0	
78 4-Methyl-2-pentanone (MIBK)	43	5.997	5.999	-0.002	96	536881	100.0	93.3	
79 Toluene	91	6.176	6.178	-0.002	97	565602	25.0	25.8	
80 trans-1,3-Dichloropropene	75	6.356	6.357	-0.001	96	189189	25.0	23.3	
81 Ethyl methacrylate	69	6.388	6.389	-0.001	88	188942	25.0	23.7	
82 1,1,2-Trichloroethane	97	6.535	6.537	-0.002	94	115357	25.0	25.5	
83 Tetrachloroethene	164	6.620	6.621	-0.001	91	94213	25.0	28.2	

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	6.672	6.674	-0.002	96	211559	25.0	24.8	
85 2-Hexanone	43	6.694	6.695	-0.001	96	382177	100.0	90.2	
87 Tetrahydrothiophene	60		6.862					ND	
86 Chlorodibromomethane	129	6.873	6.874	-0.001	89	109076	25.0	24.5	
88 Ethylene Dibromide	107	6.978	6.991	-0.012	98	122015	25.0	24.7	
89 1-Chlorohexane	91	7.390	7.380	0.010	33	2508		0.2755	
90 Chlorobenzene	112	7.411	7.413	-0.002	92	340829	25.0	25.4	
91 1,1,1,2-Tetrachloroethane	131	7.485	7.486	-0.001	92	115626	25.0	26.0	
92 Ethylbenzene	106	7.496	7.497	-0.001	99	189682	25.0	26.2	
93 m-Xylene & p-Xylene	106	7.612	7.613	-0.001	100	231187	25.0	26.1	
94 o-Xylene	106	7.970	7.972	-0.002	96	220846	25.0	25.9	
95 Styrene	104	7.981	7.982	-0.001	94	387768	25.0	25.9	
96 Bromoform	173	8.160	8.172	-0.012	94	63408	25.0	24.0	
97 Isopropylbenzene	105	8.308	8.310	-0.002	96	569514	25.0	25.1	
98 cis-1,4-Dichloro-2-butene	53		8.360					ND	U
99 Cyclohexanone	55	8.403	8.405	-0.002	92	189913	1000.0	760.1	
100 1,1,2,2-Tetrachloroethane	83	8.593	8.595	-0.002	96	157561	25.0	22.4	
101 Bromobenzene	156	8.625	8.626	-0.001	98	134986	25.0	24.5	
102 trans-1,4-Dichloro-2-butene	53	8.635	8.637	-0.002	84	33910	25.0	17.2	
103 1,2,3-Trichloropropane	110	8.656	8.658	-0.002	85	48427	25.0	23.0	
104 N-Propylbenzene	120	8.709	8.711	-0.002	99	147852	25.0	24.5	
105 2-Chlorotoluene	126	8.804	8.806	-0.002	96	132068	25.0	25.0	
106 1,3,5-Trimethylbenzene	105	8.878	8.879	-0.001	93	449399	25.0	24.3	
107 4-Chlorotoluene	126	8.920	8.922	-0.002	98	137386	25.0	24.6	
108 tert-Butylbenzene	119	9.184	9.186	-0.002	93	368035	25.0	25.0	
127 Pentachloroethane	167		9.225					ND	
109 1,2,4-Trimethylbenzene	105	9.247	9.249	-0.002	98	459028	25.0	24.2	
110 sec-Butylbenzene	134	9.406	9.407	-0.001	95	104768	25.0	25.5	
111 1,3-Dichlorobenzene	146	9.532	9.534	-0.002	97	235826	25.0	24.1	
112 4-Isopropyltoluene	119	9.553	9.555	-0.002	96	435563	25.0	24.8	
113 1,4-Dichlorobenzene	146	9.627	9.629	-0.002	95	240033	25.0	23.3	
114 1,2,3-Trimethylbenzene	105		9.648					ND	U
115 n-Butylbenzene	91	9.954	9.956	-0.002	98	391507	25.0	24.2	
116 1,2-Dichlorobenzene	146	9.975	9.977	-0.002	96	225085	25.0	23.9	
117 1,2-Dibromo-3-Chloropropane	157	10.756	10.758	-0.002	79	27494	25.0	22.1	
118 1,3,5-Trichlorobenzene	180		10.946					ND	
119 1,2,4-Trichlorobenzene	180	11.580	11.581	-0.001	94	116051	25.0	22.8	
120 Hexachlorobutadiene	225	11.717	11.729	-0.012	92	41789	25.0	25.1	
121 Naphthalene	128	11.843	11.845	-0.002	98	389029	25.0	21.8	
122 1,2,3-Trichlorobenzene	180	12.065	12.066	-0.001	95	107917	25.0	25.1	
136 1-Chlorohexane TIC	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
132 2-Methylhexane	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)	95				0		50.0	52.4	
S 142 Xylenes, Total	106				0		50.0	52.0	
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1				0		100.0	99.1	
S 143 Xylenes, Total (URS)	1				0		50.0	52.0	
S 146 Total BTEX	1				0			129.8	
S 145 1,3-Dichloropropene, Total	1				0		50.0	47.3	
S 144 1,2-Dichloroethene, Total	1				0		50.0	52.4	

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-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6419.D

Injection Date: 30-Jun-2021 06:46:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-A-10 MS

Worklist Smp#: 30

Client ID: PA-1-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

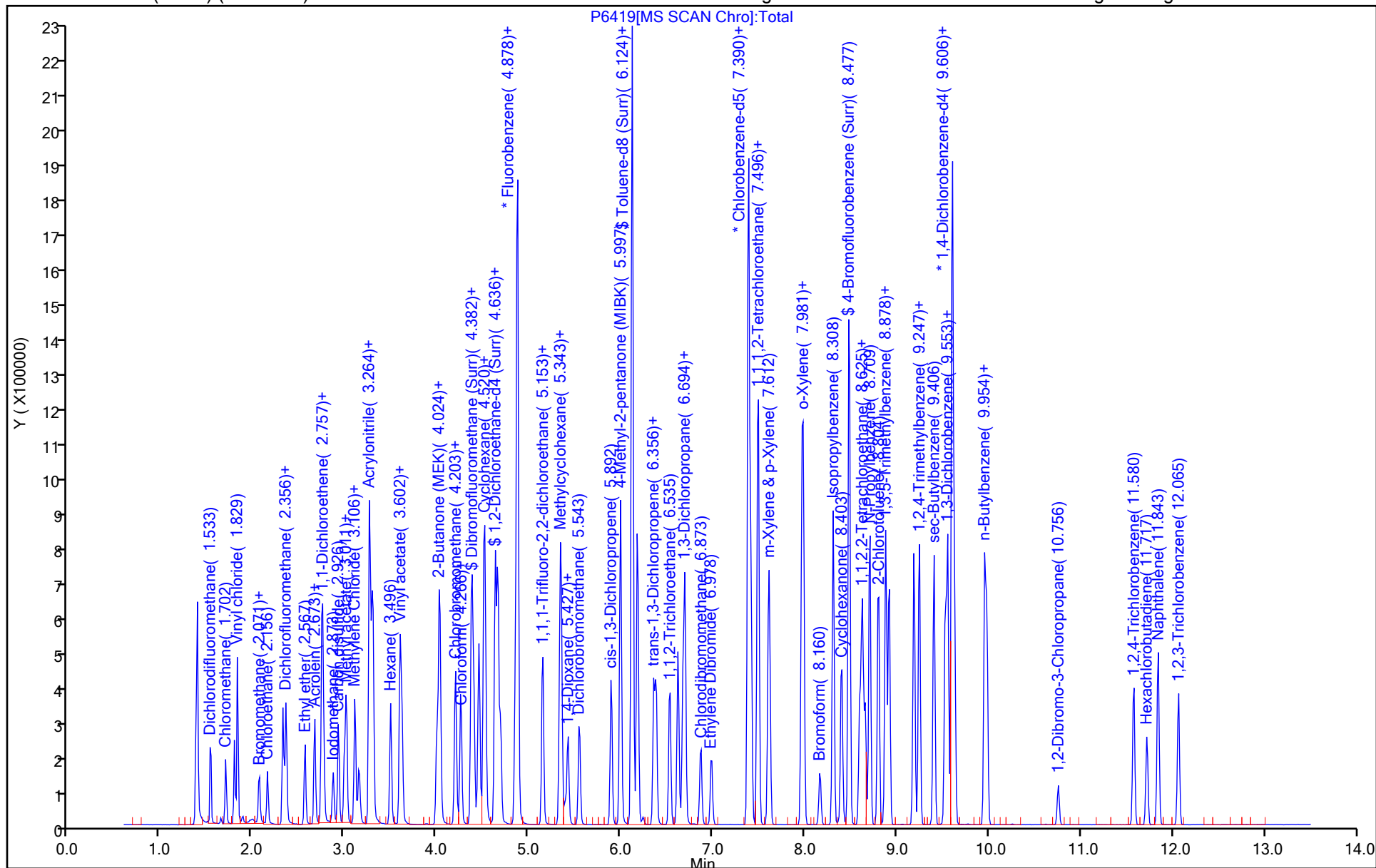
ALS Bottle#: 26

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\20210629-102808.b\IP6419.D
 Lims ID: 280-150245-A-10 MS
 Client ID: PA-1-20210622
 Sample Type: MS
 Inject. Date: 30-Jun-2021 06:46:30 ALS Bottle#: 26 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-10 MS pH<2
 Misc. Info.: 280-0102808-030
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:35:15

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.2	100.43
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.7	97.40
\$ 6 Toluene-d8 (Surr)	50.0	49.6	99.20
\$ 7 4-Bromofluorobenzene (Surr)	50.0	45.9	91.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-1-20210622 MS Lab Sample ID: 280-150245-10 MS
 Matrix: Water Lab File ID: P6421.D
 Analysis Method: 8260B Date Collected: 06/22/2021 15:05
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 07:32
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	192		30	9.6
126-99-8	Chloroprene	22.7		1.0	0.21
126-98-7	Methacrylonitrile	212		10	1.6
80-62-6	Methyl methacrylate	46.8		4.0	1.1
107-12-0	Propionitrile	206		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)	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_P\20210629-102808.b\IP6421.D
 Lims ID: 280-150245-B-10 MS
 Client ID: PA-1-20210622
 Sample Type: MS
 Inject. Date: 30-Jun-2021 07:32:30 ALS Bottle#: 28 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-10 MS pH<2
 Misc. Info.: 280-0102808-032
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:36:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.871	4.878	-0.007	98	1410651	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.393	7.389	0.004	88	325887	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.609	9.606	0.003	97	461755	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.375	4.373	0.002	92	349192	50.0	50.8	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.638	4.637	0.001	98	434876	50.0	49.8	
\$ 6 Toluene-d8 (Surr)	98	6.126	6.125	0.001	94	1358641	50.0	48.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.480	8.478	0.002	83	504879	50.0	47.7	
\$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 9 BFB	95		3.389					ND	
10 Dichlorodifluoromethane	85		1.535					ND	
11 Chloromethane	50		1.704					ND	
12 Vinyl chloride	62		1.799					ND	
13 Ethylene oxide	43		2.039				2500.0	ND	7
14 Bromomethane	94		2.073					ND	7
15 Chloroethane	64		2.157					ND	
16 Dichlorofluoromethane	67		2.326					ND	
17 Trichlorofluoromethane	101		2.358					ND	
18 Ethanol	45	2.475	2.472	0.003	100	107031	1500.0	1083.1	
19 Ethyl ether	59		2.569					ND	
20 Propene oxide	58		2.609				ND	ND	
21 Acrolein	56	2.676	2.674	0.002	55	1463		1.62	
22 1,1-Dichloroethene	96		2.748					ND	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151		2.759					ND	
24 Acetone	43	2.771	2.769	0.002	99	7204		3.90	
25 Isopropyl alcohol	45	2.855	2.852	0.003	98	96080	250.0	181.2	
26 Iodomethane	142	2.876	2.875	0.001	22	2759		0.8549	
27 Carbon disulfide	76	2.929	2.928	0.001	97	3349		0.2526	
28 Acetonitrile	41	2.971	2.968	0.003	100	181118	250.0	192.5	
29 Methyl acetate	43	2.992	2.991	0.001	96	6140		1.29	
30 3-Chloro-1-propene	41		3.012					ND	
31 Methylene Chloride	84	3.108	3.107	0.001	92	1334		0.2465	

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	3.151	3.149	0.002	90	1570		2.24	
33 Acrylonitrile	53	3.267	3.265	0.002	96	3749		1.58	
34 Methyl tert-butyl ether	73		3.297					ND	
35 trans-1,2-Dichloroethene	96		3.308					ND	
36 Hexane	57		3.498					ND	
38 Vinyl acetate	43		3.603					ND	U
40 Isopropyl ether	87	3.625	3.622	0.003	91	109491	25.0	23.2	
39 1,1-Dichloroethane	63		3.624					ND	
41 2-Chloro-1,3-butadiene	53	3.668	3.675	-0.007	94	200037	25.0	22.7	
37 Chlorotrifluoroethene	116		3.818					ND	
43 Tert-butyl ethyl ether	59	3.879	3.875	0.004	97	390604	25.0	21.9	
44 2-Butanone (MEK)	43		4.004					ND	
46 Ethyl acetate	43	4.016	4.013	0.003	99	258776	50.0	44.9	
47 cis-1,2-Dichloroethene	96		4.025					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
48 2,2-Dichloropropane	77		4.036					ND	
49 Propionitrile	54	4.048	4.044	0.004	99	222339	250.0	206.5	
50 sec-Butyl Alcohol	45		4.109					ND	
51 Methacrylonitrile	41	4.164	4.160	0.004	89	844860	250.0	212.4	
52 Tetrahydrofuran	42		4.205					ND	
53 Chlorobromomethane	128		4.205					ND	
54 Chloroform	83		4.257					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
55 1,1,1-Trichloroethane	97		4.405					ND	
56 Cyclohexane	56		4.458					ND	
57 1,1-Dichloropropene	75		4.511					ND	
59 Carbon tetrachloride	117		4.521					ND	
58 Isobutyl alcohol	41	4.533	4.532	0.001	89	1578		7.25	
60 Benzene	78		4.658					ND	
61 1,2-Dichloroethane	62		4.690					ND	
63 n-Butanol	56	4.733	4.730	0.003	51	114191	625.0	564.4	
62 Tert-amyl methyl ether	73	4.733	4.730	0.003	89	375404	25.0	22.4	
66 n-Heptane	43		4.848					ND	
64 1,2-Dichloro-1,1,2-trifluoroethane	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroethane	83		5.131					ND	
67 Trichloroethene	95	5.145	5.154	-0.009	95	6697		1.30	
68 2-Pentanone	43		5.249					ND	
69 Methylcyclohexane	55		5.344					ND	
70 1,2-Dichloropropane	63		5.355					ND	
71 Methyl methacrylate	100	5.356	5.363	-0.007	86	81384	50.0	46.8	
72 1,4-Dioxane	88		5.397					ND	
73 Dibromomethane	93		5.429					ND	
74 Dichlorobromomethane	83		5.545					ND	
75 2-Nitropropane	41	5.715	5.712	0.003	97	61829	50.0	38.4	
76 2-Chloroethyl vinyl ether	63		5.756					ND	
77 cis-1,3-Dichloropropene	75		5.893					ND	
78 4-Methyl-2-pentanone (MIBK)	43	6.000	5.999	0.001	93	3001		0.5208	
79 Toluene	91	6.179	6.178	0.001	98	2323		0.1059	
80 trans-1,3-Dichloropropene	75		6.357					ND	
81 Ethyl methacrylate	69		6.389					ND	
82 1,1,2-Trichloroethane	97		6.537					ND	
83 Tetrachloroethene	164		6.621					ND	

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		6.674					ND	
85 2-Hexanone	43	6.696	6.695	0.001	88	3508		0.8075	
87 Tetrahydrothiophene	60	6.865	6.862	0.003	91	50913	50.0	32.6	
86 Chlorodibromomethane	129		6.874					ND	
88 Ethylene Dibromide	107		6.991					ND	
89 1-Chlorohexane	91	7.382	7.380	0.002	96	176601		18.9	
90 Chlorobenzene	112	7.414	7.413	0.001	95	72264		5.26	
91 1,1,1,2-Tetrachloroethane	131		7.486					ND	
92 Ethylbenzene	106		7.497					ND	
93 m-Xylene & p-Xylene	106		7.613					ND	7
94 o-Xylene	106		7.972					ND	
95 Styrene	104	7.984	7.982	0.002	92	1710		0.1115	
96 Bromoform	173		8.172					ND	
97 Isopropylbenzene	105		8.310					ND	7
98 cis-1,4-Dichloro-2-butene	53	8.364	8.360	0.004	88	67361	50.0	40.5	
99 Cyclohexanone	55	8.416	8.405	0.011	82	7705		30.1	
100 1,1,2,2-Tetrachloroethane	83		8.595					ND	
101 Bromobenzene	156		8.626					ND	
102 trans-1,4-Dichloro-2-butene	53		8.637					ND	
103 1,2,3-Trichloropropane	110		8.658					ND	
104 N-Propylbenzene	120		8.711					ND	
105 2-Chlorotoluene	126		8.806					ND	
106 1,3,5-Trimethylbenzene	105		8.879					ND	
107 4-Chlorotoluene	126		8.922					ND	
108 tert-Butylbenzene	119		9.186					ND	
127 Pentachloroethane	167		9.225					ND	
109 1,2,4-Trimethylbenzene	105	9.250	9.249	0.001	93	2680		0.1441	
110 sec-Butylbenzene	134		9.407					ND	
111 1,3-Dichlorobenzene	146	9.524	9.534	-0.010	88	1522		0.1589	
112 4-Isopropyltoluene	119		9.555					ND	
113 1,4-Dichlorobenzene	146	9.630	9.629	0.001	35	2391		0.2366	
114 1,2,3-Trimethylbenzene	105	9.651	9.648	0.003	99	456550	25.0	25.2	
115 n-Butylbenzene	91	9.957	9.956	0.001	97	4524		0.2861	
116 1,2-Dichlorobenzene	146	9.978	9.977	0.001	90	1687		0.1828	
117 1,2-Dibromo-3-Chloropropane	157		10.758					ND	
118 1,3,5-Trichlorobenzene	180	10.949	10.946	0.003	97	130089	25.0	27.2	
119 1,2,4-Trichlorobenzene	180	11.582	11.581	0.001	91	2706		0.5438	
120 Hexachlorobutadiene	225		11.729					ND	
121 Naphthalene	128	11.846	11.845	0.001	98	11081		0.6332	
122 1,2,3-Trichlorobenzene	180	12.068	12.066	0.002	91	2892		0.1922	
136 1-Chlorohexane TIC	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
132 2-Methylhexane	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)	95		2.000					ND	7
S 142 Xylenes, Total	106		0.000					ND	7
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000					ND	7
S 143 Xylenes, Total (URS)	1		0.000					ND	7
S 146 Total BTEX	1				0			0.1059	
S 145 1,3-Dichloropropene, Total	1		0.000					ND	7
S 144 1,2-Dichloroethene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MV-Supp A_00050

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6421.D

Injection Date: 30-Jun-2021 07:32:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-B-10 MS

Worklist Smp#: 32

Client ID: PA-1-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

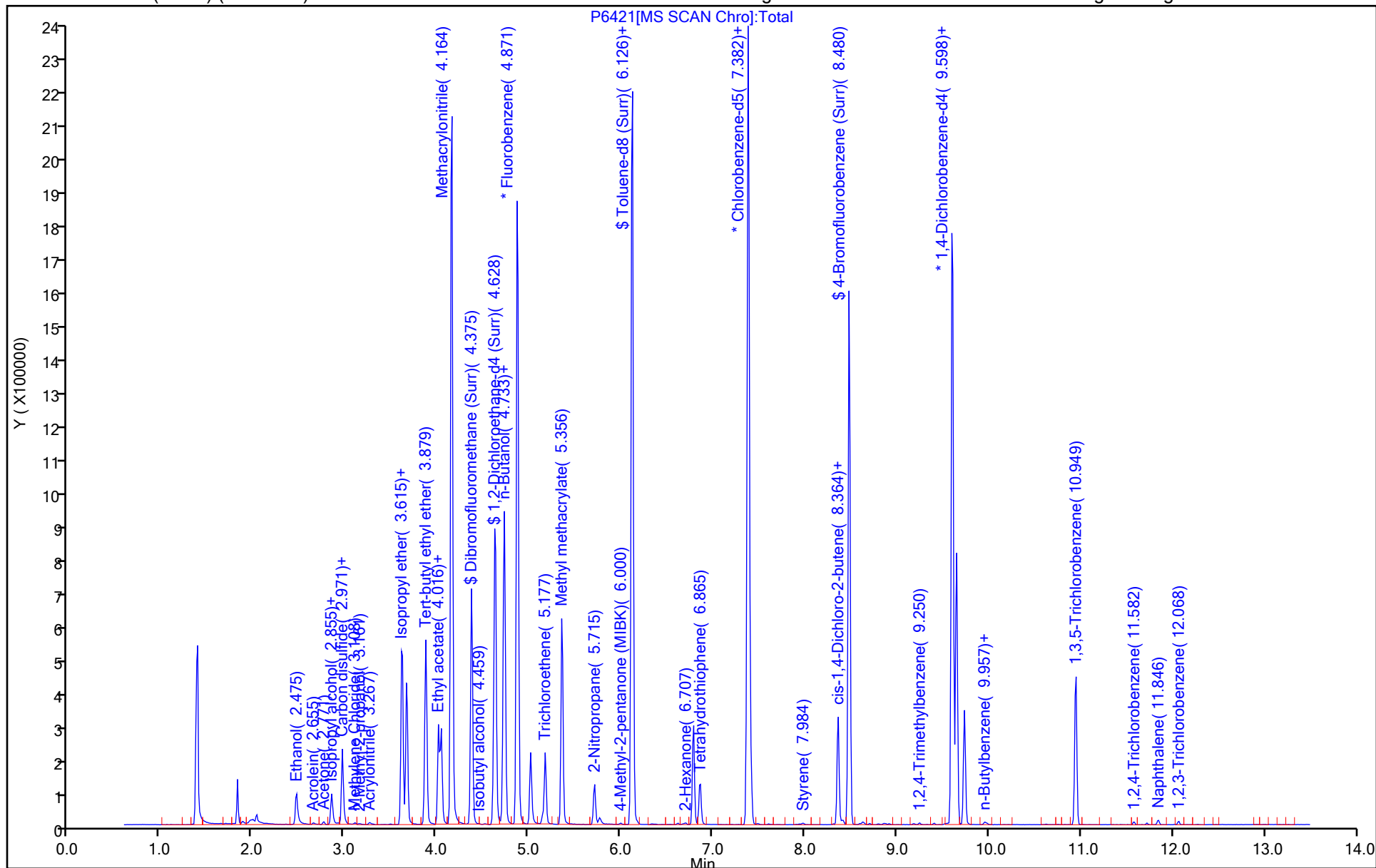
ALS Bottle#: 28

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\20210629-102808.b\IP6421.D
 Lims ID: 280-150245-B-10 MS
 Client ID: PA-1-20210622
 Sample Type: MS
 Inject. Date: 30-Jun-2021 07:32:30 ALS Bottle#: 28 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-10 MS pH<2
 Misc. Info.: 280-0102808-032
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:36:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.8	101.50
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.8	99.59
\$ 6 Toluene-d8 (Surr)	50.0	48.4	96.86
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.7	95.31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-8030P-20210623 MS</u>	Lab Sample ID: <u>280-150245-18 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>MS1_3875.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/23/2021 15:40</u>
Sample wt/vol: <u>5(mL)</u>	Date Analyzed: <u>06/30/2021 05:55</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541786</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	65.3		10	1.9
107-02-8	Acrolein	176		20	2.8
107-13-1	Acrylonitrile	203		20	1.4
71-43-2	Benzene	24.8		1.0	0.16
74-97-5	Chlorobromomethane	24.7		1.0	0.10
75-27-4	Dichlorobromomethane	21.2		1.0	0.17
75-25-2	Bromoform	16.6		1.0	0.46
74-83-9	Bromomethane	25.1		2.0	0.21
78-93-3	2-Butanone (MEK)	64.4		6.0	2.0
75-15-0	Carbon disulfide	23.9		2.0	0.17
56-23-5	Carbon tetrachloride	22.6		1.0	0.19
108-90-7	Chlorobenzene	24.6		1.0	0.17
124-48-1	Chlorodibromomethane	19.2		1.0	0.17
75-00-3	Chloroethane	25.4		2.0	0.41
67-66-3	Chloroform	23.5		1.0	0.16
74-87-3	Chloromethane	24.0		2.0	0.30
107-05-1	Allyl chloride	25.0		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	14.1		5.0	0.47
74-95-3	Dibromomethane	22.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	24.8		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.2		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	15.1		3.0	0.80
75-71-8	Dichlorodifluoromethane	24.2		2.0	0.31
75-34-3	1,1-Dichloroethane	24.2		1.0	0.22
107-06-2	1,2-Dichloroethane	24.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.3		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	23.7		1.0	0.15
75-35-4	1,1-Dichloroethene	24.1		1.0	0.23
78-87-5	1,2-Dichloropropane	25.2		1.0	0.18
142-28-9	1,3-Dichloropropane	22.2		1.0	0.090
594-20-7	2,2-Dichloropropane	24.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	21.7		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	20.5		3.0	0.19
563-58-6	1,1-Dichloropropene	25.5		1.0	0.19
100-41-4	Ethylbenzene	25.6		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8030P-20210623 MS Lab Sample ID: 280-150245-18 MS
 Matrix: Water Lab File ID: MS1_3875.D
 Analysis Method: 8260B Date Collected: 06/23/2021 15:40
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 05:55
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	19.8		3.0	0.86
591-78-6	2-Hexanone	70.8		5.0	1.7
74-88-4	Iodomethane	20.8		1.0	0.23
78-83-1	Isobutyl alcohol	330		110	37
75-09-2	Methylene Chloride	25.3		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	76.5		5.0	0.98
100-42-5	Styrene	24.0		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	22.8		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	18.0		1.0	0.21
127-18-4	Tetrachloroethene	28.2		1.0	0.20
108-88-3	Toluene	25.1		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	21.5		1.0	0.21
71-55-6	1,1,1-Trichloroethane	22.6		1.0	0.16
79-00-5	1,1,2-Trichloroethane	22.7		1.0	0.27
79-01-6	Trichloroethene	27.1		1.0	0.16
75-69-4	Trichlorofluoromethane	26.8		2.0	0.29
96-18-4	1,2,3-Trichloropropane	20.8		2.5	0.33
108-05-4	Vinyl acetate	41.0		3.0	0.94
75-01-4	Vinyl chloride	28.8		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	25.2		2.0	0.15
95-47-6	o-Xylene	25.1		1.0	0.19
1330-20-7	Xylenes, Total	50.3		2.0	0.19
106-93-4	1,2-Dibromoethane	21.4		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)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3875.D
 Lims ID: 280-150245-A-18 MS
 Client ID: RW-8030P-20210623
 Sample Type: MS
 Inject. Date: 30-Jun-2021 05:55:30 ALS Bottle#: 25 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-18 MS pH<2
 Misc. Info.: 280-0102809-021
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:04:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	746723	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	163355	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	266129	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	195499	50.0	49.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	253224	50.0	47.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	688908	50.0	48.7	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	272674	50.0	47.2	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95	3.953	3.579	0.374	0	3077		NR	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	98	81123	25.0	24.2	
12 Chloromethane	50	1.900	1.914	-0.014	98	77696	25.0	24.0	
13 Vinyl chloride	62	1.998	1.998	0.000	98	75495	25.0	28.8	
14 Ethylene oxide	43		2.319					ND	7
15 Bromomethane	94	2.347	2.361	-0.014	93	50695	25.0	25.1	
16 Chloroethane	64	2.473	2.473	0.000	97	51251	25.0	25.4	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	97	127745	25.0	25.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	115178	25.0	26.8	
19 Ethanol	45		2.892					ND	
20 Ethyl ether	59	3.004	3.004	0.000	94	48769	25.0	23.2	
21 Propene oxide	58		3.059					ND	
22 Acrolein	56	3.143	3.143	0.000	98	73427	246.9	176.4	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	51865	25.0	24.1	
24 112TCTFE	151	3.255	3.255	0.000	94	42067	25.0	29.5	
25 Acetone	43	3.269	3.269	0.000	99	59106	100.0	65.3	
27 Isopropyl alcohol	45		3.395					ND	
26 Iodomethane	142	3.395	3.395	0.000	99	66769	25.0	20.8	
28 Carbon disulfide	76	3.450	3.464	-0.014	100	173498	25.0	23.9	
29 Acetonitrile	41		3.534					ND	
30 Methyl acetate	43	3.562	3.576	-0.014	97	74893	50.0	36.7	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	108564	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
32 Methylene Chloride	84	3.716	3.716	0.000	95	67984	25.0	25.3	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	97	37930	250.0	145.7	
34 Acrylonitrile	53	3.911	3.911	0.000	99	209702	250.0	203.1	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	165854	25.0	21.8	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	95	62209	25.0	23.7	
37 Hexane	57	4.205	4.205	0.000	93	81889	25.0	24.1	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43	4.344	4.344	0.000	98	240115	50.0	41.0	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	96	122264	25.0	24.2	
41 Isopropyl ether	87		4.372					ND	
42 2-Chloro-1,3-butadiene	53		4.414					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.679					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	83973	100.0	64.4	
47 Ethyl acetate	43		4.847					ND	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	87	69655	25.0	24.3	
49 2,2-Dichloropropane	77	4.847	4.861	-0.014	88	107580	25.0	24.0	
50 Propionitrile	54		4.875					ND	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41		5.015					ND	
54 Tetrahydrofuran	42	5.057	5.057	0.000	86	30506	50.0	32.2	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	31810	25.0	24.7	
55 Chloroform	83	5.126	5.140	-0.014	95	123518	25.0	23.5	
56 1,1,1-Trichloroethane	97	5.280	5.294	-0.014	98	104456	25.0	22.6	
57 Cyclohexane	56	5.350	5.350	0.000	94	122711	25.0	26.2	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	95271	25.0	25.5	
59 Carbon tetrachloride	117	5.420	5.420	0.000	82	76729	25.0	22.6	
60 Isobutyl alcohol	41	5.462	5.462	0.000	90	30687	625.0	329.6	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78	5.587	5.587	0.000	98	256325	25.0	24.8	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	99	105184	25.0	24.1	
65 Tert-amyl methyl ether	73		5.685					ND	
66 n-Heptane	43	5.825	5.825	0.000	92	79106	25.0	25.8	
67 n-Butanol	56		6.034					ND	
68 Trichloroethene	95	6.146	6.160	-0.014	95	82062	25.0	27.1	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55	6.355	6.369	-0.014	96	91706	25.0	25.2	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	92	70745	25.0	25.2	
72 Methyl methacrylate	100		6.397					ND	
73 1,4-Dioxane	88	6.425	6.439	-0.014	93	11005	500.0	358.5	
74 Dibromomethane	93	6.453	6.453	0.000	93	39367	25.0	22.4	
75 Dichlorobromomethane	83	6.602	6.609	-0.007	97	81691	25.0	21.2	
76 2-Nitropropane	41		6.795					ND	
77 2-Chloroethyl vinyl ether	63		6.838				ND	ND	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	95760	25.0	21.7	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.103	-0.001	99	177918	100.0	76.5	
80 2,2-Dimethylpentane	57		7.251					ND	
81 2,4-Dimethylpentane	43		7.293					ND	
82 Toluene	91	7.296	7.296	0.000	97	259021	25.0	25.1	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	84622	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
83 2,2,3-Trimethylbutane	57		7.502					ND	
85 Ethyl methacrylate	69	7.517	7.524	-0.007	90	64496	25.0	19.8	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	94	49340	25.0	22.7	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164	7.767	7.768	-0.001	92	47616	25.0	28.2	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	91857	25.0	22.2	
91 2-Hexanone	43	7.853	7.853	0.000	97	121374	100.0	70.8	
93 2,3-Dimethylpentane	56		7.949					ND	
92 3-Methylhexane	43		7.949					ND	
94 Tetrahydrothiophene	60		8.018					ND	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	89	46959	25.0	19.2	
96 Ethylene Dibromide	107	8.146	8.154	-0.008	96	50343	25.0	21.4	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.568					ND	
99 Chlorobenzene	112	8.604	8.604	0.000	91	164135	25.0	24.6	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	85	53638	25.0	22.8	
101 Ethylbenzene	106	8.683	8.690	-0.007	99	90581	25.0	25.6	
102 m-Xylene & p-Xylene	106	8.804	8.811	-0.007	99	112496	25.0	25.2	
103 o-Xylene	106	9.176	9.176	0.000	98	104565	25.0	25.1	
104 Styrene	104	9.198	9.198	0.000	94	182712	25.0	24.0	
106 Bromoform	173	9.383	9.383	0.000	91	25950	25.0	16.6	
105 Dimethyl disulfide	94	9.383	9.388	-0.005	41	4206		NC	
107 Isopropylbenzene	105	9.526	9.534	-0.008	97	293516	25.0	25.2	
108 cis-1,4-Dichloro-2-butene	53		9.584					ND	U
109 Cyclohexanone	55	9.627	9.627	0.000	96	61278	1000.0	334.8	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	58963	25.0	18.0	
111 Bromobenzene	156	9.855	9.855	0.000	98	67164	25.0	25.4	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.863	-0.001	70	17489	25.0	15.1	
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	85	18858	25.0	20.8	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	76559	25.0	23.7	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	67750	25.0	25.6	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	247622	25.0	23.8	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	72258	25.0	24.8	
118 tert-Butylbenzene	119	10.427	10.427	0.000	94	204313	25.0	24.0	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	98	254087	25.0	23.8	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	57093	25.0	23.3	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	96	124787	25.0	24.2	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	246332	25.0	23.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	94	130596	25.0	24.1	
124 1,2,3-Trimethylbenzene	105		10.899					ND	
125 n-Butylbenzene	91	11.207	11.207	0.000	99	230764	25.0	22.6	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	120447	25.0	24.8	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	72	9314	25.0	14.1	
129 1,3,5-Trichlorobenzene	180		12.215					ND	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	68453	25.0	21.5	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	94	28423	25.0	26.0	
132 Naphthalene	128	13.123	13.123	0.000	98	165818	25.0	17.6	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	61977	25.0	21.4	
145 Ethyl acrylate	55		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
135 Pentachloroethane TIC	1		0.000					ND	
136 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
144 1-Chlorohexane TIC	1		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
146 t-Amyl alcohol	1		0.000					ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
141 4-Chlorobenzotrifluoride	1		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	48.0	
S 150 1,2-Dichloroethene, Total	1				0		50.0	48.0	
S 151 Trihalomethanes, Total	1				0		100.0	80.6	
S 152 Total BTEX	1				0			125.8	
S 153 Xylenes, Total (URS)	1				0		50.0	50.3	
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106				0		50.0	50.3	
S 156 1,3-Dichloropropene, Total	1				0		50.0	42.2	

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-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:19

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3875.D

Injection Date: 30-Jun-2021 05:55:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-A-18 MS

Worklist Smp#: 21

Client ID: RW-8030P-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

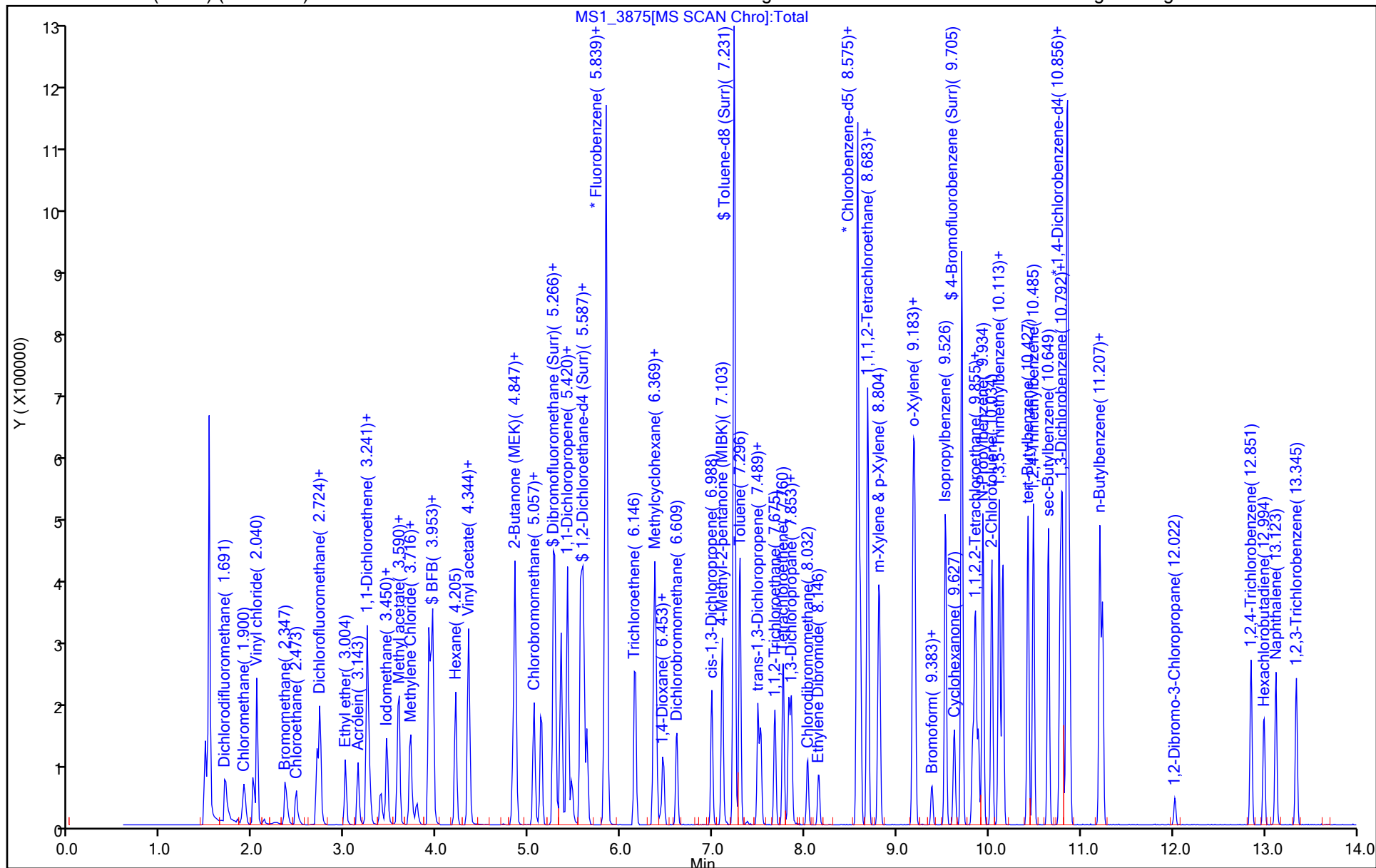
ALS Bottle#: 25

Method: AQ_VMS1_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_MS1\20210629-102809.b\MS1_3875.D
 Lims ID: 280-150245-A-18 MS
 Client ID: RW-8030P-20210623
 Sample Type: MS
 Inject. Date: 30-Jun-2021 05:55:30 ALS Bottle#: 25 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-18 MS pH<2
 Misc. Info.: 280-0102809-021
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:04:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.4	98.78
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.8	95.51
\$ 7 Toluene-d8 (Surr)	50.0	48.7	97.36
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.2	94.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8030P-20210623 MS Lab Sample ID: 280-150245-18 MS
 Matrix: Water Lab File ID: MS1_3877.D
 Analysis Method: 8260B Date Collected: 06/23/2021 15:40
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 06:37
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	222		30	9.6
126-99-8	Chloroprene	26.0		1.0	0.21
126-98-7	Methacrylonitrile	238		10	1.6
80-62-6	Methyl methacrylate	43.4		4.0	1.1
107-12-0	Propionitrile	209		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)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3877.D
 Lims ID: 280-150245-B-18 MS
 Client ID: RW-8030P-20210623
 Sample Type: MS
 Inject. Date: 30-Jun-2021 06:37:30 ALS Bottle#: 27 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-18 MS pH<2
 Misc. Info.: 280-0102809-023
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	753376	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.575	0.001	91	160526	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	264782	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	189587	50.0	47.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	255627	50.0	47.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	691945	50.0	49.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	272439	50.0	47.4	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95		3.579					ND	
11 Dichlorodifluoromethane	85		1.705					ND	
12 Chloromethane	50		1.914					ND	
13 Vinyl chloride	62		1.998					ND	
14 Ethylene oxide	43	2.319	2.319	0.000	100	13817	2500.0	32.9	
15 Bromomethane	94		2.361					ND	
16 Chloroethane	64		2.473					ND	
17 Dichlorofluoromethane	67		2.696					ND	
18 Trichlorofluoromethane	101		2.724					ND	
19 Ethanol	45	2.892	2.892	0.000	97	35095	1500.0	1049.3	
20 Ethyl ether	59		3.004					ND	
21 Propene oxide	58		3.059				ND	ND	
22 Acrolein	56		3.143					ND	
23 1,1-Dichloroethene	96		3.241					ND	
24 112TCTFE	151		3.255					ND	
25 Acetone	43		3.269					ND	
27 Isopropyl alcohol	45	3.395	3.395	0.000	95	27993	250.0	168.1	
26 Iodomethane	142		3.395					ND	
28 Carbon disulfide	76		3.464					ND	7
29 Acetonitrile	41	3.534	3.534	0.000	98	79542	250.0	221.7	
30 Methyl acetate	43		3.576					ND	
31 3-Chloro-1-propene	41		3.590					ND	
32 Methylene Chloride	84		3.716					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2-Methyl-2-propanol	59		3.786					ND	
34 Acrylonitrile	53		3.911					ND	
35 Methyl tert-butyl ether	73		3.939					ND	
36 trans-1,2-Dichloroethene	96		3.953					ND	
37 Hexane	57		4.205					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43	4.372	4.344	0.028	57	105377		17.8	
40 1,1-Dichloroethane	63		4.344					ND	
41 Isopropyl ether	87	4.372	4.372	0.000	92	49175	25.0	24.6	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	94	121893	25.0	26.0	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59	4.680	4.679	0.001	98	179566	25.0	23.4	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.819					ND	
47 Ethyl acetate	43	4.847	4.847	0.000	99	87245	50.0	44.5	
48 cis-1,2-Dichloroethene	96		4.847					ND	
49 2,2-Dichloropropane	77		4.861					ND	
50 Propionitrile	54	4.875	4.875	0.000	98	74448	250.0	208.7	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	341733	250.0	238.1	
54 Tetrahydrofuran	42		5.057					ND	
53 Chlorobromomethane	128		5.057					ND	
55 Chloroform	83		5.140					ND	
56 1,1,1-Trichloroethane	97		5.294					ND	
57 Cyclohexane	56		5.350					ND	
58 1,1-Dichloropropene	75		5.420					ND	
59 Carbon tetrachloride	117		5.420					ND	
60 Isobutyl alcohol	41		5.462					ND	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78		5.587					ND	
64 1,2-Dichloroethane	62		5.629					ND	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	80	147126	25.0	22.1	
66 n-Heptane	43		5.825					ND	
67 n-Butanol	56	6.034	6.034	0.000	97	21121	625.0	342.5	
68 Trichloroethene	95	6.160	6.160	0.000	89	14198		4.77	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55		6.369					ND	
71 1,2-Dichloropropane	63		6.383					ND	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	25247	50.0	43.4	
73 1,4-Dioxane	88		6.439					ND	
74 Dibromomethane	93		6.453					ND	
75 Dichlorobromomethane	83		6.609					ND	
76 2-Nitropropane	41	6.788	6.795	-0.007	97	15300	50.0	20.0	
77 2-Chloroethyl vinyl ether	63		6.838					ND	
78 cis-1,3-Dichloropropene	75		6.988					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103					ND	
80 2,2-Dimethylpentane	57		7.251					ND	
81 2,4-Dimethylpentane	43		7.293					ND	
82 Toluene	91		7.296					ND	
84 trans-1,3-Dichloropropene	75		7.489					ND	
83 2,2,3-Trimethylbutane	57		7.502					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 Ethyl methacrylate	69		7.524					ND	
87 1,1,2-Trichloroethane	97		7.675					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164		7.768					ND	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76		7.825					ND	
91 2-Hexanone	43		7.853					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
92 3-Methylhexane	43	7.953	7.949	0.004	75	69762		NC	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	94	18631	50.0	26.9	
95 Chlorodibromomethane	129		8.032					ND	
96 Ethylene Dibromide	107		8.154					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91	8.561	8.568	-0.007	89	85653		25.0	
99 Chlorobenzene	112	8.604	8.604	0.000	96	33595		5.13	
100 1,1,1,2-Tetrachloroethane	131		8.683					ND	
101 Ethylbenzene	106		8.690					ND	
102 m-Xylene & p-Xylene	106		8.811					ND	
103 o-Xylene	106		9.176					ND	
104 Styrene	104		9.198					ND	
106 Bromoform	173		9.383					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.534					ND	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	88	37296	50.0	28.8	
109 Cyclohexanone	55	9.627	9.627	0.000	76	2757		15.3	
110 1,1,2,2-Tetrachloroethane	83		9.827					ND	
111 Bromobenzene	156		9.855					ND	
112 trans-1,4-Dichloro-2-butene	53		9.863					ND	
113 1,2,3-Trichloropropane	110		9.891					ND	
114 N-Propylbenzene	120		9.934					ND	
115 2-Chlorotoluene	126		10.034					ND	
116 1,3,5-Trimethylbenzene	105		10.113					ND	
117 4-Chlorotoluene	126		10.156					ND	
118 tert-Butylbenzene	119		10.427					ND	
119 1,2,4-Trimethylbenzene	105		10.485					ND	
120 sec-Butylbenzene	134		10.649					ND	
121 1,3-Dichlorobenzene	146		10.778					ND	
122 4-Isopropyltoluene	119		10.799					ND	
123 1,4-Dichlorobenzene	146		10.878					ND	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	255579	25.0	25.4	
125 n-Butylbenzene	91		11.207					ND	
127 1,2-Dichlorobenzene	146		11.235					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022					ND	
129 1,3,5-Trichlorobenzene	180	12.208	12.215	-0.007	94	78899	25.0	25.6	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	80	1631		0.5158	
131 Hexachlorobutadiene	225		12.994					ND	
132 Naphthalene	128		13.123					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180	13.338	13.345	-0.007	91	2182		0.7558	
145 Ethyl acrylate	55		0.000				ND	ND	
135 Pentachloroethane 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
136 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
144 1-Chlorohexane TIC	1		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
146 t-Amyl alcohol	1		0.000				ND	ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
141 4-Chlorobenzotrifluoride	1		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95		2.000					ND	7
S 150 1,2-Dichloroethene, Total	1		0.000					ND	7
S 151 Trihalomethanes, Total	1		0.000					ND	7
S 152 Total BTEX	1		0.000					ND	7
S 153 Xylenes, Total (URS)	1		0.000					ND	7
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106		0.000					ND	7
S 156 1,3-Dichloropropene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Reagents:

MV-Supp A_00051

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:24

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3877.D

Injection Date: 30-Jun-2021 06:37:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-18 MS

Worklist Smp#: 23

Client ID: RW-8030P-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

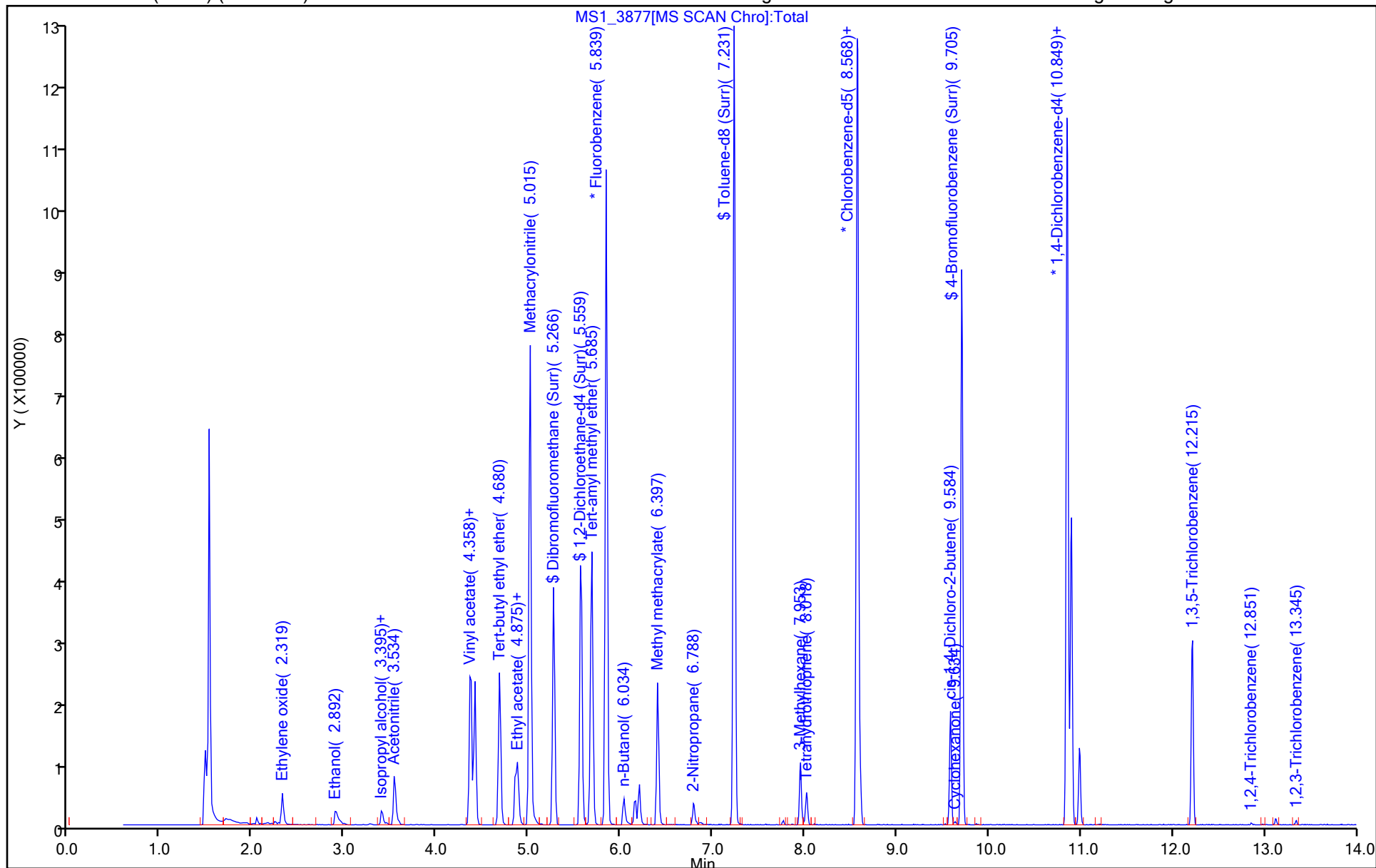
ALS Bottle#: 27

Method: AQ_VMS1_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_MS1\20210629-102809.b\MS1_3877.D
 Lims ID: 280-150245-B-18 MS
 Client ID: RW-8030P-20210623
 Sample Type: MS
 Inject. Date: 30-Jun-2021 06:37:30 ALS Bottle#: 27 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-18 MS pH<2
 Misc. Info.: 280-0102809-023
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.5	94.95
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.8	95.56
\$ 7 Toluene-d8 (Surr)	50.0	49.8	99.51
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.4	94.82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>PA-1-20210622 MSD</u>	Lab Sample ID: <u>280-150245-10 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>P6420.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/22/2021 15:05</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>06/30/2021 07:09</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541784</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	88.2		10	1.9
107-02-8	Acrolein	224		20	2.8
107-13-1	Acrylonitrile	225		20	1.4
71-43-2	Benzene	24.8		1.0	0.16
74-97-5	Chlorobromomethane	25.9		1.0	0.10
75-27-4	Dichlorobromomethane	24.5		1.0	0.17
75-25-2	Bromoform	23.8		1.0	0.46
74-83-9	Bromomethane	27.1		2.0	0.21
78-93-3	2-Butanone (MEK)	86.2		6.0	2.0
75-15-0	Carbon disulfide	21.8		2.0	0.17
56-23-5	Carbon tetrachloride	26.8		1.0	0.19
108-90-7	Chlorobenzene	24.3		1.0	0.17
124-48-1	Chlorodibromomethane	23.8		1.0	0.17
75-00-3	Chloroethane	24.4		2.0	0.41
67-66-3	Chloroform	24.7		1.0	0.16
74-87-3	Chloromethane	23.9		2.0	0.30
107-05-1	Allyl chloride	22.4		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	23.4		5.0	0.47
74-95-3	Dibromomethane	24.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	24.1		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.5		1.0	0.13
106-46-7	1,4-Dichlorobenzene	23.6		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	18.4		3.0	0.80
75-71-8	Dichlorodifluoromethane	30.7		2.0	0.31
75-34-3	1,1-Dichloroethane	24.2		1.0	0.22
107-06-2	1,2-Dichloroethane	24.0		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.7		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	25.1		1.0	0.15
75-35-4	1,1-Dichloroethene	24.9		1.0	0.23
78-87-5	1,2-Dichloropropane	23.5		1.0	0.18
142-28-9	1,3-Dichloropropane	23.8		1.0	0.090
594-20-7	2,2-Dichloropropane	23.6		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.6		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.4		3.0	0.19
563-58-6	1,1-Dichloropropene	25.1		1.0	0.19
100-41-4	Ethylbenzene	24.2		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-1-20210622 MSD Lab Sample ID: 280-150245-10 MSD
 Matrix: Water Lab File ID: P6420.D
 Analysis Method: 8260B Date Collected: 06/22/2021 15:05
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 07:09
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	22.7		3.0	0.86
591-78-6	2-Hexanone	85.6		5.0	1.7
74-88-4	Iodomethane	24.1		1.0	0.23
78-83-1	Isobutyl alcohol	530		110	37
75-09-2	Methylene Chloride	22.8		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	89.6		5.0	0.98
100-42-5	Styrene	24.7		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	23.2		1.0	0.21
127-18-4	Tetrachloroethene	26.2		1.0	0.20
108-88-3	Toluene	24.7		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	23.9		1.0	0.21
71-55-6	1,1,1-Trichloroethane	26.0		1.0	0.16
79-00-5	1,1,2-Trichloroethane	24.8		1.0	0.27
79-01-6	Trichloroethene	25.6		1.0	0.16
75-69-4	Trichlorofluoromethane	28.1		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.5		2.5	0.33
108-05-4	Vinyl acetate	44.2		3.0	0.94
75-01-4	Vinyl chloride	25.9		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.2		2.0	0.15
95-47-6	o-Xylene	24.1		1.0	0.19
1330-20-7	Xylenes, Total	48.3		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)	99		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)	102		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6420.D
 Lims ID: 280-150245-A-10 MSD
 Client ID: PA-1-20210622
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 07:09:30 ALS Bottle#: 27 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-10 MSD pH<2
 Misc. Info.: 280-0102808-031
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:35:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.870	4.878	-0.008	99	1418989	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.392	7.389	0.003	88	327588	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.608	9.606	0.002	97	458773	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.374	4.373	0.001	91	351904	50.0	50.8	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.638	4.637	0.001	97	436692	50.0	49.7	
\$ 6 Toluene-d8 (Surr)	98	6.126	6.125	0.001	94	1372575	50.0	48.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.479	8.478	0.001	84	505800	50.0	48.1	
\$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 9 BFB	95	3.308	3.389	-0.080	0	6374		NR	
10 Dichlorodifluoromethane	85	1.536	1.535	0.001	100	143843	25.0	30.7	
11 Chloromethane	50	1.704	1.704	0.000	99	122088	25.0	23.9	
12 Vinyl chloride	62	1.799	1.799	0.000	98	128960	25.0	25.9	
13 Ethylene oxide	43		2.039					ND	7
14 Bromomethane	94	2.063	2.073	-0.010	94	73188	25.0	27.1	
15 Chloroethane	64	2.158	2.157	0.001	98	78899	25.0	24.4	
16 Dichlorofluoromethane	67	2.327	2.326	0.001	98	216088	25.0	24.7	
17 Trichlorofluoromethane	101	2.359	2.358	0.001	100	194603	25.0	28.1	
18 Ethanol	45		2.472					ND	
19 Ethyl ether	59	2.570	2.569	0.001	90	98414	25.0	22.6	
20 Propene oxide	58		2.609					ND	
21 Acrolein	56	2.675	2.674	0.001	100	203762	246.9	224.2	
22 1,1-Dichloroethene	96	2.749	2.748	0.001	98	94181	25.0	24.9	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151	2.749	2.759	-0.010	74	71037	25.0	26.8	
24 Acetone	43	2.770	2.769	0.001	100	163842	100.0	88.2	
25 Isopropyl alcohol	45		2.852					ND	
26 Iodomethane	142	2.876	2.875	0.001	100	135909	25.0	24.1	
27 Carbon disulfide	76	2.929	2.928	0.001	100	290661	25.0	21.8	
28 Acetonitrile	41		2.968					ND	
29 Methyl acetate	43	2.992	2.991	0.001	97	187291	50.0	39.1	
30 3-Chloro-1-propene	41	3.013	3.012	0.001	87	155738	25.0	22.4	
31 Methylene Chloride	84	3.108	3.107	0.001	90	123919	25.0	22.8	

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	3.150	3.149	0.001	99	156609	250.0	222.0	
33 Acrylonitrile	53	3.266	3.265	0.001	98	537543	250.0	225.4	
34 Methyl tert-butyl ether	73	3.287	3.297	-0.010	94	390767	25.0	24.5	
35 trans-1,2-Dichloroethene	96	3.308	3.308	0.000	96	116651	25.0	25.1	
36 Hexane	57	3.498	3.498	0.000	92	125718	25.0	21.1	
38 Vinyl acetate	43	3.593	3.603	-0.010	98	549487	50.0	44.2	
40 Isopropyl ether	87		3.622					ND	U
39 1,1-Dichloroethane	63	3.614	3.624	-0.010	98	219051	25.0	24.2	
41 2-Chloro-1,3-butadiene	53		3.675					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
43 Tert-butyl ethyl ether	59		3.875					ND	
44 2-Butanone (MEK)	43	3.994	4.004	-0.010	99	255850	100.0	86.2	
46 Ethyl acetate	43		4.013					ND	
47 cis-1,2-Dichloroethene	96	4.026	4.025	0.001	86	131747	25.0	24.7	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
48 2,2-Dichloropropane	77	4.037	4.036	0.001	89	178168	25.0	23.6	
49 Propionitrile	54		4.044					ND	
50 sec-Butyl Alcohol	45	4.089	4.109	-0.020	12	252		0.3544	
51 Methacrylonitrile	41		4.160					ND	
52 Tetrahydrofuran	42	4.205	4.205	0.000	84	81018	50.0	41.2	
53 Chlorobromomethane	128	4.205	4.205	0.000	96	63966	25.0	25.9	
54 Chloroform	83	4.258	4.257	0.001	96	221690	25.0	24.7	
45 2-Chloro-1,1,1-Trifluoroethane	118	4.258	4.307	-0.048	25	4014		NC	
55 1,1,1-Trichloroethane	97	4.395	4.405	-0.010	98	191597	25.0	26.0	
56 Cyclohexane	56	4.459	4.458	0.001	90	194715	25.0	24.8	
57 1,1-Dichloropropene	75	4.511	4.511	0.000	94	173168	25.0	25.1	
59 Carbon tetrachloride	117	4.522	4.521	0.001	95	150577	25.0	26.8	
58 Isobutyl alcohol	41	4.533	4.532	0.001	94	115905	625.0	529.7	
60 Benzene	78	4.659	4.658	0.001	98	506667	25.0	24.8	
61 1,2-Dichloroethane	62	4.691	4.690	0.001	97	186940	25.0	24.0	
63 n-Butanol	56		4.730					ND	
62 Tert-amyl methyl ether	73		4.730					ND	
66 n-Heptane	43	4.849	4.848	0.001	89	111334	25.0	21.0	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83	5.155	5.131	0.025	44	1749		NC	
67 Trichloroethene	95	5.145	5.154	-0.009	97	132657	25.0	25.6	
68 2-Pentanone	43		5.249					ND	
69 Methylcyclohexane	55	5.335	5.344	-0.009	93	143965	25.0	24.6	
70 1,2-Dichloropropane	63	5.356	5.355	0.001	94	128012	25.0	23.5	
71 Methyl methacrylate	100		5.363					ND	
72 1,4-Dioxane	88	5.398	5.397	0.001	92	39479	500.0	485.2	
73 Dibromomethane	93	5.419	5.429	-0.010	93	84132	25.0	24.4	
74 Dichlorobromomethane	83	5.546	5.545	0.001	99	163937	25.0	24.5	
75 2-Nitropropane	41		5.712					ND	
76 2-Chloroethyl vinyl ether	63		5.756				ND	ND	
77 cis-1,3-Dichloropropene	75	5.894	5.893	0.001	94	201538	25.0	22.6	
78 4-Methyl-2-pentanone (MIBK)	43	5.999	5.999	0.000	96	519623	100.0	89.6	
79 Toluene	91	6.179	6.178	0.001	98	545242	25.0	24.7	
80 trans-1,3-Dichloropropene	75	6.358	6.357	0.001	98	190633	25.0	23.4	
81 Ethyl methacrylate	69	6.379	6.389	-0.010	88	186561	25.0	22.7	
82 1,1,2-Trichloroethane	97	6.527	6.537	-0.010	93	112848	25.0	24.8	
83 Tetrachloroethene	164	6.622	6.621	0.001	94	90022	25.0	26.2	

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	6.675	6.674	0.001	96	209180	25.0	23.8	
85 2-Hexanone	43	6.696	6.695	0.001	96	373854	100.0	85.6	
87 Tetrahydrothiophene	60		6.862					ND	
86 Chlorodibromomethane	129	6.865	6.874	-0.009	90	109464	25.0	23.8	
88 Ethylene Dibromide	107	6.981	6.991	-0.009	98	121989	25.0	23.9	
89 1-Chlorohexane	91	7.382	7.380	0.002	33	2731		0.2911	
90 Chlorobenzene	112	7.413	7.413	0.000	93	336224	25.0	24.3	
91 1,1,1,2-Tetrachloroethane	131	7.487	7.486	0.001	92	115435	25.0	25.2	
92 Ethylbenzene	106	7.498	7.497	0.001	99	180441	25.0	24.2	
93 m-Xylene & p-Xylene	106	7.614	7.613	0.001	99	221611	25.0	24.2	
94 o-Xylene	106	7.973	7.972	0.001	98	211683	25.0	24.1	
95 Styrene	104	7.983	7.982	0.001	94	380942	25.0	24.7	
96 Bromoform	173	8.163	8.172	-0.009	92	64604	25.0	23.8	
97 Isopropylbenzene	105	8.310	8.310	0.000	97	551509	25.0	25.0	
98 cis-1,4-Dichloro-2-butene	53		8.360					ND	
99 Cyclohexanone	55	8.395	8.405	-0.010	93	187586	1000.0	728.7	
100 1,1,2,2-Tetrachloroethane	83	8.595	8.595	0.000	95	158521	25.0	23.2	
101 Bromobenzene	156	8.627	8.626	0.001	98	131737	25.0	24.6	
102 trans-1,4-Dichloro-2-butene	53	8.638	8.637	0.001	88	35310	25.0	18.4	
103 1,2,3-Trichloropropane	110	8.659	8.658	0.001	85	48120	25.0	23.5	
104 N-Propylbenzene	120	8.711	8.711	0.000	99	144050	25.0	24.5	
105 2-Chlorotoluene	126	8.796	8.806	-0.010	95	124915	25.0	24.3	
106 1,3,5-Trimethylbenzene	105	8.880	8.879	0.001	93	440759	25.0	24.5	
107 4-Chlorotoluene	126	8.912	8.922	-0.010	98	132088	25.0	24.3	
108 tert-Butylbenzene	119	9.186	9.186	0.000	92	354957	25.0	24.7	
127 Pentachloroethane	167		9.225					ND	
109 1,2,4-Trimethylbenzene	105	9.250	9.249	0.001	98	450656	25.0	24.4	
110 sec-Butylbenzene	134	9.408	9.407	0.001	95	102114	25.0	25.5	
111 1,3-Dichlorobenzene	146	9.524	9.534	-0.010	96	232708	25.0	24.5	
112 4-Isopropyltoluene	119	9.556	9.555	0.001	96	425762	25.0	24.9	
113 1,4-Dichlorobenzene	146	9.630	9.629	0.001	94	237204	25.0	23.6	
114 1,2,3-Trimethylbenzene	105		9.648					ND	U
115 n-Butylbenzene	91	9.957	9.956	0.001	98	377131	25.0	24.0	
116 1,2-Dichlorobenzene	146	9.978	9.977	0.001	95	221273	25.0	24.1	
117 1,2-Dibromo-3-Chloropropane	157	10.759	10.758	0.001	81	28391	25.0	23.4	
118 1,3,5-Trichlorobenzene	180		10.946					ND	
119 1,2,4-Trichlorobenzene	180	11.582	11.581	0.001	94	118136	25.0	23.9	
120 Hexachlorobutadiene	225	11.719	11.729	-0.010	93	41065	25.0	25.4	
121 Naphthalene	128	11.846	11.845	0.001	98	384551	25.0	22.1	
122 1,2,3-Trichlorobenzene	180	12.067	12.066	0.001	95	108033	25.0	25.9	
136 1-Chlorohexane TIC	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
132 2-Methylhexane	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)	95				0		50.0	49.8	
S 142 Xylenes, Total	106				0		50.0	48.4	
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1				0		100.0	96.8	
S 143 Xylenes, Total (URS)	1				0		50.0	48.4	
S 146 Total BTEX	1				0			122.0	
S 145 1,3-Dichloropropene, Total	1				0		50.0	45.9	
S 144 1,2-Dichloroethene, Total	1				0		50.0	49.8	

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-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\P6420.D

Injection Date: 30-Jun-2021 07:09:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-A-10 MSD

Worklist Smp#: 31

Client ID: PA-1-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

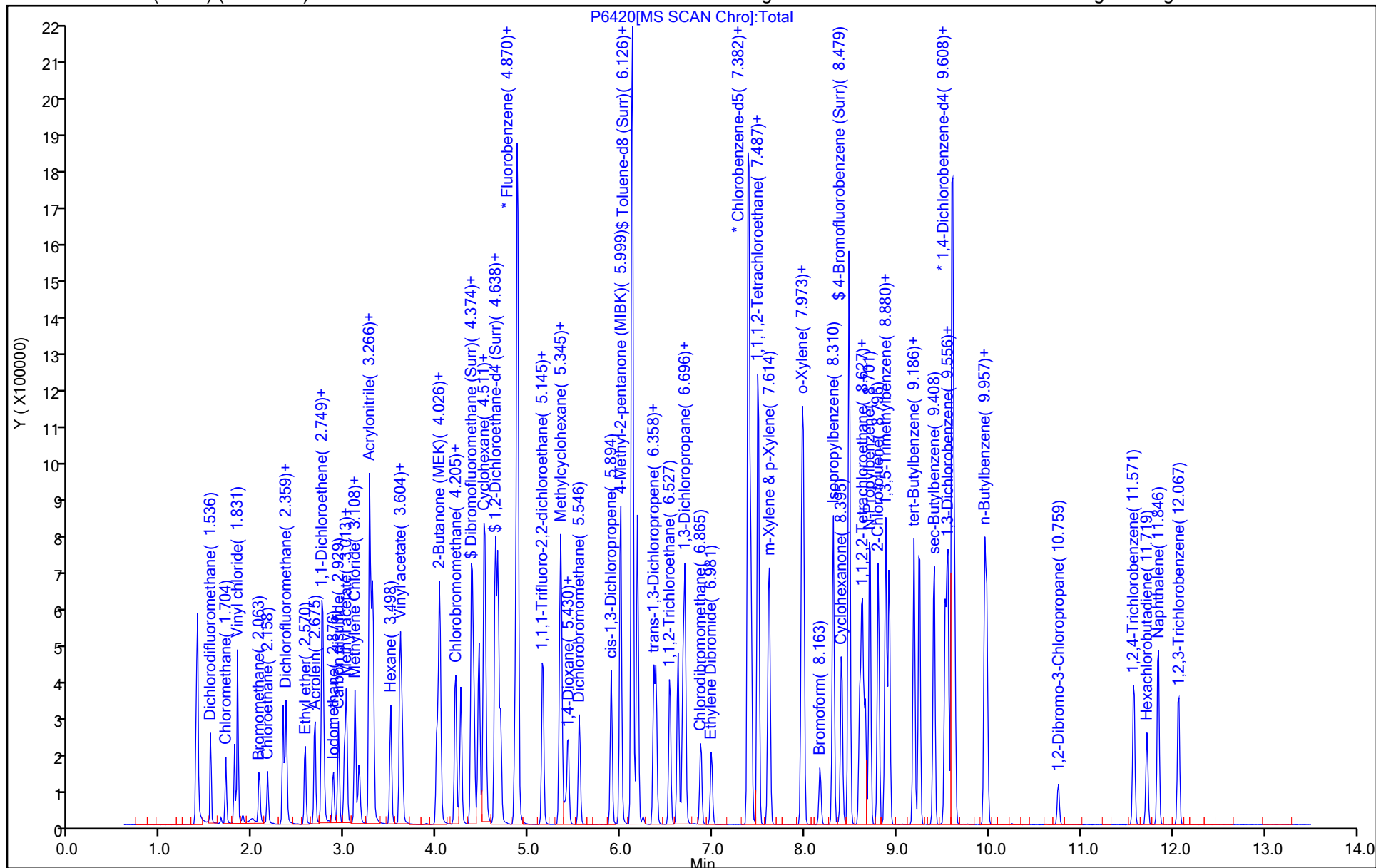
ALS Bottle#: 27

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\20210629-102808.b\IP6420.D
 Lims ID: 280-150245-A-10 MSD
 Client ID: PA-1-20210622
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 07:09:30 ALS Bottle#: 27 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-10 MSD pH<2
 Misc. Info.: 280-0102808-031
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:35:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.8	101.69
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.7	99.42
\$ 6 Toluene-d8 (Surr)	50.0	48.7	97.34
\$ 7 4-Bromofluorobenzene (Surr)	50.0	48.1	96.11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: PA-1-20210622 MSD Lab Sample ID: 280-150245-10 MSD
 Matrix: Water Lab File ID: P6422.D
 Analysis Method: 8260B Date Collected: 06/22/2021 15:05
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 07:55
 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.: 541784 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	194		30	9.6
126-99-8	Chloroprene	22.2		1.0	0.21
126-98-7	Methacrylonitrile	212		10	1.6
80-62-6	Methyl methacrylate	45.8		4.0	1.1
107-12-0	Propionitrile	203		20	3.7

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)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\IP6422.D
 Lims ID: 280-150245-B-10 MSD
 Client ID: PA-1-20210622
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 07:55:30 ALS Bottle#: 29 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-10 MSD pH<2
 Misc. Info.: 280-0102808-033
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:12:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.878	4.878	0.000	98	1423576	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.389	7.389	0.000	88	323605	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.605	9.606	-0.001	97	453352	50.0	50.0	
\$ 4 Dibromofluoromethane (Surr)	111	4.382	4.373	0.009	91	349489	50.0	50.3	
\$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.635	4.637	-0.002	98	436380	50.0	49.5	
\$ 6 Toluene-d8 (Surr)	98	6.123	6.125	-0.002	94	1363771	50.0	49.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	8.476	8.478	-0.002	84	494707	50.0	47.6	
\$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 9 BFB	95		3.389					ND	
10 Dichlorodifluoromethane	85		1.535					ND	
11 Chloromethane	50		1.704					ND	
12 Vinyl chloride	62		1.799					ND	
13 Ethylene oxide	43		2.039				2500.0	ND	7
14 Bromomethane	94		2.073					ND	7
15 Chloroethane	64		2.157					ND	
16 Dichlorofluoromethane	67		2.326					ND	
17 Trichlorofluoromethane	101		2.358					ND	
18 Ethanol	45	2.472	2.472	0.000	100	108351	1500.0	1086.5	
19 Ethyl ether	59		2.569					ND	
20 Propene oxide	58		2.609				ND	ND	
21 Acrolein	56		2.674					ND	
22 1,1-Dichloroethene	96		2.748					ND	
23 1,1,2-Trichloro-1,2,2-trifluoroethane	151		2.759					ND	
24 Acetone	43	2.767	2.769	-0.002	100	5980		3.21	
25 Isopropyl alcohol	45	2.851	2.852	-0.001	98	97540	250.0	182.3	
26 Iodomethane	142		2.875					ND	U
27 Carbon disulfide	76	2.925	2.928	-0.003	95	2015		0.1506	
28 Acetonitrile	41	2.967	2.968	-0.001	99	184639	250.0	194.4	
29 Methyl acetate	43	2.989	2.991	-0.002	97	6095		1.27	
30 3-Chloro-1-propene	41		3.012					ND	
31 Methylene Chloride	84	3.115	3.107	0.008	93	1353		0.2478	

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		3.149					ND	
33 Acrylonitrile	53		3.265					ND	
34 Methyl tert-butyl ether	73		3.297					ND	
35 trans-1,2-Dichloroethene	96		3.308					ND	
36 Hexane	57		3.498					ND	
38 Vinyl acetate	43		3.603					ND	
40 Isopropyl ether	87	3.622	3.622	0.000	92	108093	25.0	22.7	
39 1,1-Dichloroethane	63		3.624					ND	
41 2-Chloro-1,3-butadiene	53	3.675	3.675	0.000	93	197366	25.0	22.2	
37 Chlorotrifluoroethene	116		3.818					ND	
43 Tert-butyl ethyl ether	59	3.875	3.875	0.000	98	392241	25.0	21.8	
44 2-Butanone (MEK)	43		4.004					ND	
46 Ethyl acetate	43	4.012	4.013	-0.001	99	254892	50.0	43.8	
47 cis-1,2-Dichloroethene	96		4.025					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
48 2,2-Dichloropropane	77		4.036					ND	
49 Propionitrile	54	4.044	4.044	0.000	99	221074	250.0	203.4	
50 sec-Butyl Alcohol	45		4.109					ND	U
51 Methacrylonitrile	41	4.160	4.160	0.000	90	851471	250.0	212.2	
52 Tetrahydrofuran	42		4.205					ND	
53 Chlorobromomethane	128		4.205					ND	
54 Chloroform	83		4.257					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
55 1,1,1-Trichloroethane	97		4.405					ND	
56 Cyclohexane	56		4.458					ND	
57 1,1-Dichloropropene	75		4.511					ND	
59 Carbon tetrachloride	117		4.521					ND	
58 Isobutyl alcohol	41	4.624	4.532	0.092	43	21209		96.6	
60 Benzene	78		4.658					ND	
61 1,2-Dichloroethane	62		4.690					ND	
63 n-Butanol	56	4.730	4.730	0.000	51	110369	625.0	540.5	
62 Tert-amyl methyl ether	73	4.730	4.730	0.000	89	378140	25.0	22.3	
66 n-Heptane	43		4.848					ND	
64 1,2-Dichloro-1,1,2-trifluoroethane	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroethane	83		5.131					ND	
67 Trichloroethene	95	5.152	5.154	-0.002	94	6603		1.29	
68 2-Pentanone	43		5.249					ND	
69 Methylcyclohexane	55		5.344					ND	
70 1,2-Dichloropropane	63		5.355					ND	
71 Methyl methacrylate	100	5.363	5.363	0.000	87	80308	50.0	45.8	
72 1,4-Dioxane	88		5.397					ND	
73 Dibromomethane	93		5.429					ND	
74 Dichlorobromomethane	83		5.545					ND	
75 2-Nitropropane	41	5.711	5.712	-0.001	99	60653	50.0	37.3	
76 2-Chloroethyl vinyl ether	63		5.756					ND	
77 cis-1,3-Dichloropropene	75		5.893					ND	
78 4-Methyl-2-pentanone (MIBK)	43		5.999					ND	
79 Toluene	91		6.178					ND	
80 trans-1,3-Dichloropropene	75		6.357					ND	
81 Ethyl methacrylate	69		6.389					ND	
82 1,1,2-Trichloroethane	97		6.537					ND	
83 Tetrachloroethene	164		6.621					ND	

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		6.674					ND	
85 2-Hexanone	43	6.788	6.695	0.093	80	195984		45.4	
87 Tetrahydrothiophene	60	6.861	6.862	-0.001	92	52129	50.0	33.6	
86 Chlorodibromomethane	129		6.874					ND	
88 Ethylene Dibromide	107		6.991					ND	
89 1-Chlorohexane	91	7.379	7.380	-0.001	97	173854		18.8	
90 Chlorobenzene	112	7.410	7.413	-0.003	93	69872		5.12	
91 1,1,1,2-Tetrachloroethane	131		7.486					ND	
92 Ethylbenzene	106		7.497					ND	
93 m-Xylene & p-Xylene	106		7.613					ND	7
94 o-Xylene	106		7.972					ND	
95 Styrene	104		7.982					ND	
96 Bromoform	173		8.172					ND	
97 Isopropylbenzene	105		8.310					ND	
98 cis-1,4-Dichloro-2-butene	53	8.360	8.360	0.000	87	67656	50.0	41.4	
99 Cyclohexanone	55	8.413	8.405	0.008	65	5208		20.5	
100 1,1,2,2-Tetrachloroethane	83		8.595					ND	
101 Bromobenzene	156		8.626					ND	
102 trans-1,4-Dichloro-2-butene	53		8.637					ND	
103 1,2,3-Trichloropropane	110		8.658					ND	
104 N-Propylbenzene	120		8.711					ND	
105 2-Chlorotoluene	126		8.806					ND	
106 1,3,5-Trimethylbenzene	105		8.879					ND	
107 4-Chlorotoluene	126		8.922					ND	
108 tert-Butylbenzene	119		9.186					ND	
127 Pentachloroethane	167		9.225					ND	
109 1,2,4-Trimethylbenzene	105		9.249					ND	
110 sec-Butylbenzene	134		9.407					ND	
111 1,3-Dichlorobenzene	146		9.534					ND	
112 4-Isopropyltoluene	119		9.555					ND	
113 1,4-Dichlorobenzene	146		9.629					ND	
114 1,2,3-Trimethylbenzene	105	9.647	9.648	-0.001	99	451143	25.0	25.4	
115 n-Butylbenzene	91		9.956					ND	
116 1,2-Dichlorobenzene	146		9.977					ND	
117 1,2-Dibromo-3-Chloropropane	157		10.758					ND	
118 1,3,5-Trichlorobenzene	180	10.945	10.946	-0.001	96	127937	25.0	27.3	
119 1,2,4-Trichlorobenzene	180		11.581					ND	
120 Hexachlorobutadiene	225		11.729					ND	
121 Naphthalene	128		11.845					ND	
122 1,2,3-Trichlorobenzene	180		12.066					ND	
136 1-Chlorohexane TIC	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
123 3,3-Dimethylpentane	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
132 2-Methylhexane	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)	95		2.000					ND	7
S 142 Xylenes, Total	106		0.000					ND	7
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000					ND	7
S 143 Xylenes, Total (URS)	1		0.000					ND	7
S 146 Total BTEX	1		0.000					ND	7
S 145 1,3-Dichloropropene, Total	1		0.000					ND	7
S 144 1,2-Dichloroethene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MV-Supp A_00050

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:37:56

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\6422.D

Injection Date: 30-Jun-2021 07:55:30

Instrument ID: VMS_P

Operator ID: PETUNINP

Lims ID: 280-150245-B-10 MSD

Worklist Smp#: 33

Client ID: PA-1-20210622

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

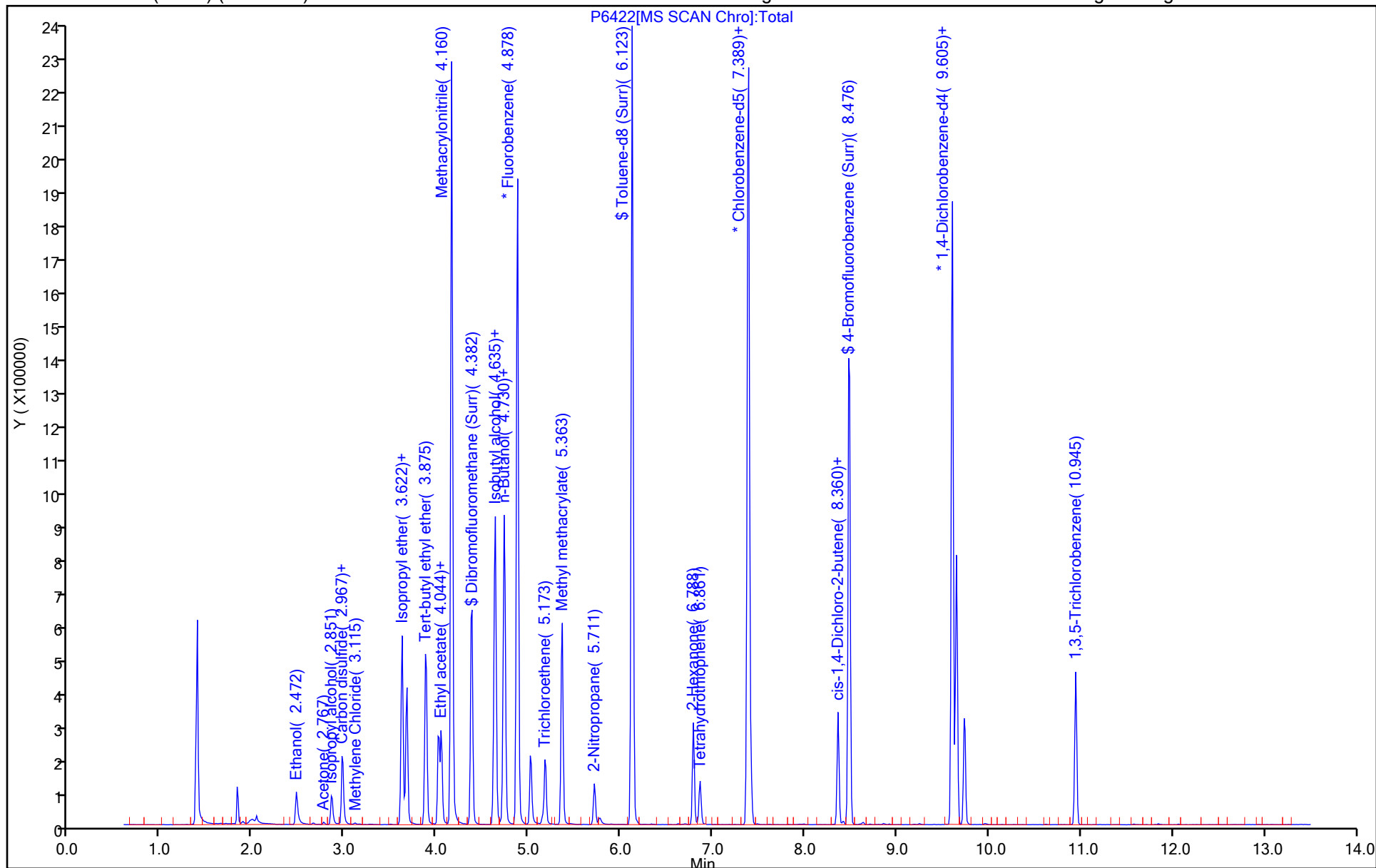
ALS Bottle#: 29

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\20210629-102808.b\IP6422.D
 Lims ID: 280-150245-B-10 MSD
 Client ID: PA-1-20210622
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 07:55:30 ALS Bottle#: 29 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-10 MSD pH<2
 Misc. Info.: 280-0102808-033
 Operator ID: PETUNINP Instrument ID: VMS_P
 Method: \\chromfs\Denver\ChromData\VMS_P\20210629-102808.b\AQ_VMSP_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:36:48 Calib Date: 26-Jun-2021 18:50:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b\IP6319.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 08:12:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	50.0	50.3	100.67
\$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	99.03
\$ 6 Toluene-d8 (Surr)	50.0	49.0	97.91
\$ 7 4-Bromofluorobenzene (Surr)	50.0	47.6	95.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150245-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-8030P-20210623 MSD</u>	Lab Sample ID: <u>280-150245-18 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>MS1_3876.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/23/2021 15:40</u>
Sample wt/vol: <u>5(mL)</u>	Date Analyzed: <u>06/30/2021 06:16</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>541786</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	65.6		10	1.9
107-02-8	Acrolein	183		20	2.8
107-13-1	Acrylonitrile	198		20	1.4
71-43-2	Benzene	25.2		1.0	0.16
74-97-5	Chlorobromomethane	24.5		1.0	0.10
75-27-4	Dichlorobromomethane	20.7		1.0	0.17
75-25-2	Bromoform	16.4		1.0	0.46
74-83-9	Bromomethane	24.3		2.0	0.21
78-93-3	2-Butanone (MEK)	65.4		6.0	2.0
75-15-0	Carbon disulfide	23.0		2.0	0.17
56-23-5	Carbon tetrachloride	22.7		1.0	0.19
108-90-7	Chlorobenzene	24.1		1.0	0.17
124-48-1	Chlorodibromomethane	20.3		1.0	0.17
75-00-3	Chloroethane	24.4		2.0	0.41
67-66-3	Chloroform	23.3		1.0	0.16
74-87-3	Chloromethane	23.6		2.0	0.30
107-05-1	Allyl chloride	24.8		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	14.6		5.0	0.47
74-95-3	Dibromomethane	23.3		1.0	0.17
95-50-1	1,2-Dichlorobenzene	23.9		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.8		1.0	0.13
106-46-7	1,4-Dichlorobenzene	23.1		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	14.5		3.0	0.80
75-71-8	Dichlorodifluoromethane	23.4		2.0	0.31
75-34-3	1,1-Dichloroethane	24.2		1.0	0.22
107-06-2	1,2-Dichloroethane	23.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	23.0		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	23.2		1.0	0.15
75-35-4	1,1-Dichloroethene	24.5		1.0	0.23
78-87-5	1,2-Dichloropropane	24.0		1.0	0.18
142-28-9	1,3-Dichloropropane	22.5		1.0	0.090
594-20-7	2,2-Dichloropropane	23.1		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	21.4		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	20.2		3.0	0.19
563-58-6	1,1-Dichloropropene	25.2		1.0	0.19
100-41-4	Ethylbenzene	24.8		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8030P-20210623 MSD Lab Sample ID: 280-150245-18 MSD
 Matrix: Water Lab File ID: MS1_3876.D
 Analysis Method: 8260B Date Collected: 06/23/2021 15:40
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 06:16
 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	19.4		3.0	0.86
591-78-6	2-Hexanone	69.3		5.0	1.7
74-88-4	Iodomethane	22.5		1.0	0.23
78-83-1	Isobutyl alcohol	356		110	37
75-09-2	Methylene Chloride	24.5		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	74.1		5.0	0.98
100-42-5	Styrene	23.4		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	21.3		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	17.7		1.0	0.21
127-18-4	Tetrachloroethene	27.7		1.0	0.20
108-88-3	Toluene	23.9		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	22.9		1.0	0.21
71-55-6	1,1,1-Trichloroethane	22.7		1.0	0.16
79-00-5	1,1,2-Trichloroethane	21.4		1.0	0.27
79-01-6	Trichloroethene	26.4		1.0	0.16
75-69-4	Trichlorofluoromethane	25.7		2.0	0.29
96-18-4	1,2,3-Trichloropropane	18.7		2.5	0.33
108-05-4	Vinyl acetate	39.8		3.0	0.94
75-01-4	Vinyl chloride	28.8		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.8		2.0	0.15
95-47-6	o-Xylene	24.8		1.0	0.19
1330-20-7	Xylenes, Total	49.6		2.0	0.19
106-93-4	1,2-Dibromoethane	21.2		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)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3876.D
 Lims ID: 280-150245-A-18 MSD
 Client ID: RW-8030P-20210623
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 06:16:30 ALS Bottle#: 26 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-18 MSD pH<2
 Misc. Info.: 280-0102809-022
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:04:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	745745	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	163851	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	271643	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	194832	50.0	49.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	259927	50.0	49.1	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	698528	50.0	49.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	275992	50.0	46.8	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95	3.953	3.579	0.374	0	2638		NR	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	78149	25.0	23.4	
12 Chloromethane	50	1.900	1.914	-0.014	99	76593	25.0	23.6	
13 Vinyl chloride	62	1.998	1.998	0.000	98	75253	25.0	28.8	
14 Ethylene oxide	43		2.319					ND	7
15 Bromomethane	94	2.347	2.361	-0.014	93	48939	25.0	24.3	
16 Chloroethane	64	2.473	2.473	0.000	99	49100	25.0	24.4	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	121373	25.0	23.7	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	100	110494	25.0	25.7	
19 Ethanol	45		2.892					ND	
20 Ethyl ether	59	3.003	3.004	-0.001	94	48835	25.0	23.2	
21 Propene oxide	58		3.059					ND	
22 Acrolein	56	3.143	3.143	0.000	98	75770	246.9	182.5	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	52698	25.0	24.5	
24 112TCTFE	151	3.255	3.255	0.000	93	41152	25.0	28.9	
25 Acetone	43	3.269	3.269	0.000	100	59270	100.0	65.6	
27 Isopropyl alcohol	45		3.395					ND	
26 Iodomethane	142	3.395	3.395	0.000	98	72135	25.0	22.5	
28 Carbon disulfide	76	3.450	3.464	-0.014	100	166520	25.0	23.0	
29 Acetonitrile	41		3.534					ND	
30 Methyl acetate	43	3.576	3.576	0.000	98	70304	50.0	34.5	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	89	107499	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
32 Methylene Chloride	84	3.716	3.716	0.000	96	65922	25.0	24.5	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	99	37064	250.0	142.6	
34 Acrylonitrile	53	3.911	3.911	0.000	97	203774	250.0	197.6	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	160240	25.0	21.1	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	96	60662	25.0	23.2	
37 Hexane	57	4.205	4.205	0.000	95	80997	25.0	23.7	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43	4.344	4.344	0.000	98	232925	50.0	39.8	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	122112	25.0	24.2	
41 Isopropyl ether	87		4.372					ND	
42 2-Chloro-1,3-butadiene	53		4.414					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.679					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	85030	100.0	65.4	
47 Ethyl acetate	43		4.847					ND	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	65927	25.0	23.0	
49 2,2-Dichloropropane	77	4.861	4.861	0.000	88	103383	25.0	23.1	
50 Propionitrile	54		4.875					ND	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41		5.015					ND	
54 Tetrahydrofuran	42	5.057	5.057	0.000	89	30093	50.0	31.7	
53 Chlorobromomethane	128	5.057	5.057	0.000	97	31494	25.0	24.5	
55 Chloroform	83	5.126	5.140	-0.014	96	122066	25.0	23.3	
56 1,1,1-Trichloroethane	97	5.280	5.294	-0.014	97	104806	25.0	22.7	
57 Cyclohexane	56	5.350	5.350	0.000	94	116956	25.0	25.0	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	92	93859	25.0	25.2	
59 Carbon tetrachloride	117	5.420	5.420	0.000	83	76993	25.0	22.7	
60 Isobutyl alcohol	41	5.462	5.462	0.000	91	33138	625.0	356.4	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78	5.587	5.587	0.000	97	259732	25.0	25.2	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	100612	25.0	23.1	
65 Tert-amyl methyl ether	73		5.685					ND	
66 n-Heptane	43	5.825	5.825	0.000	94	77480	25.0	25.3	
67 n-Butanol	56		6.034					ND	
68 Trichloroethene	95	6.146	6.160	-0.014	95	80322	25.0	26.4	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55	6.355	6.369	-0.014	95	90179	25.0	24.8	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	67405	25.0	24.0	
72 Methyl methacrylate	100		6.397					ND	
73 1,4-Dioxane	88	6.425	6.439	-0.014	95	11253	500.0	366.6	
74 Dibromomethane	93	6.453	6.453	0.000	88	41008	25.0	23.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	79646	25.0	20.7	
76 2-Nitropropane	41		6.795					ND	
77 2-Chloroethyl vinyl ether	63		6.838				ND	ND	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	94844	25.0	21.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.103	-0.001	98	172120	100.0	74.1	
80 2,2-Dimethylpentane	57	7.224	7.251	-0.027	27	1081		NC	
81 2,4-Dimethylpentane	43	7.231	7.293	-0.062	30	4212		NC	
82 Toluene	91	7.296	7.296	0.000	96	245929	25.0	23.9	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	94	82945	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
83 2,2,3-Trimethylbutane	57		7.502					ND	
85 Ethyl methacrylate	69	7.517	7.524	-0.007	90	63459	25.0	19.4	
87 1,1,2-Trichloroethane	97	7.674	7.675	-0.001	95	46431	25.0	21.4	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164	7.767	7.768	-0.001	92	47067	25.0	27.7	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	96	93259	25.0	22.5	
91 2-Hexanone	43	7.853	7.853	0.000	98	119103	100.0	69.3	
93 2,3-Dimethylpentane	56		7.949					ND	
92 3-Methylhexane	43		7.949					ND	
94 Tetrahydrothiophene	60		8.018					ND	
95 Chlorodibromomethane	129	8.032	8.032	0.000	88	49787	25.0	20.3	
96 Ethylene Dibromide	107	8.146	8.154	-0.008	97	50027	25.0	21.2	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.568					ND	7
99 Chlorobenzene	112	8.604	8.604	0.000	90	161331	25.0	24.1	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	89	50263	25.0	21.3	
101 Ethylbenzene	106	8.683	8.690	-0.007	99	88103	25.0	24.8	
102 m-Xylene & p-Xylene	106	8.804	8.811	-0.007	98	110959	25.0	24.8	
103 o-Xylene	106	9.176	9.176	0.000	96	103884	25.0	24.8	
104 Styrene	104	9.197	9.198	-0.001	93	179298	25.0	23.4	
106 Bromoform	173	9.383	9.383	0.000	91	25672	25.0	16.4	
105 Dimethyl disulfide	94	9.376	9.388	-0.012	43	5561		NC	
107 Isopropylbenzene	105	9.526	9.534	-0.008	98	287167	25.0	24.2	
108 cis-1,4-Dichloro-2-butene	53		9.584					ND	U
109 Cyclohexanone	55	9.627	9.627	-0.001	94	58403	1000.0	318.2	
110 1,1,2,2-Tetrachloroethane	83	9.820	9.827	-0.007	97	59281	25.0	17.7	
111 Bromobenzene	156	9.855	9.855	0.000	98	65114	25.0	24.1	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.863	-0.001	70	17226	25.0	14.5	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	81	17349	25.0	18.7	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	78135	25.0	23.7	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	64906	25.0	24.0	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	245565	25.0	23.1	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	69477	25.0	23.4	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	199034	25.0	22.9	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	246453	25.0	22.6	
120 sec-Butylbenzene	134	10.649	10.649	0.000	95	57150	25.0	22.9	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	95	130875	25.0	24.8	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	248539	25.0	23.0	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	93	127757	25.0	23.1	
124 1,2,3-Trimethylbenzene	105		10.899					ND	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	226588	25.0	21.8	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	94	118517	25.0	23.9	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.022	0.007	69	9860	25.0	14.6	
129 1,3,5-Trichlorobenzene	180		12.215					ND	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	94	74416	25.0	22.9	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	26904	25.0	24.2	
132 Naphthalene	128	13.123	13.123	0.000	98	174392	25.0	18.1	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	64116	25.0	21.6	
145 Ethyl acrylate	55		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
135 Pentachloroethane TIC	1		0.000					ND	
136 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
144 1-Chlorohexane TIC	1		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
146 t-Amyl alcohol	1		0.000					ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
141 4-Chlorobenzotrifluoride	1		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	46.2	
S 150 1,2-Dichloroethene, Total	1				0		50.0	46.2	
S 151 Trihalomethanes, Total	1				0		100.0	80.7	
S 152 Total BTEX	1				0			123.4	
S 153 Xylenes, Total (URS)	1				0		50.0	49.6	
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106				0		50.0	49.6	
S 156 1,3-Dichloropropene, Total	1				0		50.0	41.6	

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-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:22

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3876.D

Injection Date: 30-Jun-2021 06:16:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-A-18 MSD

Worklist Smp#: 22

Client ID: RW-8030P-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

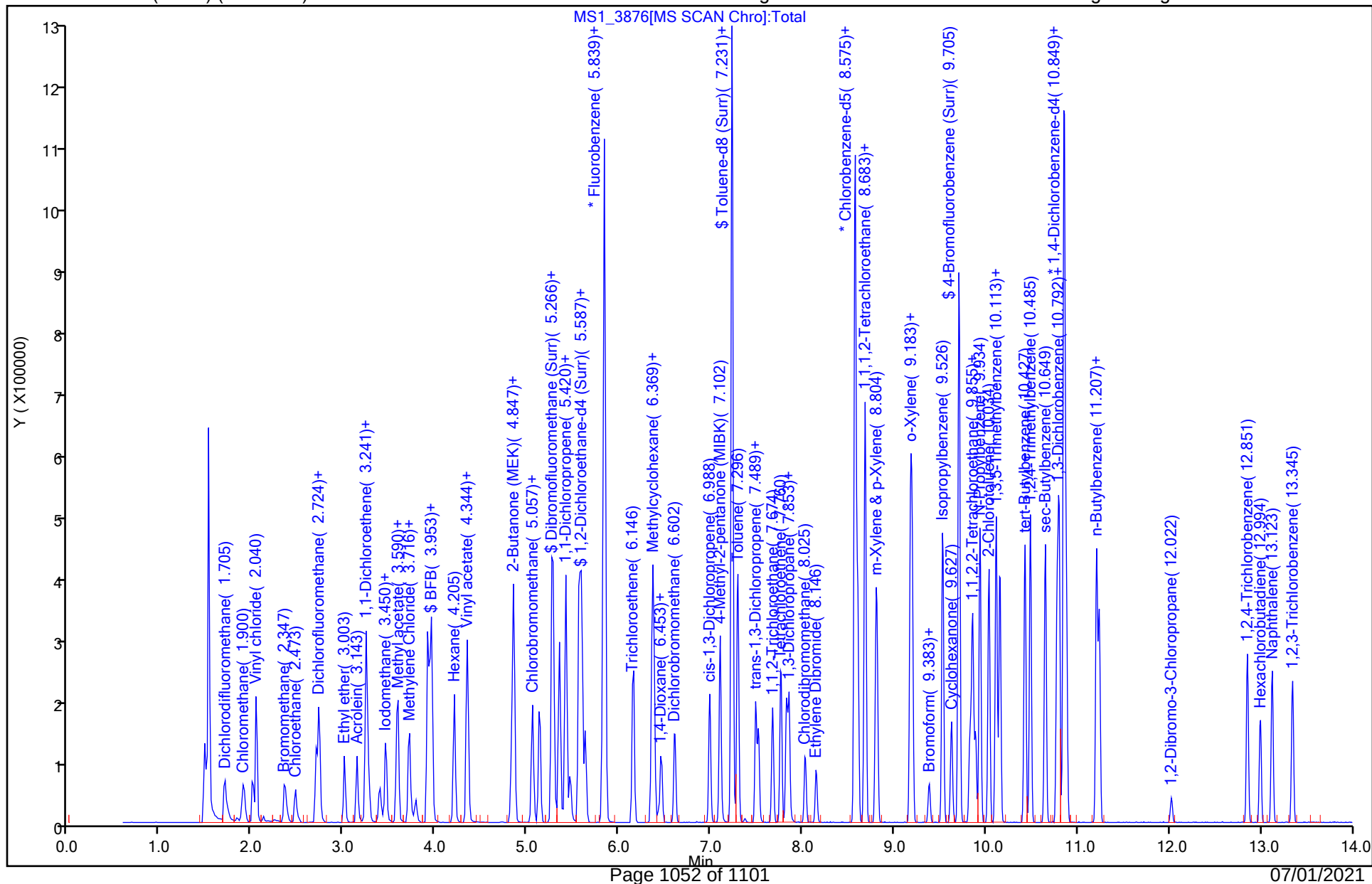
ALS Bottle#: 26

Method: AQ_VMS1_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_MS1\20210629-102809.b\VMS1_3876.D
 Lims ID: 280-150245-A-18 MSD
 Client ID: RW-8030P-20210623
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 06:16:30 ALS Bottle#: 26 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-A-18 MSD pH<2
 Misc. Info.: 280-0102809-022
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: seifertj

Date: 30-Jun-2021 11:04:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.57
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.16
\$ 7 Toluene-d8 (Surr)	50.0	49.2	98.42
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.8	93.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1
 SDG No.: _____
 Client Sample ID: RW-8030P-20210623 MSD Lab Sample ID: 280-150245-18 MSD
 Matrix: Water Lab File ID: MS1_3878.D
 Analysis Method: 8260B Date Collected: 06/23/2021 15:40
 Sample wt/vol: 5 (mL) Date Analyzed: 06/30/2021 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.: 541786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	217		30	9.6
126-99-8	Chloroprene	23.5		1.0	0.21
126-98-7	Methacrylonitrile	226		10	1.6
80-62-6	Methyl methacrylate	46.8		4.0	1.1
107-12-0	Propionitrile	207		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)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3878.D
 Lims ID: 280-150245-B-18 MSD
 Client ID: RW-8030P-20210623
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 06:58:30 ALS Bottle#: 28 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-18 MSD pH<2
 Misc. Info.: 280-0102809-024
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	757868	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	165555	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	265988	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	191298	50.0	47.6	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	255056	50.0	47.4	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	693345	50.0	48.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	279111	50.0	48.4	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95		3.579					ND	
11 Dichlorodifluoromethane	85		1.705					ND	
12 Chloromethane	50		1.914					ND	
13 Vinyl chloride	62		1.998					ND	
14 Ethylene oxide	43	2.319	2.319	0.000	100	11507	2500.0	16.9	
15 Bromomethane	94		2.361					ND	
16 Chloroethane	64		2.473					ND	
17 Dichlorofluoromethane	67		2.696					ND	
18 Trichlorofluoromethane	101		2.724					ND	
19 Ethanol	45	2.906	2.892	0.014	99	38590	1500.0	1150.8	
20 Ethyl ether	59		3.004					ND	
21 Propene oxide	58		3.059				ND	ND	
22 Acrolein	56		3.143					ND	
23 1,1-Dichloroethene	96		3.241					ND	
24 112TCTFE	151		3.255					ND	
25 Acetone	43		3.269					ND	
27 Isopropyl alcohol	45	3.395	3.395	0.000	96	28300	250.0	168.9	
26 Iodomethane	142		3.395					ND	
28 Carbon disulfide	76		3.464					ND	
29 Acetonitrile	41	3.534	3.534	0.000	99	78312	250.0	216.8	
30 Methyl acetate	43		3.576					ND	
31 3-Chloro-1-propene	41	3.618	3.590	0.028	26	1399		0.3174	
32 Methylene Chloride	84		3.716					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2-Methyl-2-propanol	59		3.786					ND	
34 Acrylonitrile	53		3.911					ND	
35 Methyl tert-butyl ether	73		3.939					ND	
36 trans-1,2-Dichloroethene	96		3.953					ND	
37 Hexane	57		4.205					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43	4.358	4.344	0.014	57	104198		17.5	
40 1,1-Dichloroethane	63		4.344					ND	
41 Isopropyl ether	87	4.372	4.372	0.000	93	48981	25.0	24.3	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	94	110843	25.0	23.5	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	97	176964	25.0	23.0	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.819					ND	
47 Ethyl acetate	43	4.847	4.847	0.000	99	81817	50.0	41.5	
48 cis-1,2-Dichloroethene	96		4.847					ND	
49 2,2-Dichloropropane	77		4.861					ND	
50 Propionitrile	54	4.875	4.875	0.000	99	74258	250.0	206.9	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	325996	250.0	225.6	
54 Tetrahydrofuran	42		5.057					ND	
53 Chlorobromomethane	128		5.057					ND	
55 Chloroform	83		5.140					ND	
56 1,1,1-Trichloroethane	97		5.294					ND	
57 Cyclohexane	56		5.350					ND	
58 1,1-Dichloropropene	75		5.420					ND	
59 Carbon tetrachloride	117		5.420					ND	
60 Isobutyl alcohol	41		5.462					ND	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78		5.587					ND	
64 1,2-Dichloroethane	62		5.629					ND	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	82	146147	25.0	21.8	
66 n-Heptane	43		5.825					ND	
67 n-Butanol	56	6.034	6.034	0.000	92	22442	625.0	361.8	
68 Trichloroethene	95	6.160	6.160	0.000	92	12777		4.16	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55		6.369					ND	
71 1,2-Dichloropropane	63		6.383					ND	
72 Methyl methacrylate	100	6.397	6.397	0.000	93	27362	50.0	46.8	
73 1,4-Dioxane	88		6.439					ND	
74 Dibromomethane	93		6.453					ND	
75 Dichlorobromomethane	83		6.609					ND	
76 2-Nitropropane	41	6.795	6.795	0.000	90	14696	50.0	18.9	
77 2-Chloroethyl vinyl ether	63		6.838					ND	
78 cis-1,3-Dichloropropene	75		6.988					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103					ND	
80 2,2-Dimethylpentane	57		7.251					ND	
81 2,4-Dimethylpentane	43		7.293					ND	
82 Toluene	91		7.296					ND	
84 trans-1,3-Dichloropropene	75		7.489					ND	
83 2,2,3-Trimethylbutane	57		7.502					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 Ethyl methacrylate	69		7.524					ND	
87 1,1,2-Trichloroethane	97		7.675					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164	7.767	7.768	-0.001	35	1166		0.6804	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76		7.825					ND	
91 2-Hexanone	43		7.853					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
92 3-Methylhexane	43	7.946	7.949	-0.003	75	67500		NC	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	18933	50.0	26.5	
95 Chlorodibromomethane	129		8.032					ND	
96 Ethylene Dibromide	107		8.154					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91	8.568	8.568	0.000	90	82115		23.2	
99 Chlorobenzene	112	8.604	8.604	0.000	90	30626		4.53	
100 1,1,1,2-Tetrachloroethane	131		8.683					ND	
101 Ethylbenzene	106		8.690					ND	
102 m-Xylene & p-Xylene	106		8.811					ND	
103 o-Xylene	106		9.176					ND	
104 Styrene	104		9.198					ND	
106 Bromoform	173		9.383					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.534					ND	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	94	37748	50.0	29.0	
109 Cyclohexanone	55	9.655	9.627	0.028	1	2069		11.2	
110 1,1,2,2-Tetrachloroethane	83		9.827					ND	
111 Bromobenzene	156		9.855					ND	
112 trans-1,4-Dichloro-2-butene	53		9.863					ND	
113 1,2,3-Trichloropropane	110		9.891					ND	
114 N-Propylbenzene	120		9.934					ND	
115 2-Chlorotoluene	126		10.034					ND	
116 1,3,5-Trimethylbenzene	105		10.113					ND	
117 4-Chlorotoluene	126		10.156					ND	
118 tert-Butylbenzene	119		10.427					ND	
119 1,2,4-Trimethylbenzene	105		10.485					ND	
120 sec-Butylbenzene	134		10.649					ND	
121 1,3-Dichlorobenzene	146		10.778					ND	
122 4-Isopropyltoluene	119		10.799					ND	
123 1,4-Dichlorobenzene	146		10.878					ND	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	250465	25.0	24.8	
125 n-Butylbenzene	91		11.207					ND	
127 1,2-Dichlorobenzene	146		11.235					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022					ND	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	81327	25.0	26.3	
130 1,2,4-Trichlorobenzene	180		12.851					ND	
131 Hexachlorobutadiene	225		12.994					ND	
132 Naphthalene	128		13.123					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180		13.345					ND	
145 Ethyl acrylate	55		0.000				ND	ND	
135 Pentachloroethane 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
136 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
144 1-Chlorohexane TIC	1		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
146 t-Amyl alcohol	1		0.000				ND	ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
141 4-Chlorobenzotrifluoride	1		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95		2.000					ND	7
S 150 1,2-Dichloroethene, Total	1		0.000					ND	7
S 151 Trihalomethanes, Total	1		0.000					ND	7
S 152 Total BTEX	1		0.000					ND	7
S 153 Xylenes, Total (URS)	1		0.000					ND	7
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106		0.000					ND	7
S 156 1,3-Dichloropropene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Reagents:

MV-Supp A_00051

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 11:08:25

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\MS1_3878.D

Injection Date: 30-Jun-2021 06:58:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150245-B-18 MSD

Worklist Smp#: 24

Client ID: RW-8030P-20210623

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

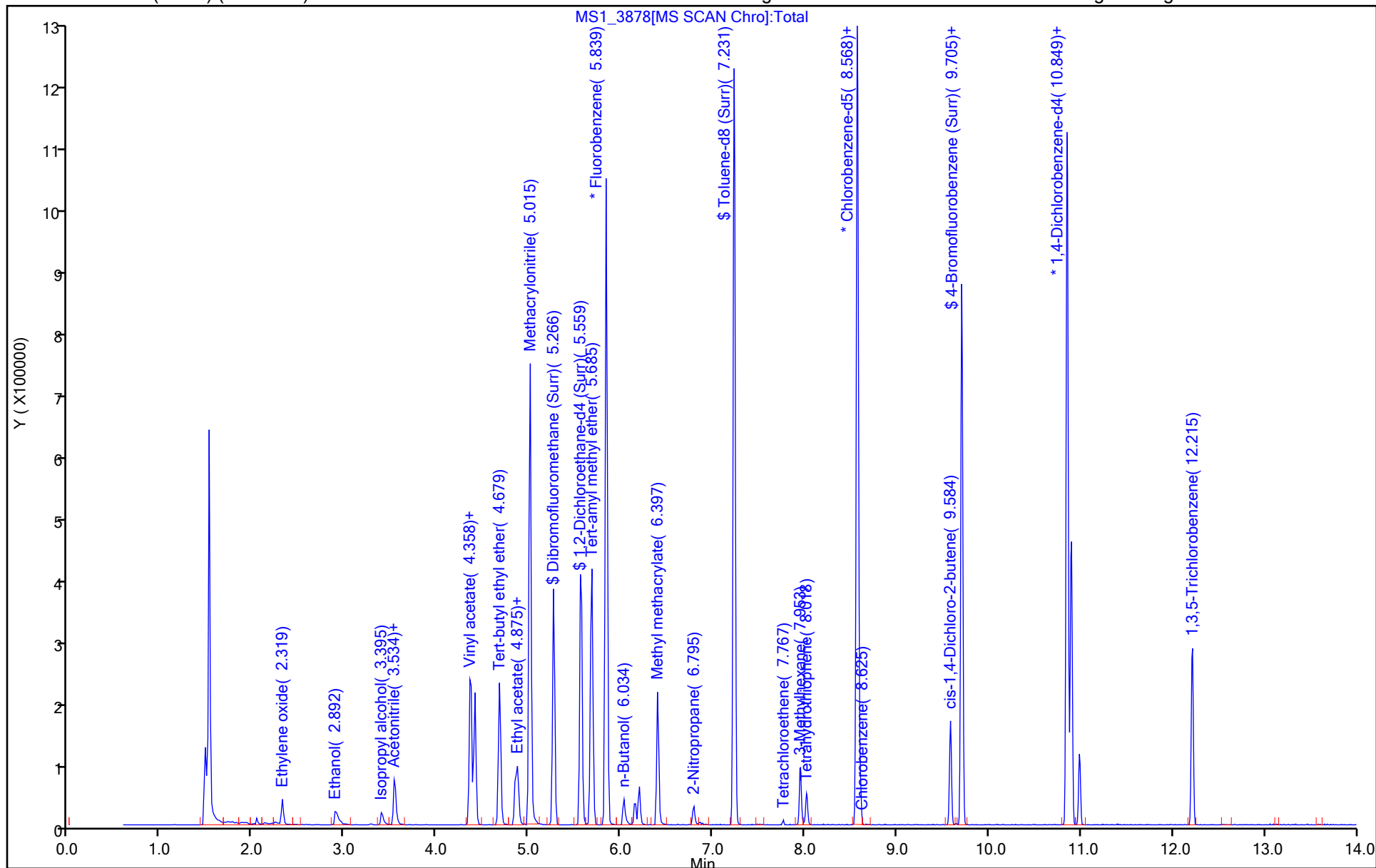
ALS Bottle#: 28

Method: AQ_VMS1_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_MS1\20210629-102809.b\MS1_3878.D
 Lims ID: 280-150245-B-18 MSD
 Client ID: RW-8030P-20210623
 Sample Type: MSD
 Inject. Date: 30-Jun-2021 06:58:30 ALS Bottle#: 28 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150245-B-18 MSD pH<2
 Misc. Info.: 280-0102809-024
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 11:04:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.6	95.24
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.78
\$ 7 Toluene-d8 (Surr)	50.0	48.3	96.69
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.4	96.71

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.:

Instrument ID: VMS_MS1

Start Date: 06/04/2021 09:51

Analysis Batch Number: 538548

End Date: 06/04/2021 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-538548/1		06/04/2021 09:51	1	MS1_2711.D	DB-624 (60.25) 0.25 (mm)
STD010 280-538548/24 IC		06/04/2021 10:18	1	MS1_2712.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 10:18	1		DB-624 (60.25) 0.25 (mm)
STD020 280-538548/25 IC		06/04/2021 10:39	1	MS1_2713.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 10:39	1		DB-624 (60.25) 0.25 (mm)
STD050 280-538548/26 IC		06/04/2021 11:00	1	MS1_2714.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 11:00	1		DB-624 (60.25) 0.25 (mm)
STD10 280-538548/27 IC		06/04/2021 11:21	1	MS1_2715.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 11:21	1		DB-624 (60.25) 0.25 (mm)
STD50 280-538548/28 IC		06/04/2021 11:42	1	MS1_2716.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 11:42	1		DB-624 (60.25) 0.25 (mm)
STD75 280-538548/29 IC		06/04/2021 12:04	1	MS1_2717.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 12:04	1		DB-624 (60.25) 0.25 (mm)
STD100 280-538548/30 IC		06/04/2021 12:25	1	MS1_2718.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 12:25	1		DB-624 (60.25) 0.25 (mm)
STD200 280-538548/31 IC		06/04/2021 12:47	1	MS1_2719.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 12:47	1		DB-624 (60.25) 0.25 (mm)
ICV 280-538548/32		06/04/2021 13:29	1	MS1_2721.D	DB-624 (60.25) 0.25 (mm)
STD005 280-538548/14 IC		06/04/2021 13:50	1	MS1_2722.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 13:50	1		DB-624 (60.25) 0.25 (mm)
STD010 280-538548/15 IC		06/04/2021 14:11	1	MS1_2723.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 14:11	1		DB-624 (60.25) 0.25 (mm)
STD020 280-538548/16 IC		06/04/2021 14:33	1	MS1_2724.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 14:33	1		DB-624 (60.25) 0.25 (mm)
STD10 280-538548/18 IC		06/04/2021 15:16	1	MS1_2726.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 15:16	1		DB-624 (60.25) 0.25 (mm)
ICIS 280-538548/19		06/04/2021 15:37	1	MS1_2727.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 15:37	1		DB-624 (60.25) 0.25 (mm)
STD75 280-538548/20 IC		06/04/2021 15:58	1	MS1_2728.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 15:58	1		DB-624 (60.25) 0.25 (mm)
STD100 280-538548/21 IC		06/04/2021 16:20	1	MS1_2729.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 16:20	1		DB-624 (60.25) 0.25 (mm)
STD200 280-538548/22 IC		06/04/2021 16:41	1	MS1_2730.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 16:41	1		DB-624 (60.25) 0.25 (mm)
ICV 280-538548/23		06/04/2021 17:24	1	MS1_2732.D	DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 17:45	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 18:06	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 18:27	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_MS1 Start Date: 06/04/2021 09:51Analysis Batch Number: 538548 End Date: 06/04/2021 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-149476-A-14 MDLV		06/04/2021 18:49	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 19:10	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 19:31	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 19:52	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 20:14	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 20:35	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 20:56	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.:

Instrument ID: VMS_P

Start Date: 06/25/2021 12:39

Analysis Batch Number: 541263

End Date: 06/26/2021 00:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541263/1		06/25/2021 12:39	1	P6264.D	DB-624 (60.25) 0.25 (mm)
STD010 280-541263/15 IC		06/25/2021 13:13	1	P6265.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 13:13	1		DB-624 (60.25) 0.25 (mm)
STD020 280-541263/16 IC		06/25/2021 13:36	1	P6266.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 13:36	1		DB-624 (60.25) 0.25 (mm)
STD050 280-541263/17 IC		06/25/2021 13:59	1	P6267.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 13:59	1		DB-624 (60.25) 0.25 (mm)
STD10 280-541263/18 IC		06/25/2021 14:22	1	P6268.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 14:22	1		DB-624 (60.25) 0.25 (mm)
STD50 280-541263/19 IC		06/25/2021 14:46	1	P6269.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 14:46	1		DB-624 (60.25) 0.25 (mm)
STD100 280-541263/20 IC		06/25/2021 15:09	1	P6270.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 15:09	1		DB-624 (60.25) 0.25 (mm)
STD200 280-541263/21 IC		06/25/2021 15:32	1	P6271.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 15:32	1		DB-624 (60.25) 0.25 (mm)
ICV 280-541263/22		06/25/2021 16:18	1		DB-624 (60.25) 0.25 (mm)
STD005 280-541263/23 IC		06/25/2021 16:41	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 16:41	1		DB-624 (60.25) 0.25 (mm)
STD010 280-541263/24 IC		06/25/2021 17:04	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 17:04	1		DB-624 (60.25) 0.25 (mm)
STD020 280-541263/25 IC		06/25/2021 17:28	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 17:28	1		DB-624 (60.25) 0.25 (mm)
STD050 280-541263/26 IC		06/25/2021 17:50	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 17:50	1		DB-624 (60.25) 0.25 (mm)
STD10 280-541263/27 IC		06/25/2021 18:14	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 18:14	1		DB-624 (60.25) 0.25 (mm)
ICIS 280-541263/28		06/25/2021 18:37	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 18:37	1		DB-624 (60.25) 0.25 (mm)
STD75 280-541263/29 IC		06/25/2021 19:00	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 19:00	1		DB-624 (60.25) 0.25 (mm)
STD100 280-541263/30 IC		06/25/2021 19:23	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 19:23	1		DB-624 (60.25) 0.25 (mm)
STD200 280-541263/31 IC		06/25/2021 19:46	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/25/2021 19:46	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-3 MDLV		06/25/2021 23:14	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-3 MDLV		06/25/2021 23:37	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-3 MDLV		06/26/2021 00:00	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-3 MDLV		06/26/2021 00:23	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Instrument ID: VMS_P Start Date: 06/25/2021 12:39Analysis Batch Number: 541263 End Date: 06/26/2021 00:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-149476-A-3 MDLV		06/26/2021 00:46	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.:

Instrument ID: VMS_P

Start Date: 06/26/2021 10:40

Analysis Batch Number: 541369

End Date: 06/26/2021 21:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541369/1		06/26/2021 10:40	1	P6298.D	DB-624 (60.25) 0.25 (mm)
STD005 280-541369/14 IC		06/26/2021 15:46	1	P6311.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 15:46	1		DB-624 (60.25) 0.25 (mm)
STD010 280-541369/15 IC		06/26/2021 16:09	1	P6312.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 16:09	1		DB-624 (60.25) 0.25 (mm)
STD020 280-541369/16 IC		06/26/2021 16:32	1	P6313.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 16:32	1		DB-624 (60.25) 0.25 (mm)
STD050 280-541369/17 IC		06/26/2021 16:55	1	P6314.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 16:55	1		DB-624 (60.25) 0.25 (mm)
STD10 280-541369/18 IC		06/26/2021 17:18	1	P6315.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 17:18	1		DB-624 (60.25) 0.25 (mm)
ICIS 280-541369/19		06/26/2021 17:41	1	P6316.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 17:41	1		DB-624 (60.25) 0.25 (mm)
STD75 280-541369/20 IC		06/26/2021 18:04	1	P6317.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 18:04	1		DB-624 (60.25) 0.25 (mm)
STD100 280-541369/21 IC		06/26/2021 18:27	1	P6318.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 18:27	1		DB-624 (60.25) 0.25 (mm)
STD200 280-541369/22 IC		06/26/2021 18:50	1	P6319.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/26/2021 18:50	1		DB-624 (60.25) 0.25 (mm)
ICV 280-541369/23		06/26/2021 19:36	1		DB-624 (60.25) 0.25 (mm)
ICV 280-541369/30		06/26/2021 19:36	1	P6321A.D	DB-624 (60.25) 0.25 (mm)
280-149476-A-2 MDLV		06/26/2021 19:59	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-2 MDLV		06/26/2021 20:22	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-2 MDLV		06/26/2021 20:45	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-2 MDLV		06/26/2021 21:08	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-2 MDLV		06/26/2021 21:31	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-2 MDLV		06/26/2021 21:54	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.:

Instrument ID: VMS_P

Start Date: 06/29/2021 20:49

Analysis Batch Number: 541784

End Date: 06/30/2021 07:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541784/1		06/29/2021 20:49	1	P6393.D	DB-624 (60.25) 0.25 (mm)
CCV 280-541784/2		06/29/2021 21:12	1	P6394.D	DB-624 (60.25) 0.25 (mm)
CCV 280-541784/3		06/29/2021 21:35	1	P6395.D	DB-624 (60.25) 0.25 (mm)
LCS 280-541784/4		06/29/2021 21:58	1	P6396.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-541784/5		06/29/2021 22:21	1	P6397.D	DB-624 (60.25) 0.25 (mm)
LCS 280-541784/6		06/29/2021 22:44	1	P6398.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-541784/7		06/29/2021 23:07	1	P6399.D	DB-624 (60.25) 0.25 (mm)
MB 280-541784/9		06/29/2021 23:53	1	P6401.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/30/2021 00:16	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/30/2021 00:39	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/30/2021 01:02	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/30/2021 01:25	1		DB-624 (60.25) 0.25 (mm)
CCVC 280-541784/18		06/30/2021 01:48	1		DB-624 (60.25) 0.25 (mm)
280-150245-1	Muni-Well-14-20210621	06/30/2021 02:33	1	P6408.D	DB-624 (60.25) 0.25 (mm)
280-150245-2	Muni-Well-33-20210621	06/30/2021 02:57	1	P6409.D	DB-624 (60.25) 0.25 (mm)
280-150245-3	RW-8249P-20210621	06/30/2021 03:20	1	P6410.D	DB-624 (60.25) 0.25 (mm)
280-150245-4	RW-7773P-20210621	06/30/2021 03:43	1	P6411.D	DB-624 (60.25) 0.25 (mm)
280-150245-5	RW-7773PQ-20210621	06/30/2021 04:06	1	P6412.D	DB-624 (60.25) 0.25 (mm)
280-150245-6	RW-7200P-20210621	06/30/2021 04:29	1	P6413.D	DB-624 (60.25) 0.25 (mm)
280-150245-7	RW-7586P-20210621	06/30/2021 04:52	1	P6414.D	DB-624 (60.25) 0.25 (mm)
280-150245-8	RW-7677P-20210621	06/30/2021 05:15	1	P6415.D	DB-624 (60.25) 0.25 (mm)
280-150245-9	RW-8000B-20210622	06/30/2021 05:38	1	P6416.D	DB-624 (60.25) 0.25 (mm)
280-150245-10	PA-1-20210622	06/30/2021 06:00	1	P6417.D	DB-624 (60.25) 0.25 (mm)
280-150245-11	MW-37-20210622	06/30/2021 06:23	1	P6418.D	DB-624 (60.25) 0.25 (mm)
280-150245-10 MS	PA-1-20210622 MS	06/30/2021 06:46	1	P6419.D	DB-624 (60.25) 0.25 (mm)
280-150245-10 MSD	PA-1-20210622 MSD	06/30/2021 07:09	1	P6420.D	DB-624 (60.25) 0.25 (mm)
280-150245-10 MS	PA-1-20210622 MS	06/30/2021 07:32	1	P6421.D	DB-624 (60.25) 0.25 (mm)
280-150245-10 MSD	PA-1-20210622 MSD	06/30/2021 07:55	1	P6422.D	DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150245-1

SDG No.:

Instrument ID: VMS_MS1

Start Date: 06/29/2021 20:49

Analysis Batch Number: 541786

End Date: 06/30/2021 06:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541786/1		06/29/2021 20:49	1	MS1_3850.D	DB-624 (60.25) 0.25 (mm)
CCV 280-541786/2		06/29/2021 21:12	1	MS1_3851.D	DB-624 (60.25) 0.25 (mm)
CCV 280-541786/3		06/29/2021 21:33	1	MS1_3852.D	DB-624 (60.25) 0.25 (mm)
LCS 280-541786/4		06/29/2021 21:55	1	MS1_3853.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-541786/5		06/29/2021 22:16	1	MS1_3854.D	DB-624 (60.25) 0.25 (mm)
LCS 280-541786/6		06/29/2021 22:37	1	MS1_3855.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-541786/7		06/29/2021 22:58	1	MS1_3856.D	DB-624 (60.25) 0.25 (mm)
MB 280-541786/9		06/29/2021 23:41	1	MS1_3858.D	DB-624 (60.25) 0.25 (mm)
280-150245-12	MW-37Q-20210622	06/30/2021 00:17	1	MS1_3859.D	DB-624 (60.25) 0.25 (mm)
280-150245-13	PA-3-20210622	06/30/2021 00:38	1	MS1_3860.D	DB-624 (60.25) 0.25 (mm)
280-150245-14	RW-7091R-20210622	06/30/2021 01:00	1	MS1_3861.D	DB-624 (60.25) 0.25 (mm)
280-150245-15	RW-2151H-20210623	06/30/2021 01:21	1	MS1_3862.D	DB-624 (60.25) 0.25 (mm)
280-150245-16	PA-8-37-47-20210623	06/30/2021 01:42	1	MS1_3863.D	DB-624 (60.25) 0.25 (mm)
280-150245-17	PA-8-77-87-20210623	06/30/2021 02:03	1	MS1_3864.D	DB-624 (60.25) 0.25 (mm)
280-150245-18	RW-8030P-20210623	06/30/2021 02:24	1	MS1_3865.D	DB-624 (60.25) 0.25 (mm)
280-150245-19	RW-2172H-20210623	06/30/2021 02:45	1	MS1_3866.D	DB-624 (60.25) 0.25 (mm)
280-150245-20	RW-2172HQ-20210623	06/30/2021 03:06	1	MS1_3867.D	DB-624 (60.25) 0.25 (mm)
280-150245-21	TB-01-20210625	06/30/2021 03:27	1	MS1_3868.D	DB-624 (60.25) 0.25 (mm)
280-150245-22	EB-01-20210622	06/30/2021 03:48	1	MS1_3869.D	DB-624 (60.25) 0.25 (mm)
280-150245-23	EB-02-20210622	06/30/2021 04:10	1	MS1_3870.D	DB-624 (60.25) 0.25 (mm)
280-150245-24	EB-03-20210623	06/30/2021 04:31	1	MS1_3871.D	DB-624 (60.25) 0.25 (mm)
280-150245-25	EB-04-20210623	06/30/2021 04:52	1	MS1_3872.D	DB-624 (60.25) 0.25 (mm)
280-150245-26	EB-05-20210624	06/30/2021 05:13	1	MS1_3873.D	DB-624 (60.25) 0.25 (mm)
280-150245-27	EB-06-20210625	06/30/2021 05:34	1	MS1_3874.D	DB-624 (60.25) 0.25 (mm)
280-150245-18 MS	RW-8030P-20210623 MS	06/30/2021 05:55	1	MS1_3875.D	DB-624 (60.25) 0.25 (mm)
280-150245-18 MSD	RW-8030P-20210623 MSD	06/30/2021 06:16	1	MS1_3876.D	DB-624 (60.25) 0.25 (mm)
280-150245-18 MS	RW-8030P-20210623 MS	06/30/2021 06:37	1	MS1_3877.D	DB-624 (60.25) 0.25 (mm)
280-150245-18 MSD	RW-8030P-20210623 MSD	06/30/2021 06:58	1	MS1_3878.D	DB-624 (60.25) 0.25 (mm)

Sequence Name: C:\msdchem\1\sequence\062921PM.s

Comment:

Operator: PETUNINP

Data Path: C:\MSDCHEM\1\DATA\062921PM\

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: MS1

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 6mL)

Matrix: (Water / Soil / Waste)

Tune Time: 2049-0658

TALs Batch: 541786

Method Sections To Run

(X) Full Method

() Reprocessing Only

Sequence Barcode Options

(X) On Mismatch, Inject Anyway

() On Mismatch, Don't Inject

() Barcode Disabled

Line	Sample Name/Misc Info
1) Sample	100 MS1_3850 BFB BFB 2049
2) Sample	1 MS1_3851 8260 CCV
3) Sample	2 MS1_3852 8260 CCV S
4) Sample	3 MS1_3853 8260 LCS
5) Sample	4 MS1_3854 8260 LCSD
6) Sample	5 MS1_3855 8260 LCS S
7) Sample	6 MS1_3856 8260 LCSD S
8) Sample	7 MS1_3857 8260 RINSE
9) Sample	8 MS1_3858 8260 MB
10) Sample	9 MS1_3859 8260 280-150245-A-12 pH 2
11) Sample	10 MS1_3860 8260 280-150245-B-13 pH 2
12) Sample	11 MS1_3861 8260 280-150245-C-14 pH 2
13) Sample	12 MS1_3862 8260 280-150245-B-15 pH 2
14) Sample	13 MS1_3863 8260 280-150245-A-16 pH 2
15) Sample	14 MS1_3864 8260 280-150245-B-17 pH 2
16) Sample	15 MS1_3865 8260 280-150245-C-18 pH 2
17) Sample	16 MS1_3866 8260 280-150245-B-19 pH 2
18) Sample	17 MS1_3867 8260 280-150245-B-20 pH 2
19) Sample	18 MS1_3868 8260 280-150245-B-21 pH 2
20) Sample	19 MS1_3869 8260 280-150245-B-22 pH 2
21) Sample	20 MS1_3870 8260 280-150245-C-23 pH 2
22) Sample	21 MS1_3871 8260 280-150245-C-24 pH 2
23) Sample	22 MS1_3872 8260 280-150245-C-25 pH 2
24) Sample	23 MS1_3873 8260 280-150245-C-26 pH 2
25) Sample	24 MS1_3874 8260 280-150245-A-27 pH 2
26) Sample	25 MS1_3875 8260 280-150245-A-18 MS pH<2
27) Sample	26 MS1_3876 8260 280-150245-A-18 MSD pH<2
28) Sample	27 MS1_3877 8260 280-150245-B-18 MS pH<2
29) Sample	28 MS1_3878 8260 280-150245-B-18 MSD pH<2

JK 6/30/21

0658
2049
JK 6/30/21

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062921PM

Worklist Number: 102809

Instrument Name: VMS_MS1

Chrom Method: AQ_VMS1_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210629-102809.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-Gas A_00091 MV-MegaMainA_00052		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00034		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00034		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client	1.000	voaWater	5.000	mL			
14	#14 280-150245-A-12	Client	1.000	voaWater	5.000	mL			
15	#15 280-150245-B-13	Client	1.000	voaWater	5.000	mL			
16	#16 280-150245-C-14	Client	1.000	voaWater	5.000	mL			
17	#17 280-150245-B-15	Client	1.000	voaWater	5.000	mL			
18	#18 280-150245-A-16	Client	1.000	voaWater	5.000	mL			
19	#19 280-150245-B-17	Client	1.000	voaWater	5.000	mL			
20	#20 280-150245-C-18	Client	1.000	voaWater	5.000	mL			
21	#21 280-150245-A-18 MS	MS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
22	#22 280-150245-A-18 MSD	MSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
23	#23 280-150245-B-18 MS	MS	1.000	voaWater	5.000	mL	MV-Supp A_00051		
24	#24 280-150245-B-18 MSD	MSD	1.000	voaWater	5.000	mL	MV-Supp A_00051		
25	#25 280-150245-B-19	Client	1.000	voaWater	5.000	mL			
26	#26 280-150245-B-20	Client	1.000	voaWater	5.000	mL			
27	#27 280-150245-B-21	Client	1.000	voaWater	5.000	mL			
28	#28 280-150245-B-22	Client	1.000	voaWater	5.000	mL			
29	#29 280-150245-C-23	Client	1.000	voaWater	5.000	mL			
30	#30 280-150245-C-24	Client	1.000	voaWater	5.000	mL			
31	#31 280-150245-C-25	Client	1.000	voaWater	5.000	mL			
32	#32 280-150245-C-26	Client	1.000	voaWater	5.000	mL			
33	#33 280-150245-A-27	Client	1.000	voaWater	5.000	mL			

6/29/2021
11:30PM

Sample Request Form: 68780

Page 1 of 2

den_msvoa_totalbacklog Gabe 6/29/2021 11:30:13 PM Assigned to: Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-150245-12	MW-37Q-20210622	(12)	8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-13	PA-3-20210622		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-14	RW-7091R-20210622		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-15	RW-2151H-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-16	PA-8-37-47-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-17	PA-8-77-87-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-18	RW-8030P-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-18MS	RW-8030P-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-18MSD	RW-8030P-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-19	RW-2172H-20210623	(19)	8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed

6/29/2021
11:30PM

Sample Request Form: 68780

Page 2 of 2

den_msvoa_totalbacklog Gabe 6/29/2021 11:30:13 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										
280-150245-20	RW-2172HQ-2021 0623	12	8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-21	TB-01-20210625		8260B	8260B	07/09 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-22	EB-01-20210622		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-23	EB-02-20210622		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-24	EB-03-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-25	EB-04-20210623		8260B	8260B	07/07 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-26	EB-05-20210624		8260B	8260B	07/08 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-27	EB-06-20210625		8260B	8260B	07/09 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										

07/01/2021

Sequence Name: C:\HPCHEM\1\SEQUENCE\062921PM.S

Comment:

Operator: PETUNINP

Data Path: C:\HPCHEM\1\DATA\062921PM\

Pre-Seq Cmd:

Post-Seq Cmd:

Microfins TestAmerica Denver

Instrument ID: 27

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Tune Time: 2049-0755

FALS Batch: 541784

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line Type Vial DataFile Method Sample Name

1 Sample	100 P6393	BFB	BFB <u>2049</u>
2 Sample	1 P6394	8260	CCV
3 Sample	2 P6395	8260	CCV S
4 Sample	3 P6396	8260	LCS
5 Sample	4 P6397	8260	LCSD
6 Sample	5 P6398	8260	LCS S
7 Sample	6 P6399	8260	LCSD S
8 Sample	7 P6400	8260	RINSE
9 Sample	8 P6401	8260	MB
10 Sample	9 P6402	8260	280-150033-B-5 pH <u>42</u>
11 Sample	10 P6403	8260	280-150033-B-8 pH <u>42</u>
12 Sample	11 P6404	8260	280-150033-A-9 pH <u>42</u>
13 Sample	12 P6405	8260	280-150033-A-10 pH <u>42</u>
14 Sample	13 P6406	8260	CCVC
15 Sample	14 P6407	8260	RINSE
16 Sample	15 P6408	8260	280-150245-C-1 pH <u>42</u>
17 Sample	16 P6409	8260	280-150245-C-2 pH <u>42</u>
18 Sample	17 P6410	8260	280-150245-C-3 pH <u>42</u>
19 Sample	18 P6411	8260	280-150245-A-4 pH <u>42</u>
20 Sample	19 P6412	8260	280-150245-B-5 pH <u>42</u>
21 Sample	20 P6413	8260	280-150245-B-6 pH <u>42</u>
22 Sample	21 P6414	8260	280-150245-C-7 pH <u>42</u>
23 Sample	22 P6415	8260	280-150245-C-8 pH <u>42</u>
24 Sample	23 P6416	8260	280-150245-A-9 pH <u>42</u>
25 Sample	24 P6417	8260	280-150245-B-10 pH <u>42</u>
26 Sample	25 P6418	8260	280-150245-A-11 pH <u>42</u>
27 Sample	26 P6419	8260	280-150245-A-10 MS pH<2
28 Sample	27 P6420	8260	280-150245-A-10 MSD pH<2
29 Sample	28 P6421	8260	280-150245-B-10 MS pH<2
30 Sample	29 P6422	8260	280-150245-B-10 MSD pH<2 <u>0755</u>

DILID
OK
6/30/21

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062921PM

Worklist Number: 102808

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\20210629-102808.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00050		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00034		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00034		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client	1.000	voaWater	5.000	mL			
14	#14 280-150033-B-5	Client	1.000	voaWater	5.000	mL			
15	#15 280-150033-B-8	Client	1.000	voaWater	5.000	mL			
16	#16 280-150033-A-9	Client	1.000	voaWater	5.000	mL			
17	#17 280-150033-A-10	Client	1.000	voaWater	5.000	mL			
18	#18 CCVC	CCVC	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
19	#19 RINSE	Client	1.000	voaWater	5.000	mL			
20	#20 280-150245-C-1	Client	1.000	voaWater	5.000	mL			
21	#21 280-150245-C-2	Client	1.000	voaWater	5.000	mL			
22	#22 280-150245-C-3	Client	1.000	voaWater	5.000	mL			
23	#23 280-150245-A-4	Client	1.000	voaWater	5.000	mL			
24	#24 280-150245-B-5	Client	1.000	voaWater	5.000	mL			
25	#25 280-150245-B-6	Client	1.000	voaWater	5.000	mL			
26	#26 280-150245-C-7	Client	1.000	voaWater	5.000	mL			
27	#27 280-150245-C-8	Client	1.000	voaWater	5.000	mL			
28	#28 280-150245-A-9	Client	1.000	voaWater	5.000	mL			
29	#29 280-150245-B-10	Client	1.000	voaWater	5.000	mL			
30	#30 280-150245-A-10 MS	MS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
31	#31 280-150245-A-10 MSD	MSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
32	#32 280-150245-B-10 MS	MS	1.000	voaWater	5.000	mL	MV-Supp A_00050		
33	#33 280-150245-B-10 MSD	MSD	1.000	voaWater	5.000	mL	MV-Supp A_00050		
34	#34 280-150245-A-11	Client	1.000	voaWater	5.000	mL			

den_msvoa_totalbacklog Gabe 6/29/2021 11:16:31 PM Assigned to:Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-150033-5	LF001_1SP7_2021 0617_FD		8260B_DO D5	8260B_DOD5	07/01 23:59	06/30/21	DRR	TN	VS-9	Unconfirmed
M Q5_Rev May 7, 2014 Revision 2_DIL1_Use DF										
280-150033-8	LF003_3SP3_2021 0617		8260B_DO D5	8260B_DOD5	07/01 23:59	06/30/21	DRR	TN	VS-9	Unconfirmed
M Q5_Rev May 7, 2014 Revision 2_DIL1_Use DF										
280-150033-9	LF003_3SP4_2021 0617		8260B_DO D5	8260B_DOD5	07/01 23:59	06/30/21	DRR	TN	VS-9	Unconfirmed
M Q5_Rev May 7, 2014 Revision 2_DIL1_Use DF										
280-150033-10	TB01_20210617		8260B_DO D5	8260B_DOD5	07/01 23:59	06/30/21	DRR	TN	VS-9	Unconfirmed
M Q5_Rev May 7, 2014 Revision 2_DIL1_Use DF										

den_msvoa_totalbacklog Gabe 6/29/2021 11:28:35 PM Assigned to: Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-150245-1	Muni-Well-14-2021 0621	1x	8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-2	Muni-Well-33-2021 0621		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-3	RW-8249P-202106 21		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-4	RW-7773P-202106 21		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-5	RW-7773PQ-20210 621		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-6	RW-7200P-202106 21		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-7	RW-7586P-202106 21		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-8	RW-7677P-202106 21		8260B	8260B	07/05 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-9	RW-8000B-202106 22		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-10	PA-1-20210622	X	8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed

6/29/2021
11:28PM

Sample Request Form: 68778

den_msvoa_totalbacklog Gabe 6/29/2021 11:28:35 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										
280-150245-10MS	PA-1-20210622	Q	8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-10MSD	PA-1-20210622		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150245-11	MW-37-20210622		8260B	8260B	07/06 23:59	07/14/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										

Sequence Name: C:\msdchem\1\sequence\060421I.s

Comment:

Operator: SEIFERTJ

Data Path: C:\MSDCHEM\1\DATA\060421I\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run

(X) Full Method

() Reprocessing Only

Sequence Barcode Options

(X) On Mismatch, Inject Anyway

() On Mismatch, Don't Inject

() Barcode Disabled

Eurofins TestAmerica Denver

Instrument ID: MS1

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Run Time: 0951-2054

ALS Batch: 538548

Main / GAS / SS / Supp

Line Sample Name/Misc Info

1) Sample	100	MS1_2711	BFB	BFB 0951
2) Sample	1	MS1_2712	8260	STD010
3) Sample	2	MS1_2713	8260	STD020
4) Sample	3	MS1_2714	8260	STD050
5) Sample	4	MS1_2715	8260	STD10
6) Sample	5	MS1_2716	8260	STD50
7) Sample	6	MS1_2717	8260	STD75
8) Sample	7	MS1_2718	8260	STD100
9) Sample	8	MS1_2719	8260	STD200
10) Sample	9	MS1_2720	8260	BLK
11) Sample	10	MS1_2721	8260	ICV
12) Sample	11	MS1_2722	8260	STD005
13) Sample	12	MS1_2723	8260	STD010
14) Sample	13	MS1_2724	8260	STD020
15) Sample	14	MS1_2725	8260	STD050
16) Sample	15	MS1_2726	8260	STD10
17) Sample	16	MS1_2727	8260	ICIS
18) Sample	17	MS1_2728	8260	STD75
19) Sample	18	MS1_2729	8260	STD100
20) Sample	19	MS1_2730	8260	STD200
21) Sample	20	MS1_2731	8260	BLK
22) Sample	21	MS1_2732	8260	ICV
23) Sample	22	MS1_2733	8260	MDLV 025
24) Sample	23	MS1_2734	8260	MDLV 005
25) Sample	24	MS1_2735	8260	MDLV 01
26) Sample	25	MS1_2736	8260	MDLV 02
27) Sample	26	MS1_2737	8260	MDLV 03
28) Sample	27	MS1_2738	8260	MDLV 05
29) Sample	28	MS1_2739	8260	MDLV 01
30) Sample	29	MS1_2740	8260	MDLV 02
31) Sample	30	MS1_2741	8260	MDLV 03
32) Sample	31	MS1_2742	8260	MDLV 05

WL 102067

Supp Calib: 54225

ICV: 23 32

JK

DNR Removed From Calibration JK 6/5/21

Main / GAS 54226

ICIS: 19 ICV: 23

1st JK 6/5/21

All < 20% D Except

Cyclohexanone - 43.7%

Ethanol + 35.1%

Last Modified: Fri Jun 04 14:05:55 2021

Page: 1

Eurofins Environment Testing America
Worklist Report

Worklist Name: 0604211

Worklist Number: 102067

Instrument Name: VMS_MS1

Chrom Method: AQ_VMS1_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00005 MV-MegaMain B_00047 MV-Gas B_00091		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00091 Acrolein_B_00005 MV-MegaMain B_00047		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00033		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00033		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
18	#18 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
19	#19 ICIS	ICIS	5	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
20	#20 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
21	#21 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
22	#22 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
24	#24 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
25	#25 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
26	#26 STD050	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
27	#27 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
28	#28 STD50	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
29	#29 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
30	#30 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
31	#31 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
32	#32 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00033 mv-Cent IS_00006		
33	#33 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
34	#34 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
35	#35 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		

Sequence Name: C:\msdchem\1\sequence\060421I.s

Comment:

Operator: SEIFERTJ

Data Path: C:\MSDCHEM\1\DATA\060421I\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run

(X) Full Method

() Reprocessing Only

Sequence Barcode Options

(X) On Mismatch, Inject Anyway

() On Mismatch, Don't Inject

() Barcode Disabled

Eurofins TestAmerica Denver

Instrument ID: MS1

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Run Time: 0951-2054

ALS Batch: 538548

Main / GAS / SS / Supp

Line	Sample Name/Misc Info
1) Sample 100	MS1_2711 BFB BFB 0951
2) Sample 1	MS1_2712 8260 STD010
3) Sample 2	MS1_2713 8260 STD020
4) Sample 3	MS1_2714 8260 STD050
5) Sample 4	MS1_2715 8260 STD10
6) Sample 5	MS1_2716 8260 STD50
7) Sample 6	MS1_2717 8260 STD75
8) Sample 7	MS1_2718 8260 STD100
9) Sample 8	MS1_2719 8260 STD200
10) Sample 9	MS1_2720 8260 BLK
11) Sample 10	MS1_2721 8260 ICV
12) Sample 11	MS1_2722 8260 STD005
13) Sample 12	MS1_2723 8260 STD010
14) Sample 13	MS1_2724 8260 STD020
15) Sample 14	MS1_2725 8260 STD050
16) Sample 15	MS1_2726 8260 STD10
17) Sample 16	MS1_2727 8260 ICIS
18) Sample 17	MS1_2728 8260 STD75
19) Sample 18	MS1_2729 8260 STD100
20) Sample 19	MS1_2730 8260 STD200
21) Sample 20	MS1_2731 8260 BLK
22) Sample 21	MS1_2732 8260 ICV
23) Sample 22	MS1_2733 8260 MDLV 025
24) Sample 23	MS1_2734 8260 MDLV 005
25) Sample 24	MS1_2735 8260 MDLV 01
26) Sample 25	MS1_2736 8260 MDLV 02
27) Sample 26	MS1_2737 8260 MDLV 03
28) Sample 27	MS1_2738 8260 MDLV 05
29) Sample 28	MS1_2739 8260 MDLV 01
30) Sample 29	MS1_2740 8260 MDLV 02
31) Sample 30	MS1_2741 8260 MDLV 03
32) Sample 31	MS1_2742 8260 MDLV 05

WL 102067

Supp Calib: 54225

ICV: 23 32

JK

DNR Removed From Calibration JK 6/5/21

Main / GAS 54226

ICIS: 19 ICV: 23

1st JK 6/5/21

All < 20% D Except

Cyclohexanone - 43.7%

Ethanol + 35.1%

Eurofins Environment Testing America
Worklist Report

Worklist Name: 0604211
Instrument Name: VMS_MS1
Purge Volume: 5.000
Analysis Type: VOA

Worklist Number: 102067
Chrom Method: AQ_VMS1_8260
Units: mL

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00005 MV-MegaMain B_00047 MV-Gas B_00091		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00091 Acrolein_B_00005 MV-MegaMain B_00047		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00033		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00033		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
18	#18 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
19	#19 ICIS	ICIS	5	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
20	#20 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
21	#21 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
22	#22 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
24	#24 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
25	#25 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
26	#26 STD050	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
27	#27 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
28	#28 STD50	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
29	#29 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
30	#30 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
31	#31 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
32	#32 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00033 mv-Cent IS_00006		
33	#33 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
34	#34 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
35	#35 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		

Sequence Name: C:\HPCHEM\1\SEQUENCE\062621I.S

Comment:

Operator: SEIFERTJ

Data Path: C:\HPCHEM\1\DATA\062621I\

Pre-Seq Cmd:

Post-Seq Cmd:

Main/GAS/SS

Eurofins TestAmerica Denver

Instrument ID: P

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 82600)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Tune Time: 1040-2154

TALS Batch: 541369 8260

541370 624

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line Type Vial DataFile Method Sample Name

1 Sample	100 P6298	BFB	BFB	1040
2 Sample	1 P6299	8260	CCV	
3 Sample	2 P6300	8260	STD005	
4 Sample	3 P6301	8260	STD010	
5 Sample	4 P6302	8260	STD020	
6 Sample	5 P6303	8260	STD050	
7 Sample	6 P6304	8260	STD10	
8 Sample	7 P6305	8260	ICIS	
9 Sample	8 P6306	8260	STD75	
10 Sample	9 P6307	8260	STD100	
11 Sample	10 P6308	8260	STD200	
12 Sample	11 P6309	8260	BLK	
13 Sample	12 P6310	8260	ICIS RR	
14 Sample	13 P6311	8260	STD005	
15 Sample	14 P6312	8260	STD010	
16 Sample	15 P6313	8260	STD020	
17 Sample	16 P6314	8260	STD050	
18 Sample	17 P6315	8260	STD10	
19 Sample	18 P6316	8260	ICIS	
20 Sample	19 P6317	8260	STD75	
21 Sample	20 P6318	8260	STD100	
22 Sample	21 P6319	8260	STD200	
23 Sample	22 P6320	8260	BLK	
24 Sample	23 P6321	8260	ICV	
25 Sample	24 P6322	8260	280-149476-a-2 mdlv	
26 Sample	25 P6323	8260	280-149476-a-2 mdlv	
27 Sample	26 P6324	8260	280-149476-a-2 mdlv	
28 Sample	27 P6325	8260	280-149476-a-2 mdlv	
29 Sample	28 P6326	8260	280-149476-a-2 mdlv	
30 Sample	29 P6327	8260	280-149476-a-2 mdlv	

2nd Day ICV
For GASES +
Batch 541649
Re-run standard ICV: 14
wrong used

Calib: 54820 8260
54821 624

+ Dichlorodifluoromethane
-40.6%

Sec-Butyl Alcohol
-27.2%

2-Pentene
-26.3%

1-Chlorohexane
-31.6%

Cyclohexanone +33.3%

RL for Bromomethane is 2

1st ML 6/28/21

2nd AP 6/28/21

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062621I

Worklist Number: 102712

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\20210626-102712.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00050		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00006 MV-Gas B_00092 MV-MegaMain B_00049		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	Acrolein_B_00006 MV-Gas B_00092 MV-MegaMain B_00049		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp A_00050		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp A_00050		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
17	#17 STD050	IC	4	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
18	#18 STD10	IC	5	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
19	#19 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
20	#20 STD75	IC	7	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
21	#21 STD100	IC	8	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
22	#22 STD200	IC	9	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00049 MV-Gas B_00092 Acrolein_B_00006		
24	#24 280-149476-A-2 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001 mv-Cent IS_00006		
25	#25 280-149476-A-2 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001 mv-Cent IS_00006		
26	#26 280-149476-A-2 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001 mv-Cent IS_00006		

Sequence Name: C:\HPCHEM\1\SEQUENCE\0626211.S

Comment:

Operator: SEIFERTJ

Data Path: C:\HPCHEM\1\DATA\0626211\

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

Main/GAS/SS

Eurofins TestAmerica Denver

Instrument ID: P

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 82600)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Tune Time: 1040-2154

TALS Batch: 541369 8260

541370 624

Line Type Vial DataFile Method Sample Name

1 Sample	100 P6298	BFB	BFB
2 Sample	1 P6299	8260	CCV
3 Sample	2 P6300	8260	STD005
4 Sample	3 P6301	8260	STD010
5 Sample	4 P6302	8260	STD020
6 Sample	5 P6303	8260	STD050
7 Sample	6 P6304	8260	STD10
8 Sample	7 P6305	8260	ICIS
9 Sample	8 P6306	8260	STD75
10 Sample	9 P6307	8260	STD100
11 Sample	10 P6308	8260	STD200
12 Sample	11 P6309	8260	BLK
13 Sample	12 P6310	8260	ICIS RR
14 Sample	13 P6311	8260	STD005
15 Sample	14 P6312	8260	STD010
16 Sample	15 P6313	8260	STD020
17 Sample	16 P6314	8260	STD050
18 Sample	17 P6315	8260	STD10
19 Sample	18 P6316	8260	ICIS
20 Sample	19 P6317	8260	STD75
21 Sample	20 P6318	8260	STD100
22 Sample	21 P6319	8260	STD200
23 Sample	22 P6320	8260	BLK
24 Sample	23 P6321	8260	ICV
25 Sample	24 P6322	8260	280-149476-a-2 mdlv
26 Sample	25 P6323	8260	280-149476-a-2 mdlv
27 Sample	26 P6324	8260	280-149476-a-2 mdlv
28 Sample	27 P6325	8260	280-149476-a-2 mdlv
29 Sample	28 P6326	8260	280-149476-a-2 mdlv
30 Sample	29 P6327	8260	280-149476-a-2 mdlv

RL for Bromomethane is 2

1st JL 6/28/21

2nd AP 6/28/21

2nd Day ICV

For GASES +

BATCH 541649

Re-run standard ICV: 14
wrong used

ICIS: 19

Main ICV: 30

Calib: 54820 8260

54821 624

6/28/21

Re-Run ICV OK

+ Dichlorodifluoromethane

-40.6%

Sec-Butyl Alcohol

-27.2%

2-Pentene

-26.3%

1-Chlorohexane

-31.6%

Cyclohexanone +33.3%

Eurofins Environment Testing America
Worklist Report

Worklist Name: 0626211

Worklist Number: 102712

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\20210626-102712.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00050		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00006 MV-Gas B_00092 MV-MegaMain B_00049		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	Acrolein_B_00006 MV-Gas B_00092 MV-MegaMain B_00049		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp A_00050		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp A_00050		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
17	#17 STD050	IC	4	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
18	#18 STD10	IC	5	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
19	#19 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
20	#20 STD75	IC	7	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
21	#21 STD100	IC	8	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
22	#22 STD200	IC	9	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00049 MV-Gas B_00092 Acrolein_B_00006		
24	#24 280-149476-A-2 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001 mv-Cent IS_00006		
25	#25 280-149476-A-2 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001 mv-Cent IS_00006		
26	#26 280-149476-A-2 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001 mv-Cent IS_00006		

Preliminary Report

Eurofins Environment Testing America
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_P\20210626-102712.b

Worklist Name: 062621I

Worklist Num:

102712

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:

Enabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 541369	MSV - 624 Raw Batch: 541370
# 1 BFB	# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV	
# 3 CCV	# 3 CCV	
# 4 LCS	# 4 LCS	
# 5 LCSD	# 5 LCSD	
# 6 LCS	# 6 LCS	
# 7 LCSD	# 7 LCSD	
# 8 RINSE	# 8 RINSE	
# 9 MB	# 9 MB	
# 10 280-141475-A-1	# 10 280-141475-A-1	
# 11 280-141475-A-2	# 11 280-141475-A-2	
# 12 280-141475-A-3	# 12 280-141475-A-3	
# 13 280-141475-A-7	# 13 280-141475-A-7	
# 14 STD005	# 14 STD005	# 14 STD005
# 15 STD010	# 15 STD010	# 15 STD010
# 16 STD020	# 16 STD020	# 16 STD020
# 17 STD050	# 17 STD050	# 17 STD050
# 18 STD10	# 18 STD10	# 18 STD10
# 19 ICIS	# 19 ICIS	# 19 ICIS
# 20 STD75	# 20 STD75	# 20 STD75
# 21 STD100	# 21 STD100	# 21 STD100
# 22 STD200	# 22 STD200	# 22 STD200
# 23 ICV	# 23 ICV	# 23 ICV
# 24 280-149476-A-2 MDLV	# 24 280-149476-A-2 MDLV	
# 25 280-149476-A-2 MDLV	# 25 280-149476-A-2 MDLV	
# 26 280-149476-A-2 MDLV	# 26 280-149476-A-2 MDLV	
# 27 280-149476-A-2 MDLV	# 27 280-149476-A-2 MDLV	
# 28 280-149476-A-2 MDLV	# 28 280-149476-A-2 MDLV	
# 29 280-149476-A-2 MDLV	# 29 280-149476-A-2 MDLV	

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00089
BFB 280-538548/1		8260B		2 uL	2 uL		5 uL		
STD005 280-538548/14 IC		8260B		5 mL	5 mL				0.1 uL
STD010 280-538548/15 IC		8260B		5 mL	5 mL				0.2 uL
STD020 280-538548/16 IC		8260B		5 mL	5 mL				0.4 uL
STD10 280-538548/18 IC		8260B		5 mL	5 mL				2 uL
ICIS 280-538548/19		8260B		5 mL	5 mL				10 uL
STD75 280-538548/20 IC		8260B		5 mL	5 mL				15 uL
STD100 280-538548/21 IC		8260B		5 mL	5 mL				20 uL
STD200 280-538548/22 IC		8260B		5 mL	5 mL				40 uL
ICV 280-538548/23		8260B		5 mL	5 mL	25 uL			
STD010 280-538548/24 IC		8260B		5 mL	5 mL			5 uL	
STD020 280-538548/25 IC		8260B		5 mL	5 mL			5 uL	
STD050 280-538548/26 IC		8260B		5 mL	5 mL			5 uL	
STD10 280-538548/27 IC		8260B		5 mL	5 mL			5 uL	
STD50 280-538548/28 IC		8260B		5 mL	5 mL			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.

8260B

Page 1 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00089
STD75 280-538548/29 IC		8260B		5 mL	5 mL			5 uL	
STD100 280-538548/30 IC		8260B		5 mL	5 mL			5 uL	
STD200 280-538548/31 IC		8260B		5 mL	5 mL			5 uL	
ICV 280-538548/32		8260B		5 mL	5 mL			5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00091	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050	MV-Supp A 00051	MV-Supp B 00033
BFB 280-538548/1		8260B							
STD005 280-538548/14 IC		8260B			5 uL		0.25 uL		
STD010 280-538548/15 IC		8260B			5 uL		0.5 uL		
STD020 280-538548/16 IC		8260B			5 uL		1 uL		
STD10 280-538548/18 IC		8260B			5 uL		5 uL		
ICIS 280-538548/19		8260B			5 uL		25 uL		
STD75 280-538548/20 IC		8260B			5 uL		37.5 uL		
STD100 280-538548/21 IC		8260B			5 uL		50 uL		
STD200 280-538548/22 IC		8260B			5 uL		100 uL		
ICV 280-538548/23		8260B		10 uL	5 uL	25 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.

8260B

Page 2 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00091	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050	MV-Supp A 00051	MV-Supp B 00033
STD010 280-538548/24 IC		8260B						1 uL	
STD020 280-538548/25 IC		8260B						2 uL	
STD050 280-538548/26 IC		8260B						5 uL	
STD10 280-538548/27 IC		8260B						10 uL	
STD50 280-538548/28 IC		8260B						50 uL	
STD75 280-538548/29 IC		8260B						75 uL	
STD100 280-538548/30 IC		8260B						100 uL	
STD200 280-538548/31 IC		8260B						200 uL	
ICV 280-538548/32		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.: 280-150245-1

SDG No.: _____

Batch Number: 541369 Batch Start Date: 06/26/21 10:40 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00006	mv-Cent BFB 00003	MV-Gas A 00091	mv-IS_SS 00018
BFB 280-541369/1		8260B		2 uL	2 uL		2 uL		
STD005 280-541369/14 IC		8260B		5 mL	5 mL			0.1 uL	5 uL
STD010 280-541369/15 IC		8260B		5 mL	5 mL			0.2 uL	5 uL
STD020 280-541369/16 IC		8260B		5 mL	5 mL			0.4 uL	5 uL
STD050 280-541369/17 IC		8260B		5 mL	5 mL			1 uL	5 uL
STD10 280-541369/18 IC		8260B		5 mL	5 mL			2 uL	5 uL
ICIS 280-541369/19		8260B		5 mL	5 mL			10 uL	5 uL
STD75 280-541369/20 IC		8260B		5 mL	5 mL			15 uL	5 uL
STD100 280-541369/21 IC		8260B		5 mL	5 mL			20 uL	5 uL
STD200 280-541369/22 IC		8260B		5 mL	5 mL			40 uL	5 uL
ICV 280-541369/30		8260B		5 mL	5 mL	25 uL			5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Main add A 00001	MV-MegaMain B 00049	MV-MegaMainA 00052			
BFB 280-541369/1		8260B							
STD005 280-541369/14 IC		8260B		0.25 uL		0.25 uL			
STD010 280-541369/15 IC		8260B		0.5 uL		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.

8260B

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Batch Number: 541369 Batch Start Date: 06/26/21 10:40 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Main add A 00001	MV-MegaMain B 00049	MV-MegaMainA 00052			
STD020 280-541369/16 IC		8260B		1 uL		1 uL			
STD050 280-541369/17 IC		8260B		2.5 uL		2.5 uL			
STD10 280-541369/18 IC		8260B		5 uL		5 uL			
ICIS 280-541369/19		8260B		25 uL		25 uL			
STD75 280-541369/20 IC		8260B		37.5 uL		37.5 uL			
STD100 280-541369/21 IC		8260B		50 uL		50 uL			
STD200 280-541369/22 IC		8260B		100 uL		100 uL			
ICV 280-541369/30		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.: 280-150245-1

SDG No.: _____

Batch Number: 541784 Batch Start Date: 06/29/21 20:49 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00091	mv-IS_SS 00018
BFB 280-541784/1		8260B		2 uL	2 uL	2 uL			
CCV 280-541784/2		8260B		5 mL	5 mL			10 uL	5 uL
CCV 280-541784/3		8260B		5 mL	5 mL		5 uL		
LCS 280-541784/4		8260B		5 mL	5 mL			10 uL	5 uL
LCSD 280-541784/5		8260B		5 mL	5 mL			10 uL	5 uL
LCS 280-541784/6		8260B		5 mL	5 mL				5 uL
LCSD 280-541784/7		8260B		5 mL	5 mL				5 uL
MB 280-541784/9		8260B		5 mL	5 mL				5 uL
280-150245-C-1	Muni-Well-14-202 10621	8260B	T	5 mL	5 mL				5 uL
280-150245-C-2	Muni-Well-33-202 10621	8260B	T	5 mL	5 mL				5 uL
280-150245-C-3	RW-8249P-2021062 1	8260B	T	5 mL	5 mL				5 uL
280-150245-A-4	RW-7773P-2021062 1	8260B	T	5 mL	5 mL				5 uL
280-150245-B-5	RW-7773PQ-202106 21	8260B	T	5 mL	5 mL				5 uL
280-150245-B-6	RW-7200P-2021062 1	8260B	T	5 mL	5 mL				5 uL
280-150245-C-7	RW-7586P-2021062 1	8260B	T	5 mL	5 mL				5 uL
280-150245-C-8	RW-7677P-2021062 1	8260B	T	5 mL	5 mL				5 uL
280-150245-A-9	RW-8000B-2021062 2	8260B	T	5 mL	5 mL				5 uL
280-150245-B-10	PA-1-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-A-10 MS	PA-1-20210622	8260B	T	5 mL	5 mL			10 uL	5 uL
280-150245-A-10 MSD	PA-1-20210622	8260B	T	5 mL	5 mL			10 uL	5 uL
280-150245-B-10 MS	PA-1-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-B-10 MSD	PA-1-20210622	8260B	T	5 mL	5 mL				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.

8260B

Page 1 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Batch Number: 541784 Batch Start Date: 06/29/21 20:49 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00091	mv-IS_SS 00018
280-150245-A-11	MW-37-20210622	8260B	T	5 mL	5 mL				5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00052	MV-Supp A 00050	MV-Supp B 00034			
BFB 280-541784/1		8260B							
CCV 280-541784/2		8260B		25 uL					
CCV 280-541784/3		8260B			50 uL				
LCS 280-541784/4		8260B		25 uL					
LCSD 280-541784/5		8260B		25 uL					
LCS 280-541784/6		8260B				25 uL			
LCSD 280-541784/7		8260B				25 uL			
MB 280-541784/9		8260B							
280-150245-C-1	Muni-Well-14-202 10621	8260B	T						
280-150245-C-2	Muni-Well-33-202 10621	8260B	T						
280-150245-C-3	RW-8249P-2021062 1	8260B	T						
280-150245-A-4	RW-7773P-2021062 1	8260B	T						
280-150245-B-5	RW-7773PQ-202106 21	8260B	T						
280-150245-B-6	RW-7200P-2021062 1	8260B	T						
280-150245-C-7	RW-7586P-2021062 1	8260B	T						
280-150245-C-8	RW-7677P-2021062 1	8260B	T						
280-150245-A-9	RW-8000B-2021062 2	8260B	T						
280-150245-B-10	PA-1-20210622	8260B	T						
280-150245-A-10 MS	PA-1-20210622	8260B	T	25 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.: 280-150245-1

SDG No.: _____

Batch Number: 541784 Batch Start Date: 06/29/21 20:49 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00052	MV-Supp A 00050	MV-Supp B 00034			
280-150245-A-10 MSD	PA-1-20210622	8260B	T	25 uL					
280-150245-B-10 MS	PA-1-20210622	8260B	T		50 uL				
280-150245-B-10 MSD	PA-1-20210622	8260B	T		50 uL				
280-150245-A-11	MW-37-20210622	8260B	T						

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.: 280-150245-1

SDG No.: _____

Batch Number: 541786 Batch Start Date: 06/29/21 20:49 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00091	mv-IS_SS 00018
BFB 280-541786/1		8260B		2 uL	2 uL	5 uL			
CCV 280-541786/2		8260B		5 mL	5 mL			10 uL	5 uL
CCV 280-541786/3		8260B		5 mL	5 mL		5 uL		
LCS 280-541786/4		8260B		5 mL	5 mL			10 uL	5 uL
LCSD 280-541786/5		8260B		5 mL	5 mL			10 uL	5 uL
LCS 280-541786/6		8260B		5 mL	5 mL				5 uL
LCSD 280-541786/7		8260B		5 mL	5 mL				5 uL
MB 280-541786/9		8260B		5 mL	5 mL				5 uL
280-150245-A-12	MW-37Q-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-B-13	PA-3-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-C-14	RW-7091R-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-B-15	RW-2151H-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-A-16	PA-8-37-47-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-B-17	PA-8-77-87-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-C-18	RW-8030P-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-A-18	RW-8030P-20210623	8260B	T	5 mL	5 mL			10 uL	5 uL
MS 280-150245-A-18	RW-8030P-20210623	8260B	T	5 mL	5 mL			10 uL	5 uL
MSD 280-150245-B-18	RW-8030P-20210623	8260B	T	5 mL	5 mL				5 uL
MS 280-150245-B-18	RW-8030P-20210623	8260B	T	5 mL	5 mL				5 uL
MSD 280-150245-B-19	RW-2172H-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-B-20	RW-2172HQ-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-B-21	TB-01-20210625	8260B	T	5 mL	5 mL				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.: 280-150245-1

SDG No.: _____

Batch Number: 541786 Batch Start Date: 06/29/21 20:49 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00091	mv-IS_SS 00018
280-150245-B-22	EB-01-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-C-23	EB-02-20210622	8260B	T	5 mL	5 mL				5 uL
280-150245-C-24	EB-03-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-C-25	EB-04-20210623	8260B	T	5 mL	5 mL				5 uL
280-150245-C-26	EB-05-20210624	8260B	T	5 mL	5 mL				5 uL
280-150245-A-27	EB-06-20210625	8260B	T	5 mL	5 mL				5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00052	MV-Supp A 00051	MV-Supp B 00034			
BFB 280-541786/1		8260B							
CCV 280-541786/2		8260B		25 uL					
CCV 280-541786/3		8260B			50 uL				
LCS 280-541786/4		8260B		25 uL					
LCSD 280-541786/5		8260B		25 uL					
LCS 280-541786/6		8260B				25 uL			
LCSD 280-541786/7		8260B				25 uL			
MB 280-541786/9		8260B							
280-150245-A-12	MW-37Q-20210622	8260B	T						
280-150245-B-13	PA-3-20210622	8260B	T						
280-150245-C-14	RW-7091R-20210622	8260B	T						
280-150245-B-15	RW-2151H-20210623	8260B	T						
280-150245-A-16	PA-8-37-47-20210623	8260B	T						
280-150245-B-17	PA-8-77-87-20210623	8260B	T						
280-150245-C-18	RW-8030P-20210623	8260B	T						
280-150245-A-18 MS	RW-8030P-20210623	8260B	T	25 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.

8260B

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150245-1

SDG No.: _____

Batch Number: 541786 Batch Start Date: 06/29/21 20:49 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00052	MV-Supp A 00051	MV-Supp B 00034			
280-150245-A-18 MSD	RW-8030P-2021062 3	8260B	T	25 uL					
280-150245-B-18 MS	RW-8030P-2021062 3	8260B	T		50 uL				
280-150245-B-18 MSD	RW-8030P-2021062 3	8260B	T		50 uL				
280-150245-B-19	RW-2172H-2021062 3	8260B	T						
280-150245-B-20	RW-2172HQ-202106 23	8260B	T						
280-150245-B-21	TB-01-20210625	8260B	T						
280-150245-B-22	EB-01-20210622	8260B	T						
280-150245-C-23	EB-02-20210622	8260B	T						
280-150245-C-24	EB-03-20210623	8260B	T						
280-150245-C-25	EB-04-20210623	8260B	T						
280-150245-C-26	EB-05-20210624	8260B	T						
280-150245-A-27	EB-06-20210625	8260B	T						

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.

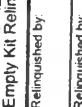
Shipping and Receiving Documents

Denver #280

eurofins | Environment Testing
TestAmerica

Chain of Custody Record

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

Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Fl. Hall Mine L.F. Idaho Site: Offsite Groundwater Sampling		Sampler: Emma Ehret Lab PM: Bienulis, Dylan T. Phone: 208-310-0192 E-Mail: Dylan.Bienulis@testamericainc.com		Carrier Tracking No(s): COC No: Page: 1 of 3 Job #:	
Due Date Requested: TAT Requested (days): 15 business days PO #: TBD WO #: Project #: 28018772 SOW#:		Analysis Requested  280-150245 Chain of Custody			
Sample Identification Sample ID: MWN-Well-A-20210621 MWN-Well-B-20210621 RW-8249P-20210621 RW-7773P-20210621 RW-7773PQ-20210621 RW-7200P-20210621 RW-7586P-20210621 RW-7677P-20210621 RW-8000B-20210622 FA-1-20210622 MWN-37-20210622		Sample Date 6/21/21 6/21/21 6/21/21 6/21/21 6/21/21 6/21/21 6/21/21 6/22/21 6/22/21 6/22/21	Sample Time 15:37 15:15 17:45 14:57 15:02 16:22 17:35 18:55 12:15 15:05 17:38	Sample Type (C=Comp, G=Grab) G G G G G G G G G G	Matrix (Weirater, On-site, BT+1, Acid) W W W W W W W W W W W
Preservation Codes: A - HCL B - HNO3 C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (Specify)		Special Instructions/Note: Total Number of Containers: 33 MS/MSD			
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:  Relinquished by:  Relinquished by:		Date: 6/25/21 Time: 15:00 Received by:  Received by: Received by:			
Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.: 1563121 1563120		Cooler Temperature(s) °C and Other Remarks: 1.9 IR12 +0.6 CF			

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

Chain of Custody Record

Denver #280



Environment Testing
TestAmerica

Client Information		Sampler	Lab PM	Camera Tracking No(s)	COC No.												
Client Contact Mary Lou Fox		Phone: Emma Ehrst	Bienulis, Dylan T.		2 of 3												
Company: CDM Smith, Inc.		208-310-0192	E-Mail: Dylan.Bienulis@testamericainc.com		Job #												
Address: 14432 S E Eastgate Way Suite 100																	
City: Bellvue																	
State, Zip: WA, 98007																	
Phone: 425-519-8300																	
Email: FoxML@cdmsmith.com																	
Project Name: Bannock Fl. Hall Mine LF, Idaho																	
Site: Offsite GW Sampling																	
SSOW#																	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Wet, Dry, Organic, Inorganic, BT+Trace, Acid)	Preservation Code	Analysis Requested	Due Date Requested:	TAT Requested (days):	PO #	TBD	WO #	Project #	SSOW#	Preservation Codes:	Special Instructions/Note:	
MW-37Q-20210622		6/22/21	17:41	G	W				15 business days								
PA-3-20210622		6/22/21	16:55	G	W												
RW-709IR-20210622		6/22/21	19:02	G	W												
RW-215IH-20210623		6/23/21	14:59	G	W												
PA837-47-20210623		6/23/21	11:52	G	W												
PA877-87-20210623		6/23/21	14:13	G	W												
RW-803DP-20210623		6/23/21	15:40	G	W												
RW-2172H-20210623		6/23/21	17:59	G	W												
RW-2172HQ-20210623		6/23/21	17:59	G	W												
TB-01-20210625		6/25/21	13:45	G	W												
Possible Hazard Identification		Deliverable Requested: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ 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		Special Instructions/OC Requirements:		Total Number of Containers		Preservation Codes:		Special Instructions/Note:			
Empty Kit Relinquished by:		Date: 6/25/21		Time: 15:00		Method of Shipment		Received by:		Date/Time: 6/26/21 0830		Company: ETADEN		Company:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:													
Δ Yes Δ No																	

Denver #280

Chain of Custody Record

eurofins
Environment Testing
TestAmerica

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

Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State, Zip: WA, 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Fl. Hall Mine L.F. Idaho Site:		Lab PM: Blentius, Dylan T. E-Mail: Dylan.Blentius@testamericainc.com Camer Tracking No(s):	
Due Date Requested: TAT Requested (days): 15 business days		COC No: 3213 Page: 3 of 3 Job #:	
PO #: TBD WO #:		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 Other:	
Sample Identification EB-01-20210622 EB-02-20210622 EB-03-20210623 EB-04-20210623 EB-05-20210624 EB-06-20210625		Analysis Requested Total Number of Containers: 2 Special Instructions/Note:	
Sample Date 6/22/21 18:10 6/22/21 18:50 6/23/21 18:35 6/23/21 18:30 6/24/21 17:35 6/25/21 12:30		Sample Type (C=Comp, G=Grab) G W G W G W G W G W G W	
Matrix (Weater, Bragdo, On, Off, B, F, H, A, J, A) W W W W W W W		Preservation Code: X X X X X X X	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant 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	
Empty Kit Relinquished by:		Special Instructions/QC Requirements:	
Relinquished by:		Date: 6/25/21 Time: 15:00	
Relinquished by:		Received by:	
Relinquished by:		Date/Time: 6/26/21 0930 Company: EJA/DAV	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: ☐ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks:	

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 280-150245-1

Login Number: 150245
List Number: 1
Creator: Dubicki, Adam L

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

ANALYTICAL REPORT

Job Number: 280-150290-1

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
7/12/2021 11:59 AM

Dylan T Bieniulis, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0138
Dylan.Bieniulis@Eurofinset.com
07/12/2021

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

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Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	9
Default Detection Limits	54
Surrogate Summary	56
QC Sample Results	58
QC Association	77
Chronicle	79
Certification Summary	84
Method Summary	85
Sample Summary	86
Manual Integration Summary	87
Reagent Traceability	95
COAs	114
Organic Sample Data	207
GC/MS VOA	207
Method 8260B	207
Method 8260B QC Summary	208
Method 8260B Sample Data	246
Standards Data	448
Method 8260B ICAL Data	448
Method 8260B CCAL Data	906
Raw QC Data	972

Table of Contents

Method 8260B Tune Data	972
Method 8260B Blank Data	1001
Method 8260B LCS/LCSD Data	1025
Method 8260B MS/MSD Data	1098
Method 8260B Run Logs	1114
Method 8260B Prep Data	1149
Shipping and Receiving Documents	1164
Client Chain of Custody	1165
Sample Receipt Checklist	1170

Definitions/Glossary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery 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.
α	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: 280-150290-1

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 06/29/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.7 and 2.3 C.

One of three HCl preserved VOA vials received for sample PA-10-20210624 (280-150290-8) was received with a headspace bubble greater than 6mm in diameter. Sufficient sample containers without headspace greater than 6mm in diameter were received to proceed with the requested analysis. The client was notified on 6/29/2021.

The chain of custody indicates three sample was submitted for sample TB-03-20210627 (280-150290-1); however, the laboratory only received 2 containers. No corrective action is required as sufficient sample volume was received to proceed with the requested analysis. The client was notified on 6/29/2021.

The chain of custody indicates three sample was submitted for sample TB-02-20210627 (280-150306-17); however, the laboratory only received 2 containers. No corrective action is required as sufficient sample volume was received to proceed with the requested analysis. The client was notified on 6/29/2021.

Logins 280-150290-1 and 280-150206-1 were combined into a single sample delivery group (SDG) for reporting as the associated samples were collected from the same client project site and received at the laboratory on the same date.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB-03-20210627 (280-150290-1), RW-8284P-20210625 (280-150306-1), PA-5-20210627 (280-150290-2), RW-2172F-20210625 (280-150306-2), MW-38-60-100-20210627 (280-150290-3), RW-7588P-20210625 (280-150306-3), RW-2879M-20210624 (280-150290-4), RW-8209P-20210625 (280-150306-4), RW-7505P-20210624 (280-150290-5), RW-7688P-20210625 (280-150306-5), RW-8048P-20210624 (280-150290-6), RW-5898BI-20210625 (280-150306-6), RW-8035P-20210624 (280-150290-7), RW-2140H-20210626 (280-150306-7), PA-10-20210624 (280-150290-8), MW-116S-20210626 (280-150306-8), RW-7350P-20210624 (280-150290-9), RW-2076F-20210626 (280-150306-9), PA-9-58-68-20210624 (280-150290-10), RW-8012P-20210626 (280-150306-10), PA-9-88-98-20210624 (280-150290-11), EB-07-20210627 (280-150306-11), RW-7549P-20210624 (280-150290-12), RW-7244P-20210624 (280-150306-12), RW-2237H-20210624 (280-150306-13), RW-7070B-20210624 (280-150306-14), RW-8105PS-20210625 (280-150306-15), MW-38-105-115-20210627 (280-150306-16), TB-02-20210627 (280-150306-17) and MW-38-121-130-20210627 (280-150306-18) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/07/2021 and 07/09/2021.

Acrylonitrile failed the recovery criteria high for LCSD 280-542401/5. The analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have qualified and been reported. Refer to the QC report for details.

Acrylonitrile failed the recovery criteria high for the MS and MSD of sample RW-2172F-20210625 (280-150306-2) in batch 280-542401. 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: 280-150290-1

Client Sample ID: TB-03-20210627

Lab Sample ID: 280-150290-1

No Detections.

Client Sample ID: PA-5-20210627

Lab Sample ID: 280-150290-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.60	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-38-60-100-20210627

Lab Sample ID: 280-150290-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.2		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2879M-20210624

Lab Sample ID: 280-150290-4

No Detections.

Client Sample ID: RW-7505P-20210624

Lab Sample ID: 280-150290-5

No Detections.

Client Sample ID: RW-8048P-20210624

Lab Sample ID: 280-150290-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.8		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8035P-20210624

Lab Sample ID: 280-150290-7

No Detections.

Client Sample ID: PA-10-20210624

Lab Sample ID: 280-150290-8

No Detections.

Client Sample ID: RW-7350P-20210624

Lab Sample ID: 280-150290-9

No Detections.

Client Sample ID: PA-9-58-68-20210624

Lab Sample ID: 280-150290-10

No Detections.

Client Sample ID: PA-9-88-98-20210624

Lab Sample ID: 280-150290-11

No Detections.

Client Sample ID: RW-7549P-20210624

Lab Sample ID: 280-150290-12

No Detections.

Client Sample ID: RW-8284P-20210625

Lab Sample ID: 280-150306-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.54	J	1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	4.9		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2172F-20210625

Lab Sample ID: 280-150306-2

No Detections.

Client Sample ID: RW-7588P-20210625

Lab Sample ID: 280-150306-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8209P-20210625

Lab Sample ID: 280-150306-4

No Detections.

Client Sample ID: RW-7688P-20210625

Lab Sample ID: 280-150306-5

No Detections.

Client Sample ID: RW-5898BI-20210625

Lab Sample ID: 280-150306-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.26	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2140H-20210626

Lab Sample ID: 280-150306-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.1		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	4.5		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: MW-116S-20210626

Lab Sample ID: 280-150306-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	4.2		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	27		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-2076F-20210626

Lab Sample ID: 280-150306-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.15	ug/L	1		8260B	Total/NA
Tetrachloroethene	4.6		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	24		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8012P-20210626

Lab Sample ID: 280-150306-10

No Detections.

Client Sample ID: EB-07-20210627

Lab Sample ID: 280-150306-11

No Detections.

Client Sample ID: RW-7244P-20210624

Lab Sample ID: 280-150306-12

No Detections.

Client Sample ID: RW-2237H-20210624

Lab Sample ID: 280-150306-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2		1.0	0.20	ug/L	1		8260B	Total/NA
Trichloroethene	8.6		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-7070B-20210624

Lab Sample ID: 280-150306-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.2		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: RW-8105PS-20210625

Lab Sample ID: 280-150306-15

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: MW-38-105-115-20210627

Lab Sample ID: 280-150306-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.5		1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TB-02-20210627

Lab Sample ID: 280-150306-17

No Detections.

Client Sample ID: MW-38-121-130-20210627

Lab Sample ID: 280-150306-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.5		1.0	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: TB-03-20210627

Lab Sample ID: 280-150290-1

Date Collected: 06/27/21 19:30

Matrix: Water

Date Received: 06/29/21 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			07/07/21 00:55	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 00:55	1
Acrolein	ND		20	2.8	ug/L			07/07/21 00:55	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 00:55	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 00:55	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 00:55	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 00:55	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 00:55	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 00:55	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 00:55	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 00:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 00:55	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 00:55	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 00:55	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 00:55	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 00:55	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 00:55	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 00:55	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 00:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 00:55	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 00:55	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 00:55	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 00:55	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 00:55	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 00:55	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 00:55	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 00:55	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 00:55	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 00:55	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 00:55	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 00:55	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 00:55	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 00:55	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 00:55	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 00:55	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 00:55	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 00:55	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 00:55	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 00:55	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 00:55	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 00:55	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 00:55	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 00:55	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 00:55	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 00:55	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 00:55	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 00:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 00:55	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: TB-03-20210627

Lab Sample ID: 280-150290-1

Date Collected: 06/27/21 19:30

Matrix: Water

Date Received: 06/29/21 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			07/07/21 00:55	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 00:55	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 00:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 00:55	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 00:55	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 00:55	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 00:55	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 00:55	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 00:55	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 00:55	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 00:55	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 00:55	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 00:55	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 00:55	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 00:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					07/07/21 00:55	1
Toluene-d8 (Surr)	98		80 - 125					07/07/21 00:55	1
4-Bromofluorobenzene (Surr)	94		78 - 120					07/07/21 00:55	1
Dibromofluoromethane (Surr)	97		77 - 120					07/07/21 00:55	1

Client Sample ID: PA-5-20210627

Lab Sample ID: 280-150290-2

Date Collected: 06/27/21 11:50

Matrix: Water

Date Received: 06/29/21 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			07/07/21 01:16	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 01:16	1
Acrolein	ND		20	2.8	ug/L			07/07/21 01:16	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 01:16	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 01:16	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 01:16	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 01:16	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 01:16	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 01:16	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 01:16	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 01:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 01:16	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 01:16	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 01:16	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 01:16	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 01:16	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 01:16	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 01:16	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 01:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 01:16	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 01:16	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 01:16	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: PA-5-20210627

Lab Sample ID: 280-150290-2

Date Collected: 06/27/21 11:50

Matrix: Water

Date Received: 06/29/21 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			07/07/21 01:16	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 01:16	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 01:16	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 01:16	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 01:16	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 01:16	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 01:16	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 01:16	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 01:16	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 01:16	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 01:16	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 01:16	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 01:16	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 01:16	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 01:16	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 01:16	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 01:16	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 01:16	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 01:16	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 01:16	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 01:16	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 01:16	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 01:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 01:16	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 01:16	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 01:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 01:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 01:16	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 01:16	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 01:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 01:16	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 01:16	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 01:16	1
Trichloroethene	0.60	J	1.0	0.16	ug/L			07/07/21 01:16	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 01:16	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 01:16	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 01:16	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 01:16	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 01:16	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 01:16	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 01:16	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127					07/07/21 01:16	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 01:16	1
4-Bromofluorobenzene (Surr)	97		78 - 120					07/07/21 01:16	1
Dibromofluoromethane (Surr)	99		77 - 120					07/07/21 01:16	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: MW-38-60-100-20210627

Lab Sample ID: 280-150290-3

Date Collected: 06/27/21 15:05

Matrix: Water

Date Received: 06/29/21 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			07/07/21 01:37	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 01:37	1
Acrolein	ND		20	2.8	ug/L			07/07/21 01:37	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 01:37	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 01:37	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 01:37	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 01:37	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 01:37	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 01:37	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 01:37	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 01:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 01:37	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 01:37	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 01:37	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 01:37	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 01:37	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 01:37	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 01:37	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 01:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 01:37	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 01:37	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 01:37	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 01:37	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 01:37	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 01:37	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 01:37	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 01:37	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 01:37	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 01:37	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 01:37	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 01:37	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 01:37	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 01:37	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 01:37	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 01:37	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 01:37	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 01:37	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 01:37	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 01:37	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 01:37	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 01:37	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 01:37	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 01:37	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 01:37	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 01:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 01:37	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 01:37	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 01:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 01:37	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: MW-38-60-100-20210627

Lab Sample ID: 280-150290-3

Date Collected: 06/27/21 15:05

Matrix: Water

Date Received: 06/29/21 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			07/07/21 01:37	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 01:37	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 01:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 01:37	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 01:37	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 01:37	1
Trichloroethene	2.2		1.0	0.16	ug/L			07/07/21 01:37	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 01:37	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 01:37	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 01:37	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 01:37	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 01:37	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 01:37	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 01:37	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127		07/07/21 01:37	1
Toluene-d8 (Surr)	97		80 - 125		07/07/21 01:37	1
4-Bromofluorobenzene (Surr)	98		78 - 120		07/07/21 01:37	1
Dibromofluoromethane (Surr)	99		77 - 120		07/07/21 01:37	1

Client Sample ID: RW-2879M-20210624

Lab Sample ID: 280-150290-4

Date Collected: 06/24/21 09:10

Matrix: Water

Date Received: 06/29/21 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			07/07/21 01:58	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 01:58	1
Acrolein	ND		20	2.8	ug/L			07/07/21 01:58	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 01:58	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 01:58	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 01:58	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 01:58	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 01:58	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 01:58	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 01:58	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 01:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 01:58	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 01:58	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 01:58	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 01:58	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 01:58	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 01:58	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 01:58	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 01:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 01:58	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 01:58	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 01:58	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2879M-20210624

Lab Sample ID: 280-150290-4

Date Collected: 06/24/21 09:10

Matrix: Water

Date Received: 06/29/21 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			07/07/21 01:58	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 01:58	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 01:58	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 01:58	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 01:58	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 01:58	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 01:58	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 01:58	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 01:58	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 01:58	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 01:58	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 01:58	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 01:58	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 01:58	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 01:58	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 01:58	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 01:58	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 01:58	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 01:58	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 01:58	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 01:58	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 01:58	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 01:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 01:58	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 01:58	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 01:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 01:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 01:58	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 01:58	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 01:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 01:58	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 01:58	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 01:58	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 01:58	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 01:58	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 01:58	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 01:58	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 01:58	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 01:58	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 01:58	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 01:58	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 01:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127					07/07/21 01:58	1
Toluene-d8 (Surr)	97		80 - 125					07/07/21 01:58	1
4-Bromofluorobenzene (Surr)	100		78 - 120					07/07/21 01:58	1
Dibromofluoromethane (Surr)	100		77 - 120					07/07/21 01:58	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7505P-20210624

Lab Sample ID: 280-150290-5

Date Collected: 06/24/21 08:44

Matrix: Water

Date Received: 06/29/21 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			07/07/21 02:19	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 02:19	1
Acrolein	ND		20	2.8	ug/L			07/07/21 02:19	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 02:19	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 02:19	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 02:19	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 02:19	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 02:19	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 02:19	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 02:19	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 02:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 02:19	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 02:19	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 02:19	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 02:19	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 02:19	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 02:19	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 02:19	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 02:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 02:19	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 02:19	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 02:19	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 02:19	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 02:19	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 02:19	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 02:19	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 02:19	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 02:19	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 02:19	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 02:19	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 02:19	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 02:19	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 02:19	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 02:19	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 02:19	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 02:19	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 02:19	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 02:19	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 02:19	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 02:19	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 02:19	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 02:19	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 02:19	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 02:19	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 02:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 02:19	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 02:19	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 02:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 02:19	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7505P-20210624

Lab Sample ID: 280-150290-5

Date Collected: 06/24/21 08:44

Matrix: Water

Date Received: 06/29/21 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			07/07/21 02:19	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 02:19	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 02:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 02:19	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 02:19	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 02:19	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 02:19	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 02:19	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 02:19	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 02:19	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 02:19	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 02:19	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 02:19	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 02:19	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 127					07/07/21 02:19	1
Toluene-d8 (Surr)	95		80 - 125					07/07/21 02:19	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 02:19	1
Dibromofluoromethane (Surr)	95		77 - 120					07/07/21 02:19	1

Client Sample ID: RW-8048P-20210624

Lab Sample ID: 280-150290-6

Date Collected: 06/24/21 10:29

Matrix: Water

Date Received: 06/29/21 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			07/07/21 02:41	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 02:41	1
Acrolein	ND		20	2.8	ug/L			07/07/21 02:41	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 02:41	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 02:41	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 02:41	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 02:41	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 02:41	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 02:41	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 02:41	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 02:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 02:41	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 02:41	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 02:41	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 02:41	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 02:41	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 02:41	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 02:41	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 02:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 02:41	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 02:41	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 02:41	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8048P-20210624

Lab Sample ID: 280-150290-6

Date Collected: 06/24/21 10:29

Matrix: Water

Date Received: 06/29/21 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			07/07/21 02:41	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 02:41	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 02:41	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 02:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 02:41	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 02:41	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 02:41	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 02:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 02:41	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 02:41	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 02:41	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 02:41	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 02:41	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 02:41	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 02:41	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 02:41	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 02:41	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 02:41	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 02:41	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 02:41	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 02:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 02:41	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 02:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 02:41	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 02:41	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 02:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 02:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 02:41	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 02:41	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 02:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 02:41	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 02:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 02:41	1
Trichloroethene	3.8		1.0	0.16	ug/L			07/07/21 02:41	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 02:41	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 02:41	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 02:41	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 02:41	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 02:41	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 02:41	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 02:41	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 127					07/07/21 02:41	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 02:41	1
4-Bromofluorobenzene (Surr)	99		78 - 120					07/07/21 02:41	1
Dibromofluoromethane (Surr)	95		77 - 120					07/07/21 02:41	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8035P-20210624

Lab Sample ID: 280-150290-7

Date Collected: 06/24/21 11:33

Matrix: Water

Date Received: 06/29/21 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			07/07/21 03:02	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 03:02	1
Acrolein	ND		20	2.8	ug/L			07/07/21 03:02	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 03:02	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 03:02	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 03:02	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 03:02	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 03:02	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 03:02	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 03:02	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 03:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 03:02	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 03:02	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 03:02	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 03:02	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 03:02	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 03:02	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 03:02	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 03:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 03:02	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 03:02	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 03:02	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 03:02	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 03:02	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 03:02	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 03:02	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 03:02	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 03:02	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 03:02	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 03:02	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 03:02	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 03:02	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 03:02	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 03:02	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 03:02	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 03:02	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 03:02	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 03:02	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 03:02	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 03:02	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 03:02	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 03:02	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 03:02	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 03:02	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 03:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 03:02	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 03:02	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 03:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 03:02	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8035P-20210624

Lab Sample ID: 280-150290-7

Date Collected: 06/24/21 11:33

Matrix: Water

Date Received: 06/29/21 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			07/07/21 03:02	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 03:02	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 03:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 03:02	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 03:02	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 03:02	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 03:02	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 03:02	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 03:02	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 03:02	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 03:02	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 03:02	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 03:02	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 03:02	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 03:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 127					07/07/21 03:02	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 03:02	1
4-Bromofluorobenzene (Surr)	97		78 - 120					07/07/21 03:02	1
Dibromofluoromethane (Surr)	98		77 - 120					07/07/21 03:02	1

Client Sample ID: PA-10-20210624

Lab Sample ID: 280-150290-8

Date Collected: 06/24/21 12:20

Matrix: Water

Date Received: 06/29/21 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			07/07/21 03:23	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 03:23	1
Acrolein	ND		20	2.8	ug/L			07/07/21 03:23	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 03:23	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 03:23	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 03:23	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 03:23	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 03:23	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 03:23	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 03:23	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 03:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 03:23	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 03:23	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 03:23	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 03:23	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 03:23	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 03:23	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 03:23	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 03:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 03:23	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 03:23	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 03:23	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: PA-10-20210624

Lab Sample ID: 280-150290-8

Date Collected: 06/24/21 12:20

Matrix: Water

Date Received: 06/29/21 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			07/07/21 03:23	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 03:23	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 03:23	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 03:23	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 03:23	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 03:23	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 03:23	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 03:23	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 03:23	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 03:23	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 03:23	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 03:23	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 03:23	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 03:23	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 03:23	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 03:23	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 03:23	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 03:23	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 03:23	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 03:23	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 03:23	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 03:23	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 03:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 03:23	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 03:23	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 03:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 03:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 03:23	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 03:23	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 03:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 03:23	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 03:23	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 03:23	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 03:23	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 03:23	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 03:23	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 03:23	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 03:23	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 03:23	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 03:23	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 03:23	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 03:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 127					07/07/21 03:23	1
Toluene-d8 (Surr)	94		80 - 125					07/07/21 03:23	1
4-Bromofluorobenzene (Surr)	99		78 - 120					07/07/21 03:23	1
Dibromofluoromethane (Surr)	98		77 - 120					07/07/21 03:23	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7350P-20210624

Lab Sample ID: 280-150290-9

Date Collected: 06/24/21 12:48

Matrix: Water

Date Received: 06/29/21 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			07/07/21 03:44	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 03:44	1
Acrolein	ND		20	2.8	ug/L			07/07/21 03:44	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 03:44	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 03:44	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 03:44	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 03:44	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 03:44	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 03:44	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 03:44	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 03:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 03:44	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 03:44	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 03:44	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 03:44	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 03:44	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 03:44	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 03:44	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 03:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 03:44	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 03:44	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 03:44	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 03:44	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 03:44	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 03:44	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 03:44	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 03:44	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 03:44	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 03:44	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 03:44	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 03:44	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 03:44	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 03:44	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 03:44	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 03:44	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 03:44	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 03:44	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 03:44	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 03:44	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 03:44	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 03:44	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 03:44	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 03:44	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 03:44	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 03:44	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 03:44	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 03:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 03:44	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7350P-20210624

Lab Sample ID: 280-150290-9

Date Collected: 06/24/21 12:48

Matrix: Water

Date Received: 06/29/21 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			07/07/21 03:44	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 03:44	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 03:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 03:44	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 03:44	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 03:44	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 03:44	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 03:44	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 03:44	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 03:44	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 03:44	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 03:44	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 03:44	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 03:44	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 03:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					07/07/21 03:44	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 03:44	1
4-Bromofluorobenzene (Surr)	94		78 - 120					07/07/21 03:44	1
Dibromofluoromethane (Surr)	98		77 - 120					07/07/21 03:44	1

Client Sample ID: PA-9-58-68-20210624

Lab Sample ID: 280-150290-10

Date Collected: 06/24/21 14:20

Matrix: Water

Date Received: 06/29/21 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			07/07/21 04:05	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 04:05	1
Acrolein	ND		20	2.8	ug/L			07/07/21 04:05	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 04:05	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 04:05	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 04:05	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 04:05	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 04:05	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 04:05	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 04:05	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 04:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 04:05	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 04:05	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 04:05	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 04:05	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 04:05	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 04:05	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 04:05	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 04:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 04:05	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 04:05	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 04:05	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: PA-9-58-68-20210624

Lab Sample ID: 280-150290-10

Date Collected: 06/24/21 14:20

Matrix: Water

Date Received: 06/29/21 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			07/07/21 04:05	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 04:05	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 04:05	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 04:05	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 04:05	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 04:05	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 04:05	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 04:05	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 04:05	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 04:05	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 04:05	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 04:05	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 04:05	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 04:05	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 04:05	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 04:05	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 04:05	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 04:05	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 04:05	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 04:05	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 04:05	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 04:05	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 04:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 04:05	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 04:05	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 04:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 04:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 04:05	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 04:05	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 04:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 04:05	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 04:05	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 04:05	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 04:05	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 04:05	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 04:05	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 04:05	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 04:05	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 04:05	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 04:05	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 04:05	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 04:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					07/07/21 04:05	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 04:05	1
4-Bromofluorobenzene (Surr)	96		78 - 120					07/07/21 04:05	1
Dibromofluoromethane (Surr)	97		77 - 120					07/07/21 04:05	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: PA-9-88-98-20210624

Lab Sample ID: 280-150290-11

Date Collected: 06/24/21 15:30

Matrix: Water

Date Received: 06/29/21 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			07/07/21 04:27	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 04:27	1
Acrolein	ND		20	2.8	ug/L			07/07/21 04:27	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 04:27	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 04:27	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 04:27	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 04:27	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 04:27	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 04:27	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 04:27	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 04:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 04:27	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 04:27	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 04:27	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 04:27	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 04:27	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 04:27	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 04:27	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 04:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 04:27	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 04:27	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 04:27	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 04:27	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 04:27	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 04:27	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 04:27	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 04:27	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 04:27	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 04:27	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 04:27	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 04:27	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 04:27	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 04:27	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 04:27	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 04:27	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 04:27	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 04:27	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 04:27	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 04:27	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 04:27	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 04:27	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 04:27	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 04:27	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 04:27	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 04:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 04:27	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 04:27	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 04:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 04:27	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: PA-9-88-98-20210624

Lab Sample ID: 280-150290-11

Date Collected: 06/24/21 15:30

Matrix: Water

Date Received: 06/29/21 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			07/07/21 04:27	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 04:27	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 04:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 04:27	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 04:27	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 04:27	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 04:27	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 04:27	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 04:27	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 04:27	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 04:27	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 04:27	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 04:27	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 04:27	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 04:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 127					07/07/21 04:27	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 04:27	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 04:27	1
Dibromofluoromethane (Surr)	97		77 - 120					07/07/21 04:27	1

Client Sample ID: RW-7549P-20210624

Lab Sample ID: 280-150290-12

Date Collected: 06/24/21 14:13

Matrix: Water

Date Received: 06/29/21 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			07/07/21 04:48	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 04:48	1
Acrolein	ND		20	2.8	ug/L			07/07/21 04:48	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 04:48	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 04:48	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 04:48	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 04:48	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 04:48	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 04:48	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 04:48	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 04:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 04:48	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 04:48	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 04:48	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 04:48	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 04:48	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 04:48	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 04:48	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 04:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 04:48	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 04:48	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 04:48	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7549P-20210624

Lab Sample ID: 280-150290-12

Date Collected: 06/24/21 14:13

Matrix: Water

Date Received: 06/29/21 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			07/07/21 04:48	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 04:48	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 04:48	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 04:48	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 04:48	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 04:48	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 04:48	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 04:48	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 04:48	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 04:48	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 04:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 04:48	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 04:48	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 04:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 04:48	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 04:48	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 04:48	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 04:48	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 04:48	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 04:48	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 04:48	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 04:48	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 04:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 04:48	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 04:48	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 04:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 04:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 04:48	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 04:48	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 04:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 04:48	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 04:48	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 04:48	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 04:48	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 04:48	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 04:48	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 04:48	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 04:48	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 04:48	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 04:48	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 04:48	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 04:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					07/07/21 04:48	1
Toluene-d8 (Surr)	94		80 - 125					07/07/21 04:48	1
4-Bromofluorobenzene (Surr)	96		78 - 120					07/07/21 04:48	1
Dibromofluoromethane (Surr)	99		77 - 120					07/07/21 04:48	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8284P-20210625

Lab Sample ID: 280-150306-1

Date Collected: 06/25/21 12:06

Matrix: Water

Date Received: 06/29/21 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			07/07/21 11:39	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 11:39	1
Acrolein	ND		20	2.8	ug/L			07/07/21 11:39	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 11:39	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 11:39	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 11:39	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 11:39	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 11:39	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 11:39	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 11:39	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 11:39	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 11:39	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 11:39	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 11:39	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 11:39	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 11:39	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 11:39	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 11:39	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 11:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 11:39	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 11:39	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 11:39	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 11:39	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 11:39	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 11:39	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 11:39	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 11:39	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 11:39	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 11:39	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 11:39	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 11:39	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 11:39	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 11:39	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 11:39	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 11:39	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 11:39	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 11:39	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 11:39	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 11:39	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 11:39	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 11:39	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 11:39	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 11:39	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 11:39	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 11:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 11:39	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 11:39	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 11:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 11:39	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8284P-20210625

Lab Sample ID: 280-150306-1

Date Collected: 06/25/21 12:06

Matrix: Water

Date Received: 06/29/21 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			07/07/21 11:39	1
Tetrachloroethene	0.54	J	1.0	0.20	ug/L			07/07/21 11:39	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 11:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 11:39	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 11:39	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 11:39	1
Trichloroethene	4.9		1.0	0.16	ug/L			07/07/21 11:39	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 11:39	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 11:39	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 11:39	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 11:39	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 11:39	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 11:39	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 11:39	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 127		07/07/21 11:39	1
Toluene-d8 (Surr)	96		80 - 125		07/07/21 11:39	1
4-Bromofluorobenzene (Surr)	96		78 - 120		07/07/21 11:39	1
Dibromofluoromethane (Surr)	104		77 - 120		07/07/21 11:39	1

Client Sample ID: RW-2172F-20210625

Lab Sample ID: 280-150306-2

Date Collected: 06/25/21 12:55

Matrix: Water

Date Received: 06/29/21 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			07/07/21 12:02	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 12:02	1
Acrolein	ND		20	2.8	ug/L			07/07/21 12:02	1
Acrylonitrile	ND	*+ F1	20	1.4	ug/L			07/07/21 12:02	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 12:02	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 12:02	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 12:02	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 12:02	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 12:02	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 12:02	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 12:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 12:02	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 12:02	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 12:02	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 12:02	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 12:02	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 12:02	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 12:02	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 12:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 12:02	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 12:02	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 12:02	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2172F-20210625

Lab Sample ID: 280-150306-2

Date Collected: 06/25/21 12:55

Matrix: Water

Date Received: 06/29/21 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			07/07/21 12:02	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 12:02	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 12:02	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 12:02	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 12:02	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 12:02	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 12:02	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 12:02	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 12:02	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 12:02	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 12:02	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 12:02	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 12:02	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 12:02	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 12:02	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 12:02	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 12:02	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 12:02	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 12:02	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 12:02	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 12:02	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 12:02	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 12:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 12:02	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 12:02	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 12:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 12:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 12:02	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 12:02	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 12:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 12:02	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 12:02	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 12:02	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 12:02	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 12:02	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 12:02	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 12:02	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 12:02	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 12:02	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 12:02	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 12:02	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 12:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 127					07/07/21 12:02	1
Toluene-d8 (Surr)	95		80 - 125					07/07/21 12:02	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 12:02	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 12:02	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7588P-20210625

Lab Sample ID: 280-150306-3

Date Collected: 06/25/21 14:31

Matrix: Water

Date Received: 06/29/21 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			07/07/21 12:25	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 12:25	1
Acrolein	ND		20	2.8	ug/L			07/07/21 12:25	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 12:25	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 12:25	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 12:25	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 12:25	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 12:25	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 12:25	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 12:25	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 12:25	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 12:25	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 12:25	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 12:25	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 12:25	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 12:25	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 12:25	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 12:25	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 12:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 12:25	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 12:25	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 12:25	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 12:25	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 12:25	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 12:25	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 12:25	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 12:25	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 12:25	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 12:25	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 12:25	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 12:25	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 12:25	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 12:25	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 12:25	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 12:25	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 12:25	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 12:25	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 12:25	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 12:25	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 12:25	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 12:25	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 12:25	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 12:25	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 12:25	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 12:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 12:25	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 12:25	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 12:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 12:25	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7588P-20210625

Lab Sample ID: 280-150306-3

Date Collected: 06/25/21 14:31

Matrix: Water

Date Received: 06/29/21 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			07/07/21 12:25	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 12:25	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 12:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 12:25	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 12:25	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 12:25	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 12:25	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 12:25	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 12:25	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 12:25	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 12:25	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 12:25	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 12:25	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 12:25	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 12:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 127					07/07/21 12:25	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 12:25	1
4-Bromofluorobenzene (Surr)	96		78 - 120					07/07/21 12:25	1
Dibromofluoromethane (Surr)	104		77 - 120					07/07/21 12:25	1

Client Sample ID: RW-8209P-20210625

Lab Sample ID: 280-150306-4

Date Collected: 06/25/21 15:51

Matrix: Water

Date Received: 06/29/21 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			07/07/21 12:48	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 12:48	1
Acrolein	ND		20	2.8	ug/L			07/07/21 12:48	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 12:48	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 12:48	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 12:48	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 12:48	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 12:48	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 12:48	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 12:48	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 12:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 12:48	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 12:48	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 12:48	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 12:48	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 12:48	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 12:48	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 12:48	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 12:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 12:48	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 12:48	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 12:48	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8209P-20210625

Lab Sample ID: 280-150306-4

Date Collected: 06/25/21 15:51

Matrix: Water

Date Received: 06/29/21 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			07/07/21 12:48	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 12:48	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 12:48	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 12:48	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 12:48	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 12:48	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 12:48	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 12:48	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 12:48	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 12:48	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 12:48	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 12:48	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 12:48	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 12:48	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 12:48	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 12:48	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 12:48	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 12:48	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 12:48	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 12:48	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 12:48	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 12:48	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 12:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 12:48	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 12:48	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 12:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 12:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 12:48	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 12:48	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 12:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 12:48	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 12:48	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 12:48	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 12:48	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 12:48	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 12:48	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 12:48	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 12:48	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 12:48	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 12:48	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 12:48	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 127					07/07/21 12:48	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 12:48	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 12:48	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 12:48	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7688P-20210625

Lab Sample ID: 280-150306-5

Date Collected: 06/25/21 16:38

Matrix: Water

Date Received: 06/29/21 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			07/07/21 13:11	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 13:11	1
Acrolein	ND		20	2.8	ug/L			07/07/21 13:11	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 13:11	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 13:11	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 13:11	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 13:11	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 13:11	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 13:11	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 13:11	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 13:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 13:11	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 13:11	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 13:11	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 13:11	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 13:11	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 13:11	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 13:11	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 13:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 13:11	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 13:11	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 13:11	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 13:11	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 13:11	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 13:11	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 13:11	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 13:11	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 13:11	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 13:11	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 13:11	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 13:11	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 13:11	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 13:11	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 13:11	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 13:11	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 13:11	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 13:11	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 13:11	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 13:11	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 13:11	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 13:11	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 13:11	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 13:11	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 13:11	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 13:11	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 13:11	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 13:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 13:11	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7688P-20210625

Lab Sample ID: 280-150306-5

Date Collected: 06/25/21 16:38

Matrix: Water

Date Received: 06/29/21 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			07/07/21 13:11	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 13:11	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 13:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 13:11	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 13:11	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 13:11	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 13:11	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 13:11	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 13:11	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 13:11	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 13:11	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 13:11	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 13:11	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 13:11	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 127					07/07/21 13:11	1
Toluene-d8 (Surr)	97		80 - 125					07/07/21 13:11	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 13:11	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 13:11	1

Client Sample ID: RW-5898BI-20210625

Lab Sample ID: 280-150306-6

Date Collected: 06/25/21 18:00

Matrix: Water

Date Received: 06/29/21 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			07/07/21 13:34	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 13:34	1
Acrolein	ND		20	2.8	ug/L			07/07/21 13:34	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 13:34	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 13:34	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 13:34	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 13:34	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 13:34	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 13:34	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 13:34	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 13:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 13:34	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 13:34	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 13:34	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 13:34	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 13:34	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 13:34	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 13:34	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 13:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 13:34	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 13:34	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 13:34	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-5898BI-20210625

Lab Sample ID: 280-150306-6

Date Collected: 06/25/21 18:00

Matrix: Water

Date Received: 06/29/21 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			07/07/21 13:34	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 13:34	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 13:34	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 13:34	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 13:34	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 13:34	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 13:34	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 13:34	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 13:34	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 13:34	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 13:34	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 13:34	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 13:34	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 13:34	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 13:34	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 13:34	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 13:34	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 13:34	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 13:34	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 13:34	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 13:34	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 13:34	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 13:34	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 13:34	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 13:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 13:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 13:34	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 13:34	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 13:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 13:34	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 13:34	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 13:34	1
Trichloroethene	0.26	J	1.0	0.16	ug/L			07/07/21 13:34	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 13:34	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 13:34	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 13:34	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 13:34	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 13:34	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 13:34	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 13:34	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 127					07/07/21 13:34	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 13:34	1
4-Bromofluorobenzene (Surr)	94		78 - 120					07/07/21 13:34	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 13:34	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2140H-20210626

Lab Sample ID: 280-150306-7

Date Collected: 06/26/21 11:20

Matrix: Water

Date Received: 06/29/21 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			07/07/21 13:57	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 13:57	1
Acrolein	ND		20	2.8	ug/L			07/07/21 13:57	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 13:57	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 13:57	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 13:57	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 13:57	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 13:57	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 13:57	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 13:57	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 13:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 13:57	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 13:57	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 13:57	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 13:57	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 13:57	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 13:57	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 13:57	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 13:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 13:57	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 13:57	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 13:57	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 13:57	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 13:57	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 13:57	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 13:57	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 13:57	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 13:57	1
cis-1,2-Dichloroethene	1.1		1.0	0.15	ug/L			07/07/21 13:57	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 13:57	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 13:57	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 13:57	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 13:57	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 13:57	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 13:57	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 13:57	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 13:57	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 13:57	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 13:57	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 13:57	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 13:57	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 13:57	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 13:57	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 13:57	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 13:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 13:57	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 13:57	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 13:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 13:57	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2140H-20210626

Lab Sample ID: 280-150306-7

Date Collected: 06/26/21 11:20

Matrix: Water

Date Received: 06/29/21 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			07/07/21 13:57	1
Tetrachloroethene	4.5		1.0	0.20	ug/L			07/07/21 13:57	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 13:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 13:57	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 13:57	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 13:57	1
Trichloroethene	26		1.0	0.16	ug/L			07/07/21 13:57	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 13:57	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 13:57	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 13:57	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 13:57	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 13:57	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 13:57	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 13:57	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 127					07/07/21 13:57	1
Toluene-d8 (Surr)	97		80 - 125					07/07/21 13:57	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 13:57	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 13:57	1

Client Sample ID: MW-116S-20210626

Lab Sample ID: 280-150306-8

Date Collected: 06/26/21 12:30

Matrix: Water

Date Received: 06/29/21 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			07/07/21 14:19	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 14:19	1
Acrolein	ND		20	2.8	ug/L			07/07/21 14:19	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 14:19	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 14:19	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 14:19	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 14:19	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 14:19	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 14:19	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 14:19	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 14:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 14:19	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 14:19	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 14:19	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 14:19	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 14:19	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 14:19	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 14:19	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 14:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 14:19	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 14:19	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 14:19	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: MW-116S-20210626

Lab Sample ID: 280-150306-8

Date Collected: 06/26/21 12:30

Matrix: Water

Date Received: 06/29/21 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			07/07/21 14:19	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 14:19	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 14:19	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 14:19	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 14:19	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 14:19	1
cis-1,2-Dichloroethene	1.3		1.0	0.15	ug/L			07/07/21 14:19	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 14:19	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 14:19	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 14:19	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 14:19	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 14:19	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 14:19	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 14:19	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 14:19	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 14:19	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 14:19	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 14:19	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 14:19	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 14:19	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 14:19	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 14:19	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 14:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 14:19	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 14:19	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 14:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 14:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 14:19	1
Tetrachloroethene	4.2		1.0	0.20	ug/L			07/07/21 14:19	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 14:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 14:19	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 14:19	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 14:19	1
Trichloroethene	27		1.0	0.16	ug/L			07/07/21 14:19	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 14:19	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 14:19	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 14:19	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 14:19	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 14:19	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 14:19	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 14:19	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 14:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 127					07/07/21 14:19	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 14:19	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 14:19	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 14:19	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2076F-20210626

Lab Sample ID: 280-150306-9

Date Collected: 06/26/21 14:55

Matrix: Water

Date Received: 06/29/21 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			07/07/21 14:42	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 14:42	1
Acrolein	ND		20	2.8	ug/L			07/07/21 14:42	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 14:42	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 14:42	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 14:42	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 14:42	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 14:42	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 14:42	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 14:42	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 14:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 14:42	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 14:42	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 14:42	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 14:42	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 14:42	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 14:42	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 14:42	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 14:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 14:42	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 14:42	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 14:42	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 14:42	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 14:42	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 14:42	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 14:42	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 14:42	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 14:42	1
cis-1,2-Dichloroethene	1.3		1.0	0.15	ug/L			07/07/21 14:42	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 14:42	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 14:42	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 14:42	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 14:42	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 14:42	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 14:42	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 14:42	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 14:42	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 14:42	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 14:42	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 14:42	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 14:42	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 14:42	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 14:42	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 14:42	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 14:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 14:42	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 14:42	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 14:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 14:42	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2076F-20210626

Lab Sample ID: 280-150306-9

Date Collected: 06/26/21 14:55

Matrix: Water

Date Received: 06/29/21 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			07/07/21 14:42	1
Tetrachloroethene	4.6		1.0	0.20	ug/L			07/07/21 14:42	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 14:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 14:42	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 14:42	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 14:42	1
Trichloroethene	24		1.0	0.16	ug/L			07/07/21 14:42	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 14:42	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 14:42	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 14:42	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 14:42	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 14:42	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 14:42	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 14:42	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 127					07/07/21 14:42	1
Toluene-d8 (Surr)	97		80 - 125					07/07/21 14:42	1
4-Bromofluorobenzene (Surr)	96		78 - 120					07/07/21 14:42	1
Dibromofluoromethane (Surr)	104		77 - 120					07/07/21 14:42	1

Client Sample ID: RW-8012P-20210626

Lab Sample ID: 280-150306-10

Date Collected: 06/26/21 15:40

Matrix: Water

Date Received: 06/29/21 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			07/07/21 15:05	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 15:05	1
Acrolein	ND		20	2.8	ug/L			07/07/21 15:05	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 15:05	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 15:05	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 15:05	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 15:05	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 15:05	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 15:05	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 15:05	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 15:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 15:05	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 15:05	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 15:05	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 15:05	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 15:05	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 15:05	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 15:05	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 15:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 15:05	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 15:05	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 15:05	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8012P-20210626

Lab Sample ID: 280-150306-10

Date Collected: 06/26/21 15:40

Matrix: Water

Date Received: 06/29/21 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			07/07/21 15:05	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 15:05	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 15:05	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 15:05	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 15:05	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 15:05	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 15:05	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 15:05	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 15:05	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 15:05	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 15:05	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 15:05	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 15:05	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 15:05	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 15:05	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 15:05	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 15:05	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 15:05	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 15:05	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 15:05	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 15:05	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 15:05	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 15:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 15:05	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 15:05	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 15:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 15:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 15:05	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 15:05	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 15:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 15:05	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 15:05	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 15:05	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 15:05	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 15:05	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 15:05	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 15:05	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 15:05	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 15:05	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 15:05	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 15:05	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 15:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 127					07/07/21 15:05	1
Toluene-d8 (Surr)	97		80 - 125					07/07/21 15:05	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 15:05	1
Dibromofluoromethane (Surr)	104		77 - 120					07/07/21 15:05	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: EB-07-20210627

Lab Sample ID: 280-150306-11

Date Collected: 06/27/21 08:50

Matrix: Water

Date Received: 06/29/21 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			07/07/21 10:31	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 10:31	1
Acrolein	ND		20	2.8	ug/L			07/07/21 10:31	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 10:31	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 10:31	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 10:31	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 10:31	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 10:31	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 10:31	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 10:31	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 10:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 10:31	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 10:31	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 10:31	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 10:31	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 10:31	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 10:31	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 10:31	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 10:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 10:31	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 10:31	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 10:31	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 10:31	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 10:31	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 10:31	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 10:31	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 10:31	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 10:31	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 10:31	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 10:31	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 10:31	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 10:31	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 10:31	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 10:31	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 10:31	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 10:31	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 10:31	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 10:31	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 10:31	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 10:31	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 10:31	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 10:31	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 10:31	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 10:31	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 10:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 10:31	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 10:31	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 10:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 10:31	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: EB-07-20210627

Lab Sample ID: 280-150306-11

Date Collected: 06/27/21 08:50

Matrix: Water

Date Received: 06/29/21 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			07/07/21 10:31	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 10:31	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 10:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 10:31	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 10:31	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 10:31	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 10:31	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 10:31	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 10:31	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 10:31	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 10:31	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 10:31	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 10:31	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 10:31	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 10:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 127					07/07/21 10:31	1
Toluene-d8 (Surr)	95		80 - 125					07/07/21 10:31	1
4-Bromofluorobenzene (Surr)	94		78 - 120					07/07/21 10:31	1
Dibromofluoromethane (Surr)	104		77 - 120					07/07/21 10:31	1

Client Sample ID: RW-7244P-20210624

Lab Sample ID: 280-150306-12

Date Collected: 06/24/21 15:03

Matrix: Water

Date Received: 06/29/21 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			07/07/21 15:28	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 15:28	1
Acrolein	ND		20	2.8	ug/L			07/07/21 15:28	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 15:28	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 15:28	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 15:28	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 15:28	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 15:28	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 15:28	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 15:28	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 15:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 15:28	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 15:28	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 15:28	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 15:28	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 15:28	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 15:28	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 15:28	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 15:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 15:28	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 15:28	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 15:28	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7244P-20210624

Lab Sample ID: 280-150306-12

Date Collected: 06/24/21 15:03

Matrix: Water

Date Received: 06/29/21 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			07/07/21 15:28	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 15:28	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 15:28	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 15:28	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 15:28	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 15:28	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 15:28	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 15:28	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 15:28	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 15:28	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 15:28	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 15:28	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 15:28	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 15:28	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 15:28	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 15:28	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 15:28	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 15:28	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 15:28	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 15:28	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 15:28	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 15:28	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 15:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 15:28	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 15:28	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 15:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 15:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 15:28	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 15:28	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 15:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 15:28	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 15:28	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 15:28	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 15:28	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 15:28	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 15:28	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 15:28	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 15:28	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 15:28	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 15:28	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 15:28	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 15:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 127					07/07/21 15:28	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 15:28	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 15:28	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 15:28	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2237H-20210624

Lab Sample ID: 280-150306-13

Date Collected: 06/24/21 16:00

Matrix: Water

Date Received: 06/29/21 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			07/07/21 15:51	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 15:51	1
Acrolein	ND		20	2.8	ug/L			07/07/21 15:51	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 15:51	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 15:51	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 15:51	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 15:51	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 15:51	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 15:51	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 15:51	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 15:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 15:51	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 15:51	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 15:51	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 15:51	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 15:51	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 15:51	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 15:51	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 15:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 15:51	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 15:51	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 15:51	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 15:51	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 15:51	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 15:51	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 15:51	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 15:51	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 15:51	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 15:51	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 15:51	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 15:51	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 15:51	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 15:51	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 15:51	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 15:51	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 15:51	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 15:51	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 15:51	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 15:51	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 15:51	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 15:51	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 15:51	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 15:51	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 15:51	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 15:51	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 15:51	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 15:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 15:51	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-2237H-20210624

Lab Sample ID: 280-150306-13

Date Collected: 06/24/21 16:00

Matrix: Water

Date Received: 06/29/21 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			07/07/21 15:51	1
Tetrachloroethene	1.2		1.0	0.20	ug/L			07/07/21 15:51	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 15:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 15:51	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 15:51	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 15:51	1
Trichloroethene	8.6		1.0	0.16	ug/L			07/07/21 15:51	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 15:51	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 15:51	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 15:51	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 15:51	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 15:51	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 15:51	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 15:51	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 127					07/07/21 15:51	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 15:51	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 15:51	1
Dibromofluoromethane (Surr)	105		77 - 120					07/07/21 15:51	1

Client Sample ID: RW-7070B-20210624

Lab Sample ID: 280-150306-14

Date Collected: 06/24/21 16:59

Matrix: Water

Date Received: 06/29/21 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			07/07/21 16:14	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 16:14	1
Acrolein	ND		20	2.8	ug/L			07/07/21 16:14	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 16:14	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 16:14	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 16:14	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 16:14	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 16:14	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 16:14	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 16:14	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 16:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 16:14	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 16:14	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 16:14	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 16:14	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 16:14	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 16:14	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 16:14	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 16:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 16:14	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 16:14	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 16:14	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7070B-20210624

Lab Sample ID: 280-150306-14

Date Collected: 06/24/21 16:59

Matrix: Water

Date Received: 06/29/21 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			07/07/21 16:14	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 16:14	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 16:14	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 16:14	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 16:14	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 16:14	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 16:14	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 16:14	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 16:14	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 16:14	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 16:14	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 16:14	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 16:14	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 16:14	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 16:14	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 16:14	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 16:14	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 16:14	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 16:14	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 16:14	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 16:14	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 16:14	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 16:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 16:14	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 16:14	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 16:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 16:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 16:14	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 16:14	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 16:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 16:14	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 16:14	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 16:14	1
Trichloroethene	3.2		1.0	0.16	ug/L			07/07/21 16:14	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 16:14	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 16:14	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 16:14	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 16:14	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 16:14	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 16:14	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 16:14	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 127					07/07/21 16:14	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 16:14	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 16:14	1
Dibromofluoromethane (Surr)	104		77 - 120					07/07/21 16:14	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8105PS-20210625

Lab Sample ID: 280-150306-15

Date Collected: 06/25/21 17:35

Matrix: Water

Date Received: 06/29/21 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			07/07/21 16:37	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 16:37	1
Acrolein	ND		20	2.8	ug/L			07/07/21 16:37	1
Acrylonitrile	ND	*+	20	1.4	ug/L			07/07/21 16:37	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 16:37	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 16:37	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 16:37	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 16:37	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 16:37	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 16:37	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 16:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 16:37	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 16:37	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 16:37	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 16:37	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 16:37	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 16:37	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 16:37	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 16:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 16:37	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 16:37	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 16:37	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 16:37	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 16:37	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 16:37	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 16:37	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 16:37	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 16:37	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 16:37	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 16:37	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 16:37	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 16:37	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 16:37	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 16:37	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 16:37	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 16:37	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 16:37	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 16:37	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 16:37	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 16:37	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 16:37	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 16:37	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 16:37	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 16:37	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 16:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 16:37	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 16:37	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 16:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 16:37	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8105PS-20210625

Lab Sample ID: 280-150306-15

Date Collected: 06/25/21 17:35

Matrix: Water

Date Received: 06/29/21 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			07/07/21 16:37	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 16:37	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 16:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 16:37	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 16:37	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 16:37	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 16:37	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 16:37	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 16:37	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 16:37	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 16:37	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 16:37	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 16:37	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 16:37	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 127					07/07/21 16:37	1
Toluene-d8 (Surr)	96		80 - 125					07/07/21 16:37	1
4-Bromofluorobenzene (Surr)	95		78 - 120					07/07/21 16:37	1
Dibromofluoromethane (Surr)	104		77 - 120					07/07/21 16:37	1

Client Sample ID: MW-38-105-115-20210627

Lab Sample ID: 280-150306-16

Date Collected: 06/27/21 16:50

Matrix: Water

Date Received: 06/29/21 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			07/09/21 11:20	1
Acetonitrile	ND		30	9.6	ug/L			07/09/21 11:20	1
Acrolein	ND		20	2.8	ug/L			07/09/21 11:20	1
Acrylonitrile	ND		20	1.4	ug/L			07/09/21 11:20	1
Benzene	ND		1.0	0.16	ug/L			07/09/21 11:20	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/09/21 11:20	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/09/21 11:20	1
Bromoform	ND		1.0	0.46	ug/L			07/09/21 11:20	1
Bromomethane	ND		2.0	0.21	ug/L			07/09/21 11:20	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/09/21 11:20	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/09/21 11:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/21 11:20	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/09/21 11:20	1
Chloroprene	ND		1.0	0.21	ug/L			07/09/21 11:20	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/09/21 11:20	1
Chloroethane	ND		2.0	0.41	ug/L			07/09/21 11:20	1
Chloroform	ND		1.0	0.16	ug/L			07/09/21 11:20	1
Chloromethane	ND		2.0	0.30	ug/L			07/09/21 11:20	1
Allyl chloride	ND		2.0	0.17	ug/L			07/09/21 11:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/09/21 11:20	1
Dibromomethane	ND		1.0	0.17	ug/L			07/09/21 11:20	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/09/21 11:20	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: MW-38-105-115-20210627

Lab Sample ID: 280-150306-16

Date Collected: 06/27/21 16:50

Matrix: Water

Date Received: 06/29/21 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			07/09/21 11:20	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/09/21 11:20	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/09/21 11:20	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/09/21 11:20	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/09/21 11:20	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/09/21 11:20	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 11:20	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 11:20	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/09/21 11:20	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/09/21 11:20	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/09/21 11:20	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/09/21 11:20	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/09/21 11:20	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/09/21 11:20	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/09/21 11:20	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/09/21 11:20	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/09/21 11:20	1
2-Hexanone	ND		5.0	1.7	ug/L			07/09/21 11:20	1
Iodomethane	ND		1.0	0.23	ug/L			07/09/21 11:20	1
Isobutyl alcohol	ND		110	37	ug/L			07/09/21 11:20	1
Methacrylonitrile	ND		10	1.6	ug/L			07/09/21 11:20	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/09/21 11:20	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/09/21 11:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/09/21 11:20	1
Propionitrile	ND		20	3.7	ug/L			07/09/21 11:20	1
Styrene	ND		1.0	0.36	ug/L			07/09/21 11:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 11:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 11:20	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/09/21 11:20	1
Toluene	ND		1.0	0.17	ug/L			07/09/21 11:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/09/21 11:20	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/09/21 11:20	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/09/21 11:20	1
Trichloroethene	2.5		1.0	0.16	ug/L			07/09/21 11:20	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/09/21 11:20	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/09/21 11:20	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/09/21 11:20	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/09/21 11:20	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/09/21 11:20	1
o-Xylene	ND		1.0	0.19	ug/L			07/09/21 11:20	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/09/21 11:20	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/09/21 11:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 127					07/09/21 11:20	1
Toluene-d8 (Surr)	97		80 - 125					07/09/21 11:20	1
4-Bromofluorobenzene (Surr)	96		78 - 120					07/09/21 11:20	1
Dibromofluoromethane (Surr)	97		77 - 120					07/09/21 11:20	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: TB-02-20210627

Lab Sample ID: 280-150306-17

Date Collected: 06/27/21 18:00

Matrix: Water

Date Received: 06/29/21 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			07/09/21 10:16	1
Acetonitrile	ND		30	9.6	ug/L			07/09/21 10:16	1
Acrolein	ND		20	2.8	ug/L			07/09/21 10:16	1
Acrylonitrile	ND		20	1.4	ug/L			07/09/21 10:16	1
Benzene	ND		1.0	0.16	ug/L			07/09/21 10:16	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/09/21 10:16	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/09/21 10:16	1
Bromoform	ND		1.0	0.46	ug/L			07/09/21 10:16	1
Bromomethane	ND		2.0	0.21	ug/L			07/09/21 10:16	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/09/21 10:16	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/09/21 10:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/21 10:16	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/09/21 10:16	1
Chloroprene	ND		1.0	0.21	ug/L			07/09/21 10:16	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/09/21 10:16	1
Chloroethane	ND		2.0	0.41	ug/L			07/09/21 10:16	1
Chloroform	ND		1.0	0.16	ug/L			07/09/21 10:16	1
Chloromethane	ND		2.0	0.30	ug/L			07/09/21 10:16	1
Allyl chloride	ND		2.0	0.17	ug/L			07/09/21 10:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/09/21 10:16	1
Dibromomethane	ND		1.0	0.17	ug/L			07/09/21 10:16	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/09/21 10:16	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/09/21 10:16	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/09/21 10:16	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/09/21 10:16	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/09/21 10:16	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/09/21 10:16	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/09/21 10:16	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 10:16	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 10:16	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/09/21 10:16	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/09/21 10:16	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/09/21 10:16	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/09/21 10:16	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/09/21 10:16	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/09/21 10:16	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/09/21 10:16	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/09/21 10:16	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/09/21 10:16	1
2-Hexanone	ND		5.0	1.7	ug/L			07/09/21 10:16	1
Iodomethane	ND		1.0	0.23	ug/L			07/09/21 10:16	1
Isobutyl alcohol	ND		110	37	ug/L			07/09/21 10:16	1
Methacrylonitrile	ND		10	1.6	ug/L			07/09/21 10:16	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/09/21 10:16	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/09/21 10:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/09/21 10:16	1
Propionitrile	ND		20	3.7	ug/L			07/09/21 10:16	1
Styrene	ND		1.0	0.36	ug/L			07/09/21 10:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 10:16	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: TB-02-20210627

Lab Sample ID: 280-150306-17

Date Collected: 06/27/21 18:00

Matrix: Water

Date Received: 06/29/21 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			07/09/21 10:16	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/09/21 10:16	1
Toluene	ND		1.0	0.17	ug/L			07/09/21 10:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/09/21 10:16	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/09/21 10:16	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/09/21 10:16	1
Trichloroethene	ND		1.0	0.16	ug/L			07/09/21 10:16	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/09/21 10:16	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/09/21 10:16	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/09/21 10:16	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/09/21 10:16	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/09/21 10:16	1
o-Xylene	ND		1.0	0.19	ug/L			07/09/21 10:16	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/09/21 10:16	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/09/21 10:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127					07/09/21 10:16	1
Toluene-d8 (Surr)	101		80 - 125					07/09/21 10:16	1
4-Bromofluorobenzene (Surr)	97		78 - 120					07/09/21 10:16	1
Dibromofluoromethane (Surr)	99		77 - 120					07/09/21 10:16	1

Client Sample ID: MW-38-121-130-20210627

Lab Sample ID: 280-150306-18

Date Collected: 06/27/21 19:30

Matrix: Water

Date Received: 06/29/21 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			07/09/21 11:41	1
Acetonitrile	ND		30	9.6	ug/L			07/09/21 11:41	1
Acrolein	ND		20	2.8	ug/L			07/09/21 11:41	1
Acrylonitrile	ND		20	1.4	ug/L			07/09/21 11:41	1
Benzene	ND		1.0	0.16	ug/L			07/09/21 11:41	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/09/21 11:41	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/09/21 11:41	1
Bromoform	ND		1.0	0.46	ug/L			07/09/21 11:41	1
Bromomethane	ND		2.0	0.21	ug/L			07/09/21 11:41	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/09/21 11:41	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/09/21 11:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/21 11:41	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/09/21 11:41	1
Chloroprene	ND		1.0	0.21	ug/L			07/09/21 11:41	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/09/21 11:41	1
Chloroethane	ND		2.0	0.41	ug/L			07/09/21 11:41	1
Chloroform	ND		1.0	0.16	ug/L			07/09/21 11:41	1
Chloromethane	ND		2.0	0.30	ug/L			07/09/21 11:41	1
Allyl chloride	ND		2.0	0.17	ug/L			07/09/21 11:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/09/21 11:41	1
Dibromomethane	ND		1.0	0.17	ug/L			07/09/21 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/09/21 11:41	1

Eurofins TestAmerica, Denver

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: MW-38-121-130-20210627

Lab Sample ID: 280-150306-18

Date Collected: 06/27/21 19:30

Matrix: Water

Date Received: 06/29/21 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			07/09/21 11:41	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/09/21 11:41	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/09/21 11:41	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/09/21 11:41	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/09/21 11:41	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/09/21 11:41	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 11:41	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/09/21 11:41	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/09/21 11:41	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/09/21 11:41	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/09/21 11:41	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/09/21 11:41	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/09/21 11:41	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/09/21 11:41	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/09/21 11:41	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/09/21 11:41	1
2-Hexanone	ND		5.0	1.7	ug/L			07/09/21 11:41	1
Iodomethane	ND		1.0	0.23	ug/L			07/09/21 11:41	1
Isobutyl alcohol	ND		110	37	ug/L			07/09/21 11:41	1
Methacrylonitrile	ND		10	1.6	ug/L			07/09/21 11:41	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/09/21 11:41	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/09/21 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/09/21 11:41	1
Propionitrile	ND		20	3.7	ug/L			07/09/21 11:41	1
Styrene	ND		1.0	0.36	ug/L			07/09/21 11:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 11:41	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/09/21 11:41	1
Toluene	ND		1.0	0.17	ug/L			07/09/21 11:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/09/21 11:41	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/09/21 11:41	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/09/21 11:41	1
Trichloroethene	2.5		1.0	0.16	ug/L			07/09/21 11:41	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/09/21 11:41	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/09/21 11:41	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/09/21 11:41	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/09/21 11:41	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/09/21 11:41	1
o-Xylene	ND		1.0	0.19	ug/L			07/09/21 11:41	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/09/21 11:41	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/09/21 11:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 127					07/09/21 11:41	1
Toluene-d8 (Surr)	98		80 - 125					07/09/21 11:41	1
4-Bromofluorobenzene (Surr)	94		78 - 120					07/09/21 11:41	1
Dibromofluoromethane (Surr)	93		77 - 120					07/09/21 11:41	1

Default Detection Limits

Client: CDM Smith, Inc.

Job ID: 280-150290-1

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: 280-150290-1

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.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-127)	TOL (80-125)	BFB (78-120)	DBFM (77-120)
280-150290-1	TB-03-20210627	95	98	94	97
280-150290-2	PA-5-20210627	96	96	97	99
280-150290-3	MW-38-60-100-20210627	95	97	98	99
280-150290-4	RW-2879M-20210624	96	97	100	100
280-150290-5	RW-7505P-20210624	93	95	95	95
280-150290-6	RW-8048P-20210624	94	96	99	95
280-150290-7	RW-8035P-20210624	91	96	97	98
280-150290-8	PA-10-20210624	93	94	99	98
280-150290-9	RW-7350P-20210624	95	96	94	98
280-150290-10	PA-9-58-68-20210624	95	96	96	97
280-150290-11	PA-9-88-98-20210624	97	96	95	97
280-150290-12	RW-7549P-20210624	95	94	96	99
280-150306-1	RW-8284P-20210625	114	96	96	104
280-150306-2	RW-2172F-20210625	115	95	95	105
280-150306-2 MS	RW-2172F-20210625	113	97	95	105
280-150306-2 MSD	RW-2172F-20210625	111	97	96	104
280-150306-3	RW-7588P-20210625	114	96	96	104
280-150306-4	RW-8209P-20210625	115	96	95	105
280-150306-5	RW-7688P-20210625	115	97	95	105
280-150306-6	RW-5898BI-20210625	115	96	94	105
280-150306-7	RW-2140H-20210626	115	97	95	105
280-150306-8	MW-116S-20210626	114	96	95	105
280-150306-9	RW-2076F-20210626	116	97	96	104
280-150306-10	RW-8012P-20210626	116	97	95	104
280-150306-11	EB-07-20210627	112	95	94	104
280-150306-12	RW-7244P-20210624	114	96	95	105
280-150306-13	RW-2237H-20210624	115	96	95	105
280-150306-14	RW-7070B-20210624	113	96	95	104
280-150306-15	RW-8105PS-20210625	114	96	95	104
280-150306-16	MW-38-105-115-20210627	93	97	96	97
280-150306-17	TB-02-20210627	95	101	97	99
280-150306-18	MW-38-121-130-20210627	92	98	94	93
LCS 280-542394/4	Lab Control Sample	98	96	98	97
LCS 280-542394/6	Lab Control Sample	95	97	97	96
LCS 280-542401/4	Lab Control Sample	111	96	95	105
LCS 280-542401/6	Lab Control Sample	114	96	95	105
LCS 280-542686/4	Lab Control Sample	91	100	96	95
LCS 280-542686/6	Lab Control Sample	93	97	95	95
LCSD 280-542394/5	Lab Control Sample Dup	96	98	100	95
LCSD 280-542394/7	Lab Control Sample Dup	95	95	98	98
LCSD 280-542401/5	Lab Control Sample Dup	110	96	95	105
LCSD 280-542401/7	Lab Control Sample Dup	114	96	95	105
LCSD 280-542686/5	Lab Control Sample Dup	91	96	98	94
LCSD 280-542686/7	Lab Control Sample Dup	94	96	96	95
MB 280-542394/9	Method Blank	96	96	95	98
MB 280-542401/9	Method Blank	111	96	95	104
MB 280-542686/9	Method Blank	92	101	94	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Surrogate Summary

Client: CDM Smith, Inc.

Job ID: 280-150290-1

Project/Site: Bannock Ft. Hall Mine LF, Idaho

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-542394/9

Matrix: Water

Analysis Batch: 542394

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			07/07/21 00:34	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 00:34	1
Acrolein	ND		20	2.8	ug/L			07/07/21 00:34	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 00:34	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 00:34	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 00:34	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 00:34	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 00:34	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 00:34	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 00:34	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 00:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 00:34	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 00:34	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 00:34	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 00:34	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 00:34	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 00:34	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 00:34	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 00:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 00:34	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 00:34	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 00:34	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 00:34	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 00:34	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 00:34	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 00:34	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 00:34	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 00:34	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 00:34	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 00:34	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 00:34	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 00:34	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 00:34	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 00:34	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 00:34	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 00:34	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 00:34	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 00:34	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 00:34	1
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 00:34	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 00:34	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 00:34	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 00:34	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 00:34	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 00:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 00:34	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 00:34	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 00:34	1

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-542394/9

Matrix: Water

Analysis Batch: 542394

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			07/07/21 00:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 00:34	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 00:34	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 00:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 00:34	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 00:34	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 00:34	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 00:34	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 00:34	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 00:34	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 00:34	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 00:34	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 00:34	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 00:34	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 00:34	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 00:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 127		07/07/21 00:34	1
Toluene-d8 (Surr)	96		80 - 125		07/07/21 00:34	1
4-Bromofluorobenzene (Surr)	95		78 - 120		07/07/21 00:34	1
Dibromofluoromethane (Surr)	98		77 - 120		07/07/21 00:34	1

Lab Sample ID: LCS 280-542394/4

Matrix: Water

Analysis Batch: 542394

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	89.3		ug/L		89	39 - 156
Acrolein	247	222		ug/L		90	36 - 147
Acrylonitrile	250	237		ug/L		95	56 - 135
Benzene	25.0	25.8		ug/L		103	65 - 135
Chlorobromomethane	25.0	24.2		ug/L		97	65 - 135
Dichlorobromomethane	25.0	22.2		ug/L		89	65 - 135
Bromoform	25.0	19.1		ug/L		76	62 - 135
Bromomethane	25.0	23.6		ug/L		94	45 - 135
2-Butanone (MEK)	100	86.1		ug/L		86	44 - 177
Carbon disulfide	25.0	26.0		ug/L		104	55 - 143
Carbon tetrachloride	25.0	24.0		ug/L		96	65 - 135
Chlorobenzene	25.0	24.4		ug/L		98	65 - 135
Chlorodibromomethane	25.0	21.3		ug/L		85	65 - 135
Chloroethane	25.0	24.9		ug/L		99	46 - 136
Chloroform	25.0	24.6		ug/L		99	65 - 135
Chloromethane	25.0	21.2		ug/L		85	34 - 145
Allyl chloride	25.0	26.1		ug/L		105	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	19.2		ug/L		77	57 - 135
Dibromomethane	25.0	24.1		ug/L		97	65 - 135
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	65 - 135

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-542394/4

Matrix: Water

Analysis Batch: 542394

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	26.4		ug/L		106	65 - 135
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	65 - 135
trans-1,4-Dichloro-2-butene	25.0	19.9		ug/L		80	53 - 135
Dichlorodifluoromethane	25.0	19.4		ug/L		78	43 - 142
1,1-Dichloroethane	25.0	25.0		ug/L		100	65 - 135
1,2-Dichloroethane	25.0	23.7		ug/L		95	65 - 135
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	65 - 135
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	65 - 135
1,1-Dichloroethene	25.0	25.9		ug/L		104	65 - 136
1,2-Dichloropropane	25.0	24.6		ug/L		98	64 - 135
1,3-Dichloropropane	25.0	23.8		ug/L		95	64 - 135
2,2-Dichloropropane	25.0	25.2		ug/L		101	65 - 135
cis-1,3-Dichloropropene	25.0	22.9		ug/L		92	65 - 135
trans-1,3-Dichloropropene	25.0	23.0		ug/L		92	65 - 135
1,1-Dichloropropene	25.0	26.0		ug/L		104	65 - 135
Ethylbenzene	25.0	24.9		ug/L		99	65 - 135
Ethyl methacrylate	25.0	22.8		ug/L		91	50 - 135
2-Hexanone	100	89.7		ug/L		90	57 - 139
Iodomethane	25.0	22.2		ug/L		89	65 - 142
Isobutyl alcohol	625	500		ug/L		80	55 - 135
Methylene Chloride	25.0	26.1		ug/L		104	54 - 141
4-Methyl-2-pentanone (MIBK)	100	96.3		ug/L		96	60 - 150
Styrene	25.0	23.6		ug/L		95	65 - 135
1,1,1,2-Tetrachloroethane	25.0	23.0		ug/L		92	65 - 135
1,1,2,2-Tetrachloroethane	25.0	21.7		ug/L		87	58 - 135
Tetrachloroethene	25.0	27.8		ug/L		111	65 - 135
Toluene	25.0	25.4		ug/L		102	65 - 135
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	58 - 135
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	65 - 135
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	64 - 135
Trichloroethene	25.0	22.0		ug/L		88	65 - 135
Trichlorofluoromethane	25.0	25.5		ug/L		102	53 - 137
1,2,3-Trichloropropane	25.0	23.1		ug/L		92	65 - 135
Vinyl acetate	50.0	49.9		ug/L		100	11 - 187
Vinyl chloride	25.0	26.9		ug/L		107	40 - 137
m-Xylene & p-Xylene	25.0	24.3		ug/L		97	65 - 135
o-Xylene	25.0	25.7		ug/L		103	65 - 135
Xylenes, Total	50.0	50.0		ug/L		100	65 - 135
1,2-Dibromoethane	25.0	22.8		ug/L		91	65 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-542394/6

Matrix: Water

Analysis Batch: 542394

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	21.3		ug/L		85	50 - 150
Methacrylonitrile	250	270		ug/L		108	50 - 150
Methyl methacrylate	50.0	49.1		ug/L		98	50 - 150
Propionitrile	250	248		ug/L		99	50 - 150

Surrogate	%Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

Lab Sample ID: LCSD 280-542394/5

Matrix: Water

Analysis Batch: 542394

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	81.0		ug/L		81	39 - 156	10	23
Acrolein	247	223		ug/L		90	36 - 147	1	30
Acrylonitrile	250	235		ug/L		94	56 - 135	1	30
Benzene	25.0	25.2		ug/L		101	65 - 135	2	20
Chlorobromomethane	25.0	24.2		ug/L		97	65 - 135	0	29
Dichlorobromomethane	25.0	22.0		ug/L		88	65 - 135	1	20
Bromoform	25.0	19.5		ug/L		78	62 - 135	2	27
Bromomethane	25.0	22.4		ug/L		90	45 - 135	5	33
2-Butanone (MEK)	100	84.1		ug/L		84	44 - 177	2	32
Carbon disulfide	25.0	24.0		ug/L		96	55 - 143	8	20
Carbon tetrachloride	25.0	23.4		ug/L		94	65 - 135	2	21
Chlorobenzene	25.0	23.2		ug/L		93	65 - 135	5	20
Chlorodibromomethane	25.0	21.9		ug/L		87	65 - 135	3	20
Chloroethane	25.0	22.8		ug/L		91	46 - 136	9	25
Chloroform	25.0	23.1		ug/L		92	65 - 135	6	20
Chloromethane	25.0	20.3		ug/L		81	34 - 145	4	24
Allyl chloride	25.0	25.1		ug/L		101	50 - 135	4	30
1,2-Dibromo-3-Chloropropane	25.0	19.0		ug/L		76	57 - 135	1	22
Dibromomethane	25.0	24.4		ug/L		98	65 - 135	1	26
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	65 - 135	1	20
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135	7	20
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	65 - 135	1	23
trans-1,4-Dichloro-2-butene	25.0	19.7		ug/L		79	53 - 135	1	25
Dichlorodifluoromethane	25.0	17.4		ug/L		69	43 - 142	11	30
1,1-Dichloroethane	25.0	23.6		ug/L		94	65 - 135	6	21
1,2-Dichloroethane	25.0	24.8		ug/L		99	65 - 135	5	20
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	65 - 135	1	20
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	65 - 135	3	24
1,1-Dichloroethene	25.0	24.9		ug/L		100	65 - 136	4	20
1,2-Dichloropropane	25.0	24.4		ug/L		97	64 - 135	1	20
1,3-Dichloropropane	25.0	23.4		ug/L		94	64 - 135	1	20

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-542394/5

Matrix: Water

Analysis Batch: 542394

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	23.7		ug/L		95	65 - 135	6	20
cis-1,3-Dichloropropene	25.0	22.9		ug/L		92	65 - 135	0	26
trans-1,3-Dichloropropene	25.0	23.0		ug/L		92	65 - 135	0	26
1,1-Dichloropropene	25.0	24.7		ug/L		99	65 - 135	5	21
Ethylbenzene	25.0	24.6		ug/L		98	65 - 135	1	20
Ethyl methacrylate	25.0	22.4		ug/L		89	50 - 135	2	30
2-Hexanone	100	86.8		ug/L		87	57 - 139	3	25
Iodomethane	25.0	21.5		ug/L		86	65 - 142	3	25
Isobutyl alcohol	625	502		ug/L		80	55 - 135	0	30
Methylene Chloride	25.0	24.4		ug/L		98	54 - 141	7	26
4-Methyl-2-pentanone (MIBK)	100	95.4		ug/L		95	60 - 150	1	22
Styrene	25.0	23.9		ug/L		96	65 - 135	1	26
1,1,1,2-Tetrachloroethane	25.0	22.6		ug/L		90	65 - 135	2	20
1,1,2,2-Tetrachloroethane	25.0	20.7		ug/L		83	58 - 135	5	20
Tetrachloroethene	25.0	26.2		ug/L		105	65 - 135	6	20
Toluene	25.0	24.4		ug/L		98	65 - 135	4	20
1,2,4-Trichlorobenzene	25.0	24.0		ug/L		96	58 - 135	5	25
1,1,1-Trichloroethane	25.0	22.0		ug/L		88	65 - 135	7	20
1,1,2-Trichloroethane	25.0	22.9		ug/L		92	64 - 135	4	27
Trichloroethene	25.0	22.3		ug/L		89	65 - 135	1	20
Trichlorofluoromethane	25.0	23.8		ug/L		95	53 - 137	7	27
1,2,3-Trichloropropane	25.0	21.4		ug/L		85	65 - 135	8	23
Vinyl acetate	50.0	48.2		ug/L		96	11 - 187	4	24
Vinyl chloride	25.0	24.7		ug/L		99	40 - 137	8	24
m-Xylene & p-Xylene	25.0	24.8		ug/L		99	65 - 135	2	20
o-Xylene	25.0	25.1		ug/L		100	65 - 135	2	20
Xylenes, Total	50.0	49.9		ug/L		100	65 - 135	0	20
1,2-Dibromoethane	25.0	23.0		ug/L		92	65 - 135	1	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

Lab Sample ID: LCSD 280-542394/7

Matrix: Water

Analysis Batch: 542394

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	251		ug/L		100	50 - 150	5	30
Chloroprene	25.0	21.0		ug/L		84	50 - 150	2	30
Methacrylonitrile	250	267		ug/L		107	50 - 150	1	30
Methyl methacrylate	50.0	50.5		ug/L		101	50 - 150	3	30
Propionitrile	250	246		ug/L		98	50 - 150	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-542394/7

Matrix: Water

Analysis Batch: 542394

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	95		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

Lab Sample ID: MB 280-542401/9

Matrix: Water

Analysis Batch: 542401

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			07/07/21 08:59	1
Acetonitrile	ND		30	9.6	ug/L			07/07/21 08:59	1
Acrolein	ND		20	2.8	ug/L			07/07/21 08:59	1
Acrylonitrile	ND		20	1.4	ug/L			07/07/21 08:59	1
Benzene	ND		1.0	0.16	ug/L			07/07/21 08:59	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/07/21 08:59	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/07/21 08:59	1
Bromoform	ND		1.0	0.46	ug/L			07/07/21 08:59	1
Bromomethane	ND		2.0	0.21	ug/L			07/07/21 08:59	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/07/21 08:59	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/07/21 08:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/07/21 08:59	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/07/21 08:59	1
Chloroprene	ND		1.0	0.21	ug/L			07/07/21 08:59	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/07/21 08:59	1
Chloroethane	ND		2.0	0.41	ug/L			07/07/21 08:59	1
Chloroform	ND		1.0	0.16	ug/L			07/07/21 08:59	1
Chloromethane	ND		2.0	0.30	ug/L			07/07/21 08:59	1
Allyl chloride	ND		2.0	0.17	ug/L			07/07/21 08:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/07/21 08:59	1
Dibromomethane	ND		1.0	0.17	ug/L			07/07/21 08:59	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/07/21 08:59	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/07/21 08:59	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/07/21 08:59	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/07/21 08:59	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/07/21 08:59	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/07/21 08:59	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/07/21 08:59	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 08:59	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/07/21 08:59	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/07/21 08:59	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/07/21 08:59	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/07/21 08:59	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/07/21 08:59	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			07/07/21 08:59	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/07/21 08:59	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/07/21 08:59	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/07/21 08:59	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/07/21 08:59	1

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-542401/9

Matrix: Water

Analysis Batch: 542401

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		5.0	1.7	ug/L			07/07/21 08:59	1
Iodomethane	ND		1.0	0.23	ug/L			07/07/21 08:59	1
Isobutyl alcohol	ND		110	37	ug/L			07/07/21 08:59	1
Methacrylonitrile	ND		10	1.6	ug/L			07/07/21 08:59	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/07/21 08:59	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/07/21 08:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/07/21 08:59	1
Propionitrile	ND		20	3.7	ug/L			07/07/21 08:59	1
Styrene	ND		1.0	0.36	ug/L			07/07/21 08:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/07/21 08:59	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/07/21 08:59	1
Toluene	ND		1.0	0.17	ug/L			07/07/21 08:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/07/21 08:59	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/07/21 08:59	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/07/21 08:59	1
Trichloroethene	ND		1.0	0.16	ug/L			07/07/21 08:59	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/07/21 08:59	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/07/21 08:59	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/07/21 08:59	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/07/21 08:59	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/07/21 08:59	1
o-Xylene	ND		1.0	0.19	ug/L			07/07/21 08:59	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/07/21 08:59	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/07/21 08:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 127		07/07/21 08:59	1
Toluene-d8 (Surr)	96		80 - 125		07/07/21 08:59	1
4-Bromofluorobenzene (Surr)	95		78 - 120		07/07/21 08:59	1
Dibromofluoromethane (Surr)	104		77 - 120		07/07/21 08:59	1

Lab Sample ID: LCS 280-542401/4

Matrix: Water

Analysis Batch: 542401

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	153		ug/L		153	39 - 156
Acrolein	247	258		ug/L		105	36 - 147
Acrylonitrile	250	336		ug/L		135	56 - 135
Benzene	25.0	24.0		ug/L		96	65 - 135
Chlorobromomethane	25.0	26.2		ug/L		105	65 - 135
Dichlorobromomethane	25.0	25.7		ug/L		103	65 - 135
Bromoform	25.0	26.4		ug/L		106	62 - 135
Bromomethane	25.0	19.3		ug/L		77	45 - 135
2-Butanone (MEK)	100	135		ug/L		135	44 - 177
Carbon disulfide	25.0	20.7		ug/L		83	55 - 143
Carbon tetrachloride	25.0	25.3		ug/L		101	65 - 135

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-542401/4

Matrix: Water

Analysis Batch: 542401

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	24.1		ug/L		96	65 - 135
Chlorodibromomethane	25.0	25.1		ug/L		101	65 - 135
Chloroethane	25.0	23.5		ug/L		94	46 - 136
Chloroform	25.0	26.2		ug/L		105	65 - 135
Chloromethane	25.0	21.5		ug/L		86	34 - 145
Allyl chloride	25.0	23.4		ug/L		94	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	29.6		ug/L		119	57 - 135
Dibromomethane	25.0	26.6		ug/L		106	65 - 135
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	65 - 135
1,3-Dichlorobenzene	25.0	23.9		ug/L		96	65 - 135
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	65 - 135
trans-1,4-Dichloro-2-butene	25.0	25.2		ug/L		101	53 - 135
Dichlorodifluoromethane	25.0	15.4		ug/L		62	43 - 142
1,1-Dichloroethane	25.0	24.0		ug/L		96	65 - 135
1,2-Dichloroethane	25.0	27.3		ug/L		109	65 - 135
cis-1,2-Dichloroethene	25.0	24.4		ug/L		97	65 - 135
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	65 - 135
1,1-Dichloroethene	25.0	23.1		ug/L		93	65 - 136
1,2-Dichloropropane	25.0	23.8		ug/L		95	64 - 135
1,3-Dichloropropane	25.0	24.4		ug/L		98	64 - 135
2,2-Dichloropropane	25.0	17.9		ug/L		72	65 - 135
cis-1,3-Dichloropropene	25.0	22.8		ug/L		91	65 - 135
trans-1,3-Dichloropropene	25.0	24.4		ug/L		98	65 - 135
1,1-Dichloropropene	25.0	24.0		ug/L		96	65 - 135
Ethylbenzene	25.0	23.5		ug/L		94	65 - 135
Ethyl methacrylate	25.0	24.9		ug/L		100	50 - 135
2-Hexanone	100	108		ug/L		108	57 - 139
Iodomethane	25.0	19.7		ug/L		79	65 - 142
Isobutyl alcohol	625	709		ug/L		113	55 - 135
Methylene Chloride	25.0	23.7		ug/L		95	54 - 141
4-Methyl-2-pentanone (MIBK)	100	113		ug/L		113	60 - 150
Styrene	25.0	24.5		ug/L		98	65 - 135
1,1,1,2-Tetrachloroethane	25.0	25.3		ug/L		101	65 - 135
1,1,2,2-Tetrachloroethane	25.0	27.6		ug/L		110	58 - 135
Tetrachloroethene	25.0	24.6		ug/L		99	65 - 135
Toluene	25.0	24.9		ug/L		100	65 - 135
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	58 - 135
1,1,1-Trichloroethane	25.0	25.9		ug/L		104	65 - 135
1,1,2-Trichloroethane	25.0	27.0		ug/L		108	64 - 135
Trichloroethene	25.0	23.5		ug/L		94	65 - 135
Trichlorofluoromethane	25.0	20.0		ug/L		80	53 - 137
1,2,3-Trichloropropane	25.0	27.2		ug/L		109	65 - 135
Vinyl acetate	50.0	47.0		ug/L		94	11 - 187
Vinyl chloride	25.0	21.8		ug/L		87	40 - 137
m-Xylene & p-Xylene	25.0	24.2		ug/L		97	65 - 135
o-Xylene	25.0	24.1		ug/L		96	65 - 135
Xylenes, Total	50.0	48.3		ug/L		97	65 - 135
1,2-Dibromoethane	25.0	23.9		ug/L		95	65 - 135

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-542401/4

Matrix: Water

Analysis Batch: 542401

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

Lab Sample ID: LCS 280-542401/6

Matrix: Water

Analysis Batch: 542401

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	250	301		ug/L		121	50 - 150
Chloroprene	25.0	18.7		ug/L		75	50 - 150
Methacrylonitrile	250	295		ug/L		118	50 - 150
Methyl methacrylate	50.0	61.7		ug/L		123	50 - 150
Propionitrile	250	338		ug/L		135	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

Lab Sample ID: LCSD 280-542401/5

Matrix: Water

Analysis Batch: 542401

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	148		ug/L		148	39 - 156	4	23
Acrolein	247	261		ug/L		106	36 - 147	1	30
Acrylonitrile	250	345	*+	ug/L		138	56 - 135	3	30
Benzene	25.0	24.5		ug/L		98	65 - 135	2	20
Chlorobromomethane	25.0	26.9		ug/L		107	65 - 135	3	29
Dichlorobromomethane	25.0	26.3		ug/L		105	65 - 135	3	20
Bromoform	25.0	27.3		ug/L		109	62 - 135	4	27
Bromomethane	25.0	19.1		ug/L		77	45 - 135	1	33
2-Butanone (MEK)	100	137		ug/L		137	44 - 177	1	32
Carbon disulfide	25.0	20.9		ug/L		84	55 - 143	1	20
Carbon tetrachloride	25.0	25.4		ug/L		102	65 - 135	0	21
Chlorobenzene	25.0	25.0		ug/L		100	65 - 135	3	20
Chlorodibromomethane	25.0	25.5		ug/L		102	65 - 135	2	20
Chloroethane	25.0	23.2		ug/L		93	46 - 136	1	25
Chloroform	25.0	27.2		ug/L		109	65 - 135	4	20
Chloromethane	25.0	21.4		ug/L		85	34 - 145	1	24
Allyl chloride	25.0	23.9		ug/L		96	50 - 135	2	30
1,2-Dibromo-3-Chloropropane	25.0	30.2		ug/L		121	57 - 135	2	22
Dibromomethane	25.0	27.6		ug/L		110	65 - 135	4	26
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	65 - 135	3	20
1,3-Dichlorobenzene	25.0	24.9		ug/L		100	65 - 135	4	20

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-542401/5

Matrix: Water

Analysis Batch: 542401

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
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	65 - 135	3	23
trans-1,4-Dichloro-2-butene	25.0	25.6		ug/L		102	53 - 135	2	25
Dichlorodifluoromethane	25.0	14.1		ug/L		56	43 - 142	9	30
1,1-Dichloroethane	25.0	24.5		ug/L		98	65 - 135	2	21
1,2-Dichloroethane	25.0	27.7		ug/L		111	65 - 135	1	20
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	65 - 135	3	20
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	65 - 135	2	24
1,1-Dichloroethene	25.0	23.6		ug/L		94	65 - 136	2	20
1,2-Dichloropropane	25.0	24.6		ug/L		99	64 - 135	3	20
1,3-Dichloropropane	25.0	25.2		ug/L		101	64 - 135	3	20
2,2-Dichloropropane	25.0	18.8		ug/L		75	65 - 135	5	20
cis-1,3-Dichloropropene	25.0	23.5		ug/L		94	65 - 135	3	26
trans-1,3-Dichloropropene	25.0	24.8		ug/L		99	65 - 135	2	26
1,1-Dichloropropene	25.0	24.2		ug/L		97	65 - 135	1	21
Ethylbenzene	25.0	24.2		ug/L		97	65 - 135	3	20
Ethyl methacrylate	25.0	25.7		ug/L		103	50 - 135	3	30
2-Hexanone	100	113		ug/L		113	57 - 139	4	25
Iodomethane	25.0	23.3		ug/L		93	65 - 142	17	25
Isobutyl alcohol	625	725		ug/L		116	55 - 135	2	30
Methylene Chloride	25.0	24.7		ug/L		99	54 - 141	4	26
4-Methyl-2-pentanone (MIBK)	100	115		ug/L		115	60 - 150	2	22
Styrene	25.0	25.4		ug/L		102	65 - 135	4	26
1,1,1,2-Tetrachloroethane	25.0	26.0		ug/L		104	65 - 135	3	20
1,1,2,2-Tetrachloroethane	25.0	28.7		ug/L		115	58 - 135	4	20
Tetrachloroethene	25.0	25.2		ug/L		101	65 - 135	2	20
Toluene	25.0	25.6		ug/L		102	65 - 135	3	20
1,2,4-Trichlorobenzene	25.0	26.3		ug/L		105	58 - 135	6	25
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	65 - 135	1	20
1,1,2-Trichloroethane	25.0	27.9		ug/L		111	64 - 135	3	27
Trichloroethene	25.0	24.2		ug/L		97	65 - 135	3	20
Trichlorofluoromethane	25.0	18.9		ug/L		75	53 - 137	6	27
1,2,3-Trichloropropane	25.0	27.4		ug/L		110	65 - 135	1	23
Vinyl acetate	50.0	48.4		ug/L		97	11 - 187	3	24
Vinyl chloride	25.0	21.4		ug/L		86	40 - 137	2	24
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	65 - 135	2	20
o-Xylene	25.0	24.8		ug/L		99	65 - 135	3	20
Xylenes, Total	50.0	49.5		ug/L		99	65 - 135	2	20
1,2-Dibromoethane	25.0	25.0		ug/L		100	65 - 135	4	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-542401/7

Matrix: Water

Analysis Batch: 542401

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	298		ug/L		119	50 - 150	1	30
Chloroprene	25.0	18.4		ug/L		74	50 - 150	2	30
Methacrylonitrile	250	294		ug/L		117	50 - 150	0	30
Methyl methacrylate	50.0	61.0		ug/L		122	50 - 150	1	30
Propionitrile	250	330		ug/L		132	50 - 150	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

Lab Sample ID: 280-150306-2 MS

Matrix: Water

Analysis Batch: 542401

Client Sample ID: RW-2172F-20210625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	148		ug/L		148	39 - 156
Acrolein	ND		247	270		ug/L		109	36 - 147
Acrylonitrile	ND	*+ F1	250	356	F1	ug/L		142	56 - 135
Benzene	ND		25.0	25.9		ug/L		104	65 - 135
Chlorobromomethane	ND		25.0	27.0		ug/L		108	65 - 135
Dichlorobromomethane	ND		25.0	26.5		ug/L		106	65 - 135
Bromoform	ND		25.0	25.6		ug/L		103	62 - 135
Bromomethane	ND		25.0	18.4		ug/L		74	45 - 135
2-Butanone (MEK)	ND		100	145		ug/L		145	44 - 177
Carbon disulfide	ND		25.0	21.9		ug/L		88	55 - 143
Carbon tetrachloride	ND		25.0	26.6		ug/L		106	65 - 135
Chlorobenzene	ND		25.0	25.5		ug/L		102	65 - 135
Chlorodibromomethane	ND		25.0	25.3		ug/L		101	65 - 135
Chloroethane	ND		25.0	24.7		ug/L		99	46 - 136
Chloroform	ND		25.0	28.2		ug/L		113	65 - 135
Chloromethane	ND		25.0	31.3		ug/L		125	34 - 145
Allyl chloride	ND		25.0	24.6		ug/L		98	50 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	30.2		ug/L		121	57 - 135
Dibromomethane	ND		25.0	28.1		ug/L		112	65 - 135
1,2-Dichlorobenzene	ND		25.0	25.3		ug/L		101	65 - 135
1,3-Dichlorobenzene	ND		25.0	24.8		ug/L		99	65 - 135
1,4-Dichlorobenzene	ND		25.0	24.8		ug/L		99	65 - 135
trans-1,4-Dichloro-2-butene	ND		25.0	23.4		ug/L		94	53 - 135
Dichlorodifluoromethane	ND		25.0	27.6		ug/L		111	43 - 142
1,1-Dichloroethane	ND		25.0	26.1		ug/L		104	65 - 135
1,2-Dichloroethane	ND		25.0	28.4		ug/L		113	65 - 135
cis-1,2-Dichloroethene	ND		25.0	26.5		ug/L		106	65 - 135
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	65 - 135
1,1-Dichloroethene	ND		25.0	24.7		ug/L		99	65 - 136
1,2-Dichloropropane	ND		25.0	25.3		ug/L		101	64 - 135
1,3-Dichloropropane	ND		25.0	26.1		ug/L		105	64 - 135

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150306-2 MS

Matrix: Water

Analysis Batch: 542401

Client Sample ID: RW-2172F-20210625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	ND		25.0	18.8		ug/L		75	65 - 135
cis-1,3-Dichloropropene	ND		25.0	23.3		ug/L		93	65 - 135
trans-1,3-Dichloropropene	ND		25.0	24.3		ug/L		97	65 - 135
1,1-Dichloropropene	ND		25.0	25.8		ug/L		103	65 - 135
Ethylbenzene	ND		25.0	25.1		ug/L		100	65 - 135
Ethyl methacrylate	ND		25.0	26.0		ug/L		104	50 - 135
2-Hexanone	ND		100	116		ug/L		116	57 - 139
Iodomethane	ND		25.0	18.1		ug/L		72	65 - 142
Isobutyl alcohol	ND		625	782		ug/L		125	55 - 135
Methylene Chloride	ND		25.0	25.5		ug/L		102	54 - 141
4-Methyl-2-pentanone (MIBK)	ND		100	119		ug/L		119	60 - 150
Styrene	ND		25.0	25.8		ug/L		103	65 - 135
1,1,1,2-Tetrachloroethane	ND		25.0	26.1		ug/L		104	65 - 135
1,1,2,2-Tetrachloroethane	ND		25.0	28.9		ug/L		116	58 - 135
Tetrachloroethene	ND		25.0	26.2		ug/L		105	65 - 135
Toluene	ND		25.0	26.5		ug/L		106	65 - 135
1,2,4-Trichlorobenzene	ND		25.0	25.0		ug/L		100	58 - 135
1,1,1-Trichloroethane	ND		25.0	27.5		ug/L		110	65 - 135
1,1,2-Trichloroethane	ND		25.0	28.0		ug/L		112	64 - 135
Trichloroethene	ND		25.0	25.0		ug/L		100	65 - 135
Trichlorofluoromethane	ND		25.0	22.6		ug/L		90	53 - 137
1,2,3-Trichloropropane	ND		25.0	28.9		ug/L		115	65 - 135
Vinyl acetate	ND		50.0	43.4		ug/L		87	11 - 187
Vinyl chloride	ND		25.0	27.9		ug/L		111	40 - 137
m-Xylene & p-Xylene	ND		25.0	25.3		ug/L		101	65 - 135
o-Xylene	ND		25.0	25.6		ug/L		103	65 - 135
Xylenes, Total	ND		50.0	50.9		ug/L		102	65 - 135
1,2-Dibromoethane	ND		25.0	25.0		ug/L		100	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

Lab Sample ID: 280-150306-2 MSD

Matrix: Water

Analysis Batch: 542401

Client Sample ID: RW-2172F-20210625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	151		ug/L		151	39 - 156	2	23
Acrolein	ND		247	278		ug/L		113	36 - 147	3	30
Acrylonitrile	ND	*+ F1	250	362	F1	ug/L		145	56 - 135	2	30
Benzene	ND		25.0	26.4		ug/L		105	65 - 135	2	20
Chlorobromomethane	ND		25.0	27.3		ug/L		109	65 - 135	1	29
Dichlorobromomethane	ND		25.0	27.2		ug/L		109	65 - 135	3	20
Bromoform	ND		25.0	26.1		ug/L		104	62 - 135	2	27
Bromomethane	ND		25.0	19.1		ug/L		76	45 - 135	3	33

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150306-2 MSD

Matrix: Water

Analysis Batch: 542401

Client Sample ID: RW-2172F-20210625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	ND		100	147		ug/L		147	44 - 177	1	32
Carbon disulfide	ND		25.0	23.0		ug/L		92	55 - 143	5	20
Carbon tetrachloride	ND		25.0	28.0		ug/L		112	65 - 135	5	21
Chlorobenzene	ND		25.0	25.8		ug/L		103	65 - 135	1	20
Chlorodibromomethane	ND		25.0	25.6		ug/L		102	65 - 135	1	20
Chloroethane	ND		25.0	25.2		ug/L		101	46 - 136	2	25
Chloroform	ND		25.0	28.7		ug/L		115	65 - 135	2	20
Chloromethane	ND		25.0	31.6		ug/L		126	34 - 145	1	24
Allyl chloride	ND		25.0	25.7		ug/L		103	50 - 135	4	30
1,2-Dibromo-3-Chloropropane	ND		25.0	31.0		ug/L		124	57 - 135	3	22
Dibromomethane	ND		25.0	28.1		ug/L		112	65 - 135	0	26
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		104	65 - 135	2	20
1,3-Dichlorobenzene	ND		25.0	25.5		ug/L		102	65 - 135	3	20
1,4-Dichlorobenzene	ND		25.0	25.4		ug/L		102	65 - 135	2	23
trans-1,4-Dichloro-2-butene	ND		25.0	23.7		ug/L		95	53 - 135	1	25
Dichlorodifluoromethane	ND		25.0	28.2		ug/L		113	43 - 142	2	30
1,1-Dichloroethane	ND		25.0	26.4		ug/L		105	65 - 135	1	21
1,2-Dichloroethane	ND		25.0	28.8		ug/L		115	65 - 135	1	20
cis-1,2-Dichloroethene	ND		25.0	26.4		ug/L		105	65 - 135	1	20
trans-1,2-Dichloroethene	ND		25.0	26.2		ug/L		105	65 - 135	1	24
1,1-Dichloroethene	ND		25.0	26.1		ug/L		104	65 - 136	5	20
1,2-Dichloropropane	ND		25.0	25.9		ug/L		103	64 - 135	2	20
1,3-Dichloropropane	ND		25.0	26.3		ug/L		105	64 - 135	0	20
2,2-Dichloropropane	ND		25.0	19.2		ug/L		77	65 - 135	2	20
cis-1,3-Dichloropropene	ND		25.0	23.8		ug/L		95	65 - 135	2	26
trans-1,3-Dichloropropene	ND		25.0	24.9		ug/L		100	65 - 135	2	26
1,1-Dichloropropene	ND		25.0	26.8		ug/L		107	65 - 135	4	21
Ethylbenzene	ND		25.0	25.8		ug/L		103	65 - 135	3	20
Ethyl methacrylate	ND		25.0	26.7		ug/L		107	50 - 135	3	30
2-Hexanone	ND		100	120		ug/L		120	57 - 139	3	25
Iodomethane	ND		25.0	22.5		ug/L		90	65 - 142	22	25
Isobutyl alcohol	ND		625	794		ug/L		127	55 - 135	2	30
Methylene Chloride	ND		25.0	25.3		ug/L		101	54 - 141	0	26
4-Methyl-2-pentanone (MIBK)	ND		100	122		ug/L		122	60 - 150	3	22
Styrene	ND		25.0	25.8		ug/L		103	65 - 135	0	26
1,1,1,2-Tetrachloroethane	ND		25.0	26.6		ug/L		106	65 - 135	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	30.1		ug/L		120	58 - 135	4	20
Tetrachloroethene	ND		25.0	26.8		ug/L		107	65 - 135	2	20
Toluene	ND		25.0	27.2		ug/L		109	65 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	26.3		ug/L		105	58 - 135	5	25
1,1,1-Trichloroethane	ND		25.0	28.6		ug/L		115	65 - 135	4	20
1,1,2-Trichloroethane	ND		25.0	28.2		ug/L		113	64 - 135	1	27
Trichloroethene	ND		25.0	25.8		ug/L		103	65 - 135	3	20
Trichlorofluoromethane	ND		25.0	23.1		ug/L		92	53 - 137	2	27
1,2,3-Trichloropropane	ND		25.0	29.8		ug/L		119	65 - 135	3	23
Vinyl acetate	ND		50.0	44.2		ug/L		88	11 - 187	2	24
Vinyl chloride	ND		25.0	28.9		ug/L		115	40 - 137	3	24
m-Xylene & p-Xylene	ND		25.0	26.0		ug/L		104	65 - 135	3	20
o-Xylene	ND		25.0	25.9		ug/L		104	65 - 135	1	20

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-150306-2 MSD

Matrix: Water

Analysis Batch: 542401

Client Sample ID: RW-2172F-20210625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	ND		50.0	51.9		ug/L		104	65 - 135	2	20
1,2-Dibromoethane	ND		25.0	25.4		ug/L		101	65 - 135	2	27
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	111		70 - 127								
Toluene-d8 (Surr)	97		80 - 125								
4-Bromofluorobenzene (Surr)	96		78 - 120								
Dibromofluoromethane (Surr)	104		77 - 120								

Lab Sample ID: MB 280-542686/9

Matrix: Water

Analysis Batch: 542686

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			07/09/21 09:55	1
Acetonitrile	ND		30	9.6	ug/L			07/09/21 09:55	1
Acrolein	ND		20	2.8	ug/L			07/09/21 09:55	1
Acrylonitrile	ND		20	1.4	ug/L			07/09/21 09:55	1
Benzene	ND		1.0	0.16	ug/L			07/09/21 09:55	1
Chlorobromomethane	ND		1.0	0.10	ug/L			07/09/21 09:55	1
Dichlorobromomethane	ND		1.0	0.17	ug/L			07/09/21 09:55	1
Bromoform	ND		1.0	0.46	ug/L			07/09/21 09:55	1
Bromomethane	ND		2.0	0.21	ug/L			07/09/21 09:55	1
2-Butanone (MEK)	ND		6.0	2.0	ug/L			07/09/21 09:55	1
Carbon disulfide	ND		2.0	0.17	ug/L			07/09/21 09:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/21 09:55	1
Chlorobenzene	ND		1.0	0.17	ug/L			07/09/21 09:55	1
Chloroprene	ND		1.0	0.21	ug/L			07/09/21 09:55	1
Chlorodibromomethane	ND		1.0	0.17	ug/L			07/09/21 09:55	1
Chloroethane	ND		2.0	0.41	ug/L			07/09/21 09:55	1
Chloroform	ND		1.0	0.16	ug/L			07/09/21 09:55	1
Chloromethane	ND		2.0	0.30	ug/L			07/09/21 09:55	1
Allyl chloride	ND		2.0	0.17	ug/L			07/09/21 09:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.47	ug/L			07/09/21 09:55	1
Dibromomethane	ND		1.0	0.17	ug/L			07/09/21 09:55	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/09/21 09:55	1
1,3-Dichlorobenzene	ND		1.0	0.13	ug/L			07/09/21 09:55	1
1,4-Dichlorobenzene	ND		1.0	0.16	ug/L			07/09/21 09:55	1
trans-1,4-Dichloro-2-butene	ND		3.0	0.80	ug/L			07/09/21 09:55	1
Dichlorodifluoromethane	ND		2.0	0.31	ug/L			07/09/21 09:55	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			07/09/21 09:55	1
1,2-Dichloroethane	ND		1.0	0.13	ug/L			07/09/21 09:55	1
cis-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 09:55	1
trans-1,2-Dichloroethene	ND		1.0	0.15	ug/L			07/09/21 09:55	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			07/09/21 09:55	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			07/09/21 09:55	1
1,3-Dichloropropane	ND		1.0	0.090	ug/L			07/09/21 09:55	1
2,2-Dichloropropane	ND		1.0	0.38	ug/L			07/09/21 09:55	1

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-542686/9

Matrix: Water

Analysis Batch: 542686

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			07/09/21 09:55	1
trans-1,3-Dichloropropene	ND		3.0	0.19	ug/L			07/09/21 09:55	1
1,1-Dichloropropene	ND		1.0	0.19	ug/L			07/09/21 09:55	1
Ethylbenzene	ND		1.0	0.16	ug/L			07/09/21 09:55	1
Ethyl methacrylate	ND		3.0	0.86	ug/L			07/09/21 09:55	1
2-Hexanone	ND		5.0	1.7	ug/L			07/09/21 09:55	1
Iodomethane	ND		1.0	0.23	ug/L			07/09/21 09:55	1
Isobutyl alcohol	ND		110	37	ug/L			07/09/21 09:55	1
Methacrylonitrile	ND		10	1.6	ug/L			07/09/21 09:55	1
Methylene Chloride	ND		2.0	0.94	ug/L			07/09/21 09:55	1
Methyl methacrylate	ND		4.0	1.1	ug/L			07/09/21 09:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.98	ug/L			07/09/21 09:55	1
Propionitrile	ND		20	3.7	ug/L			07/09/21 09:55	1
Styrene	ND		1.0	0.36	ug/L			07/09/21 09:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 09:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/09/21 09:55	1
Tetrachloroethene	ND		1.0	0.20	ug/L			07/09/21 09:55	1
Toluene	ND		1.0	0.17	ug/L			07/09/21 09:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.21	ug/L			07/09/21 09:55	1
1,1,1-Trichloroethane	ND		1.0	0.16	ug/L			07/09/21 09:55	1
1,1,2-Trichloroethane	ND		1.0	0.27	ug/L			07/09/21 09:55	1
Trichloroethene	ND		1.0	0.16	ug/L			07/09/21 09:55	1
Trichlorofluoromethane	ND		2.0	0.29	ug/L			07/09/21 09:55	1
1,2,3-Trichloropropane	ND		2.5	0.33	ug/L			07/09/21 09:55	1
Vinyl acetate	ND		3.0	0.94	ug/L			07/09/21 09:55	1
Vinyl chloride	ND		1.0	0.10	ug/L			07/09/21 09:55	1
m-Xylene & p-Xylene	ND		2.0	0.15	ug/L			07/09/21 09:55	1
o-Xylene	ND		1.0	0.19	ug/L			07/09/21 09:55	1
Xylenes, Total	ND		2.0	0.19	ug/L			07/09/21 09:55	1
1,2-Dibromoethane	ND		1.0	0.18	ug/L			07/09/21 09:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 127		07/09/21 09:55	1
Toluene-d8 (Surr)	101		80 - 125		07/09/21 09:55	1
4-Bromofluorobenzene (Surr)	94		78 - 120		07/09/21 09:55	1
Dibromofluoromethane (Surr)	95		77 - 120		07/09/21 09:55	1

Lab Sample ID: LCS 280-542686/4

Matrix: Water

Analysis Batch: 542686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	77.9		ug/L		78	39 - 156
Acrolein	247	204		ug/L		82	36 - 147
Acrylonitrile	250	228		ug/L		91	56 - 135
Benzene	25.0	25.0		ug/L		100	65 - 135
Chlorobromomethane	25.0	23.6		ug/L		94	65 - 135
Dichlorobromomethane	25.0	21.0		ug/L		84	65 - 135

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-542686/4

Matrix: Water

Analysis Batch: 542686

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	17.4		ug/L		70	62 - 135
Bromomethane	25.0	20.1		ug/L		80	45 - 135
2-Butanone (MEK)	100	85.1		ug/L		85	44 - 177
Carbon disulfide	25.0	23.1		ug/L		93	55 - 143
Carbon tetrachloride	25.0	20.2		ug/L		81	65 - 135
Chlorobenzene	25.0	24.2		ug/L		97	65 - 135
Chlorodibromomethane	25.0	22.1		ug/L		88	65 - 135
Chloroethane	25.0	21.4		ug/L		86	46 - 136
Chloroform	25.0	21.5		ug/L		86	65 - 135
Chloromethane	25.0	17.6		ug/L		70	34 - 145
Allyl chloride	25.0	23.6		ug/L		95	50 - 135
1,2-Dibromo-3-Chloropropane	25.0	17.0		ug/L		68	57 - 135
Dibromomethane	25.0	22.3		ug/L		89	65 - 135
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	65 - 135
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	65 - 135
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	65 - 135
trans-1,4-Dichloro-2-butene	25.0	16.3		ug/L		65	53 - 135
Dichlorodifluoromethane	25.0	13.4		ug/L		54	43 - 142
1,1-Dichloroethane	25.0	22.8		ug/L		91	65 - 135
1,2-Dichloroethane	25.0	23.1		ug/L		92	65 - 135
cis-1,2-Dichloroethene	25.0	22.8		ug/L		91	65 - 135
trans-1,2-Dichloroethene	25.0	21.9		ug/L		87	65 - 135
1,1-Dichloroethene	25.0	22.7		ug/L		91	65 - 136
1,2-Dichloropropane	25.0	23.1		ug/L		92	64 - 135
1,3-Dichloropropane	25.0	23.8		ug/L		95	64 - 135
2,2-Dichloropropane	25.0	21.3		ug/L		85	65 - 135
cis-1,3-Dichloropropene	25.0	22.6		ug/L		90	65 - 135
trans-1,3-Dichloropropene	25.0	20.7		ug/L		83	65 - 135
1,1-Dichloropropene	25.0	24.0		ug/L		96	65 - 135
Ethylbenzene	25.0	24.9		ug/L		100	65 - 135
Ethyl methacrylate	25.0	22.5		ug/L		90	50 - 135
2-Hexanone	100	90.5		ug/L		91	57 - 139
Iodomethane	25.0	19.8		ug/L		79	65 - 142
Isobutyl alcohol	625	434		ug/L		69	55 - 135
Methylene Chloride	25.0	23.6		ug/L		94	54 - 141
4-Methyl-2-pentanone (MIBK)	100	93.8		ug/L		94	60 - 150
Styrene	25.0	24.2		ug/L		97	65 - 135
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		91	65 - 135
1,1,2,2-Tetrachloroethane	25.0	21.0		ug/L		84	58 - 135
Tetrachloroethene	25.0	24.6		ug/L		98	65 - 135
Toluene	25.0	23.9		ug/L		96	65 - 135
1,2,4-Trichlorobenzene	25.0	22.6		ug/L		90	58 - 135
1,1,1-Trichloroethane	25.0	21.8		ug/L		87	65 - 135
1,1,2-Trichloroethane	25.0	22.5		ug/L		90	64 - 135
Trichloroethene	25.0	22.7		ug/L		91	65 - 135
Trichlorofluoromethane	25.0	20.1		ug/L		80	53 - 137
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	65 - 135
Vinyl acetate	50.0	46.1		ug/L		92	11 - 187
Vinyl chloride	25.0	21.1		ug/L		84	40 - 137

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-542686/4

Matrix: Water

Analysis Batch: 542686

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	24.6		ug/L		99	65 - 135
o-Xylene	25.0	26.0		ug/L		104	65 - 135
Xylenes, Total	50.0	50.6		ug/L		101	65 - 135
1,2-Dibromoethane	25.0	22.9		ug/L		92	65 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

Lab Sample ID: LCS 280-542686/6

Matrix: Water

Analysis Batch: 542686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetonitrile	250	248		ug/L		99	50 - 150
Chloroprene	25.0	22.6		ug/L		91	50 - 150
Methacrylonitrile	250	255		ug/L		102	50 - 150
Methyl methacrylate	50.0	47.2		ug/L		94	50 - 150
Propionitrile	250	233		ug/L		93	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	95		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

Lab Sample ID: LCSD 280-542686/5

Matrix: Water

Analysis Batch: 542686

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	74.4		ug/L		74	39 - 156	5	23
Acrolein	247	201		ug/L		82	36 - 147	1	30
Acrylonitrile	250	234		ug/L		94	56 - 135	3	30
Benzene	25.0	23.6		ug/L		94	65 - 135	6	20
Chlorobromomethane	25.0	23.5		ug/L		94	65 - 135	0	29
Dichlorobromomethane	25.0	20.6		ug/L		82	65 - 135	2	20
Bromoform	25.0	17.9		ug/L		71	62 - 135	2	27
Bromomethane	25.0	20.5		ug/L		82	45 - 135	2	33
2-Butanone (MEK)	100	82.2		ug/L		82	44 - 177	4	32
Carbon disulfide	25.0	22.2		ug/L		89	55 - 143	4	20
Carbon tetrachloride	25.0	20.1		ug/L		81	65 - 135	0	21
Chlorobenzene	25.0	23.7		ug/L		95	65 - 135	2	20
Chlorodibromomethane	25.0	20.8		ug/L		83	65 - 135	6	20
Chloroethane	25.0	21.6		ug/L		86	46 - 136	1	25
Chloroform	25.0	22.2		ug/L		89	65 - 135	4	20

Eurofins TestAmerica, Denver

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-542686/5

Matrix: Water

Analysis Batch: 542686

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
Chloromethane	25.0	18.1		ug/L		72	34 - 145	3	24
Allyl chloride	25.0	23.1		ug/L		93	50 - 135	2	30
1,2-Dibromo-3-Chloropropane	25.0	18.9		ug/L		76	57 - 135	11	22
Dibromomethane	25.0	22.4		ug/L		90	65 - 135	0	26
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	65 - 135	7	20
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	65 - 135	1	20
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	65 - 135	2	23
trans-1,4-Dichloro-2-butene	25.0	15.2		ug/L		61	53 - 135	7	25
Dichlorodifluoromethane	25.0	13.7		ug/L		55	43 - 142	2	30
1,1-Dichloroethane	25.0	22.4		ug/L		90	65 - 135	2	21
1,2-Dichloroethane	25.0	22.0		ug/L		88	65 - 135	5	20
cis-1,2-Dichloroethene	25.0	22.8		ug/L		91	65 - 135	0	20
trans-1,2-Dichloroethene	25.0	20.8		ug/L		83	65 - 135	5	24
1,1-Dichloroethene	25.0	22.4		ug/L		90	65 - 136	1	20
1,2-Dichloropropane	25.0	23.8		ug/L		95	64 - 135	3	20
1,3-Dichloropropane	25.0	23.6		ug/L		94	64 - 135	1	20
2,2-Dichloropropane	25.0	20.2		ug/L		81	65 - 135	5	20
cis-1,3-Dichloropropene	25.0	21.4		ug/L		86	65 - 135	6	26
trans-1,3-Dichloropropene	25.0	20.6		ug/L		83	65 - 135	0	26
1,1-Dichloropropene	25.0	23.1		ug/L		93	65 - 135	4	21
Ethylbenzene	25.0	24.3		ug/L		97	65 - 135	2	20
Ethyl methacrylate	25.0	20.8		ug/L		83	50 - 135	8	30
2-Hexanone	100	88.6		ug/L		89	57 - 139	2	25
Iodomethane	25.0	19.8		ug/L		79	65 - 142	0	25
Isobutyl alcohol	625	429		ug/L		69	55 - 135	1	30
Methylene Chloride	25.0	23.3		ug/L		93	54 - 141	1	26
4-Methyl-2-pentanone (MIBK)	100	93.7		ug/L		94	60 - 150	0	22
Styrene	25.0	23.2		ug/L		93	65 - 135	4	26
1,1,1,2-Tetrachloroethane	25.0	22.4		ug/L		90	65 - 135	2	20
1,1,2,2-Tetrachloroethane	25.0	21.2		ug/L		85	58 - 135	1	20
Tetrachloroethene	25.0	23.6		ug/L		94	65 - 135	4	20
Toluene	25.0	23.2		ug/L		93	65 - 135	3	20
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	58 - 135	8	25
1,1,1-Trichloroethane	25.0	20.5		ug/L		82	65 - 135	6	20
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	64 - 135	0	27
Trichloroethene	25.0	20.1		ug/L		81	65 - 135	12	20
Trichlorofluoromethane	25.0	20.5		ug/L		82	53 - 137	2	27
1,2,3-Trichloropropane	25.0	22.1		ug/L		89	65 - 135	7	23
Vinyl acetate	50.0	45.7		ug/L		91	11 - 187	1	24
Vinyl chloride	25.0	21.7		ug/L		87	40 - 137	3	24
m-Xylene & p-Xylene	25.0	23.7		ug/L		95	65 - 135	4	20
o-Xylene	25.0	24.7		ug/L		99	65 - 135	5	20
Xylenes, Total	50.0	48.4		ug/L		97	65 - 135	4	20
1,2-Dibromoethane	25.0	22.7		ug/L		91	65 - 135	1	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	96		80 - 125

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-542686/5

Matrix: Water

Analysis Batch: 542686

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	94		77 - 120

Lab Sample ID: LCSD 280-542686/7

Matrix: Water

Analysis Batch: 542686

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	236		ug/L		94	50 - 150	5	30
Chloroprene	25.0	21.8		ug/L		87	50 - 150	4	30
Methacrylonitrile	250	253		ug/L		101	50 - 150	1	30
Methyl methacrylate	50.0	48.3		ug/L		97	50 - 150	2	30
Propionitrile	250	232		ug/L		93	50 - 150	0	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

GC/MS VOA

Analysis Batch: 542394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150290-1	TB-03-20210627	Total/NA	Water	8260B	
280-150290-2	PA-5-20210627	Total/NA	Water	8260B	
280-150290-3	MW-38-60-100-20210627	Total/NA	Water	8260B	
280-150290-4	RW-2879M-20210624	Total/NA	Water	8260B	
280-150290-5	RW-7505P-20210624	Total/NA	Water	8260B	
280-150290-6	RW-8048P-20210624	Total/NA	Water	8260B	
280-150290-7	RW-8035P-20210624	Total/NA	Water	8260B	
280-150290-8	PA-10-20210624	Total/NA	Water	8260B	
280-150290-9	RW-7350P-20210624	Total/NA	Water	8260B	
280-150290-10	PA-9-58-68-20210624	Total/NA	Water	8260B	
280-150290-11	PA-9-88-98-20210624	Total/NA	Water	8260B	
280-150290-12	RW-7549P-20210624	Total/NA	Water	8260B	
MB 280-542394/9	Method Blank	Total/NA	Water	8260B	
LCS 280-542394/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-542394/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-542394/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-542394/7	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 542401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150306-1	RW-8284P-20210625	Total/NA	Water	8260B	
280-150306-2	RW-2172F-20210625	Total/NA	Water	8260B	
280-150306-3	RW-7588P-20210625	Total/NA	Water	8260B	
280-150306-4	RW-8209P-20210625	Total/NA	Water	8260B	
280-150306-5	RW-7688P-20210625	Total/NA	Water	8260B	
280-150306-6	RW-5898BI-20210625	Total/NA	Water	8260B	
280-150306-7	RW-2140H-20210626	Total/NA	Water	8260B	
280-150306-8	MW-116S-20210626	Total/NA	Water	8260B	
280-150306-9	RW-2076F-20210626	Total/NA	Water	8260B	
280-150306-10	RW-8012P-20210626	Total/NA	Water	8260B	
280-150306-11	EB-07-20210627	Total/NA	Water	8260B	
280-150306-12	RW-7244P-20210624	Total/NA	Water	8260B	
280-150306-13	RW-2237H-20210624	Total/NA	Water	8260B	
280-150306-14	RW-7070B-20210624	Total/NA	Water	8260B	
280-150306-15	RW-8105PS-20210625	Total/NA	Water	8260B	
MB 280-542401/9	Method Blank	Total/NA	Water	8260B	
LCS 280-542401/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-542401/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-542401/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-542401/7	Lab Control Sample Dup	Total/NA	Water	8260B	
280-150306-2 MS	RW-2172F-20210625	Total/NA	Water	8260B	
280-150306-2 MSD	RW-2172F-20210625	Total/NA	Water	8260B	

Analysis Batch: 542686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-150306-16	MW-38-105-115-20210627	Total/NA	Water	8260B	
280-150306-17	TB-02-20210627	Total/NA	Water	8260B	
280-150306-18	MW-38-121-130-20210627	Total/NA	Water	8260B	
MB 280-542686/9	Method Blank	Total/NA	Water	8260B	
LCS 280-542686/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 280-542686/6	Lab Control Sample	Total/NA	Water	8260B	

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

GC/MS VOA (Continued)

Analysis Batch: 542686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-542686/5	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 280-542686/7	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: TB-03-20210627

Lab Sample ID: 280-150290-1

Date Collected: 06/27/21 19:30

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 00:55	PP	TAL DEN

Client Sample ID: PA-5-20210627

Lab Sample ID: 280-150290-2

Date Collected: 06/27/21 11:50

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 01:16	PP	TAL DEN

Client Sample ID: MW-38-60-100-20210627

Lab Sample ID: 280-150290-3

Date Collected: 06/27/21 15:05

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 01:37	PP	TAL DEN

Client Sample ID: RW-2879M-20210624

Lab Sample ID: 280-150290-4

Date Collected: 06/24/21 09:10

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 01:58	PP	TAL DEN

Client Sample ID: RW-7505P-20210624

Lab Sample ID: 280-150290-5

Date Collected: 06/24/21 08:44

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 02:19	PP	TAL DEN

Client Sample ID: RW-8048P-20210624

Lab Sample ID: 280-150290-6

Date Collected: 06/24/21 10:29

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 02:41	PP	TAL DEN

Client Sample ID: RW-8035P-20210624

Lab Sample ID: 280-150290-7

Date Collected: 06/24/21 11:33

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 03:02	PP	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: PA-10-20210624

Lab Sample ID: 280-150290-8

Date Collected: 06/24/21 12:20

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 03:23	PP	TAL DEN

Client Sample ID: RW-7350P-20210624

Lab Sample ID: 280-150290-9

Date Collected: 06/24/21 12:48

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 03:44	PP	TAL DEN

Client Sample ID: PA-9-58-68-20210624

Lab Sample ID: 280-150290-10

Date Collected: 06/24/21 14:20

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 04:05	PP	TAL DEN

Client Sample ID: PA-9-88-98-20210624

Lab Sample ID: 280-150290-11

Date Collected: 06/24/21 15:30

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 04:27	PP	TAL DEN

Client Sample ID: RW-7549P-20210624

Lab Sample ID: 280-150290-12

Date Collected: 06/24/21 14:13

Matrix: Water

Date Received: 06/29/21 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	542394	07/07/21 04:48	PP	TAL DEN

Client Sample ID: RW-8284P-20210625

Lab Sample ID: 280-150306-1

Date Collected: 06/25/21 12:06

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 11:39	TAW	TAL DEN

Client Sample ID: RW-2172F-20210625

Lab Sample ID: 280-150306-2

Date Collected: 06/25/21 12:55

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 12:02	TAW	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-7588P-20210625

Lab Sample ID: 280-150306-3

Date Collected: 06/25/21 14:31

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 12:25	TAW	TAL DEN

Client Sample ID: RW-8209P-20210625

Lab Sample ID: 280-150306-4

Date Collected: 06/25/21 15:51

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 12:48	TAW	TAL DEN

Client Sample ID: RW-7688P-20210625

Lab Sample ID: 280-150306-5

Date Collected: 06/25/21 16:38

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 13:11	TAW	TAL DEN

Client Sample ID: RW-5898BI-20210625

Lab Sample ID: 280-150306-6

Date Collected: 06/25/21 18:00

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 13:34	TAW	TAL DEN

Client Sample ID: RW-2140H-20210626

Lab Sample ID: 280-150306-7

Date Collected: 06/26/21 11:20

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 13:57	TAW	TAL DEN

Client Sample ID: MW-116S-20210626

Lab Sample ID: 280-150306-8

Date Collected: 06/26/21 12:30

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 14:19	TAW	TAL DEN

Client Sample ID: RW-2076F-20210626

Lab Sample ID: 280-150306-9

Date Collected: 06/26/21 14:55

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 14:42	TAW	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: RW-8012P-20210626

Lab Sample ID: 280-150306-10

Date Collected: 06/26/21 15:40

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 15:05	TAW	TAL DEN

Client Sample ID: EB-07-20210627

Lab Sample ID: 280-150306-11

Date Collected: 06/27/21 08:50

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 10:31	TAW	TAL DEN

Client Sample ID: RW-7244P-20210624

Lab Sample ID: 280-150306-12

Date Collected: 06/24/21 15:03

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 15:28	TAW	TAL DEN

Client Sample ID: RW-2237H-20210624

Lab Sample ID: 280-150306-13

Date Collected: 06/24/21 16:00

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 15:51	TAW	TAL DEN

Client Sample ID: RW-7070B-20210624

Lab Sample ID: 280-150306-14

Date Collected: 06/24/21 16:59

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 16:14	TAW	TAL DEN

Client Sample ID: RW-8105PS-20210625

Lab Sample ID: 280-150306-15

Date Collected: 06/25/21 17:35

Matrix: Water

Date Received: 06/29/21 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	542401	07/07/21 16:37	TAW	TAL DEN

Client Sample ID: MW-38-105-115-20210627

Lab Sample ID: 280-150306-16

Date Collected: 06/27/21 16:50

Matrix: Water

Date Received: 06/29/21 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	542686	07/09/21 11:20	TAW	TAL DEN

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Client Sample ID: TB-02-20210627

Lab Sample ID: 280-150306-17

Date Collected: 06/27/21 18:00

Matrix: Water

Date Received: 06/29/21 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	542686	07/09/21 10:16	TAW	TAL DEN

Client Sample ID: MW-38-121-130-20210627

Lab Sample ID: 280-150306-18

Date Collected: 06/27/21 19:30

Matrix: Water

Date Received: 06/29/21 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	542686	07/09/21 11:41	TAW	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.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Laboratory: Eurofins TestAmerica, Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4025-011	01-08-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Dichlorobromomethane

Method Summary

Client: CDM Smith, Inc.

Job ID: 280-150290-1

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.
Project/Site: Bannock Ft. Hall Mine LF, Idaho

Job ID: 280-150290-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-150290-1	TB-03-20210627	Water	06/27/21 19:30	06/29/21 09:25	
280-150290-2	PA-5-20210627	Water	06/27/21 11:50	06/29/21 09:25	
280-150290-3	MW-38-60-100-20210627	Water	06/27/21 15:05	06/29/21 09:25	
280-150290-4	RW-2879M-20210624	Water	06/24/21 09:10	06/29/21 09:25	
280-150290-5	RW-7505P-20210624	Water	06/24/21 08:44	06/29/21 09:25	
280-150290-6	RW-8048P-20210624	Water	06/24/21 10:29	06/29/21 09:25	
280-150290-7	RW-8035P-20210624	Water	06/24/21 11:33	06/29/21 09:25	
280-150290-8	PA-10-20210624	Water	06/24/21 12:20	06/29/21 09:25	
280-150290-9	RW-7350P-20210624	Water	06/24/21 12:48	06/29/21 09:25	
280-150290-10	PA-9-58-68-20210624	Water	06/24/21 14:20	06/29/21 09:25	
280-150290-11	PA-9-88-98-20210624	Water	06/24/21 15:30	06/29/21 09:25	
280-150290-12	RW-7549P-20210624	Water	06/24/21 14:13	06/29/21 09:25	
280-150306-1	RW-8284P-20210625	Water	06/25/21 12:06	06/29/21 09:25	
280-150306-2	RW-2172F-20210625	Water	06/25/21 12:55	06/29/21 09:25	
280-150306-3	RW-7588P-20210625	Water	06/25/21 14:31	06/29/21 09:25	
280-150306-4	RW-8209P-20210625	Water	06/25/21 15:51	06/29/21 09:25	
280-150306-5	RW-7688P-20210625	Water	06/25/21 16:38	06/29/21 09:25	
280-150306-6	RW-5898BI-20210625	Water	06/25/21 18:00	06/29/21 09:25	
280-150306-7	RW-2140H-20210626	Water	06/26/21 11:20	06/29/21 09:25	
280-150306-8	MW-116S-20210626	Water	06/26/21 12:30	06/29/21 09:25	
280-150306-9	RW-2076F-20210626	Water	06/26/21 14:55	06/29/21 09:25	
280-150306-10	RW-8012P-20210626	Water	06/26/21 15:40	06/29/21 09:25	
280-150306-11	EB-07-20210627	Water	06/27/21 08:50	06/29/21 09:25	
280-150306-12	RW-7244P-20210624	Water	06/24/21 15:03	06/29/21 09:25	
280-150306-13	RW-2237H-20210624	Water	06/24/21 16:00	06/29/21 09:25	
280-150306-14	RW-7070B-20210624	Water	06/24/21 16:59	06/29/21 09:25	
280-150306-15	RW-8105PS-20210625	Water	06/25/21 17:35	06/29/21 09:25	
280-150306-16	MW-38-105-115-20210627	Water	06/27/21 16:50	06/29/21 09:25	
280-150306-17	TB-02-20210627	Water	06/27/21 18:00	06/29/21 09:25	
280-150306-18	MW-38-121-130-20210627	Water	06/27/21 19:30	06/29/21 09:25	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS1 Analysis Batch Number: 538548Lab Sample ID: STD010 280-538548/24 IC Client Sample ID: _____Date Analyzed: 06/04/21 10:18 Lab File ID: MS1_2712.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrothiophene	8.02	Assign Peak	seifertj	06/05/21 11:08
2-Nitropropane		Invalid Compound ID	seifertj	06/04/21 13:32
n-Butanol		Invalid Compound ID	seifertj	06/04/21 13:32
1,3,5-Trichlorobenzene	12.22	Assign Peak	seifertj	06/05/21 11:11

Lab Sample ID: STD020 280-538548/25 IC Client Sample ID: _____Date Analyzed: 06/04/21 10:39 Lab File ID: MS1_2713.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	2.91	Assign Peak	seifertj	06/04/21 10:55
1,3,5-Trichlorobenzene	12.22	Assign Peak	seifertj	06/04/21 10:55

Lab Sample ID: STD050 280-538548/26 IC Client Sample ID: _____Date Analyzed: 06/04/21 11:00 Lab File ID: MS1_2714.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Propanol	3.41	Assign Peak	seifertj	06/04/21 11:45

Lab Sample ID: STD10 280-538548/27 IC Client Sample ID: _____Date Analyzed: 06/04/21 11:21 Lab File ID: MS1_2715.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	6.03	Peak Tail	seifertj	06/04/21 13:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS1 Analysis Batch Number: 538548Lab Sample ID: STD005 280-538548/14 IC Client Sample ID: _____Date Analyzed: 06/04/21 13:50 Lab File ID: MS1_2722.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	seifertj	06/05/21 09:04
Bromomethane		Invalid Compound ID	seifertj	06/05/21 09:03
Ethyl methacrylate		Invalid Compound ID	seifertj	06/05/21 09:04

Lab Sample ID: STD010 280-538548/15 IC Client Sample ID: _____Date Analyzed: 06/04/21 14:11 Lab File ID: MS1_2723.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.70	Assign Peak	seifertj	06/05/21 09:05
Chloromethane	1.90	Assign Peak	seifertj	06/05/21 09:05
Chloroethane	2.46	Assign Peak	seifertj	06/05/21 09:05
Iodomethane	3.38	Assign Peak	seifertj	06/05/21 09:05
Methyl acetate	3.58	Assign Peak	seifertj	06/05/21 09:05
sec-Butyl Alcohol	4.99	Assign Peak	seifertj	06/05/21 09:05
Chlorobromomethane	5.06	Assign Peak	seifertj	06/05/21 09:06
1,1-Dichloropropene	5.42	Assign Peak	seifertj	06/05/21 09:06
1,2-Dichloroethane	5.63	Assign Peak	seifertj	06/05/21 09:06
2-Pentanone	6.29	Assign Peak	seifertj	06/05/21 09:06
1,2-Dichloropropane	6.38	Assign Peak	seifertj	06/05/21 09:06
Ethyl methacrylate	7.52	Poor chromatography	seifertj	06/05/21 09:34
1,3-Dichloropropane	7.83	Assign Peak	seifertj	06/05/21 09:07
Bromoform	9.38	Assign Peak	seifertj	06/05/21 09:07
trans-1,4-Dichloro-2-butene	9.86	Assign Peak	seifertj	06/05/21 09:07
1,2,3-Trichloropropane	9.88	Assign Peak	seifertj	06/05/21 09:08
Isobutyl alcohol		Invalid Compound ID	seifertj	06/05/21 09:06
1,2-Dibromo-3-Chloropropane	12.03	Assign Peak	seifertj	06/05/21 09:08
Hexachlorobutadiene	12.99	Assign Peak	seifertj	06/05/21 09:08
Naphthalene	13.12	Assign Peak	seifertj	06/05/21 09:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS1 Analysis Batch Number: 538548Lab Sample ID: STD020 280-538548/16 IC Client Sample ID: _____Date Analyzed: 06/04/21 14:33 Lab File ID: MS1_2724.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.69	Assign Peak	seifertj	06/05/21 09:09
Chloroethane	2.46	Assign Peak	seifertj	06/05/21 09:09
1,4-Dioxane	6.43	Assign Peak	seifertj	06/05/21 09:10
Bromoform	9.38	Assign Peak	seifertj	06/05/21 09:10
1,2-Dibromo-3-Chloropropane	12.02	Assign Peak	seifertj	06/05/21 09:09
Hexachlorobutadiene	12.99	Assign Peak	seifertj	06/05/21 09:09

Lab Sample ID: ICV 280-538548/23 Client Sample ID: _____Date Analyzed: 06/04/21 17:24 Lab File ID: MS1_2732.D GC Column: DB-624 (60.25 ID: 0.25 (mm))

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.14	Assign Peak	seifertj	06/05/21 11:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9 Analysis Batch Number: 541632Lab Sample ID: IC 280-541632/16 Client Sample ID: _____Date Analyzed: 06/29/21 11:08 Lab File ID: MS9_5637.D GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
sec-Butyl Alcohol	4.93	Wrong peak	wickhamt	06/29/21 12:05

Lab Sample ID: IC 280-541632/17 Client Sample ID: _____Date Analyzed: 06/29/21 11:27 Lab File ID: MS9_5638.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
sec-Butyl Alcohol	4.92	Wrong peak	wickhamt	06/29/21 12:08

Lab Sample ID: IC 280-541632/18 Client Sample ID: _____Date Analyzed: 06/29/21 11:47 Lab File ID: MS9_5639.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.33	Peak Tail	ornelasg	06/30/21 10:11

Lab Sample ID: ICIS 280-541632/19 Client Sample ID: _____Date Analyzed: 06/29/21 12:07 Lab File ID: MS9_5640.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.33	Peak Tail	ornelasg	06/30/21 10:10

Lab Sample ID: IC 280-541632/20 Client Sample ID: _____Date Analyzed: 06/29/21 12:27 Lab File ID: MS9_5641.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.33	Peak Tail	ornelasg	06/30/21 10:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9 Analysis Batch Number: 541632Lab Sample ID: IC 280-541632/21 Client Sample ID: _____Date Analyzed: 06/29/21 12:47 Lab File ID: MS9_5642.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.33	Peak Tail	ornelasg	06/30/21 10:09

Lab Sample ID: IC 280-541632/22 Client Sample ID: _____Date Analyzed: 06/29/21 13:07 Lab File ID: MS9_5643.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.34	Peak Tail	ornelasg	06/30/21 10:08

Lab Sample ID: IC 280-541632/23 Client Sample ID: _____Date Analyzed: 06/29/21 13:27 Lab File ID: MS9_5644.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.33	Peak Tail	ornelasg	06/30/21 10:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9 Analysis Batch Number: 541805Lab Sample ID: IC 280-541805/20 Client Sample ID: _____Date Analyzed: 06/30/21 10:49 Lab File ID: MS9_5693.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	2.87	Assign Peak	wickhamt	06/30/21 11:08

Lab Sample ID: IC 280-541805/21 Client Sample ID: _____Date Analyzed: 06/30/21 11:09 Lab File ID: MS9_5694.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	2.87	Assign Peak	wickhamt	06/30/21 12:00
2-Propanol	3.37	Assign Peak	wickhamt	06/30/21 12:00
Propionitrile	4.84	Assign Peak	wickhamt	06/30/21 12:00
Methyl methacrylate	6.35	Assign Peak	wickhamt	06/30/21 12:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9 Analysis Batch Number: 541956Lab Sample ID: IC 280-541956/20 Client Sample ID: _____Date Analyzed: 06/30/21 19:26 Lab File ID: MS9_5711.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.87	Assign Peak	wickhamt	07/01/21 05:14

Lab Sample ID: IC 280-541956/21 Client Sample ID: _____Date Analyzed: 06/30/21 19:46 Lab File ID: MS9_5712.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.87	Assign Peak	wickhamt	07/01/21 05:14
Chloroethane	2.44	Assign Peak	wickhamt	07/01/21 05:14

Lab Sample ID: IC 280-541956/22 Client Sample ID: _____Date Analyzed: 06/30/21 20:06 Lab File ID: MS9_5713.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.87	Assign Peak	wickhamt	07/01/21 05:15
Chloroethane	2.45	Assign Peak	wickhamt	07/01/21 05:15
Dichlorofluoromethane	2.67	Assign Peak	wickhamt	07/01/21 05:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9 Analysis Batch Number: 542401Lab Sample ID: CCV 280-542401/2 Client Sample ID: _____Date Analyzed: 07/07/21 06:43 Lab File ID: MS9_5878.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,3-Trichloropropane	9.81	Assign Peak	wickhamt	07/07/21 07:00

Lab Sample ID: LCSD 280-542401/5 Client Sample ID: _____Date Analyzed: 07/07/21 08:14 Lab File ID: MS9_5882.d GC Column: RXI-624SilMS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,3-Trichloropropane	9.82	Assign Peak	wickhamt	07/07/21 08:30

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Acrolein B_00005	06/08/21	05/08/21	Methanol, Lot 230446	10 mL	MV-568720.sec_00033	500 uL	Acrolein	987.5 ug/mL
.MV-568720.sec_00033	09/30/21		RESTEK, Lot A0159281		(Purchased Reagent)		Acrolein	19750 ug/mL
Acrolein B_00006	07/23/21	06/23/21	Methanol, Lot 230446	10 mL	MV-568720.sec_00033	500 uL	Acrolein	987.5 ug/mL
.MV-568720.sec_00033	09/30/21		RESTEK, Lot A0159281		(Purchased Reagent)		Acrolein	19750 ug/mL
mv-Cent BFB_00003							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					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_00089	06/06/21	05/06/21	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
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00007	1250 uL	2-Chloroethyl vinyl ether	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
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00007	02/28/22		RESTEK, Lot A0158872		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00091	07/01/21	06/01/21	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
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MV-569722_00012	03/31/23		RESTEK, Lot A0159085		MV-569723_00007	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
					(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
.MV-569723_00007	02/28/22		RESTEK, Lot A0158872		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
							2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00093	07/23/21	06/23/21	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
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722_00012	03/31/23		RESTEK, Lot A0159085		MV-569723_00007	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
					(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
.MV-569723_00007	02/28/22		RESTEK, Lot A0158872		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
							2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas B_00091	06/20/21	05/20/21	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_00092	07/17/21	06/17/21	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-Gas B_00093	08/07/21	07/07/21	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_SS_00018	08/27/21	02/27/21	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_00023	07/10/21	06/10/21	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

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-Main add A_00001	07/24/21	06/24/21	P&T Methanol, Lot 181124	12.5 mL	MV-CUS17739_00008	1000 uL	1-Chlorohexane	80 ug/mL					
							2-Pentanone	320 ug/mL					
							sec-Butyl Alcohol	2400 ug/mL					
.MV-CUS17739_00008	02/28/23	Agilent, Lot 6582355			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL					
							2-Pentanone	4000 ug/mL					
							sec-Butyl Alcohol	30000 ug/mL					
MV-MegaMain B_00047	06/22/21	05/22/21	P&T Methanol, Lot 181124	25 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
												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		

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-MegaMain B_00049	07/02/21	06/23/21	P&T Methanol, Lot 181124	25 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

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-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
							Allyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-MegaMain B_00050	07/16/21	07/06/21	P&T Methanol, Lot 181124	25 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00050	06/08/21	05/08/21	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	3000 uL	Cyclohexanone	3000 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00050	06/08/21	05/08/21	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-MegaMainA_00052	07/17/21	06/17/21	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-MegaMainA_00052	07/17/21	06/17/21	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_00051	09/30/21	03/30/21	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
							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_00011	2000 uL	cis-1,4-Dichloro-2-butene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00011	03/01/21	SPEX, Lot CP200901024			(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 A_00053	11/02/21	06/29/21	P&T Methanol, Lot 199628	30 mL	mv-570808_00007	600 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_00007	600 uL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					mv-571993_00004	600 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	900 uL	Ethanol	3000 ug/mL
					mv-VO-TAOH-5_00012	3000 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00012	11/02/21		SPEX, Lot AA210506021A		(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_00033	06/30/21	05/01/21	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00005	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00005	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00004	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808.sec_00005	04/30/21		Restek, Lot A0154206		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809.sec_00005	03/31/21		Restek, Lot A0153337		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993.sec_00004	11/30/20		RESTEK, Lot A0143318		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL
MV-Supp B_00034	07/15/21	05/15/21	P&T Methanol, Lot 127999	20 mL	mv-570808.sec_00005	400 uL	Chloroprene	50 ug/mL
							Methacrylonitrile	500 ug/mL
					mv-570809.sec_00005	400 uL	Methyl methacrylate	100 ug/mL
					mv-571993.sec_00004	400 uL	Acetonitrile	500 ug/mL
							Propionitrile	500 ug/mL
.mv-570808.sec_00005	04/30/21		Restek, Lot A0154206		(Purchased Reagent)		Chloroprene	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
.mv-570809.sec_00005	03/31/21		Restek, Lot A0153337		(Purchased Reagent)		Methyl methacrylate	5000 ug/mL
.mv-571993.sec_00004	11/30/20		RESTEK, Lot A0143318		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Propionitrile	25000 ug/mL

Reagent

mv-30241_00008



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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)

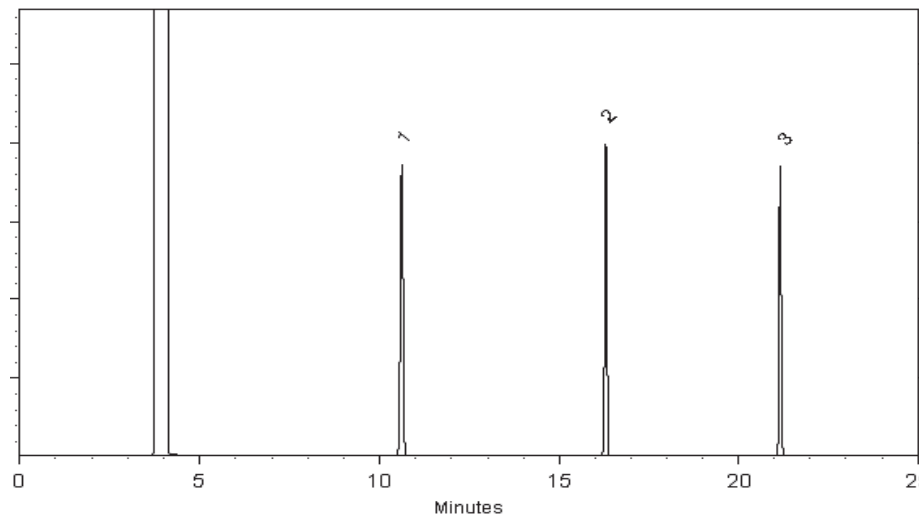
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

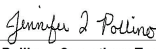
Det. Type:
FID



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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dibromofluoromethane CAS # 1868-53-7 (Lot 0012017) Purity 99.8%	2,500.2 µg/mL	+/- 14.5364 µg/mL Gravimetric +/- 140.1837 µg/mL Unstressed +/- 143.4639 µg/mL Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot PR-26748) Purity 99%	2,500.2 µg/mL	+/- 14.5361 µg/mL Gravimetric +/- 140.1809 µg/mL Unstressed +/- 143.4610 µg/mL Stressed
3	Toluene-d8 CAS # 2037-26-5 (Lot PR-26623) Purity 99%	2,500.2 µg/mL	+/- 14.5364 µg/mL Gravimetric +/- 140.1837 µg/mL Unstressed +/- 143.4639 µg/mL Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KOV) Purity 99%	2,500.3 µg/mL	+/- 14.5370 µg/mL Gravimetric +/- 140.1893 µg/mL Unstressed +/- 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:

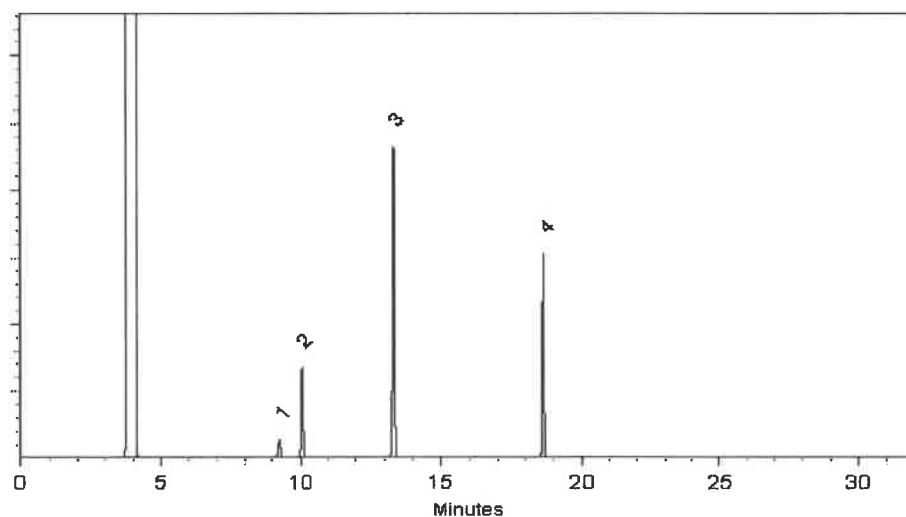
200°C

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 Maje

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 25725-11-5 (Lot CD-107) Purity 98%	5,018.0 µg/mL	+/- 29.1735 µg/mL Gravimetric +/- 107.4354 µg/mL Unstressed +/- 110.5588 µg/mL Stressed
2	2-Butanone-d5 CAS # 24313-50-6 (Lot M-276) Purity 99%	1,253.8 µg/mL	+/- 7.2897 µg/mL Gravimetric +/- 26.8440 µg/mL Unstressed +/- 27.6244 µg/mL Stressed
3	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	250.1 µg/mL	+/- 1.4575 µg/mL Gravimetric +/- 5.3556 µg/mL Unstressed +/- 5.5112 µg/mL Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 (Lot I-19942) Purity 99%	5,004.8 µg/mL	+/- 29.0965 µg/mL Gravimetric +/- 107.1519 µg/mL Unstressed +/- 110.2670 µg/mL Stressed
5	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-23926) Purity 99%	250.4 µg/mL	+/- 1.4589 µg/mL Gravimetric +/- 5.3609 µg/mL Unstressed +/- 5.5167 µg/mL Stressed
6	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	250.6 µg/mL	+/- 1.4604 µg/mL Gravimetric +/- 5.3663 µg/mL Unstressed +/- 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)

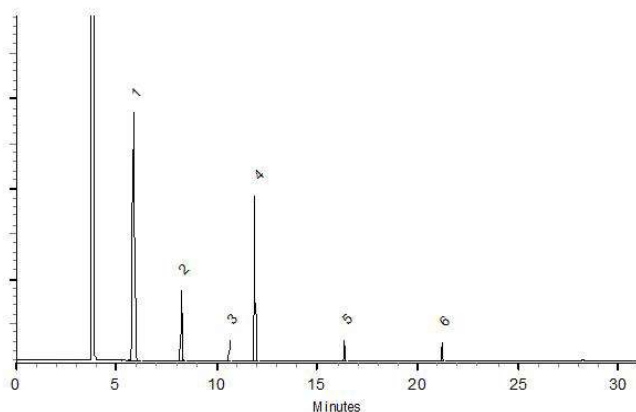
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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_00033



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



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.:** A0159281
Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : September 30, 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	19,756.8 µg/mL	+/- 115.6804 µg/mL Gravimetric
	CAS # 107-02-8.SEC (Lot CS-D0310)		+/- 394.6881 µg/mL Unstressed
	Purity 99%		+/- 885.4724 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:

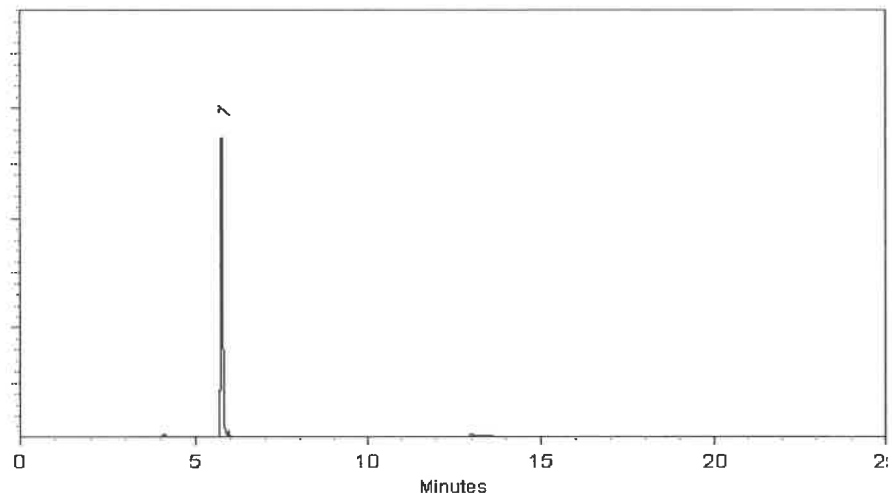
200°C

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.

Michael Mage

Date Mixed: 27-Mar-2020

Balance: 1127510105

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 03-Apr-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

MV-568720_00033



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



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 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.

Rec'd 4/28/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acrolein CAS # 107-02-8 Purity 99% (Lot D0012019410)	19,810.7 µg/mL	+/- 115.9958 µg/mL Gravimetric +/- 395.7642 µg/mL Unstressed +/- 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:

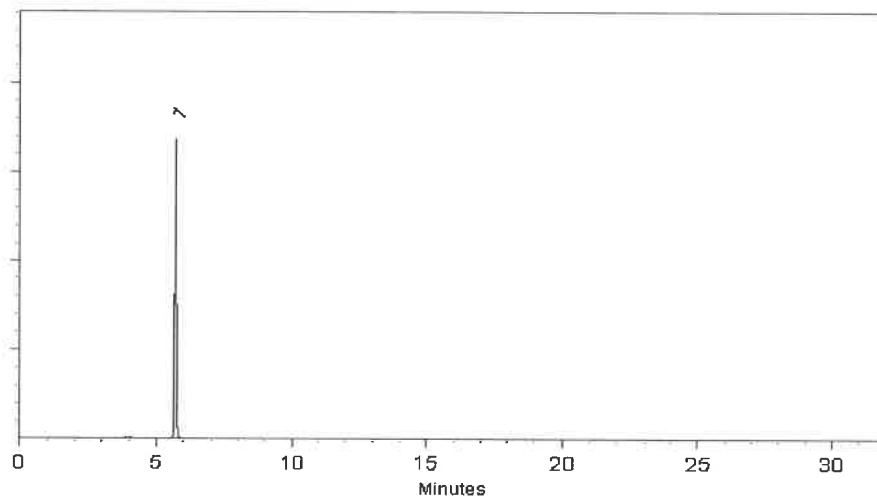
200°C

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



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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)

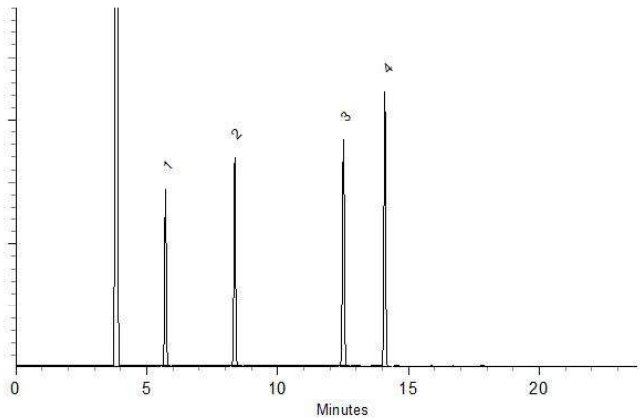
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 67-64-1 (Lot SHBJ7699) Purity 99%	12,500.5 µg/mL	+/- 72.6790 µg/mL Gravimetric +/- 754.2106 µg/mL Unstressed +/- 756.0012 µg/mL Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBF2461V) Purity 99%	12,501.0 µg/mL	+/- 72.6819 µg/mL Gravimetric +/- 754.2407 µg/mL Unstressed +/- 756.0314 µg/mL Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBH8930) Purity 99%	12,501.5 µg/mL	+/- 72.6848 µg/mL Gravimetric +/- 754.2709 µg/mL Unstressed +/- 756.0617 µg/mL Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKCD9048) Purity 99%	12,501.8 µg/mL	+/- 72.6863 µg/mL Gravimetric +/- 754.2860 µg/mL Unstressed +/- 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)

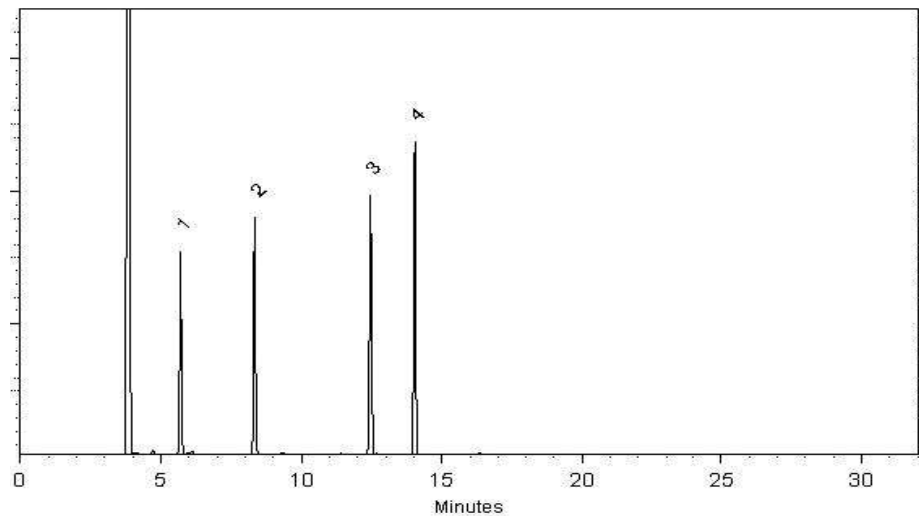
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

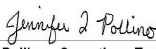
Det. Type:
FID



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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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.sec_00010



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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) CAS # 75-71-8.SEC (Lot 24847) Purity 99%	2,499.3 µg/mL	+/- 25.7724 µg/mL Gravimetric +/- 141.7384 µg/mL Unstressed +/- 144.9810 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,506.0 µg/mL	+/- 21.8612 µg/mL Gravimetric +/- 141.4482 µg/mL Unstressed +/- 144.7145 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,505.4 µg/mL	+/- 25.4396 µg/mL Gravimetric +/- 142.0168 µg/mL Unstressed +/- 145.2689 µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 22331) Purity 99%	2,500.1 µg/mL	+/- 22.0034 µg/mL Gravimetric +/- 141.1491 µg/mL Unstressed +/- 144.4071 µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,511.9 µg/mL	+/- 23.0453 µg/mL Gravimetric +/- 141.9646 µg/mL Unstressed +/- 145.2346 µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,498.5 µg/mL	+/- 23.5866 µg/mL Gravimetric +/- 141.3133 µg/mL Unstressed +/- 144.5633 µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 * (Lot 7766400) Purity 97%	2,450.0 µg/mL	+/- 14.3780 µg/mL Gravimetric +/- 137.3830 µg/mL Unstressed +/- 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)

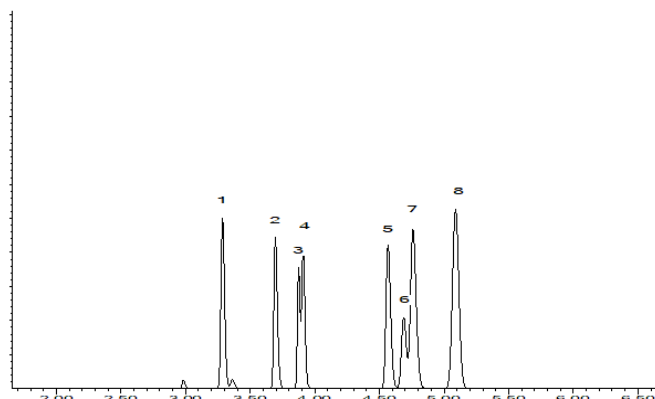
Carrier Gas:
helium-constant pressure 30 psi

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

Brandon Reish - Mix Technician

Date Mixed: 24-Oct-2018

Balance: 1127510105

Justin Albertson

Justin 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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 Lot No.: A0159085

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2023 Storage: 0°C or colder

REC'D
6/2/20
Gm

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 Gravimetric +/- 140.5076 µg/mL Unstressed +/- 143.7858 µg/mL Stressed			
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBK6571) Purity 99%	2,500.6 µg/mL	+/- 16.3299 µg/mL Gravimetric +/- 140.4038 µg/mL Unstressed +/- 143.6799 µg/mL Stressed			
3	Vinyl chloride CAS # 75-01-4 (Lot 00015559) Purity 99%	2,500.2 µg/mL	+/- 17.2154 µg/mL Gravimetric +/- 140.4890 µg/mL Unstressed +/- 143.7623 µg/mL Stressed			
4	1,3-Butadiene CAS # 106-99-0 (Lot SHBK2299) Purity 99%	2,500.7 µg/mL	+/- 17.6652 µg/mL Gravimetric +/- 140.5681 µg/mL Unstressed +/- 143.8406 µg/mL Stressed			
5	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	2,501.2 µg/mL	+/- 16.4034 µg/mL Gravimetric +/- 140.4450 µg/mL Unstressed +/- 143.7217 µg/mL Stressed			
6	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 107-401039114-1) Purity 99%	2,500.3 µg/mL	+/- 17.7279 µg/mL Gravimetric +/- 140.5555 µg/mL Unstressed +/- 143.8274 µg/mL Stressed			
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 (Lot 8582700) Purity 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL Gravimetric +/- 140.1725 µg/mL Unstressed +/- 143.4524 µg/mL 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)

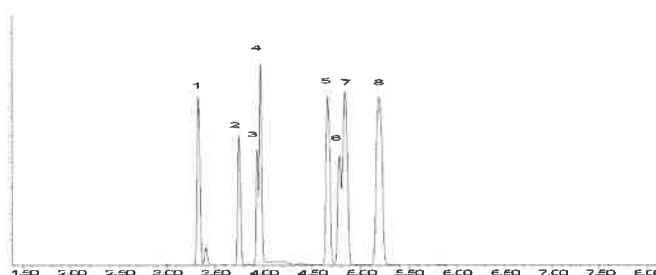
Carrier Gas:
helium-constant pressure 30 psi

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

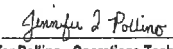


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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_00007



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0158872
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 : March 31, 2023 **Storage:** 0°C or colder

Rec'd 6/2/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether CAS # 110-75-8 (Lot MKBS6526V) Purity 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL Gravimetric +/- 53.5360 µg/mL Unstressed +/- 55.0924 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)

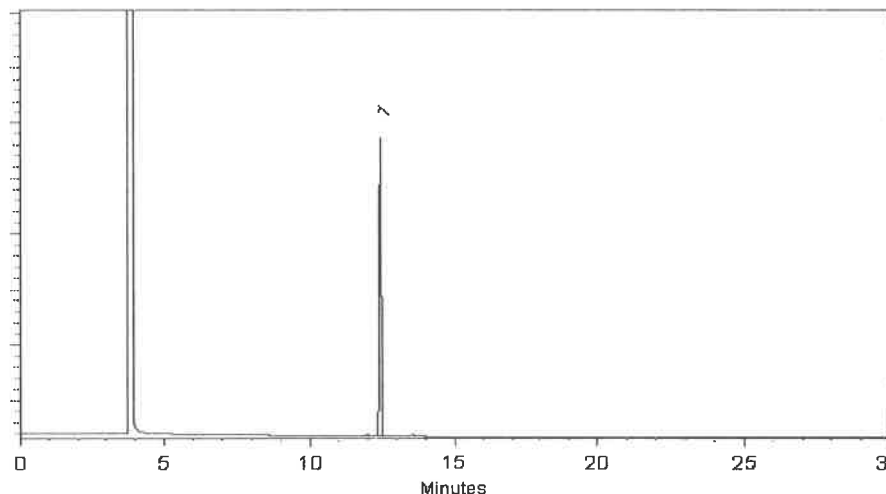
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 16-Mar-2020 **Balance:** B707717271

Tyler Brown - Operations Tech-ARM QC

Date Passed: 18-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 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	Vinyl acetate CAS # 108-05-4.SEC (Lot 190320CGKJ) Purity 99%	5,034.0 µg/mL	+/- 29.5423 µg/mL Gravimetric +/- 303.7501 µg/mL Unstressed +/- 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:

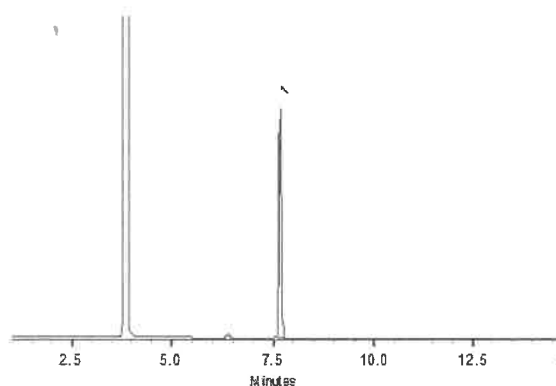
200°C

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

MV-569724_00025



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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
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2021 **Storage:** 0°C or colder
Handling: This product is photosensitive.

REC 11)
4/24/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Vinyl acetate CAS # 108-05-4 (Lot 192709KJ) Purity 99%	5,040.0 µg/mL	+/- 29.5103 µg/mL Gravimetric +/- 304.1056 µg/mL Unstressed +/- 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:

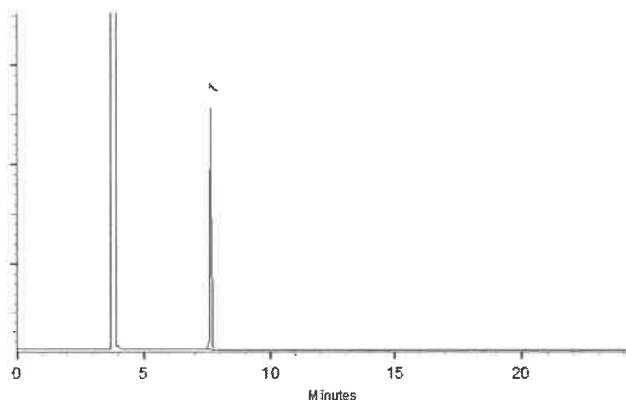
200°C

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
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Reagent

MV-569727_00010



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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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : March 31, 2022

Storage: 10°C or colder

REC'D 4/28/20

Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Cyclohexanone CAS # 108-94-1 Purity 99% (Lot MKCD4357)	25,006.0 µg/mL	+/- 146.4156 µg/mL Gravimetric +/- 1,508.8223 µg/mL Unstressed +/- 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)

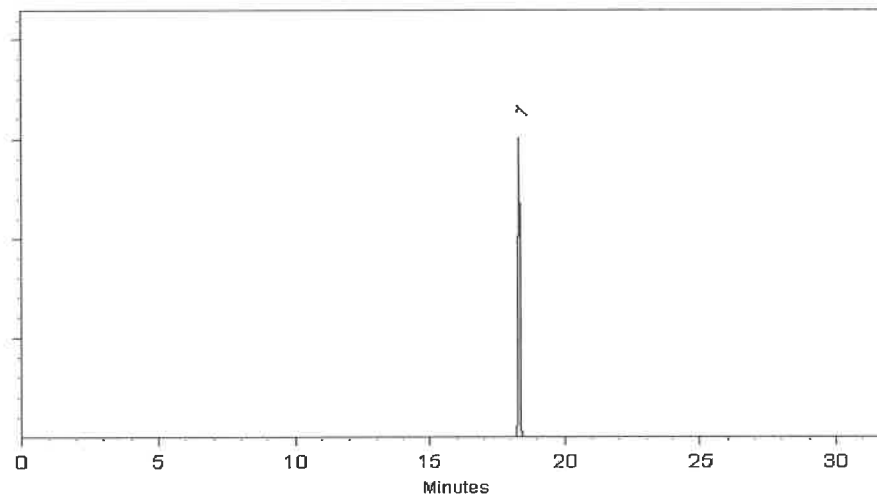
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Date Passed: 07-Mar-2019

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. : 570808.SEC **Lot No.:** A0154206
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 : April 30, 2021 **Storage:** 0°C or colder

REC'D 4/23/20

GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol) CAS # 67-63-0.SEC (Lot NWVYK) Purity 99%	25,035.5 µg/mL	+/- 146.5884 µg/mL +/- 1,238.5738 µg/mL +/- 1,269.3660 µg/mL
2	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 * (Lot 190814JLM) Purity 99%	2,506.0 µg/mL	+/- 14.7066 µg/mL +/- 123.9825 µg/mL +/- 127.0647 µg/mL
3	Methacrylonitrile CAS # 126-98-7 * (Lot 1012019) Purity 99%	25,025.5 µg/mL	+/- 146.5298 µg/mL +/- 1,238.0790 µg/mL +/- 1,268.8590 µg/mL
4	2,2,4-Trimethylpentane (Isooctane) CAS # 540-84-1.SEC (Lot 4597900) Purity 99%	2,525.0 µg/mL	+/- 14.8181 µg/mL +/- 124.9226 µg/mL +/- 128.0281 µg/mL
5	1-Butanol CAS # 71-36-3.SEC (Lot ELBOC) Purity 99%	62,526.5 µg/mL	+/- 366.0875 µg/mL +/- 3,093.3525 µg/mL +/- 3,170.2566 µg/mL
6	2-Nitropropane CAS # 79-46-9.SEC (Lot Y4YWD) Purity 98%	5,006.8 µg/mL	+/- 29.3160 µg/mL +/- 247.7009 µg/mL +/- 253.8590 µg/mL
7	1-Chlorohexane CAS # 544-10-5.SEC (Lot 8171700) Purity 99%	2,501.0 µg/mL	+/- 14.6773 µg/mL +/- 123.7352 µg/mL +/- 126.8112 µg/mL

8	1,2,3-Trimethylbenzene CAS # 526-73-8.SEC Purity 97%	(Lot 8658900)	2,502.6 µg/mL	+/- 14.6867 +/- 123.8143 +/- 126.8923	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride CAS # 100-44-7.SEC Purity 99%	(Lot H29N03)	2,506.0 µg/mL	+/- 14.7066 +/- 123.9825 +/- 127.0647	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene CAS # 108-70-3.SEC Purity 99%	(Lot I28U021)	2,518.5 µg/mL	+/- 14.7800 +/- 124.6010 +/- 127.6985	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

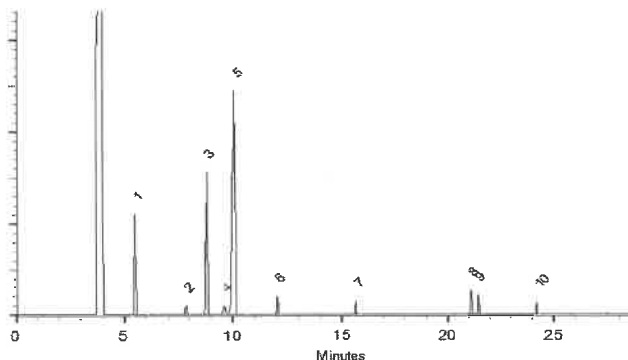
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe
Lane Kibe - Mix Technician

Date Mixed: 22-Oct-2019

Balance: 1128342314

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 25-Oct-2019

Manufactured under Restek's ISO 9001:2015
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Certificate #FM 80397

Reagent

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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
Gm

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 Gravimetric +/- 1,243.4963 µg/mL Unstressed +/- 1,274.4109 µg/mL 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 Gravimetric +/- 124.8483 µg/mL Unstressed +/- 127.9520 µg/mL Stressed
3	Methacrylonitrile CAS # 126-98-7 (Lot 1012019) Purity 99%	25,164.0 µg/mL	+/- 147.3408 µg/mL Gravimetric +/- 1,244.9310 µg/mL Unstressed +/- 1,275.8813 µg/mL Stressed
4	2,2,4-Trimethylpentane (isooctane) CAS # 540-84-1 (Lot SHBD2922V) Purity 99%	2,512.0 µg/mL	+/- 14.7418 µg/mL Gravimetric +/- 124.2794 µg/mL Unstressed +/- 127.3689 µg/mL Stressed
5	1-Butanol CAS # 71-36-3 (Lot SHBK4786) Purity 99%	63,024.5 µg/mL	+/- 369.0033 µg/mL Gravimetric +/- 3,117.9899 µg/mL Unstressed +/- 3,195.5065 µg/mL Stressed
6	2-Nitropropane CAS # 79-46-9 (Lot BCBL0537V) Purity 98%	5,009.8 µg/mL	+/- 29.3332 µg/mL Gravimetric +/- 247.8464 µg/mL Unstressed +/- 254.0081 µg/mL Stressed
7	1-Chlorohexane CAS # 544-10-5 (Lot BCBS3368V) Purity 98%	2,516.6 µg/mL	+/- 14.7691 µg/mL Gravimetric +/- 124.5090 µg/mL Unstressed +/- 127.6042 µg/mL Stressed

8	1,2,3-Trimethylbenzene CAS # 526-73-8 Purity 98%	(Lot 877605-12)	2,510.3 µg/mL	+/- 14.7317 +/- 124.1938 +/- 127.2812	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	2,516.0 µg/mL	+/- 14.7653 +/- 124.4773 +/- 127.5717	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	2,523.0 µg/mL	+/- 14.8064 +/- 124.8236 +/- 127.9267	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

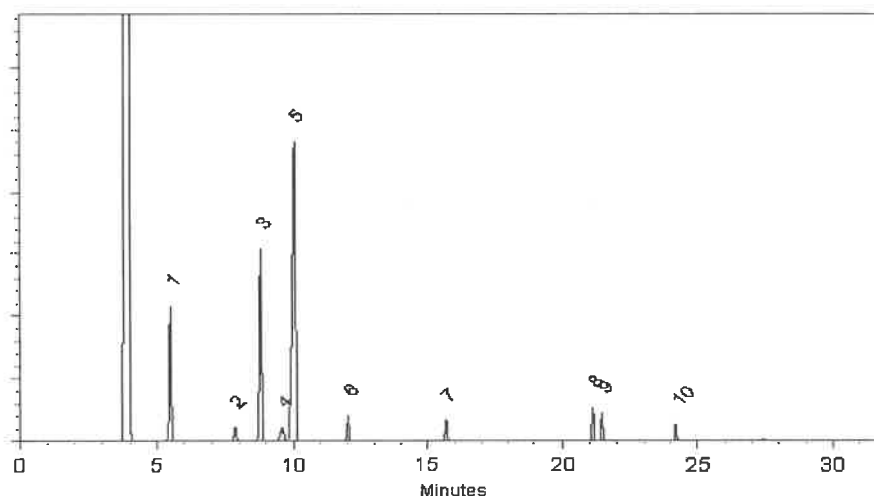
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

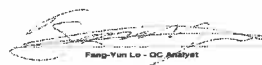


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckal - Mix Technician

Date Mixed: 05-Nov-2019

Balance: B707717271


Fang-Yun Lo - QC Analyst

Date Passed: 07-Nov-2019

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Registered Quality System
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Reagent

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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Catalog No.: 570809.SEC Lot No.: A0153337
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: March 31, 2021 Storage: 0°C or colder

REC'D
4/23/20
GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Ethyl acetate CAS # 141-78-6.SEC (Lot C386A-GG) Purity 99%	5,020.0 µg/mL	+/- 29.3932 µg/mL Gravimetric +/- 302.8988 µg/mL Unstressed +/- 303.6179 µg/mL Stressed
2	Ethyl acrylate CAS # 140-88-5.SEC (Lot YIFAM-TG) Purity 99%	2,514.0 µg/mL	+/- 14.7536 µg/mL Gravimetric +/- 151.6940 µg/mL Unstressed +/- 152.0541 µg/mL Stressed
3	Methyl methacrylate CAS # 80-62-6.SEC (Lot G01X021) Purity 99%	5,042.5 µg/mL	+/- 29.5249 µg/mL Gravimetric +/- 304.2564 µg/mL Unstressed +/- 304.9787 µg/mL Stressed
4	Butyl acetate CAS # 123-86-4.SEC (Lot V2L2G-GT) Purity 99%	2,502.5 µg/mL	+/- 14.6861 µg/mL Gravimetric +/- 151.0001 µg/mL Unstressed +/- 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:

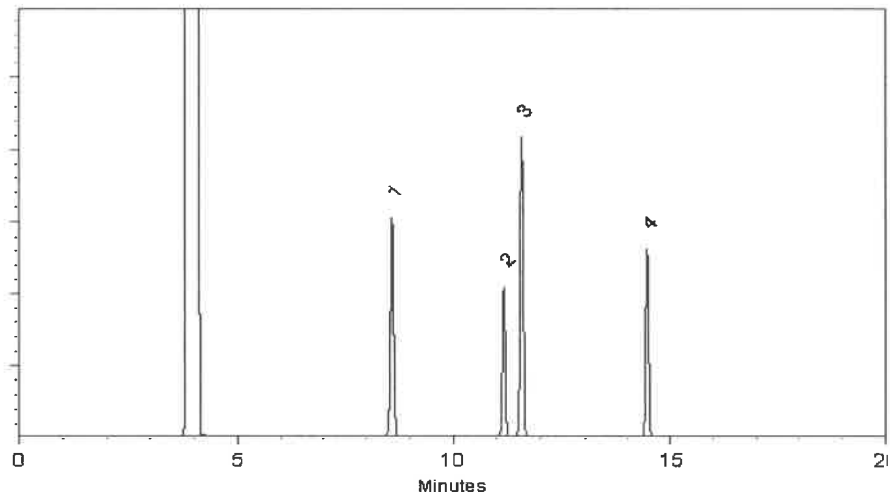
200°C

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.

Lane Kibe

Lane Kibe - Mix Technician

Date Mixed: 26-Sep-2019

Balance: 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Sep-2019

Manufactured under Restek's ISO 9001:2015
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Reagent

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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

REC'D 4/23/20

Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Ethyl acetate CAS # 141-78-6 Purity 99% (Lot SHBL1336)	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 Purity 99% (Lot 10129902)	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 Purity 99% (Lot MKCG6589)	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 Purity 99% (Lot SHBK5137)	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:

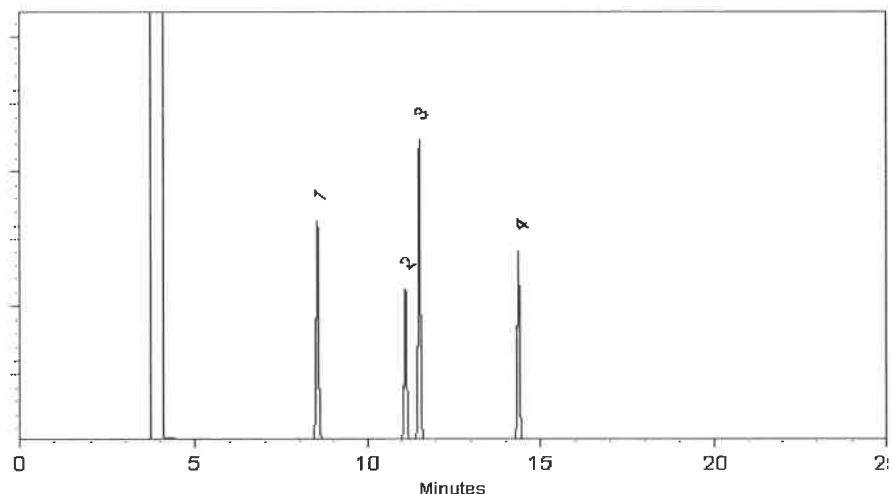
200°C

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
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



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Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

Rec'd
4/24/20

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
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
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
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
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
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
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

8	Methylene chloride (dichloromethane) CAS # 75-09-2.SEC (Lot FGM02) Purity 99%	2,506.7 µg/mL	+/-	14.5740 µg/mL	Gravimetric
			+/-	151.2383 µg/mL	Unstressed
			+/-	151.5974 µg/mL	Stressed
9	Carbon disulfide CAS # 75-15-0.SEC (Lot MKBL1376V) Purity 99%	2,500.7 µg/mL	+/-	14.5391 µg/mL	Gravimetric
			+/-	150.8763 µg/mL	Unstressed
			+/-	151.2345 µg/mL	Stressed
10	Acrylonitrile CAS # 107-13-1.SEC (Lot UERIL) Purity 99%	25,001.2 µg/mL	+/-	145.3513 µg/mL	Gravimetric
			+/-	1,508.4304 µg/mL	Unstressed
			+/-	1,512.0117 µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4.SEC (Lot ZHKYA) Purity 99%	2,501.5 µg/mL	+/-	14.5439 µg/mL	Gravimetric
			+/-	150.9266 µg/mL	Unstressed
			+/-	151.2849 µg/mL	Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2.SEC (Lot HGC01-BLKT) Purity 98%	2,501.3 µg/mL	+/-	14.5427 µg/mL	Gravimetric
			+/-	150.9137 µg/mL	Unstressed
			+/-	151.2720 µg/mL	Stressed
13	n-Hexane (C6) CAS # 110-54-3.SEC (Lot K24W001) Purity 97%	2,503.2 µg/mL	+/-	14.5541 µg/mL	Gravimetric
			+/-	151.0320 µg/mL	Unstressed
			+/-	151.3905 µg/mL	Stressed
14	1,1-Dichloroethane CAS # 75-34-3.SEC (Lot 5379000) Purity 99%	2,502.0 µg/mL	+/-	14.5468 µg/mL	Gravimetric
			+/-	150.9567 µg/mL	Unstressed
			+/-	151.3151 µg/mL	Stressed
15	2,2-Dichloropropane CAS # 594-20-7.SEC (Lot I7E8E) Purity 98%	2,503.2 µg/mL	+/-	14.5541 µg/mL	Gravimetric
			+/-	151.0320 µg/mL	Unstressed
			+/-	151.3905 µg/mL	Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5.SEC (Lot TS5UB) Purity 97%	2,501.0 µg/mL	+/-	14.5409 µg/mL	Gravimetric
			+/-	150.8954 µg/mL	Unstressed
			+/-	151.2537 µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1.SEC (Lot PH2XK) Purity 99%	62,508.3 µg/mL	+/-	363.4098 µg/mL	Gravimetric
			+/-	3,771.4029 µg/mL	Unstressed
			+/-	3,780.3569 µg/mL	Stressed
18	Chloroform CAS # 67-66-3.SEC (Lot 1297547) Purity 99%	2,500.5 µg/mL	+/-	14.5381 µg/mL	Gravimetric
			+/-	150.8662 µg/mL	Unstressed
			+/-	151.2244 µg/mL	Stressed
19	Bromochloromethane CAS # 74-97-5.SEC (Lot 5670200) Purity 99%	2,507.0 µg/mL	+/-	14.5759 µg/mL	Gravimetric
			+/-	151.2584 µg/mL	Unstressed
			+/-	151.6175 µg/mL	Stressed
20	Tetrahydrofuran CAS # 109-99-9.SEC (Lot 8DAOJ) Purity 99%	5,006.7 µg/mL	+/-	29.1092 µg/mL	Gravimetric
			+/-	302.0744 µg/mL	Unstressed
			+/-	302.7916 µg/mL	Stressed
21	1,1,1-Trichloroethane CAS # 71-55-6.SEC (Lot 7998000) Purity 99%	2,507.7 µg/mL	+/-	14.5798 µg/mL	Gravimetric
			+/-	151.2986 µg/mL	Unstressed
			+/-	151.6579 µg/mL	Stressed
22	Cyclohexane CAS # 110-82-7.SEC (Lot YADRA) Purity 99%	2,508.0 µg/mL	+/-	14.5817 µg/mL	Gravimetric
			+/-	151.3188 µg/mL	Unstressed
			+/-	151.6780 µg/mL	Stressed
23	1,1-Dichloropropene CAS # 563-58-6.SEC (Lot 5221100) Purity 96%	2,502.4 µg/mL	+/-	14.5492 µg/mL	Gravimetric
			+/-	150.9809 µg/mL	Unstressed
			+/-	151.3393 µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/-	14.5953 µg/mL	Gravimetric
				+/-	151.4595 µg/mL	Unstressed
				+/-	151.8191 µg/mL	Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/-	14.6040 µg/mL	Gravimetric
				+/-	151.5500 µg/mL	Unstressed
				+/-	151.9098 µg/mL	Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/-	14.5430 µg/mL	Gravimetric
				+/-	150.9165 µg/mL	Unstressed
				+/-	151.2748 µg/mL	Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/-	14.5633 µg/mL	Gravimetric
				+/-	151.1277 µg/mL	Unstressed
				+/-	151.4865 µg/mL	Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/-	14.5856 µg/mL	Gravimetric
				+/-	151.3590 µg/mL	Unstressed
				+/-	151.7183 µg/mL	Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/-	14.5614 µg/mL	Gravimetric
				+/-	151.1076 µg/mL	Unstressed
				+/-	151.4663 µg/mL	Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/-	14.5585 µg/mL	Gravimetric
				+/-	151.0774 µg/mL	Unstressed
				+/-	151.4361 µg/mL	Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/-	290.7356 µg/mL	Gravimetric
				+/-	3,017.2028 µg/mL	Unstressed
				+/-	3,024.3661 µg/mL	Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/-	14.5904 µg/mL	Gravimetric
				+/-	151.4093 µg/mL	Unstressed
				+/-	151.7687 µg/mL	Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/-	14.5468 µg/mL	Gravimetric
				+/-	150.9567 µg/mL	Unstressed
				+/-	151.3151 µg/mL	Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/-	14.5439 µg/mL	Gravimetric
				+/-	150.9266 µg/mL	Unstressed
				+/-	151.2849 µg/mL	Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/-	14.5866 µg/mL	Gravimetric
				+/-	151.3690 µg/mL	Unstressed
				+/-	151.7284 µg/mL	Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/-	14.5520 µg/mL	Gravimetric
				+/-	151.0098 µg/mL	Unstressed
				+/-	151.3684 µg/mL	Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/-	14.5498 µg/mL	Gravimetric
				+/-	150.9869 µg/mL	Unstressed
				+/-	151.3454 µg/mL	Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/-	14.5507 µg/mL	Gravimetric
				+/-	150.9970 µg/mL	Unstressed
				+/-	151.3555 µg/mL	Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/-	14.5643 µg/mL	Gravimetric
				+/-	151.1378 µg/mL	Unstressed
				+/-	151.4966 µg/mL	Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4	µg/mL	+/-	14.5494	µg/mL	Gravimetric
					+/-	150.9832	µg/mL	Unstressed
					+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
					+/-	151.0372	µg/mL	Unstressed
					+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
					+/-	151.1277	µg/mL	Unstressed
					+/-	151.4865	µg/mL	Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7	µg/mL	+/-	7.2941	µg/mL	Gravimetric
					+/-	75.5202	µg/mL	Unstressed
					+/-	75.6995	µg/mL	Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7	µg/mL	+/-	7.3058	µg/mL	Gravimetric
					+/-	75.6409	µg/mL	Unstressed
					+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
					+/-	151.0472	µg/mL	Unstressed
					+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
					+/-	151.2383	µg/mL	Unstressed
					+/-	151.5974	µg/mL	Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2	µg/mL	+/-	14.5594	µg/mL	Gravimetric
					+/-	151.0875	µg/mL	Unstressed
					+/-	151.4462	µg/mL	Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2	µg/mL	+/-	14.5769	µg/mL	Gravimetric
					+/-	151.2685	µg/mL	Unstressed
					+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2	µg/mL	+/-	14.5653	µg/mL	Gravimetric
					+/-	151.1478	µg/mL	Unstressed
					+/-	151.5067	µg/mL	Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
					+/-	150.8661	µg/mL	Unstressed
					+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
					+/-	150.9137	µg/mL	Unstressed
					+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
					+/-	150.9567	µg/mL	Unstressed
					+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7	µg/mL	+/-	14.5682	µg/mL	Gravimetric
					+/-	151.1780	µg/mL	Unstressed
					+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2	µg/mL	+/-	14.6177	µg/mL	Gravimetric
					+/-	151.6922	µg/mL	Unstressed
					+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
					+/-	151.0573	µg/mL	Unstressed
					+/-	151.4159	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,506.2 µg/mL	+/-	14.5711	µg/mL	Gravimetric
				+/-	151.2081	µg/mL	Unstressed
				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,510.0 µg/mL	+/-	14.5934	µg/mL	Gravimetric
				+/-	151.4394	µg/mL	Unstressed
				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,504.7 µg/mL	+/-	14.5623	µg/mL	Gravimetric
				+/-	151.1176	µg/mL	Unstressed
				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,509.2 µg/mL	+/-	14.5885	µg/mL	Gravimetric
				+/-	151.3891	µg/mL	Unstressed
				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	2,505.8 µg/mL	+/-	14.5691	µg/mL	Gravimetric
				+/-	151.1880	µg/mL	Unstressed
				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot JMIYD)	2,508.7 µg/mL	+/-	14.5856	µg/mL	Gravimetric
				+/-	151.3590	µg/mL	Unstressed
				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,504.7 µg/mL	+/-	14.5623	µg/mL	Gravimetric
				+/-	151.1176	µg/mL	Unstressed
				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 6628200)	2,500.3 µg/mL	+/-	14.5372	µg/mL	Gravimetric
				+/-	150.8562	µg/mL	Unstressed
				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,506.3 µg/mL	+/-	14.5720	µg/mL	Gravimetric
				+/-	151.2182	µg/mL	Unstressed
				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,509.8 µg/mL	+/-	14.5924	µg/mL	Gravimetric
				+/-	151.4294	µg/mL	Unstressed
				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	2,513.7 µg/mL	+/-	14.6147	µg/mL	Gravimetric
				+/-	151.6607	µg/mL	Unstressed
				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot R6QDM)	2,501.8 µg/mL	+/-	14.5459	µg/mL	Gravimetric
				+/-	150.9467	µg/mL	Unstressed
				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	2,508.5 µg/mL	+/-	14.5845	µg/mL	Gravimetric
				+/-	151.3473	µg/mL	Unstressed
				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
				+/-	151.0372	µg/mL	Unstressed
				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	2,504.4 µg/mL	+/-	14.5607	µg/mL	Gravimetric
				+/-	151.1002	µg/mL	Unstressed
				+/-	151.4590	µg/mL	Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
				+/-	151.0372	µg/mL	Unstressed
				+/-	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:

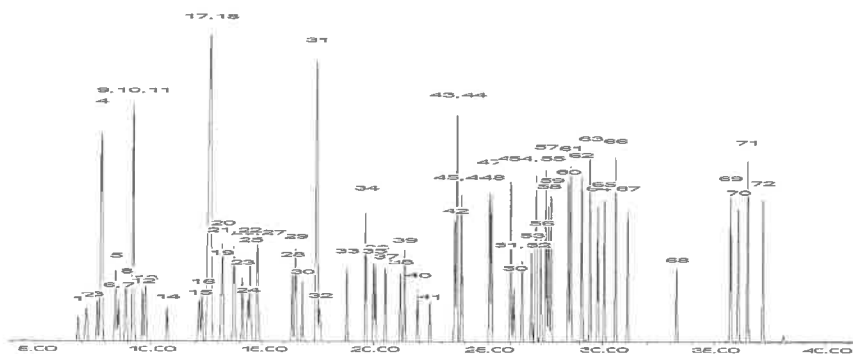
200°C

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

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018

Balance: 1127510105

Diane Shaffer

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 Lot No.: A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : June 30, 2021 Storage: 0°C or colder

RECEIVED
8/30/19
4x/mL
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 (Lot SHBJ5713) Purity 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL Gravimetric +/- 150.8738 µg/mL Unstressed +/- 151.2320 µg/mL Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00009482) Purity 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL Gravimetric +/- 150.9341 µg/mL Unstressed +/- 151.2925 µg/mL Stressed
3	1,1-dichloroethene CAS # 75-35-4 (Lot SHBG8609V) Purity 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL Gravimetric +/- 150.9492 µg/mL Unstressed +/- 151.3076 µg/mL Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBJ9404) Purity 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL Gravimetric +/- 1,508.8503 µg/mL Unstressed +/- 1,512.4325 µg/mL Stressed
5	Methyl acetate CAS # 79-20-9 (Lot SHBG4345V) Purity 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL Gravimetric +/- 301.7174 µg/mL Unstressed +/- 302.4337 µg/mL Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBH4362V) Purity 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL Gravimetric +/- 150.8738 µg/mL Unstressed +/- 151.2320 µg/mL Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot WXBB7852V) Purity 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL Gravimetric +/- 150.9567 µg/mL Unstressed +/- 151.3151 µg/mL Stressed

8	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBK5095) Purity 99%	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
				+/-	150.8813	µg/mL	Unstressed
				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide CAS # 75-15-0 (Lot U22D706) Purity 99%	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
				+/-	150.9040	µg/mL	Unstressed
				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile CAS # 107-13-1 (Lot R15D047) Purity 99%	25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
				+/-	1,508.9860	µg/mL	Unstressed
				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 (Lot SHBH9526) Purity 99%	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
				+/-	150.8512	µg/mL	Unstressed
				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
				+/-	150.9115	µg/mL	Unstressed
				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6) CAS # 110-54-3 (Lot SHBH8106) Purity 99%	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
				+/-	150.8813	µg/mL	Unstressed
				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane CAS # 75-34-3 (Lot 462600) Purity 99%	2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
				+/-	150.8587	µg/mL	Unstressed
				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBT5124) Purity 99%	2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
				+/-	150.8512	µg/mL	Unstressed
				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 (Lot SHBK0551) Purity 99%	62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
				+/-	3,770.9529	µg/mL	Unstressed
				+/-	3,779.9058	µg/mL	Stressed
18	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
				+/-	150.8662	µg/mL	Unstressed
				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane CAS # 74-97-5 (Lot 00008541) Purity 98%	2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
				+/-	150.8718	µg/mL	Unstressed
				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran CAS # 109-99-9 (Lot SHBJ6179) Purity 99%	5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
				+/-	301.7099	µg/mL	Unstressed
				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane CAS # 71-55-6 (Lot B15W12061) Purity 99%	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
				+/-	150.8813	µg/mL	Unstressed
				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane CAS # 110-82-7 (Lot MKCC9660) Purity 99%	2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene CAS # 563-58-6 (Lot 180531JLM) Purity 99%	2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
				+/-	150.8738	µg/mL	Unstressed
				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/-	14.5418 µg/mL	Gravimetric
				+/-	150.9040 µg/mL	Unstressed
				+/-	151.2622 µg/mL	Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/-	14.5447 µg/mL	Gravimetric
				+/-	150.9341 µg/mL	Unstressed
				+/-	151.2925 µg/mL	Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/-	14.5425 µg/mL	Gravimetric
				+/-	150.9115 µg/mL	Unstressed
				+/-	151.2698 µg/mL	Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/-	14.5403 µg/mL	Gravimetric
				+/-	150.8889 µg/mL	Unstressed
				+/-	151.2471 µg/mL	Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/-	14.5381 µg/mL	Gravimetric
				+/-	150.8662 µg/mL	Unstressed
				+/-	151.2244 µg/mL	Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/-	14.5447 µg/mL	Gravimetric
				+/-	150.9341 µg/mL	Unstressed
				+/-	151.2925 µg/mL	Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/-	14.5381 µg/mL	Gravimetric
				+/-	150.8662 µg/mL	Unstressed
				+/-	151.2244 µg/mL	Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/-	290.6957 µg/mL	Gravimetric
				+/-	3,016.7880 µg/mL	Unstressed
				+/-	3,023.9503 µg/mL	Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/-	14.5468 µg/mL	Gravimetric
				+/-	150.9567 µg/mL	Unstressed
				+/-	151.3151 µg/mL	Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/-	14.5432 µg/mL	Gravimetric
				+/-	150.9190 µg/mL	Unstressed
				+/-	151.2773 µg/mL	Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/-	14.5359 µg/mL	Gravimetric
				+/-	150.8436 µg/mL	Unstressed
				+/-	151.2017 µg/mL	Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/-	14.5512 µg/mL	Gravimetric
				+/-	151.0020 µg/mL	Unstressed
				+/-	151.3605 µg/mL	Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/-	14.5387 µg/mL	Gravimetric
				+/-	150.8718 µg/mL	Unstressed
				+/-	151.2300 µg/mL	Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/-	14.5374 µg/mL	Gravimetric
				+/-	150.8587 µg/mL	Unstressed
				+/-	151.2169 µg/mL	Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/-	14.5403 µg/mL	Gravimetric
				+/-	150.8889 µg/mL	Unstressed
				+/-	151.2471 µg/mL	Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/-	14.5410 µg/mL	Gravimetric
				+/-	150.8964 µg/mL	Unstressed
				+/-	151.2547 µg/mL	Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKCC0877)	2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
					+/-	150.9827	µg/mL	Unstressed
					+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
					+/-	150.8587	µg/mL	Unstressed
					+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBH4459V)	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
					+/-	150.9040	µg/mL	Unstressed
					+/-	151.2622	µg/mL	Stressed
43	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBJ2338)	1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
					+/-	75.5085	µg/mL	Unstressed
					+/-	75.6878	µg/mL	Stressed
44	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
					+/-	75.4256	µg/mL	Unstressed
					+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed
47	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH7231)	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
					+/-	150.8813	µg/mL	Unstressed
					+/-	151.2395	µg/mL	Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot MKCC9766)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
					+/-	150.8436	µg/mL	Unstressed
					+/-	151.2017	µg/mL	Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBG3138V)	2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
					+/-	150.8964	µg/mL	Unstressed
					+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCF8470)	2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
					+/-	150.9341	µg/mL	Unstressed
					+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
					+/-	150.8662	µg/mL	Unstressed
					+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
					+/-	150.9115	µg/mL	Unstressed
					+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 94%	(Lot MKBX7788V)	2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
					+/-	150.8389	µg/mL	Unstressed
					+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot WXBC3346V)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	150.8361	µg/mL	Unstressed
					+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9	µg/mL	+/- +/- +/-	14.5348 150.8320 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4	µg/mL	+/- +/- +/-	14.5432 150.9190 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9	µg/mL	+/- +/- +/-	14.5519 151.0095 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1	µg/mL	+/- +/- +/-	14.5476 150.9643 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8	µg/mL	+/- +/- +/-	14.5512 151.0020 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

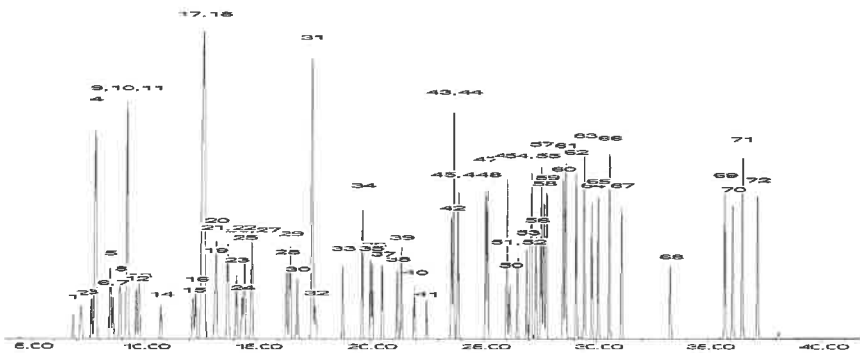
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 **Balance:** B251644995

Diane Shaffer
 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_00004



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. : 571993.SEC **Lot No.:** A0143318

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 : November 30, 2020 **Storage:** 0°C or colder

Rec'd
5/26/20
Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetonitrile CAS # 75-05-8.SEC (Lot 7KGDA) Purity 99%	25,020.5 µg/mL	+/- 146.5005 µg/mL Gravimetric +/- 1,237.8317 µg/mL Unstressed +/- 1,268.6055 µg/mL Stressed
2	Diisopropyl ether (DIPE) CAS # 108-20-3.SEC (Lot LL7TN-SH) Purity 98%	2,506.8 µg/mL	+/- 14.7115 µg/mL Gravimetric +/- 124.0241 µg/mL Unstressed +/- 127.1073 µg/mL Stressed
3	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3.SEC (Lot MHBIG-QK) Purity 99%	2,509.0 µg/mL	+/- 14.7242 µg/mL Gravimetric +/- 124.1310 µg/mL Unstressed +/- 127.2168 µg/mL Stressed
4	Propionitrile CAS # 107-12-0.SEC (Lot PS48O) Purity 99%	25,017.5 µg/mL	+/- 146.4830 µg/mL Gravimetric +/- 1,237.6833 µg/mL Unstressed +/- 1,268.4534 µg/mL Stressed
5	tert-Amyl alcohol CAS # 75-85-4.SEC (Lot ZL6RD) Purity 99%	25,019.0 µg/mL	+/- 146.4917 µg/mL Gravimetric +/- 1,237.7575 µg/mL Unstressed +/- 1,268.5294 µg/mL Stressed
6	tert-Amyl methyl ether (TAME) CAS # 994-05-8.SEC (Lot 7375800) Purity 98%	2,510.3 µg/mL	+/- 14.7317 µg/mL Gravimetric +/- 124.1938 µg/mL Unstressed +/- 127.2812 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)

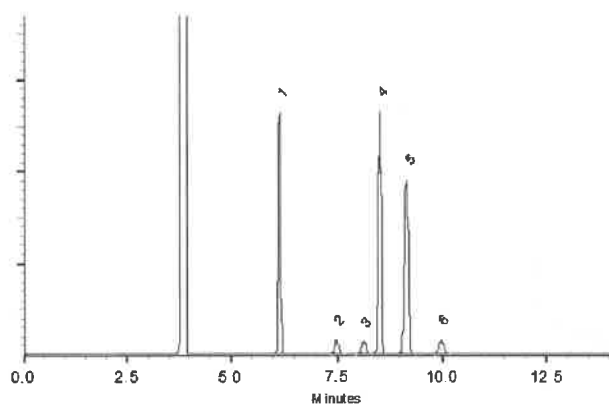
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 15-Nov-2018 **Balance:** 1128342314

Justin A. Harrison
Justin A. Harrison - Operations Tech-ARM QC

Date Passed: 20-Nov-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

mv-571993_00004



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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 CAS # 75-05-8 (Lot SHBH6233) Purity 99%	25,249.0 µg/mL	+/- 147.8384 µg/mL Gravimetric +/- 1,249.1362 µg/mL Unstressed +/- 1,280.1910 µg/mL Stressed
2	Diisopropyl ether (DIPE) CAS # 108-20-3 (Lot SHBH1927V) Purity 99%	2,524.3 µg/mL	+/- 14.8142 µg/mL Gravimetric +/- 124.8896 µg/mL Unstressed +/- 127.9943 µg/mL Stressed
3	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 (Lot MKCC2702) Purity 99%	2,524.3 µg/mL	+/- 14.8142 µg/mL Gravimetric +/- 124.8896 µg/mL Unstressed +/- 127.9943 µg/mL Stressed
4	Propionitrile CAS # 107-12-0 (Lot BCBV8545) Purity 99%	25,249.7 µg/mL	+/- 147.8424 µg/mL Gravimetric +/- 1,249.1692 µg/mL Unstressed +/- 1,280.2248 µg/mL Stressed
5	tert-Amyl alcohol CAS # 75-85-4 (Lot STBG1140V) Purity 99%	25,249.0 µg/mL	+/- 147.8384 µg/mL Gravimetric +/- 1,249.1362 µg/mL Unstressed +/- 1,280.1910 µg/mL Stressed
6	tert-Amyl methyl ether (TAME) CAS # 994-05-8 (Lot HMBF8365V) Purity 99%	2,523.7 µg/mL	+/- 14.8103 µg/mL Gravimetric +/- 124.8566 µg/mL Unstressed +/- 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)

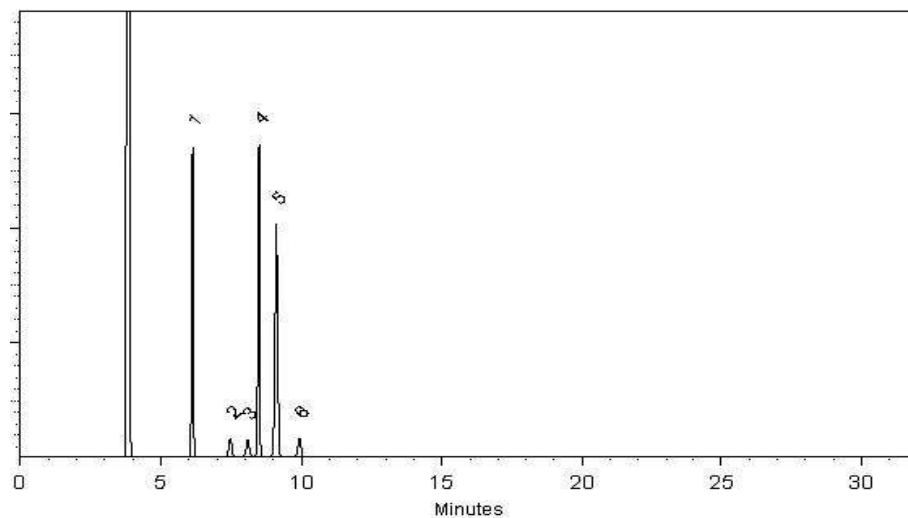
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Jessica McClenahan - Operations Technician I

Date Mixed: 14-Jan-2019

Balance: B251644995

Jennifer I Pollino

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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

REC'D 4/23/20

Gm

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Ethanol CAS # 64-17-5 Purity 99% (Lot SHBK6489)	100,295.5 µg/mL	+/- 587.2219 µg/mL Gravimetric +/- 2,148.4543 µg/mL Unstressed +/- 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
@ 5°C/min.

Inj. Temp:

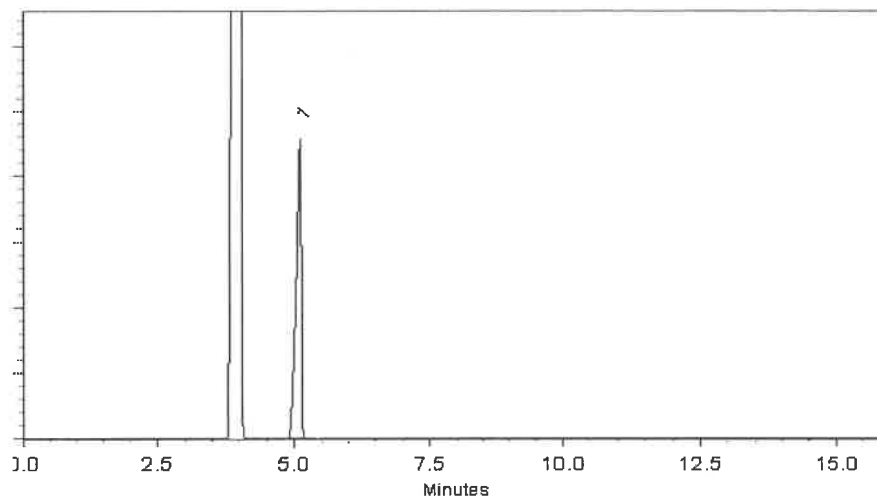
200°C

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

Cathleen Soltis - Mix Technician

Date Mixed: 23-Dec-2019

Balance: B251644995

Tyler Brown

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

Certificate of Analysis

ISO 17034

Custom Standard

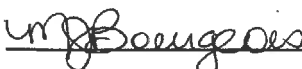
Product Number: CUS-17739**Page:** 1 of 1**Lot Number:** 0006503344**Lot Issue Date:** 12-Nov-2019**Expiration Date:** 31-Dec-2021

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/NCCL 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



ISO 17034 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO 17025 Cert No.
AT-1937

Reagent

MV-CUS17739_00008



Certificate of Analysis

REC'D
6/24/21

Product Name: Custom Standard

Product Number: CUS-17739

Lot Number: 0006582355

Lot Issue Date: 12-Jan-2021

Expiration Date: 28-Feb-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration $\pm$ Uncertainty
1-chlorohexane	000544-10-5	RM15291	1004 $\pm$ 5 μ g/mL
2-pentanone	000107-87-9	RM13478	4018 $\pm$ 20 μ g/mL
sec-butanol	000078-92-2	RM01299	30102 $\pm$ 151 μ g/mL

Matrix: methanol (purge & trap grade)

Storage Conditions: Store Frozen (-25° to -10° C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20° C to 25° C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

Reagent

mv-IS/SS Tune_00001



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

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	tert-Butyl-d9-alcohol CAS # 25725-11-5 (Lot CD-107) Purity 98%	5,000.1 µg/mL	+/- 29.0694 µg/mL Gravimetric +/- 107.0521 µg/mL Unstressed +/- 110.1643 µg/mL Stressed
2	Dibromofluoromethane CAS # 1868-53-7 (Lot 0012017) Purity 99%	250.2 µg/mL	+/- 1.4580 µg/mL Gravimetric +/- 5.3577 µg/mL Unstressed +/- 5.5134 µg/mL Stressed
3	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot PR-29377) Purity 99%	250.3 µg/mL	+/- 1.4584 µg/mL Gravimetric +/- 5.3592 µg/mL Unstressed +/- 5.5149 µg/mL Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 (Lot I-19942) Purity 99%	5,000.5 µg/mL	+/- 29.0716 µg/mL Gravimetric +/- 107.0602 µg/mL Unstressed +/- 110.1726 µg/mL Stressed
5	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	250.1 µg/mL	+/- 1.4573 µg/mL Gravimetric +/- 5.3549 µg/mL Unstressed +/- 5.5105 µg/mL Stressed
6	Toluene-d8 CAS # 2037-26-5 (Lot PR-27311) Purity 99%	250.1 µg/mL	+/- 1.4575 µg/mL Gravimetric +/- 5.3556 µg/mL Unstressed +/- 5.5112 µg/mL Stressed
7	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-23926) Purity 99%	250.5 µg/mL	+/- 1.4600 µg/mL Gravimetric +/- 5.3649 µg/mL Unstressed +/- 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)

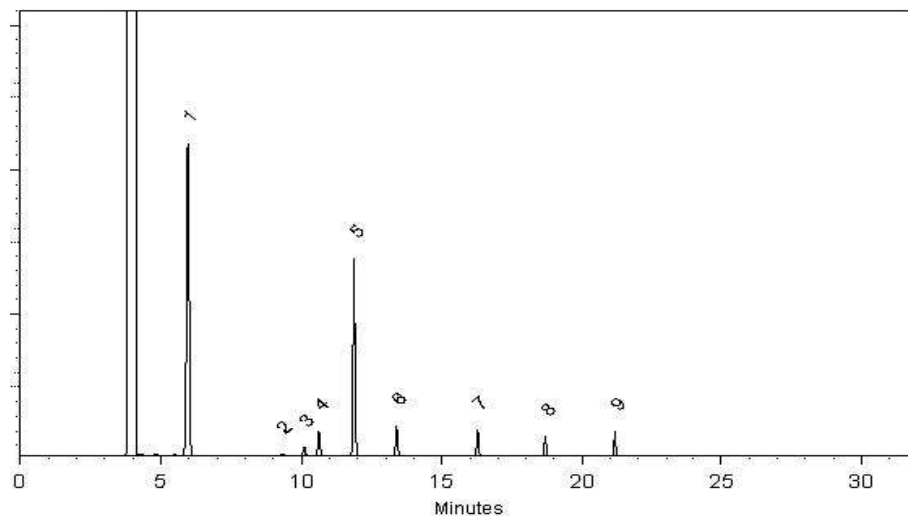
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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
F. Joseph Tallon - Mix Technician

Date Mixed: 29-Nov-2018 Balance: B251644995

Jennifer Pollino
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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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_00011



SPEXertificate®

Certificate of Reference Material



Catalog Number: VO-TAOH-5

Lot No. CP200901024

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: September 2, 2020

Expiration Date: March 1, 2021

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:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
Propylene oxide	75-56-9	50000 µg/mL	99%	49920 µg/mL	± 1797 µg/mL
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	49993 µg/mL	± 1800 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	999 µg/mL	± 36 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	1018 µg/mL	± 37 µg/mL

* - 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: September 2, 2020

Certifying Officer: Shannon Macieira
Shannon Macieira, Operations Manager

Report of Certification

Catalog Number: VO-TAOH-5

Lot No. CP200901024

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: September 2, 2020

Expiration Date: March 1, 2021

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 labels
- ISO Guide 35: Reference 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 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
- $U = k u_c$ 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 breach 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.

SPEX CertiPrep

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Reagent

mv-VO-TAOH-5_00012

SPEXertificate®

Certificate of Reference Material

Catalog Number: VO-TAOH-5

Lot No. AA210506021

Description: Custom Organic Standard

Manufactured Date: May 6, 2021

Matrix: Methanol (Purge & Trap Grade)

Expiration Date: November 2, 2021

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%	50032 µg/mL	± 1801 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	1003 µg/mL	± 36 µg/mL
Propylene oxide	75-56-9	50000 µg/mL	99%	50007 µg/mL	± 1800 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	1006 µg/mL	± 36 µg/mL

REC'D 5/14/21

* - 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 6, 2021

Certifying Officer: Shannon Macieira
Shannon Macieira, Operations Manager

Method 8260B

Volatile Organic Compounds (GC/MS)
by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

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 #
TB-03-20210627	280-150290-1	97	95	98	94
PA-5-20210627	280-150290-2	99	96	96	97
MW-38-60-100-20210627	280-150290-3	99	95	97	98
RW-2879M-20210624	280-150290-4	100	96	97	100
RW-7505P-20210624	280-150290-5	95	93	95	95
RW-8048P-20210624	280-150290-6	95	94	96	99
RW-8035P-20210624	280-150290-7	98	91	96	97
PA-10-20210624	280-150290-8	98	93	94	99
RW-7350P-20210624	280-150290-9	98	95	96	94
PA-9-58-68-20210624	280-150290-10	97	95	96	96
PA-9-88-98-20210624	280-150290-11	97	97	96	95
RW-7549P-20210624	280-150290-12	99	95	94	96
RW-8284P-20210625	280-150306-1	104	114	96	96
RW-2172F-20210625	280-150306-2	105	115	95	95
RW-7588P-20210625	280-150306-3	104	114	96	96
RW-8209P-20210625	280-150306-4	105	115	96	95
RW-7688P-20210625	280-150306-5	105	115	97	95
RW-5898BI-20210625	280-150306-6	105	115	96	94
RW-2140H-20210626	280-150306-7	105	115	97	95
MW-116S-20210626	280-150306-8	105	114	96	95
RW-2076F-20210626	280-150306-9	104	116	97	96
RW-8012P-20210626	280-150306-10	104	116	97	95
EB-07-20210627	280-150306-11	104	112	95	94
RW-7244P-20210624	280-150306-12	105	114	96	95
RW-2237H-20210624	280-150306-13	105	115	96	95
RW-7070B-20210624	280-150306-14	104	113	96	95
RW-8105PS-20210625	280-150306-15	104	114	96	95
MW-38-105-115-20210627	280-150306-16	97	93	97	96
TB-02-20210627	280-150306-17	99	95	101	97
MW-38-121-130-20210627	280-150306-18	93	92	98	94
	MB 280-542394/9	98	96	96	95
	MB 280-542401/9	104	111	96	95

QC LIMITS

DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

77-120
70-127
80-125
78-120

Column to be used to flag recovery values

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 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 #
	MB 280-542686/9	95	92	101	94
	LCS 280-542394/4	97	98	96	98
	LCS 280-542394/6	96	95	97	97
	LCS 280-542401/4	105	111	96	95
	LCS 280-542401/6	105	114	96	95
	LCS 280-542686/4	95	91	100	96
	LCS 280-542686/6	95	93	97	95
	LCSD 280-542394/5	95	96	98	100
	LCSD 280-542394/7	98	95	95	98
	LCSD 280-542401/5	105	110	96	95
	LCSD 280-542401/7	105	114	96	95
	LCSD 280-542686/5	94	91	96	98
	LCSD 280-542686/7	95	94	96	96
RW-2172F-20210625 MS	280-150306-2 MS	105	113	97	95
RW-2172F-20210625 MSD	280-150306-2 MSD	104	111	97	96

	<u>QC LIMITS</u>
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 III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_4134.D

Lab ID: LCS 280-542394/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	89.3	89	39-156	
Acrolein	247	222	90	36-147	
Acrylonitrile	250	237	95	56-135	
Benzene	25.0	25.8	103	65-135	
Chlorobromomethane	25.0	24.2	97	65-135	
Dichlorobromomethane	25.0	22.2	89	65-135	
Bromoform	25.0	19.1	76	62-135	
Bromomethane	25.0	23.6	94	45-135	
2-Butanone (MEK)	100	86.1	86	44-177	
Carbon disulfide	25.0	26.0	104	55-143	
Carbon tetrachloride	25.0	24.0	96	65-135	
Chlorobenzene	25.0	24.4	98	65-135	
Chlorodibromomethane	25.0	21.3	85	65-135	
Chloroethane	25.0	24.9	99	46-136	
Chloroform	25.0	24.6	99	65-135	
Chloromethane	25.0	21.2	85	34-145	
Allyl chloride	25.0	26.1	105	50-135	
1,2-Dibromo-3-Chloropropane	25.0	19.2	77	57-135	
Dibromomethane	25.0	24.1	97	65-135	
1,2-Dichlorobenzene	25.0	25.8	103	65-135	
1,3-Dichlorobenzene	25.0	26.4	106	65-135	
1,4-Dichlorobenzene	25.0	24.3	97	65-135	
trans-1,4-Dichloro-2-butene	25.0	19.9	80	53-135	
Dichlorodifluoromethane	25.0	19.4	78	43-142	
1,1-Dichloroethane	25.0	25.0	100	65-135	
1,2-Dichloroethane	25.0	23.7	95	65-135	
cis-1,2-Dichloroethene	25.0	24.8	99	65-135	
trans-1,2-Dichloroethene	25.0	24.2	97	65-135	
1,1-Dichloroethene	25.0	25.9	104	65-136	
1,2-Dichloropropane	25.0	24.6	98	64-135	
1,3-Dichloropropane	25.0	23.8	95	64-135	
2,2-Dichloropropane	25.0	25.2	101	65-135	
cis-1,3-Dichloropropene	25.0	22.9	92	65-135	
trans-1,3-Dichloropropene	25.0	23.0	92	65-135	
1,1-Dichloropropene	25.0	26.0	104	65-135	
Ethylbenzene	25.0	24.9	99	65-135	
Ethyl methacrylate	25.0	22.8	91	50-135	
2-Hexanone	100	89.7	90	57-139	
Iodomethane	25.0	22.2	89	65-142	
Isobutyl alcohol	625	500	80	55-135	
Methylene Chloride	25.0	26.1	104	54-141	
4-Methyl-2-pentanone (MIBK)	100	96.3	96	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_4134.D
 Lab ID: LCS 280-542394/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	23.6	95	65-135	
1,1,1,2-Tetrachloroethane	25.0	23.0	92	65-135	
1,1,2,2-Tetrachloroethane	25.0	21.7	87	58-135	
Tetrachloroethene	25.0	27.8	111	65-135	
Toluene	25.0	25.4	102	65-135	
1,2,4-Trichlorobenzene	25.0	25.3	101	58-135	
1,1,1-Trichloroethane	25.0	23.6	94	65-135	
1,1,2-Trichloroethane	25.0	23.8	95	64-135	
Trichloroethene	25.0	22.0	88	65-135	
Trichlorofluoromethane	25.0	25.5	102	53-137	
1,2,3-Trichloropropane	25.0	23.1	92	65-135	
Vinyl acetate	50.0	49.9	100	11-187	
Vinyl chloride	25.0	26.9	107	40-137	
m-Xylene & p-Xylene	25.0	24.3	97	65-135	
o-Xylene	25.0	25.7	103	65-135	
Xylenes, Total	50.0	50.0	100	65-135	
1,2-Dibromoethane	25.0	22.8	91	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: MS1_4136.D
Lab ID: LCS 280-542394/6 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	21.3	85	50-150	
Methacrylonitrile	250	270	108	50-150	
Methyl methacrylate	50.0	49.1	98	50-150	
Propionitrile	250	248	99	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS9_5881.d

Lab ID: LCS 280-542401/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	153	153	39-156	
Acrolein	247	258	105	36-147	
Acrylonitrile	250	336	135	56-135	
Benzene	25.0	24.0	96	65-135	
Chlorobromomethane	25.0	26.2	105	65-135	
Dichlorobromomethane	25.0	25.7	103	65-135	
Bromoform	25.0	26.4	106	62-135	
Bromomethane	25.0	19.3	77	45-135	
2-Butanone (MEK)	100	135	135	44-177	
Carbon disulfide	25.0	20.7	83	55-143	
Carbon tetrachloride	25.0	25.3	101	65-135	
Chlorobenzene	25.0	24.1	96	65-135	
Chlorodibromomethane	25.0	25.1	101	65-135	
Chloroethane	25.0	23.5	94	46-136	
Chloroform	25.0	26.2	105	65-135	
Chloromethane	25.0	21.5	86	34-145	
Allyl chloride	25.0	23.4	94	50-135	
1,2-Dibromo-3-Chloropropane	25.0	29.6	119	57-135	
Dibromomethane	25.0	26.6	106	65-135	
1,2-Dichlorobenzene	25.0	24.4	98	65-135	
1,3-Dichlorobenzene	25.0	23.9	96	65-135	
1,4-Dichlorobenzene	25.0	24.0	96	65-135	
trans-1,4-Dichloro-2-butene	25.0	25.2	101	53-135	
Dichlorodifluoromethane	25.0	15.4	62	43-142	
1,1-Dichloroethane	25.0	24.0	96	65-135	
1,2-Dichloroethane	25.0	27.3	109	65-135	
cis-1,2-Dichloroethene	25.0	24.4	97	65-135	
trans-1,2-Dichloroethene	25.0	23.9	96	65-135	
1,1-Dichloroethene	25.0	23.1	93	65-136	
1,2-Dichloropropane	25.0	23.8	95	64-135	
1,3-Dichloropropane	25.0	24.4	98	64-135	
2,2-Dichloropropane	25.0	17.9	72	65-135	
cis-1,3-Dichloropropene	25.0	22.8	91	65-135	
trans-1,3-Dichloropropene	25.0	24.4	98	65-135	
1,1-Dichloropropene	25.0	24.0	96	65-135	
Ethylbenzene	25.0	23.5	94	65-135	
Ethyl methacrylate	25.0	24.9	100	50-135	
2-Hexanone	100	108	108	57-139	
Iodomethane	25.0	19.7	79	65-142	
Isobutyl alcohol	625	709	113	55-135	
Methylene Chloride	25.0	23.7	95	54-141	
4-Methyl-2-pentanone (MIBK)	100	113	113	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS9_5881.d
 Lab ID: LCS 280-542401/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	24.5	98	65-135	
1,1,1,2-Tetrachloroethane	25.0	25.3	101	65-135	
1,1,2,2-Tetrachloroethane	25.0	27.6	110	58-135	
Tetrachloroethene	25.0	24.6	99	65-135	
Toluene	25.0	24.9	100	65-135	
1,2,4-Trichlorobenzene	25.0	24.7	99	58-135	
1,1,1-Trichloroethane	25.0	25.9	104	65-135	
1,1,2-Trichloroethane	25.0	27.0	108	64-135	
Trichloroethene	25.0	23.5	94	65-135	
Trichlorofluoromethane	25.0	20.0	80	53-137	
1,2,3-Trichloropropane	25.0	27.2	109	65-135	
Vinyl acetate	50.0	47.0	94	11-187	
Vinyl chloride	25.0	21.8	87	40-137	
m-Xylene & p-Xylene	25.0	24.2	97	65-135	
o-Xylene	25.0	24.1	96	65-135	
Xylenes, Total	50.0	48.3	97	65-135	
1,2-Dibromoethane	25.0	23.9	95	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: MS9_5885.d

Lab ID: LCS 280-542401/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	301	121	50-150	
Chloroprene	25.0	18.7	75	50-150	
Methacrylonitrile	250	295	118	50-150	
Methyl methacrylate	50.0	61.7	123	50-150	
Propionitrile	250	338	135	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_4284.D

Lab ID: LCS 280-542686/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	100	77.9	78	39-156	
Acrolein	247	204	82	36-147	
Acrylonitrile	250	228	91	56-135	
Benzene	25.0	25.0	100	65-135	
Chlorobromomethane	25.0	23.6	94	65-135	
Dichlorobromomethane	25.0	21.0	84	65-135	
Bromoform	25.0	17.4	70	62-135	
Bromomethane	25.0	20.1	80	45-135	
2-Butanone (MEK)	100	85.1	85	44-177	
Carbon disulfide	25.0	23.1	93	55-143	
Carbon tetrachloride	25.0	20.2	81	65-135	
Chlorobenzene	25.0	24.2	97	65-135	
Chlorodibromomethane	25.0	22.1	88	65-135	
Chloroethane	25.0	21.4	86	46-136	
Chloroform	25.0	21.5	86	65-135	
Chloromethane	25.0	17.6	70	34-145	
Allyl chloride	25.0	23.6	95	50-135	
1,2-Dibromo-3-Chloropropane	25.0	17.0	68	57-135	
Dibromomethane	25.0	22.3	89	65-135	
1,2-Dichlorobenzene	25.0	24.2	97	65-135	
1,3-Dichlorobenzene	25.0	25.3	101	65-135	
1,4-Dichlorobenzene	25.0	24.7	99	65-135	
trans-1,4-Dichloro-2-butene	25.0	16.3	65	53-135	
Dichlorodifluoromethane	25.0	13.4	54	43-142	
1,1-Dichloroethane	25.0	22.8	91	65-135	
1,2-Dichloroethane	25.0	23.1	92	65-135	
cis-1,2-Dichloroethene	25.0	22.8	91	65-135	
trans-1,2-Dichloroethene	25.0	21.9	87	65-135	
1,1-Dichloroethene	25.0	22.7	91	65-136	
1,2-Dichloropropane	25.0	23.1	92	64-135	
1,3-Dichloropropane	25.0	23.8	95	64-135	
2,2-Dichloropropane	25.0	21.3	85	65-135	
cis-1,3-Dichloropropene	25.0	22.6	90	65-135	
trans-1,3-Dichloropropene	25.0	20.7	83	65-135	
1,1-Dichloropropene	25.0	24.0	96	65-135	
Ethylbenzene	25.0	24.9	100	65-135	
Ethyl methacrylate	25.0	22.5	90	50-135	
2-Hexanone	100	90.5	91	57-139	
Iodomethane	25.0	19.8	79	65-142	
Isobutyl alcohol	625	434	69	55-135	
Methylene Chloride	25.0	23.6	94	54-141	
4-Methyl-2-pentanone (MIBK)	100	93.8	94	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_4284.D
 Lab ID: LCS 280-542686/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	24.2	97	65-135	
1,1,1,2-Tetrachloroethane	25.0	22.9	91	65-135	
1,1,2,2-Tetrachloroethane	25.0	21.0	84	58-135	
Tetrachloroethene	25.0	24.6	98	65-135	
Toluene	25.0	23.9	96	65-135	
1,2,4-Trichlorobenzene	25.0	22.6	90	58-135	
1,1,1-Trichloroethane	25.0	21.8	87	65-135	
1,1,2-Trichloroethane	25.0	22.5	90	64-135	
Trichloroethene	25.0	22.7	91	65-135	
Trichlorofluoromethane	25.0	20.1	80	53-137	
1,2,3-Trichloropropane	25.0	23.8	95	65-135	
Vinyl acetate	50.0	46.1	92	11-187	
Vinyl chloride	25.0	21.1	84	40-137	
m-Xylene & p-Xylene	25.0	24.6	99	65-135	
o-Xylene	25.0	26.0	104	65-135	
Xylenes, Total	50.0	50.6	101	65-135	
1,2-Dibromoethane	25.0	22.9	92	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: MS1_4286.D
Lab ID: LCS 280-542686/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetonitrile	250	248	99	50-150	
Chloroprene	25.0	22.6	91	50-150	
Methacrylonitrile	250	255	102	50-150	
Methyl methacrylate	50.0	47.2	94	50-150	
Propionitrile	250	233	93	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_4135.D

Lab ID: LCSD 280-542394/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	81.0	81	10	23	39-156	
Acrolein	247	223	90	1	30	36-147	
Acrylonitrile	250	235	94	1	30	56-135	
Benzene	25.0	25.2	101	2	20	65-135	
Chlorobromomethane	25.0	24.2	97	0	29	65-135	
Dichlorobromomethane	25.0	22.0	88	1	20	65-135	
Bromoform	25.0	19.5	78	2	27	62-135	
Bromomethane	25.0	22.4	90	5	33	45-135	
2-Butanone (MEK)	100	84.1	84	2	32	44-177	
Carbon disulfide	25.0	24.0	96	8	20	55-143	
Carbon tetrachloride	25.0	23.4	94	2	21	65-135	
Chlorobenzene	25.0	23.2	93	5	20	65-135	
Chlorodibromomethane	25.0	21.9	87	3	20	65-135	
Chloroethane	25.0	22.8	91	9	25	46-136	
Chloroform	25.0	23.1	92	6	20	65-135	
Chloromethane	25.0	20.3	81	4	24	34-145	
Allyl chloride	25.0	25.1	101	4	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	19.0	76	1	22	57-135	
Dibromomethane	25.0	24.4	98	1	26	65-135	
1,2-Dichlorobenzene	25.0	25.6	102	1	20	65-135	
1,3-Dichlorobenzene	25.0	24.8	99	7	20	65-135	
1,4-Dichlorobenzene	25.0	24.4	98	1	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	19.7	79	1	25	53-135	
Dichlorodifluoromethane	25.0	17.4	69	11	30	43-142	
1,1-Dichloroethane	25.0	23.6	94	6	21	65-135	
1,2-Dichloroethane	25.0	24.8	99	5	20	65-135	
cis-1,2-Dichloroethene	25.0	24.9	100	1	20	65-135	
trans-1,2-Dichloroethene	25.0	23.6	94	3	24	65-135	
1,1-Dichloroethene	25.0	24.9	100	4	20	65-136	
1,2-Dichloropropane	25.0	24.4	97	1	20	64-135	
1,3-Dichloropropane	25.0	23.4	94	1	20	64-135	
2,2-Dichloropropane	25.0	23.7	95	6	20	65-135	
cis-1,3-Dichloropropene	25.0	22.9	92	0	26	65-135	
trans-1,3-Dichloropropene	25.0	23.0	92	0	26	65-135	
1,1-Dichloropropene	25.0	24.7	99	5	21	65-135	
Ethylbenzene	25.0	24.6	98	1	20	65-135	
Ethyl methacrylate	25.0	22.4	89	2	30	50-135	
2-Hexanone	100	86.8	87	3	25	57-139	
Iodomethane	25.0	21.5	86	3	25	65-142	
Isobutyl alcohol	625	502	80	0	30	55-135	
Methylene Chloride	25.0	24.4	98	7	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	95.4	95	1	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_4135.D
 Lab ID: LCSD 280-542394/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	23.9	96	1	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	22.6	90	2	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	20.7	83	5	20	58-135	
Tetrachloroethene	25.0	26.2	105	6	20	65-135	
Toluene	25.0	24.4	98	4	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.0	96	5	25	58-135	
1,1,1-Trichloroethane	25.0	22.0	88	7	20	65-135	
1,1,2-Trichloroethane	25.0	22.9	92	4	27	64-135	
Trichloroethene	25.0	22.3	89	1	20	65-135	
Trichlorofluoromethane	25.0	23.8	95	7	27	53-137	
1,2,3-Trichloropropane	25.0	21.4	85	8	23	65-135	
Vinyl acetate	50.0	48.2	96	4	24	11-187	
Vinyl chloride	25.0	24.7	99	8	24	40-137	
m-Xylene & p-Xylene	25.0	24.8	99	2	20	65-135	
o-Xylene	25.0	25.1	100	2	20	65-135	
Xylenes, Total	50.0	49.9	100	0	20	65-135	
1,2-Dibromoethane	25.0	23.0	92	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_4137.D
 Lab ID: LCSD 280-542394/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	251	100	5	30	50-150	
Chloroprene	25.0	21.0	84	2	30	50-150	
Methacrylonitrile	250	267	107	1	30	50-150	
Methyl methacrylate	50.0	50.5	101	3	30	50-150	
Propionitrile	250	246	98	1	30	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS9_5882.d

Lab ID: LCSD 280-542401/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	148	148	4	23	39-156	
Acrolein	247	261	106	1	30	36-147	
Acrylonitrile	250	345	138	3	30	56-135	*+
Benzene	25.0	24.5	98	2	20	65-135	
Chlorobromomethane	25.0	26.9	107	3	29	65-135	
Dichlorobromomethane	25.0	26.3	105	3	20	65-135	
Bromoform	25.0	27.3	109	4	27	62-135	
Bromomethane	25.0	19.1	77	1	33	45-135	
2-Butanone (MEK)	100	137	137	1	32	44-177	
Carbon disulfide	25.0	20.9	84	1	20	55-143	
Carbon tetrachloride	25.0	25.4	102	0	21	65-135	
Chlorobenzene	25.0	25.0	100	3	20	65-135	
Chlorodibromomethane	25.0	25.5	102	2	20	65-135	
Chloroethane	25.0	23.2	93	1	25	46-136	
Chloroform	25.0	27.2	109	4	20	65-135	
Chloromethane	25.0	21.4	85	1	24	34-145	
Allyl chloride	25.0	23.9	96	2	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	30.2	121	2	22	57-135	
Dibromomethane	25.0	27.6	110	4	26	65-135	
1,2-Dichlorobenzene	25.0	25.2	101	3	20	65-135	
1,3-Dichlorobenzene	25.0	24.9	100	4	20	65-135	
1,4-Dichlorobenzene	25.0	24.8	99	3	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	25.6	102	2	25	53-135	
Dichlorodifluoromethane	25.0	14.1	56	9	30	43-142	
1,1-Dichloroethane	25.0	24.5	98	2	21	65-135	
1,2-Dichloroethane	25.0	27.7	111	1	20	65-135	
cis-1,2-Dichloroethene	25.0	25.2	101	3	20	65-135	
trans-1,2-Dichloroethene	25.0	24.5	98	2	24	65-135	
1,1-Dichloroethene	25.0	23.6	94	2	20	65-136	
1,2-Dichloropropane	25.0	24.6	99	3	20	64-135	
1,3-Dichloropropane	25.0	25.2	101	3	20	64-135	
2,2-Dichloropropane	25.0	18.8	75	5	20	65-135	
cis-1,3-Dichloropropene	25.0	23.5	94	3	26	65-135	
trans-1,3-Dichloropropene	25.0	24.8	99	2	26	65-135	
1,1-Dichloropropene	25.0	24.2	97	1	21	65-135	
Ethylbenzene	25.0	24.2	97	3	20	65-135	
Ethyl methacrylate	25.0	25.7	103	3	30	50-135	
2-Hexanone	100	113	113	4	25	57-139	
Iodomethane	25.0	23.3	93	17	25	65-142	
Isobutyl alcohol	625	725	116	2	30	55-135	
Methylene Chloride	25.0	24.7	99	4	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	115	115	2	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS9_5882.d
 Lab ID: LCSD 280-542401/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	25.4	102	4	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	26.0	104	3	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	28.7	115	4	20	58-135	
Tetrachloroethene	25.0	25.2	101	2	20	65-135	
Toluene	25.0	25.6	102	3	20	65-135	
1,2,4-Trichlorobenzene	25.0	26.3	105	6	25	58-135	
1,1,1-Trichloroethane	25.0	26.2	105	1	20	65-135	
1,1,2-Trichloroethane	25.0	27.9	111	3	27	64-135	
Trichloroethene	25.0	24.2	97	3	20	65-135	
Trichlorofluoromethane	25.0	18.9	75	6	27	53-137	
1,2,3-Trichloropropane	25.0	27.4	110	1	23	65-135	
Vinyl acetate	50.0	48.4	97	3	24	11-187	
Vinyl chloride	25.0	21.4	86	2	24	40-137	
m-Xylene & p-Xylene	25.0	24.7	99	2	20	65-135	
o-Xylene	25.0	24.8	99	3	20	65-135	
Xylenes, Total	50.0	49.5	99	2	20	65-135	
1,2-Dibromoethane	25.0	25.0	100	4	27	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS9_5886.d
 Lab ID: LCSD 280-542401/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	298	119	1	30	50-150	
Chloroprene	25.0	18.4	74	2	30	50-150	
Methacrylonitrile	250	294	117	0	30	50-150	
Methyl methacrylate	50.0	61.0	122	1	30	50-150	
Propionitrile	250	330	132	2	30	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS1_4285.D

Lab ID: LCSD 280-542686/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	74.4	74	5	23	39-156	
Acrolein	247	201	82	1	30	36-147	
Acrylonitrile	250	234	94	3	30	56-135	
Benzene	25.0	23.6	94	6	20	65-135	
Chlorobromomethane	25.0	23.5	94	0	29	65-135	
Dichlorobromomethane	25.0	20.6	82	2	20	65-135	
Bromoform	25.0	17.9	71	2	27	62-135	
Bromomethane	25.0	20.5	82	2	33	45-135	
2-Butanone (MEK)	100	82.2	82	4	32	44-177	
Carbon disulfide	25.0	22.2	89	4	20	55-143	
Carbon tetrachloride	25.0	20.1	81	0	21	65-135	
Chlorobenzene	25.0	23.7	95	2	20	65-135	
Chlorodibromomethane	25.0	20.8	83	6	20	65-135	
Chloroethane	25.0	21.6	86	1	25	46-136	
Chloroform	25.0	22.2	89	4	20	65-135	
Chloromethane	25.0	18.1	72	3	24	34-145	
Allyl chloride	25.0	23.1	93	2	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	18.9	76	11	22	57-135	
Dibromomethane	25.0	22.4	90	0	26	65-135	
1,2-Dichlorobenzene	25.0	26.0	104	7	20	65-135	
1,3-Dichlorobenzene	25.0	25.2	101	1	20	65-135	
1,4-Dichlorobenzene	25.0	24.2	97	2	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	15.2	61	7	25	53-135	
Dichlorodifluoromethane	25.0	13.7	55	2	30	43-142	
1,1-Dichloroethane	25.0	22.4	90	2	21	65-135	
1,2-Dichloroethane	25.0	22.0	88	5	20	65-135	
cis-1,2-Dichloroethene	25.0	22.8	91	0	20	65-135	
trans-1,2-Dichloroethene	25.0	20.8	83	5	24	65-135	
1,1-Dichloroethene	25.0	22.4	90	1	20	65-136	
1,2-Dichloropropane	25.0	23.8	95	3	20	64-135	
1,3-Dichloropropane	25.0	23.6	94	1	20	64-135	
2,2-Dichloropropane	25.0	20.2	81	5	20	65-135	
cis-1,3-Dichloropropene	25.0	21.4	86	6	26	65-135	
trans-1,3-Dichloropropene	25.0	20.6	83	0	26	65-135	
1,1-Dichloropropene	25.0	23.1	93	4	21	65-135	
Ethylbenzene	25.0	24.3	97	2	20	65-135	
Ethyl methacrylate	25.0	20.8	83	8	30	50-135	
2-Hexanone	100	88.6	89	2	25	57-139	
Iodomethane	25.0	19.8	79	0	25	65-142	
Isobutyl alcohol	625	429	69	1	30	55-135	
Methylene Chloride	25.0	23.3	93	1	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	93.7	94	0	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_4285.D
 Lab ID: LCSD 280-542686/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	23.2	93	4	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	22.4	90	2	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	21.2	85	1	20	58-135	
Tetrachloroethene	25.0	23.6	94	4	20	65-135	
Toluene	25.0	23.2	93	3	20	65-135	
1,2,4-Trichlorobenzene	25.0	24.6	98	8	25	58-135	
1,1,1-Trichloroethane	25.0	20.5	82	6	20	65-135	
1,1,2-Trichloroethane	25.0	22.4	90	0	27	64-135	
Trichloroethene	25.0	20.1	81	12	20	65-135	
Trichlorofluoromethane	25.0	20.5	82	2	27	53-137	
1,2,3-Trichloropropane	25.0	22.1	89	7	23	65-135	
Vinyl acetate	50.0	45.7	91	1	24	11-187	
Vinyl chloride	25.0	21.7	87	3	24	40-137	
m-Xylene & p-Xylene	25.0	23.7	95	4	20	65-135	
o-Xylene	25.0	24.7	99	5	20	65-135	
Xylenes, Total	50.0	48.4	97	4	20	65-135	
1,2-Dibromoethane	25.0	22.7	91	1	27	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: MS1_4287.D
 Lab ID: LCSD 280-542686/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetonitrile	250	236	94	5	30	50-150	
Chloroprene	25.0	21.8	87	4	30	50-150	
Methacrylonitrile	250	253	101	1	30	50-150	
Methyl methacrylate	50.0	48.3	97	2	30	50-150	
Propionitrile	250	232	93	0	30	50-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS9_5907.d

Lab ID: 280-150306-2 MS

Client ID: RW-2172F-20210625 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	100	ND	148	148	39-156	
Acrolein	247	ND	270	109	36-147	
Acrylonitrile	250	ND	356	142	56-135	F1
Benzene	25.0	ND	25.9	104	65-135	
Chlorobromomethane	25.0	ND	27.0	108	65-135	
Dichlorobromomethane	25.0	ND	26.5	106	65-135	
Bromoform	25.0	ND	25.6	103	62-135	
Bromomethane	25.0	ND	18.4	74	45-135	
2-Butanone (MEK)	100	ND	145	145	44-177	
Carbon disulfide	25.0	ND	21.9	88	55-143	
Carbon tetrachloride	25.0	ND	26.6	106	65-135	
Chlorobenzene	25.0	ND	25.5	102	65-135	
Chlorodibromomethane	25.0	ND	25.3	101	65-135	
Chloroethane	25.0	ND	24.7	99	46-136	
Chloroform	25.0	ND	28.2	113	65-135	
Chloromethane	25.0	ND	31.3	125	34-145	
Allyl chloride	25.0	ND	24.6	98	50-135	
1,2-Dibromo-3-Chloropropane	25.0	ND	30.2	121	57-135	
Dibromomethane	25.0	ND	28.1	112	65-135	
1,2-Dichlorobenzene	25.0	ND	25.3	101	65-135	
1,3-Dichlorobenzene	25.0	ND	24.8	99	65-135	
1,4-Dichlorobenzene	25.0	ND	24.8	99	65-135	
trans-1,4-Dichloro-2-butene	25.0	ND	23.4	94	53-135	
Dichlorodifluoromethane	25.0	ND	27.6	111	43-142	
1,1-Dichloroethane	25.0	ND	26.1	104	65-135	
1,2-Dichloroethane	25.0	ND	28.4	113	65-135	
cis-1,2-Dichloroethene	25.0	ND	26.5	106	65-135	
trans-1,2-Dichloroethene	25.0	ND	26.0	104	65-135	
1,1-Dichloroethene	25.0	ND	24.7	99	65-136	
1,2-Dichloropropane	25.0	ND	25.3	101	64-135	
1,3-Dichloropropane	25.0	ND	26.1	105	64-135	
2,2-Dichloropropane	25.0	ND	18.8	75	65-135	
cis-1,3-Dichloropropene	25.0	ND	23.3	93	65-135	
trans-1,3-Dichloropropene	25.0	ND	24.3	97	65-135	
1,1-Dichloropropene	25.0	ND	25.8	103	65-135	
Ethylbenzene	25.0	ND	25.1	100	65-135	
Ethyl methacrylate	25.0	ND	26.0	104	50-135	
2-Hexanone	100	ND	116	116	57-139	
Iodomethane	25.0	ND	18.1	72	65-142	
Isobutyl alcohol	625	ND	782	125	55-135	
Methylene Chloride	25.0	ND	25.5	102	54-141	
4-Methyl-2-pentanone (MIBK)	100	ND	119	119	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS9_5907.d

Lab ID: 280-150306-2 MS

Client ID: RW-2172F-20210625 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Styrene	25.0	ND	25.8	103	65-135	
1,1,1,2-Tetrachloroethane	25.0	ND	26.1	104	65-135	
1,1,2,2-Tetrachloroethane	25.0	ND	28.9	116	58-135	
Tetrachloroethene	25.0	ND	26.2	105	65-135	
Toluene	25.0	ND	26.5	106	65-135	
1,2,4-Trichlorobenzene	25.0	ND	25.0	100	58-135	
1,1,1-Trichloroethane	25.0	ND	27.5	110	65-135	
1,1,2-Trichloroethane	25.0	ND	28.0	112	64-135	
Trichloroethene	25.0	ND	25.0	100	65-135	
Trichlorofluoromethane	25.0	ND	22.6	90	53-137	
1,2,3-Trichloropropane	25.0	ND	28.9	115	65-135	
Vinyl acetate	50.0	ND	43.4	87	11-187	
Vinyl chloride	25.0	ND	27.9	111	40-137	
m-Xylene & p-Xylene	25.0	ND	25.3	101	65-135	
o-Xylene	25.0	ND	25.6	103	65-135	
Xylenes, Total	50.0	ND	50.9	102	65-135	
1,2-Dibromoethane	25.0	ND	25.0	100	65-135	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS9_5908.d

Lab ID: 280-150306-2 MSD

Client ID: RW-2172F-20210625 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	100	151	151	2	23	39-156	
Acrolein	247	278	113	3	30	36-147	
Acrylonitrile	250	362	145	2	30	56-135	F1
Benzene	25.0	26.4	105	2	20	65-135	
Chlorobromomethane	25.0	27.3	109	1	29	65-135	
Dichlorobromomethane	25.0	27.2	109	3	20	65-135	
Bromoform	25.0	26.1	104	2	27	62-135	
Bromomethane	25.0	19.1	76	3	33	45-135	
2-Butanone (MEK)	100	147	147	1	32	44-177	
Carbon disulfide	25.0	23.0	92	5	20	55-143	
Carbon tetrachloride	25.0	28.0	112	5	21	65-135	
Chlorobenzene	25.0	25.8	103	1	20	65-135	
Chlorodibromomethane	25.0	25.6	102	1	20	65-135	
Chloroethane	25.0	25.2	101	2	25	46-136	
Chloroform	25.0	28.7	115	2	20	65-135	
Chloromethane	25.0	31.6	126	1	24	34-145	
Allyl chloride	25.0	25.7	103	4	30	50-135	
1,2-Dibromo-3-Chloropropane	25.0	31.0	124	3	22	57-135	
Dibromomethane	25.0	28.1	112	0	26	65-135	
1,2-Dichlorobenzene	25.0	25.9	104	2	20	65-135	
1,3-Dichlorobenzene	25.0	25.5	102	3	20	65-135	
1,4-Dichlorobenzene	25.0	25.4	102	2	23	65-135	
trans-1,4-Dichloro-2-butene	25.0	23.7	95	1	25	53-135	
Dichlorodifluoromethane	25.0	28.2	113	2	30	43-142	
1,1-Dichloroethane	25.0	26.4	105	1	21	65-135	
1,2-Dichloroethane	25.0	28.8	115	1	20	65-135	
cis-1,2-Dichloroethene	25.0	26.4	105	1	20	65-135	
trans-1,2-Dichloroethene	25.0	26.2	105	1	24	65-135	
1,1-Dichloroethene	25.0	26.1	104	5	20	65-136	
1,2-Dichloropropane	25.0	25.9	103	2	20	64-135	
1,3-Dichloropropane	25.0	26.3	105	0	20	64-135	
2,2-Dichloropropane	25.0	19.2	77	2	20	65-135	
cis-1,3-Dichloropropene	25.0	23.8	95	2	26	65-135	
trans-1,3-Dichloropropene	25.0	24.9	100	2	26	65-135	
1,1-Dichloropropene	25.0	26.8	107	4	21	65-135	
Ethylbenzene	25.0	25.8	103	3	20	65-135	
Ethyl methacrylate	25.0	26.7	107	3	30	50-135	
2-Hexanone	100	120	120	3	25	57-139	
Iodomethane	25.0	22.5	90	22	25	65-142	
Isobutyl alcohol	625	794	127	2	30	55-135	
Methylene Chloride	25.0	25.3	101	0	26	54-141	
4-Methyl-2-pentanone (MIBK)	100	122	122	3	22	60-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: MS9_5908.d

Lab ID: 280-150306-2 MSD

Client ID: RW-2172F-20210625 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Styrene	25.0	25.8	103	0	26	65-135	
1,1,1,2-Tetrachloroethane	25.0	26.6	106	2	20	65-135	
1,1,2,2-Tetrachloroethane	25.0	30.1	120	4	20	58-135	
Tetrachloroethene	25.0	26.8	107	2	20	65-135	
Toluene	25.0	27.2	109	2	20	65-135	
1,2,4-Trichlorobenzene	25.0	26.3	105	5	25	58-135	
1,1,1-Trichloroethane	25.0	28.6	115	4	20	65-135	
1,1,2-Trichloroethane	25.0	28.2	113	1	27	64-135	
Trichloroethene	25.0	25.8	103	3	20	65-135	
Trichlorofluoromethane	25.0	23.1	92	2	27	53-137	
1,2,3-Trichloropropane	25.0	29.8	119	3	23	65-135	
Vinyl acetate	50.0	44.2	88	2	24	11-187	
Vinyl chloride	25.0	28.9	115	3	24	40-137	
m-Xylene & p-Xylene	25.0	26.0	104	3	20	65-135	
o-Xylene	25.0	25.9	104	1	20	65-135	
Xylenes, Total	50.0	51.9	104	2	20	65-135	
1,2-Dibromoethane	25.0	25.4	101	2	27	65-135	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab File ID: MS1_4139.D Lab Sample ID: MB 280-542394/9
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: VMS_MS1 Date Analyzed: 07/07/2021 00:34
 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 280-542394/4	MS1_4134.D	07/06/2021 22:48
	LCSD 280-542394/5	MS1_4135.D	07/06/2021 23:09
	LCS 280-542394/6	MS1_4136.D	07/06/2021 23:30
	LCSD 280-542394/7	MS1_4137.D	07/06/2021 23:51
TB-03-20210627	280-150290-1	MS1_4140.D	07/07/2021 00:55
PA-5-20210627	280-150290-2	MS1_4141.D	07/07/2021 01:16
MW-38-60-100-20210627	280-150290-3	MS1_4142.D	07/07/2021 01:37
RW-2879M-20210624	280-150290-4	MS1_4143.D	07/07/2021 01:58
RW-7505P-20210624	280-150290-5	MS1_4144.D	07/07/2021 02:19
RW-8048P-20210624	280-150290-6	MS1_4145.D	07/07/2021 02:41
RW-8035P-20210624	280-150290-7	MS1_4146.D	07/07/2021 03:02
PA-10-20210624	280-150290-8	MS1_4147.D	07/07/2021 03:23
RW-7350P-20210624	280-150290-9	MS1_4148.D	07/07/2021 03:44
PA-9-58-68-20210624	280-150290-10	MS1_4149.D	07/07/2021 04:05
PA-9-88-98-20210624	280-150290-11	MS1_4150.D	07/07/2021 04:27
RW-7549P-20210624	280-150290-12	MS1_4151.D	07/07/2021 04:48

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab File ID: MS9_5884.d Lab Sample ID: MB 280-542401/9
 Matrix: Water Heated Purge: (Y/N) Y
 Instrument ID: VMS_MS9 Date Analyzed: 07/07/2021 08:59
 GC Column: RXI-624SilMS ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-542401/4	MS9_5881.d	07/07/2021 07:51
	LCSD 280-542401/5	MS9_5882.d	07/07/2021 08:14
	LCS 280-542401/6	MS9_5885.d	07/07/2021 09:22
	LCSD 280-542401/7	MS9_5886.d	07/07/2021 09:45
EB-07-20210627	280-150306-11	MS9_5888.d	07/07/2021 10:31
RW-8284P-20210625	280-150306-1	MS9_5891.d	07/07/2021 11:39
RW-2172F-20210625	280-150306-2	MS9_5892.d	07/07/2021 12:02
RW-7588P-20210625	280-150306-3	MS9_5893.d	07/07/2021 12:25
RW-8209P-20210625	280-150306-4	MS9_5894.d	07/07/2021 12:48
RW-7688P-20210625	280-150306-5	MS9_5895.d	07/07/2021 13:11
RW-5898BI-20210625	280-150306-6	MS9_5896.d	07/07/2021 13:34
RW-2140H-20210626	280-150306-7	MS9_5897.d	07/07/2021 13:57
MW-116S-20210626	280-150306-8	MS9_5898.d	07/07/2021 14:19
RW-2076F-20210626	280-150306-9	MS9_5899.d	07/07/2021 14:42
RW-8012P-20210626	280-150306-10	MS9_5900.d	07/07/2021 15:05
RW-7244P-20210624	280-150306-12	MS9_5901.d	07/07/2021 15:28
RW-2237H-20210624	280-150306-13	MS9_5902.d	07/07/2021 15:51
RW-7070B-20210624	280-150306-14	MS9_5903.d	07/07/2021 16:14
RW-8105PS-20210625	280-150306-15	MS9_5904.d	07/07/2021 16:37
RW-2172F-20210625 MS	280-150306-2 MS	MS9_5907.d	07/07/2021 17:45
RW-2172F-20210625 MSD	280-150306-2 MSD	MS9_5908.d	07/07/2021 18:08

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS1_4289.D Lab Sample ID: MB 280-542686/9
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: VMS_MS1 Date Analyzed: 07/09/2021 09:55
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 280-542686/4	MS1_4284.D	07/09/2021 08:08
	LCSD 280-542686/5	MS1_4285.D	07/09/2021 08:30
	LCS 280-542686/6	MS1_4286.D	07/09/2021 08:51
	LCSD 280-542686/7	MS1_4287.D	07/09/2021 09:12
TB-02-20210627	280-150306-17	MS1_4290.D	07/09/2021 10:16
MW-38-105-115-20210627	280-150306-16	MS1_4293.D	07/09/2021 11:20
MW-38-121-130-20210627	280-150306-18	MS1_4294.D	07/09/2021 11:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS1_2711.D BFB Injection Date: 06/04/2021
Instrument ID: VMS_MS1 BFB Injection Time: 09:51
Analysis Batch No.: 538548

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	24.1
75	30.0 - 60.0 % of mass 95	58.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	67.3
175	5.0 - 9.0 % of mass 174	4.2 (6.2) 1
176	95.0 - 101.0 % of mass 174	65.8 (97.8) 1
177	5.0 - 9.0 % of mass 176	4.2 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD010 280-538548/24	MS1_2712.D	06/04/2021	10:18
	STD020 280-538548/25	MS1_2713.D	06/04/2021	10:39
	STD050 280-538548/26	MS1_2714.D	06/04/2021	11:00
	STD10 280-538548/27	MS1_2715.D	06/04/2021	11:21
	STD50 280-538548/28	MS1_2716.D	06/04/2021	11:42
	STD75 280-538548/29	MS1_2717.D	06/04/2021	12:04
	STD100 280-538548/30	MS1_2718.D	06/04/2021	12:25
	STD200 280-538548/31	MS1_2719.D	06/04/2021	12:47
	ICV 280-538548/32	MS1_2721.D	06/04/2021	13:29
	STD005 280-538548/14	MS1_2722.D	06/04/2021	13:50
	STD010 280-538548/15	MS1_2723.D	06/04/2021	14:11
	STD020 280-538548/16	MS1_2724.D	06/04/2021	14:33
	STD10 280-538548/18	MS1_2726.D	06/04/2021	15:16
	ICIS 280-538548/19	MS1_2727.D	06/04/2021	15:37
	STD75 280-538548/20	MS1_2728.D	06/04/2021	15:58
	STD100 280-538548/21	MS1_2729.D	06/04/2021	16:20
	STD200 280-538548/22	MS1_2730.D	06/04/2021	16:41
	ICV 280-538548/23	MS1_2732.D	06/04/2021	17:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS1_4129.D BFB Injection Date: 07/06/2021
Instrument ID: VMS_MS1 BFB Injection Time: 20:31
Analysis Batch No.: 542394

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.3
75	30.0 - 60.0 % of mass 95	59.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	68.5
175	5.0 - 9.0 % of mass 174	5.7 (8.4) 1
176	95.0 - 101.0 % of mass 174	66.5 (97.2) 1
177	5.0 - 9.0 % of mass 176	4.5 (6.8) 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 280-542394/3	MS1_4131.D	07/06/2021	21:15
	CCV 280-542394/2	MS1_4133.D	07/06/2021	22:15
	LCS 280-542394/4	MS1_4134.D	07/06/2021	22:48
	LCSD 280-542394/5	MS1_4135.D	07/06/2021	23:09
	LCS 280-542394/6	MS1_4136.D	07/06/2021	23:30
	LCSD 280-542394/7	MS1_4137.D	07/06/2021	23:51
	MB 280-542394/9	MS1_4139.D	07/07/2021	0:34
TB-03-20210627	280-150290-1	MS1_4140.D	07/07/2021	0:55
PA-5-20210627	280-150290-2	MS1_4141.D	07/07/2021	1:16
MW-38-60-100-20210627	280-150290-3	MS1_4142.D	07/07/2021	1:37
RW-2879M-20210624	280-150290-4	MS1_4143.D	07/07/2021	1:58
RW-7505P-20210624	280-150290-5	MS1_4144.D	07/07/2021	2:19
RW-8048P-20210624	280-150290-6	MS1_4145.D	07/07/2021	2:41
RW-8035P-20210624	280-150290-7	MS1_4146.D	07/07/2021	3:02
PA-10-20210624	280-150290-8	MS1_4147.D	07/07/2021	3:23
RW-7350P-20210624	280-150290-9	MS1_4148.D	07/07/2021	3:44
PA-9-58-68-20210624	280-150290-10	MS1_4149.D	07/07/2021	4:05
PA-9-88-98-20210624	280-150290-11	MS1_4150.D	07/07/2021	4:27
RW-7549P-20210624	280-150290-12	MS1_4151.D	07/07/2021	4:48

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS1_4280.D BFB Injection Date: 07/09/2021
Instrument ID: VMS_MS1 BFB Injection Time: 06:39
Analysis Batch No.: 542686

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.3
75	30.0 - 60.0 % of mass 95	58.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	67.5
175	5.0 - 9.0 % of mass 174	5.8 (8.5) 1
176	95.0 - 101.0 % of mass 174	64.9 (96.1) 1
177	5.0 - 9.0 % of mass 176	4.2 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-542686/2	MS1_4282.D	07/09/2021	7:26
	CCV 280-542686/3	MS1_4283.D	07/09/2021	7:47
	LCS 280-542686/4	MS1_4284.D	07/09/2021	8:08
	LCSD 280-542686/5	MS1_4285.D	07/09/2021	8:30
	LCS 280-542686/6	MS1_4286.D	07/09/2021	8:51
	LCSD 280-542686/7	MS1_4287.D	07/09/2021	9:12
	MB 280-542686/9	MS1_4289.D	07/09/2021	9:55
TB-02-20210627	280-150306-17	MS1_4290.D	07/09/2021	10:16
MW-38-105-115-20210627	280-150306-16	MS1_4293.D	07/09/2021	11:20
MW-38-121-130-20210627	280-150306-18	MS1_4294.D	07/09/2021	11:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS9_5635.d BFB Injection Date: 06/29/2021
Instrument ID: VMS_MS9 BFB Injection Time: 10:26
Analysis Batch No.: 541632

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.2
75	30.0 - 60.0 % of mass 95	46.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.1
173	Less than 2.0 % of mass 174	0.7 (0.8) 1
174	Greater than 50% of mass 95	85.6
175	5.0 - 9.0 % of mass 174	7.6 (8.9) 1
176	95.0 - 101.0 % of mass 174	83.3 (97.3) 1
177	5.0 - 9.0 % of mass 176	6.7 (8.1) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-541632/16	MS9_5637.D	06/29/2021	11:08
	IC 280-541632/17	MS9_5638.d	06/29/2021	11:27
	IC 280-541632/18	MS9_5639.d	06/29/2021	11:47
	ICIS 280-541632/19	MS9_5640.d	06/29/2021	12:07
	IC 280-541632/20	MS9_5641.d	06/29/2021	12:27
	IC 280-541632/21	MS9_5642.d	06/29/2021	12:47
	IC 280-541632/22	MS9_5643.d	06/29/2021	13:07
	IC 280-541632/23	MS9_5644.d	06/29/2021	13:27
	IC 280-541632/24	MS9_5645.d	06/29/2021	13:47
	ICV 280-541632/25	MS9_5646.d	06/29/2021	14:07

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS9_5682.d BFB Injection Date: 06/30/2021
Instrument ID: VMS_MS9 BFB Injection Time: 06:05
Analysis Batch No.: 541805

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	49.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.2
173	Less than 2.0 % of mass 174	0.8 (0.9) 1
174	Greater than 50% of mass 95	92.8
175	5.0 - 9.0 % of mass 174	8.0 (8.6) 1
176	95.0 - 101.0 % of mass 174	90.6 (97.6) 1
177	5.0 - 9.0 % of mass 176	7.4 (8.2) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-541805/14	MS9_5687.d	06/30/2021	8:49
	IC 280-541805/15	MS9_5688.d	06/30/2021	9:09
	IC 280-541805/16	MS9_5689.d	06/30/2021	9:29
	IC 280-541805/17	MS9_5690.d	06/30/2021	9:49
	IC 280-541805/18	MS9_5691.d	06/30/2021	10:09
	IC 280-541805/19	MS9_5692.d	06/30/2021	10:29
	IC 280-541805/20	MS9_5693.d	06/30/2021	10:49
	IC 280-541805/21	MS9_5694.d	06/30/2021	11:09
	ICV 280-541805/22	MS9_5695.d	06/30/2021	11:29

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab File ID: MS9_5703.d BFB Injection Date: 06/30/2021
 Instrument ID: VMS_MS9 BFB Injection Time: 17:00
 Analysis Batch No.: 541956

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.4
75	30.0 - 60.0 % of mass 95	50.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.1
173	Less than 2.0 % of mass 174	0.3 (0.3) 1
174	Greater than 50% of mass 95	91.2
175	5.0 - 9.0 % of mass 174	8.0 (8.7) 1
176	95.0 - 101.0 % of mass 174	89.2 (97.8) 1
177	5.0 - 9.0 % of mass 176	7.1 (8.0) 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
	IC 280-541956/15	MS9_5706.d	06/30/2021	17:47
	IC 280-541956/16	MS9_5707.d	06/30/2021	18:06
	ICIS 280-541956/17	MS9_5708.d	06/30/2021	18:26
	IC 280-541956/18	MS9_5709.d	06/30/2021	18:46
	IC 280-541956/19	MS9_5710.d	06/30/2021	19:06
	IC 280-541956/20	MS9_5711.d	06/30/2021	19:26
	IC 280-541956/21	MS9_5712.d	06/30/2021	19:46
	IC 280-541956/22	MS9_5713.d	06/30/2021	20:06
	IC 280-541956/14	MS9_5714.d	06/30/2021	20:26
	ICV 280-541956/23	MS9_5716.d	06/30/2021	21:06

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab File ID: MS9_5878B.D BFB Injection Date: 07/07/2021
Instrument ID: VMS_MS9 BFB Injection Time: 06:43
Analysis Batch No.: 542401

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.8
75	30.0 - 60.0 % of mass 95	47.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.0
173	Less than 2.0 % of mass 174	0.9 (0.9) 1
174	Greater than 50% of mass 95	95.2
175	5.0 - 9.0 % of mass 174	8.6 (9.0) 1
176	95.0 - 101.0 % of mass 174	92.0 (96.7) 1
177	5.0 - 9.0 % of mass 176	7.5 (8.1) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-542401/2	MS9_5878.d	07/07/2021	6:43
	CCV 280-542401/3	MS9_5879.d	07/07/2021	7:05
	CCV 280-542401/14	MS9_5880.d	07/07/2021	7:28
	LCS 280-542401/4	MS9_5881.d	07/07/2021	7:51
	LCSD 280-542401/5	MS9_5882.d	07/07/2021	8:14
	MB 280-542401/9	MS9_5884.d	07/07/2021	8:59
	LCS 280-542401/6	MS9_5885.d	07/07/2021	9:22
	LCSD 280-542401/7	MS9_5886.d	07/07/2021	9:45
EB-07-20210627	280-150306-11	MS9_5888.d	07/07/2021	10:31
RW-8284P-20210625	280-150306-1	MS9_5891.d	07/07/2021	11:39
RW-2172F-20210625	280-150306-2	MS9_5892.d	07/07/2021	12:02
RW-7588P-20210625	280-150306-3	MS9_5893.d	07/07/2021	12:25
RW-8209P-20210625	280-150306-4	MS9_5894.d	07/07/2021	12:48
RW-7688P-20210625	280-150306-5	MS9_5895.d	07/07/2021	13:11
RW-5898BI-20210625	280-150306-6	MS9_5896.d	07/07/2021	13:34
RW-2140H-20210626	280-150306-7	MS9_5897.d	07/07/2021	13:57
MW-116S-20210626	280-150306-8	MS9_5898.d	07/07/2021	14:19
RW-2076F-20210626	280-150306-9	MS9_5899.d	07/07/2021	14:42
RW-8012P-20210626	280-150306-10	MS9_5900.d	07/07/2021	15:05
RW-7244P-20210624	280-150306-12	MS9_5901.d	07/07/2021	15:28
RW-2237H-20210624	280-150306-13	MS9_5902.d	07/07/2021	15:51
RW-7070B-20210624	280-150306-14	MS9_5903.d	07/07/2021	16:14
RW-8105PS-20210625	280-150306-15	MS9_5904.d	07/07/2021	16:37
RW-2172F-20210625 MS	280-150306-2 MS	MS9_5907.d	07/07/2021	17:45
RW-2172F-20210625 MSD	280-150306-2 MSD	MS9_5908.d	07/07/2021	18:08

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Sample No.: ICIS 280-538548/19 Date Analyzed: 06/04/2021 15:37
 Instrument ID: VMS_MS1 GC Column: DB-624 (60.25) ID: 0.25 (mm)
 Lab File ID (Standard): MS1_2727.D Heated Purge: (Y/N) N
 Calibration ID: 54226

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		769988	5.84	161871	8.58	257514	10.86
UPPER LIMIT		1539976	6.34	323742	9.08	515028	11.36
LOWER LIMIT		384994	5.34	80936	8.08	128757	10.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-538548/23		749174	5.84	154032	8.58	248786	10.86
CCV 280-542394/3		743484	5.84	162198	8.58	270923	10.86
CCV 280-542394/2		737075	5.84	163764	8.58	266568	10.86
LCS 280-542394/4		754544	5.84	167347	8.58	262685	10.86
LCSD 280-542394/5		755254	5.84	166325	8.58	261427	10.86
LCS 280-542394/6		745215	5.84	163221	8.58	263875	10.86
LCSD 280-542394/7		757348	5.84	169870	8.58	266813	10.86
MB 280-542394/9		735791	5.84	165412	8.58	273102	10.86
280-150290-1	TB-03-20210627	734342	5.84	162962	8.58	267716	10.86
280-150290-2	PA-5-20210627	734225	5.84	166508	8.58	267820	10.86
280-150290-3	MW-38-60-100-20210627	722045	5.84	161485	8.58	260789	10.85
280-150290-4	RW-2879M-20210624	714908	5.84	157881	8.58	256263	10.86
280-150290-5	RW-7505P-20210624	728480	5.84	161115	8.58	266545	10.86
280-150290-6	RW-8048P-20210624	729875	5.84	163401	8.58	259397	10.86
280-150290-7	RW-8035P-20210624	722078	5.84	160931	8.58	252505	10.86
280-150290-8	PA-10-20210624	726073	5.84	166656	8.58	261878	10.86
280-150290-9	RW-7350P-20210624	728492	5.84	165598	8.58	267971	10.85
280-150290-10	PA-9-58-68-20210624	750221	5.84	166548	8.58	270741	10.86
280-150290-11	PA-9-88-98-20210624	714689	5.84	161463	8.58	264719	10.86
280-150290-12	RW-7549P-20210624	728025	5.84	164500	8.58	259379	10.86
CCV 280-542686/2		794587	5.84	166551	8.58	266068	10.85
CCV 280-542686/3		768609	5.84	160017	8.58	254950	10.85
LCS 280-542686/4		797717	5.84	165668	8.58	264664	10.85
LCSD 280-542686/5		784549	5.84	167927	8.58	261171	10.86
LCS 280-542686/6		772625	5.84	165914	8.58	261927	10.86
LCSD 280-542686/7		790409	5.84	171888	8.58	267842	10.86
MB 280-542686/9		773756	5.84	162350	8.58	269598	10.86
280-150306-17	TB-02-20210627	793243	5.84	167102	8.58	273043	10.86

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Sample No.: ICIS 280-538548/19 Date Analyzed: 06/04/2021 15:37
 Instrument ID: VMS_MS1 GC Column: DB-624 (60.25) ID: 0.25 (mm)
 Lab File ID (Standard): MS1_2727.D Heated Purge: (Y/N) N
 Calibration ID: 54226

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	769988	5.84	161871	8.58	257514	10.86
UPPER LIMIT	1539976	6.34	323742	9.08	515028	11.36
LOWER LIMIT	384994	5.34	80936	8.08	128757	10.36
LAB SAMPLE ID	CLIENT SAMPLE ID					
280-150306-16	MW-38-105-115-2021062 7	774887	5.84	170136	8.58	268287 10.85
280-150306-18	MW-38-121-130-2021062 7	785485	5.84	165923	8.58	268000 10.85

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Sample No.: ICIS 280-541632/19 Date Analyzed: 06/29/2021 12:07
 Instrument ID: VMS_MS9 GC Column: RXI-624SilMS ID: 0.25 (mm)
 Lab File ID (Standard): MS9_5640.d Heated Purge: (Y/N) Y
 Calibration ID: 54898

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	3390105	5.79	938729	8.51	1524660	10.78
UPPER LIMIT	6780210	6.29	1877458	9.01	3049320	11.28
LOWER LIMIT	1695053	5.29	469365	8.01	762330	10.28
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 280-541632/25		3373379	5.79	924259	8.51	1538772
						10.78

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Sample No.: ICIS 280-541956/17 Date Analyzed: 06/30/2021 18:26
 Instrument ID: VMS_MS9 GC Column: RXI-624SilMS ID: 0.25 (mm)
 Lab File ID (Standard): MS9_5708.d Heated Purge: (Y/N) Y
 Calibration ID: 54966

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	2089111	5.79	591194	8.51	1014129	10.77
UPPER LIMIT	4178222	6.29	1182388	9.01	2028258	11.27
LOWER LIMIT	1044556	5.29	295597	8.01	507065	10.27
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 280-541956/23		1995956	5.79	568556	8.51	945217 10.77
CCV 280-542401/2		2766158	5.78	806817	8.51	1398402 10.77
CCV 280-542401/3		2745012	5.78	802434	8.51	1405562 10.77
CCV 280-542401/14		2784052	5.78	809121	8.51	1414929 10.77
LCS 280-542401/4		2740488	5.78	807664	8.51	1403609 10.78
LCSD 280-542401/5		2741317	5.78	804242	8.51	1392621 10.77
MB 280-542401/9		2844256	5.78	827894	8.51	1417131 10.77
LCS 280-542401/6		2758023	5.78	810368	8.51	1397287 10.78
LCSD 280-542401/7		2818260	5.78	827268	8.51	1423987 10.77
280-150306-11	EB-07-20210627	2649674	5.78	786206	8.51	1351929 10.78
280-150306-1	RW-8284P-20210625	2745869	5.78	806591	8.51	1381683 10.77
280-150306-2	RW-2172F-20210625	2749677	5.78	817828	8.51	1404393 10.78
280-150306-3	RW-7588P-20210625	2770313	5.78	808210	8.51	1388540 10.78
280-150306-4	RW-8209P-20210625	2806587	5.78	823491	8.51	1401761 10.77
280-150306-5	RW-7688P-20210625	2748246	5.78	802442	8.51	1371127 10.78
280-150306-6	RW-5898BI-20210625	2752508	5.78	807666	8.51	1414480 10.78
280-150306-7	RW-2140H-20210626	2665559	5.78	781506	8.51	1352059 10.78
280-150306-8	MW-116S-20210626	2679711	5.78	784797	8.51	1344564 10.78
280-150306-9	RW-2076F-20210626	2744283	5.78	799081	8.51	1360732 10.78
280-150306-10	RW-8012P-20210626	2752734	5.78	804483	8.51	1393750 10.78
280-150306-12	RW-7244P-20210624	2716283	5.78	799379	8.51	1393902 10.78
280-150306-13	RW-2237H-20210624	2746824	5.79	806884	8.51	1391723 10.78
280-150306-14	RW-7070B-20210624	2749273	5.78	802450	8.51	1364587 10.77
280-150306-15	RW-8105PS-20210625	2723059	5.78	794898	8.51	1374292 10.77
280-150306-2 MS	RW-2172F-20210625 MS	2698812	5.78	787723	8.51	1367397 10.78
280-150306-2 MSD	RW-2172F-20210625 MSD	2741350	5.78	796975	8.51	1338676 10.78

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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: TB-03-20210627 Lab Sample ID: 280-150290-1
 Matrix: Water Lab File ID: MS1_4140.D
 Analysis Method: 8260B Date Collected: 06/27/2021 19:30
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 00:55
 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: TB-03-20210627 Lab Sample ID: 280-150290-1
 Matrix: Water Lab File ID: MS1_4140.D
 Analysis Method: 8260B Date Collected: 06/27/2021 19:30
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 00:55
 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.: 542394 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)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4140.D
 Lims ID: 280-150290-A-1
 Client ID: TB-03-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 00:55:30 ALS Bottle#: 11 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-1 pH
 Misc. Info.: 280-0102962-014
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:01:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	734342	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162962	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	267716	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	187978	48.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	248219	47.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	691674	49.0	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	274306	47.2	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:19

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4140.D

Injection Date: 07-Jul-2021 00:55:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-A-1

Lab Sample ID: 280-150290-1

Worklist Smp#: 14

Client ID: TB-03-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

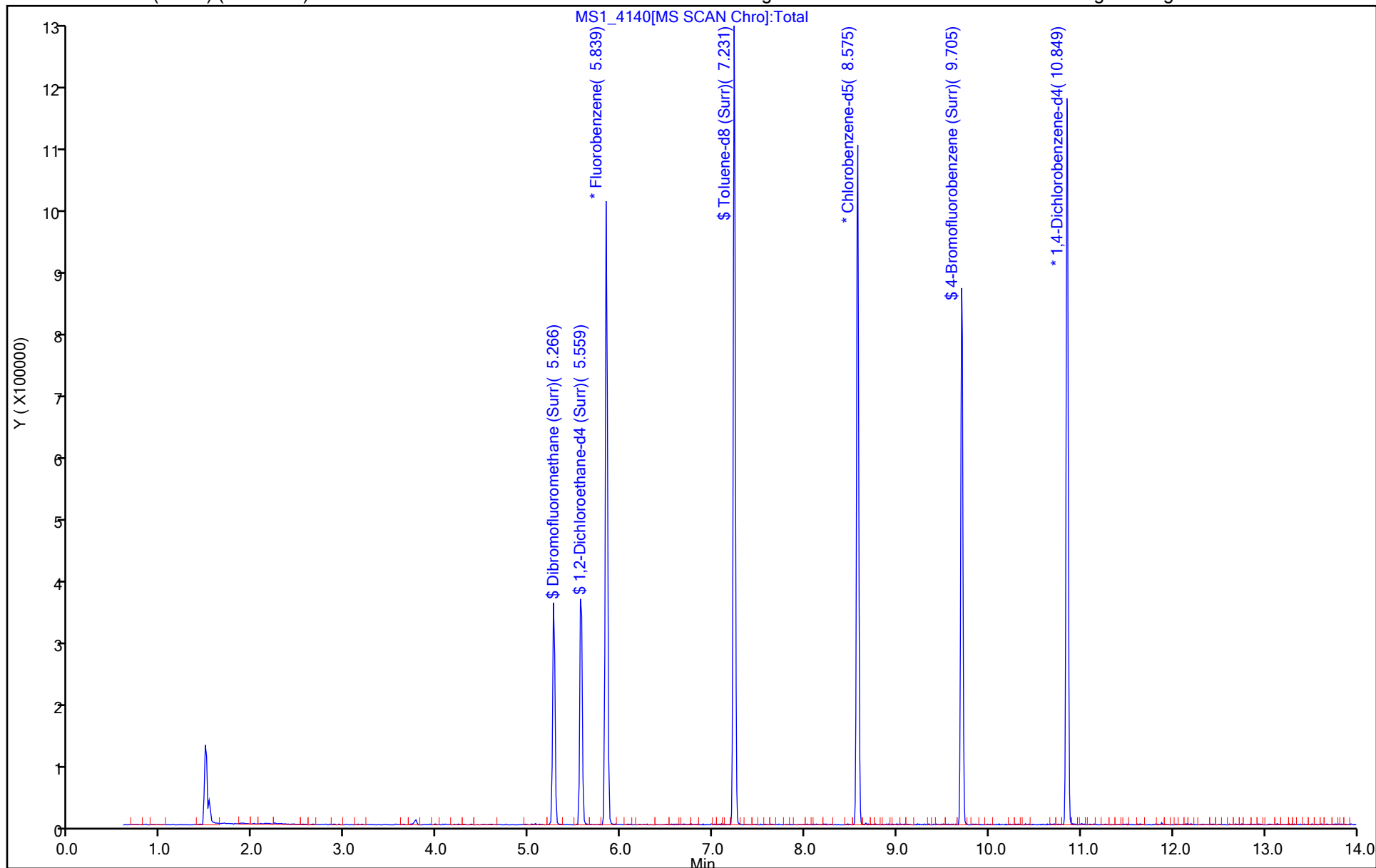
ALS Bottle#: 11

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4140.D
 Lims ID: 280-150290-A-1
 Client ID: TB-03-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 00:55:30 ALS Bottle#: 11 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-1 pH
 Misc. Info.: 280-0102962-014
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:01:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.3	96.58
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.20
\$ 7 Toluene-d8 (Surr)	50.0	49.0	97.99
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.2	94.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: PA-5-20210627 Lab Sample ID: 280-150290-2
 Matrix: Water Lab File ID: MS1_4141.D
 Analysis Method: 8260B Date Collected: 06/27/2021 11:50
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 01:16
 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: PA-5-20210627 Lab Sample ID: 280-150290-2
 Matrix: Water Lab File ID: MS1_4141.D
 Analysis Method: 8260B Date Collected: 06/27/2021 11:50
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 01:16
 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.: 542394 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	0.60	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)	96		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)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4141.D
 Lims ID: 280-150290-A-2
 Client ID: PA-5-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 01:16:30 ALS Bottle#: 12 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-2 pH
 Misc. Info.: 280-0102962-015
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:01:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	0.000	97	734225	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	166508	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	267820	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	191691	49.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	250717	48.1	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	691107	47.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	281330	48.4	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	3	1841	0.5963	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:20

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4141.D

Injection Date: 07-Jul-2021 01:16:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-A-2

Lab Sample ID: 280-150290-2

Worklist Smp#: 15

Client ID: PA-5-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

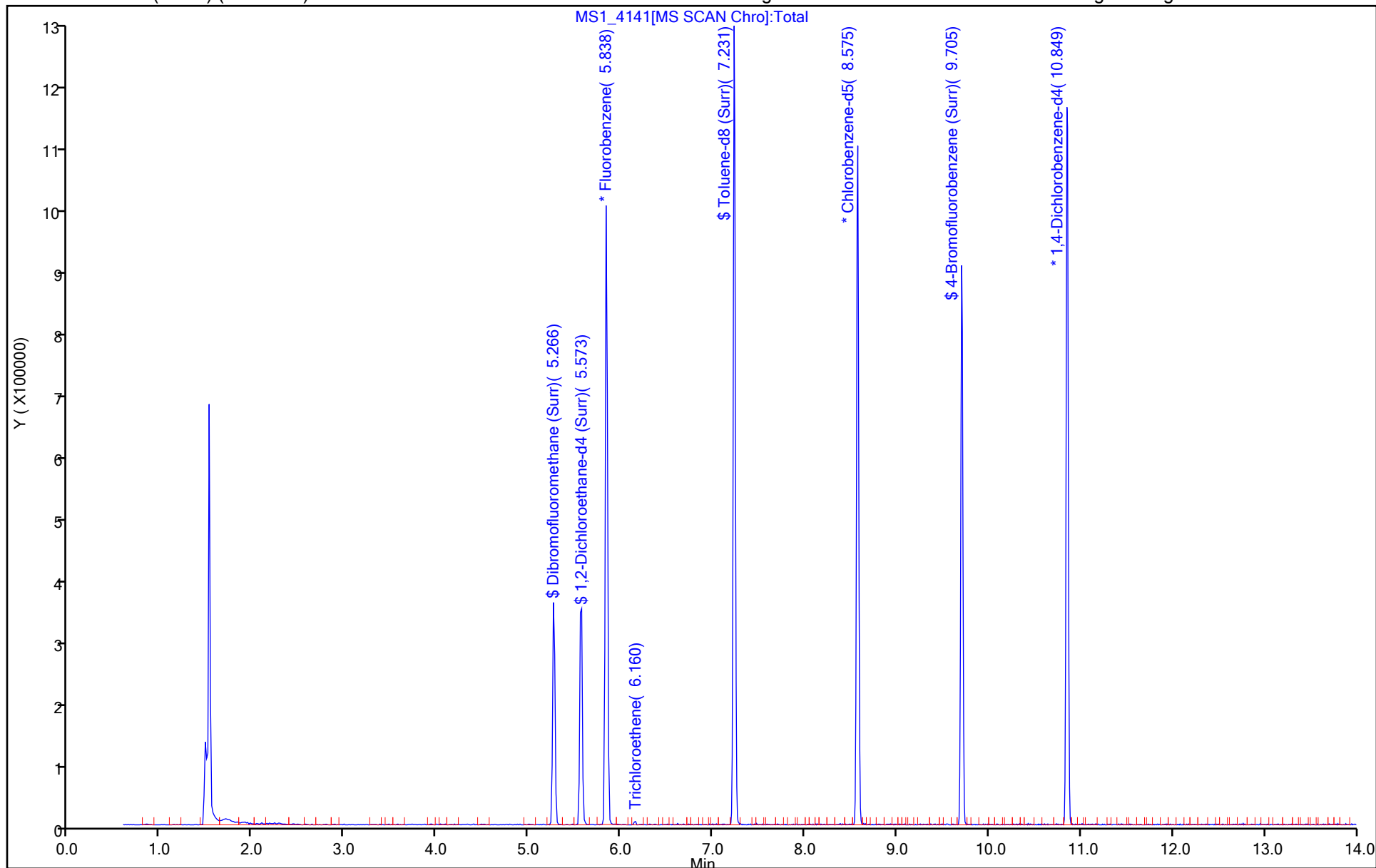
ALS Bottle#: 12

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4141.D
 Lims ID: 280-150290-A-2
 Client ID: PA-5-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 01:16:30 ALS Bottle#: 12 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-2 pH
 Misc. Info.: 280-0102962-015
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:01:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.51
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.17
\$ 7 Toluene-d8 (Surr)	50.0	47.9	95.82
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.4	96.81

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4141.D

Injection Date: 07-Jul-2021 01:16:30

Instrument ID: VMS_MS1

Lims ID: 280-150290-A-2

Lab Sample ID: 280-150290-2

Client ID: PA-5-20210627

Operator ID: PETUNINP

ALS Bottle#: 12

Worklist Smp#: 15

Purge Vol: 5.000 mL

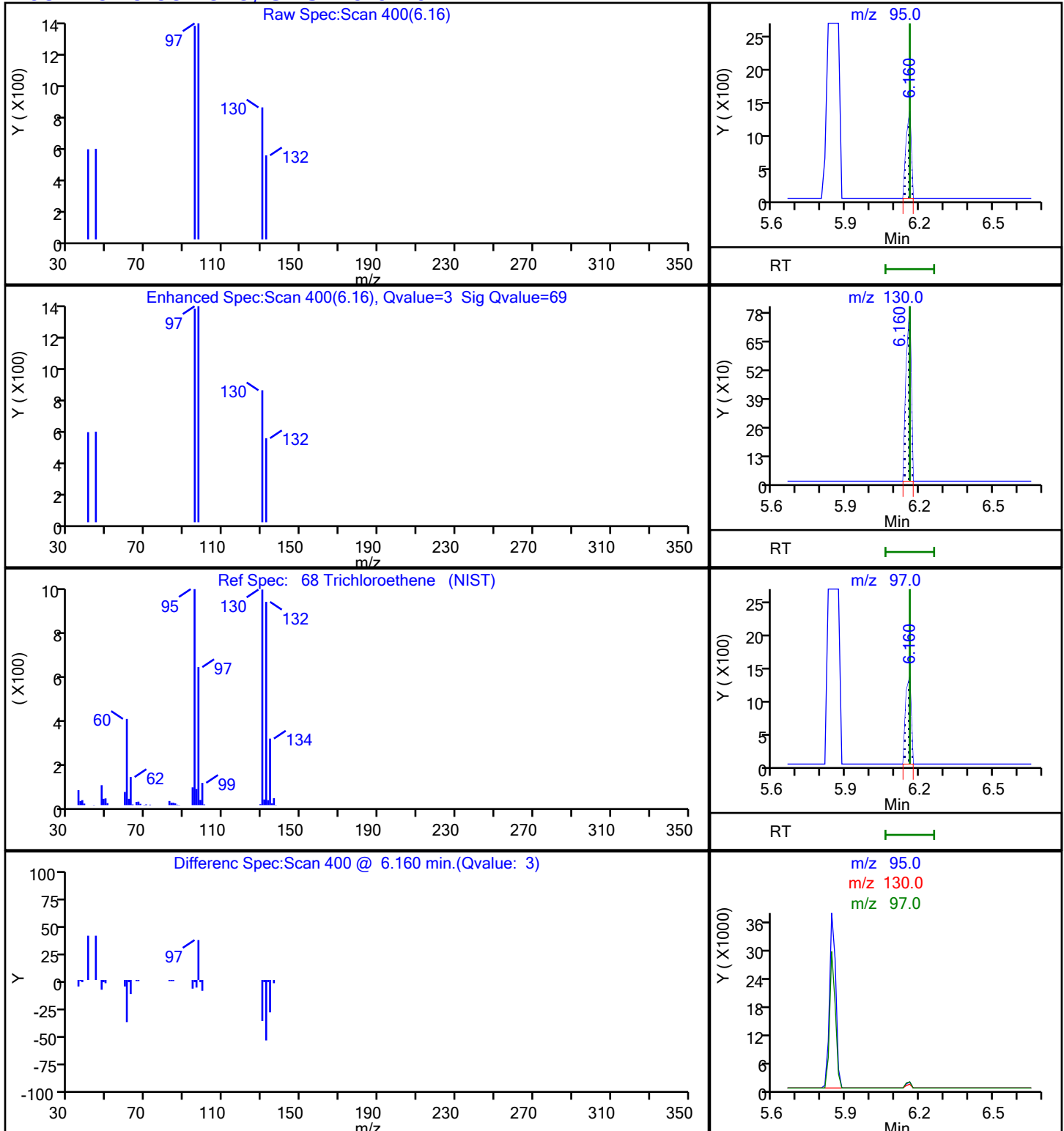
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: MW-38-60-100-20210627 Lab Sample ID: 280-150290-3
 Matrix: Water Lab File ID: MS1_4142.D
 Analysis Method: 8260B Date Collected: 06/27/2021 15:05
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 01:37
 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: MW-38-60-100-20210627 Lab Sample ID: 280-150290-3
 Matrix: Water Lab File ID: MS1_4142.D
 Analysis Method: 8260B Date Collected: 06/27/2021 15:05
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 01:37
 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.: 542394 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	2.2		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)	95		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)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4142.D
 Lims ID: 280-150290-A-3
 Client ID: MW-38-60-100-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 01:37:30 ALS Bottle#: 13 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-3 pH
 Misc. Info.: 280-0102962-016
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	722045	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.575	0.001	94	161485	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.856	-0.007	98	260789	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	189655	49.6	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	243356	47.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	677672	48.4	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	278537	49.2	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	90	6722	2.25	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:21

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4142.D

Injection Date: 07-Jul-2021 01:37:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-A-3

Lab Sample ID: 280-150290-3

Worklist Smp#: 16

Client ID: MW-38-60-100-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

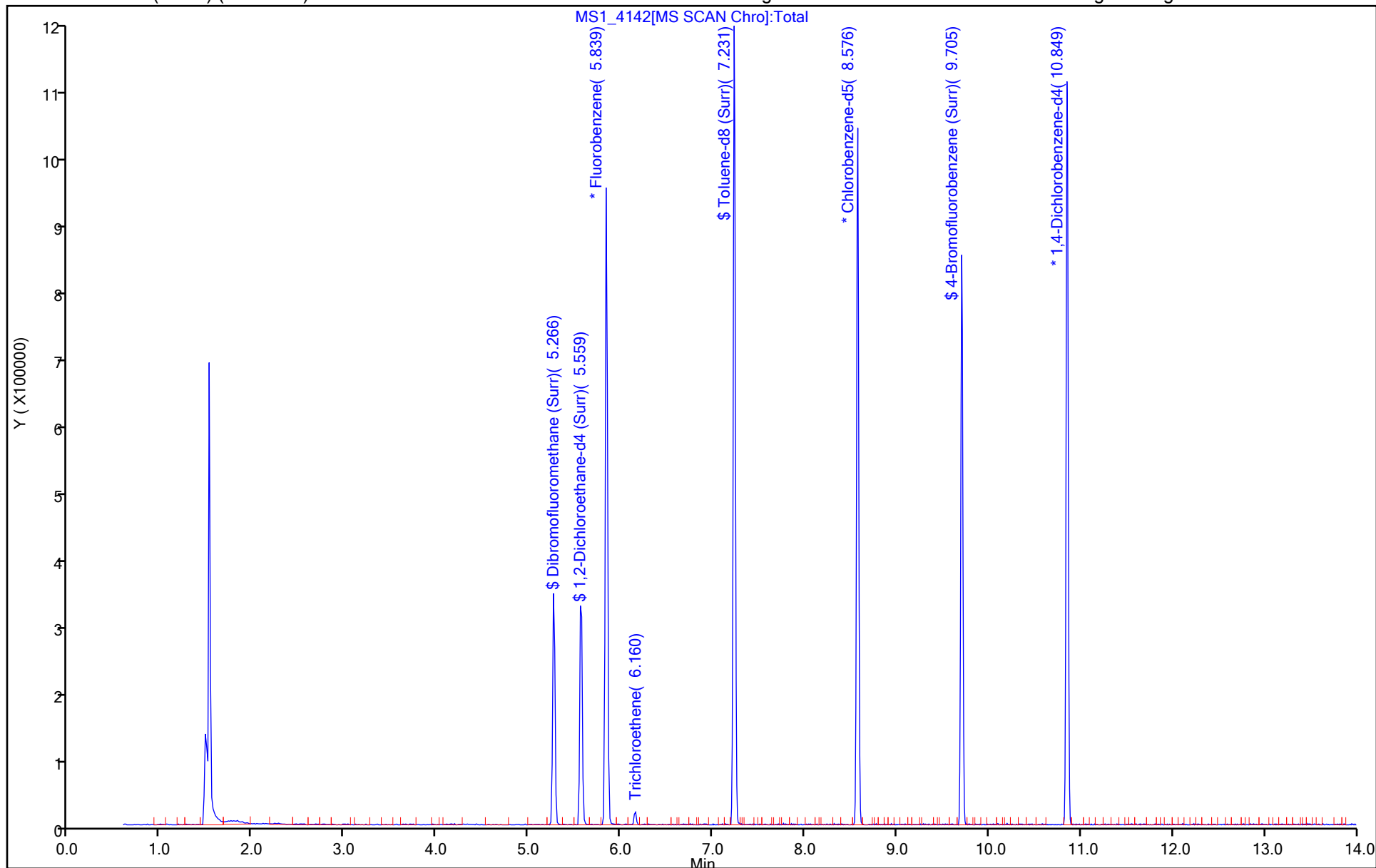
ALS Bottle#: 13

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4142.D
 Lims ID: 280-150290-A-3
 Client ID: MW-38-60-100-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 01:37:30 ALS Bottle#: 13 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-3 pH
 Misc. Info.: 280-0102962-016
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:11

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.6	99.10
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	94.92
\$ 7 Toluene-d8 (Surr)	50.0	48.4	96.88
\$ 8 4-Bromofluorobenzene (Surr)	50.0	49.2	98.43

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4142.D

Injection Date: 07-Jul-2021 01:37:30

Instrument ID: VMS_MS1

Lims ID: 280-150290-A-3

Lab Sample ID: 280-150290-3

Client ID: MW-38-60-100-20210627

Operator ID: PETUNINP

ALS Bottle#: 13

Worklist Smp#: 16

Purge Vol: 5.000 mL

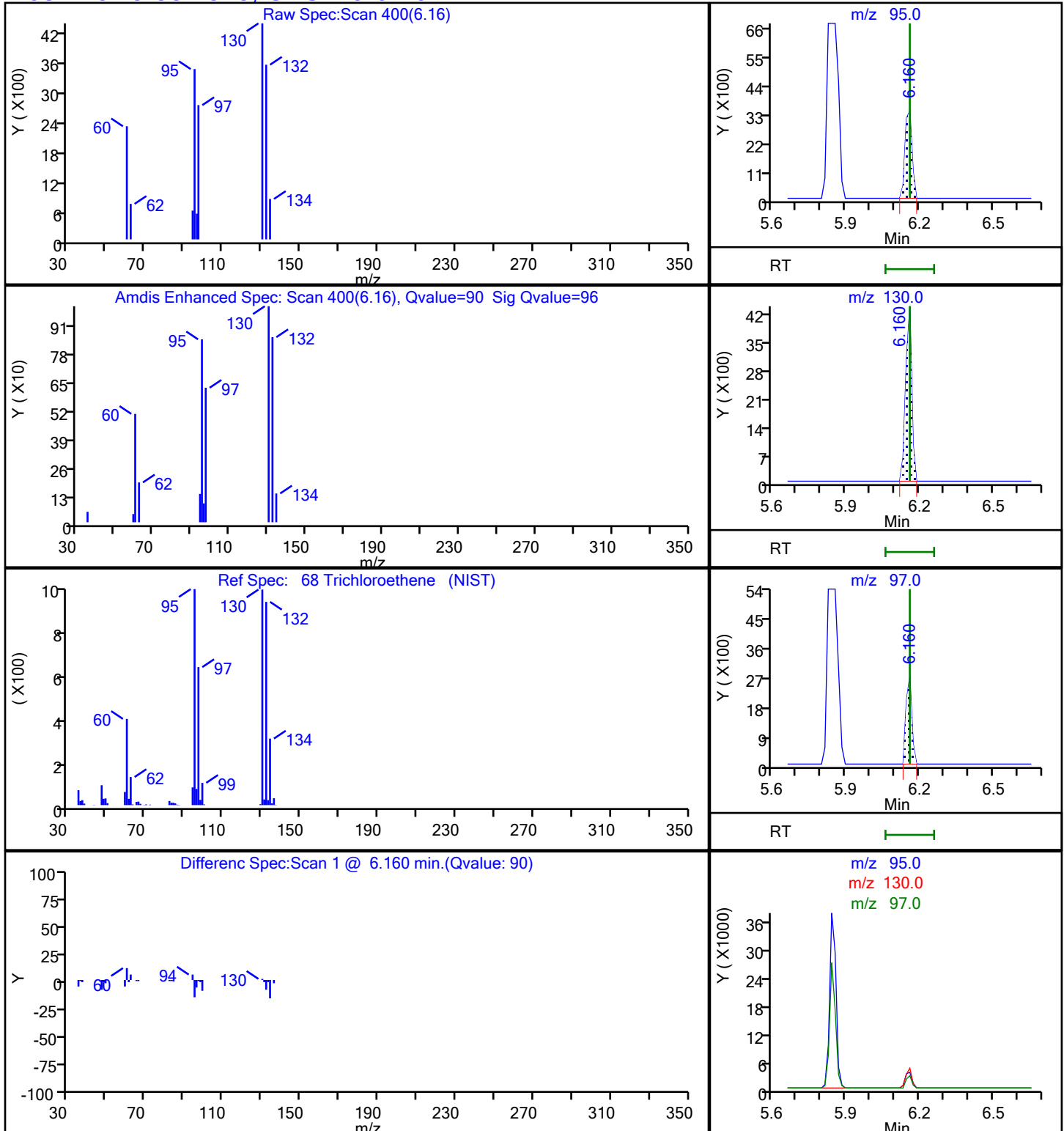
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-2879M-20210624 Lab Sample ID: 280-150290-4

Matrix: Water Lab File ID: MS1_4143.D

Analysis Method: 8260B Date Collected: 06/24/2021 09:10

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 01:58

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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2879M-20210624 Lab Sample ID: 280-150290-4
 Matrix: Water Lab File ID: MS1_4143.D
 Analysis Method: 8260B Date Collected: 06/24/2021 09:10
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 01:58
 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.: 542394 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)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4143.D
 Lims ID: 280-150290-C-4
 Client ID: RW-2879M-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 01:58:30 ALS Bottle#: 14 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-4 pH
 Misc. Info.: 280-0102962-017
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	714908	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.575	0.001	90	157881	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	99	256263	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	188851	49.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.573	5.573	0.000	98	244776	48.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	665835	48.7	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	277385	49.9	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:22

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4143.D

Injection Date: 07-Jul-2021 01:58:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-C-4

Lab Sample ID: 280-150290-4

Worklist Smp#: 17

Client ID: RW-2879M-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

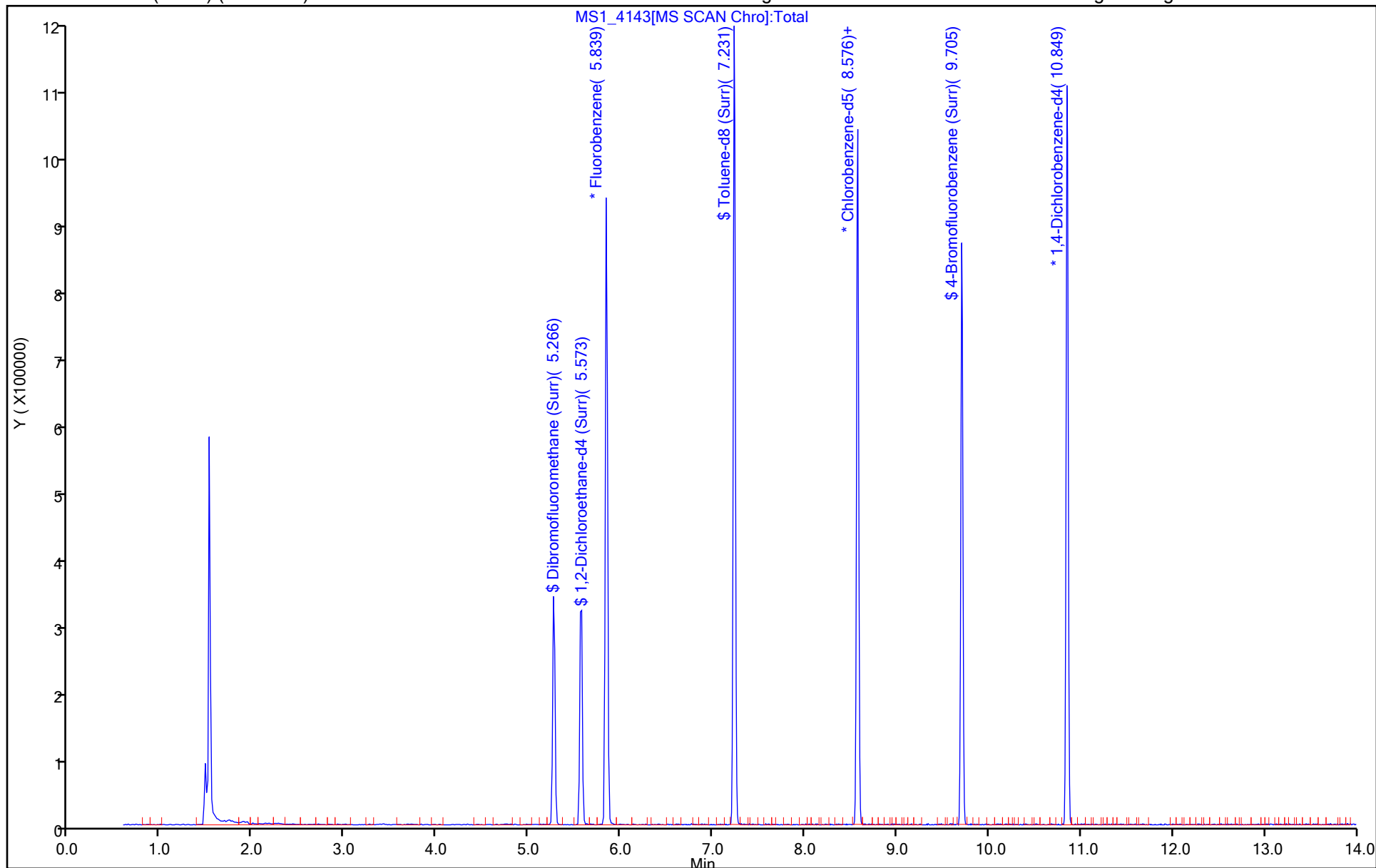
ALS Bottle#: 14

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4143.D
 Lims ID: 280-150290-C-4
 Client ID: RW-2879M-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 01:58:30 ALS Bottle#: 14 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-4 pH
 Misc. Info.: 280-0102962-017
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.8	99.67
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.2	96.43
\$ 7 Toluene-d8 (Surr)	50.0	48.7	97.36
\$ 8 4-Bromofluorobenzene (Surr)	50.0	49.9	99.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7505P-20210624 Lab Sample ID: 280-150290-5
 Matrix: Water Lab File ID: MS1_4144.D
 Analysis Method: 8260B Date Collected: 06/24/2021 08:44
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 02:19
 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7505P-20210624 Lab Sample ID: 280-150290-5
 Matrix: Water Lab File ID: MS1_4144.D
 Analysis Method: 8260B Date Collected: 06/24/2021 08:44
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 02:19
 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.: 542394 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)	93		70-127
2037-26-5	Toluene-d8 (Surr)	95		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4144.D
 Lims ID: 280-150290-C-5
 Client ID: RW-7505P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 02:19:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-5 pH
 Misc. Info.: 280-0102962-018
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	728480	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	161115	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	266545	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	184213	47.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	239439	46.3	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	664425	47.6	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	274388	47.4	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:23

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4144.D

Injection Date: 07-Jul-2021 02:19:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-C-5

Lab Sample ID: 280-150290-5

Worklist Smp#: 18

Client ID: RW-7505P-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

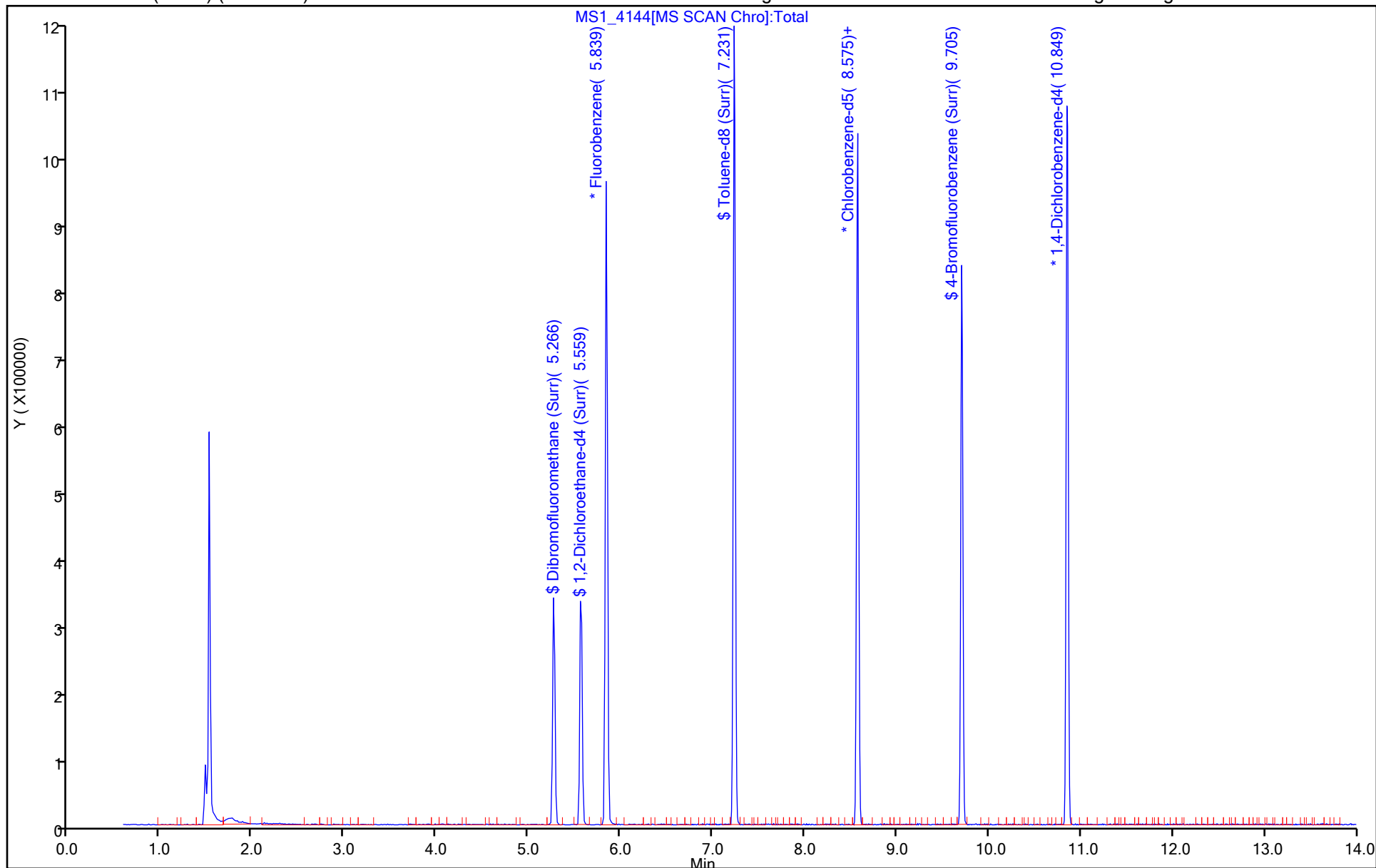
ALS Bottle#: 15

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4144.D
 Lims ID: 280-150290-C-5
 Client ID: RW-7505P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 02:19:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-5 pH
 Misc. Info.: 280-0102962-018
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.7	95.41
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.3	92.57
\$ 7 Toluene-d8 (Surr)	50.0	47.6	95.21
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.4	94.87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-8048P-20210624 Lab Sample ID: 280-150290-6
 Matrix: Water Lab File ID: MS1_4145.D
 Analysis Method: 8260B Date Collected: 06/24/2021 10:29
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 02:41
 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.: 542394 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150290-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-8048P-20210624</u>	Lab Sample ID: <u>280-150290-6</u>
Matrix: <u>Water</u>	Lab File ID: <u>MS1_4145.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/24/2021 10:29</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>07/07/2021 02:41</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624 (60.25)</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>542394</u>	Units: <u>ug/L</u>

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	3.8		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)	94		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	99		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4145.D
 Lims ID: 280-150290-B-6
 Client ID: RW-8048P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 02:41:30 ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-B-6 pH
 Misc. Info.: 280-0102962-019
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	0.000	98	729875	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	163401	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	259397	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	183252	47.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	244849	47.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	682370	48.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	277360	49.3	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	94	11481	3.79	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:25

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4145.D

Injection Date: 07-Jul-2021 02:41:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-B-6

Lab Sample ID: 280-150290-6

Worklist Smp#: 19

Client ID: RW-8048P-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

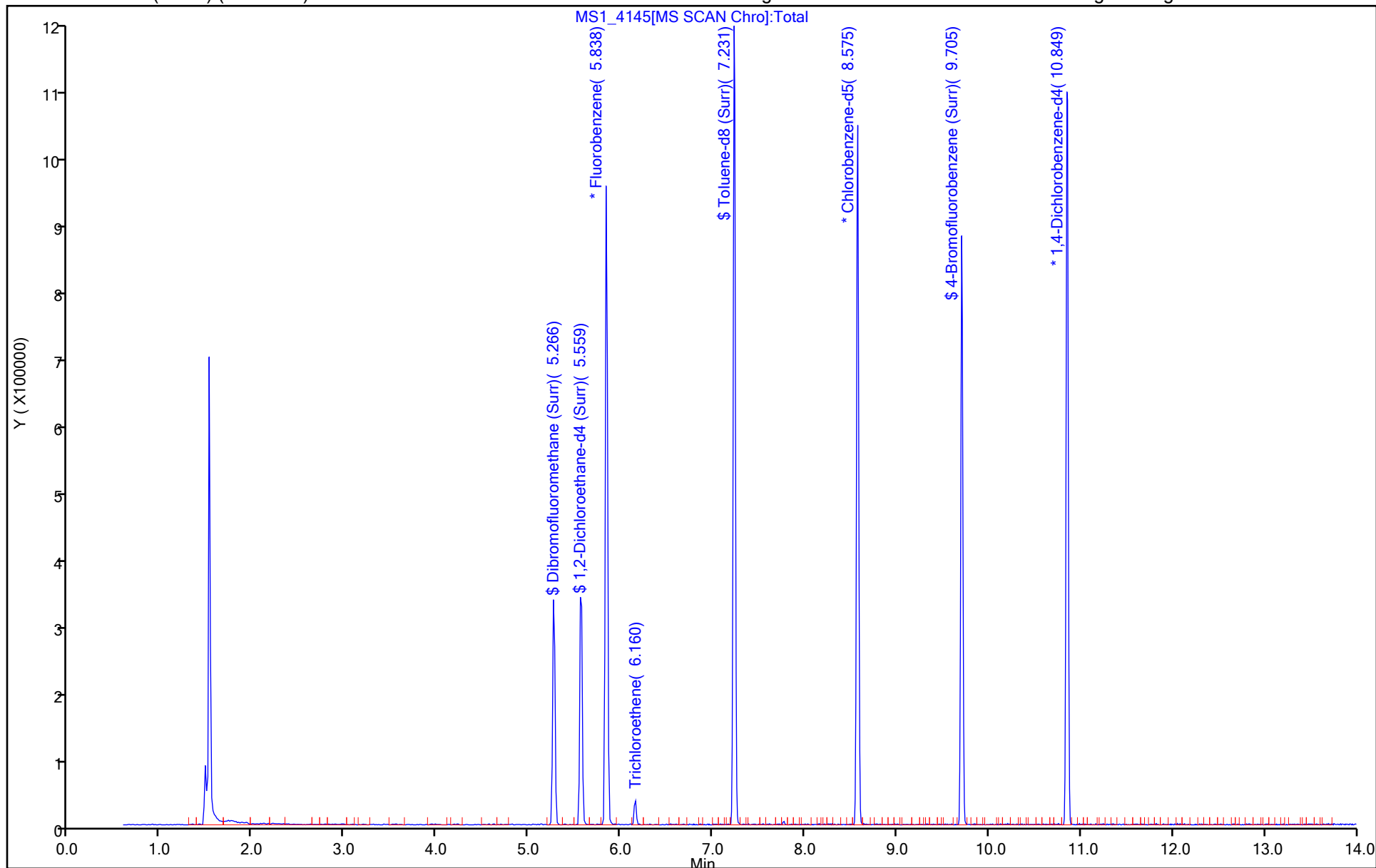
ALS Bottle#: 16

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4145.D
 Lims ID: 280-150290-B-6
 Client ID: RW-8048P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 02:41:30 ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-B-6 pH
 Misc. Info.: 280-0102962-019
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:02:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.4	94.73
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.2	94.48
\$ 7 Toluene-d8 (Surr)	50.0	48.2	96.41
\$ 8 4-Bromofluorobenzene (Surr)	50.0	49.3	98.54

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4145.D

Injection Date: 07-Jul-2021 02:41:30

Instrument ID: VMS_MS1

Lims ID: 280-150290-B-6

Lab Sample ID: 280-150290-6

Client ID: RW-8048P-20210624

Operator ID: PETUNINP

ALS Bottle#: 16

Worklist Smp#: 19

Purge Vol: 5.000 mL

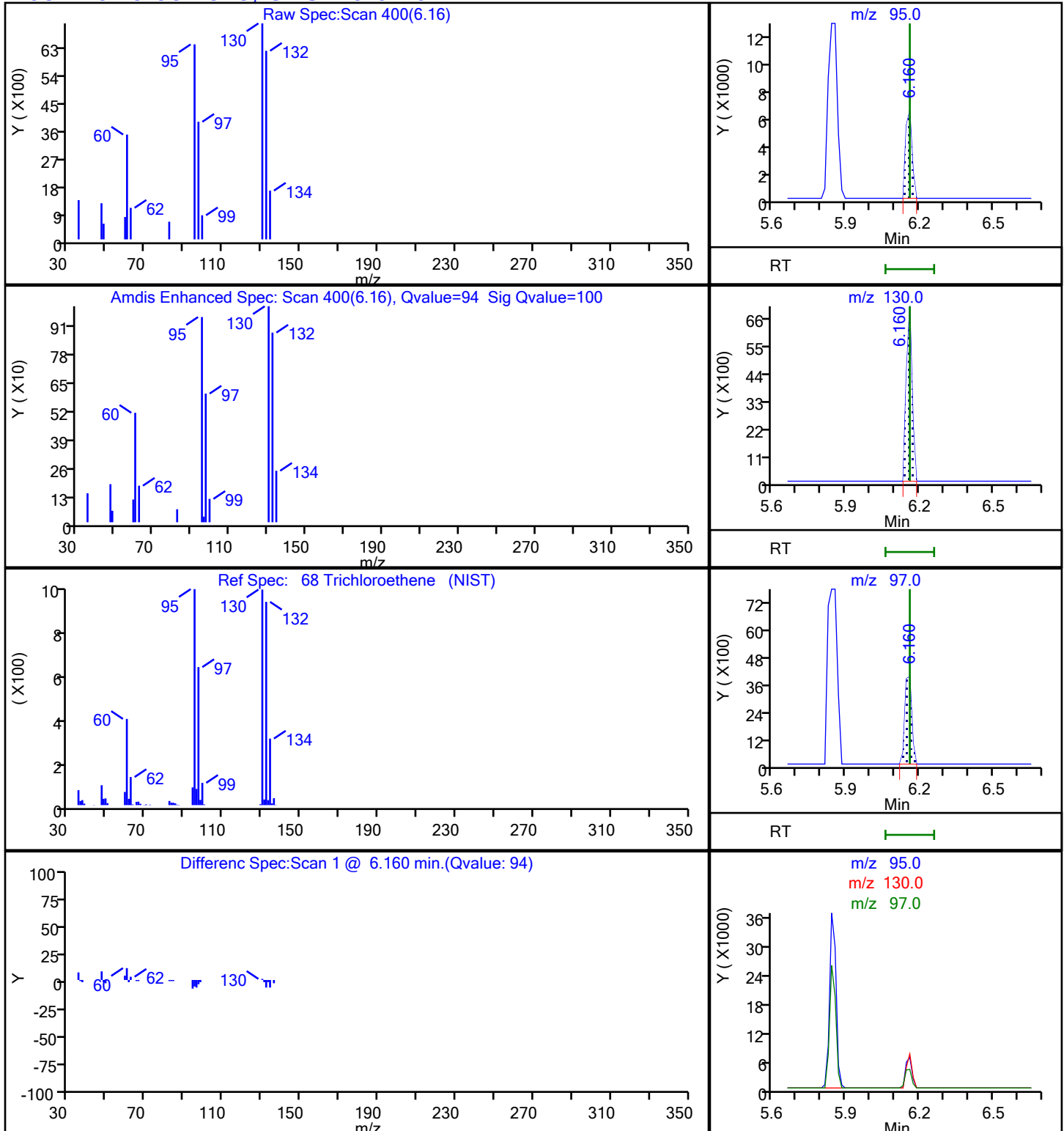
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-8035P-20210624 Lab Sample ID: 280-150290-7

Matrix: Water Lab File ID: MS1_4146.D

Analysis Method: 8260B Date Collected: 06/24/2021 11:33

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 03:02

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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-8035P-20210624 Lab Sample ID: 280-150290-7
 Matrix: Water Lab File ID: MS1_4146.D
 Analysis Method: 8260B Date Collected: 06/24/2021 11:33
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 03:02
 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.: 542394 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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4146.D
 Lims ID: 280-150290-C-7
 Client ID: RW-8035P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 03:02:30 ALS Bottle#: 17 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-7 pH
 Misc. Info.: 280-0102962-020
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	98	722078	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	160931	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	252505	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	187788	49.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	234059	45.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	94	669284	48.0	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	83	266229	48.6	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:26

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4146.D

Injection Date: 07-Jul-2021 03:02:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-C-7

Lab Sample ID: 280-150290-7

Worklist Smp#: 20

Client ID: RW-8035P-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

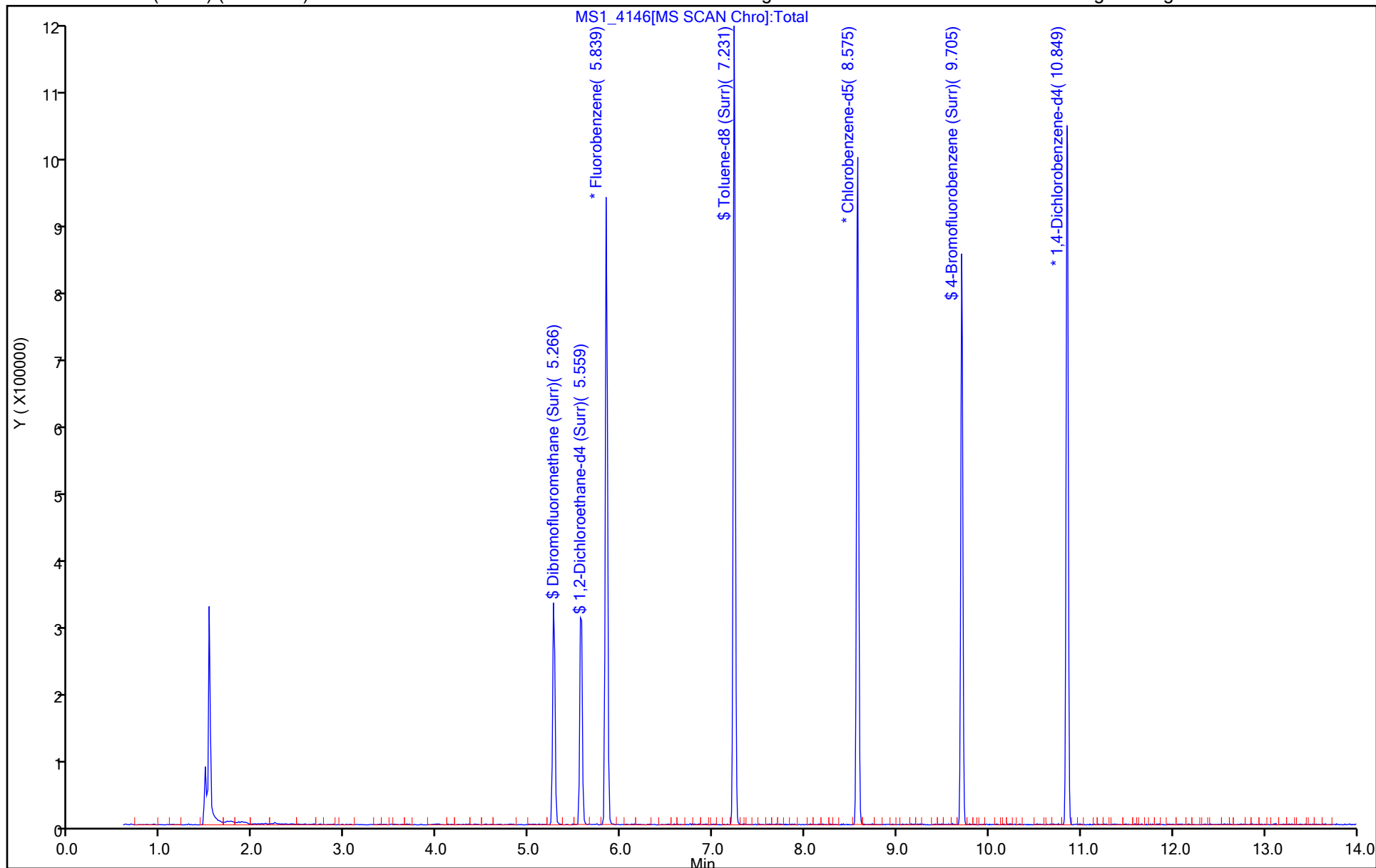
ALS Bottle#: 17

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4146.D
 Lims ID: 280-150290-C-7
 Client ID: RW-8035P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 03:02:30 ALS Bottle#: 17 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-7 pH
 Misc. Info.: 280-0102962-020
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.1	98.12
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.29
\$ 7 Toluene-d8 (Surr)	50.0	48.0	96.01
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.6	97.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: PA-10-20210624 Lab Sample ID: 280-150290-8

Matrix: Water Lab File ID: MS1_4147.D

Analysis Method: 8260B Date Collected: 06/24/2021 12:20

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: PA-10-20210624 Lab Sample ID: 280-150290-8
 Matrix: Water Lab File ID: MS1_4147.D
 Analysis Method: 8260B Date Collected: 06/24/2021 12:20
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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)	93		70-127
2037-26-5	Toluene-d8 (Surr)	94		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_MS1\20210706-102962.b\MS1_4147.D
 Lims ID: 280-150290-B-8
 Client ID: PA-10-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 03:23:30 ALS Bottle#: 18 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-B-8 pH
 Misc. Info.: 280-0102962-021
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	726073	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	166656	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	261878	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	187923	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	240932	46.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	677107	46.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	279909	49.3	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:27

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4147.D

Injection Date: 07-Jul-2021 03:23:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-B-8

Lab Sample ID: 280-150290-8

Worklist Smp#: 21

Client ID: PA-10-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

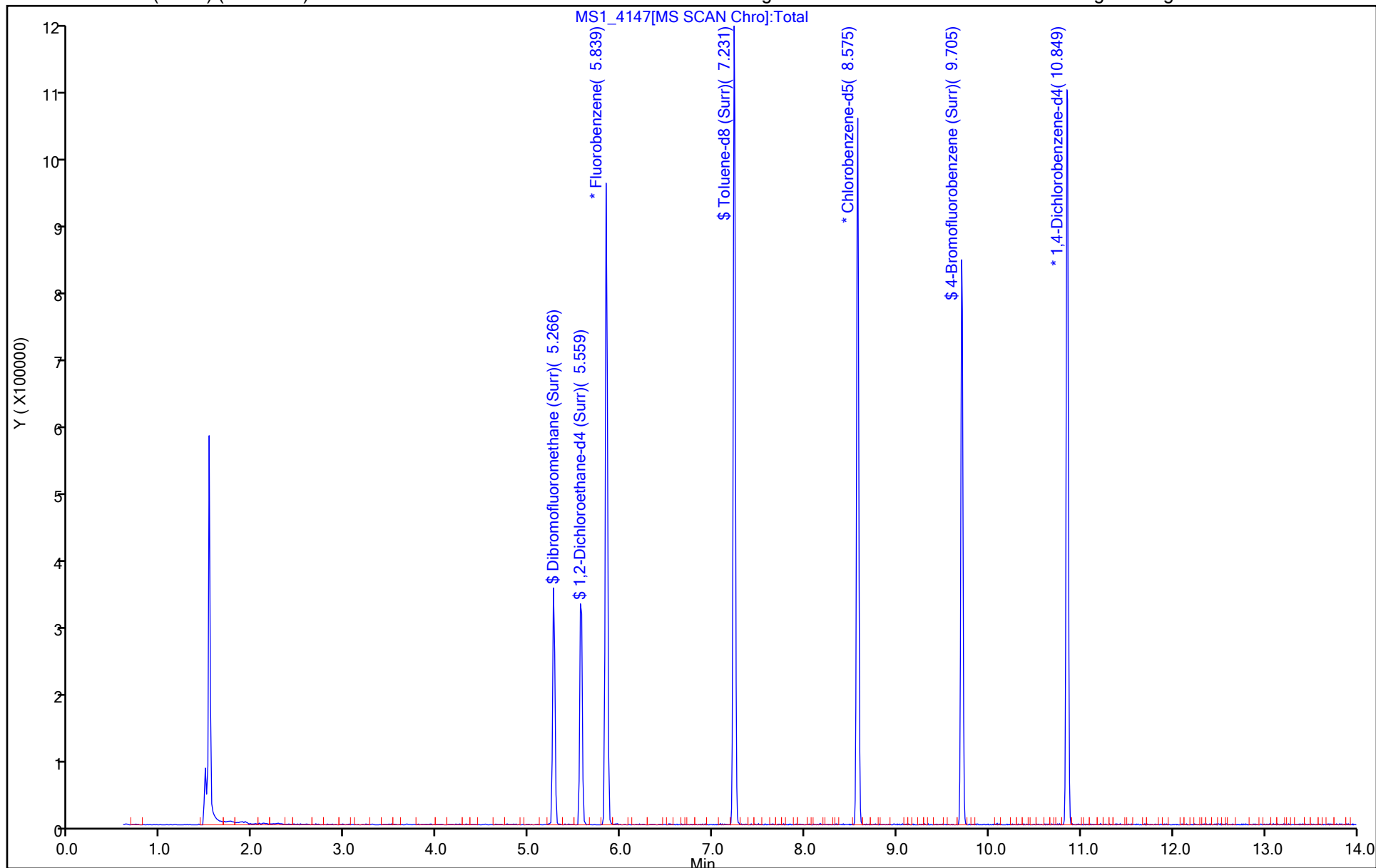
ALS Bottle#: 18

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4147.D
 Lims ID: 280-150290-B-8
 Client ID: PA-10-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 03:23:30 ALS Bottle#: 18 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-B-8 pH
 Misc. Info.: 280-0102962-021
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.65
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.7	93.46
\$ 7 Toluene-d8 (Surr)	50.0	46.9	93.80
\$ 8 4-Bromofluorobenzene (Surr)	50.0	49.3	98.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-7350P-20210624 Lab Sample ID: 280-150290-9

Matrix: Water Lab File ID: MS1_4148.D

Analysis Method: 8260B Date Collected: 06/24/2021 12:48

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7350P-20210624 Lab Sample ID: 280-150290-9
 Matrix: Water Lab File ID: MS1_4148.D
 Analysis Method: 8260B Date Collected: 06/24/2021 12:48
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4148.D
 Lims ID: 280-150290-C-9
 Client ID: RW-7350P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 03:44:30 ALS Bottle#: 19 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-9 pH
 Misc. Info.: 280-0102962-022
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	728492	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	165598	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.856	-0.007	98	267971	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	188923	48.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	98	244902	47.3	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	691726	48.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	274318	47.2	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:29

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4148.D

Injection Date: 07-Jul-2021 03:44:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-C-9

Lab Sample ID: 280-150290-9

Worklist Smp#: 22

Client ID: RW-7350P-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

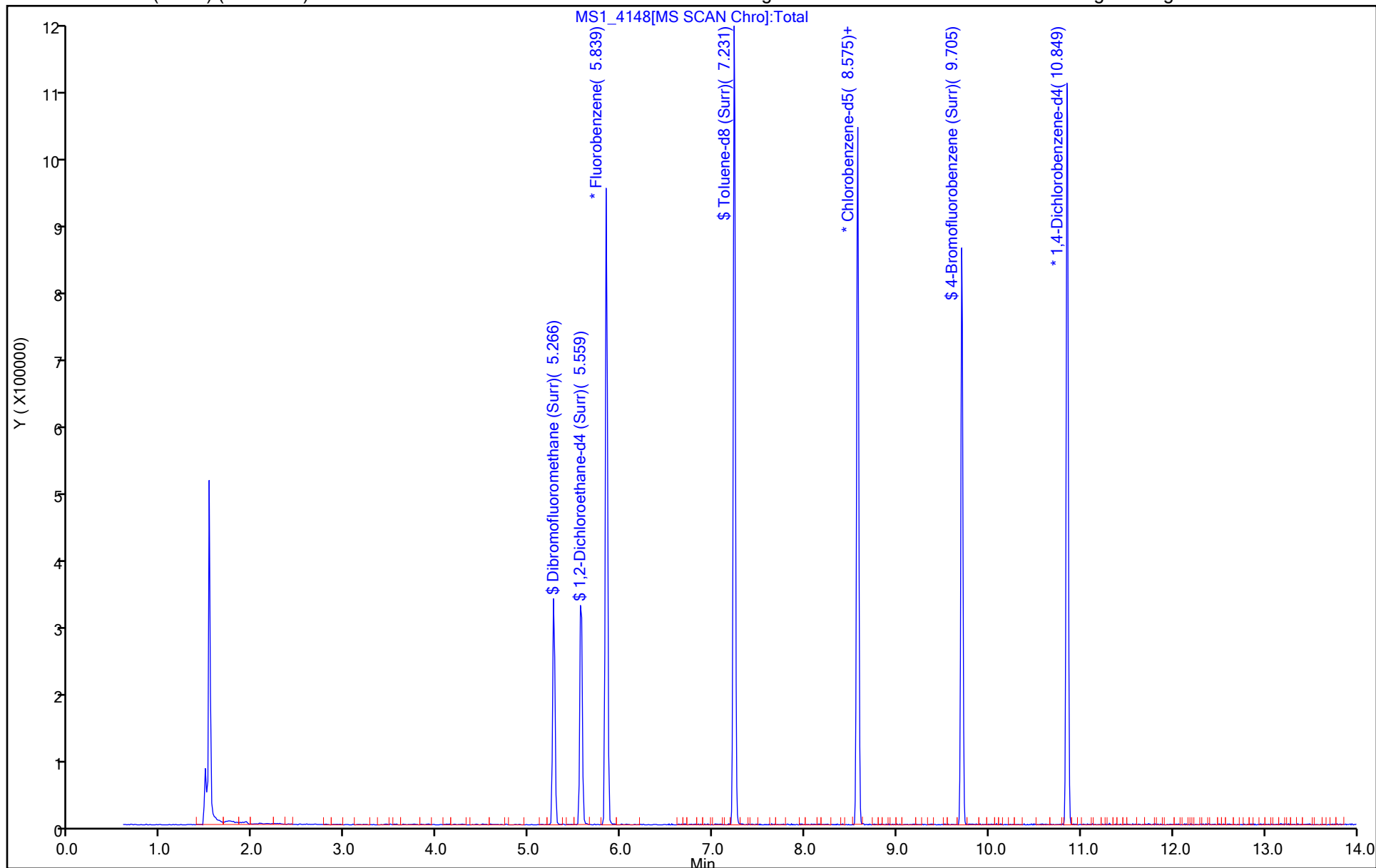
ALS Bottle#: 19

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4148.D
 Lims ID: 280-150290-C-9
 Client ID: RW-7350P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 03:44:30 ALS Bottle#: 19 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-C-9 pH
 Misc. Info.: 280-0102962-022
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.9	97.85
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.3	94.68
\$ 7 Toluene-d8 (Surr)	50.0	48.2	96.44
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.2	94.34

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: PA-9-58-68-20210624 Lab Sample ID: 280-150290-10
 Matrix: Water Lab File ID: MS1_4149.D
 Analysis Method: 8260B Date Collected: 06/24/2021 14:20
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 04:05
 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: PA-9-58-68-20210624 Lab Sample ID: 280-150290-10
 Matrix: Water Lab File ID: MS1_4149.D
 Analysis Method: 8260B Date Collected: 06/24/2021 14:20
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 04:05
 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.: 542394 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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4149.D
 Lims ID: 280-150290-A-10
 Client ID: PA-9-58-68-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 04:05:30 ALS Bottle#: 20 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-10 pH
 Misc. Info.: 280-0102962-023
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	97	750221	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.575	0.001	90	166548	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	270741	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	193822	48.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	99	254284	47.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	695596	48.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	283269	48.2	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4149.D

Injection Date: 07-Jul-2021 04:05:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-A-10

Lab Sample ID: 280-150290-10

Worklist Smp#: 23

Client ID: PA-9-58-68-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

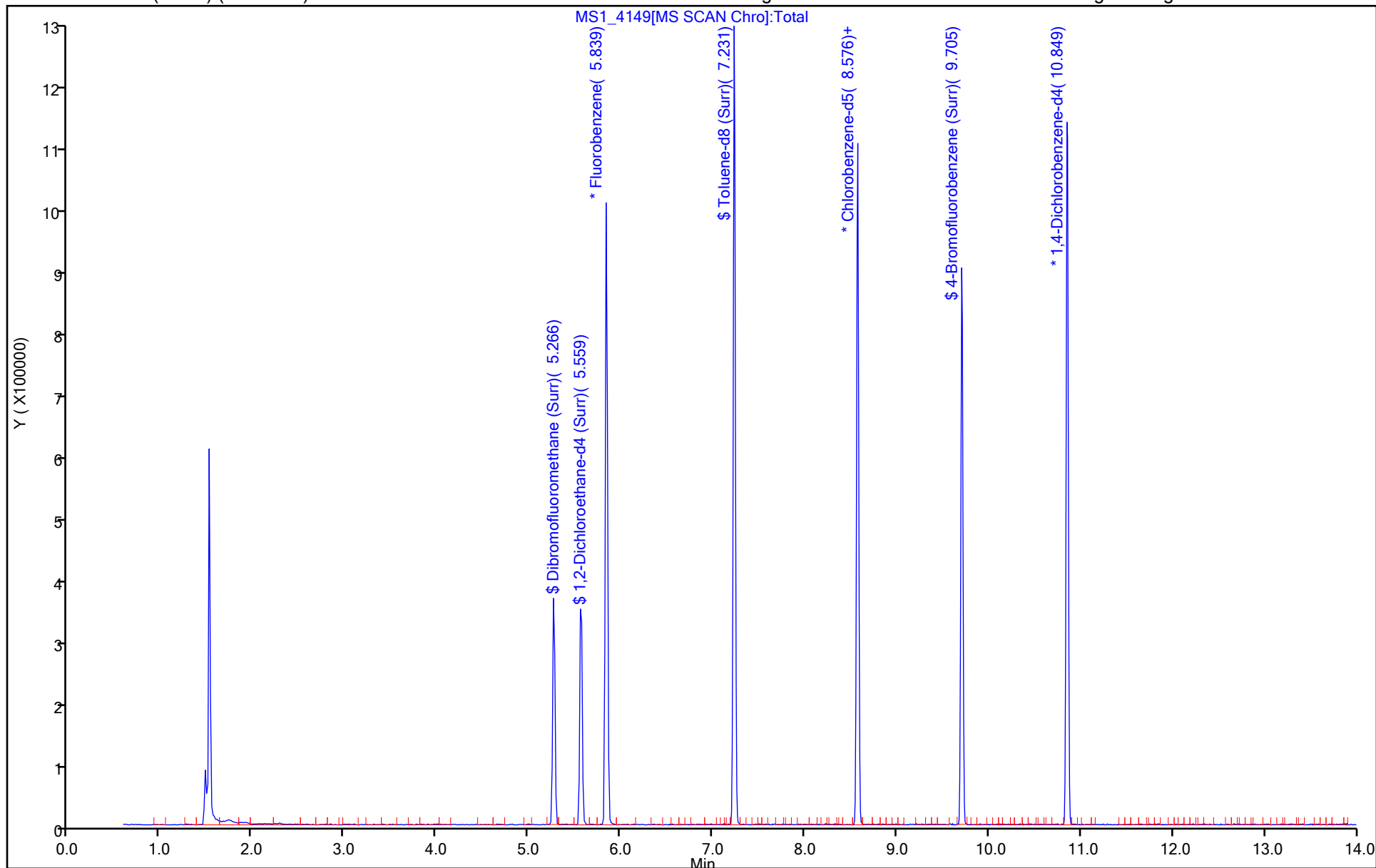
ALS Bottle#: 20

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4149.D
 Lims ID: 280-150290-A-10
 Client ID: PA-9-58-68-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 04:05:30 ALS Bottle#: 20 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-10 pH
 Misc. Info.: 280-0102962-023
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:03:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.7	97.48
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.46
\$ 7 Toluene-d8 (Surr)	50.0	48.2	96.42
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: PA-9-88-98-20210624 Lab Sample ID: 280-150290-11

Matrix: Water Lab File ID: MS1_4150.D

Analysis Method: 8260B Date Collected: 06/24/2021 15:30

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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.: 280-150290-1
SDG No.: _____
Client Sample ID: PA-9-88-98-20210624 Lab Sample ID: 280-150290-11
Matrix: Water Lab File ID: MS1_4150.D
Analysis Method: 8260B Date Collected: 06/24/2021 15:30
Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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)	97		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4150.D
 Lims ID: 280-150290-A-11
 Client ID: PA-9-88-98-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 04:27:30 ALS Bottle#: 21 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-11 pH
 Misc. Info.: 280-0102962-024
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:18:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.001	98	714689	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	161463	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	264719	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	184094	48.6	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	98	247112	48.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	669468	47.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	271740	47.3	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:32

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4150.D

Injection Date: 07-Jul-2021 04:27:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-A-11

Lab Sample ID: 280-150290-11

Worklist Smp#: 24

Client ID: PA-9-88-98-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

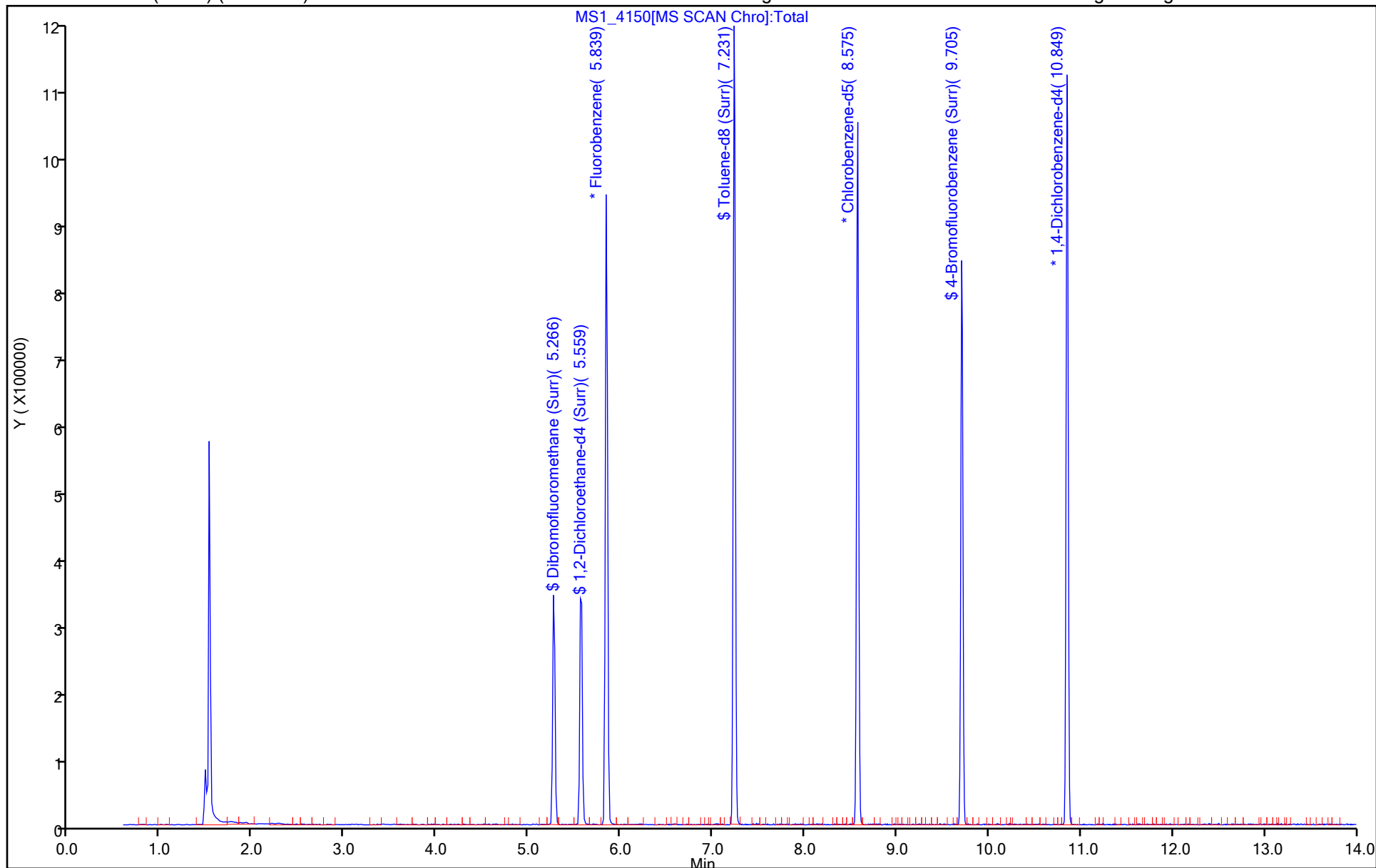
ALS Bottle#: 21

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4150.D
 Lims ID: 280-150290-A-11
 Client ID: PA-9-88-98-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 04:27:30 ALS Bottle#: 21 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-11 pH
 Misc. Info.: 280-0102962-024
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:18:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.6	97.19
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.7	97.38
\$ 7 Toluene-d8 (Surr)	50.0	47.9	95.72
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.3	94.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7549P-20210624 Lab Sample ID: 280-150290-12
 Matrix: Water Lab File ID: MS1_4151.D
 Analysis Method: 8260B Date Collected: 06/24/2021 14:13
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7549P-20210624 Lab Sample ID: 280-150290-12
 Matrix: Water Lab File ID: MS1_4151.D
 Analysis Method: 8260B Date Collected: 06/24/2021 14:13
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 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.: 542394 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)	94		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4151.D
 Lims ID: 280-150290-A-12
 Client ID: RW-7549P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 04:48:30 ALS Bottle#: 22 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-12 pH
 Misc. Info.: 280-0102962-025
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:18:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	0.000	98	728025	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	164500	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	259379	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	92	190598	49.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	98	246130	47.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	666628	46.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	269568	47.9	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.914				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.361				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.394				ND	
28 Carbon disulfide	76		3.464				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.861				ND	
50 Propionitrile	54		4.875				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Methacrylonitrile	41		5.015				ND	
53 Chlorobromomethane	128		5.056				ND	
55 Chloroform	83		5.140				ND	
56 1,1,1-Trichloroethane	97		5.294				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.461				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.467				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
85 Ethyl methacrylate	69		7.524				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
90 1,3-Dichloropropane	76		7.832				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.183				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.858				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:33

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4151.D

Injection Date: 07-Jul-2021 04:48:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: 280-150290-A-12

Lab Sample ID: 280-150290-12

Worklist Smp#: 25

Client ID: RW-7549P-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

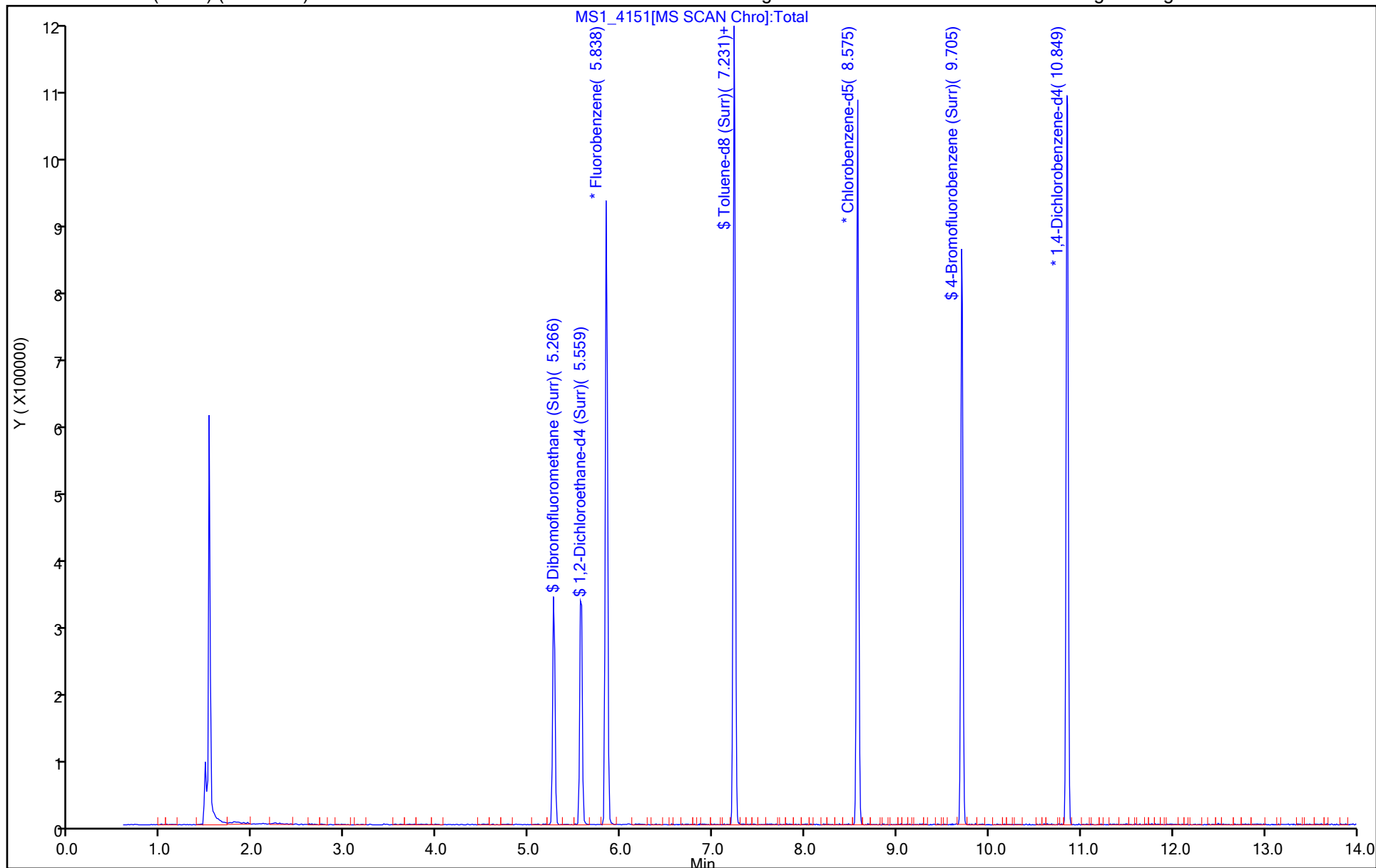
ALS Bottle#: 22

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4151.D
 Lims ID: 280-150290-A-12
 Client ID: RW-7549P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 04:48:30 ALS Bottle#: 22 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150290-A-12 pH
 Misc. Info.: 280-0102962-025
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:03:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 06:18:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.4	98.78
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.22
\$ 7 Toluene-d8 (Surr)	50.0	46.8	93.56
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.9	95.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-8284P-20210625 Lab Sample ID: 280-150306-1

Matrix: Water Lab File ID: MS9_5891.d

Analysis Method: 8260B Date Collected: 06/25/2021 12:06

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 11:39

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-8284P-20210625 Lab Sample ID: 280-150306-1
 Matrix: Water Lab File ID: MS9_5891.d
 Analysis Method: 8260B Date Collected: 06/25/2021 12:06
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 11:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	0.54	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	4.9		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)	114		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)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5891.d
 Lims ID: 280-150306-C-1
 Client ID: RW-8284P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 11:39:30 ALS Bottle#: 15 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-1 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 12:07:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2745869	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	806591	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1381683	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	94	795016	52.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	800569	57.0	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2781315	48.2	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1148347	47.9	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	7
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	
68 Trichloroethene	130	6.091	6.091	0.000	95	80743	4.92	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164	7.698	7.698	0.000	95	15117	0.5435	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 12:09:43

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5891.d

Injection Date: 07-Jul-2021 11:39:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-1

Lab Sample ID: 280-150306-1

Worklist Smp#: 19

Client ID: RW-8284P-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

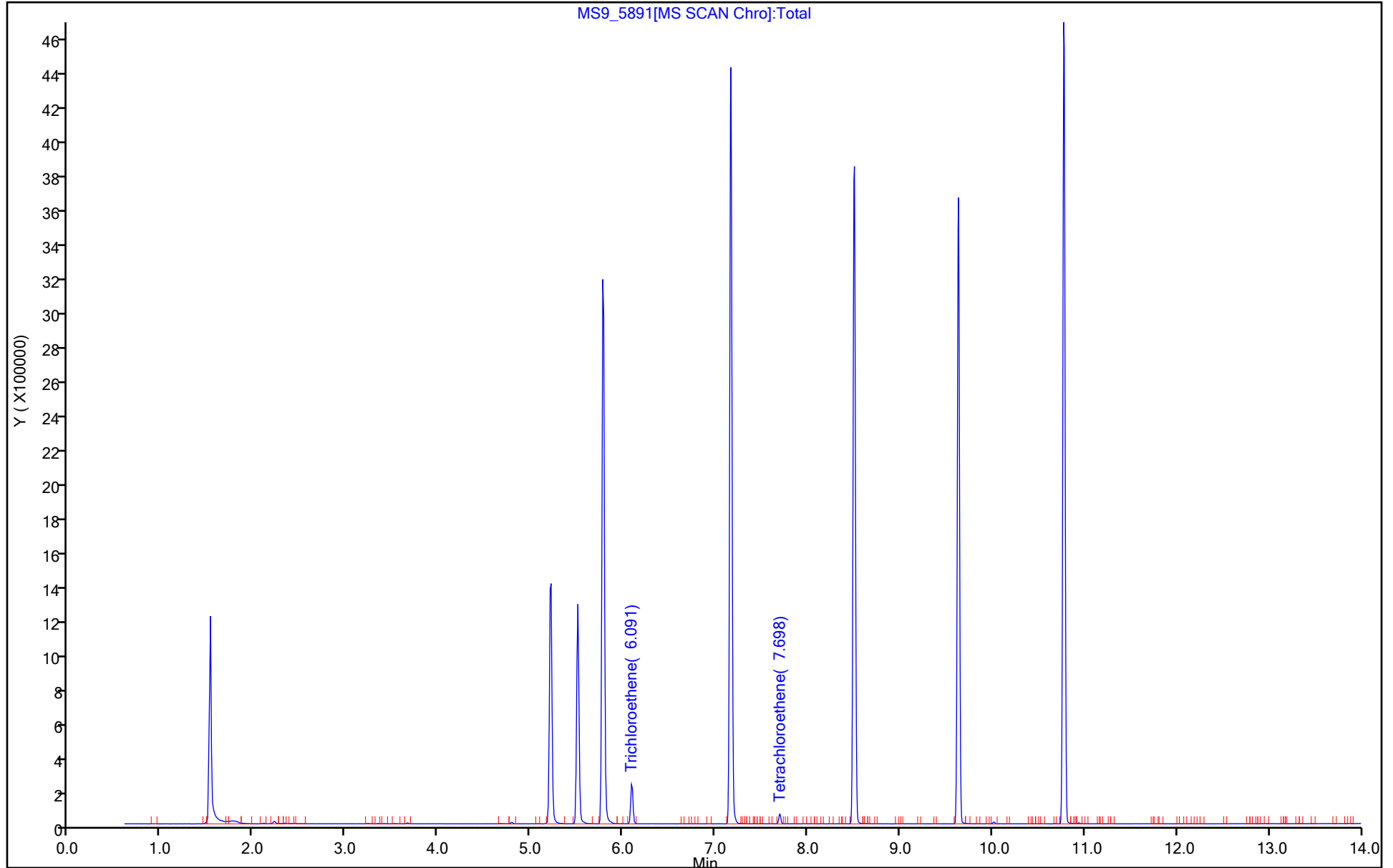
ALS Bottle#: 15

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5891.d
 Lims ID: 280-150306-C-1
 Client ID: RW-8284P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 11:39:30 ALS Bottle#: 15 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-1 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 12:07:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.1	104.18
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.0	113.97
\$ 8 Toluene-d8 (Surr)	50.0	48.2	96.41
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.9	95.84

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5891.d

Injection Date: 07-Jul-2021 11:39:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-C-1

Lab Sample ID: 280-150306-1

Client ID: RW-8284P-20210625

Operator ID: wickhamt

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 5.000 mL

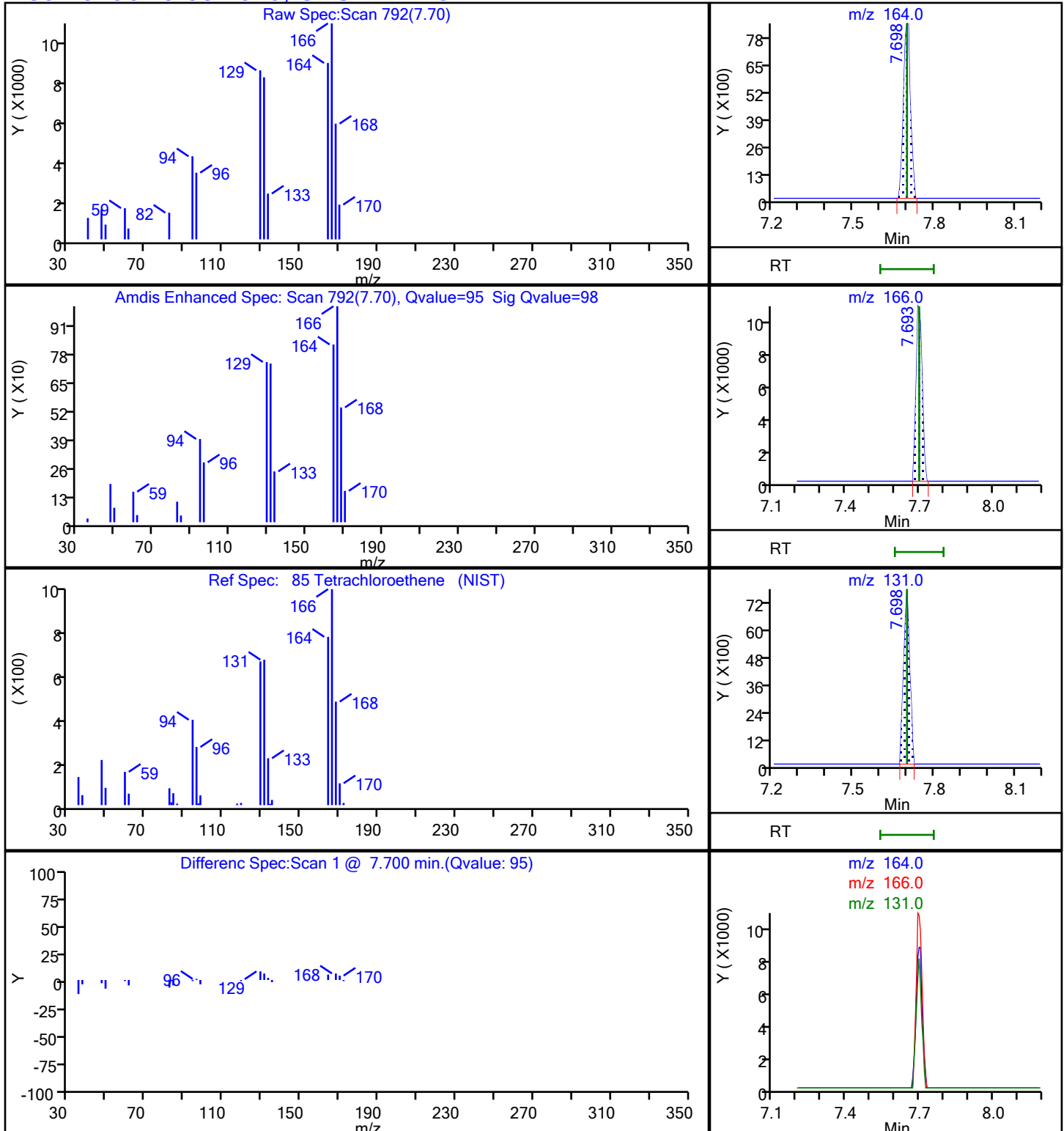
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

85 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5891.d

Injection Date: 07-Jul-2021 11:39:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-C-1

Lab Sample ID: 280-150306-1

Client ID: RW-8284P-20210625

Operator ID: wickhamt

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 5.000 mL

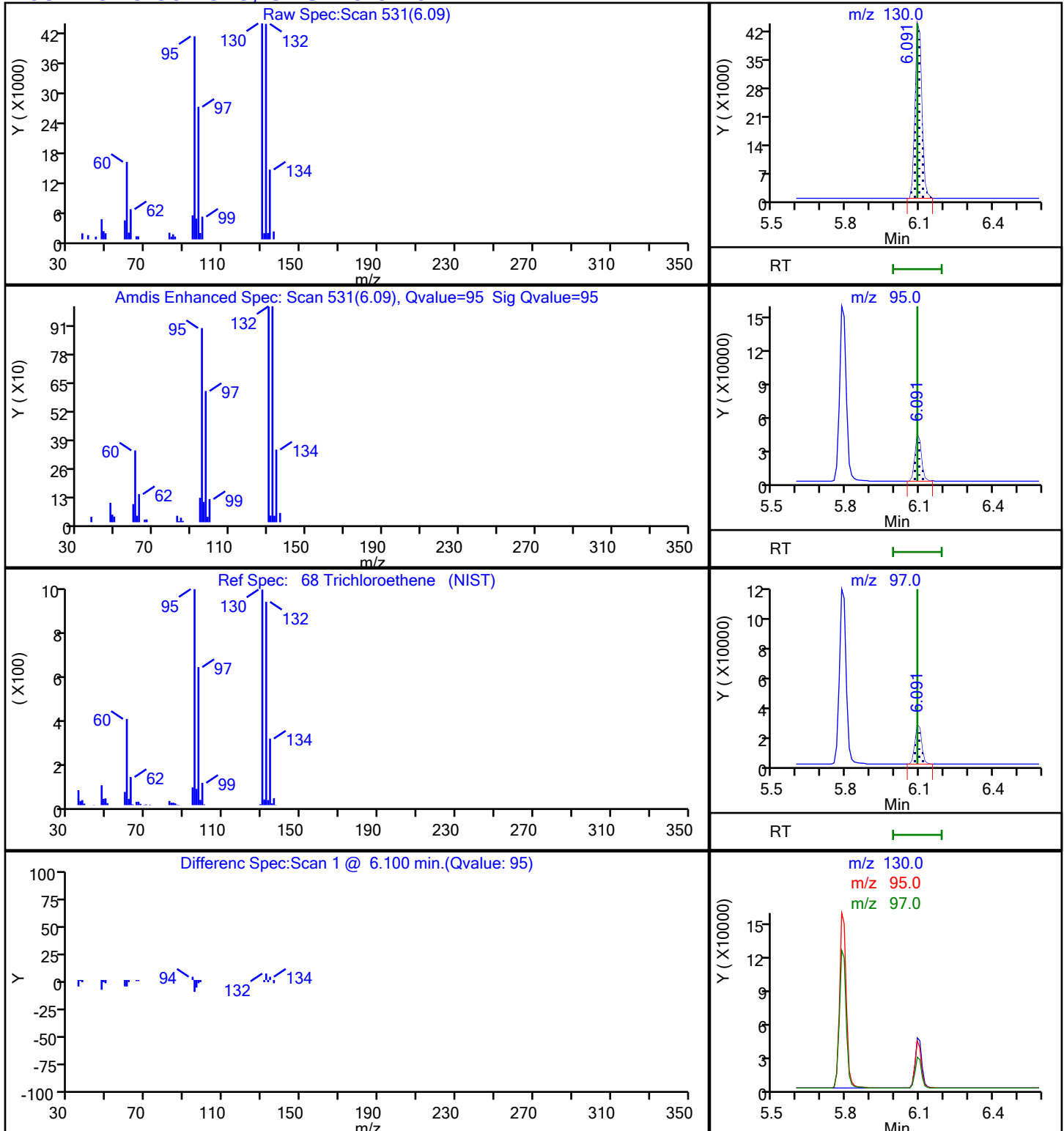
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2172F-20210625 Lab Sample ID: 280-150306-2
 Matrix: Water Lab File ID: MS9_5892.d
 Analysis Method: 8260B Date Collected: 06/25/2021 12:55
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 12:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	*+ F1	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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2172F-20210625 Lab Sample ID: 280-150306-2
 Matrix: Water Lab File ID: MS9_5892.d
 Analysis Method: 8260B Date Collected: 06/25/2021 12:55
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 12:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	115		70-127
2037-26-5	Toluene-d8 (Surr)	95		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5892.d
 Lims ID: 280-150306-C-2
 Client ID: RW-2172F-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 12:02:30 ALS Bottle#: 16 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-2 1x ph
 Operator ID: wickham Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:52:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2749677	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	817828	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1404393	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	805474	52.7	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	810275	57.6	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2775326	47.4	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1154489	47.4	
\$ 10 Trifluorotoluene (Surr)	1		0.000				ND	
\$ 11 BFB	95		9.630				ND	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
18 Ethylene oxide	43		2.297				ND	U
19 Bromomethane	94		2.328				ND	
20 Chloroethane	64		2.442				ND	
21 Dichlorofluoromethane	67		2.670				ND	
22 Trichlorofluoromethane	101		2.701				ND	
23 Ethanol	45		2.867				ND	
24 Ethyl ether	59		2.971				ND	
27 Propene oxide	58		3.023				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
29 112TCTFE	151		3.209				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
32 Isopropyl alcohol	45		3.365				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
34 Methyl acetate	43		3.531				ND	
36 3-Chloro-1-propene	41		3.541				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
39 Methylene Chloride	84		3.665				ND	
38 2-Methyl-2-propanol	59		3.738				ND	
12 Chlorotrifluoroethene	116		3.859				ND	
42 Acrylonitrile	53		3.873				ND	
40 Methyl tert-butyl ether	73		3.904				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
43 Hexane	57		4.153				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
44 Isopropyl ether	87		4.318				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
17 2-Chloro-1,1,1-Trifluoroethane	118		4.471				ND	
48 Tert-butyl ethyl ether	59		4.640				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
49 Ethyl acetate	43		4.806				ND	
54 Propionitrile	54		4.837				ND	
51 sec-Butyl Alcohol	45		4.920				ND	
55 Methacrylonitrile	41		4.961				ND	
57 Tetrahydrofuran	42		5.002				ND	
59 Chlorobromomethane	128		5.002				ND	
25 1,2-Dichloro-1,1,2-trifluoroethane	117		5.006				ND	
56 Chloroform	83		5.075				ND	
26 1,1,1-Trifluoro-2,2-dichloroethane	83		5.097				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
61 Cyclohexane	56		5.293				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
65 Tert-amyl methyl ether	73		5.635				ND	
135 n-Heptane	43		5.769				ND	
64 n-Butanol	56		5.977				ND	
68 Trichloroethene	130		6.091				ND	
69 2-Pentanone	43		6.215				ND	
71 Methylcyclohexane	55		6.298				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
73 1,4-Dioxane	88		6.371				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
77 2-Nitropropane	41		6.719				ND	
76 2-Chloroethyl vinyl ether	63		6.773				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
88 Tetrahydrothiophene	60		7.955				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
90 1-Chlorohexane	91		8.496				ND	7
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
98 Isopropylbenzene	105		9.453				ND	
99 cis-1,4-Dichloro-2-butene	53		9.501				ND	
100 Cyclohexanone	55		9.549				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
105 Bromobenzene	156		9.779				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
103 N-Propylbenzene	120		9.865				ND	
107 2-Chlorotoluene	126		9.961				ND	
106 1,3,5-Trimethylbenzene	105		10.036				ND	
108 4-Chlorotoluene	126		10.079				ND	
109 tert-Butylbenzene	119		10.352				ND	
110 1,2,4-Trimethylbenzene	105		10.411				ND	
111 sec-Butylbenzene	134		10.577				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
112 4-Isopropyltoluene	119		10.721				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
114 1,2,3-Trimethylbenzene	105		10.823				ND	
116 n-Butylbenzene	91		11.133				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
119 1,3,5-Trichlorobenzene	180		12.139				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
121 Hexachlorobutadiene	225		12.914				ND	
122 Naphthalene	128		13.043				ND	
123 1,2,3-Trichlorobenzene	180		13.262				ND	
162 Cyclohexane TIC	1		0.000				ND	
133 2,4-Dimethylpentane	1		0.000				ND	
128 Pentachloroethane	167		0.000				ND	
160 1-Chlorohexane TIC	1		0.000				ND	
132 2-Methylhexane	1		0.000				ND	
164 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
126 2,2,3-Trimethylbutane	1		0.000				ND	
129 n-Nonyl Aldehyde	1		0.000				ND	
124 2,3-Dimethylpentane	1		0.000				ND	
161 Methyl cyclohexane TIC	1		0.000				ND	
130 Dimethyl disulfide	1		0.000				ND	
127 3,3-Dimethylpentane	1		0.000				ND	
163 n-Nonane TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
134 3-Methylhexane	1		0.000				ND	
131 3-Ethylpentane	1		0.000				ND	
166 Ethyl acrylate	55		0.000				ND	
125 2,2-Dimethylpentane	1		0.000				ND	
165 t-Amyl alcohol	1		0.000				ND	
167 Pentachloroethane TIC	1		0.000				ND	
S 143 TAH	1				0		0	7
S 141 1,2-Dichloroethene, Total	1		0.000				ND	7
S 140 1,3-Dichloropropene, Total	1		0.000				ND	7
S 142 Xylenes, Total	106		0.000				ND	7
S 137 Trihalomethanes, Total	1		0.000				ND	7
S 139 Total BTEX	1		0.000				ND	7
T 157 1,3-Butadiene TIC	1		1.985				ND	
T 158 2,3-dichloro-1-propene TIC	1		6.150				ND	
T 156 4-Ethyltoluene TIC	1		9.345				ND	
T 154 Dichloroacetonitrile TIC	1		0.000				ND	
T 155 Dicyclopentadiene TIC	1		0.000				ND	
T 153 Propene TIC	1		0.000				ND	
T 152 Propene oxide TIC	1		0.000				ND	
T 159 2-Butoxyethanol TIC	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:26

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5892.d

Injection Date: 07-Jul-2021 12:02:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-2

Lab Sample ID: 280-150306-2

Worklist Smp#: 20

Client ID: RW-2172F-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

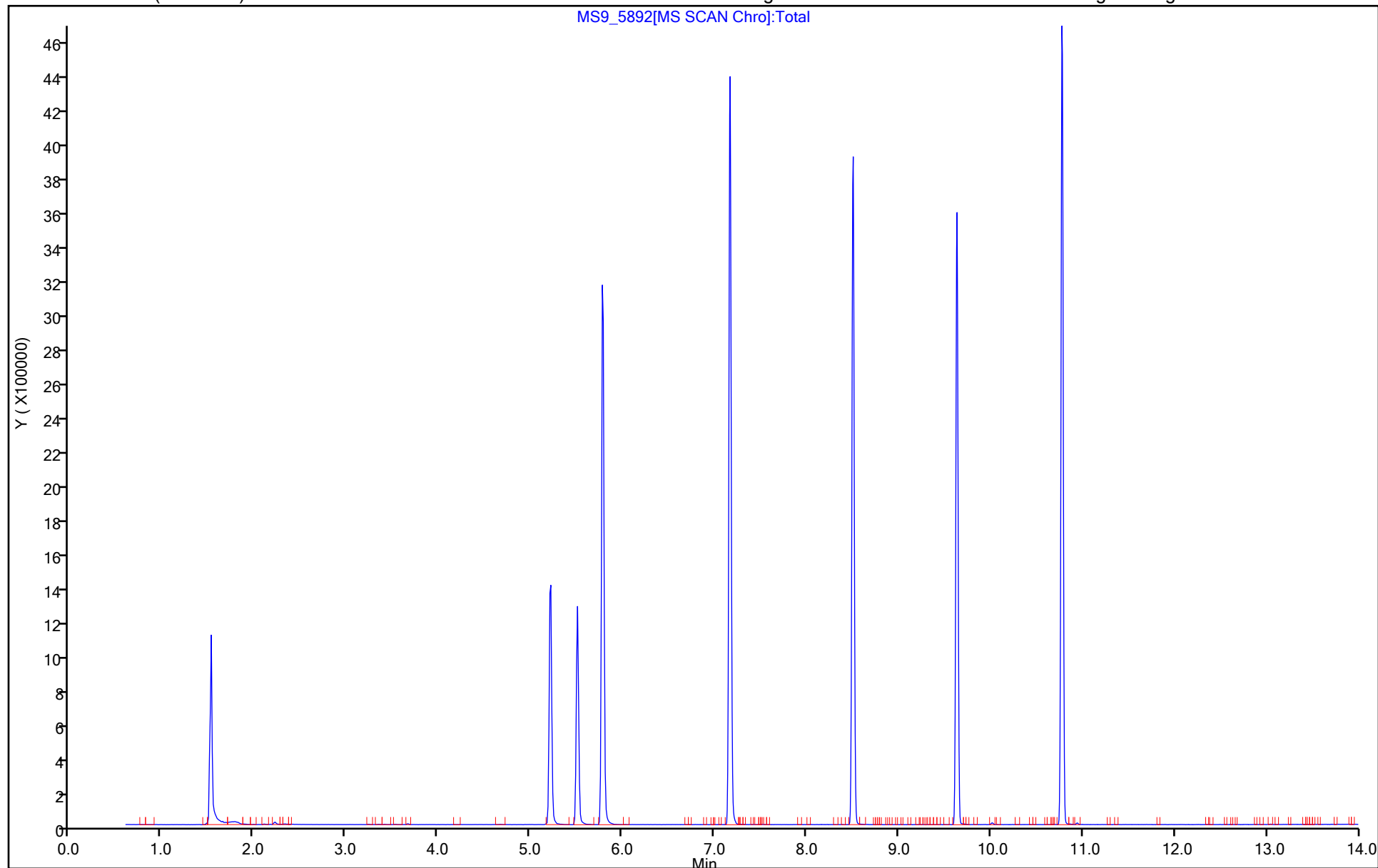
ALS Bottle#: 16

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5892.d
 Lims ID: 280-150306-C-2
 Client ID: RW-2172F-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 12:02:30 ALS Bottle#: 16 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-2 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:52:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.7	105.41
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.6	115.19
\$ 8 Toluene-d8 (Surr)	50.0	47.4	94.88
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.4	94.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-7588P-20210625 Lab Sample ID: 280-150306-3

Matrix: Water Lab File ID: MS9_5893.d

Analysis Method: 8260B Date Collected: 06/25/2021 14:31

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 12:25

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7588P-20210625 Lab Sample ID: 280-150306-3
 Matrix: Water Lab File ID: MS9_5893.d
 Analysis Method: 8260B Date Collected: 06/25/2021 14:31
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 12:25
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	114		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)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5893.d
 Lims ID: 280-150306-B-3
 Client ID: RW-7588P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 12:25:30 ALS Bottle#: 17 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-3 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:52:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2770313	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	808210	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1388540	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	799916	52.0	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	805720	56.8	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2778978	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1150969	47.8	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130		6.091				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:27

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5893.d

Injection Date: 07-Jul-2021 12:25:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-B-3

Lab Sample ID: 280-150306-3

Worklist Smp#: 21

Client ID: RW-7588P-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

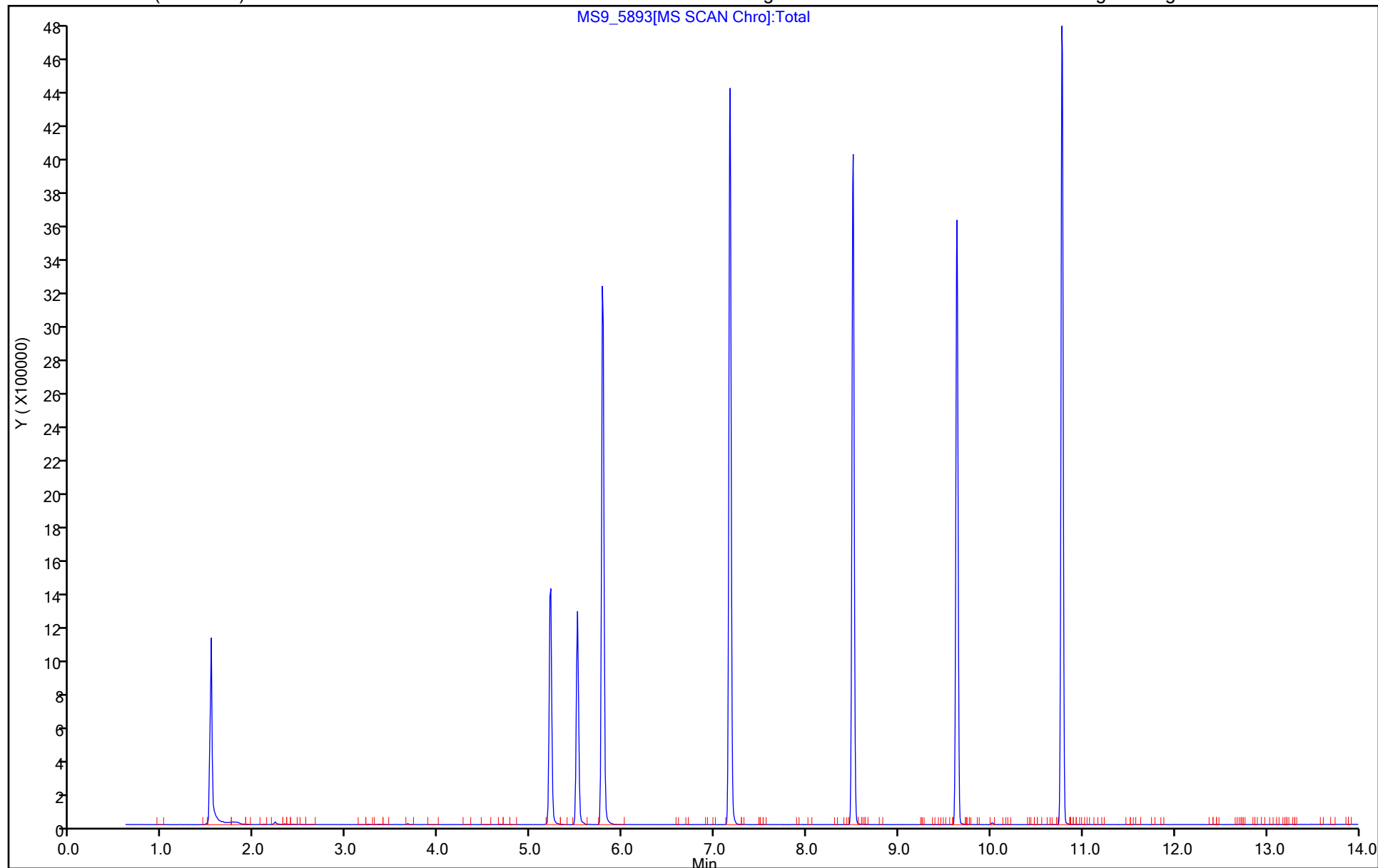
ALS Bottle#: 17

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5893.d
 Lims ID: 280-150306-B-3
 Client ID: RW-7588P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 12:25:30 ALS Bottle#: 17 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-3 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:52:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.0	103.90
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.8	113.69
\$ 8 Toluene-d8 (Surr)	50.0	48.1	96.13
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.8	95.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-8209P-20210625 Lab Sample ID: 280-150306-4

Matrix: Water Lab File ID: MS9_5894.d

Analysis Method: 8260B Date Collected: 06/25/2021 15:51

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 12:48

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-8209P-20210625 Lab Sample ID: 280-150306-4
 Matrix: Water Lab File ID: MS9_5894.d
 Analysis Method: 8260B Date Collected: 06/25/2021 15:51
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 12:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	115		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5894.d
 Lims ID: 280-150306-A-4
 Client ID: RW-8209P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 12:48:30 ALS Bottle#: 18 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-4 1x ph
 Operator ID: wickham Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2806587	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	823491	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1401761	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	815658	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	825437	57.5	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2818839	47.9	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1159569	47.7	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	
55 Methacrylonitrile	41		4.961				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130		6.091				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	7
94 m-Xylene & p-Xylene	91		8.736				ND	7
95 o-Xylene	106		9.105				ND	7
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:28

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5894.d

Injection Date: 07-Jul-2021 12:48:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-A-4

Lab Sample ID: 280-150306-4

Worklist Smp#: 22

Client ID: RW-8209P-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

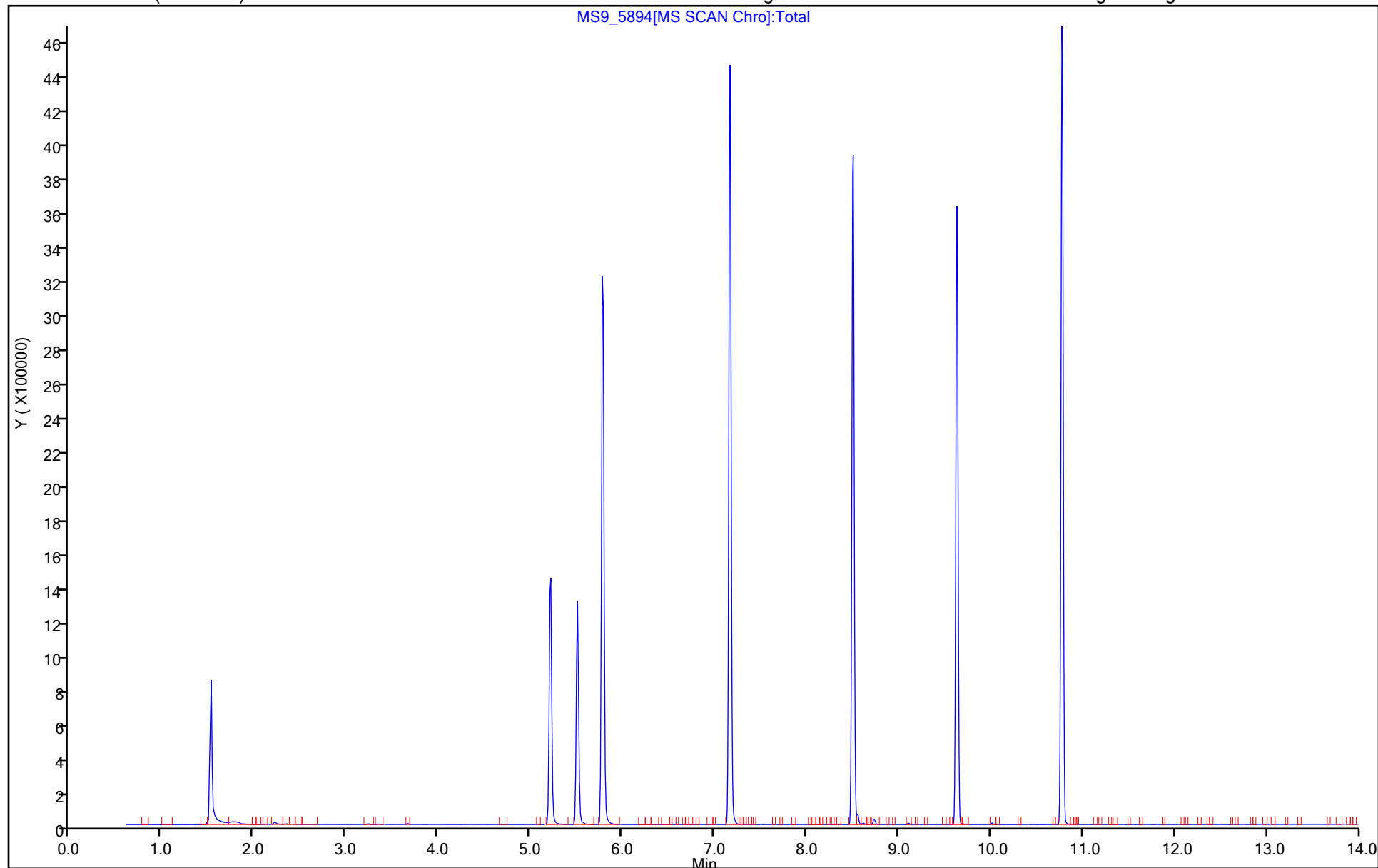
ALS Bottle#: 18

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS_5894.d
 Lims ID: 280-150306-A-4
 Client ID: RW-8209P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 12:48:30 ALS Bottle#: 18 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-4 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.3	104.58
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.5	114.97
\$ 8 Toluene-d8 (Surr)	50.0	47.9	95.70
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.7	95.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7688P-20210625 Lab Sample ID: 280-150306-5
 Matrix: Water Lab File ID: MS9_5895.d
 Analysis Method: 8260B Date Collected: 06/25/2021 16:38
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 13:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7688P-20210625 Lab Sample ID: 280-150306-5
 Matrix: Water Lab File ID: MS9_5895.d
 Analysis Method: 8260B Date Collected: 06/25/2021 16:38
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 13:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	115		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)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5895.d
 Lims ID: 280-150306-B-5
 Client ID: RW-7688P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 13:11:30 ALS Bottle#: 19 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-5 1x ph
 Operator ID: wickham Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2748246	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	802442	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1371127	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	801365	52.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	809848	57.6	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2781388	48.5	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1132342	47.6	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	7
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	
55 Methacrylonitrile	41		4.961				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130		6.091				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:29

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5895.d

Injection Date: 07-Jul-2021 13:11:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-B-5

Lab Sample ID: 280-150306-5

Worklist Smp#: 23

Client ID: RW-7688P-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

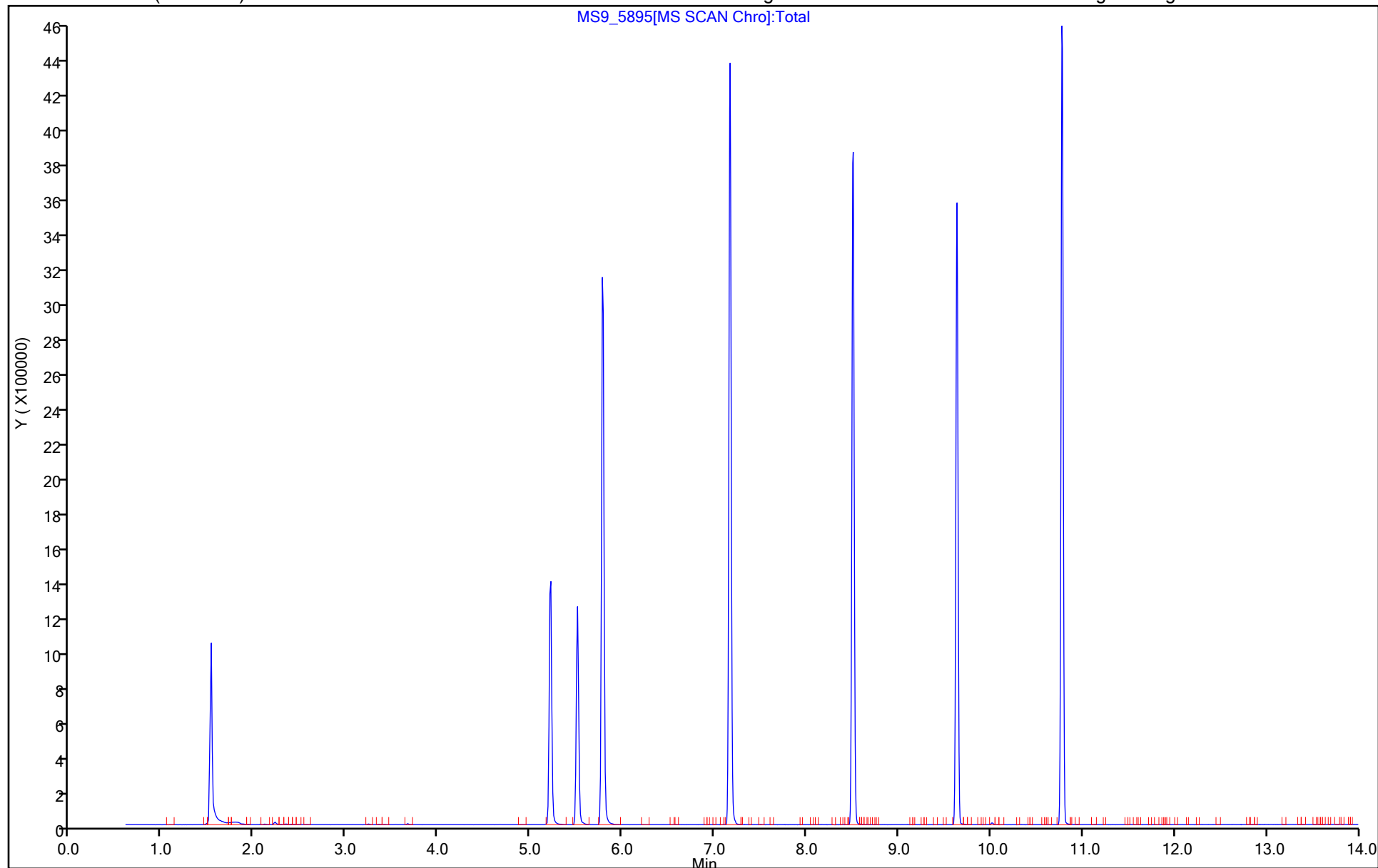
ALS Bottle#: 19

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\MS9_5895.d
 Lims ID: 280-150306-B-5
 Client ID: RW-7688P-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 13:11:30 ALS Bottle#: 19 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-5 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.5	104.93
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.6	115.19
\$ 8 Toluene-d8 (Surr)	50.0	48.5	96.91
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.6	95.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-5898BI-20210625 Lab Sample ID: 280-150306-6
 Matrix: Water Lab File ID: MS9_5896.d
 Analysis Method: 8260B Date Collected: 06/25/2021 18:00
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 13:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-5898BI-20210625 Lab Sample ID: 280-150306-6
 Matrix: Water Lab File ID: MS9_5896.d
 Analysis Method: 8260B Date Collected: 06/25/2021 18:00
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 13:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	0.26	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)	115		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5896.d
 Lims ID: 280-150306-C-6
 Client ID: RW-5898BI-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 13:34:30 ALS Bottle#: 20 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-6 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:52:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2752508	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	807666	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1414480	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	94	803751	52.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	96	812379	57.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2769967	47.9	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1152683	47.0	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130	6.091	6.091	0.000	95	15001	0.2639	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	7
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5896.d

Injection Date: 07-Jul-2021 13:34:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-6

Lab Sample ID: 280-150306-6

Worklist Smp#: 24

Client ID: RW-5898BI-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

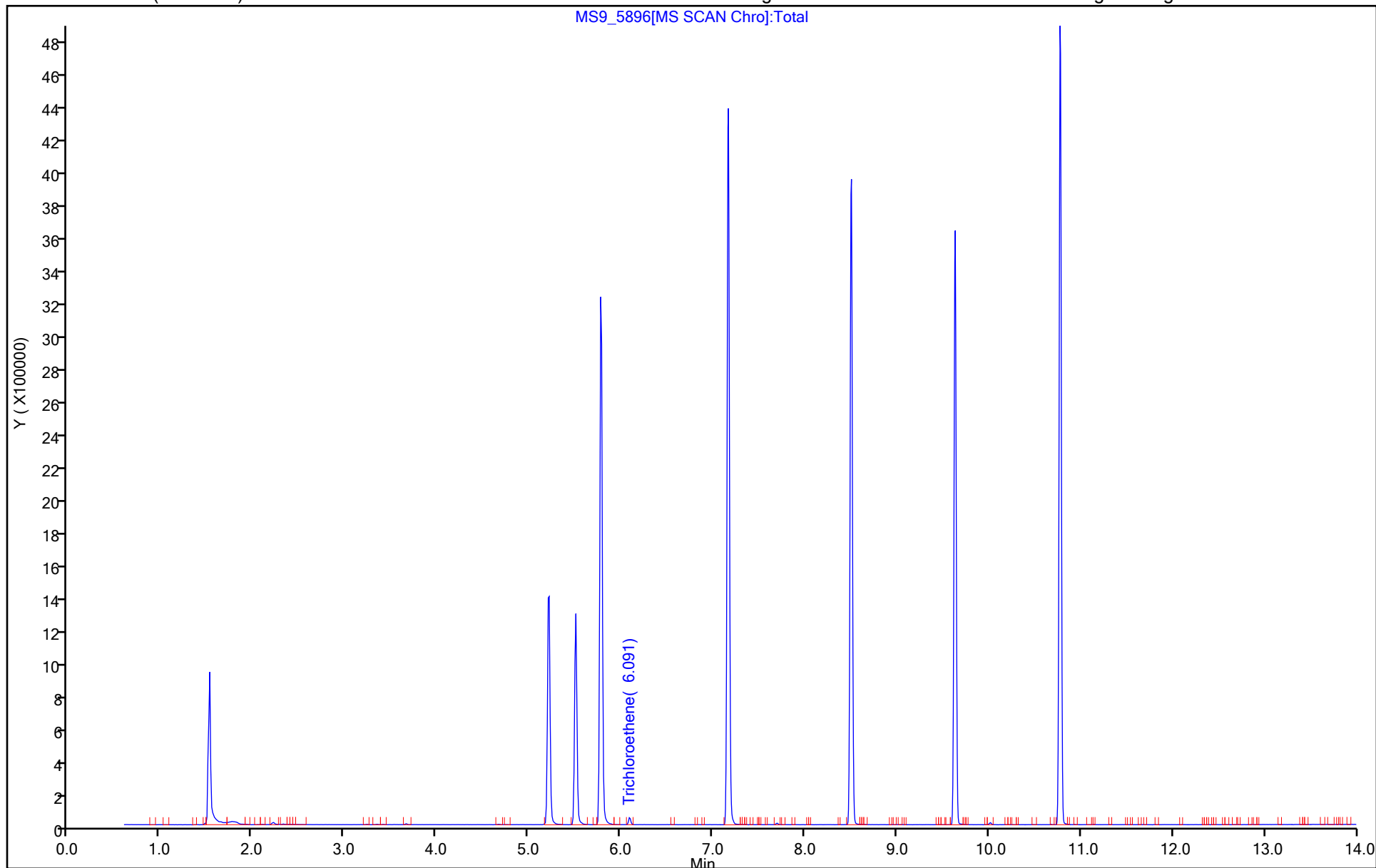
ALS Bottle#: 20

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5896.d
 Lims ID: 280-150306-C-6
 Client ID: RW-5898BI-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 13:34:30 ALS Bottle#: 20 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-6 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:52:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.5	105.08
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.7	115.37
\$ 8 Toluene-d8 (Surr)	50.0	47.9	95.88
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.0	93.97

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5896.d

Injection Date: 07-Jul-2021 13:34:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-C-6

Lab Sample ID: 280-150306-6

Client ID: RW-5898BI-20210625

Operator ID: wickhamt

ALS Bottle#: 20

Worklist Smp#: 24

Purge Vol: 5.000 mL

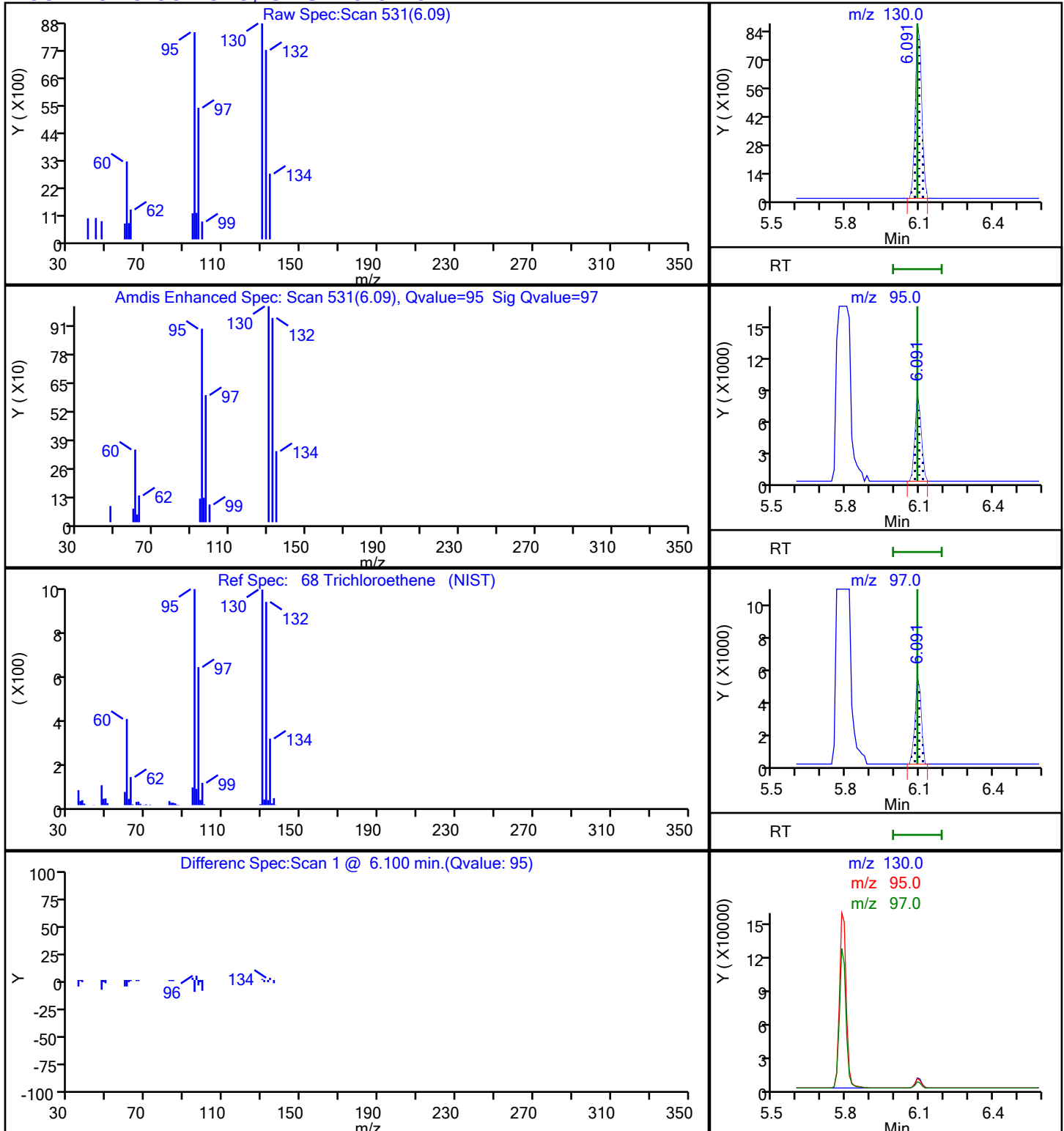
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2140H-20210626 Lab Sample ID: 280-150306-7
 Matrix: Water Lab File ID: MS9_5897.d
 Analysis Method: 8260B Date Collected: 06/26/2021 11:20
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 13:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	1.1		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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2140H-20210626 Lab Sample ID: 280-150306-7
 Matrix: Water Lab File ID: MS9_5897.d
 Analysis Method: 8260B Date Collected: 06/26/2021 11:20
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 13:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	4.5		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)	115		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)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5897.d
 Lims ID: 280-150306-C-7
 Client ID: RW-2140H-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 13:57:30 ALS Bottle#: 21 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-7 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2665559	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	781506	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1352059	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	774780	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	781514	57.3	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2700871	48.3	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1111598	47.4	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	7
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	73	20538	1.07	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	7
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130	6.091	6.091	0.000	95	363571	25.8	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	59374	4.49	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:31

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5897.d

Injection Date: 07-Jul-2021 13:57:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-7

Lab Sample ID: 280-150306-7

Worklist Smp#: 25

Client ID: RW-2140H-20210626

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

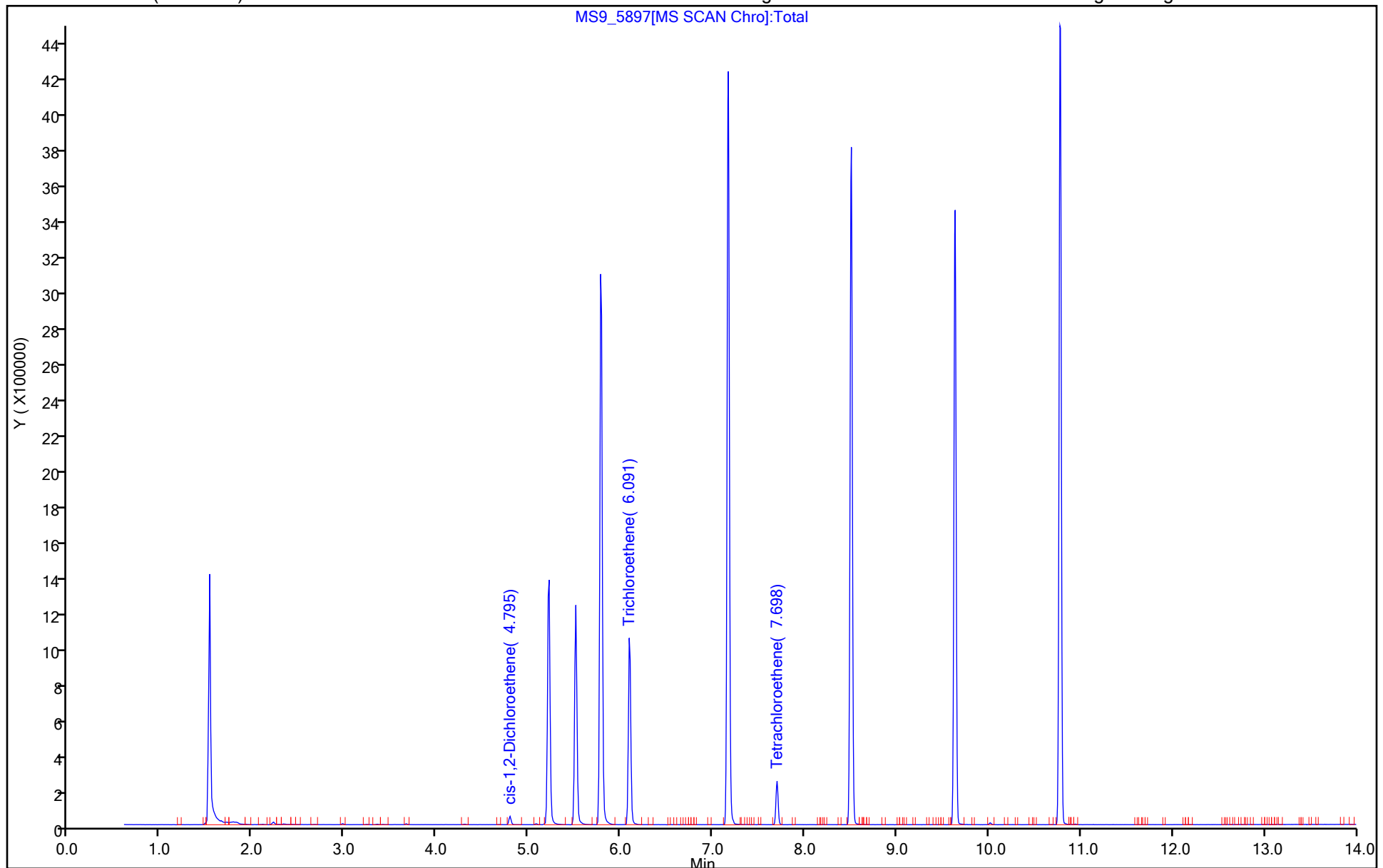
ALS Bottle#: 21

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5897.d
 Lims ID: 280-150306-C-7
 Client ID: RW-2140H-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 13:57:30 ALS Bottle#: 21 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-7 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.3	104.59
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.3	114.61
\$ 8 Toluene-d8 (Surr)	50.0	48.3	96.62
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.4	94.81

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5897.d

Injection Date: 07-Jul-2021 13:57:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-C-7

Lab Sample ID: 280-150306-7

Client ID: RW-2140H-20210626

Operator ID: wickhamt

ALS Bottle#: 21

Worklist Smp#: 25

Purge Vol: 5.000 mL

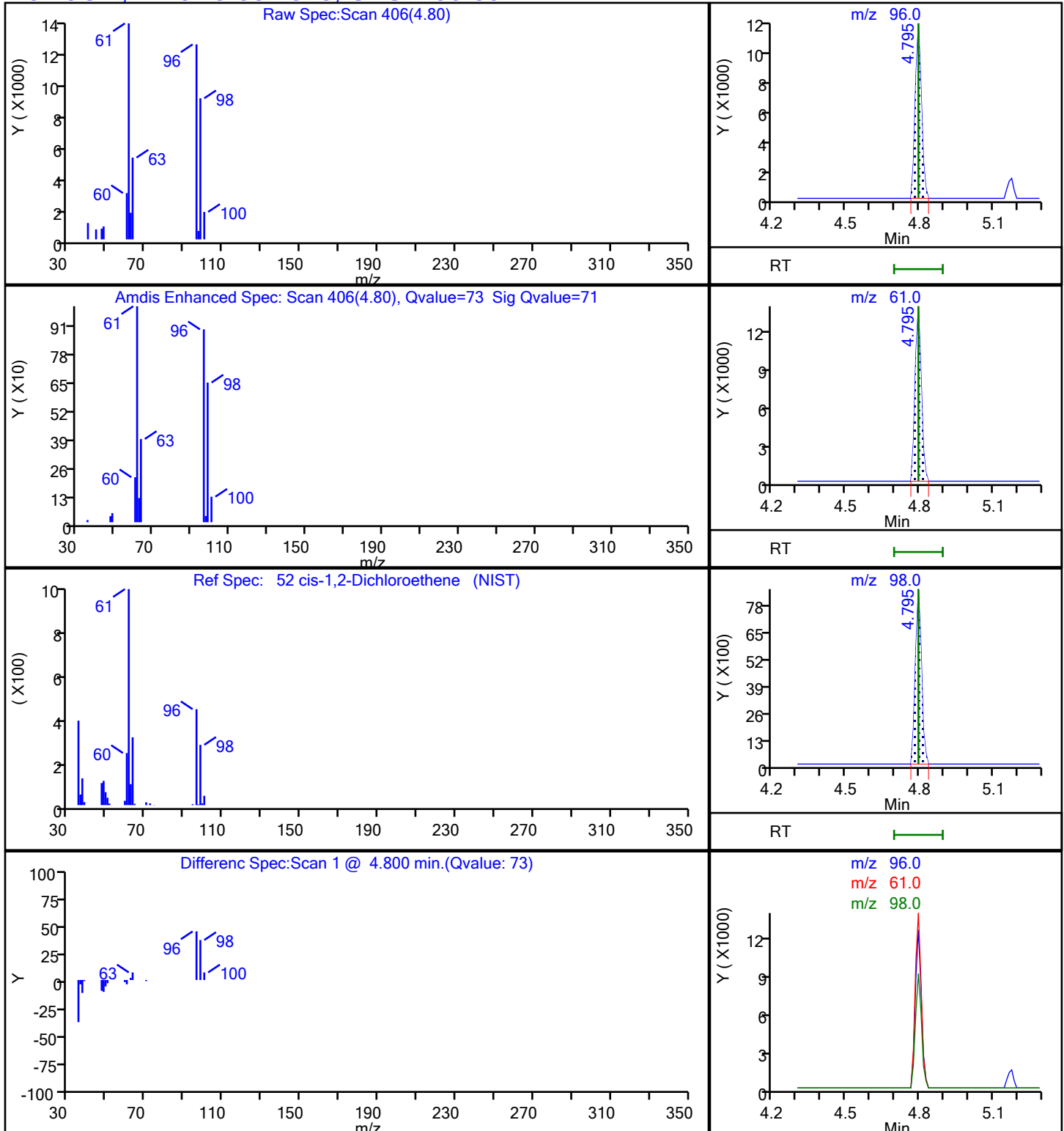
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

52 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5897.d

Injection Date: 07-Jul-2021 13:57:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-C-7

Lab Sample ID: 280-150306-7

Client ID: RW-2140H-20210626

Operator ID: wickhamt

ALS Bottle#: 21

Worklist Smp#: 25

Purge Vol: 5.000 mL

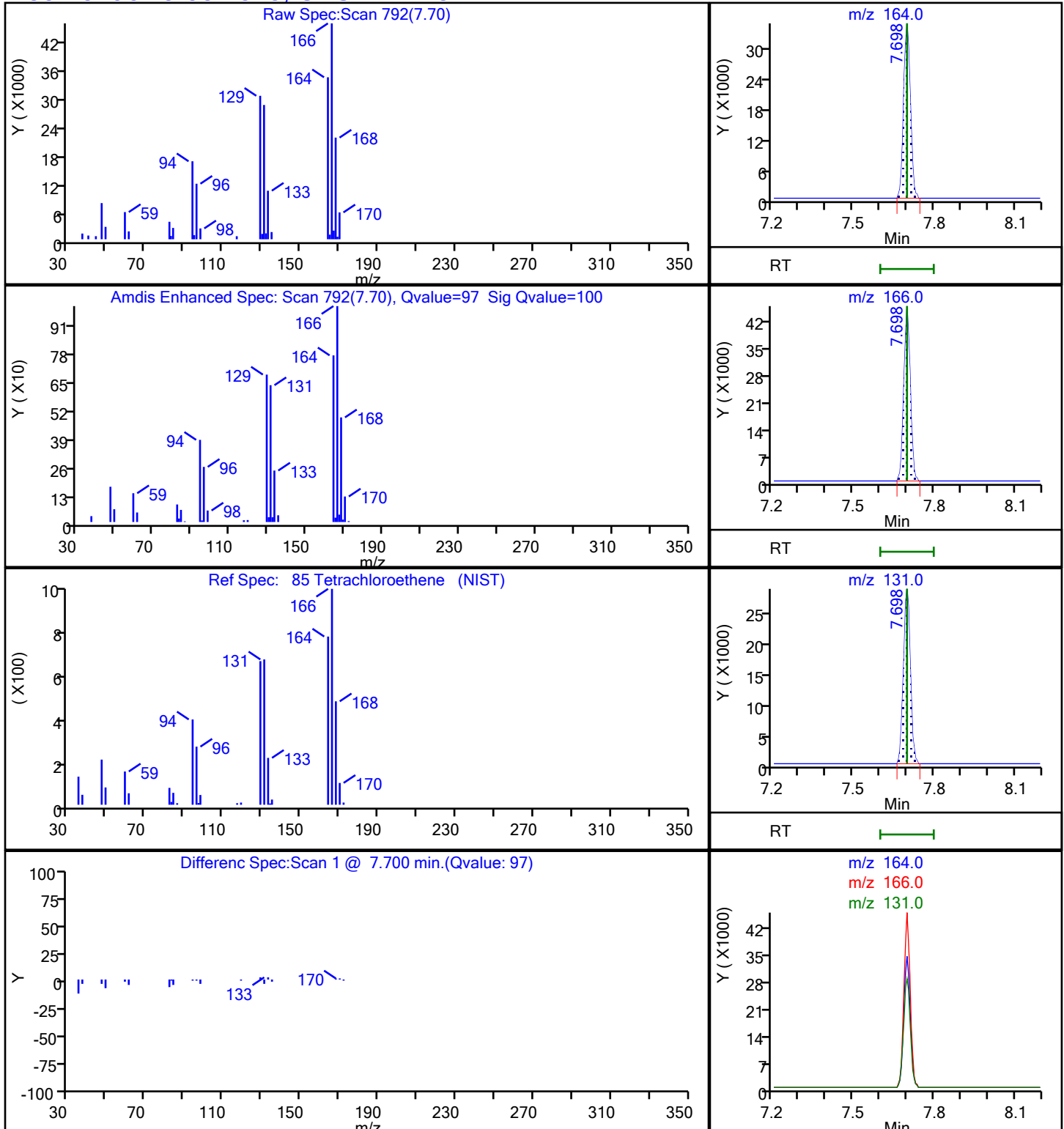
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

85 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5897.d

Injection Date: 07-Jul-2021 13:57:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-C-7

Lab Sample ID: 280-150306-7

Client ID: RW-2140H-20210626

Operator ID: wickhamt

ALS Bottle#: 21

Worklist Smp#: 25

Purge Vol: 5.000 mL

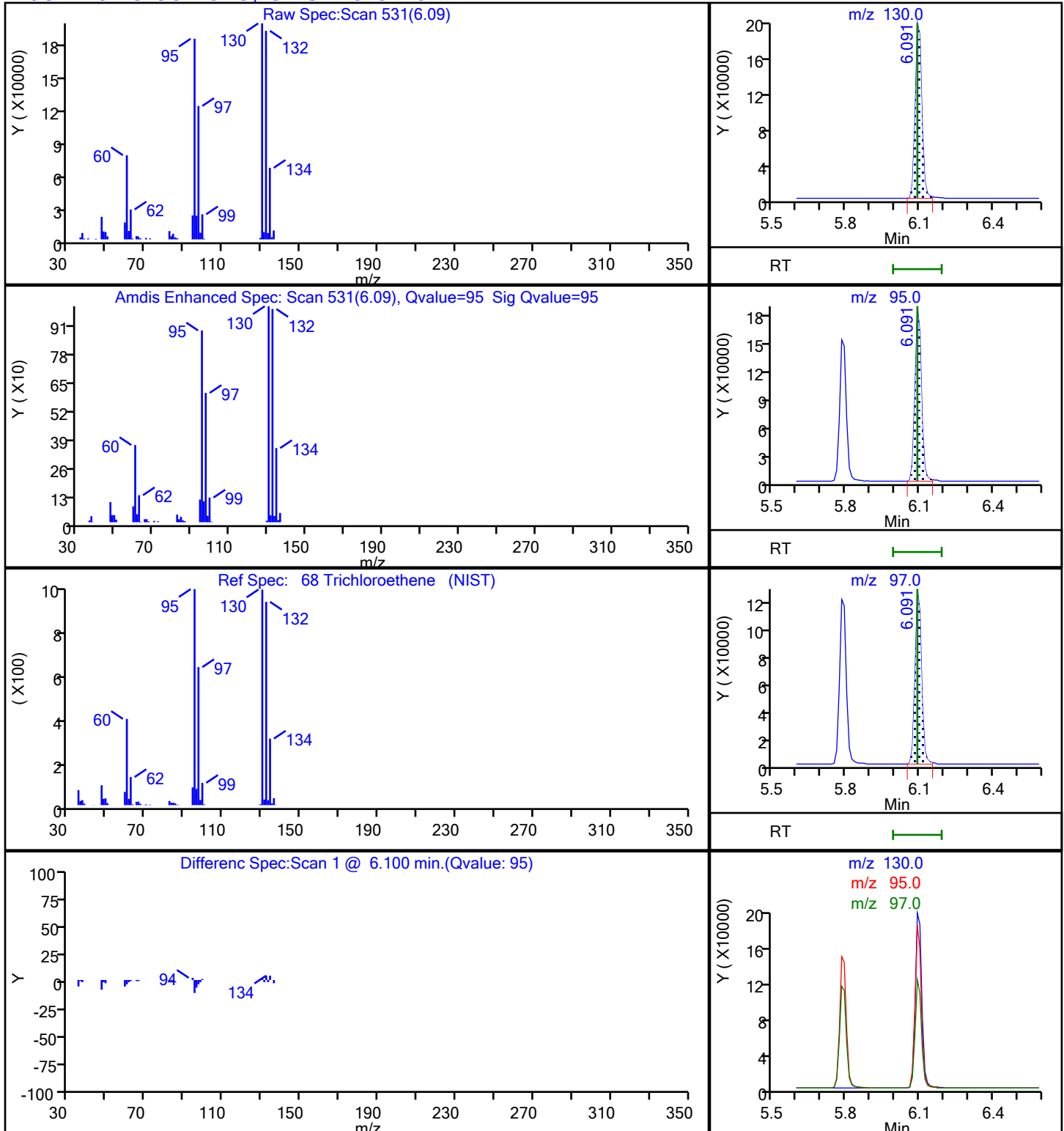
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: MW-116S-20210626 Lab Sample ID: 280-150306-8

Matrix: Water Lab File ID: MS9_5898.d

Analysis Method: 8260B Date Collected: 06/26/2021 12:30

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 14:19

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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	1.3		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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: MW-116S-20210626 Lab Sample ID: 280-150306-8
 Matrix: Water Lab File ID: MS9_5898.d
 Analysis Method: 8260B Date Collected: 06/26/2021 12:30
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 14:19
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	4.2		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	27		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)	114		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5898.d
 Lims ID: 280-150306-B-8
 Client ID: MW-116S-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 14:19:30 ALS Bottle#: 22 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-8 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2679711	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	784797	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1344564	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	778890	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	778901	56.8	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2699797	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1111636	47.7	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	74	23652	1.31	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	7
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	
68 Trichloroethene	130	6.091	6.091	0.000	96	386239	27.3	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	56719	4.23	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:32

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5898.d

Injection Date: 07-Jul-2021 14:19:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-B-8

Lab Sample ID: 280-150306-8

Worklist Smp#: 26

Client ID: MW-116S-20210626

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

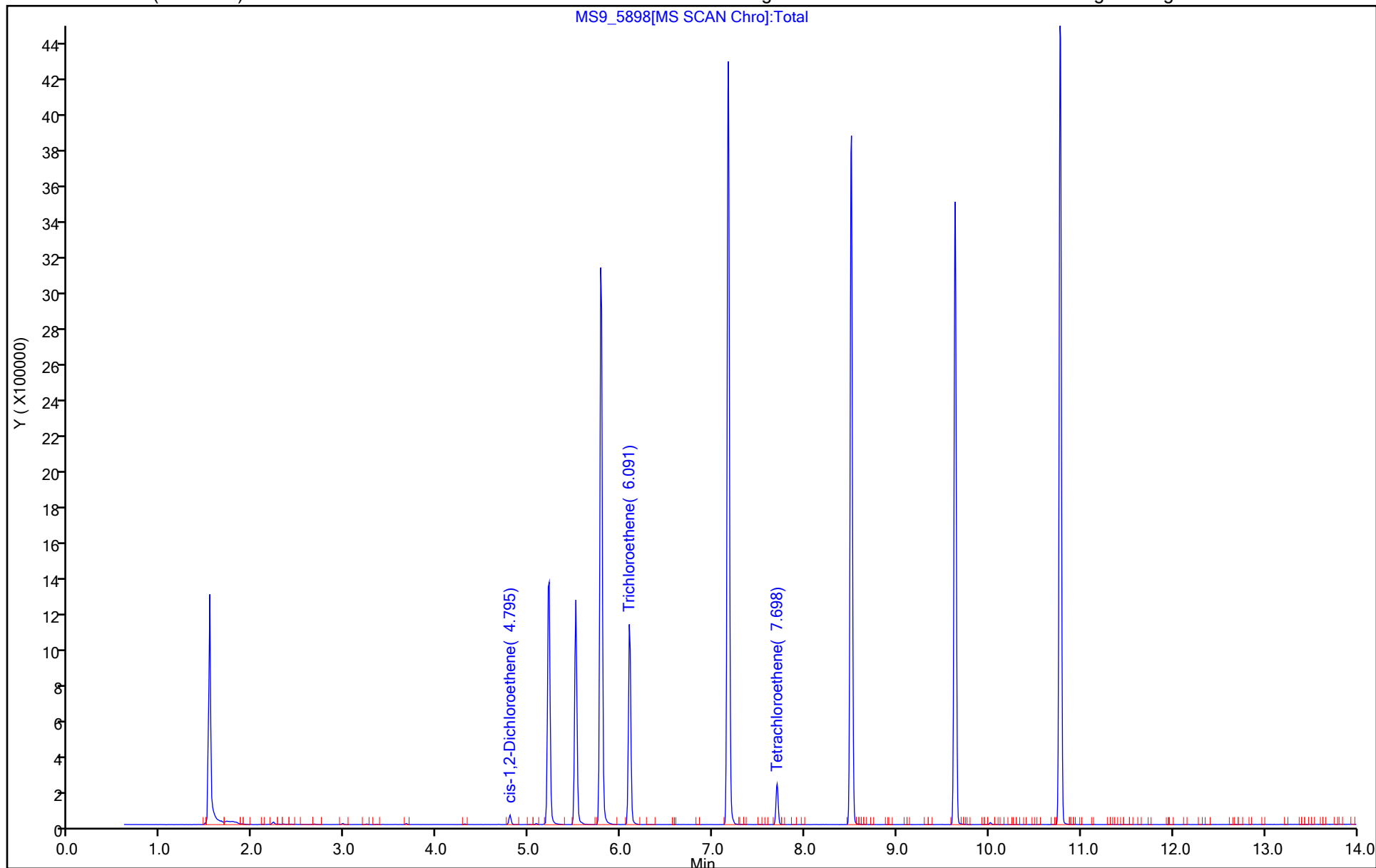
ALS Bottle#: 22

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5898.d
 Lims ID: 280-150306-B-8
 Client ID: MW-116S-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 14:19:30 ALS Bottle#: 22 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-8 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.3	104.59
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.8	113.62
\$ 8 Toluene-d8 (Surr)	50.0	48.1	96.18
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.7	95.34

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5898.d

Injection Date: 07-Jul-2021 14:19:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-B-8

Lab Sample ID: 280-150306-8

Client ID: MW-116S-20210626

Operator ID: wickhamt

ALS Bottle#: 22

Worklist Smp#: 26

Purge Vol: 5.000 mL

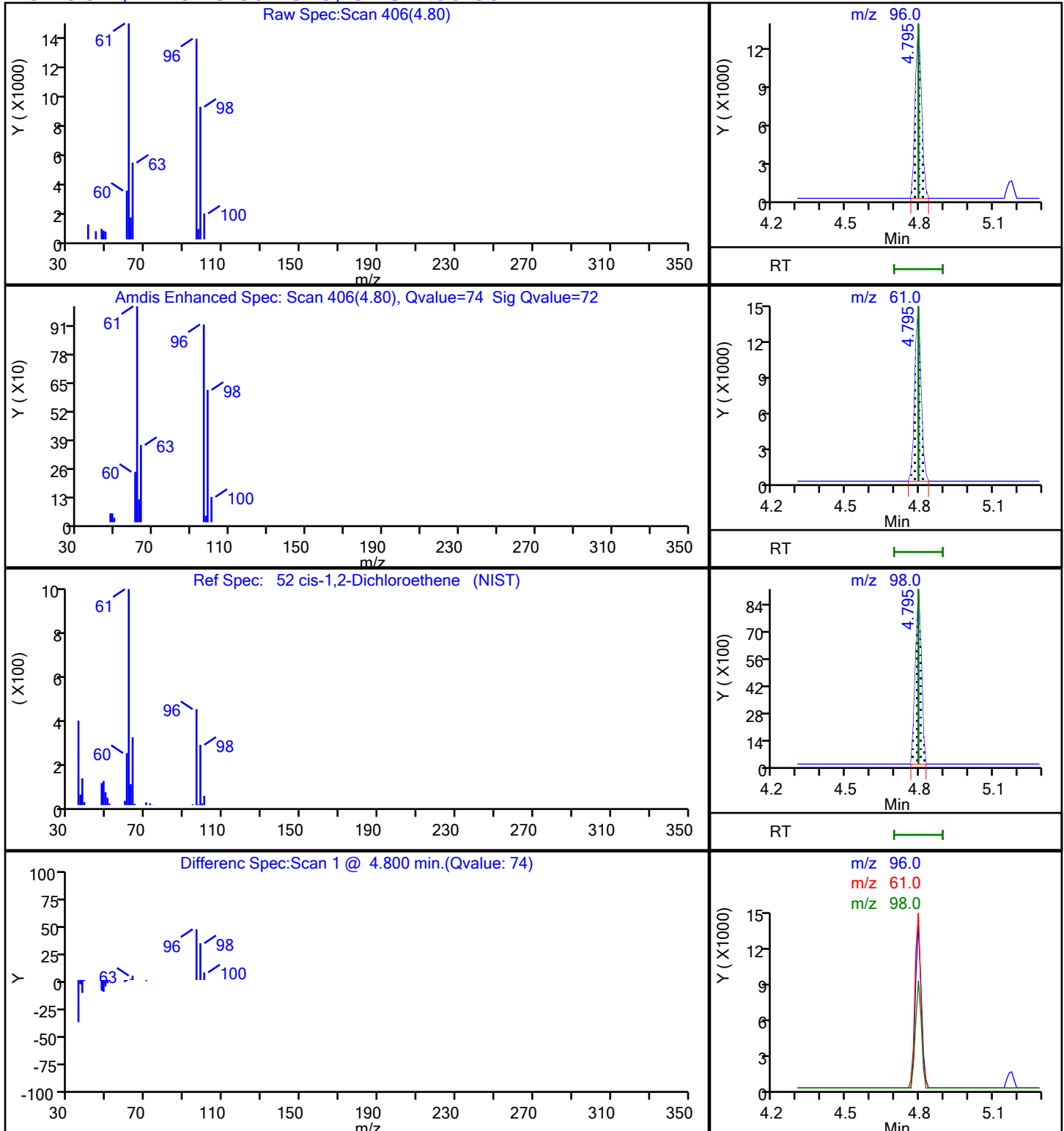
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

52 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5898.d

Injection Date: 07-Jul-2021 14:19:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-B-8

Lab Sample ID: 280-150306-8

Client ID: MW-116S-20210626

Operator ID: wickhamt

ALS Bottle#: 22

Worklist Smp#: 26

Purge Vol: 5.000 mL

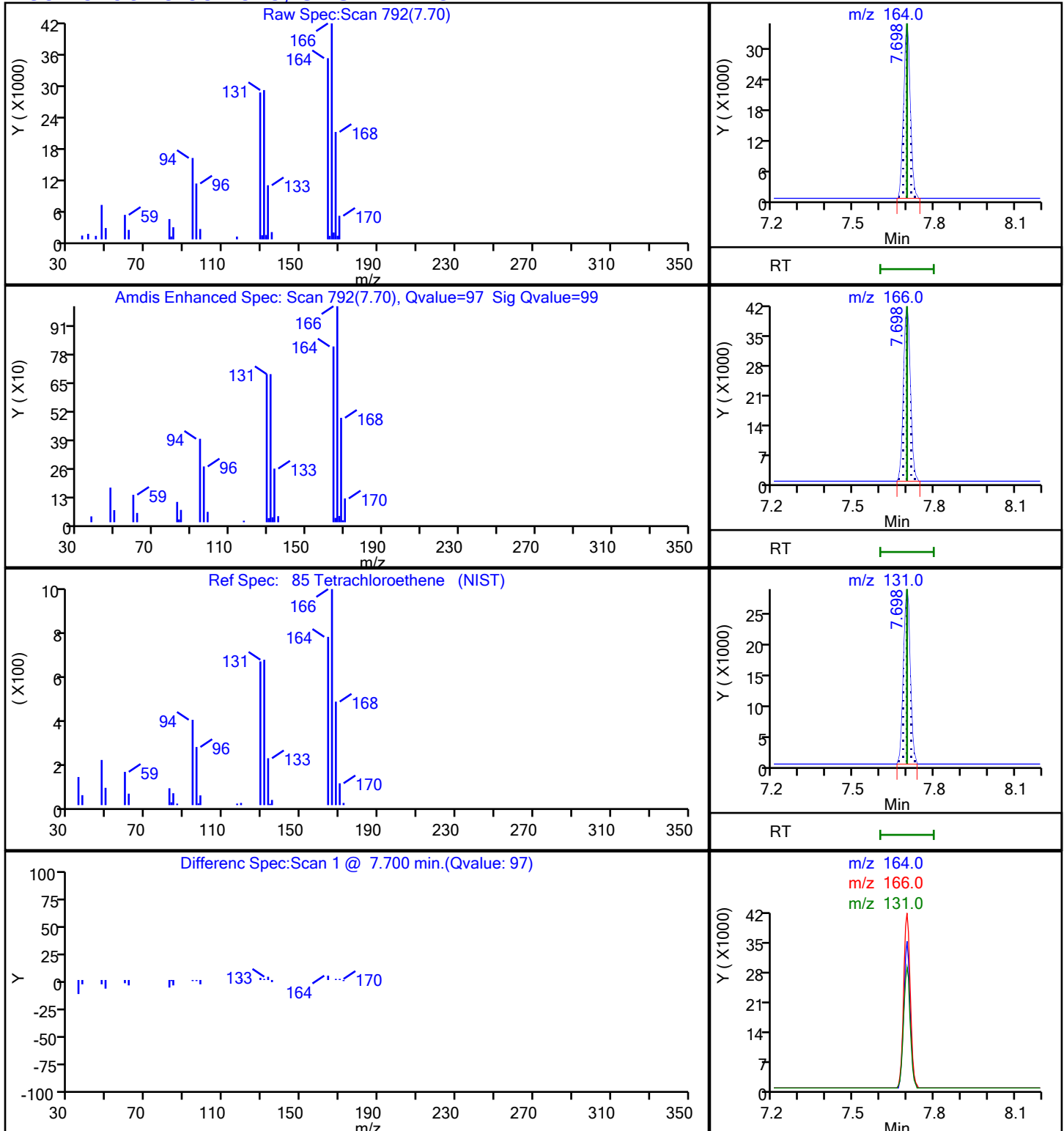
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

85 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5898.d

Injection Date: 07-Jul-2021 14:19:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-B-8

Lab Sample ID: 280-150306-8

Client ID: MW-116S-20210626

Operator ID: wickhamt

ALS Bottle#: 22

Worklist Smp#: 26

Purge Vol: 5.000 mL

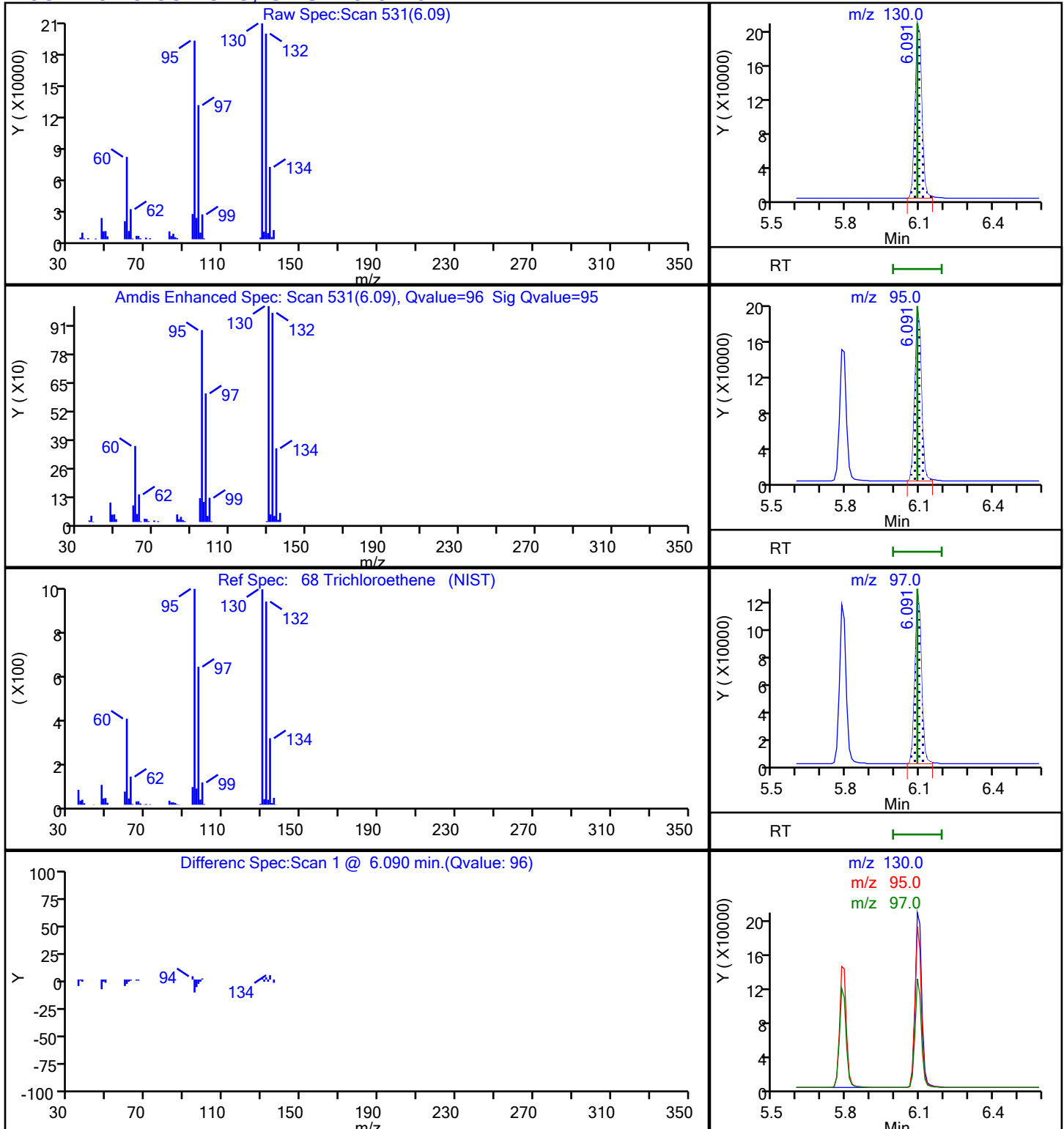
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2076F-20210626 Lab Sample ID: 280-150306-9
 Matrix: Water Lab File ID: MS9_5899.d
 Analysis Method: 8260B Date Collected: 06/26/2021 14:55
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 14:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	1.3		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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2076F-20210626 Lab Sample ID: 280-150306-9
 Matrix: Water Lab File ID: MS9_5899.d
 Analysis Method: 8260B Date Collected: 06/26/2021 14:55
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 14:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	4.6		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	24		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)	116		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)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5899.d
 Lims ID: 280-150306-A-9
 Client ID: RW-2076F-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 14:42:30 ALS Bottle#: 23 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-9 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2744283	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	799081	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1360732	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	794990	52.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	811547	57.8	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2762330	48.3	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1128924	47.8	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	75	24526	1.33	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	7
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130	6.091	6.091	0.000	96	352553	24.4	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	61989	4.60	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:33

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5899.d

Injection Date: 07-Jul-2021 14:42:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-A-9

Lab Sample ID: 280-150306-9

Worklist Smp#: 27

Client ID: RW-2076F-20210626

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

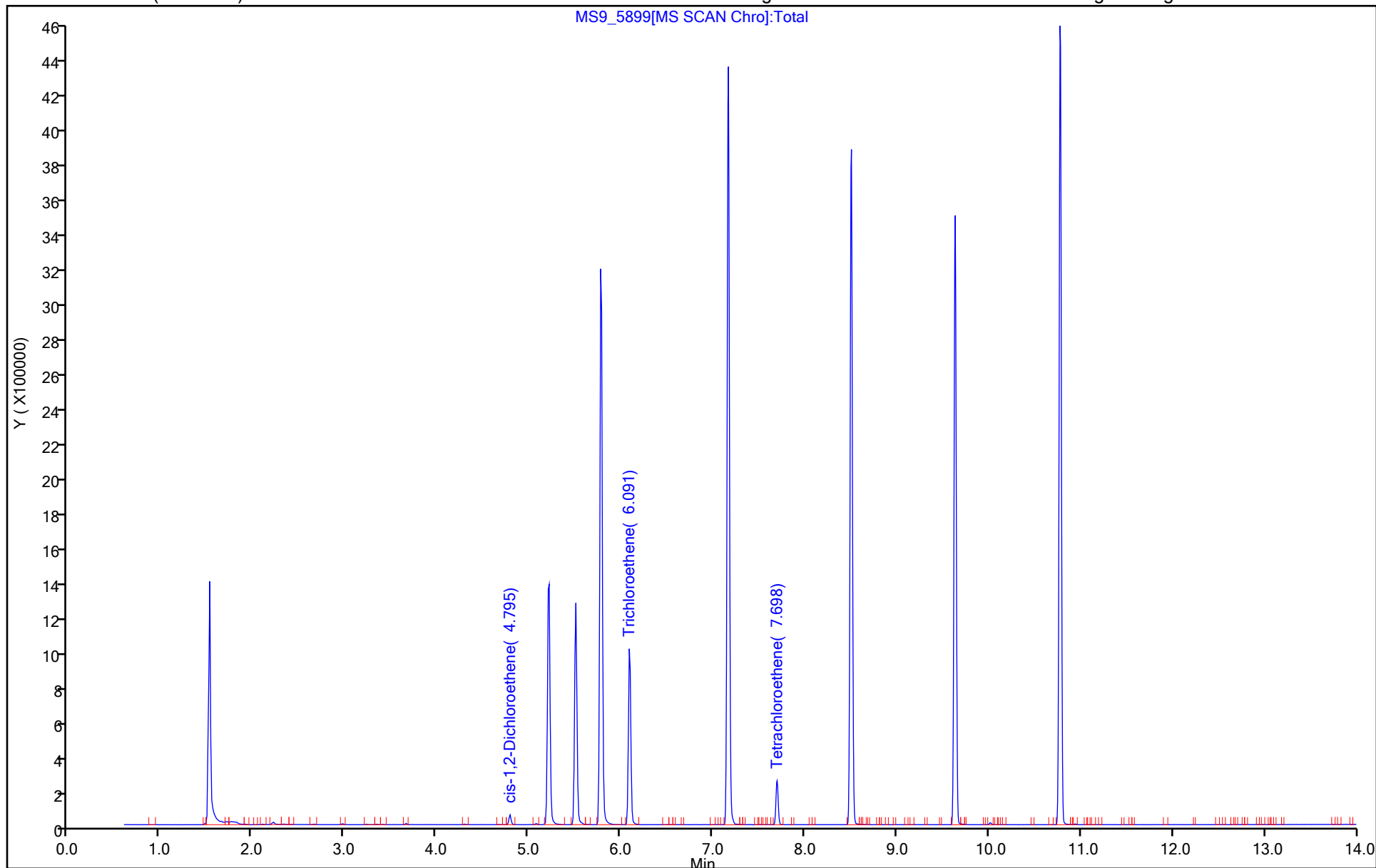
ALS Bottle#: 23

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5899.d
 Lims ID: 280-150306-A-9
 Client ID: RW-2076F-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 14:42:30 ALS Bottle#: 23 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-9 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.1	104.24
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.8	115.60
\$ 8 Toluene-d8 (Surr)	50.0	48.3	96.65
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.8	95.67

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5899.d

Injection Date: 07-Jul-2021 14:42:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-A-9

Lab Sample ID: 280-150306-9

Client ID: RW-2076F-20210626

Operator ID: wickhamt

ALS Bottle#: 23

Worklist Smp#: 27

Purge Vol: 5.000 mL

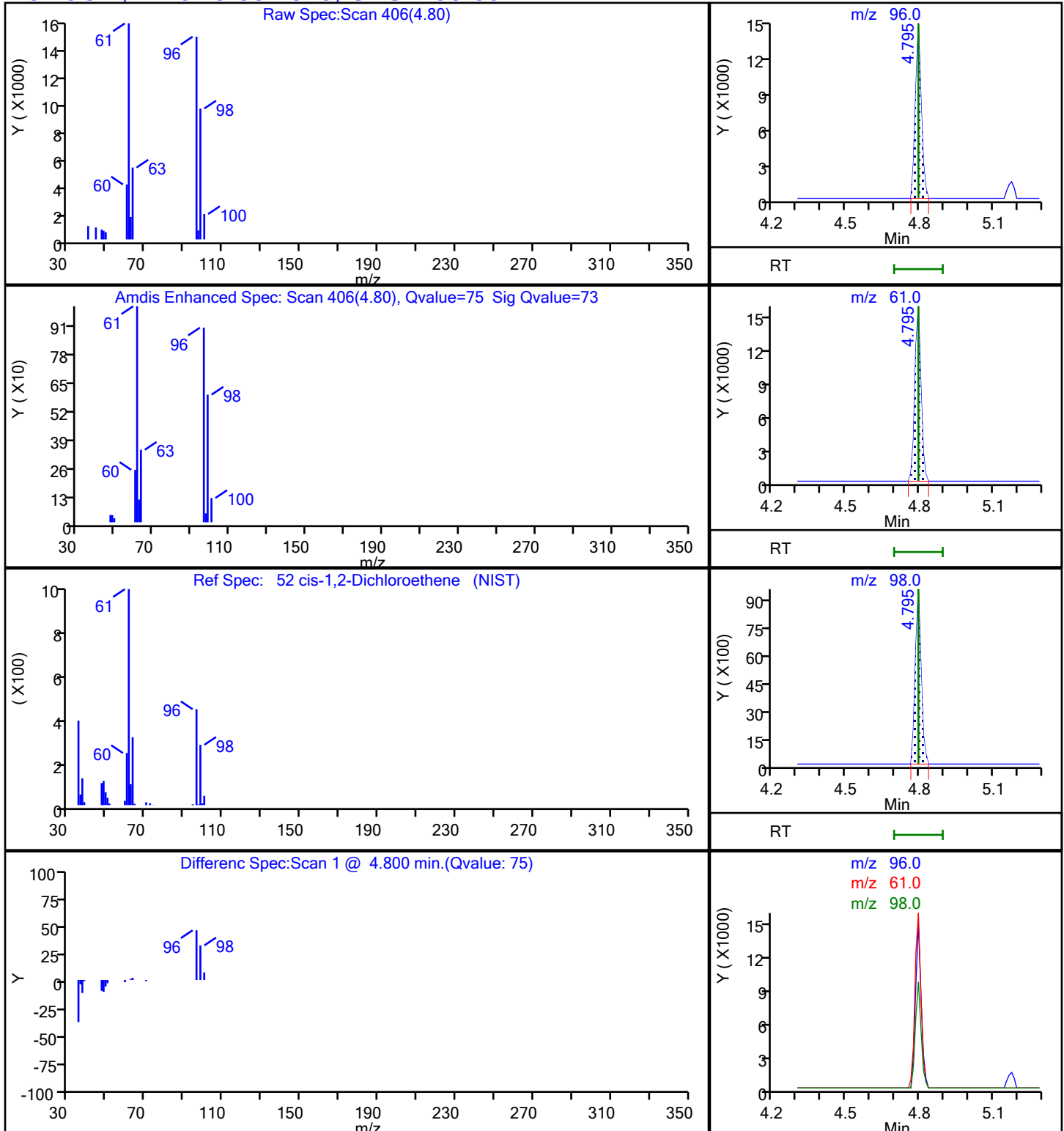
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

52 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5899.d

Injection Date: 07-Jul-2021 14:42:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-A-9

Lab Sample ID: 280-150306-9

Client ID: RW-2076F-20210626

Operator ID: wickhamt

ALS Bottle#: 23

Worklist Smp#: 27

Purge Vol: 5.000 mL

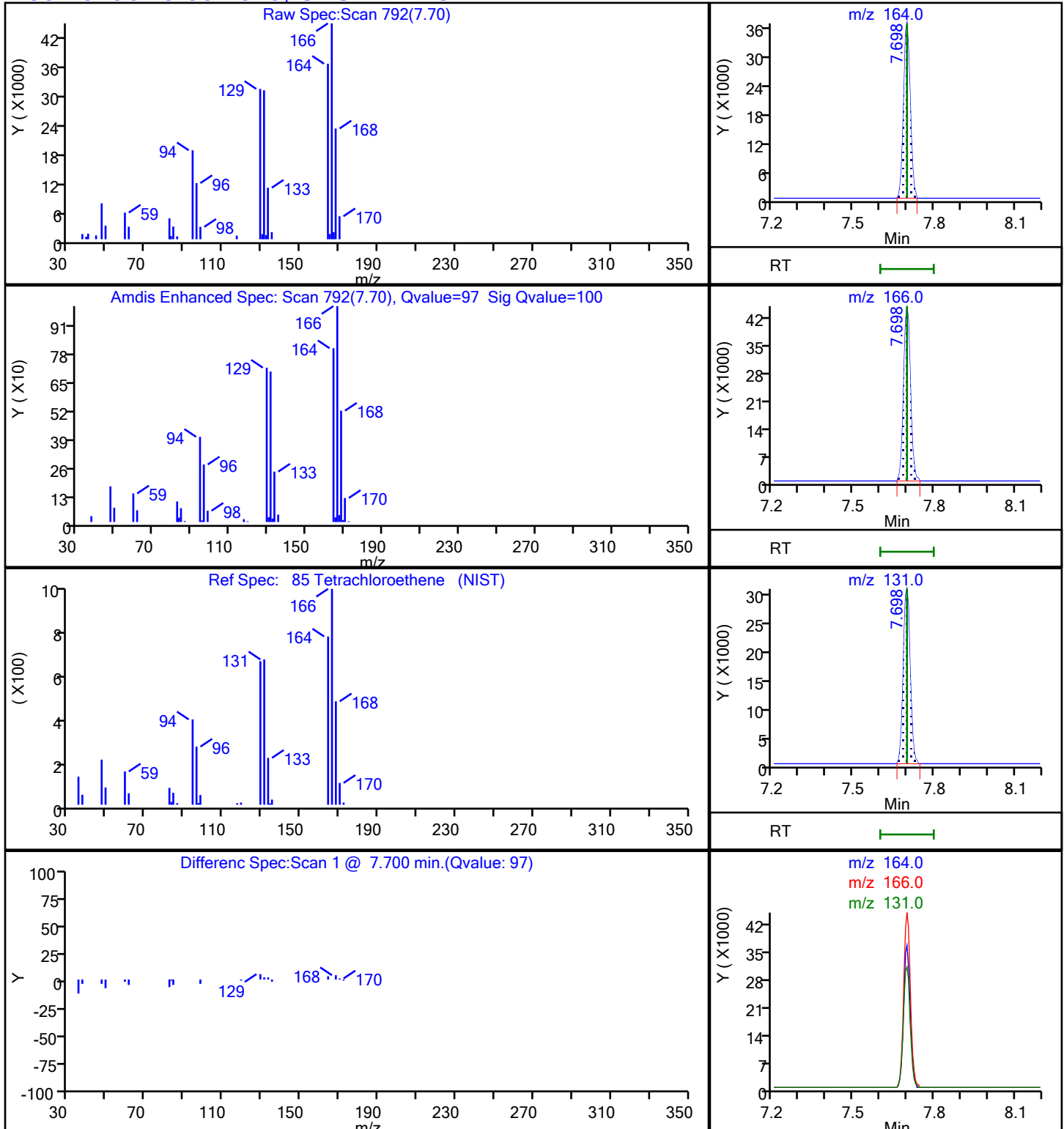
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

85 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5899.d

Injection Date: 07-Jul-2021 14:42:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-A-9

Lab Sample ID: 280-150306-9

Client ID: RW-2076F-20210626

Operator ID: wickhamt

ALS Bottle#: 23

Worklist Smp#: 27

Purge Vol: 5.000 mL

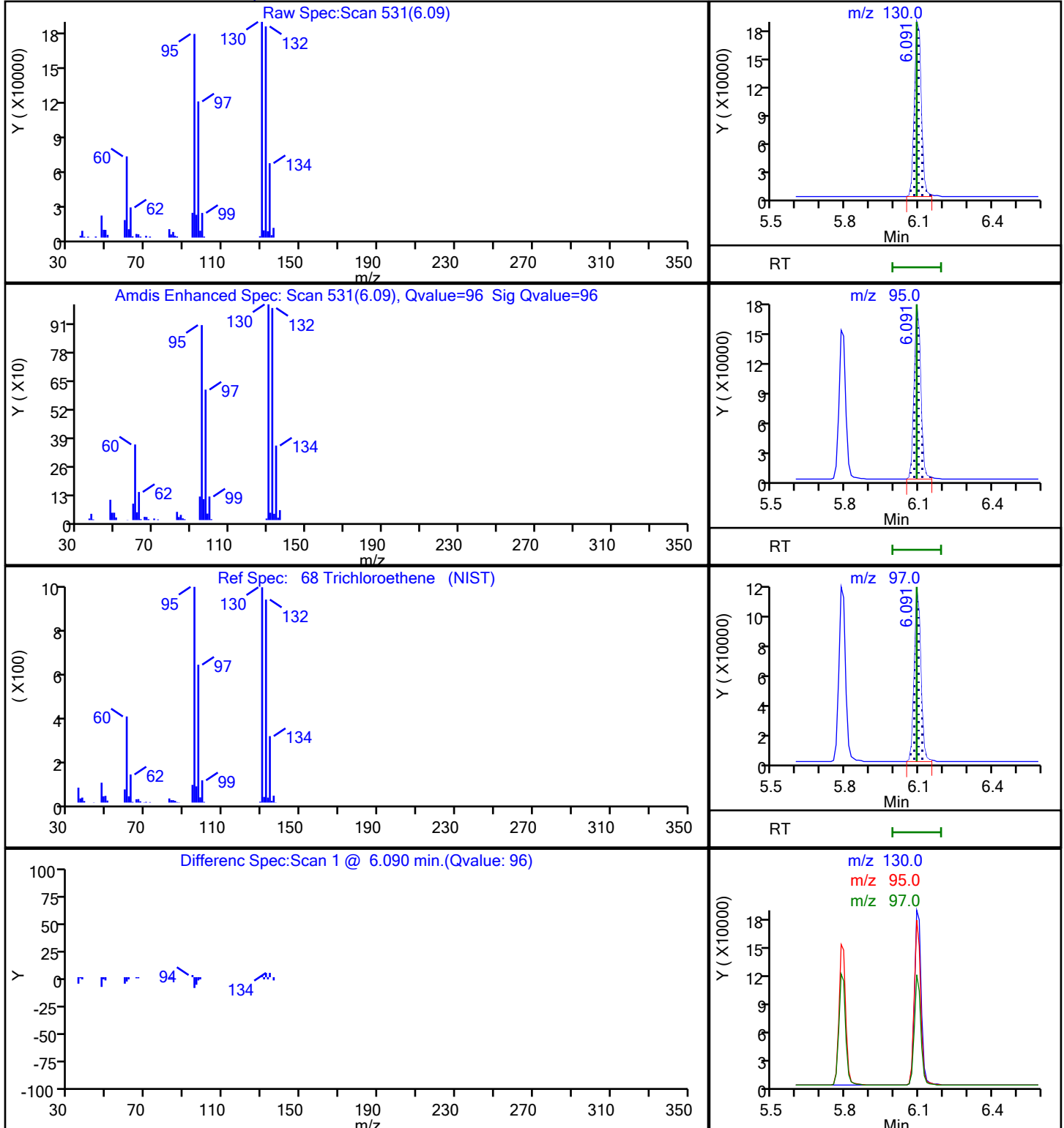
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-8012P-20210626 Lab Sample ID: 280-150306-10

Matrix: Water Lab File ID: MS9_5900.d

Analysis Method: 8260B Date Collected: 06/26/2021 15:40

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 15:05

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-8012P-20210626 Lab Sample ID: 280-150306-10
 Matrix: Water Lab File ID: MS9_5900.d
 Analysis Method: 8260B Date Collected: 06/26/2021 15:40
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 15:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	116		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)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5900.d
 Lims ID: 280-150306-B-10
 Client ID: RW-8012P-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 15:05:30 ALS Bottle#: 24 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-10 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2752734	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	804483	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1393750	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	797784	52.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	816638	58.0	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2778273	48.3	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1145416	47.4	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	7
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130	6.091	6.091	0.000	93	12956	0.1229	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	7
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:34

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5900.d

Injection Date: 07-Jul-2021 15:05:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-B-10

Lab Sample ID: 280-150306-10

Worklist Smp#: 28

Client ID: RW-8012P-20210626

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

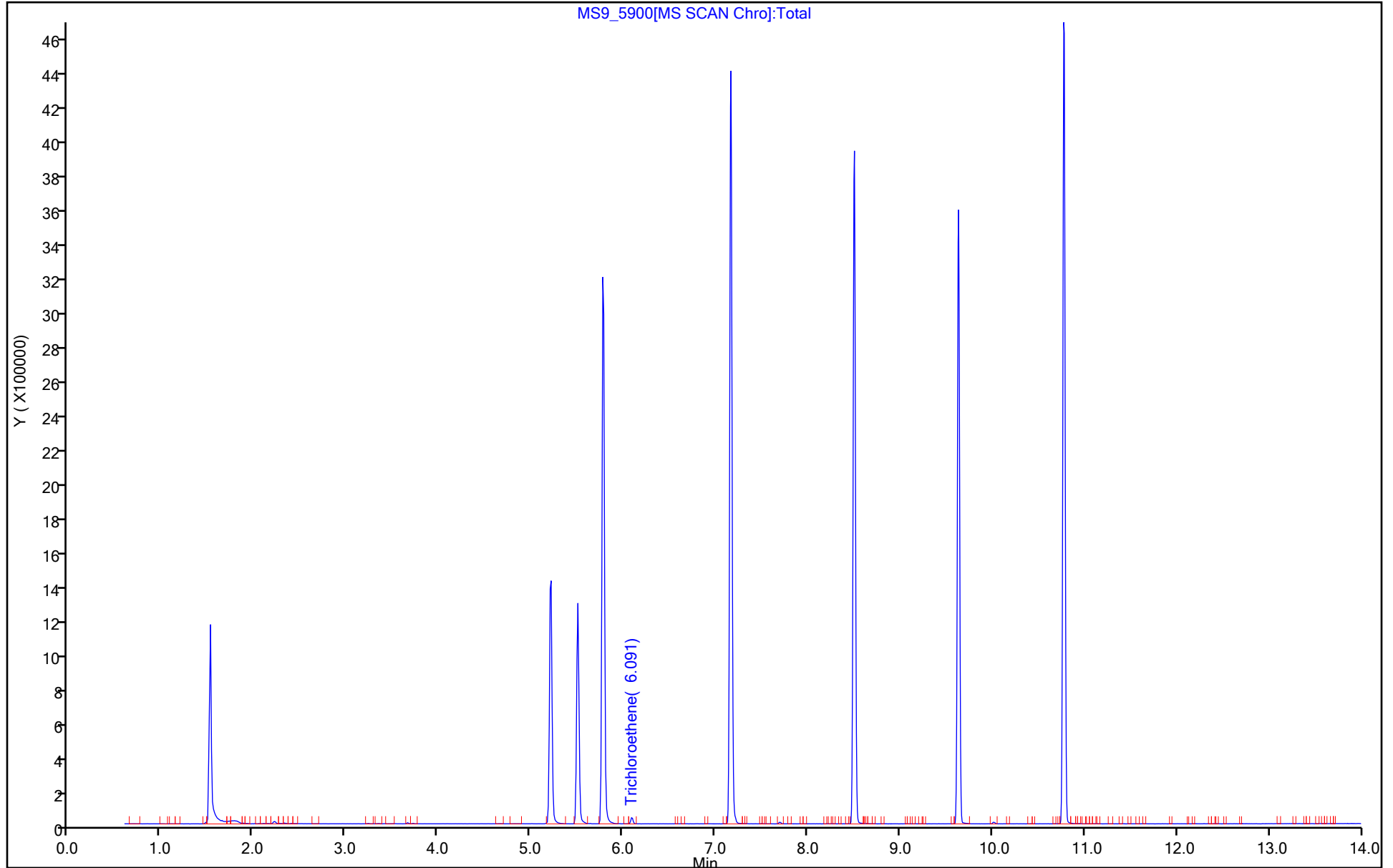
ALS Bottle#: 24

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5900.d
 Lims ID: 280-150306-B-10
 Client ID: RW-8012P-20210626
 Sample Type: Client
 Inject. Date: 07-Jul-2021 15:05:30 ALS Bottle#: 24 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-10 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:53:52

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.1	104.29
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	58.0	115.97
\$ 8 Toluene-d8 (Surr)	50.0	48.3	96.55
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.4	94.77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: EB-07-20210627 Lab Sample ID: 280-150306-11

Matrix: Water Lab File ID: MS9_5888.d

Analysis Method: 8260B Date Collected: 06/27/2021 08:50

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 10:31

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: EB-07-20210627 Lab Sample ID: 280-150306-11
 Matrix: Water Lab File ID: MS9_5888.d
 Analysis Method: 8260B Date Collected: 06/27/2021 08:50
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 10:31
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	112		70-127
2037-26-5	Toluene-d8 (Surr)	95		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5888.d
 Lims ID: 280-150306-C-11
 Client ID: EB-07-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 10:31:30 ALS Bottle#: 12 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-11 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 10:52:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2649674	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	786206	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.775	10.774	0.000	94	1351929	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	94	766207	52.0	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	761557	56.2	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2679052	47.6	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1103075	47.0	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43	3.240	3.230	0.010	97	8921	0.1041	
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	7
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	
68 Trichloroethene	130		6.091				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 12:09:39

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5888.d

Injection Date: 07-Jul-2021 10:31:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-11

Lab Sample ID: 280-150306-11

Worklist Smp#: 16

Client ID: EB-07-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

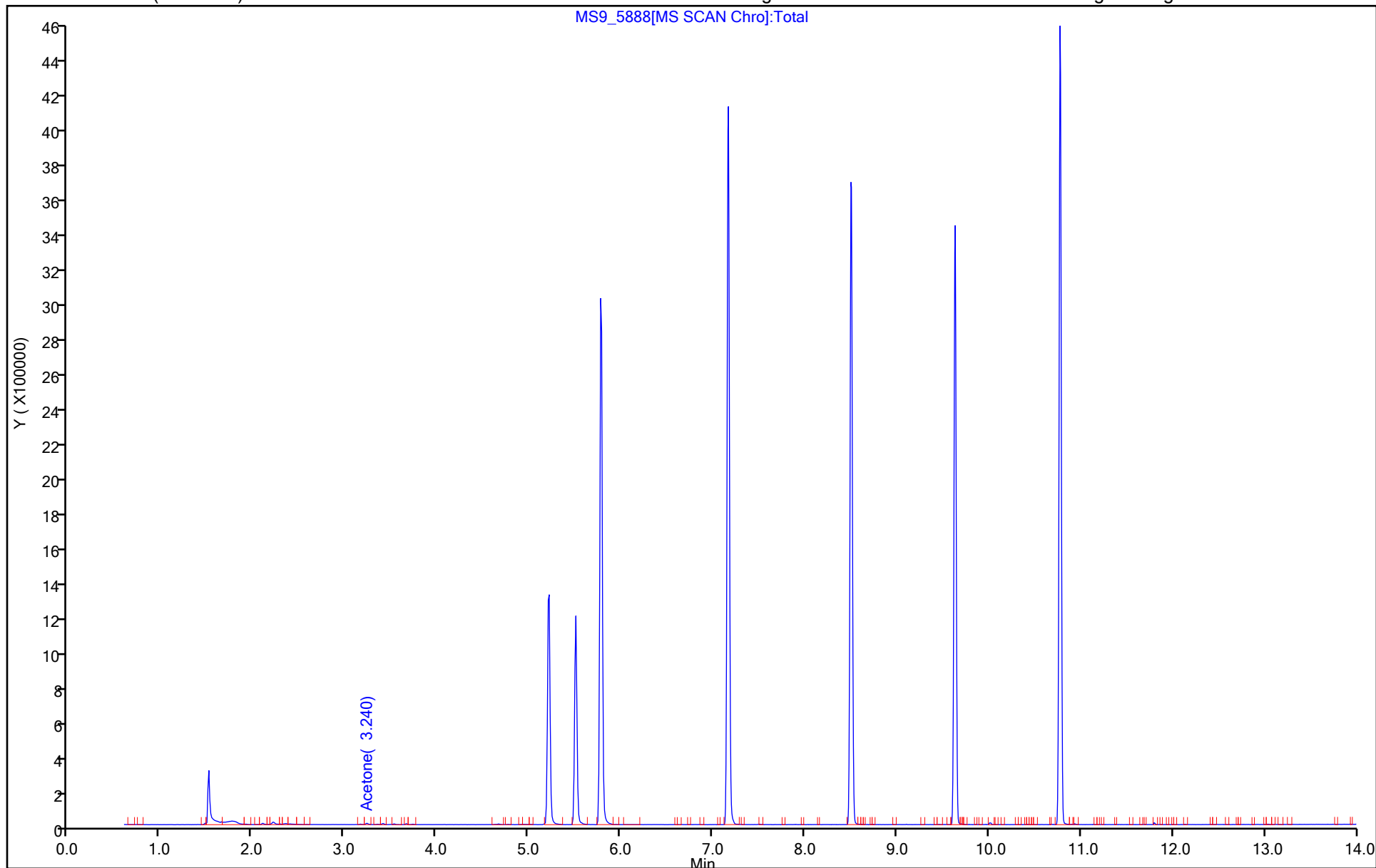
ALS Bottle#: 12

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5888.d
 Lims ID: 280-150306-C-11
 Client ID: EB-07-20210627
 Sample Type: Client
 Inject. Date: 07-Jul-2021 10:31:30 ALS Bottle#: 12 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-11 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 10:52:08

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.0	104.05
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.2	112.35
\$ 8 Toluene-d8 (Surr)	50.0	47.6	95.27
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.0	94.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-7244P-20210624 Lab Sample ID: 280-150306-12

Matrix: Water Lab File ID: MS9_5901.d

Analysis Method: 8260B Date Collected: 06/24/2021 15:03

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 15:28

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-7244P-20210624 Lab Sample ID: 280-150306-12
 Matrix: Water Lab File ID: MS9_5901.d
 Analysis Method: 8260B Date Collected: 06/24/2021 15:03
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 15:28
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	114		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5901.d
 Lims ID: 280-150306-C-12
 Client ID: RW-7244P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 15:28:30 ALS Bottle#: 25 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-12 1x ph
 Operator ID: wickham Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2716283	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	799379	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1393902	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	792273	52.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	795583	57.2	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2743749	48.0	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1146747	47.4	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	
55 Methacrylonitrile	41		4.961				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130		6.091				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:35

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5901.d

Injection Date: 07-Jul-2021 15:28:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-12

Lab Sample ID: 280-150306-12

Worklist Smp#: 29

Client ID: RW-7244P-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

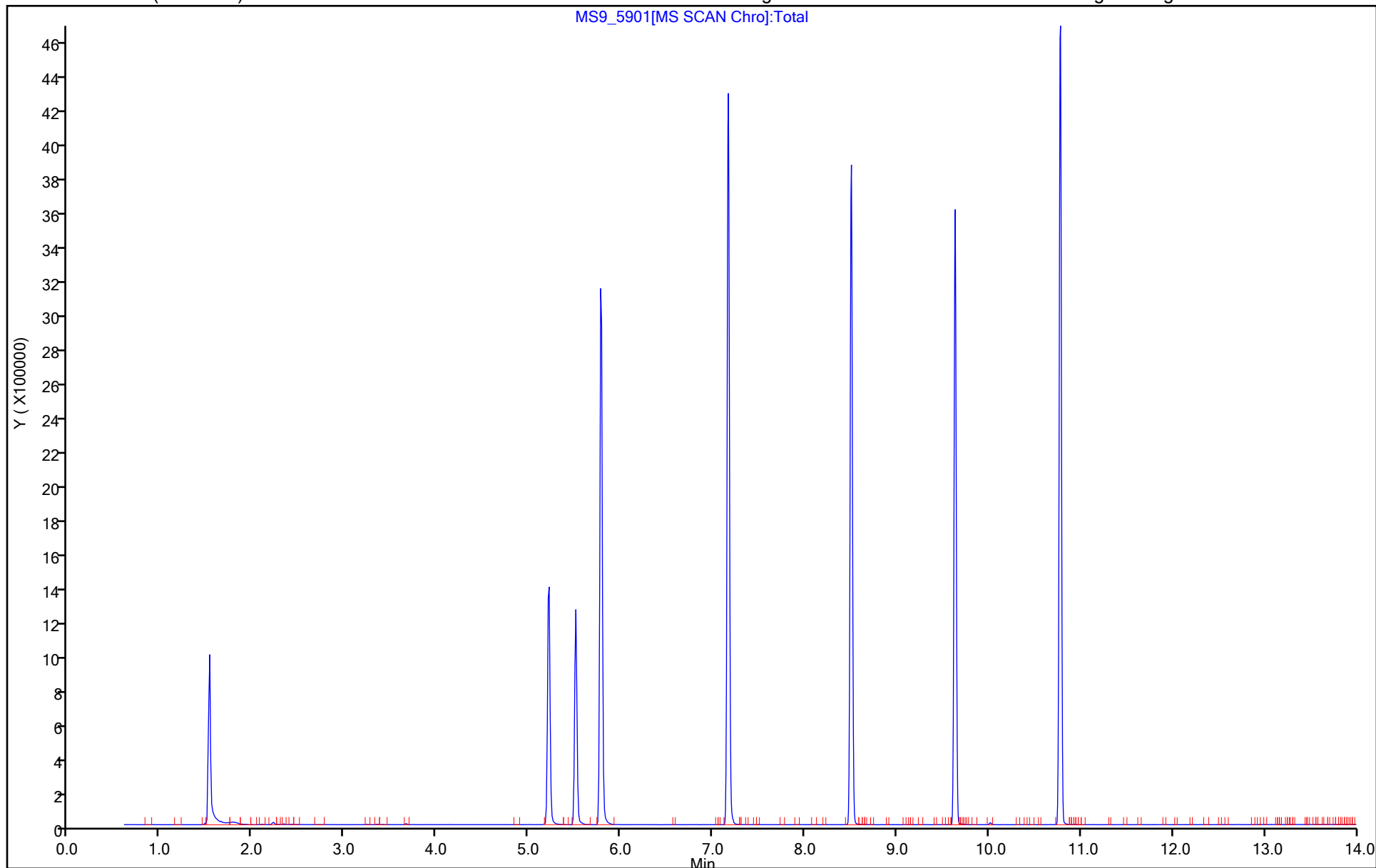
ALS Bottle#: 25

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5901.d
 Lims ID: 280-150306-C-12
 Client ID: RW-7244P-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 15:28:30 ALS Bottle#: 25 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-12 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.5	104.96
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.2	114.50
\$ 8 Toluene-d8 (Surr)	50.0	48.0	95.96
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.4	94.87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-2237H-20210624 Lab Sample ID: 280-150306-13

Matrix: Water Lab File ID: MS9_5902.d

Analysis Method: 8260B Date Collected: 06/24/2021 16:00

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 15:51

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2237H-20210624 Lab Sample ID: 280-150306-13
 Matrix: Water Lab File ID: MS9_5902.d
 Analysis Method: 8260B Date Collected: 06/24/2021 16:00
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 15:51
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	8.6		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)	115		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5902.d
 Lims ID: 280-150306-A-13
 Client ID: RW-2237H-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 15:51:30 ALS Bottle#: 26 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-13 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:54:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.790	5.780	0.010	98	2746824	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	806884	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1391723	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	800744	52.4	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	96	805531	57.3	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2772335	48.0	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1147003	47.5	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	7
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	7
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130	6.091	6.091	0.000	95	132097	8.55	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164	7.698	7.698	0.000	98	23206	1.23	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:36

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5902.d

Injection Date: 07-Jul-2021 15:51:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-A-13

Lab Sample ID: 280-150306-13

Worklist Smp#: 30

Client ID: RW-2237H-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

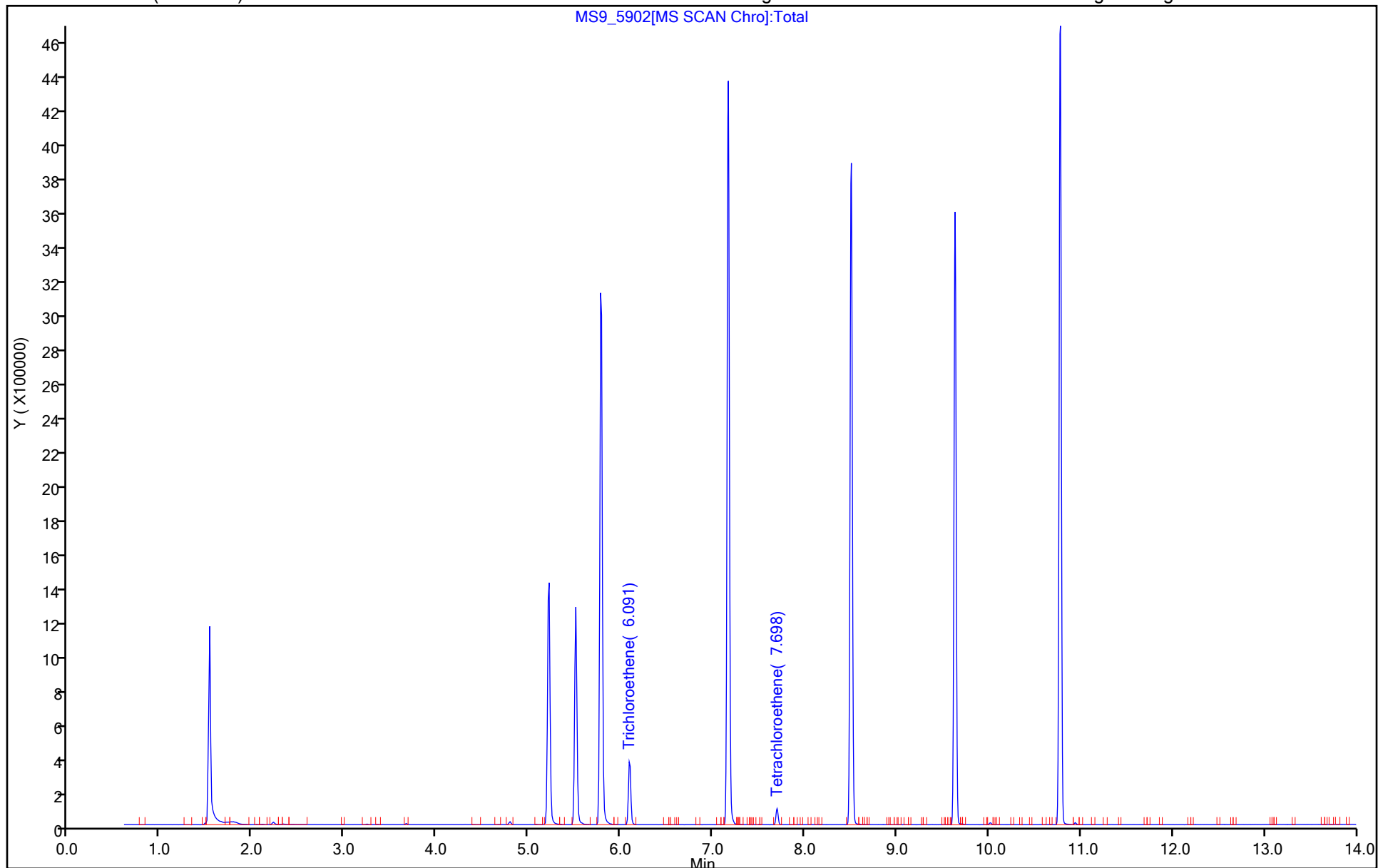
ALS Bottle#: 26

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5902.d
 Lims ID: 280-150306-A-13
 Client ID: RW-2237H-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 15:51:30 ALS Bottle#: 26 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-13 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:54:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.4	104.90
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.3	114.64
\$ 8 Toluene-d8 (Surr)	50.0	48.0	96.06
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.5	95.04

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5902.d

Injection Date: 07-Jul-2021 15:51:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-A-13

Lab Sample ID: 280-150306-13

Client ID: RW-2237H-20210624

Operator ID: wickhamt

ALS Bottle#: 26

Worklist Smp#: 30

Purge Vol: 5.000 mL

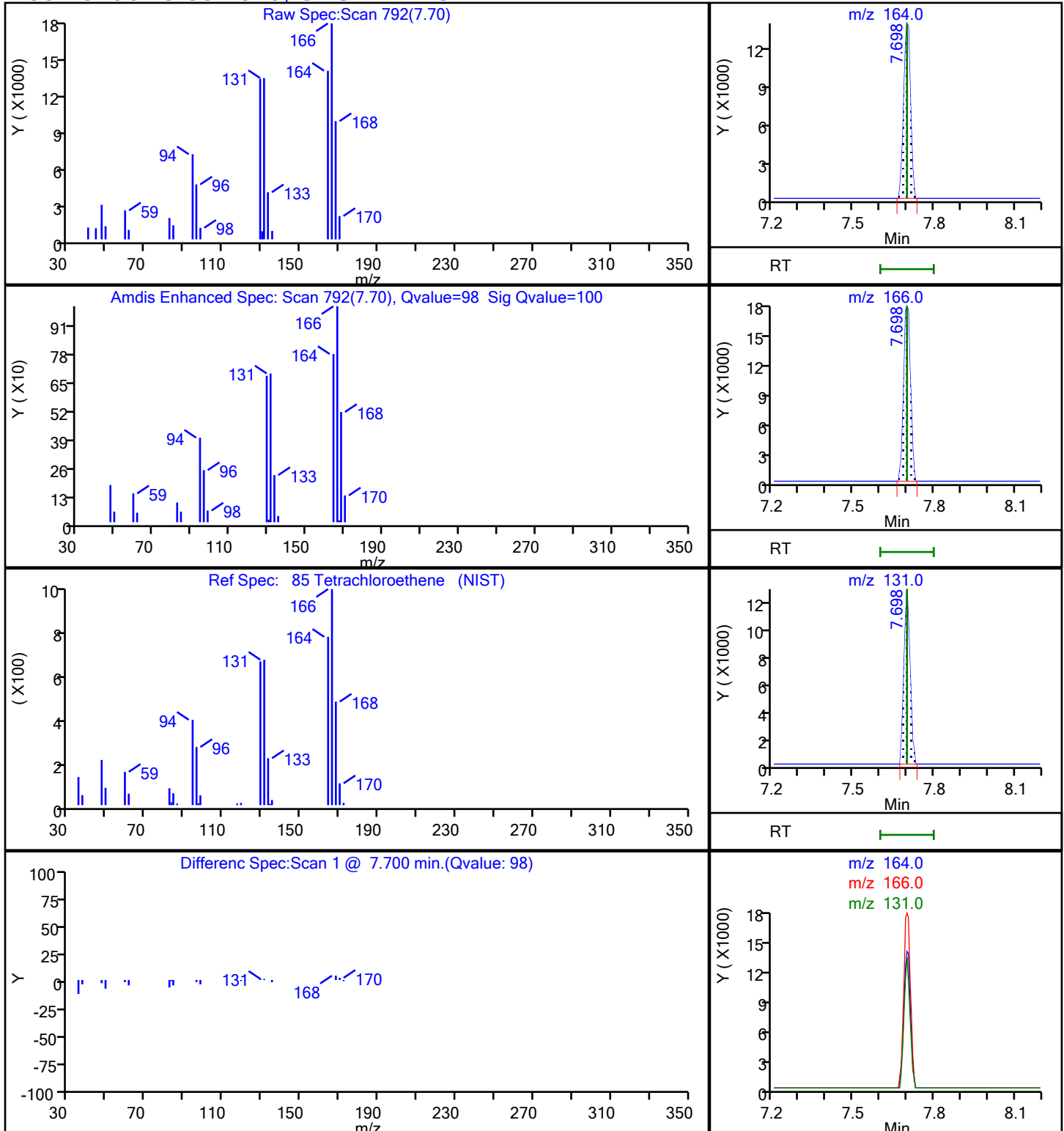
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

85 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5902.d

Injection Date: 07-Jul-2021 15:51:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-A-13

Lab Sample ID: 280-150306-13

Client ID: RW-2237H-20210624

Operator ID: wickhamt

ALS Bottle#: 26

Worklist Smp#: 30

Purge Vol: 5.000 mL

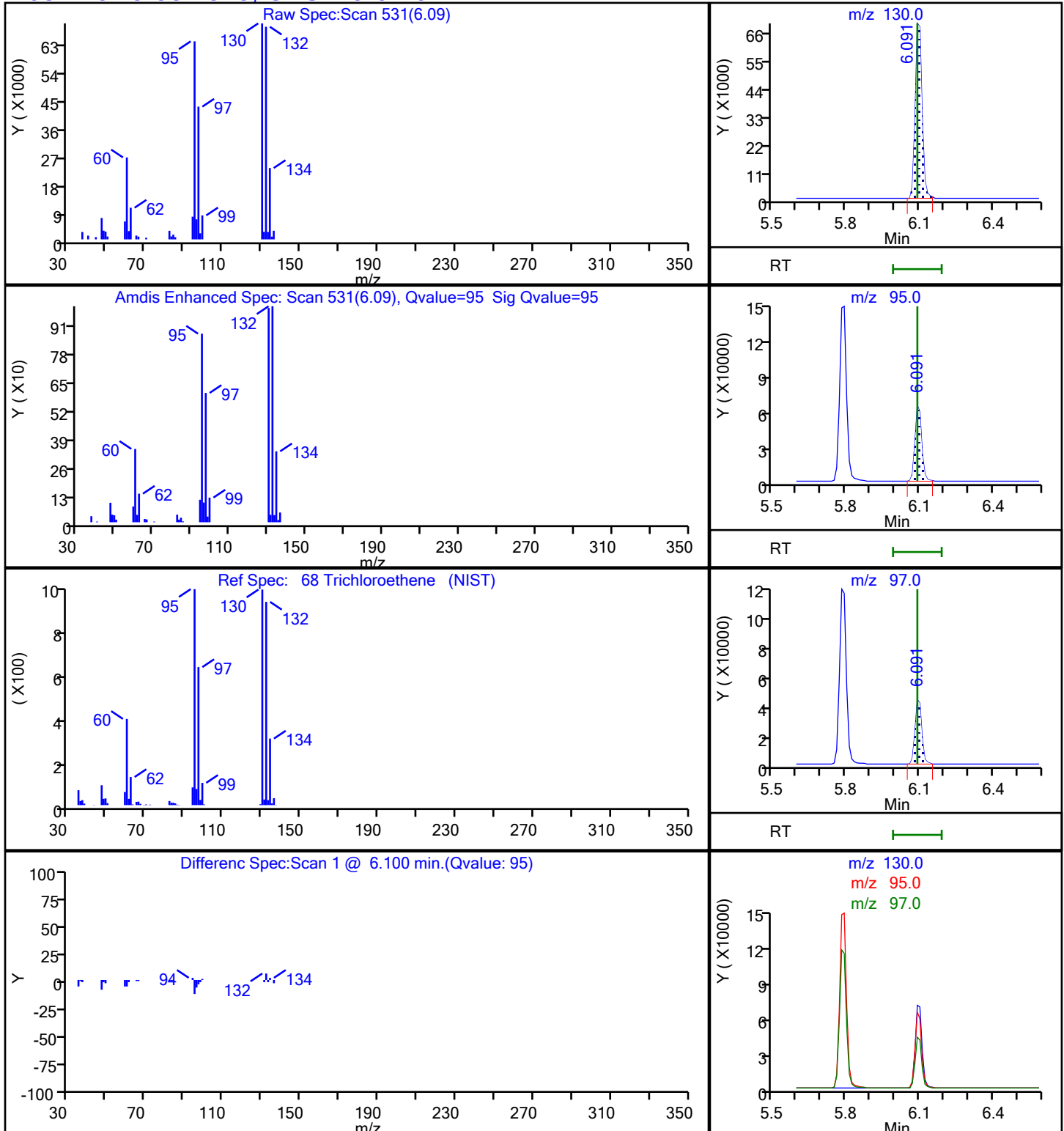
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-7070B-20210624 Lab Sample ID: 280-150306-14

Matrix: Water Lab File ID: MS9_5903.d

Analysis Method: 8260B Date Collected: 06/24/2021 16:59

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 16:14

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150290-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-7070B-20210624</u>	Lab Sample ID: <u>280-150306-14</u>
Matrix: <u>Water</u>	Lab File ID: <u>MS9_5903.d</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/24/2021 16:59</u>
Sample wt/vol: <u>5(mL)</u>	Date Analyzed: <u>07/07/2021 16:14</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>RXI-624SilMS</u> ID: <u>0.25(mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>542401</u>	Units: <u>ug/L</u>

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	3.2		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)	113		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5903.d
 Lims ID: 280-150306-B-14
 Client ID: RW-7070B-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 16:14:30 ALS Bottle#: 27 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-14 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:54:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2749273	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	802450	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1364587	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	94	794113	52.0	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	791604	56.3	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2759717	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1123071	47.5	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	7
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
55 Methacrylonitrile	41		4.961				ND	
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130	6.091	6.091	0.000	94	56511	3.23	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	7
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5903.d

Injection Date: 07-Jul-2021 16:14:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-B-14

Lab Sample ID: 280-150306-14

Worklist Smp#: 31

Client ID: RW-7070B-20210624

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

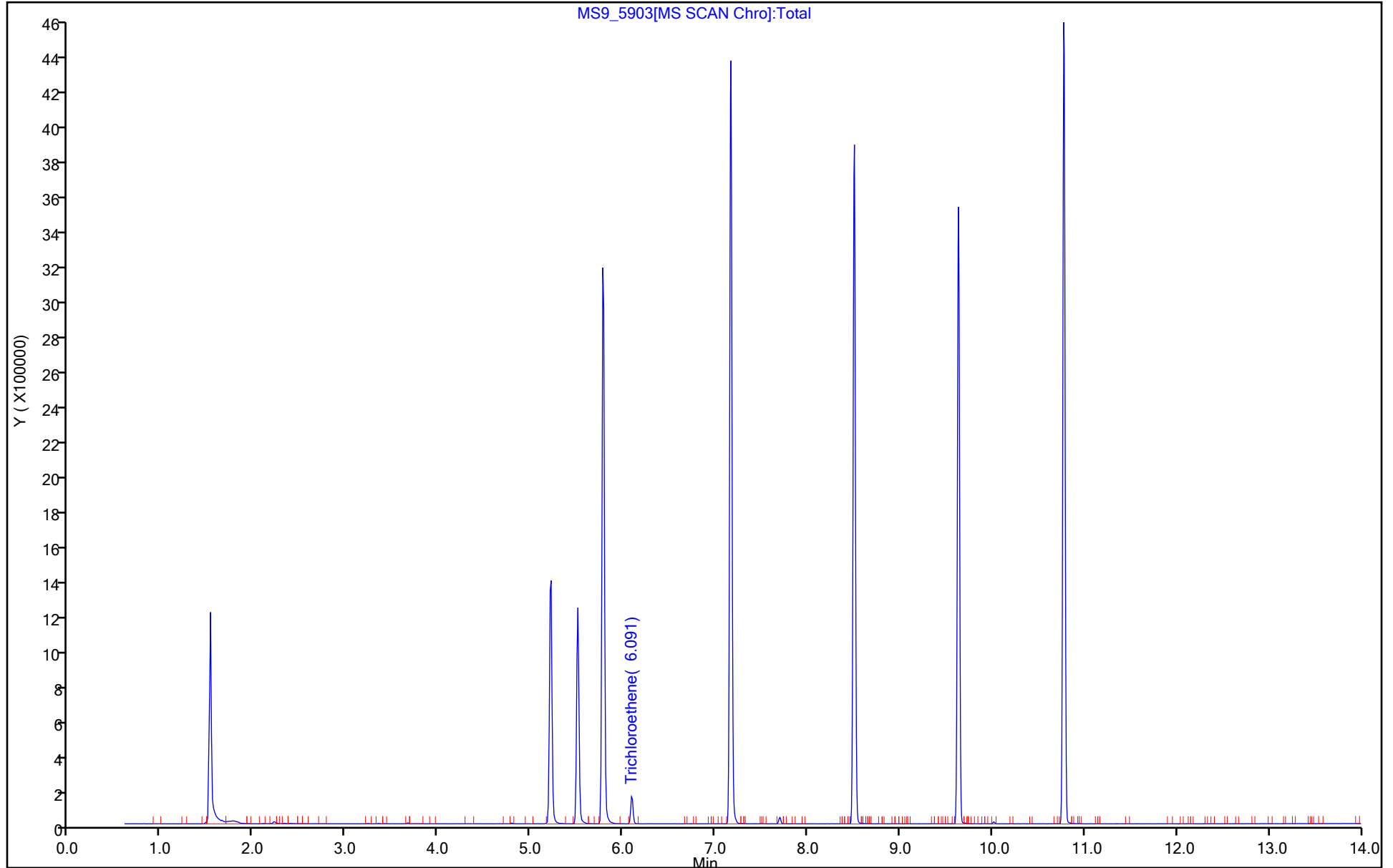
ALS Bottle#: 27

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5903.d
 Lims ID: 280-150306-B-14
 Client ID: RW-7070B-20210624
 Sample Type: Client
 Inject. Date: 07-Jul-2021 16:14:30 ALS Bottle#: 27 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-14 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:54:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.0	103.94
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.3	112.56
\$ 8 Toluene-d8 (Surr)	50.0	48.1	96.15
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.5	94.91

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5903.d

Injection Date: 07-Jul-2021 16:14:30

Instrument ID: VMS_MS9

Lims ID: 280-150306-B-14

Lab Sample ID: 280-150306-14

Client ID: RW-7070B-20210624

Operator ID: wickhamt

ALS Bottle#: 27

Worklist Smp#: 31

Purge Vol: 5.000 mL

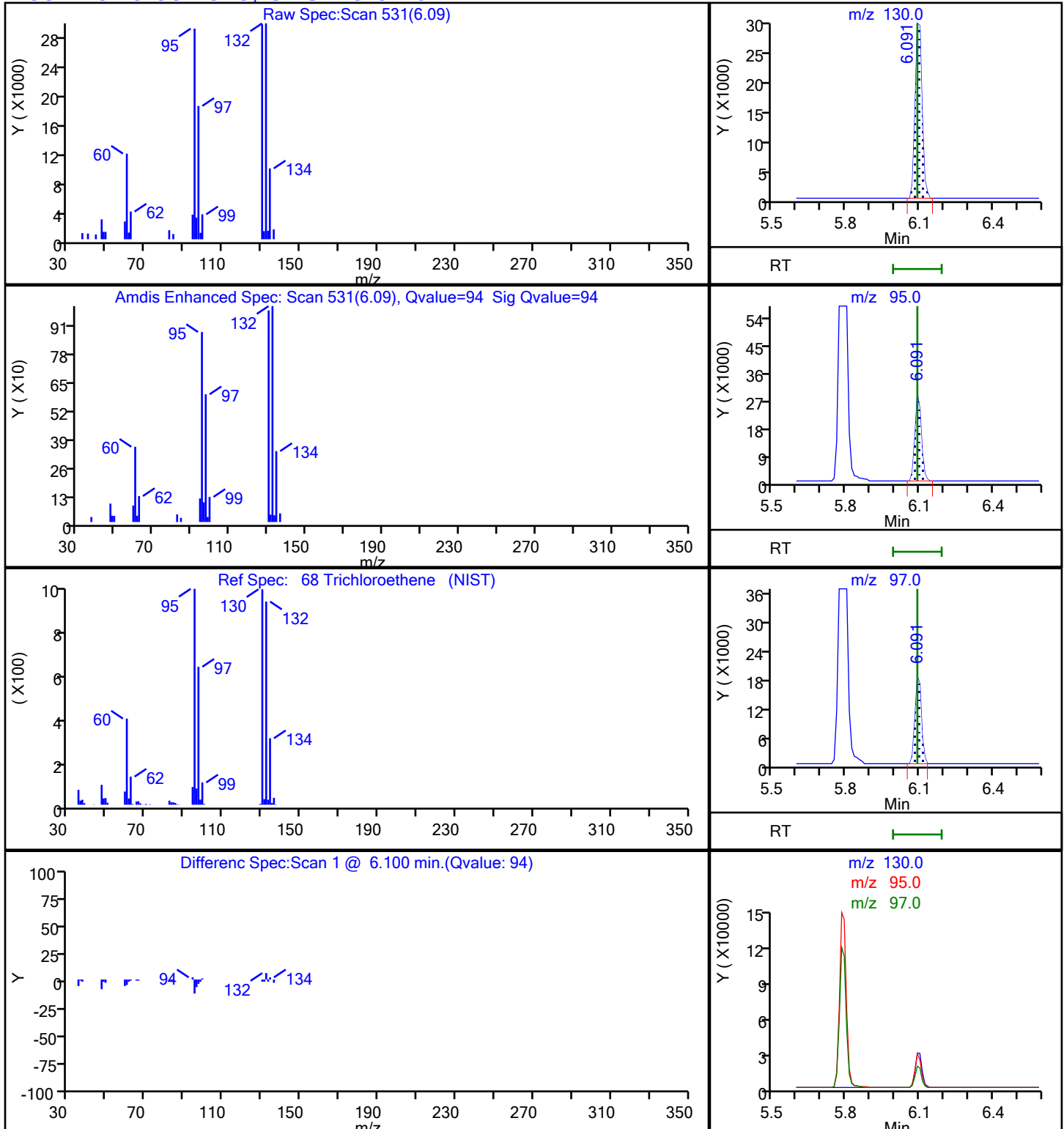
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-8105PS-20210625 Lab Sample ID: 280-150306-15

Matrix: Water Lab File ID: MS9_5904.d

Analysis Method: 8260B Date Collected: 06/25/2021 17:35

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 16:37

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-8105PS-20210625 Lab Sample ID: 280-150306-15
 Matrix: Water Lab File ID: MS9_5904.d
 Analysis Method: 8260B Date Collected: 06/25/2021 17:35
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 16:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	114		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5904.d
 Lims ID: 280-150306-B-15
 Client ID: RW-8105PS-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 16:37:30 ALS Bottle#: 28 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-15 1x ph
 Operator ID: wickham Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2723059	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	794898	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1374292	50.0	
* 174 Fluorobenzene (IS)	96		0.000				ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	94	788567	52.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	796849	57.2	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2727520	48.0	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.630	9.630	0.000	96	1137222	47.7	
13 Dichlorodifluoromethane	85		1.686				ND	
15 Chloromethane	50		1.872				ND	
16 Vinyl chloride	62		1.986				ND	
19 Bromomethane	94		2.328				ND	7
20 Chloroethane	64		2.442				ND	
22 Trichlorofluoromethane	101		2.701				ND	
28 Acrolein	56		3.106				ND	
30 1,1-Dichloroethene	96		3.199				ND	
31 Acetone	43		3.230				ND	7
33 Iodomethane	142		3.344				ND	
35 Carbon disulfide	76		3.417				ND	
37 Acetonitrile	41		3.500				ND	
36 3-Chloro-1-propene	41		3.541				ND	
39 Methylene Chloride	84		3.665				ND	
42 Acrylonitrile	53		3.873				ND	
41 trans-1,2-Dichloroethene	96		3.914				ND	
45 Vinyl acetate	43		4.287				ND	
46 1,1-Dichloroethane	63		4.298				ND	
47 2-Chloro-1,3-butadiene	53		4.370				ND	
50 2-Butanone (MEK)	43		4.774				ND	
52 cis-1,2-Dichloroethene	96		4.795				ND	
53 2,2-Dichloropropane	77		4.806				ND	
54 Propionitrile	54		4.837				ND	
55 Methacrylonitrile	41		4.961				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
59 Chlorobromomethane	128		5.002				ND	
56 Chloroform	83		5.075				ND	
60 1,1,1-Trichloroethane	97		5.231				ND	
62 1,1-Dichloropropene	75		5.365				ND	
63 Carbon tetrachloride	117		5.365				ND	
58 Isobutyl alcohol	43		5.417				ND	
66 Benzene	78		5.531				ND	
67 1,2-Dichloroethane	62		5.573				ND	7
68 Trichloroethene	130		6.091				ND	
72 1,2-Dichloropropane	63		6.319				ND	
70 Methyl methacrylate	100		6.350				ND	
74 Dibromomethane	93		6.391				ND	
75 Dichlorobromomethane	83		6.543				ND	
78 cis-1,3-Dichloropropene	75		6.923				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040				ND	
80 Toluene	91		7.228				ND	
82 trans-1,3-Dichloropropene	75		7.426				ND	
81 Ethyl methacrylate	69		7.458				ND	
83 1,1,2-Trichloroethane	97		7.607				ND	
85 Tetrachloroethene	164		7.698				ND	
86 1,3-Dichloropropane	76		7.757				ND	
84 2-Hexanone	43		7.784				ND	
87 Chlorodibromomethane	129		7.961				ND	
89 Ethylene Dibromide	107		8.078				ND	
91 Chlorobenzene	112		8.533				ND	
93 1,1,1,2-Tetrachloroethane	131		8.608				ND	
92 Ethylbenzene	106		8.613				ND	
94 m-Xylene & p-Xylene	91		8.736				ND	
95 o-Xylene	106		9.105				ND	
96 Styrene	104		9.121				ND	
97 Bromoform	173		9.309				ND	
101 1,1,2,2-Tetrachloroethane	83		9.753				ND	
102 trans-1,4-Dichloro-2-butene	53		9.790				ND	
104 1,2,3-Trichloropropane	110		9.812				ND	
113 1,3-Dichlorobenzene	146		10.700				ND	
115 1,4-Dichlorobenzene	146		10.801				ND	
117 1,2-Dichlorobenzene	146		11.160				ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946				ND	
120 1,2,4-Trichlorobenzene	180		12.775				ND	
S 142 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 19:11:38

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5904.d

Injection Date: 07-Jul-2021 16:37:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-B-15

Lab Sample ID: 280-150306-15

Worklist Smp#: 32

Client ID: RW-8105PS-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

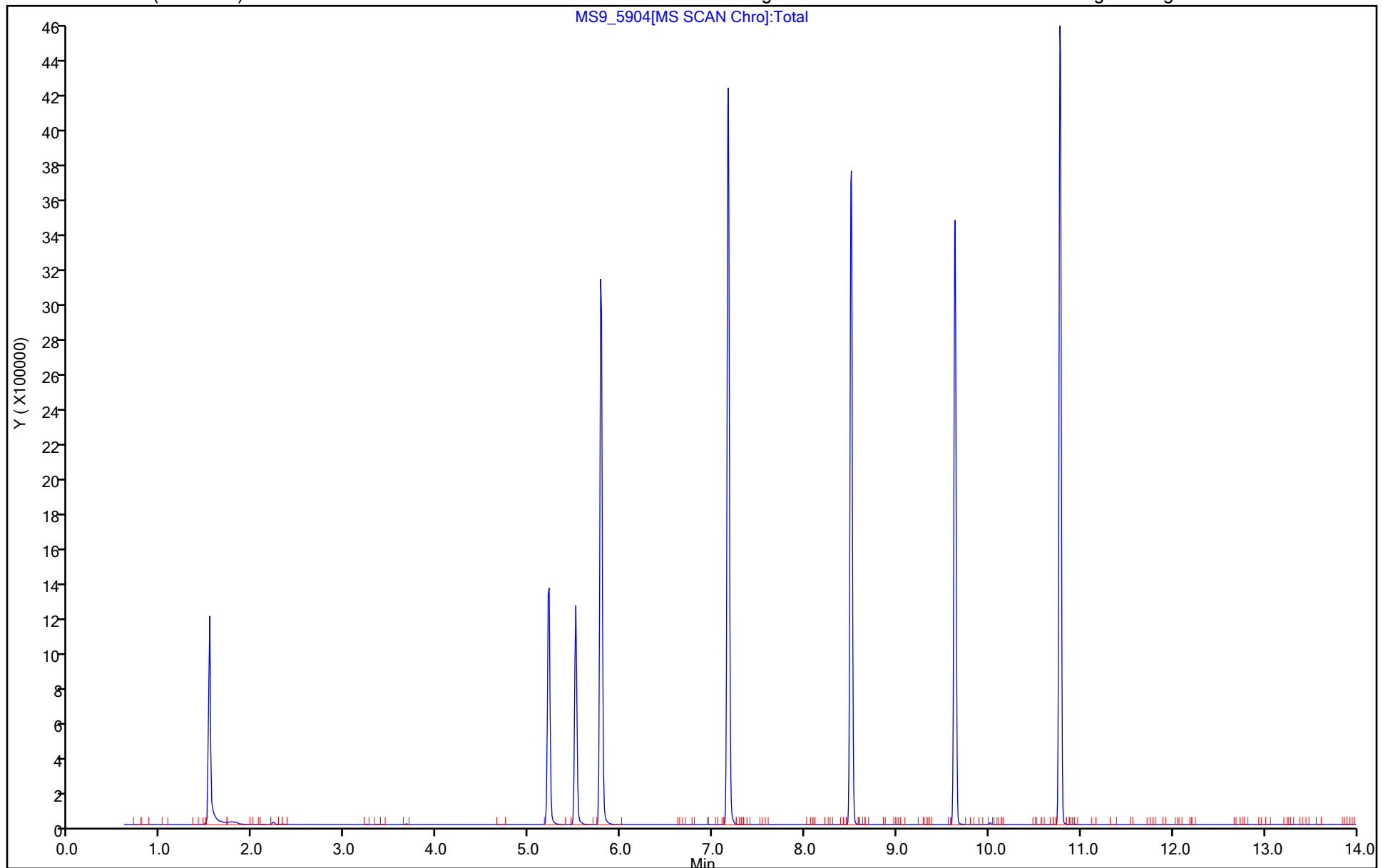
ALS Bottle#: 28

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\MS9_5904.d
 Lims ID: 280-150306-B-15
 Client ID: RW-8105PS-20210625
 Sample Type: Client
 Inject. Date: 07-Jul-2021 16:37:30 ALS Bottle#: 28 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-15 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.1	104.21
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	57.2	114.39
\$ 8 Toluene-d8 (Surr)	50.0	48.0	95.93
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.7	95.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: MW-38-105-115-20210627 Lab Sample ID: 280-150306-16

Matrix: Water Lab File ID: MS1_4293.D

Analysis Method: 8260B Date Collected: 06/27/2021 16:50

Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 11:20

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.: 542686 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: MW-38-105-115-20210627 Lab Sample ID: 280-150306-16
 Matrix: Water Lab File ID: MS1_4293.D
 Analysis Method: 8260B Date Collected: 06/27/2021 16:50
 Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 11:20
 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.: 542686 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	2.5		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)	97		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4293.D
 Lims ID: 280-150306-B-16
 Client ID: MW-38-105-115-20210627
 Sample Type: Client
 Inject. Date: 09-Jul-2021 11:20:30 ALS Bottle#: 13 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-16 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 12:08:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	774887	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	93	170136	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	268287	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	198417	48.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	257116	46.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	714073	48.4	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	278654	47.9	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.900				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.347				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.451				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.847				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.126				ND	
56 1,1,1-Trichloroethane	97		5.280				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.160	6.160	0.000	94	7989	2.53	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.517				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.147				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.683				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.384				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Jul-2021 12:10:35

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4293.D

Injection Date: 09-Jul-2021 11:20:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: 280-150306-B-16

Lab Sample ID: 280-150306-16

Worklist Smp#: 17

Client ID: MW-38-105-115-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

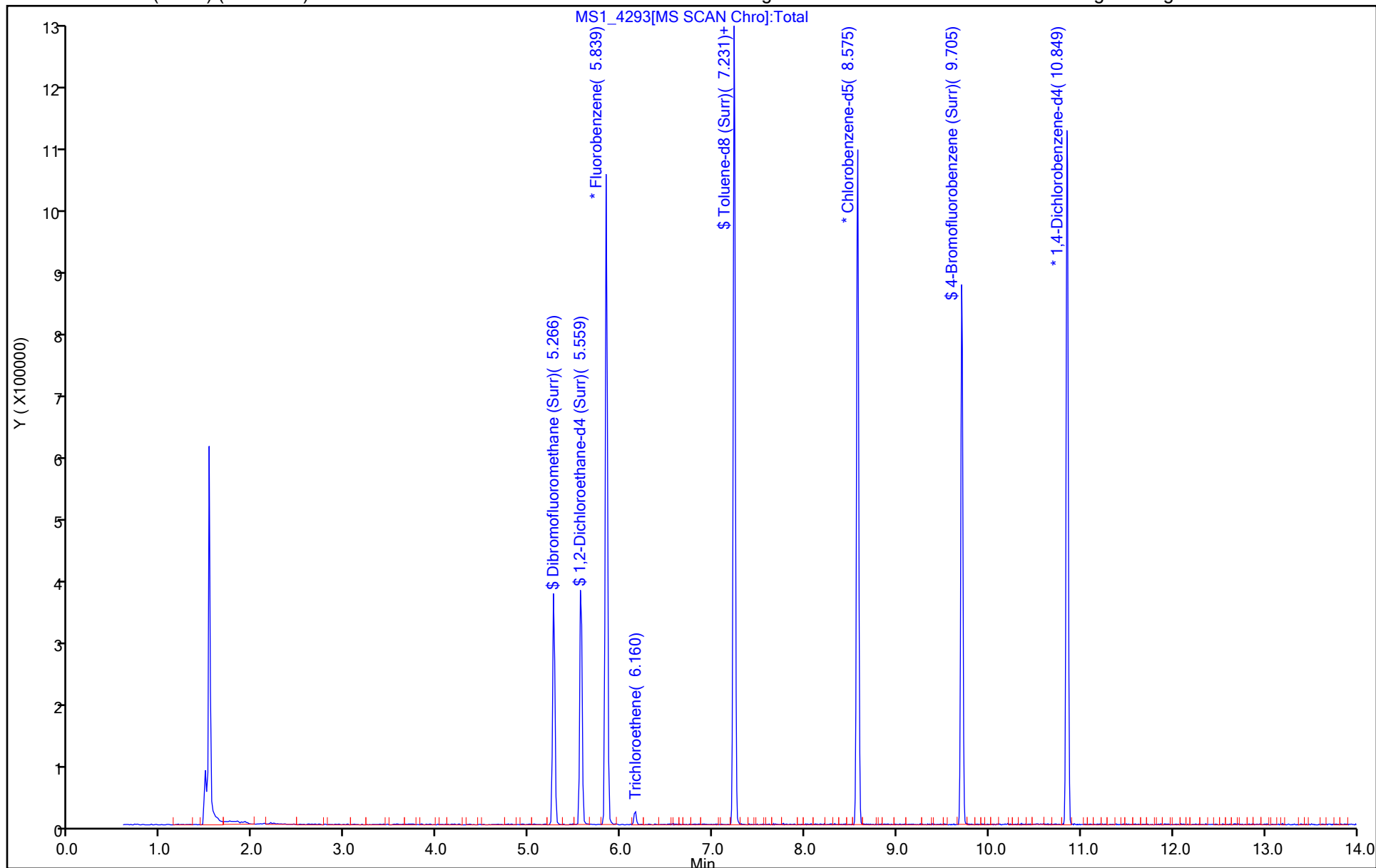
ALS Bottle#: 13

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4293.D
 Lims ID: 280-150306-B-16
 Client ID: MW-38-105-115-20210627
 Sample Type: Client
 Inject. Date: 09-Jul-2021 11:20:30 ALS Bottle#: 13 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-B-16 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 12:08:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.3	96.61
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.7	93.45
\$ 7 Toluene-d8 (Surr)	50.0	48.4	96.90
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.9	95.72

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4293.D

Injection Date: 09-Jul-2021 11:20:30

Instrument ID: VMS_MS1

Lims ID: 280-150306-B-16

Lab Sample ID: 280-150306-16

Client ID: MW-38-105-115-20210627

Operator ID: wickhamt

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 5.000 mL

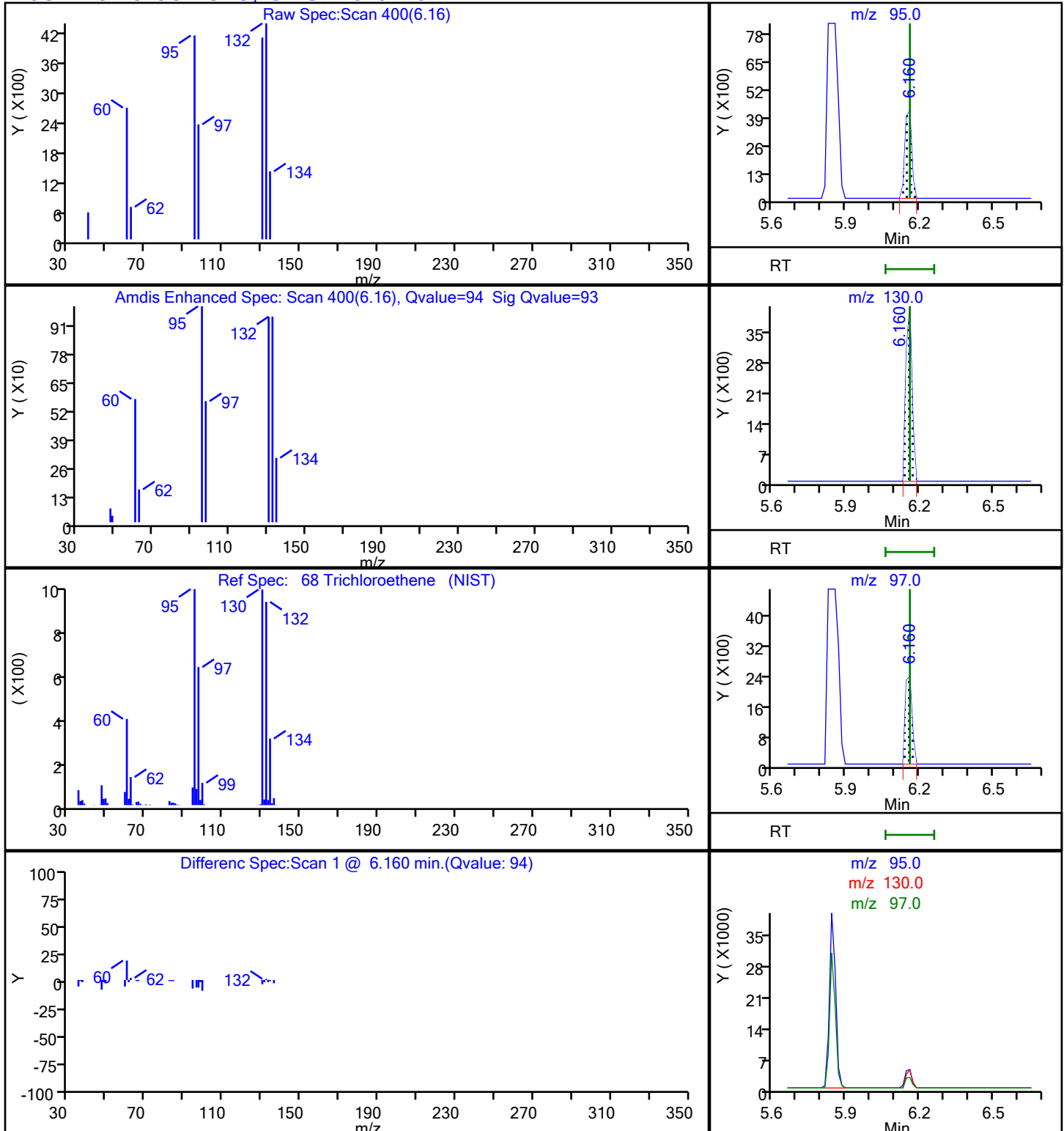
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: TB-02-20210627 Lab Sample ID: 280-150306-17

Matrix: Water Lab File ID: MS1_4290.D

Analysis Method: 8260B Date Collected: 06/27/2021 18:00

Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 10:16

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.: 542686 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: TB-02-20210627 Lab Sample ID: 280-150306-17
 Matrix: Water Lab File ID: MS1_4290.D
 Analysis Method: 8260B Date Collected: 06/27/2021 18:00
 Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 10:16
 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.: 542686 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)	97		78-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4290.D
 Lims ID: 280-150306-A-17
 Client ID: TB-02-20210627
 Sample Type: Client
 Inject. Date: 09-Jul-2021 10:16:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-17 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 11:09:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	793243	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	167102	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	273043	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	208223	49.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	267568	47.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	732720	50.6	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	285950	48.3	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.900				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.347				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.451				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.847				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.126				ND	
56 1,1,1-Trichloroethane	97		5.280				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.517				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.147				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.683				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.384				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Jul-2021 12:10:31

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4290.D

Injection Date: 09-Jul-2021 10:16:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: 280-150306-A-17

Lab Sample ID: 280-150306-17

Worklist Smp#: 14

Client ID: TB-02-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

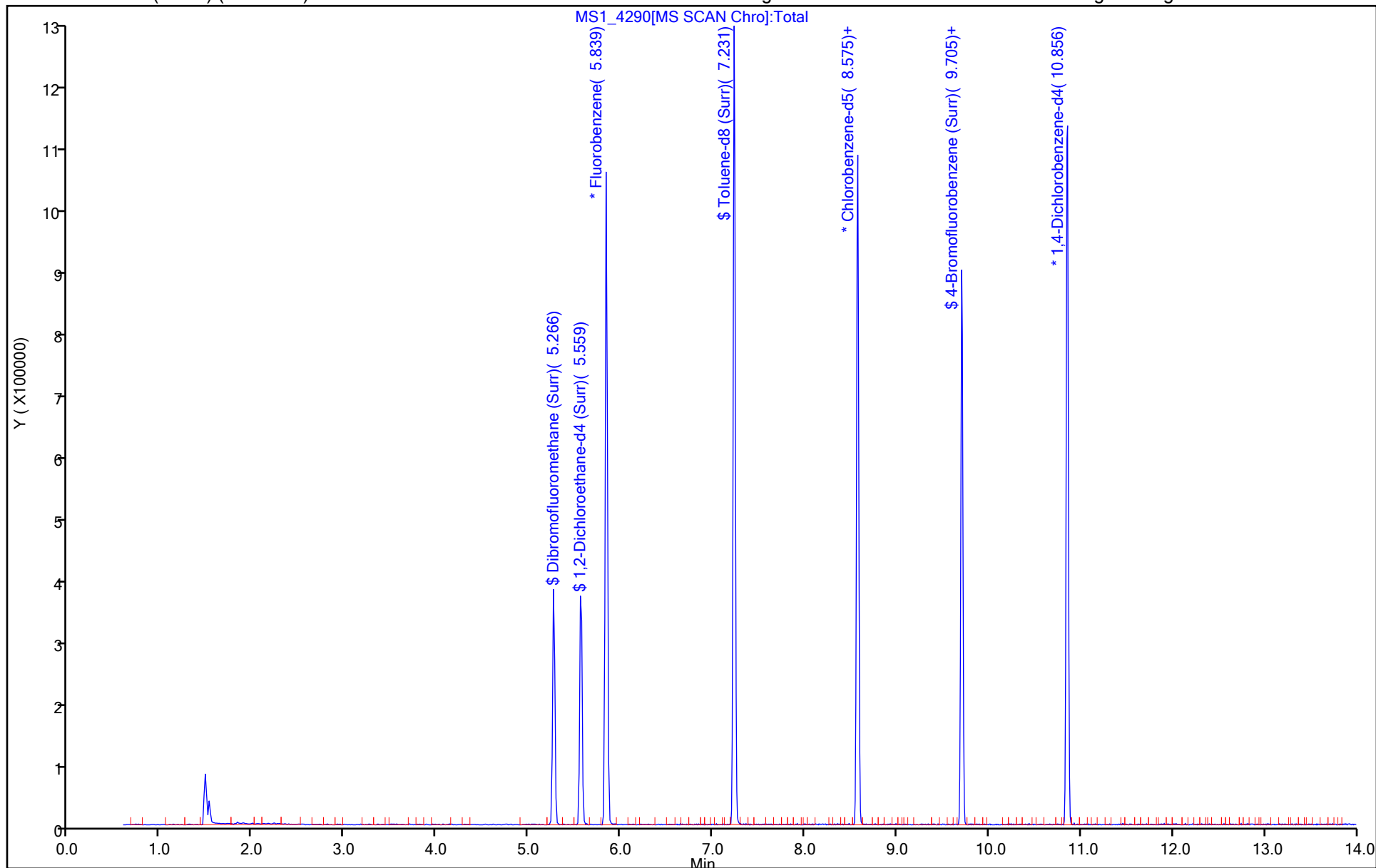
ALS Bottle#: 10

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4290.D
 Lims ID: 280-150306-A-17
 Client ID: TB-02-20210627
 Sample Type: Client
 Inject. Date: 09-Jul-2021 10:16:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-A-17 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 11:09:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.5	99.04
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	95.00
\$ 7 Toluene-d8 (Surr)	50.0	50.6	101.23
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.3	96.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: MW-38-121-130-20210627 Lab Sample ID: 280-150306-18
 Matrix: Water Lab File ID: MS1_4294.D
 Analysis Method: 8260B Date Collected: 06/27/2021 19:30
 Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 11:41
 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.: 542686 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: MW-38-121-130-20210627 Lab Sample ID: 280-150306-18
 Matrix: Water Lab File ID: MS1_4294.D
 Analysis Method: 8260B Date Collected: 06/27/2021 19:30
 Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 11:41
 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.: 542686 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	2.5		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)	92		70-127
2037-26-5	Toluene-d8 (Surr)	98		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	93		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4294.D
 Lims ID: 280-150306-C-18
 Client ID: MW-38-121-130-20210627
 Sample Type: Client
 Inject. Date: 09-Jul-2021 11:41:30 ALS Bottle#: 14 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-18 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 12:09:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	785485	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	165923	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	268000	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	193084	46.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	255492	45.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	703319	48.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	272017	46.8	
11 Dichlorodifluoromethane	85		1.705				ND	
12 Chloromethane	50		1.900				ND	
13 Vinyl chloride	62		1.998				ND	
15 Bromomethane	94		2.347				ND	
16 Chloroethane	64		2.473				ND	
18 Trichlorofluoromethane	101		2.724				ND	
22 Acrolein	56		3.143				ND	
23 1,1-Dichloroethene	96		3.241				ND	
25 Acetone	43		3.269				ND	
26 Iodomethane	142		3.395				ND	
28 Carbon disulfide	76		3.451				ND	
29 Acetonitrile	41		3.534				ND	
31 3-Chloro-1-propene	41		3.590				ND	
32 Methylene Chloride	84		3.716				ND	
34 Acrylonitrile	53		3.911				ND	
36 trans-1,2-Dichloroethene	96		3.953				ND	
40 1,1-Dichloroethane	63		4.344				ND	
39 Vinyl acetate	43		4.344				ND	
42 2-Chloro-1,3-butadiene	53		4.414				ND	
46 2-Butanone (MEK)	43		4.819				ND	
48 cis-1,2-Dichloroethene	96		4.847				ND	
49 2,2-Dichloropropane	77		4.847				ND	
50 Propionitrile	54		4.875				ND	
52 Methacrylonitrile	41		5.015				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
53 Chlorobromomethane	128		5.057				ND	
55 Chloroform	83		5.126				ND	
56 1,1,1-Trichloroethane	97		5.280				ND	
58 1,1-Dichloropropene	75		5.420				ND	
59 Carbon tetrachloride	117		5.420				ND	
60 Isobutyl alcohol	41		5.462				ND	
63 Benzene	78		5.587				ND	
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95	6.146	6.160	-0.014	89	7696	2.50	
71 1,2-Dichloropropane	63		6.383				ND	
72 Methyl methacrylate	100		6.397				ND	
74 Dibromomethane	93		6.453				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103				ND	
82 Toluene	91		7.296				ND	
84 trans-1,3-Dichloropropene	75		7.489				ND	
85 Ethyl methacrylate	69		7.517				ND	
87 1,1,2-Trichloroethane	97		7.675				ND	
89 Tetrachloroethene	164		7.768				ND	
90 1,3-Dichloropropane	76		7.825				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.147				ND	
99 Chlorobenzene	112		8.604				ND	
100 1,1,1,2-Tetrachloroethane	131		8.683				ND	
101 Ethylbenzene	106		8.683				ND	
102 m-Xylene & p-Xylene	106		8.811				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.198				ND	
106 Bromoform	173		9.384				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
112 trans-1,4-Dichloro-2-butene	53		9.863				ND	
113 1,2,3-Trichloropropane	110		9.891				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4294.D

Injection Date: 09-Jul-2021 11:41:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: 280-150306-C-18

Lab Sample ID: 280-150306-18

Worklist Smp#: 18

Client ID: MW-38-121-130-20210627

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

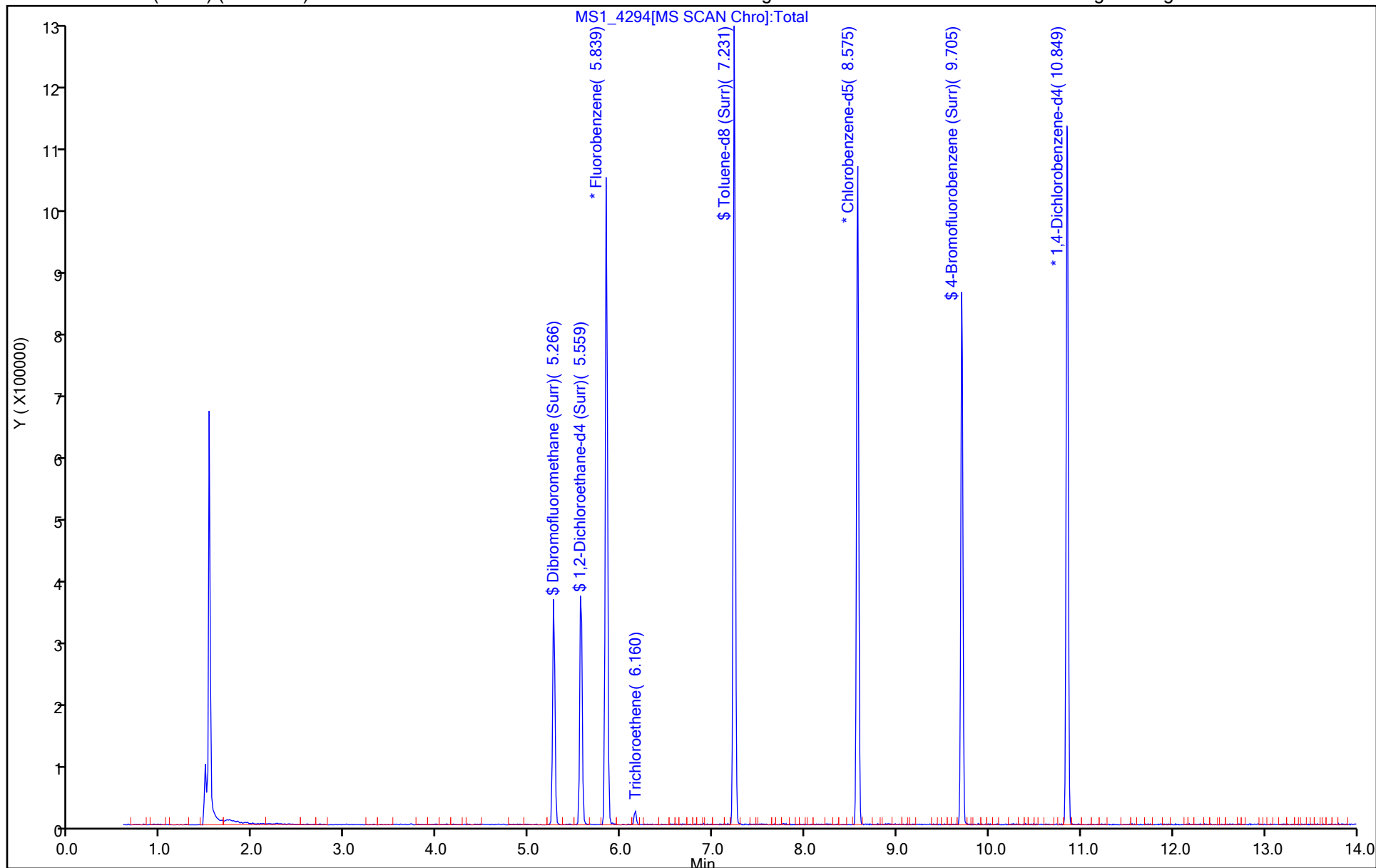
ALS Bottle#: 14

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4294.D
 Lims ID: 280-150306-C-18
 Client ID: MW-38-121-130-20210627
 Sample Type: Client
 Inject. Date: 09-Jul-2021 11:41:30 ALS Bottle#: 14 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-18 1x ph
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 12:09:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	46.4	92.75
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.8	91.61
\$ 7 Toluene-d8 (Surr)	50.0	48.9	97.86
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.8	93.54

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4294.D

Injection Date: 09-Jul-2021 11:41:30

Instrument ID: VMS_MS1

Lims ID: 280-150306-C-18

Lab Sample ID: 280-150306-18

Client ID: MW-38-121-130-20210627

Operator ID: wickhamt

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 5.000 mL

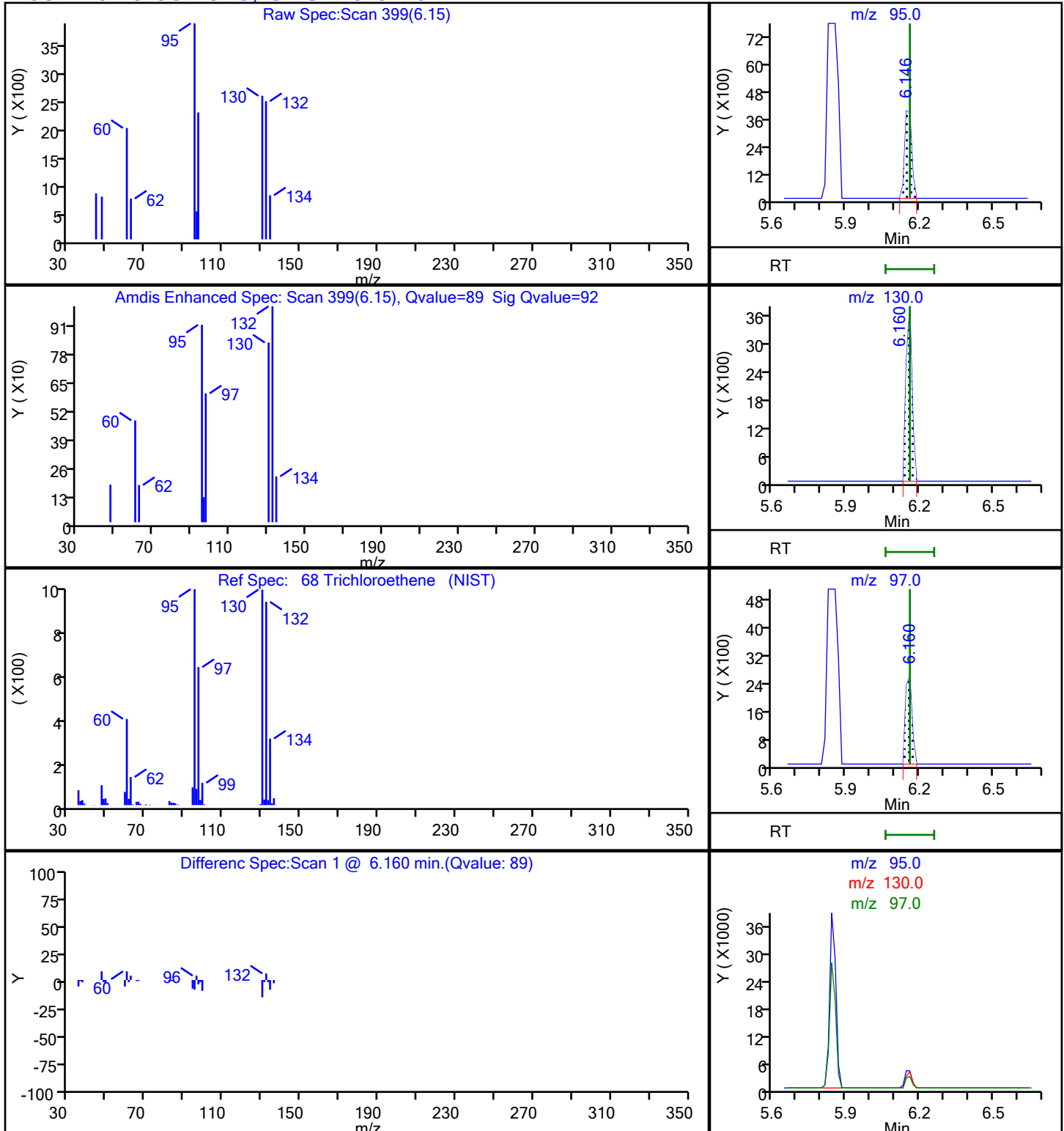
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

68 Trichloroethene, CAS: 79-01-6

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-538548/24	MS1_2712.D
Level 2	STD020 280-538548/25	MS1_2713.D
Level 3	STD050 280-538548/26	MS1_2714.D
Level 4	STD10 280-538548/27	MS1_2715.D
Level 5	STD50 280-538548/28	MS1_2716.D
Level 6	STD75 280-538548/29	MS1_2717.D
Level 7	STD100 280-538548/30	MS1_2718.D
Level 8	STD200 280-538548/31	MS1_2719.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								
Ethylene oxide	0.0171 0.0089	0.0130 0.0085	0.0115 0.0069	0.0106	0.0088	Qua	0.592 8	0.009 9	0						1.0000		0.9900
Ethanol	++++ 0.0021	0.0035 0.0020	0.0021 0.0023	0.0022	0.0020	Lin1	0.086 1	0.002 1							0.9950		0.9900
Propene oxide	0.0305 0.0293	0.0323 0.0278	0.0290 0.0298	0.0317	0.0286	Ave		0.029 9				5.2		15.0			
2-Propanol	++++ 0.0102	0.0125 0.0099	0.0120 0.0112	0.0115	0.0099	Ave		0.011 1				9.5		15.0			
Acetonitrile	0.0341 0.0226	0.0319 0.0216	0.0287 0.0240	0.0241	0.0223	Lin2	0.125 4	0.023 3							0.9920		0.9900
Di-isopropyl ether (DIPE)	++++ 0.1335	0.1205 0.1347	0.1328 0.1405	0.1376	0.1298	Ave		0.132 8				4.8		15.0			
Chloroprene	0.3897 0.2908	0.3137 0.2906	0.3073 0.2909	0.3211	0.2809	Ave		0.310 6				11.2		15.0			
Tert-butyl ethyl ether	0.4660 0.5133	0.5157 0.5108	0.4947 0.5399	0.5195	0.5067	Ave		0.508 3				4.2		15.0			
Ethyl acetate	++++ 0.1269	0.1579 0.1255	0.1212 0.1456	0.1157	0.1176	Ave		0.130 0				12.1		15.0			
Propionitrile	0.0429 0.0235	0.0345 0.0222	0.0233 0.0251	0.0261	0.0217	Lin2	0.204 6	0.022 7							0.9910		0.9900
Methacrylonitrile	0.1403 0.0954	0.1061 0.0938	0.0964 0.1029	0.0979	0.0920	Lin2	0.416 7	0.093 5							0.9950		0.9900
Tert-amyl methyl ether	0.4186 0.4504	0.4535 0.4453	0.4214 0.4742	0.4452	0.4287	Ave		0.442 1				4.2		15.0			
n-Butanol	++++ 0.0041	0.0041 0.0039	0.0035 0.0048	0.0044	0.0037	Ave		0.004 1				11.0		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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

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								
Methyl methacrylate	++++ 0.0398	0.0376 0.0379	0.0374 0.0422	0.0381	0.0370	Ave		0.038 6				4.8		15.0			
2-Nitropropane	++++ 0.0413	0.0931 0.0412	0.0599 0.0468	0.0496	0.0384	Lin2	0.208 1	0.040 3							0.9930		0.9900
Tetrahydrothiophene	0.2210 0.2112	0.2171 0.2087	0.2198 0.2214	0.2216	0.2076	Ave		0.216 0				2.8		15.0			
cis-1,4-Dichloro-2-butene	0.2957 0.2326	0.2783 0.2180	0.2347 0.2471	0.2286	0.2191	Ave		0.244 3				11.6		15.0			
1,2,3-Trimethylbenzene	2.2043 1.8923	1.8786 1.8140	1.7807 1.8763	1.9942	1.7670	Ave		1.900 9				7.5		15.0			
1,3,5-Trichlorobenzene	0.5686 0.5957	0.6106 0.5796	0.5248 0.6057	0.6083	0.5604	Ave		0.581 7				5.1		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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-538548/24	MS1_2712.D
Level 2	STD020 280-538548/25	MS1_2713.D
Level 3	STD050 280-538548/26	MS1_2714.D
Level 4	STD10 280-538548/27	MS1_2715.D
Level 5	STD50 280-538548/28	MS1_2716.D
Level 6	STD75 280-538548/29	MS1_2717.D
Level 7	STD100 280-538548/30	MS1_2718.D
Level 8	STD200 280-538548/31	MS1_2719.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
Ethylene oxide	FB	Qua	26068 1036589	38113 1325947	84752 2156198	154927	675626	100 7500	200 10000	500 20000	1000	5000
Ethanol	FB	Lin1	++++ 148252	6104 189484	9295 430073	19386	90674	++++ 4500	120 6000	300 12000	600	3000
Propene oxide	FB	Ave	46510 3412846	94633 4345569	213448 9367709	462698	2199226	100 7500	200 10000	500 20000	1000	5000
2-Propanol	FB	Ave	++++ 118762	3668 154722	8838 353633	16816	76551	++++ 750	20.0 1000	50.0 2000	100	500
Acetonitrile	FB	Lin2	5207 262979	9342 336478	21094 755055	35157	171419	10.0 750	20.0 1000	50.0 2000	100	500
Di-isopropyl ether (DIPE)	FB	Ave	++++ 155693	3527 210233	9769 441906	20052	99914	++++ 75.0	2.00 100	5.00 200	10.0	50.0
Chloroprene	FB	Ave	5950 339131	9185 453554	22612 914862	46806	216293	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Tert-butyl ethyl ether	FB	Ave	7115 598583	15102 797316	36395 1697935	75717	390067	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Ethyl acetate	FB	Ave	++++ 295874	9246 391747	17830 916063	33715	181020	++++ 150	4.00 200	10.0 400	20.0	100
Propionitrile	FB	Lin2	6552 273883	10115 345991	17161 788894	38061	167396	10.0 750	20.0 1000	50.0 2000	100	500
Methacrylonitrile	FB	Lin2	21423 1112747	31063 1464721	70916 3237312	142757	708538	10.0 750	20.0 1000	50.0 2000	100	500
Tert-amyl methyl ether	FB	Ave	6390 525182	13278 695022	31002 1491195	64899	330078	1.00 75.0	2.00 100	5.00 200	10.0	50.0
n-Butanol	FB	Ave	++++ 120882	3029 151525	6413 380063	16178	71615	++++ 1875	50.0 2500	125 5000	250	1250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

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
Methyl methacrylate	FB	Ave	+++++ 92850	2202 118435	5497 265731	11096	56906	+++++ 150	4.00 200	10.0 400	20.0	100
2-Nitropropane	FB	Lin2	+++++ 96340	5455 128713	8818 294580	14473	59124	+++++ 150	4.00 200	10.0 400	20.0	100
Tetrahydrothiophene	CBNZ d5	Ave	1432 102776	2721 135312	7052 295899	13786	66531	2.00 150	4.00 200	10.0 400	20.0	100
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	3048 174974	5665 229641	12139 514731	22598	114331	2.00 150	4.00 200	10.0 400	20.0	100
1,2,3-Trimethylbenzene	DCBd 4	Ave	11362 711897	19118 955425	46043 1954614	98549	461007	1.00 75.0	2.00 100	5.00 200	10.0	50.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	2931 224118	6214 305264	13570 630938	30060	146215	1.00 75.0	2.00 100	5.00 200	10.0	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_MS1\20210604-102067.b\VMS1_2712.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 04-Jun-2021 10:18:30 ALS Bottle#: 1 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD010
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:46 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 10:55:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	763333	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162017	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	257720	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	99	26068	100.0	113.4	
19 Ethanol	45		2.892				ND	ND	
21 Propene oxide	58	3.059	3.059	0.000	86	46510	100.0	102.0	
27 Isopropyl alcohol	45		3.395				ND	ND	
29 Acetonitrile	41	3.548	3.534	0.014	92	5207	10.0	9.28	
41 Isopropyl ether	87		4.372				ND	ND	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	88	5950	1.00	1.25	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	96	7115	1.00	0.9168	
47 Ethyl acetate	43	4.861	4.847	0.014	32	2788	2.00	1.40	
50 Propionitrile	54	4.889	4.875	0.014	91	6552	10.0	9.90	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	21423	10.0	10.6	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	82	6390	1.00	0.9467	
67 n-Butanol	56		6.034				ND	ND	U
72 Methyl methacrylate	100		6.397				ND	ND	
76 2-Nitropropane	41		6.788				ND	ND	U
94 Tetrahydrothiophene	60	8.018	8.018	0.000	1	1432	2.00	2.05	a
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	79	3048	2.00	2.42	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	93	11362	1.00	1.16	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	84	2931	1.00	0.9775	a
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MV-Supp A_00051

Amount Added: 1.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:46

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD010

Worklist Smp#: 24

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

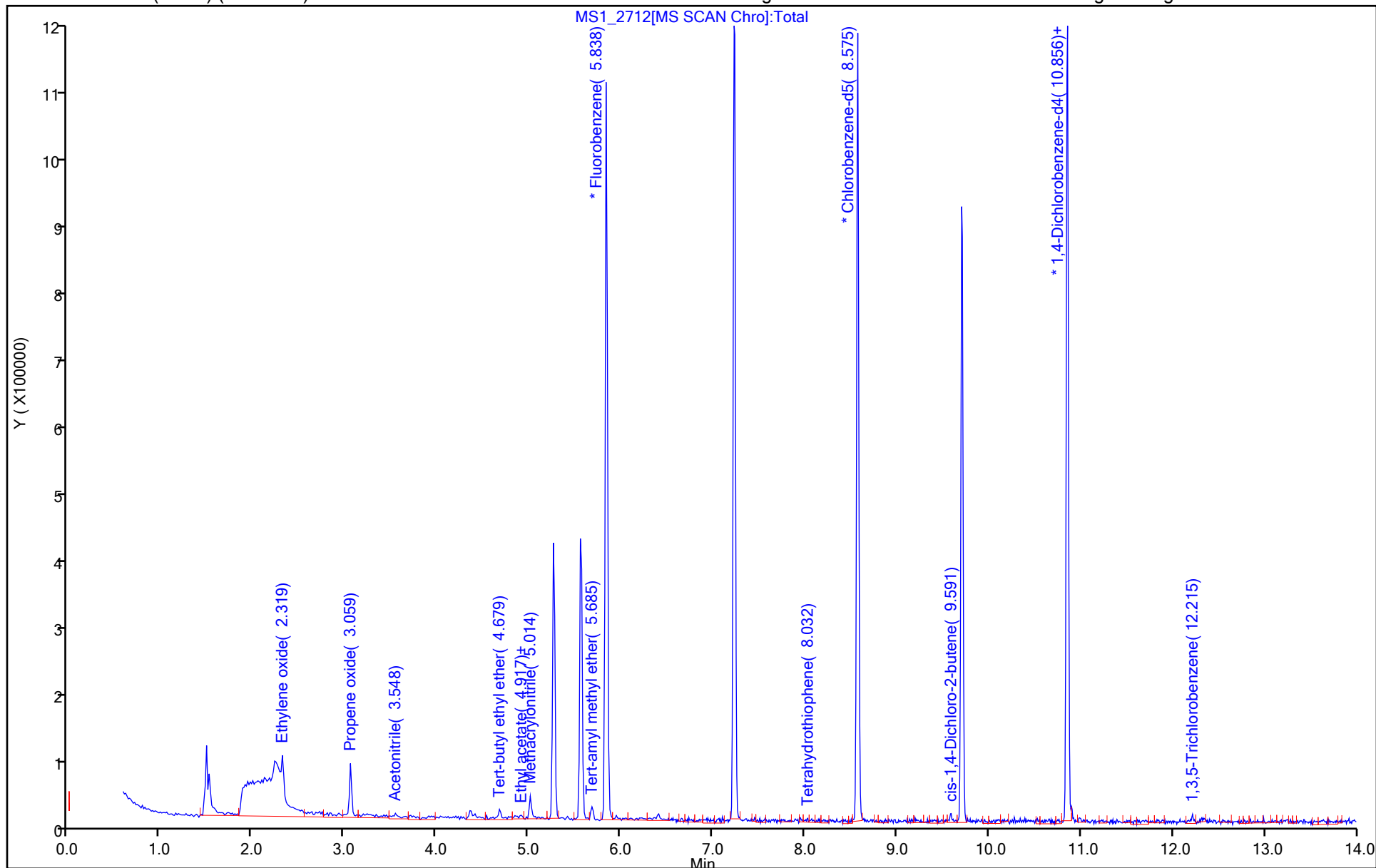
ALS Bottle#: 1

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

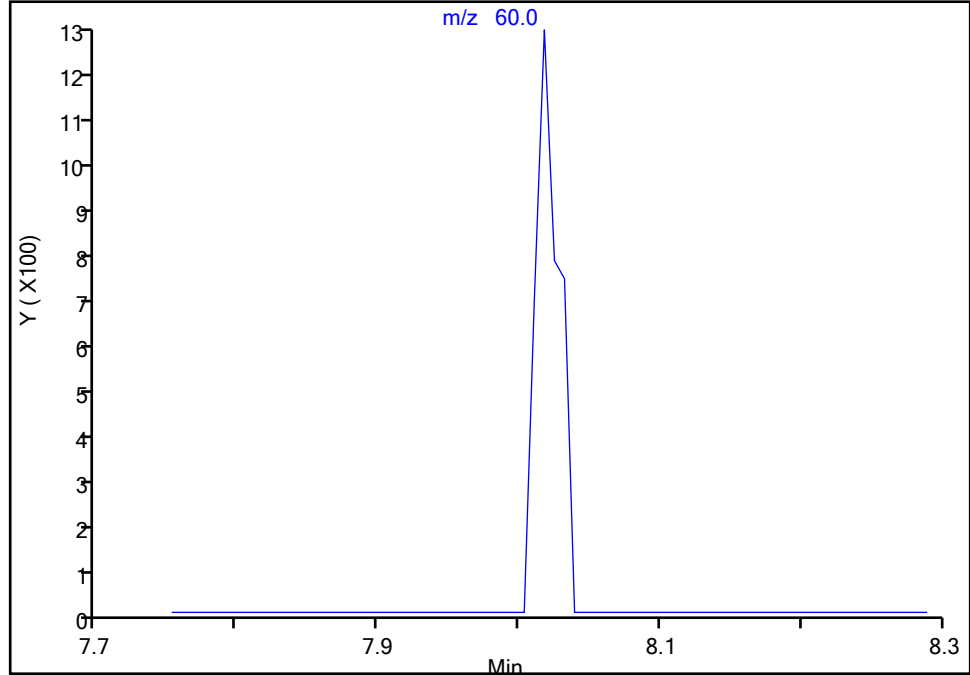
94 Tetrahydrothiophene, CAS: 110-01-0

Signal: 1

Not Detected

Expected RT: 8.02

Processing Integration Results



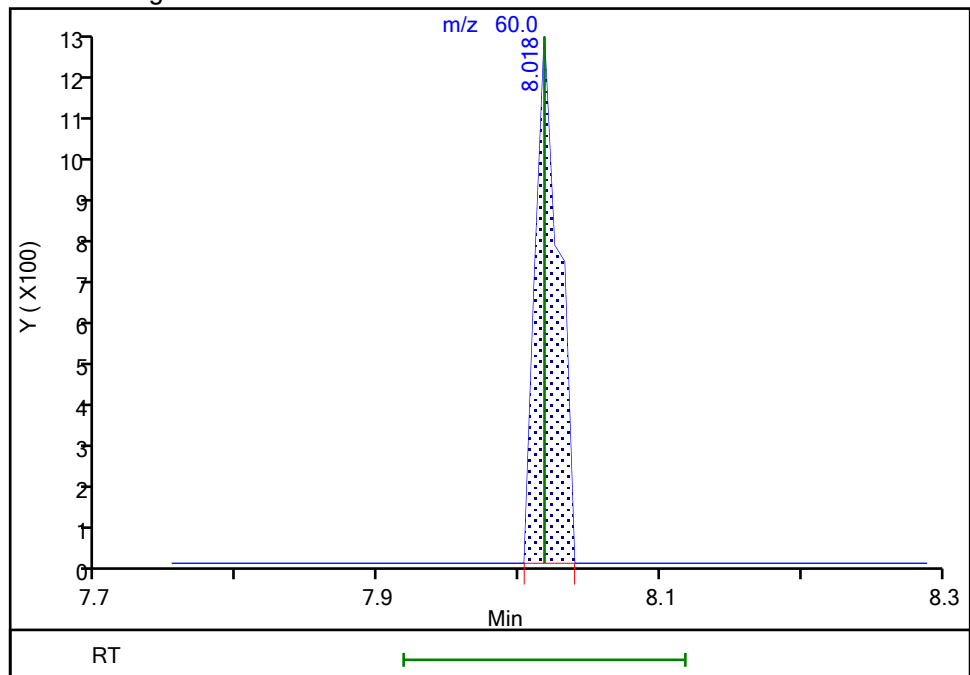
RT: 8.02

Area: 1432

Amount: 2.045579

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 11:08:30

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

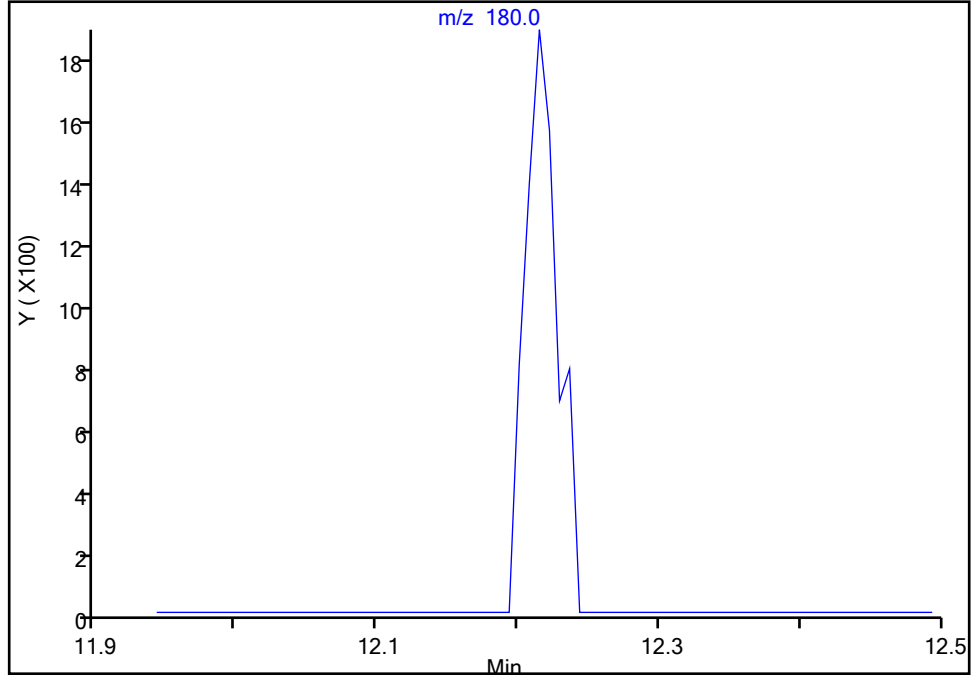
129 1,3,5-Trichlorobenzene, CAS: 108-70-3

Signal: 1

Not Detected

Expected RT: 12.21

Processing Integration Results



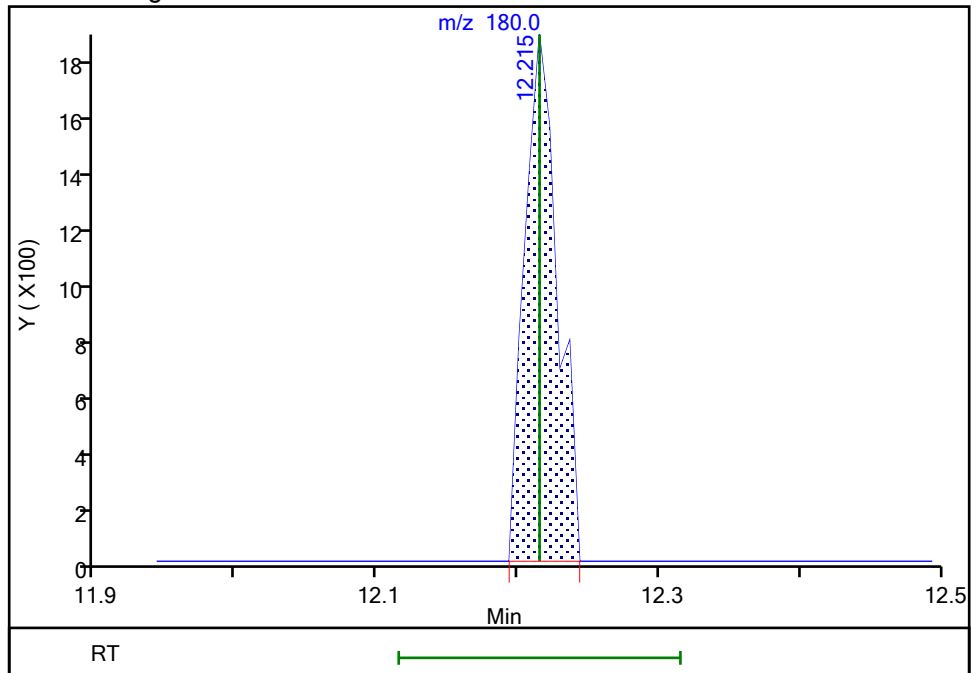
RT: 12.21

Area: 2931

Amount: 0.977512

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 11:11:32

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

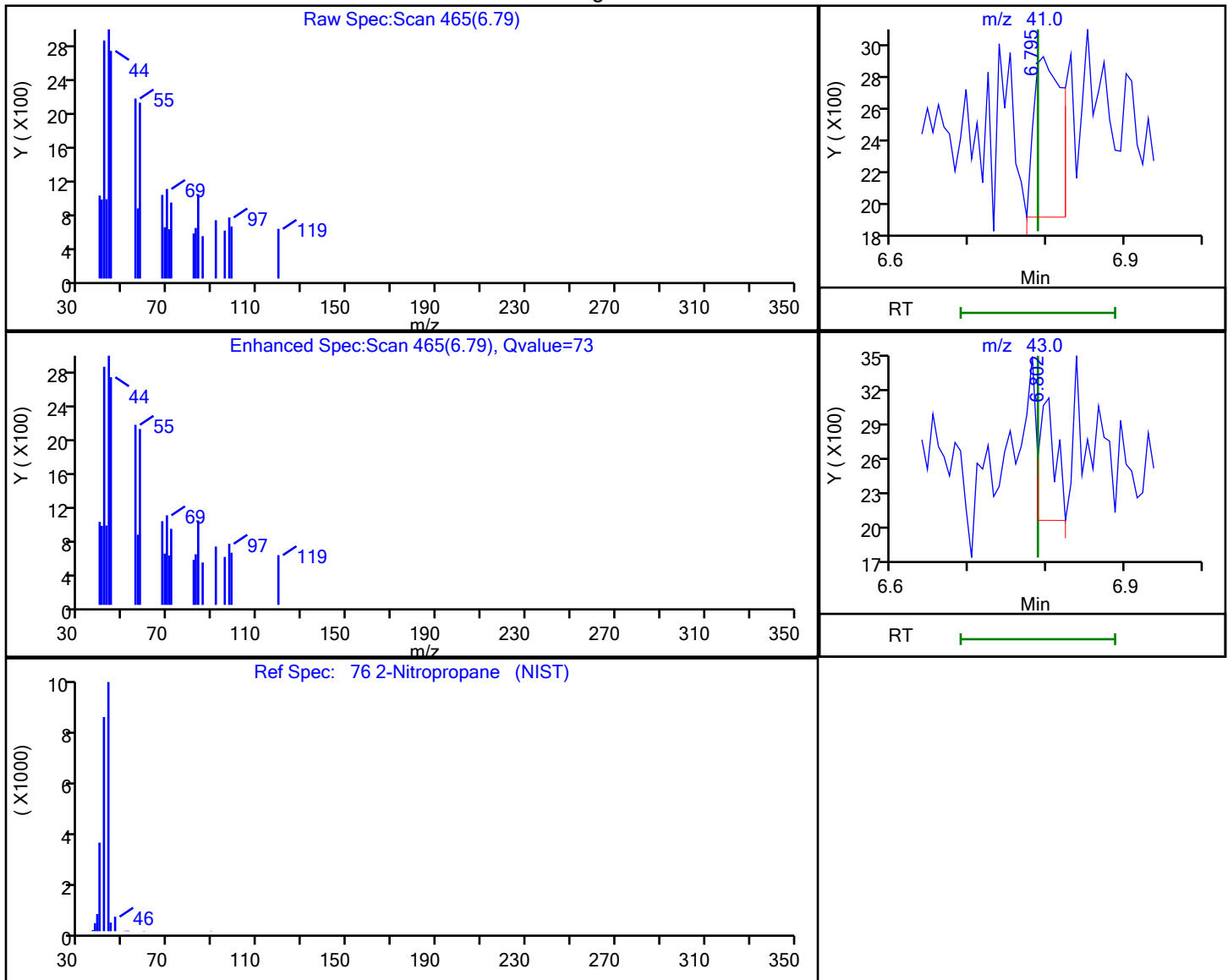
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

76 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
6.79	41.00	2363	1.015467
6.80	43.00	1535	

Reviewer: seifertj, 04-Jun-2021 13:32:08

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date: 04-Jun-2021 10:18:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

1

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

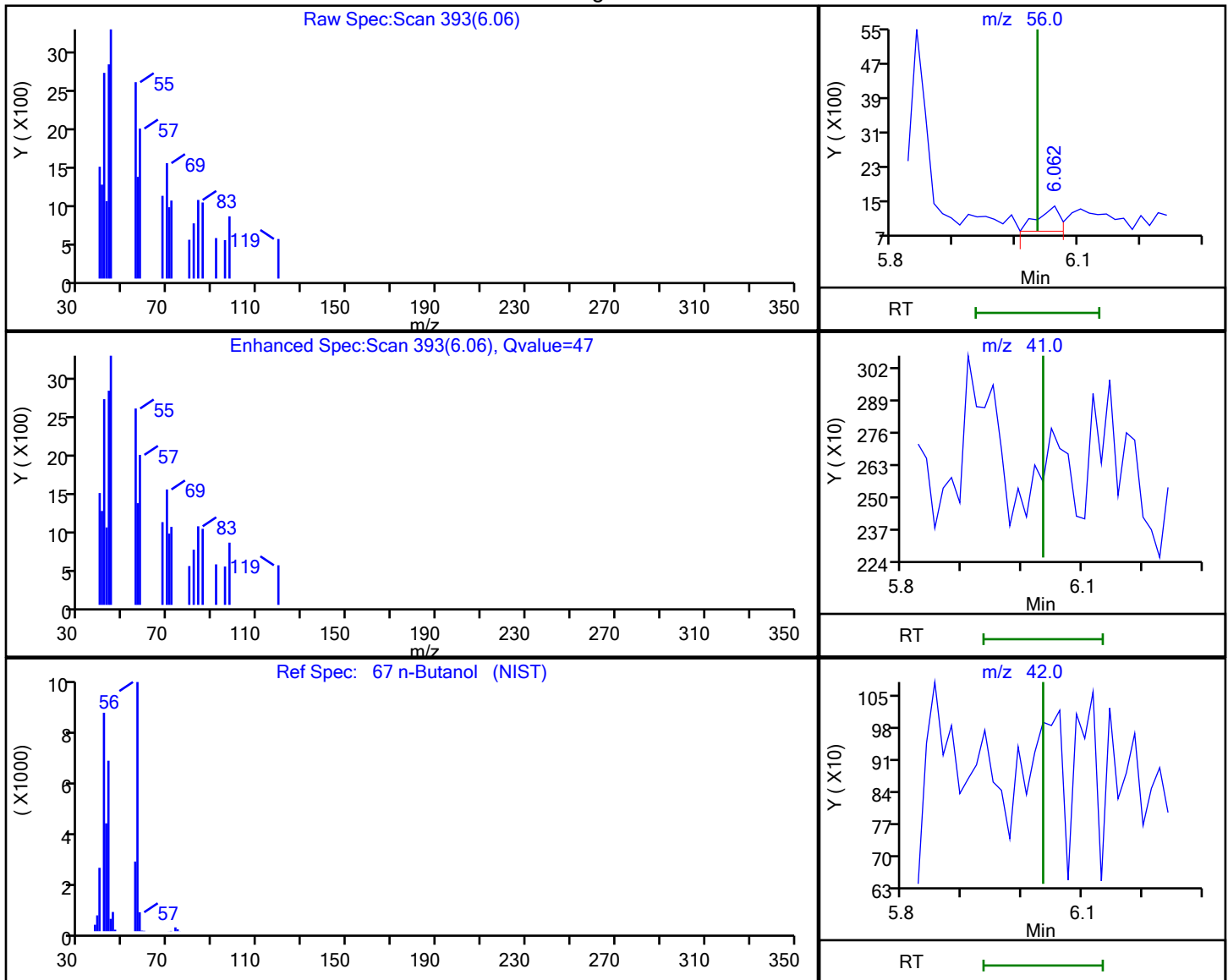
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

67 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
6.06	56.00	1484	23.133241
6.03	41.00	0	
6.03	42.00	0	

Reviewer: seifertj, 04-Jun-2021 13:32:02

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2713.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 04-Jun-2021 10:39:30 ALS Bottle#: 2 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD020
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:47 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 10:56:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	732042	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	156659	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	254416	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	38113	200.0	204.7	
19 Ethanol	45	2.906	2.892	0.014	35	6104	120.0	154.8	Ma
21 Propene oxide	58	3.059	3.059	0.000	88	94633	200.0	216.4	
27 Isopropyl alcohol	45	3.408	3.395	0.014	1	3668	20.0	22.7	
29 Acetonitrile	41	3.548	3.534	0.014	98	9342	20.0	22.0	
41 Isopropyl ether	87	4.372	4.372	0.000	94	3527	2.00	1.81	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	94	9185	2.00	2.02	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	15102	2.00	2.03	
47 Ethyl acetate	43	4.861	4.847	0.014	77	9246	4.00	4.86	
50 Propionitrile	54	4.889	4.875	0.014	92	10115	20.0	21.4	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	31063	20.0	18.2	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	88	13278	2.00	2.05	
67 n-Butanol	56	6.048	6.034	0.014	49	3029	50.0	50.6	
72 Methyl methacrylate	100	6.411	6.397	0.014	72	2202	4.00	3.90	
76 2-Nitropropane	41	6.788	6.788	0.000	88	5455	4.00	4.08	
94 Tetrahydrothiophene	60	8.025	8.018	0.007	68	2721	4.00	4.02	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	82	5665	4.00	4.56	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	94	19118	2.00	1.98	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	90	6214	2.00	2.10	a
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Supp A_00051

Amount Added: 2.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2713.D

Injection Date: 04-Jun-2021 10:39:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD020

Worklist Smp#: 25

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 2

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2713.D

Injection Date: 04-Jun-2021 10:39:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

2

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

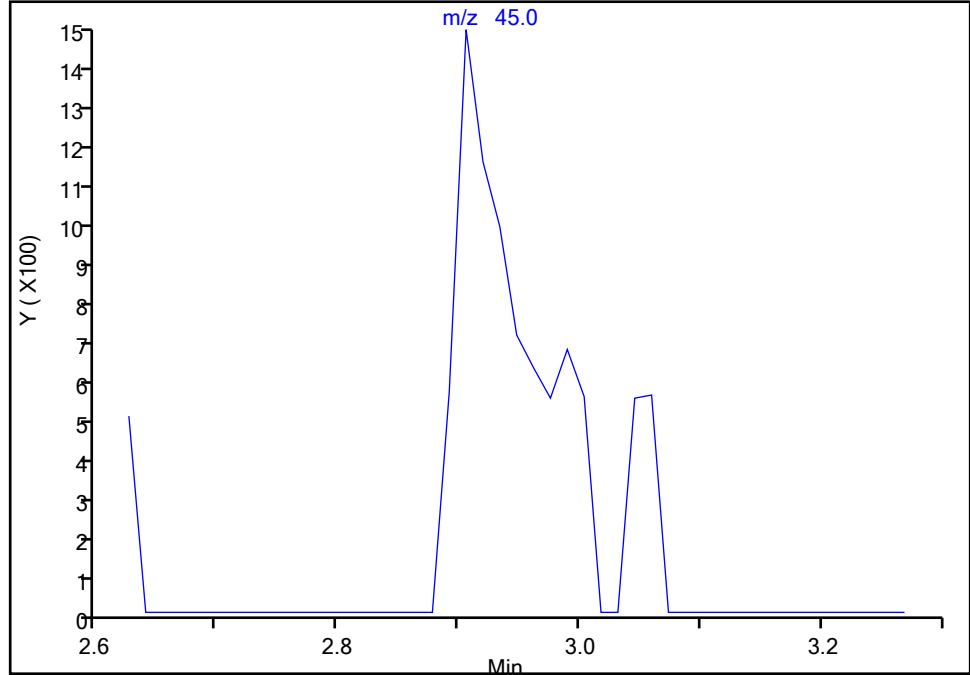
19 Ethanol, CAS: 64-17-5

Signal: 1

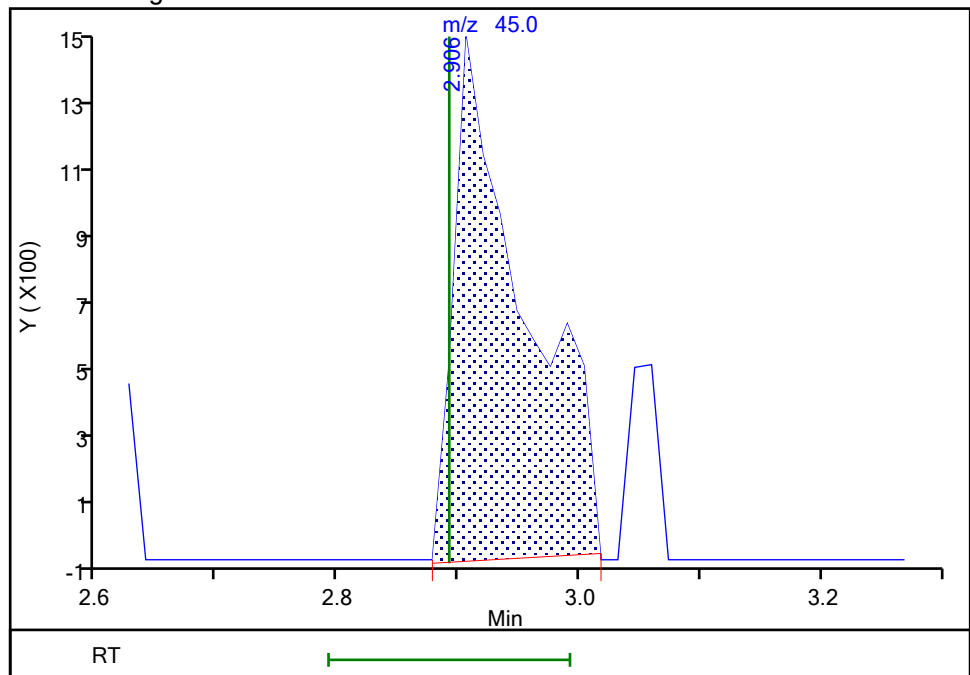
Not Detected

Expected RT: 2.89

Processing Integration Results



Manual Integration Results



Reviewer: seifertj, 04-Jun-2021 10:55:53

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2713.D		
Injection Date:	04-Jun-2021 10:39:30	Instrument ID:	VMS_MS1
Lims ID:	STD020		
Client ID:			
Operator ID:	SEIFERTJ	ALS Bottle#:	2 Workl
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Wat
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

Signal: 1

Not Detected
Expected RT: 12.21

A chromatogram plot with the y-axis labeled 'Y (X100)' ranging from 0 to 39 and the x-axis labeled 'Min' ranging from 11.9 to 12.5. A single, very sharp peak is visible at approximately 12.2 minutes, reaching a height of nearly 40. The peak is labeled 'm/z 180.0' in blue text above it.

RT: 12.21
Area: 6214
Amount: 2.099332
Amount Units: ug/l

Reviewer: seifertj, 04-Jun-2021 10:55:59
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2714.D
 Lims ID: STD050
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 04-Jun-2021 11:00:30 ALS Bottle#: 3 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD050
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:49 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 11:45:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	735722	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	160452	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	258566	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	84752	500.0	528.8	
19 Ethanol	45	2.906	2.892	0.014	94	9295	300.0	255.2	
21 Propene oxide	58	3.059	3.059	0.000	88	213448	500.0	485.6	
27 Isopropyl alcohol	45	3.408	3.395	0.014	95	8838	50.0	54.3	a
29 Acetonitrile	41	3.534	3.534	0.000	98	21094	50.0	56.3	
41 Isopropyl ether	87	4.358	4.372	-0.014	92	9769	5.00	5.00	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	22612	5.00	4.95	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	97	36395	5.00	4.87	
47 Ethyl acetate	43	4.861	4.847	0.014	99	17830	10.0	9.32	
50 Propionitrile	54	4.875	4.875	0.000	96	17161	50.0	42.4	
52 Methacrylonitrile	41	5.014	5.015	-0.001	94	70916	50.0	47.1	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	87	31002	5.00	4.77	
67 n-Butanol	56	6.034	6.034	0.000	63	6413	125.0	106.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	5497	10.0	9.69	
76 2-Nitropropane	41	6.788	6.788	0.000	97	8818	10.0	9.70	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	7052	10.0	10.2	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	84	12139	10.0	9.61	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	46043	5.00	4.68	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	89	13570	5.00	4.51	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		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_00051

Amount Added: 5.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:49

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2714.D

Injection Date: 04-Jun-2021 11:00:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD050

Worklist Smp#: 26

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

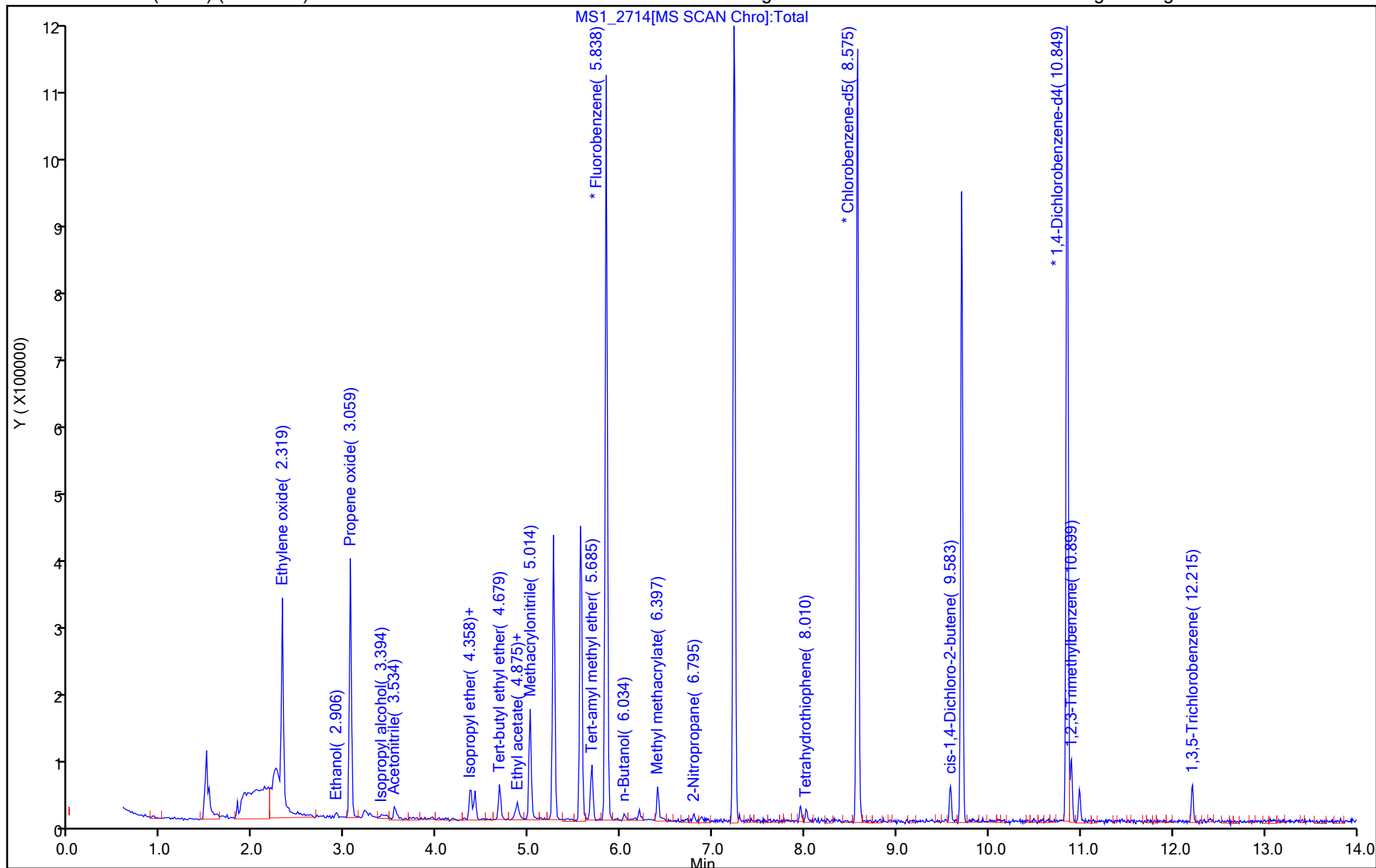
ALS Bottle#: 3

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2714.D

Injection Date: 04-Jun-2021 11:00:30

Instrument ID: VMS_MS1

Lims ID: STD050

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

3

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

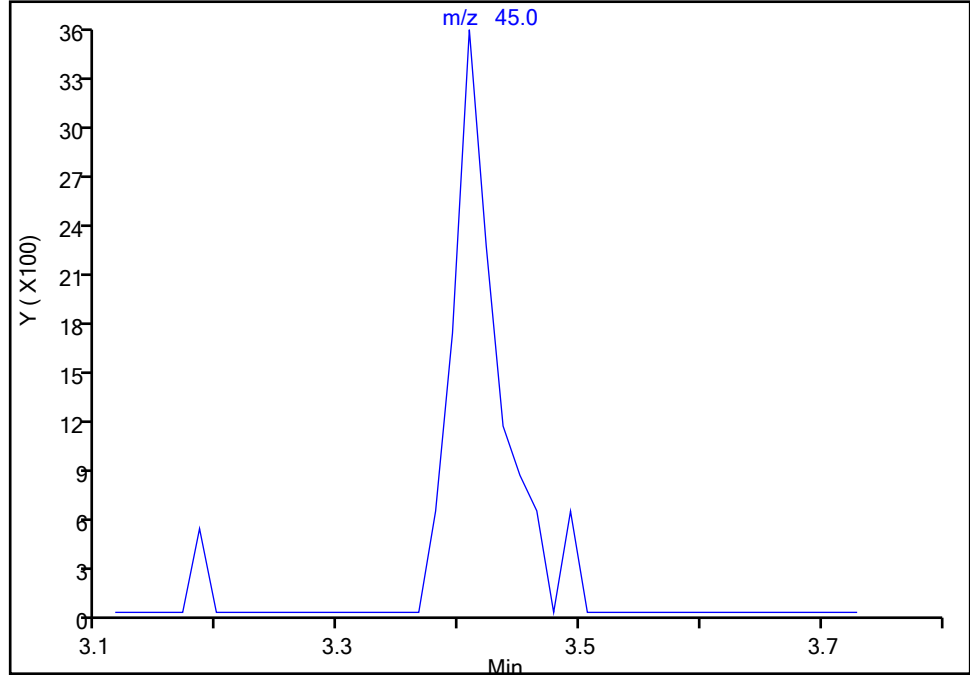
27 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

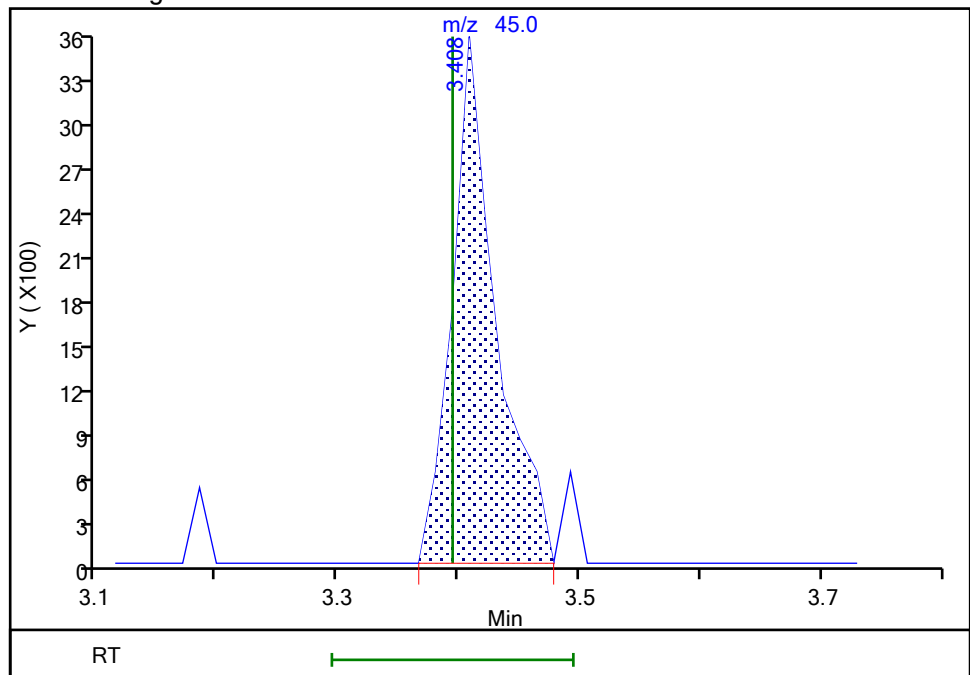
Not Detected

Expected RT: 3.39

Processing Integration Results



Manual Integration Results



RT: 3.41

Area: 8838

Amount: 54.348681

Amount Units: ug/l

Reviewer: seifertj, 04-Jun-2021 11:45:30

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2715.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 04-Jun-2021 11:21:30 ALS Bottle#: 4 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:50 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 11:50:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	728798	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	155504	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	247091	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	154927	1000.0	1035.2	
19 Ethanol	45	2.906	2.892	0.014	99	19386	600.0	581.9	
21 Propene oxide	58	3.059	3.059	0.000	86	462698	1000.0	1062.6	
27 Isopropyl alcohol	45	3.408	3.395	0.014	97	16816	100.0	104.4	
29 Acetonitrile	41	3.534	3.534	0.000	98	35157	100.0	98.3	
41 Isopropyl ether	87	4.372	4.372	0.000	92	20052	10.0	10.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	46806	10.0	10.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	75717	10.0	10.2	
47 Ethyl acetate	43	4.861	4.847	0.014	99	33715	20.0	17.8	
50 Propionitrile	54	4.875	4.875	0.000	98	38061	100.0	106.0	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	142757	100.0	100.3	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	84	64899	10.0	10.1	
67 n-Butanol	56	6.034	6.034	0.000	86	16178	250.0	271.2	M
72 Methyl methacrylate	100	6.397	6.397	0.000	90	11096	20.0	19.7	
76 2-Nitropropane	41	6.788	6.788	0.000	96	14473	20.0	19.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	13786	20.0	20.5	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	85	22598	20.0	18.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	98549	10.0	10.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	91	30060	10.0	10.5	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-Supp A_00051

Amount Added: 10.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:51

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2715.D

Injection Date: 04-Jun-2021 11:21:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD10

Worklist Smp#: 27

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

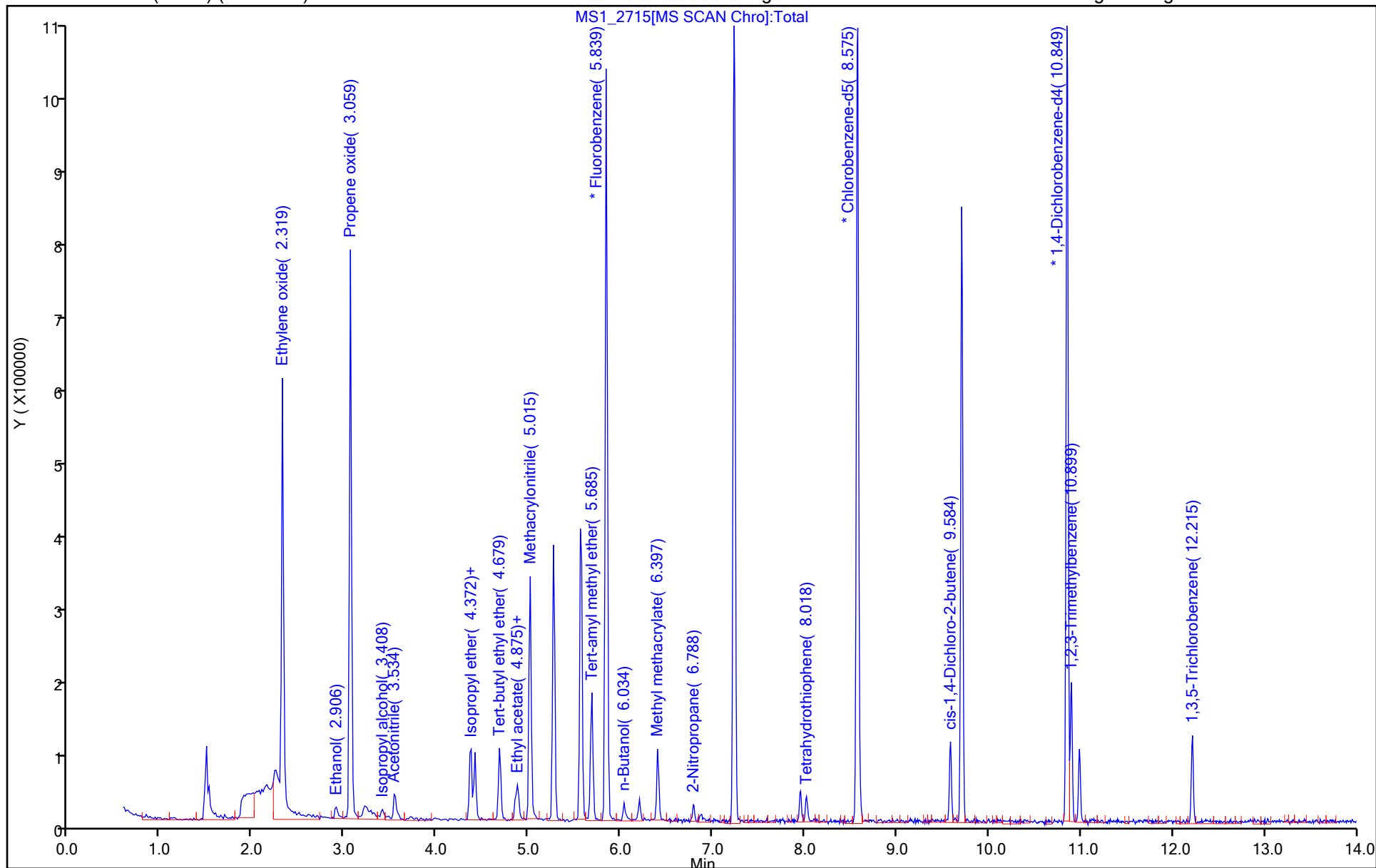
ALS Bottle#: 4

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2715.D

Injection Date: 04-Jun-2021 11:21:30

Instrument ID: VMS_MS1

Lims ID: STD10

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

4

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

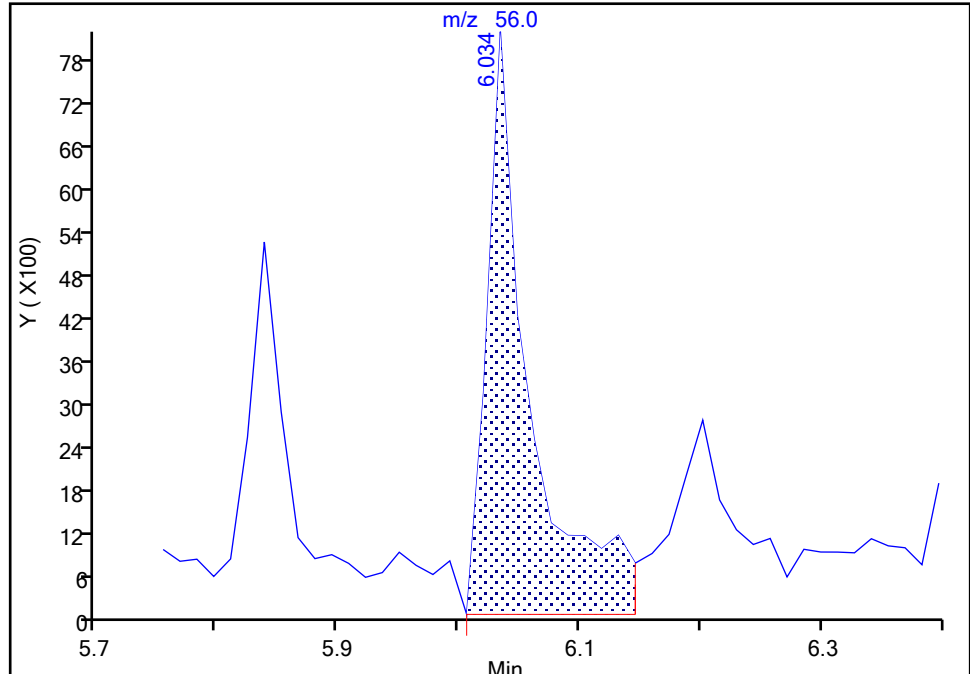
MS SCAN

67 n-Butanol, CAS: 71-36-3

Signal: 1

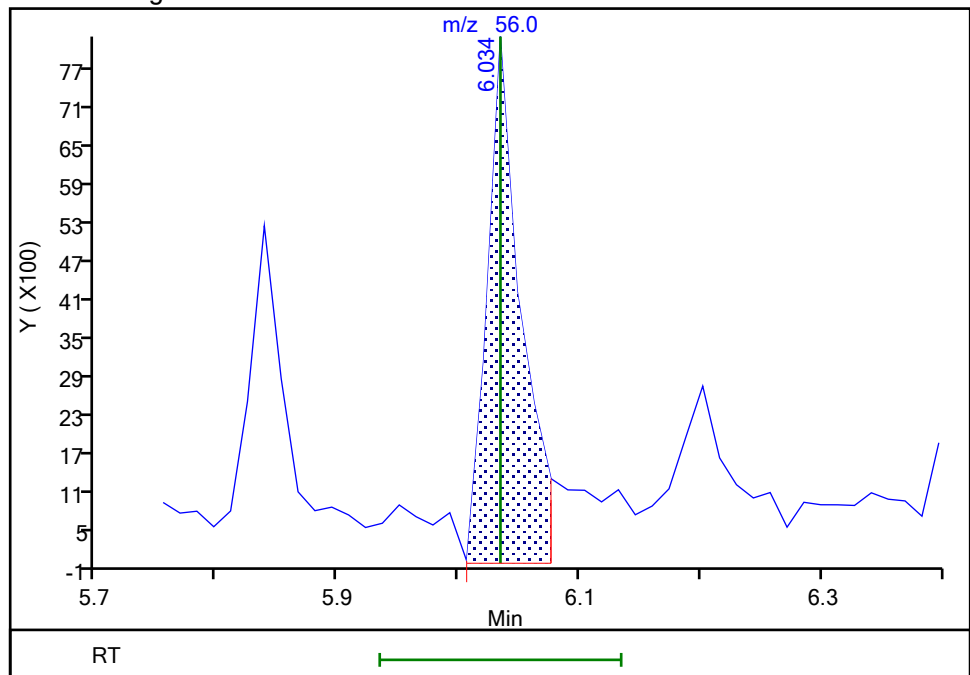
RT: 6.03
Area: 20111
Amount: 324.8890
Amount Units: ug/l

Processing Integration Results



RT: 6.03
Area: 16178
Amount: 271.1985
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 04-Jun-2021 13:35:21

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2716.D
 Lims ID: STD50
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 04-Jun-2021 11:42:30 ALS Bottle#: 5 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD50
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:52 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 12:08:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	769875	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	160270	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260891	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	675626	5000.0	4737.6	
19 Ethanol	45	2.892	2.892	0.000	100	90674	3000.0	2714.6	
21 Propene oxide	58	3.059	3.059	0.000	87	2199226	5000.0	4781.0	
27 Isopropyl alcohol	45	3.394	3.395	0.000	99	76551	500.0	449.9	
29 Acetonitrile	41	3.534	3.534	0.000	99	171419	500.0	473.4	
41 Isopropyl ether	87	4.372	4.372	0.000	92	99914	50.0	48.9	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	216293	50.0	45.2	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	390067	50.0	49.8	
47 Ethyl acetate	43	4.847	4.847	0.000	100	181020	100.0	90.4	
50 Propionitrile	54	4.875	4.875	0.000	98	167396	500.0	470.0	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	708538	500.0	487.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	330078	50.0	48.5	
67 n-Butanol	56	6.034	6.034	0.000	93	71615	1250.0	1136.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	56906	100.0	95.8	
76 2-Nitropropane	41	6.788	6.788	0.000	99	59124	100.0	90.1	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	96	66531	100.0	96.1	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	114331	100.0	89.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	461007	50.0	46.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	93	146215	50.0	48.2	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 50.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:52

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2716.D

Injection Date: 04-Jun-2021 11:42:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD50

Worklist Smp#: 28

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

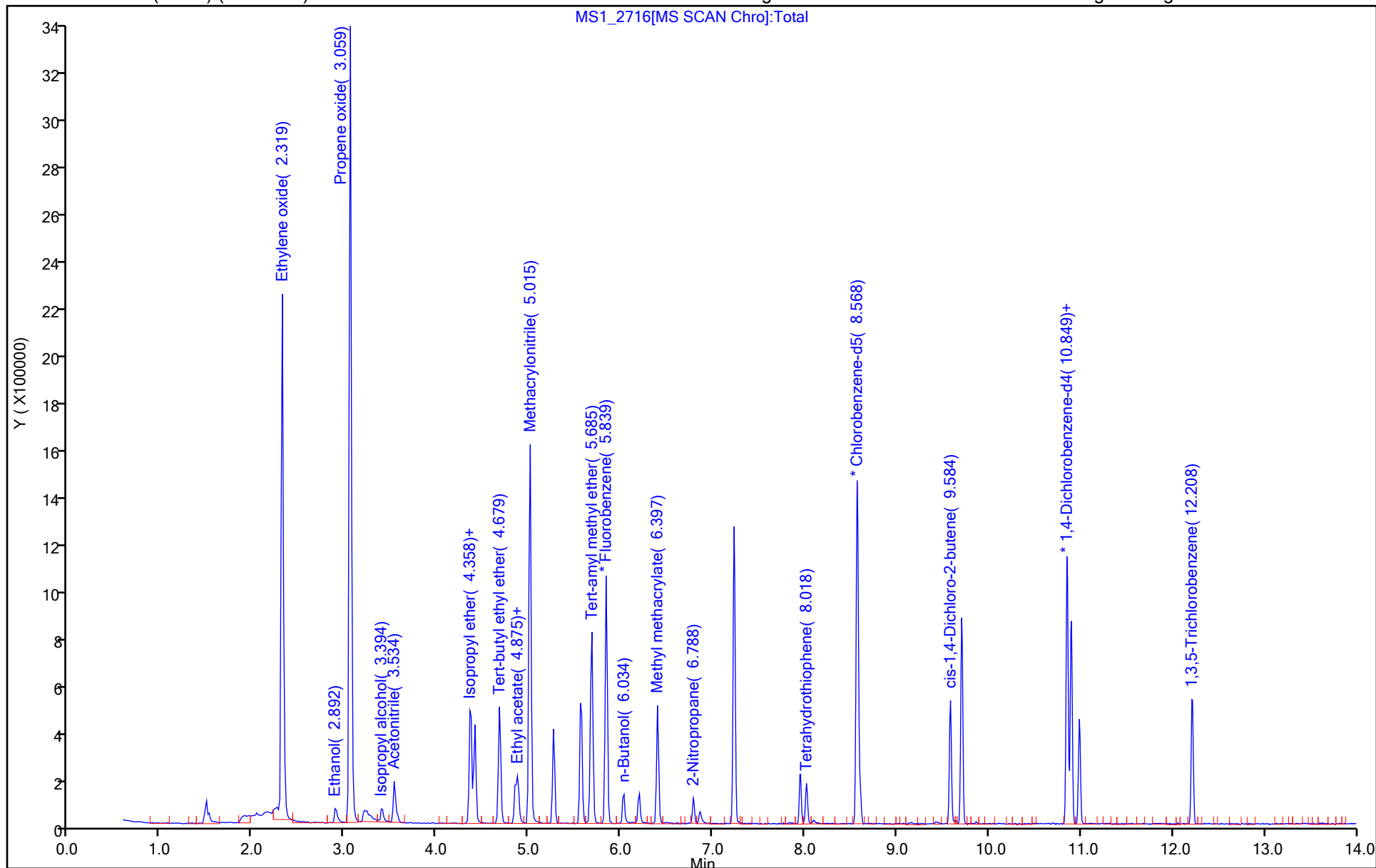
ALS Bottle#: 5

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2717.D
 Lims ID: STD75
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 04-Jun-2021 12:04:30 ALS Bottle#: 6 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD75
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:53 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 12:41:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	777438	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162224	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	250801	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	1036589	7500.0	7588.7	
19 Ethanol	45	2.892	2.892	0.000	99	148252	4500.0	4420.2	
21 Propene oxide	58	3.059	3.059	0.000	87	3412846	7500.0	7347.1	
27 Isopropyl alcohol	45	3.395	3.395	0.000	99	118762	750.0	691.1	
29 Acetonitrile	41	3.534	3.534	0.000	99	262979	750.0	722.0	
41 Isopropyl ether	87	4.372	4.372	0.000	92	155693	75.0	75.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	339131	75.0	70.2	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	598583	75.0	75.7	
47 Ethyl acetate	43	4.847	4.847	0.000	100	295874	150.0	146.3	
50 Propionitrile	54	4.875	4.875	0.000	98	273883	750.0	767.1	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	1112747	750.0	761.0	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	525182	75.0	76.4	
67 n-Butanol	56	6.034	6.034	0.000	90	120882	1875.0	1899.6	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	92850	150.0	154.8	
76 2-Nitropropane	41	6.788	6.788	0.000	99	96340	150.0	148.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	102776	150.0	146.6	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	174974	150.0	142.8	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	711897	75.0	74.7	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	224118	75.0	76.8	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 75.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:54

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2717.D

Injection Date: 04-Jun-2021 12:04:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD75

Worklist Smp#: 29

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

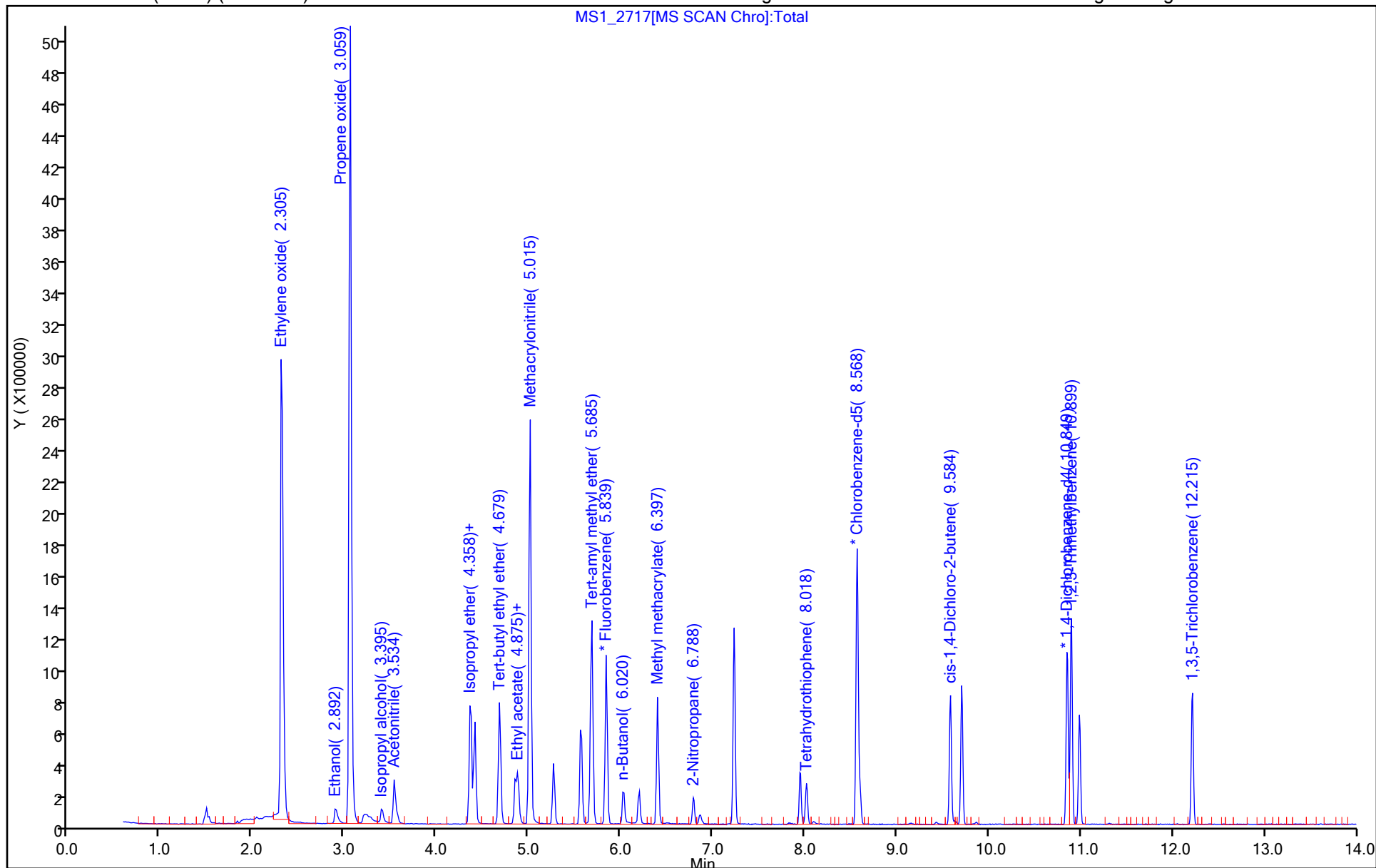
ALS Bottle#: 6

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2718.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 04-Jun-2021 12:25:30 ALS Bottle#: 7 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD100
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:55 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 13:30:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	780425	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162096	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	263349	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	1325947	10000	10136	
19 Ethanol	45	2.892	2.892	0.000	100	189484	6000.0	5638.9	
21 Propene oxide	58	3.059	3.059	0.000	87	4345569	10000	9319.2	
27 Isopropyl alcohol	45	3.394	3.395	-0.001	98	154722	1000.0	897.0	
29 Acetonitrile	41	3.534	3.534	0.000	99	336478	1000.0	921.8	
41 Isopropyl ether	87	4.372	4.372	0.000	92	210233	100.0	101.5	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	453554	100.0	93.5	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	797316	100.0	100.5	
47 Ethyl acetate	43	4.847	4.847	0.000	100	391747	200.0	193.0	
50 Propionitrile	54	4.875	4.875	0.000	98	345991	1000.0	967.7	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	1464721	1000.0	999.3	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	695022	100.0	100.7	
67 n-Butanol	56	6.034	6.034	0.000	92	151525	2500.0	2372.0	
72 Methyl methacrylate	100	6.397	6.397	0.000	89	118435	200.0	196.7	
76 2-Nitropropane	41	6.788	6.788	0.000	99	128713	200.0	199.4	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	135312	200.0	193.2	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	83	229641	200.0	178.5	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	955425	100.0	95.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	305264	100.0	99.6	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 100.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:14:55

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2718.D

Injection Date: 04-Jun-2021 12:25:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD100

Worklist Smp#: 30

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

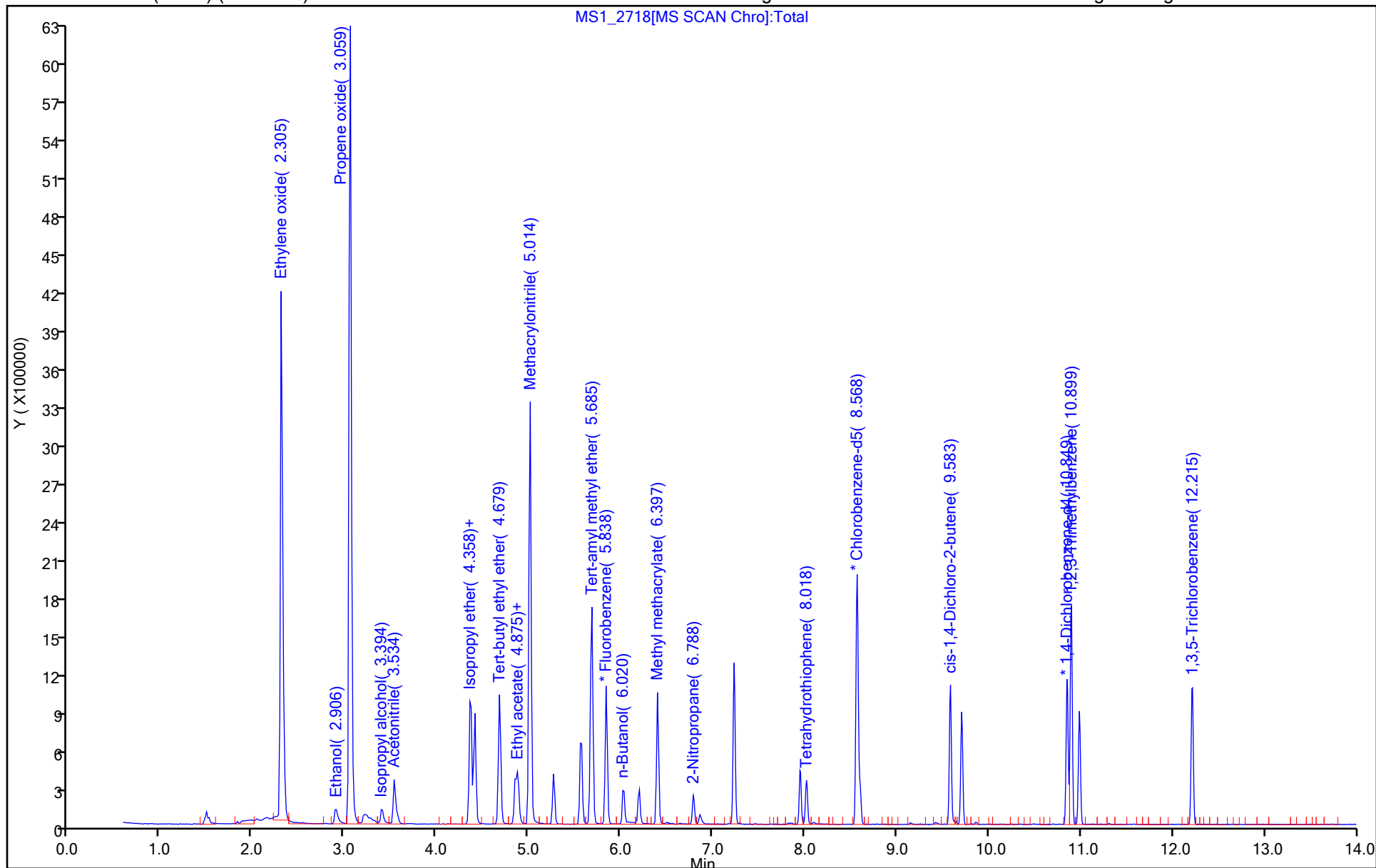
ALS Bottle#: 7

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2719.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 04-Jun-2021 12:47:30 ALS Bottle#: 8 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD200
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:56 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 13:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	786244	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	167037	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260433	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	2156198	20000	19951	
19 Ethanol	45	2.906	2.892	0.014	100	430073	12000	12754	
21 Propene oxide	58	3.059	3.059	0.000	86	9367709	20000	19941	
27 Isopropyl alcohol	45	3.408	3.395	0.013	99	353633	2000.0	2034.9	
29 Acetonitrile	41	3.534	3.534	0.000	99	755055	2000.0	2059.8	
41 Isopropyl ether	87	4.372	4.372	0.000	92	441906	200.0	211.7	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	914862	200.0	187.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	1697935	200.0	212.4	
47 Ethyl acetate	43	4.847	4.847	0.000	100	916063	400.0	448.0	
50 Propionitrile	54	4.875	4.875	0.000	98	788894	2000.0	2201.5	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	3237312	2000.0	2197.5	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	1491195	200.0	214.5	
67 n-Butanol	56	6.034	6.034	0.000	91	380063	5000.0	5905.7	
72 Methyl methacrylate	100	6.397	6.397	0.000	89	265731	400.0	438.2	
76 2-Nitropropane	41	6.788	6.788	0.000	99	294580	400.0	459.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	295899	400.0	410.0	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	84	514731	400.0	404.6	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	1954614	200.0	197.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	630938	200.0	208.2	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051

Amount Added: 200.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2719.D

Injection Date: 04-Jun-2021 12:47:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD200

Worklist Smp#: 31

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

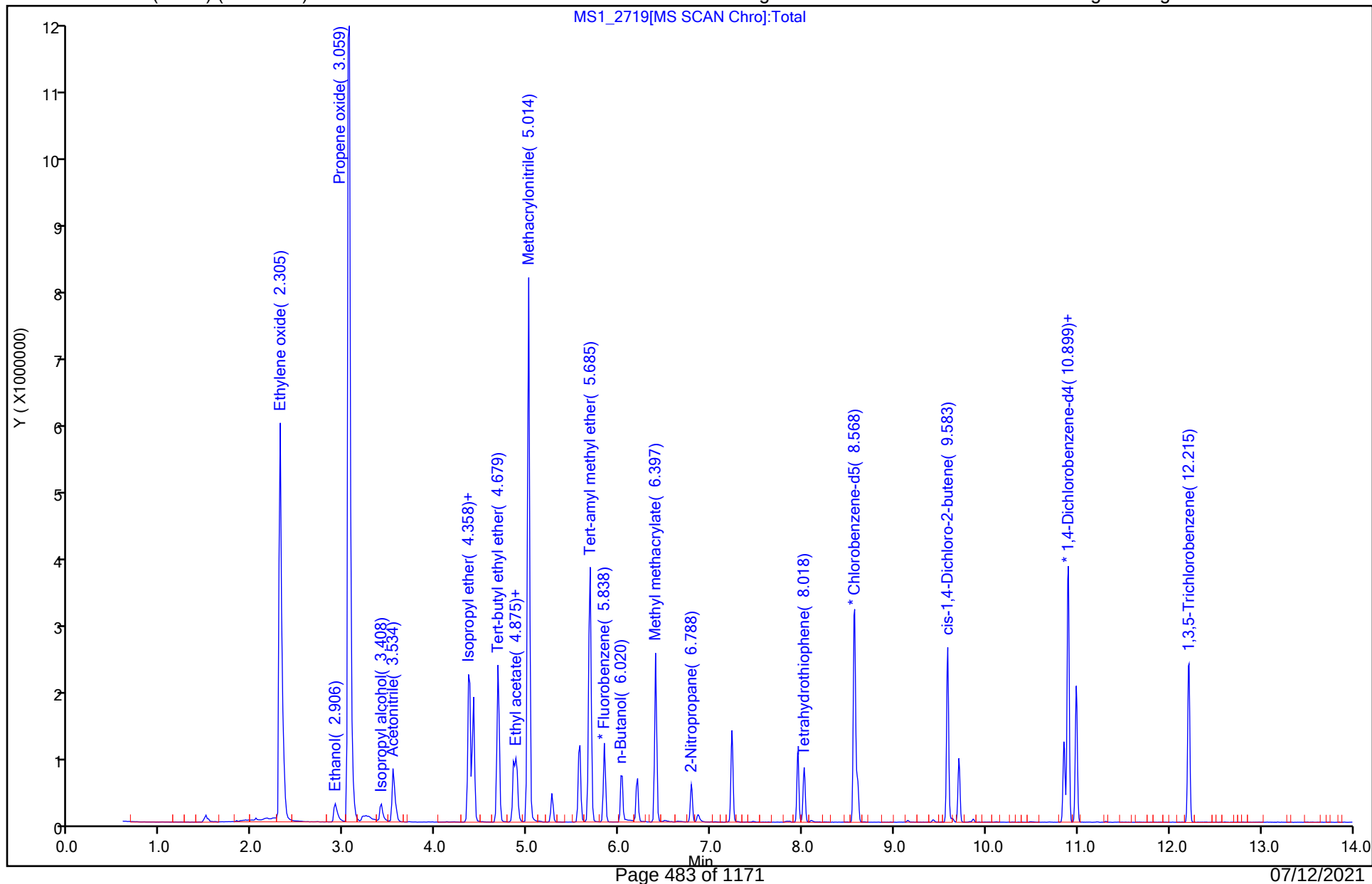
ALS Bottle#: 8

Method: AQ_VMS1_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



Calibration

/ Ethylene oxide

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

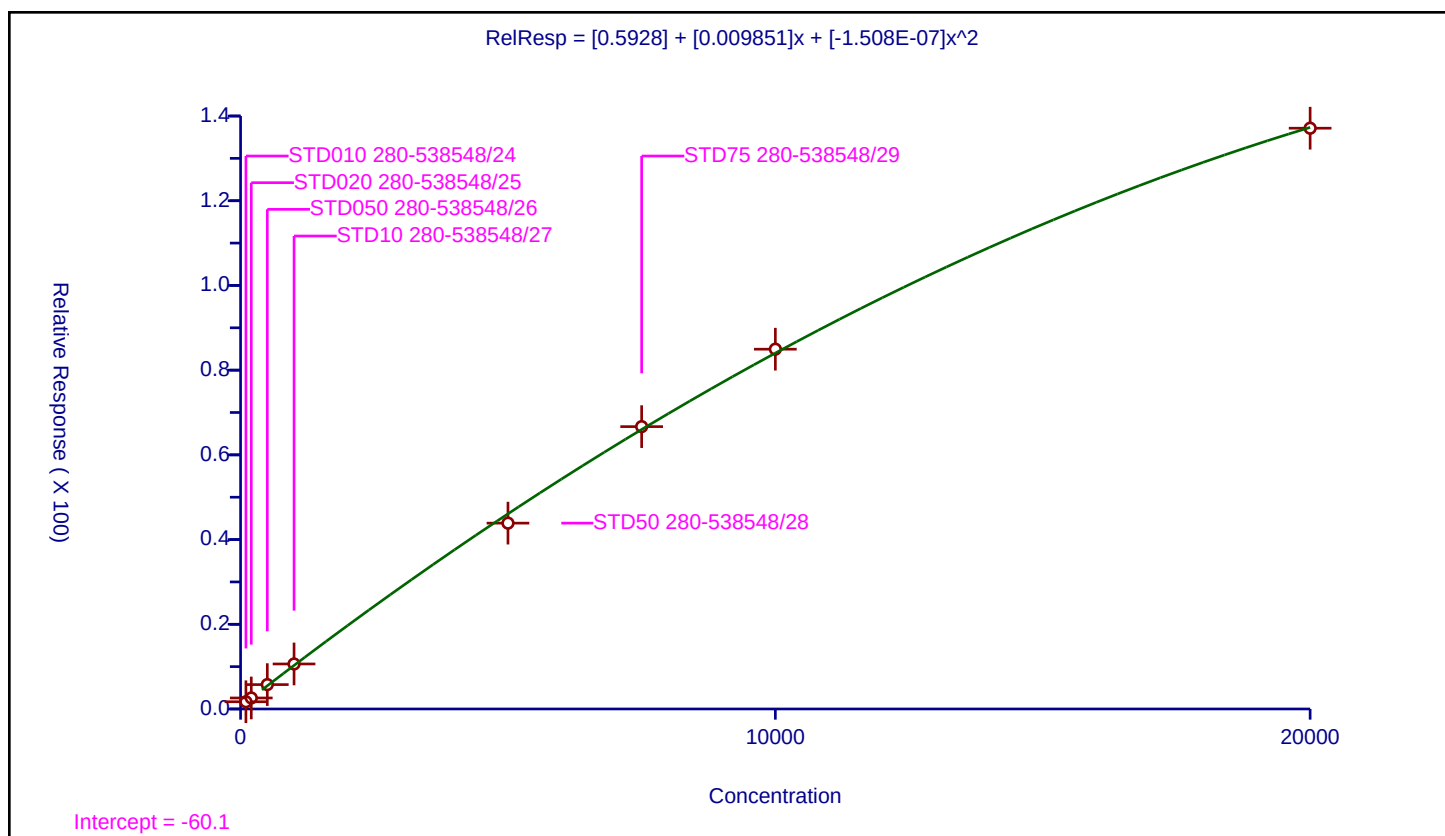
Curve Coefficients

Intercept: 0.5928
 Slope: 0.009851
 Second Order: -1.508E-07

Error Coefficients

Standard Error: 1260000
 Relative Standard Error: 7.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	100.0	1.707512	50.0	763333.0	0.017075	Y
2	STD020 280-538548/25	200.0	2.603198	50.0	732042.0	0.013016	Y
3	STD050 280-538548/26	500.0	5.759784	50.0	735722.0	0.01152	Y
4	STD10 280-538548/27	1000.0	10.62894	50.0	728798.0	0.010629	Y
5	STD50 280-538548/28	5000.0	43.878941	50.0	769875.0	0.008776	Y
6	STD75 280-538548/29	7500.0	66.666988	50.0	777438.0	0.008889	Y
7	STD100 280-538548/30	10000.0	84.950316	50.0	780425.0	0.008495	Y
8	STD200 280-538548/31	20000.0	137.120156	50.0	786244.0	0.006856	Y



Calibration

/ Ethanol

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

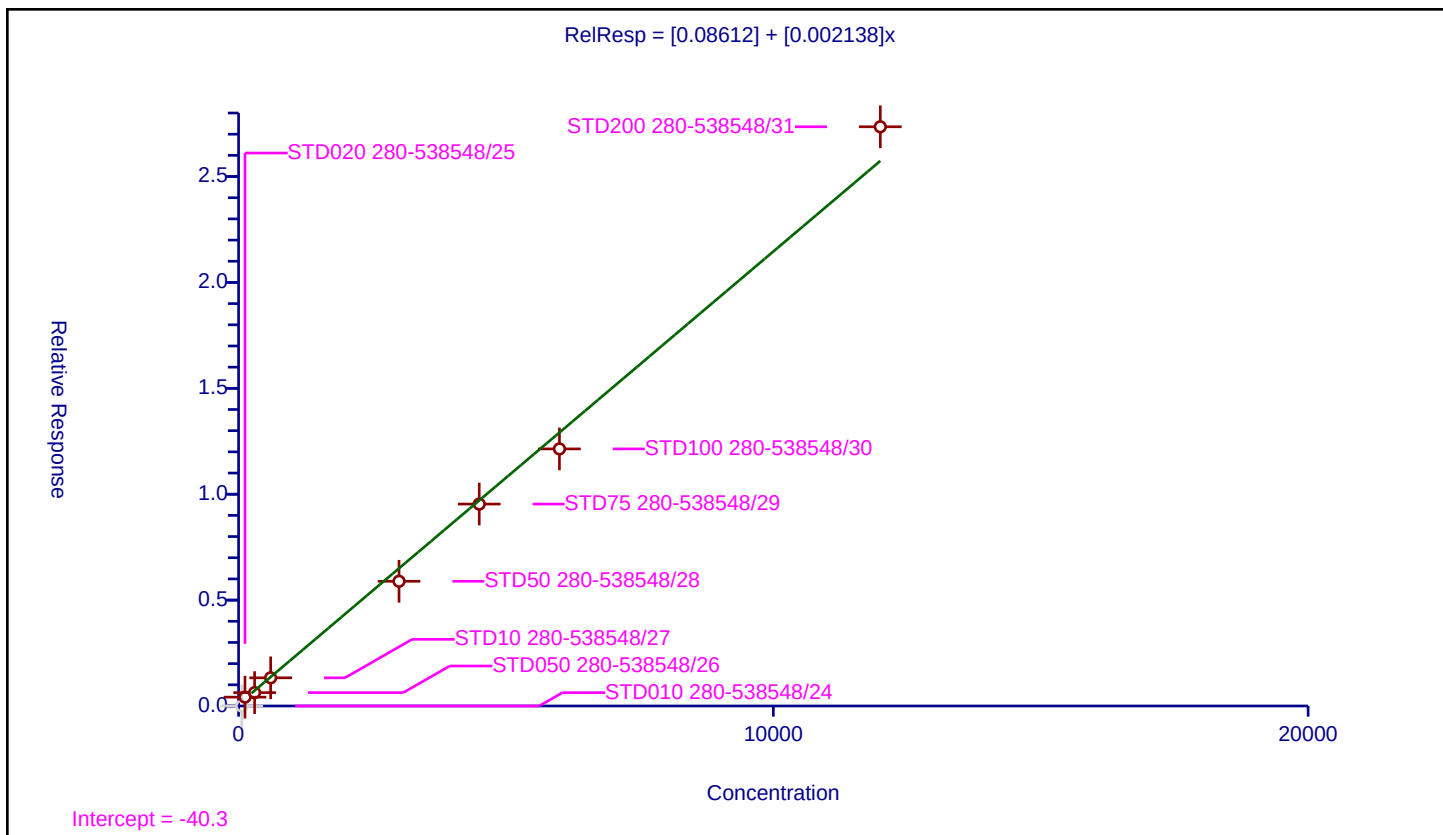
Curve Coefficients

Intercept: 0.08612
Slope: 0.002138

Error Coefficients

Standard Error: 224000
Relative Standard Error: 15.7
Correlation Coefficient: 0.995
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	60.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	120.0	0.416916	50.0	732042.0	0.003474	Y
3	STD050 280-538548/26	300.0	0.631692	50.0	735722.0	0.002106	Y
4	STD10 280-538548/27	600.0	1.329998	50.0	728798.0	0.002217	Y
5	STD50 280-538548/28	3000.0	5.888878	50.0	769875.0	0.001963	Y
6	STD75 280-538548/29	4500.0	9.534651	50.0	777438.0	0.002119	Y
7	STD100 280-538548/30	6000.0	12.139796	50.0	780425.0	0.002023	Y
8	STD200 280-538548/31	12000.0	27.349843	50.0	786244.0	0.002279	Y



Calibration

/ Propene oxide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

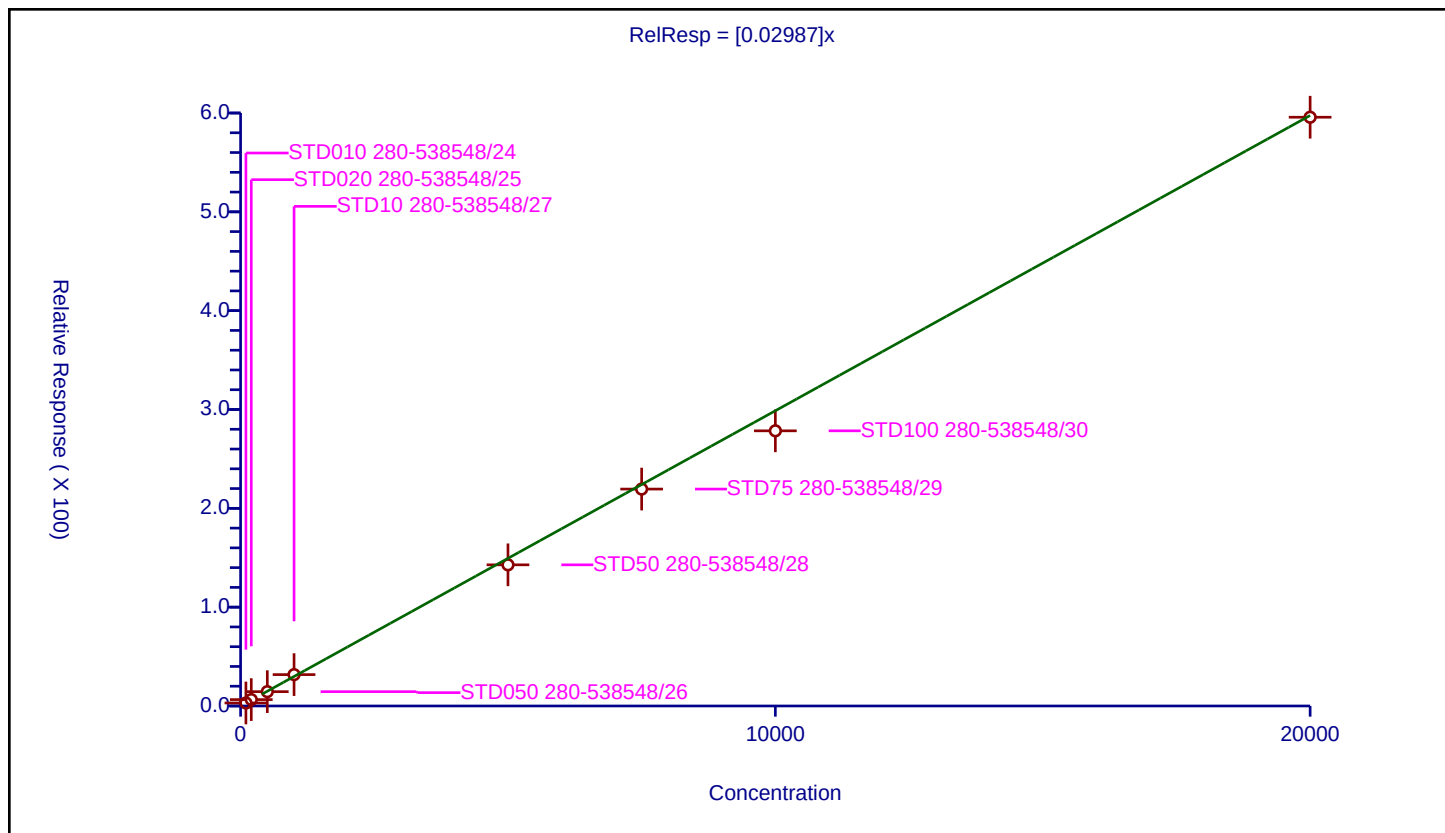
Curve Coefficients

Intercept: 0
 Slope: 0.02987

Error Coefficients

Standard Error: 4200000
 Relative Standard Error: 5.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	100.0	3.046508	50.0	763333.0	0.030465	Y
2	STD020 280-538548/25	200.0	6.463632	50.0	732042.0	0.032318	Y
3	STD050 280-538548/26	500.0	14.506023	50.0	735722.0	0.029012	Y
4	STD10 280-538548/27	1000.0	31.743913	50.0	728798.0	0.031744	Y
5	STD50 280-538548/28	5000.0	142.83007	50.0	769875.0	0.028566	Y
6	STD75 280-538548/29	7500.0	219.49313	50.0	777438.0	0.029266	Y
7	STD100 280-538548/30	10000.0	278.410417	50.0	780425.0	0.027841	Y
8	STD200 280-538548/31	20000.0	595.725309	50.0	786244.0	0.029786	Y



Calibration

/ Isopropyl alcohol

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

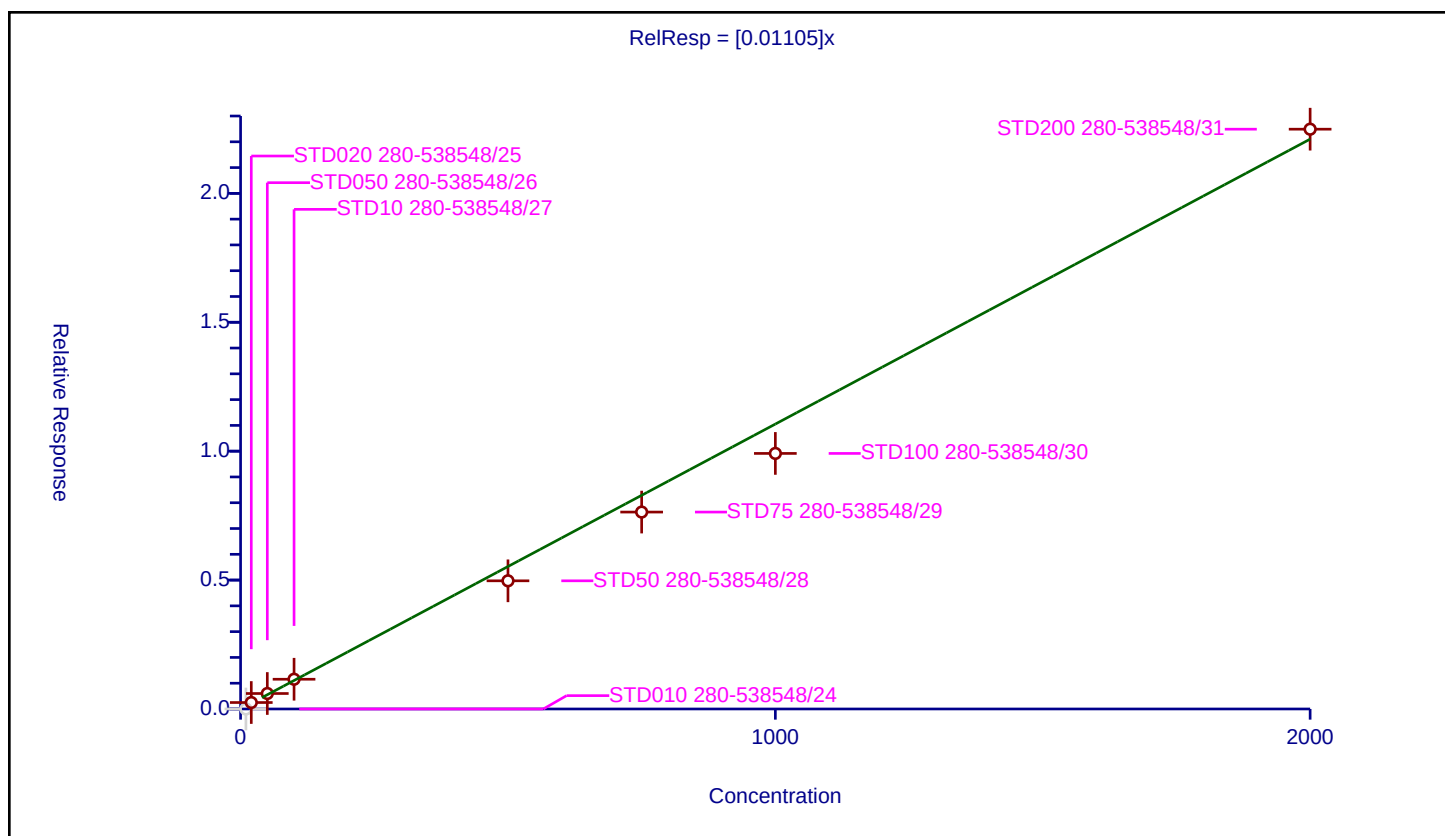
Curve Coefficients

Intercept: 0
Slope: 0.01105

Error Coefficients

Standard Error: 168000
Relative Standard Error: 9.5
Correlation Coefficient: 0.995
Coefficient of Determination (Adjusted): 0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	20.0	0.250532	50.0	732042.0	0.012527	Y
3	STD050 280-538548/26	50.0	0.600634	50.0	735722.0	0.012013	Y
4	STD10 280-538548/27	100.0	1.15368	50.0	728798.0	0.011537	Y
5	STD50 280-538548/28	500.0	4.971651	50.0	769875.0	0.009943	Y
6	STD75 280-538548/29	750.0	7.638037	50.0	777438.0	0.010184	Y
7	STD100 280-538548/30	1000.0	9.912676	50.0	780425.0	0.009913	Y
8	STD200 280-538548/31	2000.0	22.488757	50.0	786244.0	0.011244	Y



Calibration

/ Acetonitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

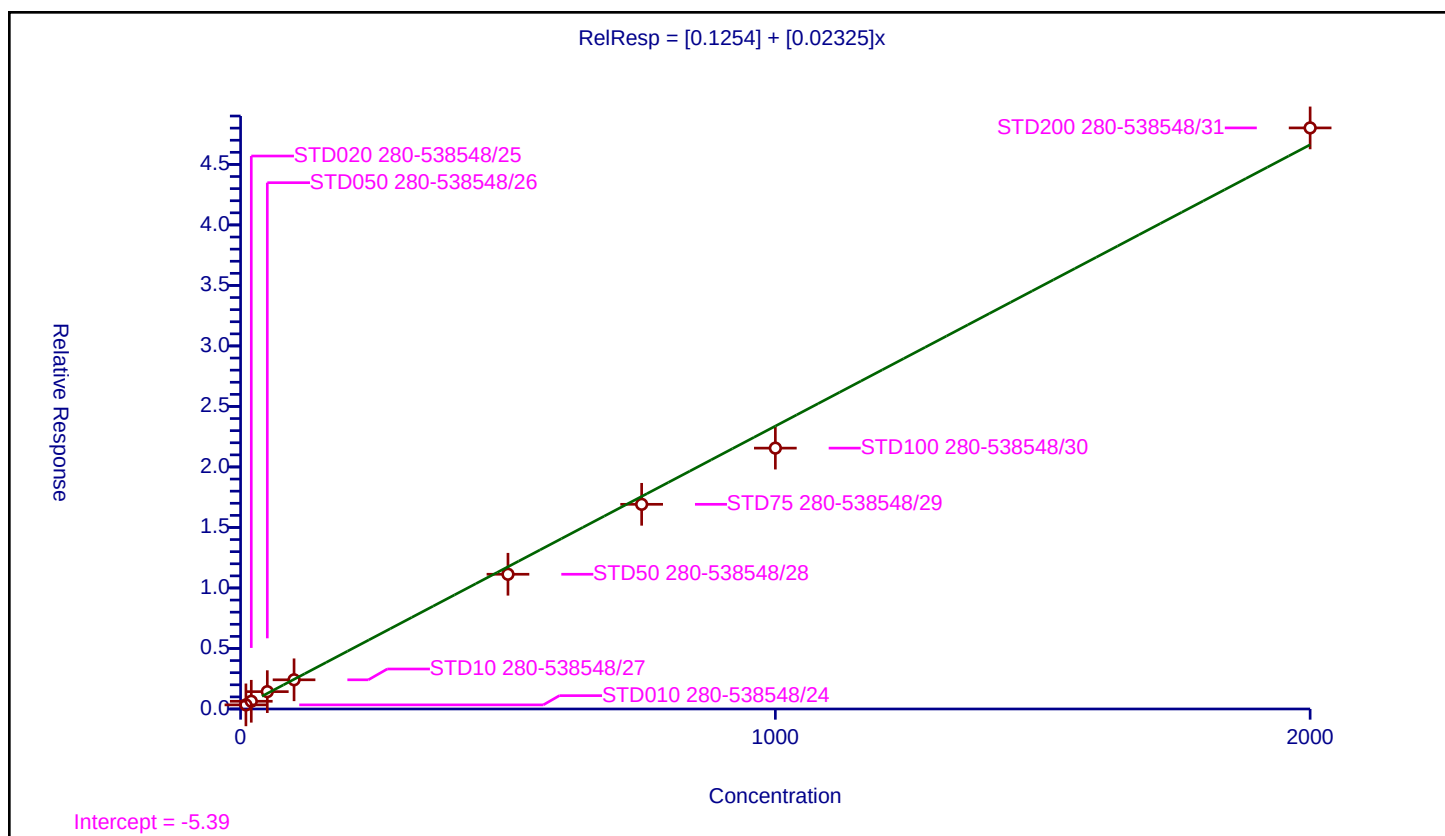
Curve Coefficients

Intercept: 0.1254
 Slope: 0.02325

Error Coefficients

Standard Error: 361000
 Relative Standard Error: 8.5
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.34107	50.0	763333.0	0.034107	Y
2	STD020 280-538548/25	20.0	0.638078	50.0	732042.0	0.031904	Y
3	STD050 280-538548/26	50.0	1.433558	50.0	735722.0	0.028671	Y
4	STD10 280-538548/27	100.0	2.411985	50.0	728798.0	0.02412	Y
5	STD50 280-538548/28	500.0	11.132911	50.0	769875.0	0.022266	Y
6	STD75 280-538548/29	750.0	16.913182	50.0	777438.0	0.022551	Y
7	STD100 280-538548/30	1000.0	21.557357	50.0	780425.0	0.021557	Y
8	STD200 280-538548/31	2000.0	48.016583	50.0	786244.0	0.024008	Y



Calibration

/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

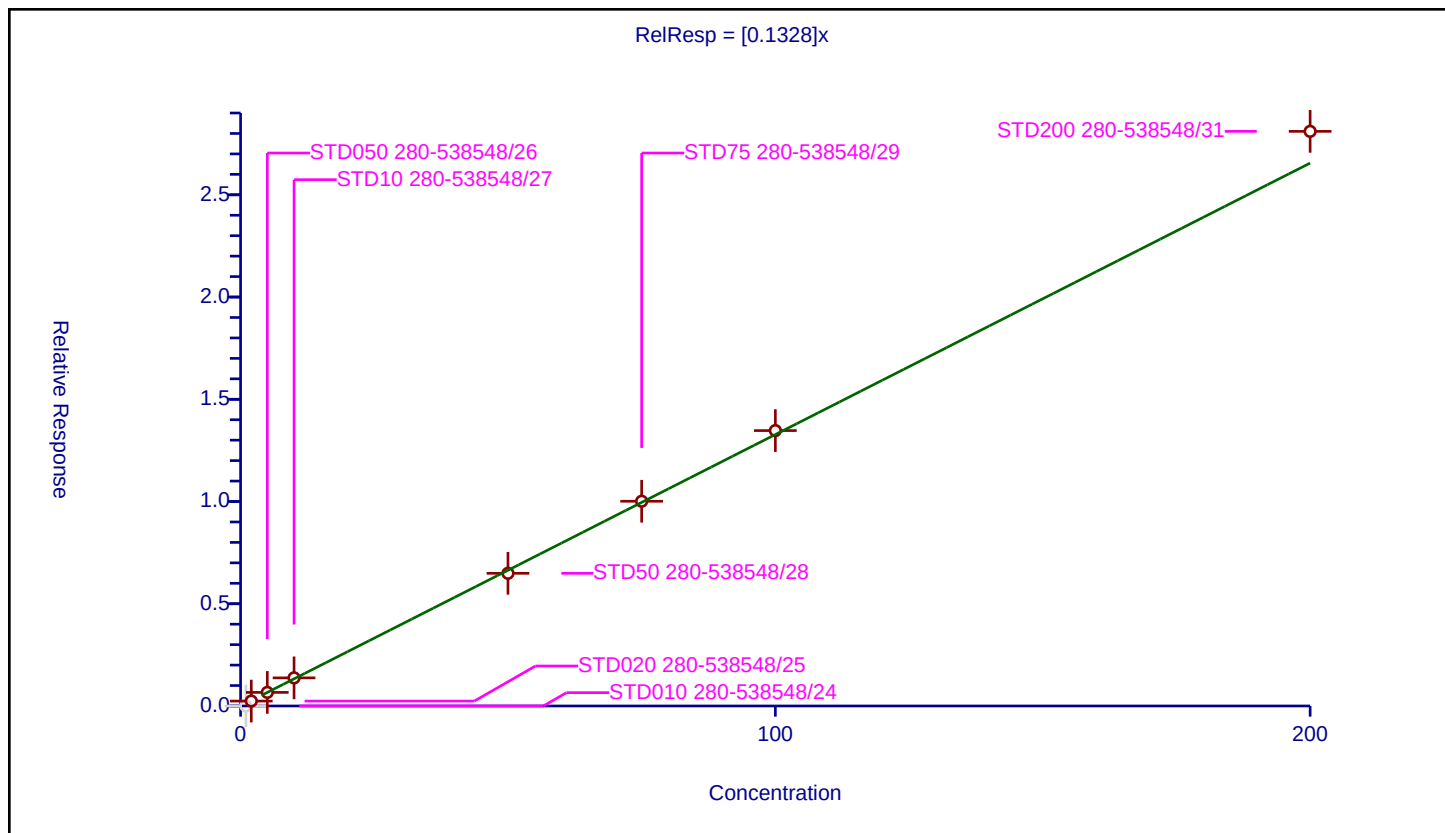
Curve Coefficients

Intercept: 0
 Slope: 0.1328

Error Coefficients

Standard Error: 214000
 Relative Standard Error: 4.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	2.0	0.240901	50.0	732042.0	0.120451	Y
3	STD050 280-538548/26	5.0	0.663906	50.0	735722.0	0.132781	Y
4	STD10 280-538548/27	10.0	1.37569	50.0	728798.0	0.137569	Y
5	STD50 280-538548/28	50.0	6.488975	50.0	769875.0	0.12978	Y
6	STD75 280-538548/29	75.0	10.01321	50.0	777438.0	0.133509	Y
7	STD100 280-538548/30	100.0	13.469135	50.0	780425.0	0.134691	Y
8	STD200 280-538548/31	200.0	28.102345	50.0	786244.0	0.140512	Y



Calibration

/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

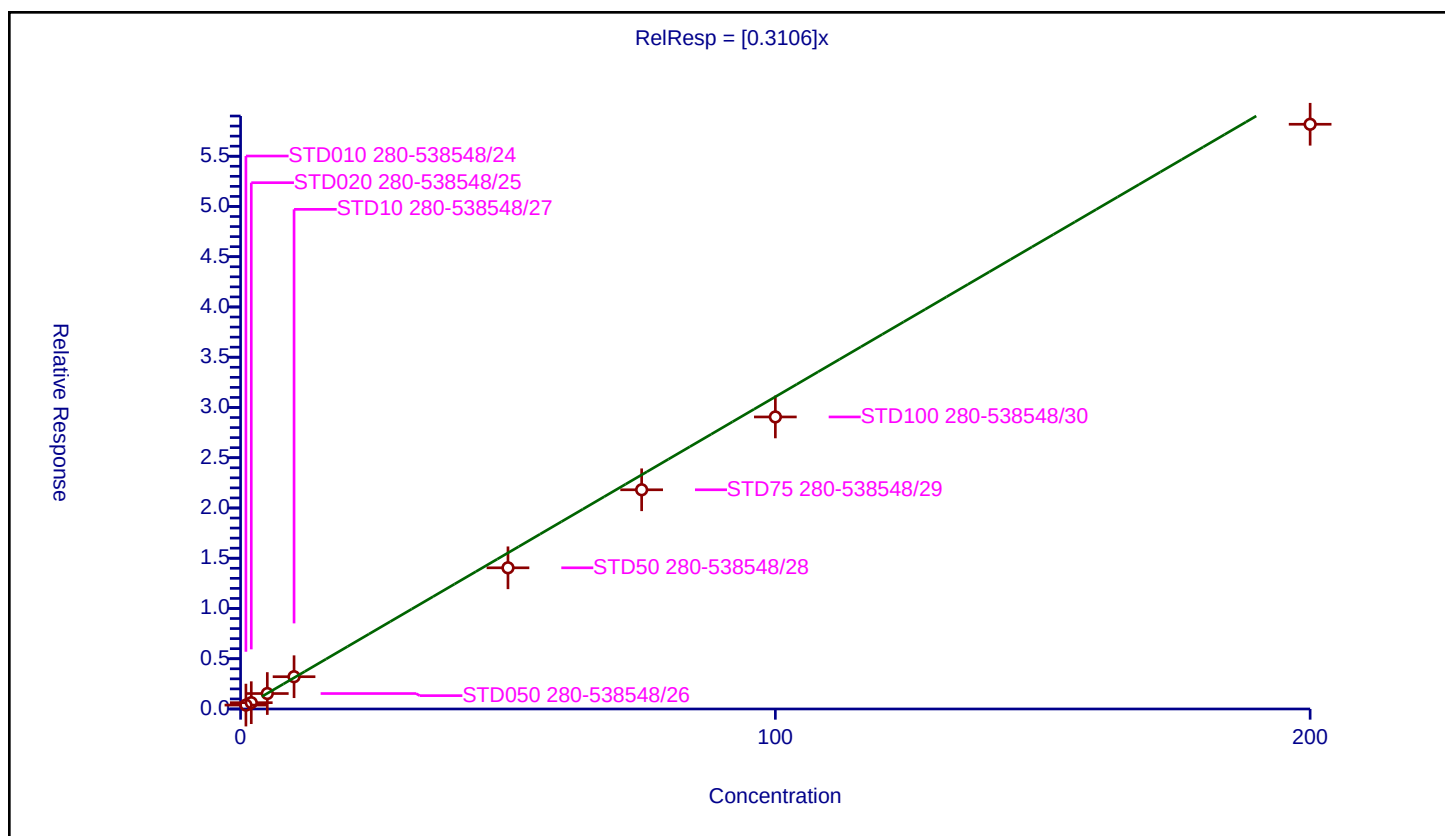
Curve Coefficients

Intercept: 0
 Slope: 0.3106

Error Coefficients

Standard Error: 415000
 Relative Standard Error: 11.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.389738	50.0	763333.0	0.389738	Y
2	STD020 280-538548/25	2.0	0.627355	50.0	732042.0	0.313677	Y
3	STD050 280-538548/26	5.0	1.536722	50.0	735722.0	0.307344	Y
4	STD10 280-538548/27	10.0	3.211178	50.0	728798.0	0.321118	Y
5	STD50 280-538548/28	50.0	14.04728	50.0	769875.0	0.280946	Y
6	STD75 280-538548/29	75.0	21.810807	50.0	777438.0	0.290811	Y
7	STD100 280-538548/30	100.0	29.058141	50.0	780425.0	0.290581	Y
8	STD200 280-538548/31	200.0	58.179268	50.0	786244.0	0.290896	Y



Calibration

/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

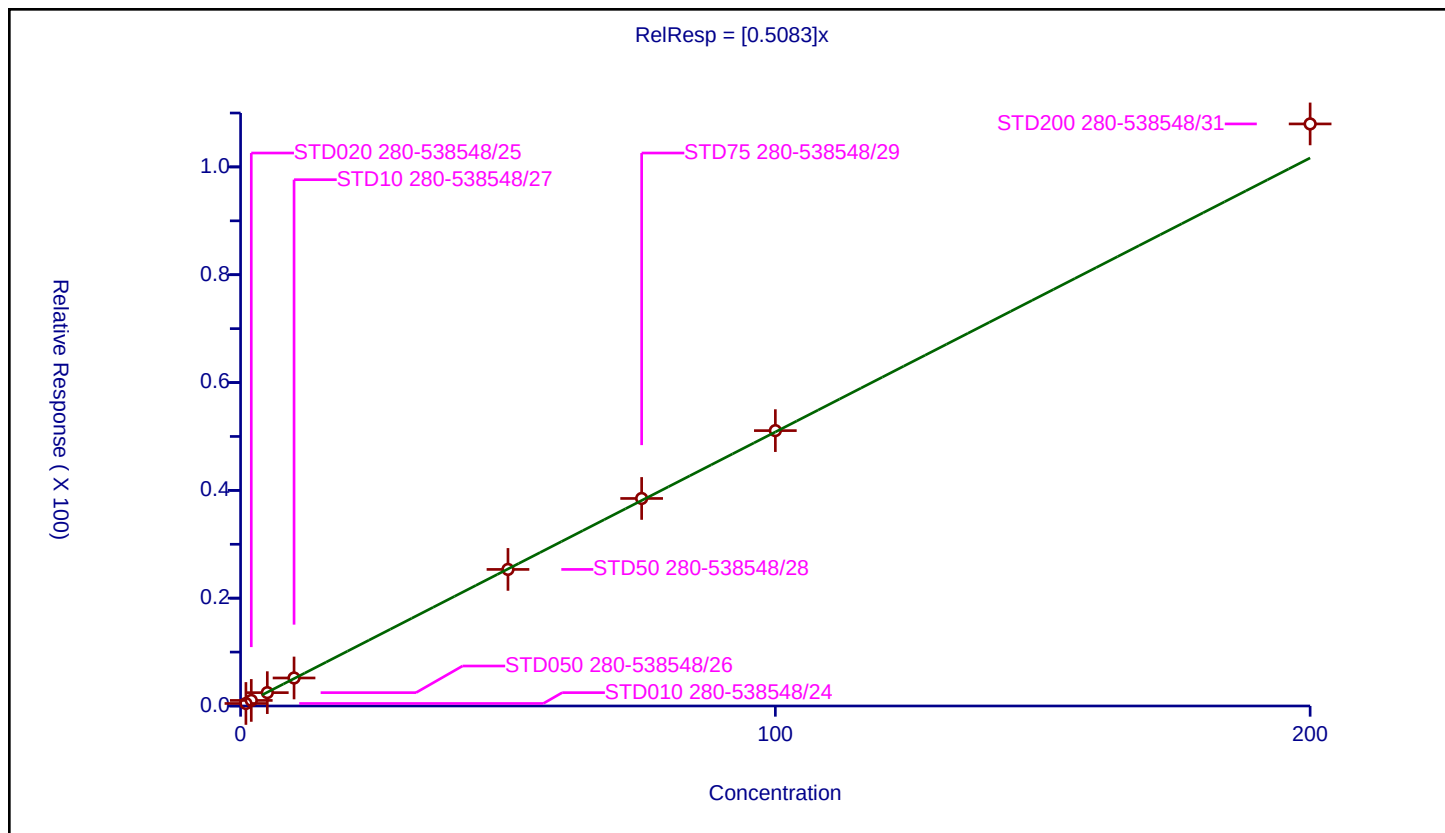
Curve Coefficients

Intercept: 0
 Slope: 0.5083

Error Coefficients

Standard Error: 759000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.466048	50.0	763333.0	0.466048	Y
2	STD020 280-538548/25	2.0	1.031498	50.0	732042.0	0.515749	Y
3	STD050 280-538548/26	5.0	2.473421	50.0	735722.0	0.494684	Y
4	STD10 280-538548/27	10.0	5.194649	50.0	728798.0	0.519465	Y
5	STD50 280-538548/28	50.0	25.333138	50.0	769875.0	0.506663	Y
6	STD75 280-538548/29	75.0	38.497153	50.0	777438.0	0.513295	Y
7	STD100 280-538548/30	100.0	51.082167	50.0	780425.0	0.510822	Y
8	STD200 280-538548/31	200.0	107.977613	50.0	786244.0	0.539888	Y



Calibration

/ Ethyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

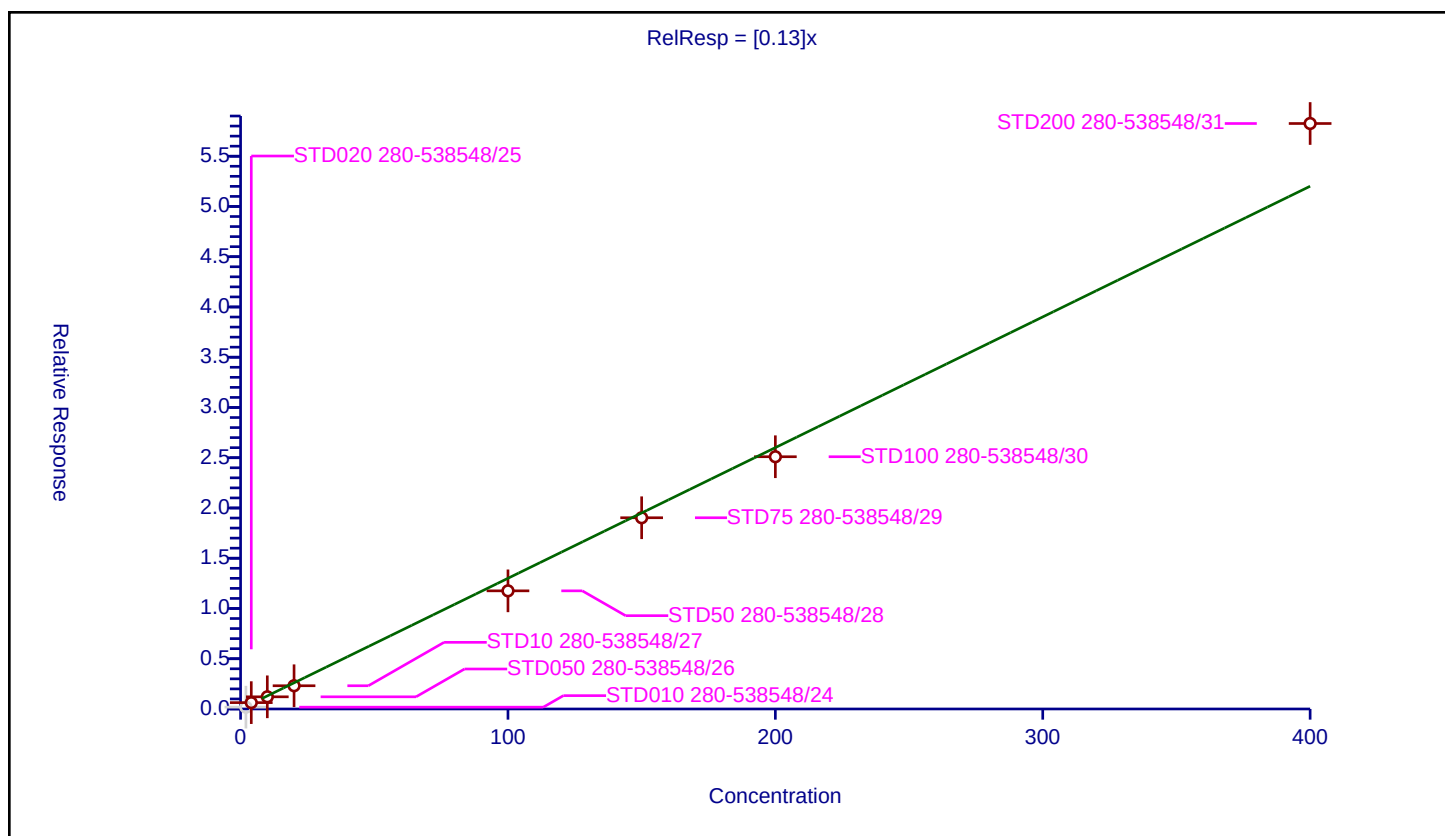
Curve Coefficients

Intercept: 0
 Slope: 0.13

Error Coefficients

Standard Error: 431000
 Relative Standard Error: 12.1
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.18262	50.0	763333.0	0.09131	N
2	STD020 280-538548/25	4.0	0.631521	50.0	732042.0	0.15788	Y
3	STD050 280-538548/26	10.0	1.211735	50.0	735722.0	0.121173	Y
4	STD10 280-538548/27	20.0	2.313055	50.0	728798.0	0.115653	Y
5	STD50 280-538548/28	100.0	11.756454	50.0	769875.0	0.117565	Y
6	STD75 280-538548/29	150.0	19.028784	50.0	777438.0	0.126859	Y
7	STD100 280-538548/30	200.0	25.098312	50.0	780425.0	0.125492	Y
8	STD200 280-538548/31	400.0	58.255643	50.0	786244.0	0.145639	Y



Calibration

/ Propionitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

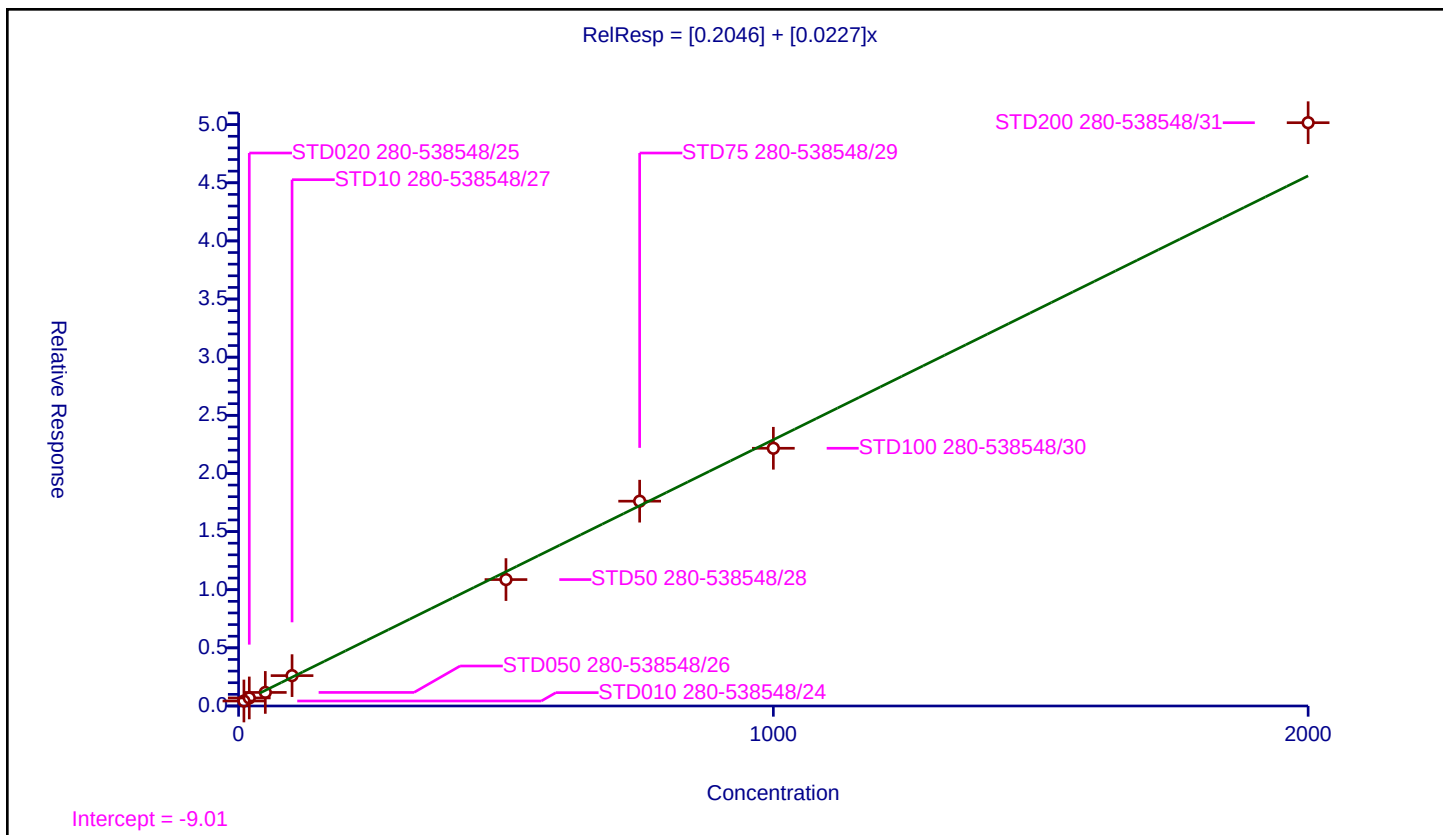
Curve Coefficients

Intercept: 0.2046
 Slope: 0.0227

Error Coefficients

Standard Error: 376000
 Relative Standard Error: 8.9
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.42917	50.0	763333.0	0.042917	Y
2	STD020 280-538548/25	20.0	0.690876	50.0	732042.0	0.034544	Y
3	STD050 280-538548/26	50.0	1.166269	50.0	735722.0	0.023325	Y
4	STD10 280-538548/27	100.0	2.611217	50.0	728798.0	0.026112	Y
5	STD50 280-538548/28	500.0	10.871635	50.0	769875.0	0.021743	Y
6	STD75 280-538548/29	750.0	17.614459	50.0	777438.0	0.023486	Y
7	STD100 280-538548/30	1000.0	22.166832	50.0	780425.0	0.022167	Y
8	STD200 280-538548/31	2000.0	50.168523	50.0	786244.0	0.025084	Y



Calibration

/ Methacrylonitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

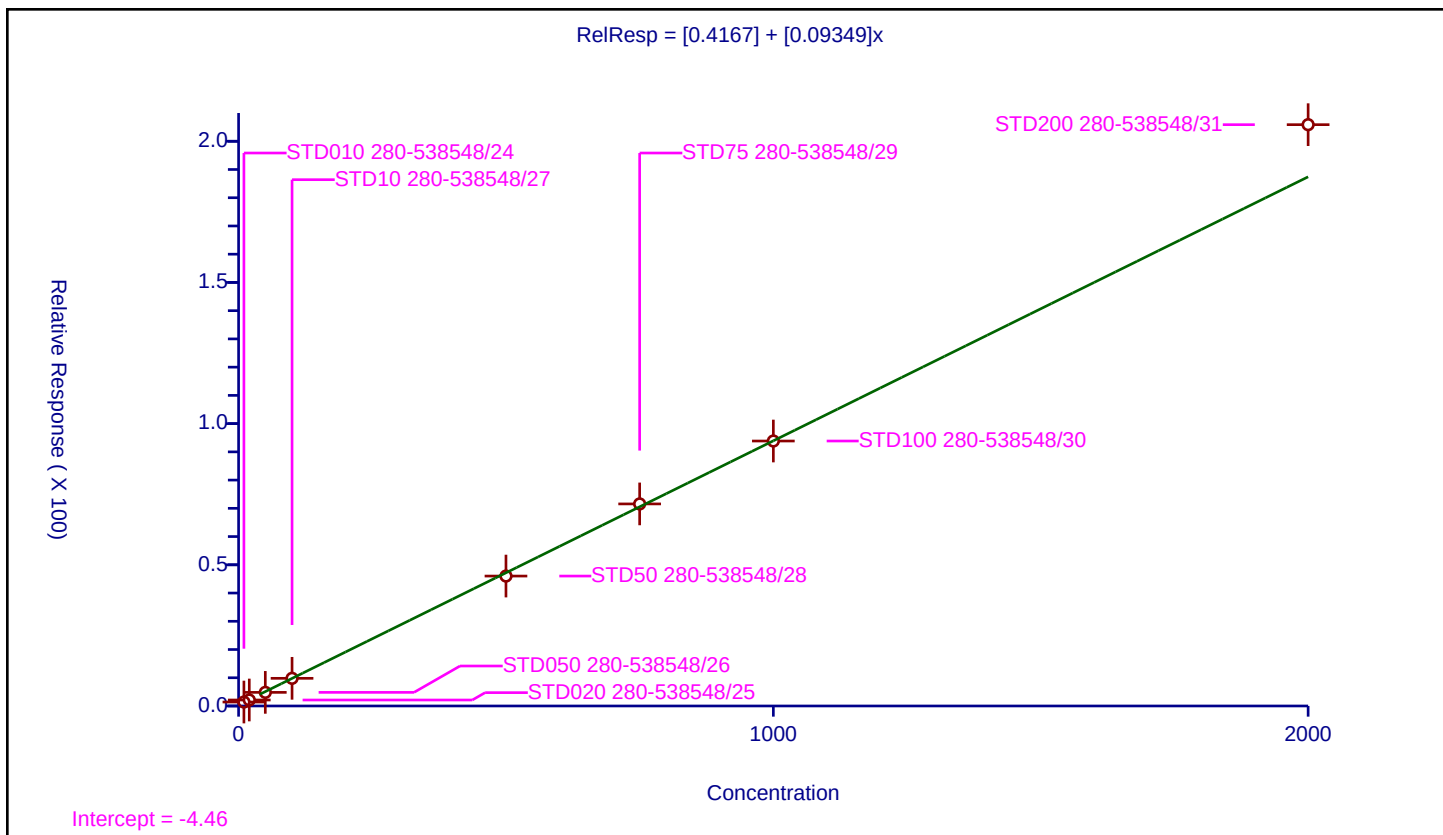
Curve Coefficients

Intercept: 0.4167
 Slope: 0.09349

Error Coefficients

Standard Error: 1550000
 Relative Standard Error: 6.4
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	1.403254	50.0	763333.0	0.140325	Y
2	STD020 280-538548/25	20.0	2.121668	50.0	732042.0	0.106083	Y
3	STD050 280-538548/26	50.0	4.819483	50.0	735722.0	0.09639	Y
4	STD10 280-538548/27	100.0	9.794003	50.0	728798.0	0.09794	Y
5	STD50 280-538548/28	500.0	46.016431	50.0	769875.0	0.092033	Y
6	STD75 280-538548/29	750.0	71.564999	50.0	777438.0	0.09542	Y
7	STD100 280-538548/30	1000.0	93.84124	50.0	780425.0	0.093841	Y
8	STD200 280-538548/31	2000.0	205.871968	50.0	786244.0	0.102936	Y



Calibration

/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

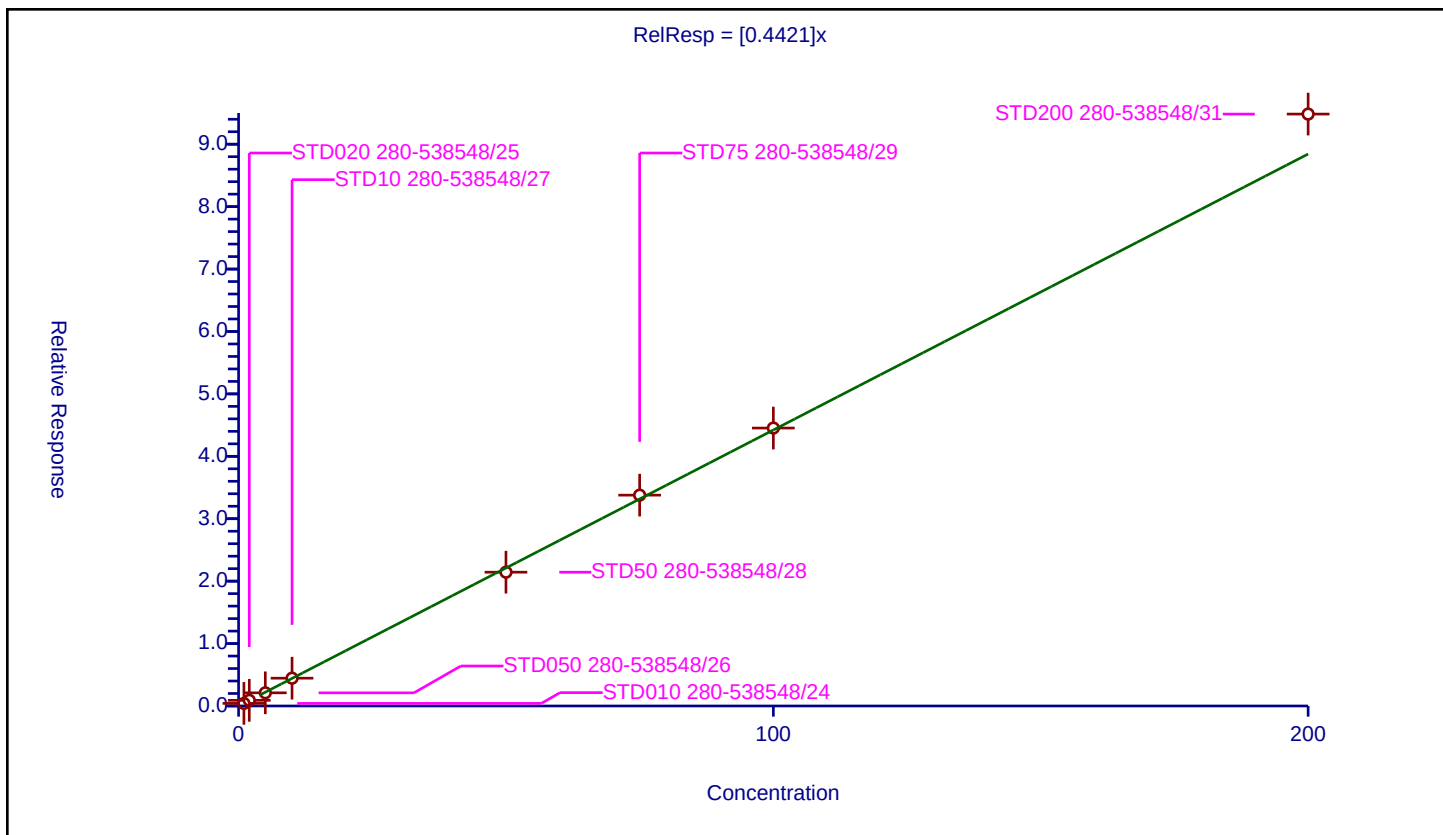
Curve Coefficients

Intercept: 0
 Slope: 0.4421

Error Coefficients

Standard Error: 665000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.418559	50.0	763333.0	0.418559	Y
2	STD020 280-538548/25	2.0	0.906915	50.0	732042.0	0.453458	Y
3	STD050 280-538548/26	5.0	2.10691	50.0	735722.0	0.421382	Y
4	STD10 280-538548/27	10.0	4.452468	50.0	728798.0	0.445247	Y
5	STD50 280-538548/28	50.0	21.437116	50.0	769875.0	0.428742	Y
6	STD75 280-538548/29	75.0	33.776455	50.0	777438.0	0.450353	Y
7	STD100 280-538548/30	100.0	44.52843	50.0	780425.0	0.445284	Y
8	STD200 280-538548/31	200.0	94.830294	50.0	786244.0	0.474151	Y



Calibration

/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

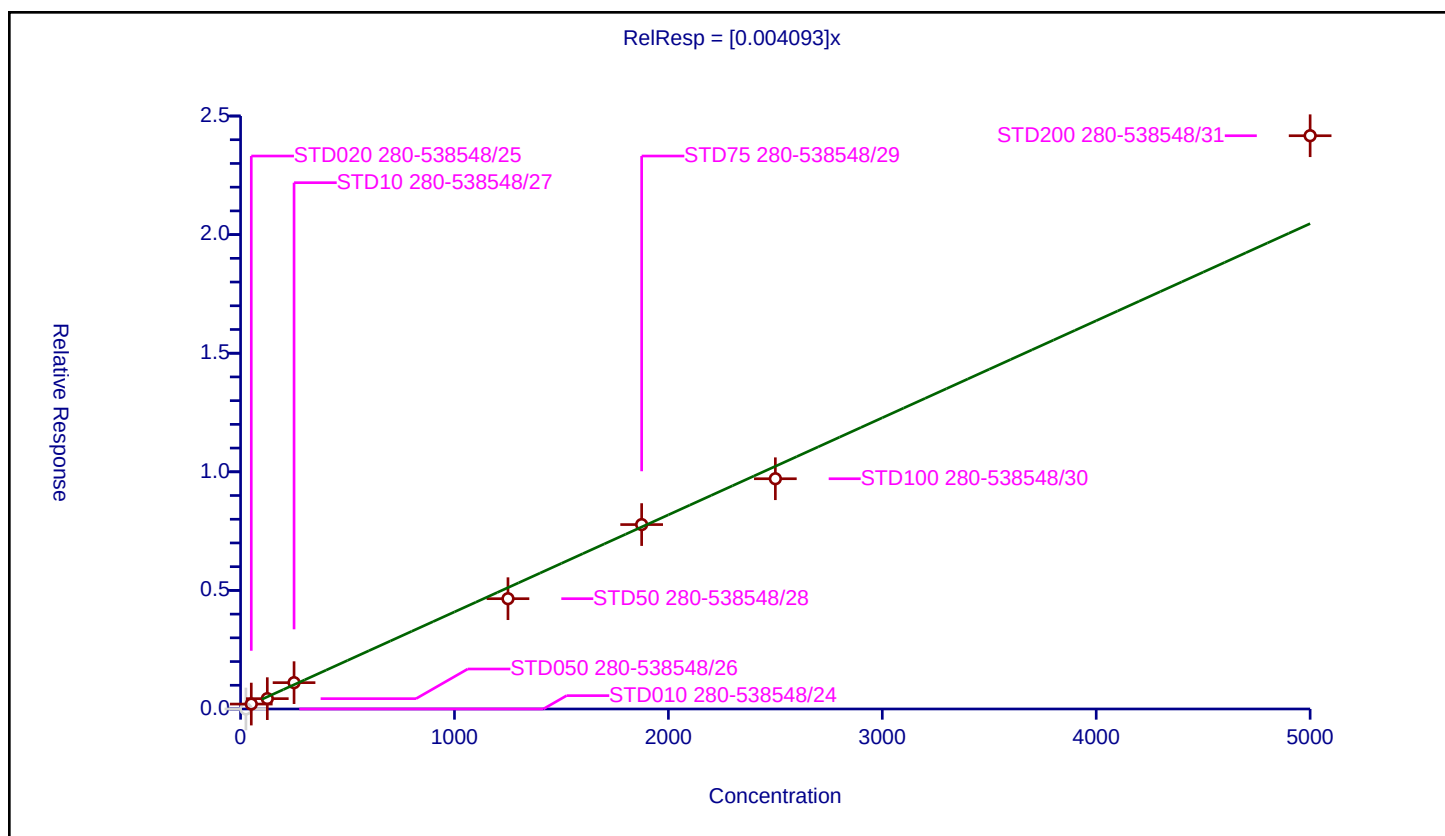
Curve Coefficients

Intercept: 0
 Slope: 0.004093

Error Coefficients

Standard Error: 177000
 Relative Standard Error: 11.0
 Correlation Coefficient: 0.988
 Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	25.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	50.0	0.206887	50.0	732042.0	0.004138	Y
3	STD050 280-538548/26	125.0	0.43583	50.0	735722.0	0.003487	Y
4	STD10 280-538548/27	250.0	1.10991	50.0	728798.0	0.00444	Y
5	STD50 280-538548/28	1250.0	4.65108	50.0	769875.0	0.003721	Y
6	STD75 280-538548/29	1875.0	7.774382	50.0	777438.0	0.004146	Y
7	STD100 280-538548/30	2500.0	9.707851	50.0	780425.0	0.003883	Y
8	STD200 280-538548/31	5000.0	24.169533	50.0	786244.0	0.004834	Y



Calibration

/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

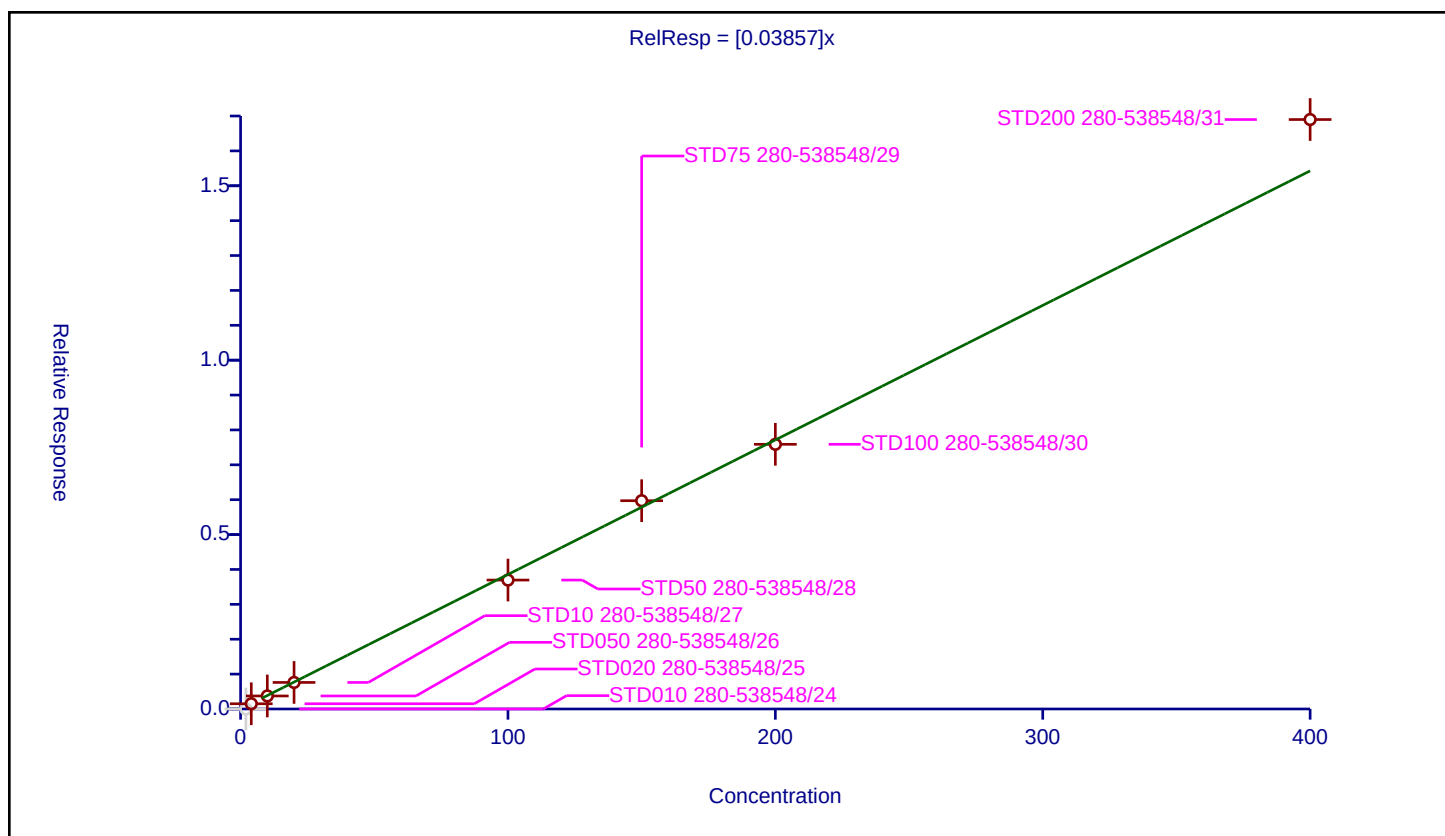
Curve Coefficients

Intercept: 0
 Slope: 0.03857

Error Coefficients

Standard Error: 127000
 Relative Standard Error: 4.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	4.0	0.150401	50.0	732042.0	0.0376	Y
3	STD050 280-538548/26	10.0	0.373579	50.0	735722.0	0.037358	Y
4	STD10 280-538548/27	20.0	0.761253	50.0	728798.0	0.038063	Y
5	STD50 280-538548/28	100.0	3.695795	50.0	769875.0	0.036958	Y
6	STD75 280-538548/29	150.0	5.971537	50.0	777438.0	0.03981	Y
7	STD100 280-538548/30	200.0	7.587853	50.0	780425.0	0.037939	Y
8	STD200 280-538548/31	400.0	16.898762	50.0	786244.0	0.042247	Y



Calibration

/ 2-Nitropropane

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

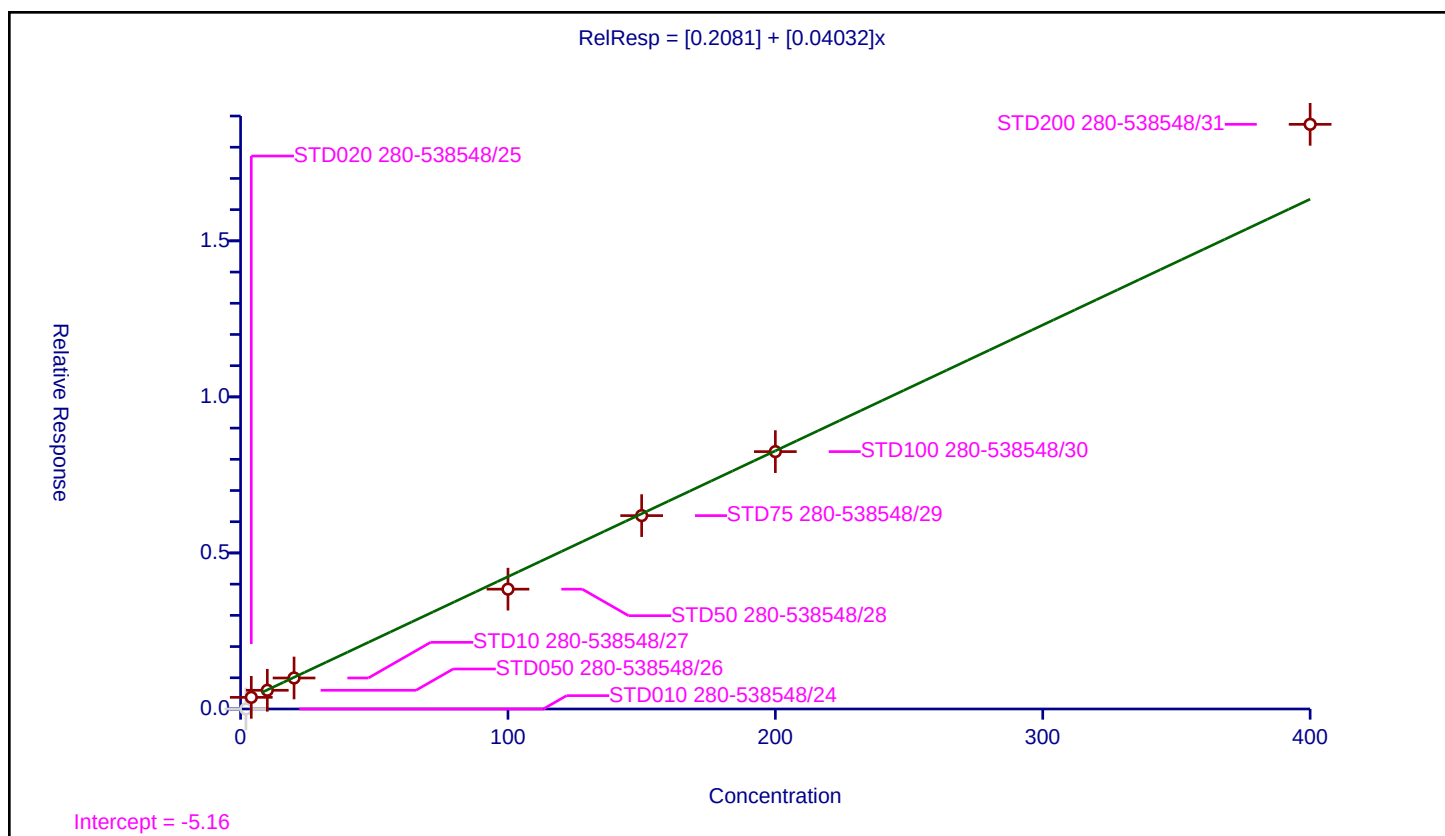
Curve Coefficients

Intercept: 0.2081
Slope: 0.04032

Error Coefficients

Standard Error: 153000
Relative Standard Error: 8.3
Correlation Coefficient: 0.993
Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	4.0	0.372588	50.0	732042.0	0.093147	Y
3	STD050 280-538548/26	10.0	0.599275	50.0	735722.0	0.059928	Y
4	STD10 280-538548/27	20.0	0.992936	50.0	728798.0	0.049647	Y
5	STD50 280-538548/28	100.0	3.839844	50.0	769875.0	0.038398	Y
6	STD75 280-538548/29	150.0	6.195992	50.0	777438.0	0.041307	Y
7	STD100 280-538548/30	200.0	8.24634	50.0	780425.0	0.041232	Y
8	STD200 280-538548/31	400.0	18.73337	50.0	786244.0	0.046833	Y



Calibration

/ Tetrahydrothiophene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

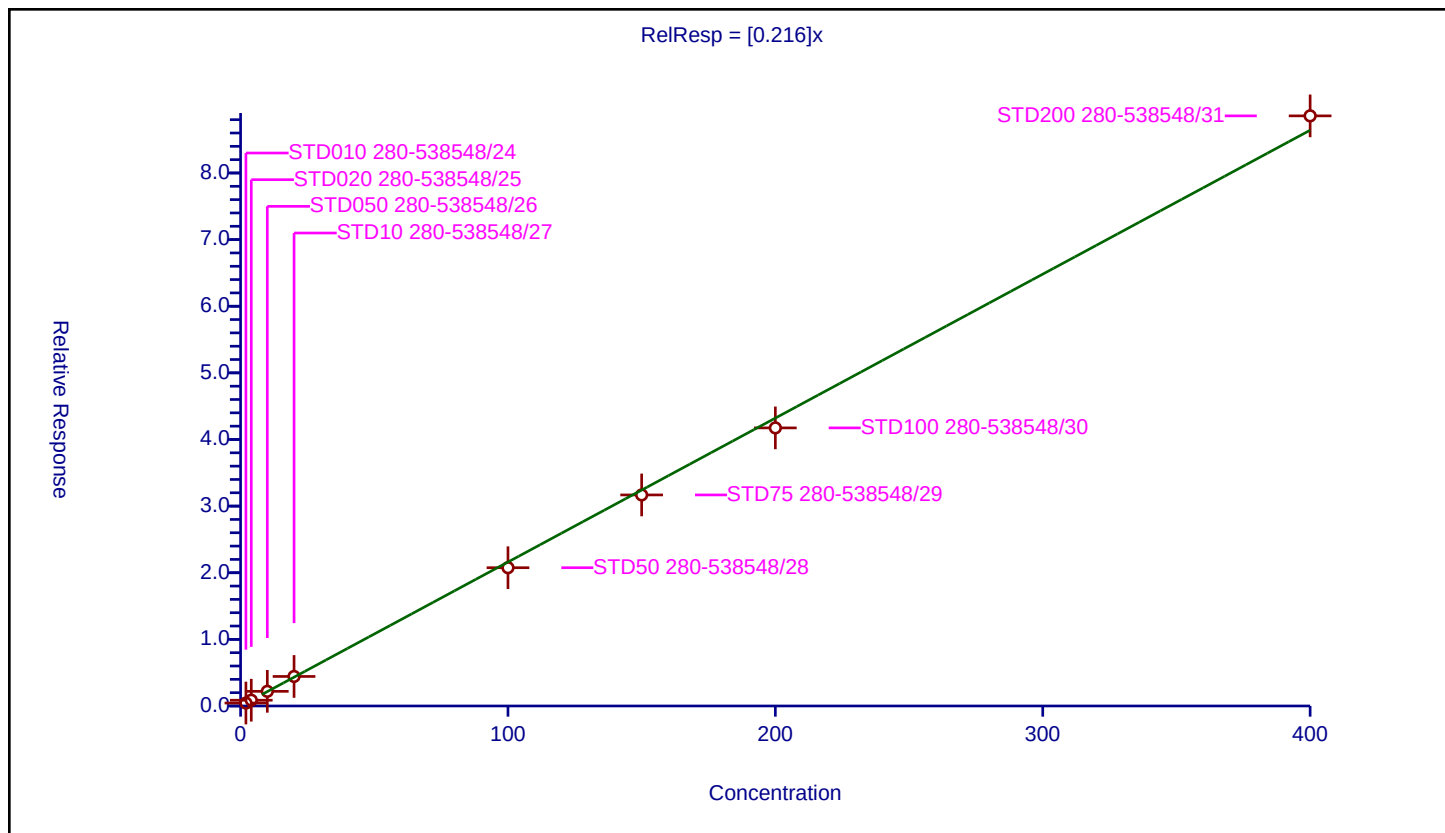
Curve Coefficients

Intercept: 0
 Slope: 0.216

Error Coefficients

Standard Error: 131000
 Relative Standard Error: 2.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.441929	50.0	162017.0	0.220964	Y
2	STD020 280-538548/25	4.0	0.868447	50.0	156659.0	0.217112	Y
3	STD050 280-538548/26	10.0	2.197542	50.0	160452.0	0.219754	Y
4	STD10 280-538548/27	20.0	4.432683	50.0	155504.0	0.221634	Y
5	STD50 280-538548/28	100.0	20.755912	50.0	160270.0	0.207559	Y
6	STD75 280-538548/29	150.0	31.677187	50.0	162224.0	0.211181	Y
7	STD100 280-538548/30	200.0	41.738229	50.0	162096.0	0.208691	Y
8	STD200 280-538548/31	400.0	88.572891	50.0	167037.0	0.221432	Y



Calibration

/ cis-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

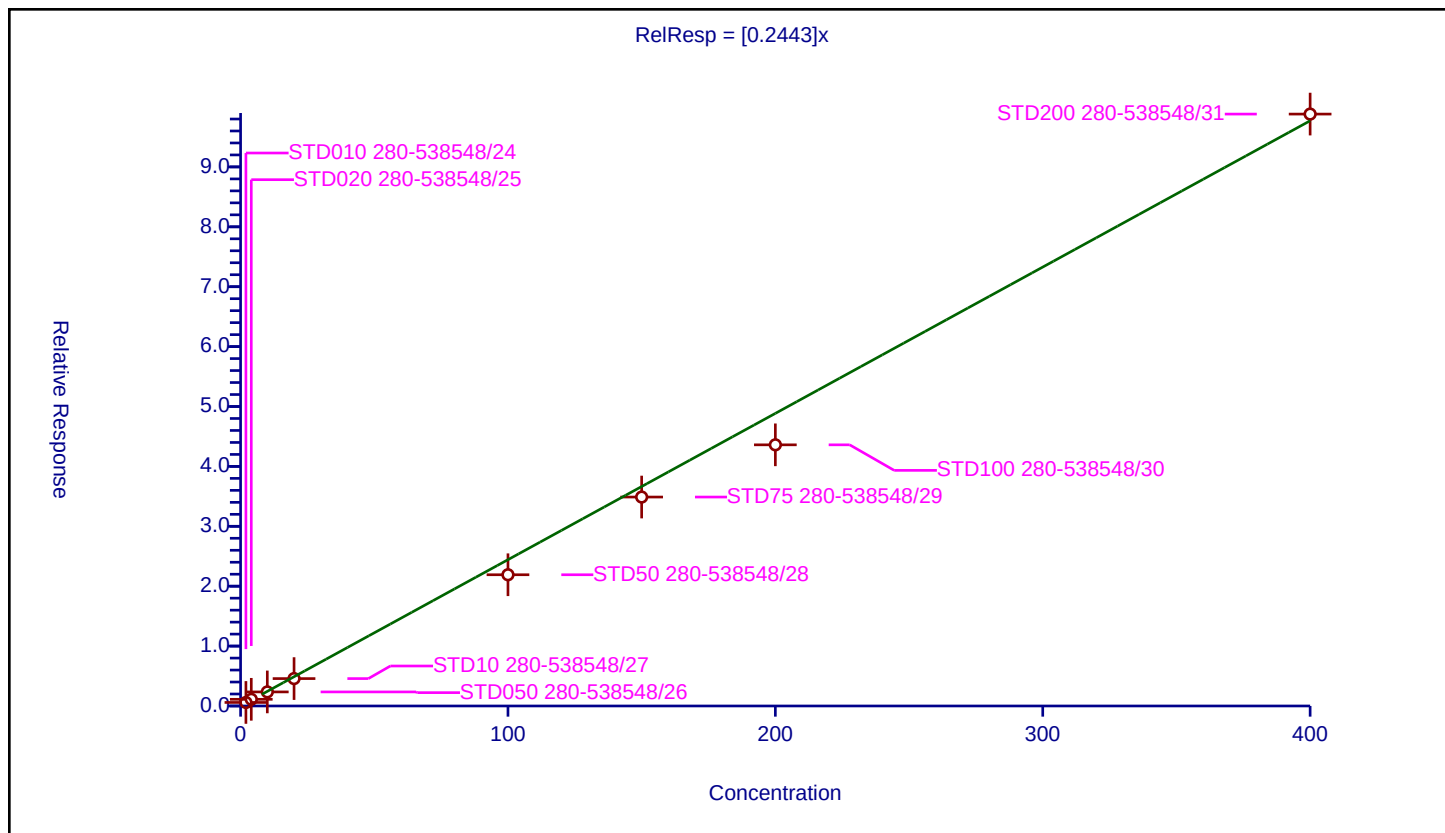
Curve Coefficients

Intercept: 0
 Slope: 0.2443

Error Coefficients

Standard Error: 227000
 Relative Standard Error: 11.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.591339	50.0	257720.0	0.29567	Y
2	STD020 280-538548/25	4.0	1.113334	50.0	254416.0	0.278334	Y
3	STD050 280-538548/26	10.0	2.34737	50.0	258566.0	0.234737	Y
4	STD10 280-538548/27	20.0	4.572809	50.0	247091.0	0.22864	Y
5	STD50 280-538548/28	100.0	21.911641	50.0	260891.0	0.219116	Y
6	STD75 280-538548/29	150.0	34.883035	50.0	250801.0	0.232554	Y
7	STD100 280-538548/30	200.0	43.600128	50.0	263349.0	0.218001	Y
8	STD200 280-538548/31	400.0	98.822154	50.0	260433.0	0.247055	Y



Calibration

/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

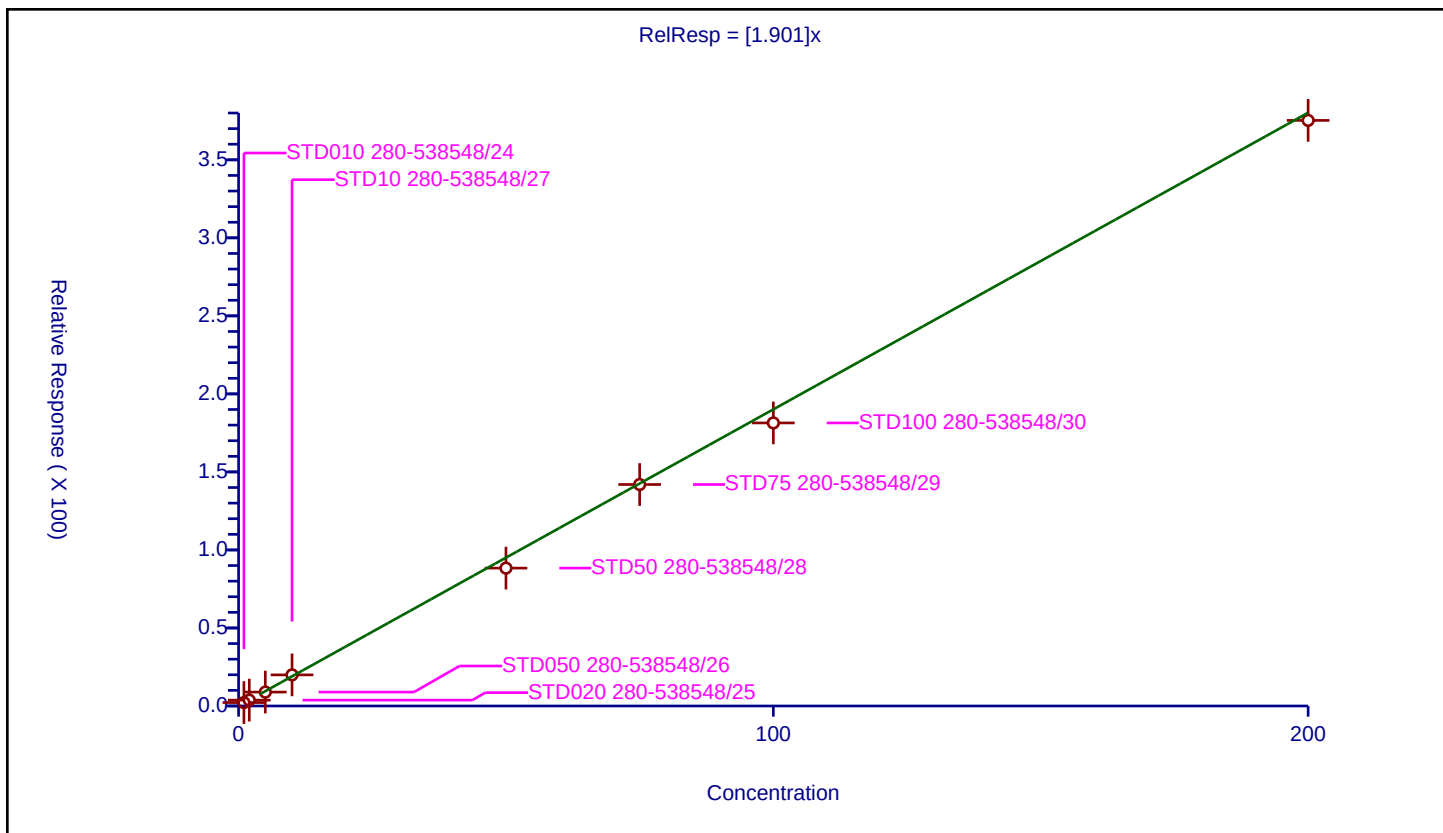
Curve Coefficients

Intercept: 0
 Slope: 1.901

Error Coefficients

Standard Error: 883000
 Relative Standard Error: 7.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	2.20433	50.0	257720.0	2.20433	Y
2	STD020 280-538548/25	2.0	3.757232	50.0	254416.0	1.878616	Y
3	STD050 280-538548/26	5.0	8.903529	50.0	258566.0	1.780706	Y
4	STD10 280-538548/27	10.0	19.941843	50.0	247091.0	1.994184	Y
5	STD50 280-538548/28	50.0	88.352415	50.0	260891.0	1.767048	Y
6	STD75 280-538548/29	75.0	141.924673	50.0	250801.0	1.892329	Y
7	STD100 280-538548/30	100.0	181.399018	50.0	263349.0	1.81399	Y
8	STD200 280-538548/31	200.0	375.262352	50.0	260433.0	1.876312	Y



Calibration

/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

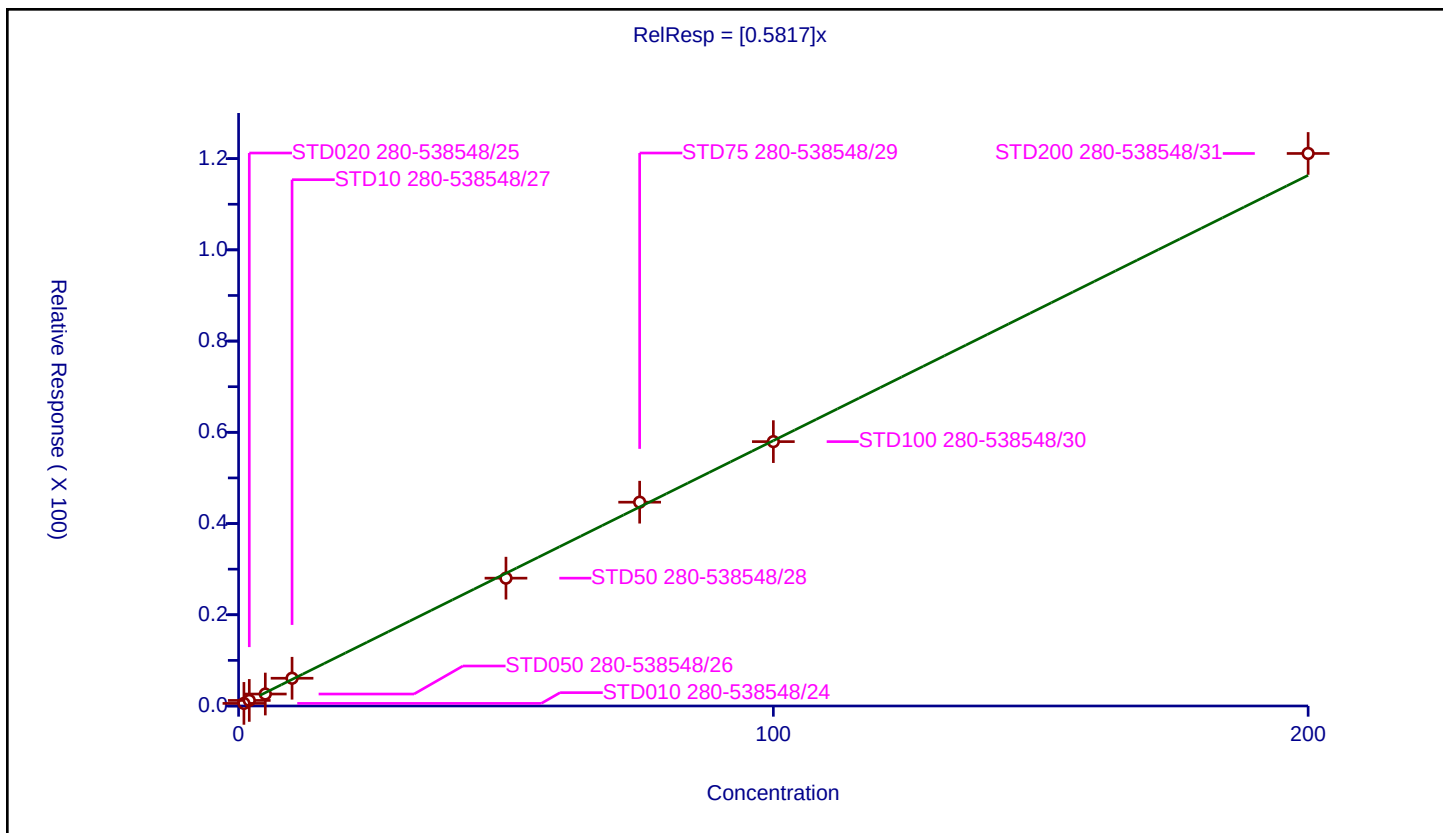
Curve Coefficients

Intercept: 0
 Slope: 0.5817

Error Coefficients

Standard Error: 284000
 Relative Standard Error: 5.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.56864	50.0	257720.0	0.56864	Y
2	STD020 280-538548/25	2.0	1.221228	50.0	254416.0	0.610614	Y
3	STD050 280-538548/26	5.0	2.624088	50.0	258566.0	0.524818	Y
4	STD10 280-538548/27	10.0	6.082779	50.0	247091.0	0.608278	Y
5	STD50 280-538548/28	50.0	28.022239	50.0	260891.0	0.560445	Y
6	STD75 280-538548/29	75.0	44.680444	50.0	250801.0	0.595739	Y
7	STD100 280-538548/30	100.0	57.958071	50.0	263349.0	0.579581	Y
8	STD200 280-538548/31	200.0	121.132499	50.0	260433.0	0.605662	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-538548/14	MS1_2722.D
Level 2	STD010 280-538548/15	MS1_2723.D
Level 3	STD020 280-538548/16	MS1_2724.D
Level 4	STD10 280-538548/18	MS1_2726.D
Level 5	ICIS 280-538548/19	MS1_2727.D
Level 6	STD75 280-538548/20	MS1_2728.D
Level 7	STD100 280-538548/21	MS1_2729.D
Level 8	STD200 280-538548/22	MS1_2730.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	++++ 0.2436	0.1945 0.2218	0.1649 0.2163	0.2742	0.2291	Lin1	-0.01 9	0.225 1							0.9960		0.9900
Chloromethane	++++ 0.2228	0.2098 0.2059	0.2126 0.2096	0.2437	0.2158	Ave		0.217 2			0.1000	5.9		15.0			
Vinyl chloride	++++ 0.1878	0.1442 0.1759	0.1666 0.1755	0.1929	0.1842	Ave		0.175 3				9.3		30.0			
Bromomethane	++++ 0.1314	0.1357 0.1268	0.1421 0.1219	0.1506	0.1364	Ave		0.135 0				7.1		15.0			
Chloroethane	++++ 0.1401	0.1179 0.1310	0.1331 0.1311	0.1512	0.1415	Ave		0.135 1				7.7		15.0			
Dichlorofluoromethane	0.7971 0.3480	0.5100 0.3224	0.4172 0.3248	0.4047	0.3446	Lin2	0.219 0	0.333 7							0.9900		0.9900
Trichlorofluoromethane	0.2928 0.3120	0.2419 0.2911	0.2545 0.2871	0.3254	0.3006	Ave		0.288 2				9.7		15.0			
Ethyl ether	++++ 0.1405	++++ 0.1426	0.1318 0.1440	0.1422	0.1446	Ave		0.140 9				3.3		15.0			
Acrolein	0.0559 0.0268	0.0424 0.0262	0.0457 0.0272	0.0302	0.0276	Lin1	0.182 1	0.026 8							0.9990		0.9900
1,1-Dichloroethene	++++ 0.1368	0.1400 0.1365	0.1611 0.1440	0.1573	0.1350	Ave		0.144 4				7.3		30.0			
Freon 113	++++ 0.1006	0.0819 0.1004	0.0786 0.1052	0.1053	0.0963	Ave		0.095 5				11.4		15.0			
Acetone	0.2176 0.0624	0.1401 0.0570	0.0887 0.0585	0.0608	0.0554	Lin2	0.323 4	0.055 7							0.9930		0.9900
Iodomethane	++++ 0.2179	0.1147 0.2237	0.1424 0.2284	0.2029	0.2193	Lin2	-0.11 6	0.220 0							0.9970		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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	++++ 0.4802	0.4831 0.4803	0.4400 0.4976	0.5410	0.4771	Ave		0.485 6				6.2		15.0			
Methyl acetate	++++ 0.1401	0.1607 0.1355	0.1240 0.1421	0.1239	0.1304	Ave		0.136 7				9.4		15.0			
Allyl chloride	++++ 0.2766	0.3013 0.2766	0.3105 0.2661	0.3206	0.2837	Ave		0.290 8				7.0		15.0			
Methylene Chloride	0.4044 0.1737	0.2781 0.1730	0.2225 0.1786	0.2048	0.1765	Lin2	0.111 5	0.175 6							0.9970		0.9900
Tert-butyl alcohol (2-methyl-2-propanol)	++++ 0.0190	0.0141 0.0189	0.0156 0.0193	0.0177	0.0174	Ave		0.017 4				11.1		15.0			
Acrylonitrile	0.0767 0.0706	0.0644 0.0688	0.0662 0.0689	0.0695	0.0678	Ave		0.069 1				5.3		15.0			
Methyl tert-butyl ether	0.5135 0.5209	0.4851 0.5280	0.4636 0.5312	0.5105	0.5226	Ave		0.509 4				4.6		15.0			
trans-1,2-Dichloroethene	0.1969 0.1577	0.2094 0.1633	0.1740 0.1640	0.1790	0.1587	Ave		0.175 4				10.8		15.0			
Hexane	++++ 1.0405	0.5202 1.0278	0.9302 1.0384	1.0966	0.9867	Lin2	-0.48 1	1.061 9							0.9950		0.9900
Vinyl acetate	++++ 0.4027	0.3213 0.4101	0.3737 0.4005	0.4168	0.4211	Ave		0.392 3				8.9		15.0			
1,1-Dichloroethane	++++ 0.3326	0.3157 0.3428	0.3473 0.3411	0.3575	0.3356	Ave		0.338 9			0.1000	3.9		15.0			
2-Butanone (MEK)	++++ 0.0862	0.1397 0.0835	0.1020 0.0867	0.0941	0.0818	Lin2	0.208 4	0.084 0							0.9960		0.9900
2,2-Dichloropropane	0.3378 0.2796	0.3037 0.2792	0.3080 0.2878	0.3213	0.2811	Ave		0.299 8				7.3		15.0			
cis-1,2-Dichloroethene	++++ 0.1811	0.2206 0.1823	0.1936 0.1868	0.1979	0.1831	Ave		0.192 2				7.3		15.0			
sec-Butyl Alcohol	++++ 0.0148	0.0089 0.0145	0.0118 0.0151	0.0132	0.0135	Lin2	-0.13 2	0.014 4							0.9980		0.9900
Chlorobromomethane	++++ 0.0829	0.0401 0.0853	0.0783 0.0859	0.0892	0.0854	Lin2	-0.04 2	0.088 0							0.9940		0.9900
Tetrahydrofuran	++++ 0.0589	0.2277 0.0537	0.1205 0.0550	0.0684	0.0528	Lin1	0.317 9	0.053 6							0.9980		0.9900
Chloroform	++++ 0.3255	0.4012 0.3259	0.3720 0.3387	0.3646	0.3334	Ave		0.351 6				8.1		30.0			

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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	++++ 0.2831	0.3833 0.2865	0.3120 0.3001	0.3146	0.2860	Ave		0.309 4				11.3		15.0			
Cyclohexane	++++ 0.3064	0.5249 0.3037	0.3573 0.3131	0.3499	0.2921	Lin1	0.185 4	0.306 0							0.9990		0.9900
1,1-Dichloropropene	++++ 0.2578	0.2247 0.2573	0.2247 0.2637	0.2703	0.2499	Ave		0.249 8				7.3		15.0			
Carbon tetrachloride	++++ 0.2303	0.2063 0.2388	0.1889 0.2469	0.2513	0.2310	Ave		0.227 6				9.9		15.0			
Isobutyl alcohol	++++ 0.0062	++++ 0.0062	0.0075 0.0063	0.0057	0.0056	Ave		0.006 2				10.9		15.0			
Benzene	0.7423 0.6831	0.6272 0.6978	0.6584 0.7128	0.7213	0.6925	Ave		0.691 9				5.3		15.0			
1,2-Dichloroethane	++++ 0.2806	0.2821 0.2923	0.2908 0.2986	0.3050	0.2927	Ave		0.291 7				2.9		15.0			
n-Heptane	0.3796 0.2013	0.2379 0.1978	0.2607 0.2064	0.2288	0.1963	Lin1	0.080 3	0.202 0							0.9990		0.9900
Trichloroethene	++++ 0.8633	1.1825 0.8775	0.9458 0.8778	0.8716	0.8710	Ave		0.927 1				12.5		15.0			
2-Pentanone	++++ 0.1400	0.1418 0.1381	0.1207 0.1413	0.1264	0.1319	Ave		0.134 3				6.1		15.0			
Methylcyclohexane	0.5210 0.2403	0.3056 0.2387	0.2685 0.2443	0.2525	0.2308	Lin1	0.105 4	0.239 6							0.9990		0.9900
1,2-Dichloropropane	++++ 0.1893	0.1543 0.1956	0.1875 0.1952	0.2042	0.1904	Ave		0.188 1				8.5		30.0			
1,4-Dioxane	++++ 0.0022	++++ 0.0022	0.0010 0.0022	0.0020	0.0020	Lin2	-0.04 8	0.002 2							0.9990		0.9900
Dibromomethane	++++ 0.1211	0.1002 0.1219	0.1104 0.1254	0.1270	0.1195	Ave		0.117 9				8.0		15.0			
Dichlorobromomethane	++++ 0.2432	0.3078 0.2500	0.2502 0.2525	0.2574	0.2451	Ave		0.258 0				8.7		15.0			
2-Chloroethyl vinyl ether	++++ 0.1258	0.1055 0.1159	0.0929 0.1190	0.1196	0.1268	Ave		0.115 1				10.5		15.0			
cis-1,3-Dichloropropene	++++ 1.4294	1.1338 1.4391	1.1952 1.4229	1.4098	1.4294	Ave		1.351 4				9.6		15.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.1646	0.1540 0.1610	0.1349 0.1656	0.1512	0.1591	Ave		0.155 8				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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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								
Toluene	++++ 0.6651	0.7321 0.6811	0.6513 0.7075	0.7160	0.6783	Ave		0.690 2				4.2		30.0			
trans-1,3-Dichloropropene	++++ 0.2854	0.2145 0.2886	0.2642 0.2972	0.2877	0.2938	Ave		0.275 9				10.5		15.0			
Ethyl methacrylate	++++ 1.0446	++++ 1.0197	0.8667 1.0116	1.0453	0.9877	Ave		0.995 9				6.7		15.0			
1,1,2-Trichloroethane	0.1988 0.1420	0.1942 0.1413	0.1580 0.1444	0.1514	0.1391	Lin2	0.031 7	0.144 2							0.9960		0.9900
Tetrachloroethene	++++ 0.5410	0.5007 0.5424	0.3991 0.5587	0.5525	0.5287	Ave		0.517 6				10.7		15.0			
1,3-Dichloropropane	++++ 1.3206	1.1641 1.2931	1.2174 1.2913	1.2824	1.3019	Ave		1.267 2				4.4		15.0			
2-Hexanone	0.2599 0.5515	0.4991 0.5329	0.4296 0.5204	0.5092	0.5120	Lin2	-0.47 8	0.531 3							0.9930		0.9900
Chlorodibromomethane	++++ 0.7682	0.6349 0.7873	0.7060 0.7981	0.7824	0.7540	Ave		0.747 3				7.8		15.0			
1,2-Dibromoethane	++++ 0.7419	0.6840 0.7322	0.7166 0.7336	0.7053	0.7218	Ave		0.719 3				2.7		15.0			
1-Chlorohexane	2.9701 1.0434	1.9332 1.0432	1.5024 1.0653	1.1655	1.0358	Lin2	0.762 7	1.035 1							0.9990		0.9900
Chlorobenzene	++++ 2.0330	2.0463 2.0529	1.9449 2.0757	2.0898	2.0478	Ave		2.041 5			0.3000	2.3		15.0			
1,1,1,2-Tetrachloroethane	++++ 0.7464	0.5820 0.7706	0.6744 0.7648	0.7623	0.7460	Ave		0.720 9				9.6		15.0			
Ethylbenzene	1.0731 1.0870	1.0190 1.1148	1.0116 1.1219	1.1533	1.0952	Ave		1.084 5				4.5		30.0			
m-Xylene & p-Xylene	1.3947 1.3489	1.2555 1.3733	1.4376 1.3725	1.4099	1.3426	Ave		1.366 9				4.0		15.0			
o-Xylene	1.1713 1.2971	1.1532 1.3230	1.3254 1.3237	1.2963	1.3233	Ave		1.276 6				5.6		15.0			
Styrene	2.4813 2.3230	2.1372 2.3499	2.2510 2.3567	2.4299	2.3425	Ave		2.333 9				4.5		15.0			
Bromoform	++++ 0.4877	0.1807 0.5022	0.3514 0.5022	0.4690	0.4708	Lin2	-0.31 1	0.496 6			0.1000				0.9990		0.9900
Isopropylbenzene	2.0599 2.2199	2.0181 2.2253	2.1407 2.3072	2.3519	2.1757	Ave		2.187 3				5.2		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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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								
Cyclohexanone	0.0580 0.0603	0.0648 0.0552	0.0582 ++++	0.0489	0.0466	Ave		0.056 0				11.4		15.0			
1,1,2,2-Tetrachloroethane	1.0853 0.6022	0.8819 0.5954	0.7225 0.6176	0.6241	0.5915	Lin2	0.249 2	0.601 4			0.3000				0.9990		0.9900
Bromobenzene	++++ 0.5075	0.4094 0.5118	0.4912 0.5366	0.5106	0.5082	Ave		0.496 5				8.2		15.0			
trans-1,4-Dichloro-2-butene	++++ 0.2199	0.2014 0.2166	0.2230 0.2304	0.2168	0.2195	Ave		0.218 2				4.0		15.0			
1,2,3-Trichloropropane	++++ 0.1764	0.2372 0.1733	0.1668 0.1759	0.1646	0.1683	Lin2	0.055 1	0.167 4							0.9910		0.9900
N-Propylbenzene	++++ 0.5956	0.5664 0.6082	0.6127 0.6305	0.6462	0.5943	Ave		0.607 7				4.3		15.0			
2-Chlorotoluene	++++ 0.5113	0.4052 0.5162	0.4641 0.5401	0.5293	0.5125	Ave		0.497 0				9.4		15.0			
1,3,5-Trimethylbenzene	2.1348 1.9074	1.8675 1.9118	1.8917 1.9953	2.0238	1.8949	Ave		1.953 4				4.7		15.0			
4-Chlorotoluene	0.5769 0.5361	0.5782 0.5513	0.4710 0.5685	0.5529	0.5410	Ave		0.547 0				6.3		15.0			
tert-Butylbenzene	++++ 1.5602	1.6929 1.5534	1.5345 1.6394	1.6811	1.5426	Ave		1.600 6				4.3		15.0			
1,2,4-Trimethylbenzene	2.2037 1.9572	1.9606 1.9810	1.8725 2.0301	2.0882	1.9336	Ave		2.003 3				5.1		15.0			
sec-Butylbenzene	++++ 0.4444	0.2789 0.4487	0.4392 0.4670	0.4764	0.4470	Lin2	-0.15 9	0.466 3							0.9950		0.9900
1,3-Dichlorobenzene	0.9297 0.9737	0.8559 0.9926	0.9944 1.0254	1.0114	0.9757	Ave		0.969 8				5.6		15.0			
4-Isopropyltoluene	2.3019 1.9506	1.8089 1.9616	1.8340 2.0491	2.0508	1.9330	Ave		1.986 2				7.8		15.0			
1,4-Dichlorobenzene	1.1208 1.0019	0.9724 1.0194	0.9736 1.0460	1.0144	0.9974	Ave		1.018 2				4.7		15.0			
n-Butylbenzene	2.1181 1.8768	1.8137 1.8527	1.9093 1.9206	1.9966	1.8335	Ave		1.915 2				5.2		15.0			
1,2-Dichlorobenzene	0.7924 0.9363	0.8559 0.9418	0.9121 0.9712	0.9532	0.9350	Ave		0.912 2				6.5		15.0			
1,2-Dibromo-3-Chloropropane	++++ 0.1322	0.0468 0.1280	0.0802 0.1314	0.1281	0.1226	Lin2	-0.08 6	0.130 2							0.9980		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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	++++ 0.6134	0.5534 0.6088	0.5828 0.6421	0.5872	0.5923	Ave		0.597 2				4.7		15.0			
Hexachlorobutadiene	++++ 0.2038	0.0575 0.2029	0.1498 0.2119	0.2118	0.1975	Lin2	-0.14 6	0.210 9							0.9970		0.9900
Naphthalene	++++ 1.8591	1.5848 1.8328	1.6197 1.8693	1.8735	1.7739	Ave		1.773 3				6.9		15.0			
1,2,3-Trichlorobenzene	++++ 0.5586	0.5249 0.5559	0.4821 0.5821	0.5592	0.5532	Ave		0.545 1				5.9		15.0			
Dibromofluoromethane (Surr)	0.2708 0.2587	0.2714 0.2591	0.2712 0.2626	0.2678	0.2586	Ave		0.265 0				2.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3532 0.3519	0.3605 0.3514	0.3614 0.3566	0.3599	0.3456	Ave		0.355 1				1.5		15.0			
Toluene-d8 (Surr)	4.3466 4.3502	4.3544 4.3575	4.3428 4.2747	4.2746	4.3512	Ave		4.331 5				0.8		15.0			
4-Bromofluorobenzene (Surr)	1.0990 1.0883	1.0908 1.0557	1.1042 1.0889	1.0922	1.0615	Ave		1.085 1				1.6		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-538548/14	MS1_2722.D
Level 2	STD010 280-538548/15	MS1_2723.D
Level 3	STD020 280-538548/16	MS1_2724.D
Level 4	STD10 280-538548/18	MS1_2726.D
Level 5	ICIS 280-538548/19	MS1_2727.D
Level 6	STD75 280-538548/20	MS1_2728.D
Level 7	STD100 280-538548/21	MS1_2729.D
Level 8	STD200 280-538548/22	MS1_2730.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	+++++ 284607	2898 341786	4813 677738	40935	176418	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Chloromethane	FB	Ave	+++++ 260275	3126 317305	6207 656518	36390	166165	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Vinyl chloride	FB	Ave	+++++ 219368	2149 271019	4864 549679	28798	141801	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Bromomethane	FB	Ave	+++++ 153469	2022 195406	4150 381898	22486	105022	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Chloroethane	FB	Ave	+++++ 163644	1757 201788	3886 410848	22577	108932	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Dichlorofluoromethane	FB	Lin2	5909 406591	7600 496647	12181 1017407	60416	265332	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Trichlorofluoromethane	FB	Ave	2171 364532	3605 448550	7431 899290	48588	231476	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl ether	FB	Ave	+++++ 164162	+++++ 219725	3849 450987	21225	111308	+++++ 75.0	+++++ 100	2.00 200	10.0	50.0
Acrolein	FB	Lin1	4089 309474	6241 398118	13172 841506	44500	210093	4.94 741	9.88 988	19.8 1975	98.8	494
1,1-Dichloroethene	FB	Ave	+++++ 159868	2087 210315	4703 451141	23478	103963	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Freon 113	FB	Ave	+++++ 117548	1221 154610	2294 329503	15716	74141	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Acetone	FB	Lin2	6452 291619	8353 351099	10353 732628	36311	170768	2.00 300	4.00 400	8.00 800	40.0	200
Iodomethane	FB	Lin2	+++++ 254607	1710 344718	4158 715491	30290	168827	+++++ 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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
Carbon disulfide	FB	Ave	++++ 561075	7200 740012	12846 1558994	80765	367379	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Methyl acetate	FB	Ave	++++ 327410	4789 417578	7238 890400	36989	200777	++++ 150	2.00 200	4.00 400	20.0	100
Allyl chloride	FB	Ave	++++ 323120	4490 426172	9065 833624	47872	218412	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Methylene Chloride	FB	Lin2	2998 202992	4145 266563	6497 559662	30580	135869	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Tert-butyl alcohol (2-methyl-2-propanol)	FB	Ave	++++ 221885	2103 291368	4555 604617	26461	133797	++++ 750	10.0 1000	20.0 2000	100	500
Acrylonitrile	FB	Ave	5689 824753	9605 1060618	19333 2157748	103754	522237	5.00 750	10.0 1000	20.0 2000	100	500
Methyl tert-butyl ether	FB	Ave	3807 608637	7230 813446	13534 1664273	76215	402379	0.500 75.0	1.00 100	2.00 200	10.0	50.0
trans-1,2-Dichloroethene	FB	Ave	1460 184274	3121 251645	5079 513885	26723	122215	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Hexane	CBNZ d5	Lin2	++++ 252996	1632 331780	5710 702356	34832	159716	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Vinyl acetate	FB	Ave	++++ 941026	9578 1263615	21822 2509441	124457	648475	++++ 150	2.00 200	4.00 400	20.0	100
1,1-Dichloroethane	FB	Ave	++++ 388591	4705 528150	10140 1068575	53370	258402	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Butanone (MEK)	FB	Lin2	++++ 402800	8329 514764	11915 1085961	56212	252081	++++ 300	4.00 400	8.00 800	40.0	200
2,2-Dichloropropane	FB	Ave	2504 326634	4526 430208	8991 901541	47969	216419	0.500 75.0	1.00 100	2.00 200	10.0	50.0
cis-1,2-Dichloroethene	FB	Ave	++++ 211634	3288 280945	5653 585356	29549	140988	++++ 75.0	1.00 100	2.00 200	10.0	50.0
sec-Butyl Alcohol	FB	Lin2	++++ 414351	3183 535348	8253 1133775	47182	250296	++++ 1800	24.0 2400	48.0 4800	240	1200
Chlorobromomethane	FB	Lin2	++++ 96812	597 131412	2285 269171	13324	65722	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Tetrahydrofuran	FB	Lin1	++++ 137587	6788 165527	7039 344648	20411	81383	++++ 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.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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
Chloroform	FB	Ave	++++ 380346	5979 502179	10862 1061208	54433	256700	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1,1-Trichloroethane	FB	Ave	++++ 330741	5713 441385	9110 940114	46977	220241	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Cyclohexane	FB	Lin1	++++ 357975	7823 467867	10432 980879	52233	224931	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1-Dichloropropene	FB	Ave	++++ 301212	3349 396397	6559 826072	40352	192450	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Carbon tetrachloride	FB	Ave	++++ 269121	3074 367905	5514 773566	37517	177897	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Isobutyl alcohol	FB	Ave	++++ 181153	++++ 237028	5445 497289	21152	107180	++++ 1875	++++ 2500	50.0 5000	250	1250
Benzene	FB	Ave	5503 798115	9347 1075144	19222 2233092	107690	533232	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichloroethane	FB	Ave	++++ 327847	4204 450298	8489 935335	45534	225397	++++ 75.0	1.00 100	2.00 200	10.0	50.0
n-Heptane	FB	Lin1	2814 235218	3546 304713	7610 646535	34155	151151	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Trichloroethene	CBNZ d5	Ave	++++ 209925	3710 283268	5806 593715	27685	140987	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Pentanone	FB	Ave	++++ 523443	6764 681033	11280 1416166	60410	324899	++++ 240	3.20 320	6.40 640	32.0	160
Methylcyclohexane	FB	Lin1	3862 280807	4554 367688	7839 765192	37693	177721	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichloropropane	FB	Ave	++++ 221164	2299 301386	5473 611580	30490	146601	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,4-Dioxane	FB	Lin2	++++ 51778	++++ 66461	580 139700	5826	31314	++++ 1500	++++ 2000	40.0 4000	200	1000
Dibromomethane	FB	Ave	++++ 141533	1494 187746	3222 392807	18955	92021	++++ 75.0	1.00 100	2.00 200	10.0	50.0
Dichlorobromomethane	FB	Ave	++++ 284099	4588 385100	7304 790878	38423	188758	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Chloroethyl vinyl ether	FB	Ave	++++ 146946	1572 178538	2713 372671	17861	97660	++++ 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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-1,3-Dichloropropene	CBNZ d5	Ave	+++++	3557	7337	44781	231384	+++++	1.00	2.00	10.0	50.0
			347569	464577	962416			75.0	100	200		
4-Methyl-2-pentanone (MIBK)	FB	Ave	+++++	9180	15752	90316	490067	+++++	4.00	8.00	40.0	200
			769063	992438	2075132			300	400	800		
Toluene	FB	Ave	+++++	10911	19016	106895	522295	+++++	1.00	2.00	10.0	50.0
			777134	1049392	2216570			75.0	100	200		
trans-1,3-Dichloropropene	FB	Ave	+++++	3197	7715	42952	226226	+++++	1.00	2.00	10.0	50.0
			333444	444618	931126			75.0	100	200		
Ethyl methacrylate	CBNZ d5	Ave	+++++	+++++	5320	33204	159888	+++++	+++++	2.00	10.0	50.0
			254008	329168	684215			75.0	100	200		
1,1,2-Trichloroethane	FB	Lin2	1474	2894	4614	22601	107076	0.500	1.00	2.00	10.0	50.0
			165901	217713	452414			75.0	100	200		
Tetrachloroethene	CBNZ d5	Ave	+++++	1571	2450	17549	85583	+++++	1.00	2.00	10.0	50.0
			131552	175087	377868			75.0	100	200		
1,3-Dichloropropane	CBNZ d5	Ave	+++++	3652	7473	40733	210737	+++++	1.00	2.00	10.0	50.0
			321117	417430	873388			75.0	100	200		
2-Hexanone	CBNZ d5	Lin2	1610	6263	10548	64691	331503	2.00	4.00	8.00	40.0	200
			536450	688140	1407897			300	400	800		
Chlorodibromomethane	CBNZ d5	Ave	+++++	1992	4334	24851	122044	+++++	1.00	2.00	10.0	50.0
			186804	254169	539788			75.0	100	200		
1,2-Dibromoethane	CBNZ d5	Ave	+++++	2146	4399	22403	116835	+++++	1.00	2.00	10.0	50.0
			180401	236353	496186			75.0	100	200		
1-Chlorohexane	CBNZ d5	Lin2	3680	4852	7378	29616	134135	0.400	0.800	1.60	8.00	40.0
			202968	269413	576421			60.0	80.0	160		
Chlorobenzene	CBNZ d5	Ave	+++++	6420	11939	66381	331478	+++++	1.00	2.00	10.0	50.0
			494335	662703	1403932			75.0	100	200		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++	1826	4140	24212	120755	+++++	1.00	2.00	10.0	50.0
			181499	248769	517259			75.0	100	200		
Ethylbenzene	CBNZ d5	Ave	1662	3197	6210	36634	177275	0.500	1.00	2.00	10.0	50.0
			264323	359882	758836			75.0	100	200		
m-Xylene & p-Xylene	CBNZ d5	Ave	2160	3939	8825	44784	217333	0.500	1.00	2.00	10.0	50.0
			327998	443325	928312			75.0	100	200		
o-Xylene	CBNZ d5	Ave	1814	3618	8136	41175	214199	0.500	1.00	2.00	10.0	50.0
			315393	427099	895286			75.0	100	200		
Styrene	CBNZ d5	Ave	3843	6705	13818	77181	379177	0.500	1.00	2.00	10.0	50.0
			564847	758598	1593996			75.0	100	200		
Bromoform	CBNZ d5	Lin2	+++++	567	2157	14898	76209	+++++	1.00	2.00	10.0	50.0
			118591	162117	339679			75.0	100	200		
Isopropylbenzene	DCBd 4	Ave	5056	10101	20761	117182	560279	0.500	1.00	2.00	10.0	50.0
			858053	1146614	2397490			75.0	100	200		
Cyclohexanone	CBNZ d5	Ave	2696	6099	10716	46603	226441	15.0	30.0	60.0	300	1500
			440233	534760	+++++			2250	3000	+++++		
1,1,2,2-Tetrachloroethane	DCBd 4	Lin2	2664	4414	7007	31093	152322	0.500	1.00	2.00	10.0	50.0
			232780	306793	641786			75.0	100	200		
Bromobenzene	DCBd 4	Ave	+++++	2049	4764	25440	130861	+++++	1.00	2.00	10.0	50.0
			196163	263713	557639			75.0	100	200		
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++	1008	2163	10802	56519	+++++	1.00	2.00	10.0	50.0
			85012	111621	239439			75.0	100	200		
1,2,3-Trichloropropane	DCBd 4	Lin2	+++++	1187	1618	8203	43336	+++++	1.00	2.00	10.0	50.0
			68184	89319	182772			75.0	100	200		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

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
N-Propylbenzene	DCBd 4	Ave	++++ 230236	2835 313375	5942 655122	32197	153038	++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Chlorotoluene	DCBd 4	Ave	++++ 197622	2028 265995	4501 561245	26371	131982	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	5240 737280	9347 985068	18346 2073344	100834	487963	0.500 75.0	1.00 100	2.00 200	10.0	50.0
4-Chlorotoluene	DCBd 4	Ave	1416 207234	2894 284037	4568 590717	27546	139315	0.500 75.0	1.00 100	2.00 200	10.0	50.0
tert-Butylbenzene	DCBd 4	Ave	++++ 603080	8473 800394	14882 1703470	83762	397245	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	5409 756516	9813 1020729	18160 2109459	104041	497917	0.500 75.0	1.00 100	2.00 200	10.0	50.0
sec-Butylbenzene	DCBd 4	Lin2	++++ 171771	1396 231170	4259 485251	23738	115108	++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,3-Dichlorobenzene	DCBd 4	Ave	2282 376351	4284 511419	9644 1065476	50391	251268	0.500 75.0	1.00 100	2.00 200	10.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	5650 753987	9054 1010734	17787 2129213	102178	497776	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,4-Dichlorobenzene	DCBd 4	Ave	2751 387260	4867 525253	9442 1086868	50543	256844	0.500 75.0	1.00 100	2.00 200	10.0	50.0
n-Butylbenzene	DCBd 4	Ave	5199 725430	9078 954625	18517 1995762	99478	472146	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	1945 361918	4284 485254	8846 1009176	47494	240782	0.500 75.0	1.00 100	2.00 200	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 538548

SDG No.: _____

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25 (mm)) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin2	+++++	234	778	6381	31563	+++++	1.00	2.00	10.0	50.0
			51111	65946	136502			75.0	100	200		
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++	2770	5652	29259	152525	+++++	1.00	2.00	10.0	50.0
			237116	313667	667214			75.0	100	200		
Hexachlorobutadiene	DCBd 4	Lin2	+++++	288	1453	10553	50864	+++++	1.00	2.00	10.0	50.0
			78775	104528	220210			75.0	100	200		
Naphthalene	DCBd 4	Ave	+++++	7932	15708	93344	456812	+++++	1.00	2.00	10.0	50.0
			718615	944344	1942455			75.0	100	200		
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++	2627	4676	27863	142446	+++++	1.00	2.00	10.0	50.0
			215935	286406	604902			75.0	100	200		
Dibromofluoromethane (Surr)	FB	Ave	200782	202219	197983	199938	199154	50.0	50.0	50.0	50.0	50.0
			201488	199583	205683			50.0	50.0	50.0		
1,2-Dichloroethane-d4 (Surr)	FB	Ave	261841	268609	263804	268659	266131	50.0	50.0	50.0	50.0	50.0
			274090	270692	279300			50.0	50.0	50.0		
Toluene-d8 (Surr)	CBNZ d5	Ave	673194	683061	666453	678886	704331	50.0	50.0	50.0	50.0	50.0
			705195	703336	722826			50.0	50.0	50.0		
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	269753	272976	267729	272092	273340	50.0	50.0	50.0	50.0	50.0
			280451	271979	282862			50.0	50.0	50.0		

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_MS1\20210604-102067.b\VMS1_2722.D
 Lims ID: STD005
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 04-Jun-2021 13:50:30 ALS Bottle#: 11 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD005
 Misc. Info.: 280-0102067-014
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:22 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 14:55:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	741336	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	154877	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	245453	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	200782	50.0	51.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	261841	50.0	49.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	673194	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	269753	50.0	50.6	
11 Dichlorodifluoromethane	85		1.690				ND	ND	
12 Chloromethane	50		1.900				ND	ND	
13 Vinyl chloride	62		1.998				ND	ND	
15 Bromomethane	94		2.347				ND	ND	U
16 Chloroethane	64		2.459				ND	ND	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	34	5909	0.5000	0.5380	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	92	2171	0.5000	0.5081	
20 Ethyl ether	59		3.003				ND	ND	
22 Acrolein	56	3.143	3.143	0.000	38	4089	4.94	3.49	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	5	1501	0.5000	0.7011	
24 112TCTFE	151		3.255				ND	ND	
25 Acetone	43	3.283	3.269	0.014	97	6452	2.00	2.01	
26 Iodomethane	142		3.380				ND	ND	
28 Carbon disulfide	76	3.450	3.450	0.000	94	4394	0.5000	0.6103	
30 Methyl acetate	43		3.576				ND	ND	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	40	2694	0.5000	0.6249	
32 Methylene Chloride	84	3.716	3.716	0.000	92	2998	0.5000	0.5166	
33 2-Methyl-2-propanol	59		3.785				ND	ND	
34 Acrylonitrile	53	3.911	3.911	0.000	78	5689	5.00	5.55	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	82	3807	0.5000	0.5040	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	82	1460	0.5000	0.5614	
37 Hexane	57	4.205	4.204	0.001	74	2659	0.5000	1.26	
39 Vinyl acetate	43	4.344	4.344	0.000	92	6958	1.00	1.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.358	4.344	0.014	1	2535	0.5000	0.5044	
46 2-Butanone (MEK)	43		4.819				ND	ND	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	60	2504	0.5000	0.5633	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	83	1849	0.5000	0.6487	
51 sec-Butyl Alcohol	45		4.973				ND	ND	
54 Tetrahydrofuran	42	5.070	5.056	0.014	40	4881	1.00	0.2115	
53 Chlorobromomethane	128		5.056				ND	ND	
55 Chloroform	83	5.126	5.126	0.000	87	4658	0.5000	0.8934	
56 1,1,1-Trichloroethane	97		5.280				ND	ND	
57 Cyclohexane	56	5.350	5.350	0.000	78	3189	0.5000	0.0970	
58 1,1-Dichloropropene	75		5.419				ND	ND	
59 Carbon tetrachloride	117		5.419				ND	ND	
60 Isobutyl alcohol	41	5.559	5.461	0.098	33	2612	12.5	28.3	
63 Benzene	78	5.587	5.587	0.000	88	5503	0.5000	0.5364	
64 1,2-Dichloroethane	62		5.629				ND	ND	
66 n-Heptane	43	5.825	5.824	0.001	36	2814	0.5000	0.5421	
68 Trichloroethene	95	6.160	6.146	0.014	1	1955	0.5000	0.6808	
69 2-Pentanone	43		6.271				ND	ND	
70 Methylcyclohexane	55	6.355	6.355	0.000	77	3862	0.5000	0.6470	
71 1,2-Dichloropropane	63		6.383				ND	ND	
73 1,4-Dioxane	88		6.425				ND	ND	
74 Dibromomethane	93		6.453				ND	ND	
75 Dichlorobromomethane	83		6.609				ND	ND	
77 2-Chloroethyl vinyl ether	63		6.838				ND	ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	ND	U
82 Toluene	91	7.296	7.295	0.001	95	6088	0.5000	0.5949	
84 trans-1,3-Dichloropropene	75		7.488				ND	ND	
85 Ethyl methacrylate	69		7.517				ND	ND	U
87 1,1,2-Trichloroethane	97	7.682	7.674	0.008	62	1474	0.5000	0.4696	
89 Tetrachloroethene	164		7.767				ND	ND	
90 1,3-Dichloropropane	76		7.824				ND	ND	
91 2-Hexanone	43	7.860	7.853	0.007	44	1610	2.00	1.88	
95 Chlorodibromomethane	129		8.032				ND	ND	
96 Ethylene Dibromide	107		8.146				ND	ND	
98 1-Chlorohexane	91	8.575	8.568	0.007	34	3680	0.4000	0.4110	
99 Chlorobenzene	112		8.604				ND	ND	
100 1,1,1,2-Tetrachloroethane	131		8.682				ND	ND	
101 Ethylbenzene	106	8.683	8.682	0.001	94	1662	0.5000	0.4947	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	94	2160	0.5000	0.5102	
103 o-Xylene	106	9.183	9.176	0.007	91	1814	0.5000	0.4587	
104 Styrene	104	9.197	9.197	0.000	75	3843	0.5000	0.5316	
106 Bromoform	173		9.383				ND	ND	
107 Isopropylbenzene	105	9.534	9.526	0.008	92	5056	0.5000	0.4709	
109 Cyclohexanone	55	9.619	9.626	-0.007	72	2696	15.0	15.5	
110 1,1,2,2-Tetrachloroethane	83	9.812	9.827	-0.015	1	2664	0.5000	0.4880	
111 Bromobenzene	156		9.855				ND	ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	ND	
113 1,2,3-Trichloropropane	110		9.891				ND	ND	
114 N-Propylbenzene	120		9.941				ND	ND	
115 2-Chlorotoluene	126	10.034	10.034	0.000	89	1414	0.5000	0.5796	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	86	5240	0.5000	0.5464	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.148	10.155	-0.007	89	1416	0.5000	0.5273	
118 tert-Butylbenzene	119		10.427				ND	ND	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	93	5409	0.5000	0.5500	
120 sec-Butylbenzene	134		10.649				ND	ND	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	88	2282	0.5000	0.4793	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	92	5650	0.5000	0.5795	
123 1,4-Dichlorobenzene	146	10.871	10.878	-0.007	21	2751	0.5000	0.5504	
125 n-Butylbenzene	91	11.214	11.207	0.007	93	5199	0.5000	0.5530	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	85	1945	0.5000	0.4343	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	ND	
131 Hexachlorobutadiene	225		12.994				ND	ND	
132 Naphthalene	128		13.123				ND	ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	ND	
S 149 1,2-Dichloroethene, Total (URS)	95				0		1.00	1.21	
S 150 1,2-Dichloroethene, Total	1				0		1.00	1.21	
S 151 Trihalomethanes, Total	1				0		2.00	0.8934	
S 152 Total BTEX	1				0			2.59	
S 153 Xylenes, Total (URS)	1				0		1.00	0.9689	
S 155 Xylenes, Total	106				0		1.00	0.9689	
S 156 1,3-Dichloropropene, Total	1				0		1.00	0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

MV-Gas A_00089

Amount Added: 0.10

Units: uL

MV-MegaMainA_00050

Amount Added: 0.25

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD005

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

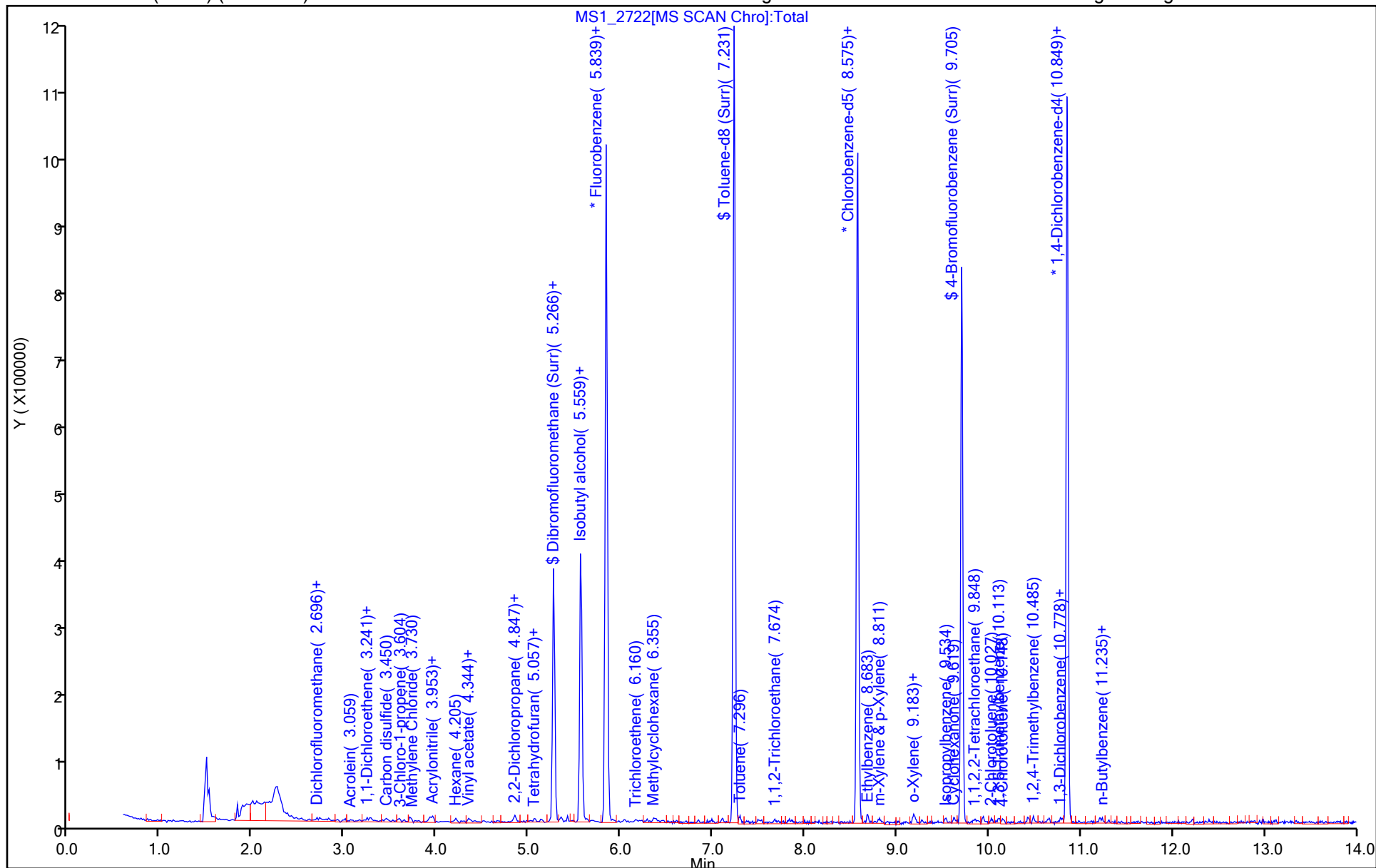
ALS Bottle#: 11

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

11

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

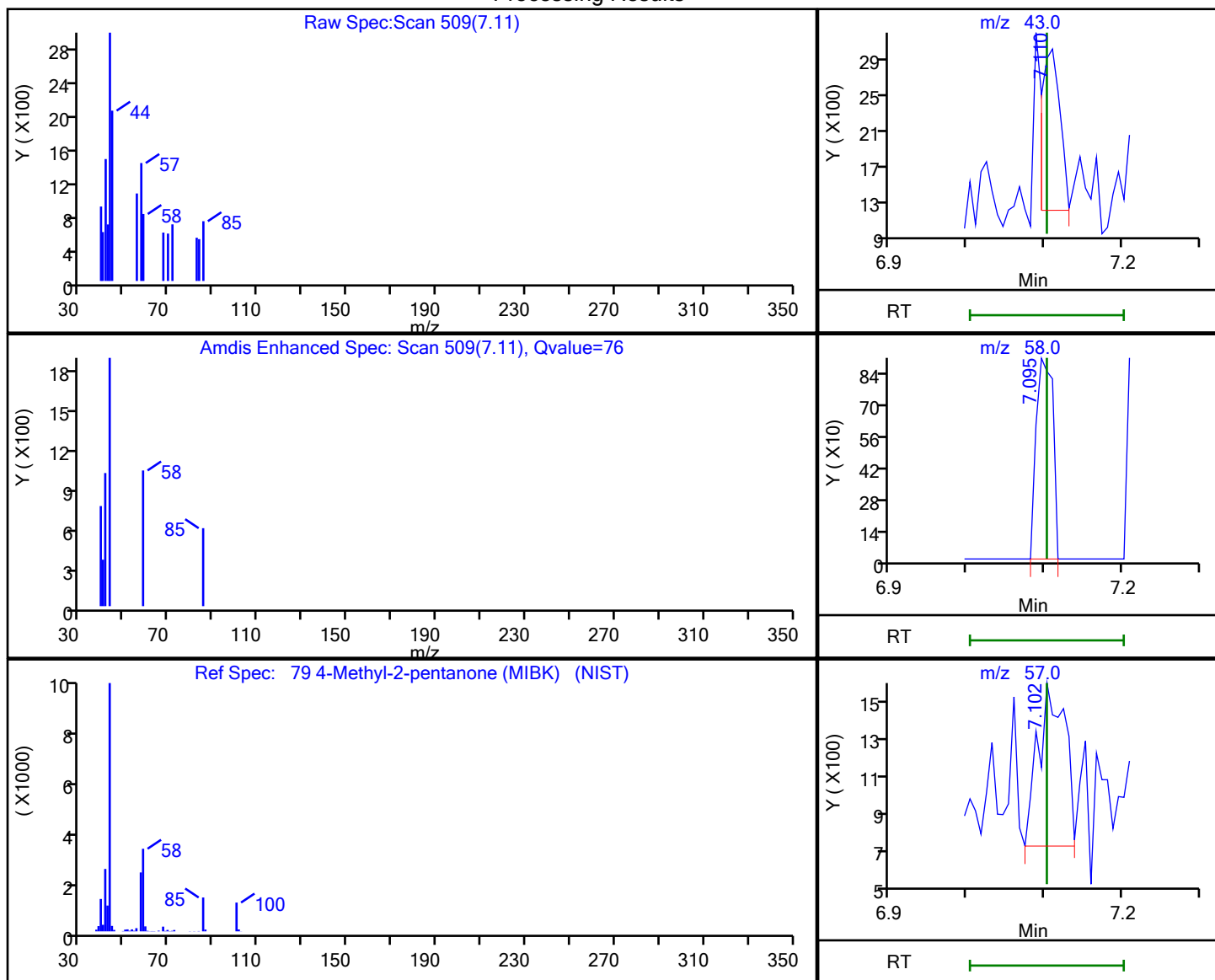
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

79 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.11	43.00	2989	1.353885
7.10	58.00	1350	
7.10	57.00	2080	

Reviewer: seifertj, 05-Jun-2021 09:04:16

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

11

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

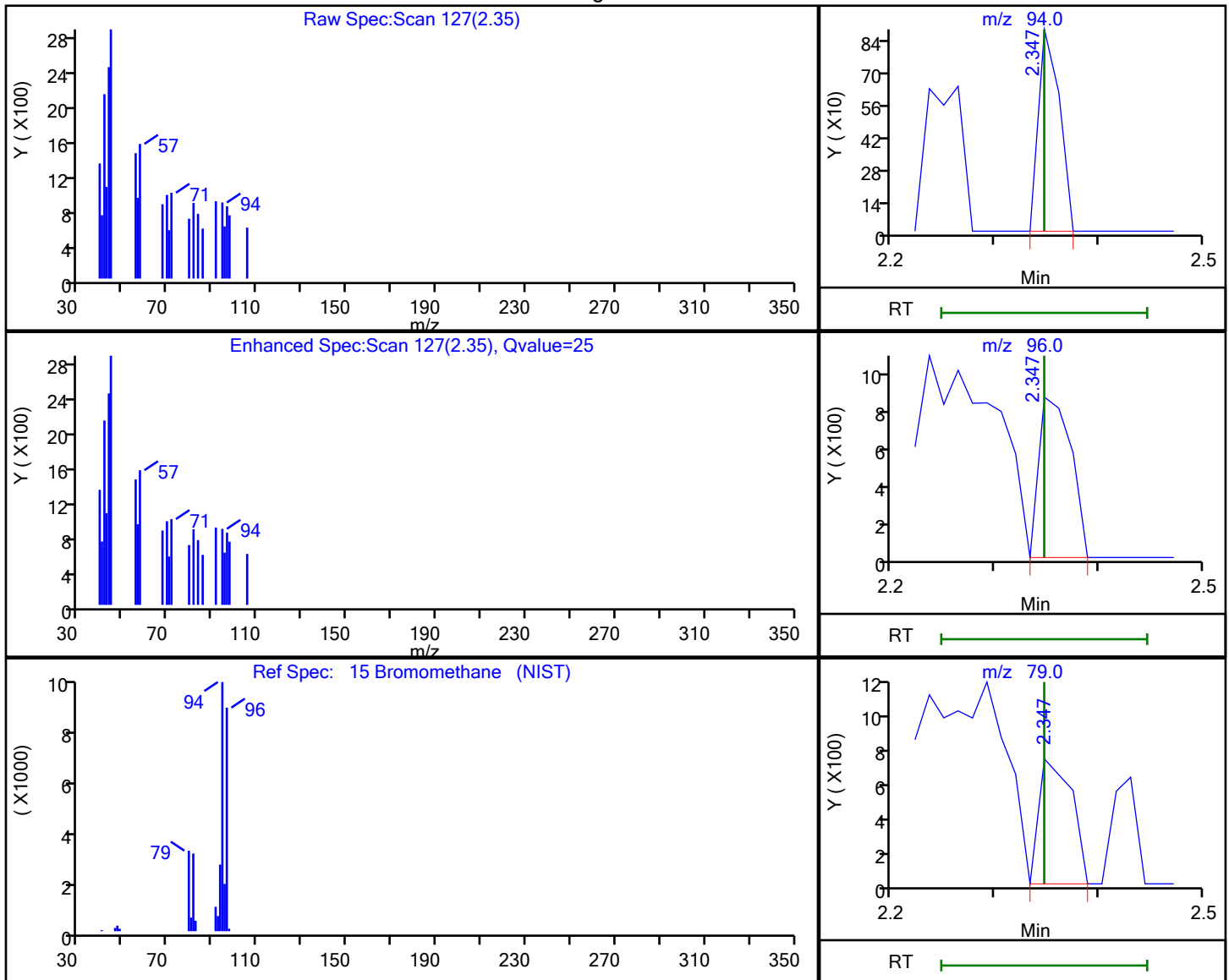
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.35	94.00	1246	0.604053
2.35	96.00	1811	
2.35	79.00	1522	

Reviewer: seifertj, 05-Jun-2021 09:03:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date: 04-Jun-2021 13:50:30

Instrument ID: VMS_MS1

Lims ID: STD005

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

11

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

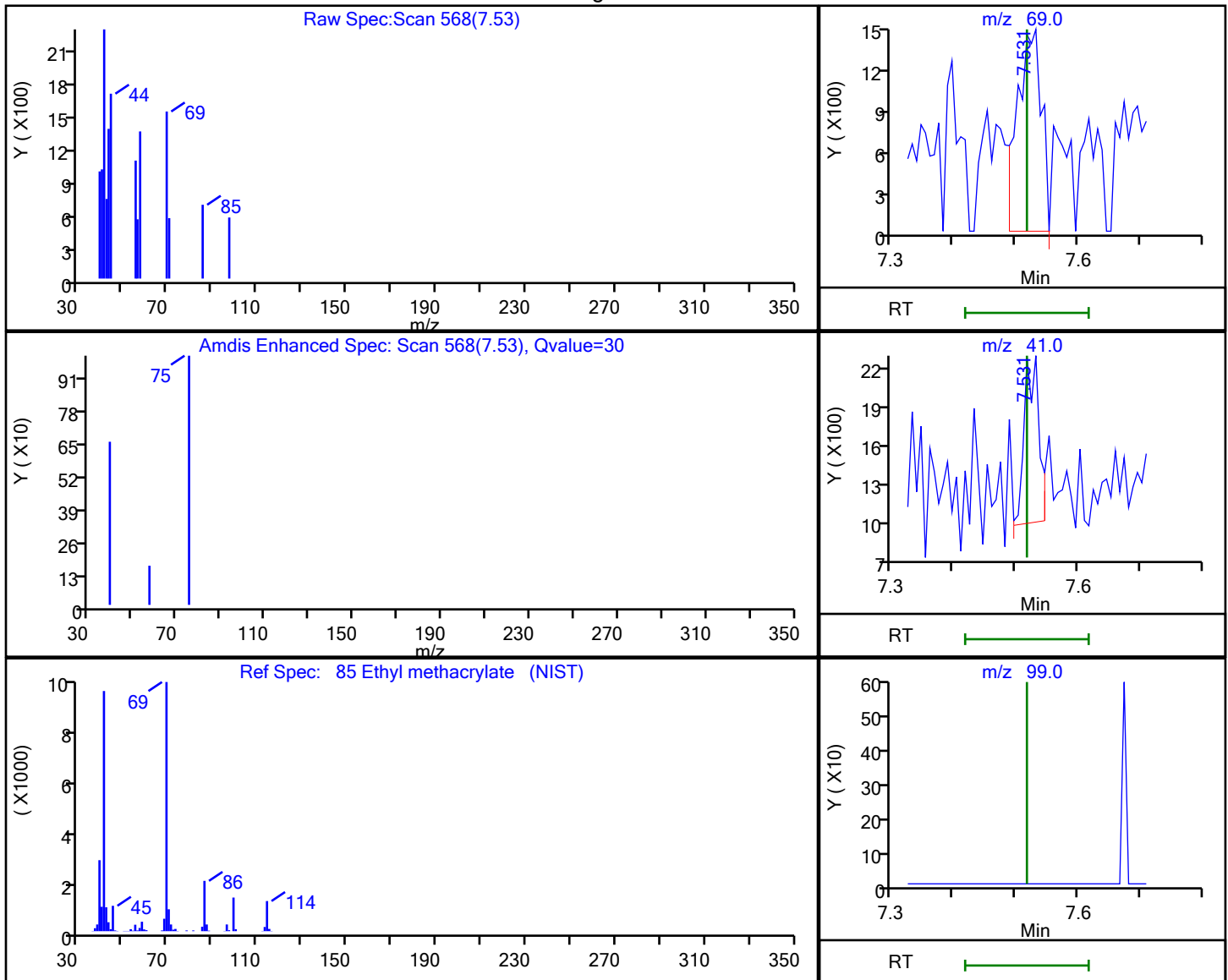
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

85 Ethyl methacrylate, CAS: 97-63-2

Processing Results



RT	Mass	Response	Amount
7.53	69.00	4052	1.143619
7.53	41.00	2030	
7.52	99.00	0	

Reviewer: seifertj, 05-Jun-2021 09:04:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D
 Lims ID: STD010
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 04-Jun-2021 14:11:30 ALS Bottle#: 12 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD010
 Misc. Info.: 280-0102067-015
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 14:49:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	745169	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	156866	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	250257	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	202219	50.0	51.2	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	268609	50.0	50.8	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	683061	50.0	50.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	272976	50.0	50.3	
11 Dichlorodifluoromethane	85	1.704	1.690	0.014	1	2898	1.00	0.9476	a
12 Chloromethane	50	1.900	1.900	0.000	93	3126	1.00	0.9659	a
13 Vinyl chloride	62	1.998	1.998	0.000	85	2149	1.00	0.8227	
15 Bromomethane	94	2.347	2.347	0.000	76	2022	1.00	1.01	
16 Chloroethane	64	2.459	2.459	0.000	1	1757	1.00	0.8725	a
17 Dichlorofluoromethane	67	2.696	2.696	0.000	94	7600	1.00	0.8719	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	95	3605	1.00	0.8393	
20 Ethyl ether	59	3.003	3.003	0.000	84	1969	1.00	0.9374	
22 Acrolein	56	3.143	3.143	0.000	93	6241	9.88	8.82	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	89	2087	1.00	0.9698	
24 112TCTFE	151	3.255	3.255	0.000	56	1221	1.00	0.8583	
25 Acetone	43	3.283	3.269	0.014	96	8353	4.00	4.26	
26 Iodomethane	142	3.380	3.380	0.000	1	1710	1.00	1.05	a
28 Carbon disulfide	76	3.450	3.450	0.000	94	7200	1.00	0.99	
30 Methyl acetate	43	3.576	3.576	0.000	70	4789	2.00	2.35	a
31 3-Chloro-1-propene	41	3.590	3.590	0.000	84	4490	1.00	1.04	
32 Methylene Chloride	84	3.702	3.716	-0.014	94	4145	1.00	0.9489	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	24	2103	10.0	8.10	
34 Acrylonitrile	53	3.911	3.911	0.000	98	9605	10.0	9.32	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	64	7230	1.00	0.9523	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	85	3121	1.00	1.19	
37 Hexane	57	4.204	4.204	0.000	77	1632	1.00	0.9428	
39 Vinyl acetate	43	4.344	4.344	0.000	98	9578	2.00	1.64	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	64	4705	1.00	0.9314	
46 2-Butanone (MEK)	43	4.833	4.819	0.014	87	8329	4.00	4.17	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	71	4526	1.00	1.01	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	80	3288	1.00	1.15	
51 sec-Butyl Alcohol	45	4.987	4.973	0.014	15	3183	24.0	24.0	a
54 Tetrahydrofuran	42	5.056	5.056	0.000	60	6788	2.00	2.57	
53 Chlorobromomethane	128	5.056	5.056	0.000	22	597	1.00	0.9316	Ma
55 Chloroform	83	5.140	5.126	0.014	90	5979	1.00	1.14	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	35	5713	1.00	1.24	
57 Cyclohexane	56	5.350	5.350	0.000	85	7823	1.00	1.11	
58 1,1-Dichloropropene	75	5.420	5.419	0.001	85	3349	1.00	0.8997	a
59 Carbon tetrachloride	117	5.420	5.419	0.001	83	3074	1.00	0.9061	
60 Isobutyl alcohol	41		5.461				ND	ND	U
63 Benzene	78	5.587	5.587	0.000	91	9347	1.00	0.9064	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	94	4204	1.00	0.9670	a
66 n-Heptane	43	5.825	5.824	0.001	36	3546	1.00	0.7804	
68 Trichloroethene	95	6.146	6.146	0.000	83	3710	1.00	1.28	
69 2-Pentanone	43	6.285	6.271	0.014	35	6764	3.20	3.38	a
70 Methylcyclohexane	55	6.355	6.355	0.000	84	4554	1.00	0.8352	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	65	2299	1.00	0.8202	a
73 1,4-Dioxane	88		6.425				ND	ND	
74 Dibromomethane	93	6.453	6.453	0.000	8	1494	1.00	0.8501	
75 Dichlorobromomethane	83	6.602	6.609	-0.007	88	4588	1.00	1.19	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	1	1572	1.00	0.9167	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	81	3557	1.00	0.8390	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	94	9180	4.00	3.95	
82 Toluene	91	7.295	7.295	0.000	97	10911	1.00	1.06	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	87	3197	1.00	0.7774	
85 Ethyl methacrylate	69	7.524	7.517	0.007	50	5251	1.00	1.68	M
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	80	2894	1.00	1.13	
89 Tetrachloroethene	164	7.767	7.767	0.000	75	1571	1.00	0.9675	
90 1,3-Dichloropropane	76	7.825	7.824	0.000	91	3652	1.00	0.9186	a
91 2-Hexanone	43	7.853	7.853	0.000	94	6263	4.00	4.66	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	81	1992	1.00	0.8497	
96 Ethylene Dibromide	107	8.153	8.146	0.007	77	2146	1.00	0.9509	
98 1-Chlorohexane	91	8.568	8.568	0.000	34	4852	0.8000	0.7573	
99 Chlorobenzene	112	8.604	8.604	0.000	94	6420	1.00	1.00	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.682	0.001	44	1826	1.00	0.8073	
101 Ethylbenzene	106	8.683	8.682	0.001	96	3197	1.00	0.9396	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	96	3939	1.00	0.9185	
103 o-Xylene	106	9.183	9.176	0.007	97	3618	1.00	0.9033	
104 Styrene	104	9.197	9.197	0.000	83	6705	1.00	0.9157	
106 Bromoform	173	9.376	9.383	-0.007	75	567	1.00	0.9897	Ma
107 Isopropylbenzene	105	9.526	9.526	0.000	95	10101	1.00	0.9226	
109 Cyclohexanone	55	9.626	9.626	0.000	90	6099	30.0	34.7	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	87	4414	1.00	1.05	
111 Bromobenzene	156	9.855	9.855	0.000	90	2049	1.00	0.8246	
112 trans-1,4-Dichloro-2-butene	53	9.855	9.862	-0.007	1	1008	1.00	0.9228	M
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	1	1187	1.00	1.09	M
114 N-Propylbenzene	120	9.934	9.941	-0.007	98	2835	1.00	0.9321	
115 2-Chlorotoluene	126	10.034	10.034	0.000	90	2028	1.00	0.8153	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	90	9347	1.00	0.9560	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	95	2894	1.00	1.06	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	8473	1.00	1.06	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	95	9813	1.00	0.9787	
120 sec-Butylbenzene	134	10.642	10.649	-0.007	93	1396	1.00	0.9397	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	90	4284	1.00	0.8825	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	93	9054	1.00	0.9107	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	80	4867	1.00	0.9550	
125 n-Butylbenzene	91	11.207	11.207	0.000	93	9078	1.00	0.9470	
127 1,2-Dichlorobenzene	146	11.242	11.235	0.007	85	4284	1.00	0.9383	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.022	0.007	1	234	1.00	1.02	Ma
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	81	2770	1.00	0.9268	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	1	288	1.00	0.9658	M
132 Naphthalene	128	13.123	13.123	0.000	95	7932	1.00	0.8937	a
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	86	2627	1.00	0.9628	
S 149 1,2-Dichloroethene, Total (URS)	95				0		2.00	2.34	
S 150 1,2-Dichloroethene, Total	1				0		2.00	2.34	
S 151 Trihalomethanes, Total	1				0		4.00	4.17	
S 152 Total BTEX	1				0			4.73	
S 153 Xylenes, Total (URS)	1				0		2.00	1.82	
S 155 Xylenes, Total	106				0		2.00	1.82	
S 156 1,3-Dichloropropene, Total	1				0		2.00	1.62	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MV-Gas A_00089

Amount Added: 0.20

Units: uL

MV-MegaMainA_00050

Amount Added: 0.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 05-Jun-2021 11:14:25

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD010

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

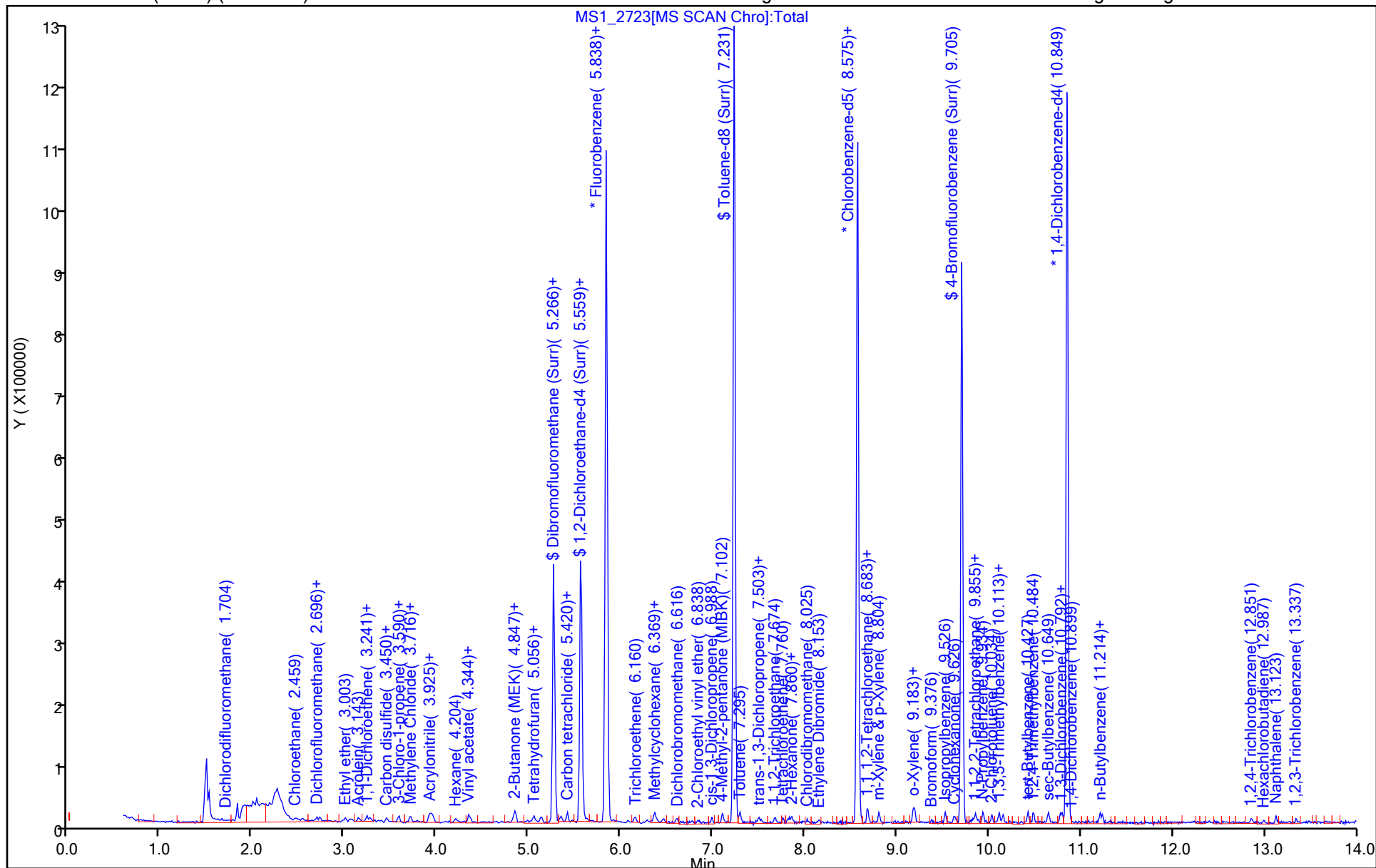
ALS Bottle#: 12

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

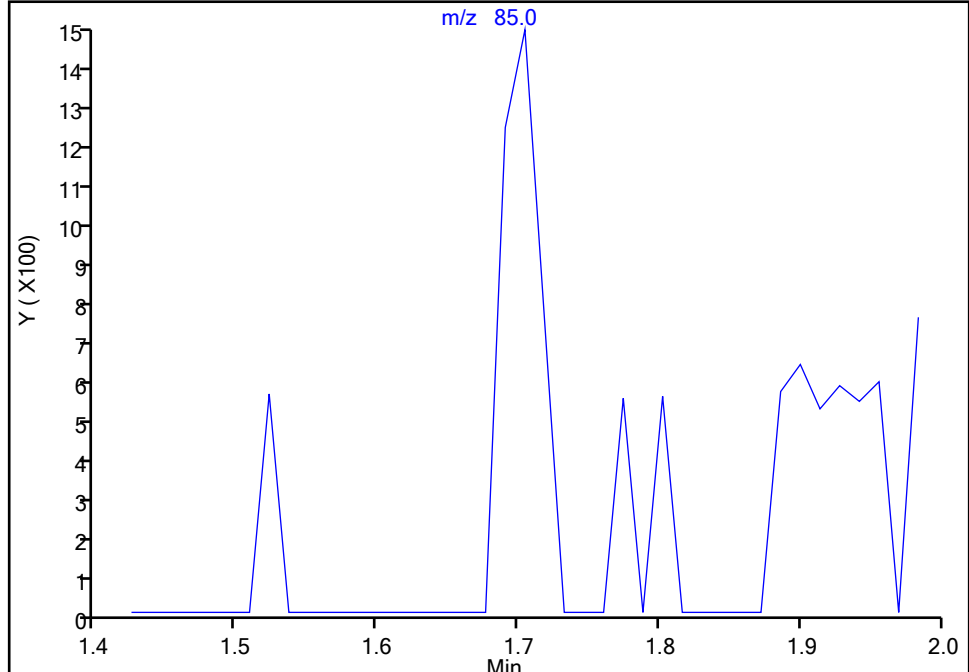
11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

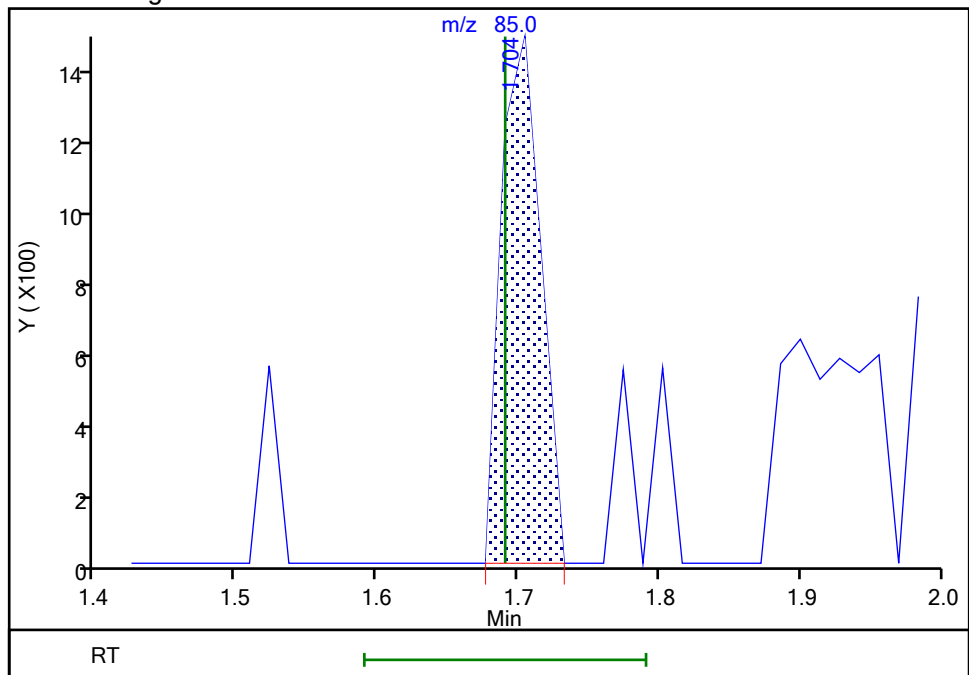
Not Detected

Expected RT: 1.69

Processing Integration Results



Manual Integration Results



RT: 1.70

Area: 2898

Amount: 0.947636

Amount Units: ug/l

Reviewer: seifertj, 05-Jun-2021 09:05:00

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

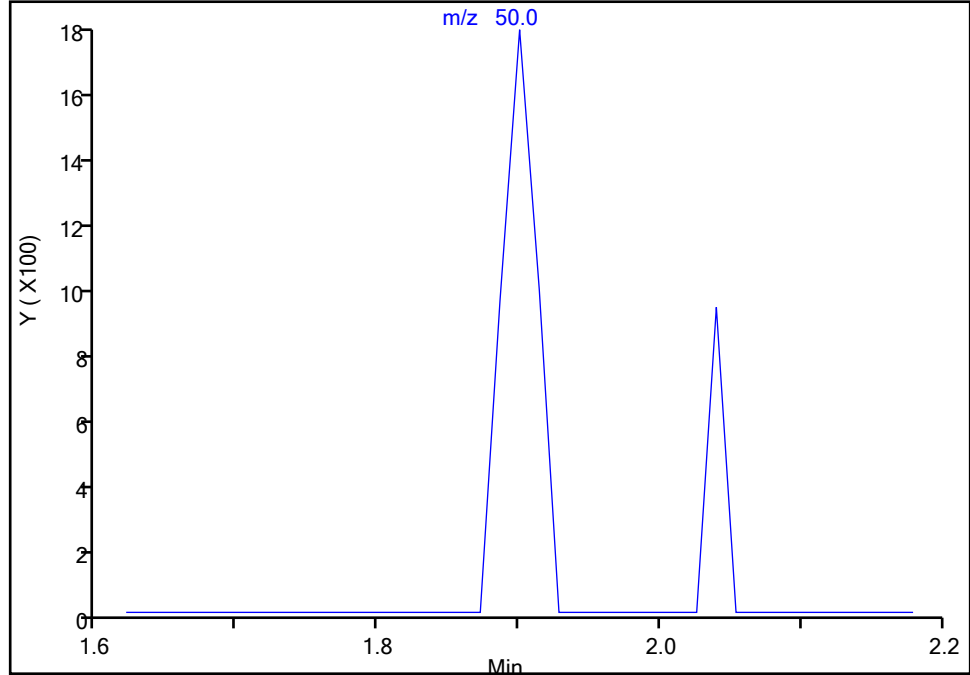
12 Chloromethane, CAS: 74-87-3

Signal: 1

Not Detected

Expected RT: 1.90

Processing Integration Results



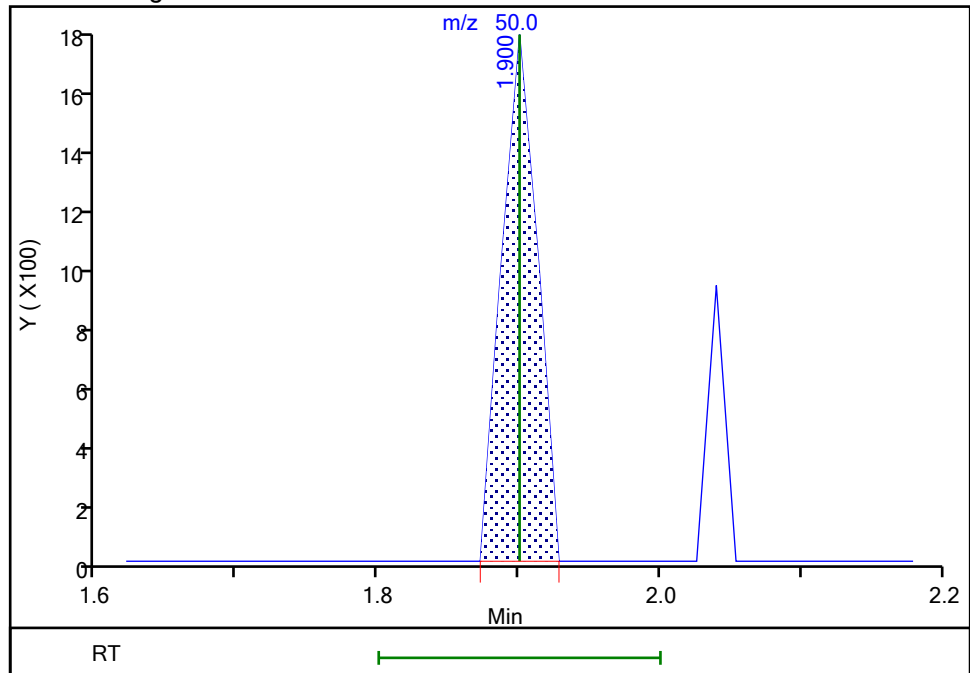
RT: 1.90

Area: 3126

Amount: 0.965853

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:05

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

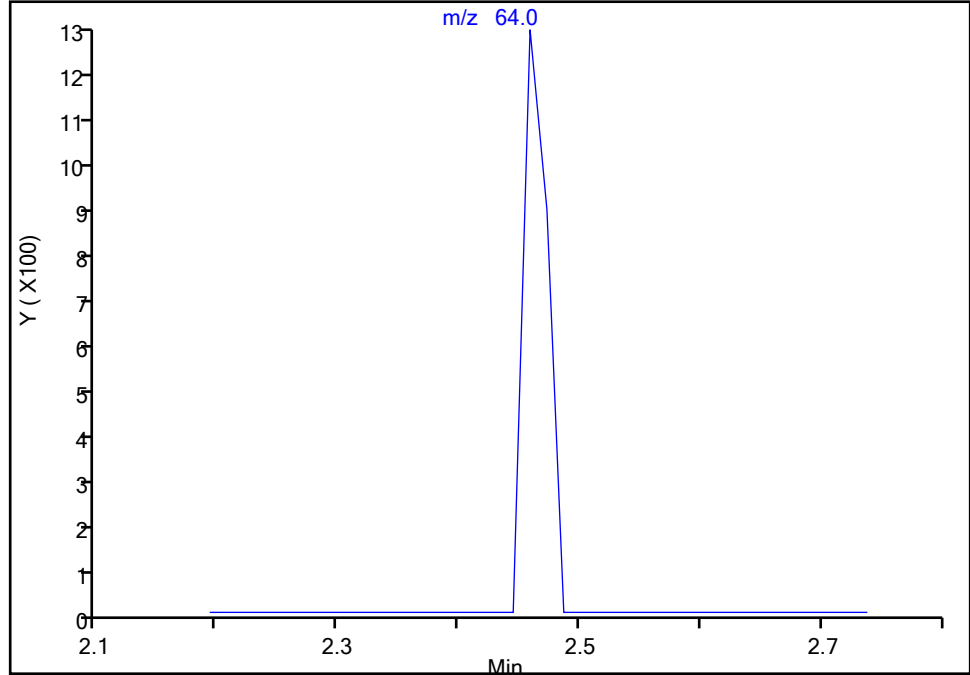
16 Chloroethane, CAS: 75-00-3

Signal: 1

Not Detected

Expected RT: 2.46

Processing Integration Results



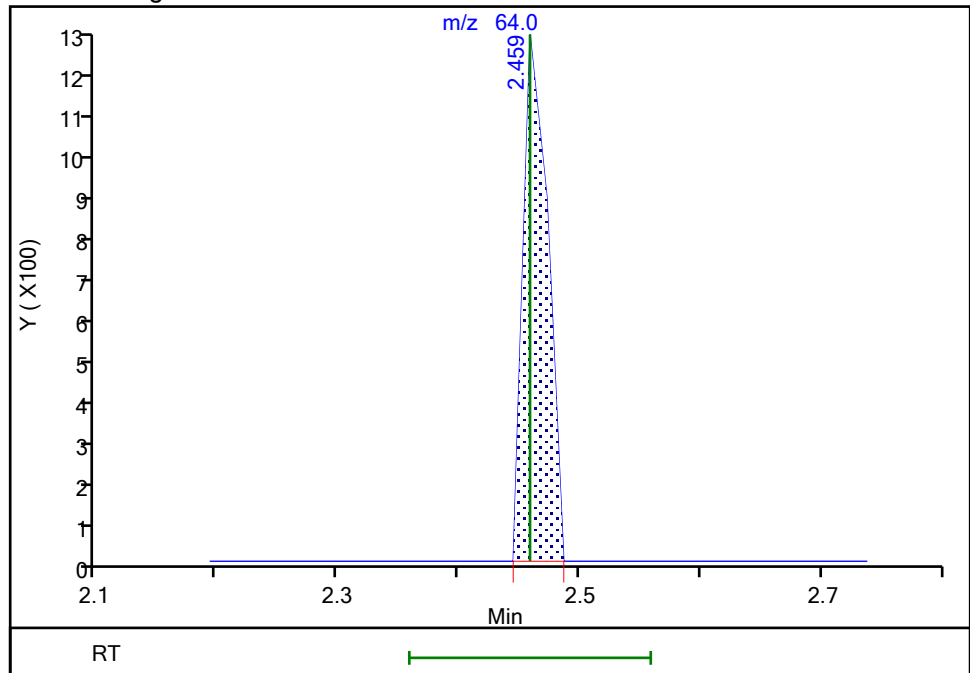
RT: 2.46

Area: 1757

Amount: 0.872484

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:12

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

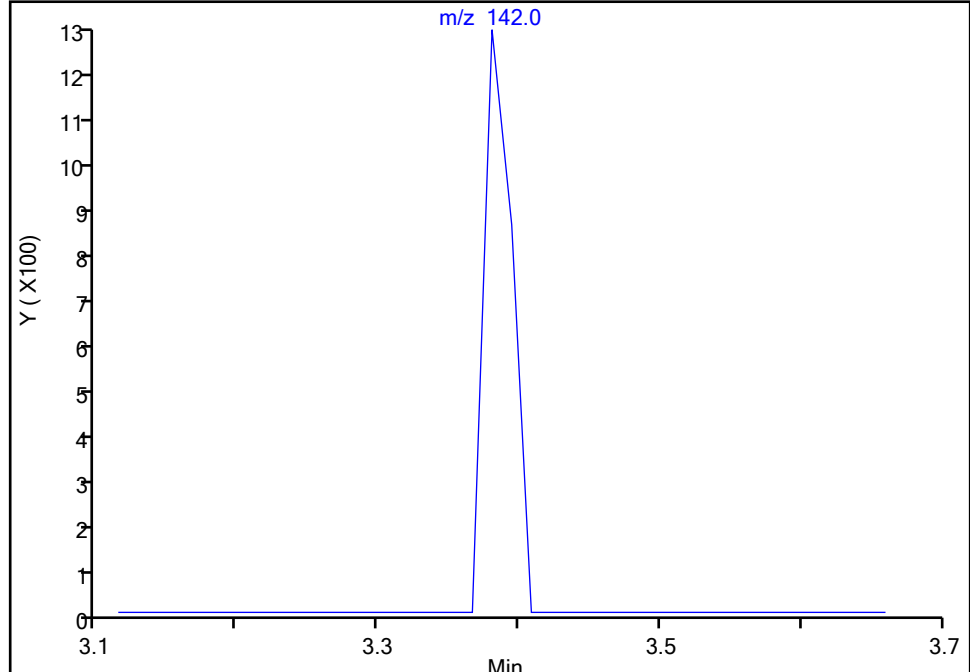
26 Iodomethane, CAS: 74-88-4

Signal: 1

Not Detected

Expected RT: 3.38

Processing Integration Results



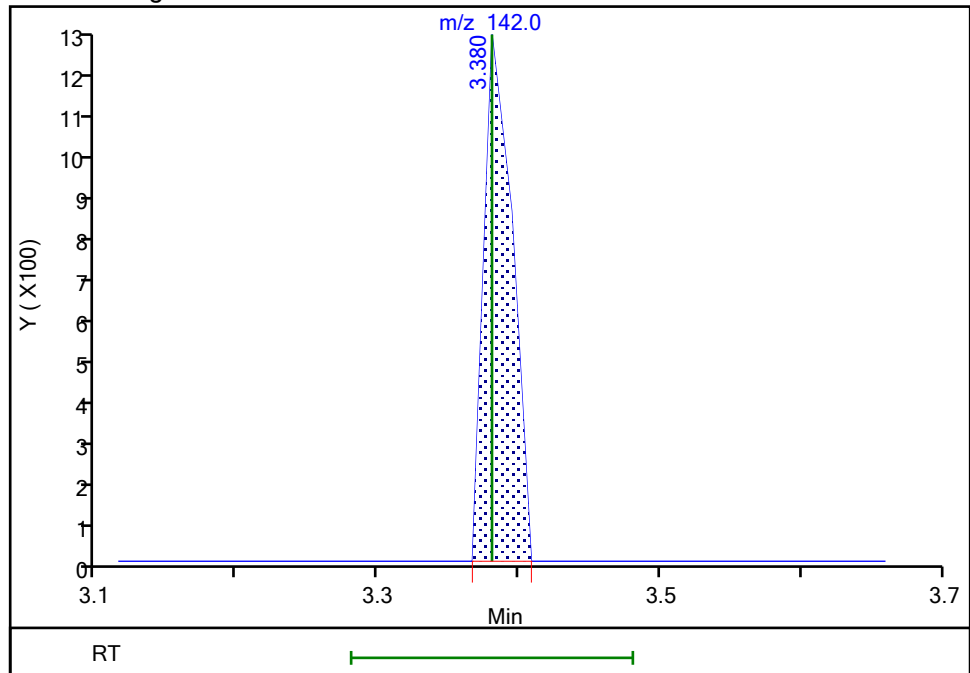
RT: 3.38

Area: 1710

Amount: 1.046931

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:27

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

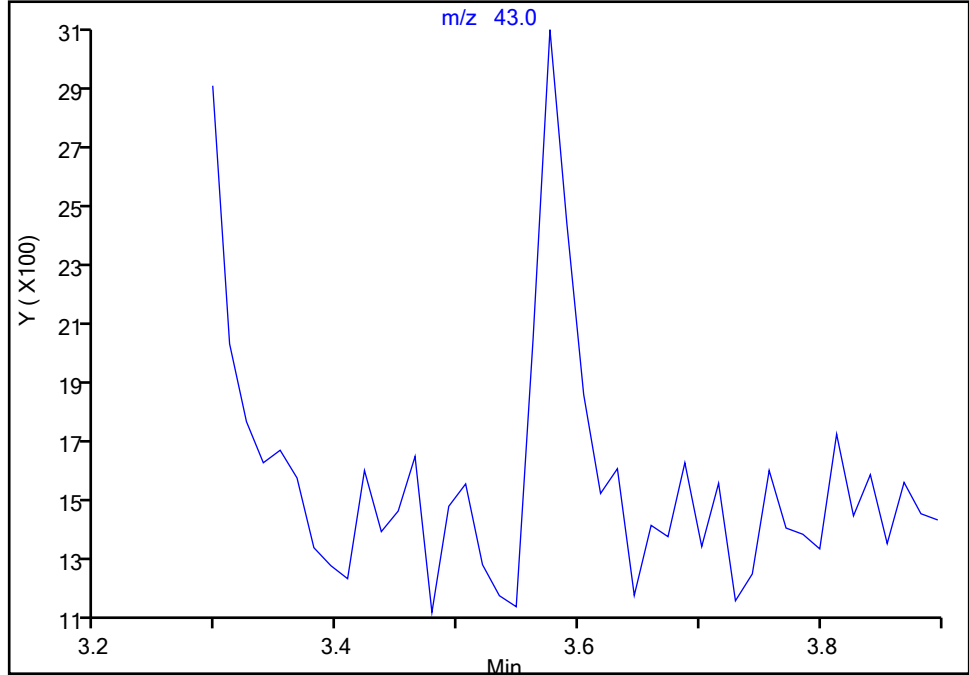
30 Methyl acetate, CAS: 79-20-9

Signal: 1

Not Detected

Expected RT: 3.58

Processing Integration Results



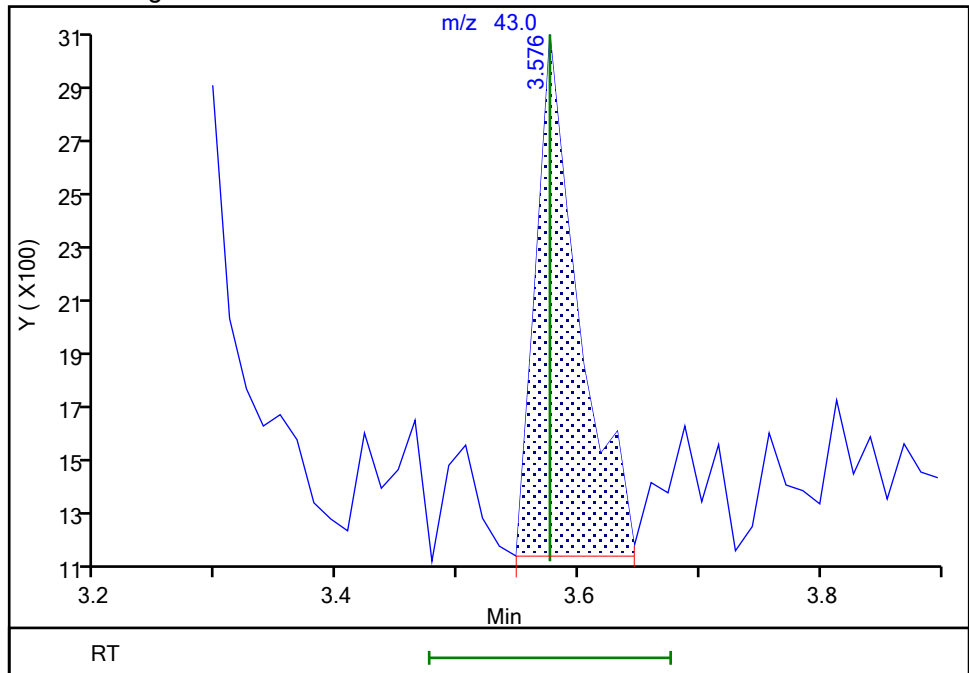
RT: 3.58

Area: 4789

Amount: 2.351372

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:35

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

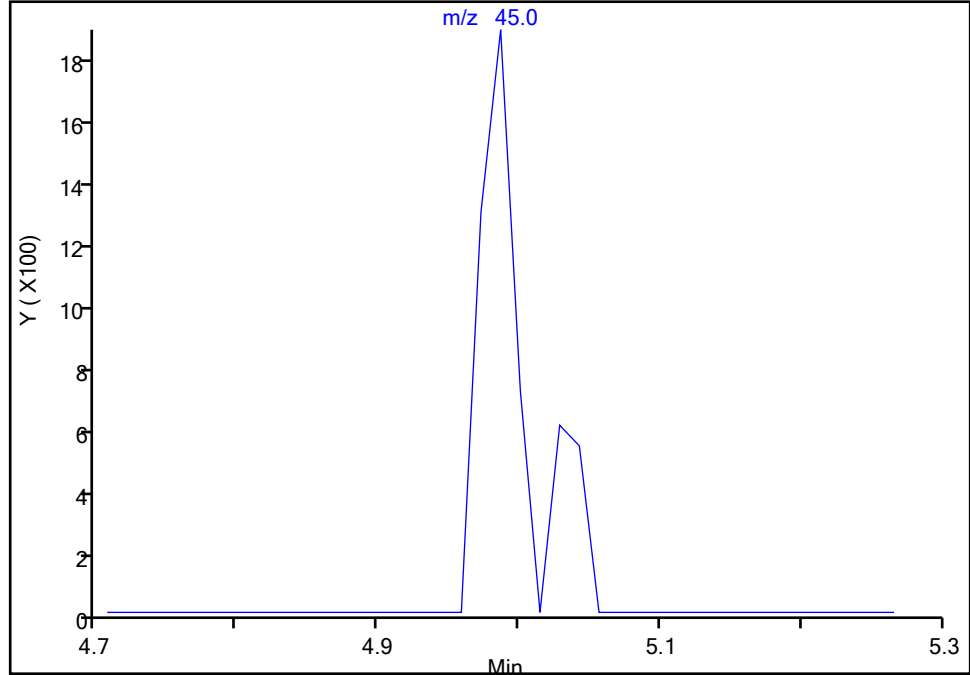
51 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

Not Detected

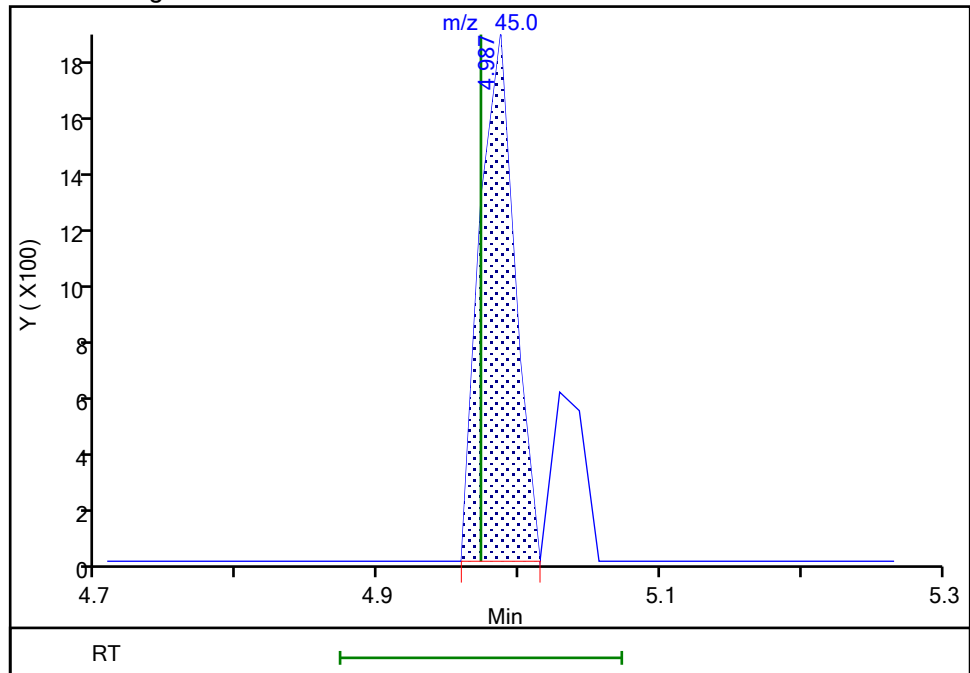
Expected RT: 4.97

Processing Integration Results



RT: 4.99
Area: 3183
Amount: 24.010620
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:48

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

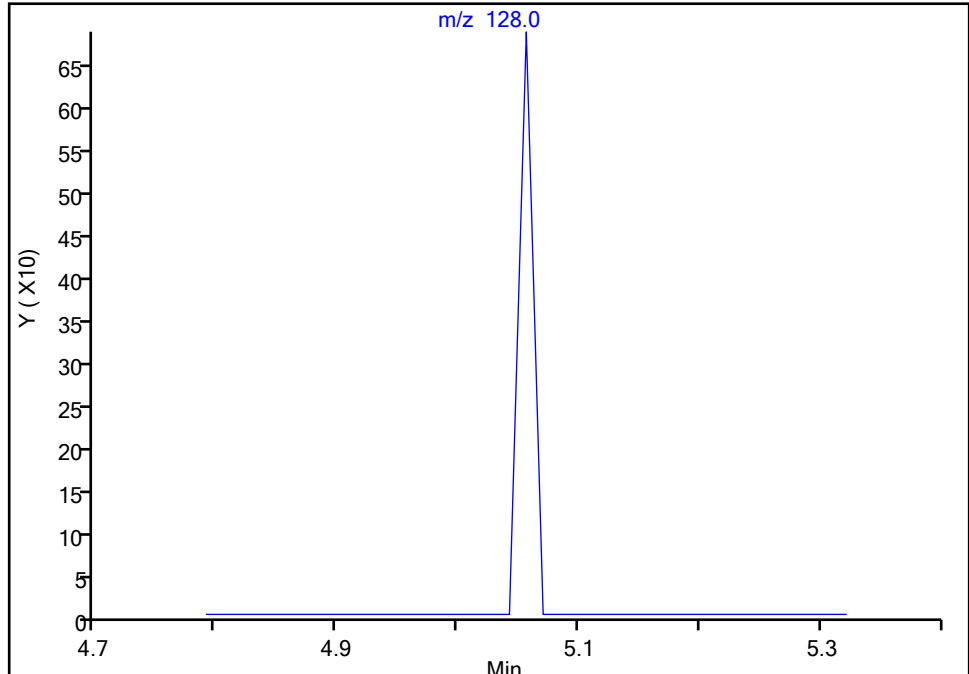
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

53 Chlorobromomethane, CAS: 74-97-5

Signal: 1

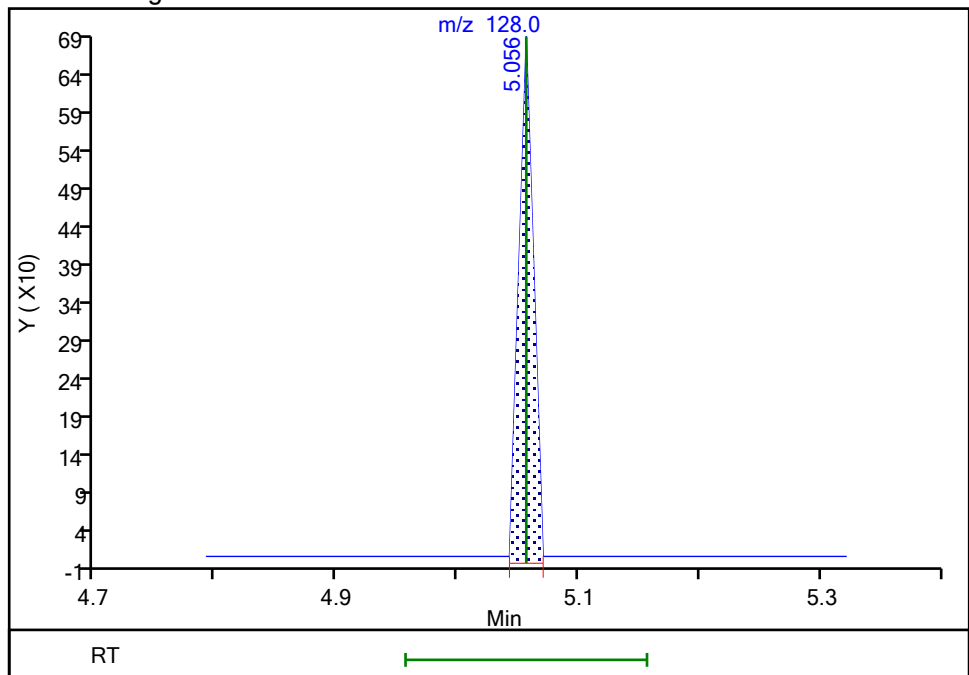
Not Detected
Expected RT: 5.06

Processing Integration Results



RT: 5.06
Area: 597
Amount: 0.931608
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:02
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

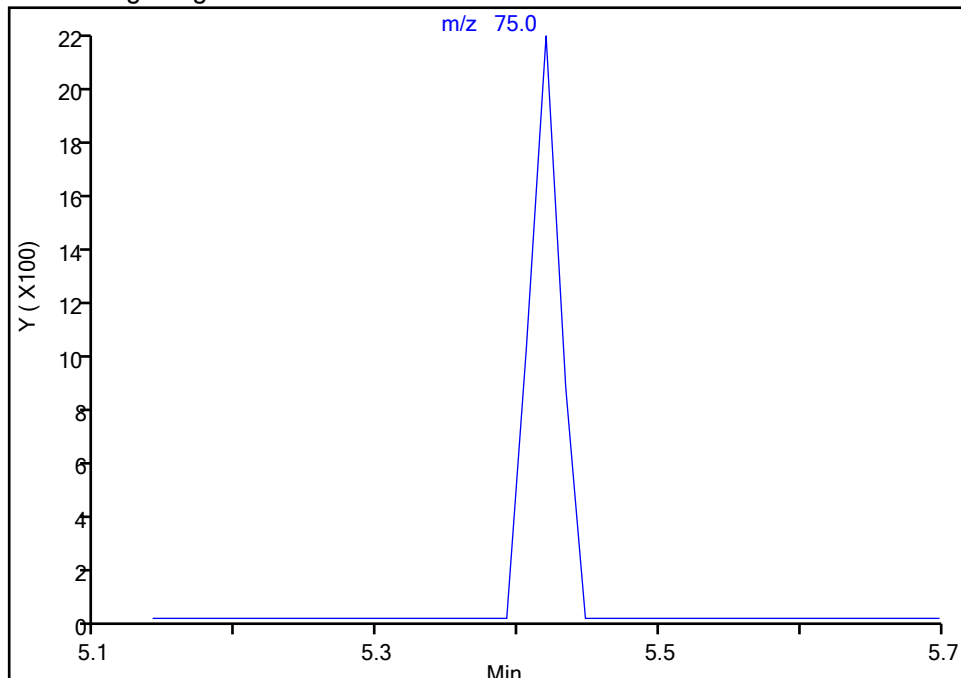
58 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

Not Detected

Expected RT: 5.42

Processing Integration Results



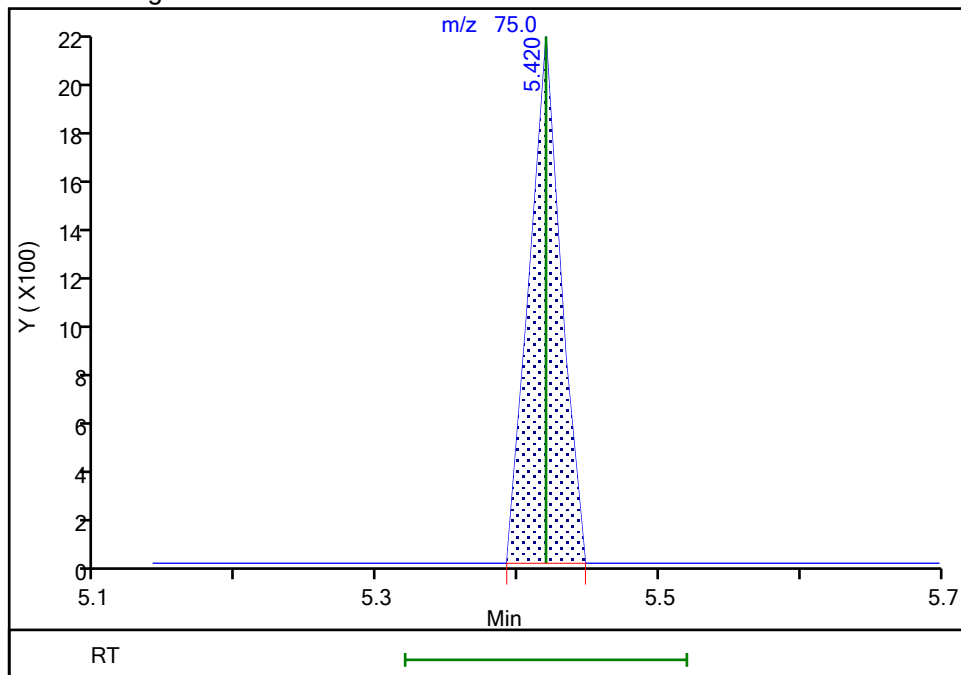
RT: 5.42

Area: 3349

Amount: 0.899702

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:11

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

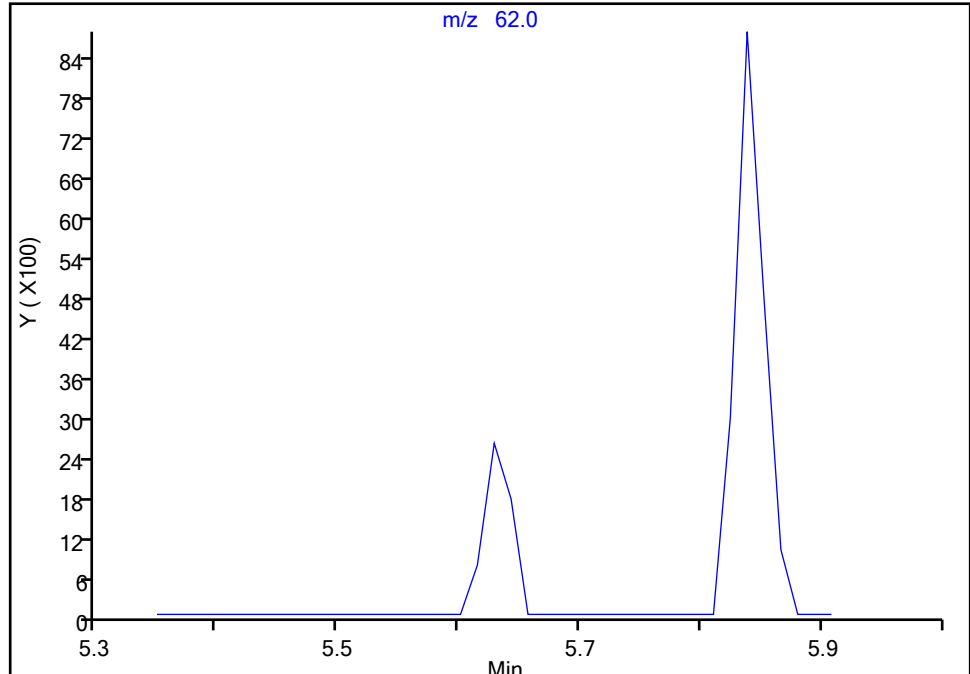
64 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

Not Detected

Expected RT: 5.63

Processing Integration Results



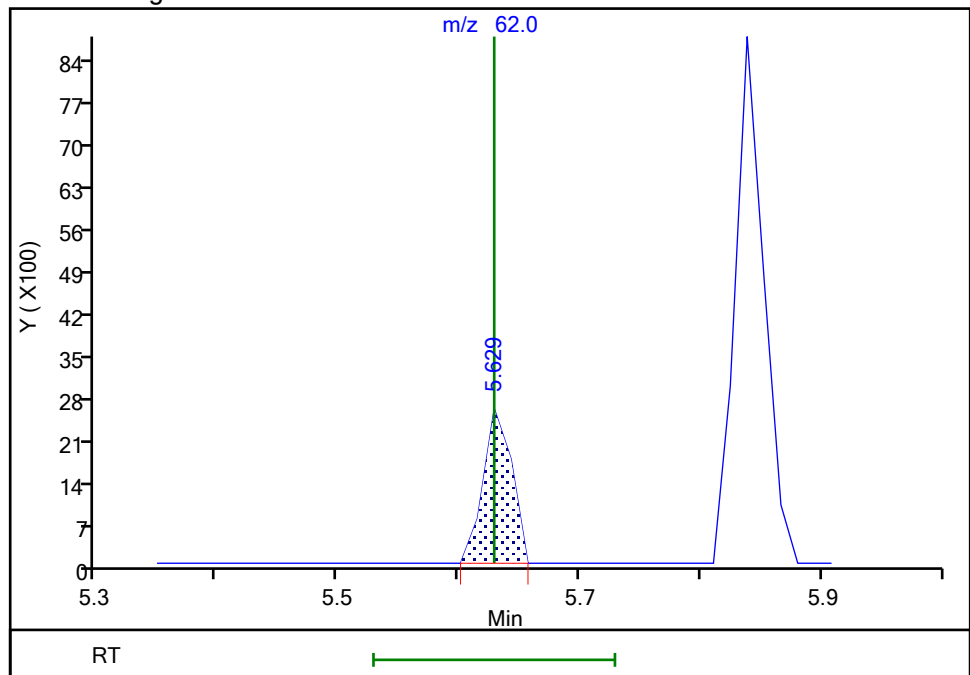
RT: 5.63

Area: 4204

Amount: 0.966993

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:29

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

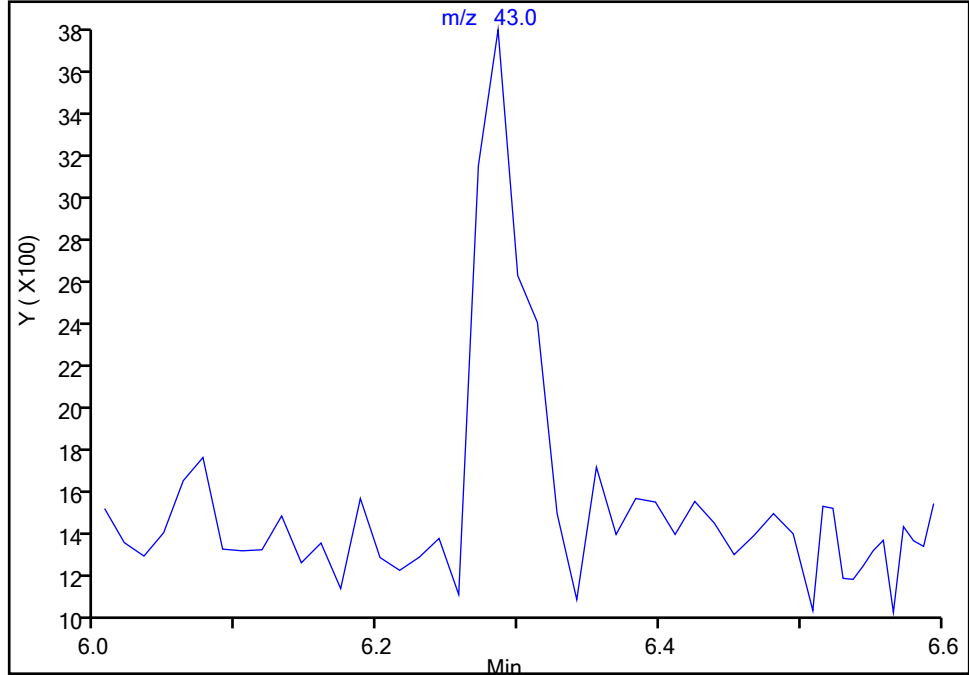
69 2-Pentanone, CAS: 107-87-9

Signal: 1

Not Detected

Expected RT: 6.27

Processing Integration Results



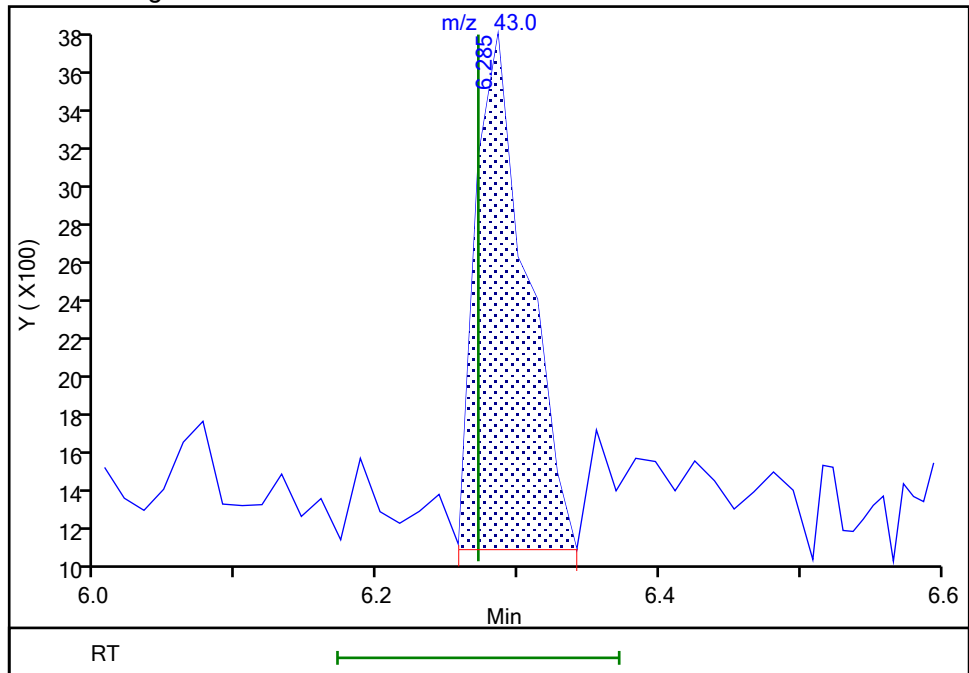
RT: 6.29

Area: 6764

Amount: 3.378807

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:39

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

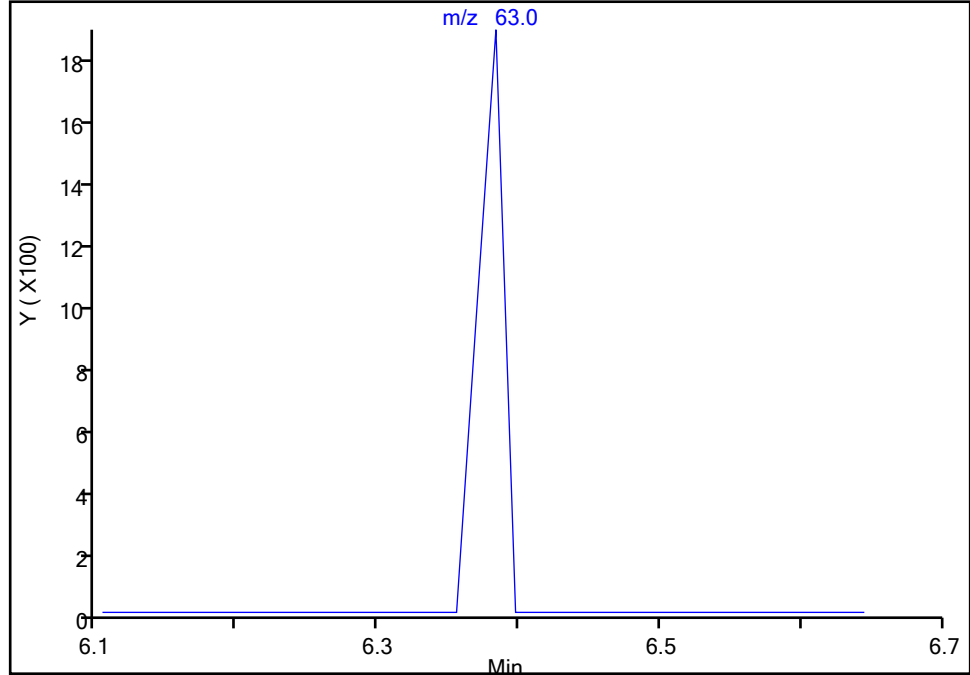
71 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

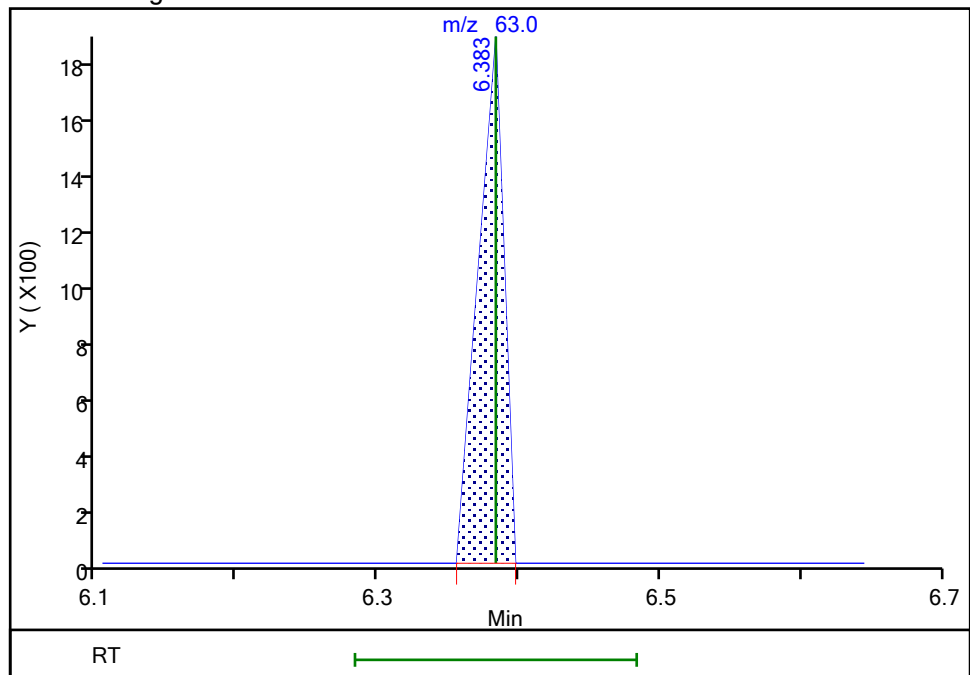
Not Detected

Expected RT: 6.38

Processing Integration Results



Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:06:46

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

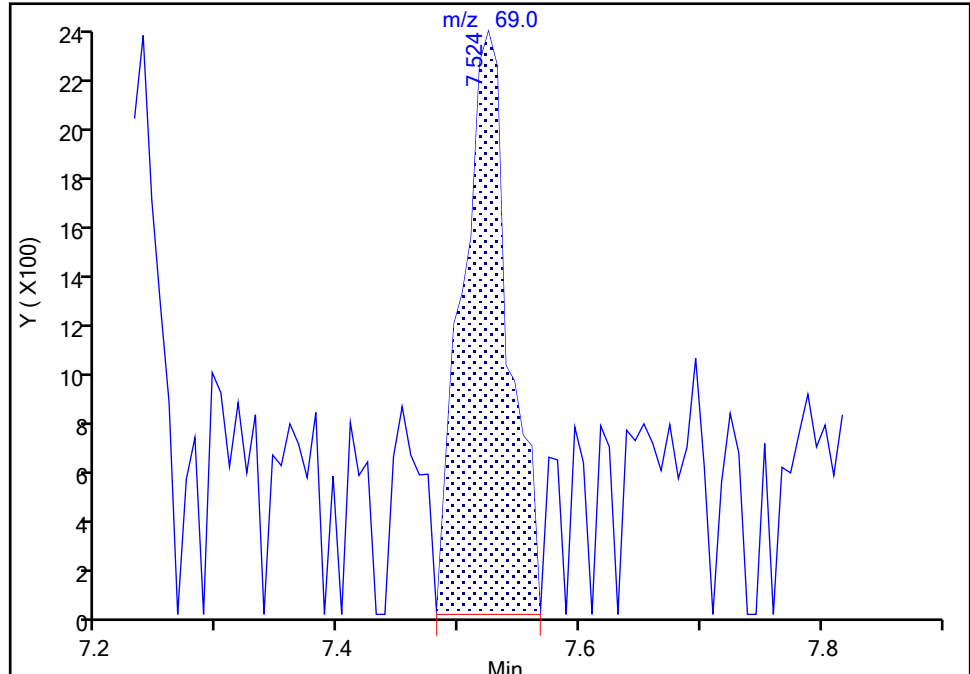
MS SCAN

85 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

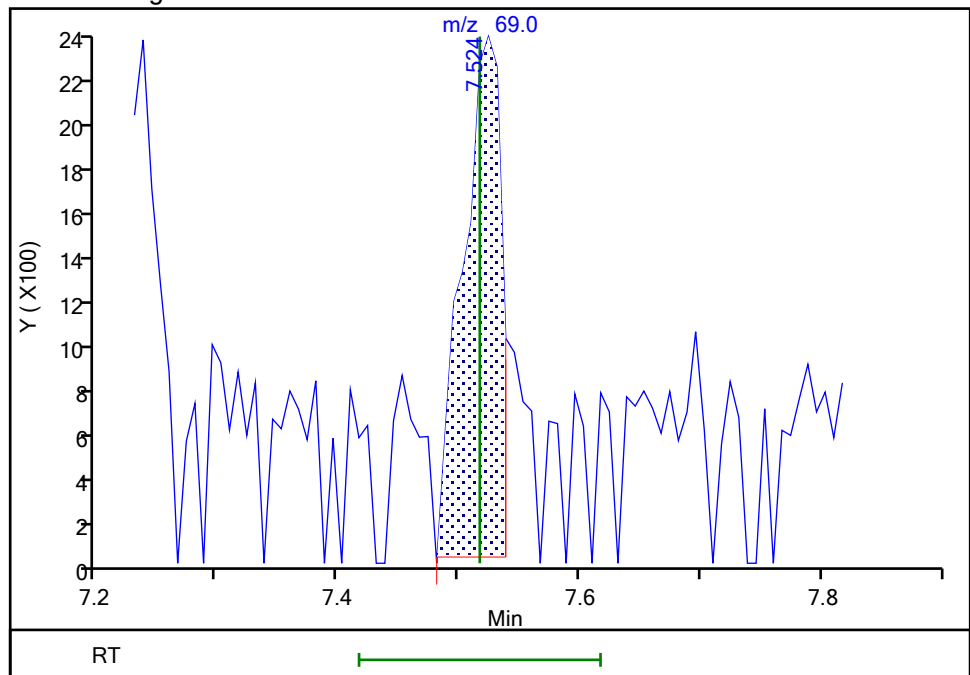
RT: 7.52
Area: 6373
Amount: 2.039633
Amount Units: ug/l

Processing Integration Results



RT: 7.52
Area: 5251
Amount: 1.680545
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:34:30

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

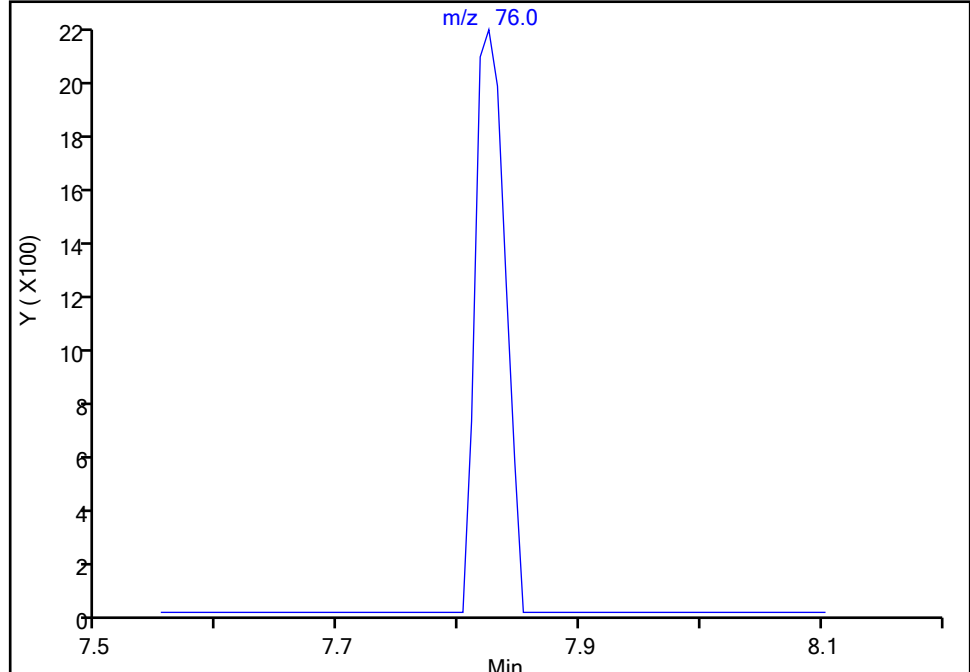
90 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

Not Detected

Expected RT: 7.82

Processing Integration Results



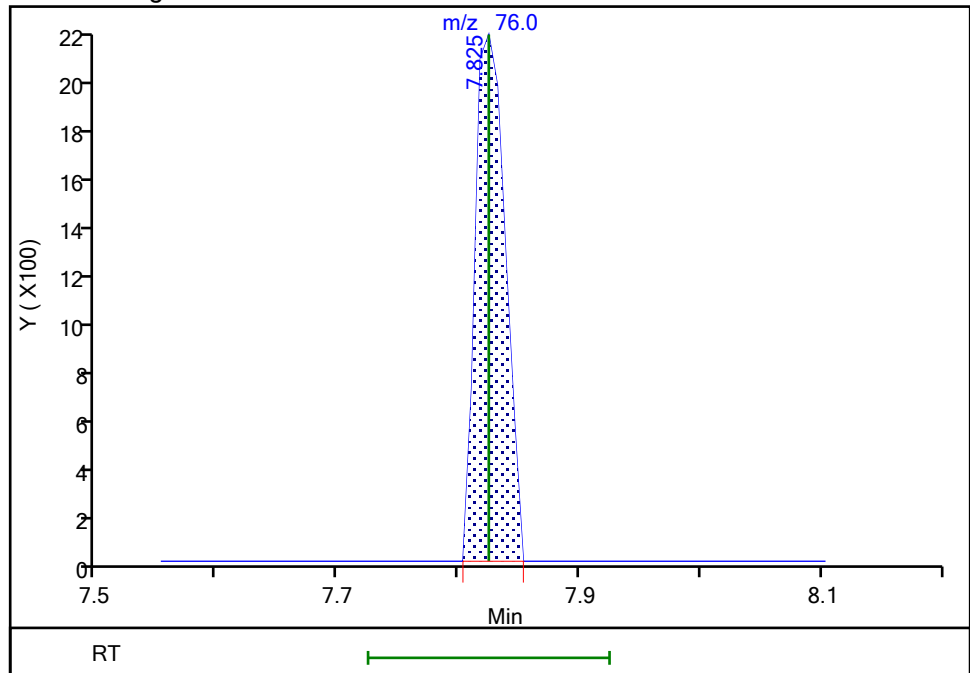
RT: 7.82

Area: 3652

Amount: 0.918572

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:07:00

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

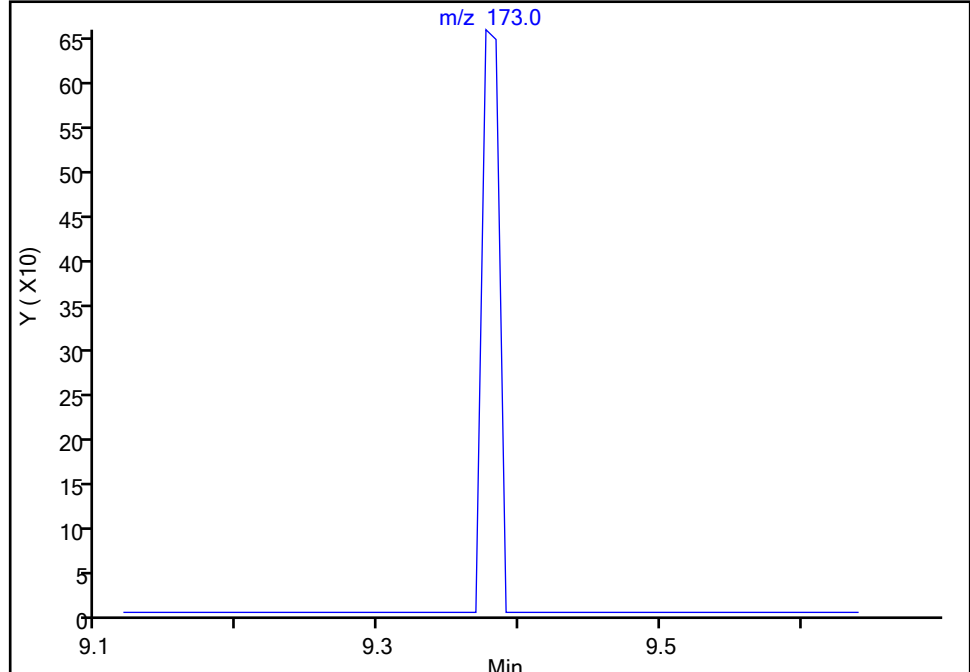
106 Bromoform, CAS: 75-25-2

Signal: 1

Not Detected

Expected RT: 9.38

Processing Integration Results



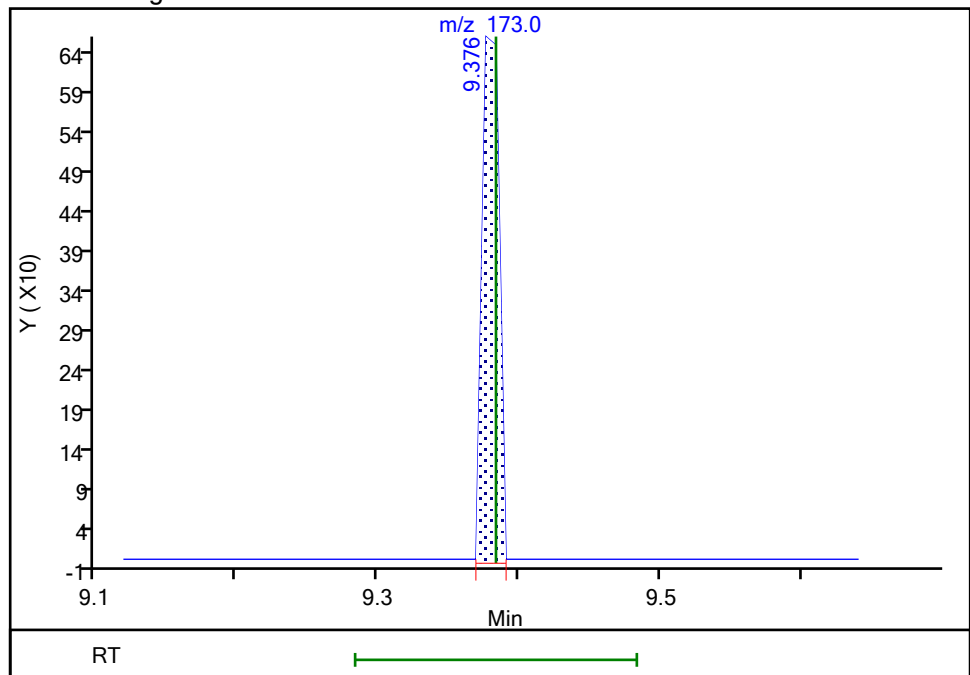
RT: 9.38

Area: 567

Amount: 0.989735

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:07:28

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

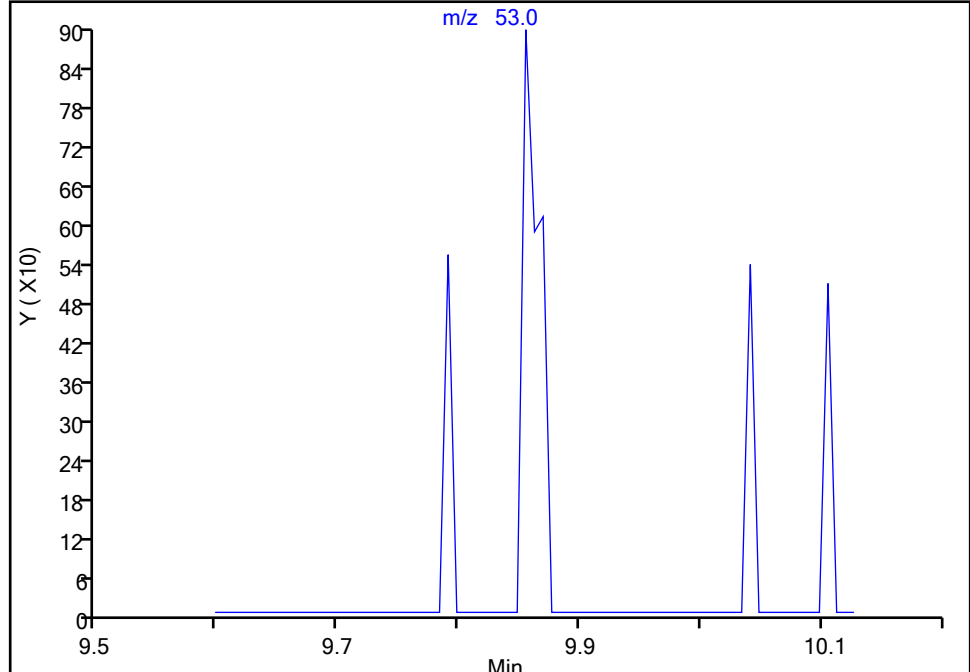
112 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

Not Detected

Expected RT: 9.86

Processing Integration Results



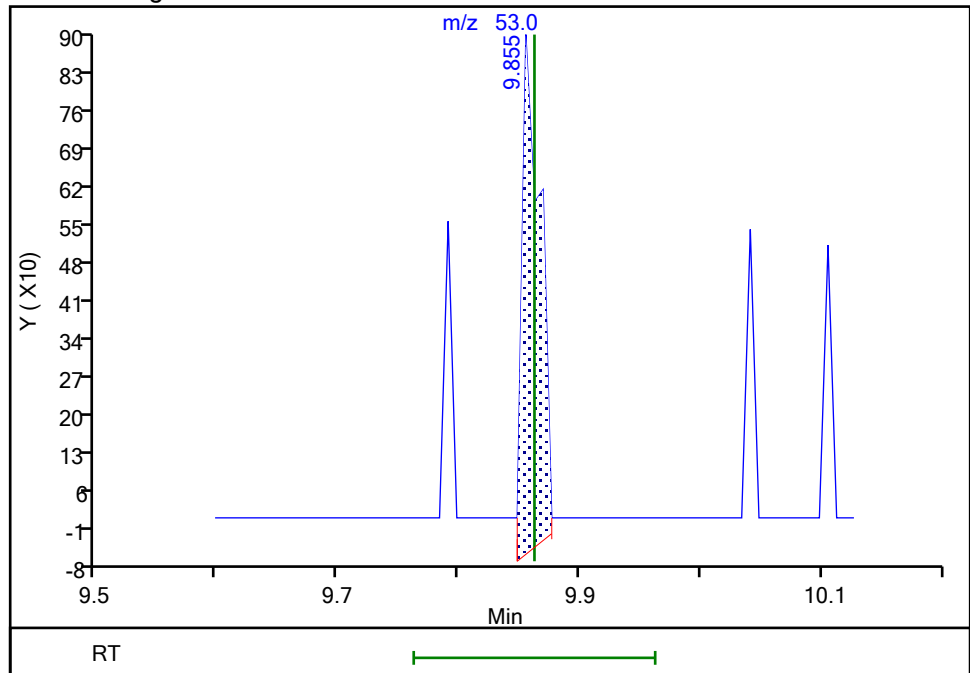
RT: 9.86

Area: 1008

Amount: 0.922794

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:07:46

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

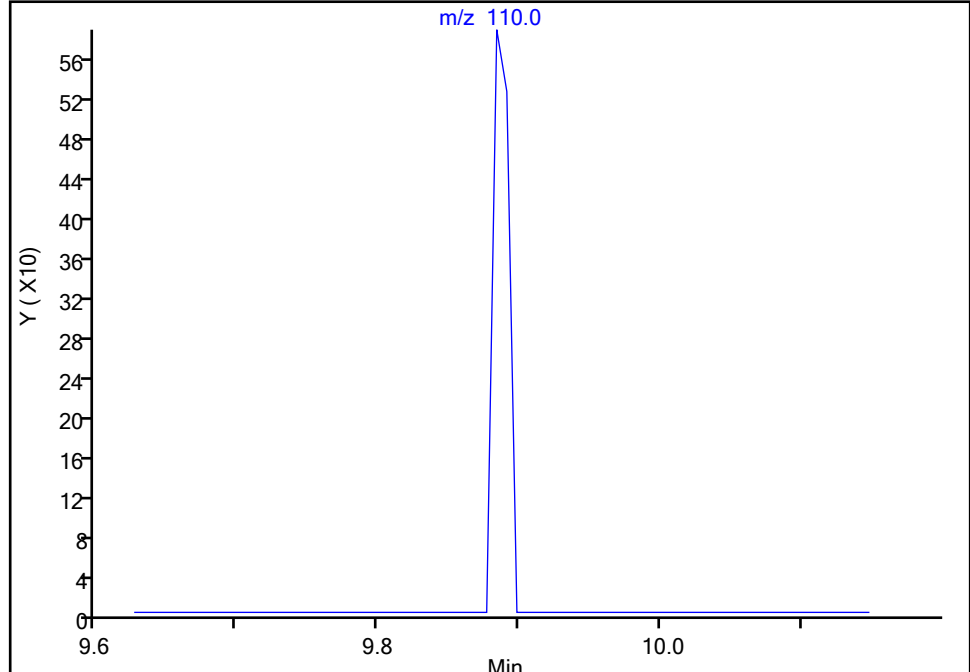
113 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

Not Detected

Expected RT: 9.89

Processing Integration Results



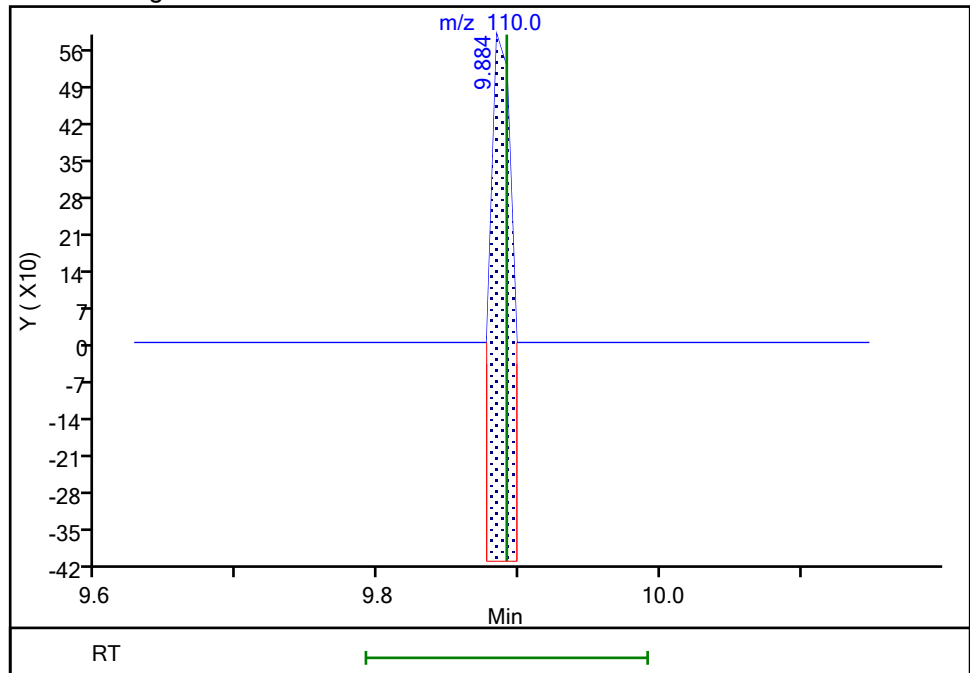
RT: 9.88

Area: 1187

Amount: 1.087675

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:00

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

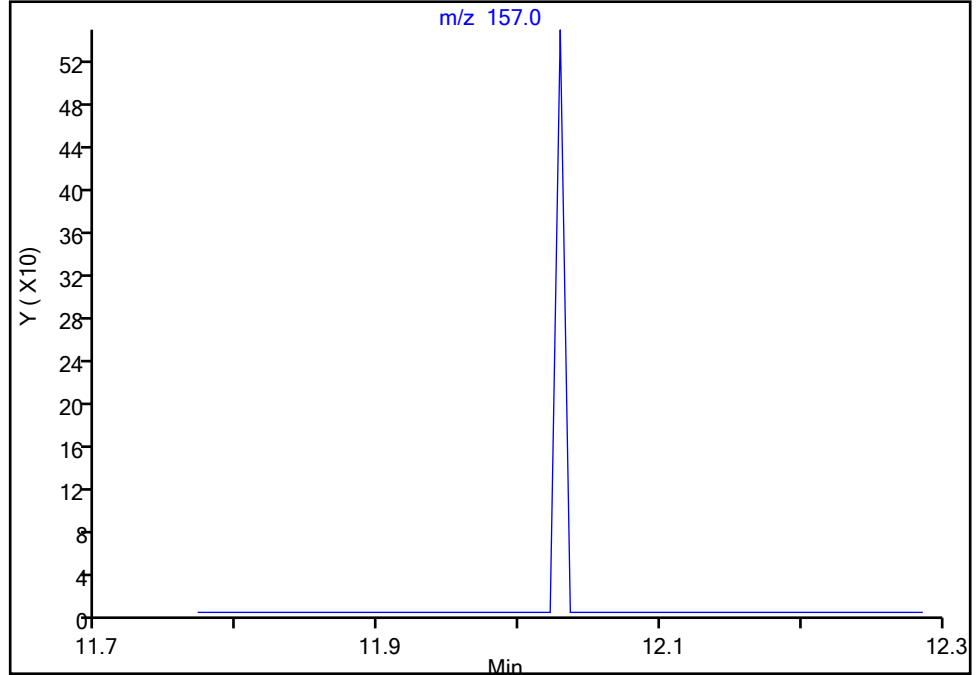
128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

Not Detected

Expected RT: 12.02

Processing Integration Results



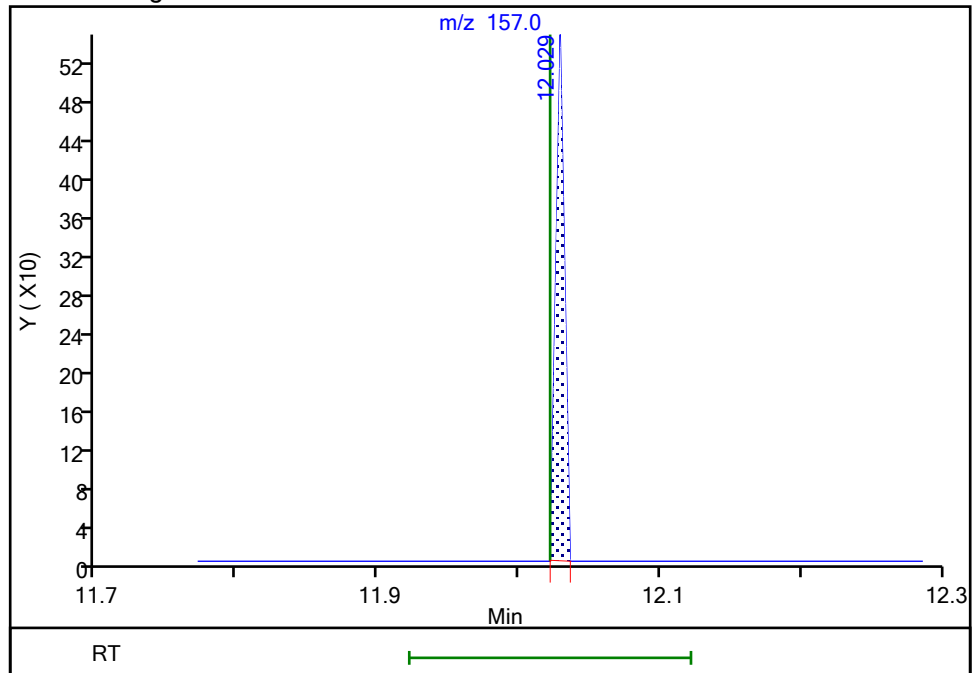
RT: 12.03

Area: 234

Amount: 1.021883

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:21

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

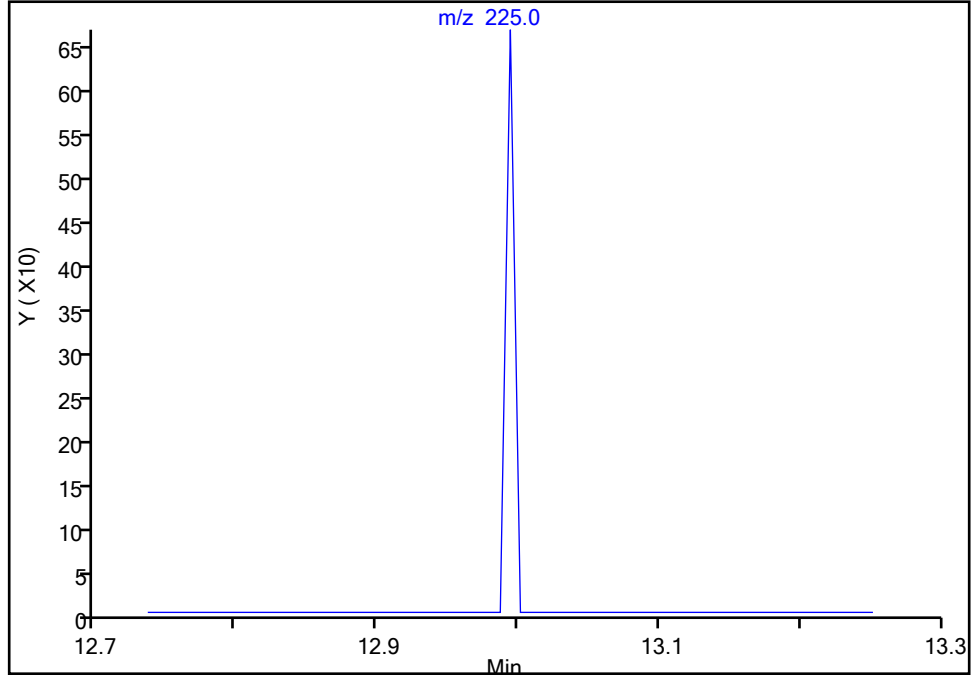
131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

Not Detected

Expected RT: 12.99

Processing Integration Results



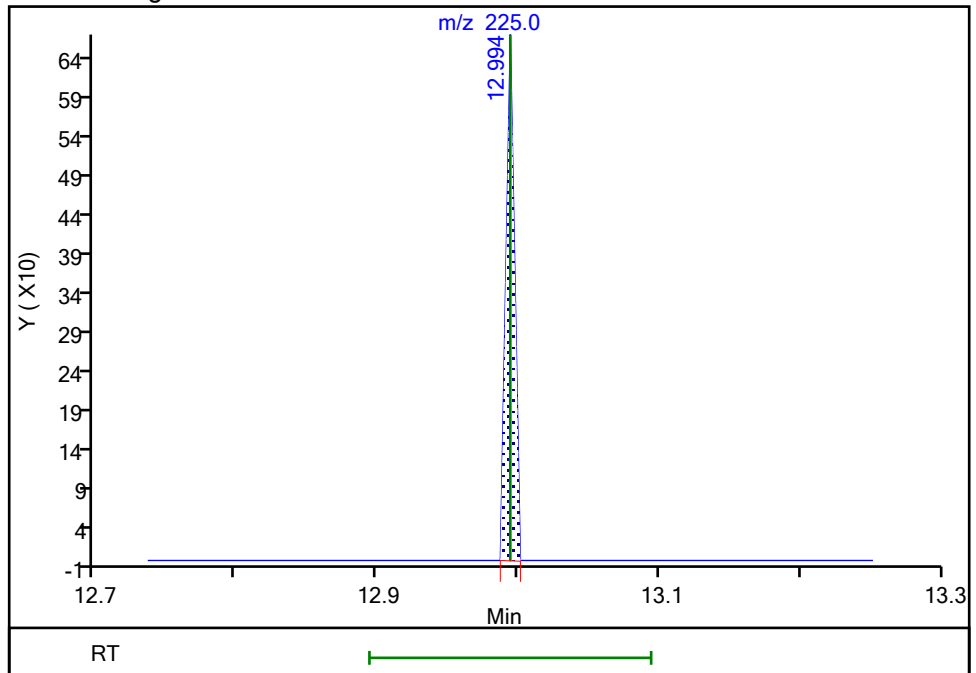
RT: 12.99

Area: 288

Amount: 0.965751

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:34

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

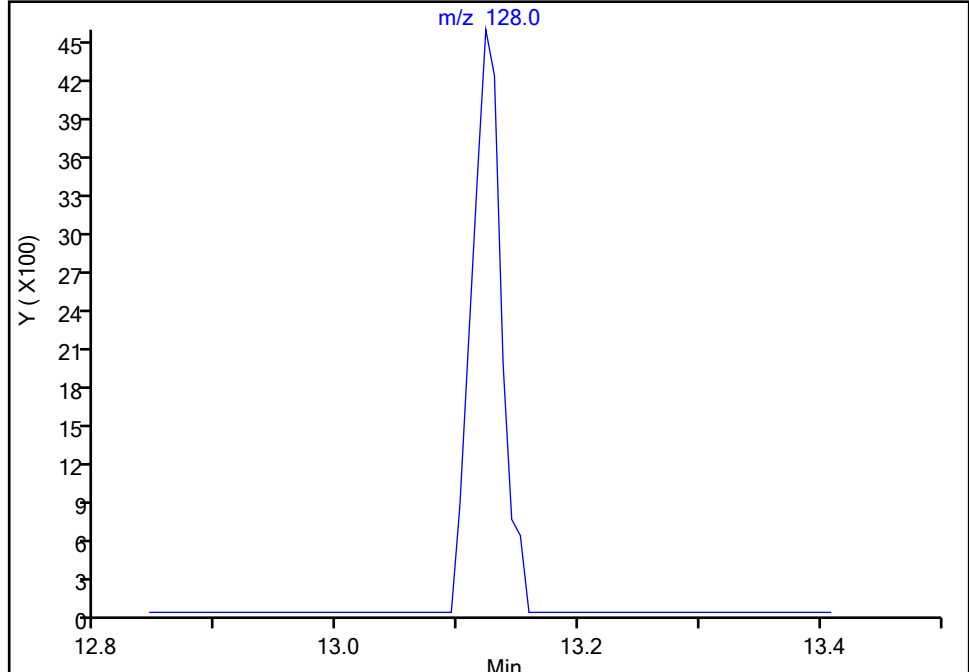
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

132 Naphthalene, CAS: 91-20-3

Signal: 1

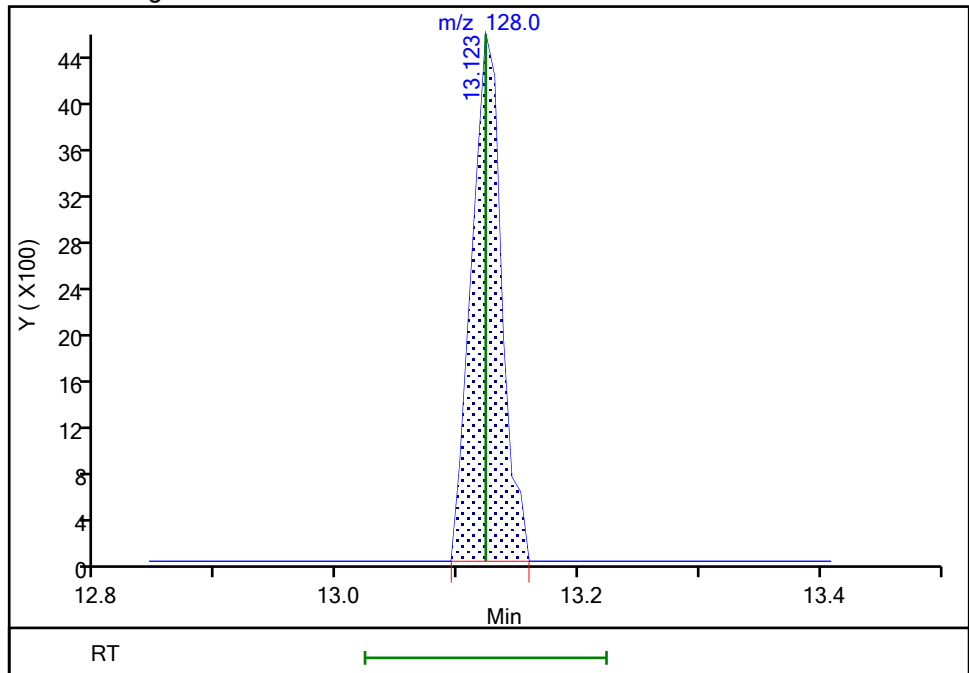
Not Detected
Expected RT: 13.12

Processing Integration Results



RT: 13.12
Area: 7932
Amount: 0.893686
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:08:43
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date: 04-Jun-2021 14:11:30

Instrument ID: VMS_MS1

Lims ID: STD010

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

12

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

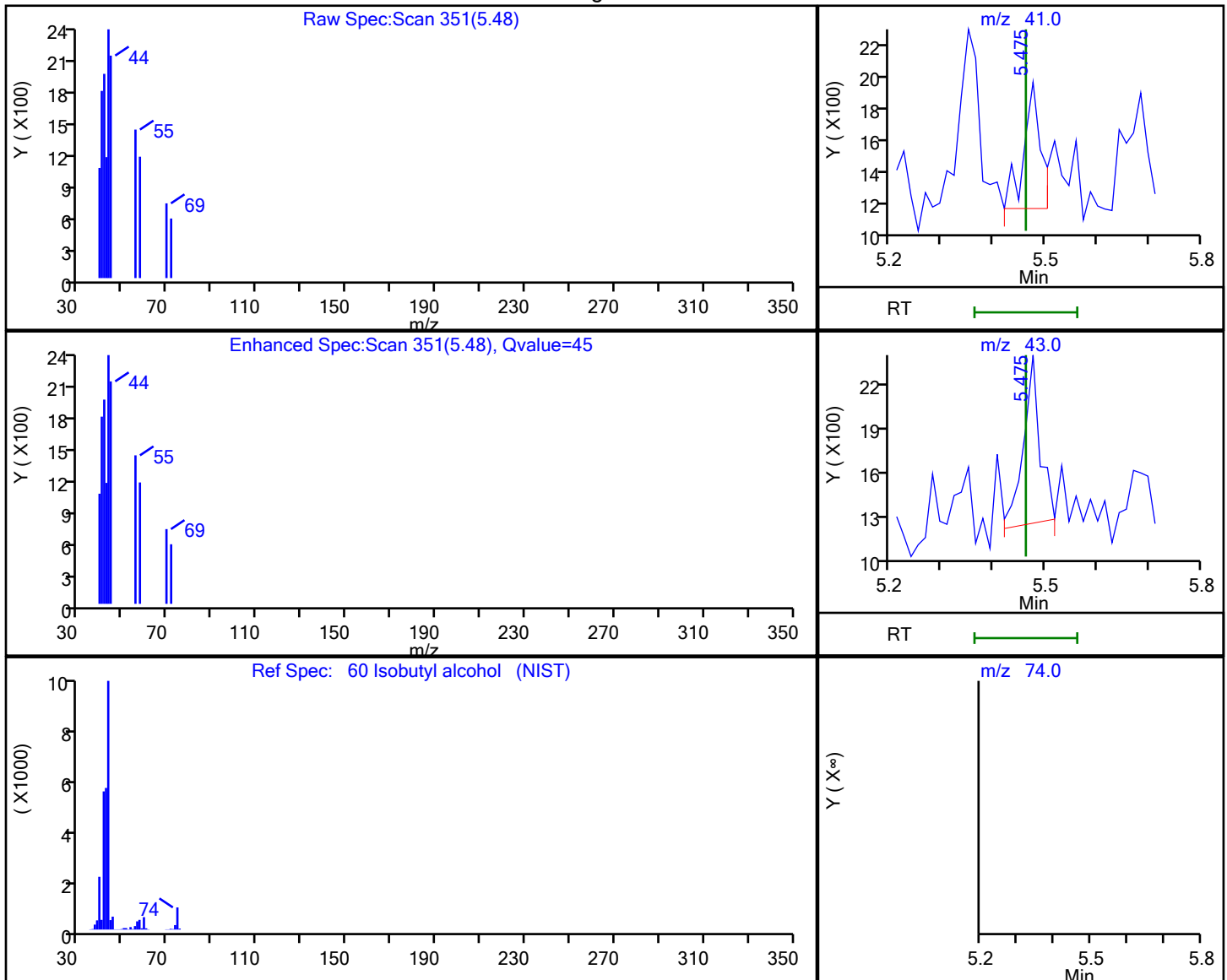
Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

60 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
5.48	41.00	1765	19.674036
5.48	43.00	2424	
5.46	74.00	0	

Reviewer: seifertj, 05-Jun-2021 09:06:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2724.D
 Lims ID: STD020
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 04-Jun-2021 14:33:30 ALS Bottle#: 13 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD020
 Misc. Info.: 280-0102067-016
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:28 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 14:53:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	729901	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	153463	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	242456	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	197983	50.0	51.2	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	263804	50.0	50.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	666453	50.0	50.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	267729	50.0	50.9	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	91	4813	2.00	1.55	a
12 Chloromethane	50	1.900	1.900	0.000	91	6207	2.00	1.96	
13 Vinyl chloride	62	1.998	1.998	0.000	95	4864	2.00	1.90	
15 Bromomethane	94	2.347	2.347	0.000	86	4150	2.00	2.11	
16 Chloroethane	64	2.459	2.459	0.000	92	3886	2.00	1.97	a
17 Dichlorofluoromethane	67	2.696	2.696	0.000	95	12181	2.00	1.84	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	96	7431	2.00	1.77	
20 Ethyl ether	59	3.003	3.003	0.000	84	3849	2.00	1.87	
22 Acrolein	56	3.143	3.143	0.000	93	13172	19.8	26.8	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	96	4703	2.00	2.23	
24 112TCTFE	151	3.241	3.255	-0.014	61	2294	2.00	1.65	
25 Acetone	43	3.283	3.269	0.014	99	10353	8.00	6.93	
26 Iodomethane	142	3.380	3.380	0.000	92	4158	2.00	1.82	
28 Carbon disulfide	76	3.450	3.450	0.000	99	12846	2.00	1.81	
30 Methyl acetate	43	3.576	3.576	0.000	70	7238	4.00	3.63	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	9065	2.00	2.14	
32 Methylene Chloride	84	3.716	3.716	0.000	96	6497	2.00	1.90	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	91	4555	20.0	17.9	
34 Acrylonitrile	53	3.911	3.911	0.000	100	19333	20.0	19.2	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	79	13534	2.00	1.82	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	92	5079	2.00	1.98	
37 Hexane	57	4.204	4.204	0.000	93	5710	2.00	2.20	
39 Vinyl acetate	43	4.344	4.344	0.000	99	21822	4.00	3.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	70	10140	2.00	2.05	
46 2-Butanone (MEK)	43	4.833	4.819	0.014	93	11915	8.00	7.23	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	73	8991	2.00	2.05	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	5653	2.00	2.01	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	92	8253	48.0	48.4	
54 Tetrahydrofuran	42	5.056	5.056	0.000	54	7039	4.00	3.07	
53 Chlorobromomethane	128	5.056	5.056	0.000	89	2285	2.00	2.25	
55 Chloroform	83	5.126	5.126	0.000	95	10862	2.00	2.12	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	88	9110	2.00	2.02	
57 Cyclohexane	56	5.350	5.350	0.000	89	10432	2.00	1.73	
58 1,1-Dichloropropene	75	5.419	5.419	0.000	85	6559	2.00	1.80	
59 Carbon tetrachloride	117	5.419	5.419	0.000	82	5514	2.00	1.66	
60 Isobutyl alcohol	41	5.475	5.461	0.014	49	5445	50.0	59.8	
63 Benzene	78	5.587	5.587	0.000	93	19222	2.00	1.90	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	96	8489	2.00	1.99	
66 n-Heptane	43	5.824	5.824	0.000	36	7610	2.00	2.18	
68 Trichloroethene	95	6.146	6.146	0.000	89	5806	2.00	2.04	
69 2-Pentanone	43	6.285	6.271	0.014	97	11280	6.40	5.75	
70 Methylcyclohexane	55	6.355	6.355	0.000	90	7839	2.00	1.80	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	93	5473	2.00	1.99	
73 1,4-Dioxane	88	6.425	6.425	0.000	7	580	40.0	40.0	Ma
74 Dibromomethane	93	6.453	6.453	0.000	56	3222	2.00	1.87	
75 Dichlorobromomethane	83	6.609	6.609	0.000	87	7304	2.00	1.94	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	80	2713	2.00	1.62	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	87	7337	2.00	1.77	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	97	15752	8.00	6.93	
82 Toluene	91	7.295	7.295	0.000	97	19016	2.00	1.89	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	91	7715	2.00	1.92	
85 Ethyl methacrylate	69	7.517	7.517	0.000	88	5320	2.00	1.74	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	89	4614	2.00	1.97	
89 Tetrachloroethene	164	7.760	7.767	-0.007	82	2450	2.00	1.54	
90 1,3-Dichloropropane	76	7.832	7.824	0.008	89	7473	2.00	1.92	
91 2-Hexanone	43	7.853	7.853	0.000	96	10548	8.00	7.37	
95 Chlorodibromomethane	129	8.032	8.032	0.000	83	4334	2.00	1.89	
96 Ethylene Dibromide	107	8.146	8.146	0.000	94	4399	2.00	1.99	
98 1-Chlorohexane	91	8.568	8.568	0.000	34	7378	1.60	1.59	
99 Chlorobenzene	112	8.597	8.604	-0.007	96	11939	2.00	1.91	
100 1,1,1,2-Tetrachloroethane	131	8.682	8.682	0.000	45	4140	2.00	1.87	
101 Ethylbenzene	106	8.682	8.682	0.000	99	6210	2.00	1.87	
102 m-Xylene & p-Xylene	106	8.811	8.804	0.007	97	8825	2.00	2.10	
103 o-Xylene	106	9.176	9.176	0.000	95	8136	2.00	2.08	
104 Styrene	104	9.197	9.197	0.000	90	13818	2.00	1.93	
106 Bromoform	173	9.383	9.383	0.000	82	2157	2.00	2.04	a
107 Isopropylbenzene	105	9.526	9.526	0.000	96	20761	2.00	1.96	
109 Cyclohexanone	55	9.619	9.626	-0.007	94	10716	60.0	62.3	
110 1,1,2,2-Tetrachloroethane	83	9.819	9.827	-0.008	90	7007	2.00	1.99	
111 Bromobenzene	156	9.855	9.855	0.000	94	4764	2.00	1.98	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	40	2163	2.00	2.04	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	80	1618	2.00	1.66	
114 N-Propylbenzene	120	9.941	9.941	0.000	98	5942	2.00	2.02	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	4501	2.00	1.87	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	18346	2.00	1.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.148	10.155	-0.007	98	4568	2.00	1.72	
118 tert-Butylbenzene	119	10.427	10.427	0.000	91	14882	2.00	1.92	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	98	18160	2.00	1.87	
120 sec-Butylbenzene	134	10.649	10.649	0.000	95	4259	2.00	2.23	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	92	9644	2.00	2.05	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	95	17787	2.00	1.85	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	9442	2.00	1.91	
125 n-Butylbenzene	91	11.207	11.207	0.000	97	18517	2.00	1.99	
127 1,2-Dichlorobenzene	146	11.228	11.235	-0.007	85	8846	2.00	2.00	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	61	778	2.00	1.90	Ma
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	86	5652	2.00	1.95	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	77	1453	2.00	2.11	a
132 Naphthalene	128	13.123	13.123	0.000	97	15708	2.00	1.83	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	87	4676	2.00	1.77	
S 149 1,2-Dichloroethene, Total (URS)	98				0		4.00	4.00	
S 150 1,2-Dichloroethene, Total	1				0		4.00	4.00	
S 151 Trihalomethanes, Total	1				0		8.00	7.99	
S 152 Total BTEX	1				0			9.84	
S 153 Xylenes, Total (URS)	1				0		4.00	4.18	
S 155 Xylenes, Total	106				0		4.00	4.18	
S 156 1,3-Dichloropropene, Total	1				0		4.00	3.68	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Gas A_00089

Amount Added: 0.40

Units: uL

MV-MegaMainA_00050

Amount Added: 1.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Chrom Revision: 2.3 13-May-2021 07:57:40

Operator ID: SEIFERTJ

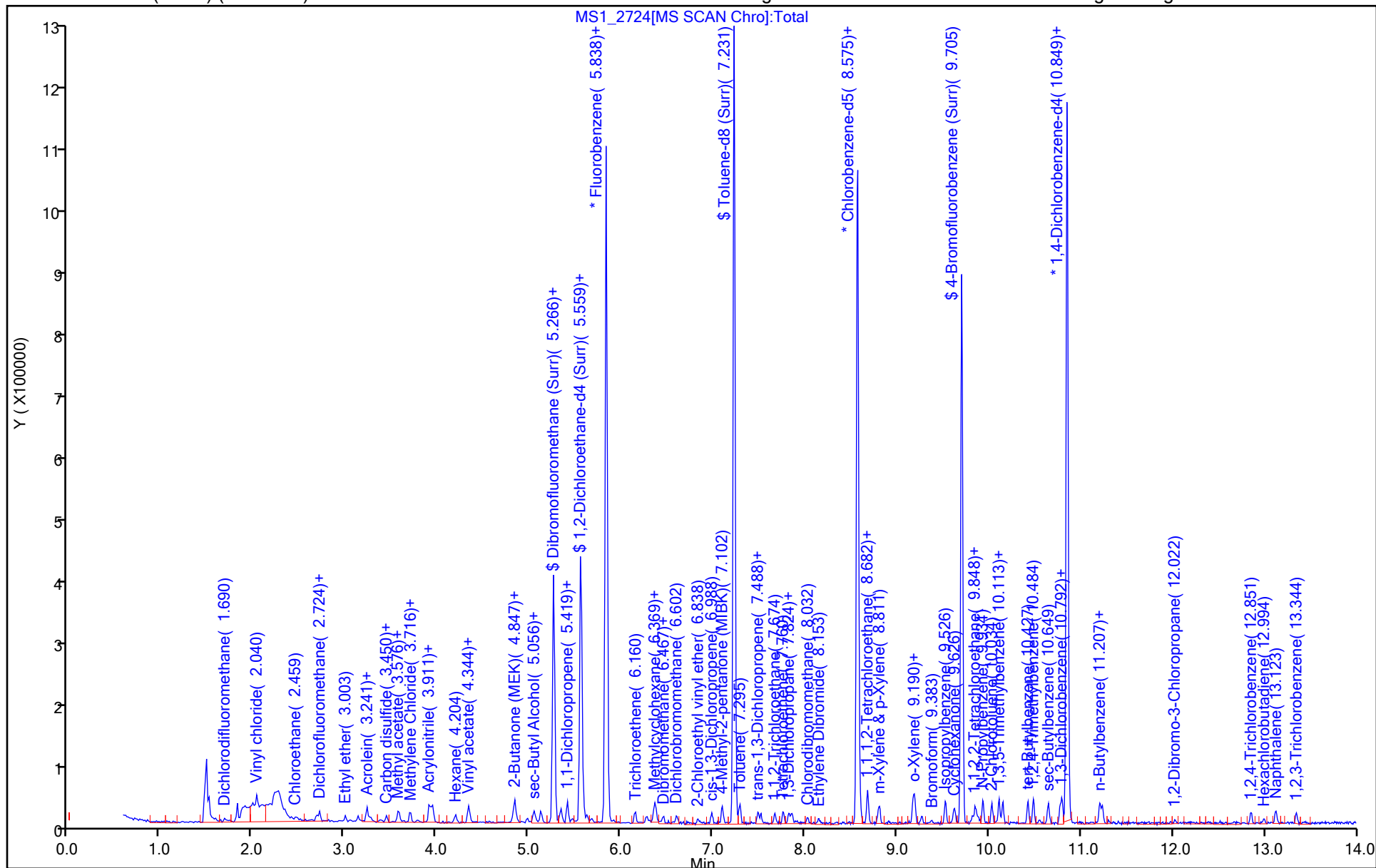
Worklist Smp#: 16

Client ID:

ALS Bottle#: 13

Limit Group: MSV - 8260B Water and Solid

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

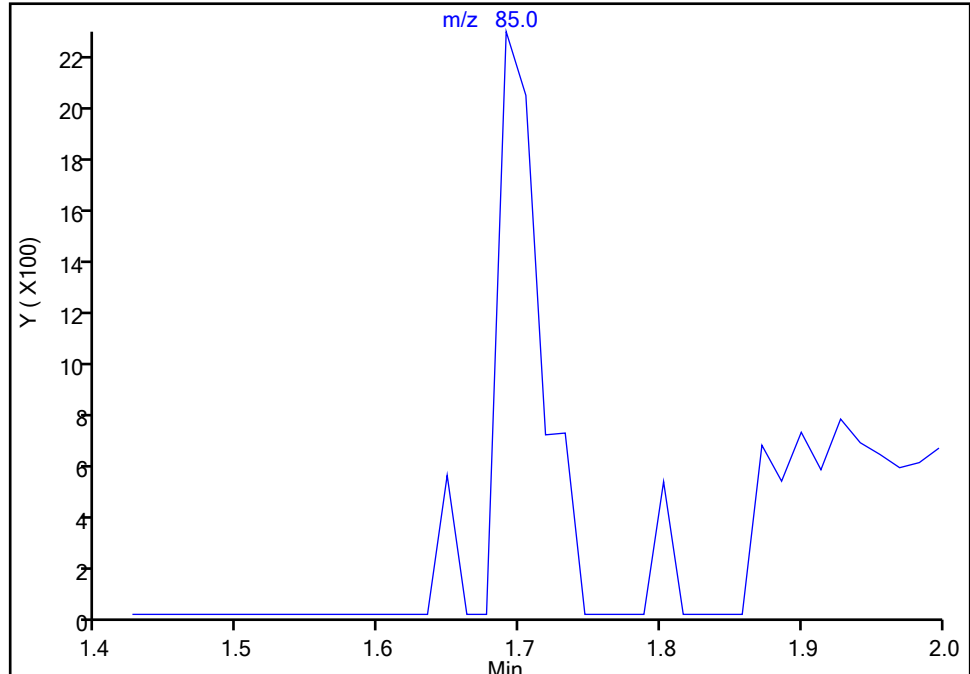
11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

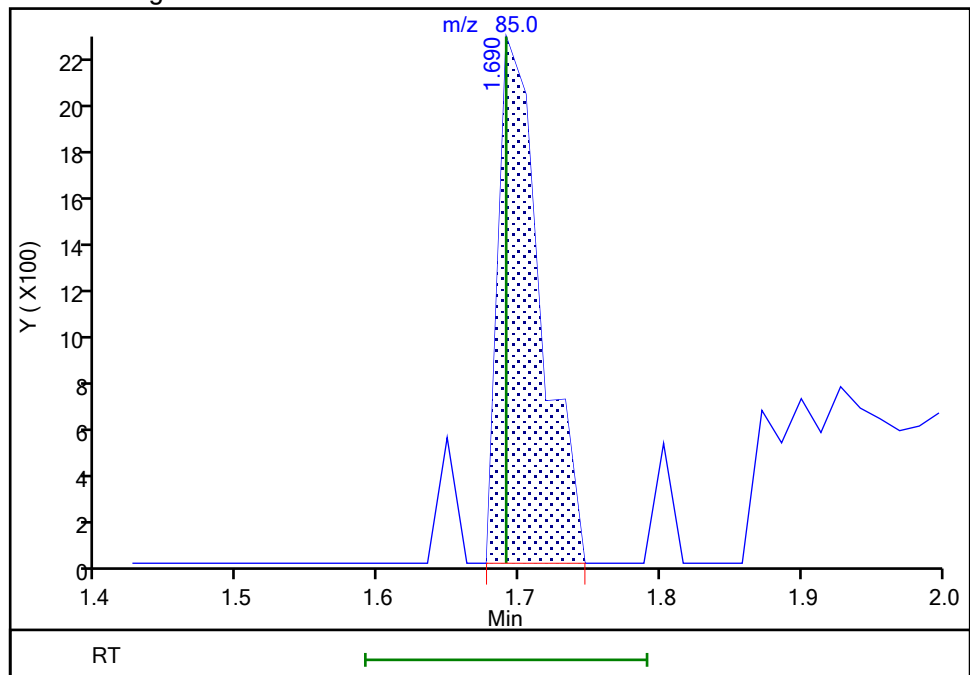
Not Detected

Expected RT: 1.69

Processing Integration Results



Manual Integration Results



RT: 1.69

Area: 4813

Amount: 1.548599

Amount Units: ug/l

Reviewer: seifertj, 05-Jun-2021 09:09:40

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

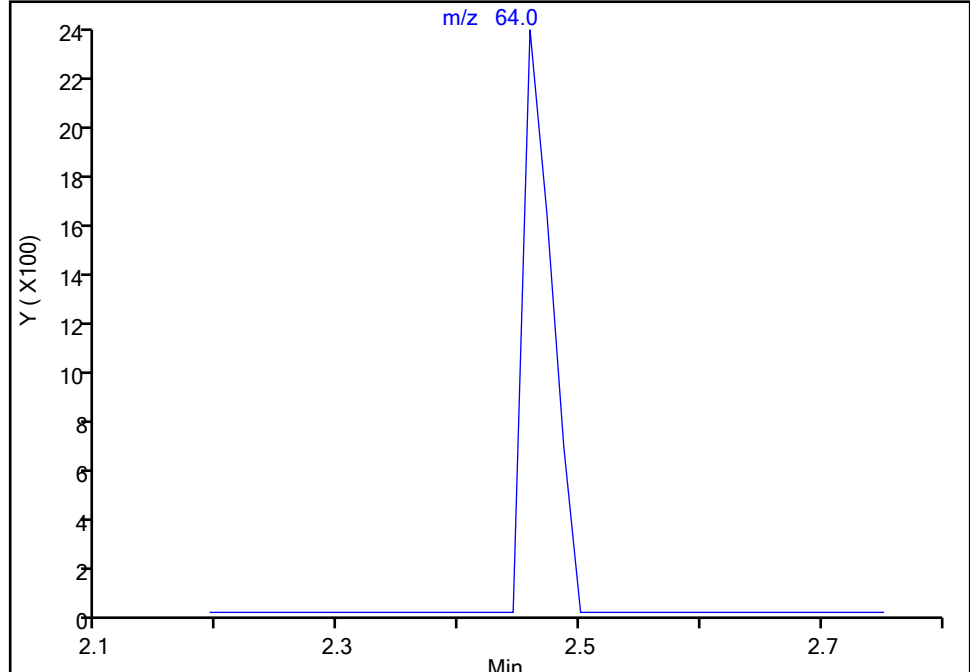
16 Chloroethane, CAS: 75-00-3

Signal: 1

Not Detected

Expected RT: 2.46

Processing Integration Results



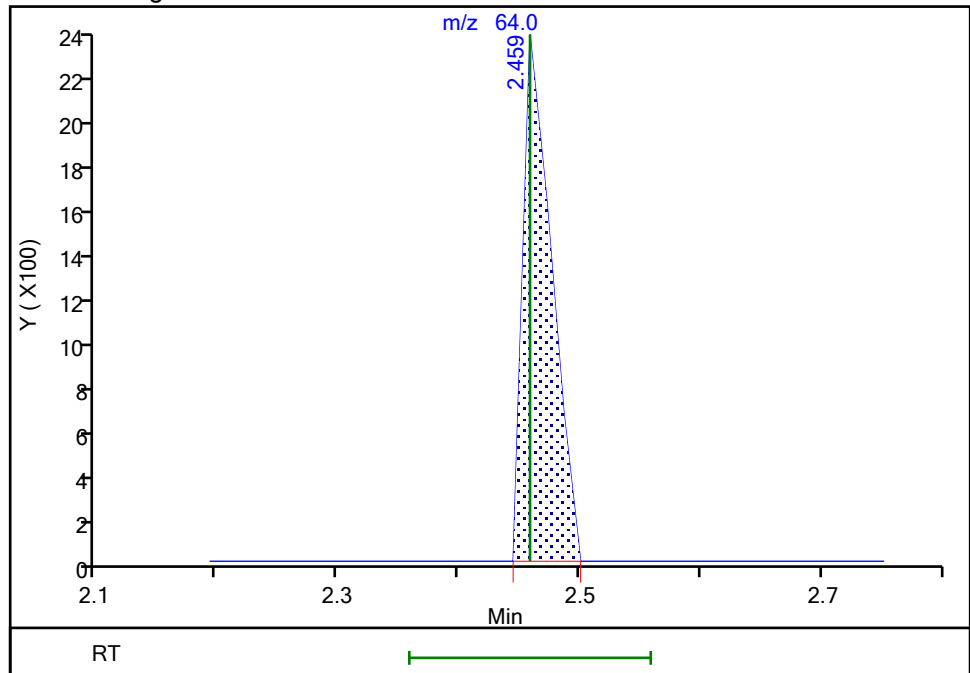
RT: 2.46

Area: 3886

Amount: 1.970059

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:09:50

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

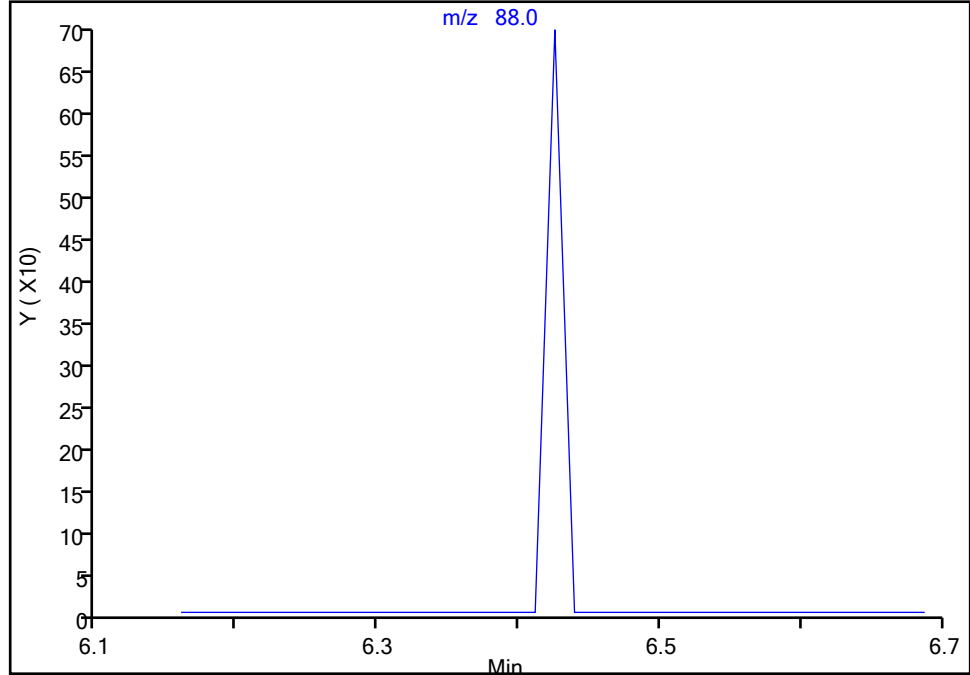
73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

Not Detected

Expected RT: 6.43

Processing Integration Results



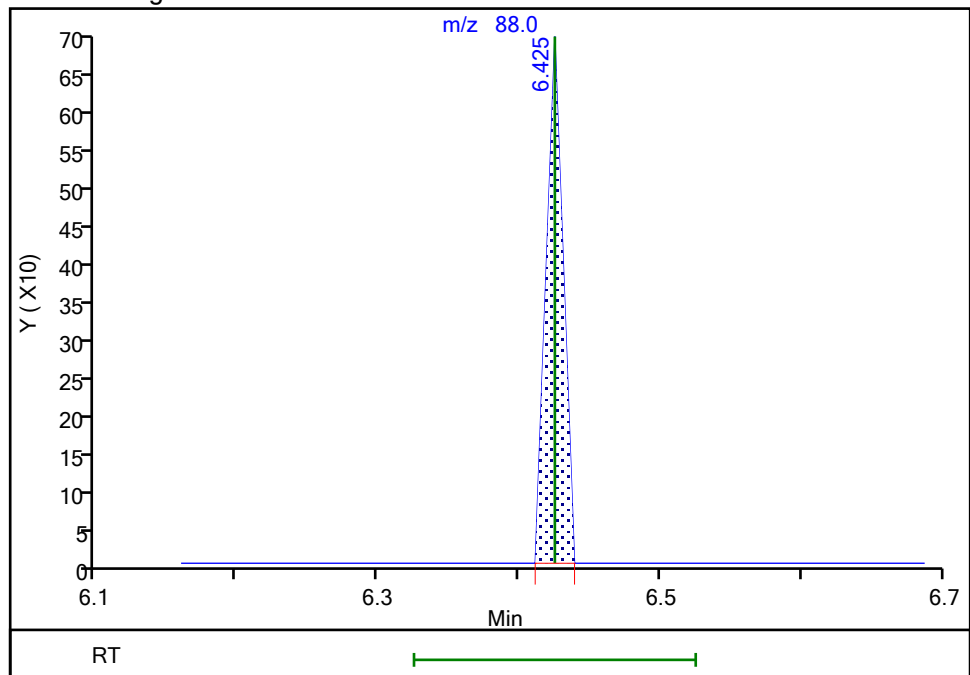
RT: 6.43

Area: 580

Amount: 40.036575

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:10:21

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector: MS SCAN

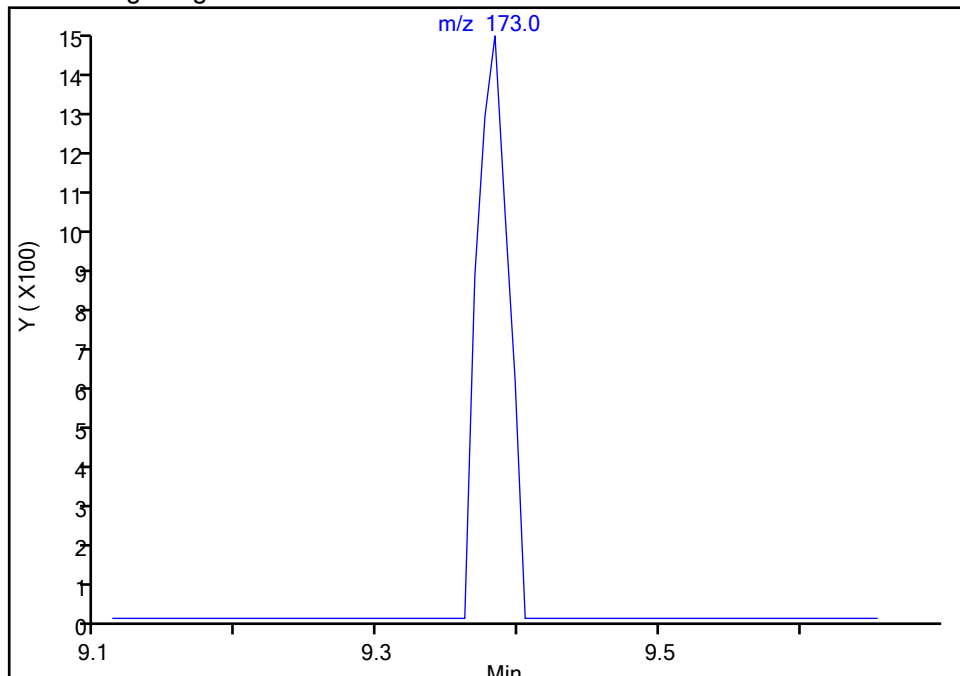
106 Bromoform, CAS: 75-25-2

Signal: 1

Not Detected

Expected RT: 9.38

Processing Integration Results



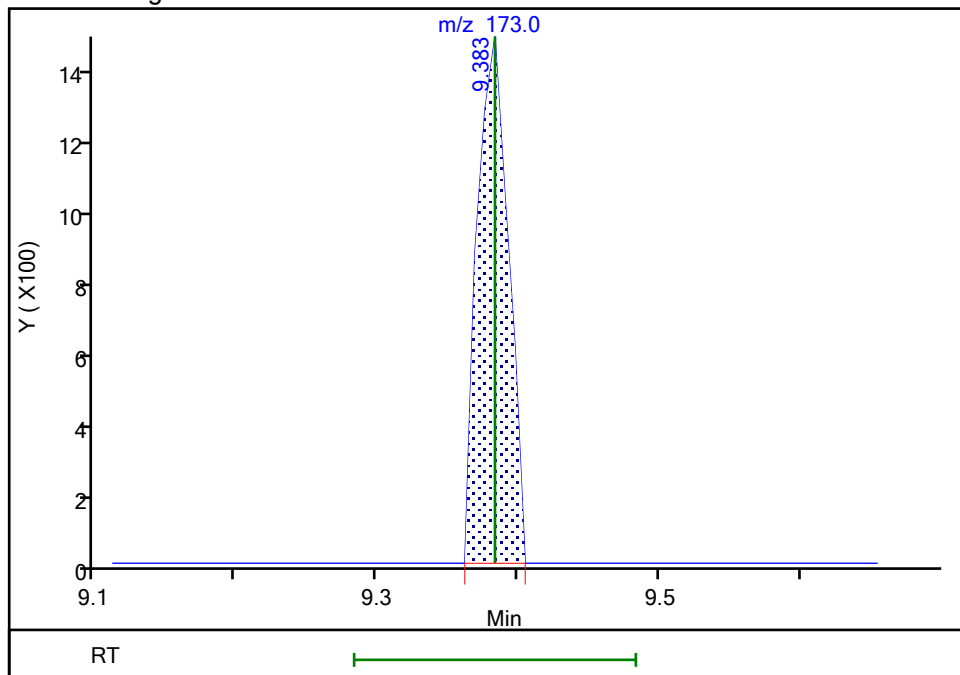
RT: 9.38

Area: 2157

Amount: 2.040934

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:10:34

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date: 04-Jun-2021 14:33:30

Instrument ID: VMS_MS1

Lims ID: STD020

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

13

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

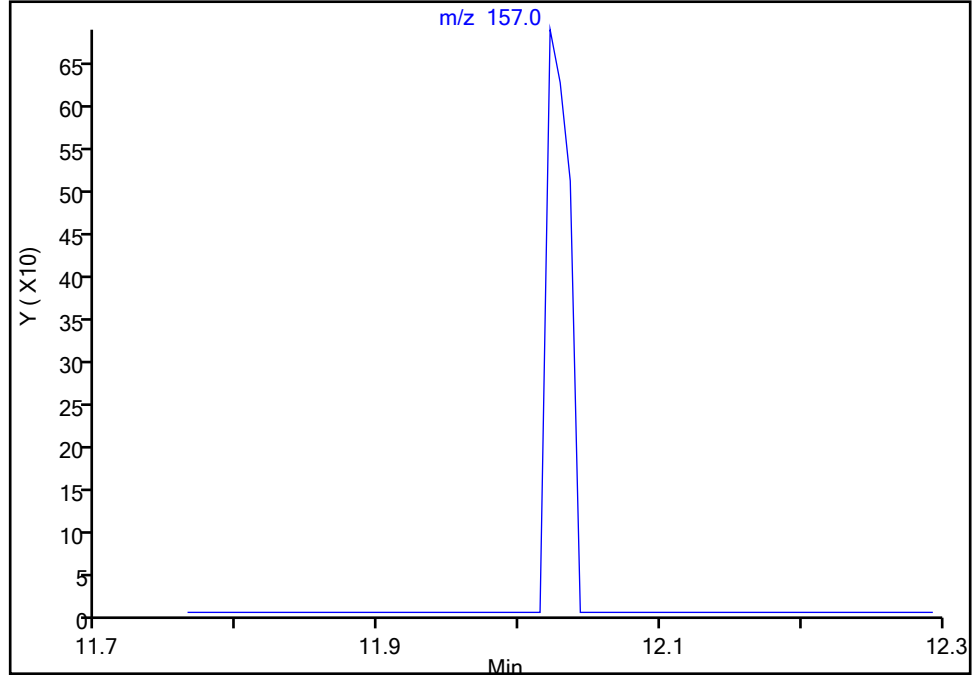
128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

Not Detected

Expected RT: 12.02

Processing Integration Results



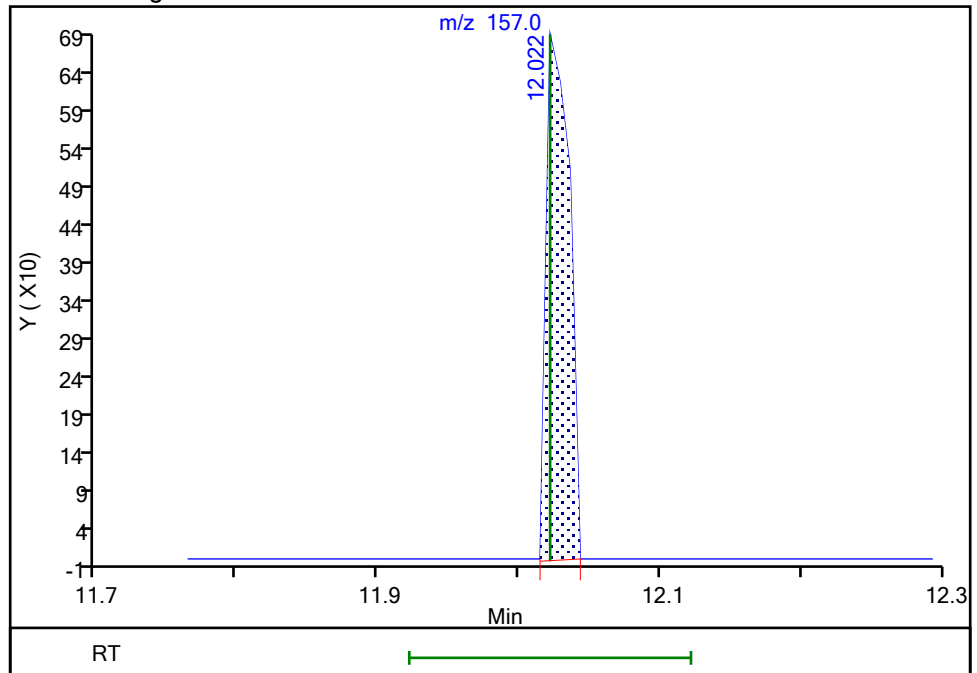
RT: 12.02

Area: 778

Amount: 1.895027

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:09:19

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

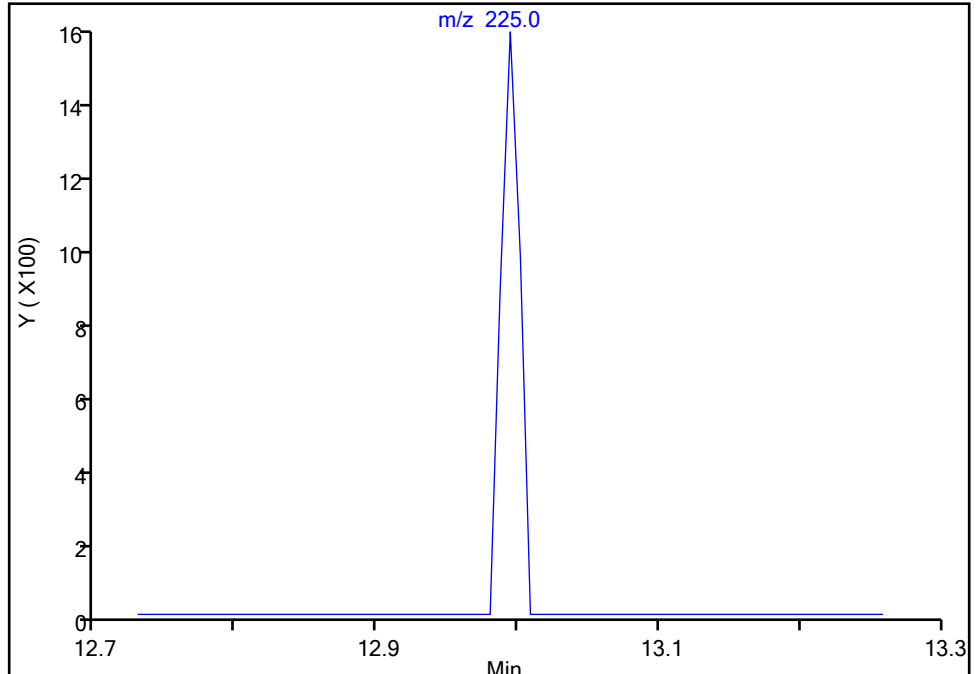
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector: MS SCAN

131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

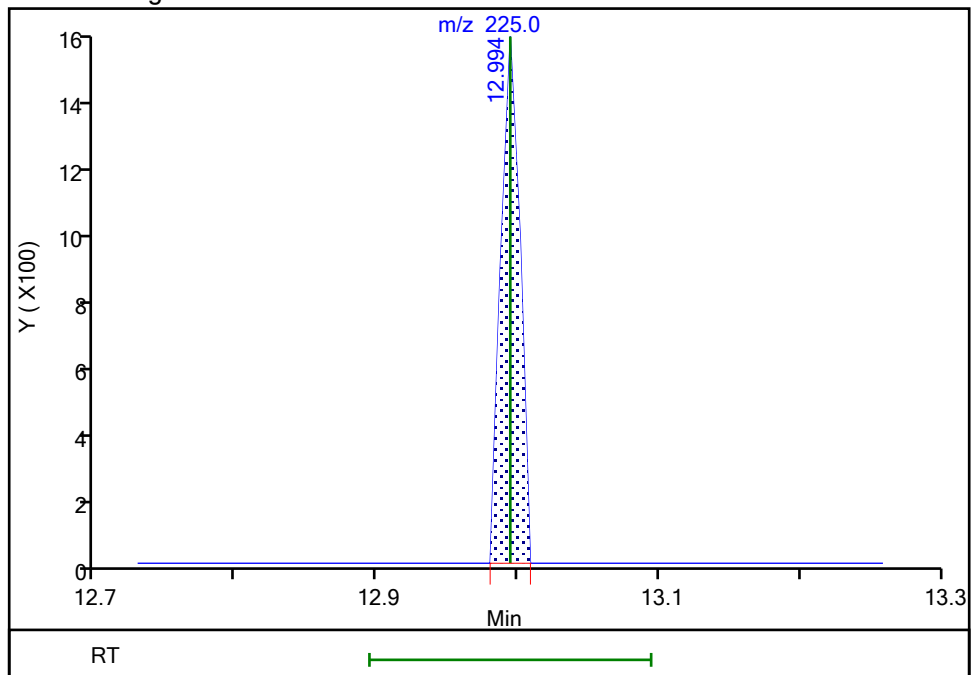
Not Detected
Expected RT: 12.99

Processing Integration Results



RT: 12.99
Area: 1453
Amount: 2.113842
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:09:05
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2726.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 04-Jun-2021 15:16:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD10
 Misc. Info.: 280-0102067-018
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:31 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 08:11:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	746498	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	158818	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	249122	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199938	50.0	50.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	268659	50.0	50.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	678886	50.0	49.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	272092	50.0	50.3	
11 Dichlorodifluoromethane	85	1.691	1.690	0.001	98	40935	10.0	12.3	
12 Chloromethane	50	1.914	1.900	0.014	99	36390	10.0	11.2	
13 Vinyl chloride	62	1.998	1.998	0.000	98	28798	10.0	11.0	
15 Bromomethane	94	2.347	2.347	0.000	95	22486	10.0	11.2	
16 Chloroethane	64	2.459	2.459	0.000	97	22577	10.0	11.2	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	60416	10.0	11.5	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	48588	10.0	11.3	
20 Ethyl ether	59	3.003	3.003	0.000	93	21225	10.0	10.1	
22 Acrolein	56	3.143	3.143	0.000	98	44500	98.8	104.3	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	23478	10.0	10.9	
24 112TCTFE	151	3.241	3.255	-0.014	95	15716	10.0	11.0	
25 Acetone	43	3.269	3.269	0.000	99	36311	40.0	37.9	
26 Iodomethane	142	3.381	3.380	0.001	99	30290	10.0	9.75	
28 Carbon disulfide	76	3.450	3.450	0.000	100	80765	10.0	11.1	
30 Methyl acetate	43	3.576	3.576	0.000	97	36989	20.0	18.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	47872	10.0	11.0	
32 Methylene Chloride	84	3.702	3.716	-0.014	97	30580	10.0	11.0	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	98	26461	100.0	101.7	
34 Acrylonitrile	53	3.911	3.911	0.000	97	103754	100.0	100.5	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	76215	10.0	10.0	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	26723	10.0	10.2	
37 Hexane	57	4.205	4.204	0.001	94	34832	10.0	10.8	
39 Vinyl acetate	43	4.344	4.344	0.000	98	124457	20.0	21.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	53370	10.0	10.5	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	56212	40.0	42.3	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	47969	10.0	10.7	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	29549	10.0	10.3	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	47182	240.0	228.6	
54 Tetrahydrofuran	42	5.057	5.056	0.001	86	20411	20.0	19.6	
53 Chlorobromomethane	128	5.057	5.056	0.001	96	13324	10.0	10.6	
55 Chloroform	83	5.126	5.126	0.000	98	54433	10.0	10.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	95	46977	10.0	10.2	
57 Cyclohexane	56	5.350	5.350	0.000	94	52233	10.0	10.8	
58 1,1-Dichloropropene	75	5.420	5.419	0.001	90	40352	10.0	10.8	
59 Carbon tetrachloride	117	5.420	5.419	0.001	85	37517	10.0	11.0	
60 Isobutyl alcohol	41	5.462	5.461	0.001	94	21152	250.0	227.3	
63 Benzene	78	5.587	5.587	0.000	97	107690	10.0	10.4	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	96	45534	10.0	10.5	
66 n-Heptane	43	5.825	5.824	0.001	95	34155	10.0	10.9	
68 Trichloroethene	95	6.146	6.146	0.000	94	27685	10.0	9.40	
69 2-Pentanone	43	6.272	6.271	0.001	98	60410	32.0	30.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	37693	10.0	10.1	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	30490	10.0	10.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	93	5826	200.0	200.2	
74 Dibromomethane	93	6.453	6.453	0.000	88	18955	10.0	10.8	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	38423	10.0	9.97	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	92	17861	10.0	10.4	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	44781	10.0	10.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	97	90316	40.0	38.8	
82 Toluene	91	7.296	7.295	0.001	97	106895	10.0	10.4	
84 trans-1,3-Dichloropropene	75	7.489	7.488	0.001	94	42952	10.0	10.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	33204	10.0	10.5	
87 1,1,2-Trichloroethane	97	7.675	7.674	0.000	95	22601	10.0	10.3	
89 Tetrachloroethene	164	7.767	7.767	0.000	91	17549	10.0	10.7	
90 1,3-Dichloropropane	76	7.825	7.824	0.001	90	40733	10.0	10.1	
91 2-Hexanone	43	7.853	7.853	0.000	99	64691	40.0	39.2	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	88	24851	10.0	10.5	
96 Ethylene Dibromide	107	8.146	8.146	0.000	95	22403	10.0	9.80	
98 1-Chlorohexane	91	8.561	8.568	-0.007	87	29616	8.00	8.27	
99 Chlorobenzene	112	8.604	8.604	0.000	93	66381	10.0	10.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.682	0.001	90	24212	10.0	10.6	
101 Ethylbenzene	106	8.683	8.682	0.001	99	36634	10.0	10.6	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	44784	10.0	10.3	
103 o-Xylene	106	9.176	9.176	0.000	99	41175	10.0	10.2	
104 Styrene	104	9.198	9.197	0.001	94	77181	10.0	10.4	
106 Bromoform	173	9.383	9.383	0.000	90	14898	10.0	10.1	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	117182	10.0	10.8	
109 Cyclohexanone	55	9.627	9.626	0.001	94	46603	300.0	261.9	
110 1,1,2,2-Tetrachloroethane	83	9.820	9.827	-0.007	94	31093	10.0	9.96	
111 Bromobenzene	156	9.855	9.855	0.000	96	25440	10.0	10.3	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	74	10802	10.0	9.93	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	85	8203	10.0	9.51	
114 N-Propylbenzene	120	9.934	9.941	-0.007	99	32197	10.0	10.6	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	26371	10.0	10.7	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	100834	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.155	0.001	99	27546	10.0	10.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	83762	10.0	10.5	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	99	104041	10.0	10.4	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	23738	10.0	10.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	92	50391	10.0	10.4	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	97	102178	10.0	10.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	95	50543	10.0	9.96	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	99478	10.0	10.4	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	89	47494	10.0	10.4	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	6381	10.0	10.5	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	29259	10.0	9.83	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	88	10553	10.0	10.7	
132 Naphthalene	128	13.123	13.123	0.000	98	93344	10.0	10.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.344	0.001	93	27863	10.0	10.3	
S 149 1,2-Dichloroethene, Total (URS)	93				0		20.0	20.5	
S 150 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 151 Trihalomethanes, Total	1				0		40.0	40.9	
S 152 Total BTEX	1				0			51.9	
S 153 Xylenes, Total (URS)	1				0		20.0	20.5	
S 155 Xylenes, Total	106				0		20.0	20.5	
S 156 1,3-Dichloropropene, Total	1				0		20.0	20.9	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 2.00

Units: uL

MV-MegaMainA_00050

Amount Added: 5.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2726.D

Injection Date: 04-Jun-2021 15:16:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD10

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

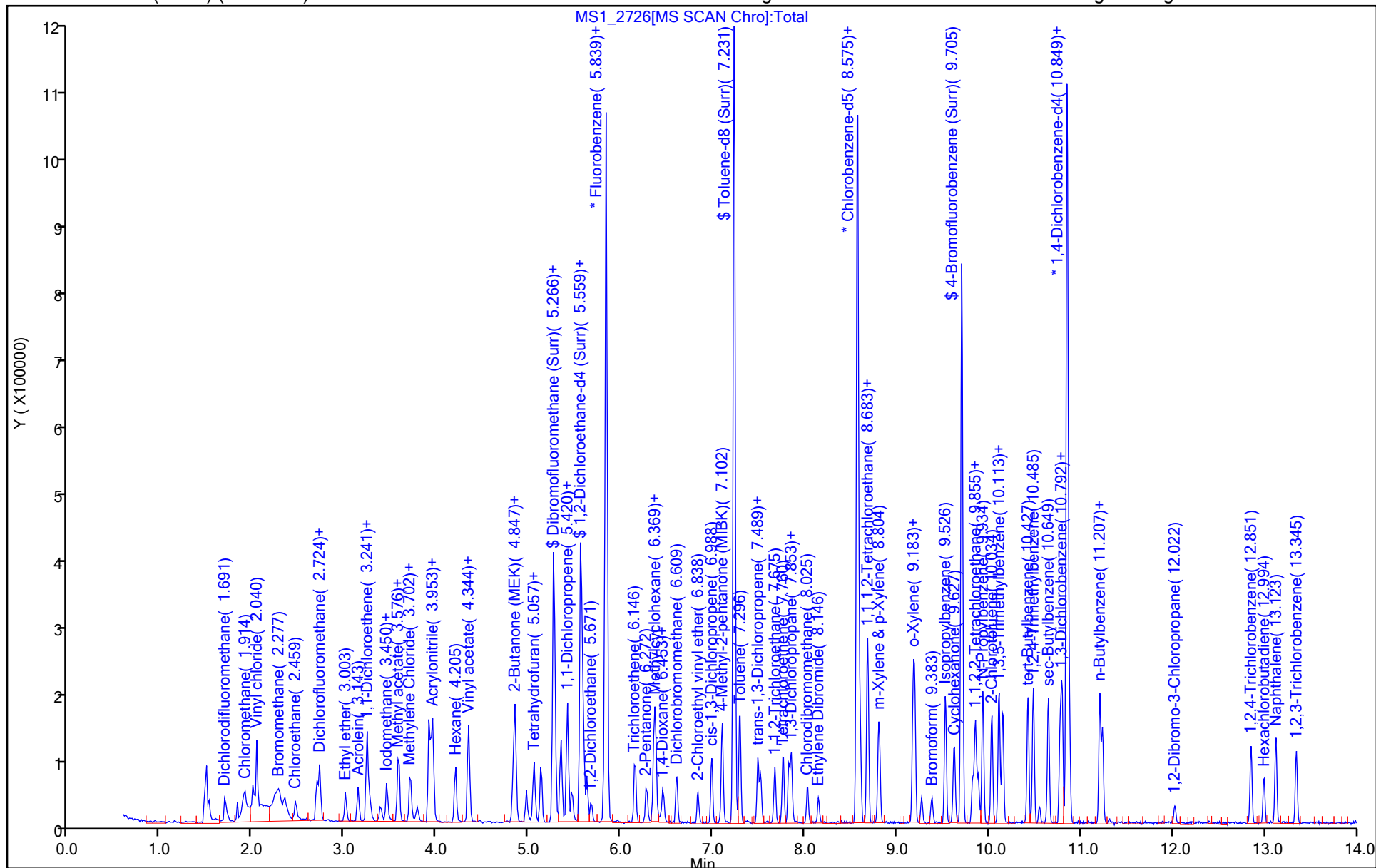
ALS Bottle#: 15

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2727.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 04-Jun-2021 15:37:30 ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS
 Misc. Info.: 280-0102067-019
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:34 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 08:09:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.838	0.000	97	769988	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	161871	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	257514	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199154	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	266131	50.0	48.7	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	704331	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	273340	50.0	48.9	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	176418	50.0	51.0	
12 Chloromethane	50	1.900	1.900	0.000	99	166165	50.0	49.7	
13 Vinyl chloride	62	1.998	1.998	0.000	100	141801	50.0	52.5	
15 Bromomethane	94	2.347	2.347	0.000	93	105022	50.0	50.5	
16 Chloroethane	64	2.459	2.459	0.000	99	108932	50.0	52.3	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	265332	50.0	51.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	231476	50.0	52.2	
20 Ethyl ether	59	3.003	3.003	0.000	93	111308	50.0	51.3	
22 Acrolein	56	3.143	3.143	0.000	98	210093	493.8	501.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	103963	50.0	46.8	
24 112TCTFE	151	3.255	3.255	0.000	94	74141	50.0	50.4	
25 Acetone	43	3.269	3.269	0.000	98	170768	200.0	193.3	
26 Iodomethane	142	3.380	3.380	0.000	99	168827	50.0	50.4	
28 Carbon disulfide	76	3.450	3.450	0.000	100	367379	50.0	49.1	
30 Methyl acetate	43	3.562	3.562	0.000	98	200777	100.0	95.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	218412	50.0	48.8	
32 Methylene Chloride	84	3.716	3.716	0.000	97	135869	50.0	49.6	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	133797	500.0	498.4	
34 Acrylonitrile	53	3.911	3.911	0.000	97	522237	500.0	490.6	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	402379	50.0	51.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	122215	50.0	45.2	
37 Hexane	57	4.204	4.204	0.000	94	159716	50.0	46.9	
39 Vinyl acetate	43	4.344	4.344	0.000	98	648475	100.0	107.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	258402	50.0	49.5	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	252081	200.0	192.3	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	90	216419	50.0	46.9	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	140988	50.0	47.6	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	250296	1200.0	1137.9	
54 Tetrahydrofuran	42	5.056	5.056	0.000	87	81383	100.0	92.7	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	65722	50.0	49.0	
55 Chloroform	83	5.126	5.126	0.000	98	256700	50.0	47.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	220241	50.0	46.2	
57 Cyclohexane	56	5.350	5.350	0.000	94	224931	50.0	47.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	192450	50.0	50.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	85	177897	50.0	50.7	
60 Isobutyl alcohol	41	5.461	5.461	0.000	94	107180	1250.0	1116.6	
63 Benzene	78	5.587	5.587	0.000	99	533232	50.0	50.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	225397	50.0	50.2	
66 n-Heptane	43	5.825	5.825	0.000	93	151151	50.0	48.2	
68 Trichloroethene	95	6.146	6.146	0.000	95	140987	50.0	47.0	
69 2-Pentanone	43	6.271	6.271	0.000	98	324899	160.0	157.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	177721	50.0	47.7	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	146601	50.0	50.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	98	31314	1000.0	950.9	
74 Dibromomethane	93	6.453	6.453	0.000	88	92021	50.0	50.7	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	188758	50.0	47.5	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	97660	50.0	55.1	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	231384	50.0	52.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	490067	200.0	204.3	
82 Toluene	91	7.295	7.295	0.000	97	522295	50.0	49.1	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	98	226226	50.0	53.2	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	159888	50.0	49.6	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	96	107076	50.0	48.0	
89 Tetrachloroethene	164	7.767	7.767	0.000	87	85583	50.0	51.1	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	210737	50.0	51.4	
91 2-Hexanone	43	7.853	7.853	0.000	97	331503	200.0	193.6	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	122044	50.0	50.4	
96 Ethylene Dibromide	107	8.146	8.146	0.000	99	116835	50.0	50.2	
98 1-Chlorohexane	91	8.561	8.561	0.000	93	134135	40.0	39.3	
99 Chlorobenzene	112	8.604	8.604	0.000	91	331478	50.0	50.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	120755	50.0	51.7	
101 Ethylbenzene	106	8.683	8.683	0.000	100	177275	50.0	50.5	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	217333	50.0	49.1	
103 o-Xylene	106	9.176	9.176	0.000	99	214199	50.0	51.8	
104 Styrene	104	9.197	9.197	0.000	94	379177	50.0	50.2	
106 Bromoform	173	9.383	9.383	0.000	89	76209	50.0	48.0	
107 Isopropylbenzene	105	9.526	9.526	0.000	97	560279	50.0	49.7	
109 Cyclohexanone	55	9.626	9.626	0.000	95	226441	1500.0	1248.6	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	152322	50.0	48.8	
111 Bromobenzene	156	9.855	9.855	0.000	98	130861	50.0	51.2	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	78	56519	50.0	50.3	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	43336	50.0	49.9	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	153038	50.0	48.9	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	131982	50.0	51.6	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	487963	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
117 4-Chlorotoluene	126	10.155	10.155	0.000	100	139315	50.0	49.5	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	397245	50.0	48.2	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	497917	50.0	48.3	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	115108	50.0	48.3	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	251268	50.0	50.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	497776	50.0	48.7	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	89	256844	50.0	49.0	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	472146	50.0	47.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	240782	50.0	51.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	71	31563	50.0	47.7	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	91	152525	50.0	49.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	50864	50.0	47.5	
132 Naphthalene	128	13.123	13.123	0.000	98	456812	50.0	50.0	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	93	142446	50.0	50.7	
S 149 1,2-Dichloroethene, Total (URS)	95				0		100.0	92.9	
S 150 1,2-Dichloroethene, Total	1				0		100.0	92.9	
S 151 Trihalomethanes, Total	1				0		200.0	193.4	
S 153 Xylenes, Total (URS)	1				0		100.0	100.9	
S 155 Xylenes, Total	106				0		100.0	100.9	
S 156 1,3-Dichloropropene, Total	1				0		100.0	106.1	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 10.00

Units: uL

MV-MegaMainA_00050

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2727.D

Injection Date: 04-Jun-2021 15:37:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: ICIS

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

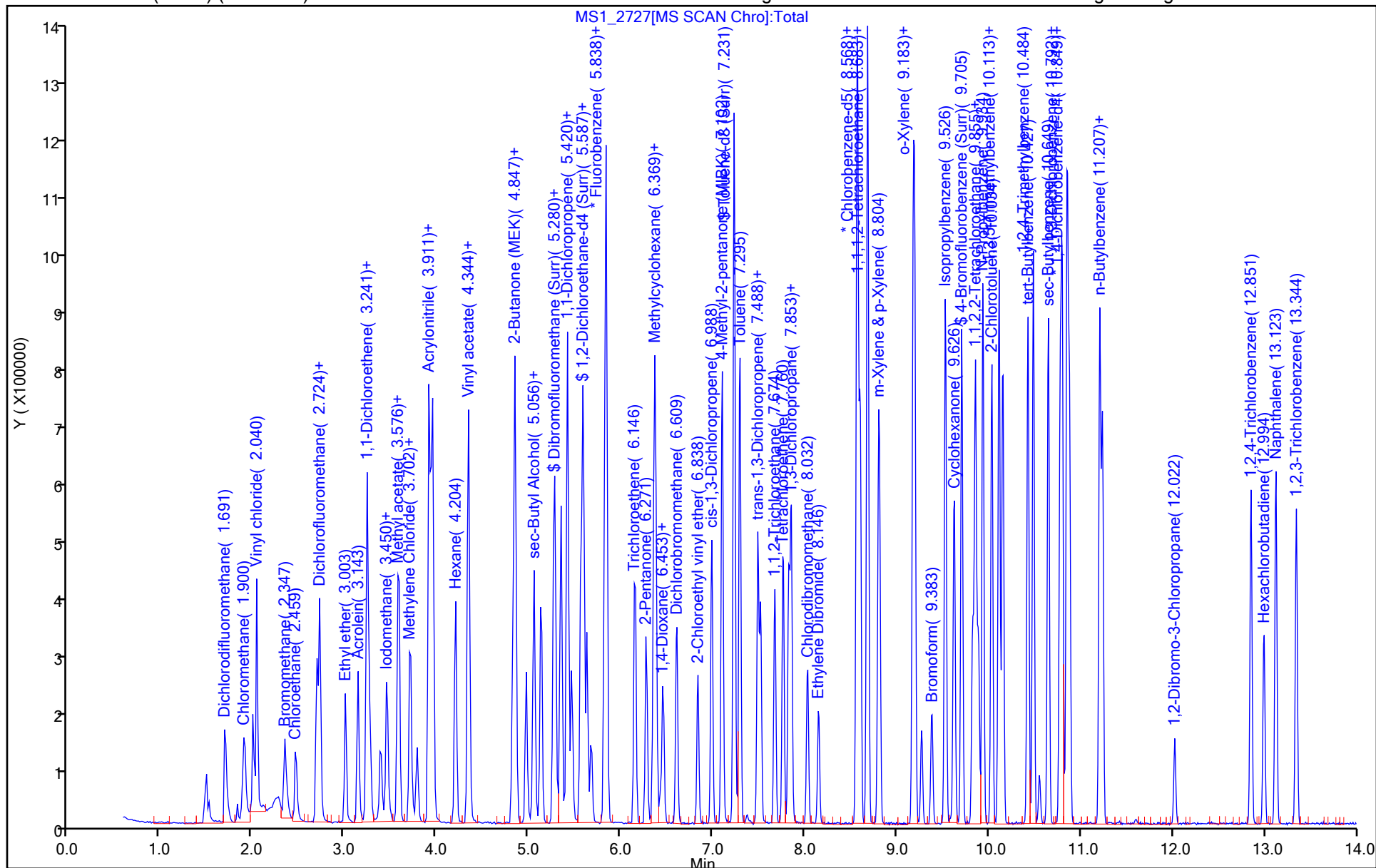
ALS Bottle#: 16

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2728.D
 Lims ID: STD75
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 04-Jun-2021 15:58:30 ALS Bottle#: 17 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD75
 Misc. Info.: 280-0102067-020
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:37 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 09:12:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	778921	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162105	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	257689	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	201488	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	100	274090	50.0	49.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	705195	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	280451	50.0	50.2	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	284607	75.0	81.3	
12 Chloromethane	50	1.900	1.900	0.000	99	260275	75.0	76.9	
13 Vinyl chloride	62	1.998	1.998	0.000	100	219368	75.0	80.3	
15 Bromomethane	94	2.333	2.333	0.000	94	153469	75.0	73.0	
16 Chloroethane	64	2.459	2.459	0.000	99	163644	75.0	77.7	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	406591	75.0	77.6	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	364532	75.0	81.2	
20 Ethyl ether	59	3.003	3.003	0.000	93	164162	75.0	74.8	
22 Acrolein	56	3.143	3.143	0.000	99	309474	740.6	733.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	159868	75.0	71.1	
24 112TCTFE	151	3.241	3.241	0.000	96	117548	75.0	79.0	
25 Acetone	43	3.269	3.269	0.000	98	291619	300.0	330.4	
26 Iodomethane	142	3.381	3.381	0.000	98	254607	75.0	74.8	
28 Carbon disulfide	76	3.450	3.450	0.000	100	561075	75.0	74.2	
30 Methyl acetate	43	3.562	3.562	0.000	98	327410	150.0	153.8	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	323120	75.0	71.3	
32 Methylene Chloride	84	3.702	3.702	0.000	97	202992	75.0	73.6	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	221885	750.0	817.1	
34 Acrylonitrile	53	3.911	3.911	0.000	98	824753	750.0	765.8	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	608637	75.0	76.7	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	184274	75.0	67.4	
37 Hexane	57	4.205	4.205	0.000	94	252996	75.0	73.9	
39 Vinyl acetate	43	4.330	4.330	0.000	98	941026	150.0	154.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	388591	75.0	73.6	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	402800	300.0	305.2	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	326634	75.0	69.9	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	211634	75.0	70.7	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	414351	1800.0	1856.2	
54 Tetrahydrofuran	42	5.057	5.057	0.000	87	137587	150.0	158.9	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	96812	75.0	71.1	
55 Chloroform	83	5.126	5.126	0.000	98	380346	75.0	69.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	330741	75.0	68.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	357975	75.0	74.5	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	301212	75.0	77.4	
59 Carbon tetrachloride	117	5.420	5.420	0.000	84	269121	75.0	75.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	181153	1875.0	1865.5	
63 Benzene	78	5.587	5.587	0.000	99	798115	75.0	74.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	327847	75.0	72.1	
66 n-Heptane	43	5.825	5.825	0.000	92	235218	75.0	74.4	
68 Trichloroethene	95	6.146	6.146	0.000	94	209925	75.0	69.8	
69 2-Pentanone	43	6.272	6.272	0.000	98	523443	240.0	250.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	280807	75.0	74.8	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	221164	75.0	75.5	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	51778	1500.0	1540.4	
74 Dibromomethane	93	6.453	6.453	0.000	88	141533	75.0	77.0	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	284099	75.0	70.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	146946	75.0	82.0	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	347569	75.0	79.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	769063	300.0	316.9	
82 Toluene	91	7.296	7.296	0.000	97	777134	75.0	72.3	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	333444	75.0	77.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	254008	75.0	78.7	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	96	165901	75.0	73.6	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	131552	75.0	78.4	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	321117	75.0	78.2	
91 2-Hexanone	43	7.853	7.853	0.000	98	536450	300.0	312.3	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	186804	75.0	77.1	
96 Ethylene Dibromide	107	8.146	8.146	0.000	97	180401	75.0	77.4	
98 1-Chlorohexane	91	8.561	8.561	0.000	93	202968	60.0	59.7	
99 Chlorobenzene	112	8.604	8.604	0.000	91	494335	75.0	74.7	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	181499	75.0	77.7	
101 Ethylbenzene	106	8.683	8.683	0.000	100	264323	75.0	75.2	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	327998	75.0	74.0	
103 o-Xylene	106	9.176	9.176	0.000	98	315393	75.0	76.2	
104 Styrene	104	9.198	9.198	0.000	93	564847	75.0	74.6	
106 Bromoform	173	9.383	9.383	0.000	90	118591	75.0	74.3	
107 Isopropylbenzene	105	9.526	9.526	0.000	97	858053	75.0	76.1	
109 Cyclohexanone	55	9.619	9.619	0.000	95	440233	2250.0	2424.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	232780	75.0	74.7	
111 Bromobenzene	156	9.855	9.855	0.000	97	196163	75.0	76.7	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	78	85012	75.0	75.6	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	68184	75.0	78.7	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	230236	75.0	73.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	197622	75.0	77.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	737280	75.0	73.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	207234	75.0	73.5	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	603080	75.0	73.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	756516	75.0	73.3	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	171771	75.0	71.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	376351	75.0	75.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	753987	75.0	73.7	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	387260	75.0	73.8	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	725430	75.0	73.5	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	361918	75.0	77.0	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	74	51111	75.0	76.8	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	237116	75.0	77.0	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	78775	75.0	73.2	
132 Naphthalene	128	13.123	13.123	0.000	98	718615	75.0	78.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	215935	75.0	76.9	
S 149 1,2-Dichloroethene, Total (URS)	93				0		150.0	138.1	
S 150 1,2-Dichloroethene, Total	1				0		150.0	138.1	
S 151 Trihalomethanes, Total	1				0		300.0	291.5	
S 152 Total BTEX	1				0			371.7	
S 153 Xylenes, Total (URS)	1				0		150.0	150.2	
S 155 Xylenes, Total	106				0		150.0	150.2	
S 156 1,3-Dichloropropene, Total	1				0		150.0	156.9	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 15.00

Units: uL

MV-MegaMainA_00050

Amount Added: 37.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2728.D

Injection Date: 04-Jun-2021 15:58:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD75

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

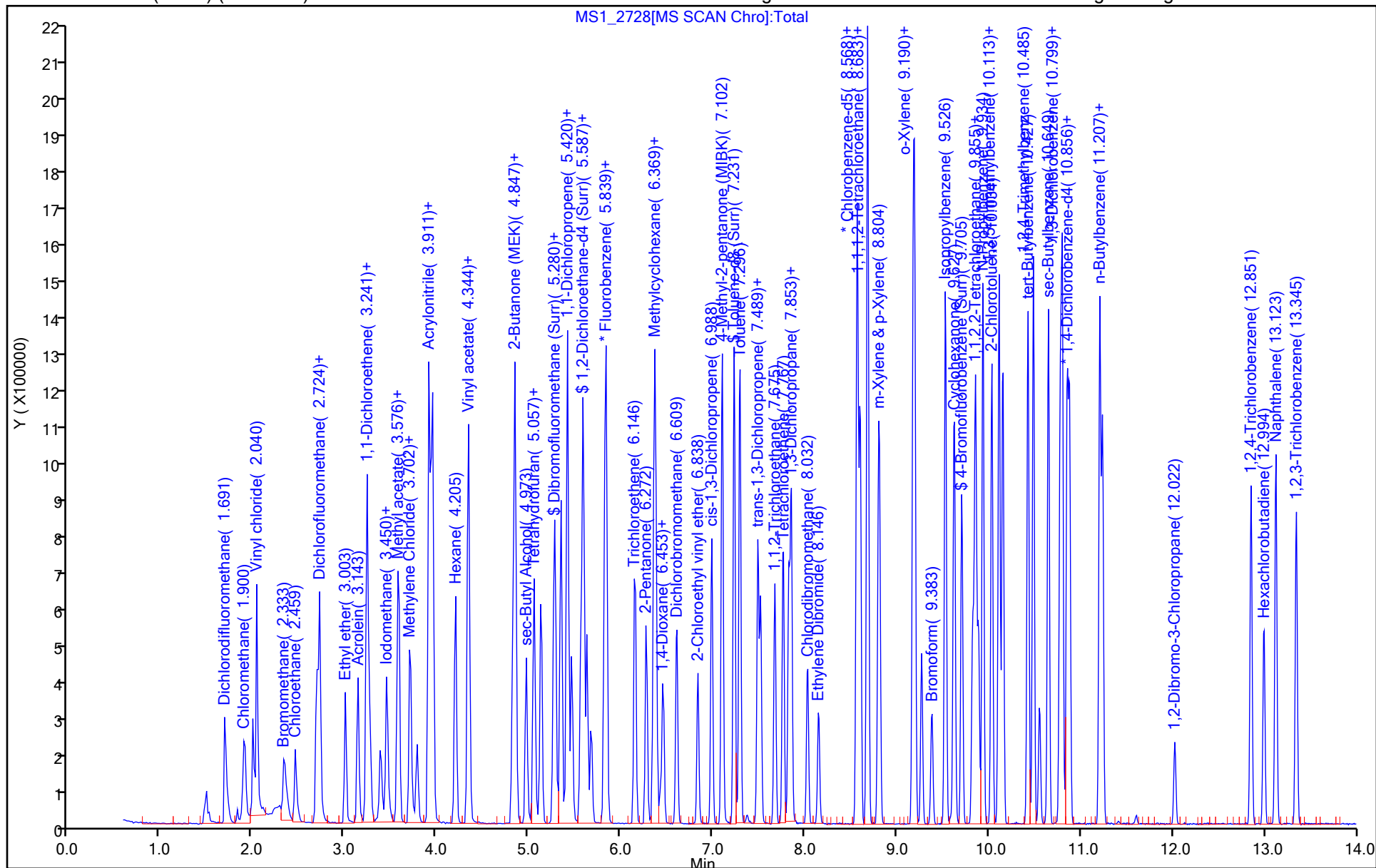
ALS Bottle#: 17

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2729.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 04-Jun-2021 16:20:30 ALS Bottle#: 18 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD100
 Misc. Info.: 280-0102067-021
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:40 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 08:48:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	770348	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	161409	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	97	257627	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199583	50.0	48.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	270692	50.0	49.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	703336	50.0	50.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	271979	50.0	48.6	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	98	341786	100.0	98.7	
12 Chloromethane	50	1.900	1.900	0.000	99	317305	100.0	94.8	
13 Vinyl chloride	62	1.998	1.998	0.000	100	271019	100.0	100.4	
15 Bromomethane	94	2.347	2.333	0.014	93	195406	100.0	94.0	
16 Chloroethane	64	2.459	2.459	0.000	98	201788	100.0	96.9	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	496647	100.0	95.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	448550	100.0	101.0	
20 Ethyl ether	59	3.003	3.003	0.000	93	219725	100.0	101.2	
22 Acrolein	56	3.143	3.143	0.000	98	398118	987.5	956.2	
24 112TCTFE	151	3.255	3.241	0.014	96	154610	100.0	105.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	210315	100.0	94.5	
25 Acetone	43	3.269	3.269	0.000	98	351099	400.0	403.5	
26 Iodomethane	142	3.381	3.381	0.000	99	344718	100.0	102.2	
28 Carbon disulfide	76	3.450	3.450	0.000	99	740012	100.0	98.9	
30 Methyl acetate	43	3.562	3.562	0.000	98	417578	200.0	198.3	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	426172	100.0	95.1	
32 Methylene Chloride	84	3.702	3.702	0.000	97	266563	100.0	97.9	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	99	291368	1000.0	1085.0	
34 Acrylonitrile	53	3.911	3.911	0.000	98	1060618	1000.0	995.8	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	813446	100.0	103.6	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	251645	100.0	93.1	
37 Hexane	57	4.205	4.205	0.000	94	331780	100.0	97.2	
39 Vinyl acetate	43	4.330	4.330	0.000	98	1263615	200.0	209.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	528150	100.0	101.1	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	514764	400.0	395.1	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	430208	100.0	93.1	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	280945	100.0	94.9	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	535348	2400.0	2422.1	
54 Tetrahydrofuran	42	5.057	5.057	0.000	86	165527	200.0	194.6	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	131412	100.0	97.4	
55 Chloroform	83	5.126	5.126	0.000	98	502179	100.0	92.7	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	441385	100.0	92.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	467867	100.0	98.6	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	396397	100.0	103.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	85	367905	100.0	104.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	92	237028	2500.0	2468.1	
63 Benzene	78	5.587	5.587	0.000	99	1075144	100.0	100.9	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	450298	100.0	100.2	
66 n-Heptane	43	5.825	5.825	0.000	92	304713	100.0	97.5	
68 Trichloroethene	95	6.146	6.146	0.000	94	283268	100.0	94.7	
69 2-Pentanone	43	6.272	6.272	0.000	98	681033	320.0	329.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	367688	100.0	99.2	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	301386	100.0	104.0	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	66461	2000.0	1992.7	
74 Dibromomethane	93	6.453	6.453	0.000	88	187746	100.0	103.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	385100	100.0	96.9	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	95	178538	100.0	100.7	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	464577	100.0	106.5	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	992438	400.0	413.5	
82 Toluene	91	7.296	7.296	0.000	97	1049392	100.0	98.7	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	99	444618	100.0	104.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	329168	100.0	102.4	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	95	217713	100.0	97.8	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	175087	100.0	104.8	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	417430	100.0	102.0	
91 2-Hexanone	43	7.853	7.853	0.000	98	688140	400.0	402.1	
95 Chlorodibromomethane	129	8.032	8.032	0.000	90	254169	100.0	105.4	
96 Ethylene Dibromide	107	8.146	8.146	0.000	97	236353	100.0	101.8	
98 1-Chlorohexane	91	8.561	8.561	0.000	94	269413	80.0	79.9	
99 Chlorobenzene	112	8.604	8.604	0.000	91	662703	100.0	100.6	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	93	248769	100.0	106.9	
101 Ethylbenzene	106	8.683	8.683	0.000	99	359882	100.0	102.8	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	443325	100.0	100.5	
103 o-Xylene	106	9.176	9.176	0.000	98	427099	100.0	103.6	
104 Styrene	104	9.198	9.198	0.000	94	758598	100.0	100.7	
106 Bromoform	173	9.383	9.383	0.000	89	162117	100.0	101.7	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	1146614	100.0	101.7	
109 Cyclohexanone	55	9.619	9.619	0.000	95	534760	3000.0	2957.2	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	306793	100.0	98.6	
111 Bromobenzene	156	9.855	9.855	0.000	97	263713	100.0	103.1	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	82	111621	100.0	99.3	
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	89	89319	100.0	103.2	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	313375	100.0	100.1	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	265995	100.0	103.9	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	985068	100.0	97.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	284037	100.0	100.8	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	800394	100.0	97.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	1020729	100.0	98.9	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	231170	100.0	96.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	511419	100.0	102.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	1010734	100.0	98.8	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	525253	100.0	100.1	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	954625	100.0	96.7	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	485254	100.0	103.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	74	65946	100.0	99.0	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	313667	100.0	101.9	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	104528	100.0	96.9	
132 Naphthalene	128	13.123	13.123	0.000	98	944344	100.0	103.4	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	92	286406	100.0	102.0	
S 149 1,2-Dichloroethene, Total (URS)	95				0		200.0	188.0	
S 150 1,2-Dichloroethene, Total	1				0		200.0	188.0	
S 151 Trihalomethanes, Total	1				0		400.0	396.7	
S 152 Total BTEX	1				0			506.4	
S 153 Xylenes, Total (URS)	1				0		200.0	204.1	
S 155 Xylenes, Total	106				0		200.0	204.1	
S 156 1,3-Dichloropropene, Total	1				0		200.0	211.1	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 20.00

Units: uL

MV-MegaMainA_00050

Amount Added: 50.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2729.D

Injection Date: 04-Jun-2021 16:20:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD100

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

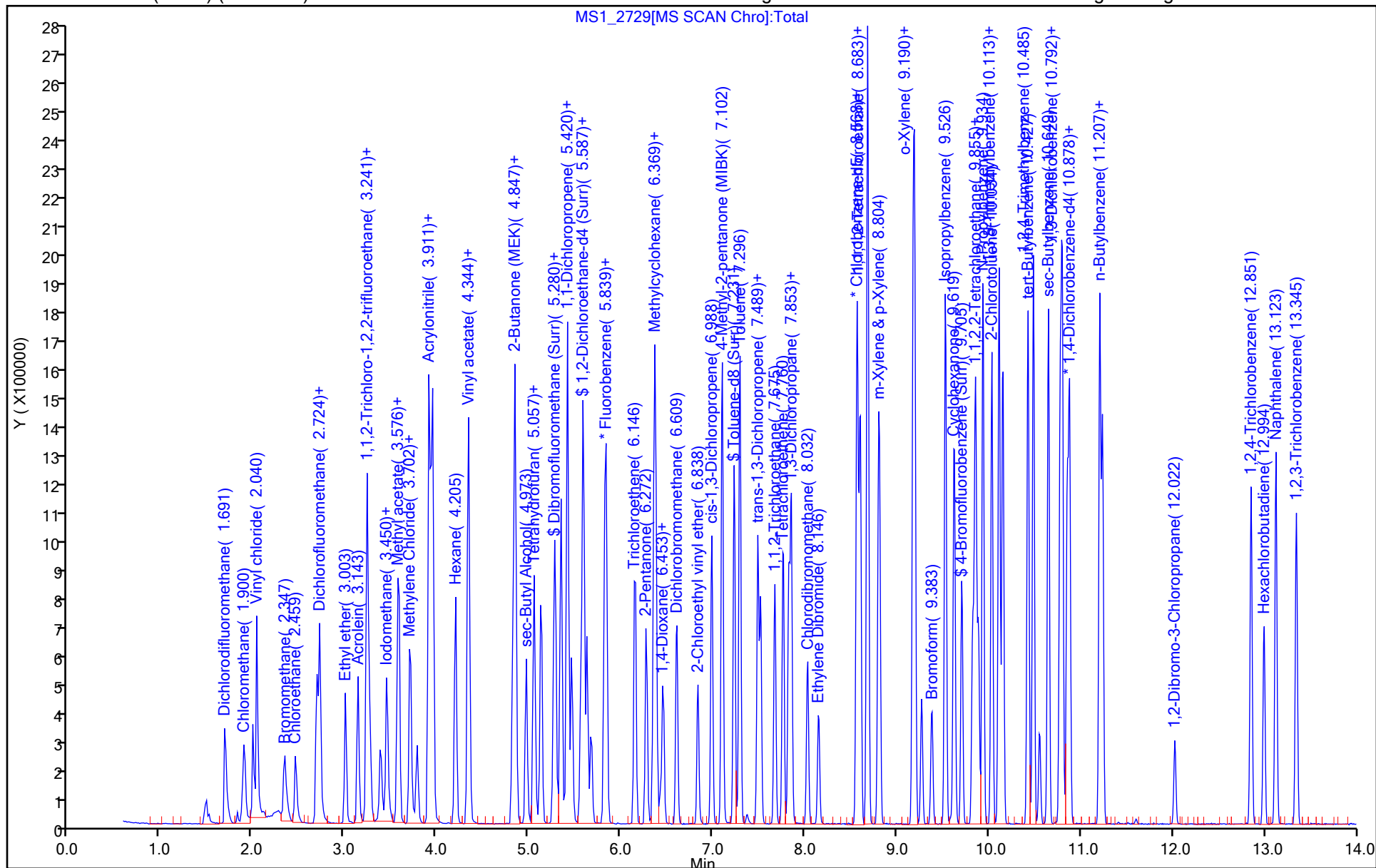
ALS Bottle#: 18

Method: AQ_VMS1_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_MS1\20210604-102067.b\VMS1_2730.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 04-Jun-2021 16:41:30 ALS Bottle#: 19 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: STD200
 Misc. Info.: 280-0102067-022
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:14:43 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: petuningp

Date: 04-Jun-2021 17:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	783196	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.568	8.575	-0.007	90	169094	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	96	259778	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	205683	50.0	49.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	279300	50.0	50.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	722826	50.0	49.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	282862	50.0	50.2	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	677738	200.0	192.3	
12 Chloromethane	50	1.900	1.900	0.000	99	656518	200.0	193.0	
13 Vinyl chloride	62	1.998	1.998	0.000	100	549679	200.0	200.2	
15 Bromomethane	94	2.333	2.333	0.000	94	381898	200.0	180.6	
16 Chloroethane	64	2.459	2.459	0.000	99	410848	200.0	194.1	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	1017407	200.0	194.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	899290	200.0	199.2	
20 Ethyl ether	59	3.004	3.003	0.001	93	450987	200.0	204.3	
22 Acrolein	56	3.143	3.143	0.000	98	841506	1975.0	1995.3	
24 112TCTFE	151	3.241	3.241	0.000	98	329503	200.0	220.4	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	451141	200.0	199.5	
25 Acetone	43	3.269	3.269	0.000	98	732628	800.0	834.2	
26 Iodomethane	142	3.381	3.381	0.000	99	715491	200.0	208.2	
28 Carbon disulfide	76	3.450	3.450	0.000	99	1558994	200.0	204.9	
30 Methyl acetate	43	3.562	3.562	0.000	98	890400	400.0	416.0	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	833624	200.0	183.0	
32 Methylene Chloride	84	3.702	3.702	0.000	98	559662	200.0	202.8	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	604617	2000.0	2214.5	
34 Acrylonitrile	53	3.911	3.911	0.000	97	2157748	2000.0	1992.7	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	1664273	200.0	208.6	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	513885	200.0	187.1	
37 Hexane	57	4.205	4.205	0.000	94	702356	200.0	196.0	
39 Vinyl acetate	43	4.330	4.330	0.000	98	2509441	400.0	408.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	1068575	200.0	201.3	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	1085961	800.0	822.6	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	901541	200.0	192.0	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	585356	200.0	194.4	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	1133775	4800.0	5035.6	
54 Tetrahydrofuran	42	5.057	5.057	0.000	85	344648	400.0	404.7	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	269171	200.0	195.7	
55 Chloroform	83	5.126	5.126	0.000	99	1061208	200.0	192.7	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	940114	200.0	194.0	
57 Cyclohexane	56	5.350	5.350	0.000	94	980879	200.0	204.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	826072	200.0	211.1	
59 Carbon tetrachloride	117	5.420	5.420	0.000	87	773566	200.0	216.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	497289	5000.0	5093.2	
63 Benzene	78	5.587	5.587	0.000	99	2233092	200.0	206.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	935335	200.0	204.7	
66 n-Heptane	43	5.825	5.825	0.000	94	646535	200.0	204.0	
68 Trichloroethene	95	6.146	6.146	0.000	94	593715	200.0	189.4	
69 2-Pentanone	43	6.272	6.272	0.000	98	1416166	640.0	673.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	765192	200.0	203.4	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	611580	200.0	207.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	99	139700	4000.0	4096.5	
74 Dibromomethane	93	6.453	6.453	0.000	88	392807	200.0	212.7	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	790878	200.0	195.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	372671	200.0	206.8	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	962416	200.0	210.6	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.102	0.000	98	2075132	800.0	850.5	
82 Toluene	91	7.296	7.296	0.000	97	2216570	200.0	205.0	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	931126	200.0	215.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	684215	200.0	203.1	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.001	95	452414	200.0	200.1	
89 Tetrachloroethene	164	7.767	7.767	0.000	90	377868	200.0	215.9	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	873388	200.0	203.8	
91 2-Hexanone	43	7.853	7.853	0.000	97	1407897	800.0	784.5	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	539788	200.0	213.6	
96 Ethylene Dibromide	107	8.146	8.146	0.000	96	496186	200.0	204.0	
98 1-Chlorohexane	91	8.561	8.561	0.000	95	576421	160.0	163.9	
99 Chlorobenzene	112	8.604	8.604	0.000	91	1403932	200.0	203.3	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	517259	200.0	212.2	
101 Ethylbenzene	106	8.683	8.683	0.000	99	758836	200.0	206.9	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	928312	200.0	200.8	
103 o-Xylene	106	9.176	9.176	0.000	99	895286	200.0	207.4	
104 Styrene	104	9.198	9.198	0.000	93	1593996	200.0	201.9	
106 Bromoform	173	9.383	9.383	0.000	90	339679	200.0	202.9	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	2397490	200.0	211.0	
109 Cyclohexanone	55	9.627	9.619	0.008	95	891889	6000.0	4708.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	641786	200.0	205.0	
111 Bromobenzene	156	9.855	9.855	0.000	97	557639	200.0	216.2	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.862	0.000	82	239439	200.0	211.2	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	182772	200.0	209.8	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	655122	200.0	207.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	561245	200.0	217.4	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	2073344	200.0	204.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	100	590717	200.0	207.9	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	1703470	200.0	204.8	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	2109459	200.0	202.7	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	485251	200.0	200.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	1065476	200.0	211.5	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	2129213	200.0	206.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	1086868	200.0	205.4	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	1995762	200.0	200.6	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	1009176	200.0	212.9	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	136502	200.0	202.4	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	667214	200.0	215.1	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	220210	200.0	201.7	
132 Naphthalene	128	13.123	13.123	0.000	98	1942455	200.0	210.8	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	604902	200.0	213.6	
S 149 1,2-Dichloroethene, Total (URS)	93				0		400.0	381.5	
S 150 1,2-Dichloroethene, Total	1				0		400.0	381.5	
S 151 Trihalomethanes, Total	1				0		800.0	804.8	
S 152 Total BTEX	1				0			1026.1	
S 153 Xylenes, Total (URS)	1				0		400.0	408.2	
S 155 Xylenes, Total	106				0		400.0	408.2	
S 156 1,3-Dichloropropene, Total	1				0		400.0	426.0	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089

Amount Added: 40.00

Units: uL

MV-MegaMainA_00050

Amount Added: 100.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Injection Date: 04-Jun-2021 16:41:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: STD200

Worklist Smp#: 22

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

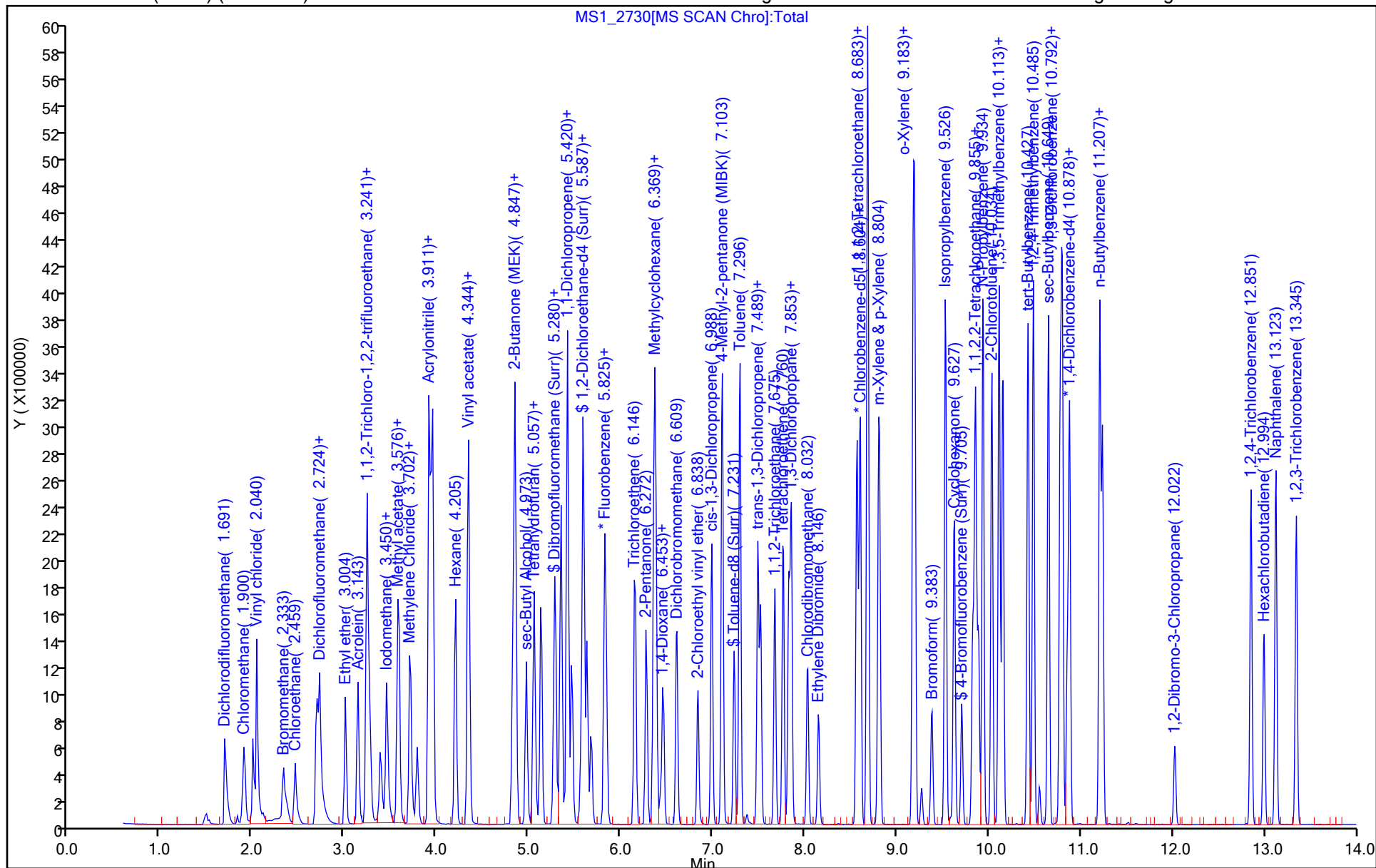
ALS Bottle#: 19

Method: AQ_VMS1_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



Calibration

/ Dichlorodifluoromethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

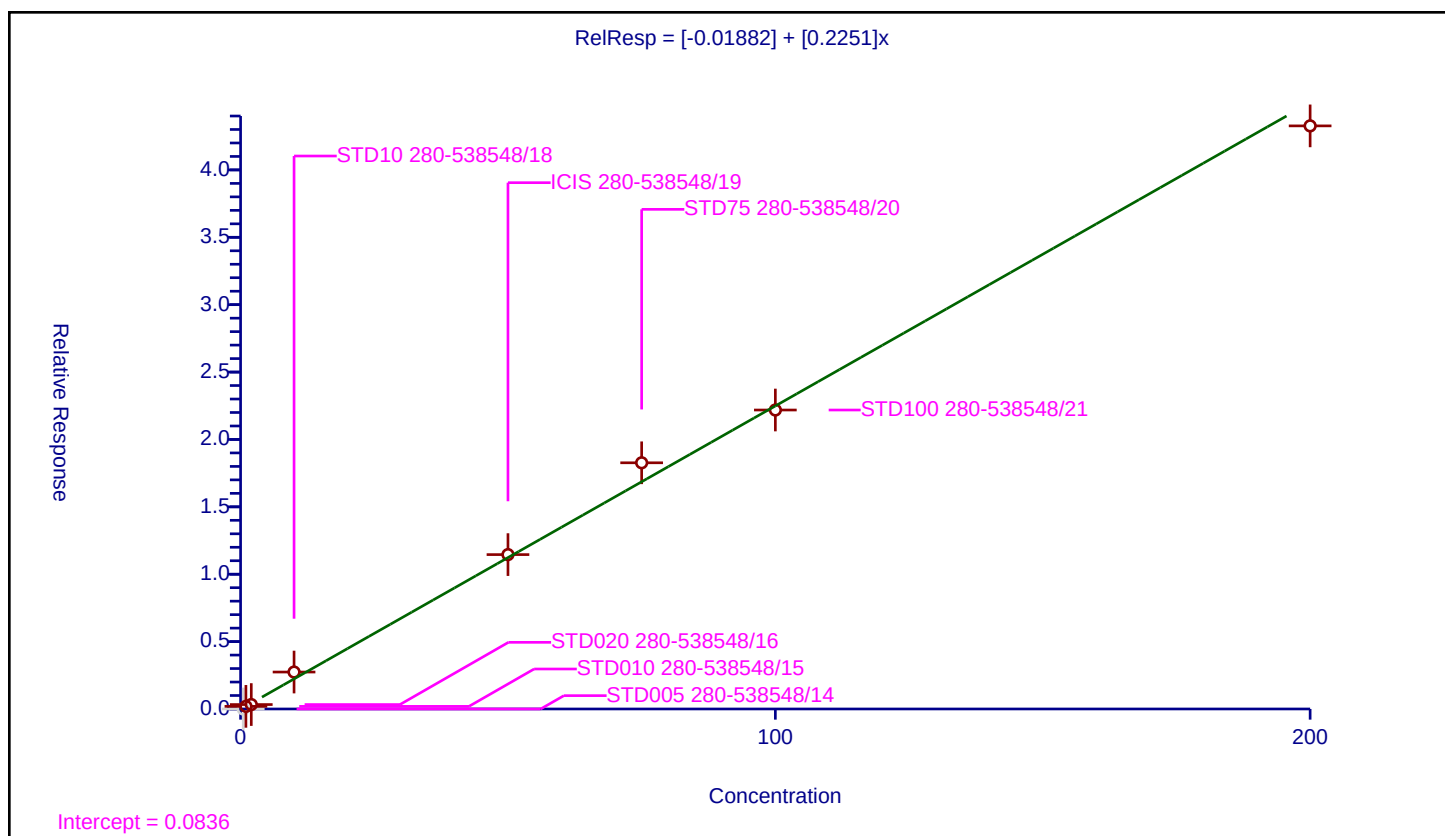
Curve Coefficients

Intercept: -0.01882
 Slope: 0.2251

Error Coefficients

Standard Error: 371000
 Relative Standard Error: 15.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.194453	50.0	745169.0	0.194453	Y
3	STD020 280-538548/16	2.0	0.329702	50.0	729901.0	0.164851	Y
4	STD10 280-538548/18	10.0	2.741802	50.0	746498.0	0.27418	Y
5	ICIS 280-538548/19	50.0	11.455893	50.0	769988.0	0.229118	Y
6	STD75 280-538548/20	75.0	18.269311	50.0	778921.0	0.243591	Y
7	STD100 280-538548/21	100.0	22.18387	50.0	770348.0	0.221839	Y
8	STD200 280-538548/22	200.0	43.267458	50.0	783196.0	0.216337	Y



Calibration

/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

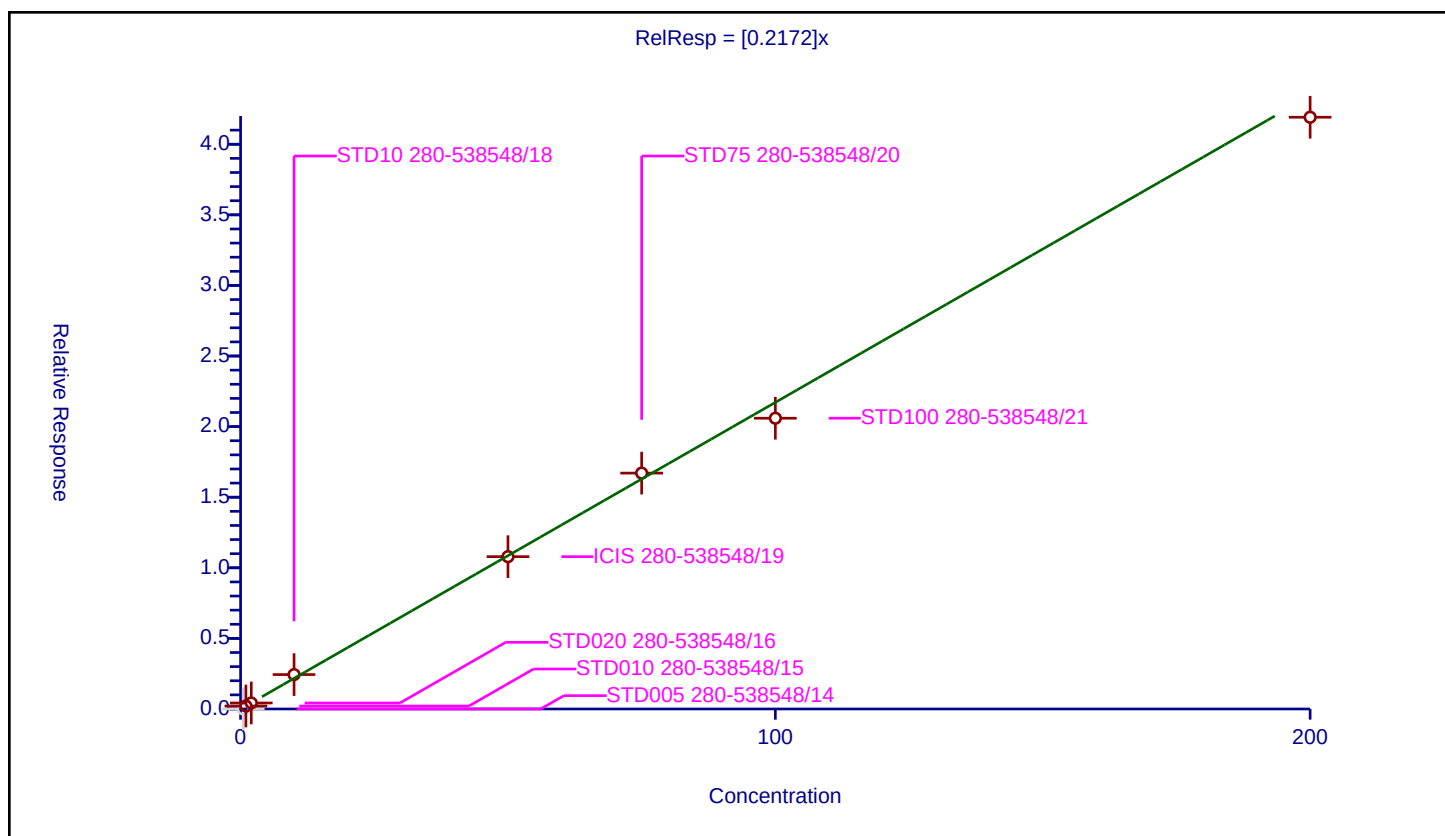
Curve Coefficients

Intercept: 0
 Slope: 0.2172

Error Coefficients

Standard Error: 324000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.209751	50.0	745169.0	0.209751	Y
3	STD020 280-538548/16	2.0	0.425195	50.0	729901.0	0.212597	Y
4	STD10 280-538548/18	10.0	2.437381	50.0	746498.0	0.243738	Y
5	ICIS 280-538548/19	50.0	10.790103	50.0	769988.0	0.215802	Y
6	STD75 280-538548/20	75.0	16.707407	50.0	778921.0	0.222765	Y
7	STD100 280-538548/21	100.0	20.594913	50.0	770348.0	0.205949	Y
8	STD200 280-538548/22	200.0	41.912752	50.0	783196.0	0.209564	Y



Calibration

/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

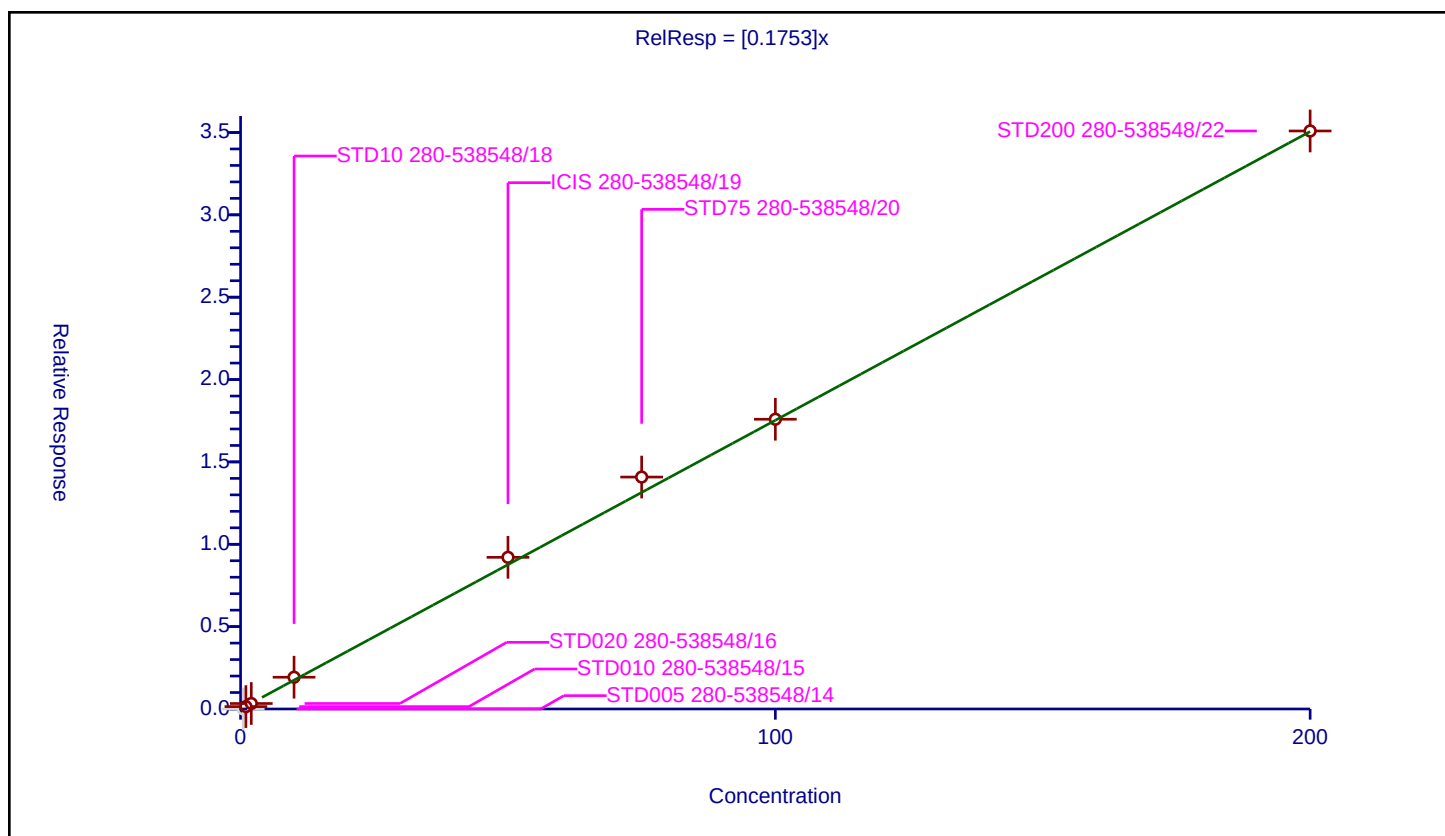
Curve Coefficients

Intercept: 0
 Slope: 0.1753

Error Coefficients

Standard Error: 272000
 Relative Standard Error: 9.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.144195	50.0	745169.0	0.144195	Y
3	STD020 280-538548/16	2.0	0.333196	50.0	729901.0	0.166598	Y
4	STD10 280-538548/18	10.0	1.928873	50.0	746498.0	0.192887	Y
5	ICIS 280-538548/19	50.0	9.208001	50.0	769988.0	0.18416	Y
6	STD75 280-538548/20	75.0	14.081531	50.0	778921.0	0.187754	Y
7	STD100 280-538548/21	100.0	17.590686	50.0	770348.0	0.175907	Y
8	STD200 280-538548/22	200.0	35.092046	50.0	783196.0	0.17546	Y



Calibration

/ Bromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

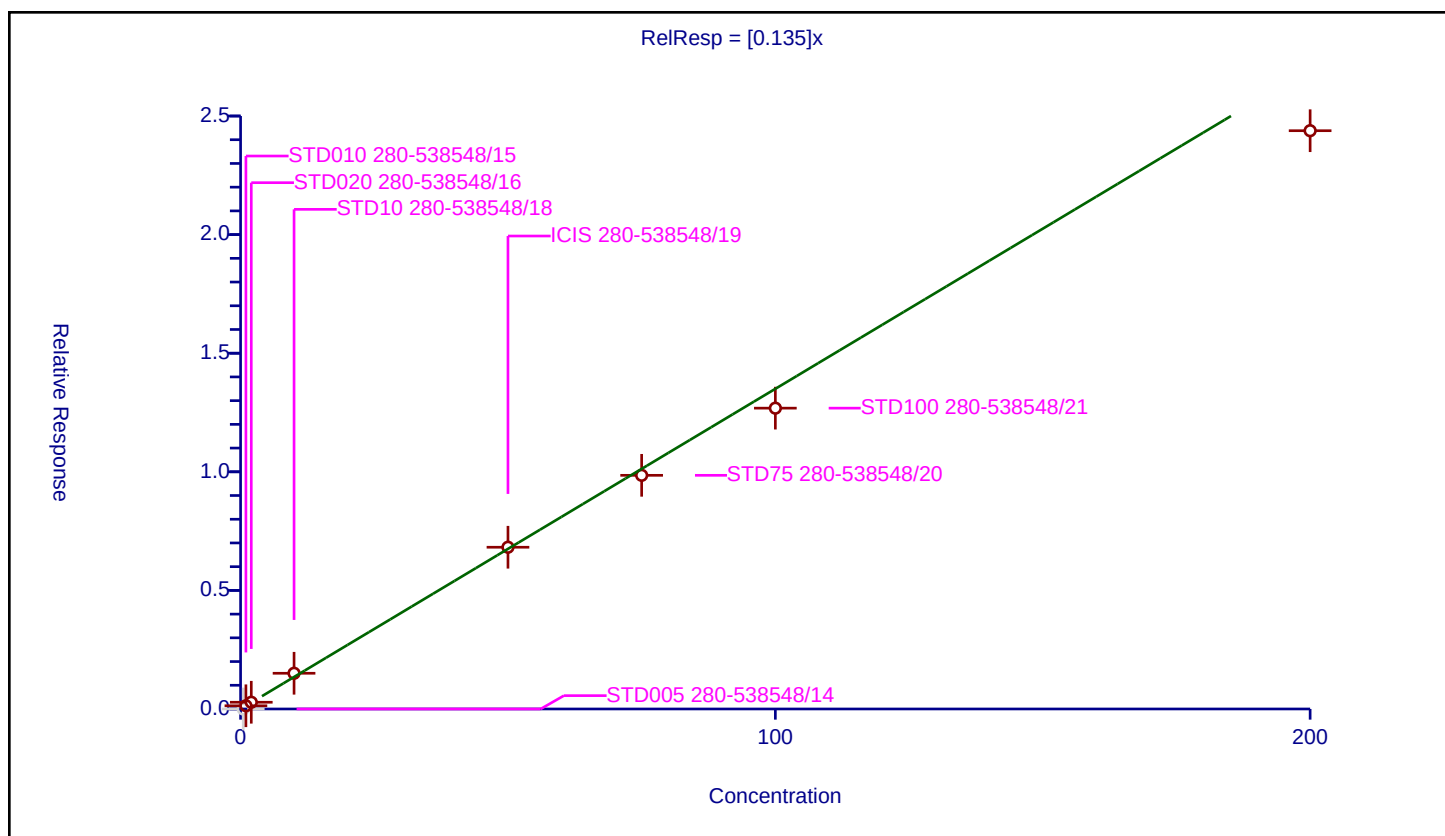
Curve Coefficients

Intercept: 0
Slope: 0.135

Error Coefficients

Standard Error: 191000
Relative Standard Error: 7.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.135674	50.0	745169.0	0.135674	Y
3	STD020 280-538548/16	2.0	0.284285	50.0	729901.0	0.142143	Y
4	STD10 280-538548/18	10.0	1.506099	50.0	746498.0	0.15061	Y
5	ICIS 280-538548/19	50.0	6.819717	50.0	769988.0	0.136394	Y
6	STD75 280-538548/20	75.0	9.851384	50.0	778921.0	0.131352	Y
7	STD100 280-538548/21	100.0	12.682969	50.0	770348.0	0.12683	Y
8	STD200 280-538548/22	200.0	24.380742	50.0	783196.0	0.121904	Y



Calibration

/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

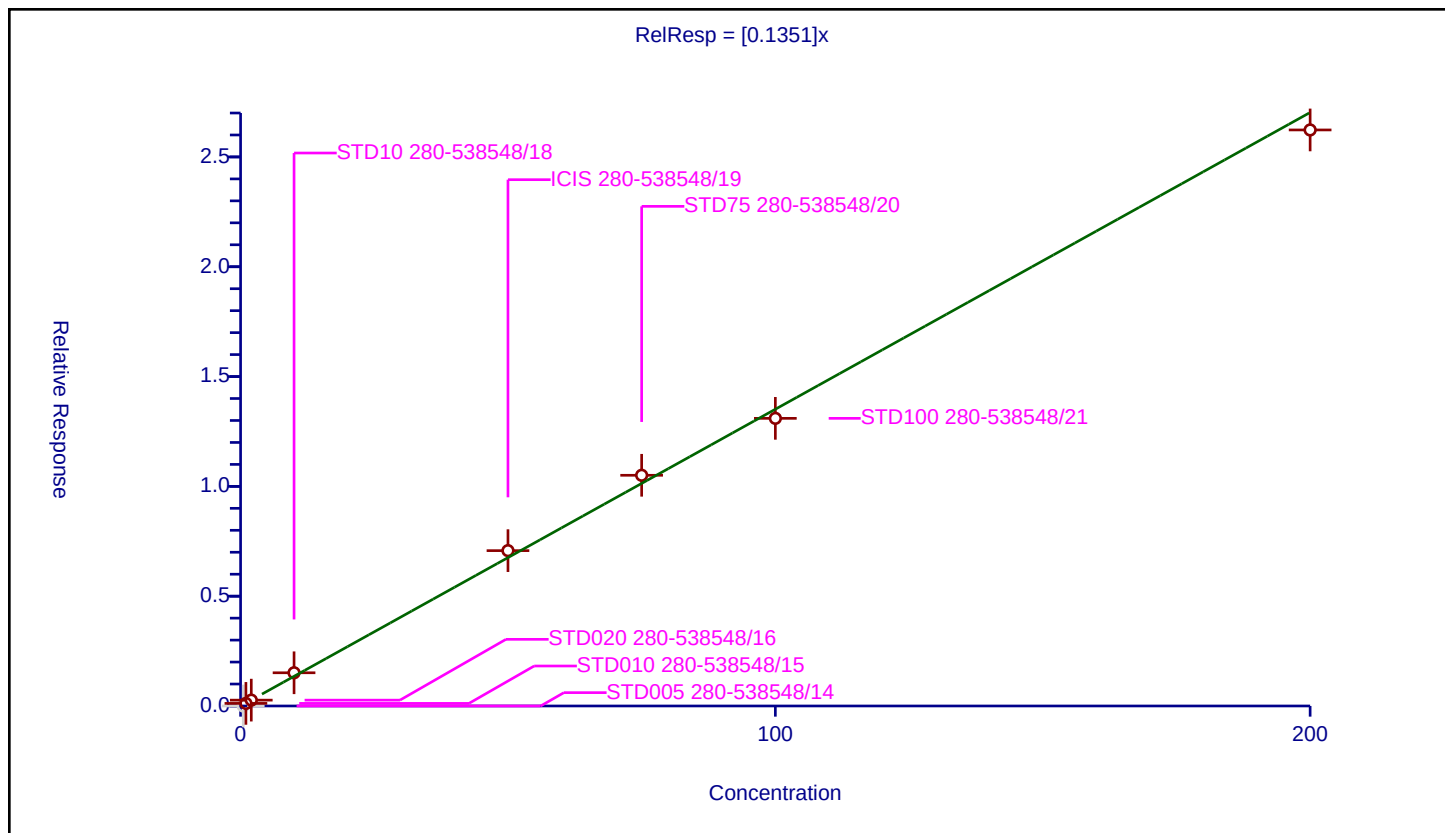
Curve Coefficients

Intercept: 0
 Slope: 0.1351

Error Coefficients

Standard Error: 204000
 Relative Standard Error: 7.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.117893	50.0	745169.0	0.117893	Y
3	STD020 280-538548/16	2.0	0.2662	50.0	729901.0	0.1331	Y
4	STD10 280-538548/18	10.0	1.512194	50.0	746498.0	0.151219	Y
5	ICIS 280-538548/19	50.0	7.073617	50.0	769988.0	0.141472	Y
6	STD75 280-538548/20	75.0	10.504531	50.0	778921.0	0.14006	Y
7	STD100 280-538548/21	100.0	13.097198	50.0	770348.0	0.130972	Y
8	STD200 280-538548/22	200.0	26.228939	50.0	783196.0	0.131145	Y



Calibration

/ Dichlorofluoromethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

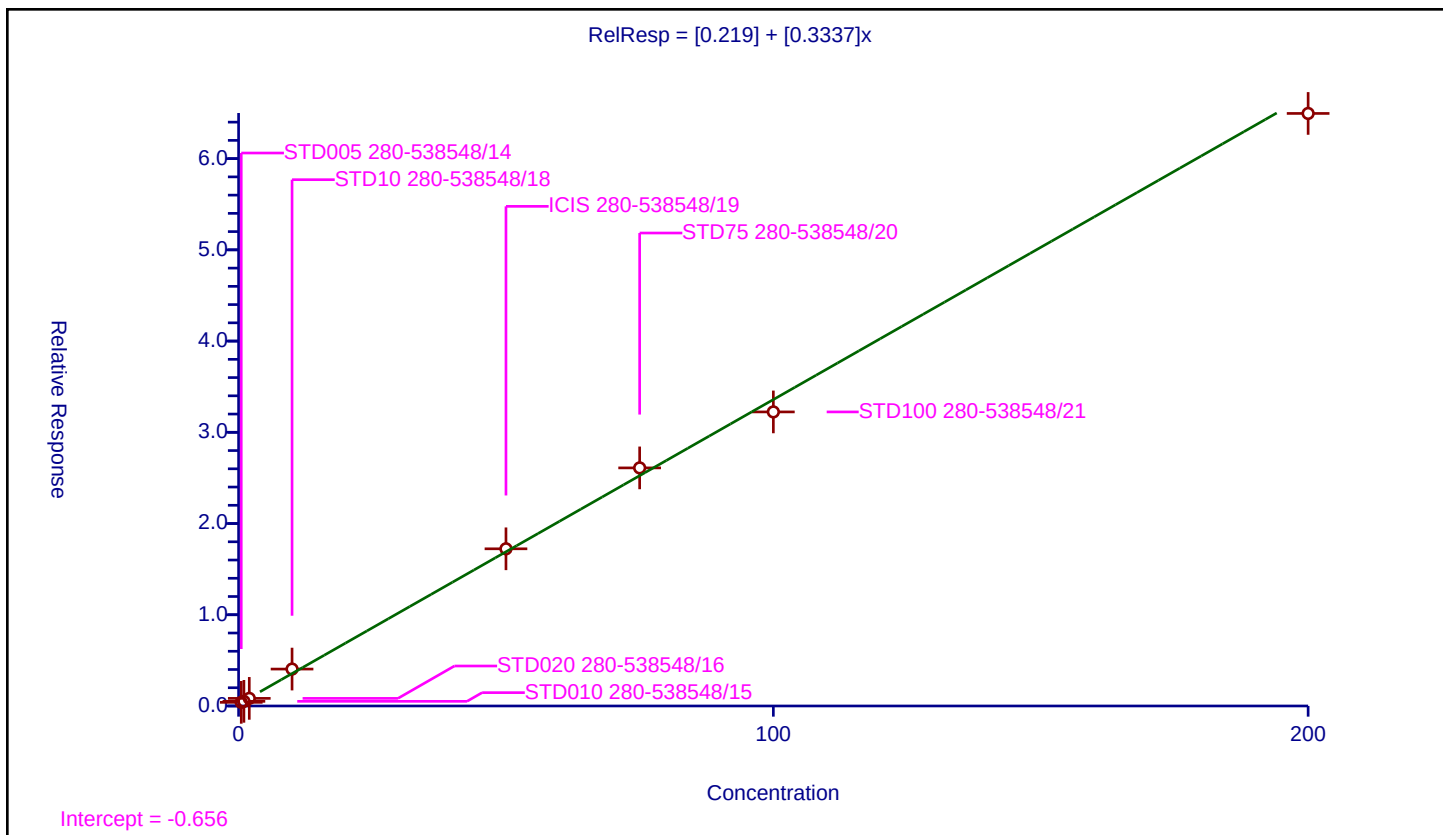
Curve Coefficients

Intercept: 0.219
 Slope: 0.3337

Error Coefficients

Standard Error: 504000
 Relative Standard Error: 9.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.398537	50.0	741336.0	0.797074	Y
2	STD010 280-538548/15	1.0	0.509951	50.0	745169.0	0.509951	Y
3	STD020 280-538548/16	2.0	0.834428	50.0	729901.0	0.417214	Y
4	STD10 280-538548/18	10.0	4.046628	50.0	746498.0	0.404663	Y
5	ICIS 280-538548/19	50.0	17.229619	50.0	769988.0	0.344592	Y
6	STD75 280-538548/20	75.0	26.09963	50.0	778921.0	0.347995	Y
7	STD100 280-538548/21	100.0	32.235237	50.0	770348.0	0.322352	Y
8	STD200 280-538548/22	200.0	64.95226	50.0	783196.0	0.324761	Y



Calibration

/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

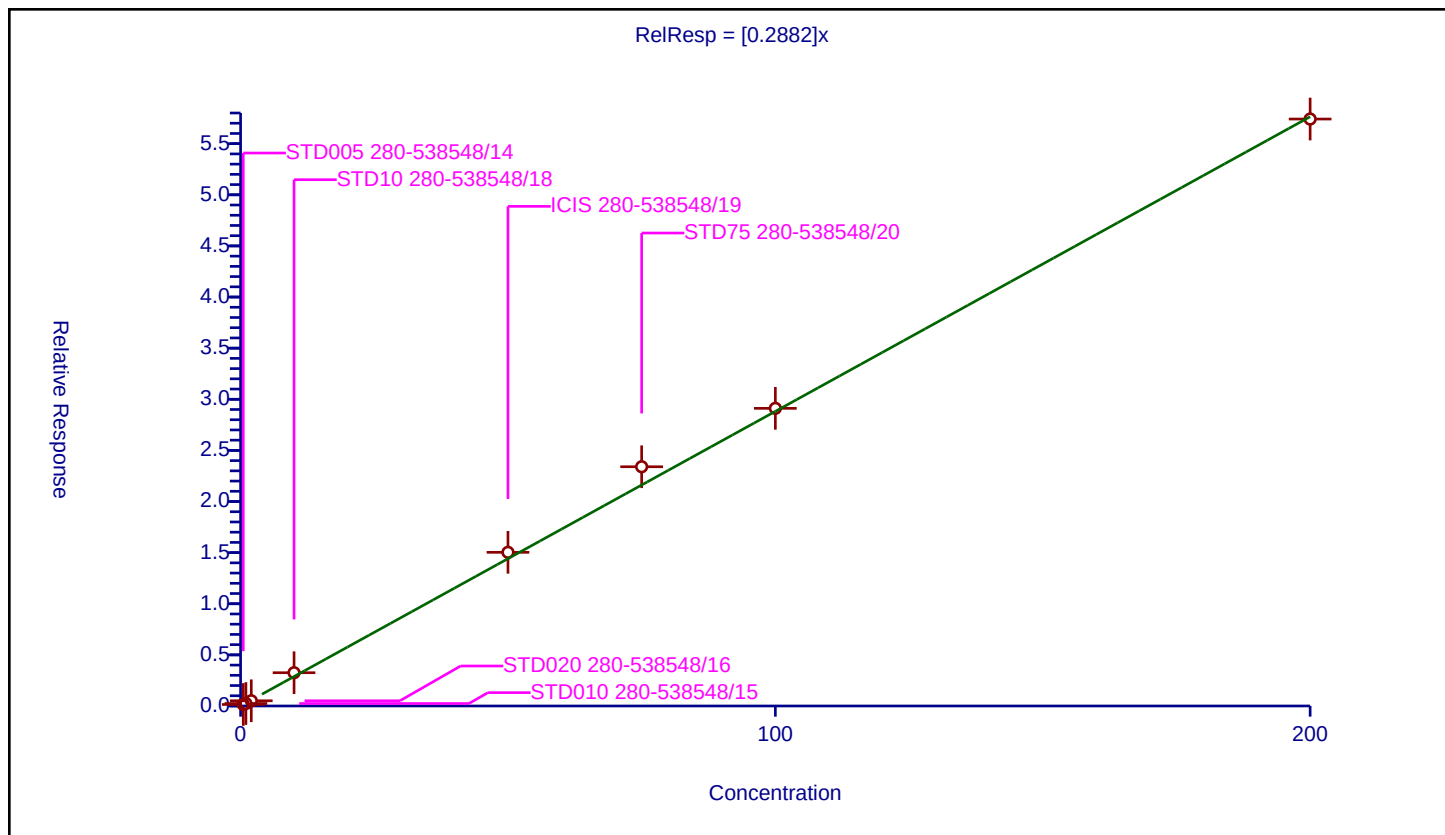
Curve Coefficients

Intercept: 0
 Slope: 0.2882

Error Coefficients

Standard Error: 414000
 Relative Standard Error: 9.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.146425	50.0	741336.0	0.29285	Y
2	STD010 280-538548/15	1.0	0.241891	50.0	745169.0	0.241891	Y
3	STD020 280-538548/16	2.0	0.509042	50.0	729901.0	0.254521	Y
4	STD10 280-538548/18	10.0	3.254396	50.0	746498.0	0.32544	Y
5	ICIS 280-538548/19	50.0	15.031143	50.0	769988.0	0.300623	Y
6	STD75 280-538548/20	75.0	23.399806	50.0	778921.0	0.311997	Y
7	STD100 280-538548/21	100.0	29.113466	50.0	770348.0	0.291135	Y
8	STD200 280-538548/22	200.0	57.411555	50.0	783196.0	0.287058	Y



Calibration

/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

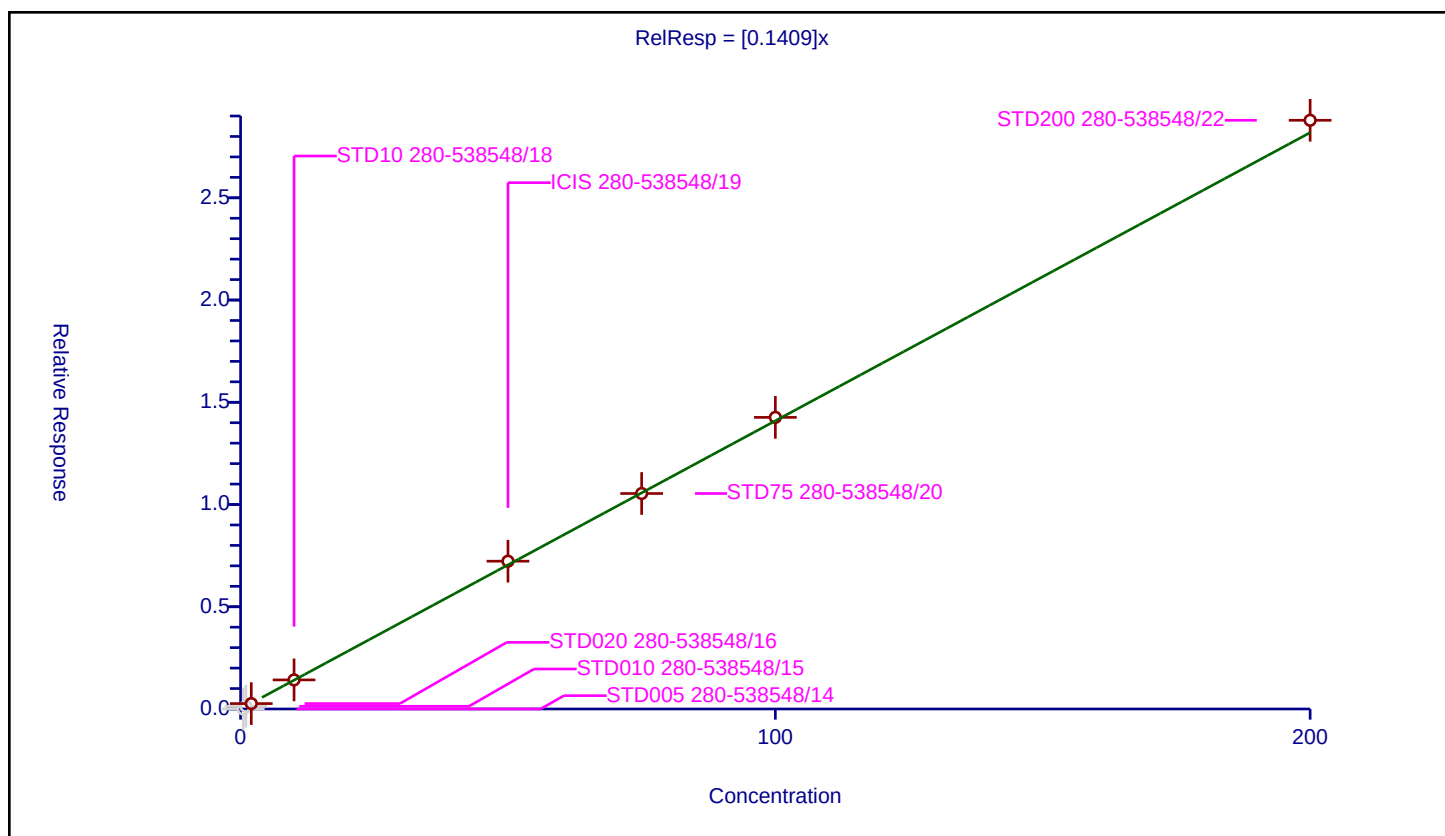
Curve Coefficients

Intercept: 0
 Slope: 0.1409

Error Coefficients

Standard Error: 241000
 Relative Standard Error: 3.3
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.132118	50.0	745169.0	0.132118	N
3	STD020 280-538548/16	2.0	0.263666	50.0	729901.0	0.131833	Y
4	STD10 280-538548/18	10.0	1.421638	50.0	746498.0	0.142164	Y
5	ICIS 280-538548/19	50.0	7.227905	50.0	769988.0	0.144558	Y
6	STD75 280-538548/20	75.0	10.537782	50.0	778921.0	0.140504	Y
7	STD100 280-538548/21	100.0	14.261412	50.0	770348.0	0.142614	Y
8	STD200 280-538548/22	200.0	28.791452	50.0	783196.0	0.143957	Y



Calibration

/ Acrolein

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

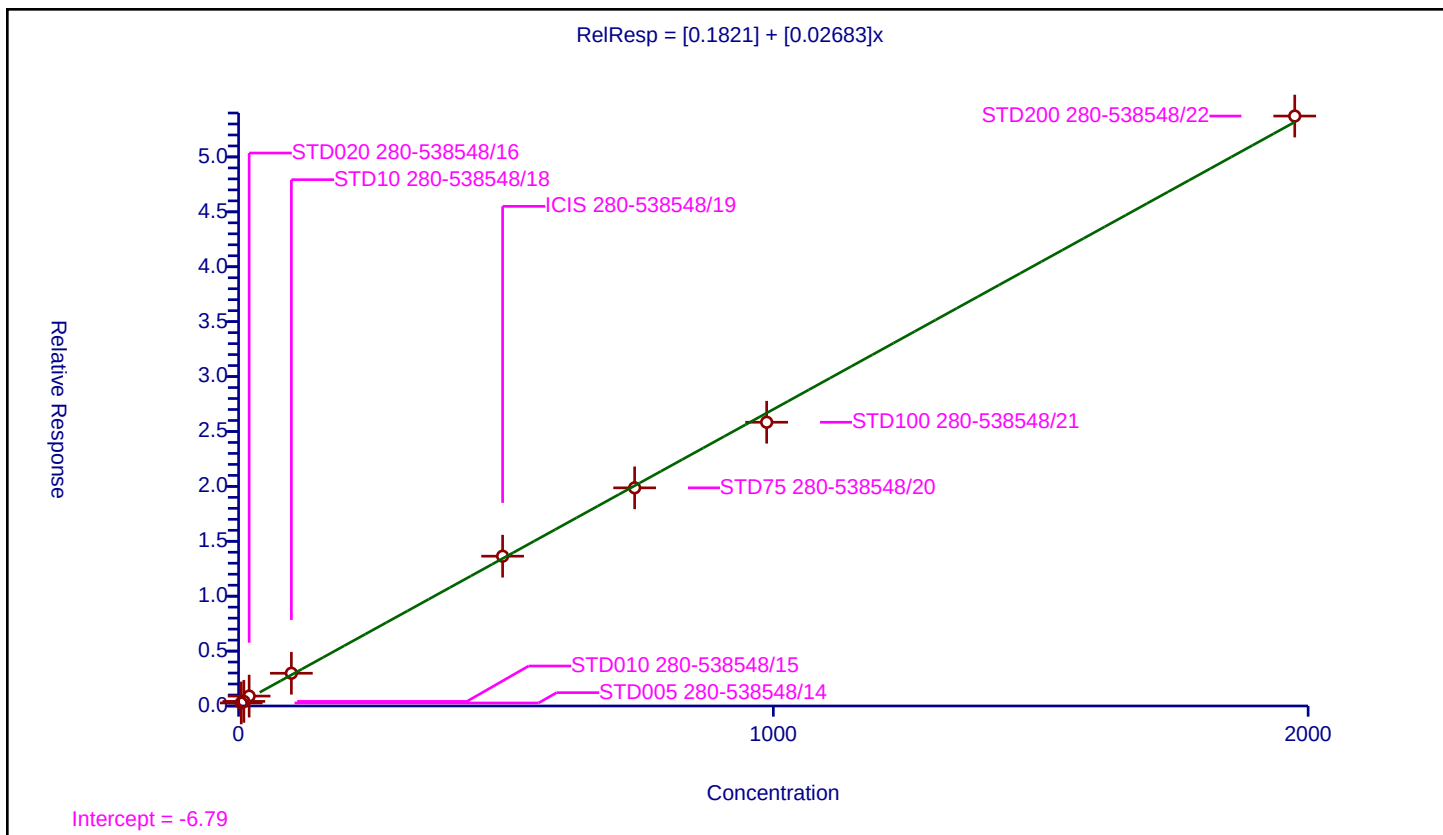
Curve Coefficients

Intercept: 0.1821
 Slope: 0.02683

Error Coefficients

Standard Error: 410000
 Relative Standard Error: 19.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	4.9375	0.275786	50.0	741336.0	0.055855	Y
2	STD010 280-538548/15	9.875	0.418764	50.0	745169.0	0.042406	Y
3	STD020 280-538548/16	19.75	0.902314	50.0	729901.0	0.045687	Y
4	STD10 280-538548/18	98.75	2.980584	50.0	746498.0	0.030183	Y
5	ICIS 280-538548/19	493.75	13.642615	50.0	769988.0	0.027631	Y
6	STD75 280-538548/20	740.625	19.865558	50.0	778921.0	0.026823	Y
7	STD100 280-538548/21	987.5	25.84014	50.0	770348.0	0.026167	Y
8	STD200 280-538548/22	1975.0	53.722568	50.0	783196.0	0.027201	Y



Calibration

/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

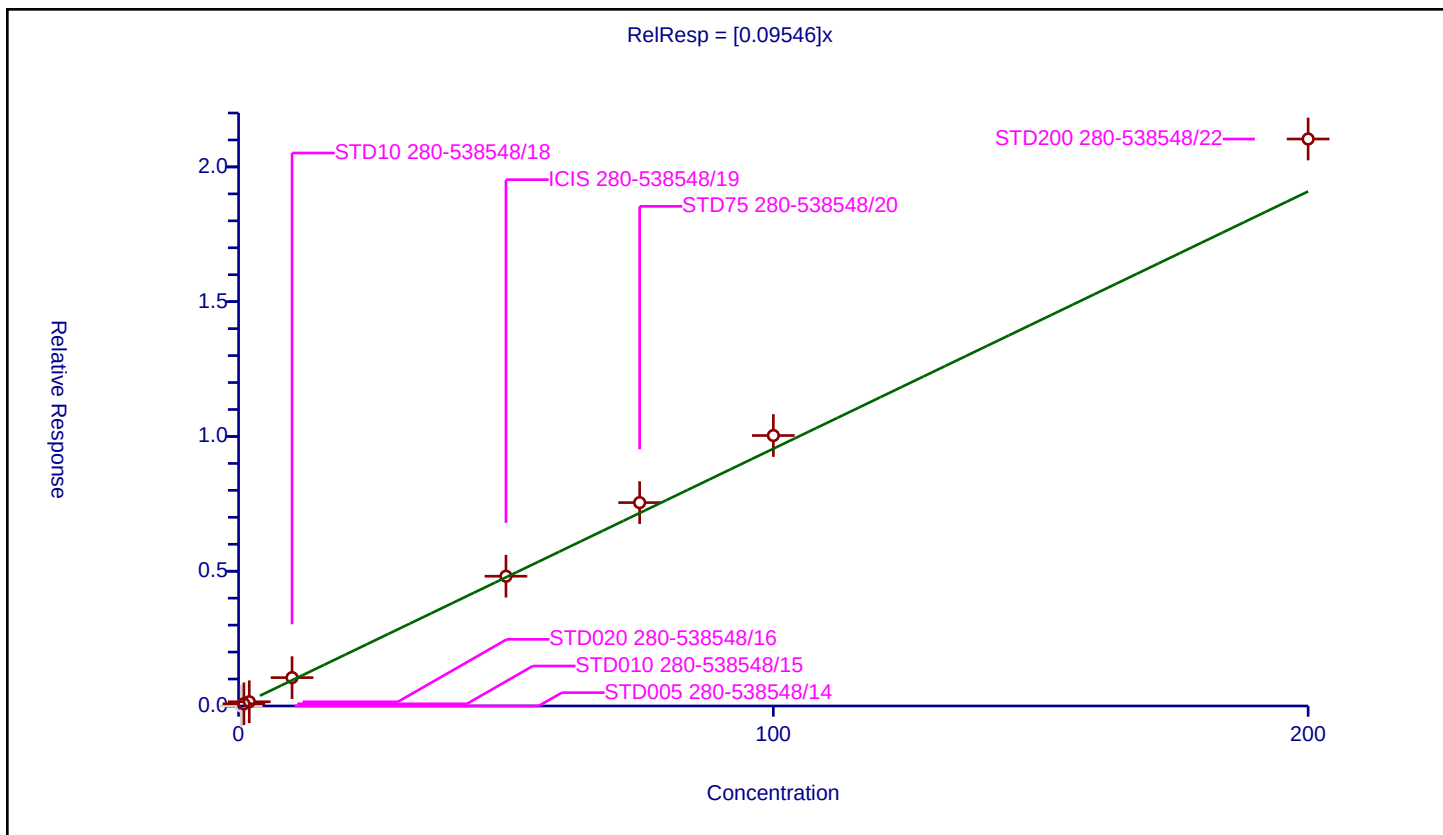
Curve Coefficients

Intercept: 0
 Slope: 0.09546

Error Coefficients

Standard Error: 159000
 Relative Standard Error: 11.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.081928	50.0	745169.0	0.081928	Y
3	STD020 280-538548/16	2.0	0.157145	50.0	729901.0	0.078572	Y
4	STD10 280-538548/18	10.0	1.052649	50.0	746498.0	0.105265	Y
5	ICIS 280-538548/19	50.0	4.814426	50.0	769988.0	0.096289	Y
6	STD75 280-538548/20	75.0	7.545566	50.0	778921.0	0.100608	Y
7	STD100 280-538548/21	100.0	10.035075	50.0	770348.0	0.100351	Y
8	STD200 280-538548/22	200.0	21.035794	50.0	783196.0	0.105179	Y



Calibration

/ 1,1-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

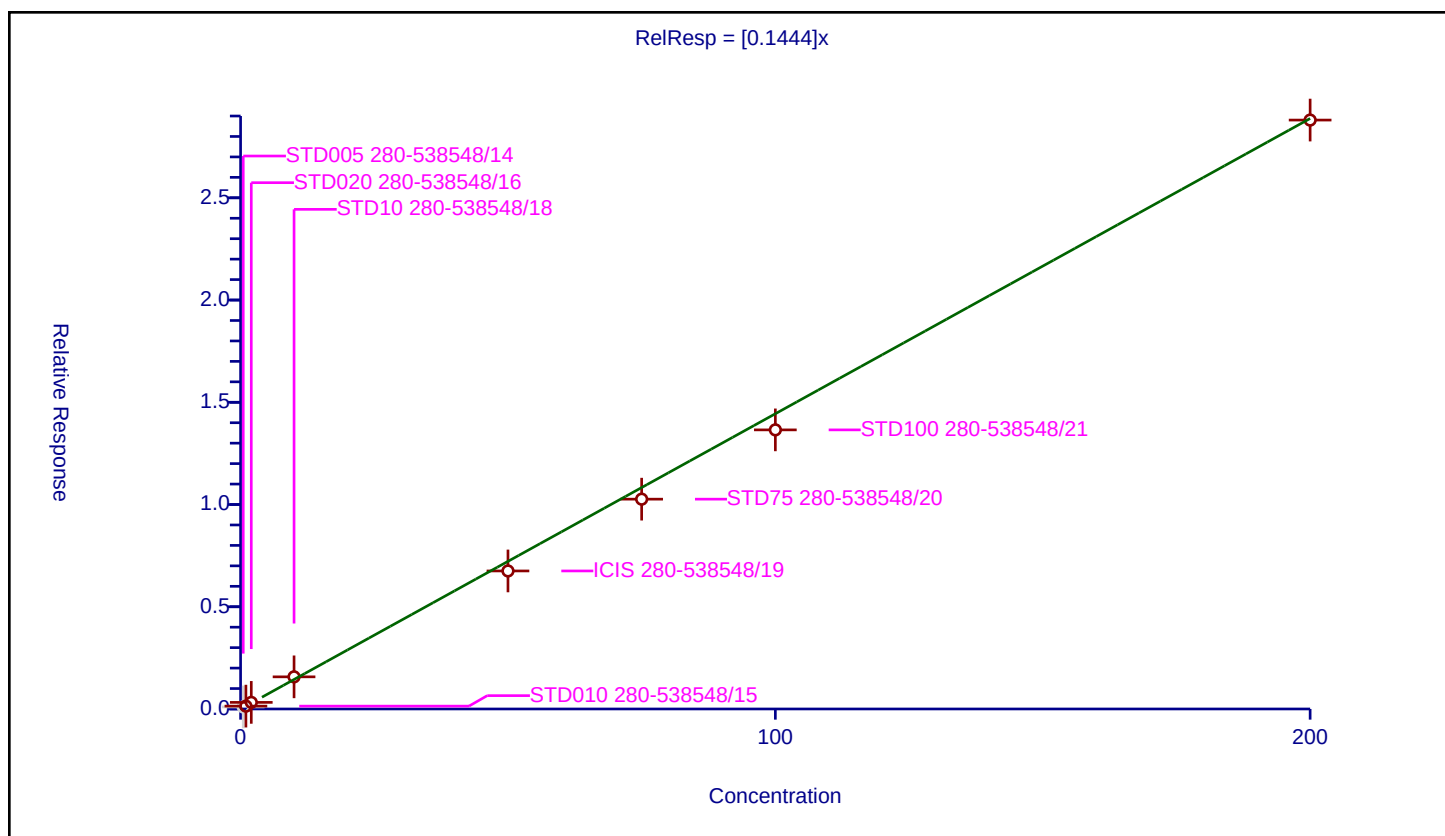
Curve Coefficients

Intercept:	0
Slope:	0.1444

Error Coefficients

Standard Error:	218000
Relative Standard Error:	7.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.101236	50.0	741336.0	0.202472	N
2	STD010 280-538548/15	1.0	0.140035	50.0	745169.0	0.140035	Y
3	STD020 280-538548/16	2.0	0.322167	50.0	729901.0	0.161083	Y
4	STD10 280-538548/18	10.0	1.572543	50.0	746498.0	0.157254	Y
5	ICIS 280-538548/19	50.0	6.750949	50.0	769988.0	0.135019	Y
6	STD75 280-538548/20	75.0	10.262145	50.0	778921.0	0.136829	Y
7	STD100 280-538548/21	100.0	13.650649	50.0	770348.0	0.136506	Y
8	STD200 280-538548/22	200.0	28.801283	50.0	783196.0	0.144006	Y



Calibration

/ Acetone

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

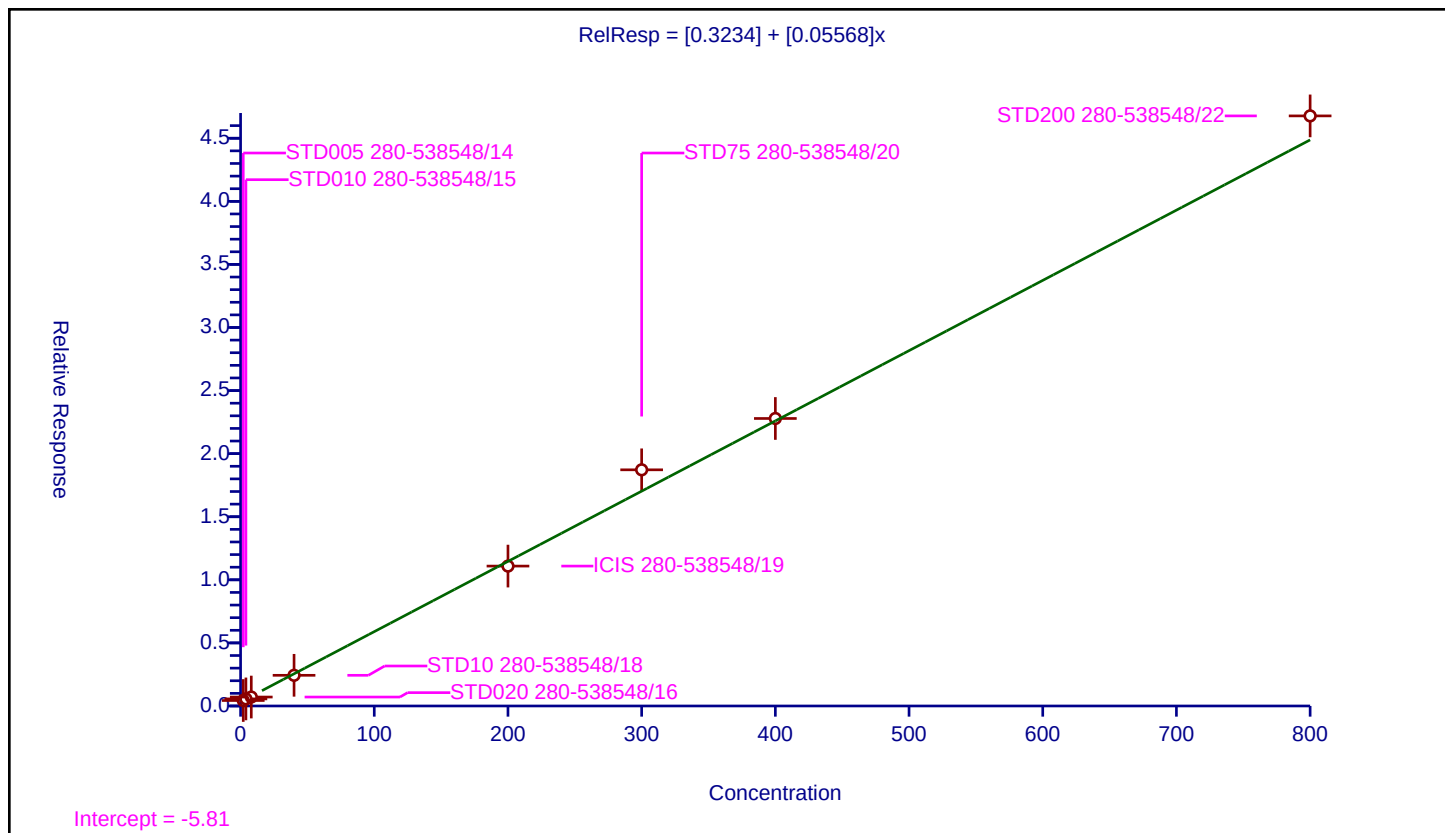
Curve Coefficients

Intercept: 0.3234
 Slope: 0.05568

Error Coefficients

Standard Error: 360000
 Relative Standard Error: 8.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.43516	50.0	741336.0	0.21758	Y
2	STD010 280-538548/15	4.0	0.560477	50.0	745169.0	0.140119	Y
3	STD020 280-538548/16	8.0	0.709206	50.0	729901.0	0.088651	Y
4	STD10 280-538548/18	40.0	2.43209	50.0	746498.0	0.060802	Y
5	ICIS 280-538548/19	200.0	11.089004	50.0	769988.0	0.055445	Y
6	STD75 280-538548/20	300.0	18.719421	50.0	778921.0	0.062398	Y
7	STD100 280-538548/21	400.0	22.788337	50.0	770348.0	0.056971	Y
8	STD200 280-538548/22	800.0	46.771689	50.0	783196.0	0.058465	Y



Calibration

/ Iodomethane

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

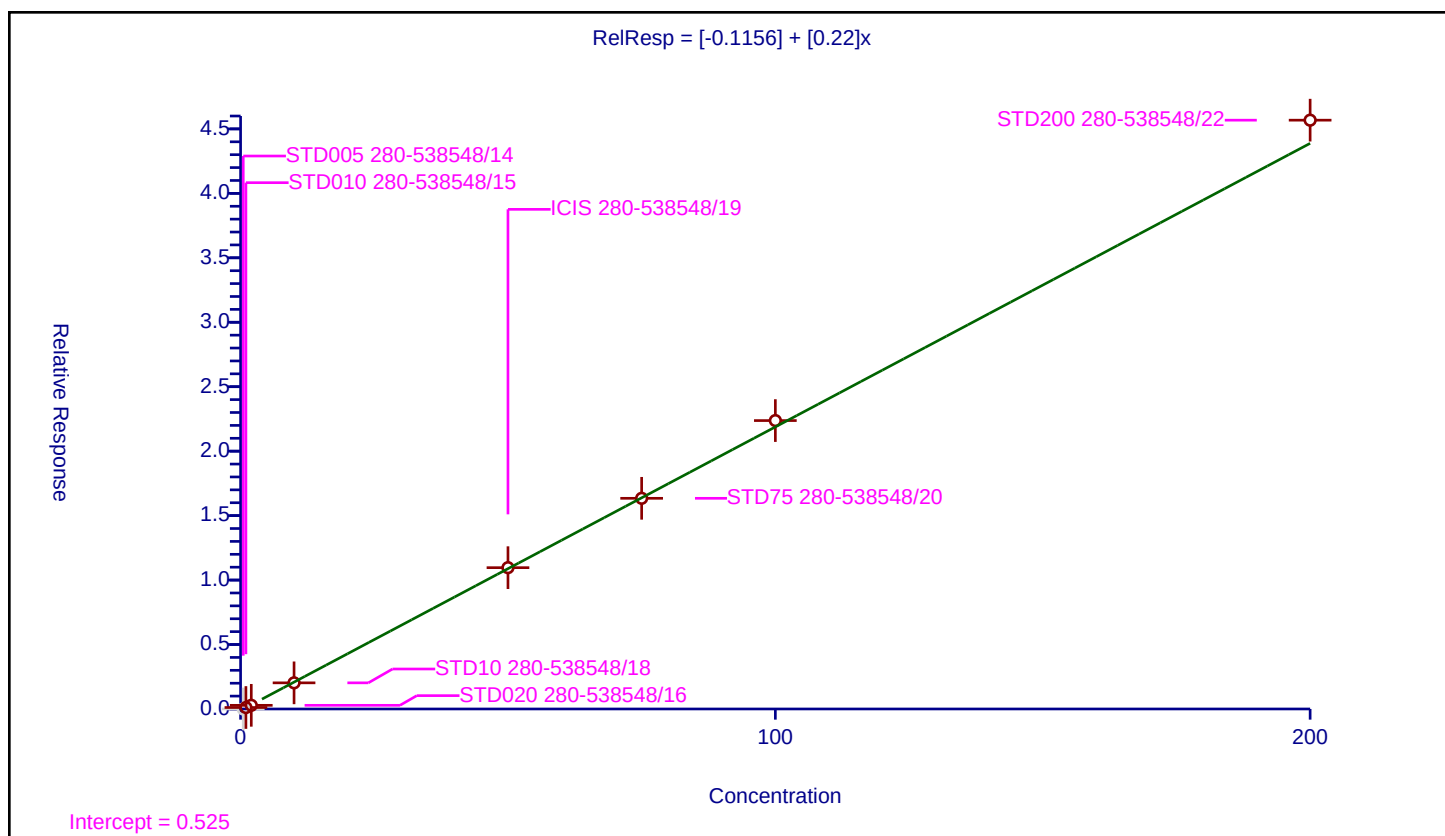
Curve Coefficients

Intercept: -0.1156
Slope: 0.22

Error Coefficients

Standard Error: 381000
Relative Standard Error: 5.1
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.114739	50.0	745169.0	0.114739	Y
3	STD020 280-538548/16	2.0	0.284833	50.0	729901.0	0.142417	Y
4	STD10 280-538548/18	10.0	2.028807	50.0	746498.0	0.202881	Y
5	ICIS 280-538548/19	50.0	10.962963	50.0	769988.0	0.219259	Y
6	STD75 280-538548/20	75.0	16.34357	50.0	778921.0	0.217914	Y
7	STD100 280-538548/21	100.0	22.374174	50.0	770348.0	0.223742	Y
8	STD200 280-538548/22	200.0	45.677646	50.0	783196.0	0.228388	Y



Calibration

/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

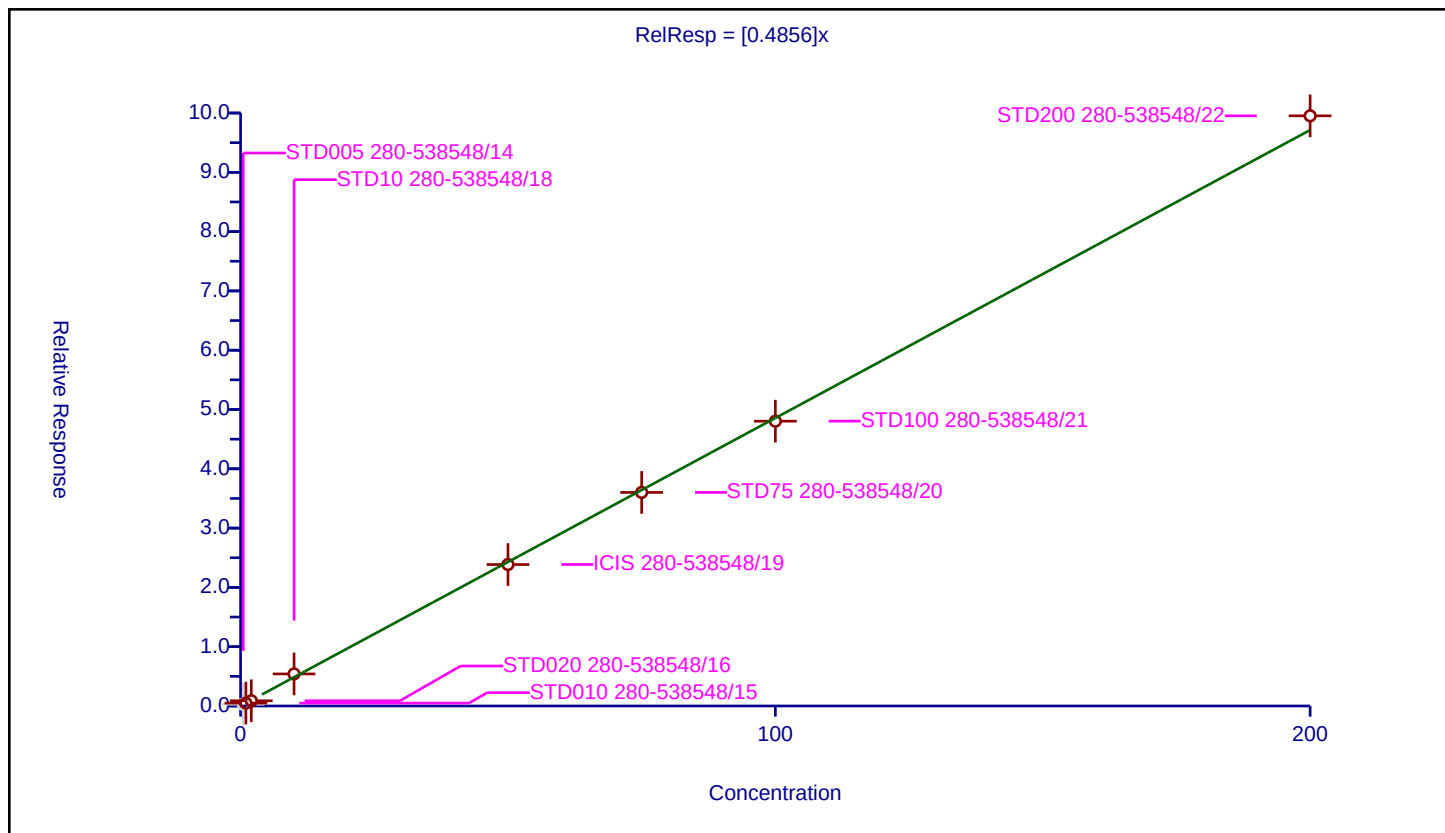
Curve Coefficients

Intercept: 0
 Slope: 0.4856

Error Coefficients

Standard Error: 757000
 Relative Standard Error: 6.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.296357	50.0	741336.0	0.592714	N
2	STD010 280-538548/15	1.0	0.483112	50.0	745169.0	0.483112	Y
3	STD020 280-538548/16	2.0	0.879982	50.0	729901.0	0.439991	Y
4	STD10 280-538548/18	10.0	5.409593	50.0	746498.0	0.540959	Y
5	ICIS 280-538548/19	50.0	23.856151	50.0	769988.0	0.477123	Y
6	STD75 280-538548/20	75.0	36.016169	50.0	778921.0	0.480216	Y
7	STD100 280-538548/21	100.0	48.03102	50.0	770348.0	0.48031	Y
8	STD200 280-538548/22	200.0	99.527704	50.0	783196.0	0.497639	Y



Calibration

/ Methyl acetate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

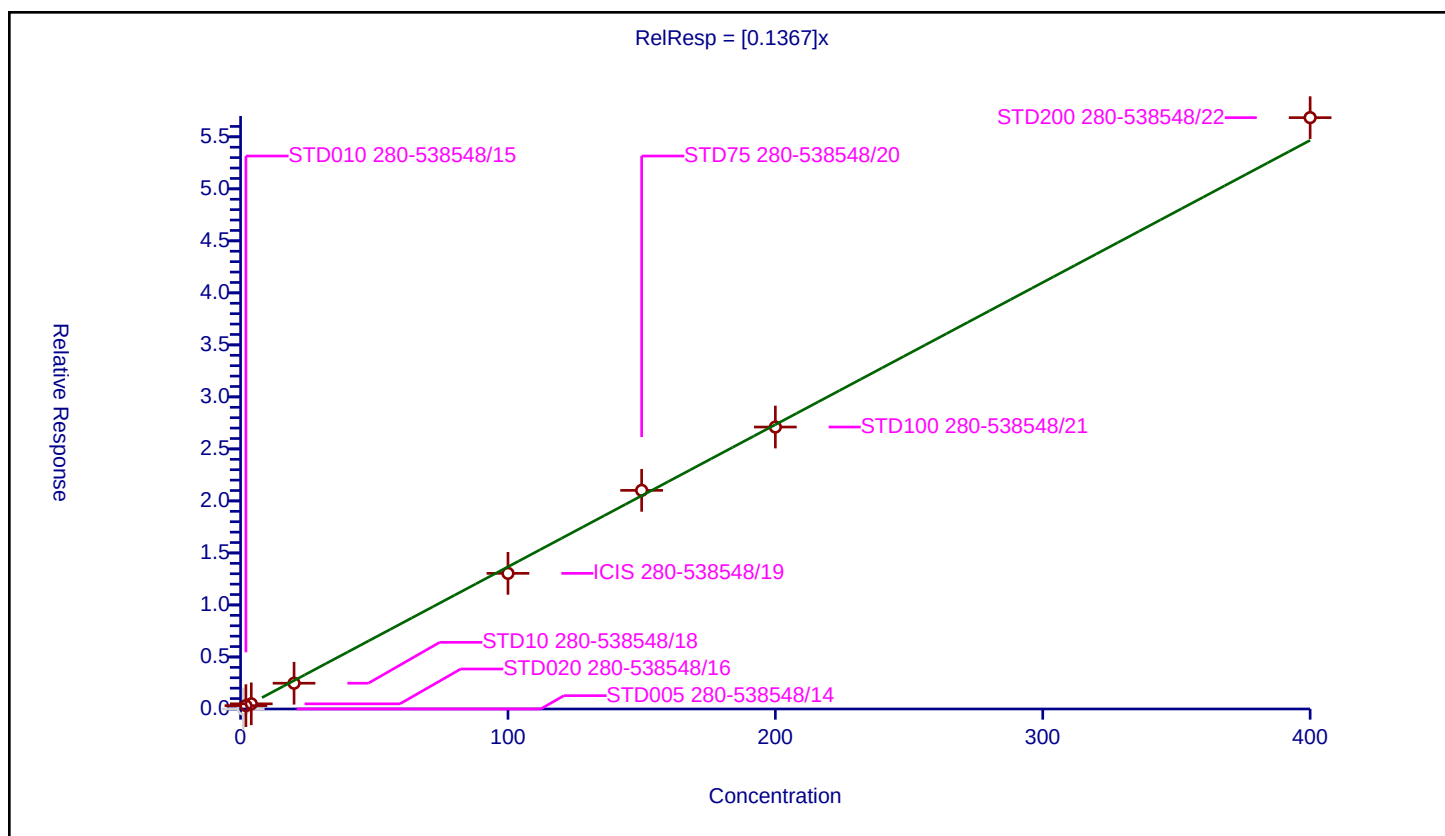
Curve Coefficients

Intercept: 0
Slope: 0.1367

Error Coefficients

Standard Error: 431000
Relative Standard Error: 9.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	2.0	0.321337	50.0	745169.0	0.160668	Y
3	STD020 280-538548/16	4.0	0.495821	50.0	729901.0	0.123955	Y
4	STD10 280-538548/18	20.0	2.477502	50.0	746498.0	0.123875	Y
5	ICIS 280-538548/19	100.0	13.037671	50.0	769988.0	0.130377	Y
6	STD75 280-538548/20	150.0	21.016894	50.0	778921.0	0.140113	Y
7	STD100 280-538548/21	200.0	27.103205	50.0	770348.0	0.135516	Y
8	STD200 280-538548/22	400.0	56.844008	50.0	783196.0	0.14211	Y



Calibration

/ 3-Chloro-1-propene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

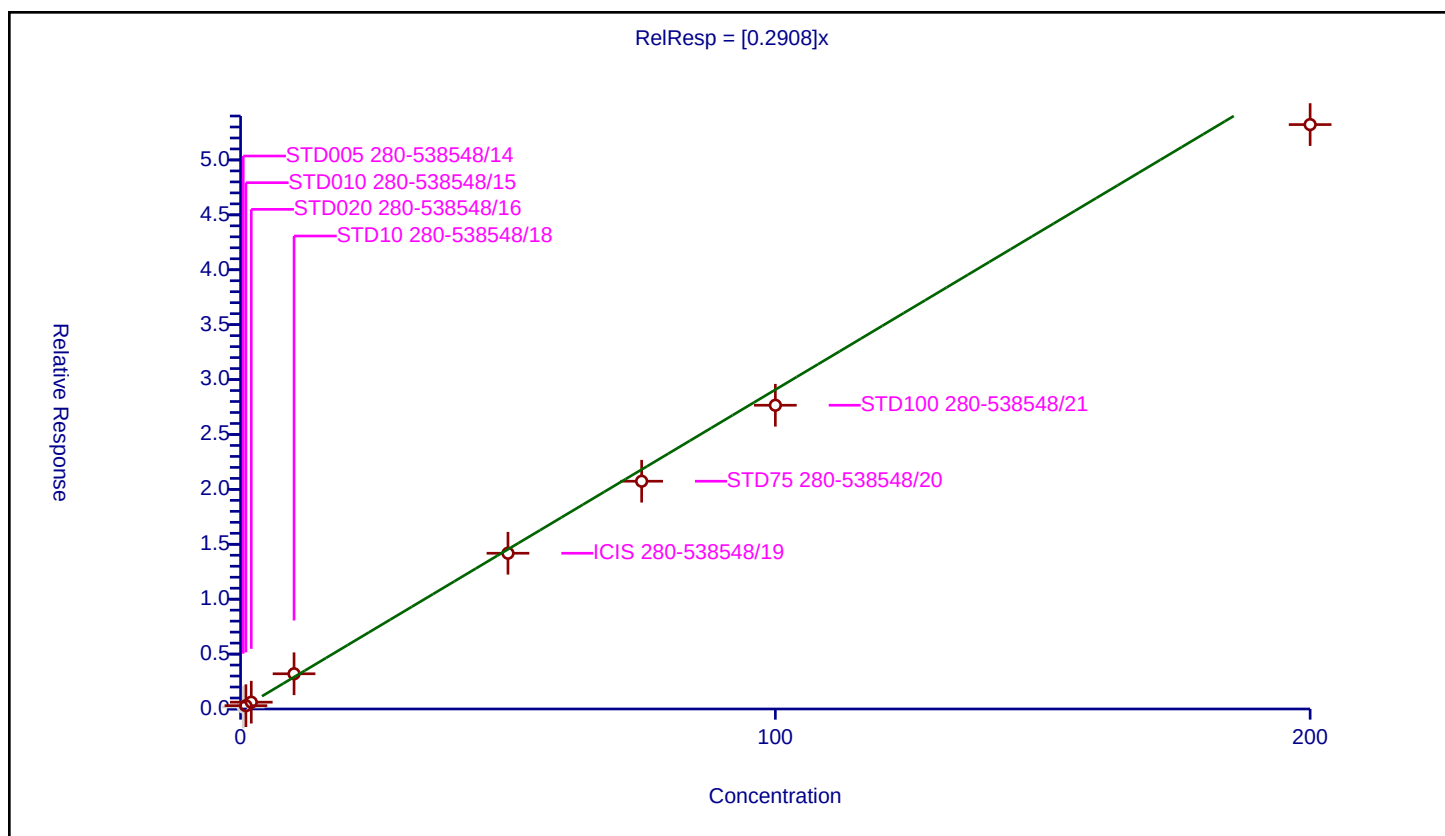
Curve Coefficients

Intercept: 0
Slope: 0.2908

Error Coefficients

Standard Error: 415000
Relative Standard Error: 7.0
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.181699	50.0	741336.0	0.363398	N
2	STD010 280-538548/15	1.0	0.301274	50.0	745169.0	0.301274	Y
3	STD020 280-538548/16	2.0	0.620975	50.0	729901.0	0.310487	Y
4	STD10 280-538548/18	10.0	3.206439	50.0	746498.0	0.320644	Y
5	ICIS 280-538548/19	50.0	14.182818	50.0	769988.0	0.283656	Y
6	STD75 280-538548/20	75.0	20.741513	50.0	778921.0	0.276554	Y
7	STD100 280-538548/21	100.0	27.661005	50.0	770348.0	0.27661	Y
8	STD200 280-538548/22	200.0	53.219373	50.0	783196.0	0.266097	Y



Calibration

/ Methylene Chloride

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

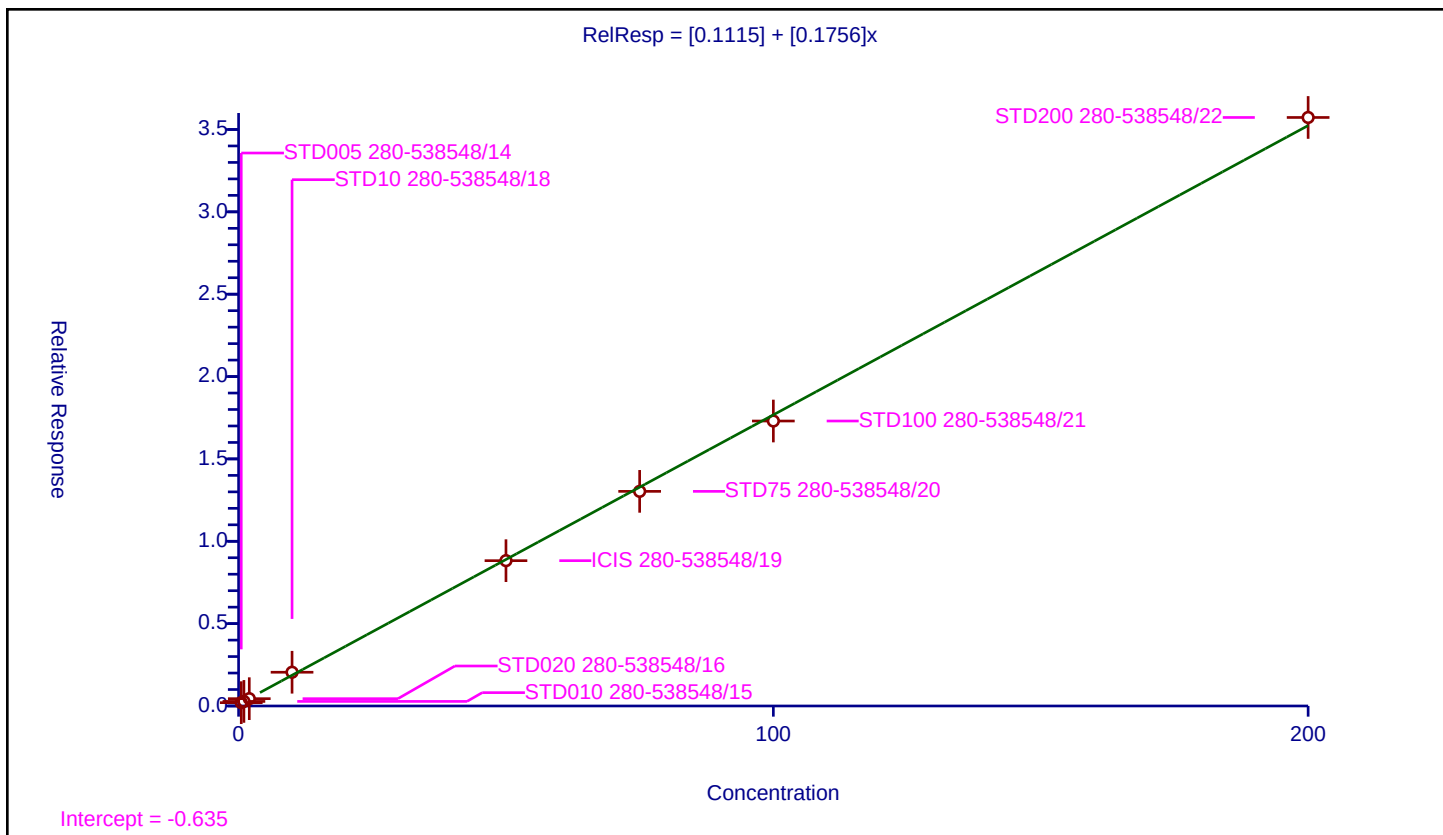
Curve Coefficients

Intercept: 0.1115
 Slope: 0.1756

Error Coefficients

Standard Error: 272000
 Relative Standard Error: 5.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.202203	50.0	741336.0	0.404405	Y
2	STD010 280-538548/15	1.0	0.278125	50.0	745169.0	0.278125	Y
3	STD020 280-538548/16	2.0	0.44506	50.0	729901.0	0.22253	Y
4	STD10 280-538548/18	10.0	2.048231	50.0	746498.0	0.204823	Y
5	ICIS 280-538548/19	50.0	8.8228	50.0	769988.0	0.176456	Y
6	STD75 280-538548/20	75.0	13.030333	50.0	778921.0	0.173738	Y
7	STD100 280-538548/21	100.0	17.301466	50.0	770348.0	0.173015	Y
8	STD200 280-538548/22	200.0	35.72937	50.0	783196.0	0.178647	Y



Calibration

/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

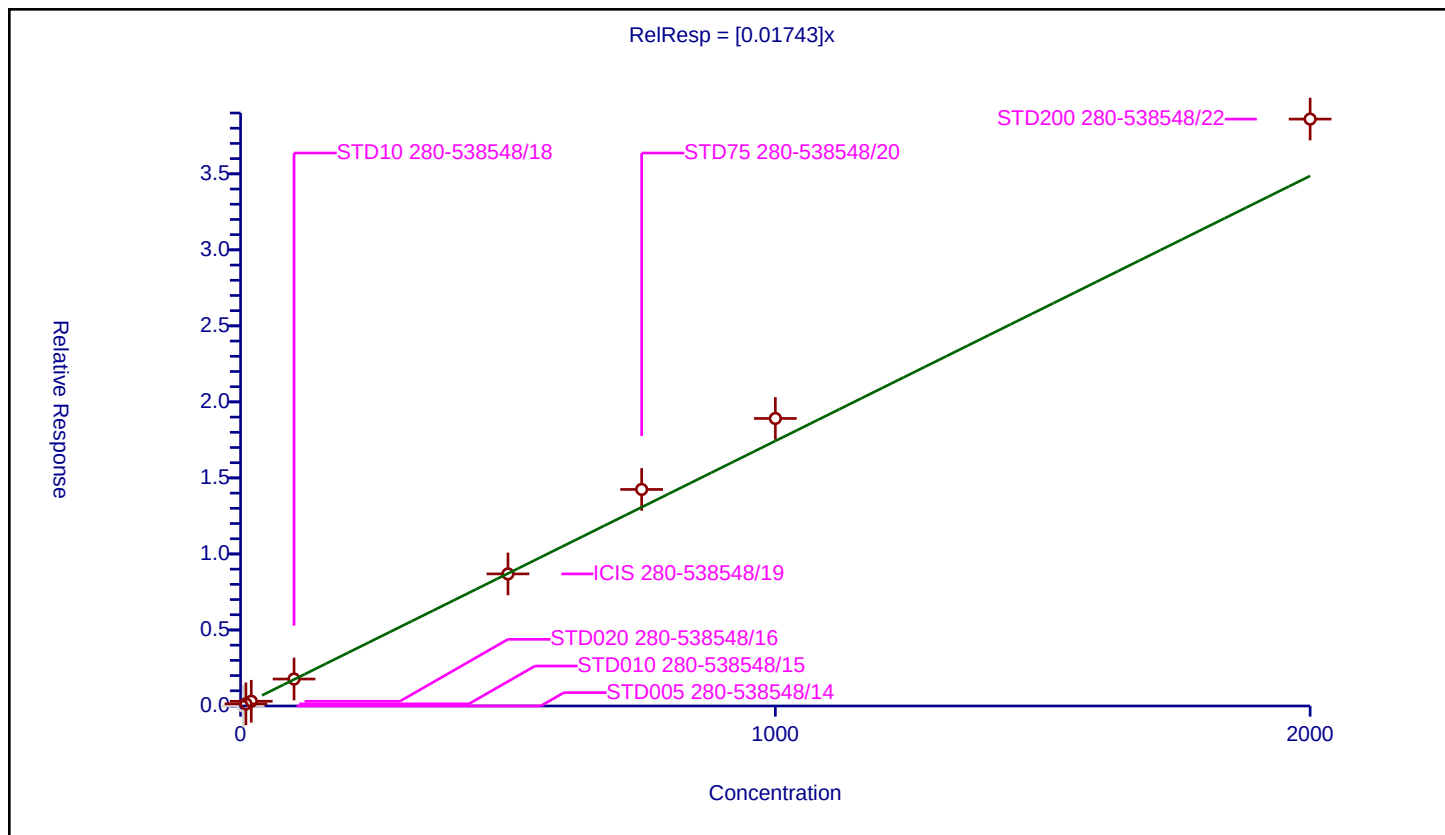
Curve Coefficients

Intercept: 0
 Slope: 0.01743

Error Coefficients

Standard Error: 294000
 Relative Standard Error: 11.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	5.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	10.0	0.141109	50.0	745169.0	0.014111	Y
3	STD020 280-538548/16	20.0	0.312029	50.0	729901.0	0.015601	Y
4	STD10 280-538548/18	100.0	1.772342	50.0	746498.0	0.017723	Y
5	ICIS 280-538548/19	500.0	8.688252	50.0	769988.0	0.017377	Y
6	STD75 280-538548/20	750.0	14.2431	50.0	778921.0	0.018991	Y
7	STD100 280-538548/21	1000.0	18.911453	50.0	770348.0	0.018911	Y
8	STD200 280-538548/22	2000.0	38.599342	50.0	783196.0	0.0193	Y



Calibration

/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

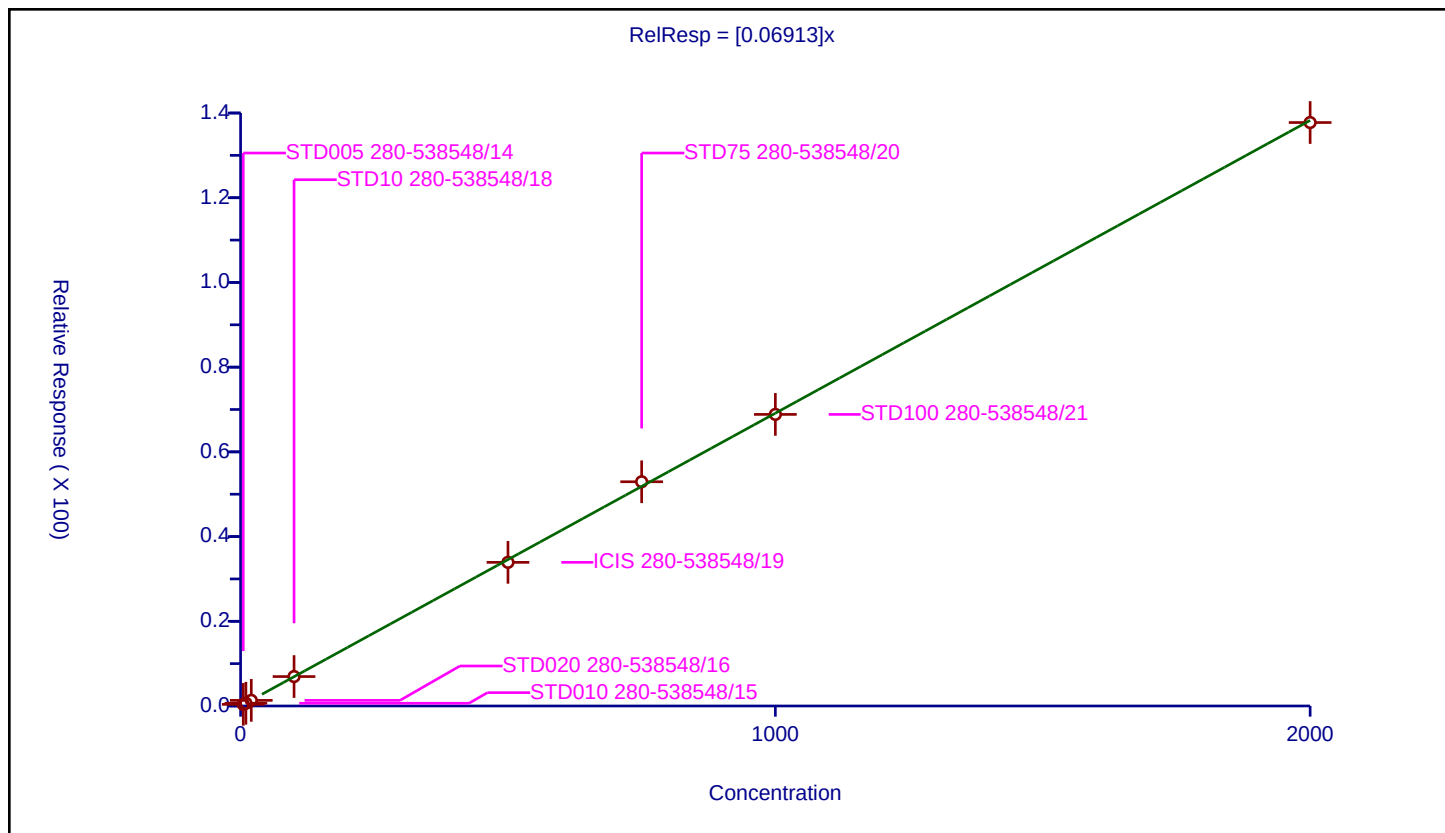
Curve Coefficients

Intercept: 0
 Slope: 0.06913

Error Coefficients

Standard Error: 982000
 Relative Standard Error: 5.3
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	5.0	0.383699	50.0	741336.0	0.07674	Y
2	STD010 280-538548/15	10.0	0.644485	50.0	745169.0	0.064448	Y
3	STD020 280-538548/16	20.0	1.324358	50.0	729901.0	0.066218	Y
4	STD10 280-538548/18	100.0	6.949382	50.0	746498.0	0.069494	Y
5	ICIS 280-538548/19	500.0	33.912022	50.0	769988.0	0.067824	Y
6	STD75 280-538548/20	750.0	52.942019	50.0	778921.0	0.070589	Y
7	STD100 280-538548/21	1000.0	68.840187	50.0	770348.0	0.06884	Y
8	STD200 280-538548/22	2000.0	137.752746	50.0	783196.0	0.068876	Y



Calibration

/ Methyl tert-butyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

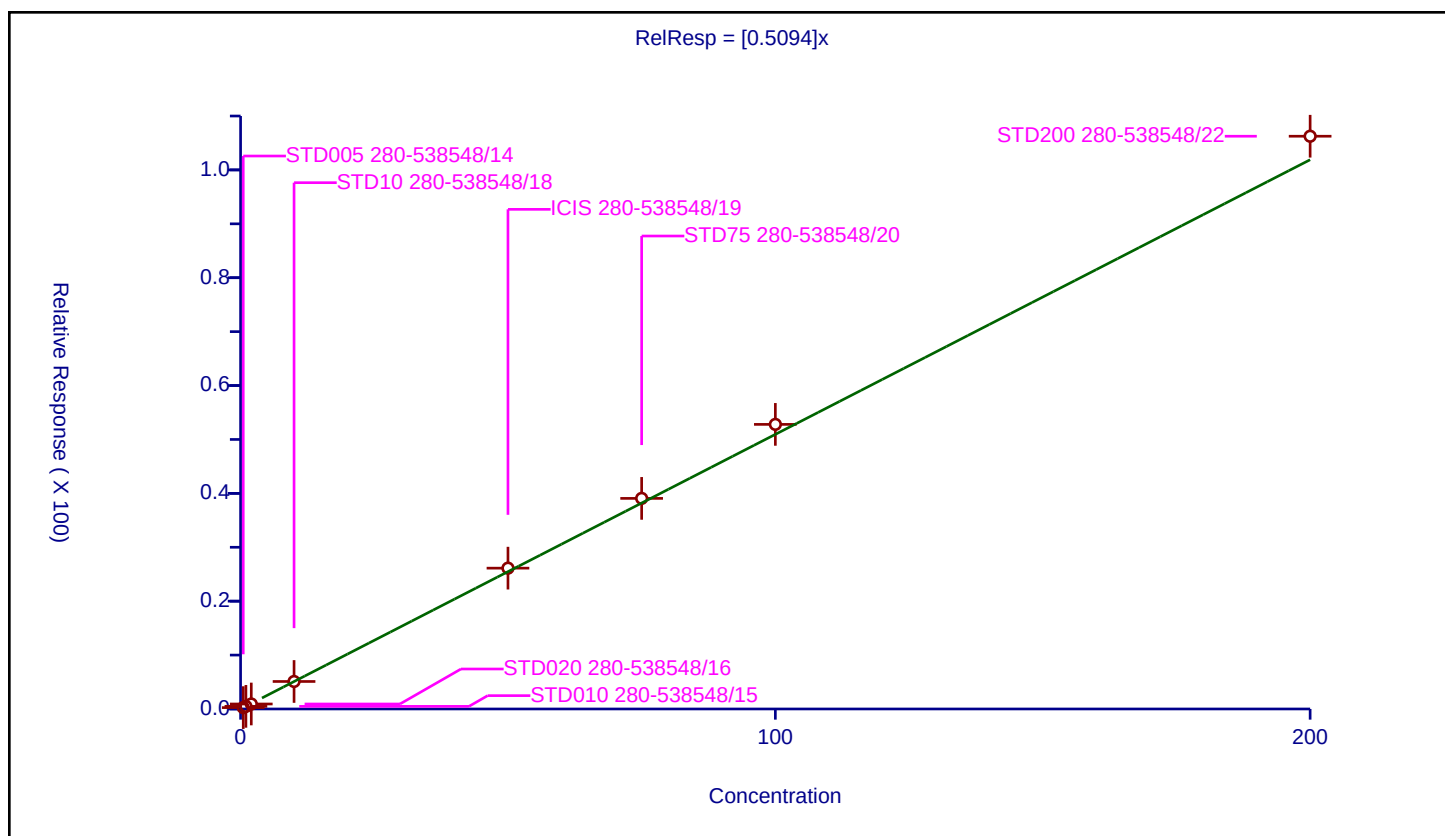
Curve Coefficients

Intercept: 0
Slope: 0.5094

Error Coefficients

Standard Error: 753000
Relative Standard Error: 4.6
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.256766	50.0	741336.0	0.513532	Y
2	STD010 280-538548/15	1.0	0.485125	50.0	745169.0	0.485125	Y
3	STD020 280-538548/16	2.0	0.927112	50.0	729901.0	0.463556	Y
4	STD10 280-538548/18	10.0	5.104836	50.0	746498.0	0.510484	Y
5	ICIS 280-538548/19	50.0	26.128914	50.0	769988.0	0.522578	Y
6	STD75 280-538548/20	75.0	39.069238	50.0	778921.0	0.520923	Y
7	STD100 280-538548/21	100.0	52.797307	50.0	770348.0	0.527973	Y
8	STD200 280-538548/22	200.0	106.248819	50.0	783196.0	0.531244	Y



Calibration

/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

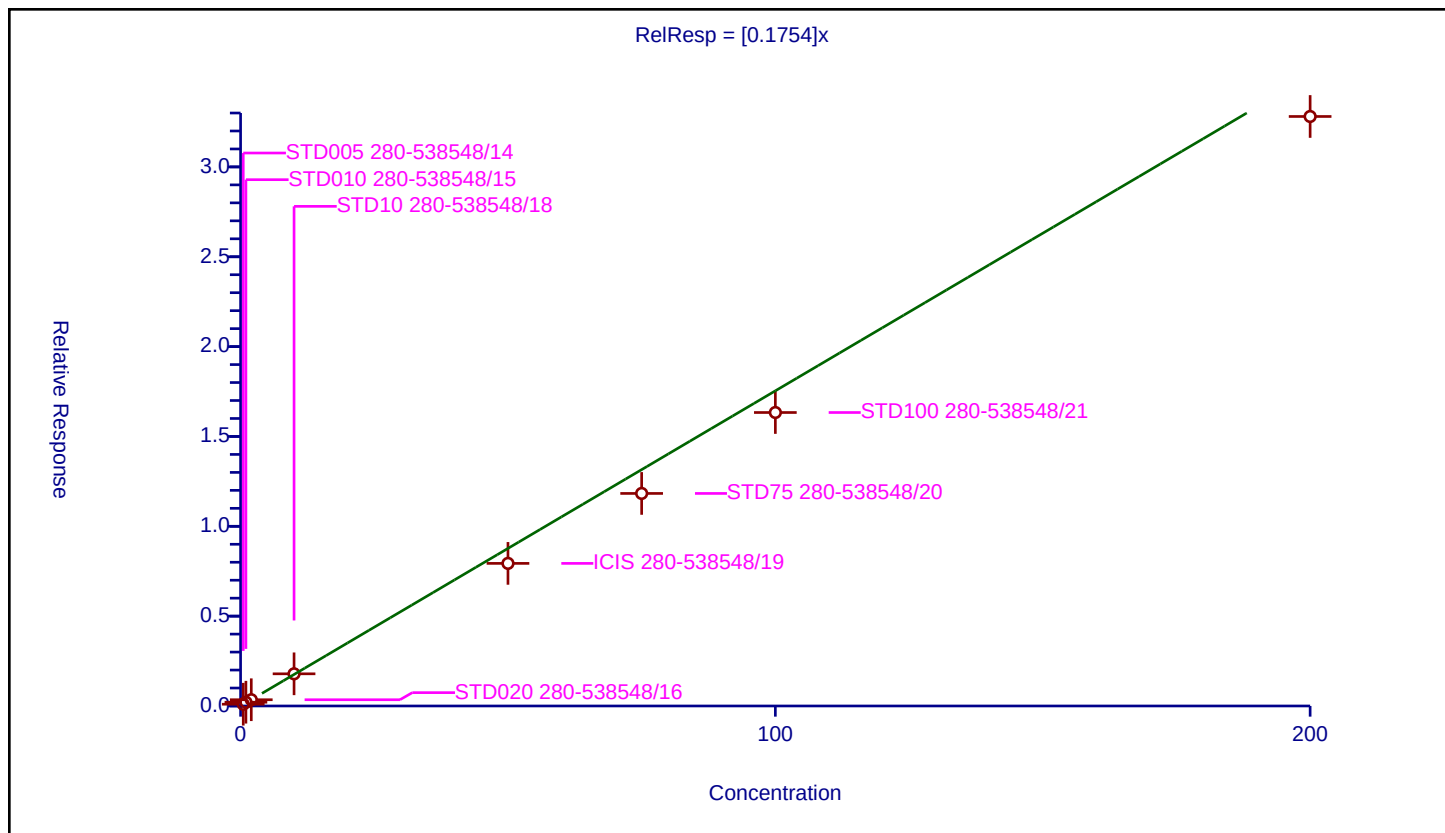
Curve Coefficients

Intercept: 0
 Slope: 0.1754

Error Coefficients

Standard Error: 232000
 Relative Standard Error: 10.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.098471	50.0	741336.0	0.196942	Y
2	STD010 280-538548/15	1.0	0.209416	50.0	745169.0	0.209416	Y
3	STD020 280-538548/16	2.0	0.347924	50.0	729901.0	0.173962	Y
4	STD10 280-538548/18	10.0	1.789891	50.0	746498.0	0.178989	Y
5	ICIS 280-538548/19	50.0	7.936163	50.0	769988.0	0.158723	Y
6	STD75 280-538548/20	75.0	11.828799	50.0	778921.0	0.157717	Y
7	STD100 280-538548/21	100.0	16.333203	50.0	770348.0	0.163332	Y
8	STD200 280-538548/22	200.0	32.806922	50.0	783196.0	0.164035	Y



Calibration

/ Hexane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

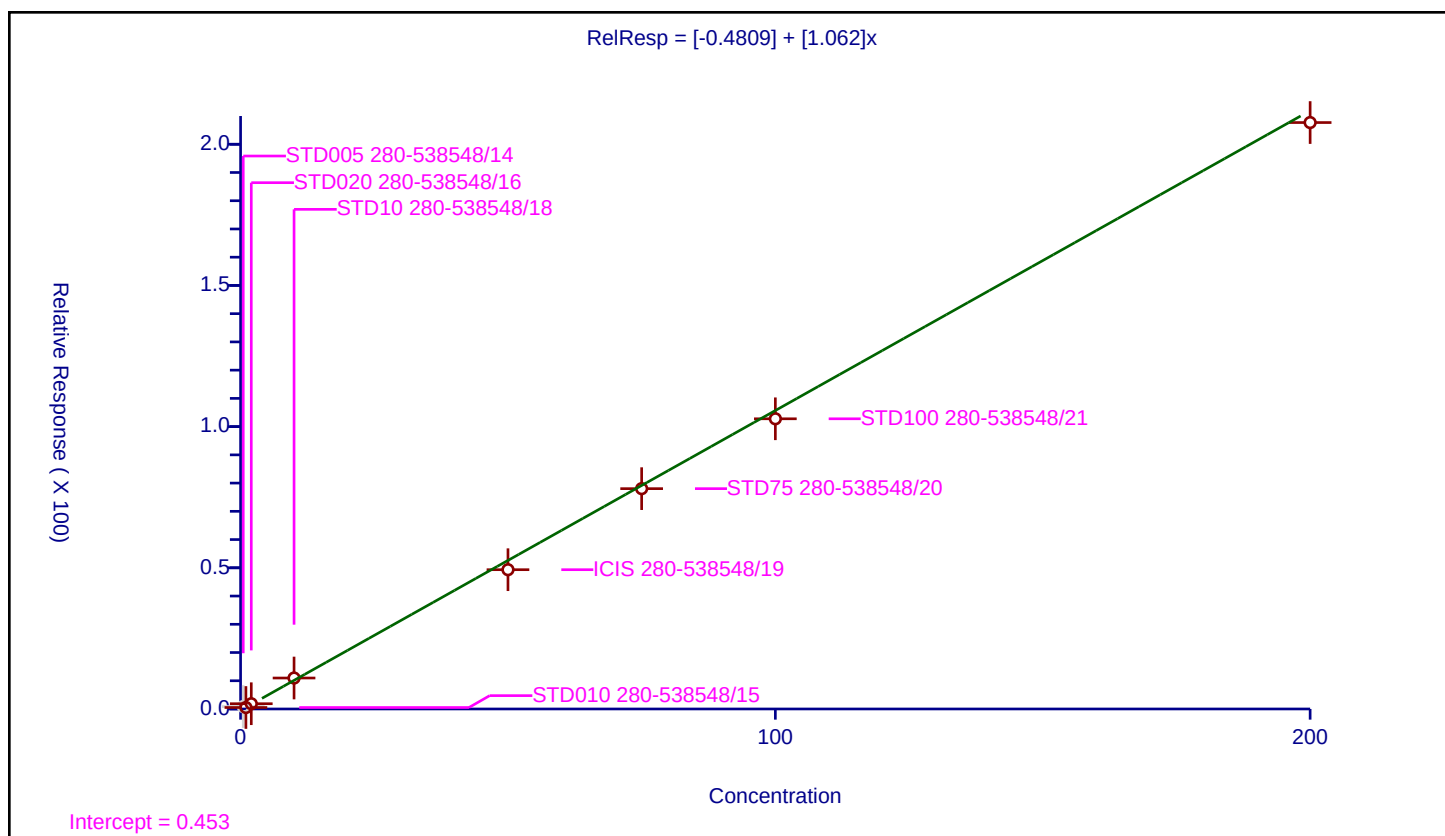
Curve Coefficients

Intercept: -0.4809
 Slope: 1.062

Error Coefficients

Standard Error: 372000
 Relative Standard Error: 7.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.858423	50.0	154877.0	1.716846	N
2	STD010 280-538548/15	1.0	0.520189	50.0	156866.0	0.520189	Y
3	STD020 280-538548/16	2.0	1.860383	50.0	153463.0	0.930192	Y
4	STD10 280-538548/18	10.0	10.966011	50.0	158818.0	1.096601	Y
5	ICIS 280-538548/19	50.0	49.334346	50.0	161871.0	0.986687	Y
6	STD75 280-538548/20	75.0	78.034607	50.0	162105.0	1.040461	Y
7	STD100 280-538548/21	100.0	102.776177	50.0	161409.0	1.027762	Y
8	STD200 280-538548/22	200.0	207.682118	50.0	169094.0	1.038411	Y



Calibration

/ Vinyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

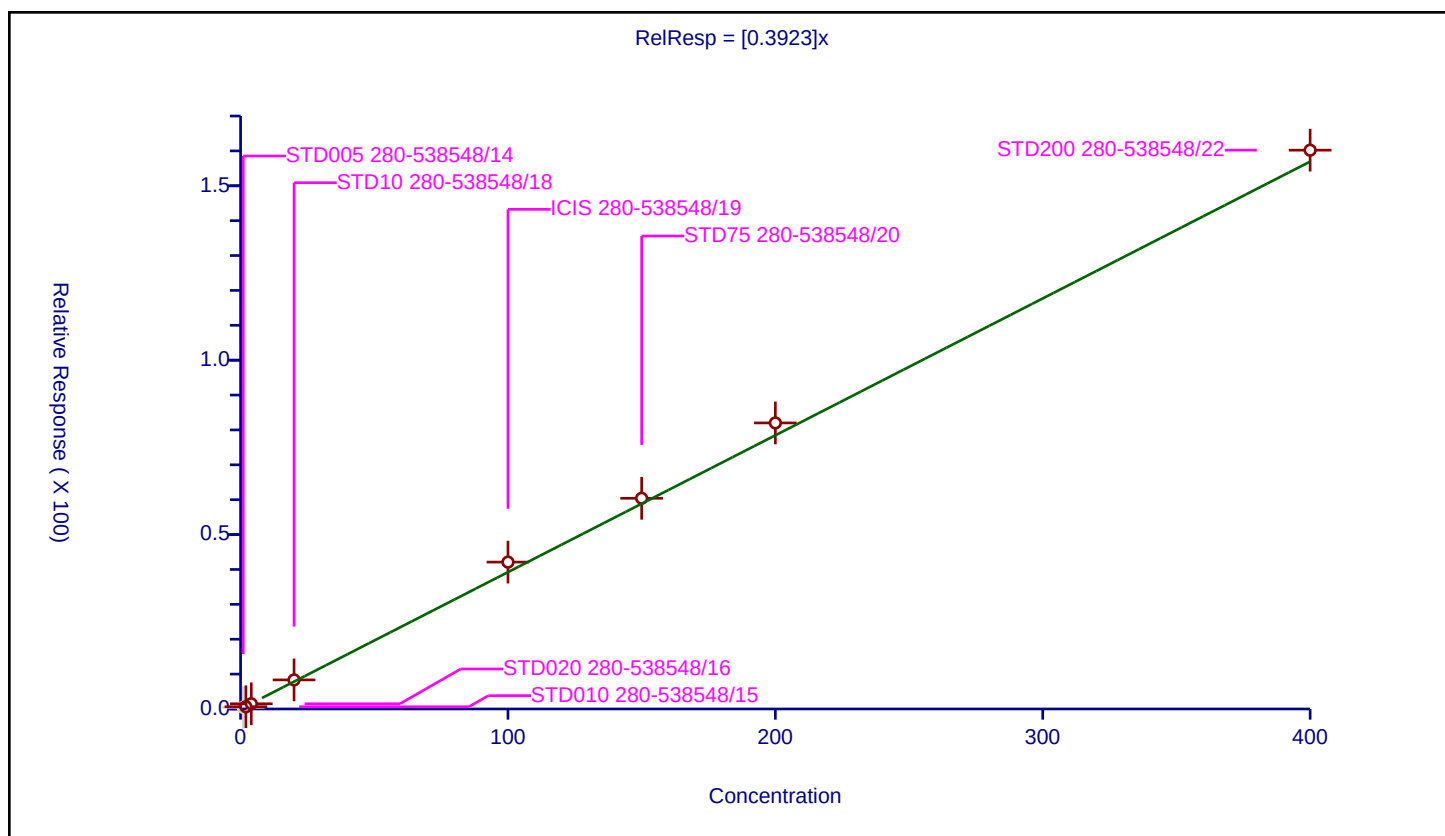
Curve Coefficients

Intercept: 0
 Slope: 0.3923

Error Coefficients

Standard Error: 1240000
 Relative Standard Error: 8.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.469288	50.0	741336.0	0.469288	N
2	STD010 280-538548/15	2.0	0.642673	50.0	745169.0	0.321337	Y
3	STD020 280-538548/16	4.0	1.49486	50.0	729901.0	0.373715	Y
4	STD10 280-538548/18	20.0	8.336057	50.0	746498.0	0.416803	Y
5	ICIS 280-538548/19	100.0	42.109422	50.0	769988.0	0.421094	Y
6	STD75 280-538548/20	150.0	60.405741	50.0	778921.0	0.402705	Y
7	STD100 280-538548/21	200.0	82.015855	50.0	770348.0	0.410079	Y
8	STD200 280-538548/22	400.0	160.205172	50.0	783196.0	0.400513	Y



Calibration

/ 1,1-Dichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

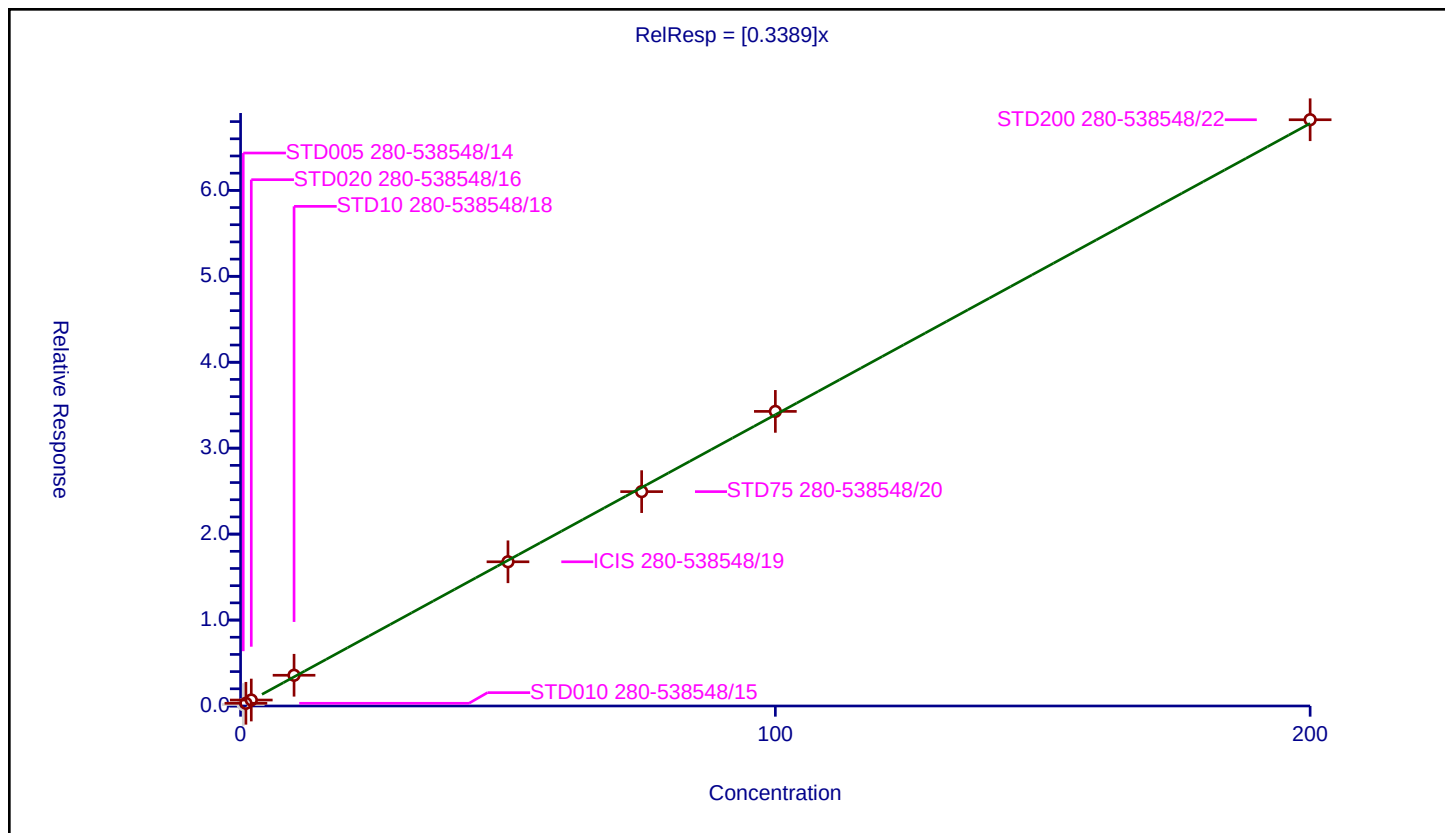
Curve Coefficients

Intercept: 0
Slope: 0.3389

Error Coefficients

Standard Error: 523000
Relative Standard Error: 3.9
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.170975	50.0	741336.0	0.34195	N
2	STD010 280-538548/15	1.0	0.3157	50.0	745169.0	0.3157	Y
3	STD020 280-538548/16	2.0	0.694615	50.0	729901.0	0.347307	Y
4	STD10 280-538548/18	10.0	3.574691	50.0	746498.0	0.357469	Y
5	ICIS 280-538548/19	50.0	16.779612	50.0	769988.0	0.335592	Y
6	STD75 280-538548/20	75.0	24.944186	50.0	778921.0	0.332589	Y
7	STD100 280-538548/21	100.0	34.279962	50.0	770348.0	0.3428	Y
8	STD200 280-538548/22	200.0	68.218875	50.0	783196.0	0.341094	Y



Calibration

/ 2-Butanone (MEK)

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

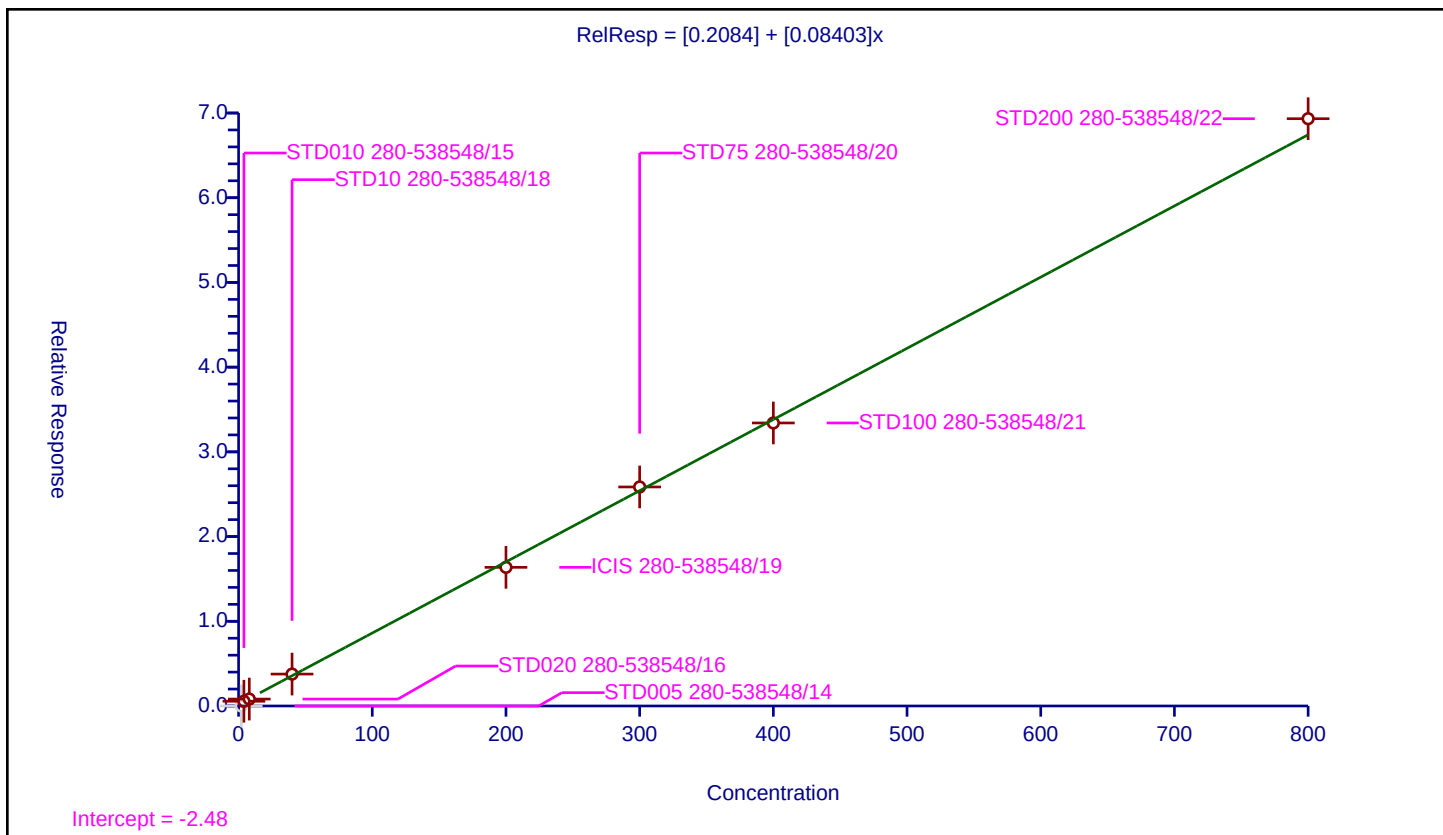
Curve Coefficients

Intercept: 0.2084
 Slope: 0.08403

Error Coefficients

Standard Error: 578000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	4.0	0.558867	50.0	745169.0	0.139717	Y
3	STD020 280-538548/16	8.0	0.816207	50.0	729901.0	0.102026	Y
4	STD10 280-538548/18	40.0	3.765047	50.0	746498.0	0.094126	Y
5	ICIS 280-538548/19	200.0	16.369151	50.0	769988.0	0.081846	Y
6	STD75 280-538548/20	300.0	25.856281	50.0	778921.0	0.086188	Y
7	STD100 280-538548/21	400.0	33.411134	50.0	770348.0	0.083528	Y
8	STD200 280-538548/22	800.0	69.328814	50.0	783196.0	0.086661	Y



Calibration

/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

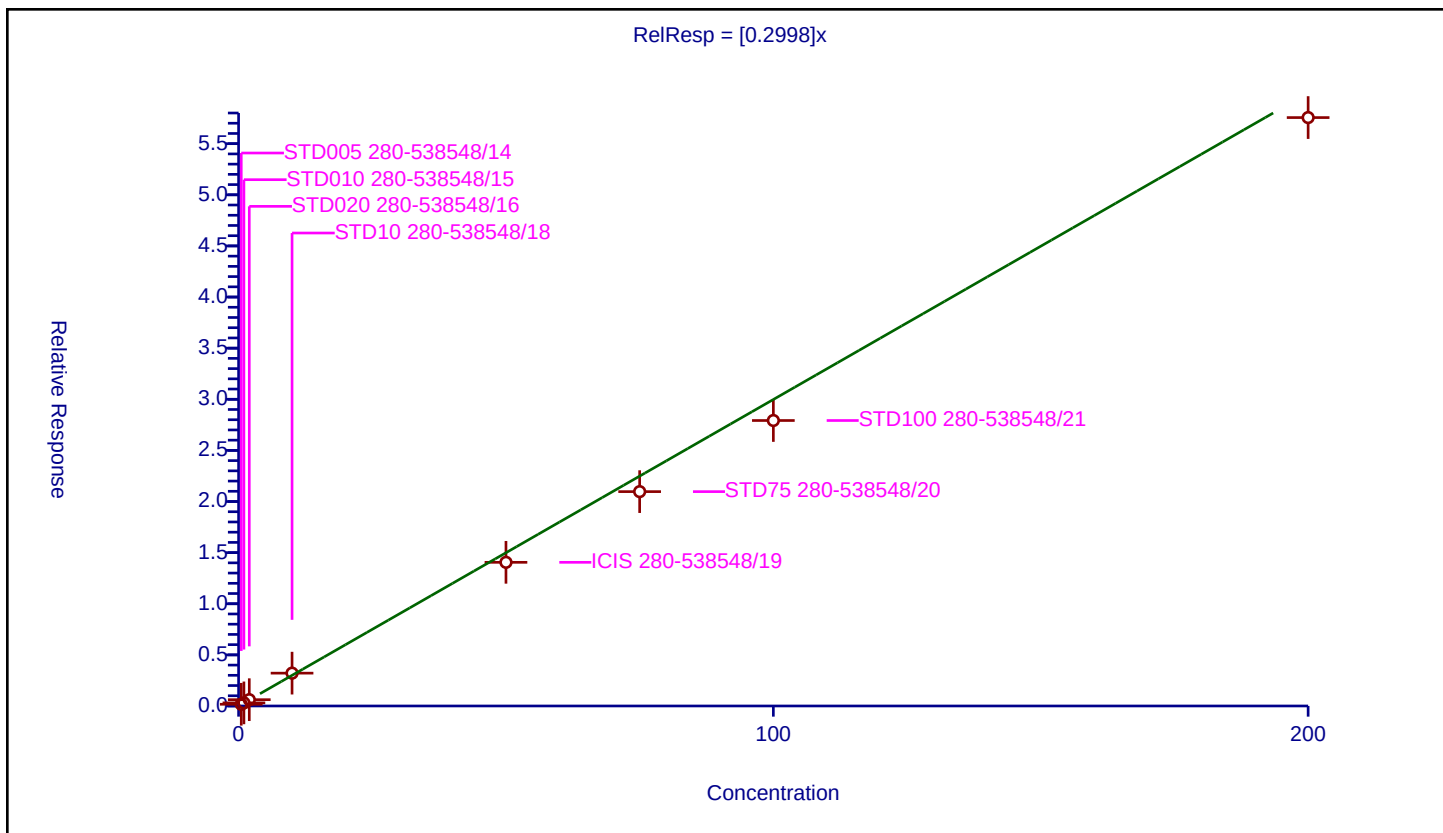
Curve Coefficients

Intercept: 0
 Slope: 0.2998

Error Coefficients

Standard Error: 406000
 Relative Standard Error: 7.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.168884	50.0	741336.0	0.337769	Y
2	STD010 280-538548/15	1.0	0.303689	50.0	745169.0	0.303689	Y
3	STD020 280-538548/16	2.0	0.615905	50.0	729901.0	0.307953	Y
4	STD10 280-538548/18	10.0	3.212936	50.0	746498.0	0.321294	Y
5	ICIS 280-538548/19	50.0	14.053401	50.0	769988.0	0.281068	Y
6	STD75 280-538548/20	75.0	20.967081	50.0	778921.0	0.279561	Y
7	STD100 280-538548/21	100.0	27.922965	50.0	770348.0	0.27923	Y
8	STD200 280-538548/22	200.0	57.555261	50.0	783196.0	0.287776	Y



Calibration

/ cis-1,2-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

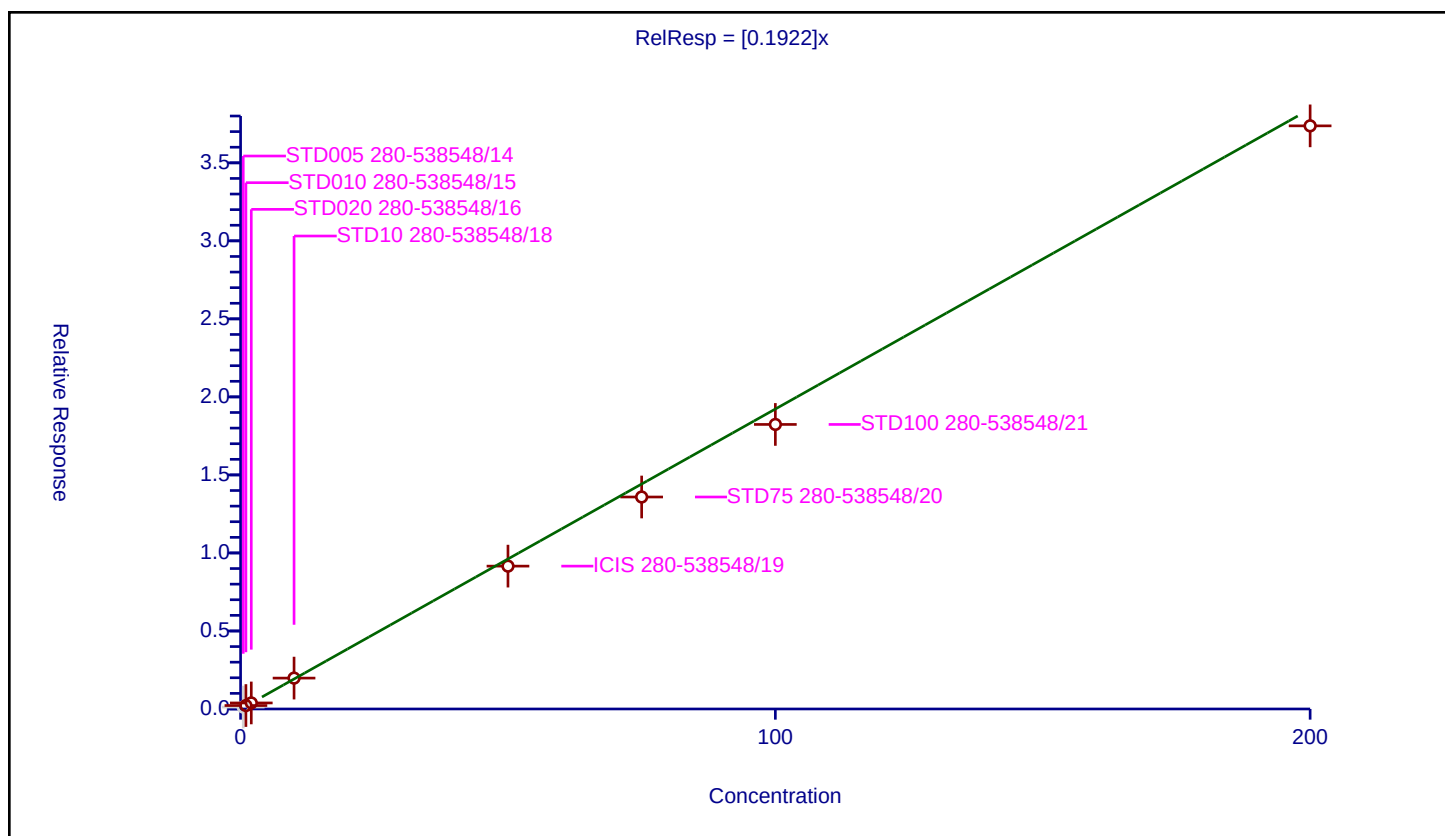
Curve Coefficients

Intercept: 0
Slope: 0.1922

Error Coefficients

Standard Error: 285000
Relative Standard Error: 7.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.124707	50.0	741336.0	0.249415	N
2	STD010 280-538548/15	1.0	0.220621	50.0	745169.0	0.220621	Y
3	STD020 280-538548/16	2.0	0.387244	50.0	729901.0	0.193622	Y
4	STD10 280-538548/18	10.0	1.979175	50.0	746498.0	0.197917	Y
5	ICIS 280-538548/19	50.0	9.155208	50.0	769988.0	0.183104	Y
6	STD75 280-538548/20	75.0	13.585075	50.0	778921.0	0.181134	Y
7	STD100 280-538548/21	100.0	18.234941	50.0	770348.0	0.182349	Y
8	STD200 280-538548/22	200.0	37.369701	50.0	783196.0	0.186849	Y



Calibration

/ sec-Butyl Alcohol

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

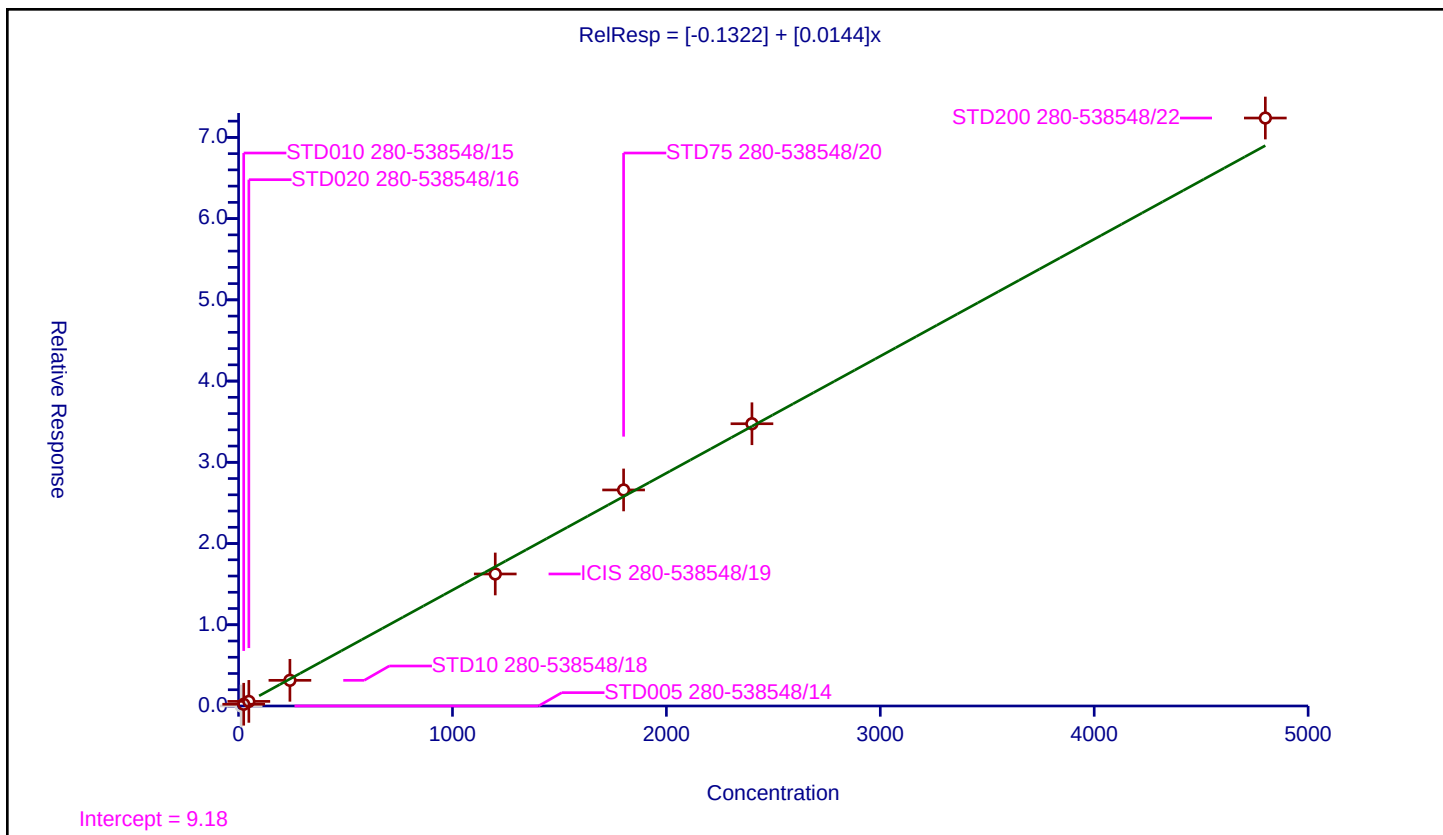
Curve Coefficients

Intercept: -0.1322
 Slope: 0.0144

Error Coefficients

Standard Error: 601000
 Relative Standard Error: 4.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	12.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	24.0	0.213576	50.0	745169.0	0.008899	Y
3	STD020 280-538548/16	48.0	0.565351	50.0	729901.0	0.011778	Y
4	STD10 280-538548/18	240.0	3.160223	50.0	746498.0	0.013168	Y
5	ICIS 280-538548/19	1200.0	16.25324	50.0	769988.0	0.013544	Y
6	STD75 280-538548/20	1800.0	26.597755	50.0	778921.0	0.014777	Y
7	STD100 280-538548/21	2400.0	34.747153	50.0	770348.0	0.014478	Y
8	STD200 280-538548/22	4800.0	72.381307	50.0	783196.0	0.015079	Y



Calibration

/ Chlorobromomethane

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

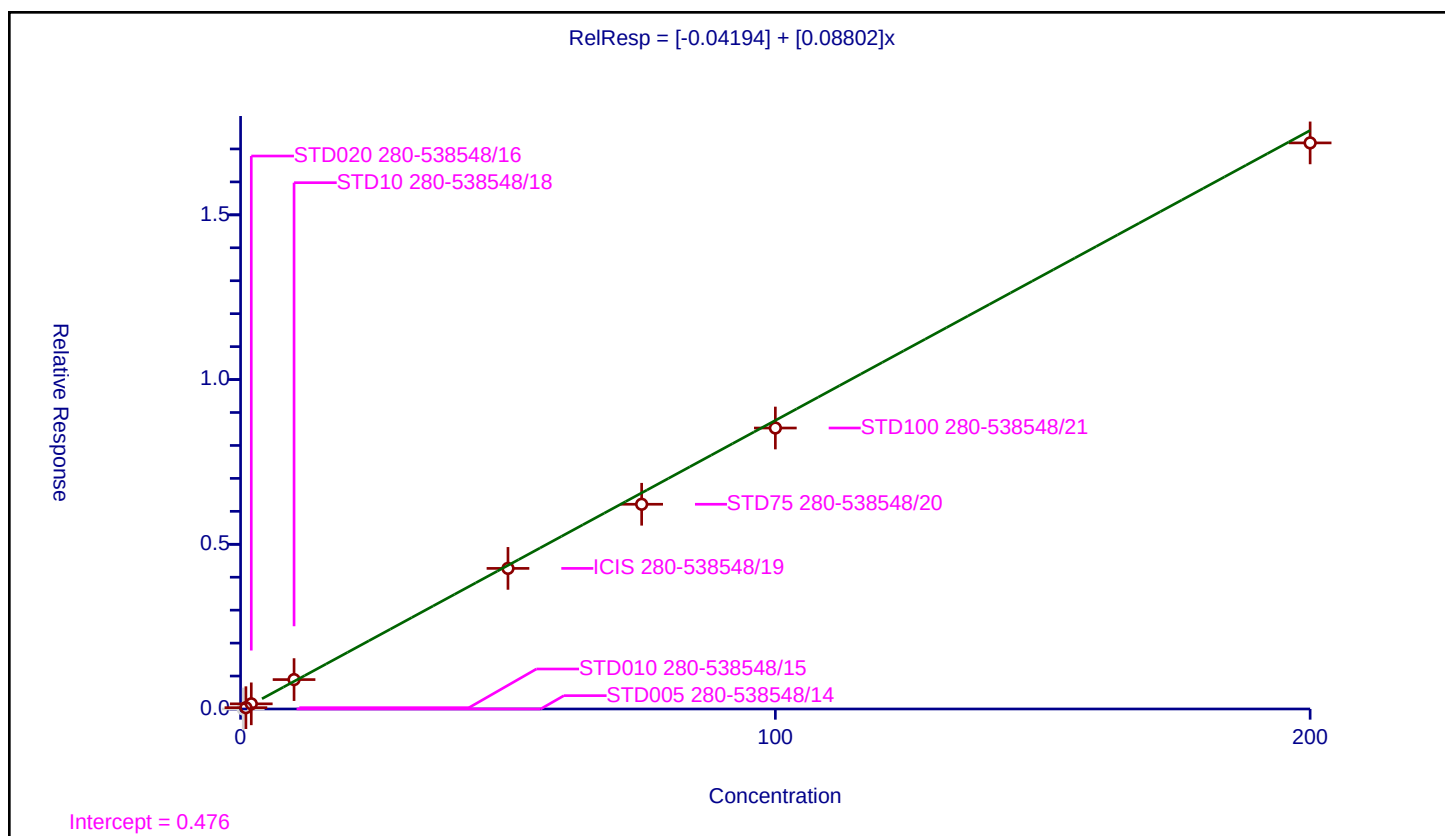
Curve Coefficients

Intercept: -0.04194
Slope: 0.08802

Error Coefficients

Standard Error: 144000
Relative Standard Error: 7.6
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.040058	50.0	745169.0	0.040058	Y
3	STD020 280-538548/16	2.0	0.156528	50.0	729901.0	0.078264	Y
4	STD10 280-538548/18	10.0	0.892434	50.0	746498.0	0.089243	Y
5	ICIS 280-538548/19	50.0	4.267729	50.0	769988.0	0.085355	Y
6	STD75 280-538548/20	75.0	6.214494	50.0	778921.0	0.08286	Y
7	STD100 280-538548/21	100.0	8.529392	50.0	770348.0	0.085294	Y
8	STD200 280-538548/22	200.0	17.18414	50.0	783196.0	0.085921	Y



Calibration

/ Tetrahydrofuran

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

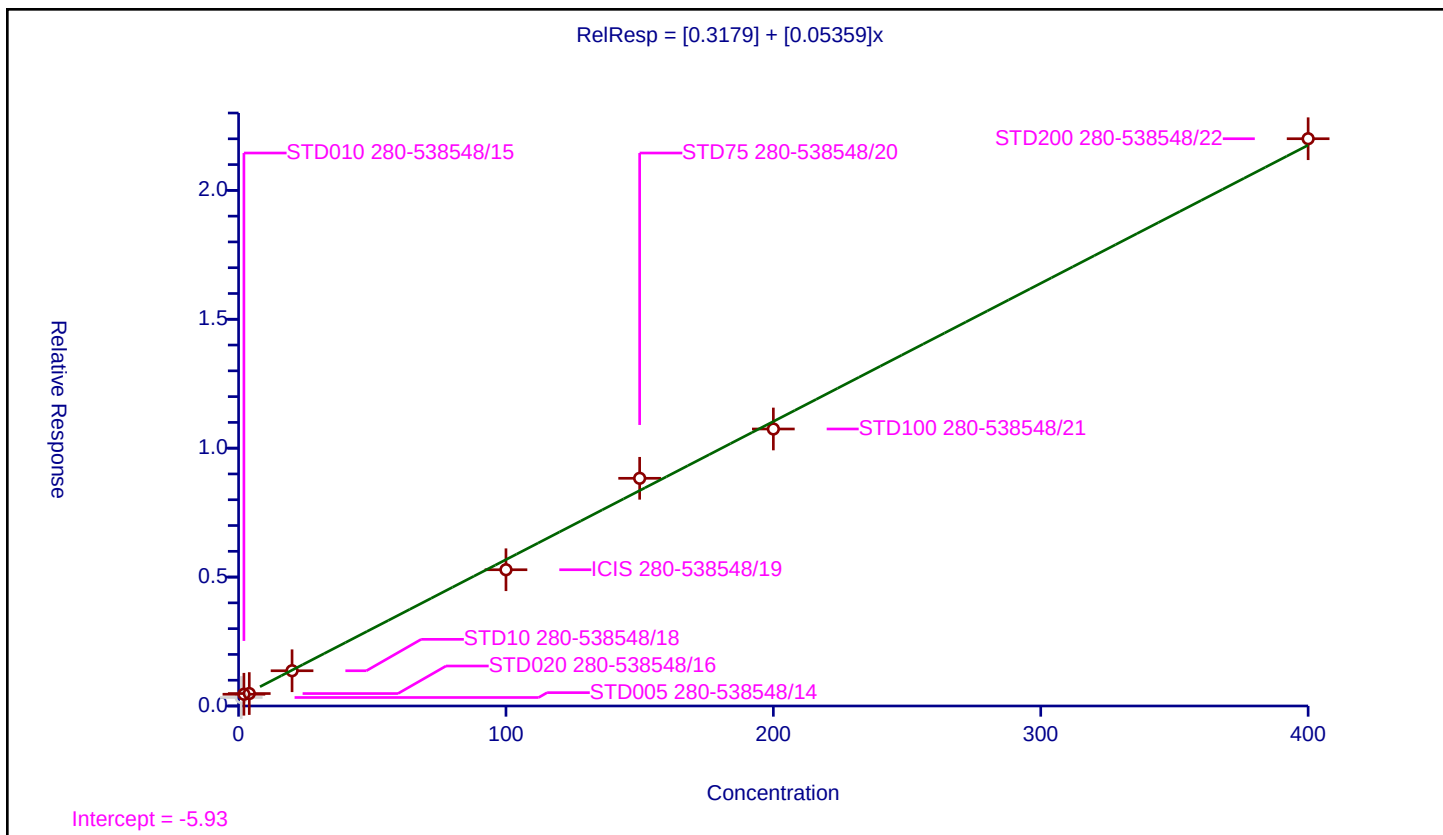
Curve Coefficients

Intercept: 0.3179
 Slope: 0.05359

Error Coefficients

Standard Error: 186000
 Relative Standard Error: 17.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.329203	50.0	741336.0	0.329203	N
2	STD010 280-538548/15	2.0	0.455467	50.0	745169.0	0.227734	Y
3	STD020 280-538548/16	4.0	0.482189	50.0	729901.0	0.120547	Y
4	STD10 280-538548/18	20.0	1.367117	50.0	746498.0	0.068356	Y
5	ICIS 280-538548/19	100.0	5.284693	50.0	769988.0	0.052847	Y
6	STD75 280-538548/20	150.0	8.831897	50.0	778921.0	0.058879	Y
7	STD100 280-538548/21	200.0	10.743651	50.0	770348.0	0.053718	Y
8	STD200 280-538548/22	400.0	22.002666	50.0	783196.0	0.055007	Y



Calibration

/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

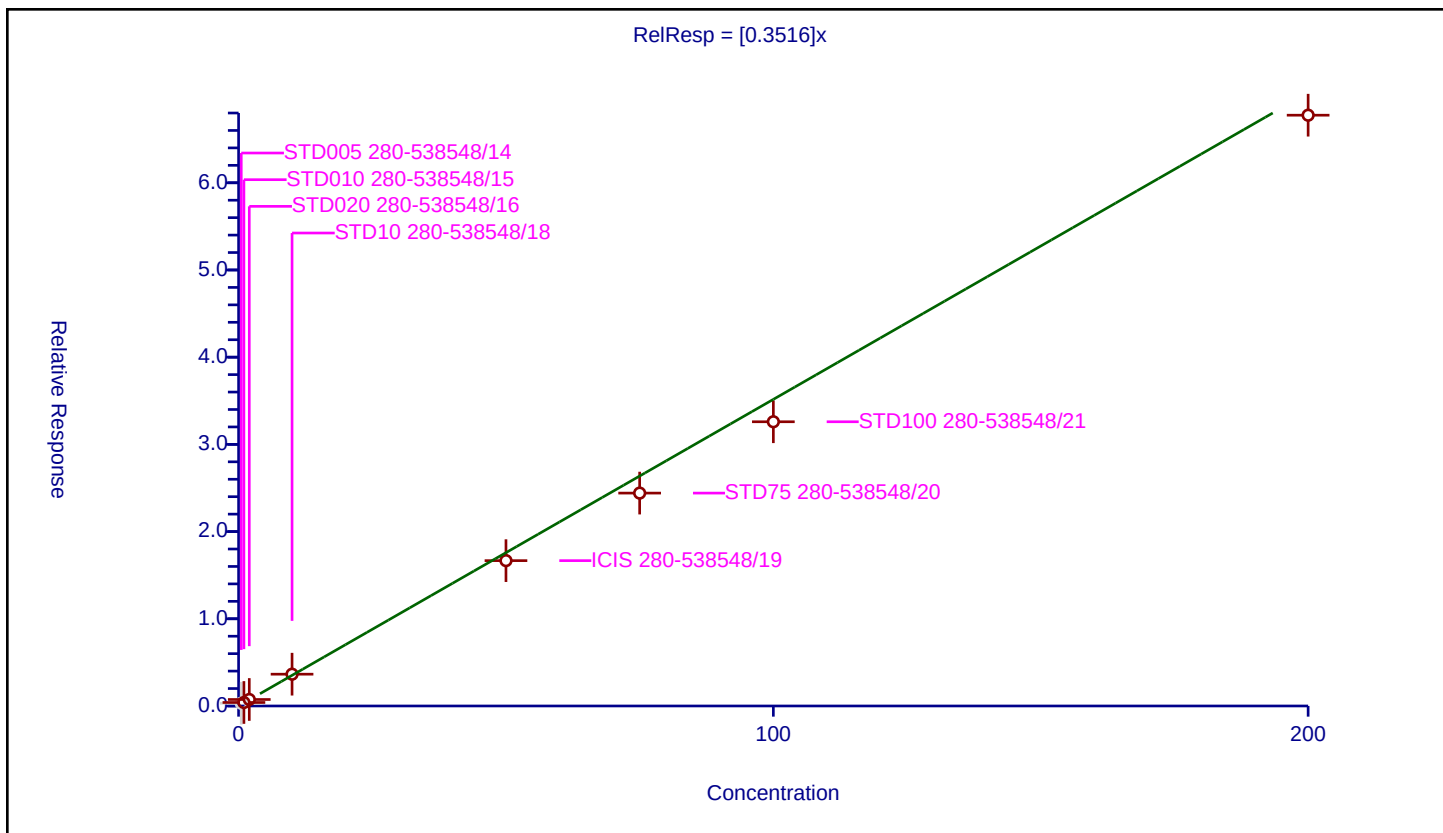
Curve Coefficients

Intercept: 0
 Slope: 0.3516

Error Coefficients

Standard Error: 515000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.314163	50.0	741336.0	0.628325	N
2	STD010 280-538548/15	1.0	0.401184	50.0	745169.0	0.401184	Y
3	STD020 280-538548/16	2.0	0.744074	50.0	729901.0	0.372037	Y
4	STD10 280-538548/18	10.0	3.645891	50.0	746498.0	0.364589	Y
5	ICIS 280-538548/19	50.0	16.669091	50.0	769988.0	0.333382	Y
6	STD75 280-538548/20	75.0	24.414928	50.0	778921.0	0.325532	Y
7	STD100 280-538548/21	100.0	32.594295	50.0	770348.0	0.325943	Y
8	STD200 280-538548/22	200.0	67.748558	50.0	783196.0	0.338743	Y



Calibration

/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

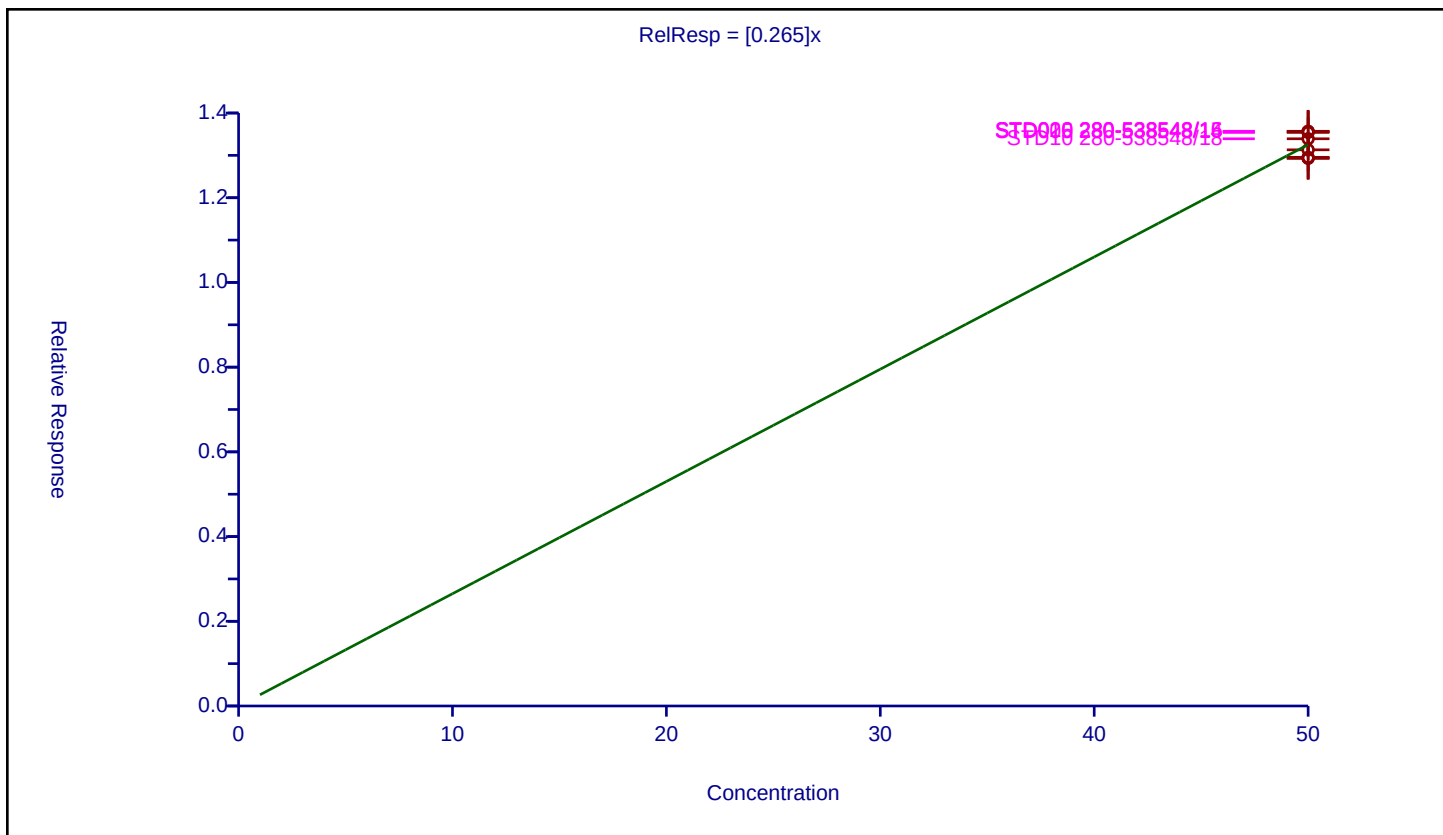
Curve Coefficients

Intercept: 0
 Slope: 0.265

Error Coefficients

Standard Error: 215000
 Relative Standard Error: 2.2
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	13.541903	50.0	741336.0	0.270838	Y
2	STD010 280-538548/15	50.0	13.568667	50.0	745169.0	0.271373	Y
3	STD020 280-538548/16	50.0	13.562319	50.0	729901.0	0.271246	Y
4	STD10 280-538548/18	50.0	13.39173	50.0	746498.0	0.267835	Y
5	ICIS 280-538548/19	50.0	12.932279	50.0	769988.0	0.258646	Y
6	STD75 280-538548/20	50.0	12.933789	50.0	778921.0	0.258676	Y
7	STD100 280-538548/21	50.0	12.95408	50.0	770348.0	0.259082	Y
8	STD200 280-538548/22	50.0	13.131004	50.0	783196.0	0.26262	Y



Calibration

/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

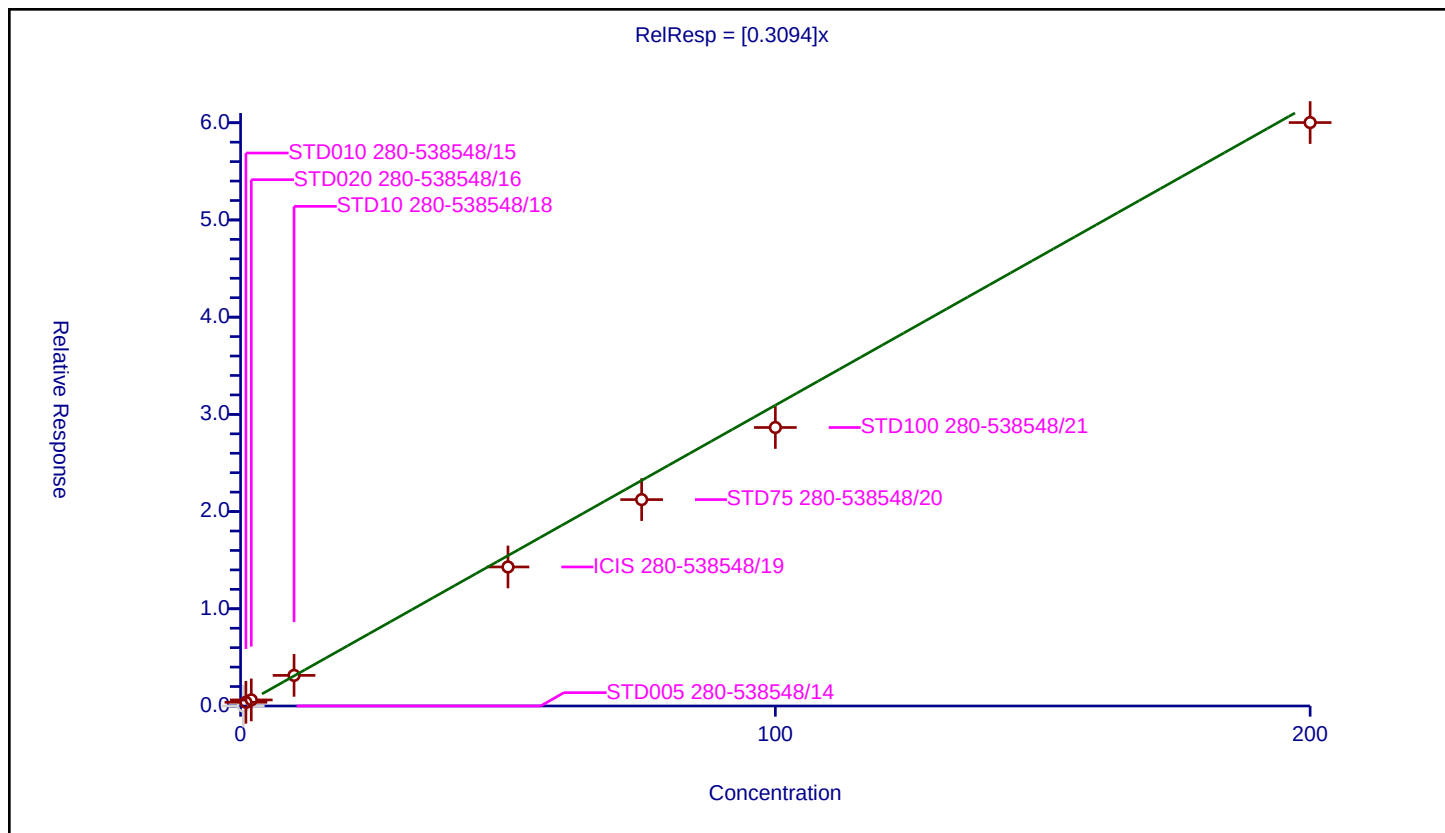
Curve Coefficients

Intercept: 0
 Slope: 0.3094

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 11.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.383336	50.0	745169.0	0.383336	Y
3	STD020 280-538548/16	2.0	0.624057	50.0	729901.0	0.312029	Y
4	STD10 280-538548/18	10.0	3.146492	50.0	746498.0	0.314649	Y
5	ICIS 280-538548/19	50.0	14.301587	50.0	769988.0	0.286032	Y
6	STD75 280-538548/20	75.0	21.230715	50.0	778921.0	0.283076	Y
7	STD100 280-538548/21	100.0	28.648416	50.0	770348.0	0.286484	Y
8	STD200 280-538548/22	200.0	60.017799	50.0	783196.0	0.300089	Y



Calibration

/ Cyclohexane

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

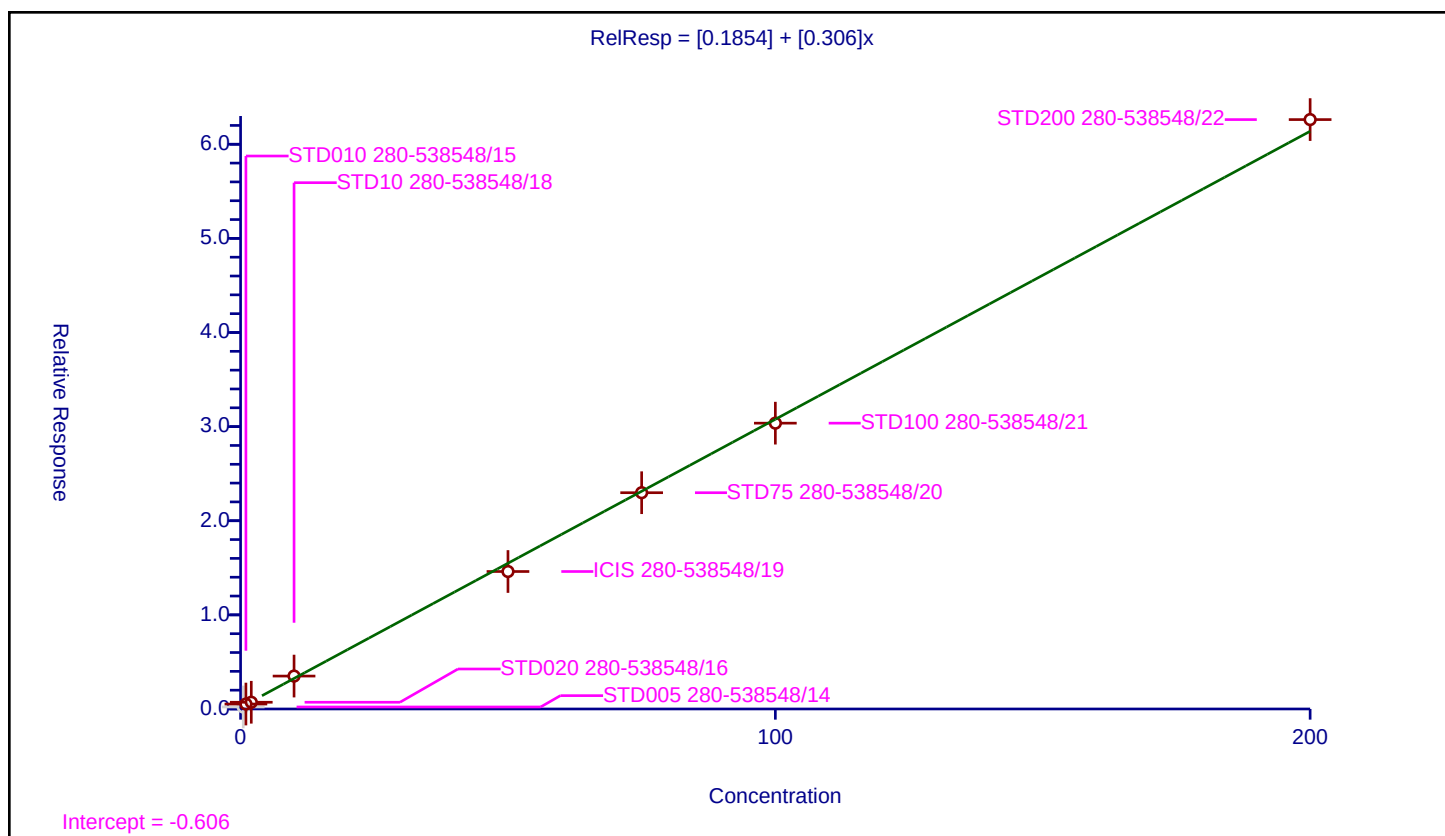
Curve Coefficients

Intercept: 0.1854
Slope: 0.306

Error Coefficients

Standard Error: 522000
Relative Standard Error: 9.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.215085	50.0	741336.0	0.430169	N
2	STD010 280-538548/15	1.0	0.524914	50.0	745169.0	0.524914	Y
3	STD020 280-538548/16	2.0	0.714617	50.0	729901.0	0.357309	Y
4	STD10 280-538548/18	10.0	3.498536	50.0	746498.0	0.349854	Y
5	ICIS 280-538548/19	50.0	14.606137	50.0	769988.0	0.292123	Y
6	STD75 280-538548/20	75.0	22.978903	50.0	778921.0	0.306385	Y
7	STD100 280-538548/21	100.0	30.36725	50.0	770348.0	0.303672	Y
8	STD200 280-538548/22	200.0	62.620276	50.0	783196.0	0.313101	Y



Calibration

/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

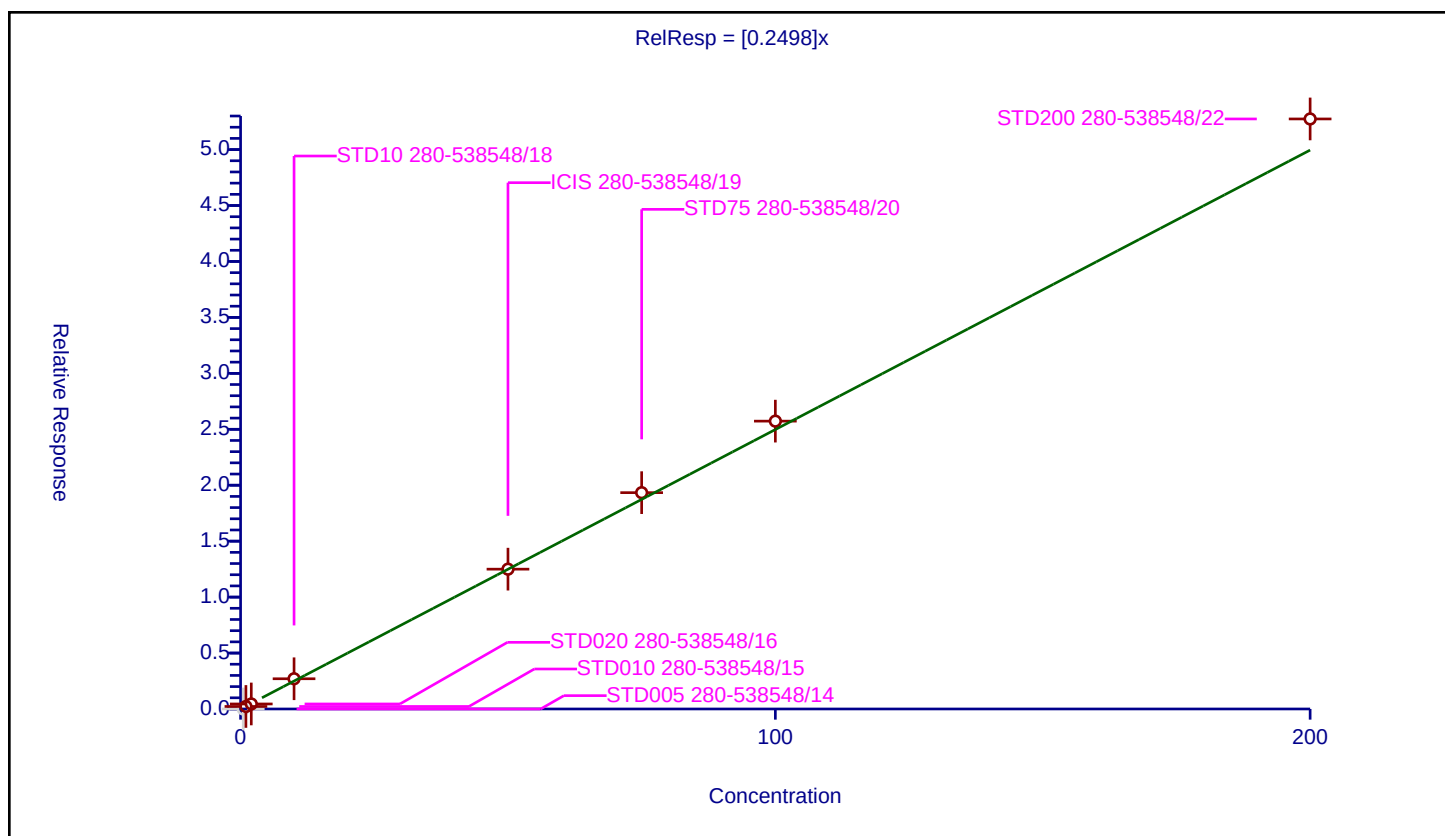
Curve Coefficients

Intercept: 0
 Slope: 0.2498

Error Coefficients

Standard Error: 402000
 Relative Standard Error: 7.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.224714	50.0	745169.0	0.224714	Y
3	STD020 280-538548/16	2.0	0.449308	50.0	729901.0	0.224654	Y
4	STD10 280-538548/18	10.0	2.702753	50.0	746498.0	0.270275	Y
5	ICIS 280-538548/19	50.0	12.496948	50.0	769988.0	0.249939	Y
6	STD75 280-538548/20	75.0	19.335209	50.0	778921.0	0.257803	Y
7	STD100 280-538548/21	100.0	25.728437	50.0	770348.0	0.257284	Y
8	STD200 280-538548/22	200.0	52.737246	50.0	783196.0	0.263686	Y



Calibration

/ Carbon tetrachloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

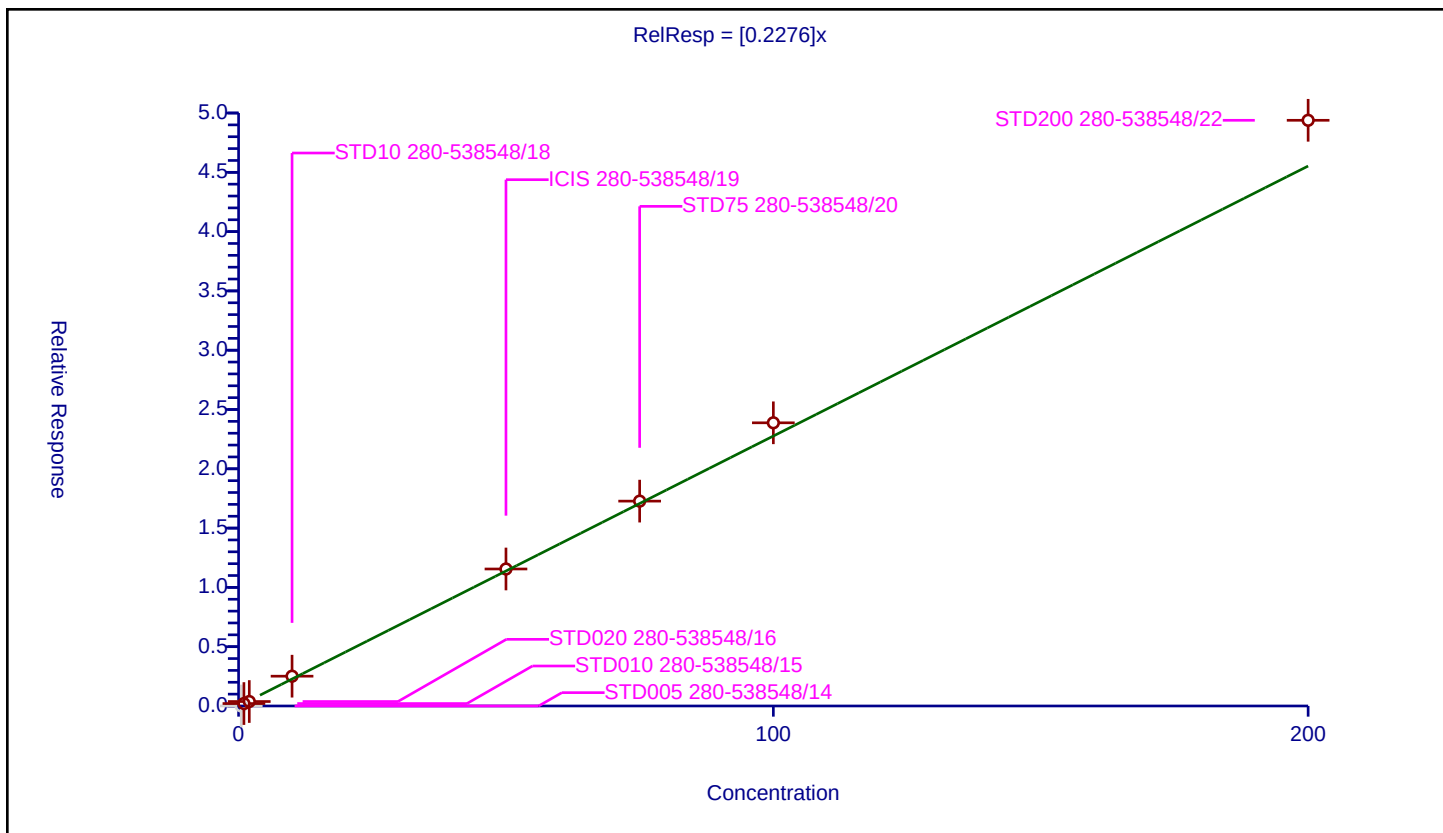
Curve Coefficients

Intercept: 0
Slope: 0.2276

Error Coefficients

Standard Error: 374000
Relative Standard Error: 9.9
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.206262	50.0	745169.0	0.206262	Y
3	STD020 280-538548/16	2.0	0.377722	50.0	729901.0	0.188861	Y
4	STD10 280-538548/18	10.0	2.512867	50.0	746498.0	0.251287	Y
5	ICIS 280-538548/19	50.0	11.551933	50.0	769988.0	0.231039	Y
6	STD75 280-538548/20	75.0	17.275244	50.0	778921.0	0.230337	Y
7	STD100 280-538548/21	100.0	23.879143	50.0	770348.0	0.238791	Y
8	STD200 280-538548/22	200.0	49.385211	50.0	783196.0	0.246926	Y



Calibration

/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

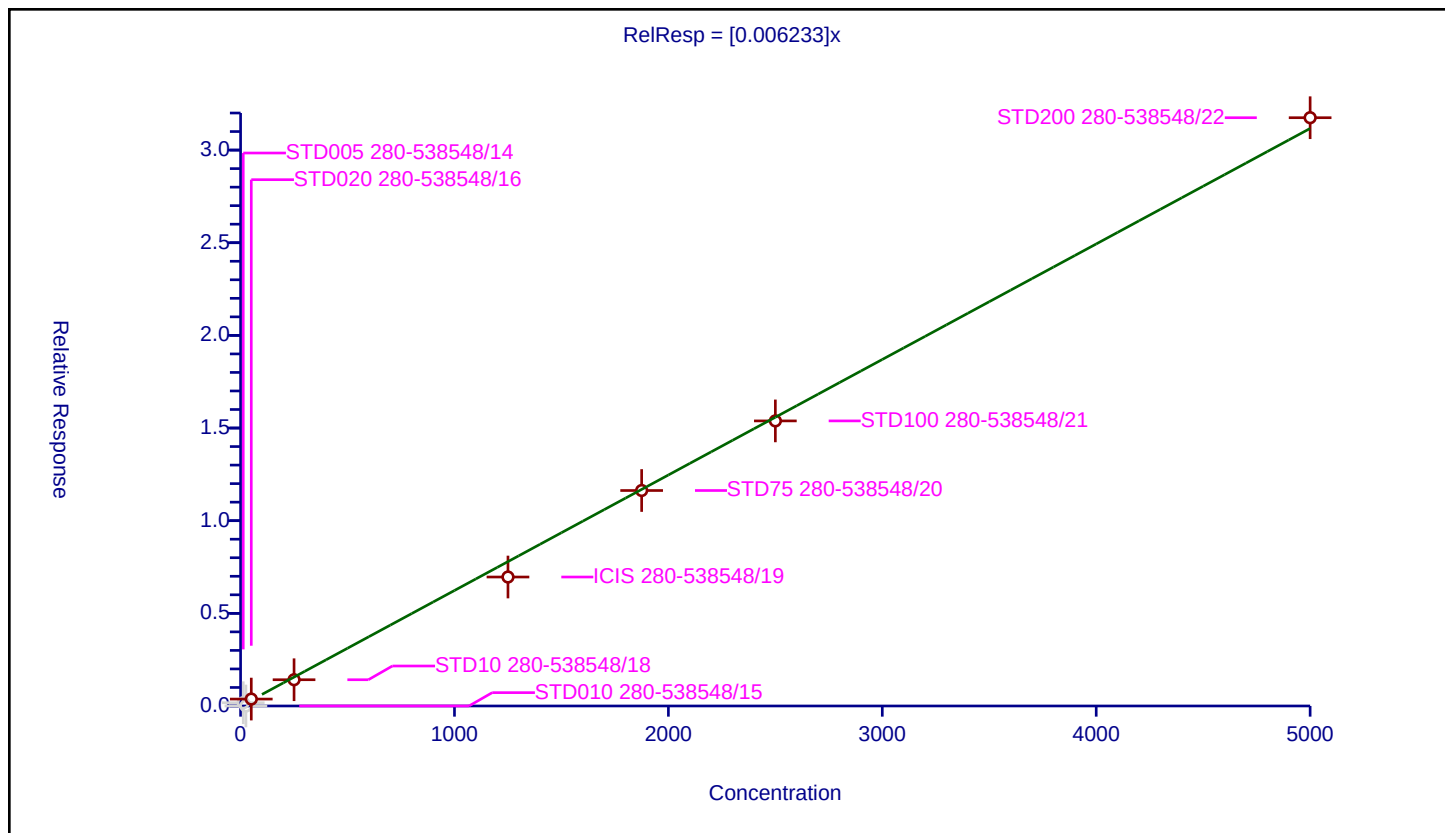
Curve Coefficients

Intercept: 0
 Slope: 0.006233

Error Coefficients

Standard Error: 264000
 Relative Standard Error: 10.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	12.5	0.176168	50.0	741336.0	0.014093	N
2	STD010 280-538548/15	25.0	0.0	50.0	745169.0	0.0	N
3	STD020 280-538548/16	50.0	0.372996	50.0	729901.0	0.00746	Y
4	STD10 280-538548/18	250.0	1.416749	50.0	746498.0	0.005667	Y
5	ICIS 280-538548/19	1250.0	6.959849	50.0	769988.0	0.005568	Y
6	STD75 280-538548/20	1875.0	11.628458	50.0	778921.0	0.006202	Y
7	STD100 280-538548/21	2500.0	15.384476	50.0	770348.0	0.006154	Y
8	STD200 280-538548/22	5000.0	31.747417	50.0	783196.0	0.006349	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

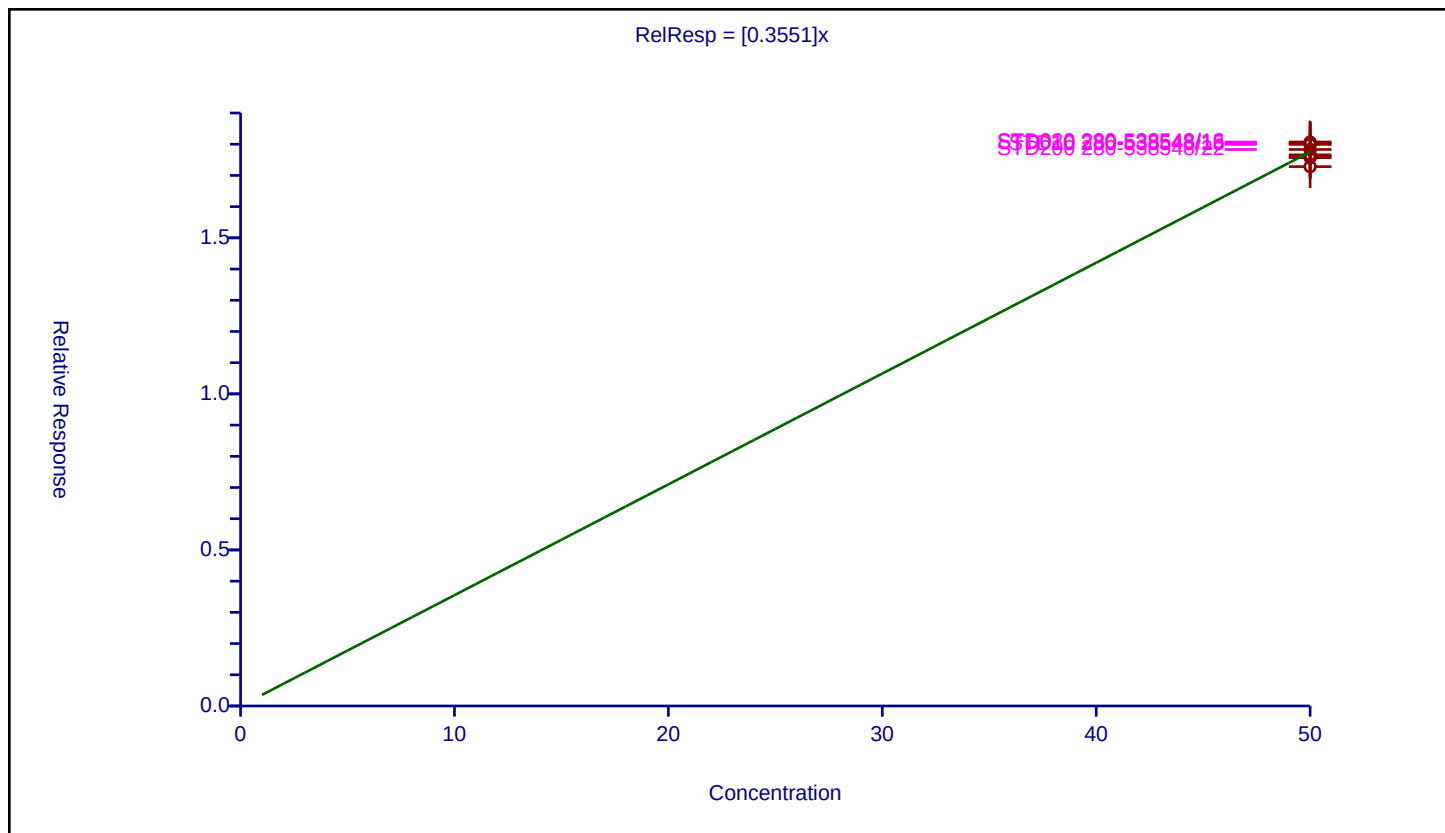
Curve Coefficients

Intercept: 0
 Slope: 0.3551

Error Coefficients

Standard Error: 288000
 Relative Standard Error: 1.5
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	17.660076	50.0	741336.0	0.353202	Y
2	STD010 280-538548/15	50.0	18.023361	50.0	745169.0	0.360467	Y
3	STD020 280-538548/16	50.0	18.071218	50.0	729901.0	0.361424	Y
4	STD10 280-538548/18	50.0	17.994623	50.0	746498.0	0.359892	Y
5	ICIS 280-538548/19	50.0	17.281503	50.0	769988.0	0.34563	Y
6	STD75 280-538548/20	50.0	17.59421	50.0	778921.0	0.351884	Y
7	STD100 280-538548/21	50.0	17.569462	50.0	770348.0	0.351389	Y
8	STD200 280-538548/22	50.0	17.830786	50.0	783196.0	0.356616	Y



Calibration

/ Benzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

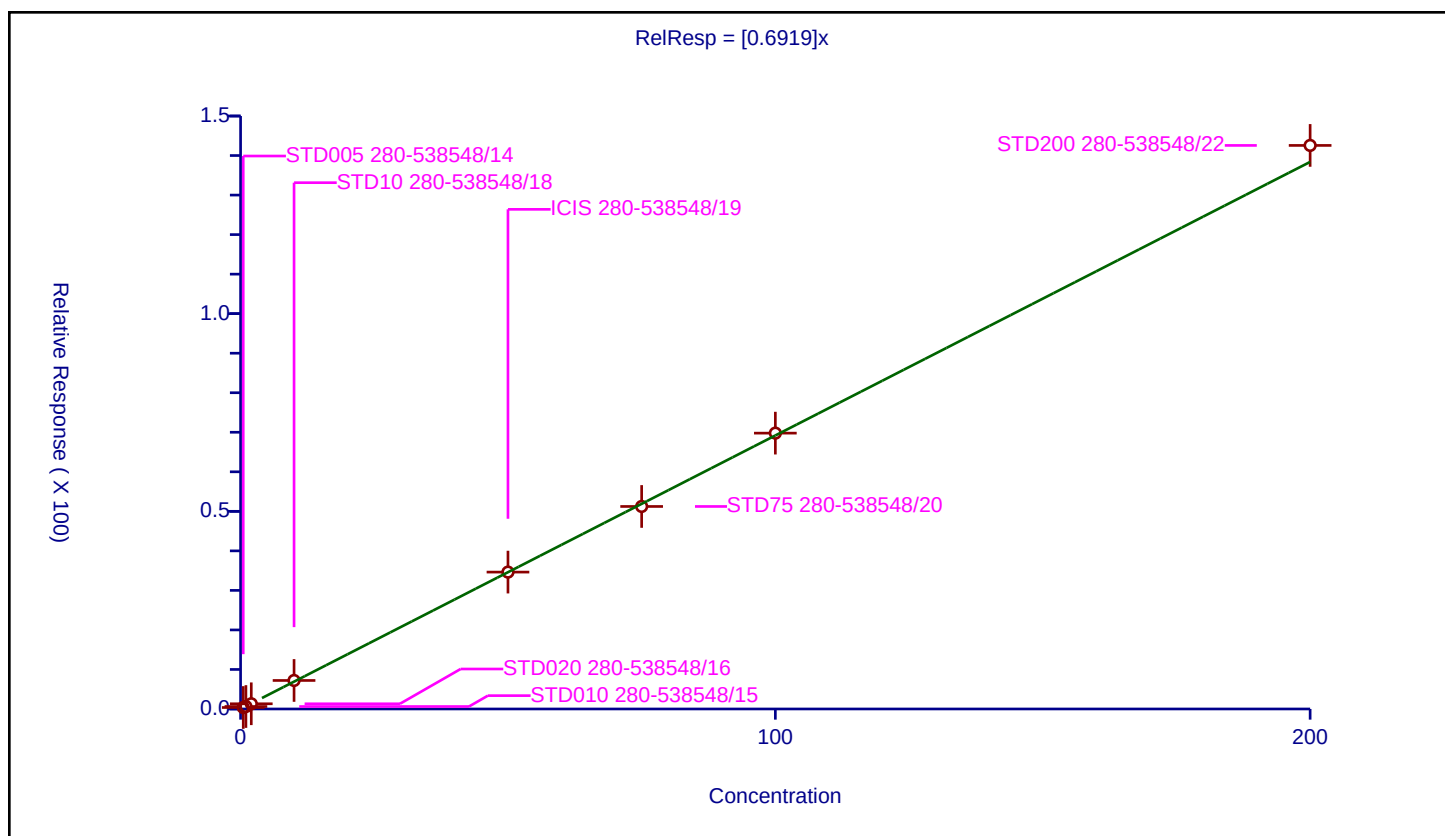
Curve Coefficients

Intercept: 0
Slope: 0.6919

Error Coefficients

Standard Error: 1010000
Relative Standard Error: 5.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.371154	50.0	741336.0	0.742308	Y
2	STD010 280-538548/15	1.0	0.627173	50.0	745169.0	0.627173	Y
3	STD020 280-538548/16	2.0	1.316754	50.0	729901.0	0.658377	Y
4	STD10 280-538548/18	10.0	7.213013	50.0	746498.0	0.721301	Y
5	ICIS 280-538548/19	50.0	34.625994	50.0	769988.0	0.69252	Y
6	STD75 280-538548/20	75.0	51.232089	50.0	778921.0	0.683095	Y
7	STD100 280-538548/21	100.0	69.783007	50.0	770348.0	0.69783	Y
8	STD200 280-538548/22	200.0	142.562781	50.0	783196.0	0.712814	Y



Calibration

/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

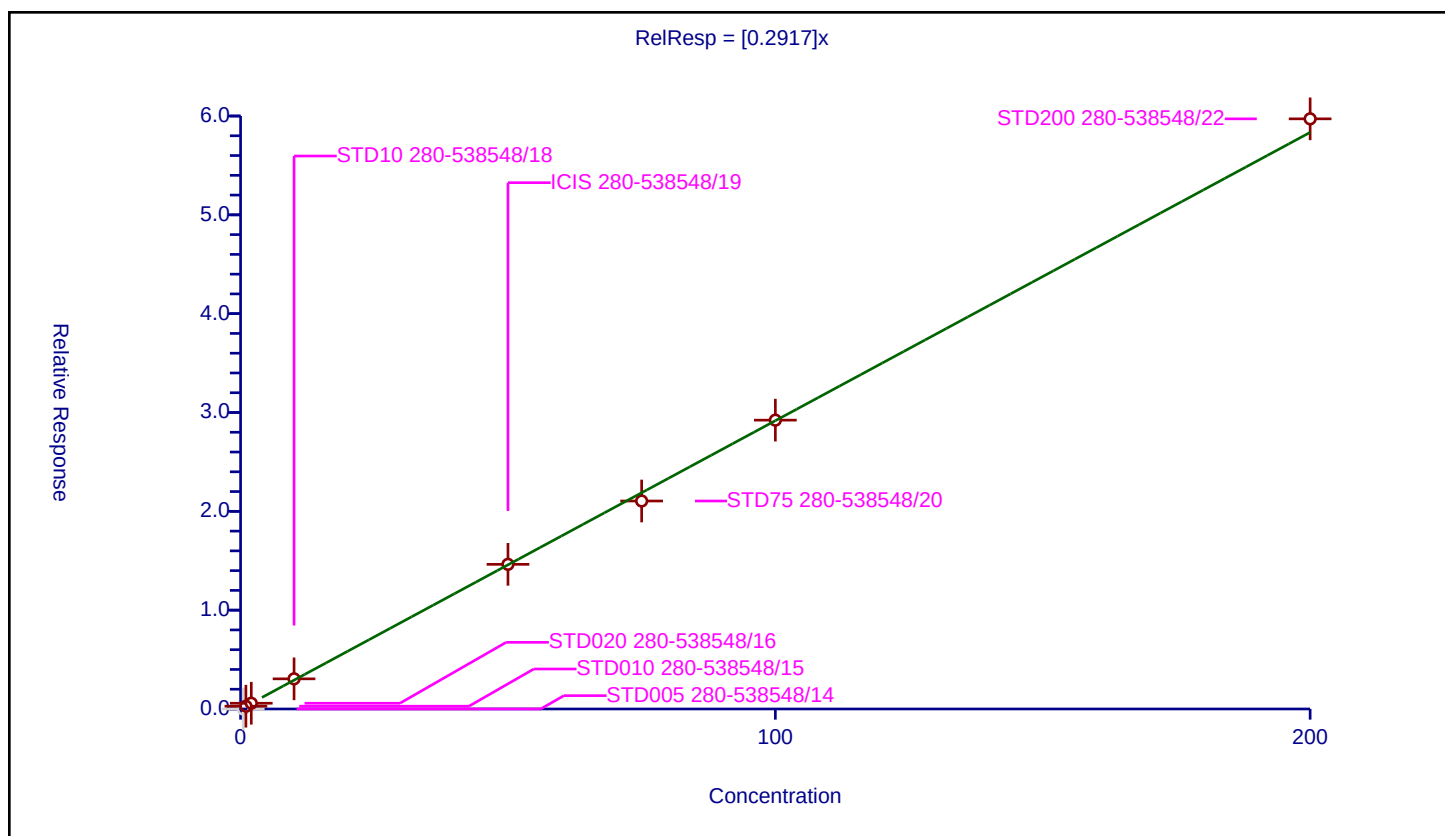
Curve Coefficients

Intercept: 0
 Slope: 0.2917

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 2.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.282084	50.0	745169.0	0.282084	Y
3	STD020 280-538548/16	2.0	0.581517	50.0	729901.0	0.290759	Y
4	STD10 280-538548/18	10.0	3.049841	50.0	746498.0	0.304984	Y
5	ICIS 280-538548/19	50.0	14.636397	50.0	769988.0	0.292728	Y
6	STD75 280-538548/20	75.0	21.044946	50.0	778921.0	0.280599	Y
7	STD100 280-538548/21	100.0	29.226921	50.0	770348.0	0.292269	Y
8	STD200 280-538548/22	200.0	59.712703	50.0	783196.0	0.298564	Y



Calibration

/ n-Heptane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

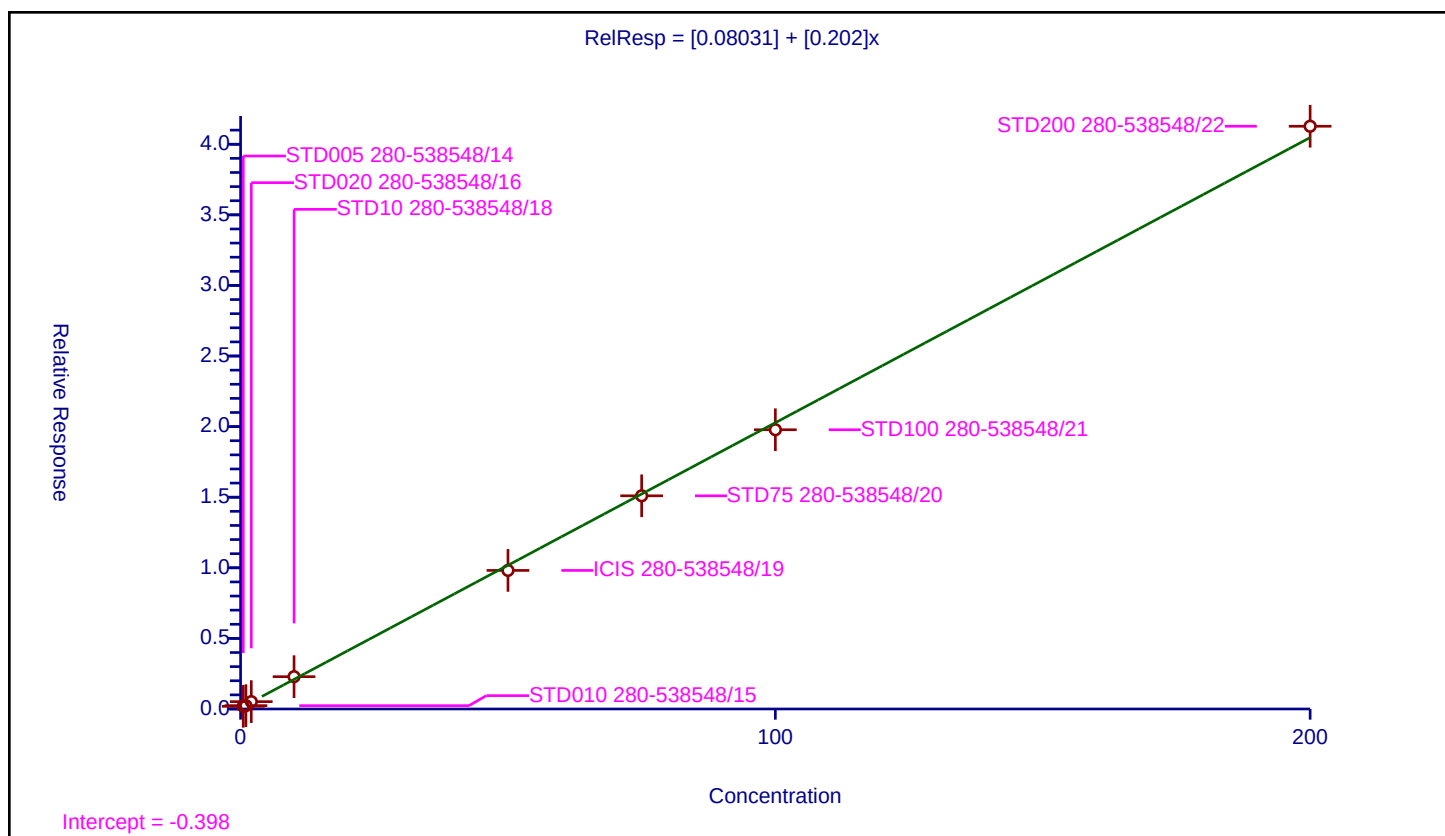
Curve Coefficients

Intercept: 0.08031
 Slope: 0.202

Error Coefficients

Standard Error: 314000
 Relative Standard Error: 11.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.189792	50.0	741336.0	0.379585	Y
2	STD010 280-538548/15	1.0	0.237933	50.0	745169.0	0.237933	Y
3	STD020 280-538548/16	2.0	0.521304	50.0	729901.0	0.260652	Y
4	STD10 280-538548/18	10.0	2.287682	50.0	746498.0	0.228768	Y
5	ICIS 280-538548/19	50.0	9.815153	50.0	769988.0	0.196303	Y
6	STD75 280-538548/20	75.0	15.098964	50.0	778921.0	0.20132	Y
7	STD100 280-538548/21	100.0	19.77762	50.0	770348.0	0.197776	Y
8	STD200 280-538548/22	200.0	41.275428	50.0	783196.0	0.206377	Y



Calibration

/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

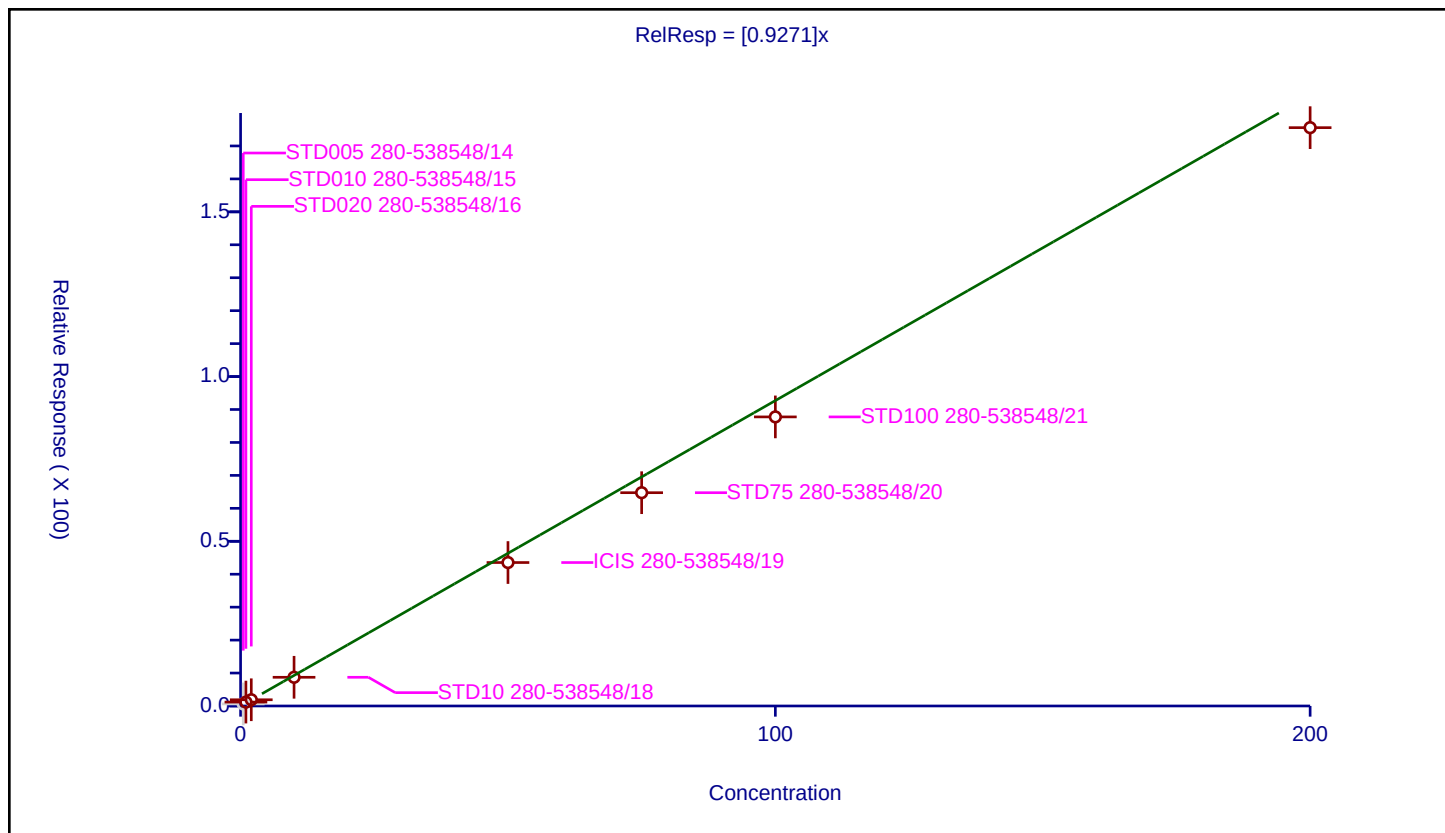
Curve Coefficients

Intercept: 0
 Slope: 0.9271

Error Coefficients

Standard Error: 288000
 Relative Standard Error: 12.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.631146	50.0	154877.0	1.262292	N
2	STD010 280-538548/15	1.0	1.182538	50.0	156866.0	1.182538	Y
3	STD020 280-538548/16	2.0	1.891661	50.0	153463.0	0.945831	Y
4	STD10 280-538548/18	10.0	8.715952	50.0	158818.0	0.871595	Y
5	ICIS 280-538548/19	50.0	43.549184	50.0	161871.0	0.870984	Y
6	STD75 280-538548/20	75.0	64.749699	50.0	162105.0	0.863329	Y
7	STD100 280-538548/21	100.0	87.748515	50.0	161409.0	0.877485	Y
8	STD200 280-538548/22	200.0	175.557678	50.0	169094.0	0.877788	Y



Calibration

/ 2-Pentanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

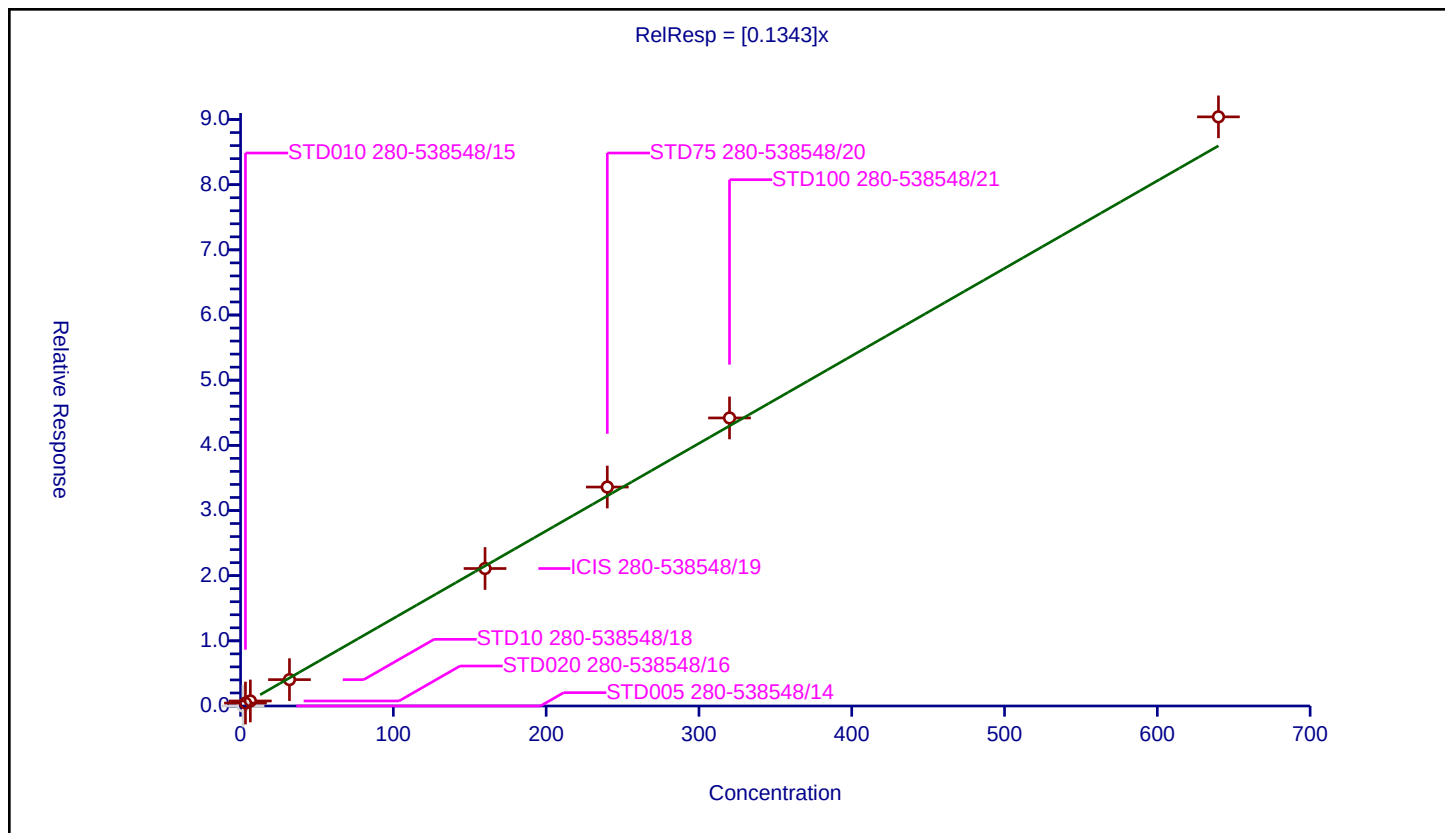
Curve Coefficients

Intercept: 0
Slope: 0.1343

Error Coefficients

Standard Error: 689000
Relative Standard Error: 6.1
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.6	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	3.2	0.453857	50.0	745169.0	0.14183	Y
3	STD020 280-538548/16	6.4	0.772708	50.0	729901.0	0.120736	Y
4	STD10 280-538548/18	32.0	4.046227	50.0	746498.0	0.126445	Y
5	ICIS 280-538548/19	160.0	21.097666	50.0	769988.0	0.13186	Y
6	STD75 280-538548/20	240.0	33.600519	50.0	778921.0	0.140002	Y
7	STD100 280-538548/21	320.0	44.202945	50.0	770348.0	0.138134	Y
8	STD200 280-538548/22	640.0	90.409425	50.0	783196.0	0.141265	Y



Calibration

/ Methylcyclohexane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

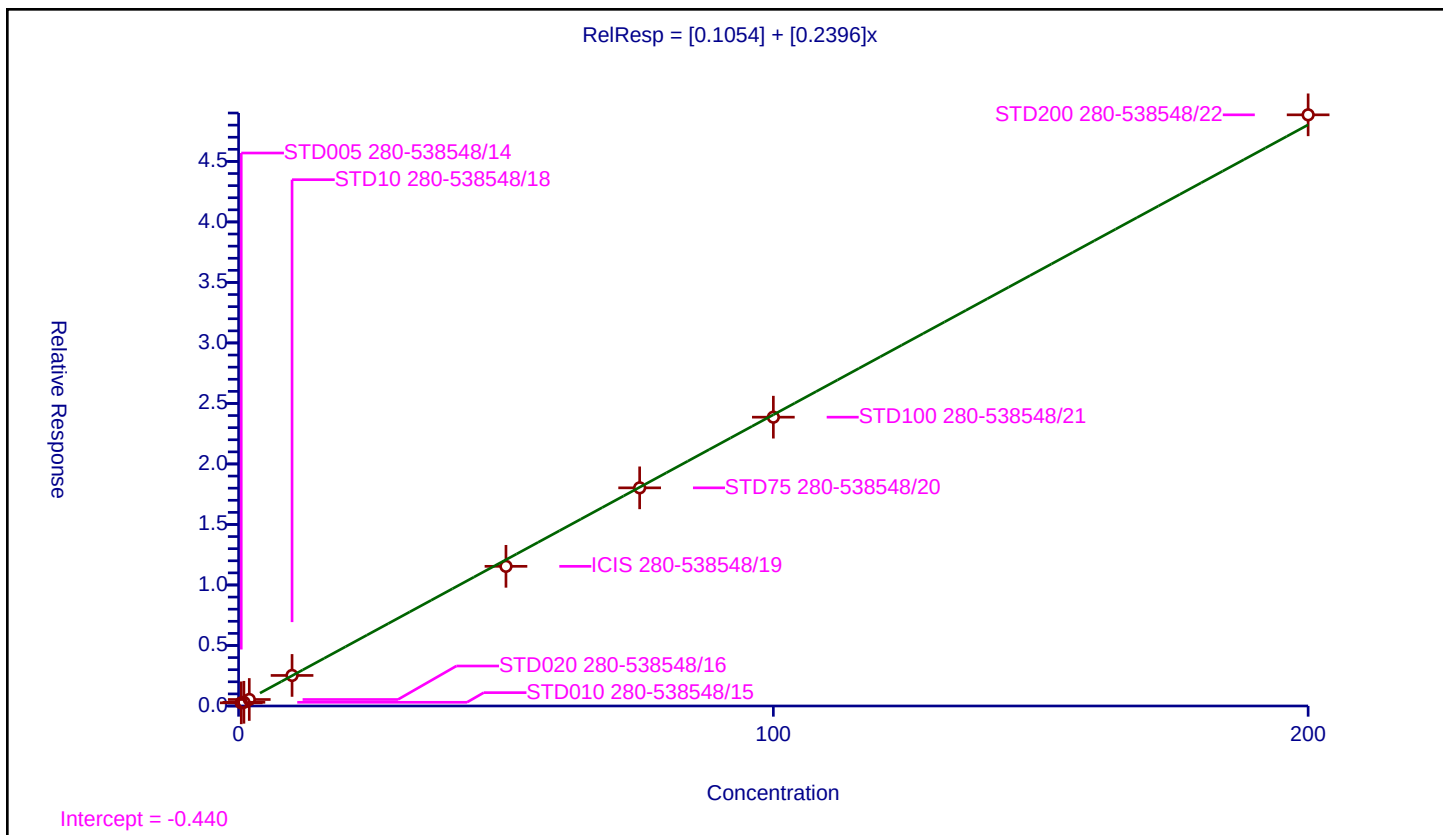
Curve Coefficients

Intercept: 0.1054
 Slope: 0.2396

Error Coefficients

Standard Error: 373000
 Relative Standard Error: 14.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.260476	50.0	741336.0	0.520951	Y
2	STD010 280-538548/15	1.0	0.305568	50.0	745169.0	0.305568	Y
3	STD020 280-538548/16	2.0	0.536991	50.0	729901.0	0.268495	Y
4	STD10 280-538548/18	10.0	2.524655	50.0	746498.0	0.252466	Y
5	ICIS 280-538548/19	50.0	11.540505	50.0	769988.0	0.23081	Y
6	STD75 280-538548/20	75.0	18.025384	50.0	778921.0	0.240338	Y
7	STD100 280-538548/21	100.0	23.865058	50.0	770348.0	0.238651	Y
8	STD200 280-538548/22	200.0	48.850607	50.0	783196.0	0.244253	Y



Calibration

/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

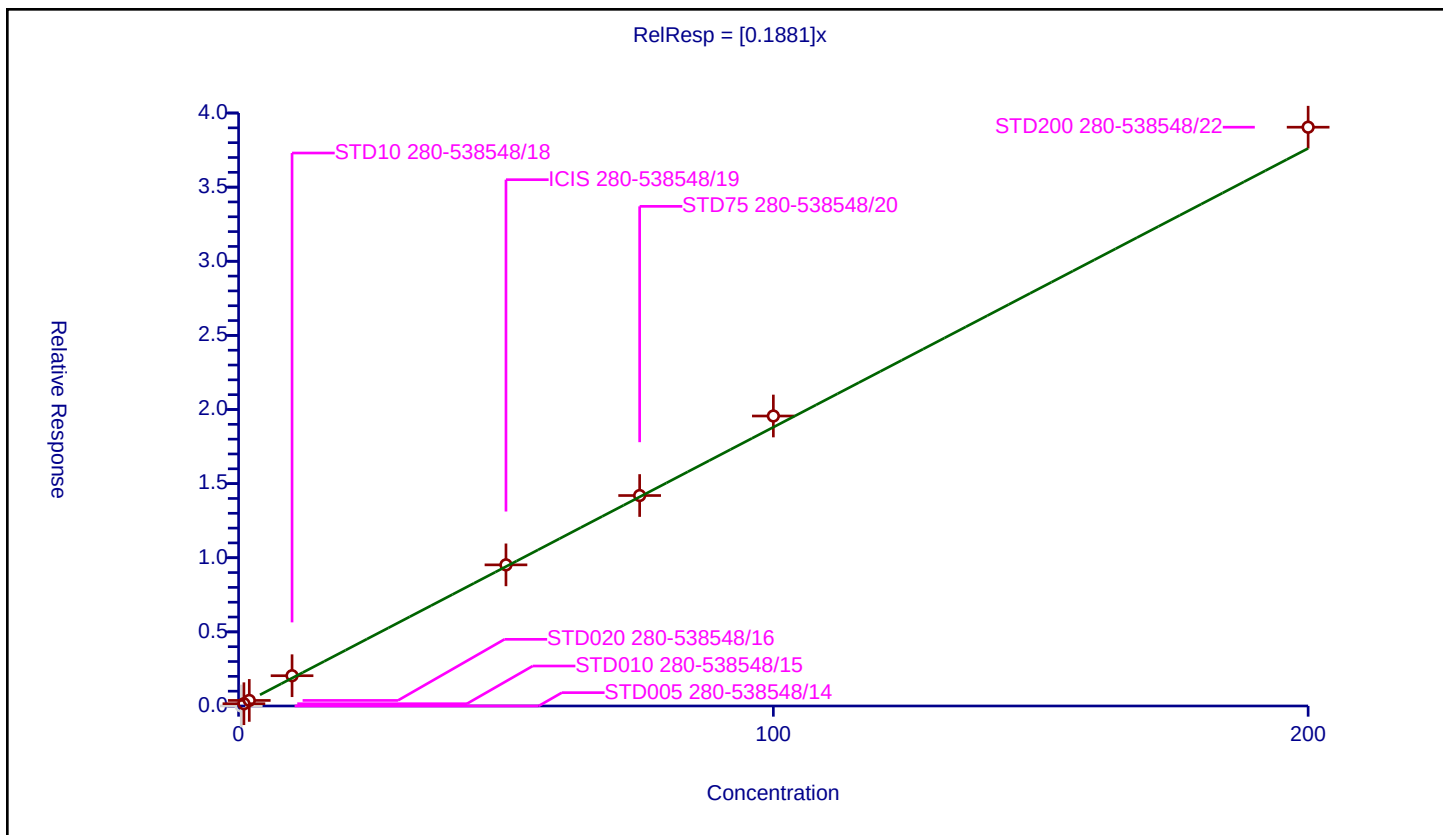
Curve Coefficients

Intercept: 0
 Slope: 0.1881

Error Coefficients

Standard Error: 299000
 Relative Standard Error: 8.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.15426	50.0	745169.0	0.15426	Y
3	STD020 280-538548/16	2.0	0.374914	50.0	729901.0	0.187457	Y
4	STD10 280-538548/18	10.0	2.042202	50.0	746498.0	0.20422	Y
5	ICIS 280-538548/19	50.0	9.519694	50.0	769988.0	0.190394	Y
6	STD75 280-538548/20	75.0	14.196818	50.0	778921.0	0.189291	Y
7	STD100 280-538548/21	100.0	19.561679	50.0	770348.0	0.195617	Y
8	STD200 280-538548/22	200.0	39.043866	50.0	783196.0	0.195219	Y



Calibration

/ 1,4-Dioxane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

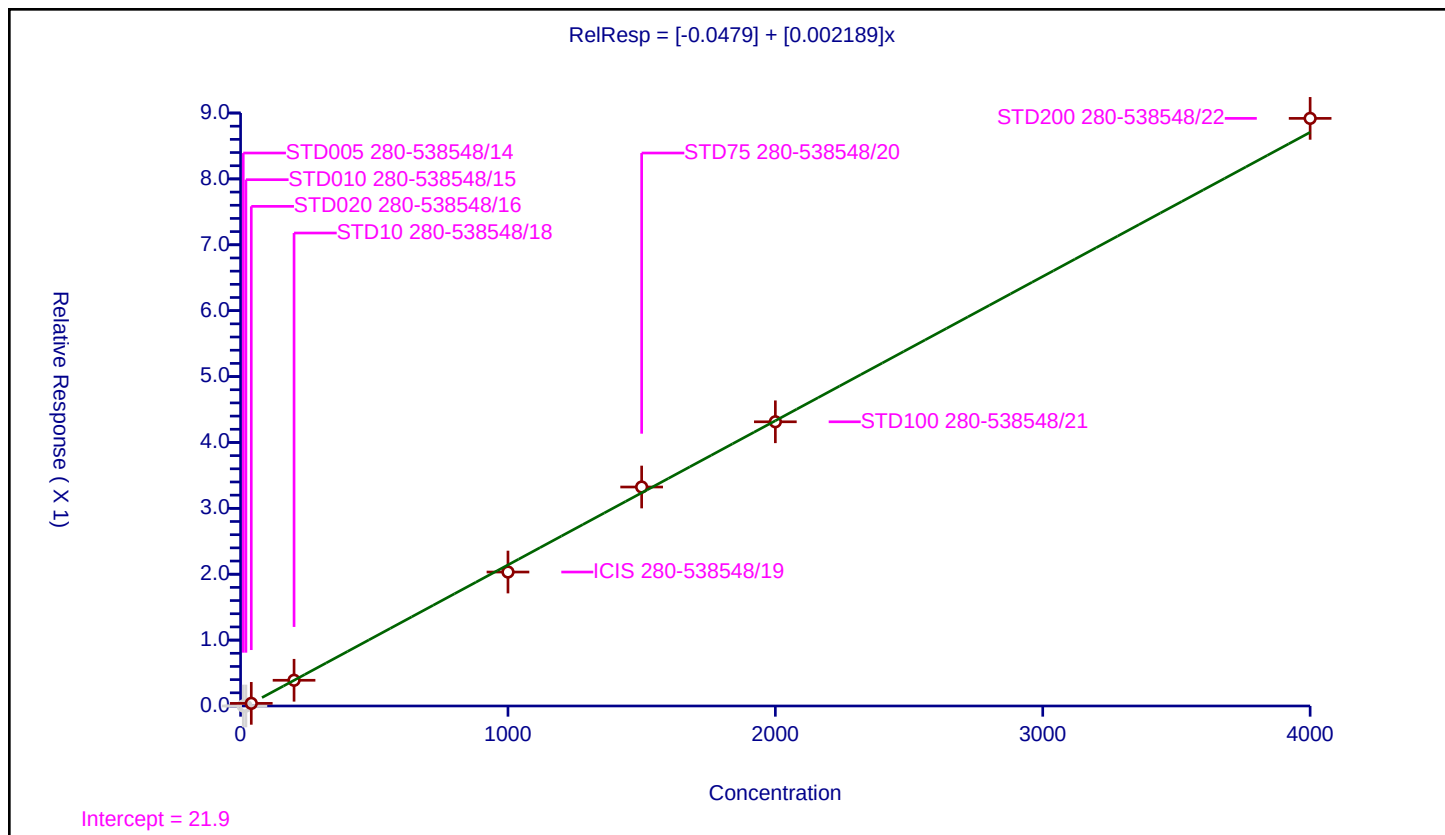
Curve Coefficients

Intercept: -0.0479
 Slope: 0.002189

Error Coefficients

Standard Error: 83100
 Relative Standard Error: 3.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	10.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	20.0	0.0	50.0	745169.0	0.0	N
3	STD020 280-538548/16	40.0	0.039731	50.0	729901.0	0.000993	Y
4	STD10 280-538548/18	200.0	0.390222	50.0	746498.0	0.001951	Y
5	ICIS 280-538548/19	1000.0	2.033408	50.0	769988.0	0.002033	Y
6	STD75 280-538548/20	1500.0	3.3237	50.0	778921.0	0.002216	Y
7	STD100 280-538548/21	2000.0	4.3137	50.0	770348.0	0.002157	Y
8	STD200 280-538548/22	4000.0	8.918585	50.0	783196.0	0.00223	Y



Calibration

/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

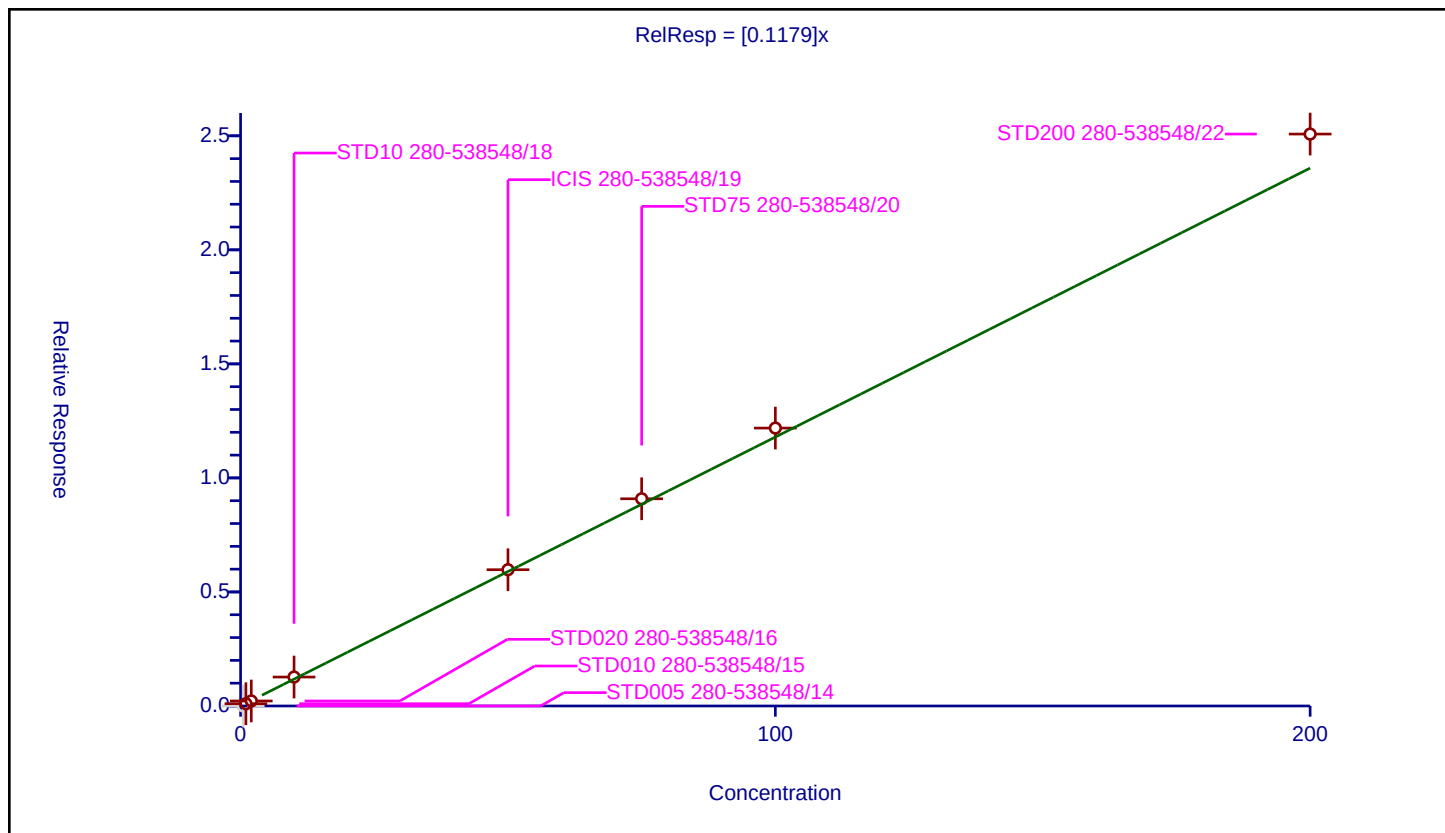
Curve Coefficients

Intercept: 0
 Slope: 0.1179

Error Coefficients

Standard Error: 191000
 Relative Standard Error: 8.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.100246	50.0	745169.0	0.100246	Y
3	STD020 280-538548/16	2.0	0.220715	50.0	729901.0	0.110357	Y
4	STD10 280-538548/18	10.0	1.269595	50.0	746498.0	0.126959	Y
5	ICIS 280-538548/19	50.0	5.975483	50.0	769988.0	0.11951	Y
6	STD75 280-538548/20	75.0	9.085196	50.0	778921.0	0.121136	Y
7	STD100 280-538548/21	100.0	12.185791	50.0	770348.0	0.121858	Y
8	STD200 280-538548/22	200.0	25.077184	50.0	783196.0	0.125386	Y



Calibration

/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

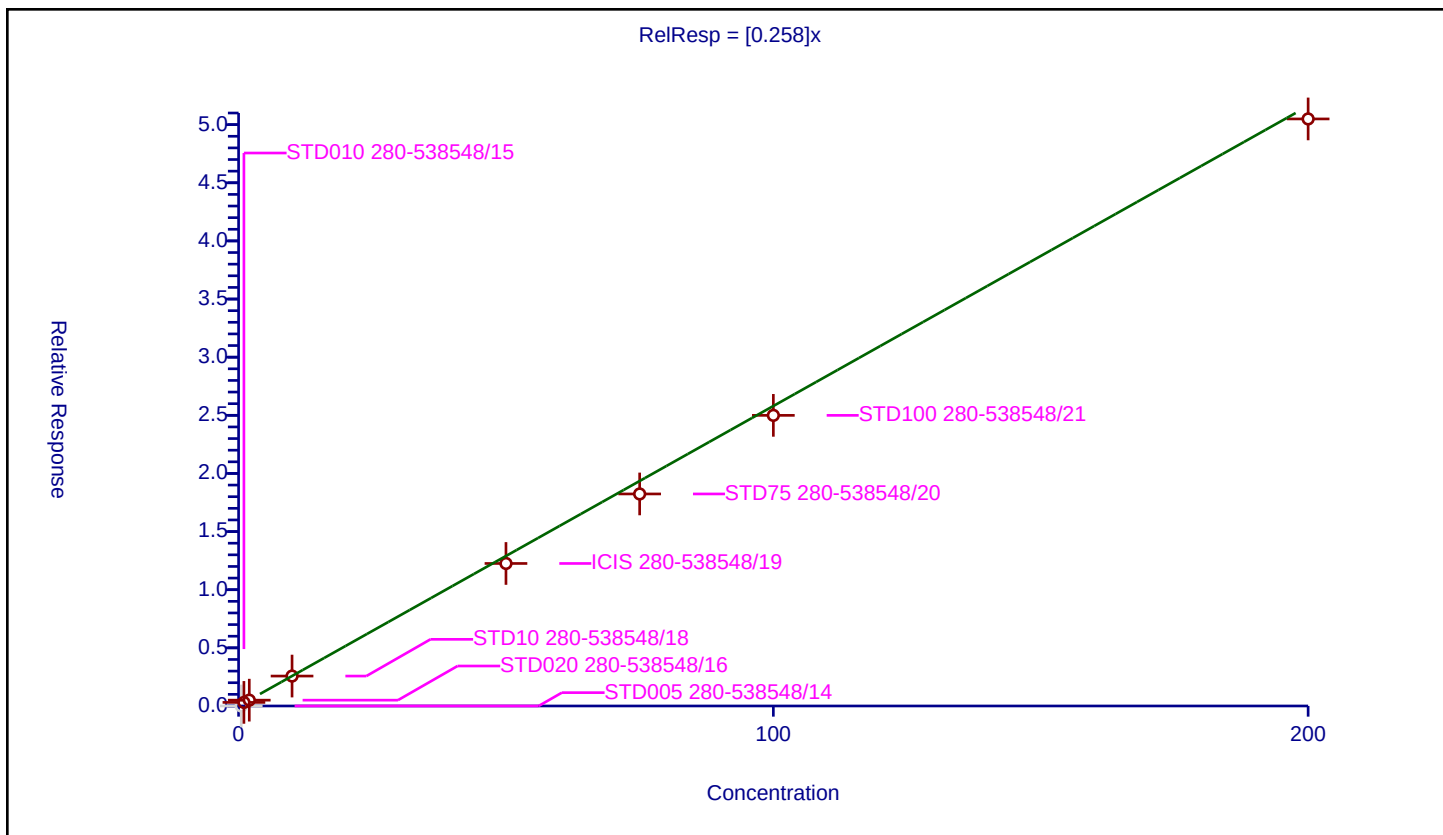
Curve Coefficients

Intercept: 0
 Slope: 0.258

Error Coefficients

Standard Error: 385000
 Relative Standard Error: 8.7
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.30785	50.0	745169.0	0.30785	Y
3	STD020 280-538548/16	2.0	0.500342	50.0	729901.0	0.250171	Y
4	STD10 280-538548/18	10.0	2.57355	50.0	746498.0	0.257355	Y
5	ICIS 280-538548/19	50.0	12.257204	50.0	769988.0	0.245144	Y
6	STD75 280-538548/20	75.0	18.236702	50.0	778921.0	0.243156	Y
7	STD100 280-538548/21	100.0	24.995197	50.0	770348.0	0.249952	Y
8	STD200 280-538548/22	200.0	50.490426	50.0	783196.0	0.252452	Y



Calibration

/ 2-Chloroethyl vinyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

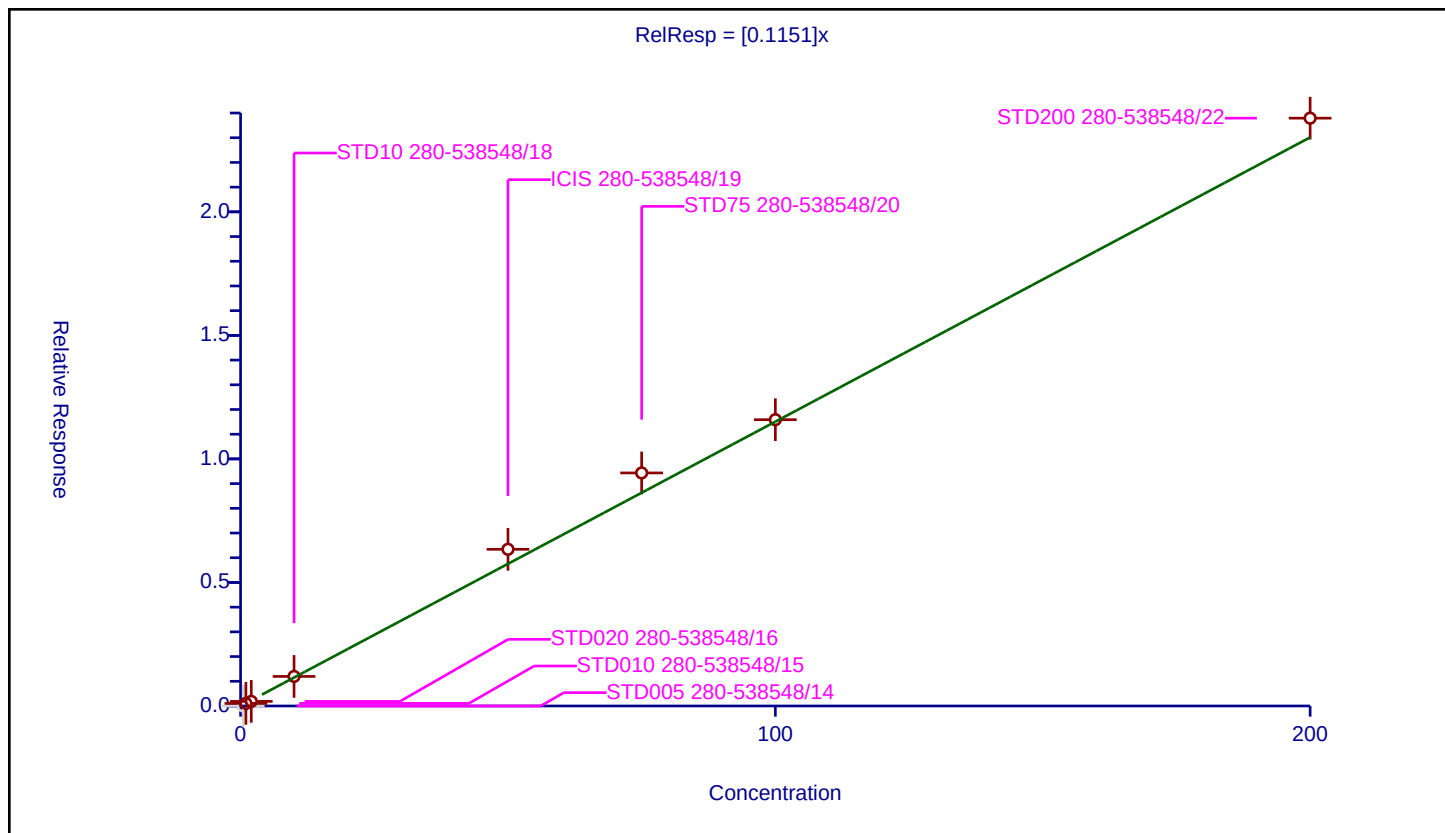
Curve Coefficients

Intercept: 0
Slope: 0.1151

Error Coefficients

Standard Error: 184000
Relative Standard Error: 10.5
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.105479	50.0	745169.0	0.105479	Y
3	STD020 280-538548/16	2.0	0.185847	50.0	729901.0	0.092924	Y
4	STD10 280-538548/18	10.0	1.196319	50.0	746498.0	0.119632	Y
5	ICIS 280-538548/19	50.0	6.341657	50.0	769988.0	0.126833	Y
6	STD75 280-538548/20	75.0	9.432664	50.0	778921.0	0.125769	Y
7	STD100 280-538548/21	100.0	11.588139	50.0	770348.0	0.115881	Y
8	STD200 280-538548/22	200.0	23.791682	50.0	783196.0	0.118958	Y



Calibration

/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

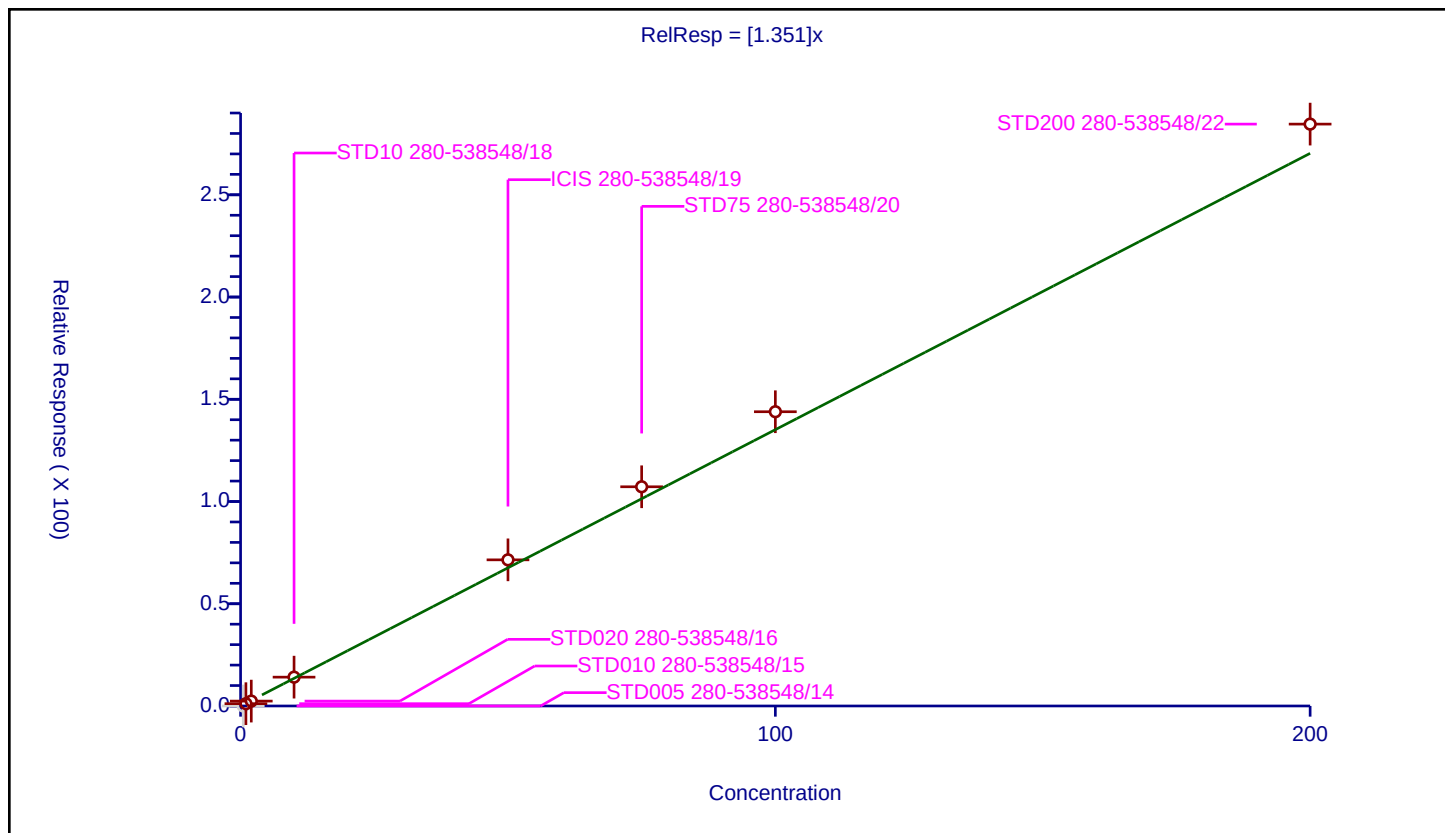
Curve Coefficients

Intercept: 0
 Slope: 1.351

Error Coefficients

Standard Error: 469000
 Relative Standard Error: 9.6
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.13377	50.0	156866.0	1.13377	Y
3	STD020 280-538548/16	2.0	2.390478	50.0	153463.0	1.195239	Y
4	STD10 280-538548/18	10.0	14.098213	50.0	158818.0	1.409821	Y
5	ICIS 280-538548/19	50.0	71.471727	50.0	161871.0	1.429435	Y
6	STD75 280-538548/20	75.0	107.204898	50.0	162105.0	1.429399	Y
7	STD100 280-538548/21	100.0	143.912979	50.0	161409.0	1.43913	Y
8	STD200 280-538548/22	200.0	284.580174	50.0	169094.0	1.422901	Y



Calibration

/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

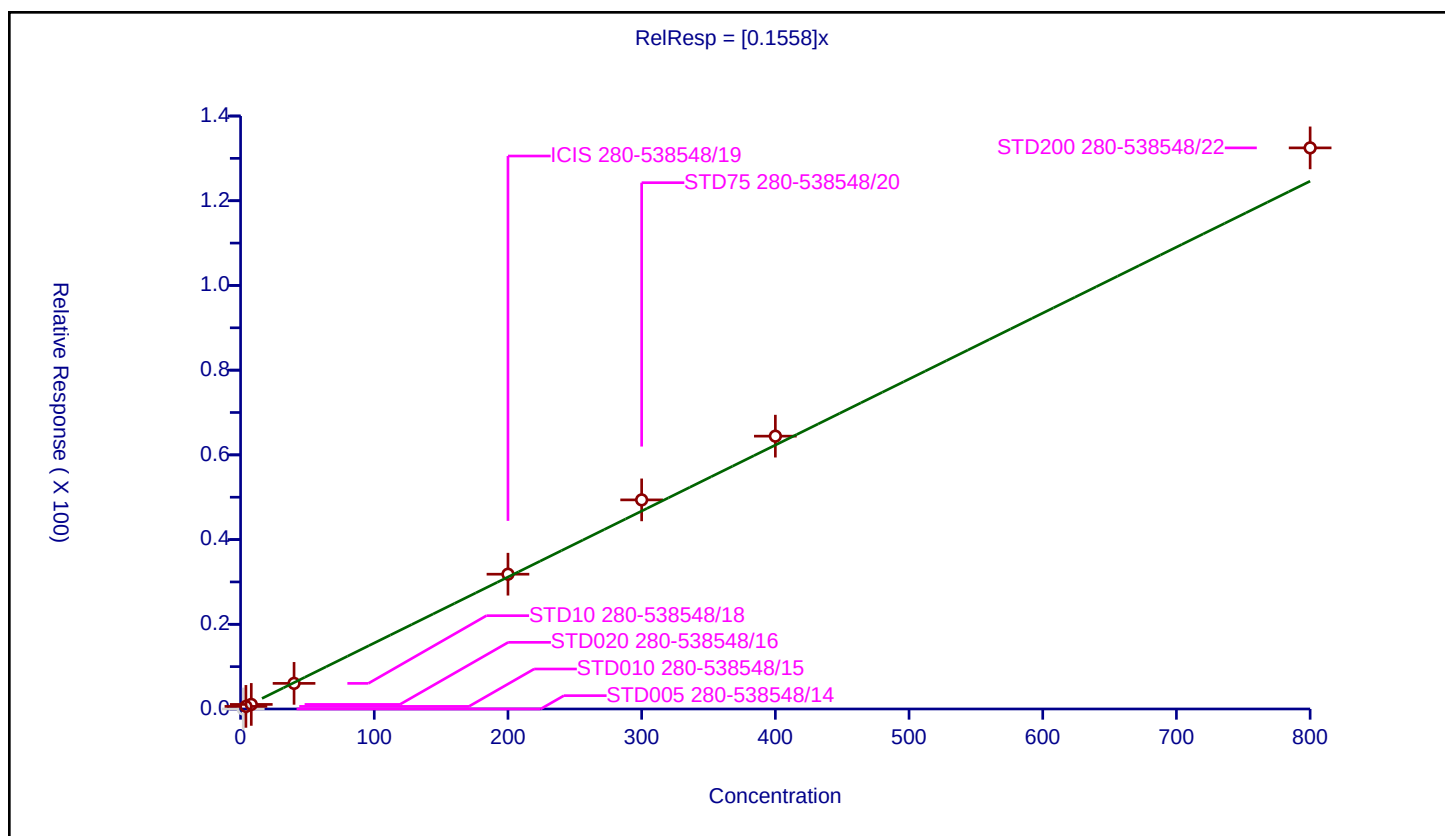
Curve Coefficients

Intercept: 0
 Slope: 0.1558

Error Coefficients

Standard Error: 1010000
 Relative Standard Error: 6.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	4.0	0.615968	50.0	745169.0	0.153992	Y
3	STD020 280-538548/16	8.0	1.07905	50.0	729901.0	0.134881	Y
4	STD10 280-538548/18	40.0	6.049313	50.0	746498.0	0.151233	Y
5	ICIS 280-538548/19	200.0	31.823028	50.0	769988.0	0.159115	Y
6	STD75 280-538548/20	300.0	49.367202	50.0	778921.0	0.164557	Y
7	STD100 280-538548/21	400.0	64.414914	50.0	770348.0	0.161037	Y
8	STD200 280-538548/22	800.0	132.47846	50.0	783196.0	0.165598	Y



Calibration

/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

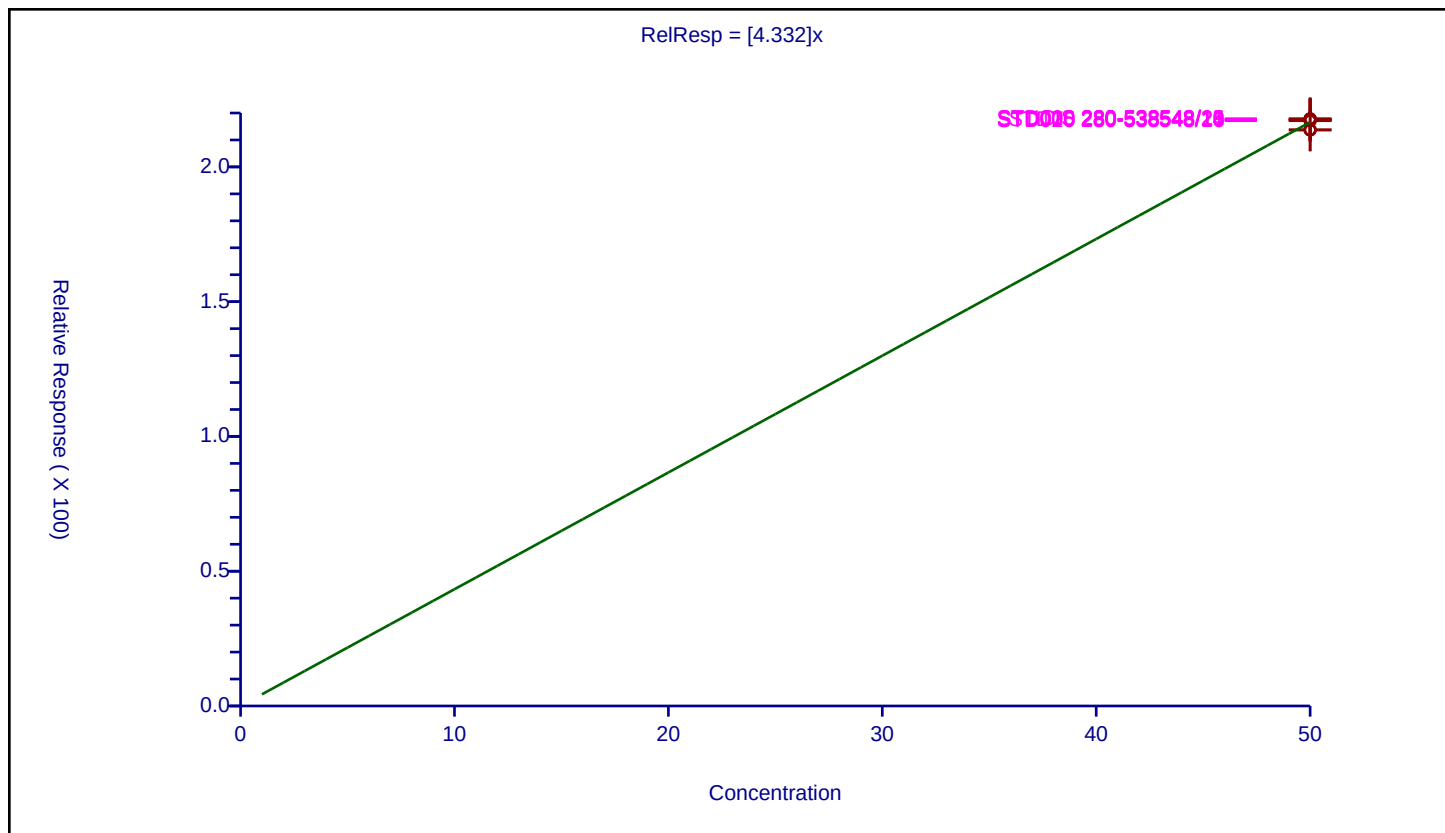
Curve Coefficients

Intercept: 0
 Slope: 4.332

Error Coefficients

Standard Error: 740000
 Relative Standard Error: 0.8
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	217.331818	50.0	154877.0	4.346636	Y
2	STD010 280-538548/15	50.0	217.721176	50.0	156866.0	4.354424	Y
3	STD020 280-538548/16	50.0	217.138007	50.0	153463.0	4.34276	Y
4	STD10 280-538548/18	50.0	213.730811	50.0	158818.0	4.274616	Y
5	ICIS 280-538548/19	50.0	217.559353	50.0	161871.0	4.351187	Y
6	STD75 280-538548/20	50.0	217.511798	50.0	162105.0	4.350236	Y
7	STD100 280-538548/21	50.0	217.873848	50.0	161409.0	4.357477	Y
8	STD200 280-538548/22	50.0	213.734964	50.0	169094.0	4.274699	Y



Calibration

/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

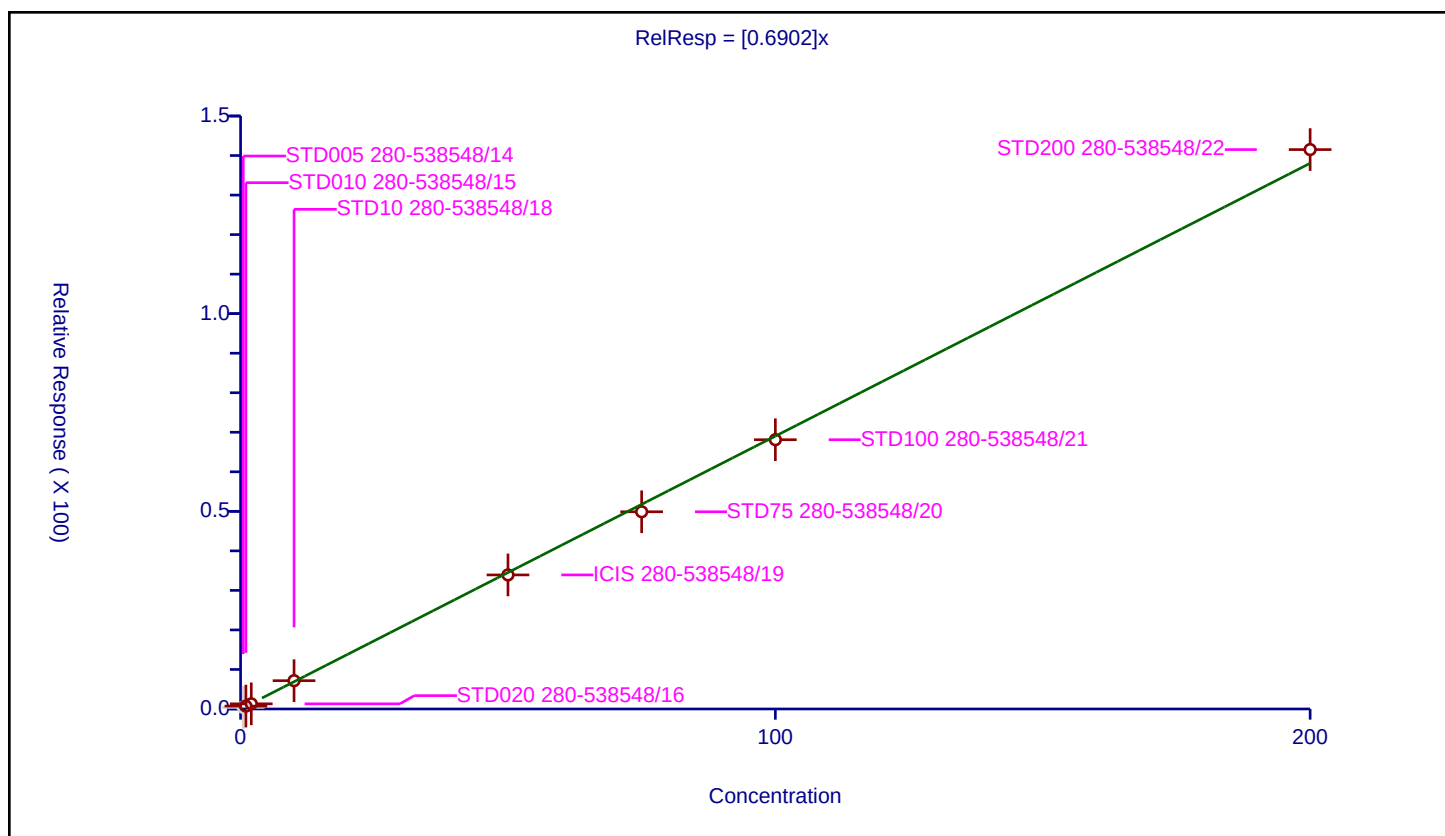
Curve Coefficients

Intercept: 0
 Slope: 0.6902

Error Coefficients

Standard Error: 1070000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.41061	50.0	741336.0	0.82122	N
2	STD010 280-538548/15	1.0	0.732116	50.0	745169.0	0.732116	Y
3	STD020 280-538548/16	2.0	1.302642	50.0	729901.0	0.651321	Y
4	STD10 280-538548/18	10.0	7.159765	50.0	746498.0	0.715976	Y
5	ICIS 280-538548/19	50.0	33.915788	50.0	769988.0	0.678316	Y
6	STD75 280-538548/20	75.0	49.88529	50.0	778921.0	0.665137	Y
7	STD100 280-538548/21	100.0	68.111555	50.0	770348.0	0.681116	Y
8	STD200 280-538548/22	200.0	141.508001	50.0	783196.0	0.70754	Y



Calibration

/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

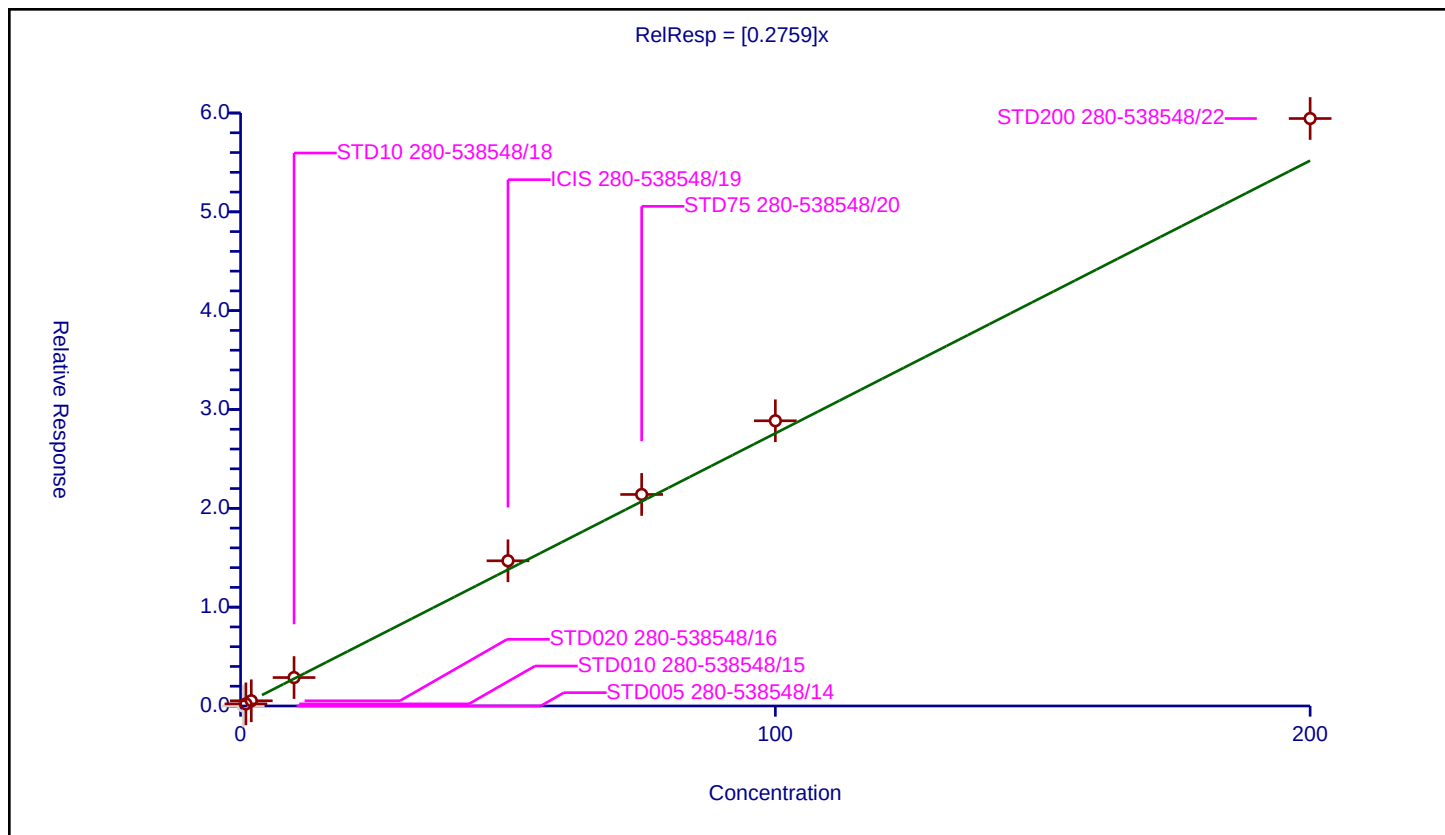
Curve Coefficients

Intercept: 0
 Slope: 0.2759

Error Coefficients

Standard Error: 453000
 Relative Standard Error: 10.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.214515	50.0	745169.0	0.214515	Y
3	STD020 280-538548/16	2.0	0.528496	50.0	729901.0	0.264248	Y
4	STD10 280-538548/18	10.0	2.8769	50.0	746498.0	0.28769	Y
5	ICIS 280-538548/19	50.0	14.690229	50.0	769988.0	0.293805	Y
6	STD75 280-538548/20	75.0	21.404225	50.0	778921.0	0.28539	Y
7	STD100 280-538548/21	100.0	28.858256	50.0	770348.0	0.288583	Y
8	STD200 280-538548/22	200.0	59.443996	50.0	783196.0	0.29722	Y



Calibration

/ Ethyl methacrylate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

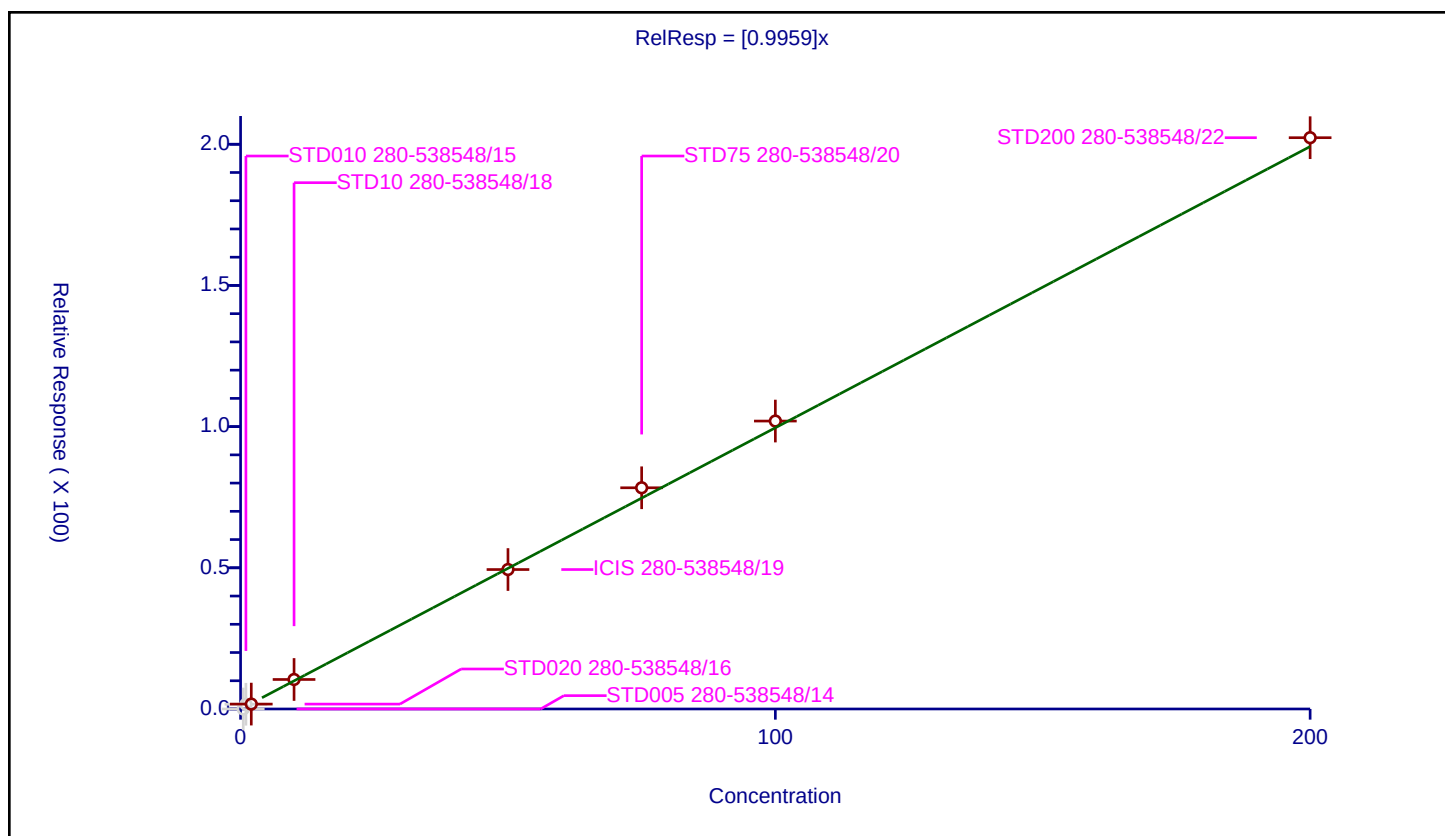
Curve Coefficients

Intercept: 0
Slope: 0.9959

Error Coefficients

Standard Error: 365000
Relative Standard Error: 6.7
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.673722	50.0	156866.0	1.673722	N
3	STD020 280-538548/16	2.0	1.733317	50.0	153463.0	0.866658	Y
4	STD10 280-538548/18	10.0	10.453475	50.0	158818.0	1.045348	Y
5	ICIS 280-538548/19	50.0	49.387475	50.0	161871.0	0.98775	Y
6	STD75 280-538548/20	75.0	78.346751	50.0	162105.0	1.044623	Y
7	STD100 280-538548/21	100.0	101.967053	50.0	161409.0	1.019671	Y
8	STD200 280-538548/22	200.0	202.317941	50.0	169094.0	1.01159	Y



Calibration

/ 1,1,2-Trichloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

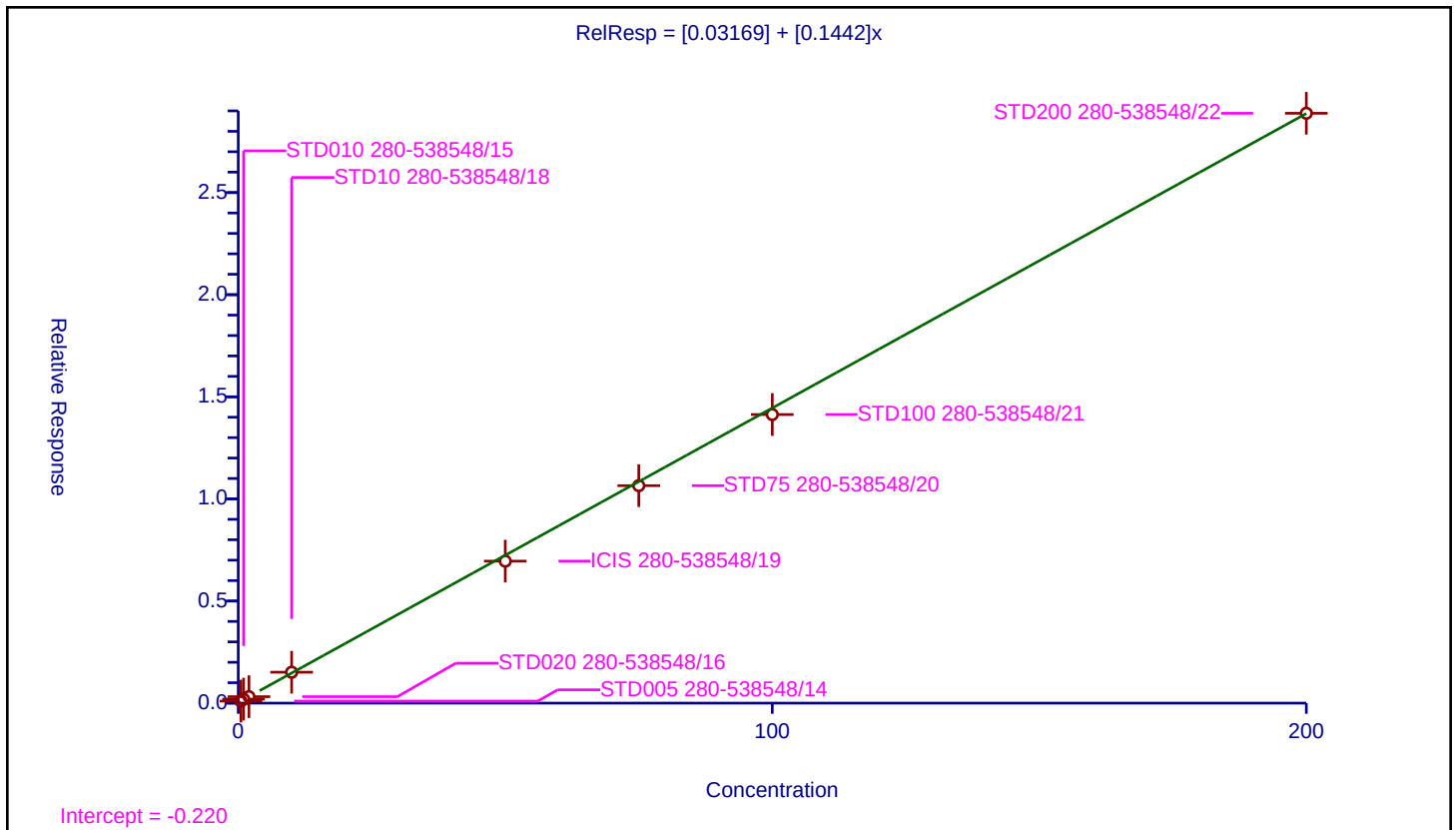
Curve Coefficients

Intercept: 0.03169
 Slope: 0.1442

Error Coefficients

Standard Error: 220000
 Relative Standard Error: 6.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.099415	50.0	741336.0	0.19883	Y
2	STD010 280-538548/15	1.0	0.194184	50.0	745169.0	0.194184	Y
3	STD020 280-538548/16	2.0	0.31607	50.0	729901.0	0.158035	Y
4	STD10 280-538548/18	10.0	1.513802	50.0	746498.0	0.15138	Y
5	ICIS 280-538548/19	50.0	6.953095	50.0	769988.0	0.139062	Y
6	STD75 280-538548/20	75.0	10.649411	50.0	778921.0	0.141992	Y
7	STD100 280-538548/21	100.0	14.130821	50.0	770348.0	0.141308	Y
8	STD200 280-538548/22	200.0	28.882553	50.0	783196.0	0.144413	Y



Calibration

/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

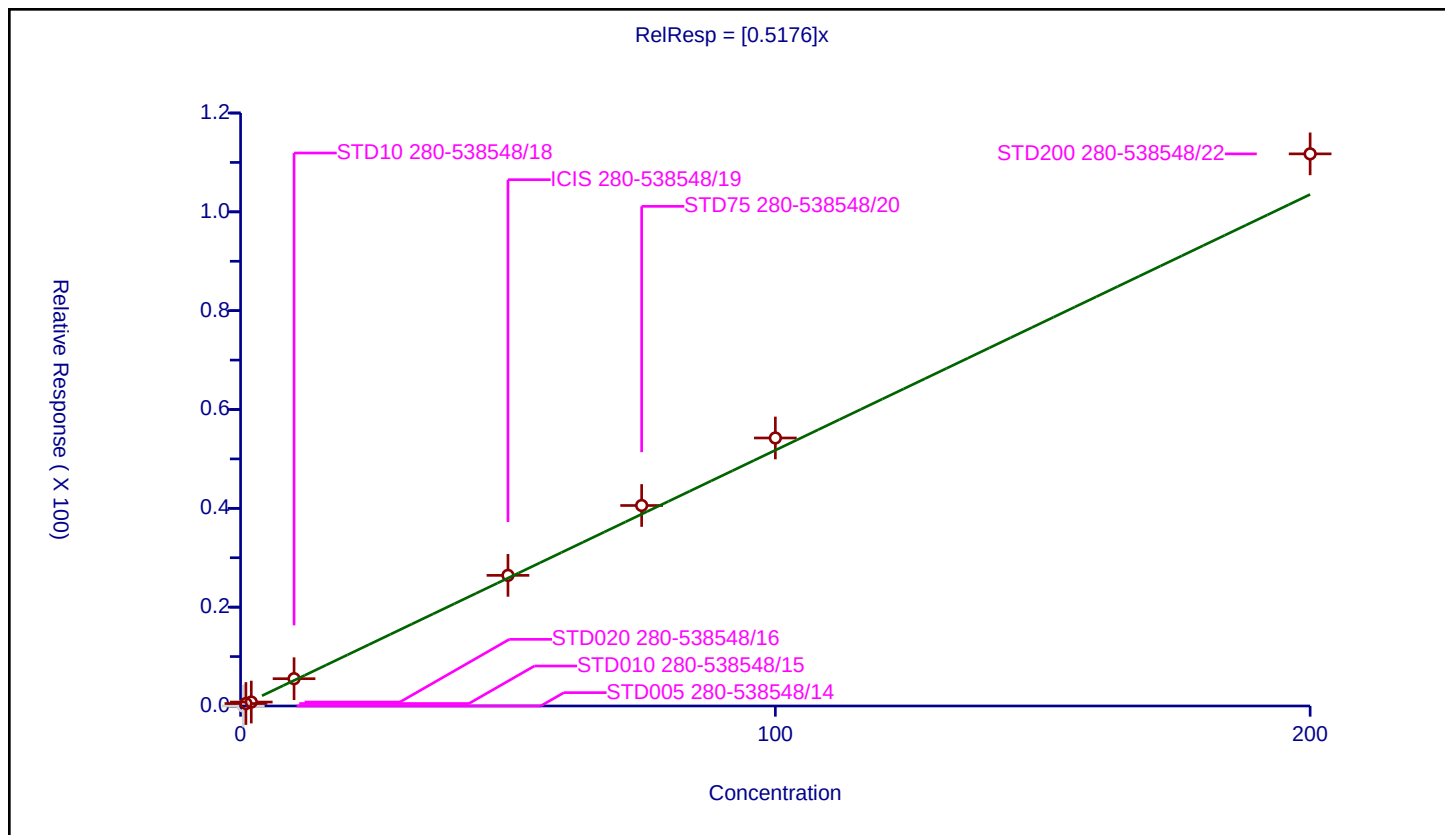
Curve Coefficients

Intercept: 0
 Slope: 0.5176

Error Coefficients

Standard Error: 182000
 Relative Standard Error: 10.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.500746	50.0	156866.0	0.500746	Y
3	STD020 280-538548/16	2.0	0.798238	50.0	153463.0	0.399119	Y
4	STD10 280-538548/18	10.0	5.524878	50.0	158818.0	0.552488	Y
5	ICIS 280-538548/19	50.0	26.435557	50.0	161871.0	0.528711	Y
6	STD75 280-538548/20	75.0	40.57617	50.0	162105.0	0.541016	Y
7	STD100 280-538548/21	100.0	54.237062	50.0	161409.0	0.542371	Y
8	STD200 280-538548/22	200.0	111.733119	50.0	169094.0	0.558666	Y



Calibration

/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

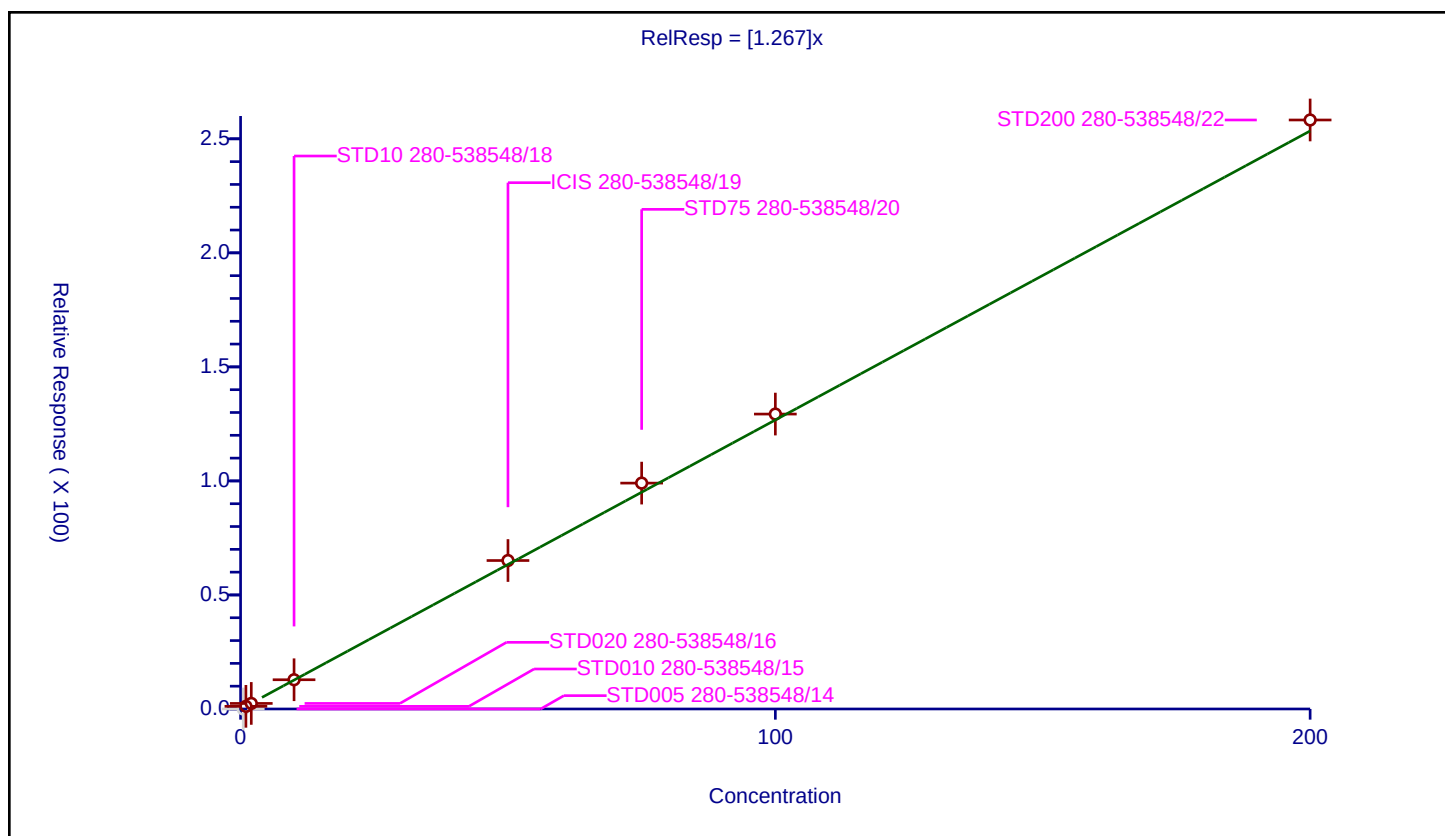
Curve Coefficients

Intercept: 0
 Slope: 1.267

Error Coefficients

Standard Error: 425000
 Relative Standard Error: 4.4
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.164051	50.0	156866.0	1.164051	Y
3	STD020 280-538548/16	2.0	2.434789	50.0	153463.0	1.217394	Y
4	STD10 280-538548/18	10.0	12.823798	50.0	158818.0	1.28238	Y
5	ICIS 280-538548/19	50.0	65.094118	50.0	161871.0	1.301882	Y
6	STD75 280-538548/20	75.0	99.045989	50.0	162105.0	1.320613	Y
7	STD100 280-538548/21	100.0	129.308155	50.0	161409.0	1.293082	Y
8	STD200 280-538548/22	200.0	258.255172	50.0	169094.0	1.291276	Y



Calibration

/ 2-Hexanone

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

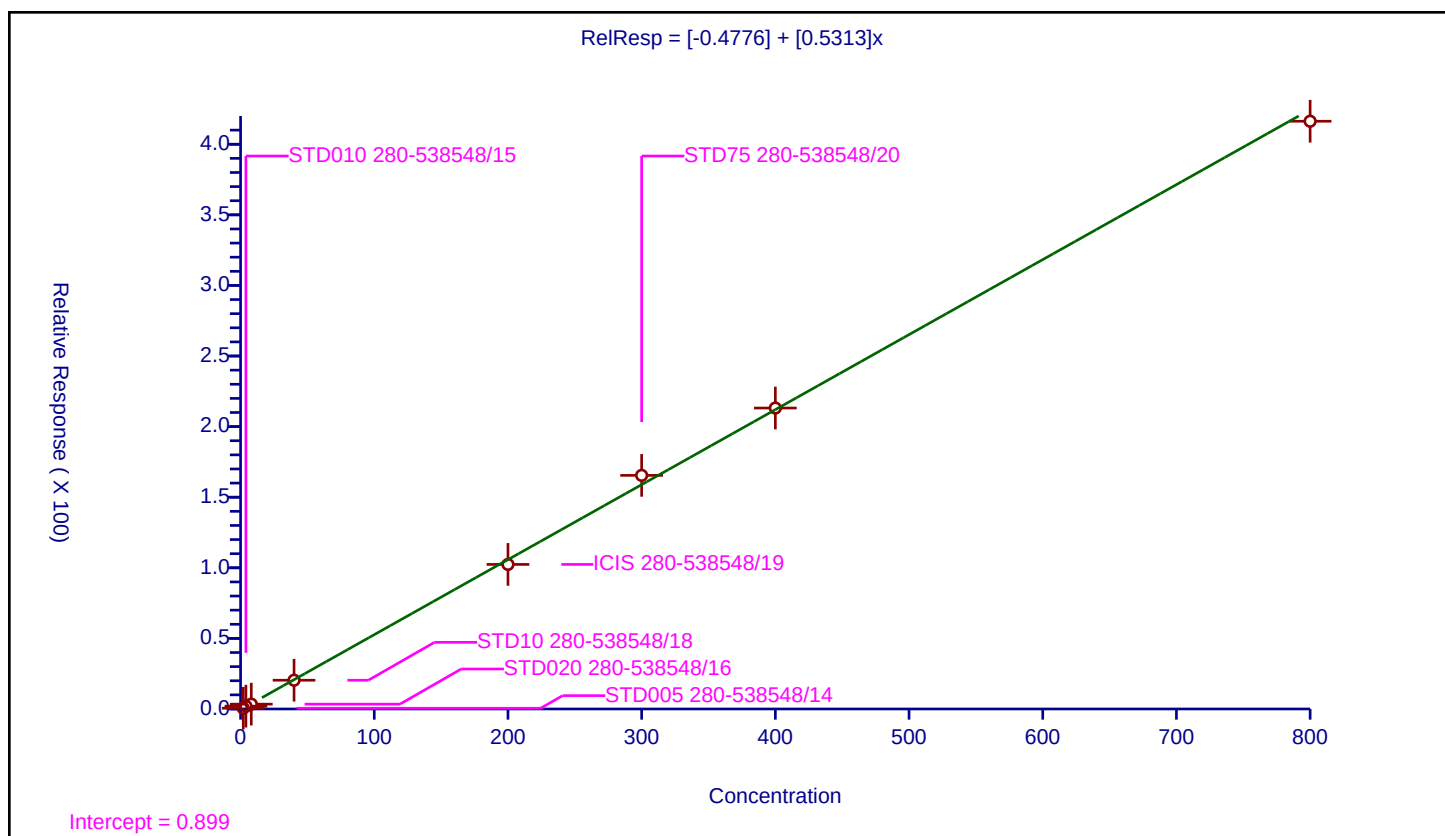
Curve Coefficients

Intercept: -0.4776
 Slope: 0.5313

Error Coefficients

Standard Error: 690000
 Relative Standard Error: 8.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.519767	50.0	154877.0	0.259884	Y
2	STD010 280-538548/15	4.0	1.99629	50.0	156866.0	0.499072	Y
3	STD020 280-538548/16	8.0	3.436659	50.0	153463.0	0.429582	Y
4	STD10 280-538548/18	40.0	20.366394	50.0	158818.0	0.50916	Y
5	ICIS 280-538548/19	200.0	102.397279	50.0	161871.0	0.511986	Y
6	STD75 280-538548/20	300.0	165.463743	50.0	162105.0	0.551546	Y
7	STD100 280-538548/21	400.0	213.166552	50.0	161409.0	0.532916	Y
8	STD200 280-538548/22	800.0	416.306019	50.0	169094.0	0.520383	Y



Calibration

/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

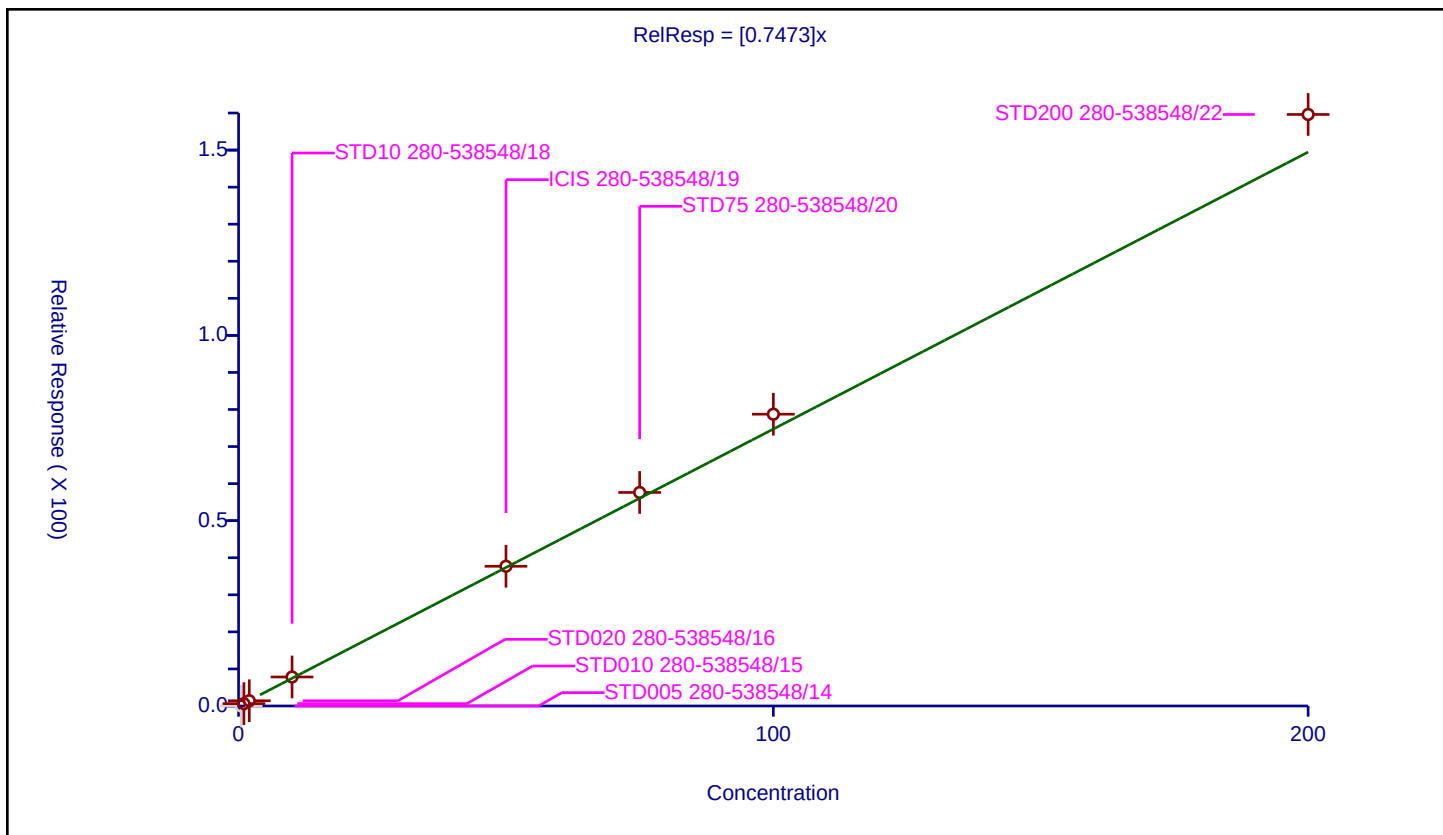
Curve Coefficients

Intercept: 0
 Slope: 0.7473

Error Coefficients

Standard Error: 260000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.634937	50.0	156866.0	0.634937	Y
3	STD020 280-538548/16	2.0	1.412067	50.0	153463.0	0.706033	Y
4	STD10 280-538548/18	10.0	7.823735	50.0	158818.0	0.782374	Y
5	ICIS 280-538548/19	50.0	37.69792	50.0	161871.0	0.753958	Y
6	STD75 280-538548/20	75.0	57.61821	50.0	162105.0	0.768243	Y
7	STD100 280-538548/21	100.0	78.734457	50.0	161409.0	0.787345	Y
8	STD200 280-538548/22	200.0	159.611814	50.0	169094.0	0.798059	Y



Calibration

/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

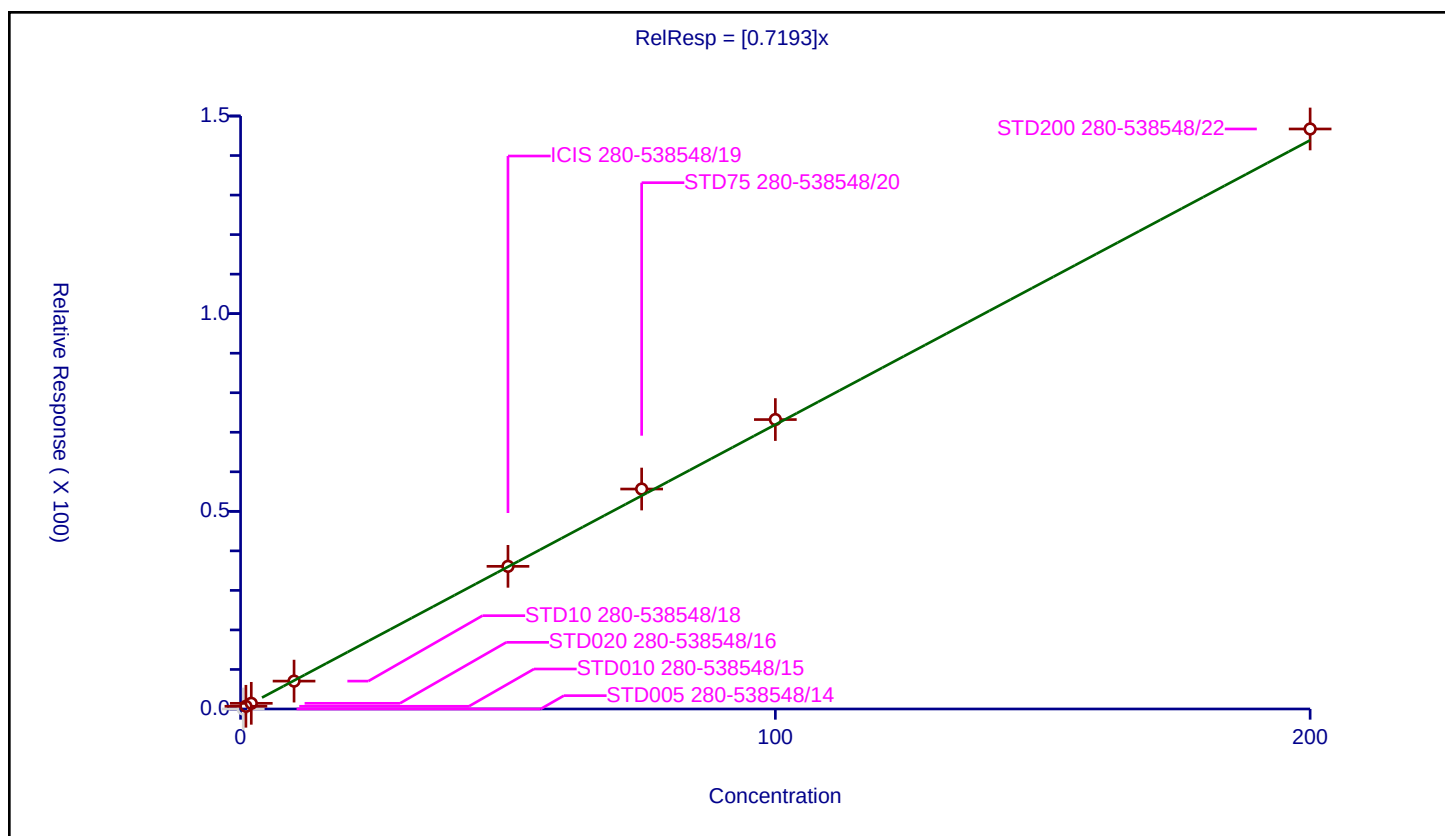
Curve Coefficients

Intercept: 0
 Slope: 0.7193

Error Coefficients

Standard Error: 241000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.684023	50.0	156866.0	0.684023	Y
3	STD020 280-538548/16	2.0	1.433244	50.0	153463.0	0.716622	Y
4	STD10 280-538548/18	10.0	7.053042	50.0	158818.0	0.705304	Y
5	ICIS 280-538548/19	50.0	36.088923	50.0	161871.0	0.721778	Y
6	STD75 280-538548/20	75.0	55.643256	50.0	162105.0	0.74191	Y
7	STD100 280-538548/21	100.0	73.215558	50.0	161409.0	0.732156	Y
8	STD200 280-538548/22	200.0	146.718985	50.0	169094.0	0.733595	Y



Calibration

/ 1-Chlorohexane

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

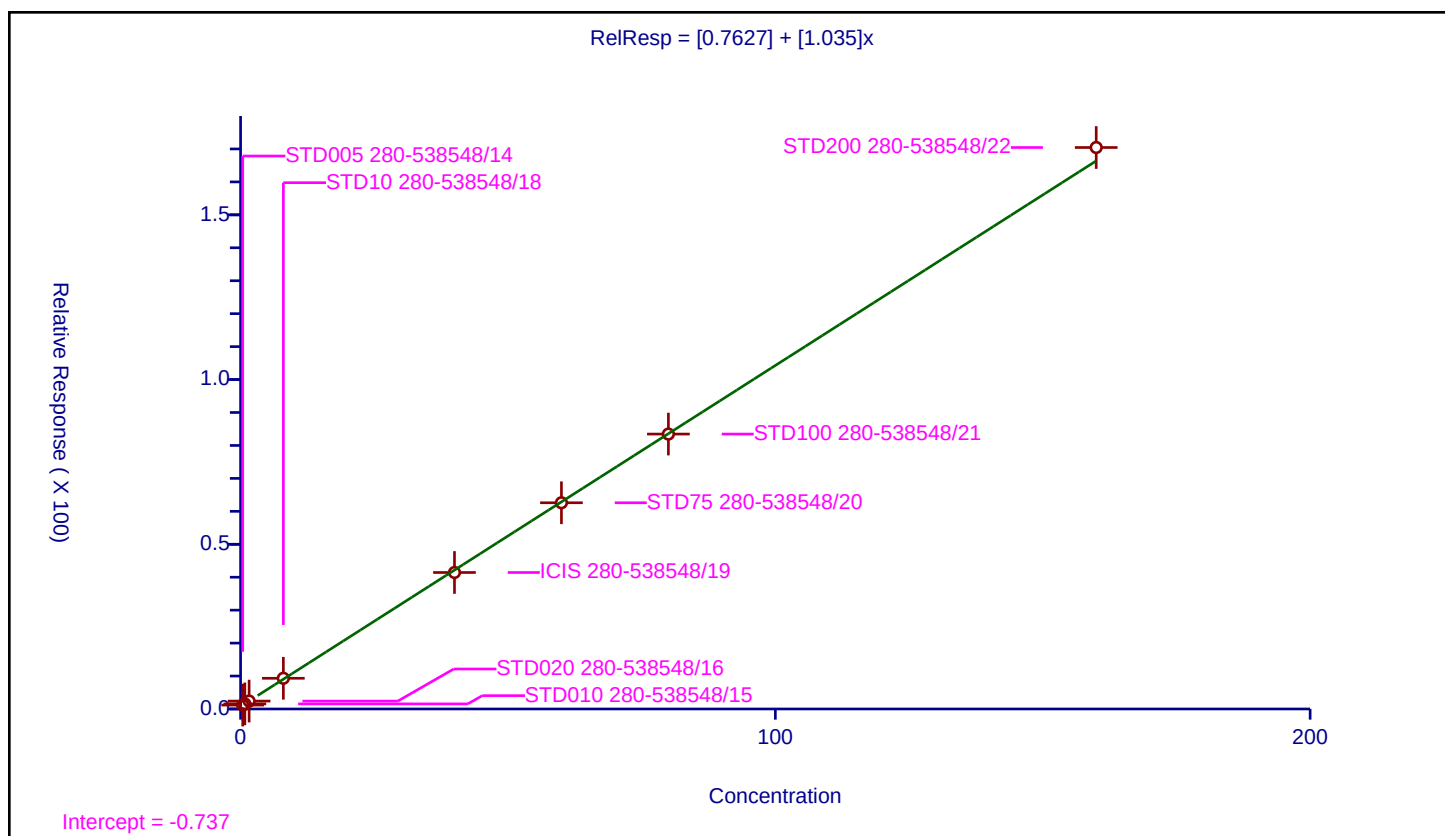
Curve Coefficients

Intercept: 0.7627
Slope: 1.035

Error Coefficients

Standard Error: 278000
Relative Standard Error: 3.1
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.4	1.18804	50.0	154877.0	2.970099	Y
2	STD010 280-538548/15	0.8	1.546543	50.0	156866.0	1.933179	Y
3	STD020 280-538548/16	1.6	2.403837	50.0	153463.0	1.502398	Y
4	STD10 280-538548/18	8.0	9.32388	50.0	158818.0	1.165485	Y
5	ICIS 280-538548/19	40.0	41.432684	50.0	161871.0	1.035817	Y
6	STD75 280-538548/20	60.0	62.603868	50.0	162105.0	1.043398	Y
7	STD100 280-538548/21	80.0	83.456623	50.0	161409.0	1.043208	Y
8	STD200 280-538548/22	160.0	170.443954	50.0	169094.0	1.065275	Y



Calibration

/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

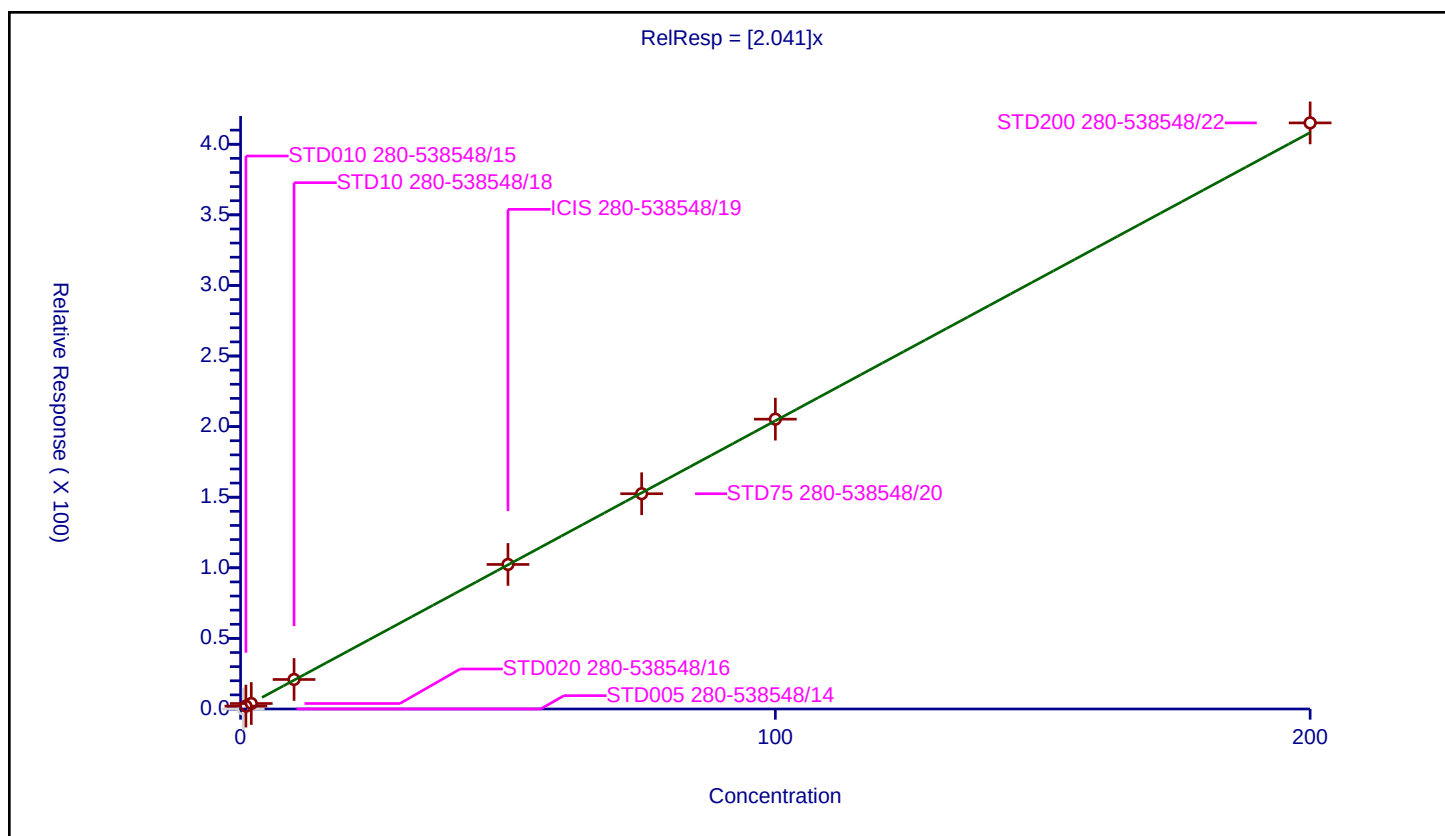
Curve Coefficients

Intercept: 0
 Slope: 2.041

Error Coefficients

Standard Error: 679000
 Relative Standard Error: 2.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	2.046333	50.0	156866.0	2.046333	Y
3	STD020 280-538548/16	2.0	3.889863	50.0	153463.0	1.944931	Y
4	STD10 280-538548/18	10.0	20.89845	50.0	158818.0	2.089845	Y
5	ICIS 280-538548/19	50.0	102.389557	50.0	161871.0	2.047791	Y
6	STD75 280-538548/20	75.0	152.473705	50.0	162105.0	2.032983	Y
7	STD100 280-538548/21	100.0	205.28688	50.0	161409.0	2.052869	Y
8	STD200 280-538548/22	200.0	415.133594	50.0	169094.0	2.075668	Y



Calibration

/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

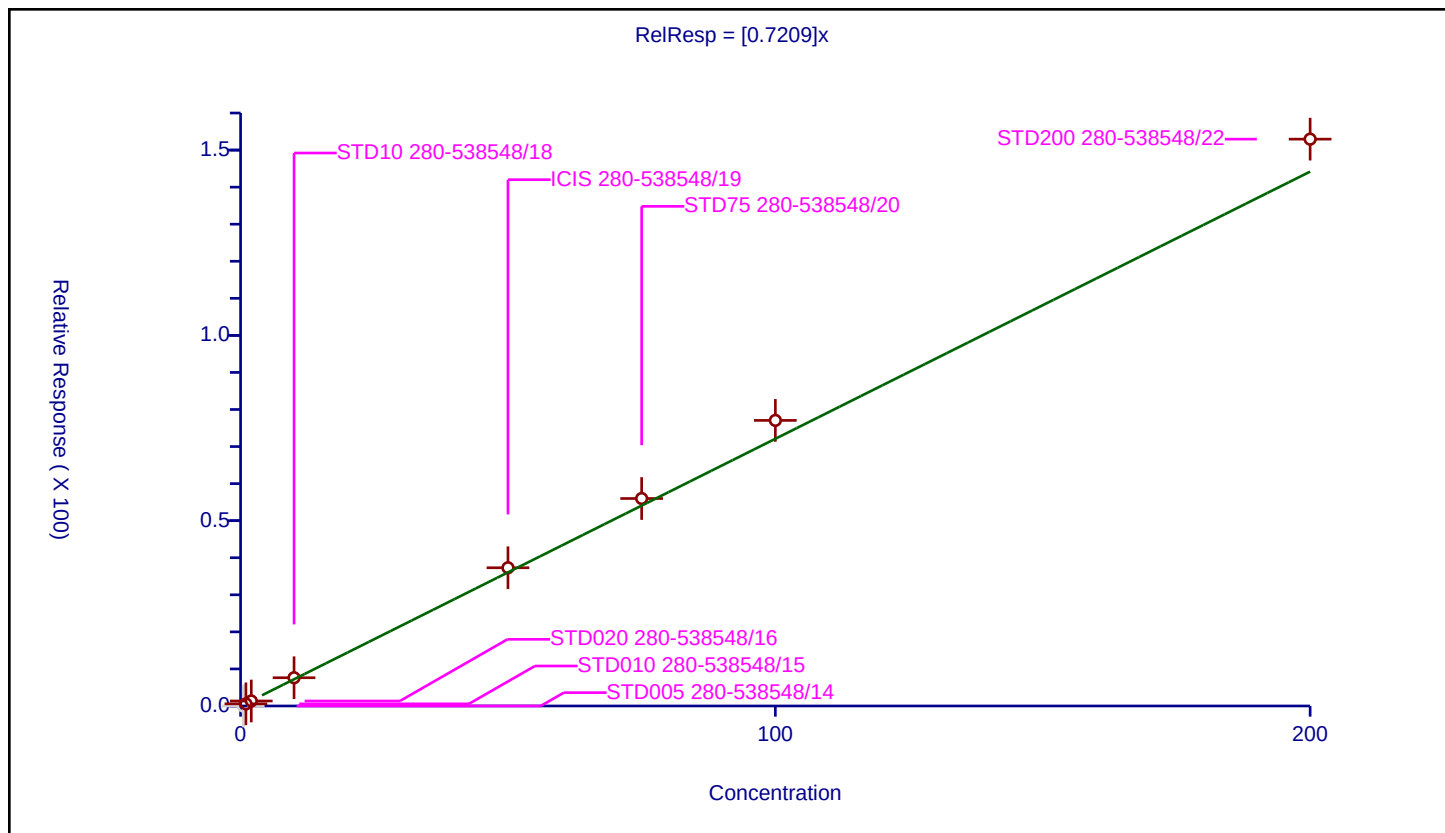
Curve Coefficients

Intercept: 0
Slope: 0.7209

Error Coefficients

Standard Error: 251000
Relative Standard Error: 9.6
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.582025	50.0	156866.0	0.582025	Y
3	STD020 280-538548/16	2.0	1.348859	50.0	153463.0	0.67443	Y
4	STD10 280-538548/18	10.0	7.622562	50.0	158818.0	0.762256	Y
5	ICIS 280-538548/19	50.0	37.299763	50.0	161871.0	0.745995	Y
6	STD75 280-538548/20	75.0	55.981925	50.0	162105.0	0.746426	Y
7	STD100 280-538548/21	100.0	77.061688	50.0	161409.0	0.770617	Y
8	STD200 280-538548/22	200.0	152.950134	50.0	169094.0	0.764751	Y



Calibration

/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

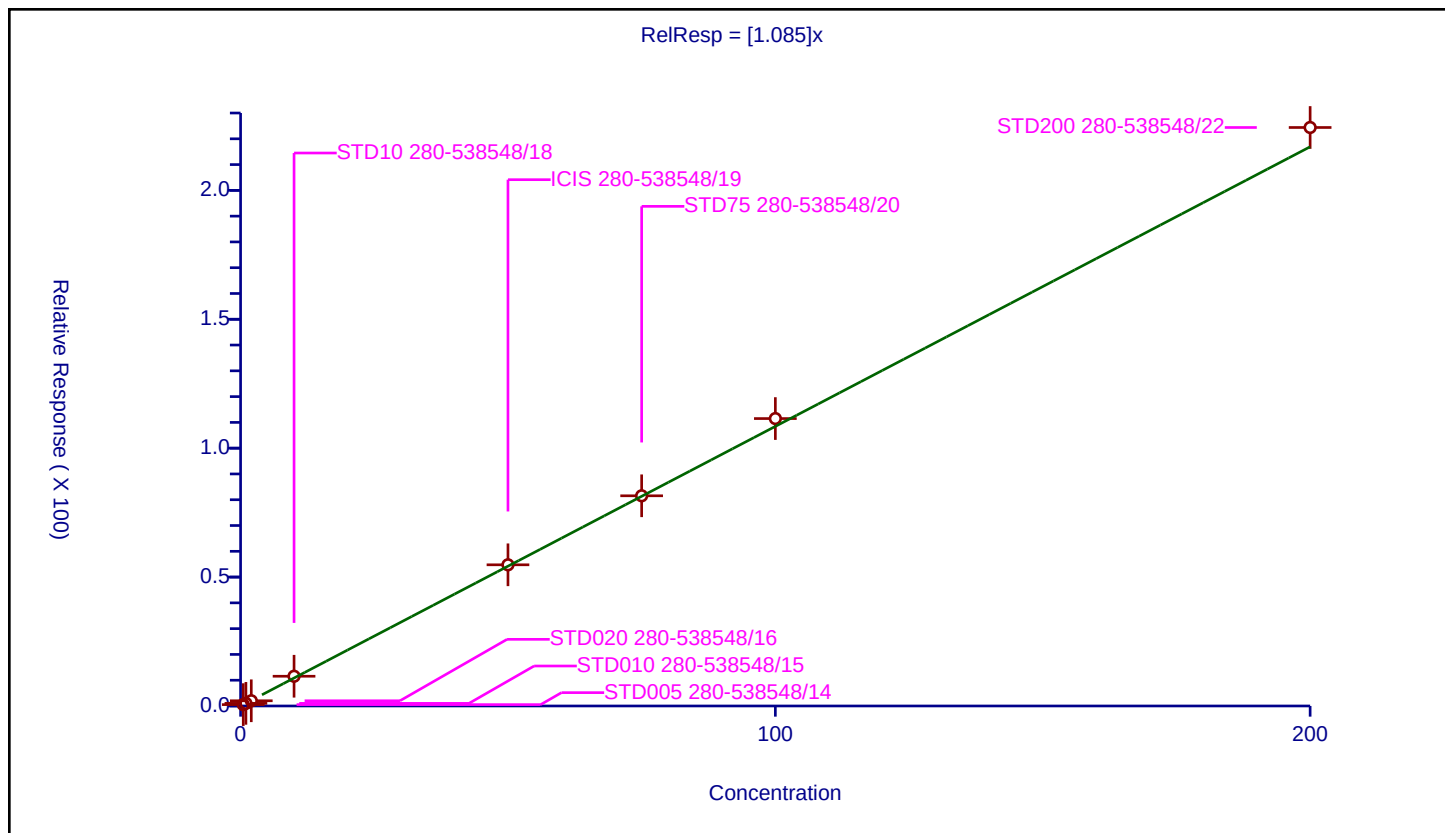
Curve Coefficients

Intercept: 0
 Slope: 1.085

Error Coefficients

Standard Error: 340000
 Relative Standard Error: 4.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.536555	50.0	154877.0	1.07311	Y
2	STD010 280-538548/15	1.0	1.019023	50.0	156866.0	1.019023	Y
3	STD020 280-538548/16	2.0	2.023289	50.0	153463.0	1.011645	Y
4	STD10 280-538548/18	10.0	11.533327	50.0	158818.0	1.153333	Y
5	ICIS 280-538548/19	50.0	54.75811	50.0	161871.0	1.095162	Y
6	STD75 280-538548/20	75.0	81.52833	50.0	162105.0	1.087044	Y
7	STD100 280-538548/21	100.0	111.481392	50.0	161409.0	1.114814	Y
8	STD200 280-538548/22	200.0	224.382888	50.0	169094.0	1.121914	Y



Calibration

/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

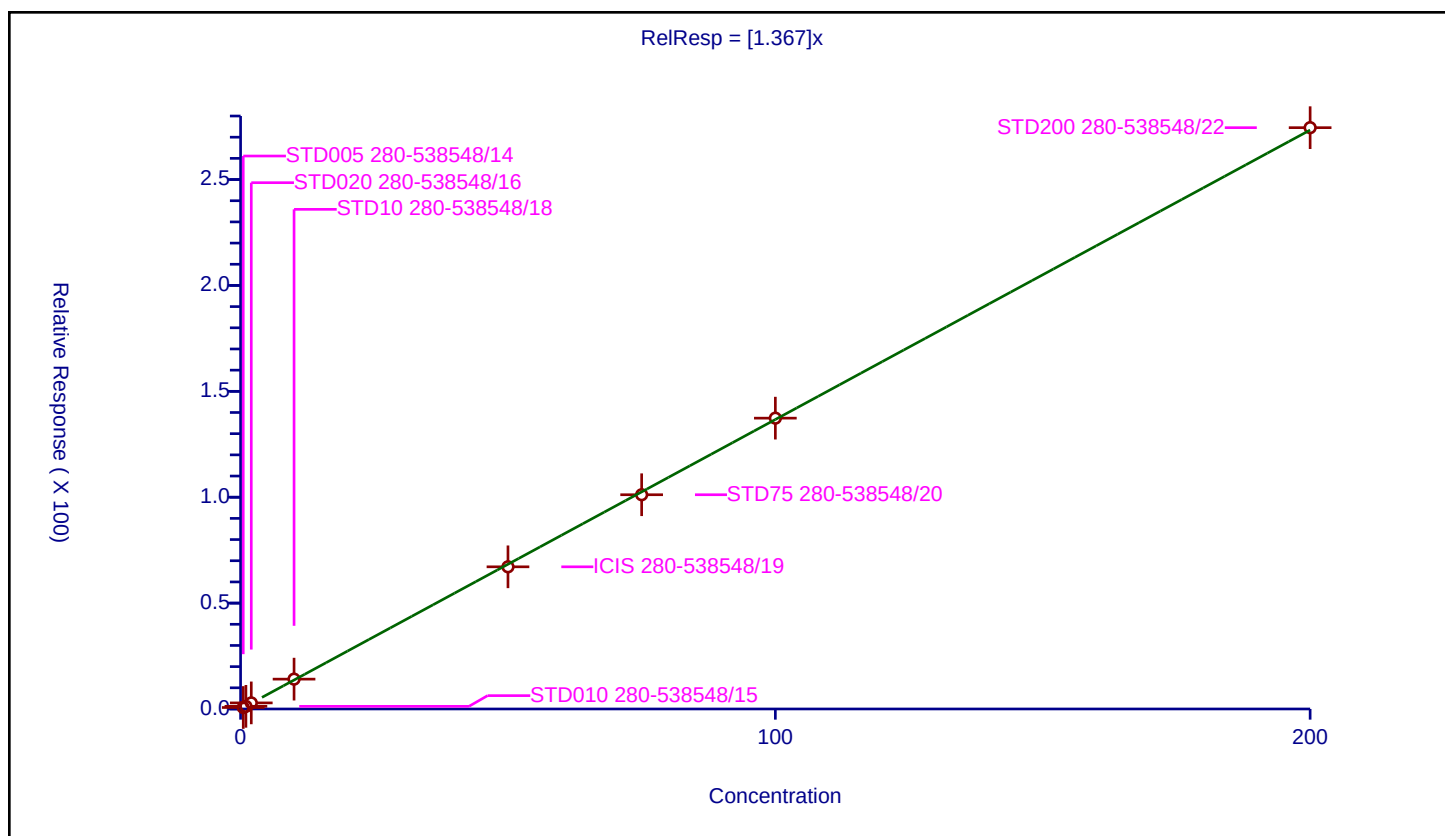
Curve Coefficients

Intercept: 0
 Slope: 1.367

Error Coefficients

Standard Error: 417000
 Relative Standard Error: 4.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.697328	50.0	154877.0	1.394655	Y
2	STD010 280-538548/15	1.0	1.25553	50.0	156866.0	1.25553	Y
3	STD020 280-538548/16	2.0	2.875286	50.0	153463.0	1.437643	Y
4	STD10 280-538548/18	10.0	14.099158	50.0	158818.0	1.409916	Y
5	ICIS 280-538548/19	50.0	67.131543	50.0	161871.0	1.342631	Y
6	STD75 280-538548/20	75.0	101.168379	50.0	162105.0	1.348912	Y
7	STD100 280-538548/21	100.0	137.329703	50.0	161409.0	1.373297	Y
8	STD200 280-538548/22	200.0	274.495843	50.0	169094.0	1.372479	Y



Calibration

/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

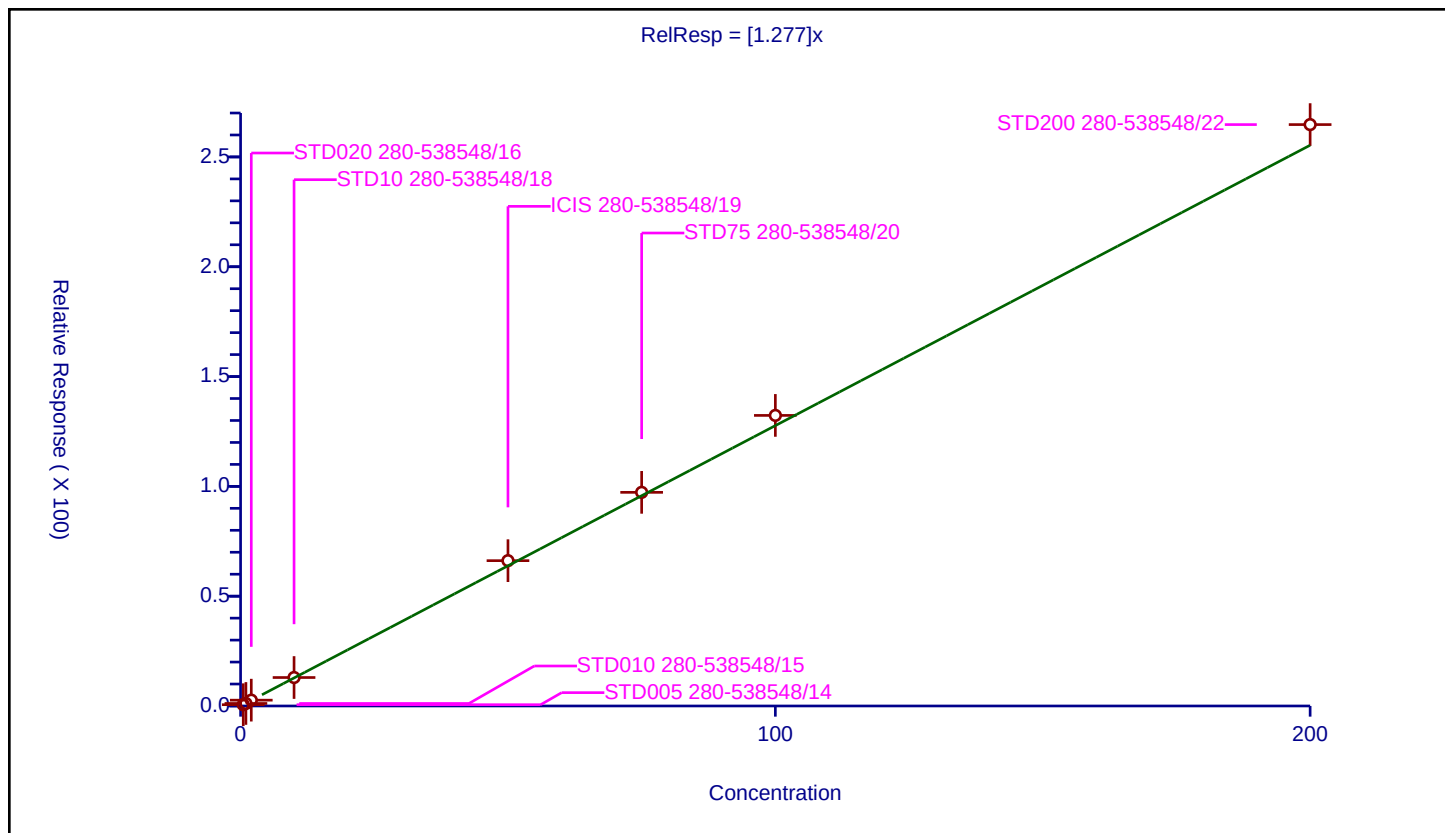
Curve Coefficients

Intercept: 0
 Slope: 1.277

Error Coefficients

Standard Error: 402000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.585626	50.0	154877.0	1.171252	Y
2	STD010 280-538548/15	1.0	1.153214	50.0	156866.0	1.153214	Y
3	STD020 280-538548/16	2.0	2.650802	50.0	153463.0	1.325401	Y
4	STD10 280-538548/18	10.0	12.962951	50.0	158818.0	1.296295	Y
5	ICIS 280-538548/19	50.0	66.163488	50.0	161871.0	1.32327	Y
6	STD75 280-538548/20	75.0	97.280466	50.0	162105.0	1.297073	Y
7	STD100 280-538548/21	100.0	132.303341	50.0	161409.0	1.323033	Y
8	STD200 280-538548/22	200.0	264.730268	50.0	169094.0	1.323651	Y



Calibration

/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

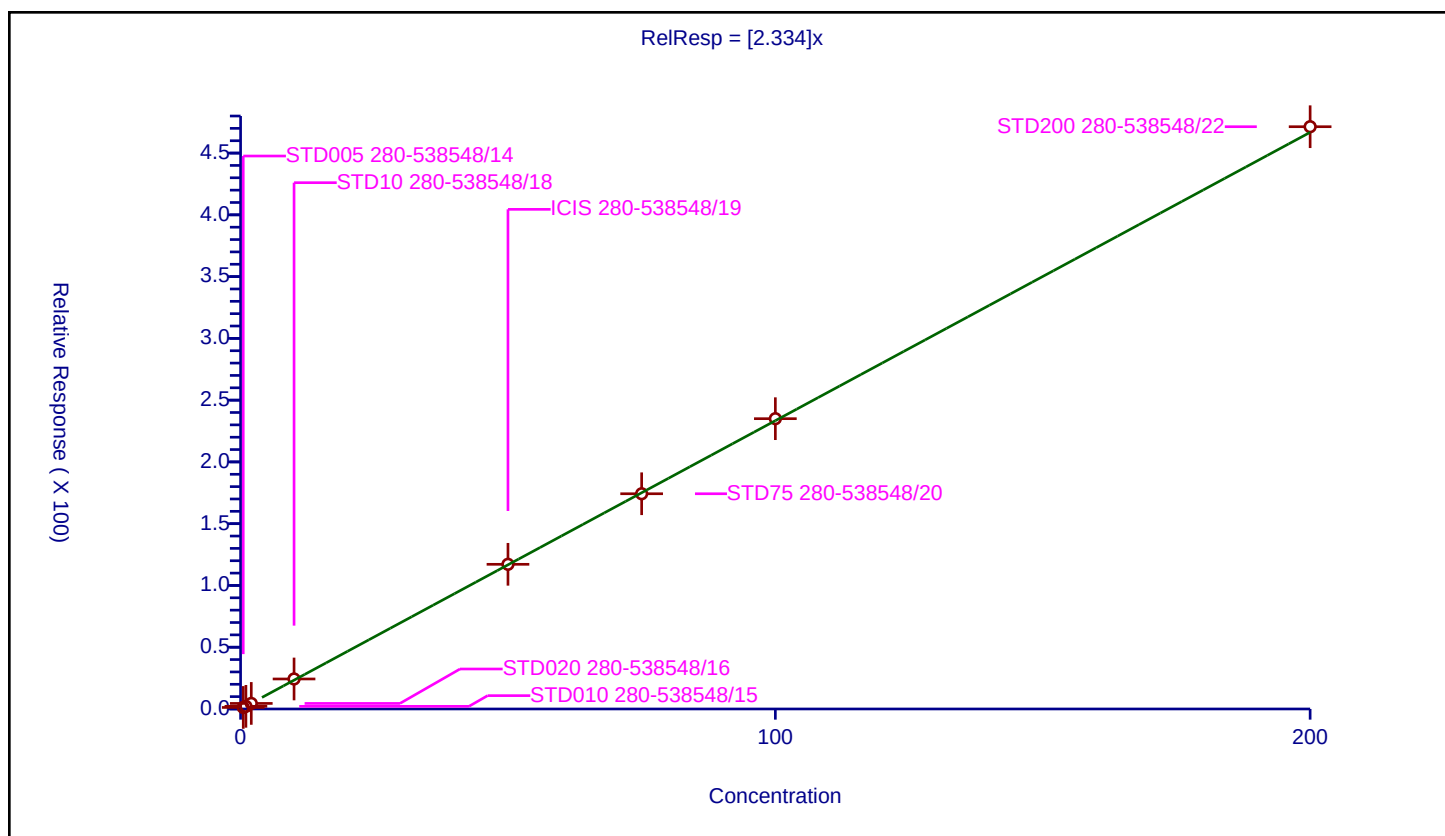
Curve Coefficients

Intercept: 0
 Slope: 2.334

Error Coefficients

Standard Error: 715000
 Relative Standard Error: 4.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.240662	50.0	154877.0	2.481324	Y
2	STD010 280-538548/15	1.0	2.137174	50.0	156866.0	2.137174	Y
3	STD020 280-538548/16	2.0	4.502062	50.0	153463.0	2.251031	Y
4	STD10 280-538548/18	10.0	24.298568	50.0	158818.0	2.429857	Y
5	ICIS 280-538548/19	50.0	117.123203	50.0	161871.0	2.342464	Y
6	STD75 280-538548/20	75.0	174.222572	50.0	162105.0	2.322968	Y
7	STD100 280-538548/21	100.0	234.992473	50.0	161409.0	2.349925	Y
8	STD200 280-538548/22	200.0	471.334287	50.0	169094.0	2.356671	Y



Calibration

/ Bromoform

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

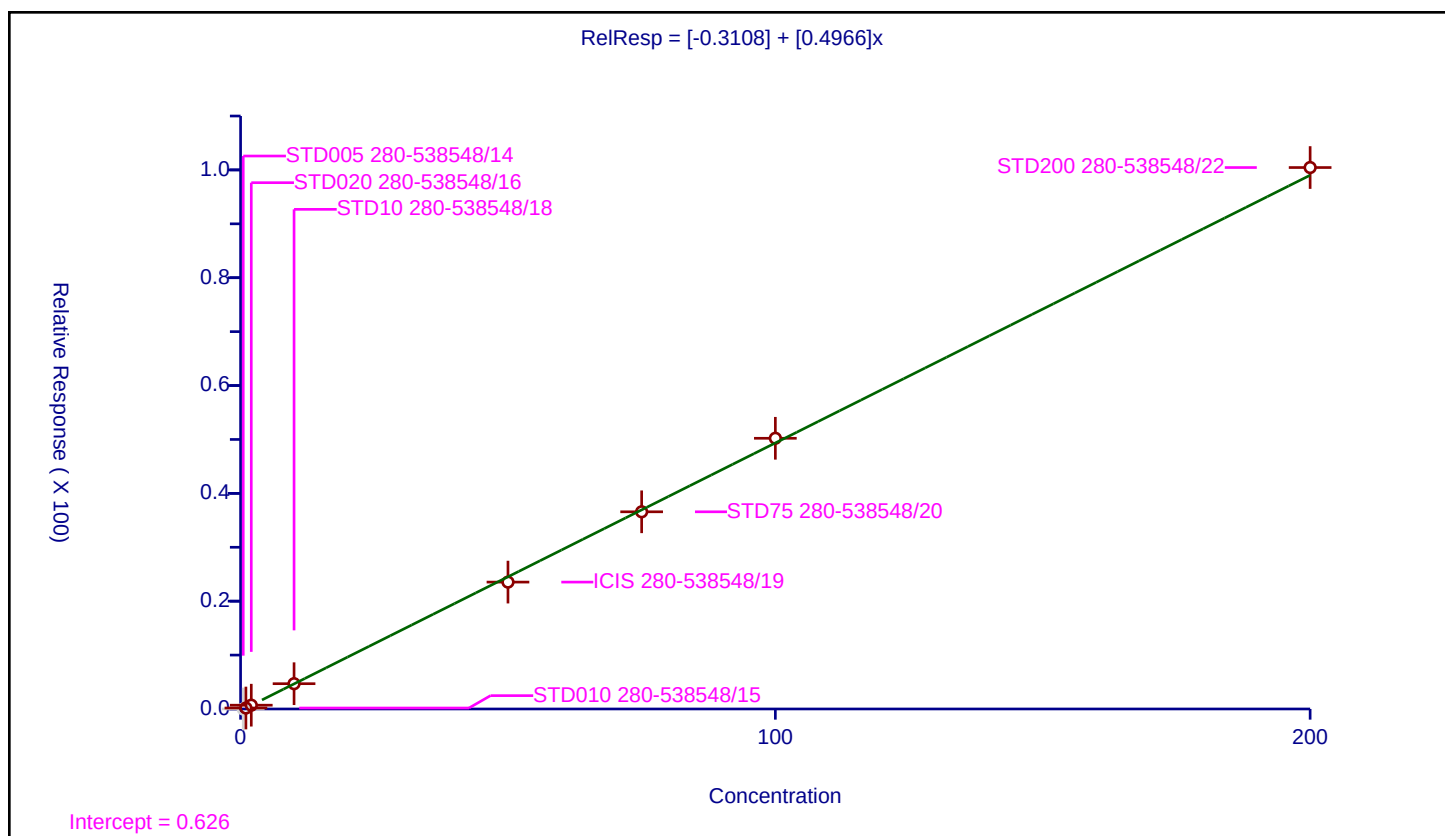
Curve Coefficients

Intercept: -0.3108
Slope: 0.4966

Error Coefficients

Standard Error: 180000
Relative Standard Error: 2.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.180727	50.0	156866.0	0.180727	Y
3	STD020 280-538548/16	2.0	0.702775	50.0	153463.0	0.351388	Y
4	STD10 280-538548/18	10.0	4.690274	50.0	158818.0	0.469027	Y
5	ICIS 280-538548/19	50.0	23.540041	50.0	161871.0	0.470801	Y
6	STD75 280-538548/20	75.0	36.578452	50.0	162105.0	0.487713	Y
7	STD100 280-538548/21	100.0	50.219319	50.0	161409.0	0.502193	Y
8	STD200 280-538548/22	200.0	100.440879	50.0	169094.0	0.502204	Y



Calibration

/ Isopropylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

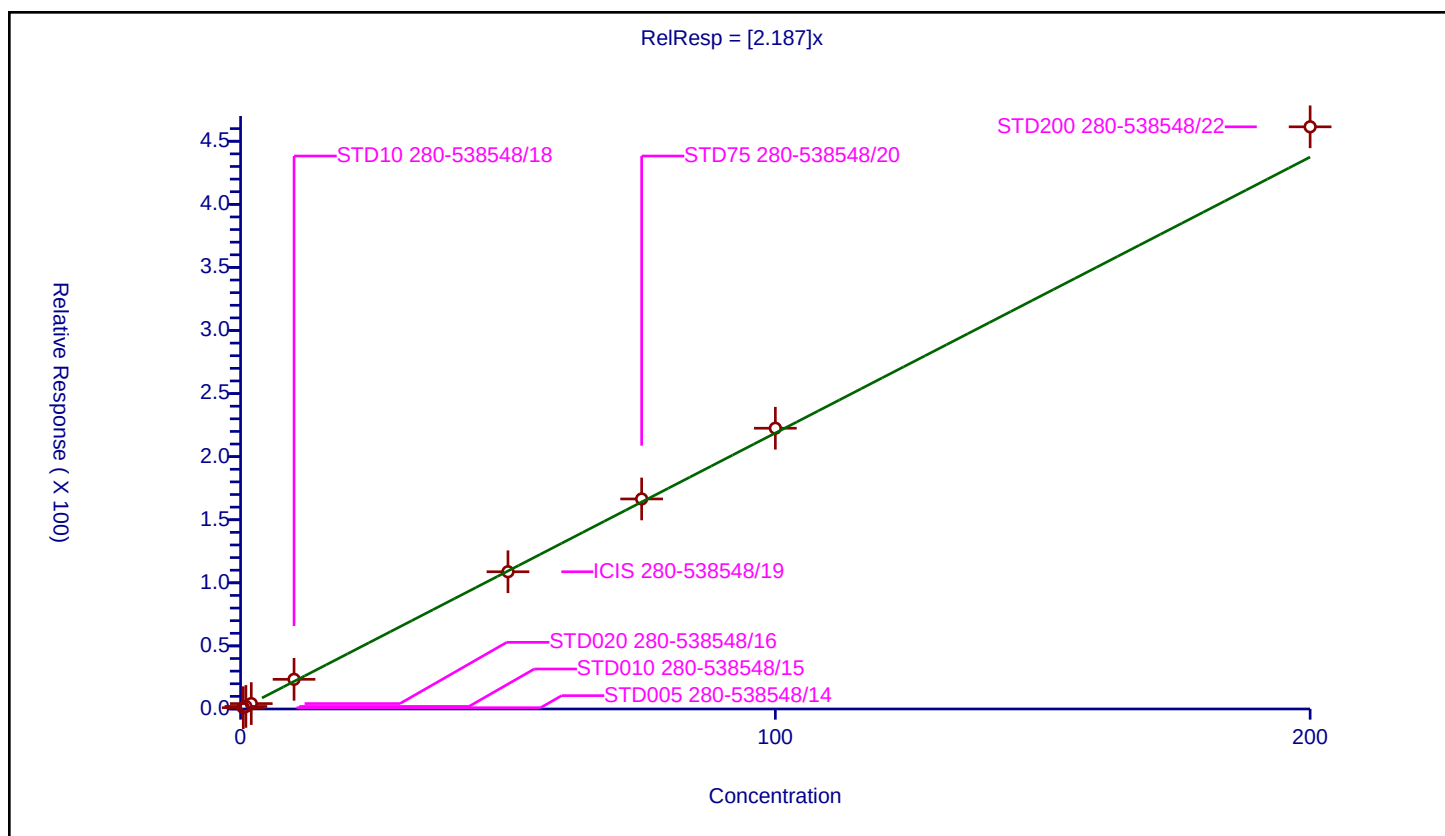
Curve Coefficients

Intercept: 0
Slope: 2.187

Error Coefficients

Standard Error: 1080000
Relative Standard Error: 5.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.029932	50.0	245453.0	2.059865	Y
2	STD010 280-538548/15	1.0	2.018125	50.0	250257.0	2.018125	Y
3	STD020 280-538548/16	2.0	4.281395	50.0	242456.0	2.140698	Y
4	STD10 280-538548/18	10.0	23.518999	50.0	249122.0	2.3519	Y
5	ICIS 280-538548/19	50.0	108.786124	50.0	257514.0	2.175722	Y
6	STD75 280-538548/20	75.0	166.490033	50.0	257689.0	2.219867	Y
7	STD100 280-538548/21	100.0	222.533741	50.0	257627.0	2.225337	Y
8	STD200 280-538548/22	200.0	461.449776	50.0	259778.0	2.307249	Y



Calibration

/ Cyclohexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

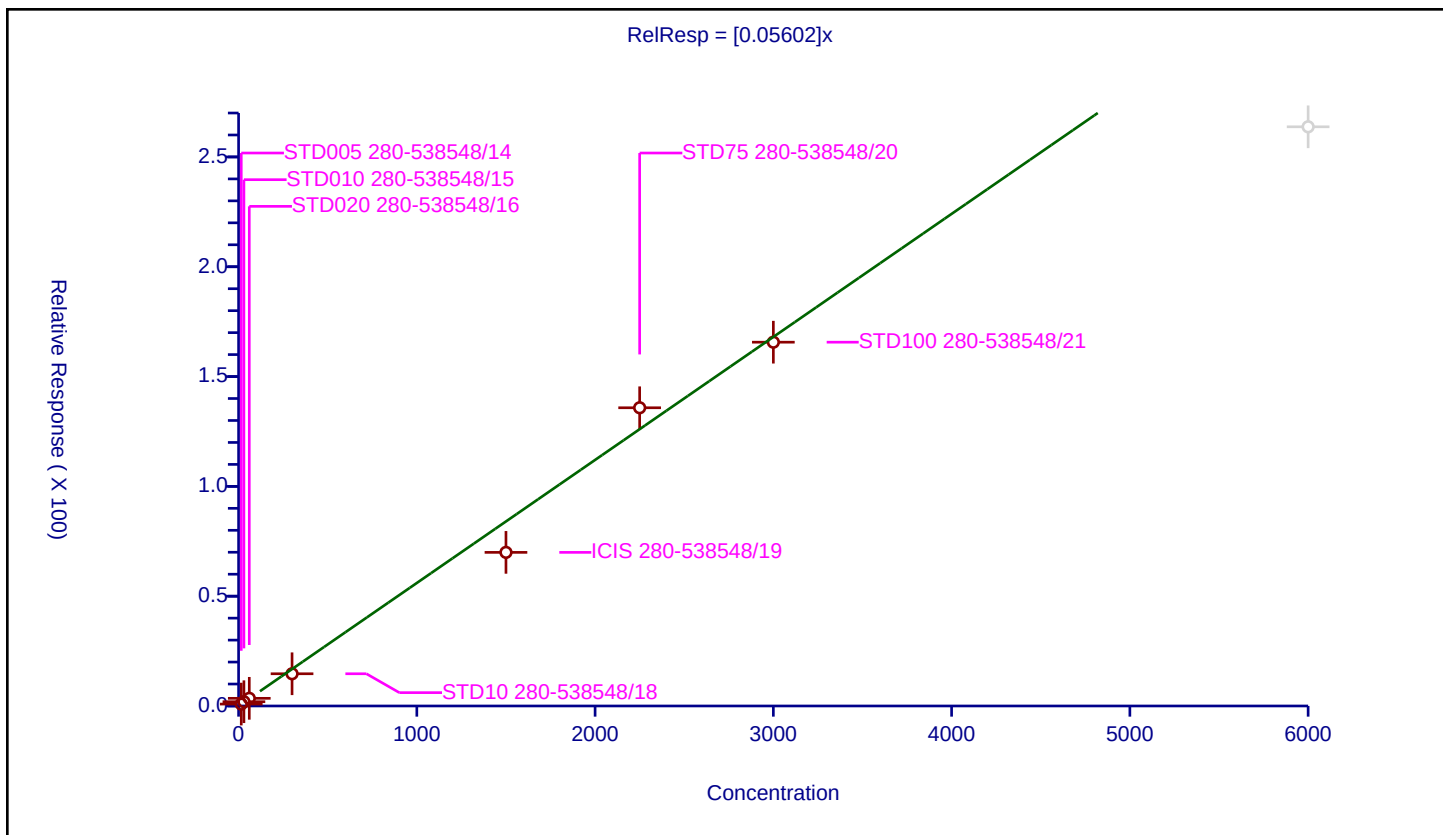
Curve Coefficients

Intercept: 0
 Slope: 0.05602

Error Coefficients

Standard Error: 298000
 Relative Standard Error: 11.4
 Correlation Coefficient: 0.990
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	15.0	0.870368	50.0	154877.0	0.058025	Y
2	STD010 280-538548/15	30.0	1.944016	50.0	156866.0	0.064801	Y
3	STD020 280-538548/16	60.0	3.491395	50.0	153463.0	0.05819	Y
4	STD10 280-538548/18	300.0	14.671826	50.0	158818.0	0.048906	Y
5	ICIS 280-538548/19	1500.0	69.944894	50.0	161871.0	0.04663	Y
6	STD75 280-538548/20	2250.0	135.786373	50.0	162105.0	0.060349	Y
7	STD100 280-538548/21	3000.0	165.653712	50.0	161409.0	0.055218	Y
8	STD200 280-538548/22	6000.0	263.725797	50.0	169094.0	0.043954	N



Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

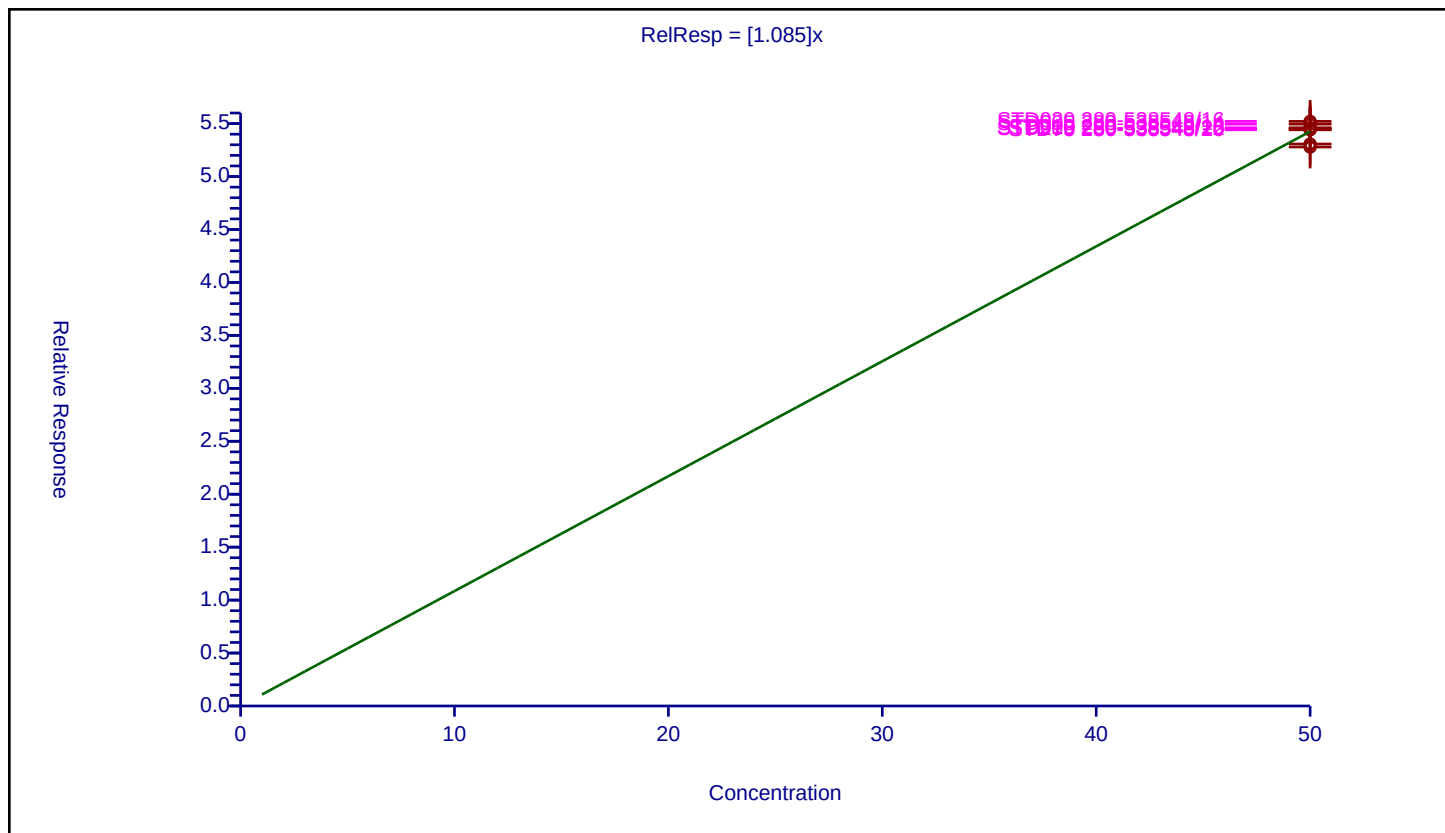
Curve Coefficients

Intercept: 0
 Slope: 1.085

Error Coefficients

Standard Error: 293000
 Relative Standard Error: 1.6
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	54.950031	50.0	245453.0	1.099001	Y
2	STD010 280-538548/15	50.0	54.539134	50.0	250257.0	1.090783	Y
3	STD020 280-538548/16	50.0	55.211873	50.0	242456.0	1.104237	Y
4	STD10 280-538548/18	50.0	54.610191	50.0	249122.0	1.092204	Y
5	ICIS 280-538548/19	50.0	53.072843	50.0	257514.0	1.061457	Y
6	STD75 280-538548/20	50.0	54.416564	50.0	257689.0	1.088331	Y
7	STD100 280-538548/21	50.0	52.785422	50.0	257627.0	1.055708	Y
8	STD200 280-538548/22	50.0	54.443024	50.0	259778.0	1.08886	Y



Calibration

/ 1,1,2,2-Tetrachloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

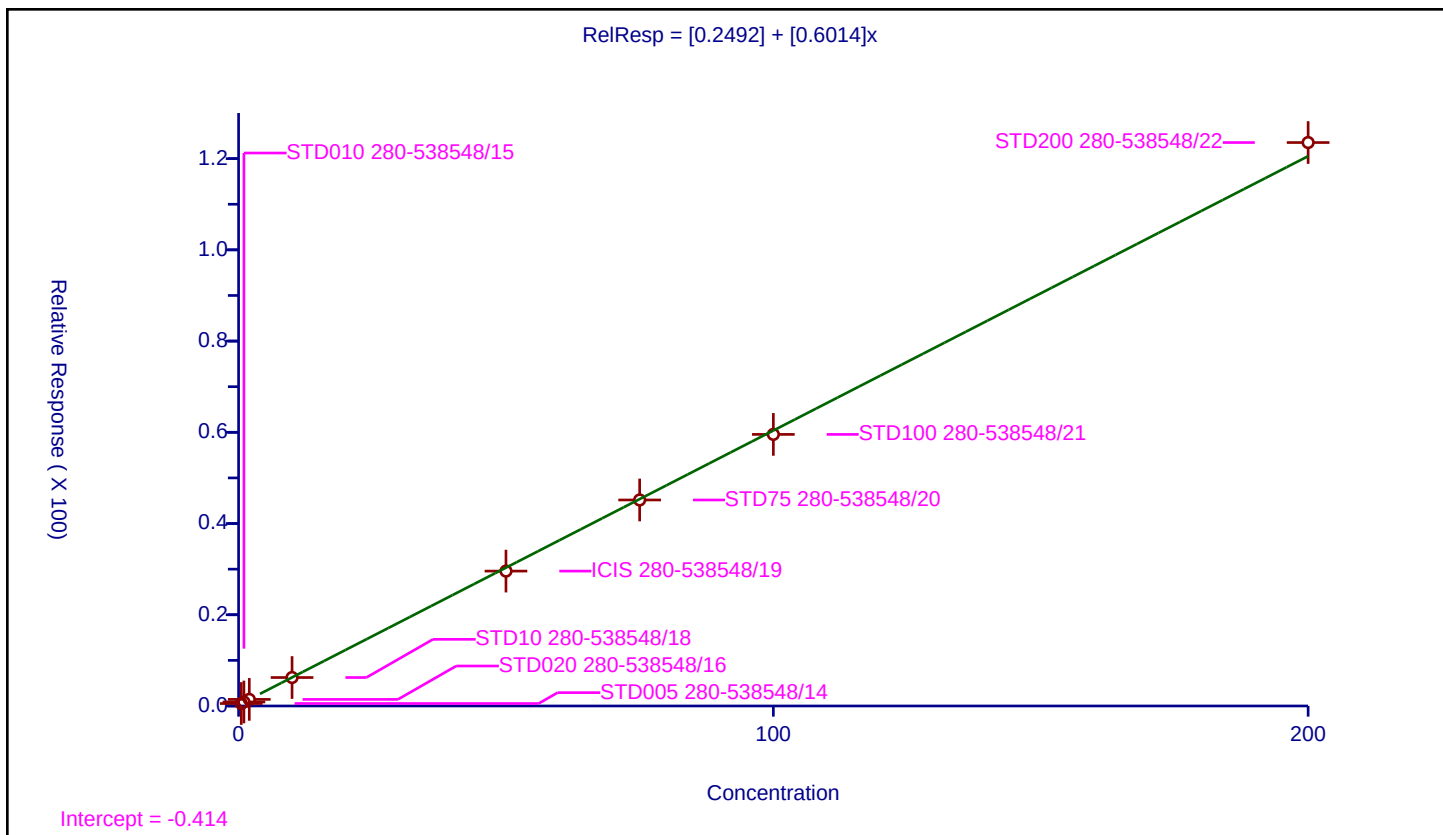
Curve Coefficients

Intercept: 0.2492
 Slope: 0.6014

Error Coefficients

Standard Error: 312000
 Relative Standard Error: 2.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.54267	50.0	245453.0	1.08534	Y
2	STD010 280-538548/15	1.0	0.881893	50.0	250257.0	0.881893	Y
3	STD020 280-538548/16	2.0	1.445004	50.0	242456.0	0.722502	Y
4	STD10 280-538548/18	10.0	6.240517	50.0	249122.0	0.624052	Y
5	ICIS 280-538548/19	50.0	29.575479	50.0	257514.0	0.59151	Y
6	STD75 280-538548/20	75.0	45.166848	50.0	257689.0	0.602225	Y
7	STD100 280-538548/21	100.0	59.54209	50.0	257627.0	0.595421	Y
8	STD200 280-538548/22	200.0	123.525857	50.0	259778.0	0.617629	Y



Calibration

/ Bromobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

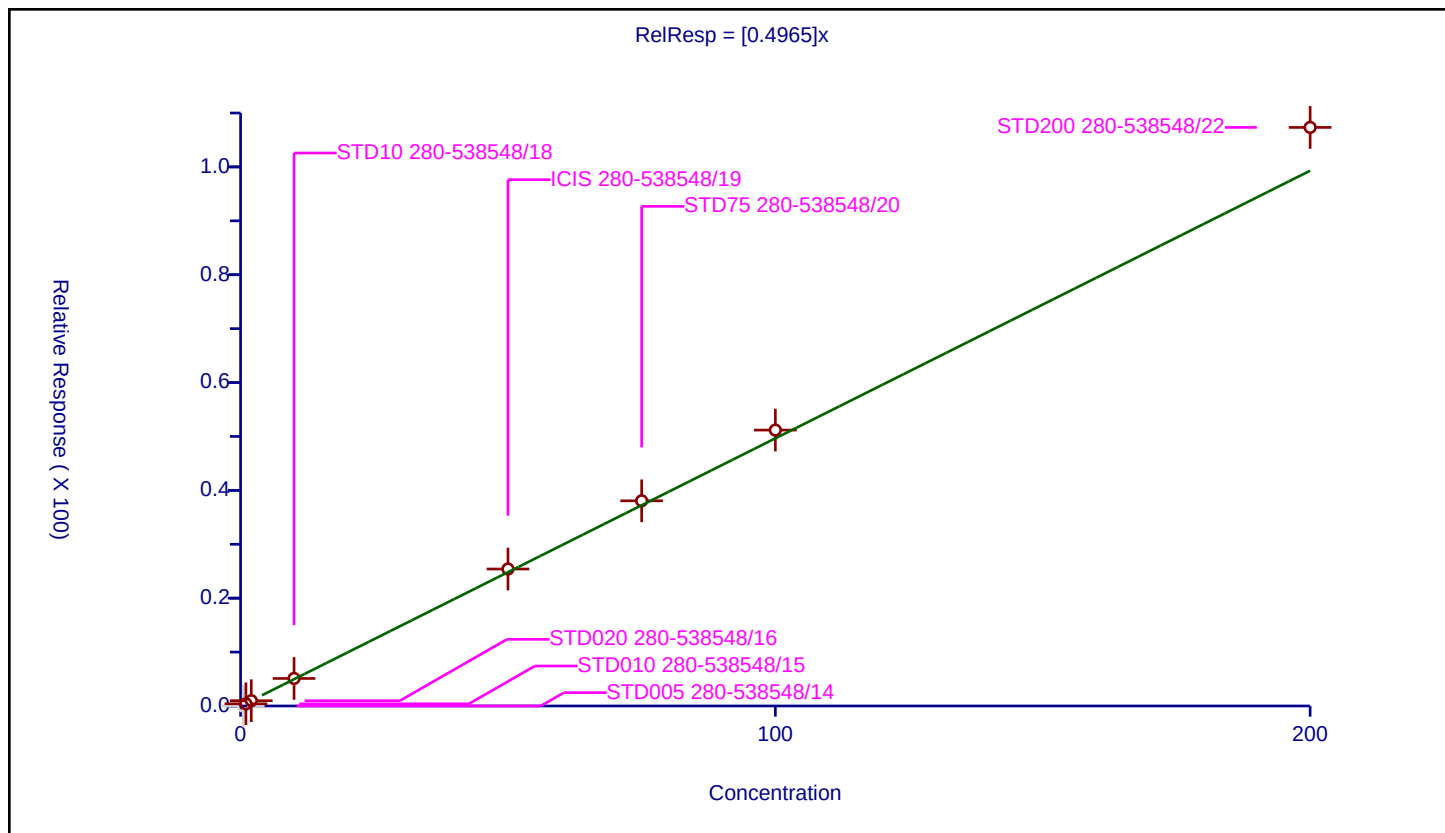
Curve Coefficients

Intercept: 0
 Slope: 0.4965

Error Coefficients

Standard Error: 270000
 Relative Standard Error: 8.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.409379	50.0	250257.0	0.409379	Y
3	STD020 280-538548/16	2.0	0.982446	50.0	242456.0	0.491223	Y
4	STD10 280-538548/18	10.0	5.105932	50.0	249122.0	0.510593	Y
5	ICIS 280-538548/19	50.0	25.408521	50.0	257514.0	0.50817	Y
6	STD75 280-538548/20	75.0	38.061966	50.0	257689.0	0.507493	Y
7	STD100 280-538548/21	100.0	51.181165	50.0	257627.0	0.511812	Y
8	STD200 280-538548/22	200.0	107.329912	50.0	259778.0	0.53665	Y



Calibration

/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

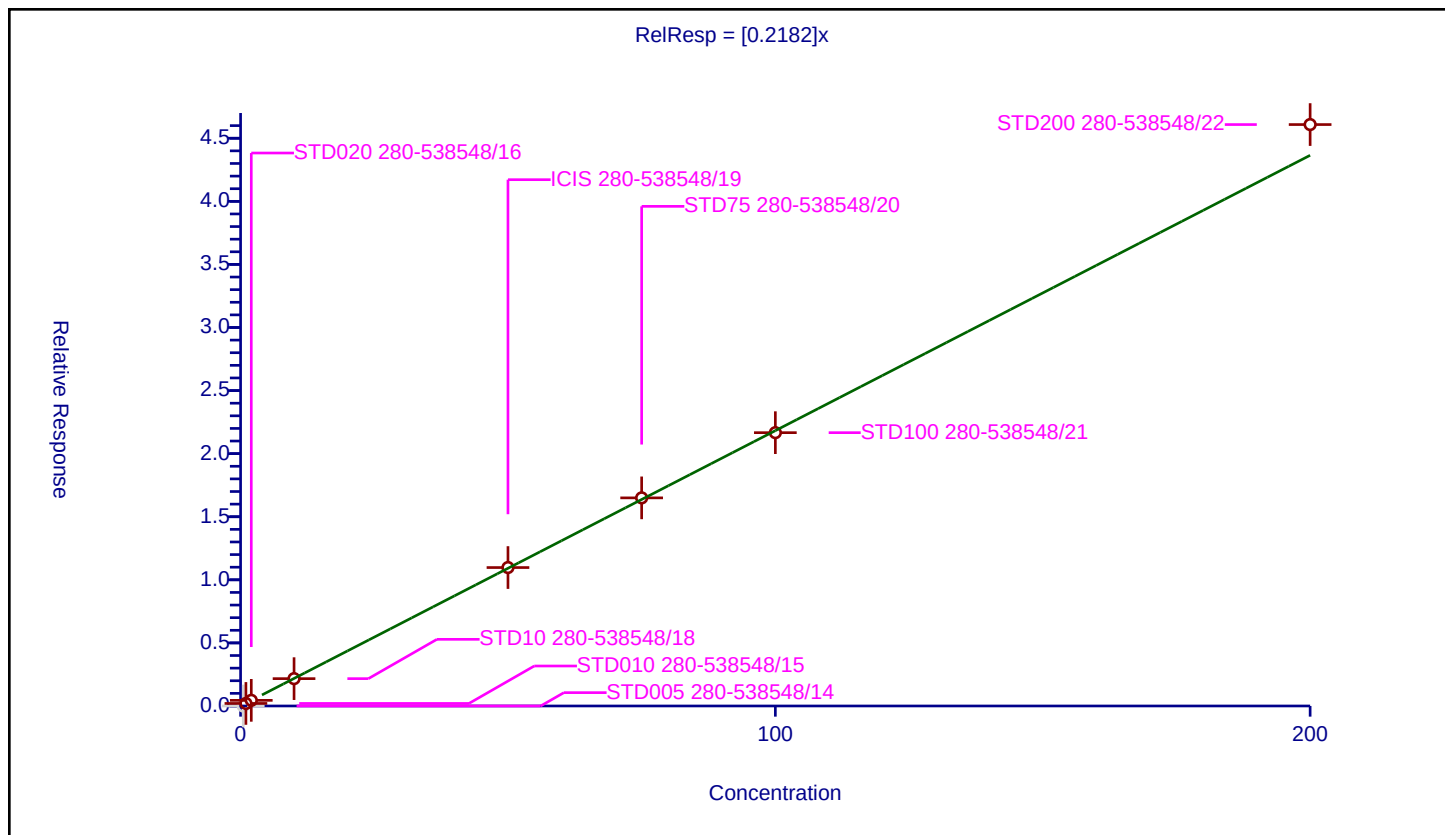
Curve Coefficients

Intercept: 0
 Slope: 0.2182

Error Coefficients

Standard Error: 116000
 Relative Standard Error: 4.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.201393	50.0	250257.0	0.201393	Y
3	STD020 280-538548/16	2.0	0.44606	50.0	242456.0	0.22303	Y
4	STD10 280-538548/18	10.0	2.168014	50.0	249122.0	0.216801	Y
5	ICIS 280-538548/19	50.0	10.973966	50.0	257514.0	0.219479	Y
6	STD75 280-538548/20	75.0	16.495077	50.0	257689.0	0.219934	Y
7	STD100 280-538548/21	100.0	21.663296	50.0	257627.0	0.216633	Y
8	STD200 280-538548/22	200.0	46.085311	50.0	259778.0	0.230427	Y



Calibration

/ 1,2,3-Trichloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

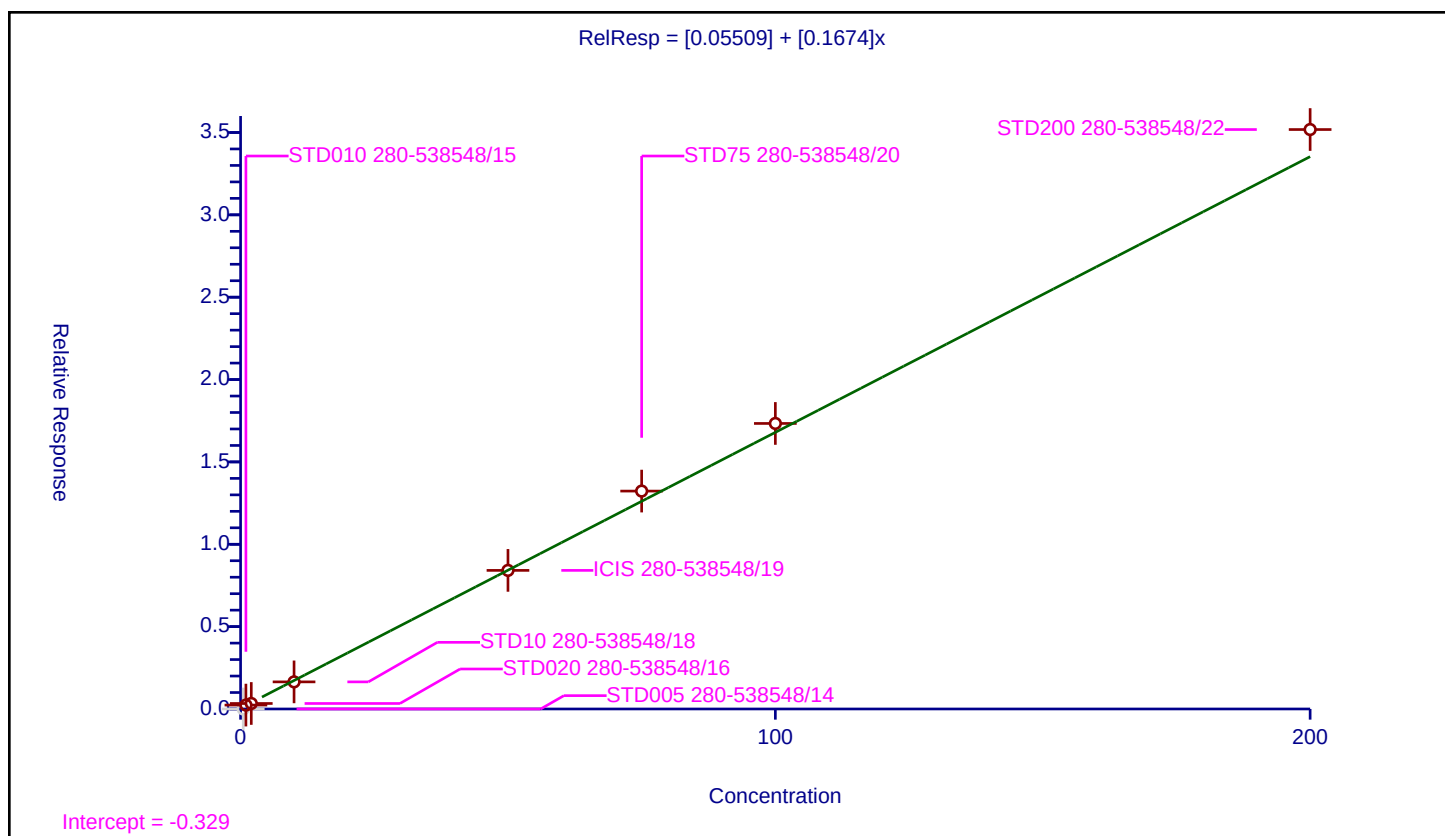
Curve Coefficients

Intercept: 0.05509
 Slope: 0.1674

Error Coefficients

Standard Error: 97900
 Relative Standard Error: 9.4
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.237156	50.0	250257.0	0.237156	Y
3	STD020 280-538548/16	2.0	0.333669	50.0	242456.0	0.166834	Y
4	STD10 280-538548/18	10.0	1.646382	50.0	249122.0	0.164638	Y
5	ICIS 280-538548/19	50.0	8.4143	50.0	257514.0	0.168286	Y
6	STD75 280-538548/20	75.0	13.229901	50.0	257689.0	0.176399	Y
7	STD100 280-538548/21	100.0	17.334945	50.0	257627.0	0.173349	Y
8	STD200 280-538548/22	200.0	35.178499	50.0	259778.0	0.175892	Y



Calibration

/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

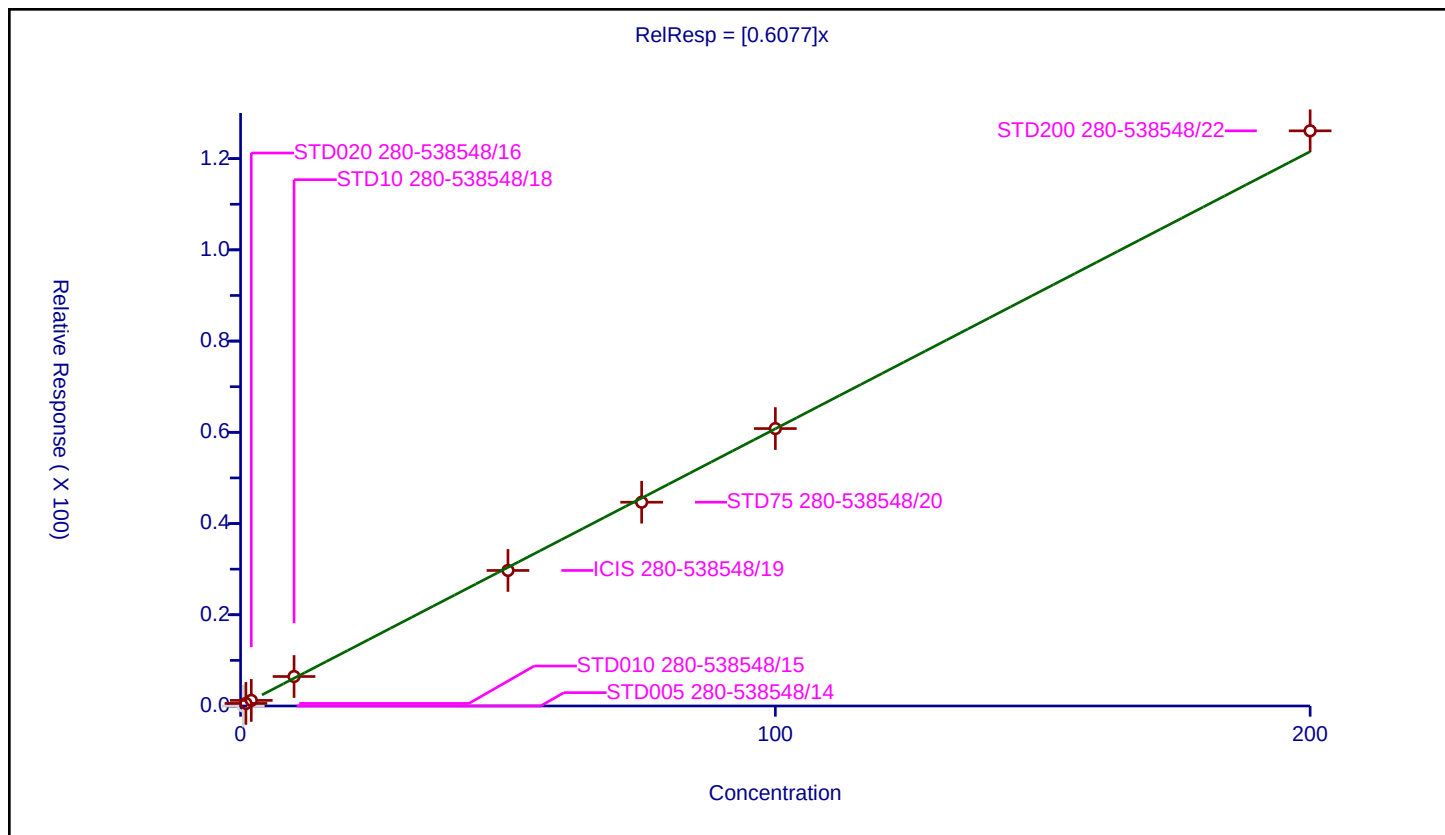
Curve Coefficients

Intercept: 0
 Slope: 0.6077

Error Coefficients

Standard Error: 317000
 Relative Standard Error: 4.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.566418	50.0	250257.0	0.566418	Y
3	STD020 280-538548/16	2.0	1.225377	50.0	242456.0	0.612688	Y
4	STD10 280-538548/18	10.0	6.462095	50.0	249122.0	0.646209	Y
5	ICIS 280-538548/19	50.0	29.714501	50.0	257514.0	0.59429	Y
6	STD75 280-538548/20	75.0	44.67323	50.0	257689.0	0.595643	Y
7	STD100 280-538548/21	100.0	60.819518	50.0	257627.0	0.608195	Y
8	STD200 280-538548/22	200.0	126.092664	50.0	259778.0	0.630463	Y



Calibration

/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

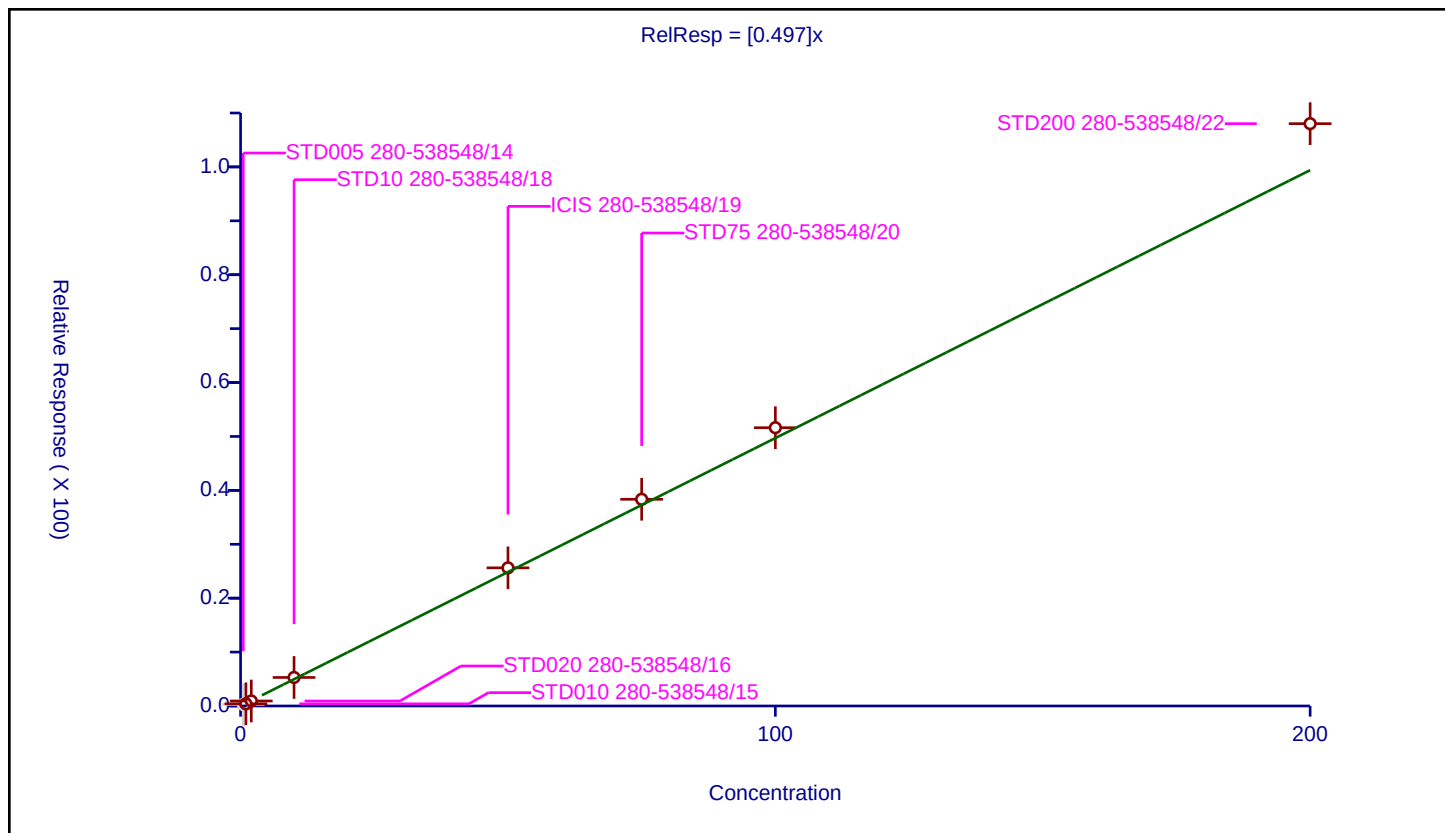
Curve Coefficients

Intercept: 0
 Slope: 0.497

Error Coefficients

Standard Error: 272000
 Relative Standard Error: 9.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.288039	50.0	245453.0	0.576078	N
2	STD010 280-538548/15	1.0	0.405183	50.0	250257.0	0.405183	Y
3	STD020 280-538548/16	2.0	0.92821	50.0	242456.0	0.464105	Y
4	STD10 280-538548/18	10.0	5.292788	50.0	249122.0	0.529279	Y
5	ICIS 280-538548/19	50.0	25.62618	50.0	257514.0	0.512524	Y
6	STD75 280-538548/20	75.0	38.345059	50.0	257689.0	0.511267	Y
7	STD100 280-538548/21	100.0	51.624053	50.0	257627.0	0.516241	Y
8	STD200 280-538548/22	200.0	108.023967	50.0	259778.0	0.54012	Y



Calibration

/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

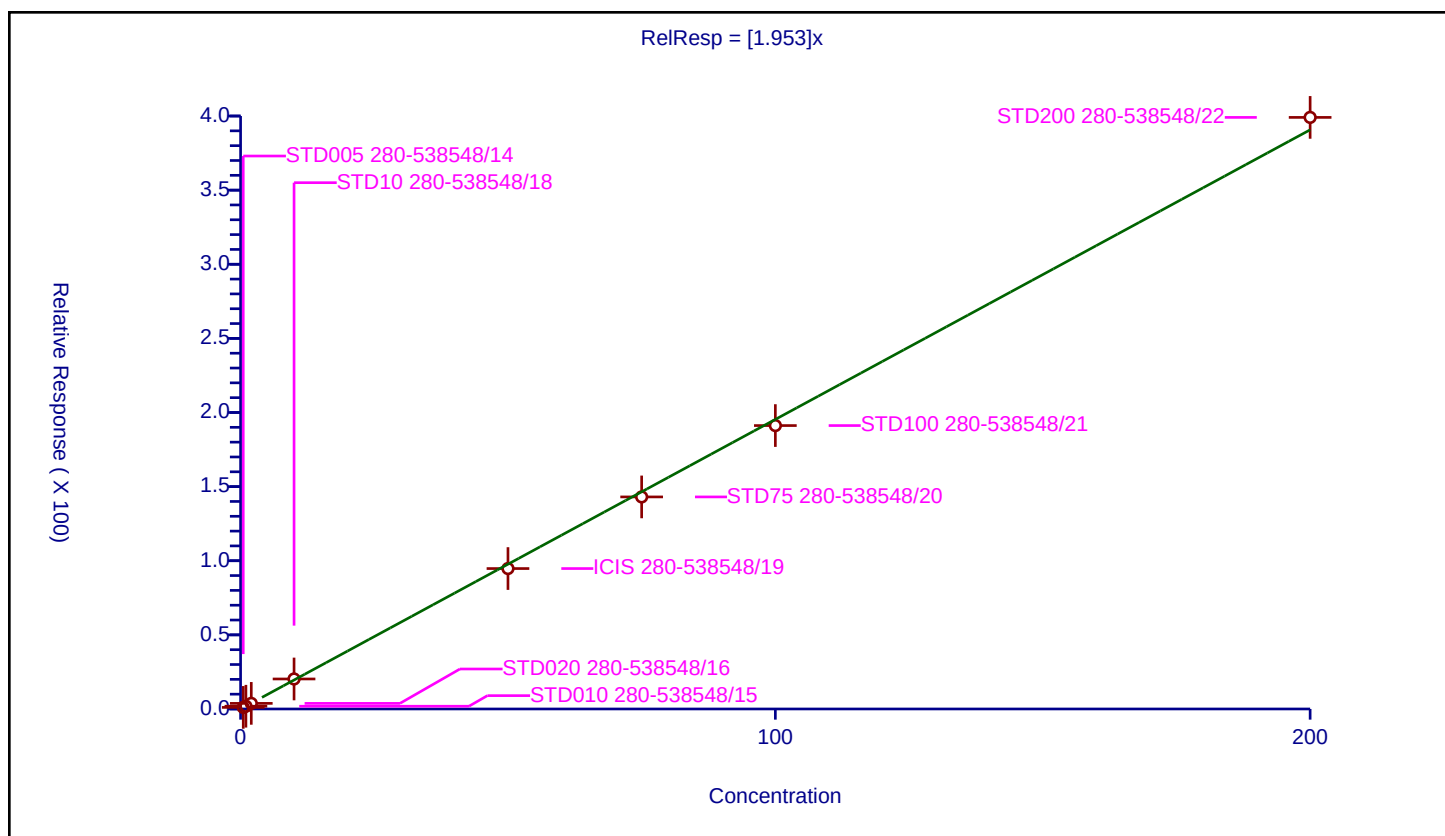
Curve Coefficients

Intercept: 0
 Slope: 1.953

Error Coefficients

Standard Error: 930000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.067414	50.0	245453.0	2.134828	Y
2	STD010 280-538548/15	1.0	1.86748	50.0	250257.0	1.86748	Y
3	STD020 280-538548/16	2.0	3.783367	50.0	242456.0	1.891683	Y
4	STD10 280-538548/18	10.0	20.237875	50.0	249122.0	2.023788	Y
5	ICIS 280-538548/19	50.0	94.744946	50.0	257514.0	1.894899	Y
6	STD75 280-538548/20	75.0	143.056165	50.0	257689.0	1.907416	Y
7	STD100 280-538548/21	100.0	191.181049	50.0	257627.0	1.91181	Y
8	STD200 280-538548/22	200.0	399.060736	50.0	259778.0	1.995304	Y



Calibration

/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

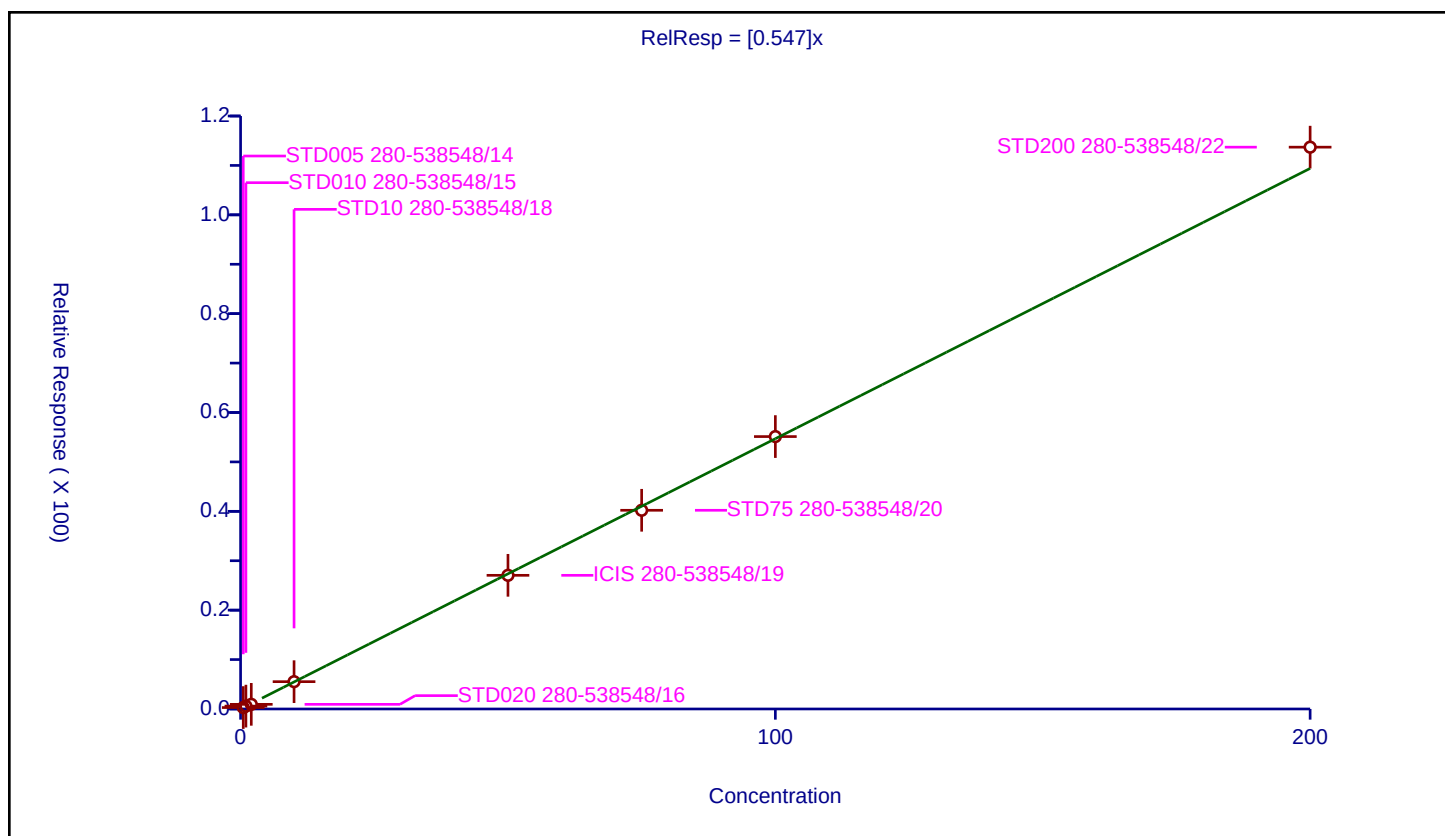
Curve Coefficients

Intercept: 0
 Slope: 0.547

Error Coefficients

Standard Error: 265000
 Relative Standard Error: 6.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.288446	50.0	245453.0	0.576893	Y
2	STD010 280-538548/15	1.0	0.578206	50.0	250257.0	0.578206	Y
3	STD020 280-538548/16	2.0	0.942027	50.0	242456.0	0.471013	Y
4	STD10 280-538548/18	10.0	5.528617	50.0	249122.0	0.552862	Y
5	ICIS 280-538548/19	50.0	27.049986	50.0	257514.0	0.541	Y
6	STD75 280-538548/20	75.0	40.210098	50.0	257689.0	0.536135	Y
7	STD100 280-538548/21	100.0	55.125627	50.0	257627.0	0.551256	Y
8	STD200 280-538548/22	200.0	113.696502	50.0	259778.0	0.568483	Y



Calibration

/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

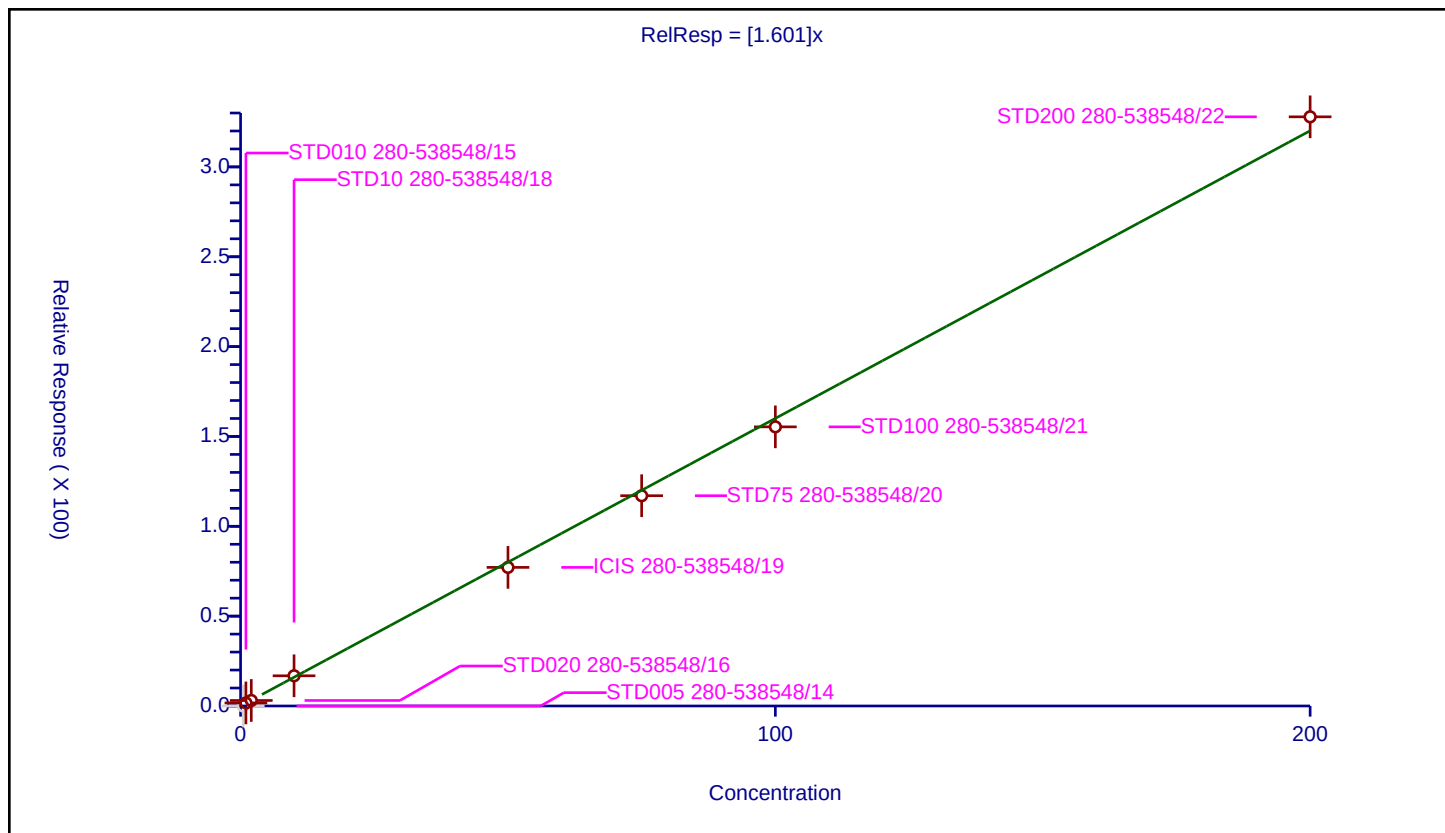
Curve Coefficients

Intercept: 0
 Slope: 1.601

Error Coefficients

Standard Error: 824000
 Relative Standard Error: 4.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	1.69286	50.0	250257.0	1.69286	Y
3	STD020 280-538548/16	2.0	3.06901	50.0	242456.0	1.534505	Y
4	STD10 280-538548/18	10.0	16.811442	50.0	249122.0	1.681144	Y
5	ICIS 280-538548/19	50.0	77.130758	50.0	257514.0	1.542615	Y
6	STD75 280-538548/20	75.0	117.017024	50.0	257689.0	1.560227	Y
7	STD100 280-538548/21	100.0	155.339697	50.0	257627.0	1.553397	Y
8	STD200 280-538548/22	200.0	327.870335	50.0	259778.0	1.639352	Y



Calibration

/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

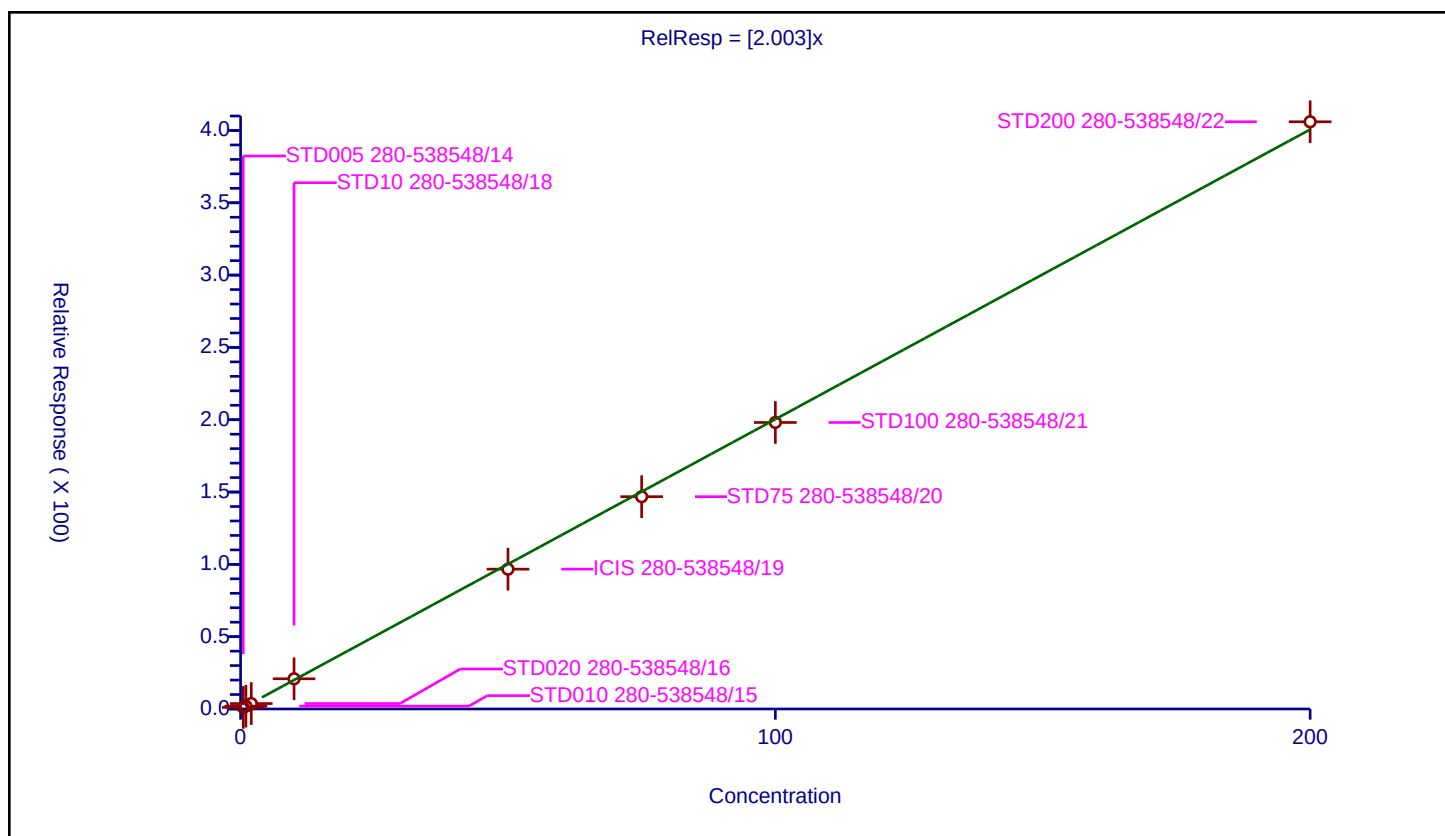
Curve Coefficients

Intercept: 0
 Slope: 2.003

Error Coefficients

Standard Error: 950000
 Relative Standard Error: 5.1
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.10184	50.0	245453.0	2.203681	Y
2	STD010 280-538548/15	1.0	1.960585	50.0	250257.0	1.960585	Y
3	STD020 280-538548/16	2.0	3.745009	50.0	242456.0	1.872505	Y
4	STD10 280-538548/18	10.0	20.881536	50.0	249122.0	2.088154	Y
5	ICIS 280-538548/19	50.0	96.677656	50.0	257514.0	1.933553	Y
6	STD75 280-538548/20	75.0	146.788571	50.0	257689.0	1.957181	Y
7	STD100 280-538548/21	100.0	198.102101	50.0	257627.0	1.981021	Y
8	STD200 280-538548/22	200.0	406.011864	50.0	259778.0	2.030059	Y



Calibration

/ sec-Butylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

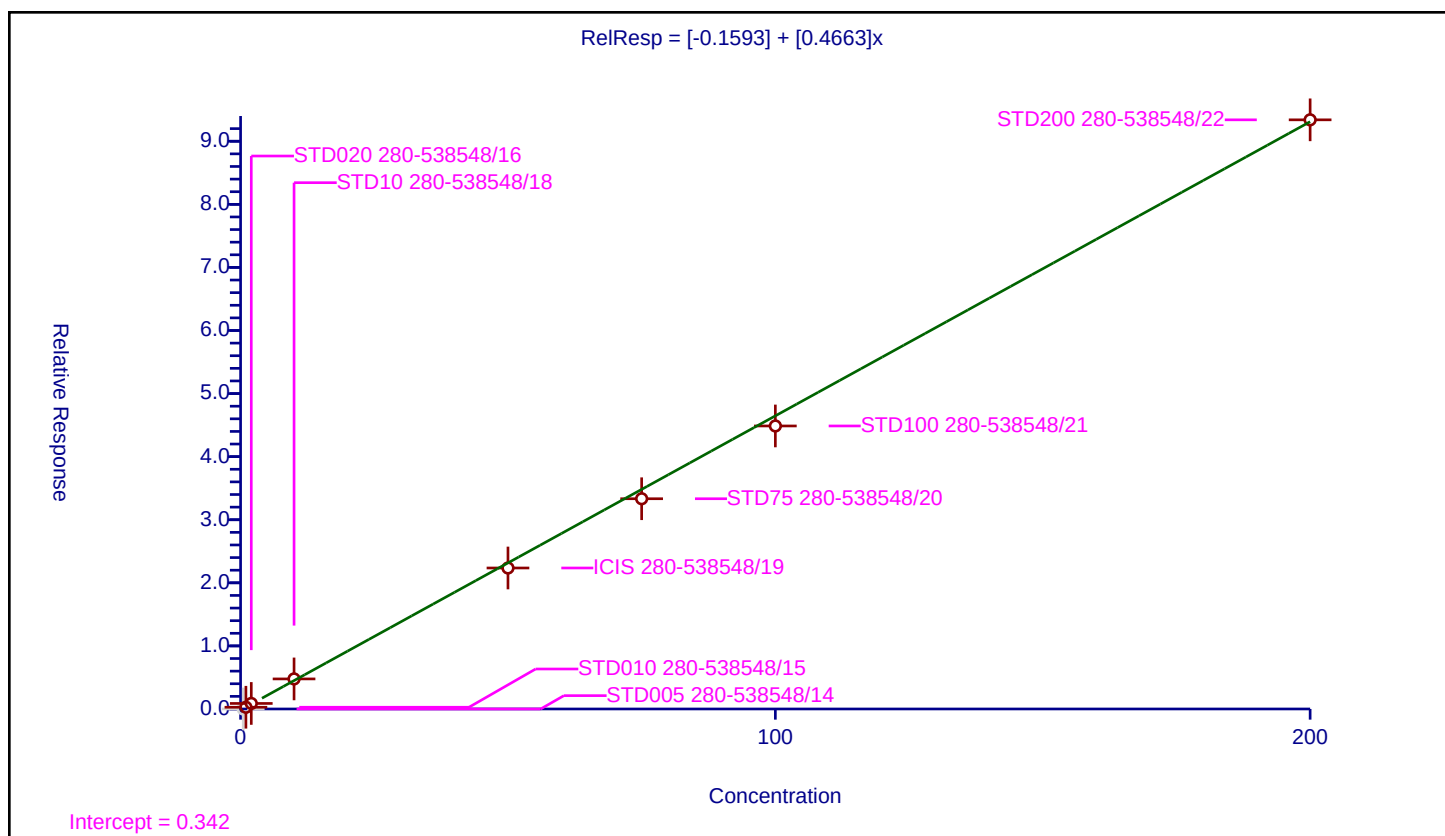
Curve Coefficients

Intercept: -0.1593
 Slope: 0.4663

Error Coefficients

Standard Error: 258000
 Relative Standard Error: 6.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.278913	50.0	250257.0	0.278913	Y
3	STD020 280-538548/16	2.0	0.878304	50.0	242456.0	0.439152	Y
4	STD10 280-538548/18	10.0	4.764332	50.0	249122.0	0.476433	Y
5	ICIS 280-538548/19	50.0	22.349853	50.0	257514.0	0.446997	Y
6	STD75 280-538548/20	75.0	33.329129	50.0	257689.0	0.444388	Y
7	STD100 280-538548/21	100.0	44.865251	50.0	257627.0	0.448653	Y
8	STD200 280-538548/22	200.0	93.397247	50.0	259778.0	0.466986	Y



Calibration

/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

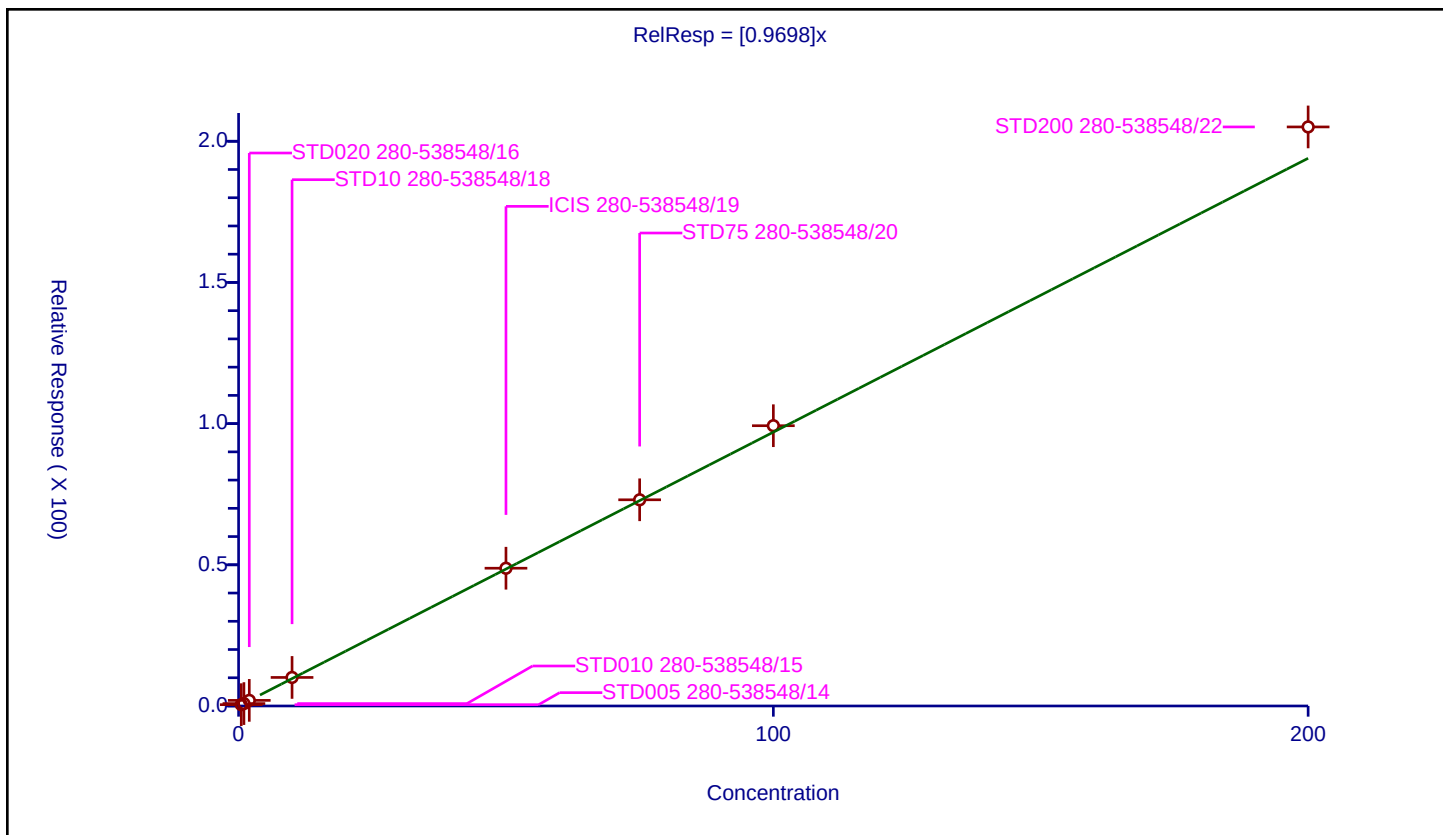
Curve Coefficients

Intercept: 0
 Slope: 0.9698

Error Coefficients

Standard Error: 479000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.464855	50.0	245453.0	0.92971	Y
2	STD010 280-538548/15	1.0	0.85592	50.0	250257.0	0.85592	Y
3	STD020 280-538548/16	2.0	1.988814	50.0	242456.0	0.994407	Y
4	STD10 280-538548/18	10.0	10.113719	50.0	249122.0	1.011372	Y
5	ICIS 280-538548/19	50.0	48.78725	50.0	257514.0	0.975745	Y
6	STD75 280-538548/20	75.0	73.024266	50.0	257689.0	0.973657	Y
7	STD100 280-538548/21	100.0	99.255707	50.0	257627.0	0.992557	Y
8	STD200 280-538548/22	200.0	205.074333	50.0	259778.0	1.025372	Y



Calibration

/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

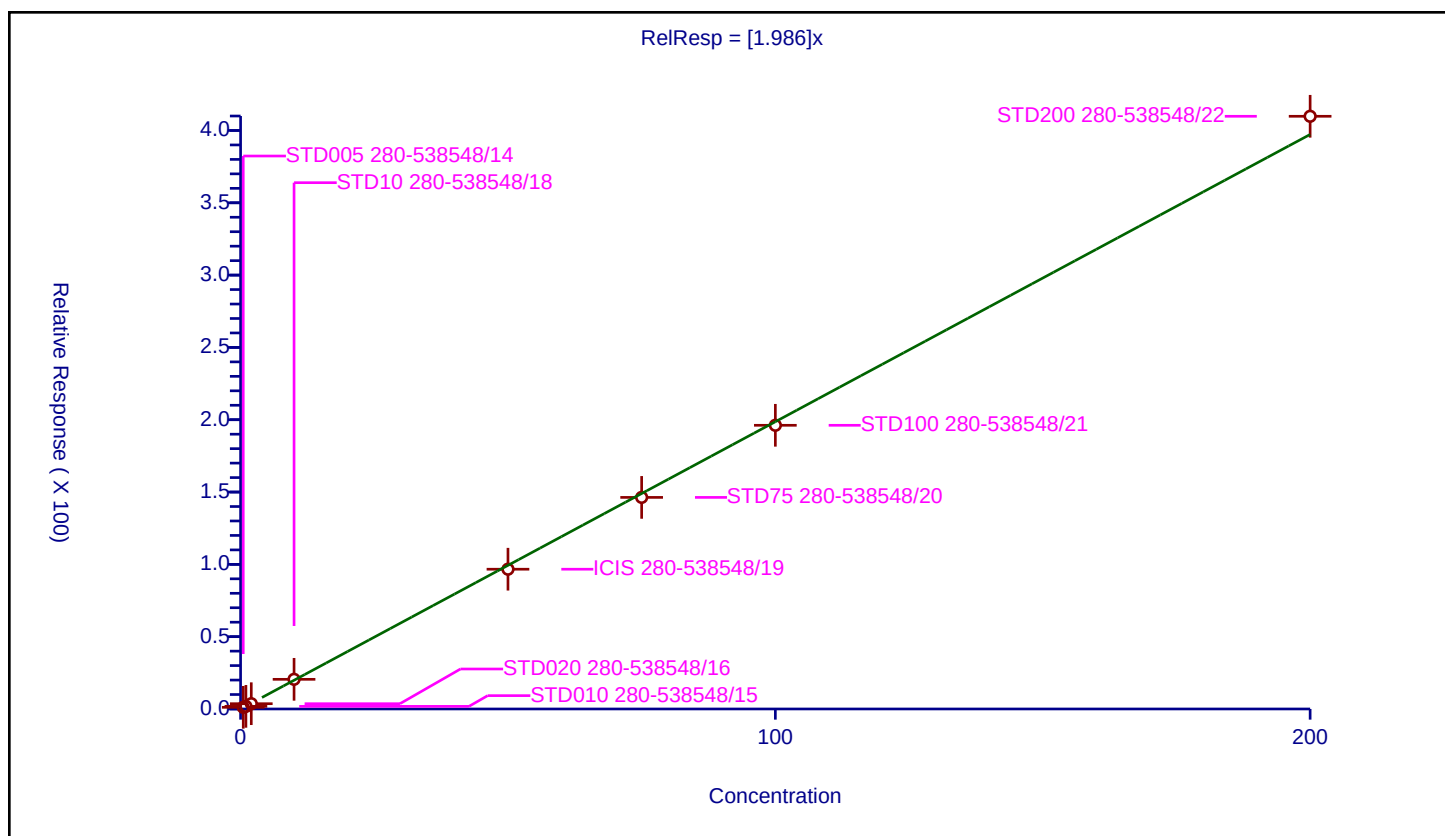
Curve Coefficients

Intercept: 0
 Slope: 1.986

Error Coefficients

Standard Error: 955000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.150933	50.0	245453.0	2.301866	Y
2	STD010 280-538548/15	1.0	1.80894	50.0	250257.0	1.80894	Y
3	STD020 280-538548/16	2.0	3.668088	50.0	242456.0	1.834044	Y
4	STD10 280-538548/18	10.0	20.507623	50.0	249122.0	2.050762	Y
5	ICIS 280-538548/19	50.0	96.650279	50.0	257514.0	1.933006	Y
6	STD75 280-538548/20	75.0	146.297863	50.0	257689.0	1.950638	Y
7	STD100 280-538548/21	100.0	196.162281	50.0	257627.0	1.961623	Y
8	STD200 280-538548/22	200.0	409.813957	50.0	259778.0	2.04907	Y



Calibration

/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

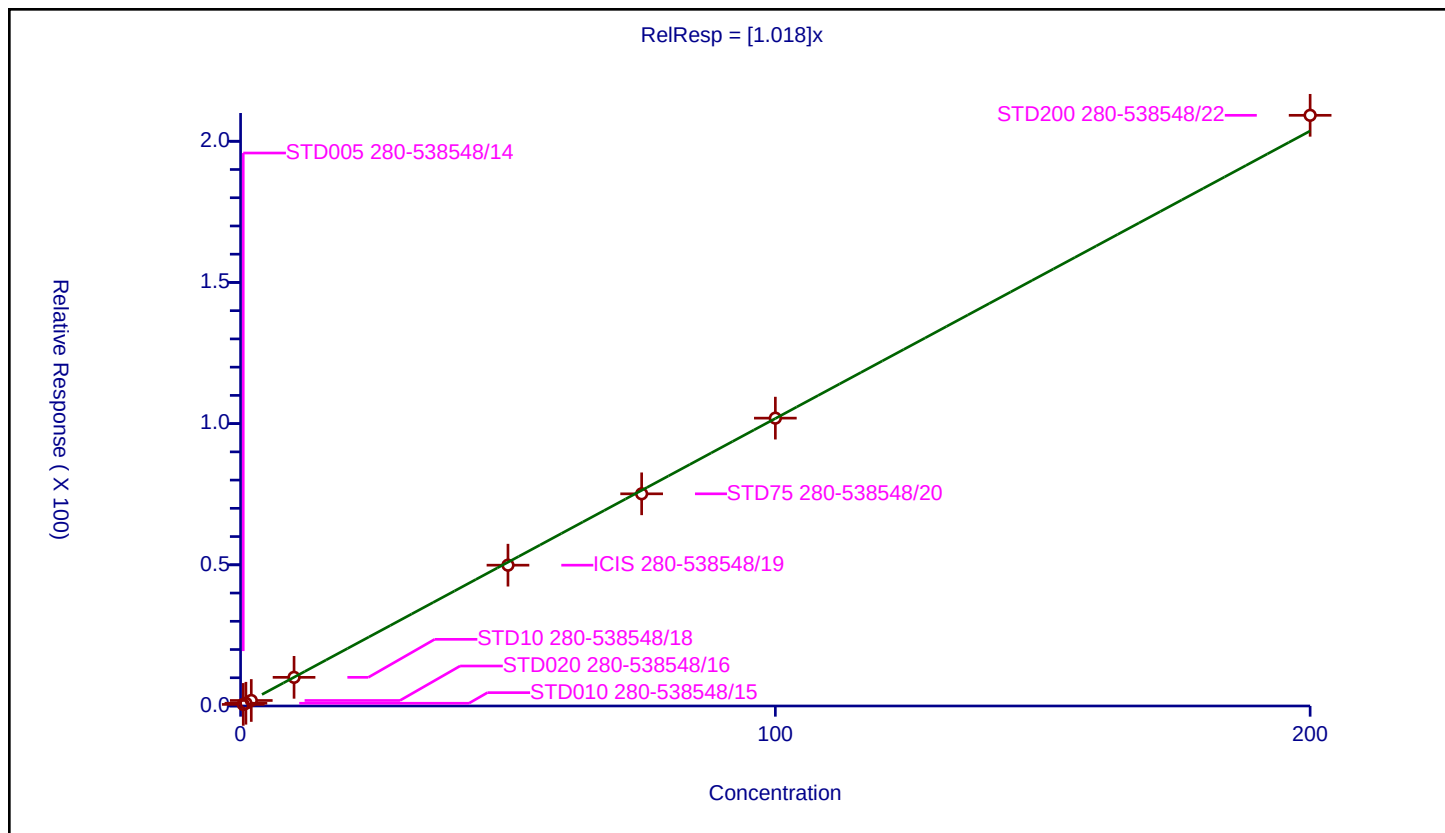
Curve Coefficients

Intercept: 0
 Slope: 1.018

Error Coefficients

Standard Error: 489000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.560392	50.0	245453.0	1.120785	Y
2	STD010 280-538548/15	1.0	0.9724	50.0	250257.0	0.9724	Y
3	STD020 280-538548/16	2.0	1.947157	50.0	242456.0	0.973579	Y
4	STD10 280-538548/18	10.0	10.144227	50.0	249122.0	1.014423	Y
5	ICIS 280-538548/19	50.0	49.86991	50.0	257514.0	0.997398	Y
6	STD75 280-538548/20	75.0	75.140964	50.0	257689.0	1.00188	Y
7	STD100 280-538548/21	100.0	101.940596	50.0	257627.0	1.019406	Y
8	STD200 280-538548/22	200.0	209.191694	50.0	259778.0	1.045958	Y



Calibration

/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

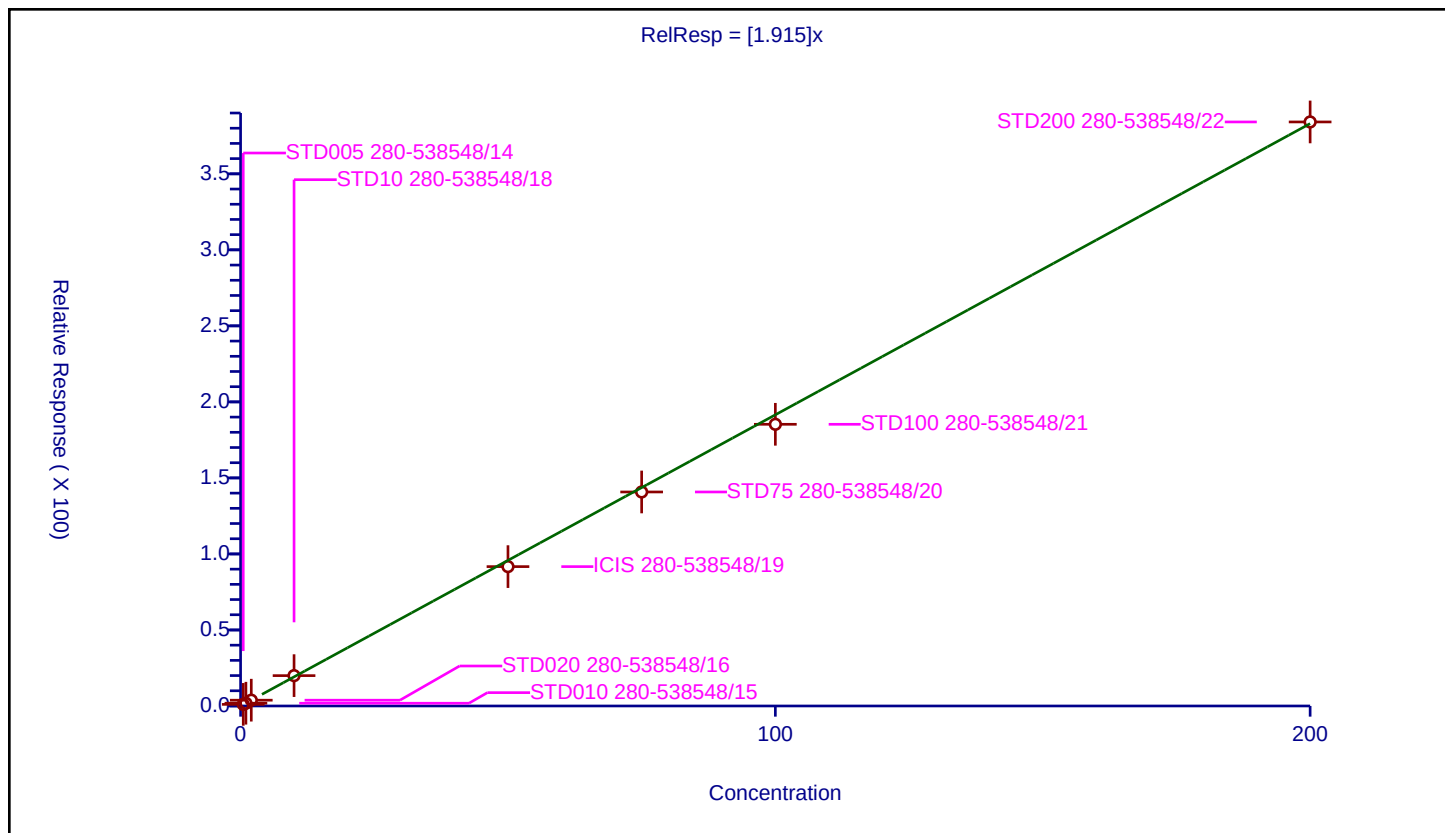
Curve Coefficients

Intercept: 0
 Slope: 1.915

Error Coefficients

Standard Error: 899000
 Relative Standard Error: 5.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.059062	50.0	245453.0	2.118124	Y
2	STD010 280-538548/15	1.0	1.813735	50.0	250257.0	1.813735	Y
3	STD020 280-538548/16	2.0	3.818631	50.0	242456.0	1.909316	Y
4	STD10 280-538548/18	10.0	19.96572	50.0	249122.0	1.996572	Y
5	ICIS 280-538548/19	50.0	91.673851	50.0	257514.0	1.833477	Y
6	STD75 280-538548/20	75.0	140.756881	50.0	257689.0	1.876758	Y
7	STD100 280-538548/21	100.0	185.2727	50.0	257627.0	1.852727	Y
8	STD200 280-538548/22	200.0	384.128371	50.0	259778.0	1.920642	Y



Calibration

/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

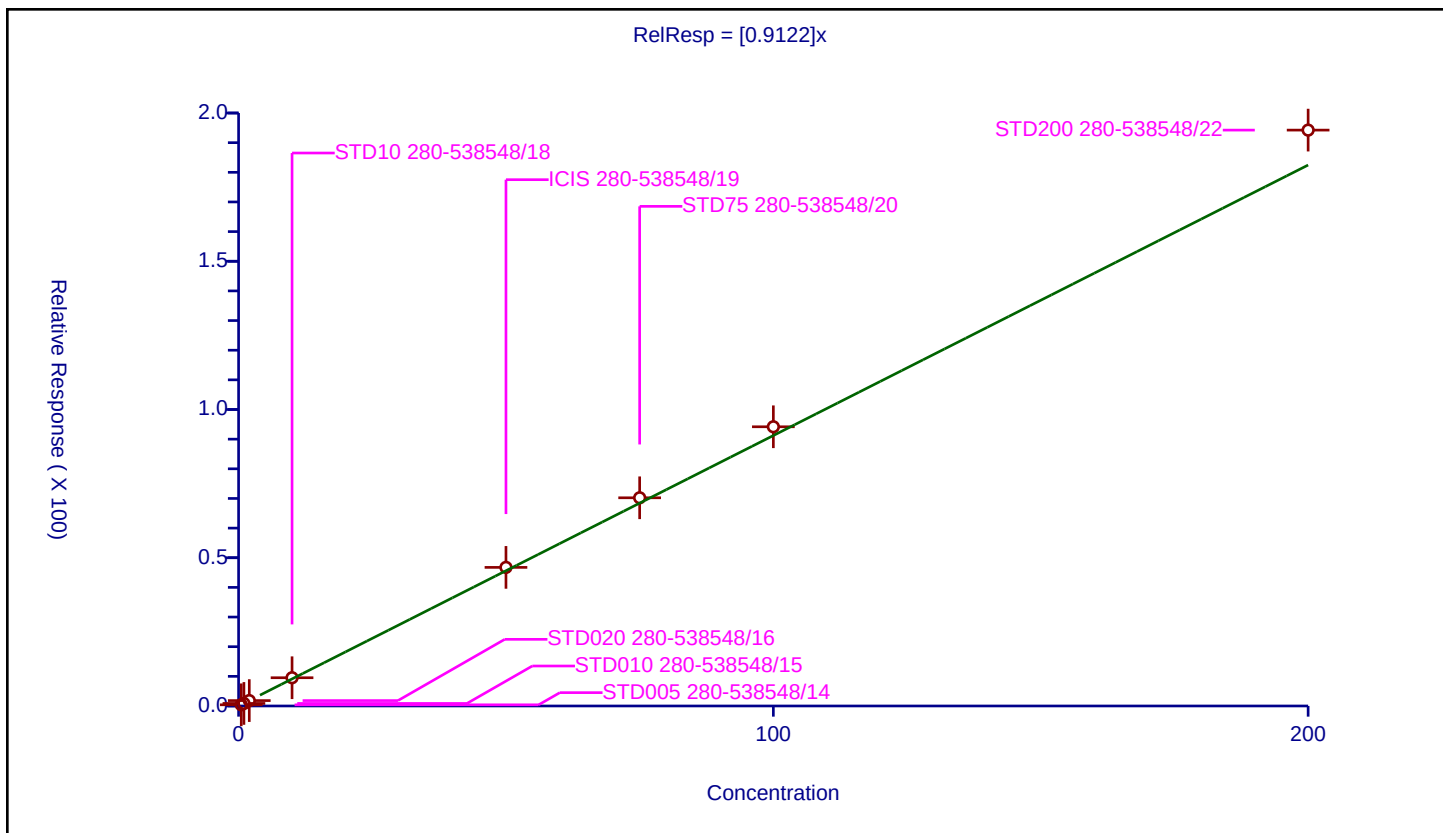
Curve Coefficients

Intercept: 0
 Slope: 0.9122

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 6.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.396206	50.0	245453.0	0.792412	Y
2	STD010 280-538548/15	1.0	0.85592	50.0	250257.0	0.85592	Y
3	STD020 280-538548/16	2.0	1.824249	50.0	242456.0	0.912124	Y
4	STD10 280-538548/18	10.0	9.532277	50.0	249122.0	0.953228	Y
5	ICIS 280-538548/19	50.0	46.751245	50.0	257514.0	0.935025	Y
6	STD75 280-538548/20	75.0	70.223797	50.0	257689.0	0.936317	Y
7	STD100 280-538548/21	100.0	94.177629	50.0	257627.0	0.941776	Y
8	STD200 280-538548/22	200.0	194.238157	50.0	259778.0	0.971191	Y



Calibration

/ 1,2-Dibromo-3-Chloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

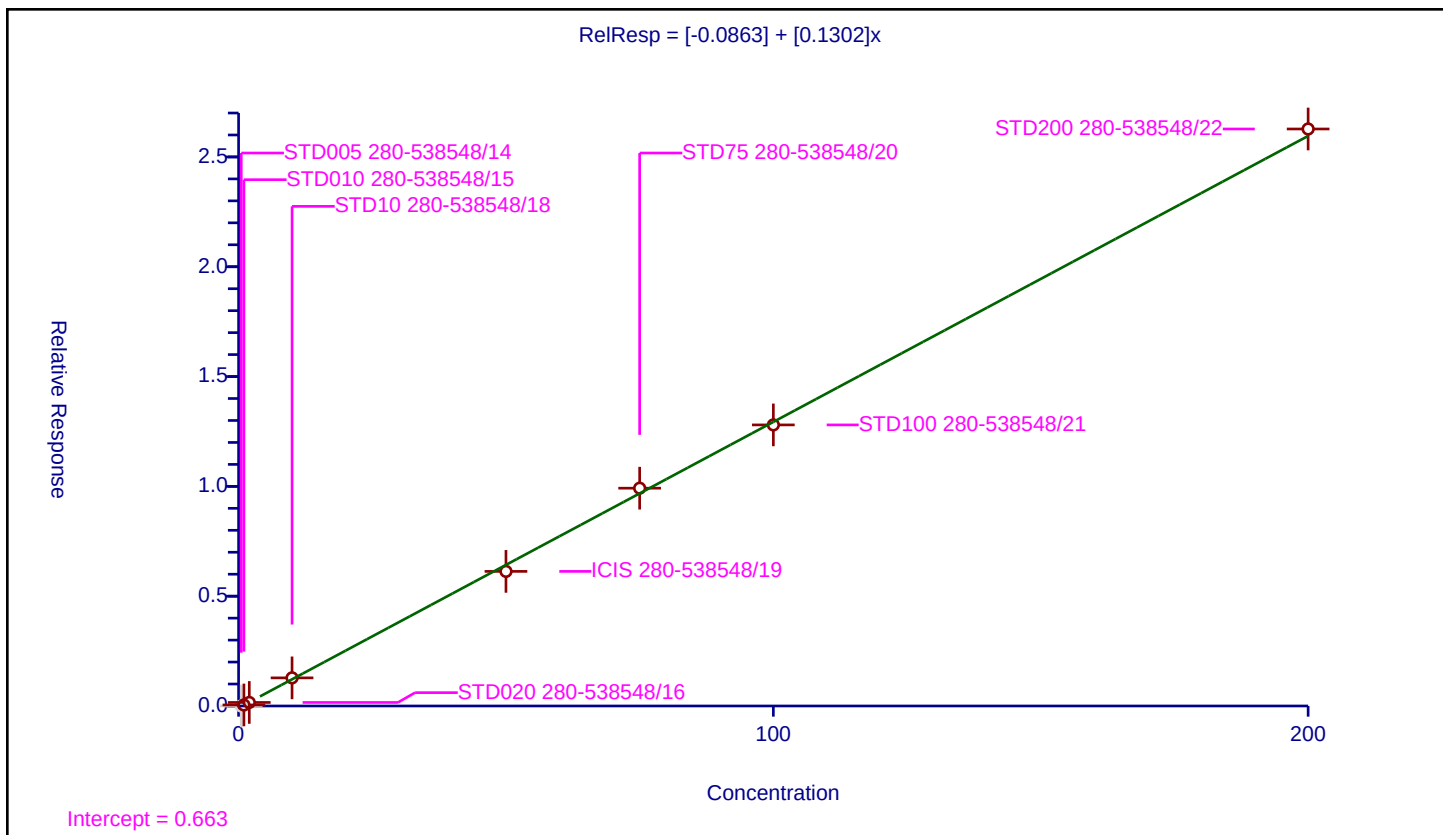
Curve Coefficients

Intercept: -0.0863
 Slope: 0.1302

Error Coefficients

Standard Error: 73000
 Relative Standard Error: 4.2
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.046752	50.0	250257.0	0.046752	Y
3	STD020 280-538548/16	2.0	0.160441	50.0	242456.0	0.080221	Y
4	STD10 280-538548/18	10.0	1.280698	50.0	249122.0	0.12807	Y
5	ICIS 280-538548/19	50.0	6.128405	50.0	257514.0	0.122568	Y
6	STD75 280-538548/20	75.0	9.917187	50.0	257689.0	0.132229	Y
7	STD100 280-538548/21	100.0	12.798736	50.0	257627.0	0.127987	Y
8	STD200 280-538548/22	200.0	26.272818	50.0	259778.0	0.131364	Y



Calibration

/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

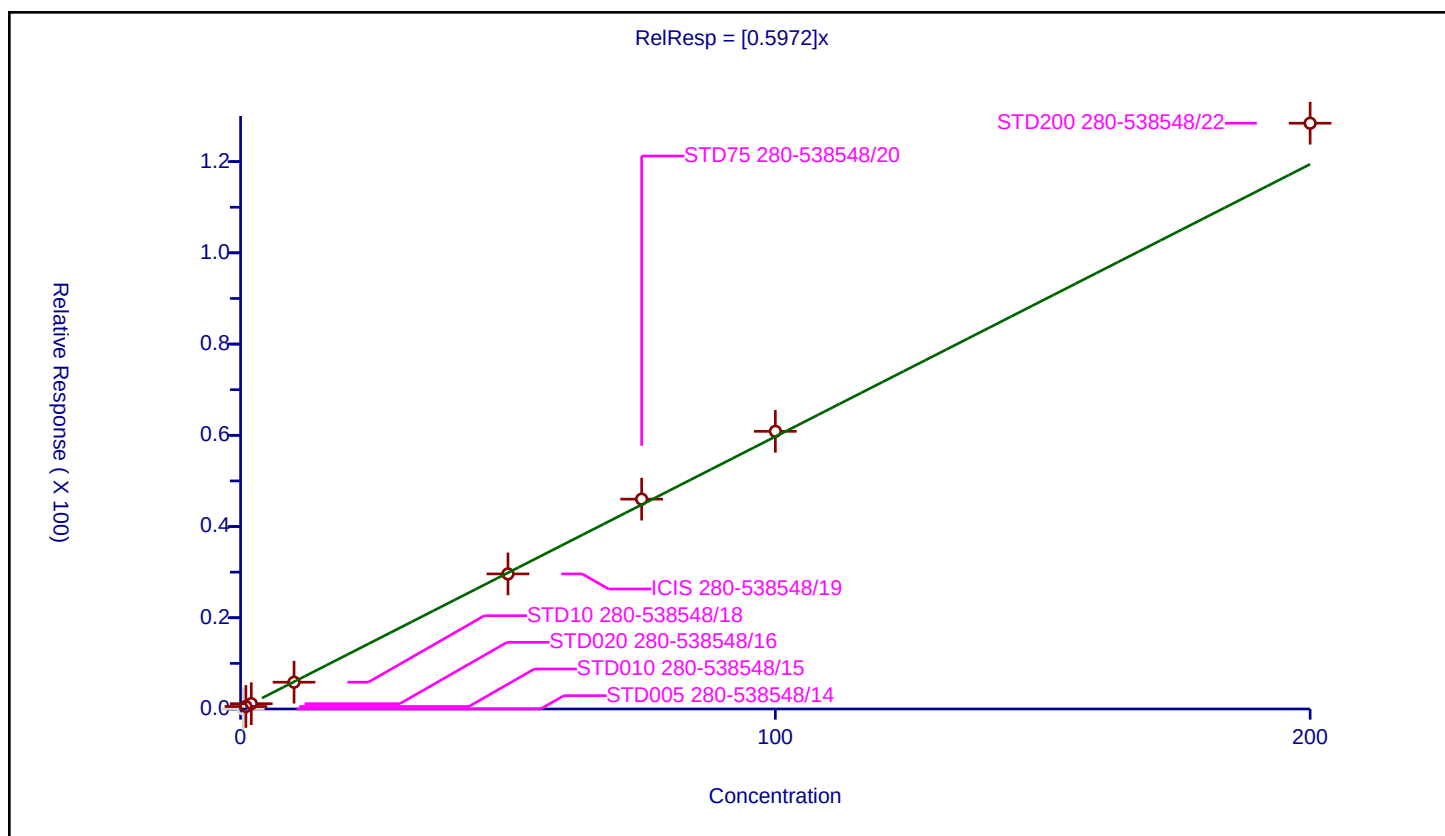
Curve Coefficients

Intercept: 0
 Slope: 0.5972

Error Coefficients

Standard Error: 322000
 Relative Standard Error: 4.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.553431	50.0	250257.0	0.553431	Y
3	STD020 280-538548/16	2.0	1.165572	50.0	242456.0	0.582786	Y
4	STD10 280-538548/18	10.0	5.872424	50.0	249122.0	0.587242	Y
5	ICIS 280-538548/19	50.0	29.614895	50.0	257514.0	0.592298	Y
6	STD75 280-538548/20	75.0	46.008173	50.0	257689.0	0.613442	Y
7	STD100 280-538548/21	100.0	60.876189	50.0	257627.0	0.608762	Y
8	STD200 280-538548/22	200.0	128.420036	50.0	259778.0	0.6421	Y



Calibration

/ Hexachlorobutadiene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

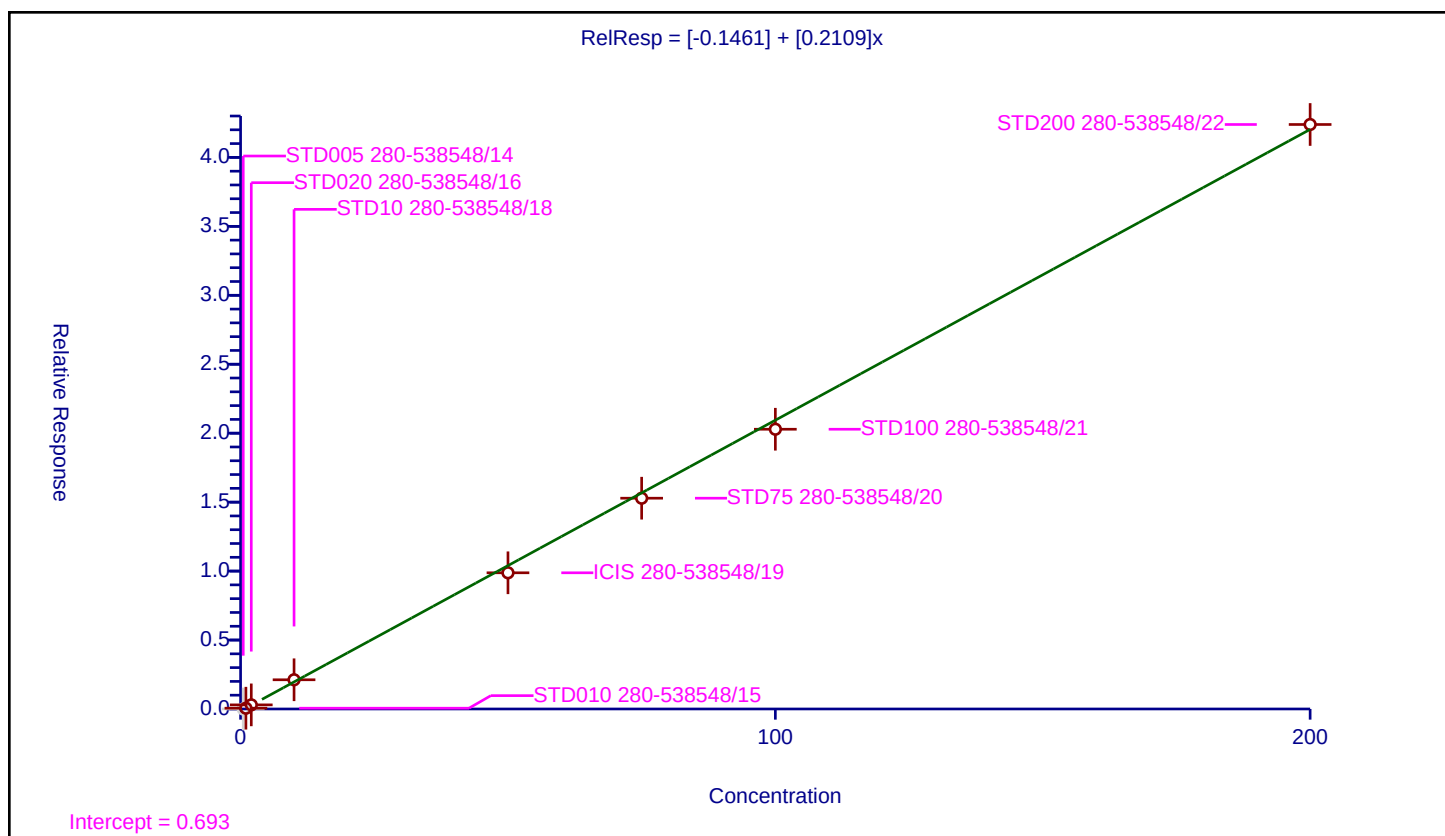
Curve Coefficients

Intercept: -0.1461
 Slope: 0.2109

Error Coefficients

Standard Error: 117000
 Relative Standard Error: 5.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.057541	50.0	250257.0	0.057541	Y
3	STD020 280-538548/16	2.0	0.299642	50.0	242456.0	0.149821	Y
4	STD10 280-538548/18	10.0	2.118039	50.0	249122.0	0.211804	Y
5	ICIS 280-538548/19	50.0	9.875968	50.0	257514.0	0.197519	Y
6	STD75 280-538548/20	75.0	15.284898	50.0	257689.0	0.203799	Y
7	STD100 280-538548/21	100.0	20.286694	50.0	257627.0	0.202867	Y
8	STD200 280-538548/22	200.0	42.384267	50.0	259778.0	0.211921	Y



Calibration

/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

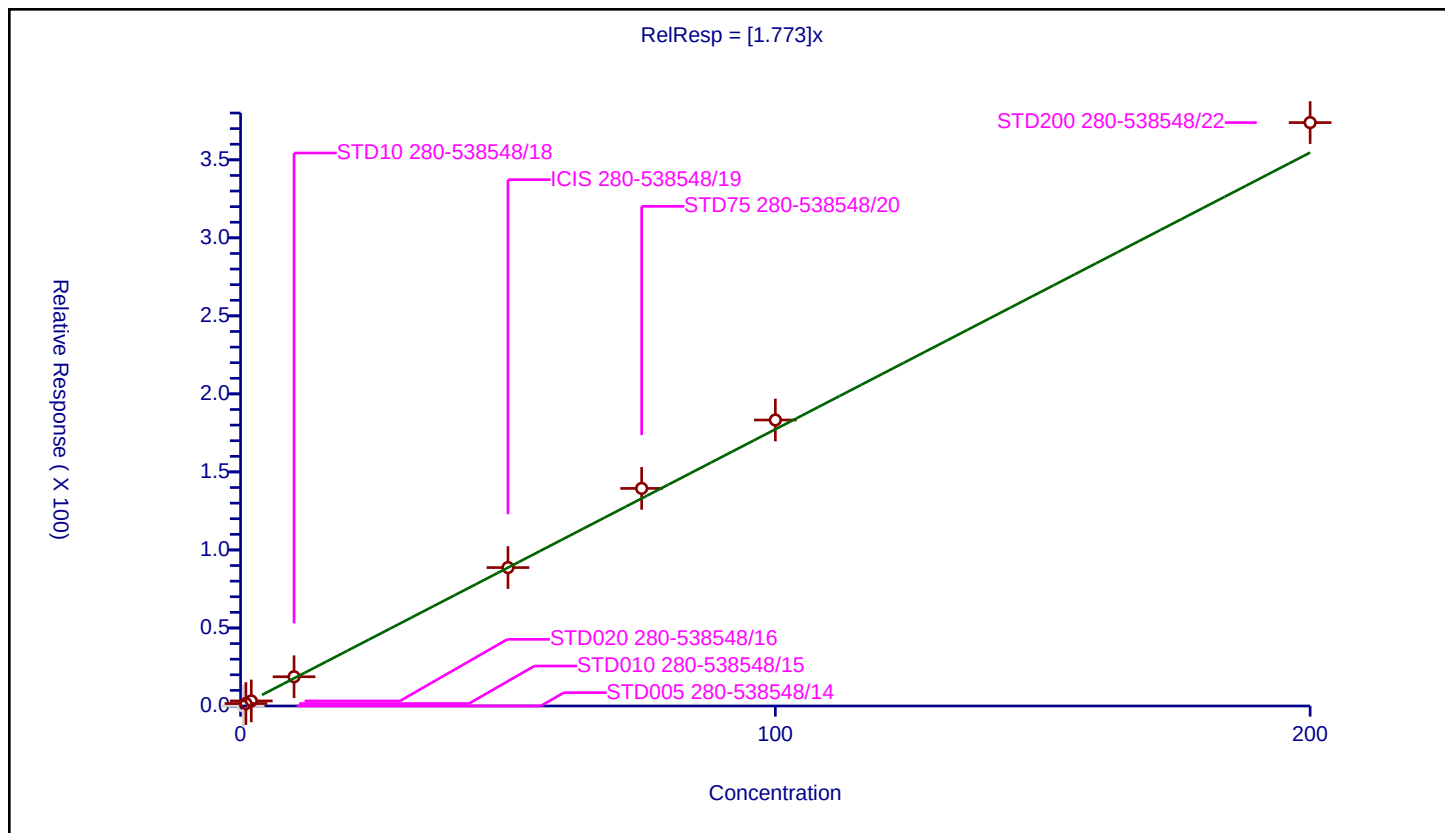
Curve Coefficients

Intercept: 0
 Slope: 1.773

Error Coefficients

Standard Error: 948000
 Relative Standard Error: 6.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	1.584771	50.0	250257.0	1.584771	Y
3	STD020 280-538548/16	2.0	3.239351	50.0	242456.0	1.619675	Y
4	STD10 280-538548/18	10.0	18.734596	50.0	249122.0	1.87346	Y
5	ICIS 280-538548/19	50.0	88.696537	50.0	257514.0	1.773931	Y
6	STD75 280-538548/20	75.0	139.434551	50.0	257689.0	1.859127	Y
7	STD100 280-538548/21	100.0	183.277374	50.0	257627.0	1.832774	Y
8	STD200 280-538548/22	200.0	373.868264	50.0	259778.0	1.869341	Y



Calibration

/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

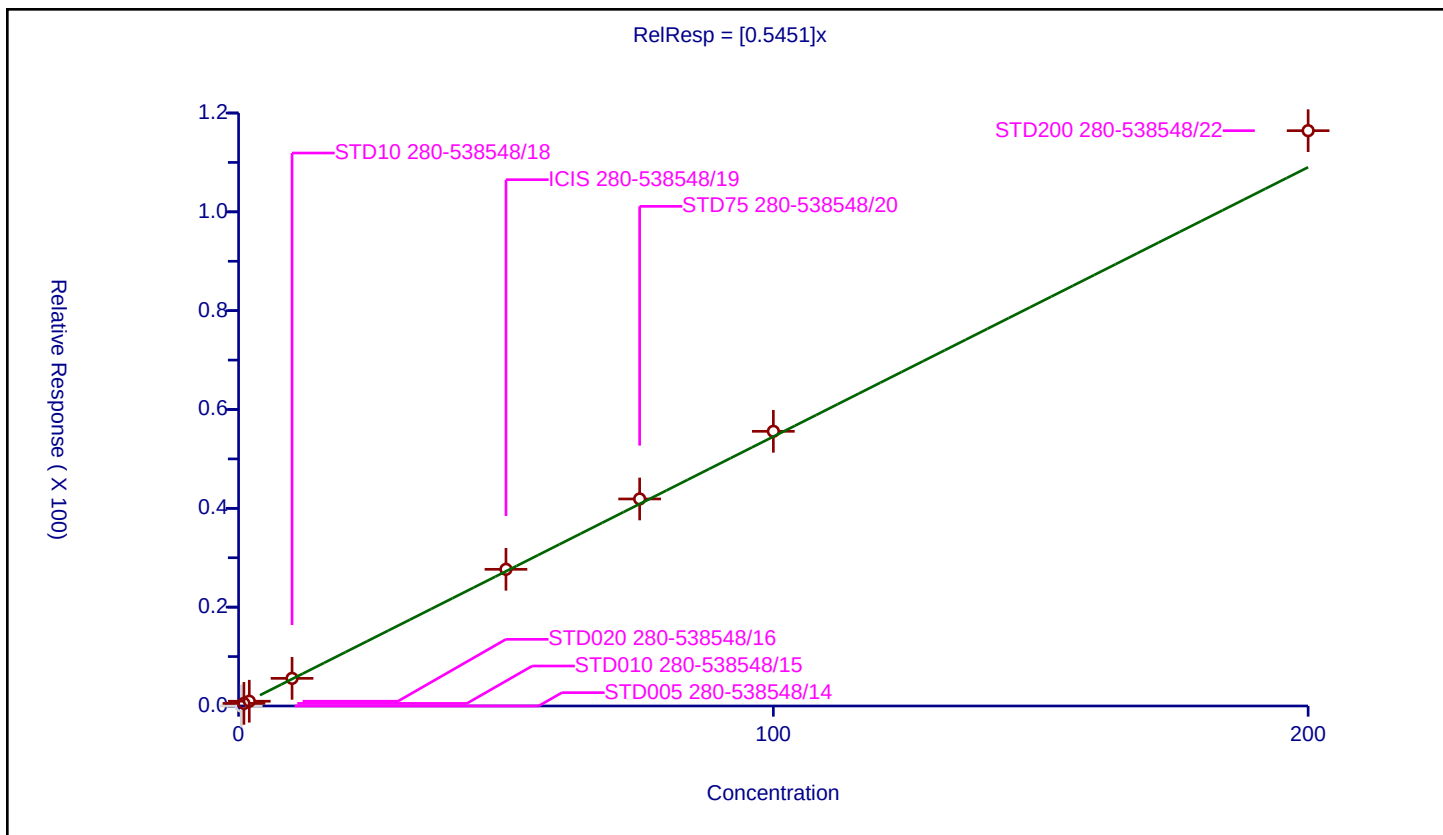
Curve Coefficients

Intercept: 0
 Slope: 0.5451

Error Coefficients

Standard Error: 293000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.52486	50.0	250257.0	0.52486	Y
3	STD020 280-538548/16	2.0	0.964299	50.0	242456.0	0.482149	Y
4	STD10 280-538548/18	10.0	5.59224	50.0	249122.0	0.559224	Y
5	ICIS 280-538548/19	50.0	27.657914	50.0	257514.0	0.553158	Y
6	STD75 280-538548/20	75.0	41.898374	50.0	257689.0	0.558645	Y
7	STD100 280-538548/21	100.0	55.585401	50.0	257627.0	0.555854	Y
8	STD200 280-538548/22	200.0	116.426718	50.0	259778.0	0.582134	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-541632/24	MS9_5645.d
Level 2	IC 280-541632/23	MS9_5644.d
Level 3	IC 280-541632/22	MS9_5643.d
Level 4	IC 280-541632/21	MS9_5642.d
Level 5	IC 280-541632/20	MS9_5641.d
Level 6	ICIS 280-541632/19	MS9_5640.d
Level 7	IC 280-541632/18	MS9_5639.d
Level 8	IC 280-541632/17	MS9_5638.d
Level 9	IC 280-541632/16	MS9_5637.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Dichlorodifluoromethane	0.2021 0.1847	0.2248 0.1918	0.1870 0.1771	0.2503 0.1676	0.2028	Ave		0.198 7				12.8		15.0			
Chloromethane	0.3337 0.1073	0.2177 0.1136	0.1553 0.1259	0.1403 0.1129	0.1235	Lin2	0.108 6	0.112 5			0.1000				0.9950		0.9900
Vinyl chloride	++++ 0.1177	0.2090 0.1146	0.1604 ++++	0.1609 ++++	0.1244	Lin1	0.108 3	0.114 8							0.9980		0.9900
Bromomethane	++++ 0.1132	0.3073 0.1098	0.2194 0.0924	0.1628 ++++	0.1542	Qua	0.155 4	0.138 3	-0.000463						0.9980		0.9900
Chloroethane	0.3701 0.1239	0.2096 0.1190	0.1631 0.1162	0.1406 0.1039	0.1424	Lin1	0.127 3	0.111 0							0.9950		0.9900
Dichlorofluoromethane	0.9275 0.3284	0.6094 0.3114	0.4518 0.3003	0.4071 0.2808	0.3583	Lin2	0.307 2	0.310 3							0.9950		0.9900
Trichlorofluoromethane	++++ 0.2905	0.4414 0.2978	0.3607 0.2870	0.3705 0.2469	0.3008	Lin1	0.241 3	0.268 7							0.9930		0.9900
Ethyl ether	0.1931 0.1350	0.1712 0.1303	0.1667 0.1317	0.1637 0.1206	0.1538	Lin2	0.030 4	0.138 8							0.9900		0.9900
Acrolein	0.0247 0.0214	0.0250 0.0196	0.0270 0.0209	0.0259 0.0189	0.0254	Ave		0.023 2				12.9		15.0			
1,1-Dichloroethene	++++ 0.1911	0.2830 0.1735	0.2343 0.1906	0.2087 0.1660	0.1917	Lin1	0.129 4	0.175 0							0.9960		0.9900
Freon 113	0.1742 0.1569	0.1654 0.1467	0.1691 0.1682	0.1727 0.1422	0.1586	Ave		0.161 6				7.0		15.0			
Acetone	++++ 0.0370	0.0630 0.0350	0.0554 0.0355	0.0469 0.0333	0.0448	Lin1	0.164 8	0.034 4							0.9980		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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Iodomethane	0.7283 0.2775	0.4688 0.2768	0.3426 0.2969	0.2814 0.2727	0.2609	Lin1	0.185 9	0.276 7							0.9980		0.9900
Carbon disulfide	1.2298 0.5028	0.8241 0.4603	0.6423 0.5108	0.5523 0.4705	0.5139	Lin2	0.369 4	0.476 1							0.9980		0.9900
Methyl acetate	0.1036 0.0879	0.1129 0.0827	0.1096 0.0838	0.1110 0.0772	0.1036	Ave		0.096 9				14.3		15.0			
Allyl chloride	0.5590 0.2123	0.3700 0.1937	0.2896 0.2095	0.2374 0.1931	0.2222	Lin2	0.177 6	0.200 4							0.9990		0.9900
Methylene Chloride	0.7192 0.2104	0.4708 0.1967	0.3476 0.2048	0.2730 0.1883	0.2440	Lin2	0.260 2	0.205 9							0.9960		0.9900
Tert-butyl alcohol (2-methyl-2-propanol)	0.0180 0.0171	0.0182 0.0162	0.0211 0.0166	0.0199 0.0156	0.0197	Ave		0.018 0				10.3		15.0			
Acrylonitrile	0.0680 0.0484	0.0611 0.0452	0.0637 0.0459	0.0612 0.0407	0.0584	Lin1	0.255 9	0.043 8							0.9930		0.9900
Methyl tert-butyl ether	0.6823 0.5104	0.6094 0.4825	0.6029 0.4891	0.6017 0.4393	0.5666	Ave		0.553 8				14.1		15.0			
trans-1,2-Dichloroethene	0.5762 0.2150	0.3697 0.1988	0.2855 0.2113	0.2483 0.1894	0.2293	Lin2	0.182 8	0.202 2							0.9960		0.9900
Hexane	0.7430 0.7154	0.6748 0.6470	0.7206 0.7572	0.7530 0.6497	0.7430	Ave		0.711 5				6.1		15.0			
Vinyl acetate	0.3085 0.2666	0.3009 0.2505	0.3005 0.2531	0.3090 0.2279	0.2864	Ave		0.278 1				10.6		15.0			
1,1-Dichloroethane	0.7516 0.3233	0.5010 0.2959	0.4214 0.3107	0.3731 0.2818	0.3434	Lin2	0.218 5	0.306 8			0.1000				0.9960		0.9900
2-Butanone (MEK)	0.0838 0.0552	0.0737 0.0511	0.0701 0.0519	0.0671 0.0478	0.0648	Lin1	0.117 2	0.050 3							0.9950		0.9900
cis-1,2-Dichloroethene	0.5036 0.2377	0.3698 0.2202	0.3064 0.2296	0.2804 0.2049	0.2615	Lin2	0.138 4	0.231 3							0.9950		0.9900
2,2-Dichloropropane	0.6159 0.2945	0.4209 0.2759	0.3529 0.2939	0.3164 0.2731	0.2932	Lin2	0.162 6	0.279 0							0.9980		0.9900
sec-Butyl Alcohol	++++ 0.0131	0.0146 0.0130	0.0161 0.0133	0.0161 0.0121	0.0147	Ave		0.014 1				10.6		15.0			
Chlorobromomethane	0.1981 0.1283	0.1604 0.1226	0.1563 0.1235	0.1511 0.1139	0.1438	Lin2	0.035 7	0.129 0							0.9920		0.9900
Tetrahydrofuran	0.0578 0.0397	0.0477 0.0375	0.0466 0.0377	0.0489 ++++	0.0444	Lin2	0.017 0	0.040 9							0.9910		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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Chloroform	++++ 0.3564	0.5331 0.3367	0.4516 0.3452	0.4094 0.3237	0.3781	Lin1	0.253 9	0.333 1							0.9990		0.9900
1,1,1-Trichloroethane	0.7121 0.3222	0.4860 0.3000	0.3971 0.3214	0.3481 0.3001	0.3253	Lin2	0.198 2	0.305 5							0.9980		0.9900
Cyclohexane	0.3375 0.2680	0.2991 0.2405	0.2891 0.2744	0.2850 0.2498	0.2690	Ave		0.279 1				10.2		15.0			
1,1-Dichloropropene	0.6042 0.2774	0.4180 0.2566	0.3501 0.2740	0.3043 0.2518	0.2851	Lin2	0.167 4	0.264 2							0.9980		0.9900
Carbon tetrachloride	0.4913 0.2778	0.3537 0.2604	0.3026 0.2832	0.2860 0.2658	0.2669	Lin2	0.107 5	0.263 8							0.9970		0.9900
Isobutyl alcohol	0.0059 0.0059	0.0062 0.0056	0.0075 0.0057	0.0069 0.0055	0.0071	Ave		0.006 3				11.7		15.0			
Benzene	1.9220 0.7726	1.2538 0.7136	1.0416 0.7449	0.9060 0.6734	0.8228	Lin2	0.583 7	0.733 8							0.9960		0.9900
1,2-Dichloroethane	0.4491 0.2535	0.3476 0.2406	0.3288 0.2430	0.2998 0.2291	0.2821	Lin2	0.100 4	0.254 1							0.9930		0.9900
n-Heptane	0.1899 0.1492	0.1546 0.1369	0.1581 0.1583	0.1619 0.1411	0.1533	Ave		0.155 9				9.7		15.0			
Trichloroethene	2.2843 0.9206	1.5437 0.8593	1.2065 0.9030	1.0449 0.8097	0.9909	Lin2	0.697 6	0.875 3							0.9980		0.9900
2-Pentanone	0.1479 0.1147	0.1344 0.1110	0.1477 0.1099	0.1395 ++++	0.1324	Ave		0.129 7				12.2		15.0			
Methylcyclohexane	0.2426 0.1960	0.2113 0.1804	0.2052 0.2034	0.2056 0.1821	0.1940	Ave		0.202 3				9.1		15.0			
1,2-Dichloropropane	0.3749 0.1922	0.2713 0.1800	0.2404 0.1819	0.2210 0.1678	0.1998	Lin2	0.094 9	0.184 9							0.9960		0.9900
1,4-Dioxane	++++ 0.0027	++++ 0.0026	0.0033 0.0027	0.0032 0.0025	0.0031	Ave		0.002 9				11.1		15.0			
Dibromomethane	0.2031 0.1330	0.1682 0.1279	0.1645 0.1282	0.1601 0.1213	0.1431	Lin2	0.036 2	0.134 5							0.9930		0.9900
Dichlorobromomethane	0.4087 0.2568	0.2992 0.2486	0.2795 0.2533	0.2725 0.2448	0.2575	Lin2	0.074 1	0.248 4							0.9980		0.9900
2-Chloroethyl vinyl ether	0.1552 0.1220	0.1443 0.1204	0.1274 0.1132	0.1494 0.1110	0.1274	Ave		0.130 0				12.3		15.0			
cis-1,3-Dichloropropene	1.8363 1.1609	1.4770 1.1278	1.3862 1.1519	1.2778 1.0697	1.2155	Lin2	0.347 7	1.151 7							0.9980		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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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								
4-Methyl-2-pentanone (MIBK)	0.1373 0.1105	0.1332 0.1065	0.1362 0.1048	0.1373 0.0973	0.1247	Ave		0.120 9				13.3		15.0			
Toluene	++++ 0.8504	1.4142 0.8041	1.1498 0.8180	0.9924 0.7425	0.8795	Lin2	0.626 7	0.811 6							0.9970		0.9900
trans-1,3-Dichloropropene	++++ 0.2916	0.3448 0.2834	0.3351 0.2850	0.3233 0.2749	0.3007	Ave		0.304 9				8.6		15.0			
Ethyl methacrylate	1.0204 0.8656	0.9248 0.8397	0.9596 0.8394	0.9878 0.7856	0.9477	Ave		0.907 8				8.7		15.0			
1,1,2-Trichloroethane	0.2892 0.1882	0.2335 0.1804	0.2347 0.1805	0.2220 0.1725	0.2044	Lin2	0.051 5	0.189 7							0.9930		0.9900
Tetrachloroethene	1.8126 0.7551	1.2633 0.7106	0.9958 0.7532	0.8410 0.6992	0.7856	Lin2	0.542 9	0.725 2							0.9990		0.9900
1,3-Dichloropropane	1.6064 1.0602	1.3294 1.0241	1.3161 1.0221	1.2597 0.9565	1.1768	Lin2	0.279 8	1.075 0							0.9920		0.9900
2-Hexanone	0.3407 0.2902	0.3361 0.2802	0.3607 0.2787	0.3474 0.2572	0.3331	Ave		0.313 8				11.8		15.0			
Chlorodibromomethane	0.8539 0.7343	0.7274 0.7306	0.7478 0.7520	0.7445 0.7317	0.7362	Lin2	0.048 5	0.730 2							0.9990		0.9900
1,2-Dibromoethane	1.0237 0.7172	0.8881 0.6969	0.8907 0.6994	0.8409 0.6653	0.8091	Ave		0.803 5				14.8		15.0			
1-Chlorohexane	3.3811 1.3157	2.3357 1.2936	1.8336 1.3298	1.5263 1.2453	1.4534	Lin2	0.833 6	1.300 5							0.9990		0.9900
Chlorobenzene	4.8584 2.1892	3.4009 2.0899	2.9267 2.1238	2.5884 1.9607	2.4125	Lin2	1.352 9	2.149 3			0.3000				0.9960		0.9900
1,1,1,2-Tetrachloroethane	1.3684 0.8159	1.0203 0.7965	0.9327 0.8031	0.8887 0.7544	0.8540	Lin2	0.274 8	0.797 4							0.9980		0.9900
Ethylbenzene	++++ 1.2393	2.0080 1.1590	1.6406 1.1853	1.3834 ++++	1.3231	Lin2	0.824 5	1.202 7							0.9990		0.9900
m-Xylene & p-Xylene	6.5605 2.7673	4.5457 2.6277	3.6357 2.7056	3.1832 2.5152	2.9293	Lin2	1.939 1	2.667 6							0.9990		0.9900
o-Xylene	3.2290 1.4378	2.2328 1.3694	1.9357 1.3860	1.6645 1.2666	1.5840	Lin2	0.911 2	1.399 9							0.9960		0.9900
Styrene	4.6261 2.3718	3.3382 2.2593	2.9427 2.2653	2.6955 2.0500	2.5635	Lin2	1.157 2	2.295 4							0.9960		0.9900
Bromoform	0.4499 0.4616	0.4457 0.4697	0.4237 0.4831	0.4390 0.4816	0.4481	Lin1	-0.05 0	0.477 1			0.1000				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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Isopropylbenzene	5.0391 2.0855	3.3856 1.9231	2.7686 2.0525	2.3654 1.8183	2.1966	Lin2	1.513 4	1.979 0							0.9970		0.9900
Cyclohexanone	0.0287 0.0241	0.0258 0.0225	0.0317 0.0231	0.0281 0.0211	0.0299	Ave		0.026 1				14.2		15.0			
1,1,2,2-Tetrachloroethane	0.6829 0.4873	0.5964 0.4614	0.6358 0.4728	0.5849 0.4446	0.5476	Lin1	0.201 3	0.459 9			0.3000				0.9980		0.9900
Bromobenzene	1.2538 0.6406	0.9036 0.6039	0.8461 0.6231	0.7561 0.5823	0.6933	Lin2	0.310 0	0.634 4							0.9950		0.9900
trans-1,4-Dichloro-2-butene	0.1250 0.1184	0.1167 0.1093	0.1317 0.1191	0.1265 0.1145	0.1310	Ave		0.121 4				6.3		15.0			
1,2,3-Trichloropropane	++++ 0.1714	++++ 0.1630	0.2173 0.1652	0.2018 0.1583	0.1928	Ave		0.181 4				12.5		15.0			
N-Propylbenzene	1.5776 0.6545	1.0415 0.6089	0.8418 0.6501	0.7353 0.6038	0.6904	Lin2	0.464 7	0.624 0							0.9980		0.9900
2-Chlorotoluene	1.3254 0.5906	0.9270 0.5527	0.8032 0.5748	0.6863 0.5382	0.6266	Lin2	0.376 0	0.575 3							0.9970		0.9900
1,3,5-Trimethylbenzene	3.9900 1.7360	2.7319 1.6271	2.2785 1.6908	1.9713 1.5107	1.8215	Lin2	1.157 6	1.655 9							0.9970		0.9900
4-Chlorotoluene	1.3491 0.6129	0.9577 0.5737	0.8177 0.5950	0.7238 0.5466	0.6584	Lin2	0.377 9	0.597 9							0.9960		0.9900
tert-Butylbenzene	3.6094 1.4942	2.4305 1.4003	1.9781 1.4742	1.6947 1.3407	1.5813	Lin2	1.076 5	1.429 0							0.9980		0.9900
1,2,4-Trimethylbenzene	3.9677 1.7706	2.7588 1.6630	2.3154 1.7006	2.0490 1.5298	1.9019	Lin2	1.129 7	1.701 1							0.9960		0.9900
sec-Butylbenzene	1.1072 0.4821	0.6870 0.4490	0.6124 0.4694	0.5347 0.4342	0.4981	Lin2	0.309 6	0.453 6							0.9930		0.9900
1,3-Dichlorobenzene	2.2834 1.1114	1.7200 1.0569	1.4514 1.0654	1.3412 0.9703	1.2201	Lin2	0.609 9	1.097 0							0.9940		0.9900
4-Isopropyltoluene	4.0777 1.8007	2.8542 1.7044	2.3292 1.7531	2.0782 1.5435	1.9162	Lin2	1.173 5	1.726 8							0.9970		0.9900
1,4-Dichlorobenzene	2.3047 1.1251	1.7314 1.0763	1.5083 1.0775	1.3564 0.9871	1.2489	Lin2	0.611 4	1.118 1							0.9940		0.9900
n-Butylbenzene	3.2788 1.4573	2.3036 1.3959	1.8808 1.4220	1.6662 1.2958	1.5534	Lin2	0.932 6	1.407 2							0.9980		0.9900
1,2-Dichlorobenzene	1.8923 1.0470	1.4876 1.0026	1.3630 0.9966	1.2595 0.9181	1.1569	Lin2	0.441 5	1.047 2							0.9920		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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1,2-Dibromo-3-Chloropropane	0.1026 0.1147	0.1061 0.1136	0.1129 0.1159	0.1177 0.1120	0.1198	Lin2	-0.00 7	0.115 8							0.9990		0.9900
1,2,4-Trichlorobenzene	1.0969 0.6110	0.8668 0.5888	0.7943 0.5876	0.7227 0.5359	0.6915	Lin2	0.252 4	0.613 8							0.9930		0.9900
Hexachlorobutadiene	0.6145 0.2803	0.4154 0.2706	0.3753 0.2758	0.3242 0.2534	0.3012	Lin2	0.166 9	0.274 2							0.9960		0.9900
Naphthalene	++++ 1.2031	1.6778 1.2012	1.5167 1.2127	1.5892 1.0566	1.5628	Lin1	1.050 5	1.134 8							0.9930		0.9900
1,2,3-Trichlorobenzene	++++ 0.4580	0.6890 0.4473	0.5952 0.4469	0.5849 ++++	0.5596	Lin1	0.345 9	0.449 0							0.9980		0.9900
Dibromofluoromethane (Surr)	0.2764 0.2805	0.2737 0.2801	0.2751 0.2792	0.2786 0.2787	0.2788	Ave		0.277 9				0.8		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2541 0.2577	0.2529 0.2552	0.2505 0.2557	0.2570 0.2593	0.2598	Ave		0.255 8				1.2		15.0			
Toluene-d8 (Surr)	3.5514 3.5627	3.5954 3.6051	3.5809 3.6165	3.5462 3.6140	3.5189	Ave		3.576 8				1.0		15.0			
4-Bromofluorobenzene (Surr)	0.8749 0.8610	0.8519 0.8491	0.8703 0.8770	0.8569 0.9061	0.8576	Ave		0.867 2				2.0		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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-541632/24	MS9_5645.d
Level 2	IC 280-541632/23	MS9_5644.d
Level 3	IC 280-541632/22	MS9_5643.d
Level 4	IC 280-541632/21	MS9_5642.d
Level 5	IC 280-541632/20	MS9_5641.d
Level 6	ICIS 280-541632/19	MS9_5640.d
Level 7	IC 280-541632/18	MS9_5639.d
Level 8	IC 280-541632/17	MS9_5638.d
Level 9	IC 280-541632/16	MS9_5637.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	7039 626131	15510 944889	25665 1226713	84906 2197895	140211	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Lin2	11624 363748	15019 559659	21320 872464	47605 1480055	85428	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Lin1	++++ 398858	14424 564789	22018 ++++	54571 ++++	86024	++++ 50.0	1.00 75.0	2.00 ++++	5.00 ++++	10.0
Bromomethane	FB	Qua	++++ 383659	21202 541076	30109 639859	55213 ++++	106609	++++ 50.0	1.00 75.0	2.00 100	5.00 ++++	10.0
Chloroethane	FB	Lin1	12893 419958	14462 586143	22379 804816	47705 1363203	98472	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Lin2	32312 1113382	42049 1534235	62009 2080098	138104 3683322	247788	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Lin1	++++ 984954	30459 1466980	49508 1987947	125667 3238314	208011	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Lin2	6726 457655	11813 642091	22882 912402	55515 1581119	106323	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	8482 717068	17009 951760	36655 1430217	86734 2447651	173220	4.94 494	9.88 741	19.8 988	49.4 1975	98.8
1,1-Dichloroethene	FB	Lin1	++++ 647742	19528 854840	32157 1320420	70788 2177321	132542	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Freon 113	FB	Ave	6068 531799	11415 722683	23209 1165175	58577 1864445	109691	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Lin1	++++ 501917	17395 689724	30391 984536	63581 1747339	124031	++++ 200	4.00 300	8.00 400	20.0 800	40.0
Iodomethane	FB	Lin1	25371	32347	47016	95467	180420	0.500	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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
			940652	1363558	2056878	3576567		50.0	75.0	100	200	
Carbon disulfide	FB	Lin2	42841 1704454	56861 2267888	88150 3538284	187331 6171034	355383	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methyl acetate	FB	Ave	7217 595718	15575 815126	30084 1161536	75305 2024341	143259	1.00 100	2.00 150	4.00 200	10.0 400	20.0
Allyl chloride	FB	Lin2	19473 719777	25530 954416	39747 1451492	80516 2532607	153629	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Lin2	25054 713240	32484 968874	47708 1418418	92619 2469586	168701	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	6265 578377	12558 798064	28893 1146956	67431 2050115	135980	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Lin1	23703 1640852	42130 2228319	87425 3179588	207645 5339425	404172	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	23770 1730439	42049 2376939	82747 3388369	204113 5761522	391784	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Lin2	20072 728974	25509 979581	39181 1464102	84229 2483590	158574	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Ave	7136 671603	12616 882493	27117 1443219	70337 2396540	138644	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	21493 1807605	41520 2467875	82491 3506562	209664 5976588	396058	1.00 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Lin2	26185 1096140	34569 1457803	57834 2152323	126561 3696368	237429	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Lin1	11679 749045	20349 1006618	38460 1438200	91010 2505427	179342	2.00 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Lin2	17544 805857	25518 1084861	42057 1590272	95118 2686956	180803	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Lin2	21455 998553	29041 1359058	48437 2036019	107327 3582146	202730	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	+++++ 1065246	24240 1534163	53121 2207821	131300 3823679	243697	+++++ 1200	24.0 1800	48.0 2400	120 4800	240
Chlorobromomethane	FB	Lin2	6902 435042	11065 603876	21453 855770	51256 1493919	99447	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Lin2	4028	6584	12798	33174	61365	1.00	2.00	4.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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
			268985	369572	522219	++++		100	150	200	++++	
Chloroform	FB	Lin1	++++ 1208267	36786 1658816	61975 2391385	138865 4245797	261475	++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Lin2	24809 1092165	33537 1477971	54505 2226765	118071 3936081	224939	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	11757 908580	20635 1184698	39670 1900551	96670 3276685	186011	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Lin2	21049 940538	28842 1264024	48047 1897790	103228 3302796	197156	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Lin2	17117 941622	24408 1282911	41533 1961693	97009 3486202	184530	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isobutyl alcohol	FB	Ave	5096 500667	10656 693736	25720 992222	58735 1798397	123503	12.5 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Lin2	66956 2619234	86513 3515280	142946 5159995	307337 8831029	568938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Lin2	15646 859490	23986 1185367	45121 1683586	101698 3004174	195073	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Heptane	FB	Ave	6615 505762	10667 674276	21699 1096466	54910 1849902	105976	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	CBNZ d5	Lin2	21939 864169	28861 1172050	45399 1721250	97598 2986743	184904	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	16482 1244651	29670 1750107	64855 2437170	151461 ++++	292993	1.60 160	3.20 240	6.40 320	16.0 ++++	32.0
Methylcyclohexane	FB	Ave	8451 664313	14582 888961	28157 1409157	69754 2388298	134148	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Lin2	13062 651411	18723 886971	32993 1259970	74971 2200969	138140	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	++++ 183593	++++ 257438	9164 370976	21404 662720	43043	++++ 1000	++++ 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Lin2	7075 450728	11603 630313	22575 888259	54296 1591183	98936	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorobromomethane	FB	Lin2	14239 870585	20642 1224717	38362 1754536	92442 3210438	178024	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	5407 413608	9956 592971	17480 783844	50679 1455799	88123	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.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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
cis-1,3-Dichloropropene	CBNZ d5	Lin2	17636	27614	52161	119355	226807	0.500	1.00	2.00	5.00	10.0
			1089785	1538333	2195696	3945505		50.0	75.0	100	200	
4-Methyl-2-pentanone (MIBK)	FB	Ave	19134	36753	74751	186353	344791	2.00	4.00	8.00	20.0	40.0
			1498212	2098509	2904559	5106822		200	300	400	800	
Toluene	FB	Lin2	+++++	97582	157803	336626	608133	+++++	1.00	2.00	5.00	10.0
			2882995	3961557	5666346	9737699		50.0	75.0	100	200	
trans-1,3-Dichloropropene	FB	Ave	+++++	23793	45995	109680	207897	+++++	1.00	2.00	5.00	10.0
			988623	1395932	1974349	3605817		50.0	75.0	100	200	
Ethyl methacrylate	CBNZ d5	Ave	9800	17290	36109	92271	176831	0.500	1.00	2.00	5.00	10.0
			812589	1145319	1600076	2897541		50.0	75.0	100	200	
1,1,2-Trichloroethane	FB	Lin2	10075	16109	32204	75298	141317	0.500	1.00	2.00	5.00	10.0
			638079	888560	1250510	2261982		50.0	75.0	100	200	
Tetrachloroethene	CBNZ d5	Lin2	17409	23620	37469	78554	146589	0.500	1.00	2.00	5.00	10.0
			708861	969242	1435695	2579090		50.0	75.0	100	200	
1,3-Dichloropropane	CBNZ d5	Lin2	15428	24855	49523	117667	219592	0.500	1.00	2.00	5.00	10.0
			995215	1396964	1948189	3527915		50.0	75.0	100	200	
2-Hexanone	CBNZ d5	Ave	13089	25137	54291	129802	248658	2.00	4.00	8.00	20.0	40.0
			1089680	1529026	2125014	3794372		200	300	400	800	
Chlorodibromomethane	CBNZ d5	Lin2	8201	13599	28138	69543	137373	0.500	1.00	2.00	5.00	10.0
			689339	996501	1433476	2698837		50.0	75.0	100	200	
1,2-Dibromoethane	CBNZ d5	Ave	9832	16604	33514	78549	150968	0.500	1.00	2.00	5.00	10.0
			673254	950587	1333141	2454100		50.0	75.0	100	200	
1-Chlorohexane	CBNZ d5	Lin2	25978	34936	55197	114056	216963	0.400	0.800	1.60	4.00	8.00
			988097	1411651	2027806	3674754		40.0	60.0	80.0	160	
Chlorobenzene	CBNZ d5	Lin2	46661	63585	110126	241779	450161	0.500	1.00	2.00	5.00	10.0
			2055032	2850618	4048139	7232265		50.0	75.0	100	200	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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
1,1,1,2-Tetrachloroethane	CBNZ d5	Lin2	13142	19076	35095	83013	159347	0.500	1.00	2.00	5.00	10.0
			765896	1086479	1530788	2782700		50.0	75.0	100	200	
Ethylbenzene	CBNZ d5	Lin2	+++++	37542	61733	129223	246890	+++++	1.00	2.00	5.00	10.0
			1163369	1580942	2259378	+++++		50.0	75.0	100	+++++	
m-Xylene & p-Xylene	CBNZ d5	Lin2	63008	84988	136807	297339	546612	0.500	1.00	2.00	5.00	10.0
			2597779	3584239	5157222	9277230		50.0	75.0	100	200	
o-Xylene	CBNZ d5	Lin2	31012	41745	72836	155477	295582	0.500	1.00	2.00	5.00	10.0
			1349684	1867872	2641827	4672057		50.0	75.0	100	200	
Styrene	CBNZ d5	Lin2	44430	62413	110730	251778	478342	0.500	1.00	2.00	5.00	10.0
			2226502	3081705	4317877	7561595		50.0	75.0	100	200	
Bromoform	CBNZ d5	Lin1	4321	8333	15942	41007	83614	0.500	1.00	2.00	5.00	10.0
			433334	640717	920874	1776420		50.0	75.0	100	200	
Isopropylbenzene	DCBd 4	Lin2	76899	102656	167346	360822	673890	0.500	1.00	2.00	5.00	10.0
			3179729	4364520	6295030	10745717		50.0	75.0	100	200	
Cyclohexanone	CBNZ d5	Ave	11044	19279	47786	104973	223500	20.0	40.0	80.0	200	400
			904024	1227303	1757868	3108253		2000	3000	4000	8000	
1,1,2,2-Tetrachloroethane	DCBd 4	Lin1	10421	18085	38429	89223	168005	0.500	1.00	2.00	5.00	10.0
			742961	1047235	1449992	2627188		50.0	75.0	100	200	
Bromobenzene	DCBd 4	Lin2	19134	27398	51140	115339	212712	0.500	1.00	2.00	5.00	10.0
			976744	1370622	1910925	3441433		50.0	75.0	100	200	
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1907	3539	7963	19296	40181	0.500	1.00	2.00	5.00	10.0
			180502	248145	365269	676441		50.0	75.0	100	200	
1,2,3-Trichloropropane	DCBd 4	Ave	+++++	+++++	13136	30781	59156	+++++	+++++	2.00	5.00	10.0
			261385	369828	506670	935632		50.0	75.0	100	200	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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
N-Propylbenzene	DCBd 4	Lin2	24075	31581	50880	112173	211809	0.500	1.00	2.00	5.00	10.0
			997925	1382033	1993948	3568279		50.0	75.0	100	200	
2-Chlorotoluene	DCBd 4	Lin2	20227	28107	48552	104692	192248	0.500	1.00	2.00	5.00	10.0
			900489	1254407	1762910	3180317		50.0	75.0	100	200	
1,3,5-Trimethylbenzene	DCBd 4	Lin2	60890	82835	137722	300713	558819	0.500	1.00	2.00	5.00	10.0
			2646748	3692684	5185769	8927815		50.0	75.0	100	200	
4-Chlorotoluene	DCBd 4	Lin2	20588	29039	49428	110417	201988	0.500	1.00	2.00	5.00	10.0
			934531	1302080	1824899	3230331		50.0	75.0	100	200	
tert-Butylbenzene	DCBd 4	Lin2	55081	73697	119564	258511	485139	0.500	1.00	2.00	5.00	10.0
			2278133	3178085	4521338	7923282		50.0	75.0	100	200	
1,2,4-Trimethylbenzene	DCBd 4	Lin2	60550	83651	139955	312560	583497	0.500	1.00	2.00	5.00	10.0
			2699583	3774366	5215656	9040542		50.0	75.0	100	200	
sec-Butylbenzene	DCBd 4	Lin2	16897	20832	37014	81561	152798	0.500	1.00	2.00	5.00	10.0
			735019	1018946	1439675	2566145		50.0	75.0	100	200	
1,3-Dichlorobenzene	DCBd 4	Lin2	34846	52154	87731	204593	374324	0.500	1.00	2.00	5.00	10.0
			1694473	2398602	3267432	5734270		50.0	75.0	100	200	
4-Isopropyltoluene	DCBd 4	Lin2	62228	86544	140788	317018	587859	0.500	1.00	2.00	5.00	10.0
			2745531	3868119	5376594	9121630		50.0	75.0	100	200	
1,4-Dichlorobenzene	DCBd 4	Lin2	35171	52498	91168	206906	383157	0.500	1.00	2.00	5.00	10.0
			1715410	2442623	3304796	5833602		50.0	75.0	100	200	
n-Butylbenzene	DCBd 4	Lin2	50037	69848	113686	254163	476576	0.500	1.00	2.00	5.00	10.0
			2221869	3168182	4361335	7657582		50.0	75.0	100	200	
1,2-Dichlorobenzene	DCBd 4	Lin2	28877	45106	82384	192126	354929	0.500	1.00	2.00	5.00	10.0
			1596327	2275439	3056498	5425715		50.0	75.0	100	200	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541632

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/29/2021 11:08 Calibration End Date: 06/29/2021 13:47 Calibration ID: 54898

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-Dibromo-3-Chloropropane	DCBd 4	Lin2	1566	3217	6827	17955	36755	0.500	1.00	2.00	5.00	10.0
			174828	257799	355410	662005		50.0	75.0	100	200	
1,2,4-Trichlorobenzene	DCBd 4	Lin2	16740	26283	48009	110239	212148	0.500	1.00	2.00	5.00	10.0
			931633	1336212	1802208	3166728		50.0	75.0	100	200	
Hexachlorobutadiene	DCBd 4	Lin2	9378	12594	22686	49454	92390	0.500	1.00	2.00	5.00	10.0
			427328	614200	845756	1497473		50.0	75.0	100	200	
Naphthalene	DCBd 4	Lin1	+++++	50873	91678	242429	479466	+++++	1.00	2.00	5.00	10.0
			1834284	2726110	3719327	6244392		50.0	75.0	100	200	
1,2,3-Trichlorobenzene	DCBd 4	Lin1	+++++	20891	35974	89220	171687	+++++	1.00	2.00	5.00	10.0
			698359	1015141	1370612	+++++		50.0	75.0	100	+++++	
Dibromofluoromethane (Surr)	FB	Ave	962856	944334	943950	944882	963862	50.0	50.0	50.0	50.0	50.0
			950923	920057	966969	913941		50.0	50.0	50.0	50.0	
1,2-Dichloroethane-d4 (Surr)	FB	Ave	885229	872334	859644	871820	898378	50.0	50.0	50.0	50.0	50.0
			873656	838073	885830	850248		50.0	50.0	50.0	50.0	
Toluene-d8 (Surr)	CBNZ d5	Ave	3410809	3361020	3368614	3312485	3283148	50.0	50.0	50.0	50.0	50.0
			3344452	3278335	3446761	3332578		50.0	50.0	50.0	50.0	
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	1335175	1291486	1315074	1307095	1315538	50.0	50.0	50.0	50.0	50.0
			1312698	1284655	1344915	1338631		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_MS9\20210629-102775.b\MS9_5637.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 29-Jun-2021 11:08:30 ALS Bottle#: 2 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:17:57 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 29-Jun-2021 12:04:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3278733	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	922134	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	93	1477421	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	913941	50.0	50.2	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	96	850248	50.0	50.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3332578	50.0	50.5	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	94	1338631	50.0	52.2	
13 Dichlorodifluoromethane	85	1.686	1.686	0.000	98	2197895	200.0	168.7	
15 Chloromethane	50	1.872	1.872	0.000	97	1480055	200.0	199.7	
16 Vinyl chloride	62	1.997	1.997	0.000	97	1407585	200.0	186.1	
19 Bromomethane	94	2.307	2.307	0.000	92	847275	200.0	NQ	
20 Chloroethane	64	2.432	2.432	0.000	98	1363203	200.0	186.1	
21 Dichlorofluoromethane	67	2.660	2.660	0.000	96	3683322	200.0	180.0	
22 Trichlorofluoromethane	101	2.691	2.691	0.000	98	3238314	200.0	182.9	
24 Ethyl ether	59	2.971	2.971	0.000	87	1581119	200.0	173.5	
28 Acrolein	56	3.106	3.106	0.000	99	2447651	1975.0	1609.5	
30 1,1-Dichloroethene	96	3.199	3.199	0.000	96	2177321	200.0	189.0	
29 112TCTFE	151	3.209	3.209	0.000	90	1864445	200.0	176.0	
31 Acetone	43	3.240	3.240	0.000	98	1747339	800.0	770.9	
33 Iodomethane	142	3.344	3.344	0.000	100	3576567	200.0	196.4	
35 Carbon disulfide	76	3.417	3.417	0.000	98	6171034	200.0	196.9	
34 Methyl acetate	43	3.531	3.531	0.000	94	2024341	400.0	318.5	
36 3-Chloro-1-propene	41	3.541	3.541	0.000	85	2532607	200.0	191.8	
39 Methylene Chloride	84	3.665	3.665	0.000	80	2469586	200.0	181.6	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	99	2050115	2000.0	1734.4	
42 Acrylonitrile	53	3.873	3.873	0.000	97	5339425	2000.0	1853.0	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	5761522	200.0	158.6	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	93	2483590	200.0	186.4	
43 Hexane	57	4.152	4.152	0.000	88	2396540	200.0	182.6	
45 Vinyl acetate	43	4.287	4.287	0.000	97	5976588	400.0	327.7	
46 1,1-Dichloroethane	63	4.298	4.298	0.000	95	3696368	200.0	183.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	95	2505427	800.0	757.2	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	78	2686956	200.0	176.6	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	87	3582146	200.0	195.2	
51 sec-Butyl Alcohol	45	4.930	4.930	0.000	96	3823679	4800.0	4125.5	a
59 Chlorobromomethane	128	5.002	5.002	0.000	81	1493919	200.0	176.4	
57 Tetrahydrofuran	42	5.013	5.013	0.000	78	913951	400.0	340.0	
56 Chloroform	83	5.075	5.075	0.000	92	4245797	200.0	193.6	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	98	3936081	200.0	195.8	
61 Cyclohexane	56	5.293	5.293	0.000	84	3276685	200.0	179.0	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	93	3302796	200.0	190.0	
63 Carbon tetrachloride	117	5.365	5.365	0.000	95	3486202	200.0	201.1	
58 Isobutyl alcohol	43	5.417	5.417	0.000	92	1798397	5000.0	4380.3	
66 Benzene	78	5.531	5.531	0.000	97	8831029	200.0	182.7	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	97	3004174	200.0	179.9	
135 n-Heptane	43	5.769	5.769	0.000	84	1849902	200.0	181.0	
68 Trichloroethene	130	6.091	6.091	0.000	97	2986743	200.0	184.2	
69 2-Pentanone	43	6.215	6.215	0.000	95	4371920	640.0	514.1	
71 Methylcyclohexane	55	6.298	6.298	0.000	88	2388298	200.0	180.0	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	2200969	200.0	181.0	
73 1,4-Dioxane	88	6.371	6.371	0.000	90	662720	4000.0	3514.2	
74 Dibromomethane	93	6.402	6.402	0.000	92	1591183	200.0	180.2	
75 Dichlorobromomethane	83	6.543	6.543	0.000	98	3210438	200.0	196.8	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	93	1455799	200.0	170.7	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	96	3945505	200.0	185.5	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	5106822	800.0	644.3	
80 Toluene	91	7.228	7.228	0.000	98	9737699	200.0	182.2	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	3605817	200.0	180.4	
81 Ethyl methacrylate	69	7.458	7.458	0.000	86	2897541	200.0	173.1	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	2261982	200.0	181.6	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	2579090	200.0	192.1	
86 1,3-Dichloropropane	76	7.763	7.763	0.000	86	3527915	200.0	177.7	
84 2-Hexanone	43	7.789	7.789	0.000	89	3794372	800.0	655.6	
87 Chlorodibromomethane	129	7.960	7.960	0.000	90	2698837	200.0	200.3	
89 Ethylene Dibromide	107	8.084	8.084	0.000	99	2454100	200.0	165.6	
90 1-Chlorohexane	91	8.495	8.495	0.000	92	3674754	160.0	152.6	
91 Chlorobenzene	112	8.533	8.533	0.000	95	7232265	200.0	181.8	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	95	2782700	200.0	188.9	
92 Ethylbenzene	106	8.619	8.619	0.000	97	4007040	200.0	180.0	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	9277230	200.0	187.8	
95 o-Xylene	106	9.105	9.105	0.000	94	4672057	200.0	180.3	
96 Styrene	104	9.127	9.127	0.000	93	7561595	200.0	178.1	
97 Bromoform	173	9.309	9.309	0.000	96	1776420	200.0	202.0	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	10745717	200.0	183.0	
100 Cyclohexanone	55	9.555	9.555	0.000	86	3108253	8000.0	6454.4	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	2627188	200.0	192.9	
105 Bromobenzene	156	9.779	9.779	0.000	88	3441433	200.0	183.1	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	87	676441	200.0	188.6	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	84	935632	200.0	174.5	
103 N-Propylbenzene	120	9.865	9.865	0.000	95	3568279	200.0	192.8	
107 2-Chlorotoluene	126	9.961	9.961	0.000	97	3180317	200.0	186.4	
106 1,3,5-Trimethylbenzene	105	10.042	10.042	0.000	96	8927815	200.0	181.8	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	3230331	200.0	182.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	7923282	200.0	186.9	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	9040542	200.0	179.2	
111 sec-Butylbenzene	134	10.577	10.577	0.000	95	2566145	200.0	190.8	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	5734270	200.0	176.3	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	94	9121630	200.0	178.1	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	93	5833602	200.0	176.0	
116 n-Butylbenzene	91	11.133	11.133	0.000	95	7657582	200.0	183.5	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	97	5425715	200.0	174.9	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	91	662005	200.0	193.6	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	3166728	200.0	174.2	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	1497473	200.0	184.2	
122 Naphthalene	128	13.043	13.043	0.000	98	6244392	200.0	185.3	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	95	2308215	200.0	173.2	
S 141 1,2-Dichloroethene, Total	1				0		400.0	362.9	
S 140 1,3-Dichloropropene, Total	1				0		400.0	365.8	
S 142 Xylenes, Total	106				0		400.0	368.2	
S 137 Trihalomethanes, Total	1				0		800.0	792.7	
S 139 Total BTEX	1				0			913.0	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 100.00

Units: uL

MV-Main add A_00001

Amount Added: 100.00

Units: uL

MV-Gas A_00093

Amount Added: 40.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 10:17:58

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5637.D

Injection Date: 29-Jun-2021 11:08:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

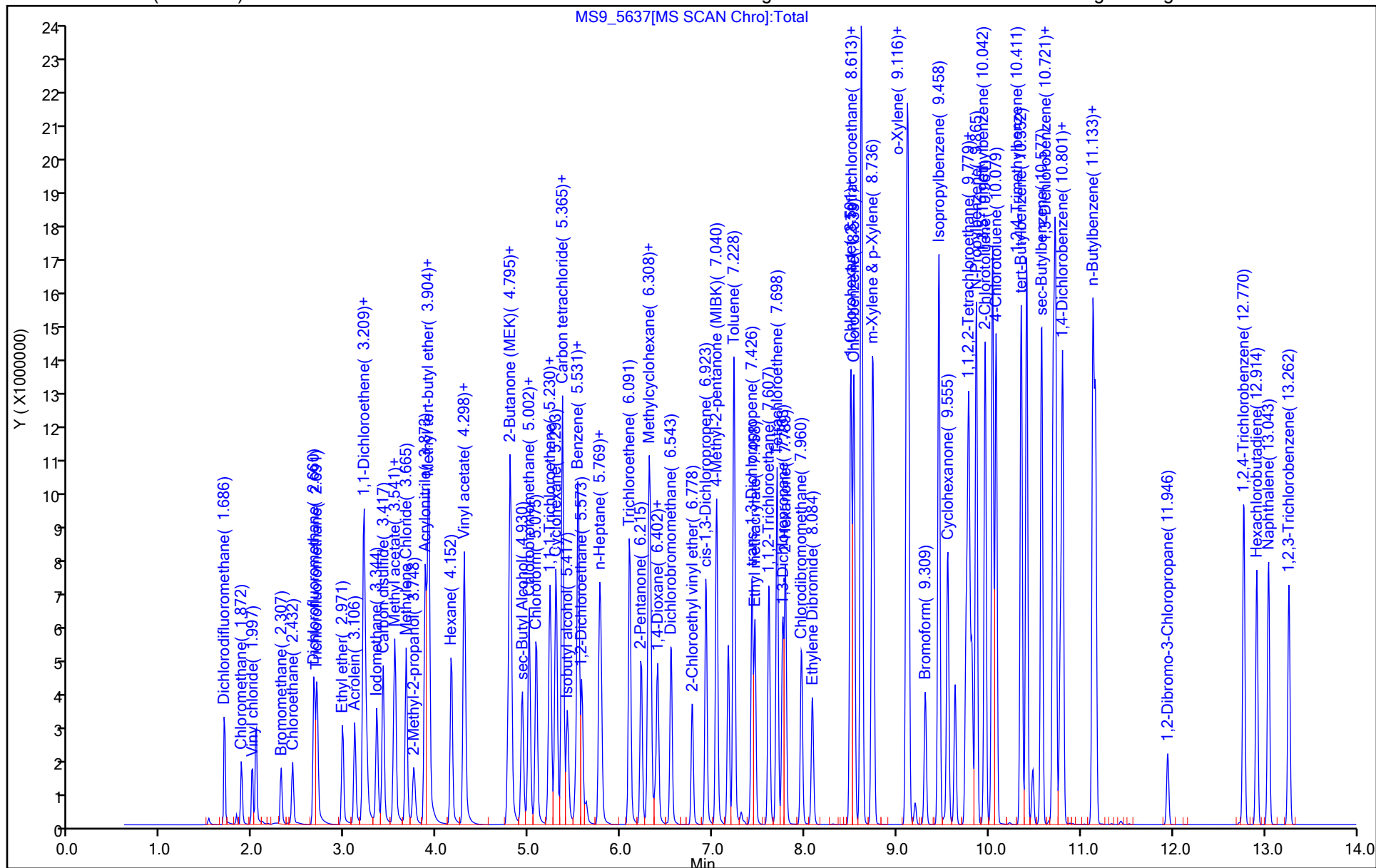
ALS Bottle#: 2

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5637.D

Injection Date: 29-Jun-2021 11:08:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

2

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

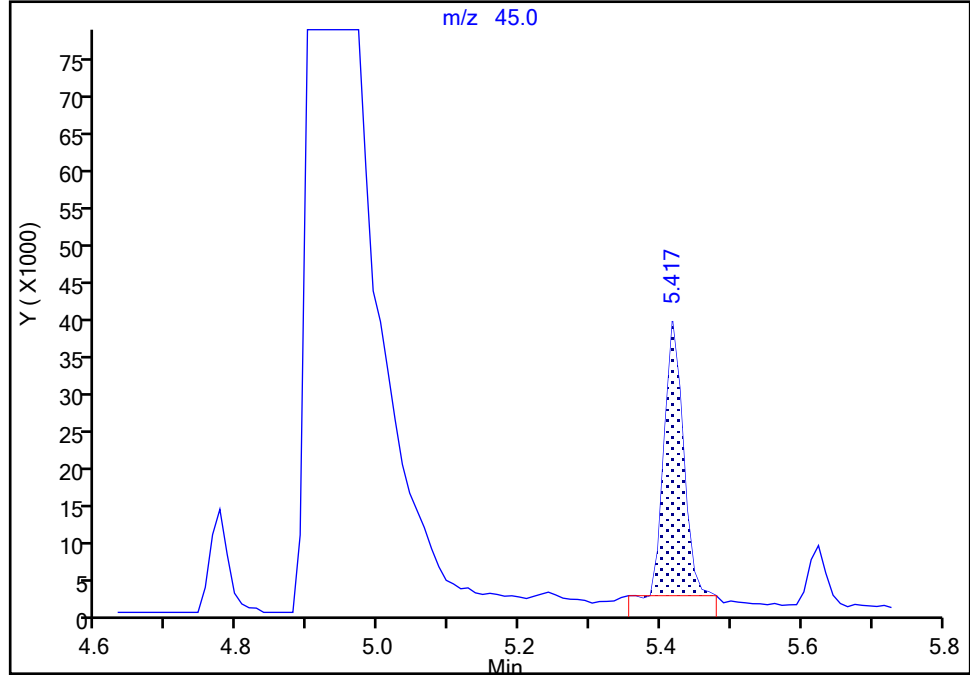
Detector: MS SCAN

51 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

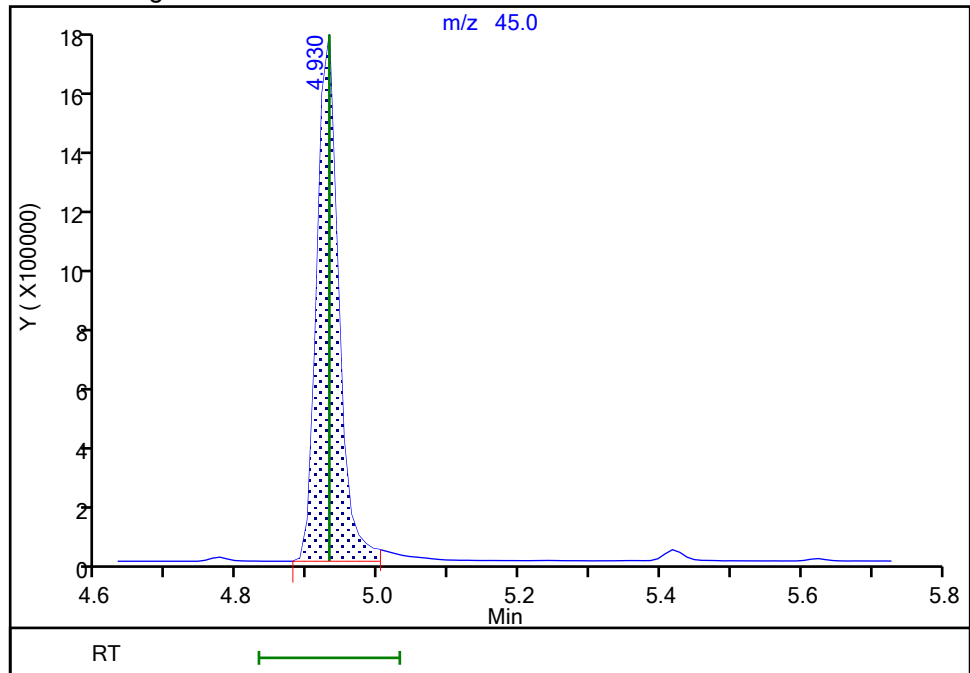
RT: 5.42
Area: 68563
Amount: 4714.7719
Amount Units: ug/l

Processing Integration Results



RT: 4.93
Area: 3823679
Amount: 4125.4822
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 29-Jun-2021 12:05:22

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5638.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 29-Jun-2021 11:27:30 ALS Bottle#: 3 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:01 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 29-Jun-2021 12:08:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3463720	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	953058	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	93	1533491	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	966969	50.0	50.2	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	885830	50.0	50.0	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3446761	50.0	50.6	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1344915	50.0	50.6	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	1226713	100.0	89.1	
15 Chloromethane	50	1.872	1.872	0.000	97	872464	100.0	111.0	
16 Vinyl chloride	62	1.997	1.997	0.000	96	715113	100.0	89.0	
19 Bromomethane	94	2.318	2.318	0.000	92	639859	100.0	97.5	
20 Chloroethane	64	2.442	2.442	0.000	98	804816	100.0	103.5	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	2080098	100.0	95.8	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	1987947	100.0	105.9	
24 Ethyl ether	59	2.981	2.981	0.000	86	912402	100.0	94.7	
28 Acrolein	56	3.106	3.106	0.000	99	1430217	987.5	890.3	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	94	1320420	100.0	108.2	
29 112TCTFE	151	3.220	3.220	0.000	90	1165175	100.0	104.1	
31 Acetone	43	3.240	3.240	0.000	98	984536	400.0	408.9	
33 Iodomethane	142	3.354	3.354	0.000	99	2056878	100.0	106.6	
35 Carbon disulfide	76	3.417	3.417	0.000	98	3538284	100.0	106.5	
34 Methyl acetate	43	3.531	3.531	0.000	94	1161536	200.0	173.0	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	85	1451492	100.0	103.7	
39 Methylene Chloride	84	3.665	3.665	0.000	80	1418418	100.0	98.2	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	99	1146956	1000.0	918.5	
42 Acrylonitrile	53	3.873	3.873	0.000	97	3179588	1000.0	1041.9	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	3388369	100.0	88.3	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	94	1464102	100.0	103.6	
43 Hexane	57	4.163	4.163	0.000	87	1443219	100.0	106.4	
45 Vinyl acetate	43	4.298	4.298	0.000	97	3506562	200.0	182.0	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	2152323	100.0	100.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	1438200	400.0	410.4	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	1590272	100.0	98.7	
53 2,2-Dichloropropane	77	4.806	4.806	0.000	87	2036019	100.0	104.8	
51 sec-Butyl Alcohol	45	4.920	4.920	0.000	96	2207821	2400.0	2254.9	a
59 Chlorobromomethane	128	5.002	5.002	0.000	81	855770	100.0	95.5	
57 Tetrahydrofuran	42	5.013	5.013	0.000	78	522219	200.0	183.7	
56 Chloroform	83	5.085	5.085	0.000	92	2391385	100.0	102.9	
60 1,1,1-Trichloroethane	97	5.231	5.231	0.000	97	2226765	100.0	104.6	
61 Cyclohexane	56	5.293	5.293	0.000	84	1900551	100.0	98.3	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	1897790	100.0	103.1	
63 Carbon tetrachloride	117	5.365	5.365	0.000	94	1961693	100.0	106.9	
58 Isobutyl alcohol	43	5.417	5.417	0.000	92	992222	2500.0	2287.6	
66 Benzene	78	5.541	5.541	0.000	96	5159995	100.0	100.7	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	97	1683586	100.0	95.2	
135 n-Heptane	43	5.770	5.770	0.000	86	1096466	100.0	101.5	
68 Trichloroethene	130	6.101	6.101	0.000	96	1721250	100.0	102.4	
69 2-Pentanone	43	6.215	6.215	0.000	95	2437170	320.0	271.3	
71 Methylcyclohexane	55	6.298	6.298	0.000	88	1409157	100.0	100.6	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	1259970	100.0	97.8	
73 1,4-Dioxane	88	6.371	6.371	0.000	90	370976	2000.0	1862.1	
74 Dibromomethane	93	6.402	6.402	0.000	92	888259	100.0	95.1	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	1754536	100.0	101.7	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	92	783844	100.0	87.0	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	97	2195696	100.0	99.7	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	2904559	400.0	346.9	
80 Toluene	91	7.228	7.228	0.000	99	5666346	100.0	100.0	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	1974349	100.0	93.5	
81 Ethyl methacrylate	69	7.458	7.458	0.000	86	1600076	100.0	92.5	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	1250510	100.0	94.9	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	1435695	100.0	103.1	
86 1,3-Dichloropropane	76	7.763	7.763	0.000	86	1948189	100.0	94.8	
84 2-Hexanone	43	7.789	7.789	0.000	87	2125014	400.0	355.2	
87 Chlorodibromomethane	129	7.966	7.966	0.000	90	1433476	100.0	102.9	
89 Ethylene Dibromide	107	8.084	8.084	0.000	99	1333141	100.0	87.0	
90 1-Chlorohexane	91	8.496	8.496	0.000	91	2027806	80.0	81.2	
91 Chlorobenzene	112	8.533	8.533	0.000	96	4048139	100.0	98.2	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	96	1530788	100.0	100.4	
92 Ethylbenzene	106	8.619	8.619	0.000	97	2259378	100.0	97.9	
94 m-Xylene & p-Xylene	91	8.742	8.742	0.000	97	5157222	100.0	100.7	
95 o-Xylene	106	9.111	9.111	0.000	95	2641827	100.0	98.4	
96 Styrene	104	9.127	9.127	0.000	93	4317877	100.0	98.2	
97 Bromoform	173	9.309	9.309	0.000	96	920874	100.0	101.4	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	6295030	100.0	103.0	
100 Cyclohexanone	55	9.549	9.549	0.000	87	1757868	4000.0	3531.8	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	1449992	100.0	102.4	
105 Bromobenzene	156	9.779	9.779	0.000	87	1910925	100.0	97.7	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	72	365269	100.0	98.1	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	84	506670	100.0	91.1	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	1993948	100.0	103.4	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	1762910	100.0	99.3	
106 1,3,5-Trimethylbenzene	105	10.042	10.042	0.000	96	5185769	100.0	101.4	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	1824899	100.0	98.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	4521338	100.0	102.4	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	5215656	100.0	99.3	
111 sec-Butylbenzene	134	10.577	10.577	0.000	94	1439675	100.0	102.8	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	3267432	100.0	96.6	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	96	5376594	100.0	100.8	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	3304796	100.0	95.8	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	4361335	100.0	100.4	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	97	3056498	100.0	94.7	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	90	355410	100.0	100.2	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	1802208	100.0	95.3	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	845756	100.0	99.9	
122 Naphthalene	128	13.043	13.043	0.000	97	3719327	100.0	105.9	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	96	1370612	100.0	98.8	
S 141 1,2-Dichloroethene, Total	1				0		200.0	202.3	
S 140 1,3-Dichloropropene, Total	1				0		200.0	193.2	
S 142 Xylenes, Total	106				0		200.0	199.1	
S 137 Trihalomethanes, Total	1				0		400.0	408.8	
S 139 Total BTEX	1				0			497.6	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 50.00

Units: uL

MV-Main add A_00001

Amount Added: 50.00

Units: uL

MV-Gas A_00093

Amount Added: 20.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5638.d

Injection Date: 29-Jun-2021 11:27:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

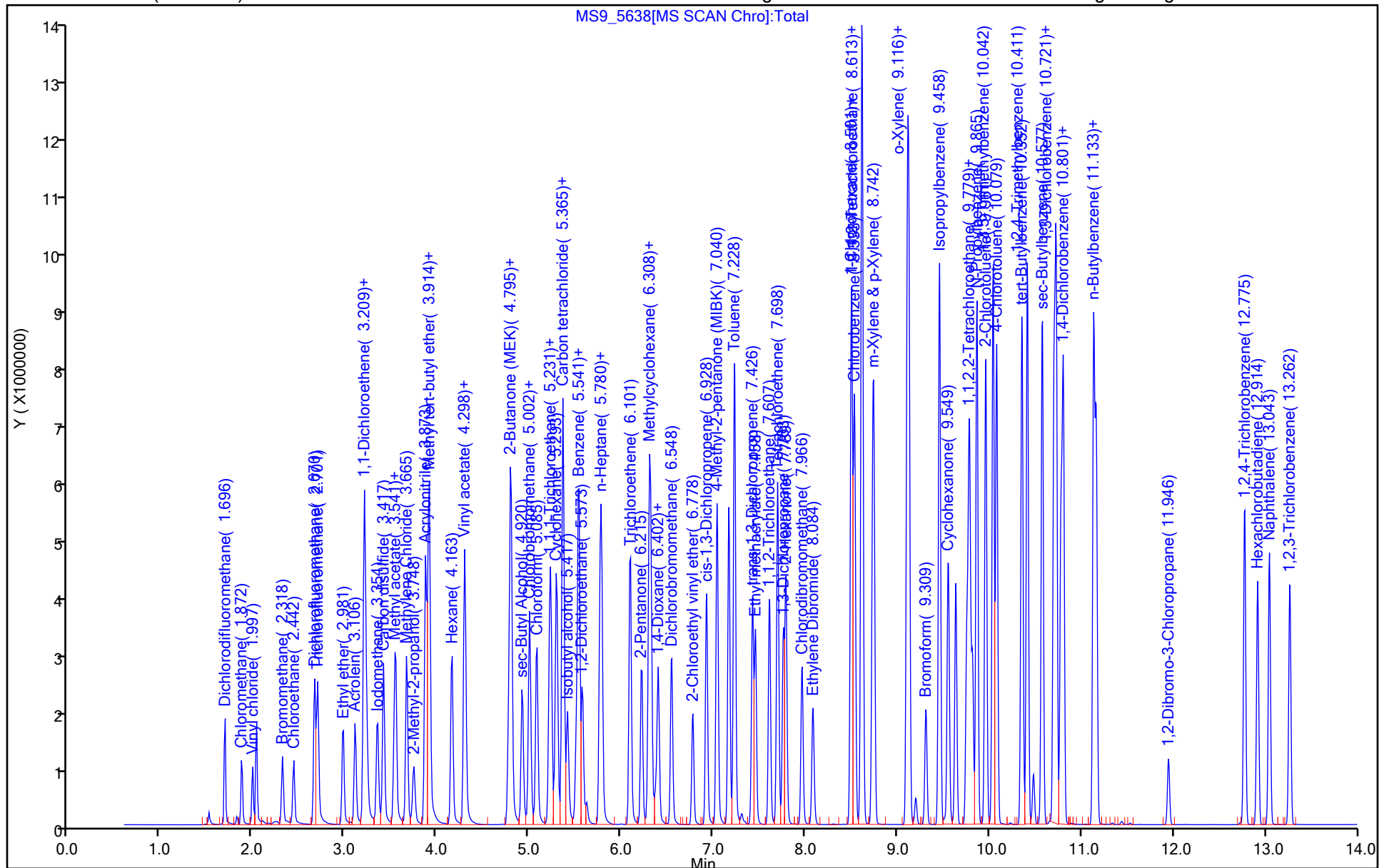
ALS Bottle#: 3

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\VMS9_5638.d

Injection Date: 29-Jun-2021 11:27:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

3

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

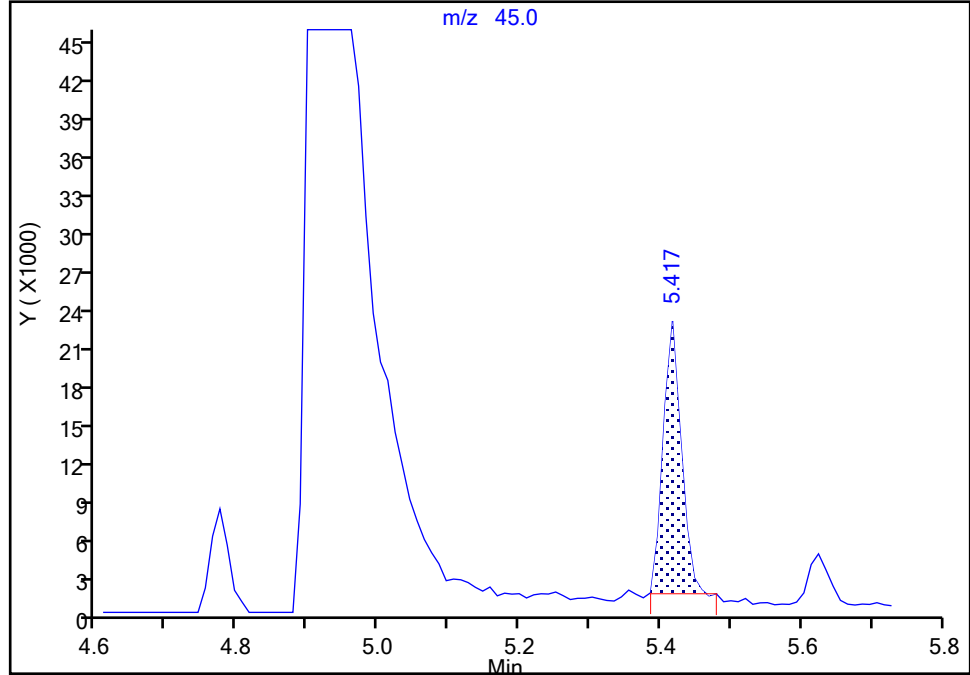
MS SCAN

51 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

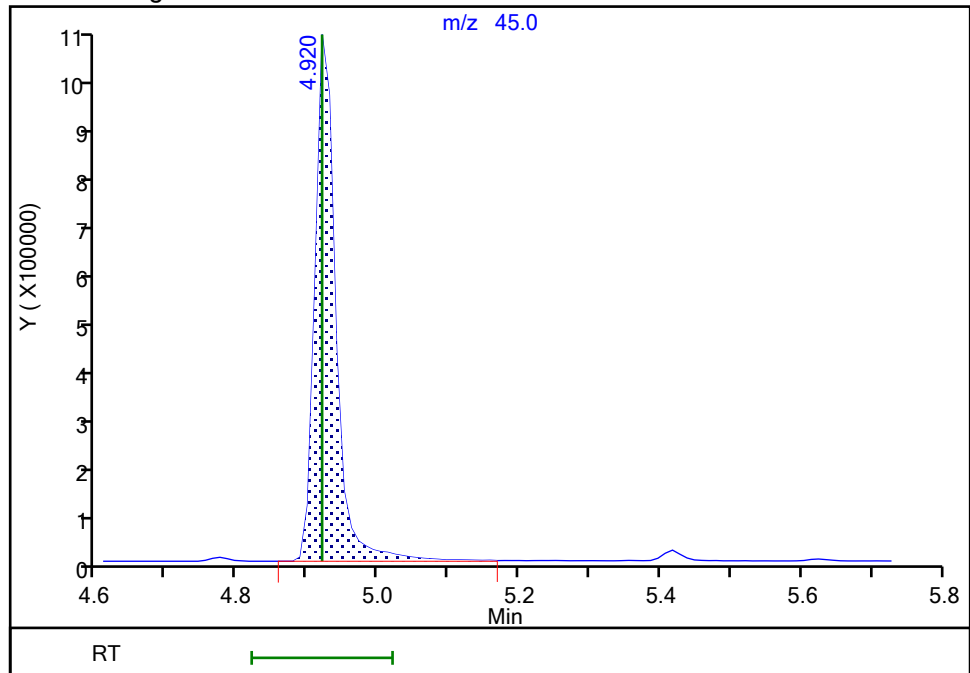
RT: 5.42
Area: 37525
Amount: 64.106783
Amount Units: ug/l

Processing Integration Results



RT: 4.92
Area: 2207821
Amount: 2254.8644
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 29-Jun-2021 12:08:14

Audit Action: Assigned Compound ID

Audit Reason: Wrong peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5639.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 29-Jun-2021 11:47:30 ALS Bottle#: 4 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:06 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 09:47:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	99	3284298	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	909350	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	93	1513037	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	95	920057	50.0	50.4	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	98	838073	50.0	49.9	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3278335	50.0	50.4	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1284655	50.0	49.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	944889	75.0	72.4	
15 Chloromethane	50	1.872	1.872	0.000	97	559659	75.0	74.8	
16 Vinyl chloride	62	1.996	1.996	0.000	96	564789	75.0	74.0	
19 Bromomethane	94	2.328	2.328	0.000	92	541076	75.0	79.8	M
20 Chloroethane	64	2.442	2.442	0.000	98	586143	75.0	79.2	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	1534235	75.0	74.3	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	1466980	75.0	82.2	
24 Ethyl ether	59	2.981	2.981	0.000	86	642091	75.0	70.2	
28 Acrolein	56	3.105	3.105	0.000	99	951760	740.6	624.8	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	94	854840	75.0	73.6	
29 112TCTFE	151	3.219	3.219	0.000	90	722683	75.0	68.1	
31 Acetone	43	3.240	3.240	0.000	98	689724	300.0	300.9	
33 Iodomethane	142	3.354	3.354	0.000	99	1363558	75.0	74.3	
35 Carbon disulfide	76	3.416	3.416	0.000	98	2267888	75.0	71.7	
34 Methyl acetate	43	3.530	3.530	0.000	94	815126	150.0	128.0	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	86	954416	75.0	71.6	
39 Methylene Chloride	84	3.665	3.665	0.000	80	968874	75.0	70.4	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	99	798064	750.0	674.0	
42 Acrylonitrile	53	3.872	3.872	0.000	97	2228319	750.0	768.6	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	2376939	75.0	65.3	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	95	979581	75.0	72.8	
43 Hexane	57	4.163	4.163	0.000	87	882493	75.0	68.2	
45 Vinyl acetate	43	4.297	4.297	0.000	97	2467875	150.0	135.1	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	1457803	75.0	71.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	1006618	300.0	302.3	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	1084861	75.0	70.8	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	87	1359058	75.0	73.6	
51 sec-Butyl Alcohol	45	4.919	4.919	0.000	96	1534163	1800.0	1652.4	
59 Chlorobromomethane	128	5.002	5.002	0.000	81	603876	75.0	71.0	
57 Tetrahydrofuran	42	5.013	5.013	0.000	78	369572	150.0	137.0	
56 Chloroform	83	5.085	5.085	0.000	92	1658816	75.0	75.0	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	97	1477971	75.0	73.0	
61 Cyclohexane	56	5.292	5.292	0.000	84	1184698	75.0	64.6	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	1264024	75.0	72.2	
63 Carbon tetrachloride	117	5.365	5.365	0.000	93	1282911	75.0	73.6	
58 Isobutyl alcohol	43	5.417	5.417	0.000	92	693736	1875.0	1686.8	
66 Benzene	78	5.541	5.541	0.000	96	3515280	75.0	72.1	
67 1,2-Dichloroethane	62	5.572	5.572	0.000	97	1185367	75.0	70.6	
135 n-Heptane	43	5.769	5.769	0.000	83	674276	75.0	65.8	
68 Trichloroethene	130	6.101	6.101	0.000	96	1172050	75.0	72.8	
69 2-Pentanone	43	6.215	6.215	0.000	95	1750107	240.0	205.4	
71 Methylcyclohexane	55	6.298	6.298	0.000	89	888961	75.0	66.9	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	886971	75.0	72.5	
73 1,4-Dioxane	88	6.370	6.370	0.000	91	257438	1500.0	1362.8	
74 Dibromomethane	93	6.402	6.402	0.000	92	630313	75.0	71.1	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	1224717	75.0	74.8	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	93	592971	75.0	69.4	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	97	1538333	75.0	73.1	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	2098509	300.0	264.3	
80 Toluene	91	7.233	7.233	0.000	99	3961557	75.0	73.5	
82 trans-1,3-Dichloropropene	75	7.425	7.425	0.000	89	1395932	75.0	69.7	
81 Ethyl methacrylate	69	7.457	7.457	0.000	86	1145319	75.0	69.4	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	888560	75.0	71.0	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	969242	75.0	72.7	
86 1,3-Dichloropropane	76	7.762	7.762	0.000	86	1396964	75.0	71.2	
84 2-Hexanone	43	7.789	7.789	0.000	88	1529026	300.0	267.9	
87 Chlorodibromomethane	129	7.960	7.960	0.000	90	996501	75.0	75.0	
89 Ethylene Dibromide	107	8.083	8.083	0.000	99	950587	75.0	65.1	
90 1-Chlorohexane	91	8.495	8.495	0.000	92	1411651	60.0	59.0	
91 Chlorobenzene	112	8.533	8.533	0.000	96	2850618	75.0	72.3	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	95	1086479	75.0	74.6	
92 Ethylbenzene	106	8.618	8.618	0.000	97	1580942	75.0	71.6	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	3584239	75.0	73.2	
95 o-Xylene	106	9.105	9.105	0.000	95	1867872	75.0	72.7	
96 Styrene	104	9.127	9.127	0.000	94	3081705	75.0	73.3	
97 Bromoform	173	9.308	9.308	0.000	97	640717	75.0	73.9	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	4364520	75.0	72.1	
100 Cyclohexanone	55	9.555	9.555	0.000	86	1227303	3000.0	2584.4	
101 1,1,2,2-Tetrachloroethane	83	9.752	9.752	0.000	96	1047235	75.0	74.8	
105 Bromobenzene	156	9.779	9.779	0.000	86	1370622	75.0	70.9	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	81	248145	75.0	67.6	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	82	369828	75.0	67.4	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	1382033	75.0	72.4	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	1254407	75.0	71.4	
106 1,3,5-Trimethylbenzene	105	10.041	10.041	0.000	95	3692684	75.0	73.0	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	1302080	75.0	71.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	3178085	75.0	72.7	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	3774366	75.0	72.7	
111 sec-Butylbenzene	134	10.576	10.576	0.000	94	1018946	75.0	73.5	
113 1,3-Dichlorobenzene	146	10.699	10.699	0.000	97	2398602	75.0	71.7	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	3868119	75.0	73.3	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	2442623	75.0	71.6	
116 n-Butylbenzene	91	11.133	11.133	0.000	95	3168182	75.0	73.7	
117 1,2-Dichlorobenzene	146	11.159	11.159	0.000	97	2275439	75.0	71.4	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	93	257799	75.0	73.6	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	1336212	75.0	71.5	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	614200	75.0	73.4	
122 Naphthalene	128	13.043	13.043	0.000	97	2726110	75.0	78.5	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	96	1015141	75.0	73.9	
S 141 1,2-Dichloroethene, Total	1				0		150.0	143.7	
S 140 1,3-Dichloropropene, Total	1				0		150.0	142.9	
S 142 Xylenes, Total	106				0		150.0	145.9	
S 137 Trihalomethanes, Total	1				0		300.0	298.7	
S 139 Total BTEX	1				0			363.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 37.50

Units: uL

MV-Main add A_00001

Amount Added: 37.50

Units: uL

MV-Gas A_00093

Amount Added: 15.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 10:18:06

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5639.d

Injection Date: 29-Jun-2021 11:47:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

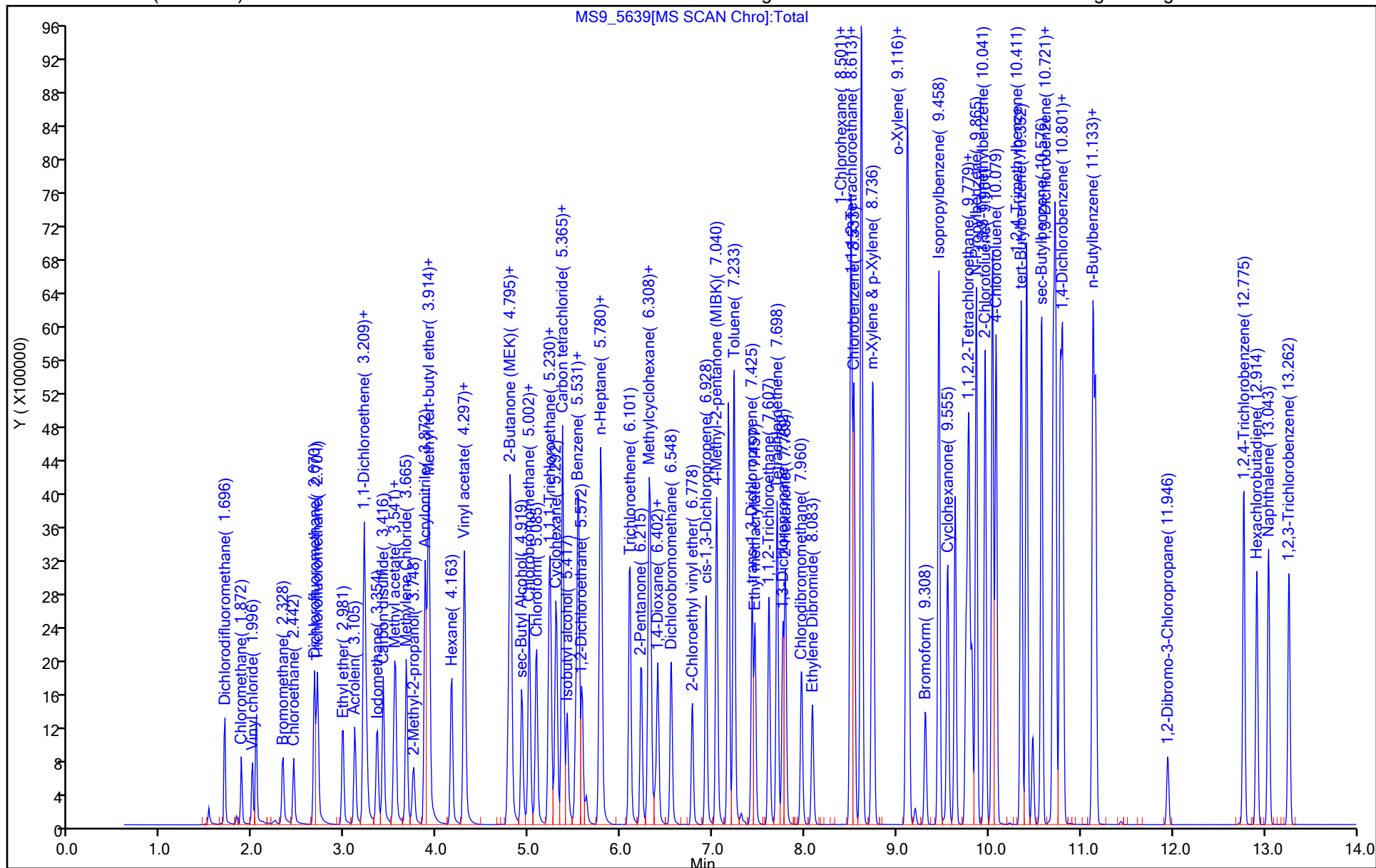
ALS Bottle#: 4

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\VMS9_5639.d

Injection Date: 29-Jun-2021 11:47:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

4

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

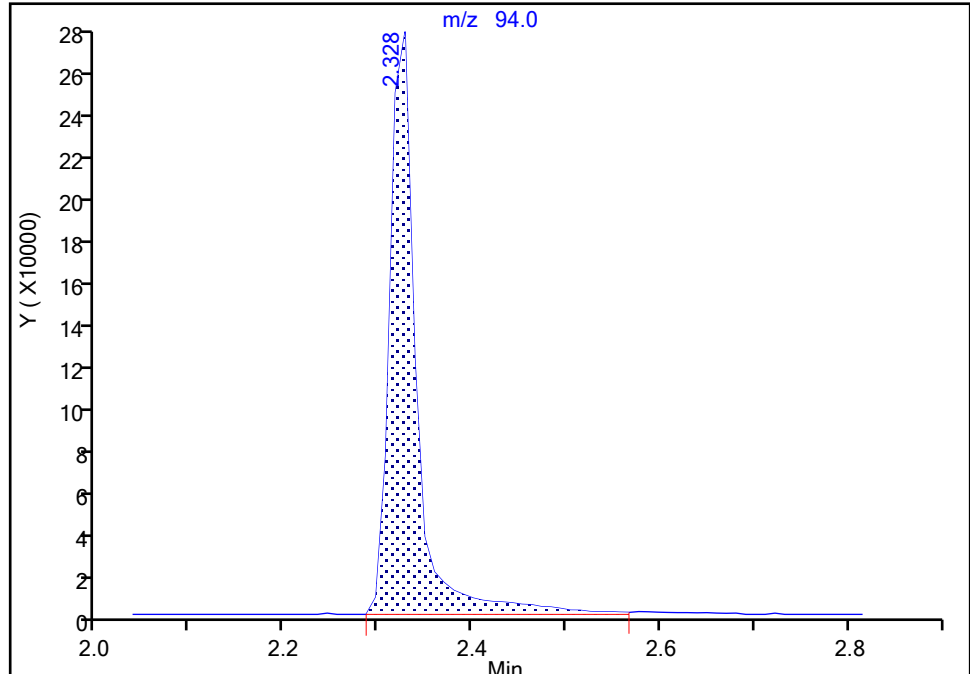
Detector: MS SCAN

19 Bromomethane, CAS: 74-83-9

Signal: 1

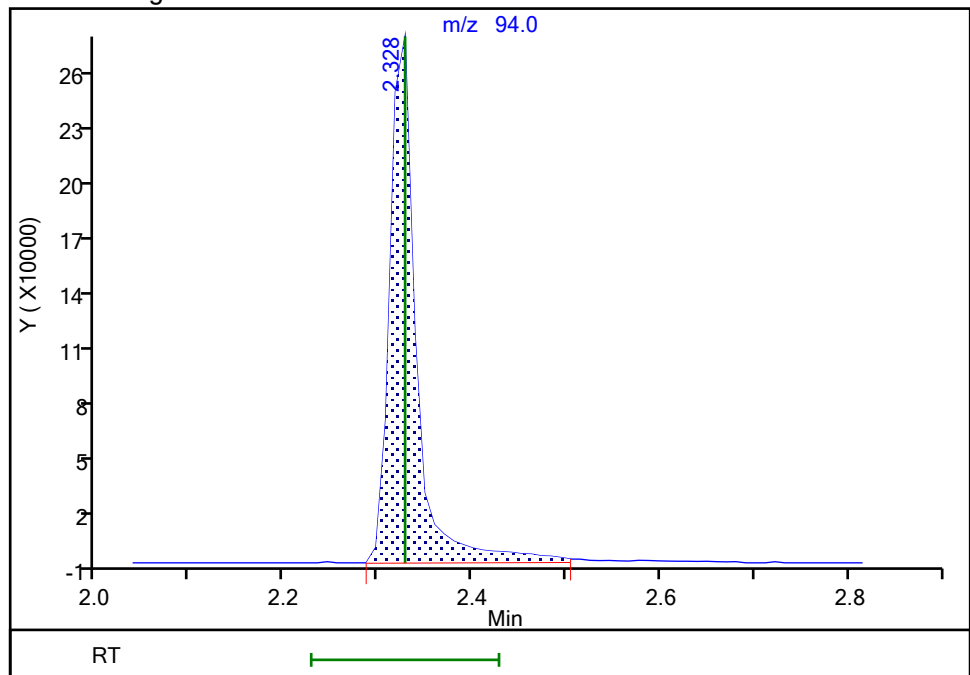
RT: 2.33
Area: 545554
Amount: 39.116463
Amount Units: ug/l

Processing Integration Results



RT: 2.33
Area: 541076
Amount: 79.750678
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 30-Jun-2021 10:11:30

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5640.d
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 29-Jun-2021 12:07:30 ALS Bottle#: 5 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icis
 Operator ID: wickham Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:11 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: ornelasg

Date: 30-Jun-2021 10:07:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	99	3390105	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	938729	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1524660	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	950923	50.0	50.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	98	873656	50.0	50.4	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3344452	50.0	49.8	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1312698	50.0	49.6	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	626131	50.0	46.5	
15 Chloromethane	50	1.872	1.872	0.000	97	363748	50.0	46.7	
16 Vinyl chloride	62	1.996	1.996	0.000	96	398858	50.0	50.3	
19 Bromomethane	94	2.328	2.328	0.000	91	383659	50.0	47.3	M
20 Chloroethane	64	2.442	2.442	0.000	98	419958	50.0	54.7	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	95	1113382	50.0	51.9	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	984954	50.0	53.2	
24 Ethyl ether	59	2.981	2.981	0.000	86	457655	50.0	48.4	
28 Acrolein	56	3.106	3.106	0.000	99	717068	493.8	456.0	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	94	647742	50.0	53.9	
29 112TCTFE	151	3.220	3.220	0.000	90	531799	50.0	48.6	
31 Acetone	43	3.240	3.240	0.000	98	501917	200.0	210.7	
33 Iodomethane	142	3.354	3.354	0.000	99	940652	50.0	49.5	
35 Carbon disulfide	76	3.417	3.417	0.000	98	1704454	50.0	52.0	
34 Methyl acetate	43	3.531	3.531	0.000	94	595718	100.0	90.7	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	85	719777	50.0	52.1	
39 Methylene Chloride	84	3.665	3.665	0.000	80	713240	50.0	49.8	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	99	578377	500.0	473.2	
42 Acrylonitrile	53	3.873	3.873	0.000	97	1640852	500.0	546.6	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	1730439	50.0	46.1	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	95	728974	50.0	52.3	
43 Hexane	57	4.163	4.163	0.000	88	671603	50.0	50.3	
45 Vinyl acetate	43	4.298	4.298	0.000	97	1807605	100.0	95.8	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	1096140	50.0	52.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	95	749045	200.0	217.3	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	805857	50.0	50.8	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	87	998553	50.0	52.2	
51 sec-Butyl Alcohol	45	4.919	4.919	0.000	96	1065246	1200.0	1111.6	
59 Chlorobromomethane	128	5.002	5.002	0.000	81	435042	50.0	49.5	
57 Tetrahydrofuran	42	5.013	5.013	0.000	77	268985	100.0	96.5	
56 Chloroform	83	5.085	5.085	0.000	92	1208267	50.0	52.7	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	97	1092165	50.0	52.1	
61 Cyclohexane	56	5.293	5.293	0.000	84	908580	50.0	48.0	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	940538	50.0	51.9	
63 Carbon tetrachloride	117	5.365	5.365	0.000	92	941622	50.0	52.2	
58 Isobutyl alcohol	43	5.417	5.417	0.000	91	500667	1250.0	1179.4	
66 Benzene	78	5.541	5.541	0.000	97	2619234	50.0	51.8	
67 1,2-Dichloroethane	62	5.572	5.572	0.000	97	859490	50.0	49.5	
135 n-Heptane	43	5.769	5.769	0.000	84	505762	50.0	47.8	
68 Trichloroethene	130	6.101	6.101	0.000	96	864169	50.0	51.8	
69 2-Pentanone	43	6.215	6.215	0.000	95	1244651	160.0	141.5	
71 Methylcyclohexane	55	6.298	6.298	0.000	88	664313	50.0	48.4	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	651411	50.0	51.4	
73 1,4-Dioxane	88	6.371	6.371	0.000	90	183593	1000.0	941.6	
74 Dibromomethane	93	6.402	6.402	0.000	92	450728	50.0	49.2	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	870585	50.0	51.4	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	92	413608	50.0	46.9	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	96	1089785	50.0	50.1	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	89	1498212	200.0	182.8	
80 Toluene	91	7.233	7.233	0.000	99	2882995	50.0	51.6	
82 trans-1,3-Dichloropropene	75	7.425	7.425	0.000	89	988623	50.0	47.8	
81 Ethyl methacrylate	69	7.458	7.458	0.000	86	812589	50.0	47.7	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	90	638079	50.0	49.3	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	708861	50.0	51.3	
86 1,3-Dichloropropane	76	7.763	7.763	0.000	87	995215	50.0	49.1	
84 2-Hexanone	43	7.789	7.789	0.000	86	1089680	200.0	184.9	
87 Chlorodibromomethane	129	7.966	7.966	0.000	90	689339	50.0	50.2	
89 Ethylene Dibromide	107	8.083	8.083	0.000	99	673254	50.0	44.6	
90 1-Chlorohexane	91	8.495	8.495	0.000	91	988097	40.0	39.8	
91 Chlorobenzene	112	8.533	8.533	0.000	96	2055032	50.0	50.3	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	96	765896	50.0	50.8	
92 Ethylbenzene	106	8.618	8.618	0.000	97	1163369	50.0	50.8	
94 m-Xylene & p-Xylene	91	8.742	8.742	0.000	97	2597779	50.0	51.1	
95 o-Xylene	106	9.105	9.105	0.000	95	1349684	50.0	50.7	
96 Styrene	104	9.127	9.127	0.000	93	2226502	50.0	51.2	
97 Bromoform	173	9.309	9.309	0.000	96	433334	50.0	48.5	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	3179729	50.0	51.9	
100 Cyclohexanone	55	9.549	9.549	0.000	87	904024	2000.0	1844.0	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	742961	50.0	52.5	
105 Bromobenzene	156	9.779	9.779	0.000	87	976744	50.0	50.0	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	65	180502	50.0	48.8	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	83	261385	50.0	47.3	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	997925	50.0	51.7	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	900489	50.0	50.7	
106 1,3,5-Trimethylbenzene	105	10.041	10.041	0.000	95	2646748	50.0	51.7	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	934531	50.0	50.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	2278133	50.0	51.5	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	2699583	50.0	51.4	
111 sec-Butylbenzene	134	10.576	10.576	0.000	94	735019	50.0	52.5	
113 1,3-Dichlorobenzene	146	10.699	10.699	0.000	97	1694473	50.0	50.1	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	2745531	50.0	51.5	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	1715410	50.0	49.8	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	2221869	50.0	51.1	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	97	1596327	50.0	49.6	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	91	174828	50.0	49.6	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	931633	50.0	49.4	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	427328	50.0	50.5	
122 Naphthalene	128	13.043	13.043	0.000	97	1834284	50.0	52.1	
123 1,2,3-Trichlorobenzene	180	13.267	13.267	0.000	95	698359	50.0	50.2	
S 141 1,2-Dichloroethene, Total	1				0		100.0	103.1	
S 140 1,3-Dichloropropene, Total	1				0		100.0	97.9	
S 142 Xylenes, Total	106				0		100.0	101.8	
S 137 Trihalomethanes, Total	1				0		200.0	202.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 25.00

Units: uL

MV-Main add A_00001

Amount Added: 25.00

Units: uL

MV-Gas A_00093

Amount Added: 10.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5640.d

Injection Date: 29-Jun-2021 12:07:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ics

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

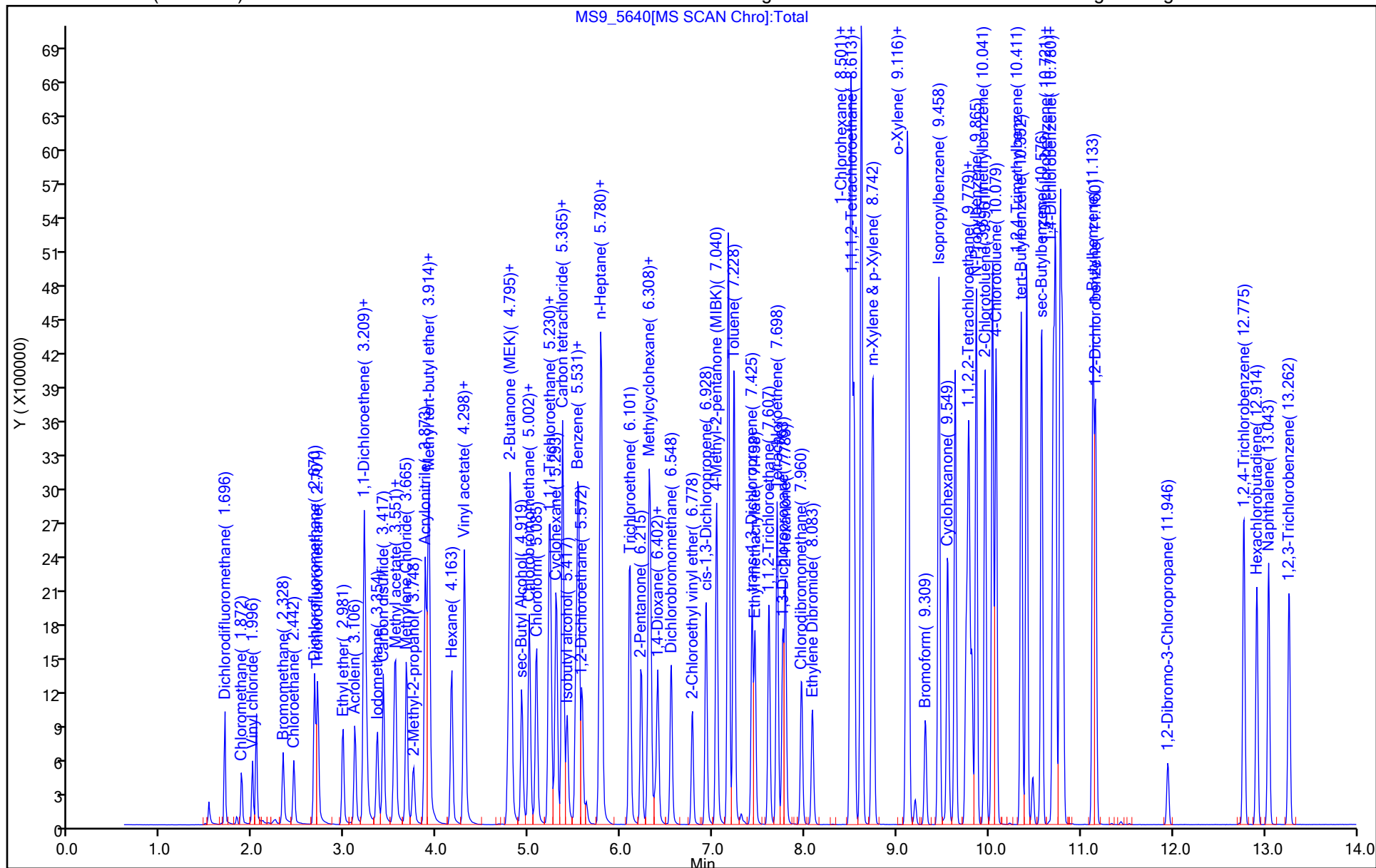
ALS Bottle#: 5

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5640.d

Injection Date: 29-Jun-2021 12:07:30

Instrument ID: VMS_MS9

Lims ID: icis

Client ID:

Operator ID: wickhamt

ALS Bottle#:

5

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

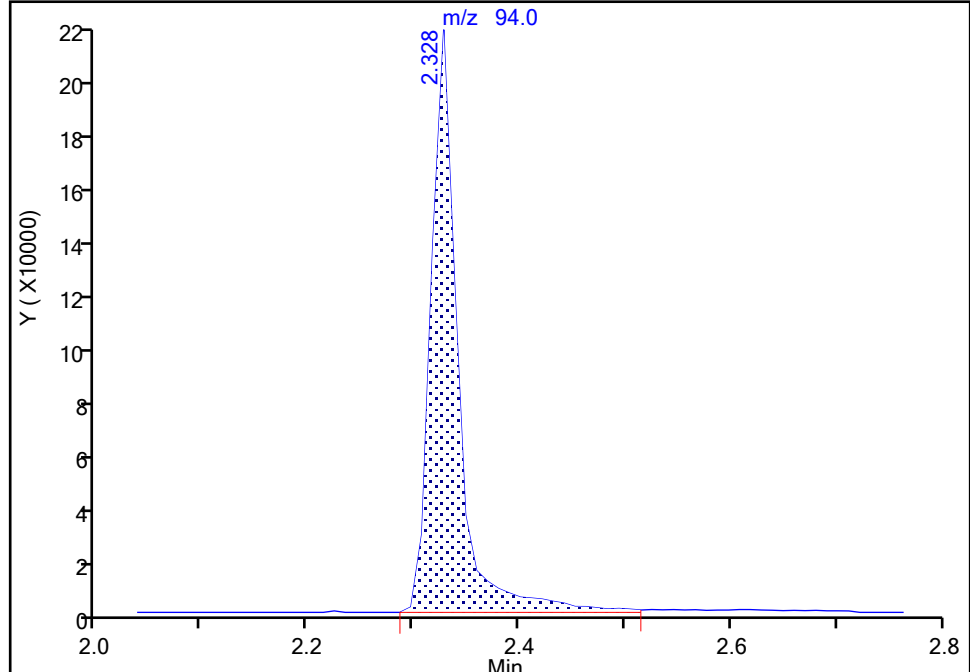
Detector: MS SCAN

19 Bromomethane, CAS: 74-83-9

Signal: 1

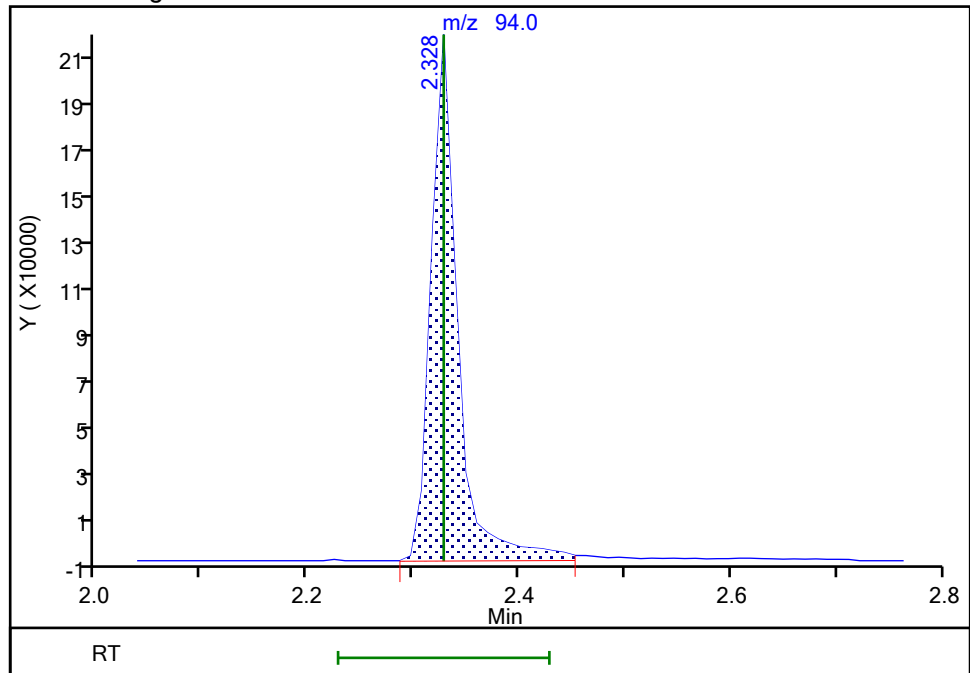
RT: 2.33
Area: 388433
Amount: 26.961710
Amount Units: ug/l

Processing Integration Results



RT: 2.33
Area: 383659
Amount: 47.290823
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 30-Jun-2021 10:10:40

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5641.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 29-Jun-2021 12:27:30 ALS Bottle#: 6 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:16 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 29-Jun-2021 12:51:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3457419	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	932995	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1533949	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	963862	50.0	50.2	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	98	898378	50.0	50.8	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3283148	50.0	49.2	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1315538	50.0	49.4	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	140211	10.0	10.2	
15 Chloromethane	50	1.872	1.872	0.000	97	85428	10.0	10.0	
16 Vinyl chloride	62	1.997	1.997	0.000	96	86024	10.0	9.90	
19 Bromomethane	94	2.328	2.328	0.000	91	106609	10.0	10.4	M
20 Chloroethane	64	2.442	2.442	0.000	99	98472	10.0	11.7	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	95	247788	10.0	10.6	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	208011	10.0	10.3	
24 Ethyl ether	59	2.981	2.981	0.000	86	106323	10.0	10.9	
28 Acrolein	56	3.106	3.106	0.000	99	173220	98.8	108.0	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	94	132542	10.0	10.2	
29 112TCTFE	151	3.220	3.220	0.000	89	109691	10.0	9.82	
31 Acetone	43	3.240	3.240	0.000	97	124031	40.0	47.4	
33 Iodomethane	142	3.354	3.354	0.000	99	180420	10.0	8.76	
35 Carbon disulfide	76	3.417	3.417	0.000	98	355383	10.0	10.0	
34 Methyl acetate	43	3.531	3.531	0.000	94	143259	20.0	21.4	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	85	153629	10.0	10.2	
39 Methylene Chloride	84	3.665	3.665	0.000	81	168701	10.0	10.6	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	98	135980	100.0	109.1	
42 Acrylonitrile	53	3.873	3.873	0.000	98	404172	100.0	127.6	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	391784	10.0	10.2	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	96	158574	10.0	10.4	
43 Hexane	57	4.163	4.163	0.000	87	138644	10.0	10.4	
45 Vinyl acetate	43	4.298	4.298	0.000	97	396058	20.0	20.6	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	94	237429	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	95	179342	40.0	49.2	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	180803	10.0	10.7	
53 2,2-Dichloropropane	77	4.806	4.806	0.000	85	202730	10.0	9.93	
51 sec-Butyl Alcohol	45	4.920	4.920	0.000	96	243697	240.0	249.3	
59 Chlorobromomethane	128	5.002	5.002	0.000	80	99447	10.0	10.9	
57 Tetrahydrofuran	42	5.013	5.013	0.000	74	61365	20.0	21.3	
56 Chloroform	83	5.085	5.085	0.000	91	261475	10.0	10.6	
60 1,1,1-Trichloroethane	97	5.231	5.231	0.000	97	224939	10.0	10.0	
61 Cyclohexane	56	5.293	5.293	0.000	84	186011	10.0	9.64	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	93	197156	10.0	10.2	
63 Carbon tetrachloride	117	5.365	5.365	0.000	88	184530	10.0	9.71	
58 Isobutyl alcohol	43	5.417	5.417	0.000	93	123503	250.0	285.3	
66 Benzene	78	5.541	5.541	0.000	95	568938	10.0	10.4	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	97	195073	10.0	10.7	
135 n-Heptane	43	5.769	5.769	0.000	83	105976	10.0	9.83	
68 Trichloroethene	130	6.101	6.101	0.000	96	184904	10.0	10.5	
69 2-Pentanone	43	6.215	6.215	0.000	94	292993	32.0	32.7	
71 Methylcyclohexane	55	6.298	6.298	0.000	88	134148	10.0	9.59	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	138140	10.0	10.3	
73 1,4-Dioxane	88	6.371	6.371	0.000	88	43043	200.0	216.5	
74 Dibromomethane	93	6.402	6.402	0.000	91	98936	10.0	10.4	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	178024	10.0	10.1	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	92	88123	10.0	9.80	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	97	226807	10.0	10.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	89	344791	40.0	41.3	
80 Toluene	91	7.228	7.228	0.000	99	608133	10.0	10.1	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	207897	10.0	9.86	
81 Ethyl methacrylate	69	7.458	7.458	0.000	85	176831	10.0	10.4	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	141317	10.0	10.5	
85 Tetrachloroethene	164	7.698	7.698	0.000	96	146589	10.0	10.1	
86 1,3-Dichloropropane	76	7.763	7.763	0.000	86	219592	10.0	10.7	
84 2-Hexanone	43	7.789	7.789	0.000	87	248658	40.0	42.5	
87 Chlorodibromomethane	129	7.961	7.961	0.000	90	137373	10.0	10.0	
89 Ethylene Dibromide	107	8.084	8.084	0.000	98	150968	10.0	10.1	
90 1-Chlorohexane	91	8.496	8.496	0.000	92	216963	8.00	8.30	
91 Chlorobenzene	112	8.533	8.533	0.000	97	450161	10.0	10.6	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	95	159347	10.0	10.4	
92 Ethylbenzene	106	8.619	8.619	0.000	97	246890	10.0	10.3	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	546612	10.0	10.3	
95 o-Xylene	106	9.105	9.105	0.000	95	295582	10.0	10.7	
96 Styrene	104	9.127	9.127	0.000	94	478342	10.0	10.7	
97 Bromoform	173	9.309	9.309	0.000	96	83614	10.0	9.50	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	673890	10.0	10.3	
100 Cyclohexanone	55	9.549	9.549	0.000	86	223500	400.0	458.7	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	168005	10.0	11.5	
105 Bromobenzene	156	9.779	9.779	0.000	87	212712	10.0	10.4	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	84	40181	10.0	10.8	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	82	59156	10.0	10.6	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	211809	10.0	10.3	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	192248	10.0	10.2	
106 1,3,5-Trimethylbenzene	105	10.042	10.042	0.000	95	558819	10.0	10.3	
108 4-Chlorotoluene	126	10.079	10.079	0.000	95	201988	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	485139	10.0	10.3	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	583497	10.0	10.5	
111 sec-Butylbenzene	134	10.577	10.577	0.000	94	152798	10.0	10.3	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	374324	10.0	10.6	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	587859	10.0	10.4	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	383157	10.0	10.6	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	476576	10.0	10.4	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	98	354929	10.0	10.6	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	89	36755	10.0	10.4	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	212148	10.0	10.9	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	92390	10.0	10.4	
122 Naphthalene	128	13.043	13.043	0.000	97	479466	10.0	12.8	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	96	171687	10.0	11.7	
S 141 1,2-Dichloroethene, Total	1				0		20.0	21.1	
S 140 1,3-Dichloropropene, Total	1				0		20.0	20.1	
S 142 Xylenes, Total	106				0		20.0	20.9	
S 137 Trihalomethanes, Total	1				0		40.0	40.2	
S 139 Total BTEX	1				0			51.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 5.00

Units: uL

MV-Main add A_00001

Amount Added: 5.00

Units: uL

MV-Gas A_00093

Amount Added: 2.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 10:18:17

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5641.d

Injection Date: 29-Jun-2021 12:27:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

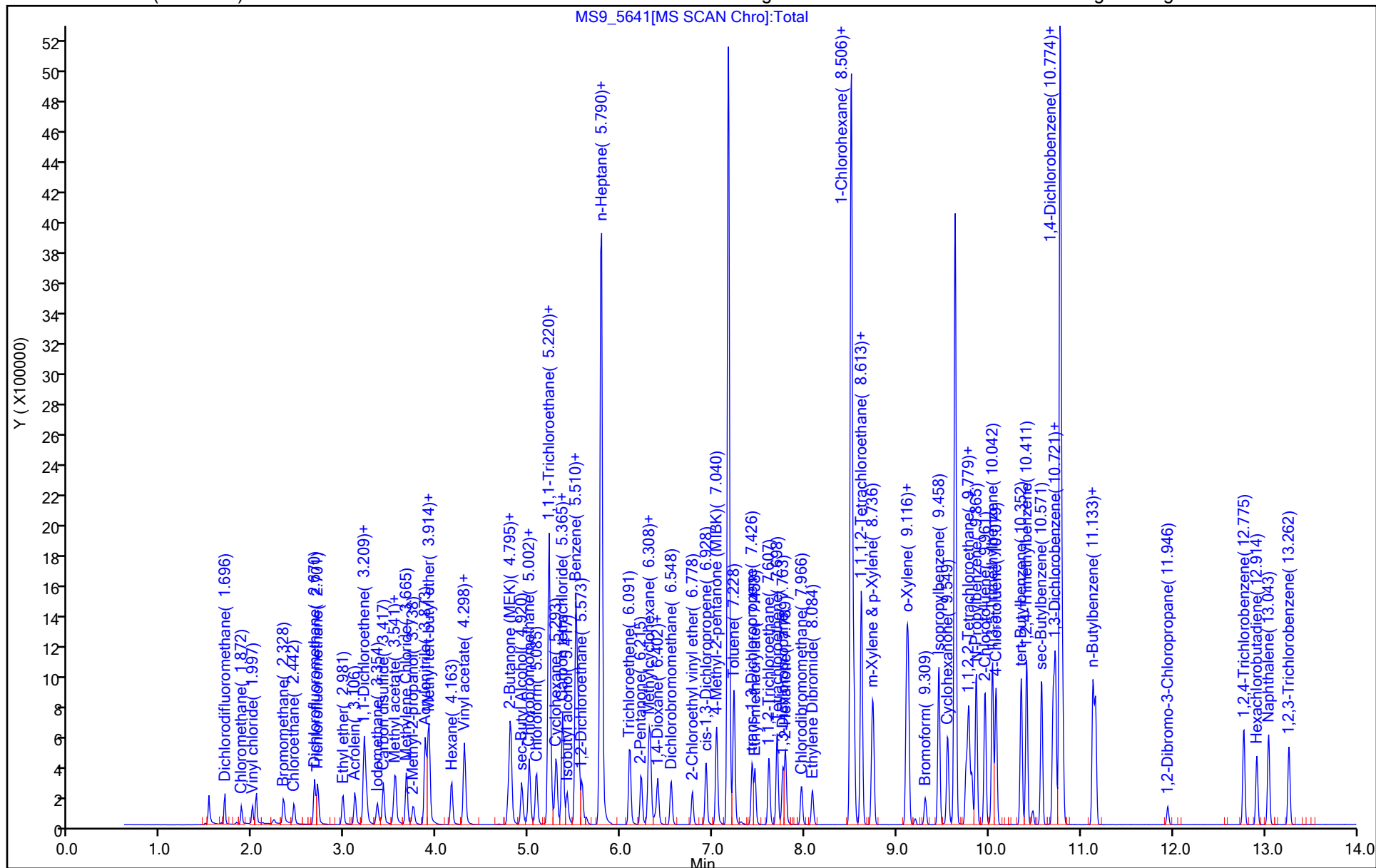
ALS Bottle#: 6

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5641.d

Injection Date: 29-Jun-2021 12:27:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

6

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

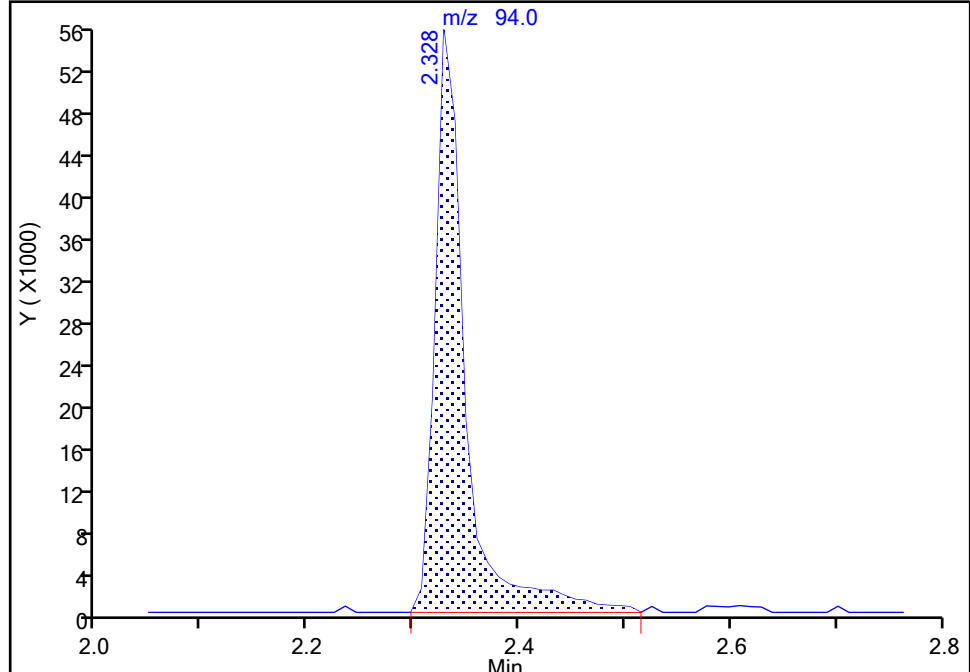
Detector: MS SCAN

19 Bromomethane, CAS: 74-83-9

Signal: 1

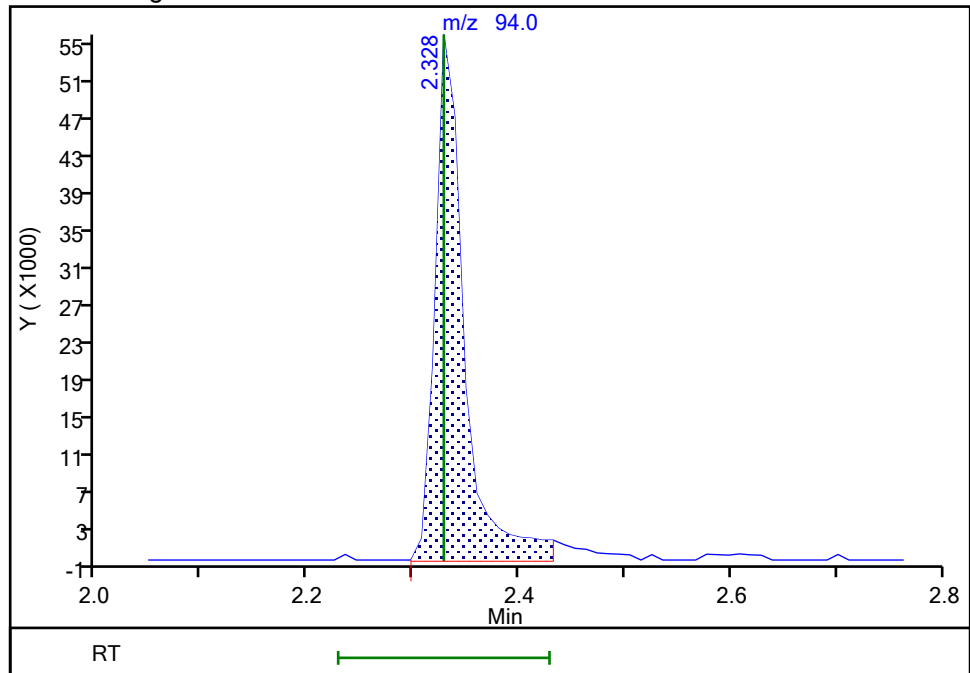
RT: 2.33
Area: 109572
Amount: 7.440806
Amount Units: ug/l

Processing Integration Results



RT: 2.33
Area: 106609
Amount: 10.388151
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 30-Jun-2021 10:10:06

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5642.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 29-Jun-2021 12:47:30 ALS Bottle#: 7 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:25 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: ornelasg

Date: 30-Jun-2021 10:09:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3392101	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	934083	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1525442	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	944882	50.0	50.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	871820	50.0	50.2	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3312485	50.0	49.6	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	94	1307095	50.0	49.4	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	84906	5.00	6.30	
15 Chloromethane	50	1.872	1.872	0.000	97	47605	5.00	5.27	
16 Vinyl chloride	62	1.996	1.996	0.000	97	54571	5.00	6.07	
19 Bromomethane	94	2.328	2.328	0.000	92	55213	5.00	4.84	M
20 Chloroethane	64	2.442	2.442	0.000	98	47705	5.00	5.19	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	138104	5.00	5.57	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	125667	5.00	6.00	
24 Ethyl ether	59	2.981	2.981	0.000	85	55515	5.00	5.68	
28 Acrolein	56	3.105	3.105	0.000	99	86734	49.4	55.1	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	94	70788	5.00	5.22	
29 112TCTFE	151	3.219	3.219	0.000	89	58577	5.00	5.34	
31 Acetone	43	3.240	3.240	0.000	97	63581	20.0	22.5	
33 Iodomethane	142	3.354	3.354	0.000	99	95467	5.00	4.41	
35 Carbon disulfide	76	3.416	3.416	0.000	98	187331	5.00	5.02	
34 Methyl acetate	43	3.530	3.530	0.000	94	75305	10.0	11.5	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	86	80516	5.00	5.04	
39 Methylene Chloride	84	3.665	3.665	0.000	80	92619	5.00	5.37	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	98	67431	50.0	55.1	
42 Acrylonitrile	53	3.872	3.872	0.000	97	207645	50.0	64.0	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	204113	5.00	5.43	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	94	84229	5.00	5.24	
43 Hexane	57	4.163	4.163	0.000	87	70337	5.00	5.29	
45 Vinyl acetate	43	4.297	4.297	0.000	97	209664	10.0	11.1	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	126561	5.00	5.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	95	91010	20.0	24.3	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	95118	5.00	5.46	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	85	107327	5.00	5.09	
51 sec-Butyl Alcohol	45	4.919	4.919	0.000	95	131300	120.0	136.9	
59 Chlorobromomethane	128	5.002	5.002	0.000	81	51256	5.00	5.58	
57 Tetrahydrofuran	42	5.013	5.013	0.000	79	33174	10.0	11.5	
56 Chloroform	83	5.085	5.085	0.000	91	138865	5.00	5.38	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	97	118071	5.00	5.05	
61 Cyclohexane	56	5.292	5.292	0.000	84	96670	5.00	5.10	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	94	103228	5.00	5.13	
63 Carbon tetrachloride	117	5.365	5.365	0.000	89	97009	5.00	5.01	
58 Isobutyl alcohol	43	5.417	5.417	0.000	93	58735	125.0	138.3	
66 Benzene	78	5.541	5.541	0.000	96	307337	5.00	5.38	
67 1,2-Dichloroethane	62	5.572	5.572	0.000	98	101698	5.00	5.50	
135 n-Heptane	43	5.769	5.769	0.000	83	54910	5.00	5.19	
68 Trichloroethene	130	6.101	6.101	0.000	96	97598	5.00	5.17	
69 2-Pentanone	43	6.215	6.215	0.000	94	151461	16.0	17.2	
71 Methylcyclohexane	55	6.298	6.298	0.000	86	69754	5.00	5.08	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	74971	5.00	5.46	
73 1,4-Dioxane	88	6.370	6.370	0.000	88	21404	100.0	109.7	
74 Dibromomethane	93	6.402	6.402	0.000	93	54296	5.00	5.68	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	92442	5.00	5.19	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	92	50679	5.00	5.75	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	96	119355	5.00	5.25	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	90	186353	20.0	22.7	
80 Toluene	91	7.233	7.233	0.000	99	336626	5.00	5.34	
82 trans-1,3-Dichloropropene	75	7.425	7.425	0.000	89	109680	5.00	5.30	
81 Ethyl methacrylate	69	7.457	7.457	0.000	86	92271	5.00	5.44	
83 1,1,2-Trichloroethane	97	7.613	7.613	0.000	91	75298	5.00	5.58	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	78554	5.00	5.05	
86 1,3-Dichloropropane	76	7.762	7.762	0.000	84	117667	5.00	5.60	
84 2-Hexanone	43	7.789	7.789	0.000	87	129802	20.0	22.1	
87 Chlorodibromomethane	129	7.966	7.966	0.000	90	69543	5.00	5.03	
89 Ethylene Dibromide	107	8.083	8.083	0.000	99	78549	5.00	5.23	
90 1-Chlorohexane	91	8.495	8.495	0.000	93	114056	4.00	4.05	
91 Chlorobenzene	112	8.533	8.533	0.000	96	241779	5.00	5.39	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	95	83013	5.00	5.23	
92 Ethylbenzene	106	8.618	8.618	0.000	98	129223	5.00	5.07	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	297339	5.00	5.24	
95 o-Xylene	106	9.105	9.105	0.000	94	155477	5.00	5.29	
96 Styrene	104	9.127	9.127	0.000	93	251778	5.00	5.37	
97 Bromoform	173	9.308	9.308	0.000	97	41007	5.00	4.71	
98 Isopropylbenzene	105	9.458	9.458	0.000	95	360822	5.00	5.21	
100 Cyclohexanone	55	9.555	9.555	0.000	86	104973	200.0	215.2	
101 1,1,2,2-Tetrachloroethane	83	9.752	9.752	0.000	96	89223	5.00	5.92	
105 Bromobenzene	156	9.779	9.779	0.000	87	115339	5.00	5.47	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	88	19296	5.00	5.21	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	82	30781	5.00	5.56	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	112173	5.00	5.15	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	104692	5.00	5.31	
106 1,3,5-Trimethylbenzene	105	10.041	10.041	0.000	95	300713	5.00	5.25	
108 4-Chlorotoluene	126	10.079	10.079	0.000	95	110417	5.00	5.42	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	258511	5.00	5.18	
110 1,2,4-Trimethylbenzene	105	10.410	10.410	0.000	96	312560	5.00	5.36	
111 sec-Butylbenzene	134	10.576	10.576	0.000	94	81561	5.00	5.21	
113 1,3-Dichlorobenzene	146	10.699	10.699	0.000	97	204593	5.00	5.56	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	317018	5.00	5.34	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	206906	5.00	5.52	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	254163	5.00	5.26	
117 1,2-Dichlorobenzene	146	11.159	11.159	0.000	98	192126	5.00	5.59	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	88	17955	5.00	5.14	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	110239	5.00	5.48	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	49454	5.00	5.30	
122 Naphthalene	128	13.043	13.043	0.000	97	242429	5.00	6.08	
123 1,2,3-Trichlorobenzene	180	13.267	13.267	0.000	95	89220	5.00	5.74	
S 141 1,2-Dichloroethene, Total	1				0		10.0	10.7	
S 140 1,3-Dichloropropene, Total	1				0		10.0	10.5	
S 142 Xylenes, Total	106				0		10.0	10.5	
S 137 Trihalomethanes, Total	1				0		20.0	20.3	
S 139 Total BTEX	1				0			26.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 2.50

Units: uL

MV-Main add A_00001

Amount Added: 2.50

Units: uL

MV-Gas A_00093

Amount Added: 1.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 30-Jun-2021 10:18:25

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5642.d

Injection Date: 29-Jun-2021 12:47:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

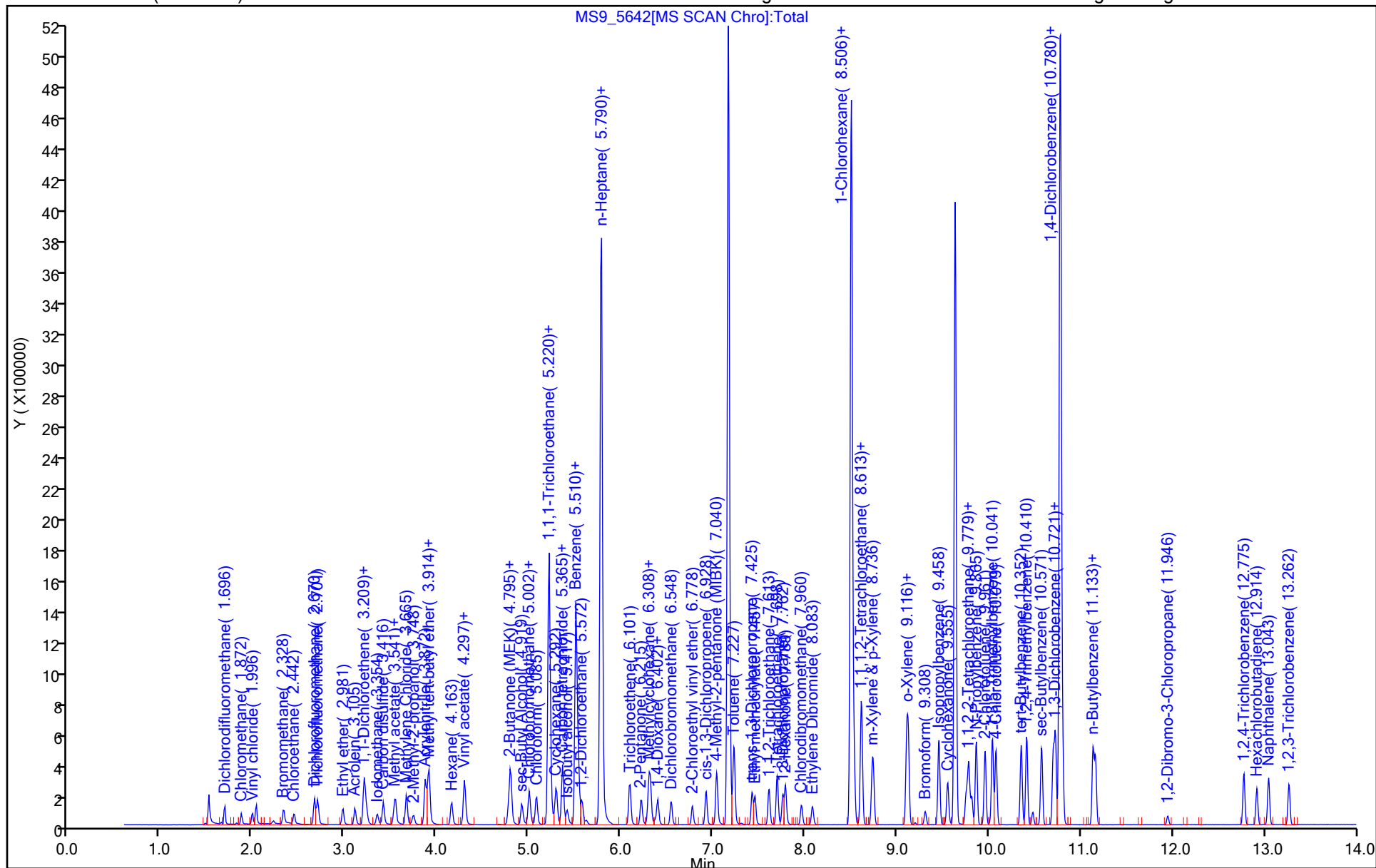
ALS Bottle#: 7

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\VMS9_5642.d

Injection Date: 29-Jun-2021 12:47:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

7

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

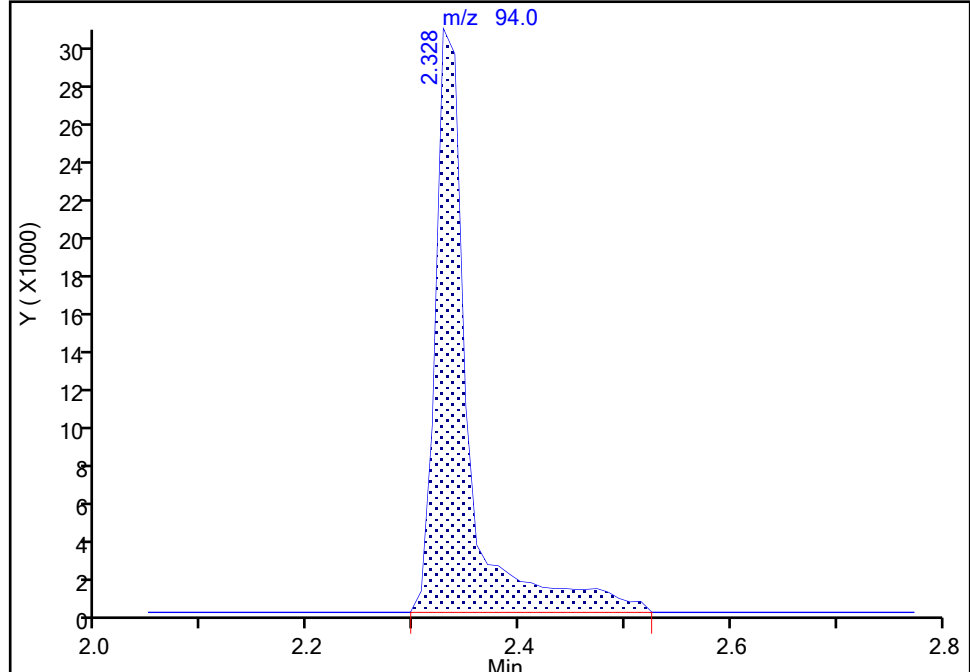
MS SCAN

19 Bromomethane, CAS: 74-83-9

Signal: 1

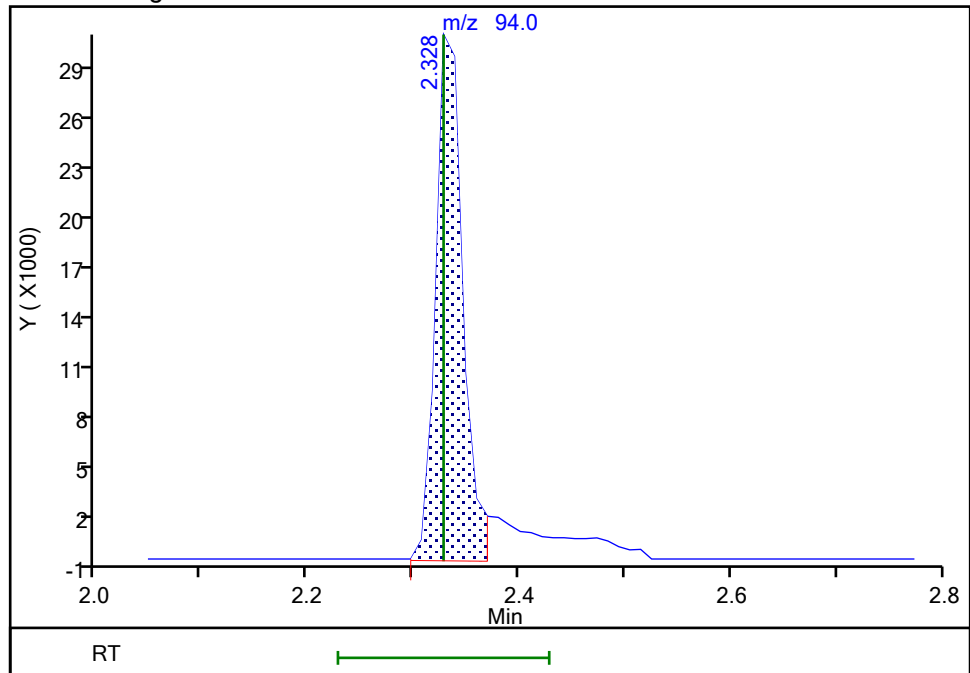
RT: 2.33
Area: 65776
Amount: 4.479935
Amount Units: ug/l

Processing Integration Results



RT: 2.33
Area: 55213
Amount: 4.840584
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 30-Jun-2021 10:09:36

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5643.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 29-Jun-2021 13:07:30 ALS Bottle#: 8 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:33 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: sumichrastr

Date: 29-Jun-2021 18:02:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3431058	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	940716	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1511131	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	943950	50.0	49.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	98	859644	50.0	49.0	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3368614	50.0	50.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1315074	50.0	50.2	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	25665	2.00	1.88	
15 Chloromethane	50	1.872	1.872	0.000	97	21320	2.00	1.80	
16 Vinyl chloride	62	1.996	1.996	0.000	97	22018	2.00	1.85	
19 Bromomethane	94	2.338	2.338	0.000	92	30109	2.00	2.06	M
20 Chloroethane	64	2.452	2.452	0.000	99	22379	2.00	1.79	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	95	62009	2.00	1.92	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	49508	2.00	1.79	
24 Ethyl ether	59	2.981	2.981	0.000	85	22882	2.00	2.18	
28 Acrolein	56	3.105	3.105	0.000	97	36655	19.8	23.0	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	95	32157	2.00	1.94	
29 112TCTFE	151	3.219	3.219	0.000	90	23209	2.00	2.09	
31 Acetone	43	3.240	3.240	0.000	96	30391	8.00	8.10	
33 Iodomethane	142	3.354	3.354	0.000	99	47016	2.00	1.80	
35 Carbon disulfide	76	3.416	3.416	0.000	98	88150	2.00	1.92	
34 Methyl acetate	43	3.530	3.530	0.000	95	30084	4.00	4.52	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	86	39747	2.00	2.00	
39 Methylene Chloride	84	3.665	3.665	0.000	80	47708	2.00	2.11	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	97	28893	20.0	23.4	
42 Acrylonitrile	53	3.872	3.872	0.000	97	87425	20.0	23.2	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	95	82747	2.00	2.18	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	91	39181	2.00	1.92	
43 Hexane	57	4.163	4.163	0.000	87	27117	2.00	2.03	
45 Vinyl acetate	43	4.297	4.297	0.000	97	82491	4.00	4.32	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	57834	2.00	2.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	96	38460	8.00	8.81	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	42057	2.00	2.05	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	85	48437	2.00	1.95	
51 sec-Butyl Alcohol	45	4.919	4.919	0.000	95	53121	48.0	54.8	
59 Chlorobromomethane	128	5.002	5.002	0.000	83	21453	2.00	2.15	
57 Tetrahydrofuran	42	5.013	5.013	0.000	78	12798	4.00	4.14	
56 Chloroform	83	5.085	5.085	0.000	92	61975	2.00	1.95	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	98	54505	2.00	1.95	
61 Cyclohexane	56	5.293	5.293	0.000	85	39670	2.00	2.07	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	93	48047	2.00	2.02	
63 Carbon tetrachloride	117	5.365	5.365	0.000	85	41533	2.00	1.89	
58 Isobutyl alcohol	43	5.417	5.417	0.000	92	25720	50.0	59.9	
66 Benzene	78	5.541	5.541	0.000	95	142946	2.00	2.04	
67 1,2-Dichloroethane	62	5.572	5.572	0.000	97	45121	2.00	2.19	
135 n-Heptane	43	5.769	5.769	0.000	77	21699	2.00	2.03	
68 Trichloroethene	130	6.101	6.101	0.000	96	45399	2.00	1.96	
69 2-Pentanone	43	6.225	6.225	0.000	94	64855	6.40	7.29	
71 Methylcyclohexane	55	6.308	6.308	0.000	85	28157	2.00	2.03	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	32993	2.00	2.09	
73 1,4-Dioxane	88	6.371	6.371	0.000	88	9164	40.0	46.4	
74 Dibromomethane	93	6.402	6.402	0.000	92	22575	2.00	2.18	
75 Dichlorobromomethane	83	6.548	6.548	0.000	96	38362	2.00	1.95	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	91	17480	2.00	1.96	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	97	52161	2.00	2.11	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	74751	8.00	9.01	
80 Toluene	91	7.233	7.233	0.000	99	157803	2.00	2.06	
82 trans-1,3-Dichloropropene	75	7.425	7.425	0.000	86	45995	2.00	2.20	
81 Ethyl methacrylate	69	7.457	7.457	0.000	84	36109	2.00	2.11	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	89	32204	2.00	2.20	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	37469	2.00	2.00	
86 1,3-Dichloropropane	76	7.762	7.762	0.000	88	49523	2.00	2.19	
84 2-Hexanone	43	7.789	7.789	0.000	88	54291	8.00	9.20	
87 Chlorodibromomethane	129	7.966	7.966	0.000	89	28138	2.00	1.98	
89 Ethylene Dibromide	107	8.083	8.083	0.000	98	33514	2.00	2.22	
90 1-Chlorohexane	91	8.495	8.495	0.000	91	55197	1.60	1.61	
91 Chlorobenzene	112	8.533	8.533	0.000	97	110126	2.00	2.09	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	94	35095	2.00	1.99	
92 Ethylbenzene	106	8.618	8.618	0.000	97	61733	2.00	2.04	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	136807	2.00	2.00	
95 o-Xylene	106	9.105	9.105	0.000	93	72836	2.00	2.11	
96 Styrene	104	9.127	9.127	0.000	94	110730	2.00	2.06	
97 Bromoform	173	9.308	9.308	0.000	93	15942	2.00	1.88	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	167346	2.00	2.03	
100 Cyclohexanone	55	9.555	9.555	0.000	86	47786	80.0	97.3	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	95	38429	2.00	2.33	
105 Bromobenzene	156	9.779	9.779	0.000	85	51140	2.00	2.18	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	68	7963	2.00	2.17	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	83	13136	2.00	2.40	
103 N-Propylbenzene	120	9.860	9.860	0.000	98	50880	2.00	1.95	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	48552	2.00	2.14	
106 1,3,5-Trimethylbenzene	105	10.041	10.041	0.000	95	137722	2.00	2.05	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	49428	2.00	2.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	119564	2.00	2.02	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	96	139955	2.00	2.06	
111 sec-Butylbenzene	134	10.576	10.576	0.000	94	37014	2.00	2.02	
113 1,3-Dichlorobenzene	146	10.699	10.699	0.000	96	87731	2.00	2.09	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	140788	2.00	2.02	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	95	91168	2.00	2.15	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	113686	2.00	2.01	
117 1,2-Dichlorobenzene	146	11.159	11.159	0.000	97	82384	2.00	2.18	
118 1,2-Dibromo-3-Chloropropane	157	11.941	11.941	0.000	85	6827	2.00	2.01	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	48009	2.00	2.18	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	96	22686	2.00	2.13	
122 Naphthalene	128	13.043	13.043	0.000	98	91678	2.00	1.75	
123 1,2,3-Trichlorobenzene	180	13.267	13.267	0.000	94	35974	2.00	1.88	
S 141 1,2-Dichloroethene, Total	1				0		4.00	3.97	
S 140 1,3-Dichloropropene, Total	1				0		4.00	4.30	
S 142 Xylenes, Total	106				0		4.00	4.11	
S 137 Trihalomethanes, Total	1				0		8.00	7.76	
S 139 Total BTEX	1				0			10.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 1.00

Units: uL

MV-Main add A_00001

Amount Added: 1.00

Units: uL

MV-Gas A_00093

Amount Added: 0.40

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Chrom Revision: 2.3 13-May-2021 07:57:40

Operator ID: wickhamt

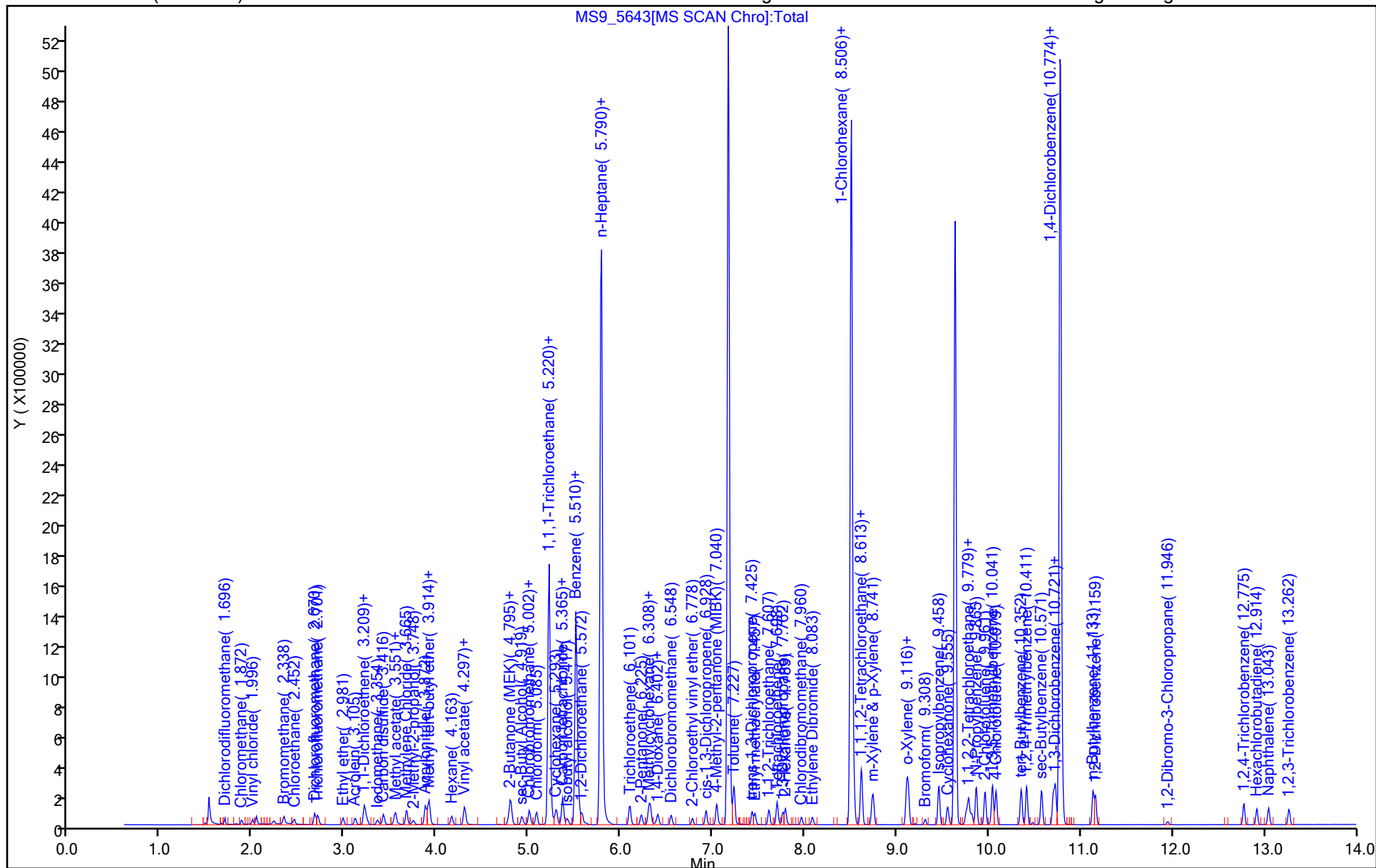
Worklist Smp#: 22

Client ID:

ALS Bottle#: 8

Limit Group: MSV - 8260B Water and Solid

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5643.d

Injection Date: 29-Jun-2021 13:07:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

8

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

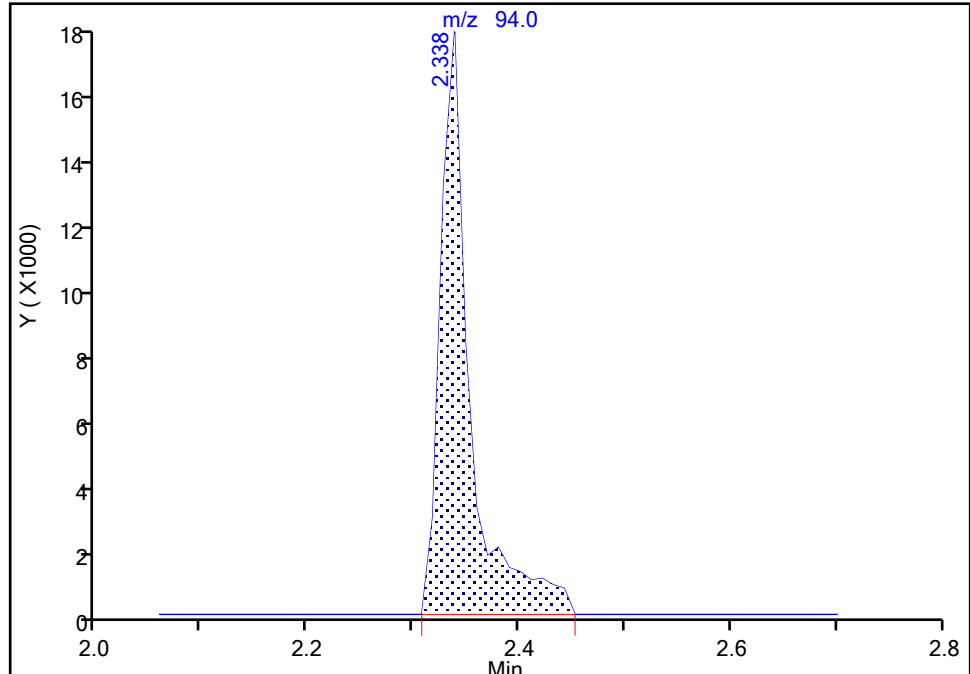
Detector: MS SCAN

19 Bromomethane, CAS: 74-83-9

Signal: 1

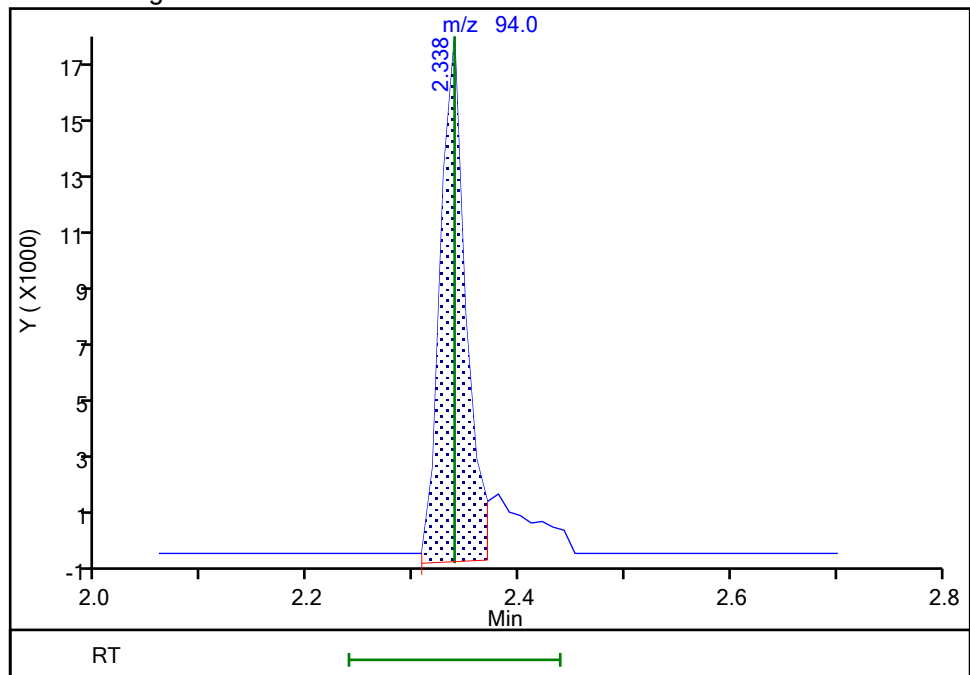
RT: 2.34
Area: 34176
Amount: 2.266776
Amount Units: ug/l

Processing Integration Results



RT: 2.34
Area: 30109
Amount: 2.063561
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 30-Jun-2021 10:08:53

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5644.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 29-Jun-2021 13:27:30 ALS Bottle#: 9 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:40 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: sumichrastr

Date: 29-Jun-2021 18:15:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	99	3449974	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	934818	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1516064	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	94	944334	50.0	49.2	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	872334	50.0	49.4	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3361020	50.0	50.3	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1291486	50.0	49.1	
13 Dichlorodifluoromethane	85	1.685	1.685	0.000	98	15510	1.00	1.13	
15 Chloromethane	50	1.872	1.872	0.000	98	15019	1.00	0.9696	
16 Vinyl chloride	62	1.996	1.996	0.000	97	14424	1.00	0.8780	
19 Bromomethane	94	2.328	2.328	0.000	91	21202	1.00	1.10	M
20 Chloroethane	64	2.442	2.442	0.000	98	14462	1.00	0.7416	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	42049	1.00	0.9738	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	97	30459	1.00	0.7447	
24 Ethyl ether	59	2.971	2.971	0.000	84	11813	1.00	1.01	
28 Acrolein	56	3.105	3.105	0.000	97	17009	9.88	10.6	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	95	19528	1.00	0.8779	
29 112TCTFE	151	3.219	3.219	0.000	83	11415	1.00	1.02	
31 Acetone	43	3.240	3.240	0.000	98	17395	4.00	2.54	
33 Iodomethane	142	3.354	3.354	0.000	98	32347	1.00	1.02	
35 Carbon disulfide	76	3.416	3.416	0.000	98	56861	1.00	0.9550	
34 Methyl acetate	43	3.530	3.530	0.000	94	15575	2.00	2.33	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	91	25530	1.00	0.9604	
39 Methylene Chloride	84	3.665	3.665	0.000	80	32484	1.00	1.02	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	95	12558	10.0	10.1	
42 Acrylonitrile	53	3.872	3.872	0.000	97	42130	10.0	8.10	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	42049	1.00	1.10	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	98	25509	1.00	0.9240	
43 Hexane	57	4.163	4.163	0.000	88	12616	1.00	0.9484	
45 Vinyl acetate	43	4.297	4.297	0.000	97	41520	2.00	2.16	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	93	34569	1.00	0.9208	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	92	20349	4.00	3.53	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	25518	1.00	1.00	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	85	29041	1.00	0.9258	
51 sec-Butyl Alcohol	45	4.919	4.919	0.000	95	24240	24.0	24.9	
59 Chlorobromomethane	128	5.002	5.002	0.000	79	11065	1.00	0.9668	
57 Tetrahydrofuran	42	5.013	5.013	0.000	77	6584	2.00	1.91	
56 Chloroform	83	5.085	5.085	0.000	92	36786	1.00	0.8383	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	96	33537	1.00	0.9422	
61 Cyclohexane	56	5.293	5.293	0.000	81	20635	1.00	1.07	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	94	28842	1.00	0.9487	
63 Carbon tetrachloride	117	5.365	5.365	0.000	82	24408	1.00	0.9336	
58 Isobutyl alcohol	43	5.417	5.417	0.000	91	10656	25.0	24.7	
66 Benzene	78	5.541	5.541	0.000	93	86513	1.00	0.9132	
67 1,2-Dichloroethane	62	5.572	5.572	0.000	97	23986	1.00	0.9727	
135 n-Heptane	43	5.769	5.769	0.000	67	10667	1.00	0.99	
68 Trichloroethene	130	6.101	6.101	0.000	93	28861	1.00	0.9665	
69 2-Pentanone	43	6.225	6.225	0.000	93	29670	3.20	3.32	
71 Methylcyclohexane	55	6.298	6.298	0.000	85	14582	1.00	1.04	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	18723	1.00	0.9543	
73 1,4-Dioxane	88		6.371				ND	ND	
74 Dibromomethane	93	6.402	6.402	0.000	93	11603	1.00	0.9817	
75 Dichlorobromomethane	83	6.548	6.548	0.000	97	20642	1.00	0.9059	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	91	9956	1.00	1.11	
78 cis-1,3-Dichloropropene	75	6.928	6.928	0.000	97	27614	1.00	0.9806	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	89	36753	4.00	4.41	
80 Toluene	91	7.233	7.233	0.000	98	97582	1.00	0.9704	
82 trans-1,3-Dichloropropene	75	7.425	7.425	0.000	86	23793	1.00	1.13	
81 Ethyl methacrylate	69	7.457	7.457	0.000	85	17290	1.00	1.02	
83 1,1,2-Trichloroethane	97	7.613	7.613	0.000	89	16109	1.00	0.9594	
85 Tetrachloroethene	164	7.698	7.698	0.000	94	23620	1.00	0.99	
86 1,3-Dichloropropane	76	7.762	7.762	0.000	81	24855	1.00	0.9765	
84 2-Hexanone	43	7.789	7.789	0.000	93	25137	4.00	4.28	
87 Chlorodibromomethane	129	7.960	7.960	0.000	88	13599	1.00	0.9297	
89 Ethylene Dibromide	107	8.083	8.083	0.000	97	16604	1.00	1.11	
90 1-Chlorohexane	91	8.495	8.495	0.000	94	34936	0.8000	0.7958	
91 Chlorobenzene	112	8.538	8.538	0.000	93	63585	1.00	0.9529	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	93	19076	1.00	0.9349	
92 Ethylbenzene	106	8.613	8.613	0.000	98	37542	1.00	0.9840	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	96	84988	1.00	0.9772	
95 o-Xylene	106	9.105	9.105	0.000	94	41745	1.00	0.9441	
96 Styrene	104	9.127	9.127	0.000	93	62413	1.00	0.9502	
97 Bromoform	173	9.308	9.308	0.000	94	8333	1.00	1.04	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	102656	1.00	0.9461	
100 Cyclohexanone	55	9.560	9.560	0.000	85	19279	40.0	39.5	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	94	18085	1.00	0.8592	
105 Bromobenzene	156	9.779	9.779	0.000	87	27398	1.00	0.9356	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	57	3539	1.00	0.9618	
104 1,2,3-Trichloropropane	110		9.817				ND	ND	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	31581	1.00	0.9245	
107 2-Chlorotoluene	126	9.961	9.961	0.000	97	28107	1.00	0.9577	
106 1,3,5-Trimethylbenzene	105	10.041	10.041	0.000	95	82835	1.00	0.9507	
108 4-Chlorotoluene	126	10.079	10.079	0.000	95	29039	1.00	0.9698	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	91	73697	1.00	0.9476	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	83651	1.00	0.9577	
111 sec-Butylbenzene	134	10.576	10.576	0.000	94	20832	1.00	0.8320	
113 1,3-Dichlorobenzene	146	10.705	10.705	0.000	97	52154	1.00	1.01	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	86544	1.00	0.9733	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	90	52498	1.00	1.00	
116 n-Butylbenzene	91	11.133	11.133	0.000	97	69848	1.00	0.9743	
117 1,2-Dichlorobenzene	146	11.159	11.159	0.000	97	45106	1.00	1.00	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	86	3217	1.00	0.9762	
120 1,2,4-Trichlorobenzene	180	12.770	12.770	0.000	95	26283	1.00	1.00	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	94	12594	1.00	0.9058	
122 Naphthalene	128	13.043	13.043	0.000	97	50873	1.00	0.5528	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	95	20891	1.00	0.7641	
S 141 1,2-Dichloroethene, Total	1				0		2.00	1.92	
S 140 1,3-Dichloropropene, Total	1				0		2.00	2.11	
S 142 Xylenes, Total	106				0		2.00	1.92	
S 137 Trihalomethanes, Total	1				0		4.00	3.71	
S 139 Total BTEX	1				0			4.79	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00052

Amount Added: 0.50

Units: uL

MV-Main add A_00001

Amount Added: 0.50

Units: uL

MV-Gas A_00093

Amount Added: 0.20

Units: uL

mv-IS_SS_00023

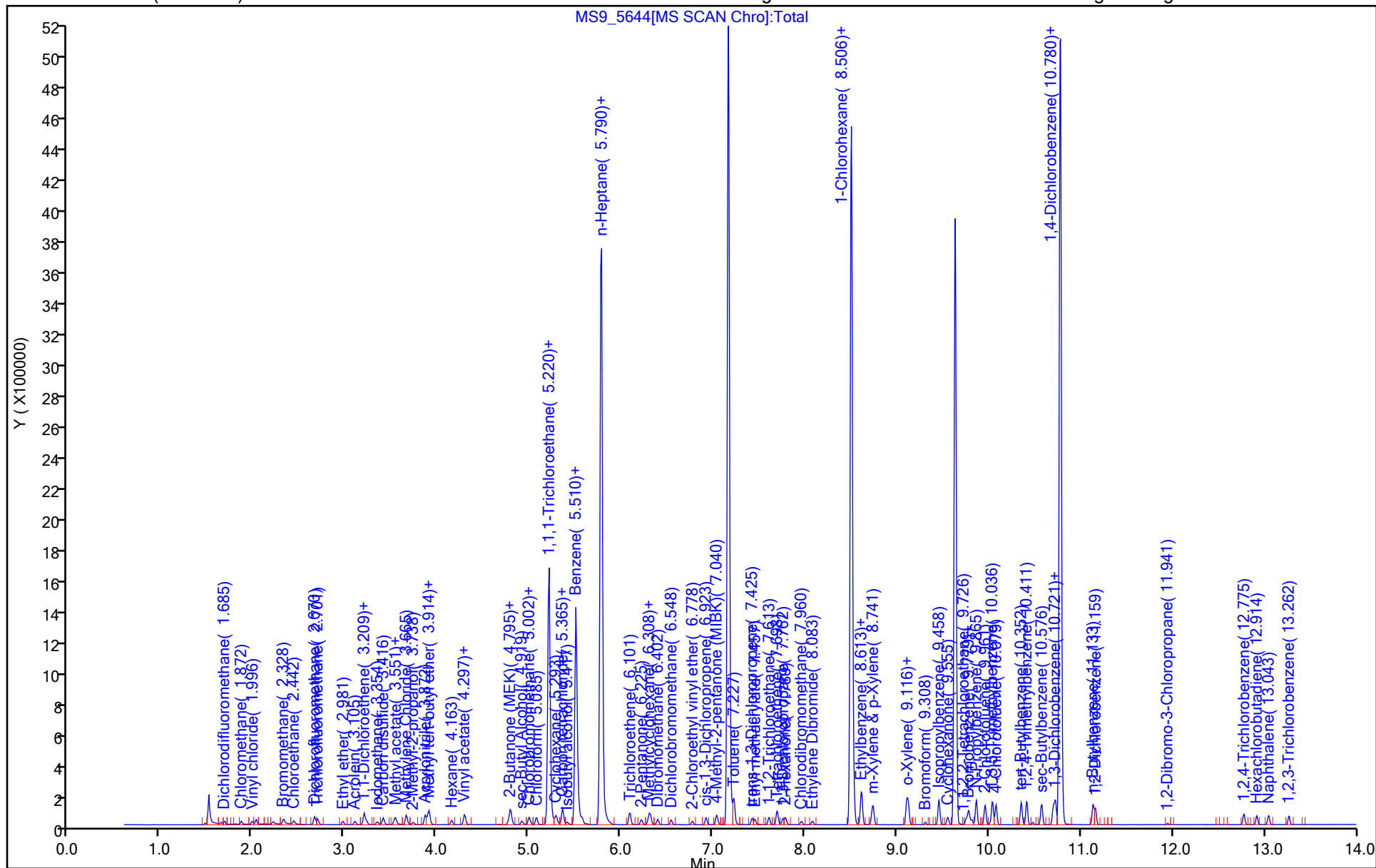
Amount Added: 5.00

Units: uL

Run Reagent

Chrom Revision: 2.3 13-May-2021 07:57:40

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5644.d

Injection Date: 29-Jun-2021 13:27:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

9

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

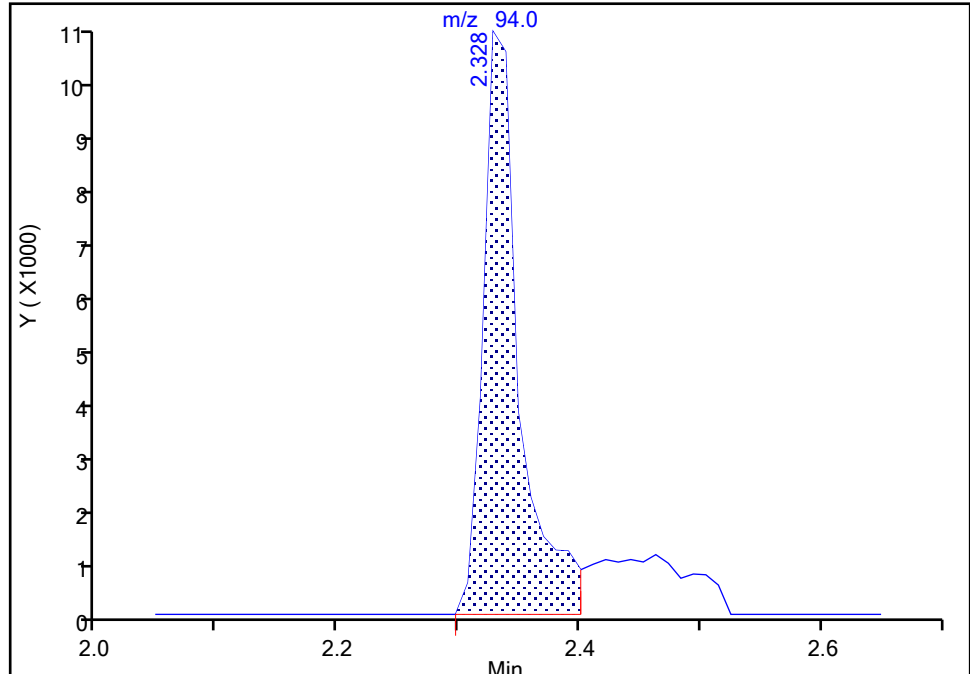
MS SCAN

19 Bromomethane, CAS: 74-83-9

Signal: 1

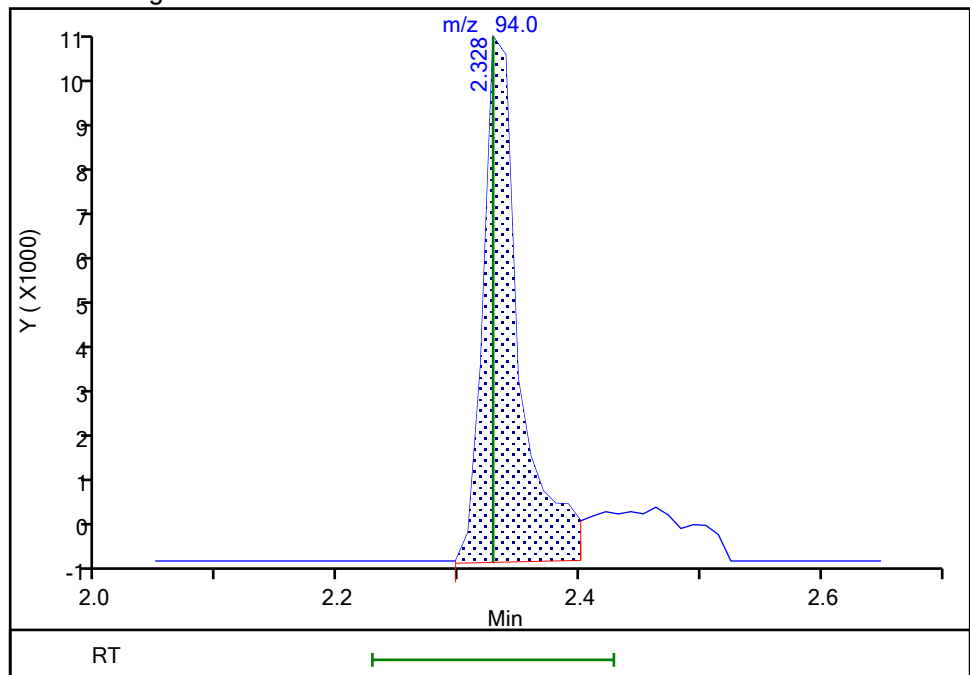
RT: 2.33
Area: 21095
Amount: 0.460765
Amount Units: ug/l

Processing Integration Results



RT: 2.33
Area: 21202
Amount: 1.102311
Amount Units: ug/l

Manual Integration Results



Reviewer: ornelasg, 30-Jun-2021 10:08:19

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 29-Jun-2021 13:47:30 ALS Bottle#: 10 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub1
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:18:48 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: sumichrastr

Date: 29-Jun-2021 16:49:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3483680	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	960420	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1526057	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	95	962856	50.0	49.7	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	885229	50.0	49.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3410809	50.0	49.6	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	94	1335175	50.0	50.4	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	7039	0.5000	0.5085	
15 Chloromethane	50	1.872	1.872	0.000	99	11624	0.5000	0.5176	
16 Vinyl chloride	62	1.996	1.996	0.000	96	11404	0.5000	0.4826	
19 Bromomethane	94	2.339	2.339	0.000	92	23914	0.5000	1.36	
20 Chloroethane	64	2.442	2.442	0.000	99	12893	0.5000	0.5204	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	32312	0.5000	0.5044	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	97	17641	0.5000	0.0441	
24 Ethyl ether	59	2.981	2.981	0.000	84	6726	0.5000	0.4766	
28 Acrolein	56	3.106	3.106	0.000	97	8482	4.94	5.25	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	97	13461	0.5000	0.3646	
29 112TCTFE	151	3.220	3.220	0.000	82	6068	0.5000	0.5391	
31 Acetone	43	3.240	3.240	0.000	98	11288	2.00	-0.0801	
33 Iodomethane	142	3.354	3.354	0.000	96	25371	0.5000	0.6441	
35 Carbon disulfide	76	3.417	3.417	0.000	98	42841	0.5000	0.5156	
34 Methyl acetate	43	3.531	3.531	0.000	74	7217	1.00	1.07	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	85	19473	0.5000	0.5087	
39 Methylene Chloride	84	3.665	3.665	0.000	81	25054	0.5000	0.4826	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	93	6265	5.00	4.99	
42 Acrylonitrile	53	3.873	3.873	0.000	97	23703	5.00	1.93	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	23770	0.5000	0.6160	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	95	20072	0.5000	0.5204	
43 Hexane	57	4.163	4.163	0.000	88	7136	0.5000	0.5221	
45 Vinyl acetate	43	4.298	4.298	0.000	97	21493	1.00	1.11	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	26185	0.5000	0.5128	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	96	11679	2.00	1.00	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	17544	0.5000	0.4905	
53 2,2-Dichloropropane	77	4.805	4.805	0.000	85	21455	0.5000	0.5209	
51 sec-Butyl Alcohol	45		4.919				ND	ND	
59 Chlorobromomethane	128	5.002	5.002	0.000	82	6902	0.5000	0.4916	
57 Tetrahydrofuran	42	5.013	5.013	0.000	69	4028	1.00	1.00	
56 Chloroform	83	5.085	5.085	0.000	92	27945	0.5000	0.4419	
60 1,1,1-Trichloroethane	97	5.230	5.230	0.000	98	24809	0.5000	0.5168	
61 Cyclohexane	56	5.293	5.293	0.000	80	11757	0.5000	0.6045	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	94	21049	0.5000	0.5100	
63 Carbon tetrachloride	117	5.365	5.365	0.000	79	17117	0.5000	0.5239	
58 Isobutyl alcohol	43	5.417	5.417	0.000	87	5096	12.5	11.7	
66 Benzene	78	5.541	5.541	0.000	92	66956	0.5000	0.5142	
67 1,2-Dichloroethane	62	5.583	5.583	0.000	97	15646	0.5000	0.4885	
135 n-Heptane	43	5.769	5.769	0.000	34	6615	0.5000	0.6090	
68 Trichloroethene	130	6.101	6.101	0.000	96	21939	0.5000	0.5078	
69 2-Pentanone	43	6.225	6.225	0.000	94	16482	1.60	1.82	
71 Methylcyclohexane	55	6.308	6.308	0.000	86	8451	0.5000	0.5996	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	13062	0.5000	0.5008	
73 1,4-Dioxane	88		6.371				ND	ND	
74 Dibromomethane	93	6.402	6.402	0.000	93	7075	0.5000	0.4862	
75 Dichlorobromomethane	83	6.548	6.548	0.000	96	14239	0.5000	0.5243	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	87	5407	0.5000	0.5968	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	98	17636	0.5000	0.4954	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	19134	2.00	2.27	
80 Toluene	91	7.233	7.233	0.000	99	73423	0.5000	0.5263	
82 trans-1,3-Dichloropropene	75	7.425	7.425	0.000	84	14520	0.5000	0.6836	
81 Ethyl methacrylate	69	7.463	7.463	0.000	78	9800	0.5000	0.5620	
83 1,1,2-Trichloroethane	97	7.613	7.613	0.000	84	10075	0.5000	0.4909	
85 Tetrachloroethene	164	7.704	7.704	0.000	95	17409	0.5000	0.5011	
86 1,3-Dichloropropane	76	7.757	7.757	0.000	83	15428	0.5000	0.4869	
84 2-Hexanone	43	7.789	7.789	0.000	92	13089	2.00	2.17	
87 Chlorodibromomethane	129	7.960	7.960	0.000	84	8201	0.5000	0.5183	
89 Ethylene Dibromide	107	8.078	8.078	0.000	96	9832	0.5000	0.6371	
90 1-Chlorohexane	91	8.501	8.501	0.000	34	25978	0.4000	0.3989	
91 Chlorobenzene	112	8.533	8.533	0.000	97	46661	0.5000	0.5008	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	88	13142	0.5000	0.5134	
92 Ethylbenzene	106	8.618	8.618	0.000	97	29258	0.5000	0.5810	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	96	63008	0.5000	0.5028	
95 o-Xylene	106	9.105	9.105	0.000	94	31012	0.5000	0.5024	
96 Styrene	104	9.127	9.127	0.000	94	44430	0.5000	0.5035	
97 Bromoform	173	9.309	9.309	0.000	92	4321	0.5000	0.5757	
98 Isopropylbenzene	105	9.458	9.458	0.000	95	76899	0.5000	0.5084	
100 Cyclohexanone	55	9.555	9.555	0.000	85	11044	20.0	22.0	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	92	10421	0.5000	0.3047	
105 Bromobenzene	156	9.779	9.779	0.000	83	19134	0.5000	0.4995	
102 trans-1,4-Dichloro-2-butene	53	9.785	9.785	0.000	41	1907	0.5000	0.5149	
104 1,2,3-Trichloropropane	110		9.817				ND	ND	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	24075	0.5000	0.5194	
107 2-Chlorotoluene	126	9.961	9.961	0.000	97	20227	0.5000	0.4984	
106 1,3,5-Trimethylbenzene	105	10.041	10.041	0.000	96	60890	0.5000	0.5057	
108 4-Chlorotoluene	126	10.079	10.079	0.000	95	20588	0.5000	0.4962	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	55081	0.5000	0.5096	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	60550	0.5000	0.5022	
111 sec-Butylbenzene	134	10.576	10.576	0.000	94	16897	0.5000	0.5379	
113 1,3-Dichlorobenzene	146	10.705	10.705	0.000	97	34846	0.5000	0.4848	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	62228	0.5000	0.5012	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	92	35171	0.5000	0.4838	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	50037	0.5000	0.5023	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	95	28877	0.5000	0.4819	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	81	1566	0.5000	0.5030	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	93	16740	0.5000	0.4823	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	95	9378	0.5000	0.5117	
122 Naphthalene	128	13.043	13.043	0.000	97	25584	0.5000	-0.1871	
123 1,2,3-Trichlorobenzene	180	13.267	13.267	0.000	95	11685	0.5000	0.0823	
S 141 1,2-Dichloroethene, Total	1				0		1.00	1.01	
S 140 1,3-Dichloropropene, Total	1				0		1.00	1.18	
S 142 Xylenes, Total	106				0		1.00	1.01	
S 137 Trihalomethanes, Total	1				0		2.00	2.06	
S 139 Total BTEX	1				0			2.63	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00052	Amount Added: 0.25	Units: uL	
MV-Main add A_00001	Amount Added: 0.25	Units: uL	
MV-Gas A_00093	Amount Added: 0.10	Units: uL	
mv-IS_SS_00023	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Jun-2021 10:18:49

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d

Injection Date: 29-Jun-2021 13:47:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 24

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

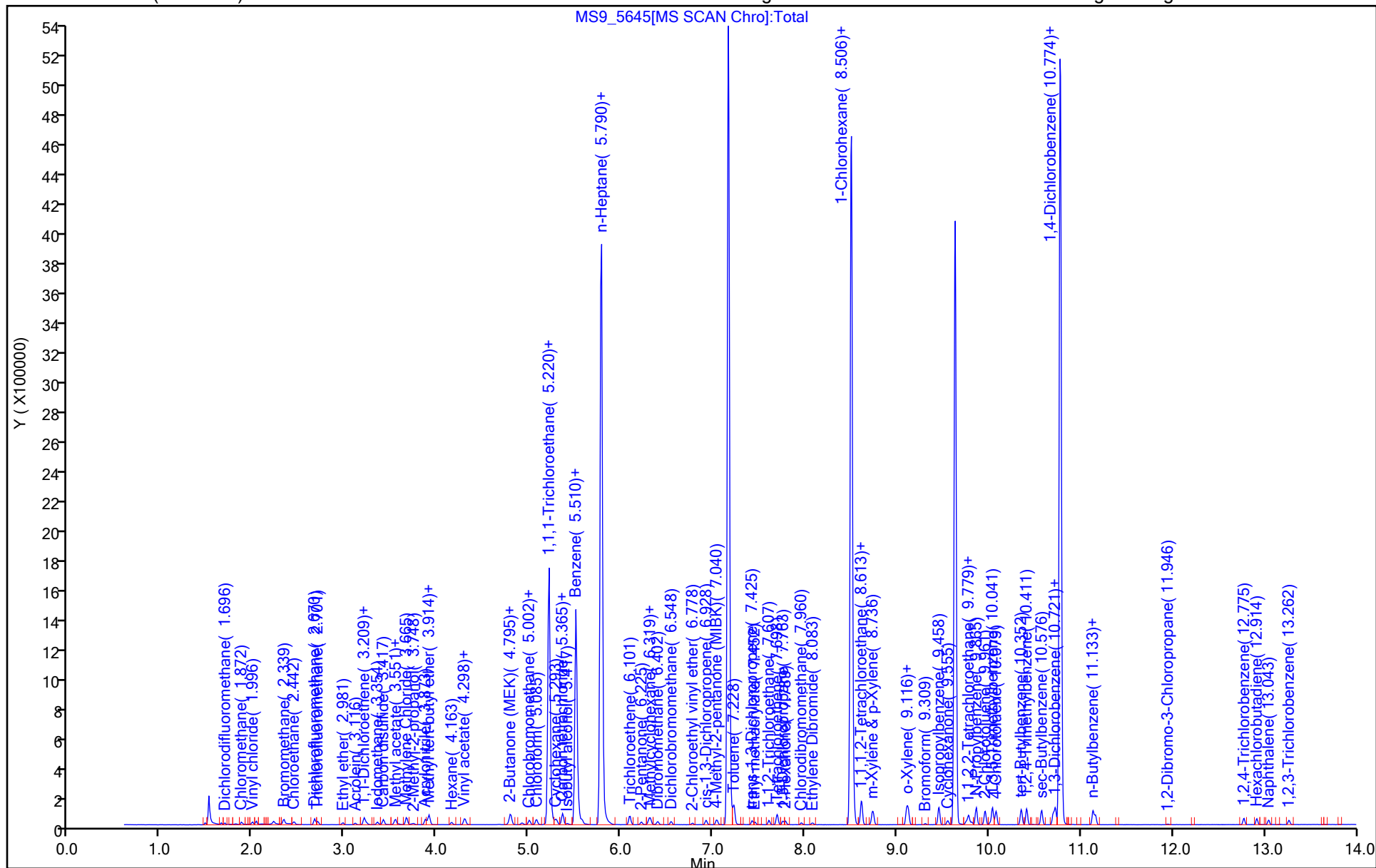
ALS Bottle#: 10

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration

/ Dichlorodifluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

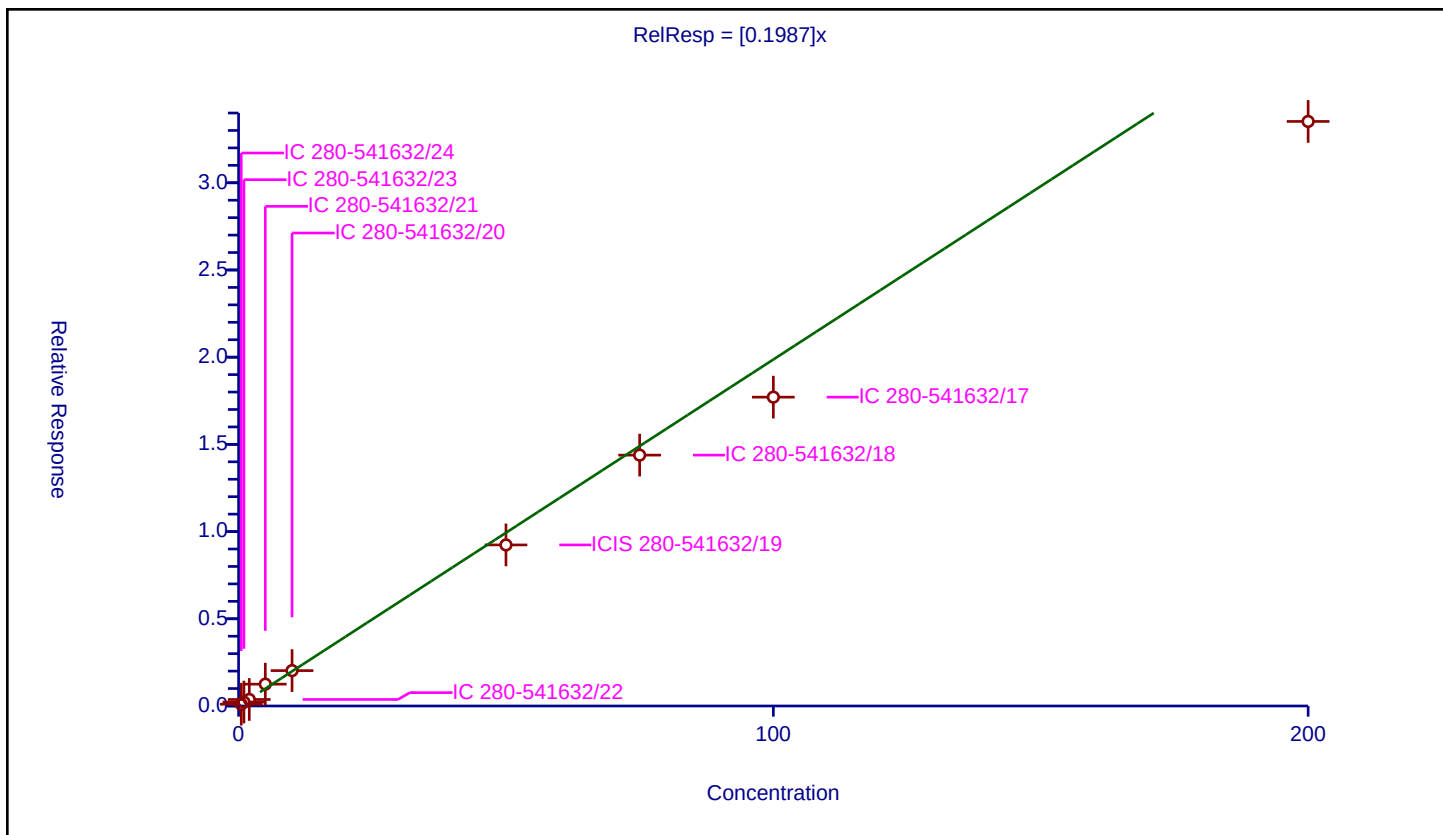
Curve Coefficients

Intercept: 0
 Slope: 0.1987

Error Coefficients

Standard Error: 978000
 Relative Standard Error: 12.8
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.101028	50.0	3483680.0	0.202056	Y
2	IC 280-541632/23	1.0	0.224784	50.0	3449974.0	0.224784	Y
3	IC 280-541632/22	2.0	0.37401	50.0	3431058.0	0.187005	Y
4	IC 280-541632/21	5.0	1.251525	50.0	3392101.0	0.250305	Y
5	IC 280-541632/20	10.0	2.027683	50.0	3457419.0	0.202768	Y
6	ICIS 280-541632/19	50.0	9.234684	50.0	3390105.0	0.184694	Y
7	IC 280-541632/18	75.0	14.384946	50.0	3284298.0	0.191799	Y
8	IC 280-541632/17	100.0	17.708028	50.0	3463720.0	0.17708	Y
9	IC 280-541632/16	200.0	33.517444	50.0	3278733.0	0.167587	Y



Calibration

/ Chloromethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

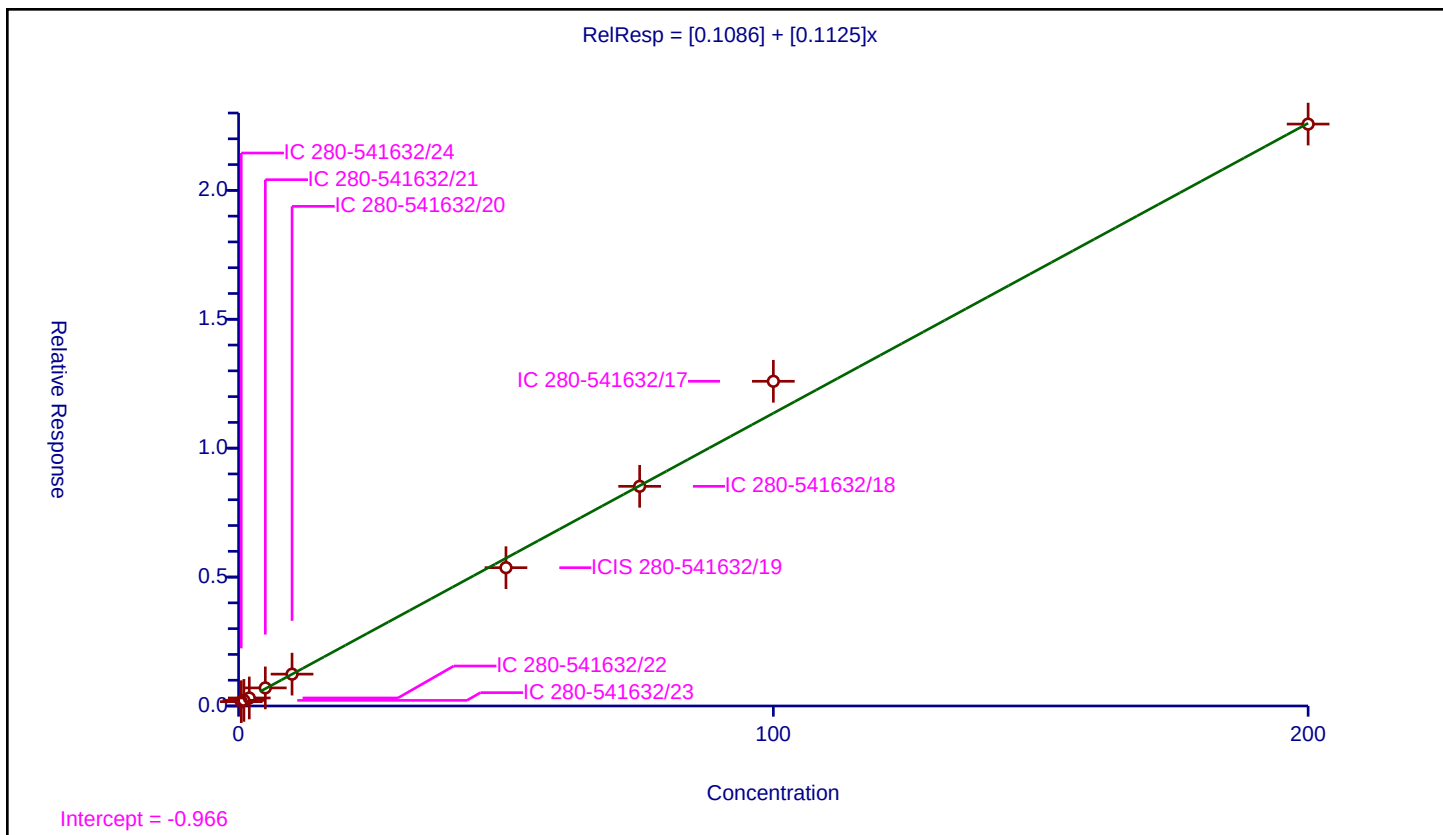
Curve Coefficients

Intercept: 0.1086
 Slope: 0.1125

Error Coefficients

Standard Error: 698000
 Relative Standard Error: 6.8
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.166835	50.0	3483680.0	0.33367	Y
2	IC 280-541632/23	1.0	0.217668	50.0	3449974.0	0.217668	Y
3	IC 280-541632/22	2.0	0.310691	50.0	3431058.0	0.155346	Y
4	IC 280-541632/21	5.0	0.701704	50.0	3392101.0	0.140341	Y
5	IC 280-541632/20	10.0	1.23543	50.0	3457419.0	0.123543	Y
6	ICIS 280-541632/19	50.0	5.364849	50.0	3390105.0	0.107297	Y
7	IC 280-541632/18	75.0	8.520223	50.0	3284298.0	0.113603	Y
8	IC 280-541632/17	100.0	12.594321	50.0	3463720.0	0.125943	Y
9	IC 280-541632/16	200.0	22.570533	50.0	3278733.0	0.112853	Y



Calibration

/ Vinyl chloride

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

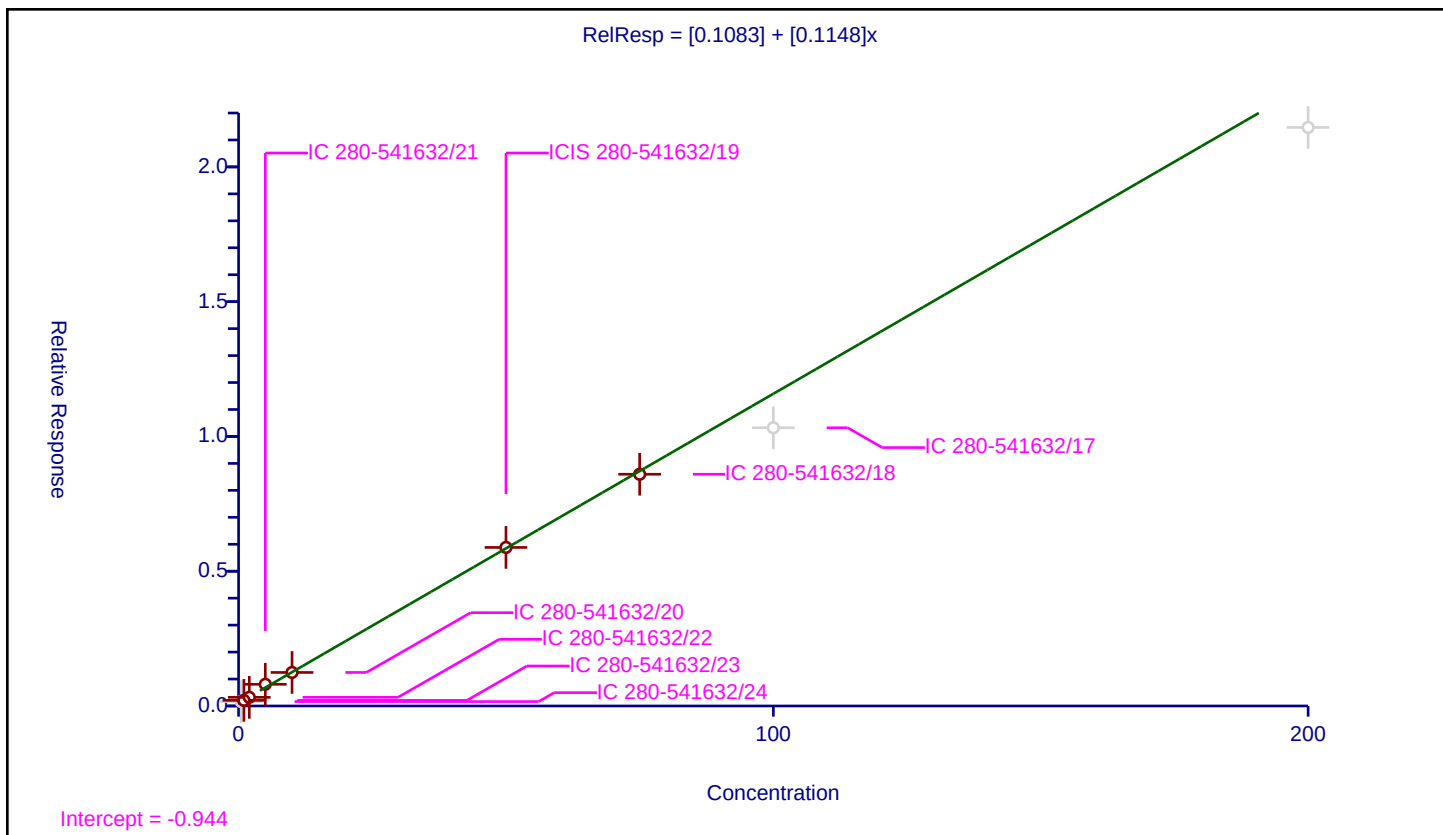
Curve Coefficients

Intercept: 0.1083
 Slope: 0.1148

Error Coefficients

Standard Error: 350000
 Relative Standard Error: 12.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.163677	50.0	3483680.0	0.327355	N
2	IC 280-541632/23	1.0	0.209045	50.0	3449974.0	0.209045	Y
3	IC 280-541632/22	2.0	0.320863	50.0	3431058.0	0.160432	Y
4	IC 280-541632/21	5.0	0.804383	50.0	3392101.0	0.160877	Y
5	IC 280-541632/20	10.0	1.244049	50.0	3457419.0	0.124405	Y
6	ICIS 280-541632/19	50.0	5.882679	50.0	3390105.0	0.117654	Y
7	IC 280-541632/18	75.0	8.598321	50.0	3284298.0	0.114644	Y
8	IC 280-541632/17	100.0	10.322904	50.0	3463720.0	0.103229	N
9	IC 280-541632/16	200.0	21.46538	50.0	3278733.0	0.107327	N



Calibration

/ Bromomethane

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

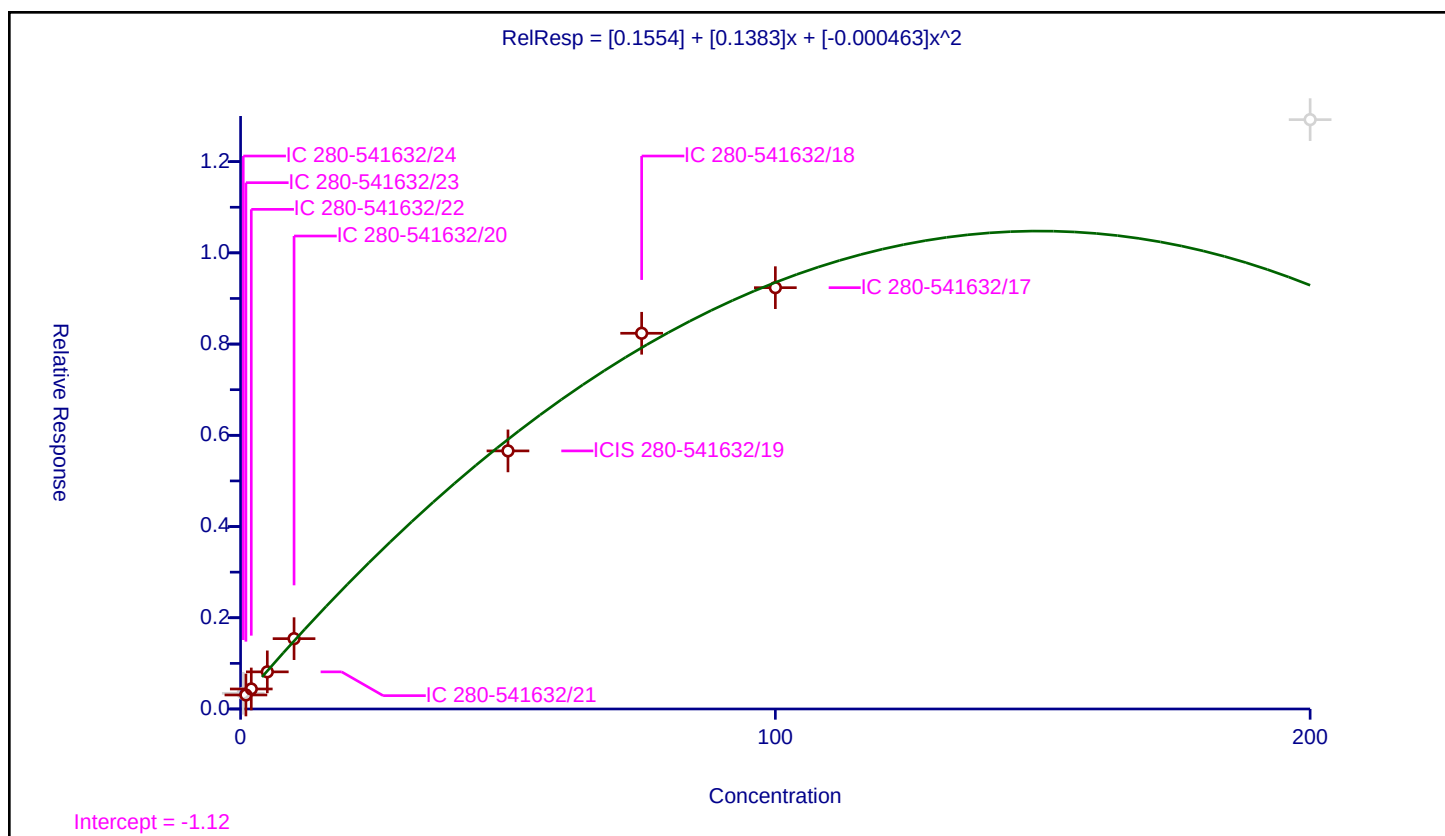
Curve Coefficients

Intercept: 0.1554
 Slope: 0.1383
 Second Order: -0.000463

Error Coefficients

Standard Error: 465000
 Relative Standard Error: 7.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.343229	50.0	3483680.0	0.686458	N
2	IC 280-541632/23	1.0	0.307278	50.0	3449974.0	0.307278	Y
3	IC 280-541632/22	2.0	0.438771	50.0	3431058.0	0.219386	Y
4	IC 280-541632/21	5.0	0.813847	50.0	3392101.0	0.162769	Y
5	IC 280-541632/20	10.0	1.541743	50.0	3457419.0	0.154174	Y
6	ICIS 280-541632/19	50.0	5.658512	50.0	3390105.0	0.11317	Y
7	IC 280-541632/18	75.0	8.237316	50.0	3284298.0	0.109831	Y
8	IC 280-541632/17	100.0	9.236587	50.0	3463720.0	0.092366	Y
9	IC 280-541632/16	200.0	12.920768	50.0	3278733.0	0.064604	N



Calibration

/ Chloroethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

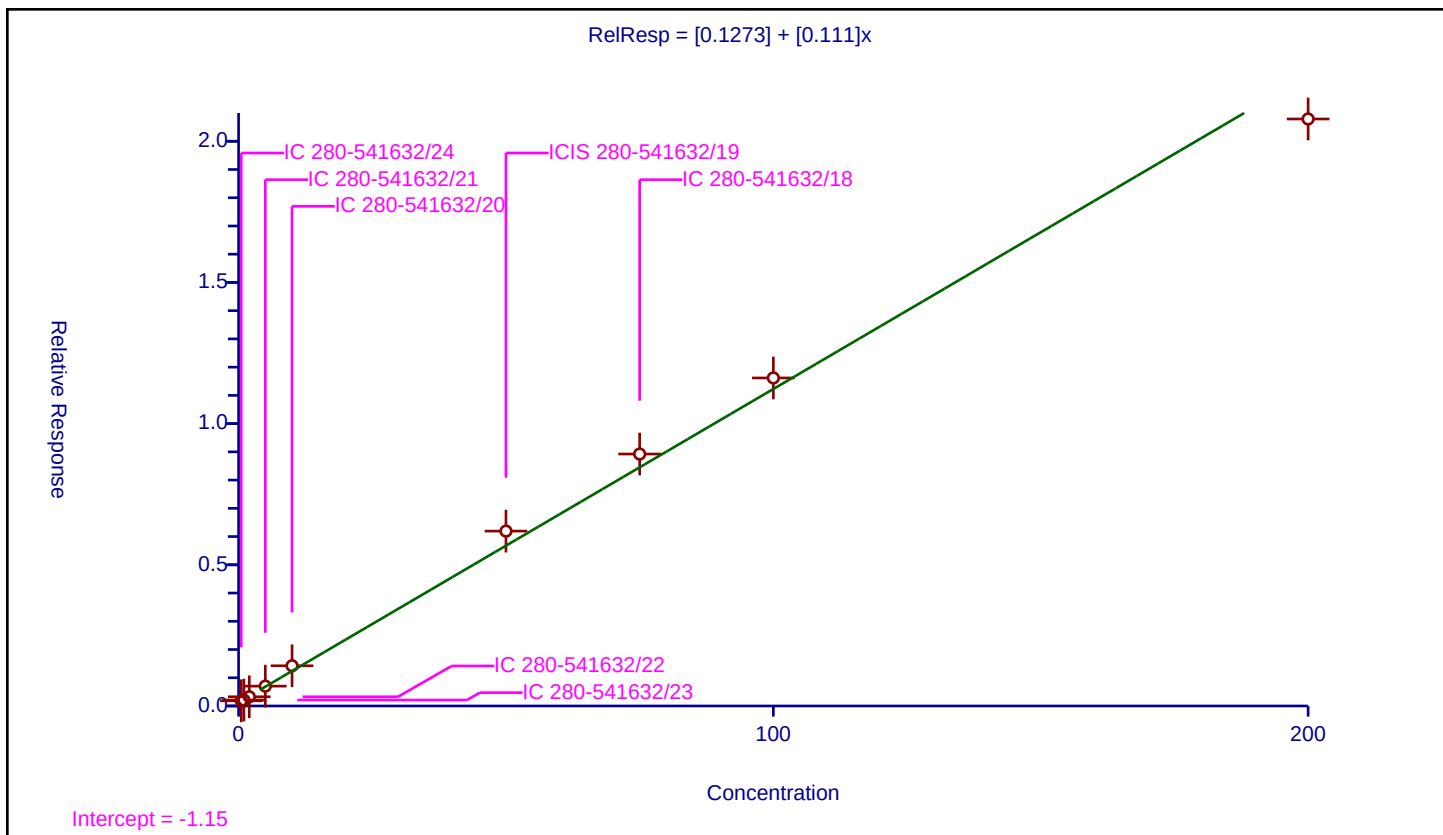
Curve Coefficients

Intercept: 0.1273
 Slope: 0.111

Error Coefficients

Standard Error: 659000
 Relative Standard Error: 13.5
 Correlation Coefficient: 0.992
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.185049	50.0	3483680.0	0.370097	Y
2	IC 280-541632/23	1.0	0.209596	50.0	3449974.0	0.209596	Y
3	IC 280-541632/22	2.0	0.326124	50.0	3431058.0	0.163062	Y
4	IC 280-541632/21	5.0	0.703178	50.0	3392101.0	0.140636	Y
5	IC 280-541632/20	10.0	1.424068	50.0	3457419.0	0.142407	Y
6	ICIS 280-541632/19	50.0	6.193879	50.0	3390105.0	0.123878	Y
7	IC 280-541632/18	75.0	8.923414	50.0	3284298.0	0.118979	Y
8	IC 280-541632/17	100.0	11.617798	50.0	3463720.0	0.116178	Y
9	IC 280-541632/16	200.0	20.788564	50.0	3278733.0	0.103943	Y



Calibration

/ Dichlorofluoromethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

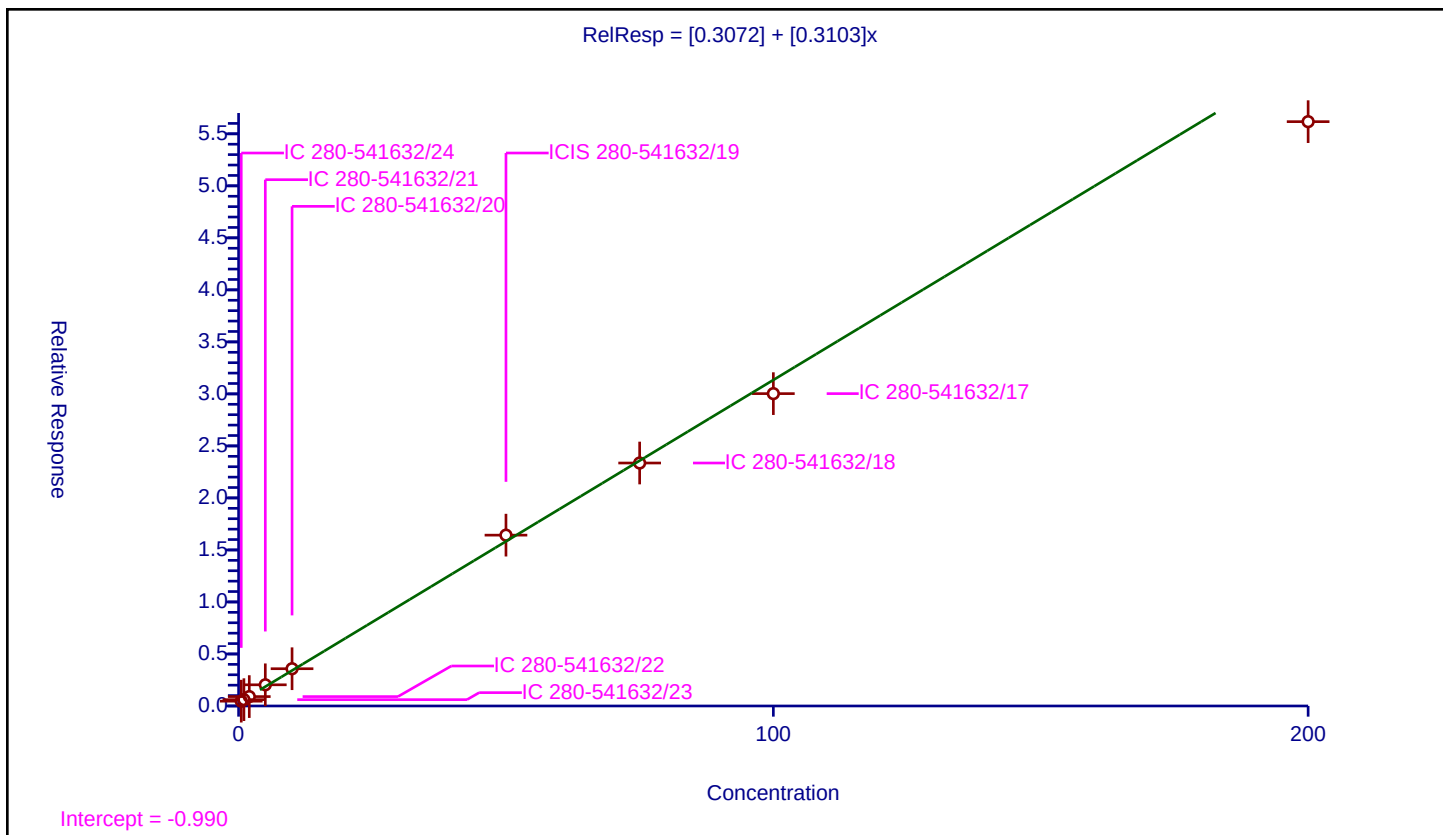
Curve Coefficients

Intercept: 0.3072
 Slope: 0.3103

Error Coefficients

Standard Error: 1760000
 Relative Standard Error: 6.7
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.463762	50.0	3483680.0	0.927525	Y
2	IC 280-541632/23	1.0	0.60941	50.0	3449974.0	0.60941	Y
3	IC 280-541632/22	2.0	0.903643	50.0	3431058.0	0.451821	Y
4	IC 280-541632/21	5.0	2.035671	50.0	3392101.0	0.407134	Y
5	IC 280-541632/20	10.0	3.583425	50.0	3457419.0	0.358342	Y
6	ICIS 280-541632/19	50.0	16.421055	50.0	3390105.0	0.328421	Y
7	IC 280-541632/18	75.0	23.357122	50.0	3284298.0	0.311428	Y
8	IC 280-541632/17	100.0	30.026936	50.0	3463720.0	0.300269	Y
9	IC 280-541632/16	200.0	56.169899	50.0	3278733.0	0.280849	Y



Calibration

/ Trichlorofluoromethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

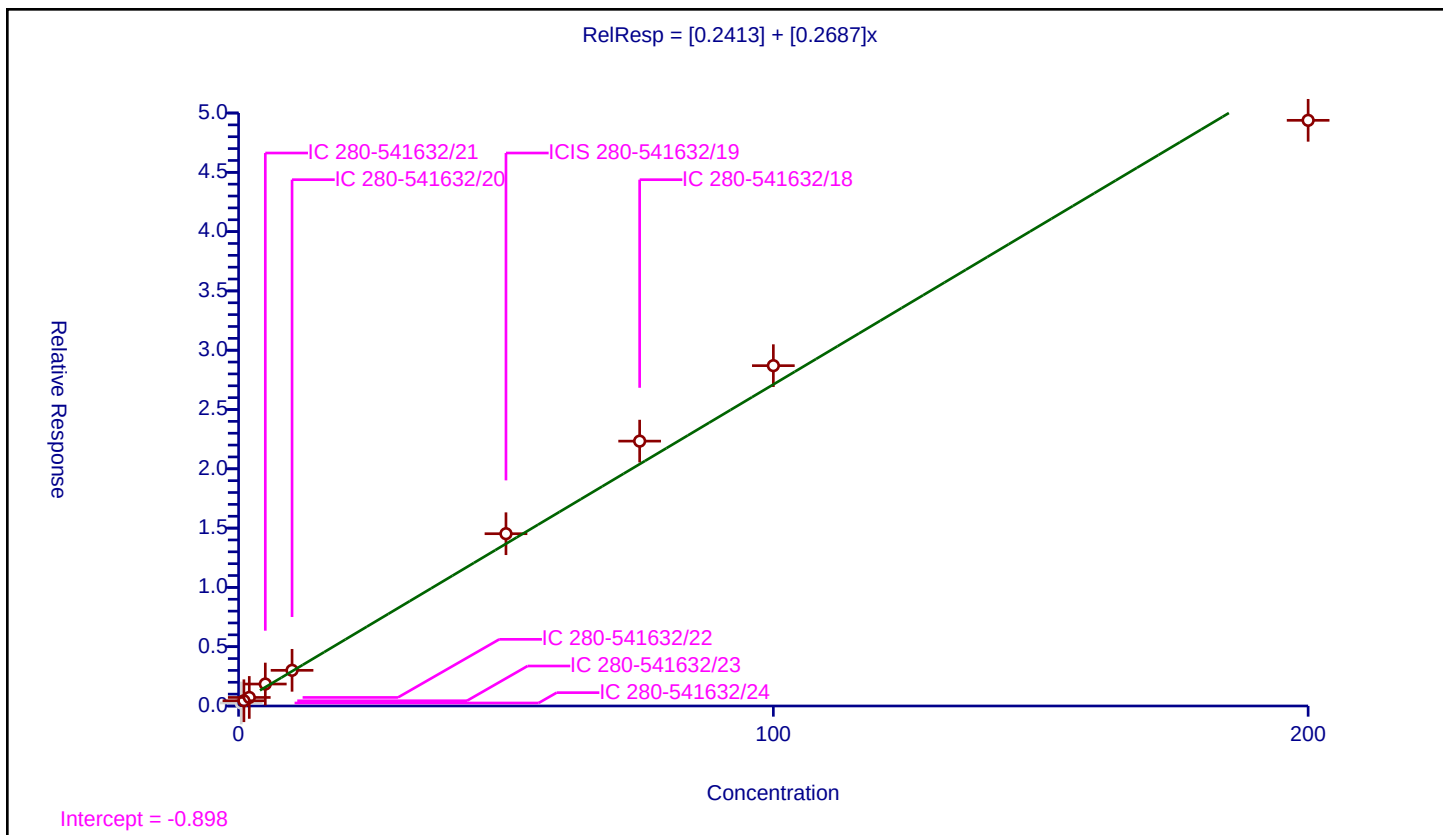
Curve Coefficients

Intercept: 0.2413
 Slope: 0.2687

Error Coefficients

Standard Error: 1710000
 Relative Standard Error: 15.3
 Correlation Coefficient: 0.987
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.253195	50.0	3483680.0	0.50639	N
2	IC 280-541632/23	1.0	0.441438	50.0	3449974.0	0.441438	Y
3	IC 280-541632/22	2.0	0.721468	50.0	3431058.0	0.360734	Y
4	IC 280-541632/21	5.0	1.852348	50.0	3392101.0	0.37047	Y
5	IC 280-541632/20	10.0	3.008183	50.0	3457419.0	0.300818	Y
6	ICIS 280-541632/19	50.0	14.526895	50.0	3390105.0	0.290538	Y
7	IC 280-541632/18	75.0	22.333235	50.0	3284298.0	0.297776	Y
8	IC 280-541632/17	100.0	28.696705	50.0	3463720.0	0.286967	Y
9	IC 280-541632/16	200.0	49.383619	50.0	3278733.0	0.246918	Y



Calibration

/ Ethyl ether

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

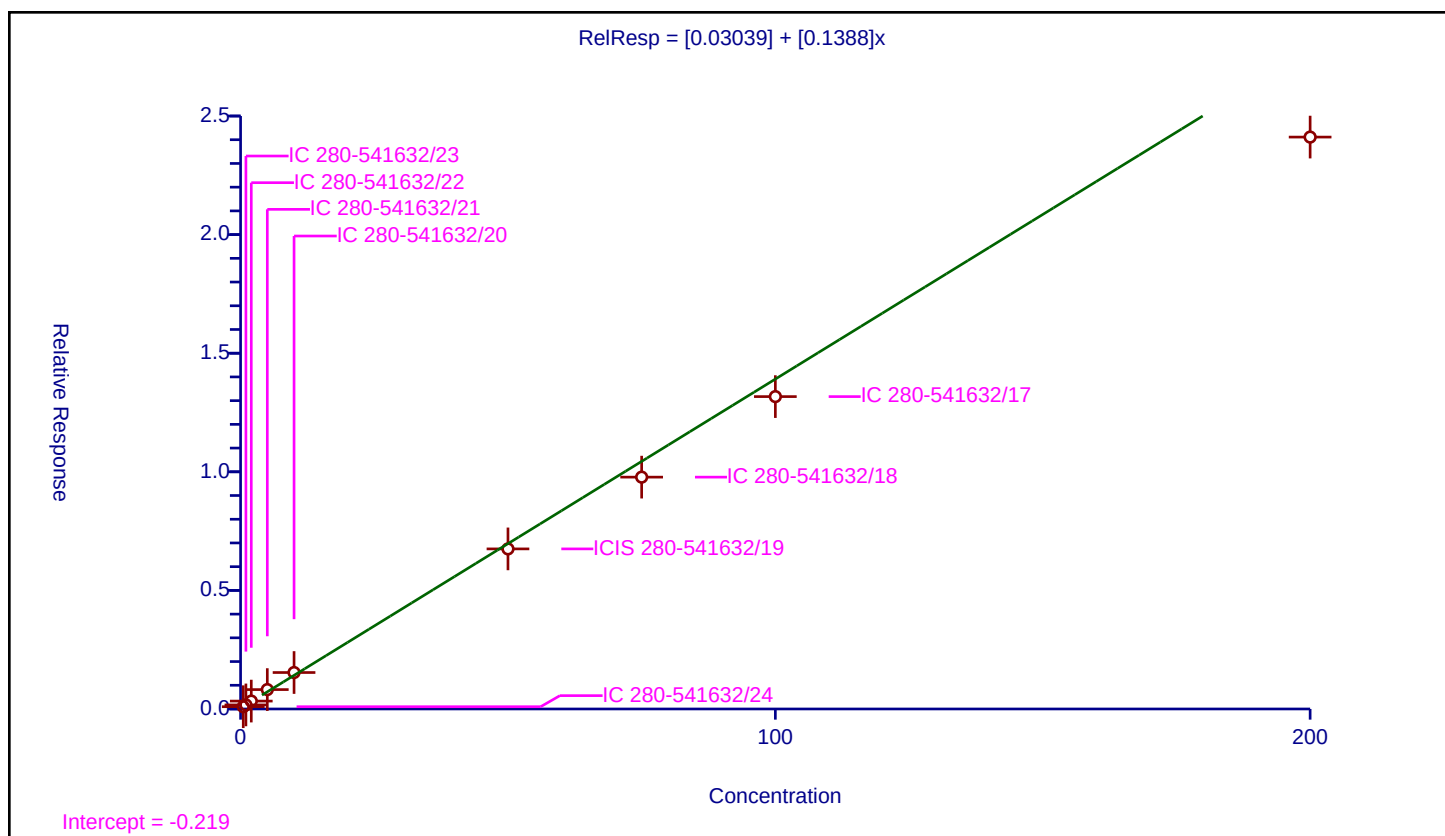
Curve Coefficients

Intercept: 0.03039
Slope: 0.1388

Error Coefficients

Standard Error: 753000
Relative Standard Error: 9.4
Correlation Coefficient: 0.995
Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.096536	50.0	3483680.0	0.193072	Y
2	IC 280-541632/23	1.0	0.171204	50.0	3449974.0	0.171204	Y
3	IC 280-541632/22	2.0	0.333454	50.0	3431058.0	0.166727	Y
4	IC 280-541632/21	5.0	0.818298	50.0	3392101.0	0.16366	Y
5	IC 280-541632/20	10.0	1.537607	50.0	3457419.0	0.153761	Y
6	ICIS 280-541632/19	50.0	6.749865	50.0	3390105.0	0.134997	Y
7	IC 280-541632/18	75.0	9.775164	50.0	3284298.0	0.130336	Y
8	IC 280-541632/17	100.0	13.170839	50.0	3463720.0	0.131708	Y
9	IC 280-541632/16	200.0	24.111738	50.0	3278733.0	0.120559	Y



Calibration

/ Acrolein

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

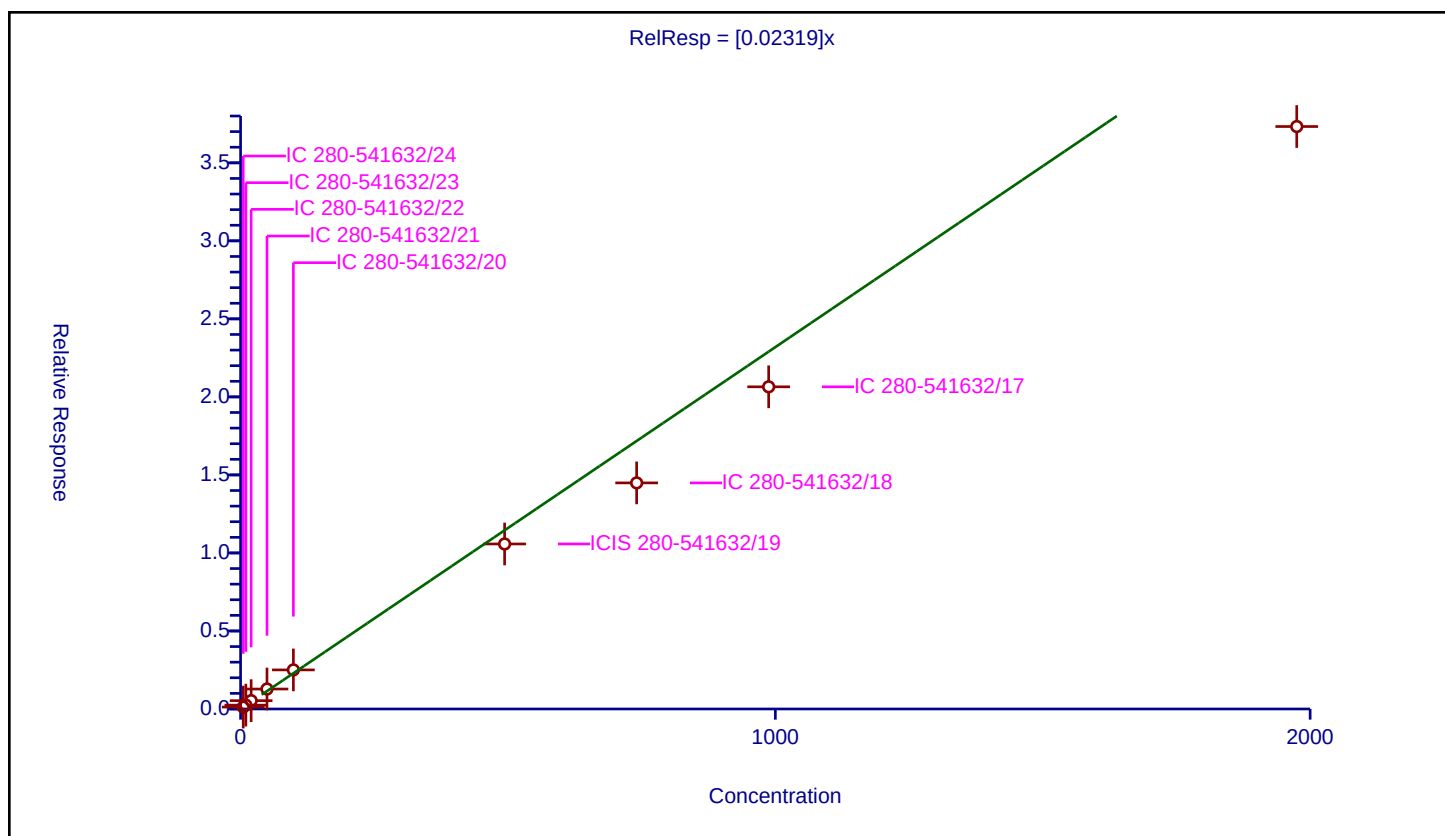
Curve Coefficients

Intercept: 0
 Slope: 0.02319

Error Coefficients

Standard Error: 1090000
 Relative Standard Error: 12.9
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	4.9375	0.121739	50.0	3483680.0	0.024656	Y
2	IC 280-541632/23	9.875	0.246509	50.0	3449974.0	0.024963	Y
3	IC 280-541632/22	19.75	0.534165	50.0	3431058.0	0.027046	Y
4	IC 280-541632/21	49.375	1.27847	50.0	3392101.0	0.025893	Y
5	IC 280-541632/20	98.75	2.505048	50.0	3457419.0	0.025368	Y
6	ICIS 280-541632/19	493.75	10.575897	50.0	3390105.0	0.02142	Y
7	IC 280-541632/18	740.625	14.48955	50.0	3284298.0	0.019564	Y
8	IC 280-541632/17	987.5	20.645679	50.0	3463720.0	0.020907	Y
9	IC 280-541632/16	1975.0	37.326171	50.0	3278733.0	0.018899	Y



Calibration

/ 1,1-Dichloroethene

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

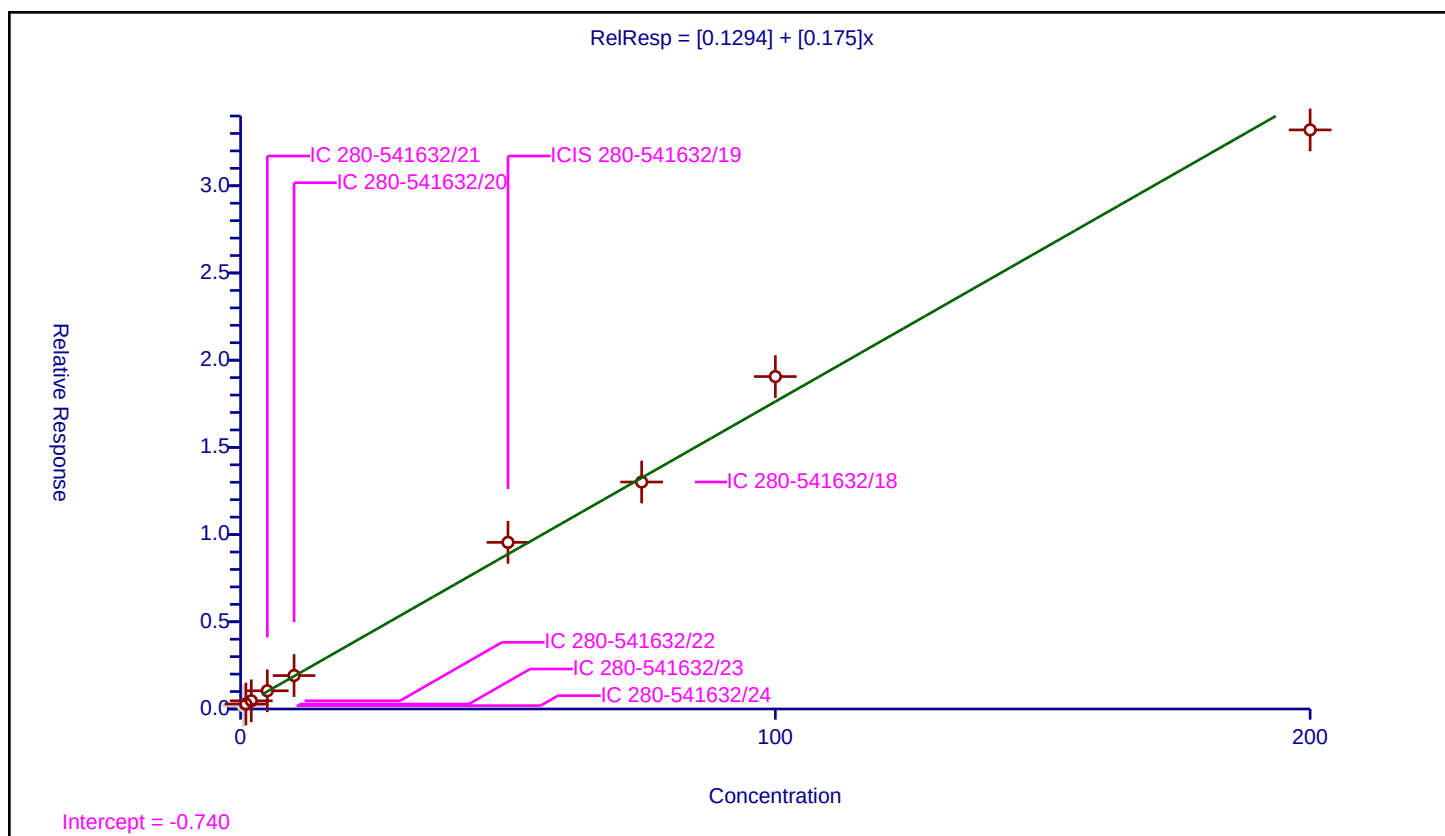
Curve Coefficients

Intercept: 0.1294
Slope: 0.175

Error Coefficients

Standard Error: 1130000
Relative Standard Error: 7.6
Correlation Coefficient: 0.990
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.193201	50.0	3483680.0	0.386402	N
2	IC 280-541632/23	1.0	0.283017	50.0	3449974.0	0.283017	Y
3	IC 280-541632/22	2.0	0.468616	50.0	3431058.0	0.234308	Y
4	IC 280-541632/21	5.0	1.043424	50.0	3392101.0	0.208685	Y
5	IC 280-541632/20	10.0	1.916777	50.0	3457419.0	0.191678	Y
6	ICIS 280-541632/19	50.0	9.553421	50.0	3390105.0	0.191068	Y
7	IC 280-541632/18	75.0	13.014044	50.0	3284298.0	0.173521	Y
8	IC 280-541632/17	100.0	19.060721	50.0	3463720.0	0.190607	Y
9	IC 280-541632/16	200.0	33.203695	50.0	3278733.0	0.166018	Y



Calibration

/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

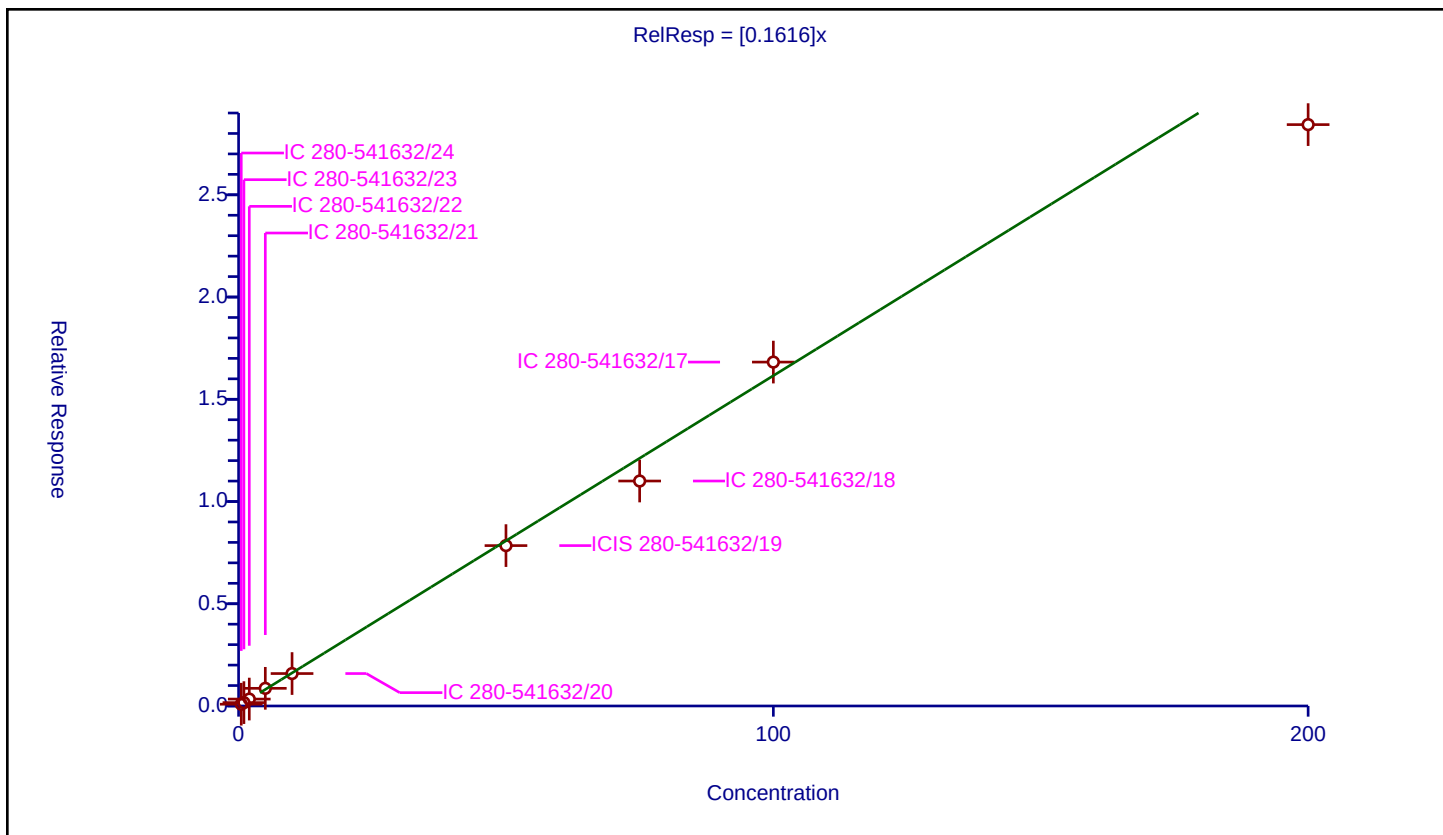
Curve Coefficients

Intercept: 0
 Slope: 0.1616

Error Coefficients

Standard Error: 841000
 Relative Standard Error: 7.0
 Correlation Coefficient: 0.988
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.087092	50.0	3483680.0	0.174184	Y
2	IC 280-541632/23	1.0	0.165436	50.0	3449974.0	0.165436	Y
3	IC 280-541632/22	2.0	0.338219	50.0	3431058.0	0.16911	Y
4	IC 280-541632/21	5.0	0.863432	50.0	3392101.0	0.172686	Y
5	IC 280-541632/20	10.0	1.586313	50.0	3457419.0	0.158631	Y
6	ICIS 280-541632/19	50.0	7.8434	50.0	3390105.0	0.156868	Y
7	IC 280-541632/18	75.0	11.002092	50.0	3284298.0	0.146695	Y
8	IC 280-541632/17	100.0	16.819705	50.0	3463720.0	0.168197	Y
9	IC 280-541632/16	200.0	28.432401	50.0	3278733.0	0.142162	Y



Calibration

/ Acetone

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

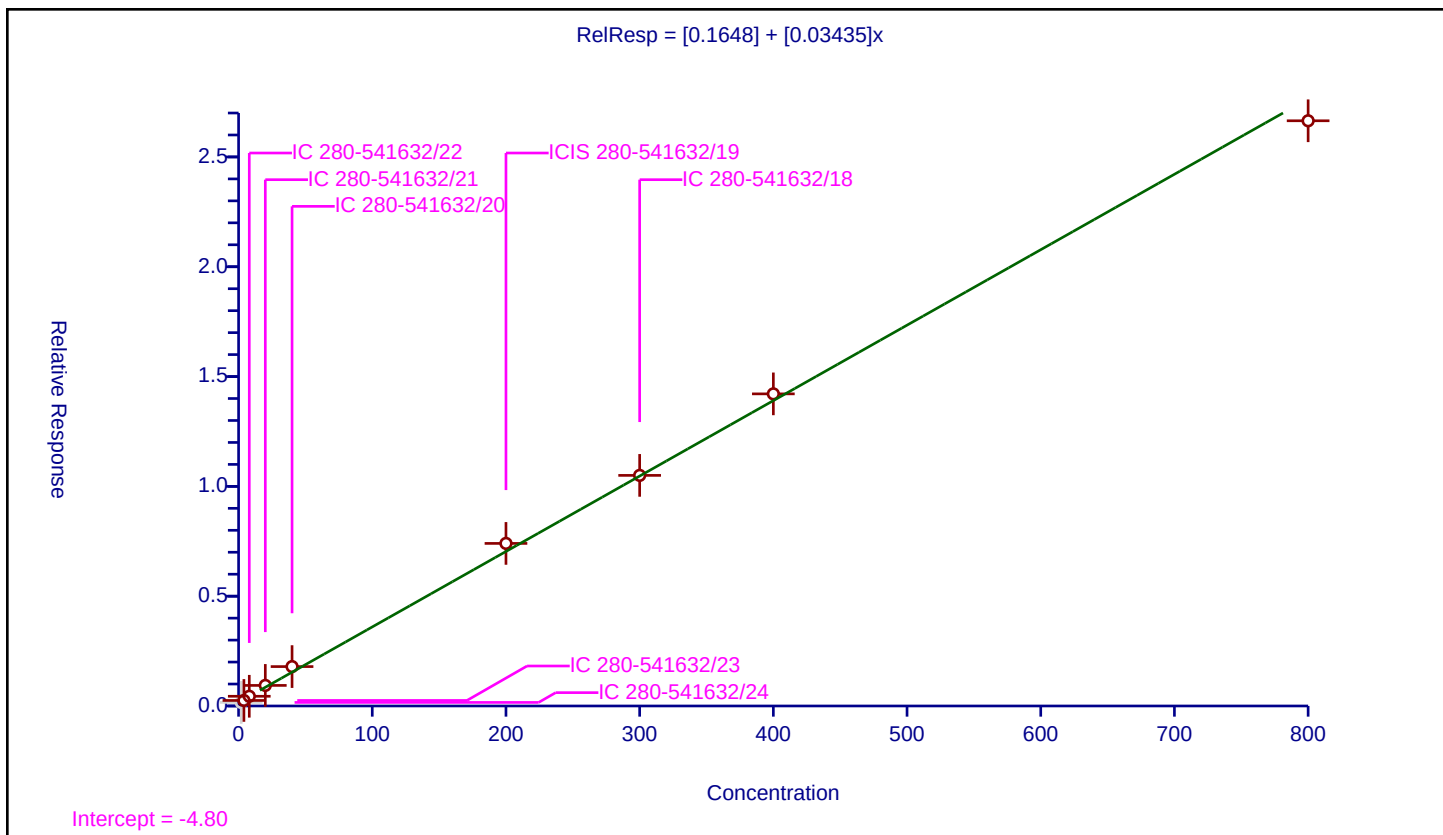
Curve Coefficients

Intercept: 0.1648
 Slope: 0.03435

Error Coefficients

Standard Error: 892000
 Relative Standard Error: 17.7
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	2.0	0.162013	50.0	3483680.0	0.081006	N
2	IC 280-541632/23	4.0	0.252103	50.0	3449974.0	0.063026	Y
3	IC 280-541632/22	8.0	0.442881	50.0	3431058.0	0.05536	Y
4	IC 280-541632/21	20.0	0.937192	50.0	3392101.0	0.04686	Y
5	IC 280-541632/20	40.0	1.793694	50.0	3457419.0	0.044842	Y
6	ICIS 280-541632/19	200.0	7.402676	50.0	3390105.0	0.037013	Y
7	IC 280-541632/18	300.0	10.500326	50.0	3284298.0	0.035001	Y
8	IC 280-541632/17	400.0	14.212119	50.0	3463720.0	0.03553	Y
9	IC 280-541632/16	800.0	26.646558	50.0	3278733.0	0.033308	Y



Calibration

/ Iodomethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

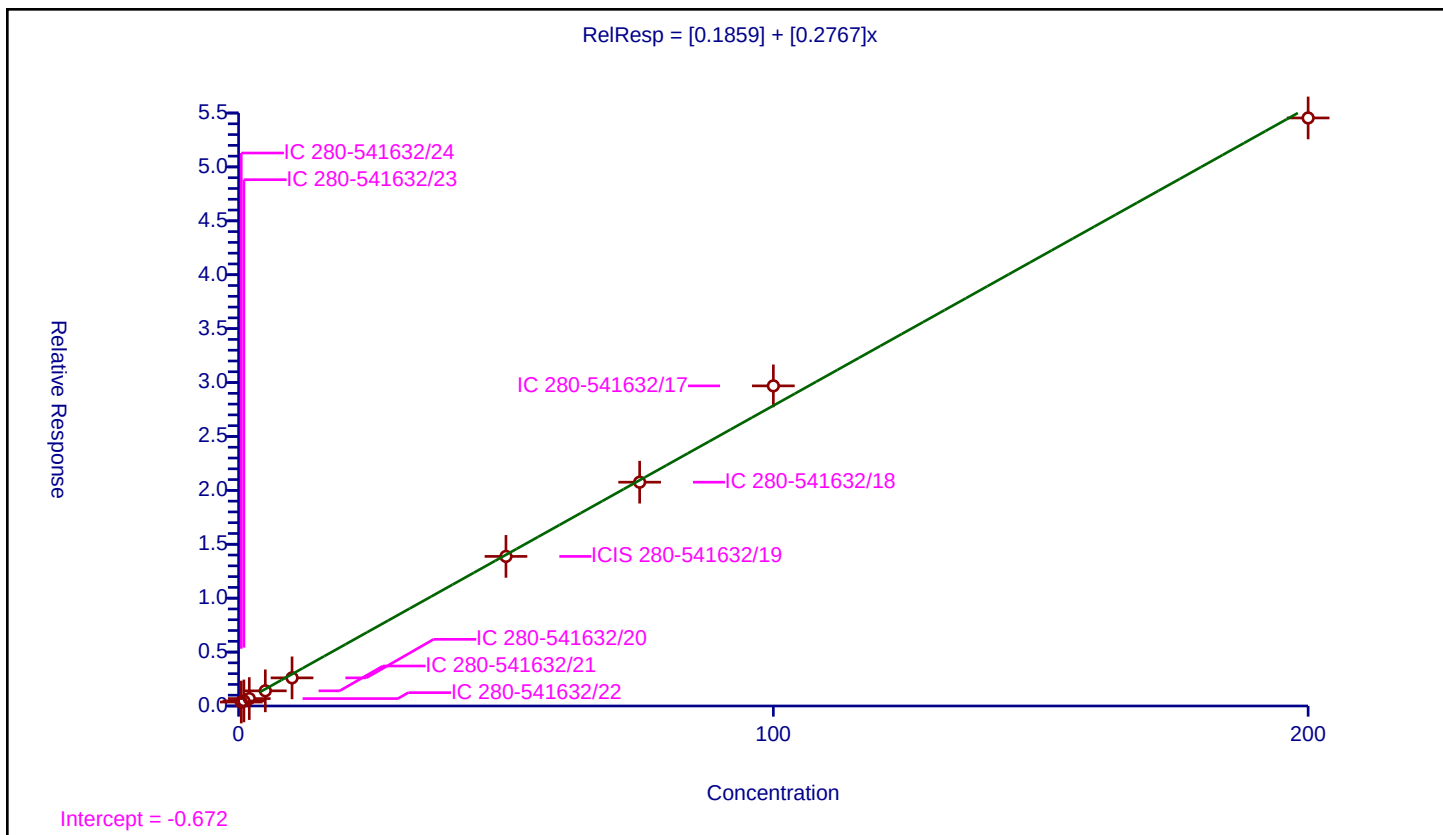
Curve Coefficients

Intercept: 0.1859
 Slope: 0.2767

Error Coefficients

Standard Error: 1680000
 Relative Standard Error: 13.5
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.364141	50.0	3483680.0	0.728282	Y
2	IC 280-541632/23	1.0	0.468801	50.0	3449974.0	0.468801	Y
3	IC 280-541632/22	2.0	0.685153	50.0	3431058.0	0.342577	Y
4	IC 280-541632/21	5.0	1.407196	50.0	3392101.0	0.281439	Y
5	IC 280-541632/20	10.0	2.609172	50.0	3457419.0	0.260917	Y
6	ICIS 280-541632/19	50.0	13.873494	50.0	3390105.0	0.27747	Y
7	IC 280-541632/18	75.0	20.758744	50.0	3284298.0	0.276783	Y
8	IC 280-541632/17	100.0	29.691748	50.0	3463720.0	0.296917	Y
9	IC 280-541632/16	200.0	54.541907	50.0	3278733.0	0.27271	Y



Calibration

/ Carbon disulfide

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

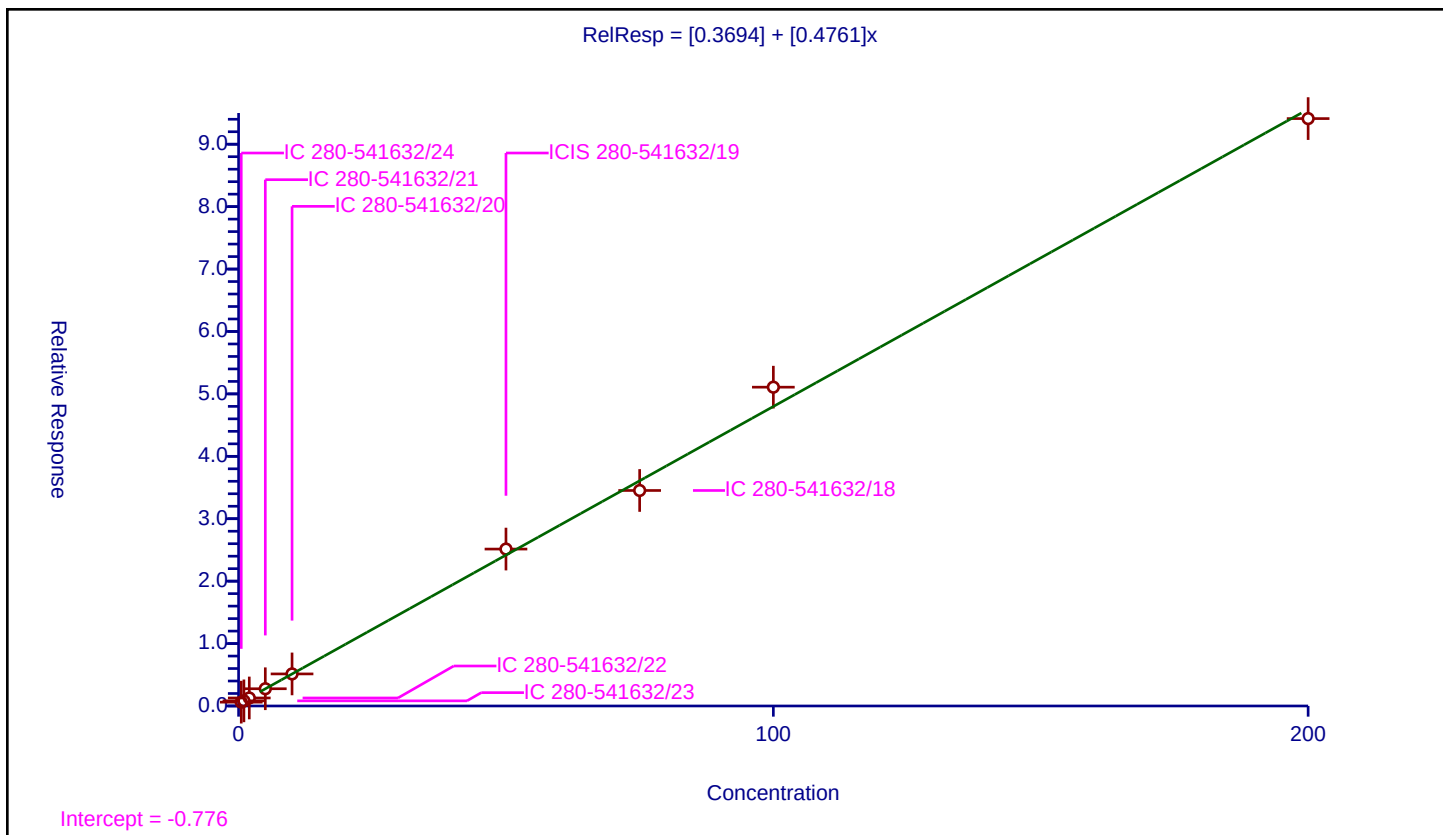
Curve Coefficients

Intercept: 0.3694
 Slope: 0.4761

Error Coefficients

Standard Error: 2900000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.614881	50.0	3483680.0	1.229763	Y
2	IC 280-541632/23	1.0	0.824079	50.0	3449974.0	0.824079	Y
3	IC 280-541632/22	2.0	1.284589	50.0	3431058.0	0.642295	Y
4	IC 280-541632/21	5.0	2.761283	50.0	3392101.0	0.552257	Y
5	IC 280-541632/20	10.0	5.139426	50.0	3457419.0	0.513943	Y
6	ICIS 280-541632/19	50.0	25.138661	50.0	3390105.0	0.502773	Y
7	IC 280-541632/18	75.0	34.526221	50.0	3284298.0	0.46035	Y
8	IC 280-541632/17	100.0	51.076357	50.0	3463720.0	0.510764	Y
9	IC 280-541632/16	200.0	94.106992	50.0	3278733.0	0.470535	Y



Calibration

/ Methyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

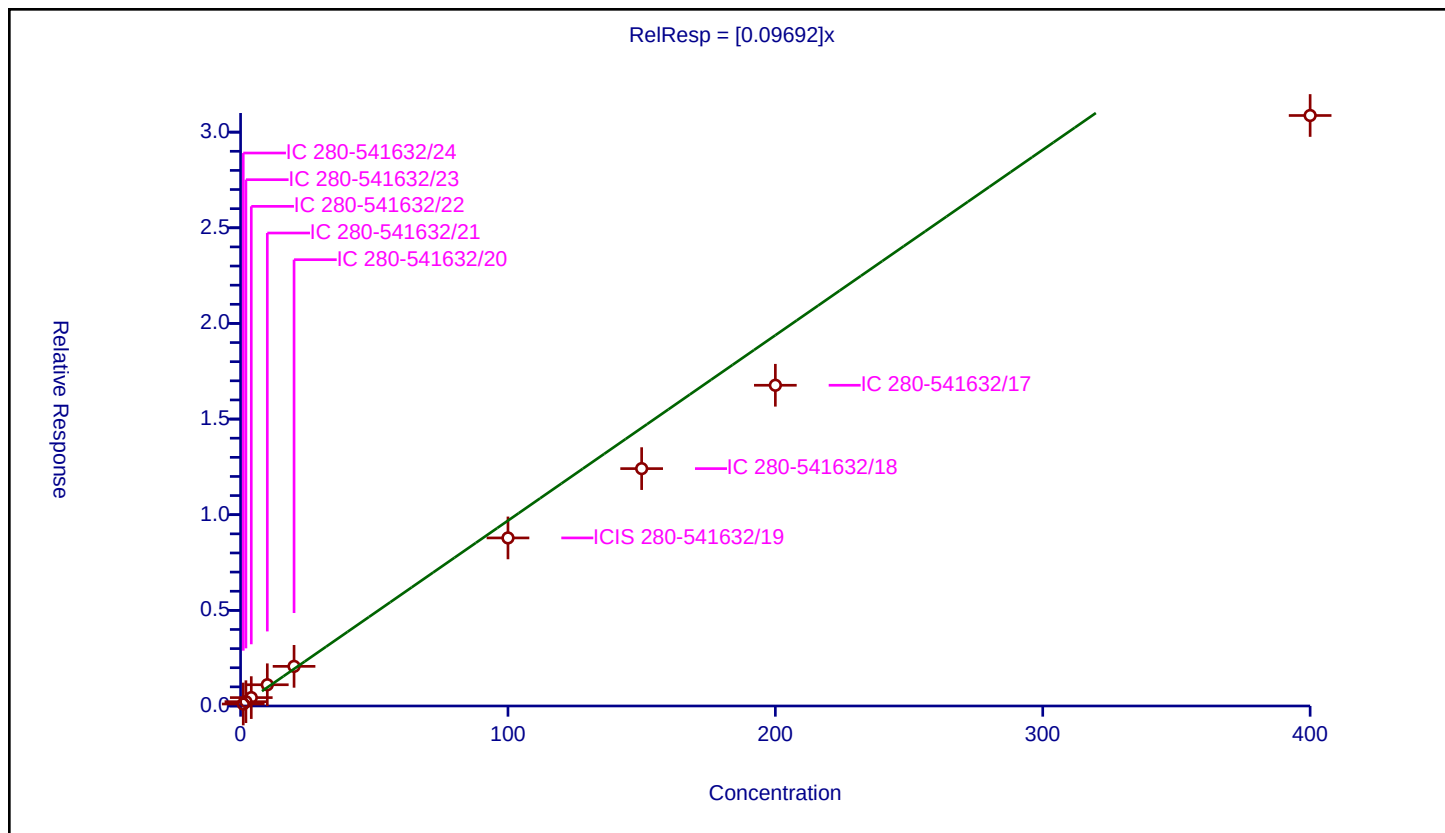
Curve Coefficients

Intercept: 0
 Slope: 0.09692

Error Coefficients

Standard Error: 901000
 Relative Standard Error: 14.3
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	1.0	0.103583	50.0	3483680.0	0.103583	Y
2	IC 280-541632/23	2.0	0.225726	50.0	3449974.0	0.112863	Y
3	IC 280-541632/22	4.0	0.438407	50.0	3431058.0	0.109602	Y
4	IC 280-541632/21	10.0	1.110005	50.0	3392101.0	0.111001	Y
5	IC 280-541632/20	20.0	2.071762	50.0	3457419.0	0.103588	Y
6	ICIS 280-541632/19	100.0	8.786129	50.0	3390105.0	0.087861	Y
7	IC 280-541632/18	150.0	12.40944	50.0	3284298.0	0.08273	Y
8	IC 280-541632/17	200.0	16.767175	50.0	3463720.0	0.083836	Y
9	IC 280-541632/16	400.0	30.870781	50.0	3278733.0	0.077177	Y



Calibration

/ 3-Chloro-1-propene

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

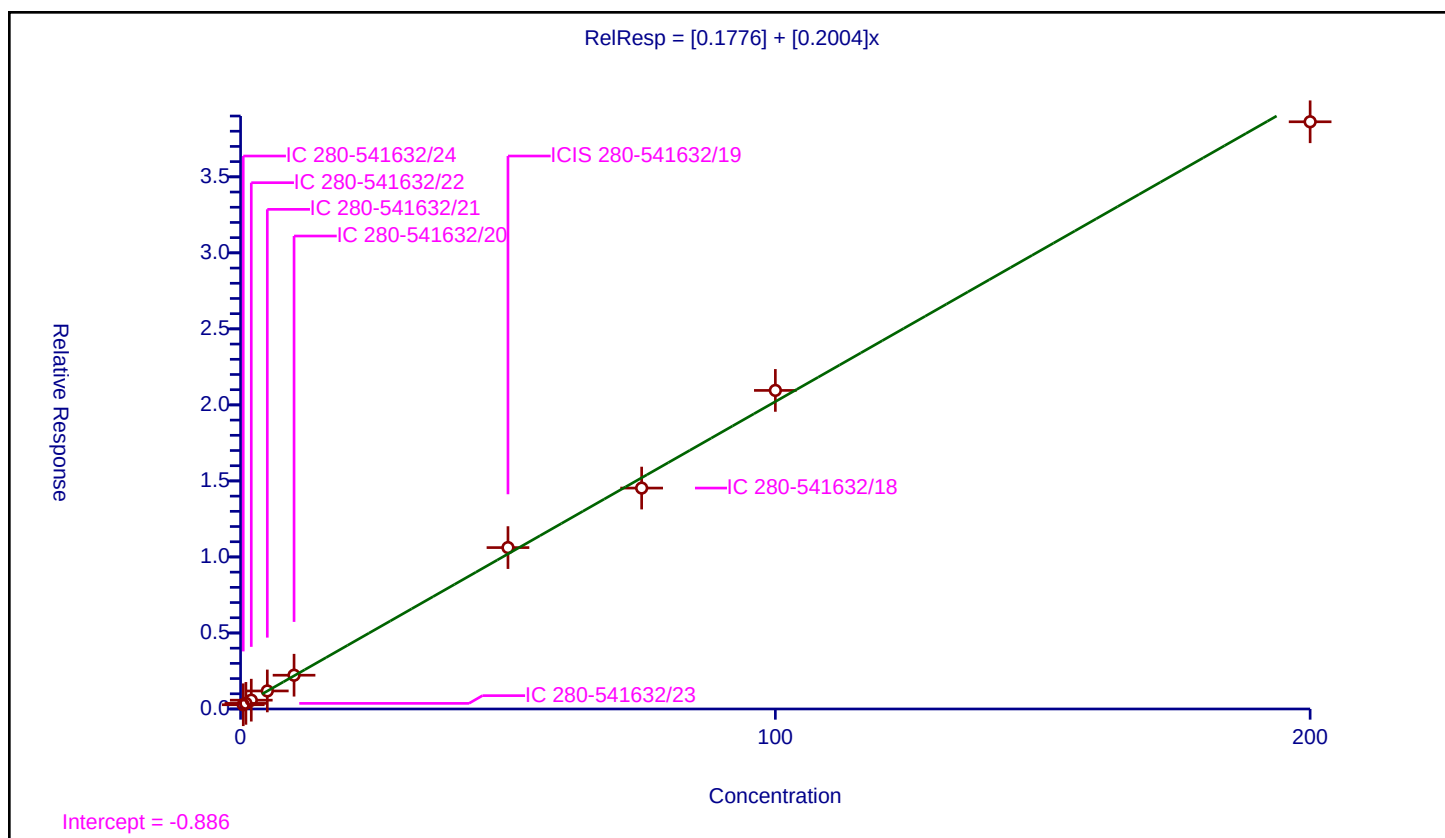
Curve Coefficients

Intercept:	0.1776
Slope:	0.2004

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	3.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.279489	50.0	3483680.0	0.558978	Y
2	IC 280-541632/23	1.0	0.370003	50.0	3449974.0	0.370003	Y
3	IC 280-541632/22	2.0	0.579224	50.0	3431058.0	0.289612	Y
4	IC 280-541632/21	5.0	1.186816	50.0	3392101.0	0.237363	Y
5	IC 280-541632/20	10.0	2.22173	50.0	3457419.0	0.222173	Y
6	ICIS 280-541632/19	50.0	10.615851	50.0	3390105.0	0.212317	Y
7	IC 280-541632/18	75.0	14.529985	50.0	3284298.0	0.193733	Y
8	IC 280-541632/17	100.0	20.952791	50.0	3463720.0	0.209528	Y
9	IC 280-541632/16	200.0	38.621733	50.0	3278733.0	0.193109	Y



Calibration

/ Methylene Chloride

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

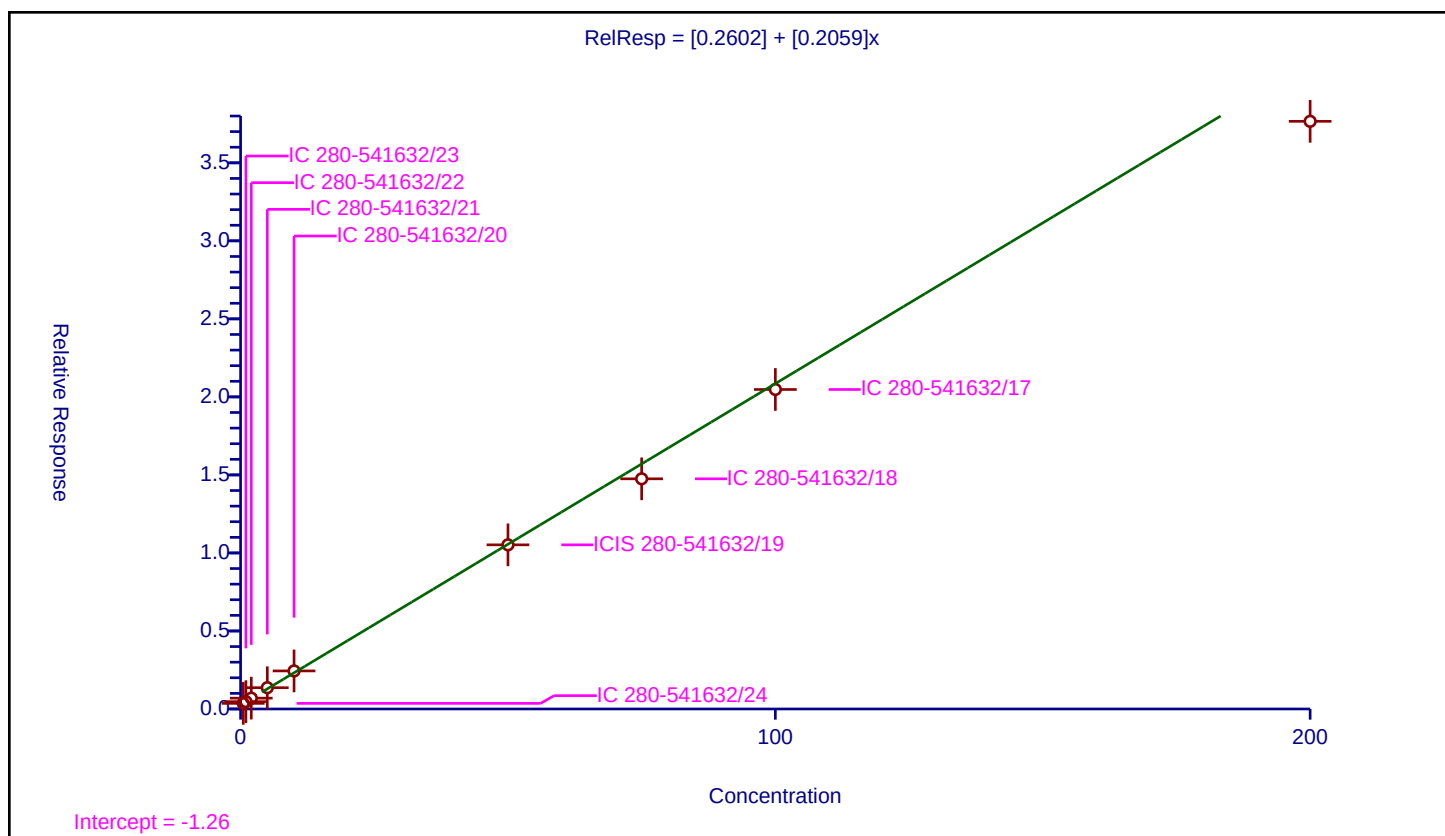
Curve Coefficients

Intercept: 0.2602
 Slope: 0.2059

Error Coefficients

Standard Error: 1170000
 Relative Standard Error: 6.1
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.359591	50.0	3483680.0	0.719182	Y
2	IC 280-541632/23	1.0	0.470786	50.0	3449974.0	0.470786	Y
3	IC 280-541632/22	2.0	0.695237	50.0	3431058.0	0.347619	Y
4	IC 280-541632/21	5.0	1.365216	50.0	3392101.0	0.273043	Y
5	IC 280-541632/20	10.0	2.439696	50.0	3457419.0	0.24397	Y
6	ICIS 280-541632/19	50.0	10.519438	50.0	3390105.0	0.210389	Y
7	IC 280-541632/18	75.0	14.750093	50.0	3284298.0	0.196668	Y
8	IC 280-541632/17	100.0	20.475356	50.0	3463720.0	0.204754	Y
9	IC 280-541632/16	200.0	37.660676	50.0	3278733.0	0.188303	Y



Calibration

/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

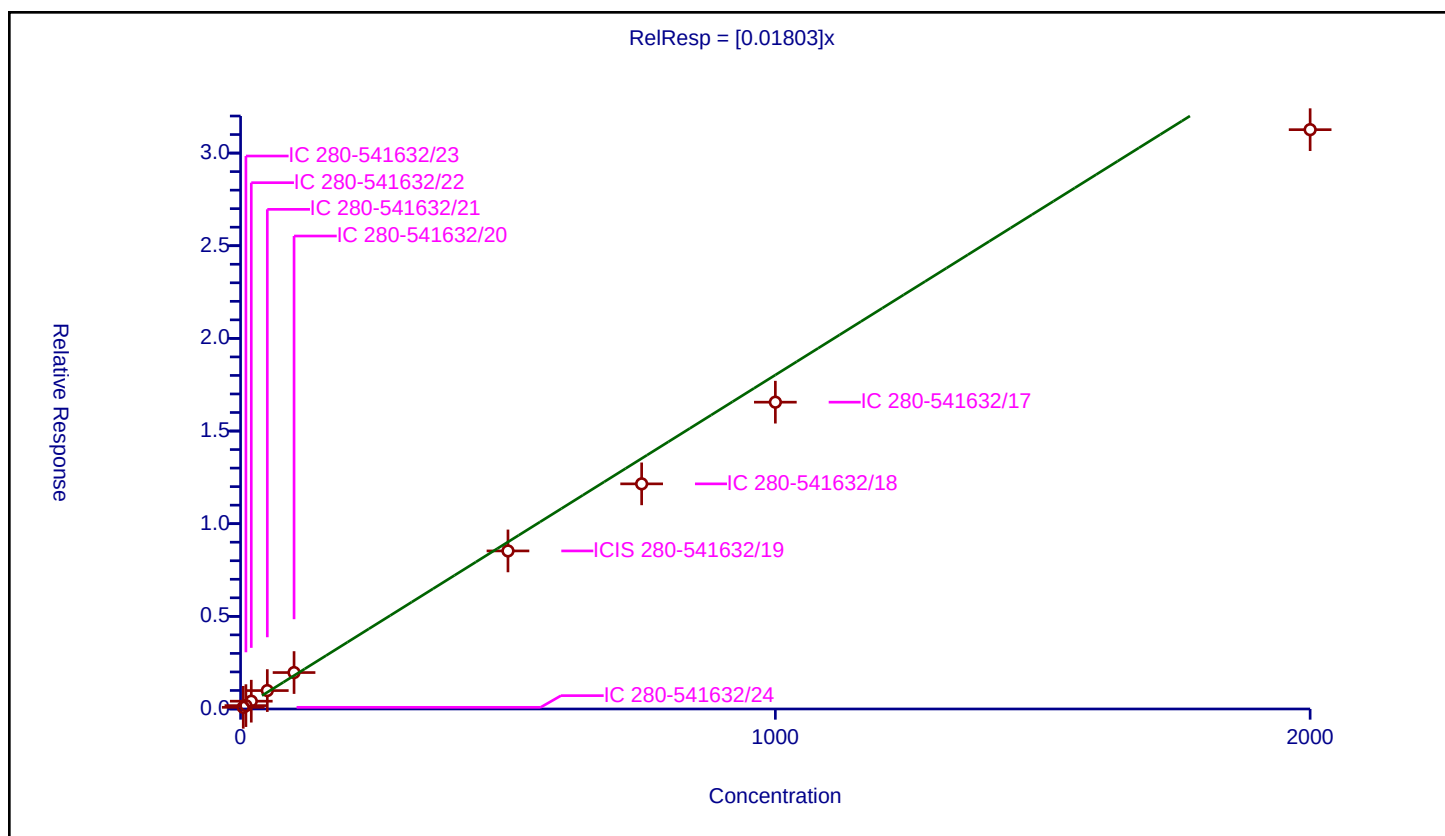
Curve Coefficients

Intercept: 0
 Slope: 0.01803

Error Coefficients

Standard Error: 902000
 Relative Standard Error: 10.3
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	5.0	0.089919	50.0	3483680.0	0.017984	Y
2	IC 280-541632/23	10.0	0.182001	50.0	3449974.0	0.0182	Y
3	IC 280-541632/22	20.0	0.421051	50.0	3431058.0	0.021053	Y
4	IC 280-541632/21	50.0	0.993942	50.0	3392101.0	0.019879	Y
5	IC 280-541632/20	100.0	1.966496	50.0	3457419.0	0.019665	Y
6	ICIS 280-541632/19	500.0	8.53037	50.0	3390105.0	0.017061	Y
7	IC 280-541632/18	750.0	12.149689	50.0	3284298.0	0.0162	Y
8	IC 280-541632/17	1000.0	16.556708	50.0	3463720.0	0.016557	Y
9	IC 280-541632/16	2000.0	31.26383	50.0	3278733.0	0.015632	Y



Calibration

/ Acrylonitrile

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

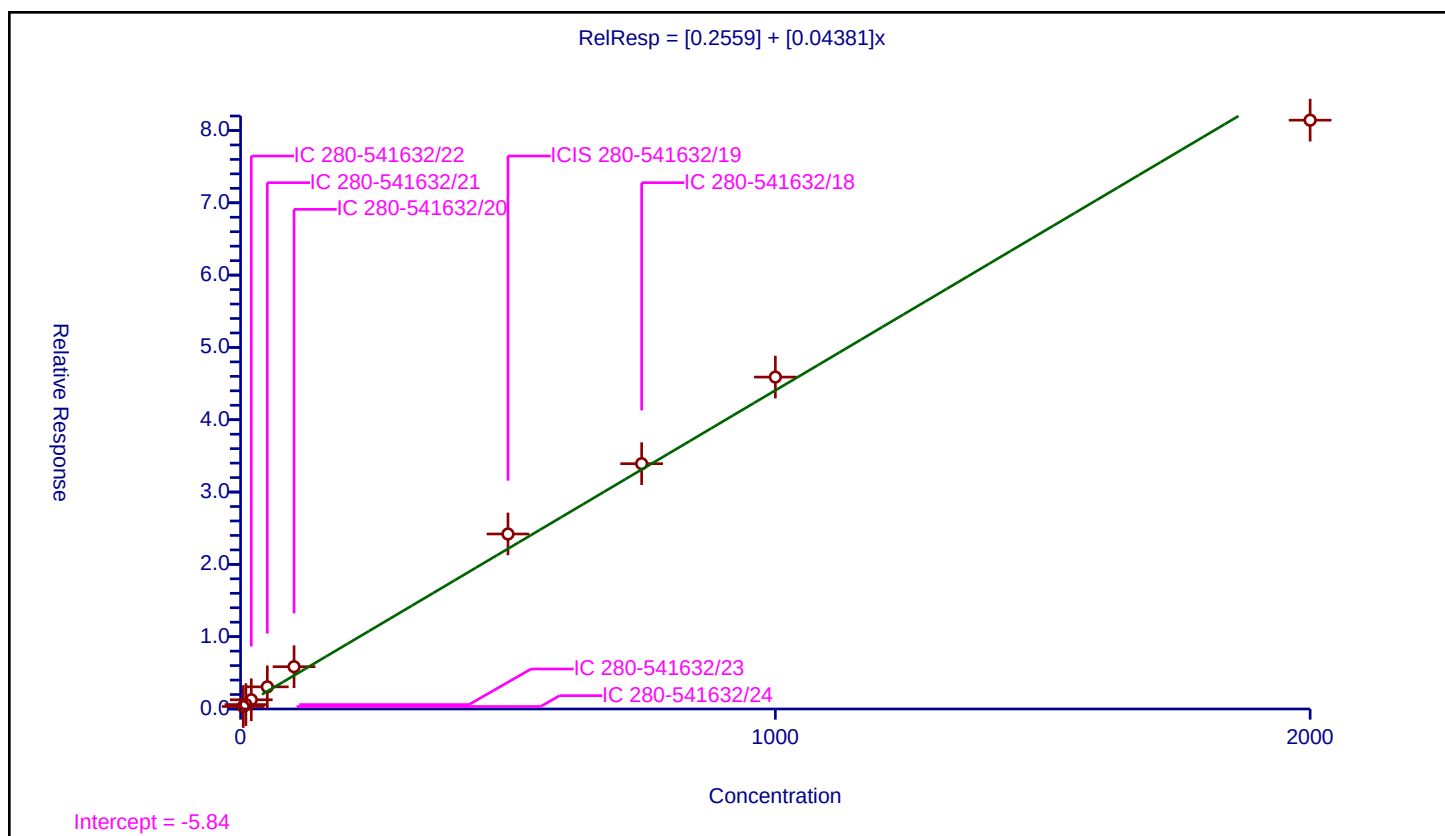
Curve Coefficients

Intercept: 0.2559
 Slope: 0.04381

Error Coefficients

Standard Error: 2580000
 Relative Standard Error: 29.6
 Correlation Coefficient: 0.992
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	5.0	0.340201	50.0	3483680.0	0.06804	Y
2	IC 280-541632/23	10.0	0.610584	50.0	3449974.0	0.061058	Y
3	IC 280-541632/22	20.0	1.274024	50.0	3431058.0	0.063701	Y
4	IC 280-541632/21	50.0	3.060714	50.0	3392101.0	0.061214	Y
5	IC 280-541632/20	100.0	5.844996	50.0	3457419.0	0.05845	Y
6	ICIS 280-541632/19	500.0	24.200607	50.0	3390105.0	0.048401	Y
7	IC 280-541632/18	750.0	33.923825	50.0	3284298.0	0.045232	Y
8	IC 280-541632/17	1000.0	45.898456	50.0	3463720.0	0.045898	Y
9	IC 280-541632/16	2000.0	81.425127	50.0	3278733.0	0.040713	Y



Calibration

/ Methyl tert-butyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

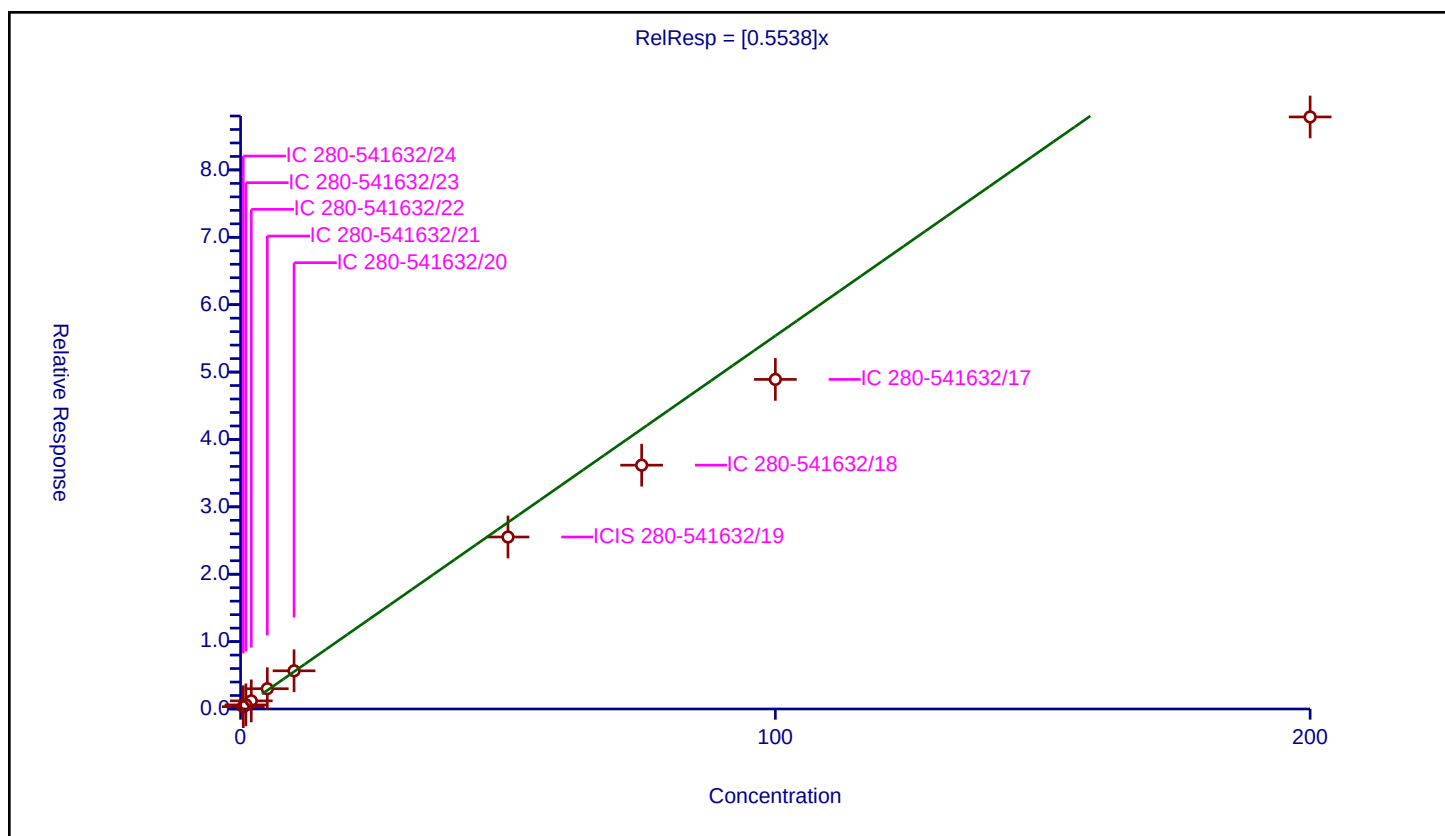
Curve Coefficients

Intercept: 0
Slope: 0.5538

Error Coefficients

Standard Error: 2590000
Relative Standard Error: 14.1
Correlation Coefficient: 0.993
Coefficient of Determination (Adjusted): 0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.341162	50.0	3483680.0	0.682324	Y
2	IC 280-541632/23	1.0	0.60941	50.0	3449974.0	0.60941	Y
3	IC 280-541632/22	2.0	1.205853	50.0	3431058.0	0.602926	Y
4	IC 280-541632/21	5.0	3.008652	50.0	3392101.0	0.60173	Y
5	IC 280-541632/20	10.0	5.665845	50.0	3457419.0	0.566584	Y
6	ICIS 280-541632/19	50.0	25.521909	50.0	3390105.0	0.510438	Y
7	IC 280-541632/18	75.0	36.186409	50.0	3284298.0	0.482485	Y
8	IC 280-541632/17	100.0	48.912282	50.0	3463720.0	0.489123	Y
9	IC 280-541632/16	200.0	87.862019	50.0	3278733.0	0.43931	Y



Calibration

/ trans-1,2-Dichloroethene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

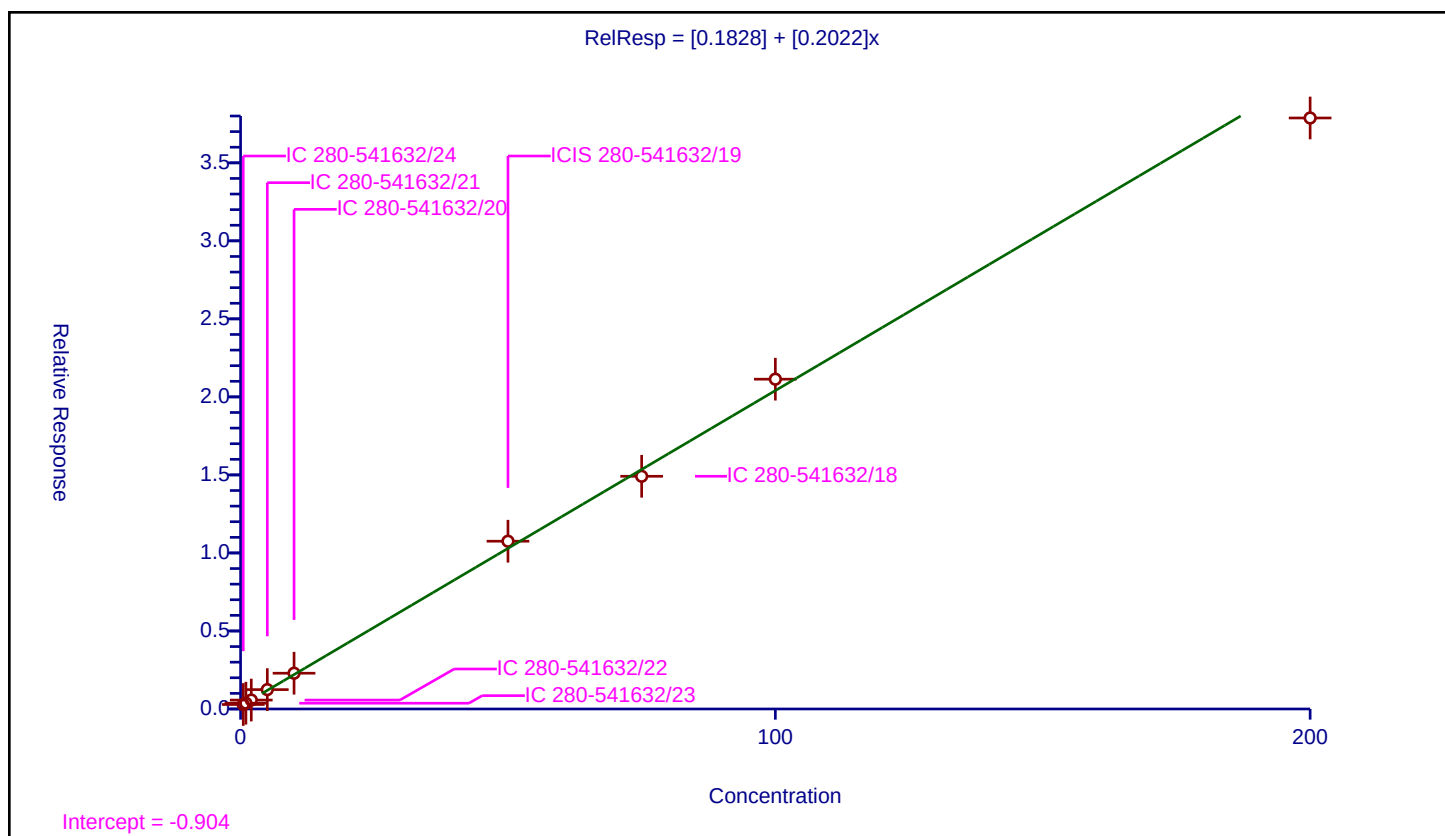
Curve Coefficients

Intercept: 0.1828
 Slope: 0.2022

Error Coefficients

Standard Error: 1190000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.288086	50.0	3483680.0	0.576172	Y
2	IC 280-541632/23	1.0	0.369698	50.0	3449974.0	0.369698	Y
3	IC 280-541632/22	2.0	0.570975	50.0	3431058.0	0.285488	Y
4	IC 280-541632/21	5.0	1.241546	50.0	3392101.0	0.248309	Y
5	IC 280-541632/20	10.0	2.293242	50.0	3457419.0	0.229324	Y
6	ICIS 280-541632/19	50.0	10.751496	50.0	3390105.0	0.21503	Y
7	IC 280-541632/18	75.0	14.913096	50.0	3284298.0	0.198841	Y
8	IC 280-541632/17	100.0	21.13482	50.0	3463720.0	0.211348	Y
9	IC 280-541632/16	200.0	37.874234	50.0	3278733.0	0.189371	Y



Calibration

/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

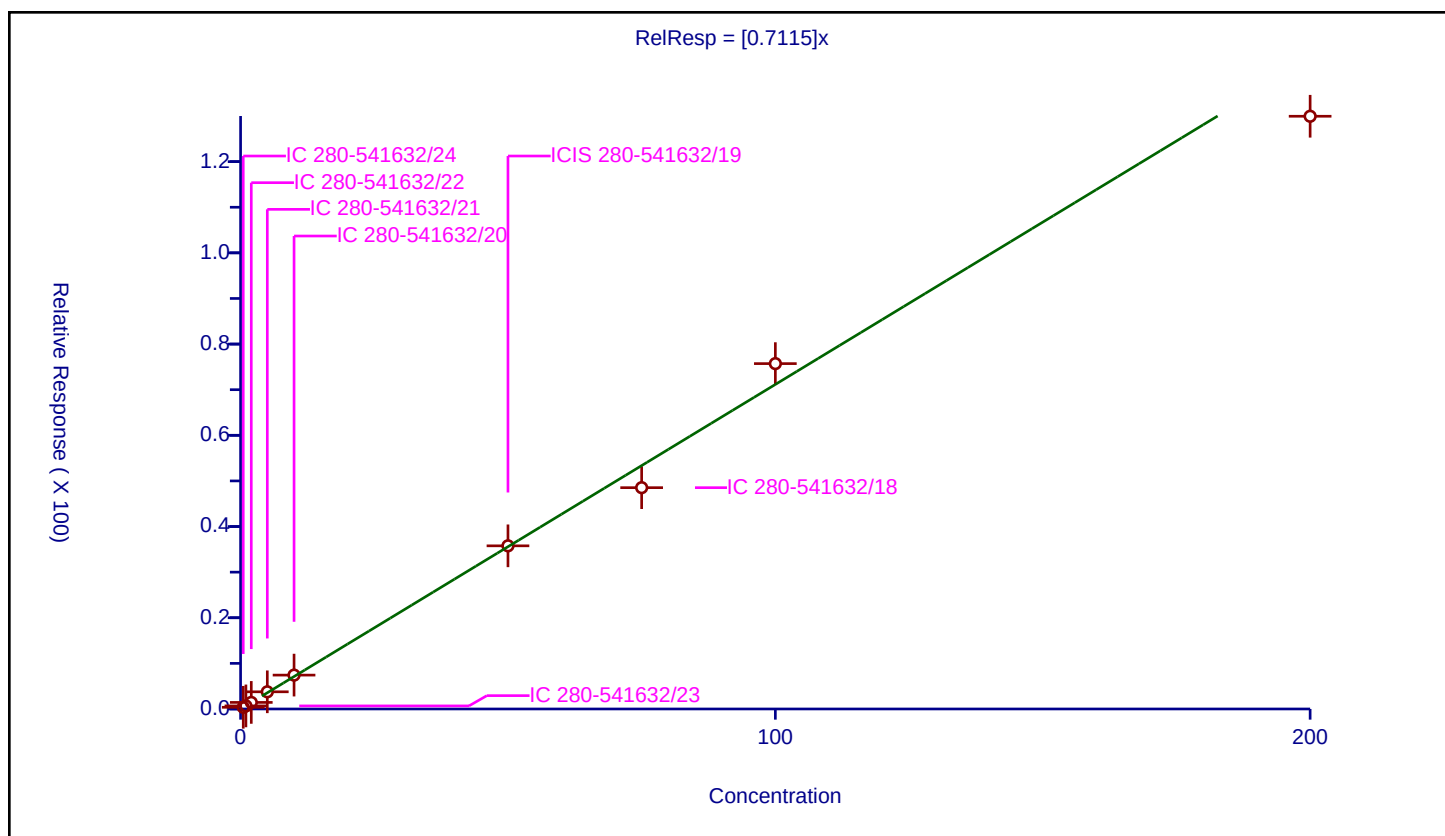
Curve Coefficients

Intercept: 0
 Slope: 0.7115

Error Coefficients

Standard Error: 1070000
 Relative Standard Error: 6.1
 Correlation Coefficient: 0.991
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.371504	50.0	960420.0	0.743008	Y
2	IC 280-541632/23	1.0	0.674784	50.0	934818.0	0.674784	Y
3	IC 280-541632/22	2.0	1.441296	50.0	940716.0	0.720648	Y
4	IC 280-541632/21	5.0	3.765029	50.0	934083.0	0.753006	Y
5	IC 280-541632/20	10.0	7.430051	50.0	932995.0	0.743005	Y
6	ICIS 280-541632/19	50.0	35.771932	50.0	938729.0	0.715439	Y
7	IC 280-541632/18	75.0	48.523286	50.0	909350.0	0.646977	Y
8	IC 280-541632/17	100.0	75.715172	50.0	953058.0	0.757152	Y
9	IC 280-541632/16	200.0	129.945322	50.0	922134.0	0.649727	Y



Calibration

/ Vinyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

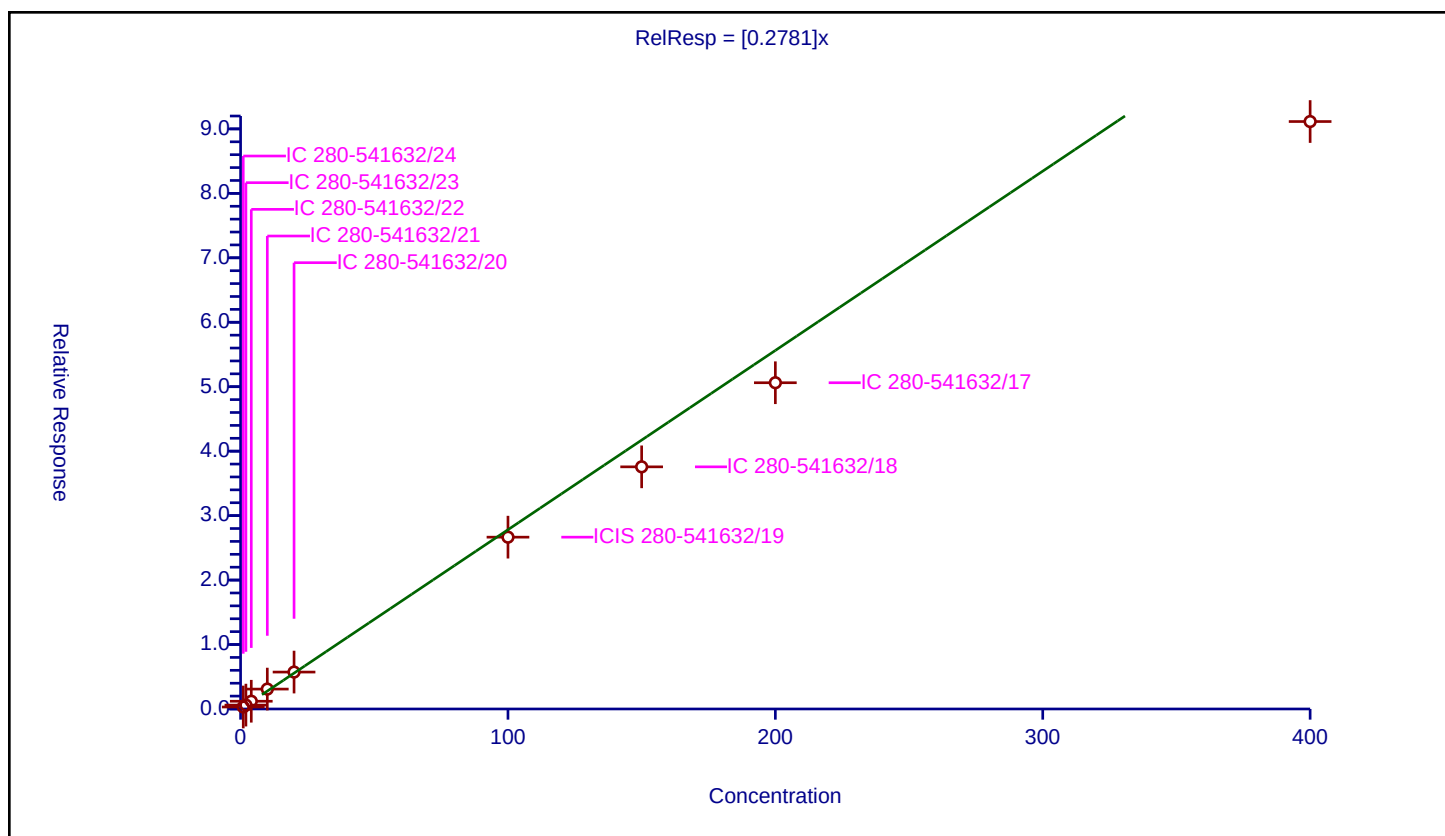
Curve Coefficients

Intercept: 0
 Slope: 0.2781

Error Coefficients

Standard Error: 2680000
 Relative Standard Error: 10.6
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	1.0	0.308481	50.0	3483680.0	0.308481	Y
2	IC 280-541632/23	2.0	0.601744	50.0	3449974.0	0.300872	Y
3	IC 280-541632/22	4.0	1.202122	50.0	3431058.0	0.30053	Y
4	IC 280-541632/21	10.0	3.090474	50.0	3392101.0	0.309047	Y
5	IC 280-541632/20	20.0	5.727654	50.0	3457419.0	0.286383	Y
6	ICIS 280-541632/19	100.0	26.660015	50.0	3390105.0	0.2666	Y
7	IC 280-541632/18	150.0	37.570814	50.0	3284298.0	0.250472	Y
8	IC 280-541632/17	200.0	50.618439	50.0	3463720.0	0.253092	Y
9	IC 280-541632/16	400.0	91.141731	50.0	3278733.0	0.227854	Y



Calibration

/ 1,1-Dichloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

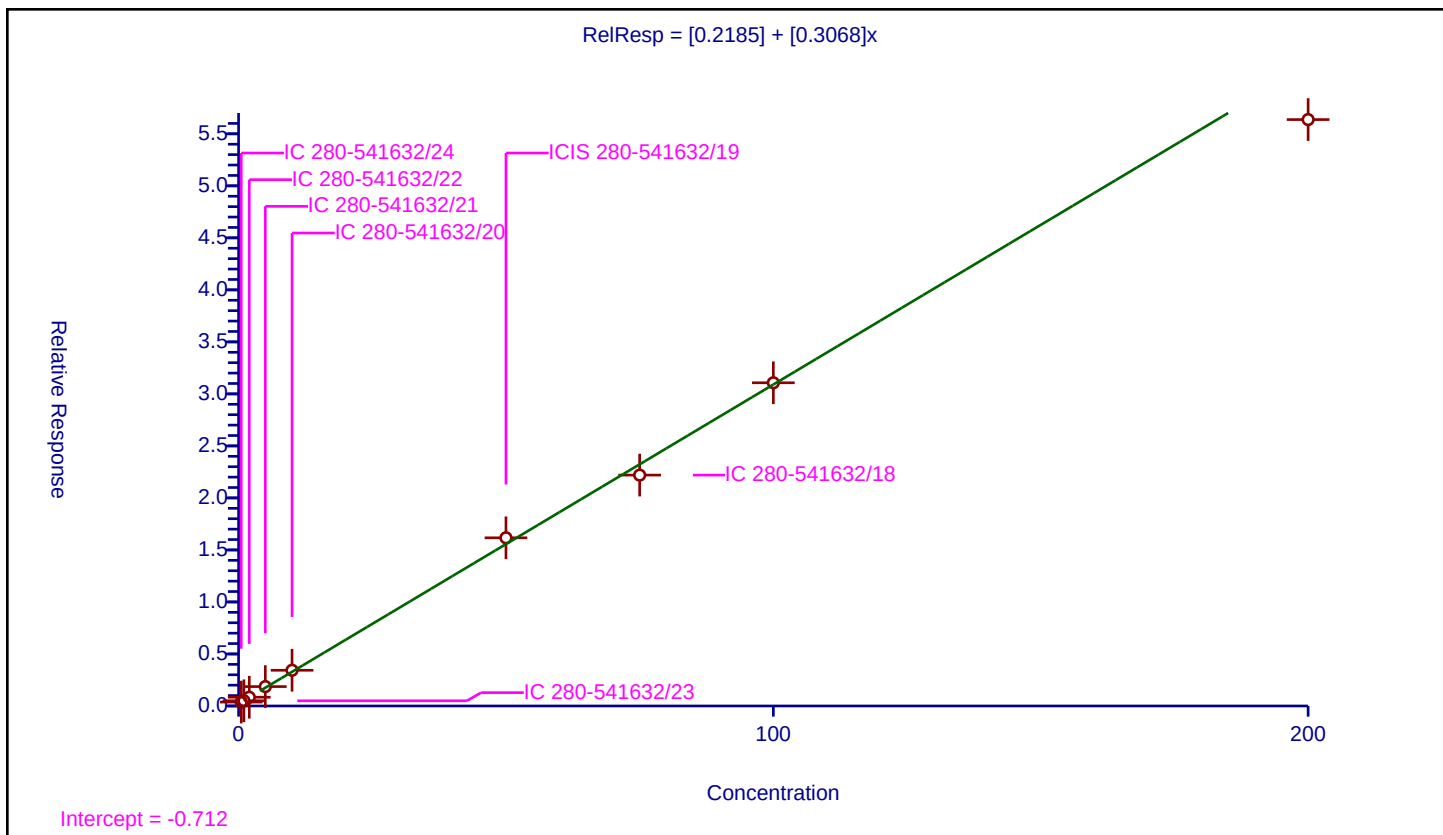
Curve Coefficients

Intercept: 0.2185
 Slope: 0.3068

Error Coefficients

Standard Error: 1760000
 Relative Standard Error: 6.1
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.375824	50.0	3483680.0	0.751648	Y
2	IC 280-541632/23	1.0	0.501004	50.0	3449974.0	0.501004	Y
3	IC 280-541632/22	2.0	0.842801	50.0	3431058.0	0.421401	Y
4	IC 280-541632/21	5.0	1.865525	50.0	3392101.0	0.373105	Y
5	IC 280-541632/20	10.0	3.433616	50.0	3457419.0	0.343362	Y
6	ICIS 280-541632/19	50.0	16.166756	50.0	3390105.0	0.323335	Y
7	IC 280-541632/18	75.0	22.193525	50.0	3284298.0	0.295914	Y
8	IC 280-541632/17	100.0	31.069529	50.0	3463720.0	0.310695	Y
9	IC 280-541632/16	200.0	56.368847	50.0	3278733.0	0.281844	Y



Calibration

/ 2-Butanone (MEK)

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

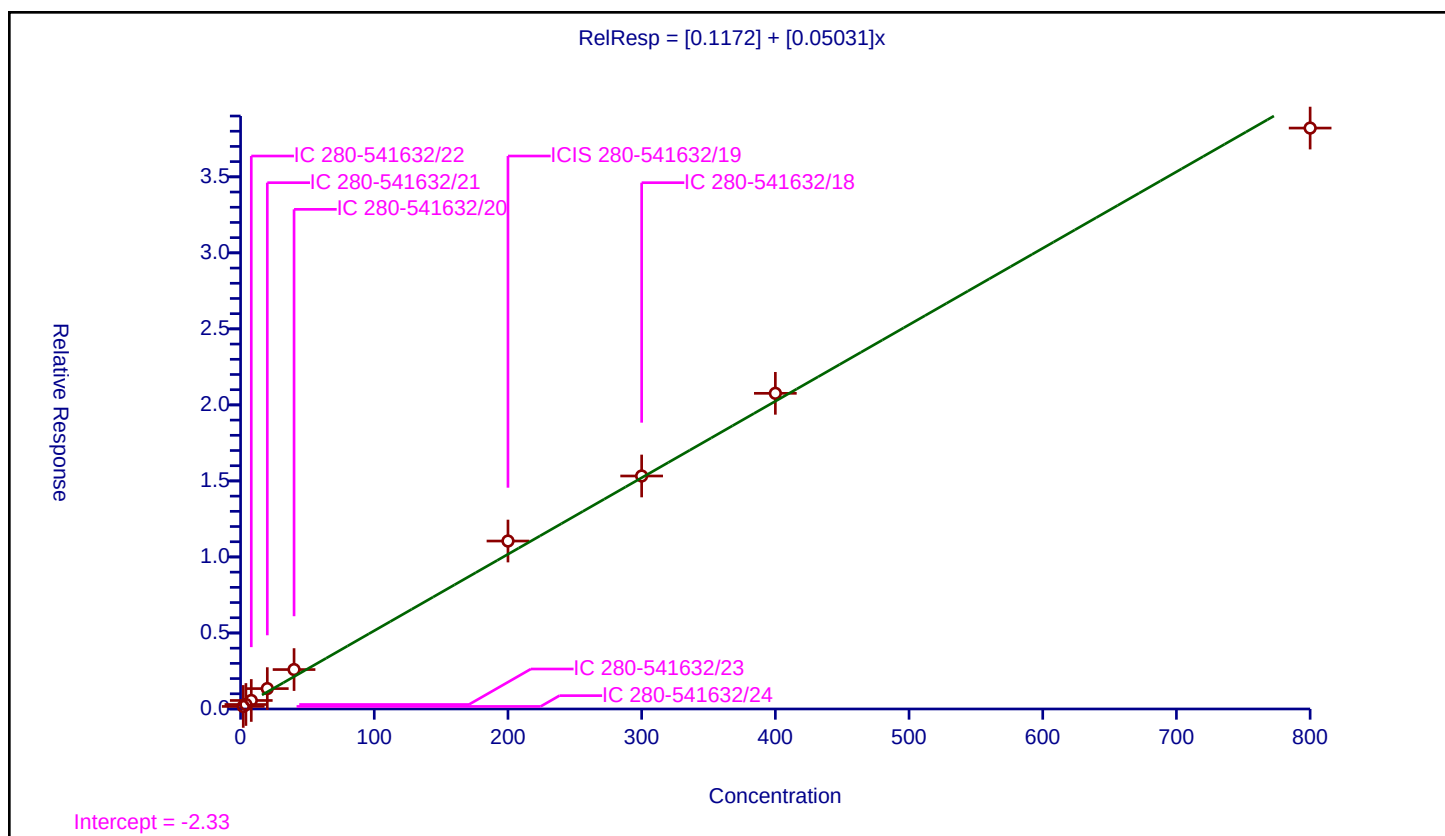
Curve Coefficients

Intercept: 0.1172
 Slope: 0.05031

Error Coefficients

Standard Error: 1190000
 Relative Standard Error: 23.4
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	2.0	0.167624	50.0	3483680.0	0.083812	Y
2	IC 280-541632/23	4.0	0.294915	50.0	3449974.0	0.073729	Y
3	IC 280-541632/22	8.0	0.560469	50.0	3431058.0	0.070059	Y
4	IC 280-541632/21	20.0	1.341499	50.0	3392101.0	0.067075	Y
5	IC 280-541632/20	40.0	2.593582	50.0	3457419.0	0.06484	Y
6	ICIS 280-541632/19	200.0	11.047519	50.0	3390105.0	0.055238	Y
7	IC 280-541632/18	300.0	15.324706	50.0	3284298.0	0.051082	Y
8	IC 280-541632/17	400.0	20.760916	50.0	3463720.0	0.051902	Y
9	IC 280-541632/16	800.0	38.207243	50.0	3278733.0	0.047759	Y



Calibration

/ cis-1,2-Dichloroethene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

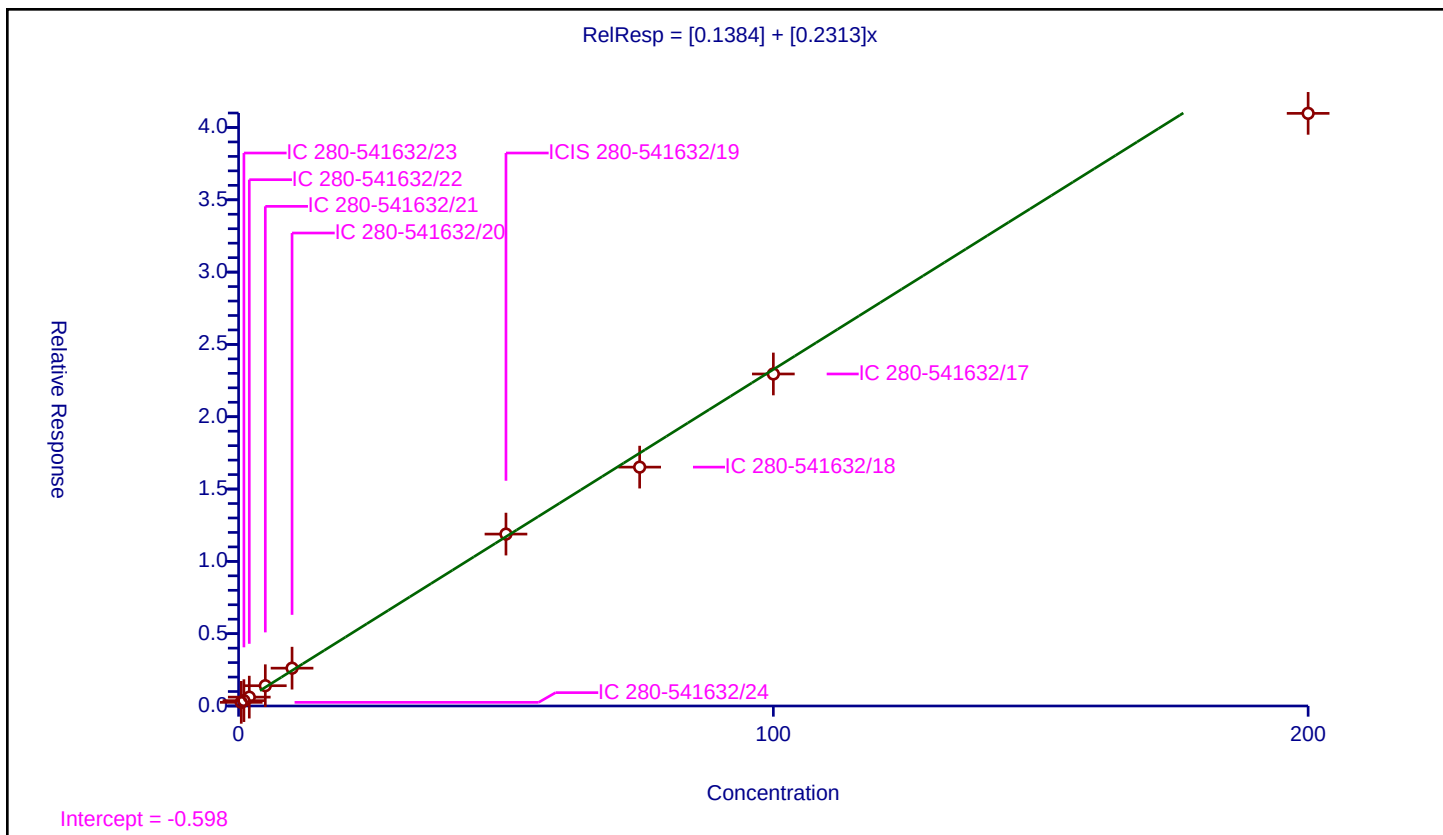
Curve Coefficients

Intercept: 0.1384
 Slope: 0.2313

Error Coefficients

Standard Error: 1290000
 Relative Standard Error: 6.8
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.251803	50.0	3483680.0	0.503605	Y
2	IC 280-541632/23	1.0	0.369829	50.0	3449974.0	0.369829	Y
3	IC 280-541632/22	2.0	0.612887	50.0	3431058.0	0.306443	Y
4	IC 280-541632/21	5.0	1.402051	50.0	3392101.0	0.28041	Y
5	IC 280-541632/20	10.0	2.614711	50.0	3457419.0	0.261471	Y
6	ICIS 280-541632/19	50.0	11.885428	50.0	3390105.0	0.237709	Y
7	IC 280-541632/18	75.0	16.515873	50.0	3284298.0	0.220212	Y
8	IC 280-541632/17	100.0	22.956128	50.0	3463720.0	0.229561	Y
9	IC 280-541632/16	200.0	40.975523	50.0	3278733.0	0.204878	Y



Calibration

/ 2,2-Dichloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

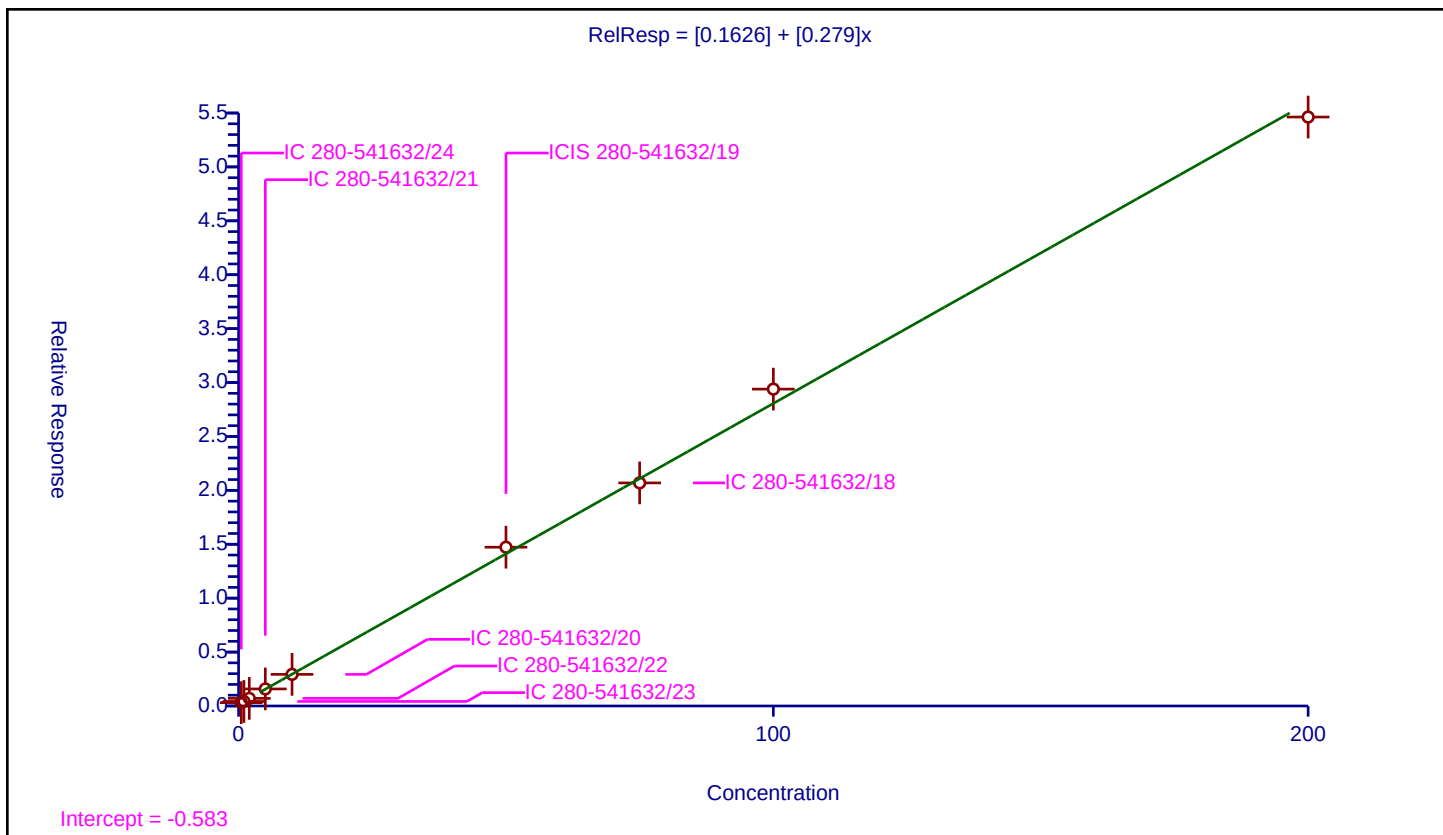
Curve Coefficients

Intercept: 0.1626
 Slope: 0.279

Error Coefficients

Standard Error: 1690000
 Relative Standard Error: 4.4
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.307936	50.0	3483680.0	0.615872	Y
2	IC 280-541632/23	1.0	0.420887	50.0	3449974.0	0.420887	Y
3	IC 280-541632/22	2.0	0.705861	50.0	3431058.0	0.35293	Y
4	IC 280-541632/21	5.0	1.582014	50.0	3392101.0	0.316403	Y
5	IC 280-541632/20	10.0	2.931811	50.0	3457419.0	0.293181	Y
6	ICIS 280-541632/19	50.0	14.727464	50.0	3390105.0	0.294549	Y
7	IC 280-541632/18	75.0	20.690236	50.0	3284298.0	0.27587	Y
8	IC 280-541632/17	100.0	29.390641	50.0	3463720.0	0.293906	Y
9	IC 280-541632/16	200.0	54.626985	50.0	3278733.0	0.273135	Y



Calibration

/ sec-Butyl Alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

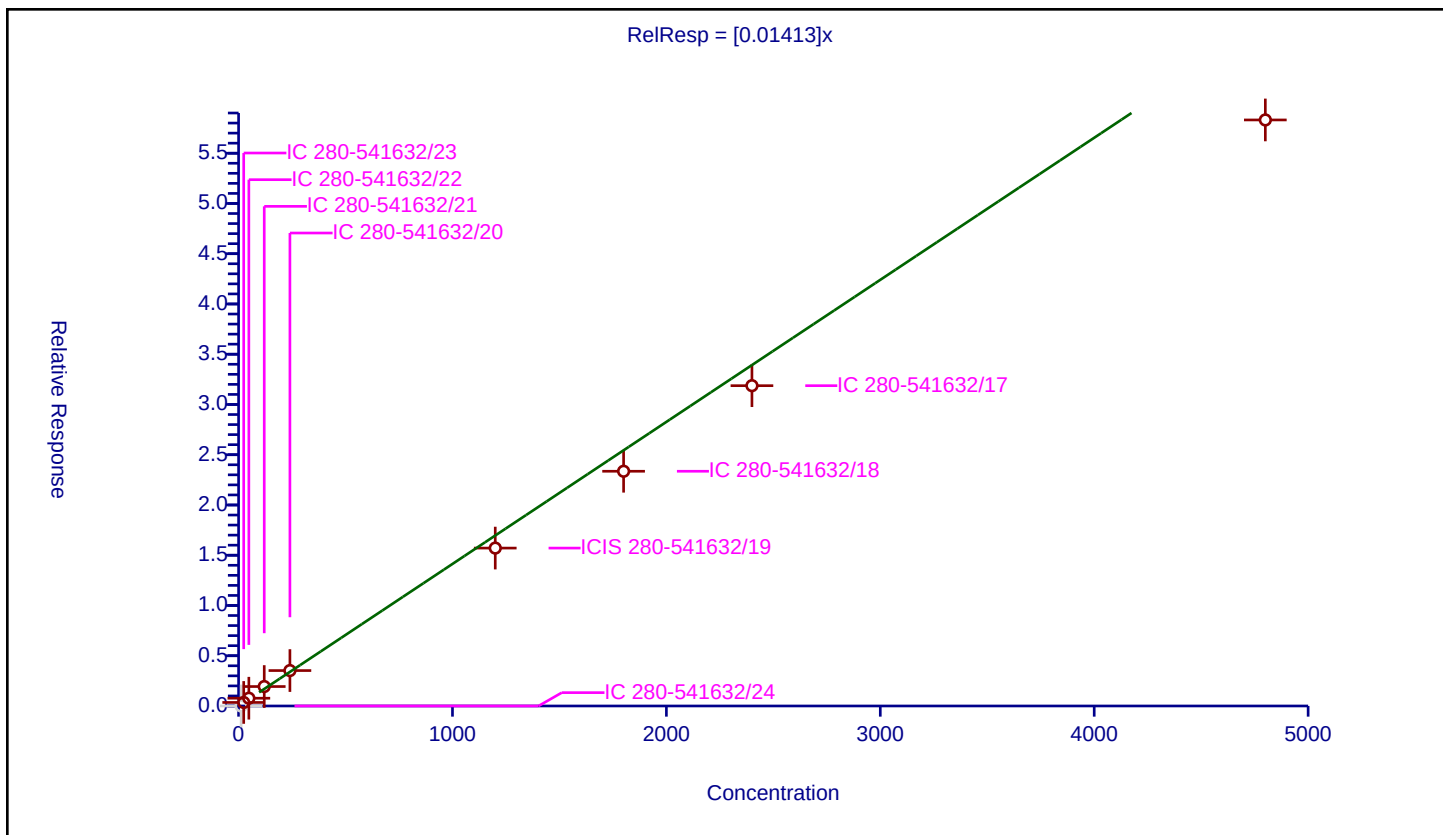
Curve Coefficients

Intercept: 0
 Slope: 0.01413

Error Coefficients

Standard Error: 1820000
 Relative Standard Error: 10.6
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	12.0	0.0	50.0	3483680.0	0.0	N
2	IC 280-541632/23	24.0	0.351307	50.0	3449974.0	0.014638	Y
3	IC 280-541632/22	48.0	0.77412	50.0	3431058.0	0.016127	Y
4	IC 280-541632/21	120.0	1.935379	50.0	3392101.0	0.016128	Y
5	IC 280-541632/20	240.0	3.524262	50.0	3457419.0	0.014684	Y
6	ICIS 280-541632/19	1200.0	15.711106	50.0	3390105.0	0.013093	Y
7	IC 280-541632/18	1800.0	23.356026	50.0	3284298.0	0.012976	Y
8	IC 280-541632/17	2400.0	31.870662	50.0	3463720.0	0.013279	Y
9	IC 280-541632/16	4800.0	58.310314	50.0	3278733.0	0.012148	Y



Calibration

/ Chlorobromomethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

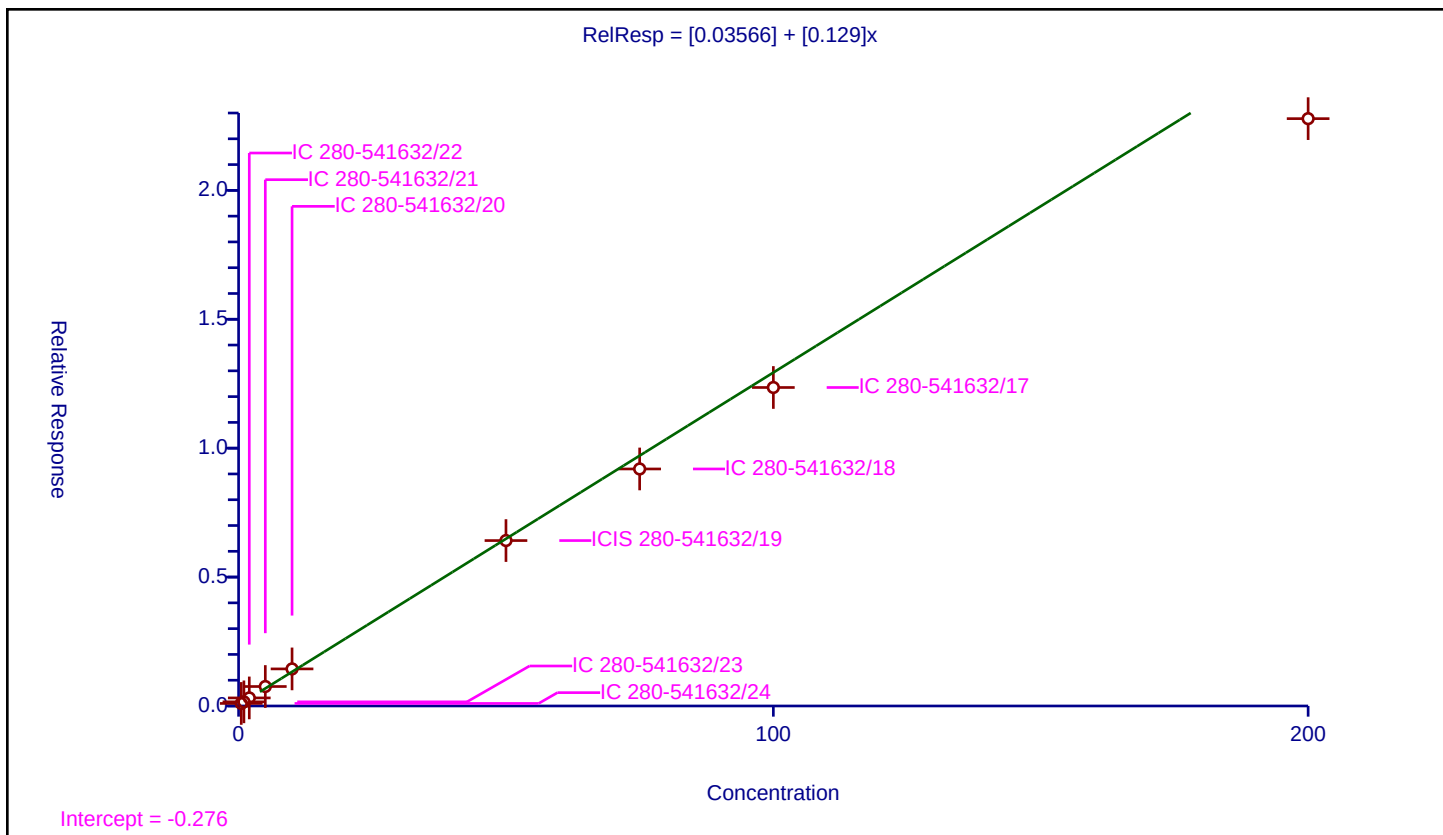
Curve Coefficients

Intercept: 0.03566
 Slope: 0.129

Error Coefficients

Standard Error: 710000
 Relative Standard Error: 8.2
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.099062	50.0	3483680.0	0.198124	Y
2	IC 280-541632/23	1.0	0.160364	50.0	3449974.0	0.160364	Y
3	IC 280-541632/22	2.0	0.31263	50.0	3431058.0	0.156315	Y
4	IC 280-541632/21	5.0	0.75552	50.0	3392101.0	0.151104	Y
5	IC 280-541632/20	10.0	1.438168	50.0	3457419.0	0.143817	Y
6	ICIS 280-541632/19	50.0	6.41635	50.0	3390105.0	0.128327	Y
7	IC 280-541632/18	75.0	9.19338	50.0	3284298.0	0.122578	Y
8	IC 280-541632/17	100.0	12.35337	50.0	3463720.0	0.123533	Y
9	IC 280-541632/16	200.0	22.781956	50.0	3278733.0	0.11391	Y



Calibration

/ Tetrahydrofuran

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

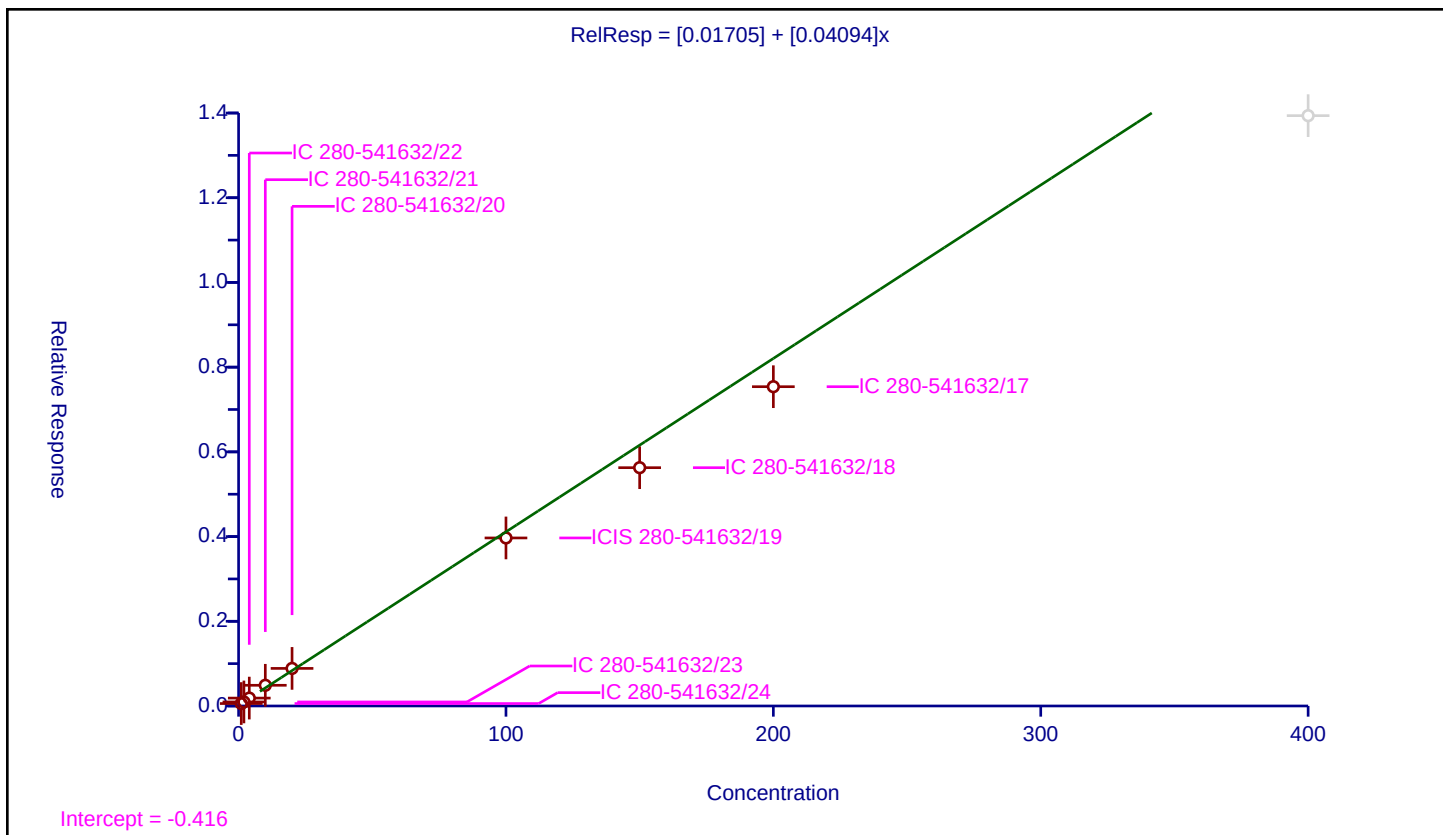
Curve Coefficients

Intercept: 0.01705
 Slope: 0.04094

Error Coefficients

Standard Error: 285000
 Relative Standard Error: 8.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	1.0	0.057812	50.0	3483680.0	0.057812	Y
2	IC 280-541632/23	2.0	0.095421	50.0	3449974.0	0.047711	Y
3	IC 280-541632/22	4.0	0.186502	50.0	3431058.0	0.046626	Y
4	IC 280-541632/21	10.0	0.488989	50.0	3392101.0	0.048899	Y
5	IC 280-541632/20	20.0	0.887439	50.0	3457419.0	0.044372	Y
6	ICIS 280-541632/19	100.0	3.967208	50.0	3390105.0	0.039672	Y
7	IC 280-541632/18	150.0	5.626347	50.0	3284298.0	0.037509	Y
8	IC 280-541632/17	200.0	7.538412	50.0	3463720.0	0.037692	Y
9	IC 280-541632/16	400.0	13.937564	50.0	3278733.0	0.034844	N



Calibration

/ Chloroform

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

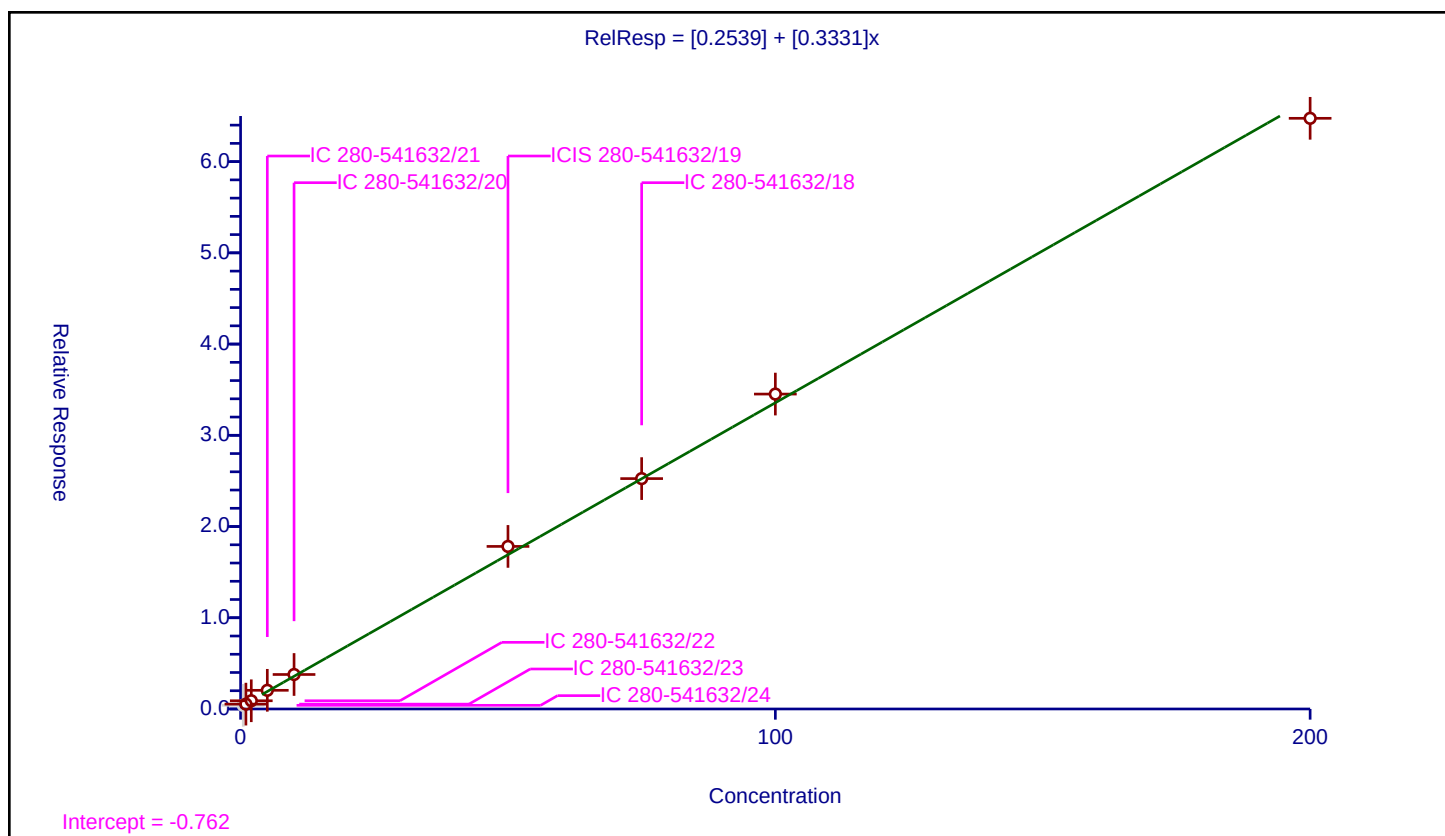
Curve Coefficients

Intercept: 0.2539
Slope: 0.3331

Error Coefficients

Standard Error: 2160000
Relative Standard Error: 8.3
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.401084	50.0	3483680.0	0.802169	N
2	IC 280-541632/23	1.0	0.533134	50.0	3449974.0	0.533134	Y
3	IC 280-541632/22	2.0	0.903147	50.0	3431058.0	0.451574	Y
4	IC 280-541632/21	5.0	2.046888	50.0	3392101.0	0.409378	Y
5	IC 280-541632/20	10.0	3.781361	50.0	3457419.0	0.378136	Y
6	ICIS 280-541632/19	50.0	17.820495	50.0	3390105.0	0.35641	Y
7	IC 280-541632/18	75.0	25.253738	50.0	3284298.0	0.336717	Y
8	IC 280-541632/17	100.0	34.520472	50.0	3463720.0	0.345205	Y
9	IC 280-541632/16	200.0	64.747526	50.0	3278733.0	0.323738	Y



Calibration

/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

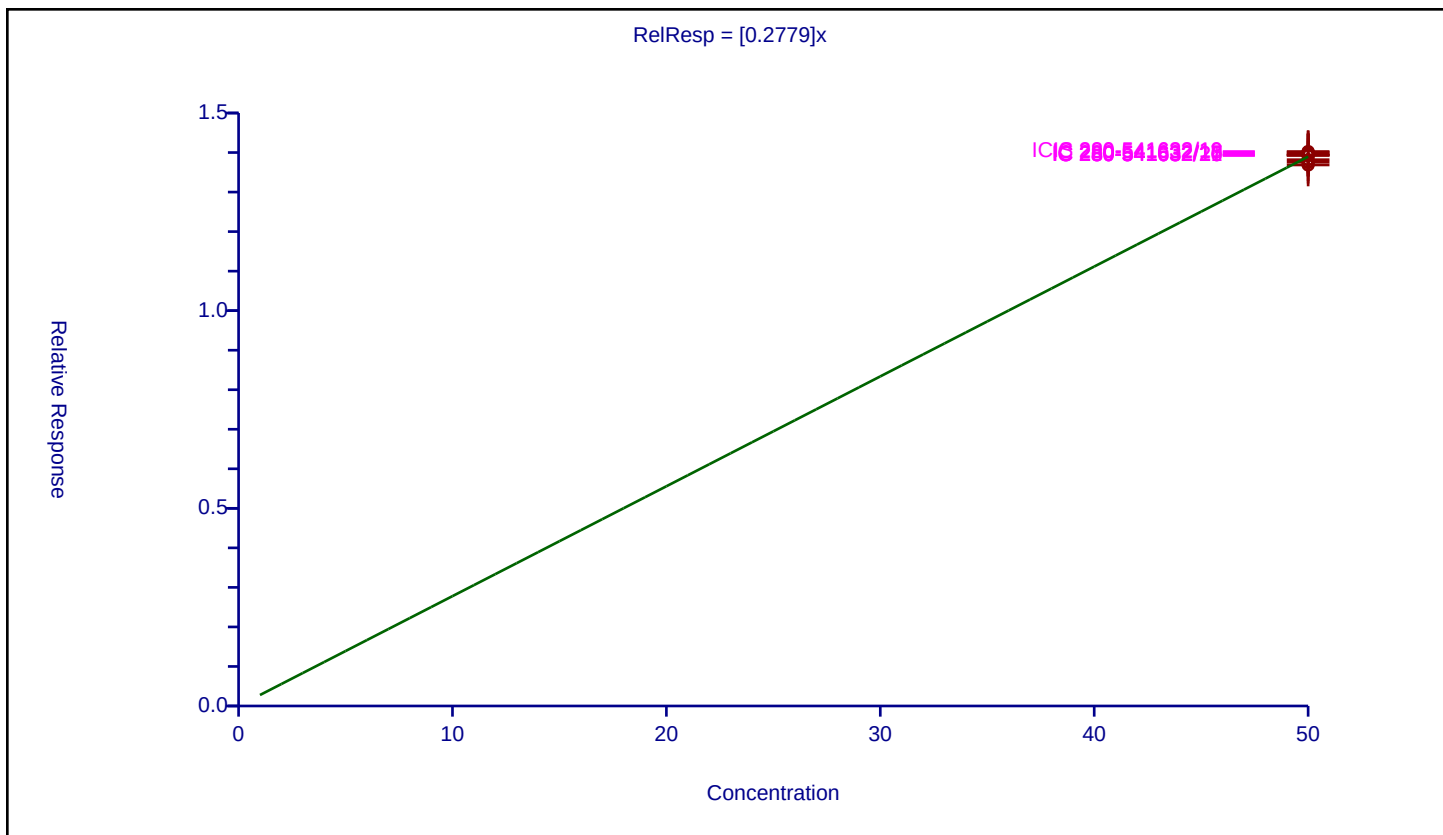
Curve Coefficients

Intercept: 0
 Slope: 0.2779

Error Coefficients

Standard Error: 1000000
 Relative Standard Error: 0.8
 Correlation Coefficient: NA
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/16	50.0	13.937411	50.0	3278733.0	0.278748	Y
2	IC 280-541632/17	50.0	13.958533	50.0	3463720.0	0.279171	Y
3	IC 280-541632/18	50.0	14.006905	50.0	3284298.0	0.280138	Y
4	ICIS 280-541632/19	50.0	14.024979	50.0	3390105.0	0.2805	Y
5	IC 280-541632/20	50.0	13.939039	50.0	3457419.0	0.278781	Y
6	IC 280-541632/21	50.0	13.927681	50.0	3392101.0	0.278554	Y
7	IC 280-541632/22	50.0	13.755961	50.0	3431058.0	0.275119	Y
8	IC 280-541632/23	50.0	13.686103	50.0	3449974.0	0.273722	Y
9	IC 280-541632/24	50.0	13.819524	50.0	3483680.0	0.27639	Y



Calibration

/ 1,1,1-Trichloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

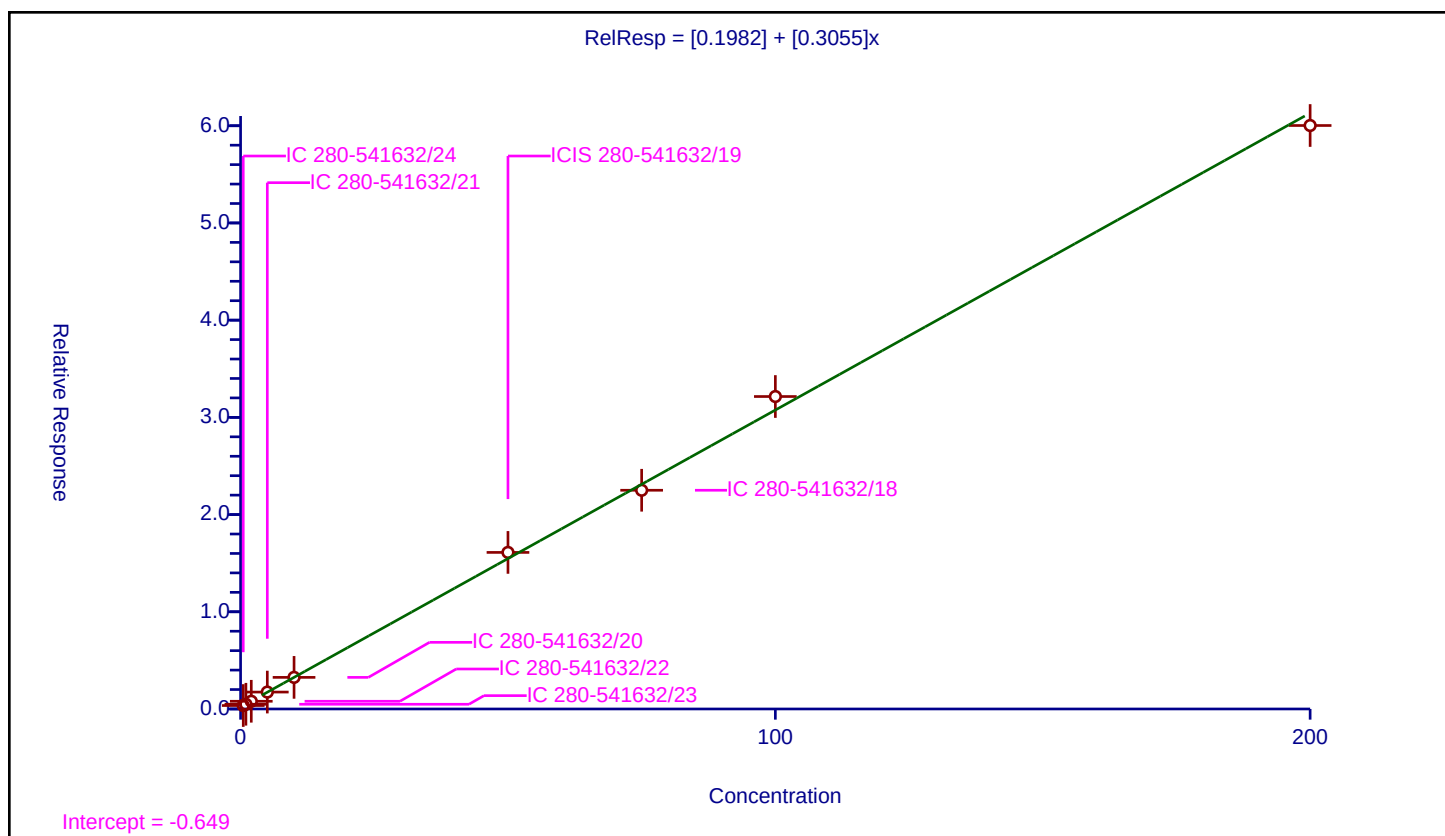
Curve Coefficients

Intercept: 0.1982
 Slope: 0.3055

Error Coefficients

Standard Error: 1850000
 Relative Standard Error: 3.8
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.356075	50.0	3483680.0	0.712149	Y
2	IC 280-541632/23	1.0	0.486047	50.0	3449974.0	0.486047	Y
3	IC 280-541632/22	2.0	0.794289	50.0	3431058.0	0.397144	Y
4	IC 280-541632/21	5.0	1.740382	50.0	3392101.0	0.348076	Y
5	IC 280-541632/20	10.0	3.25299	50.0	3457419.0	0.325299	Y
6	ICIS 280-541632/19	50.0	16.108129	50.0	3390105.0	0.322163	Y
7	IC 280-541632/18	75.0	22.500562	50.0	3284298.0	0.300007	Y
8	IC 280-541632/17	100.0	32.144125	50.0	3463720.0	0.321441	Y
9	IC 280-541632/16	200.0	60.024421	50.0	3278733.0	0.300122	Y



Calibration

/ Cyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

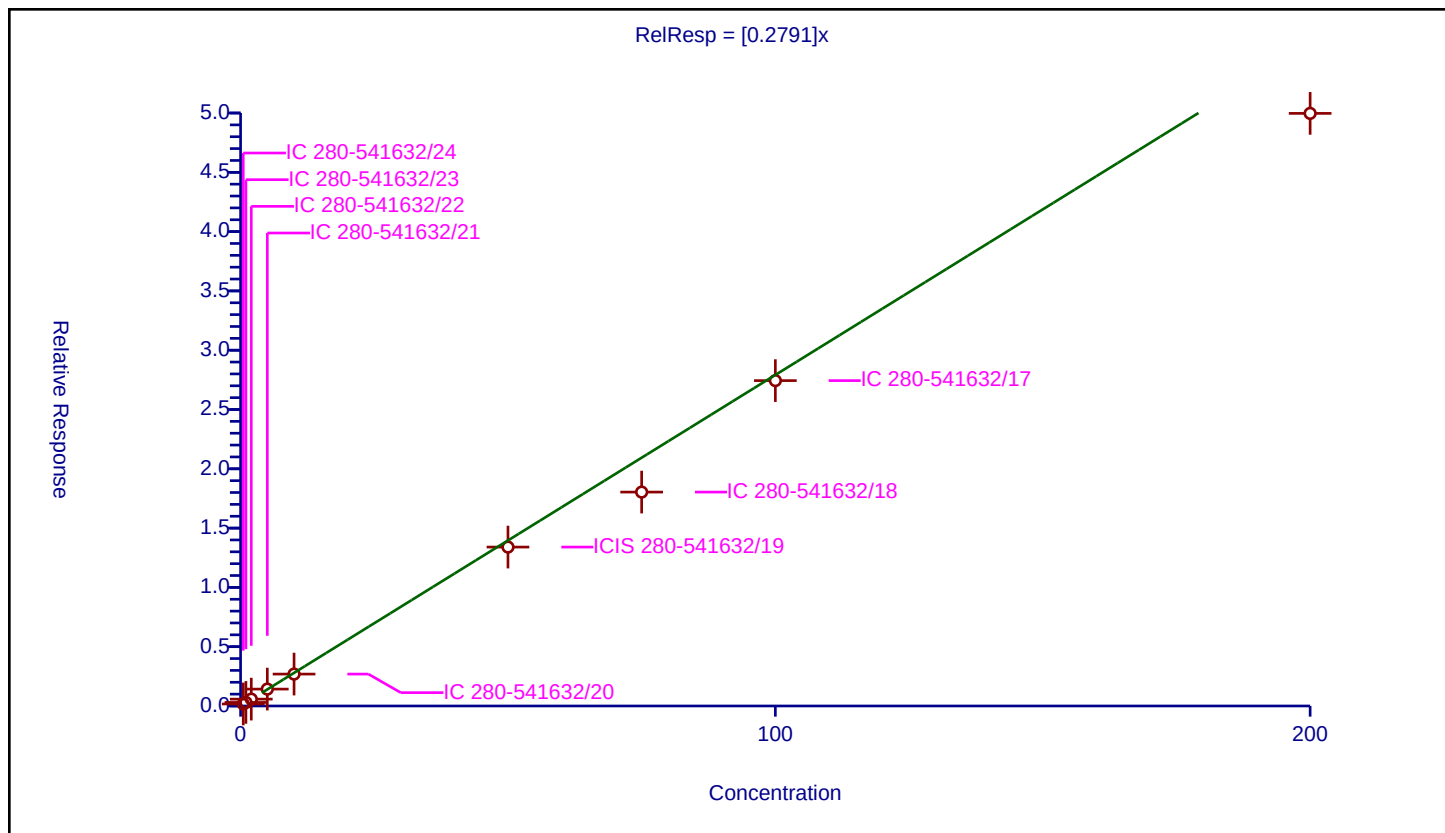
Curve Coefficients

Intercept: 0
Slope: 0.2791

Error Coefficients

Standard Error: 1440000
Relative Standard Error: 10.2
Correlation Coefficient: 0.994
Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.168744	50.0	3483680.0	0.337488	Y
2	IC 280-541632/23	1.0	0.29906	50.0	3449974.0	0.29906	Y
3	IC 280-541632/22	2.0	0.578102	50.0	3431058.0	0.289051	Y
4	IC 280-541632/21	5.0	1.424928	50.0	3392101.0	0.284986	Y
5	IC 280-541632/20	10.0	2.690027	50.0	3457419.0	0.269003	Y
6	ICIS 280-541632/19	50.0	13.40047	50.0	3390105.0	0.268009	Y
7	IC 280-541632/18	75.0	18.035787	50.0	3284298.0	0.240477	Y
8	IC 280-541632/17	100.0	27.435113	50.0	3463720.0	0.274351	Y
9	IC 280-541632/16	200.0	49.968768	50.0	3278733.0	0.249844	Y



Calibration

/ 1,1-Dichloropropene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

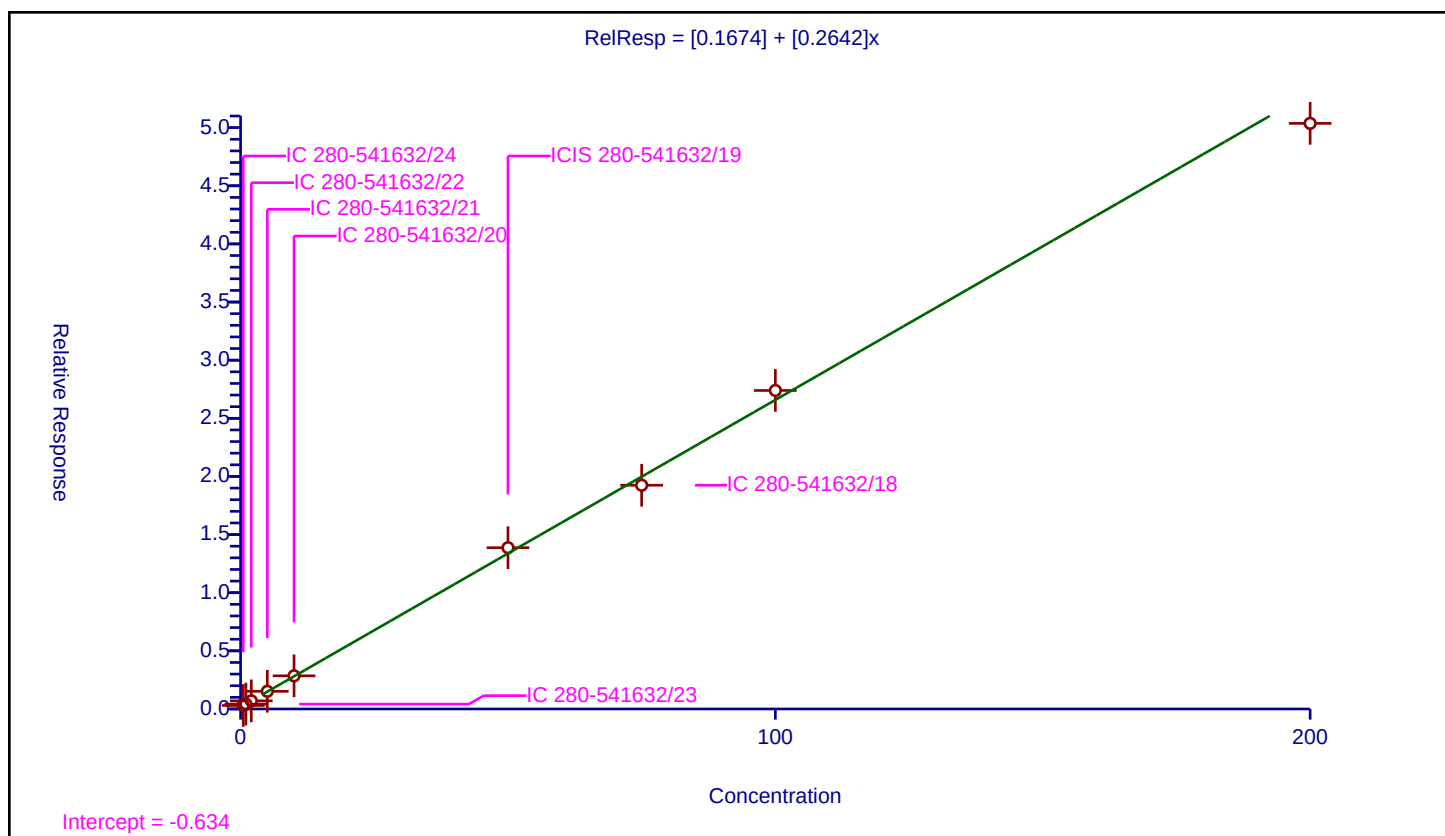
Curve Coefficients

Intercept: 0.1674
 Slope: 0.2642

Error Coefficients

Standard Error: 1560000
 Relative Standard Error: 3.8
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.302109	50.0	3483680.0	0.604217	Y
2	IC 280-541632/23	1.0	0.418003	50.0	3449974.0	0.418003	Y
3	IC 280-541632/22	2.0	0.700178	50.0	3431058.0	0.350089	Y
4	IC 280-541632/21	5.0	1.521594	50.0	3392101.0	0.304319	Y
5	IC 280-541632/20	10.0	2.851202	50.0	3457419.0	0.28512	Y
6	ICIS 280-541632/19	50.0	13.871812	50.0	3390105.0	0.277436	Y
7	IC 280-541632/18	75.0	19.243443	50.0	3284298.0	0.256579	Y
8	IC 280-541632/17	100.0	27.395257	50.0	3463720.0	0.273953	Y
9	IC 280-541632/16	200.0	50.366956	50.0	3278733.0	0.251835	Y



Calibration

/ Carbon tetrachloride

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

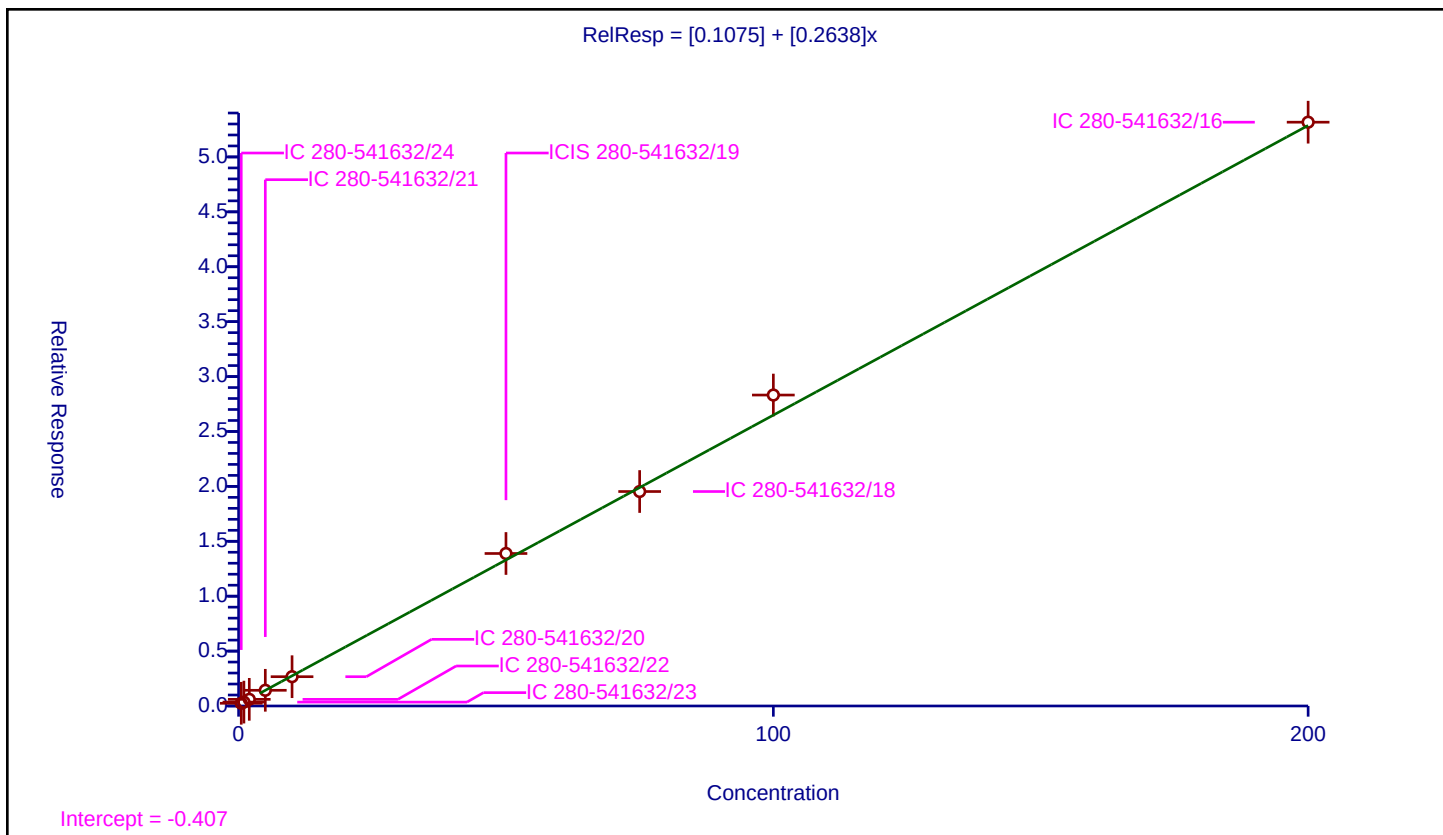
Curve Coefficients

Intercept: 0.1075
 Slope: 0.2638

Error Coefficients

Standard Error: 1630000
 Relative Standard Error: 5.1
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.245674	50.0	3483680.0	0.491348	Y
2	IC 280-541632/23	1.0	0.353742	50.0	3449974.0	0.353742	Y
3	IC 280-541632/22	2.0	0.605251	50.0	3431058.0	0.302625	Y
4	IC 280-541632/21	5.0	1.429925	50.0	3392101.0	0.285985	Y
5	IC 280-541632/20	10.0	2.668609	50.0	3457419.0	0.266861	Y
6	ICIS 280-541632/19	50.0	13.8878	50.0	3390105.0	0.277756	Y
7	IC 280-541632/18	75.0	19.530977	50.0	3284298.0	0.260413	Y
8	IC 280-541632/17	100.0	28.317719	50.0	3463720.0	0.283177	Y
9	IC 280-541632/16	200.0	53.163859	50.0	3278733.0	0.265819	Y



Calibration

/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

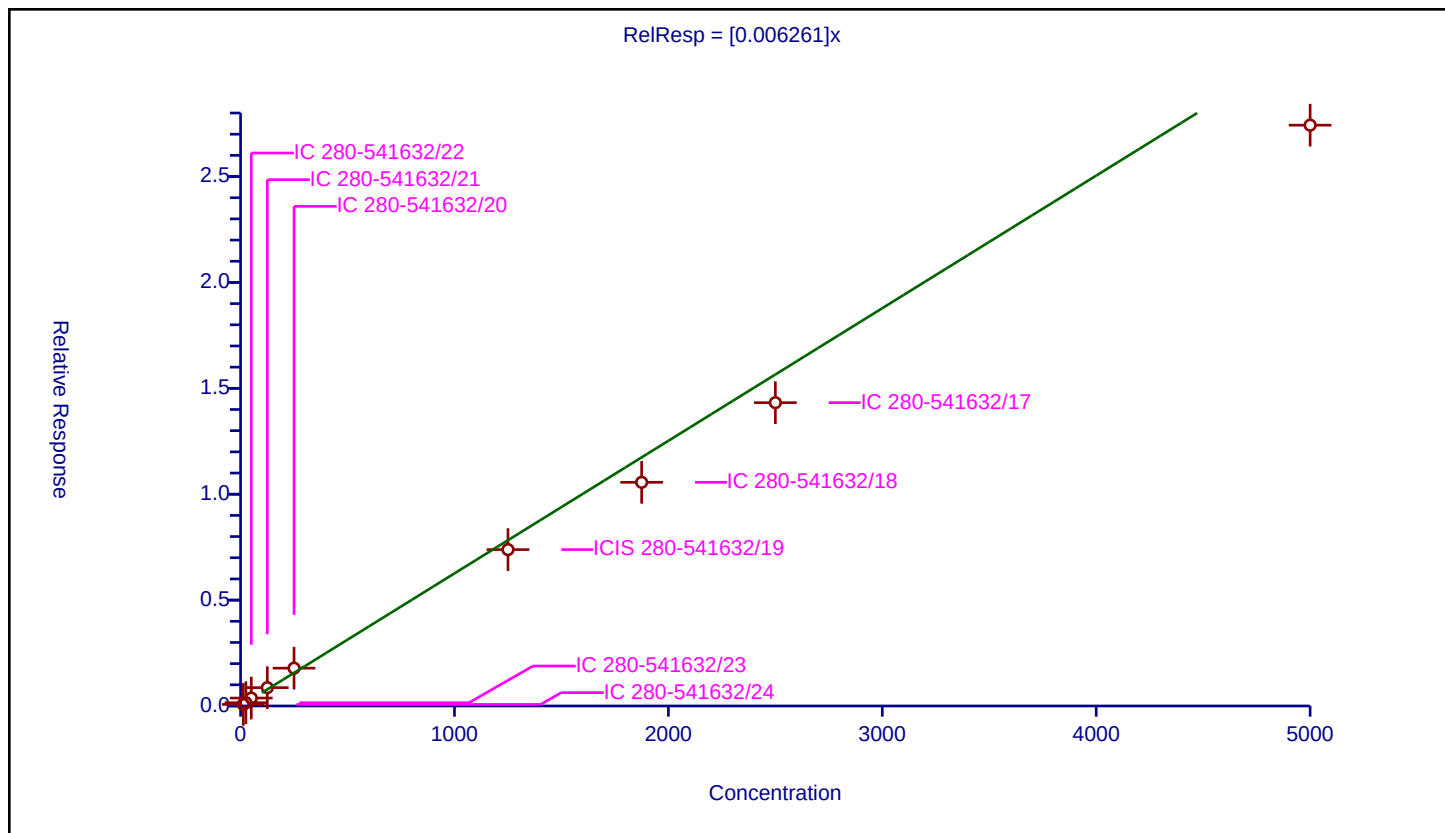
Curve Coefficients

Intercept: 0
 Slope: 0.006261

Error Coefficients

Standard Error: 788000
 Relative Standard Error: 11.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	12.5	0.073141	50.0	3483680.0	0.005851	Y
2	IC 280-541632/23	25.0	0.154436	50.0	3449974.0	0.006177	Y
3	IC 280-541632/22	50.0	0.374812	50.0	3431058.0	0.007496	Y
4	IC 280-541632/21	125.0	0.865761	50.0	3392101.0	0.006926	Y
5	IC 280-541632/20	250.0	1.786058	50.0	3457419.0	0.007144	Y
6	ICIS 280-541632/19	1250.0	7.38424	50.0	3390105.0	0.005907	Y
7	IC 280-541632/18	1875.0	10.561405	50.0	3284298.0	0.005633	Y
8	IC 280-541632/17	2500.0	14.323069	50.0	3463720.0	0.005729	Y
9	IC 280-541632/16	5000.0	27.425182	50.0	3278733.0	0.005485	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

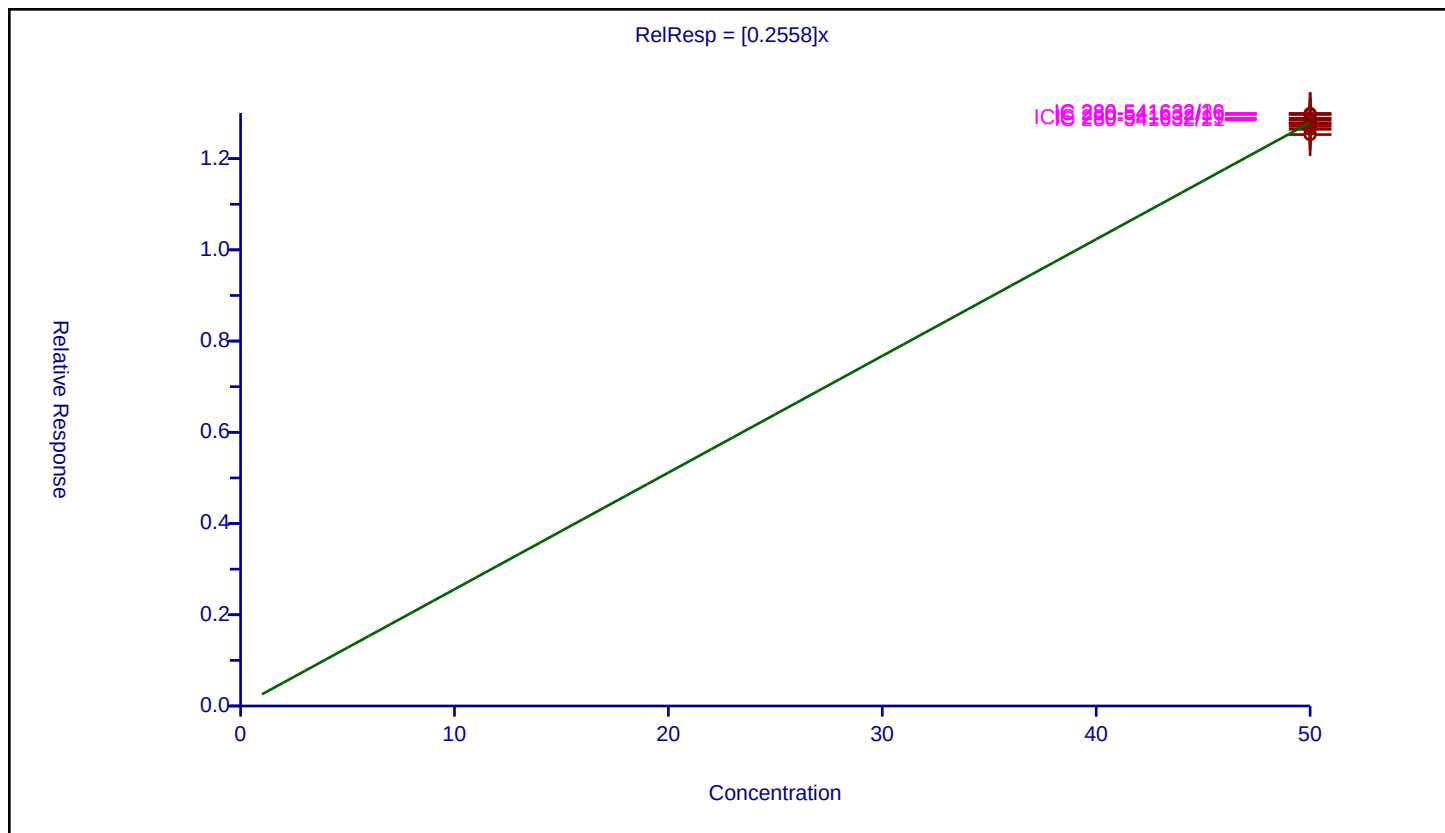
Curve Coefficients

Intercept: 0
Slope: 0.2558

Error Coefficients

Standard Error: 924000
Relative Standard Error: 1.2
Correlation Coefficient: 0.00000000000000000000
Coefficient of Determination (Adjusted): 0.0000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/16	50.0	12.966106	50.0	3278733.0	0.259322	Y
2	IC 280-541632/17	50.0	12.787263	50.0	3463720.0	0.255745	Y
3	IC 280-541632/18	50.0	12.758784	50.0	3284298.0	0.255176	Y
4	ICIS 280-541632/19	50.0	12.885383	50.0	3390105.0	0.257708	Y
5	IC 280-541632/20	50.0	12.992032	50.0	3457419.0	0.259841	Y
6	IC 280-541632/21	50.0	12.850738	50.0	3392101.0	0.257015	Y
7	IC 280-541632/22	50.0	12.52739	50.0	3431058.0	0.250548	Y
8	IC 280-541632/23	50.0	12.642617	50.0	3449974.0	0.252852	Y
9	IC 280-541632/24	50.0	12.705372	50.0	3483680.0	0.254107	Y



Calibration

/ Benzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

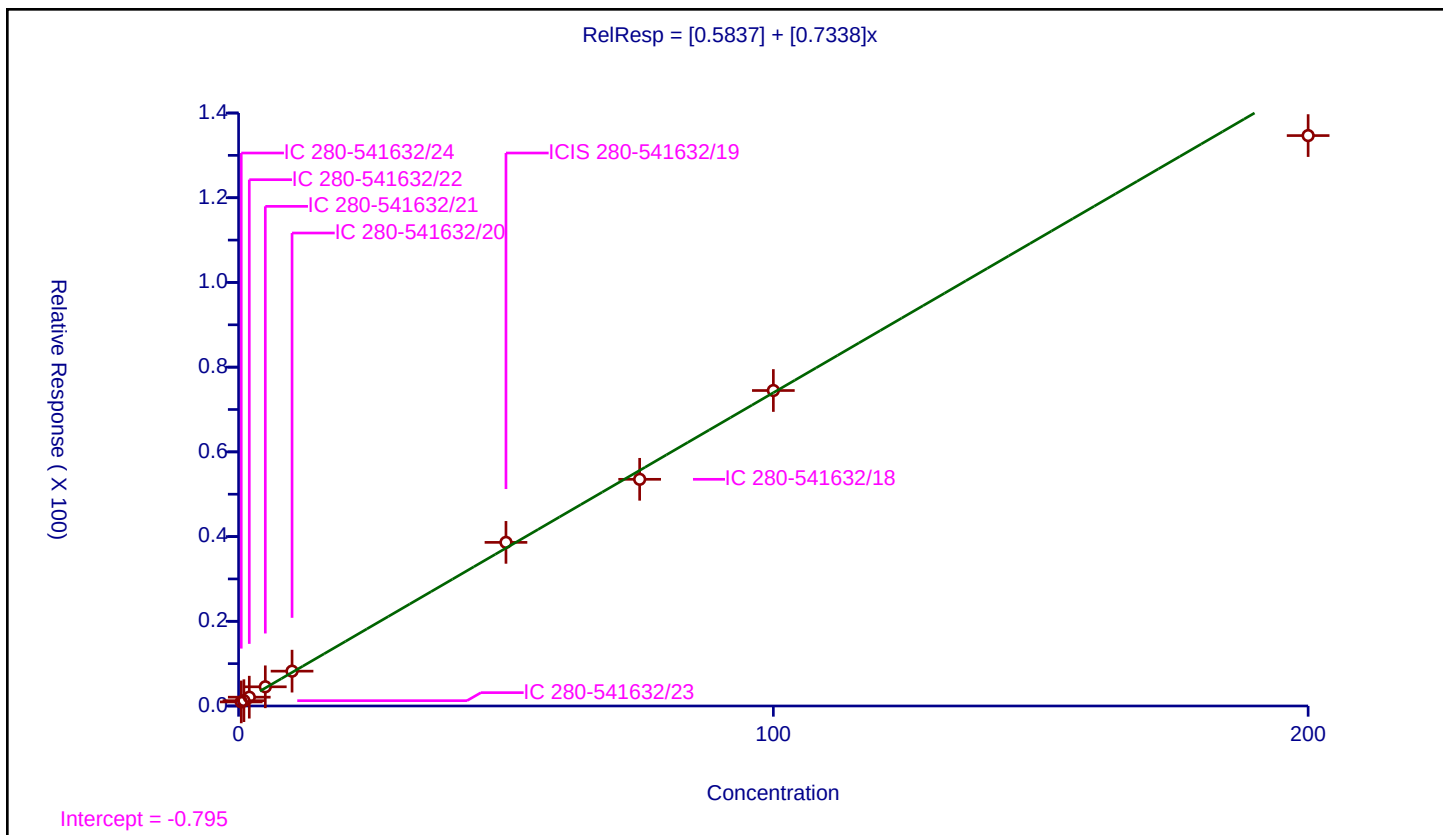
Curve Coefficients

Intercept: 0.5837
 Slope: 0.7338

Error Coefficients

Standard Error: 4210000
 Relative Standard Error: 6.2
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.960995	50.0	3483680.0	1.921991	Y
2	IC 280-541632/23	1.0	1.253821	50.0	3449974.0	1.253821	Y
3	IC 280-541632/22	2.0	2.083118	50.0	3431058.0	1.041559	Y
4	IC 280-541632/21	5.0	4.530186	50.0	3392101.0	0.906037	Y
5	IC 280-541632/20	10.0	8.227785	50.0	3457419.0	0.822778	Y
6	ICIS 280-541632/19	50.0	38.630573	50.0	3390105.0	0.772611	Y
7	IC 280-541632/18	75.0	53.516459	50.0	3284298.0	0.713553	Y
8	IC 280-541632/17	100.0	74.486318	50.0	3463720.0	0.744863	Y
9	IC 280-541632/16	200.0	134.671365	50.0	3278733.0	0.673357	Y



Calibration

/ 1,2-Dichloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

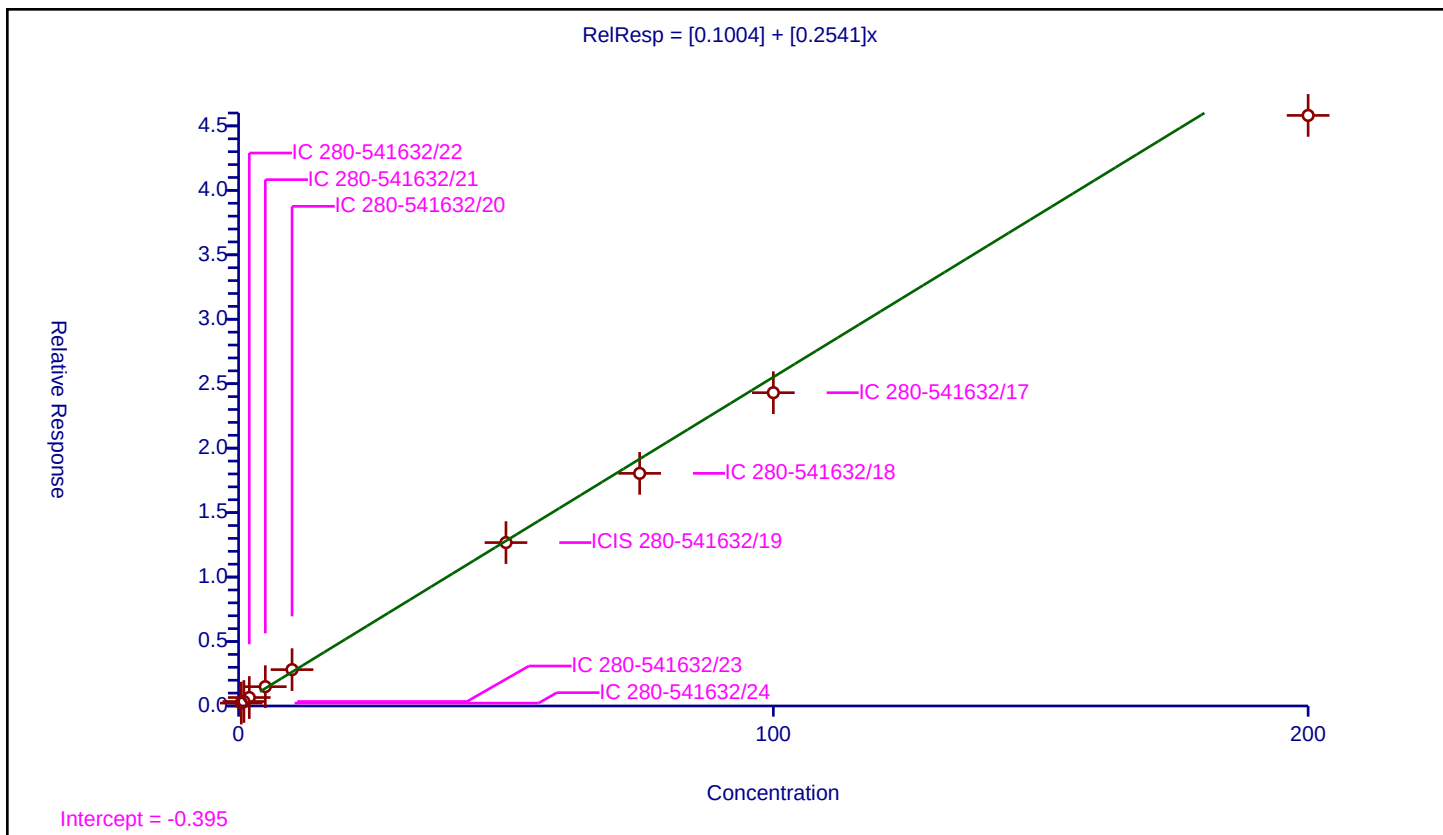
Curve Coefficients

Intercept: 0.1004
 Slope: 0.2541

Error Coefficients

Standard Error: 1420000
 Relative Standard Error: 7.7
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.224561	50.0	3483680.0	0.449123	Y
2	IC 280-541632/23	1.0	0.347626	50.0	3449974.0	0.347626	Y
3	IC 280-541632/22	2.0	0.657538	50.0	3431058.0	0.328769	Y
4	IC 280-541632/21	5.0	1.499041	50.0	3392101.0	0.299808	Y
5	IC 280-541632/20	10.0	2.821078	50.0	3457419.0	0.282108	Y
6	ICIS 280-541632/19	50.0	12.676451	50.0	3390105.0	0.253529	Y
7	IC 280-541632/18	75.0	18.045972	50.0	3284298.0	0.240613	Y
8	IC 280-541632/17	100.0	24.303148	50.0	3463720.0	0.243031	Y
9	IC 280-541632/16	200.0	45.813032	50.0	3278733.0	0.229065	Y



Calibration

/ n-Heptane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

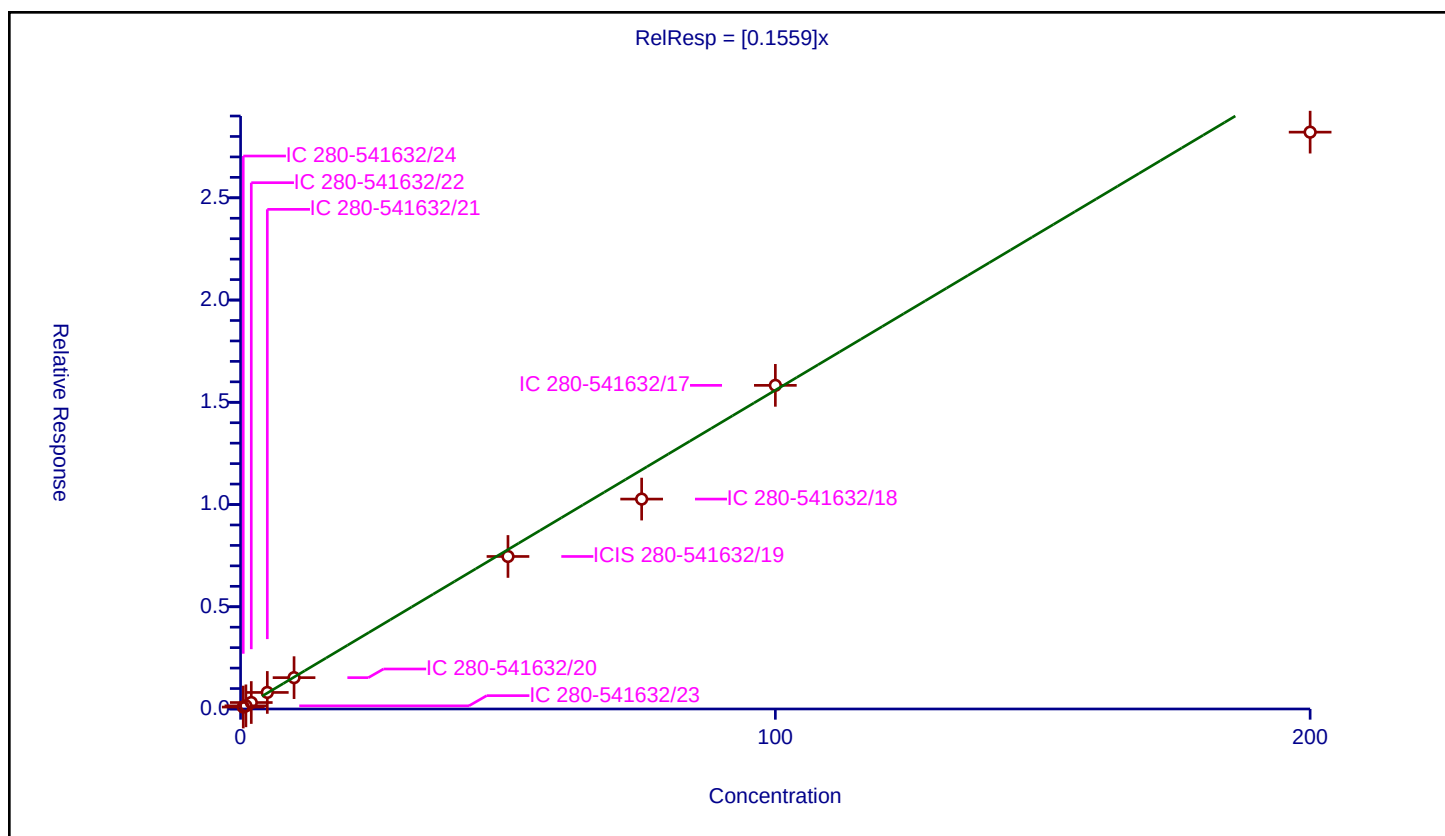
Curve Coefficients

Intercept: 0
Slope: 0.1559

Error Coefficients

Standard Error: 818000
Relative Standard Error: 9.7
Correlation Coefficient: 0.992
Coefficient of Determination (Adjusted): 0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.094943	50.0	3483680.0	0.189885	Y
2	IC 280-541632/23	1.0	0.154595	50.0	3449974.0	0.154595	Y
3	IC 280-541632/22	2.0	0.316214	50.0	3431058.0	0.158107	Y
4	IC 280-541632/21	5.0	0.80938	50.0	3392101.0	0.161876	Y
5	IC 280-541632/20	10.0	1.532588	50.0	3457419.0	0.153259	Y
6	ICIS 280-541632/19	50.0	7.459385	50.0	3390105.0	0.149188	Y
7	IC 280-541632/18	75.0	10.265146	50.0	3284298.0	0.136869	Y
8	IC 280-541632/17	100.0	15.827867	50.0	3463720.0	0.158279	Y
9	IC 280-541632/16	200.0	28.210623	50.0	3278733.0	0.141053	Y



Calibration

/ Trichloroethene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

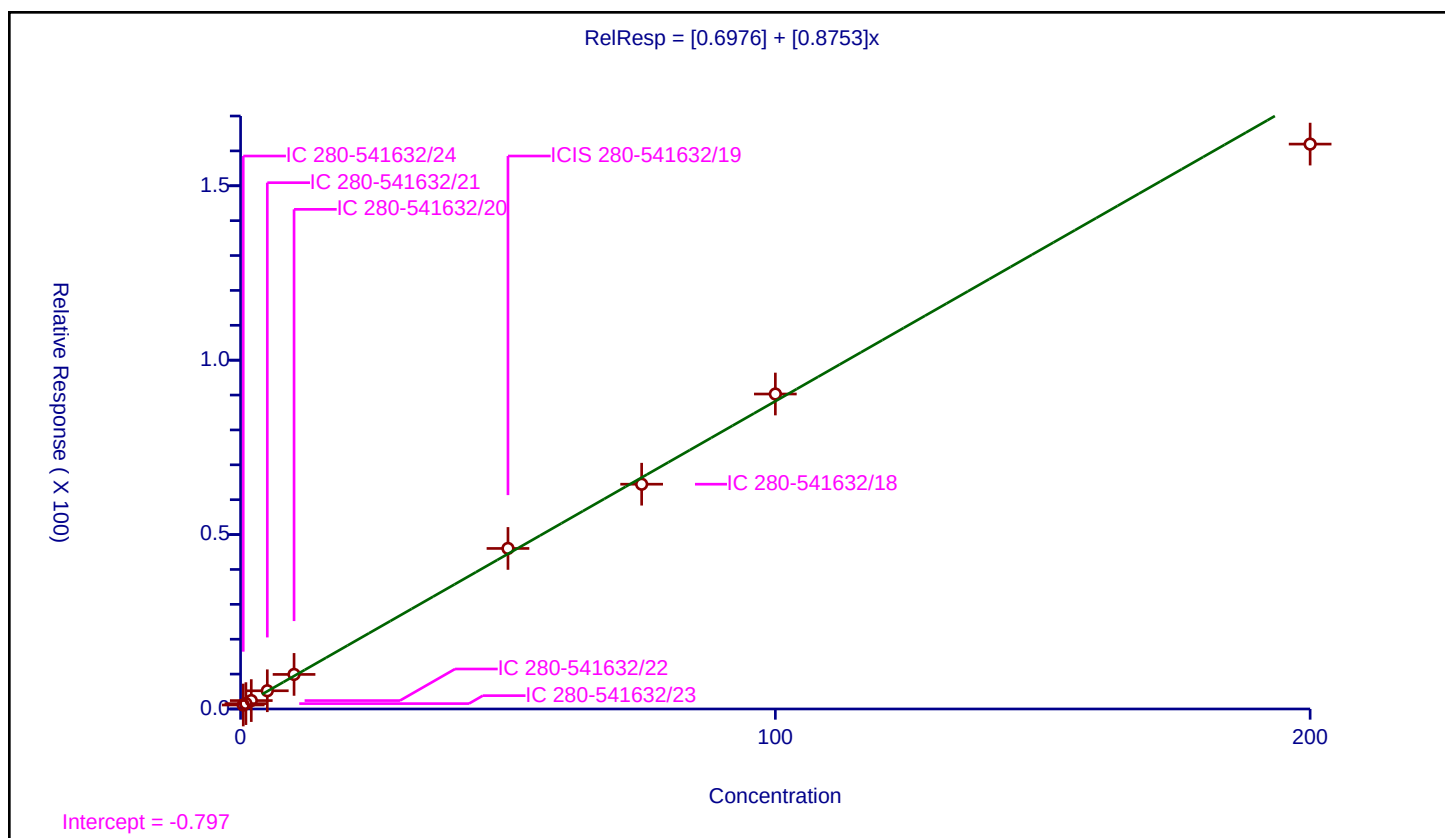
Curve Coefficients

Intercept: 0.6976
 Slope: 0.8753

Error Coefficients

Standard Error: 1420000
 Relative Standard Error: 4.6
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.142157	50.0	960420.0	2.284313	Y
2	IC 280-541632/23	1.0	1.543669	50.0	934818.0	1.543669	Y
3	IC 280-541632/22	2.0	2.413002	50.0	940716.0	1.206501	Y
4	IC 280-541632/21	5.0	5.224268	50.0	934083.0	1.044854	Y
5	IC 280-541632/20	10.0	9.909164	50.0	932995.0	0.990916	Y
6	ICIS 280-541632/19	50.0	46.028673	50.0	938729.0	0.920573	Y
7	IC 280-541632/18	75.0	64.444383	50.0	909350.0	0.859258	Y
8	IC 280-541632/17	100.0	90.30143	50.0	953058.0	0.903014	Y
9	IC 280-541632/16	200.0	161.947342	50.0	922134.0	0.809737	Y



Calibration

/ 2-Pentanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

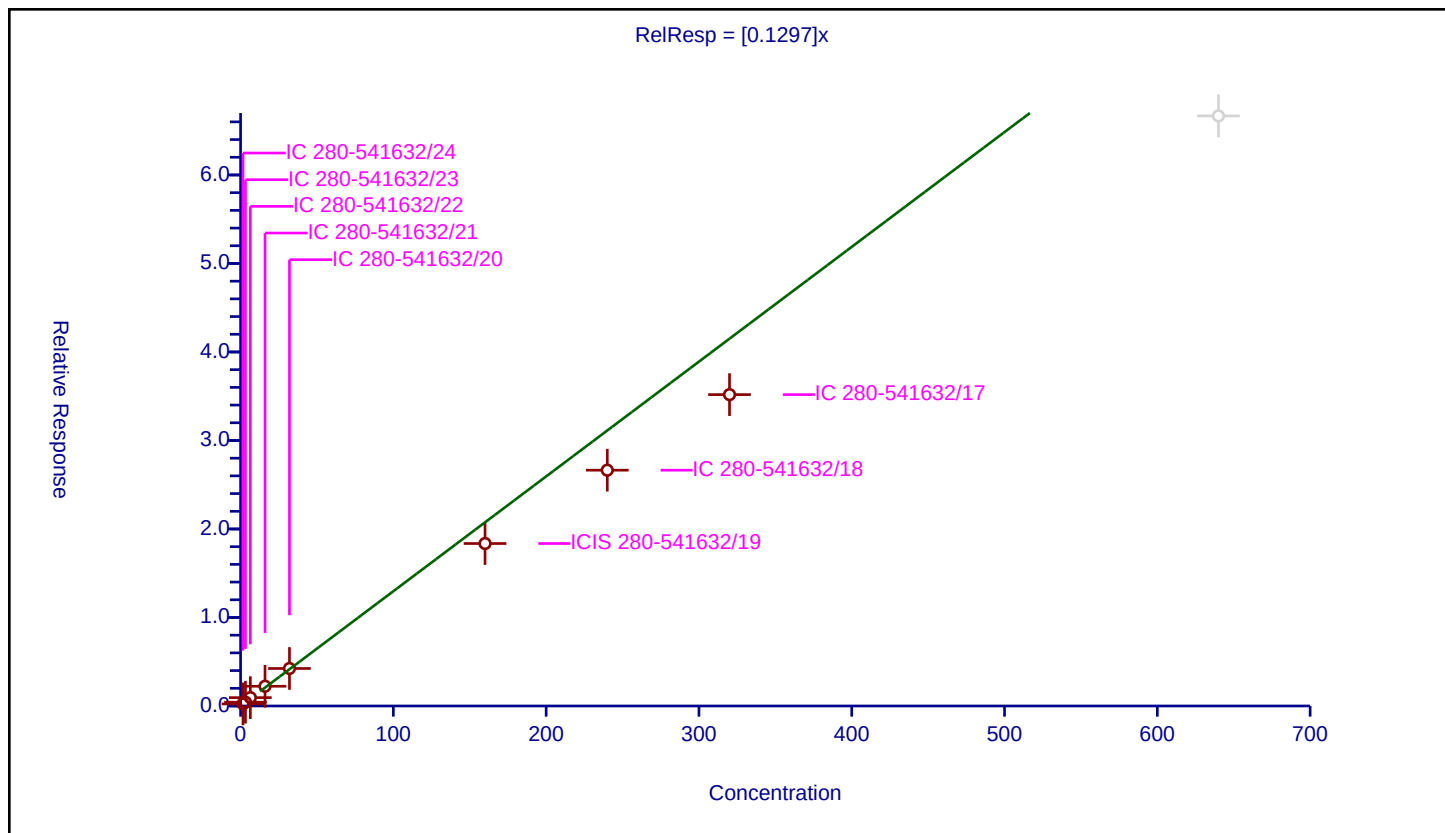
Curve Coefficients

Intercept: 0
Slope: 0.1297

Error Coefficients

Standard Error: 1230000
Relative Standard Error: 12.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	1.6	0.23656	50.0	3483680.0	0.14785	Y
2	IC 280-541632/23	3.2	0.430003	50.0	3449974.0	0.134376	Y
3	IC 280-541632/22	6.4	0.945117	50.0	3431058.0	0.147674	Y
4	IC 280-541632/21	16.0	2.232554	50.0	3392101.0	0.139535	Y
5	IC 280-541632/20	32.0	4.237164	50.0	3457419.0	0.132411	Y
6	ICIS 280-541632/19	160.0	18.357116	50.0	3390105.0	0.114732	Y
7	IC 280-541632/18	240.0	26.643548	50.0	3284298.0	0.111015	Y
8	IC 280-541632/17	320.0	35.181395	50.0	3463720.0	0.109942	Y
9	IC 280-541632/16	640.0	66.670876	50.0	3278733.0	0.104173	N



Calibration

/ Methylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

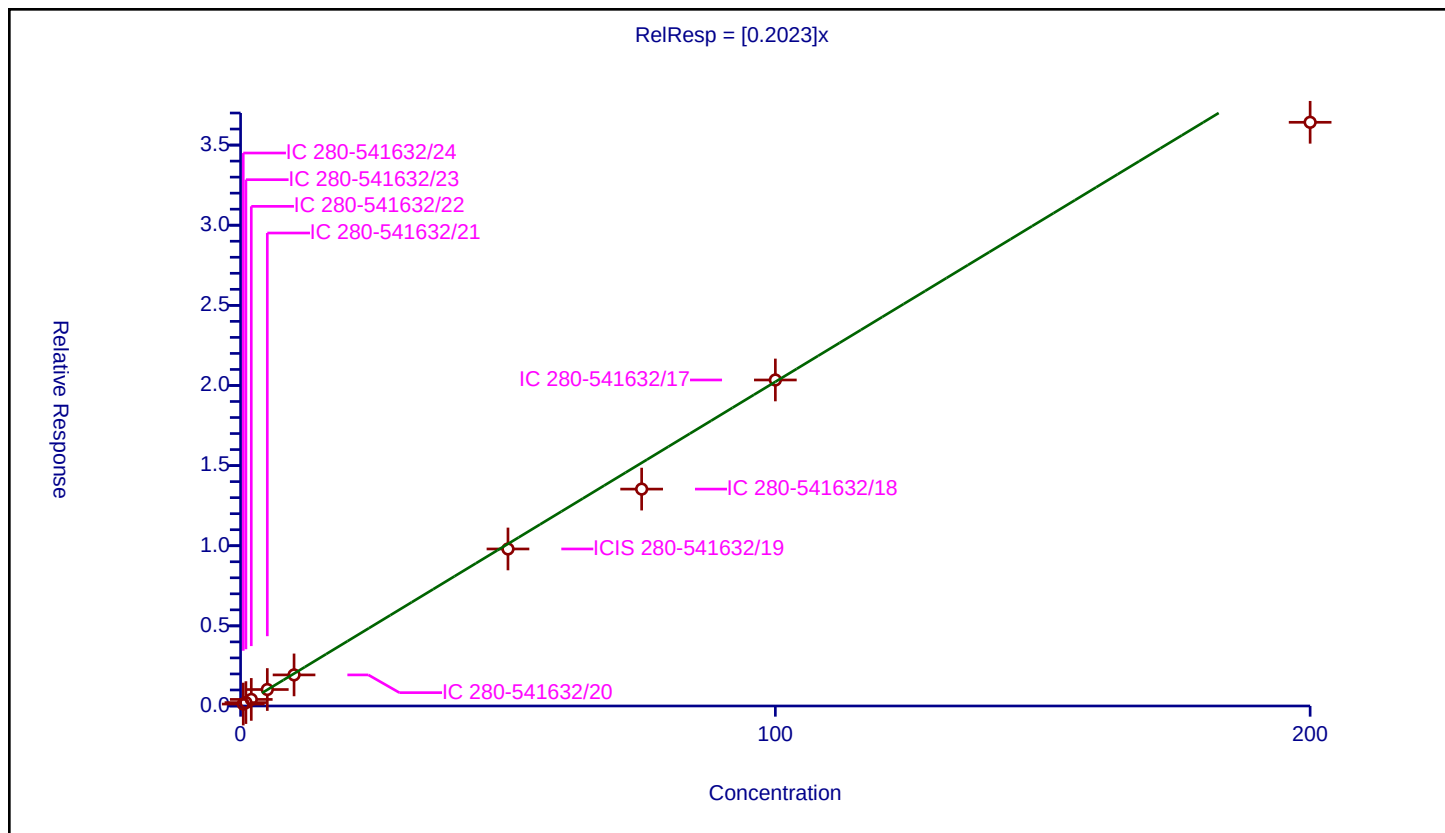
Curve Coefficients

Intercept: 0
 Slope: 0.2023

Error Coefficients

Standard Error: 1060000
 Relative Standard Error: 9.1
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.121294	50.0	3483680.0	0.242588	Y
2	IC 280-541632/23	1.0	0.211335	50.0	3449974.0	0.211335	Y
3	IC 280-541632/22	2.0	0.410325	50.0	3431058.0	0.205163	Y
4	IC 280-541632/21	5.0	1.028183	50.0	3392101.0	0.205637	Y
5	IC 280-541632/20	10.0	1.940002	50.0	3457419.0	0.194	Y
6	ICIS 280-541632/19	50.0	9.797823	50.0	3390105.0	0.195956	Y
7	IC 280-541632/18	75.0	13.533501	50.0	3284298.0	0.180447	Y
8	IC 280-541632/17	100.0	20.34167	50.0	3463720.0	0.203417	Y
9	IC 280-541632/16	200.0	36.42105	50.0	3278733.0	0.182105	Y



Calibration

/ 1,2-Dichloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

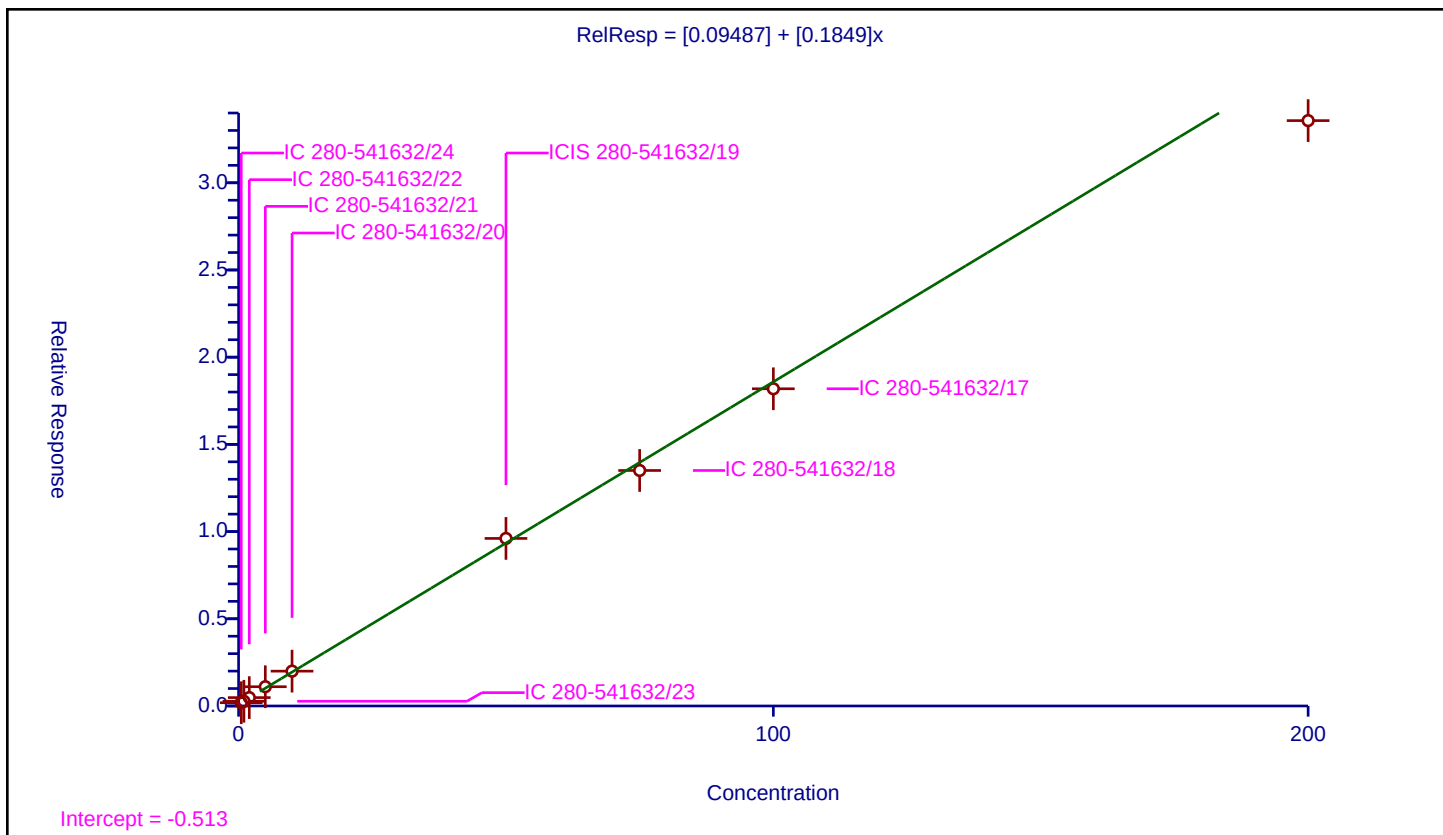
Curve Coefficients

Intercept: 0.09487
 Slope: 0.1849

Error Coefficients

Standard Error: 1050000
 Relative Standard Error: 6.0
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.187474	50.0	3483680.0	0.374948	Y
2	IC 280-541632/23	1.0	0.27135	50.0	3449974.0	0.27135	Y
3	IC 280-541632/22	2.0	0.480799	50.0	3431058.0	0.2404	Y
4	IC 280-541632/21	5.0	1.105082	50.0	3392101.0	0.221016	Y
5	IC 280-541632/20	10.0	1.997733	50.0	3457419.0	0.199773	Y
6	ICIS 280-541632/19	50.0	9.607534	50.0	3390105.0	0.192151	Y
7	IC 280-541632/18	75.0	13.503205	50.0	3284298.0	0.180043	Y
8	IC 280-541632/17	100.0	18.188104	50.0	3463720.0	0.181881	Y
9	IC 280-541632/16	200.0	33.564322	50.0	3278733.0	0.167822	Y



Calibration

/ 1,4-Dioxane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

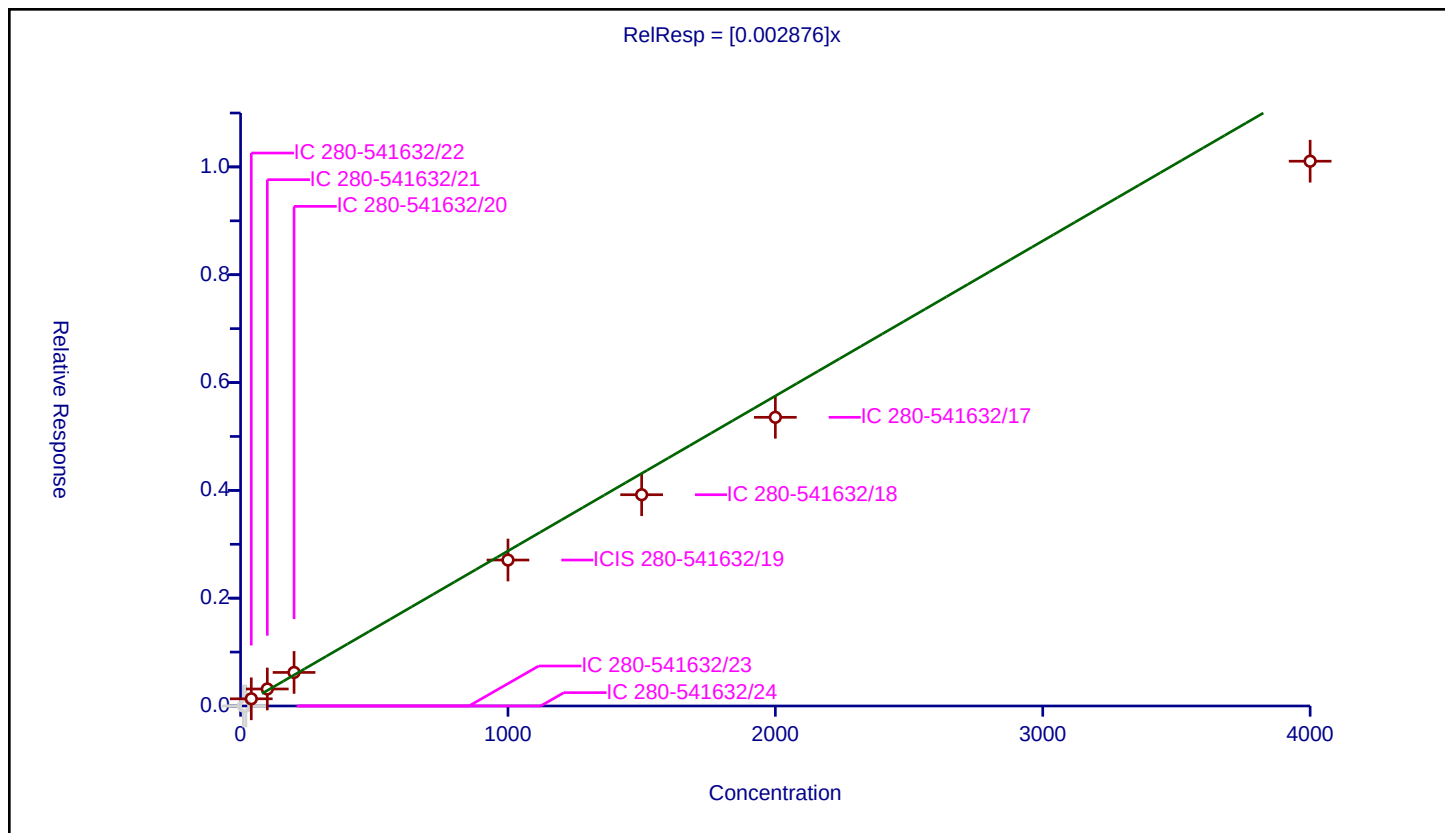
Curve Coefficients

Intercept: 0
 Slope: 0.002876

Error Coefficients

Standard Error: 336000
 Relative Standard Error: 11.1
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	10.0	0.0	50.0	3483680.0	0.0	N
2	IC 280-541632/23	20.0	0.0	50.0	3449974.0	0.0	N
3	IC 280-541632/22	40.0	0.133545	50.0	3431058.0	0.003339	Y
4	IC 280-541632/21	100.0	0.315498	50.0	3392101.0	0.003155	Y
5	IC 280-541632/20	200.0	0.622473	50.0	3457419.0	0.003112	Y
6	ICIS 280-541632/19	1000.0	2.707777	50.0	3390105.0	0.002708	Y
7	IC 280-541632/18	1500.0	3.919224	50.0	3284298.0	0.002613	Y
8	IC 280-541632/17	2000.0	5.355167	50.0	3463720.0	0.002678	Y
9	IC 280-541632/16	4000.0	10.106343	50.0	3278733.0	0.002527	Y



Calibration

/ Dibromomethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

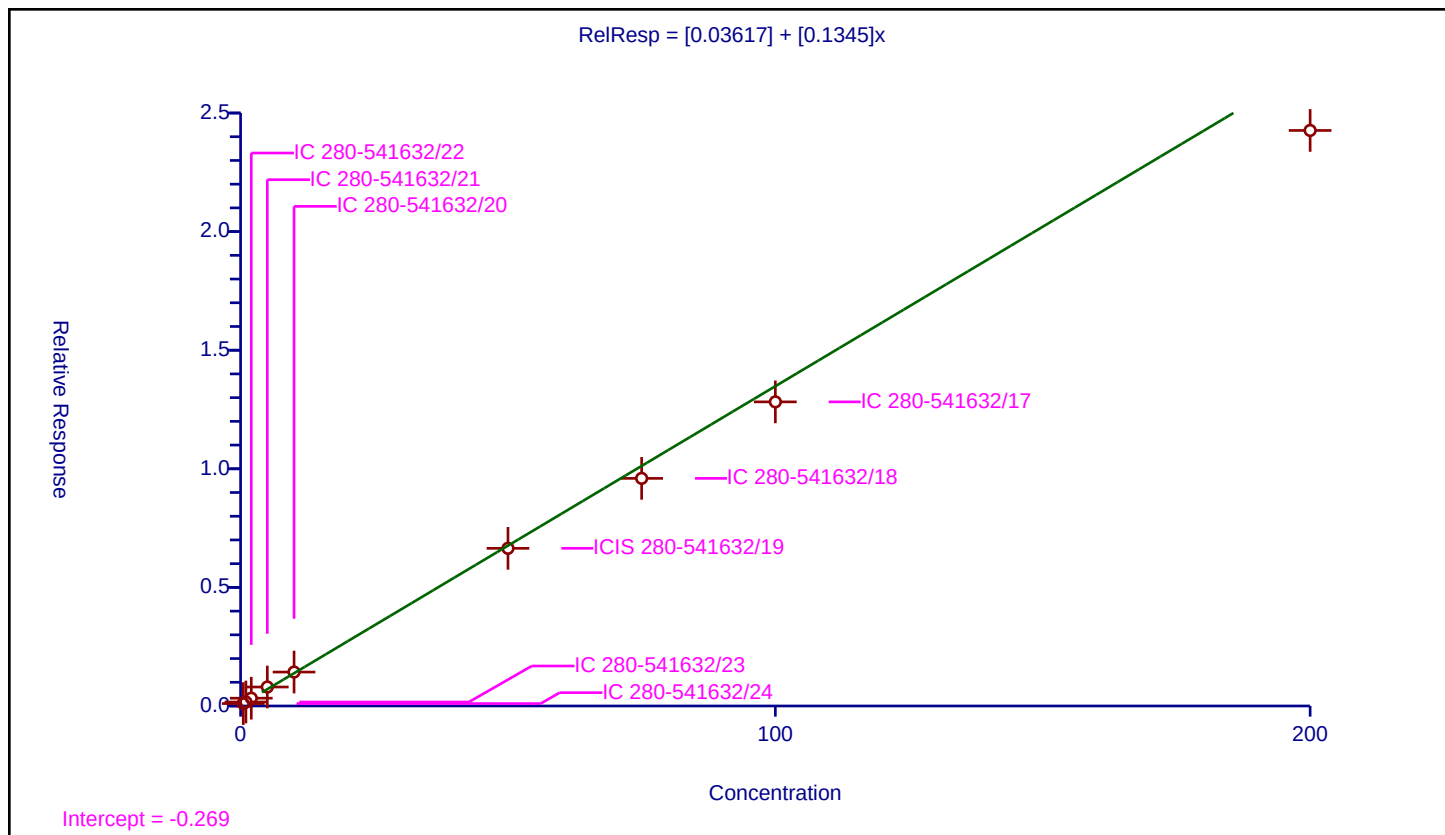
Curve Coefficients

Intercept: 0.03617
 Slope: 0.1345

Error Coefficients

Standard Error: 750000
 Relative Standard Error: 7.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.101545	50.0	3483680.0	0.20309	Y
2	IC 280-541632/23	1.0	0.168161	50.0	3449974.0	0.168161	Y
3	IC 280-541632/22	2.0	0.32898	50.0	3431058.0	0.16449	Y
4	IC 280-541632/21	5.0	0.80033	50.0	3392101.0	0.160066	Y
5	IC 280-541632/20	10.0	1.430778	50.0	3457419.0	0.143078	Y
6	ICIS 280-541632/19	50.0	6.6477	50.0	3390105.0	0.132954	Y
7	IC 280-541632/18	75.0	9.595856	50.0	3284298.0	0.127945	Y
8	IC 280-541632/17	100.0	12.822327	50.0	3463720.0	0.128223	Y
9	IC 280-541632/16	200.0	24.265212	50.0	3278733.0	0.121326	Y



Calibration

/ Dichlorobromomethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

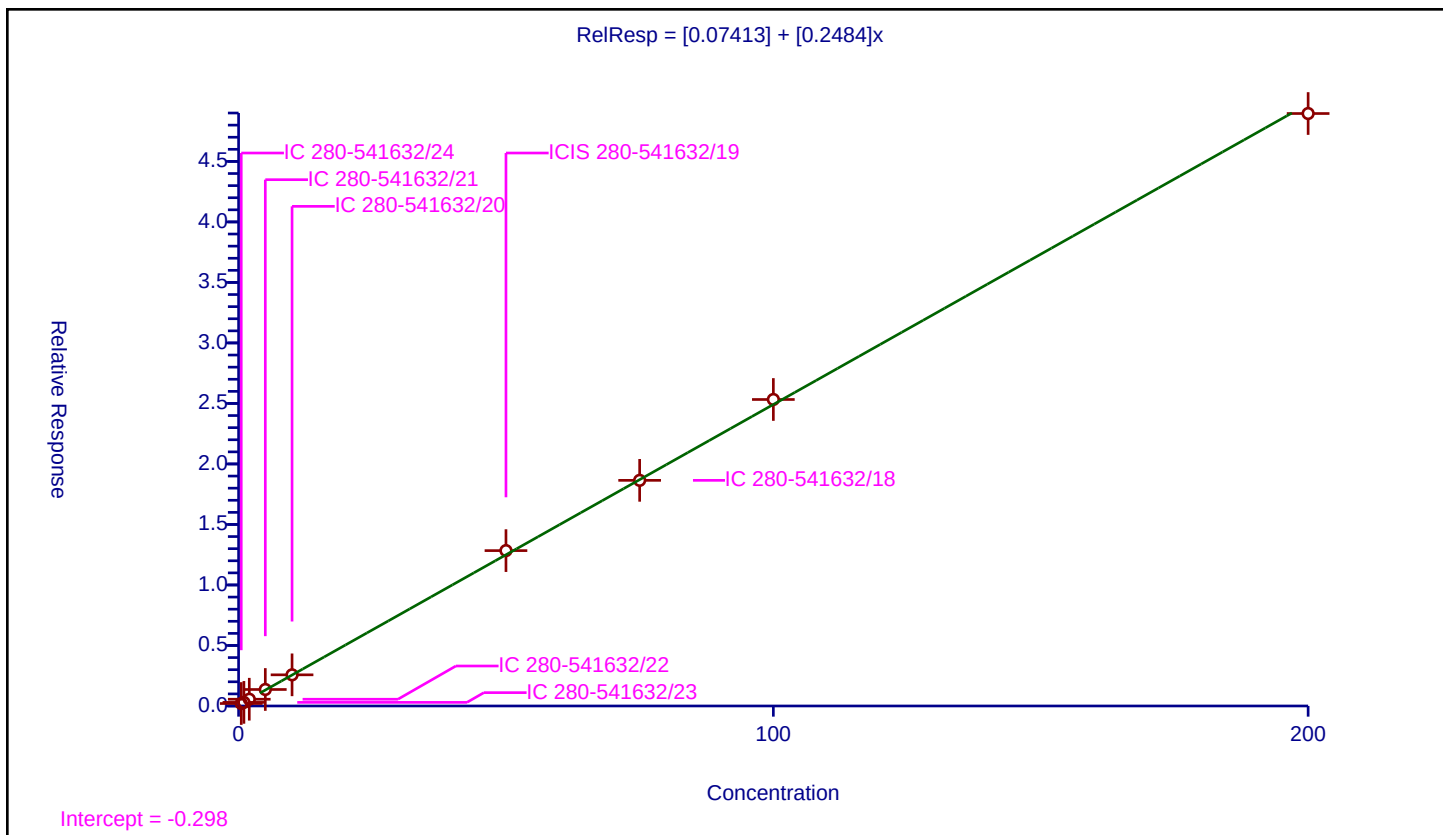
Curve Coefficients

Intercept: 0.07413
 Slope: 0.2484

Error Coefficients

Standard Error: 1500000
 Relative Standard Error: 4.6
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.204367	50.0	3483680.0	0.408734	Y
2	IC 280-541632/23	1.0	0.299162	50.0	3449974.0	0.299162	Y
3	IC 280-541632/22	2.0	0.55904	50.0	3431058.0	0.27952	Y
4	IC 280-541632/21	5.0	1.362607	50.0	3392101.0	0.272521	Y
5	IC 280-541632/20	10.0	2.574522	50.0	3457419.0	0.257452	Y
6	ICIS 280-541632/19	50.0	12.840089	50.0	3390105.0	0.256802	Y
7	IC 280-541632/18	75.0	18.645035	50.0	3284298.0	0.2486	Y
8	IC 280-541632/17	100.0	25.327336	50.0	3463720.0	0.253273	Y
9	IC 280-541632/16	200.0	48.958515	50.0	3278733.0	0.244793	Y



Calibration

/ 2-Chloroethyl vinyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

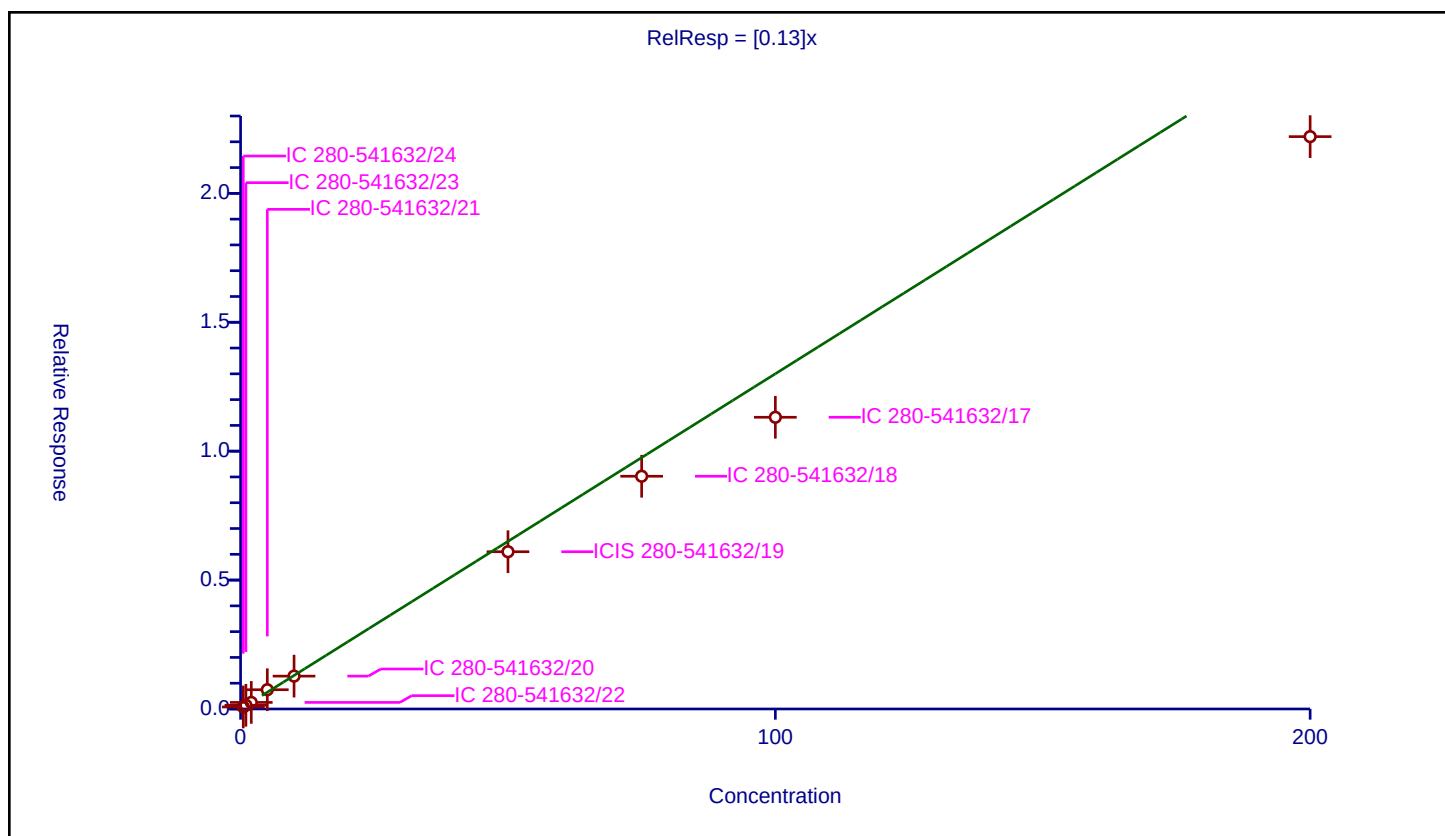
Curve Coefficients

Intercept: 0
 Slope: 0.13

Error Coefficients

Standard Error: 639000
 Relative Standard Error: 12.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.077605	50.0	3483680.0	0.155209	Y
2	IC 280-541632/23	1.0	0.144291	50.0	3449974.0	0.144291	Y
3	IC 280-541632/22	2.0	0.254732	50.0	3431058.0	0.127366	Y
4	IC 280-541632/21	5.0	0.747015	50.0	3392101.0	0.149403	Y
5	IC 280-541632/20	10.0	1.274404	50.0	3457419.0	0.12744	Y
6	ICIS 280-541632/19	50.0	6.100224	50.0	3390105.0	0.122004	Y
7	IC 280-541632/18	75.0	9.027363	50.0	3284298.0	0.120365	Y
8	IC 280-541632/17	100.0	11.31506	50.0	3463720.0	0.113151	Y
9	IC 280-541632/16	200.0	22.200634	50.0	3278733.0	0.111003	Y



Calibration

/ cis-1,3-Dichloropropene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

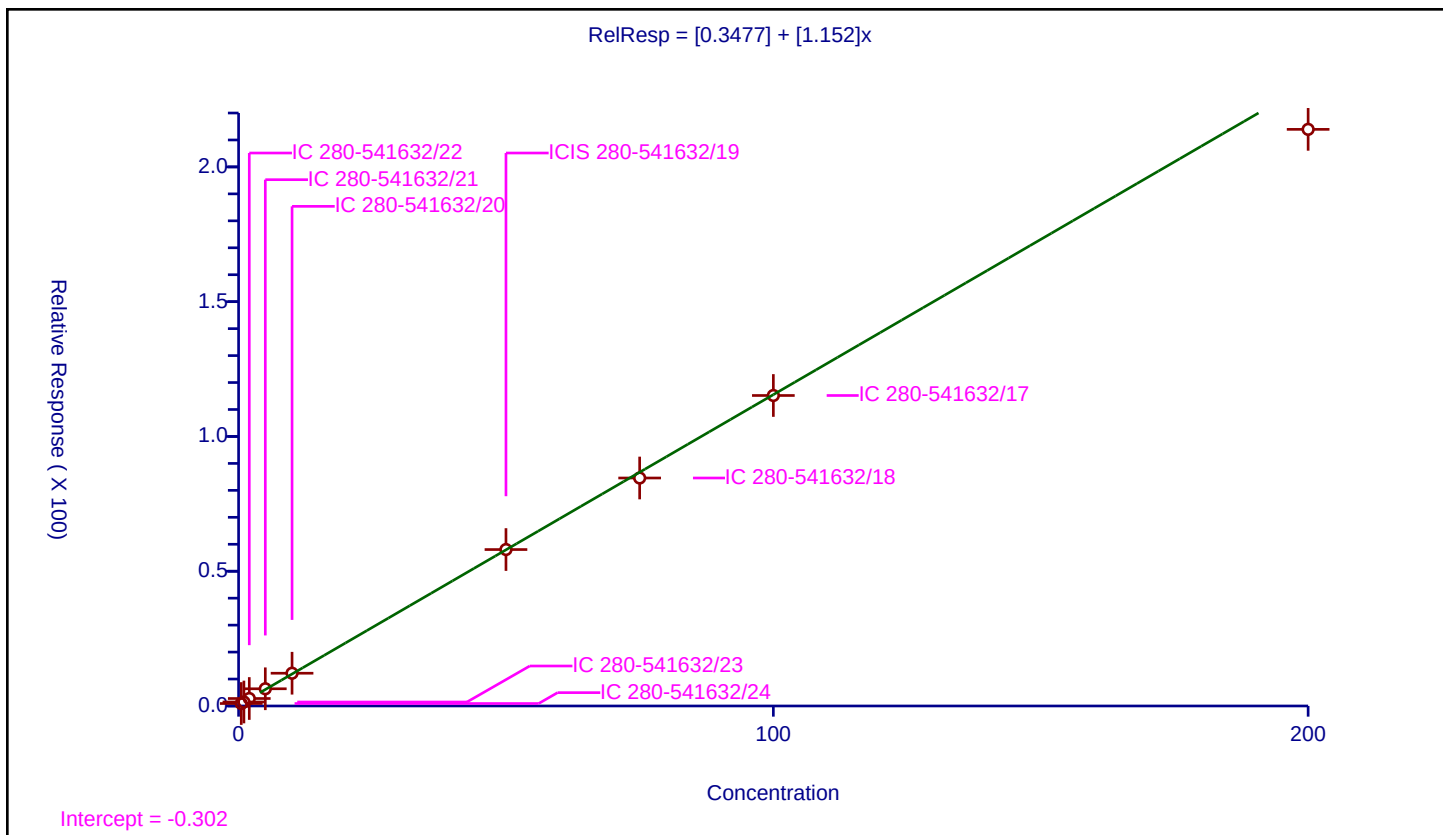
Curve Coefficients

Intercept: 0.3477
 Slope: 1.152

Error Coefficients

Standard Error: 1850000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.91814	50.0	960420.0	1.83628	Y
2	IC 280-541632/23	1.0	1.476972	50.0	934818.0	1.476972	Y
3	IC 280-541632/22	2.0	2.77241	50.0	940716.0	1.386205	Y
4	IC 280-541632/21	5.0	6.388886	50.0	934083.0	1.277777	Y
5	IC 280-541632/20	10.0	12.154781	50.0	932995.0	1.215478	Y
6	ICIS 280-541632/19	50.0	58.045773	50.0	938729.0	1.160915	Y
7	IC 280-541632/18	75.0	84.584209	50.0	909350.0	1.127789	Y
8	IC 280-541632/17	100.0	115.19215	50.0	953058.0	1.151921	Y
9	IC 280-541632/16	200.0	213.933387	50.0	922134.0	1.069667	Y



Calibration

/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

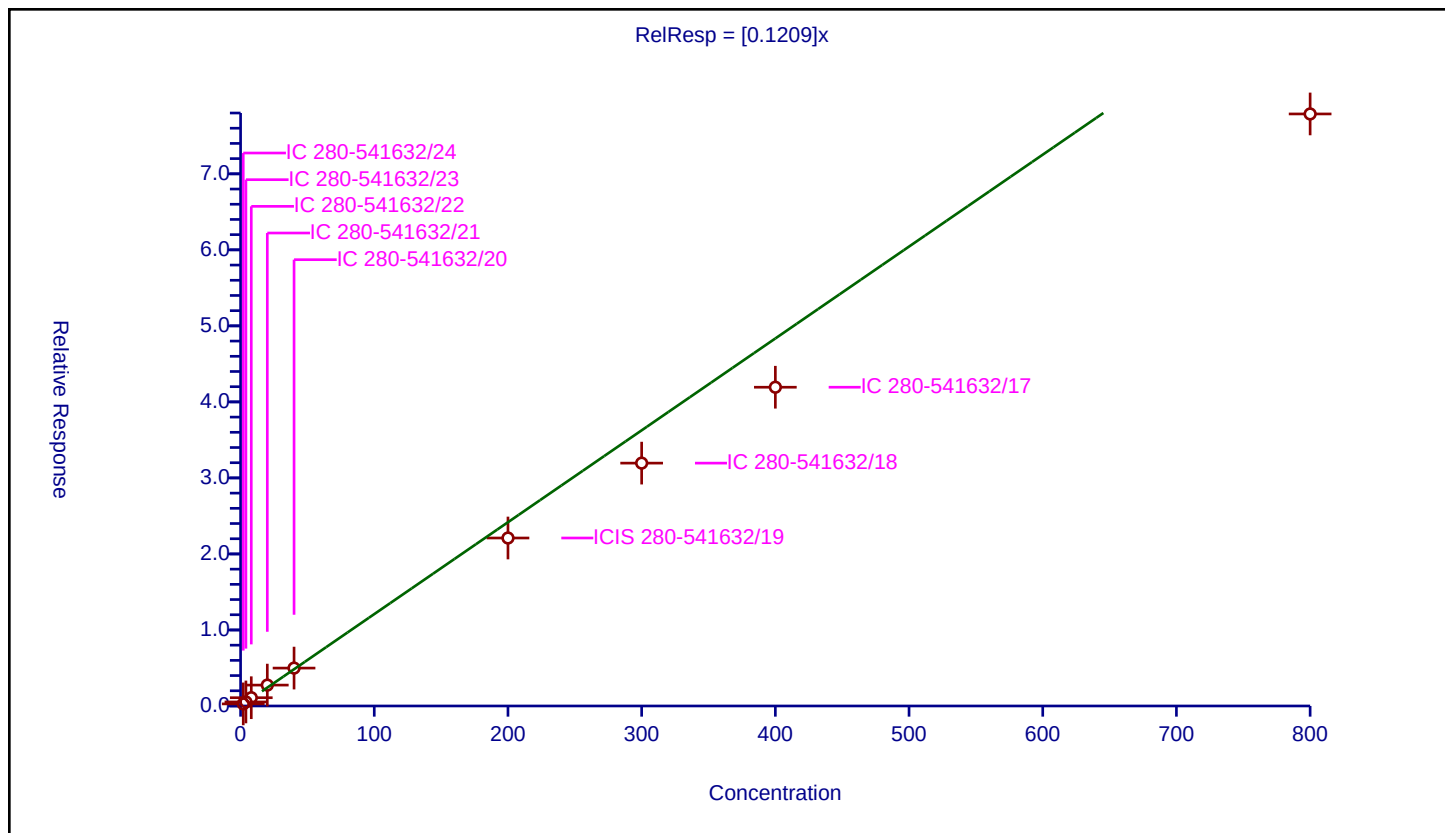
Curve Coefficients

Intercept: 0
 Slope: 0.1209

Error Coefficients

Standard Error: 2270000
 Relative Standard Error: 13.3
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	2.0	0.274623	50.0	3483680.0	0.137312	Y
2	IC 280-541632/23	4.0	0.532656	50.0	3449974.0	0.133164	Y
3	IC 280-541632/22	8.0	1.089329	50.0	3431058.0	0.136166	Y
4	IC 280-541632/21	20.0	2.746867	50.0	3392101.0	0.137343	Y
5	IC 280-541632/20	40.0	4.986248	50.0	3457419.0	0.124656	Y
6	ICIS 280-541632/19	200.0	22.096838	50.0	3390105.0	0.110484	Y
7	IC 280-541632/18	300.0	31.947603	50.0	3284298.0	0.106492	Y
8	IC 280-541632/17	400.0	41.928317	50.0	3463720.0	0.104821	Y
9	IC 280-541632/16	800.0	77.877979	50.0	3278733.0	0.097347	Y



Calibration

/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

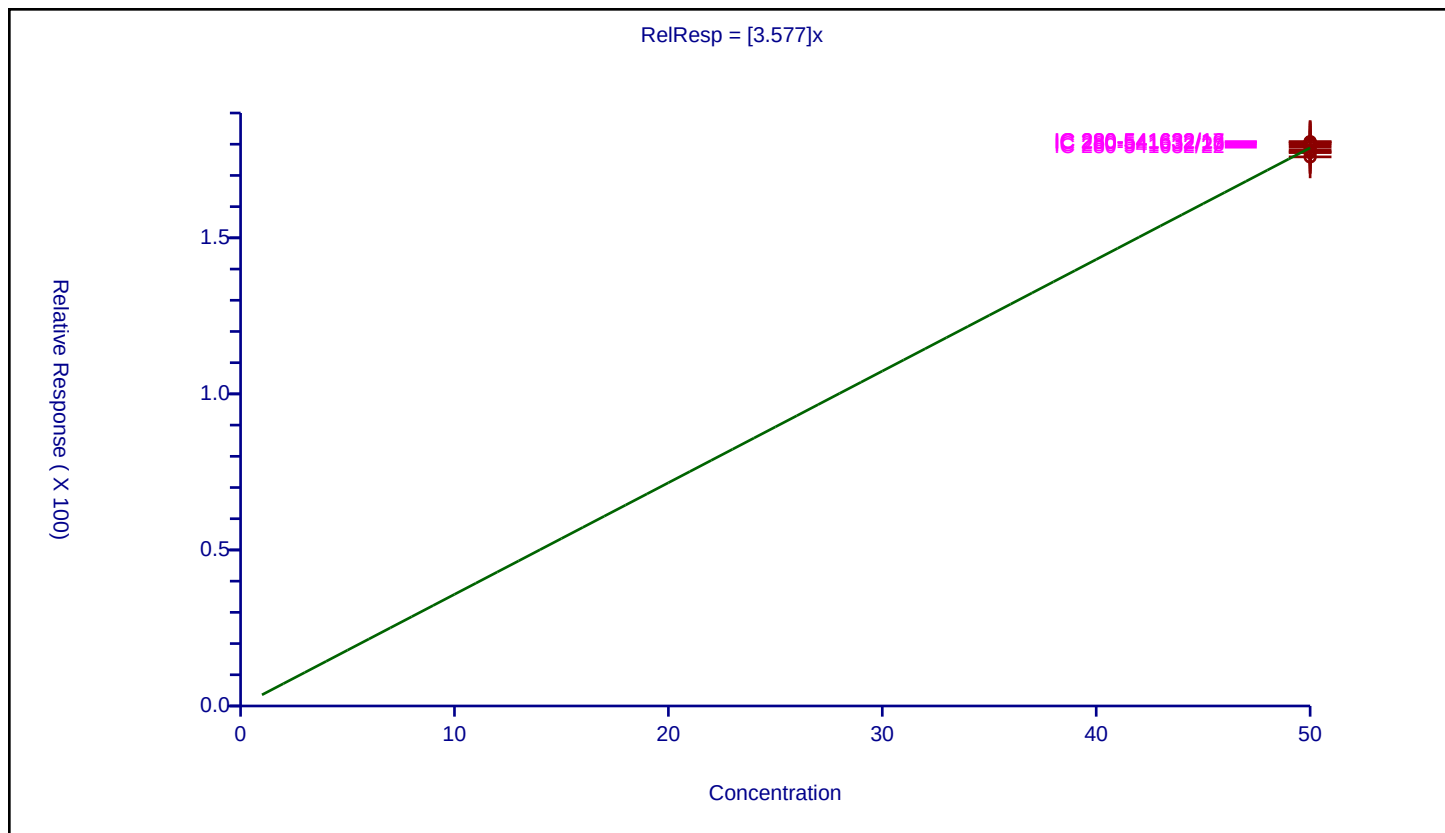
Curve Coefficients

Intercept: 0
 Slope: 3.577

Error Coefficients

Standard Error: 3550000
 Relative Standard Error: 1.0
 Correlation Coefficient: NA
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/16	50.0	180.699226	50.0	922134.0	3.613985	Y
2	IC 280-541632/17	50.0	180.826403	50.0	953058.0	3.616528	Y
3	IC 280-541632/18	50.0	180.257052	50.0	909350.0	3.605141	Y
4	ICIS 280-541632/19	50.0	178.137247	50.0	938729.0	3.562745	Y
5	IC 280-541632/20	50.0	175.946709	50.0	932995.0	3.518934	Y
6	IC 280-541632/21	50.0	177.312134	50.0	934083.0	3.546243	Y
7	IC 280-541632/22	50.0	179.045217	50.0	940716.0	3.580904	Y
8	IC 280-541632/23	50.0	179.768682	50.0	934818.0	3.595374	Y
9	IC 280-541632/24	50.0	177.568616	50.0	960420.0	3.551372	Y



Calibration

/ Toluene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

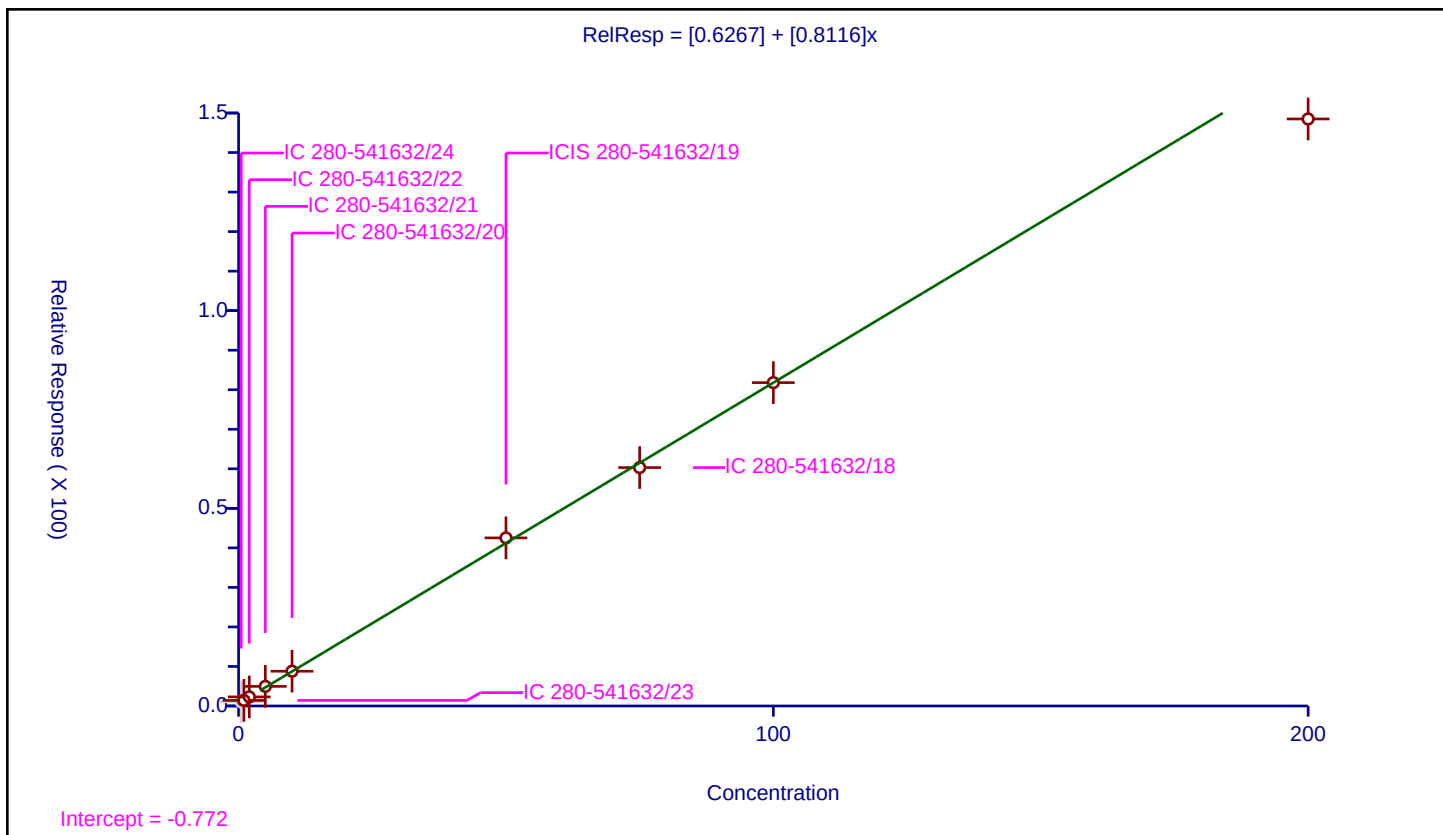
Curve Coefficients

Intercept: 0.6267
 Slope: 0.8116

Error Coefficients

Standard Error: 5020000
 Relative Standard Error: 5.1
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.053814	50.0	3483680.0	2.107628	N
2	IC 280-541632/23	1.0	1.414243	50.0	3449974.0	1.414243	Y
3	IC 280-541632/22	2.0	2.299626	50.0	3431058.0	1.149813	Y
4	IC 280-541632/21	5.0	4.96191	50.0	3392101.0	0.992382	Y
5	IC 280-541632/20	10.0	8.79461	50.0	3457419.0	0.879461	Y
6	ICIS 280-541632/19	50.0	42.520733	50.0	3390105.0	0.850415	Y
7	IC 280-541632/18	75.0	60.31056	50.0	3284298.0	0.804141	Y
8	IC 280-541632/17	100.0	81.795671	50.0	3463720.0	0.817957	Y
9	IC 280-541632/16	200.0	148.497895	50.0	3278733.0	0.742489	Y



Calibration

/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

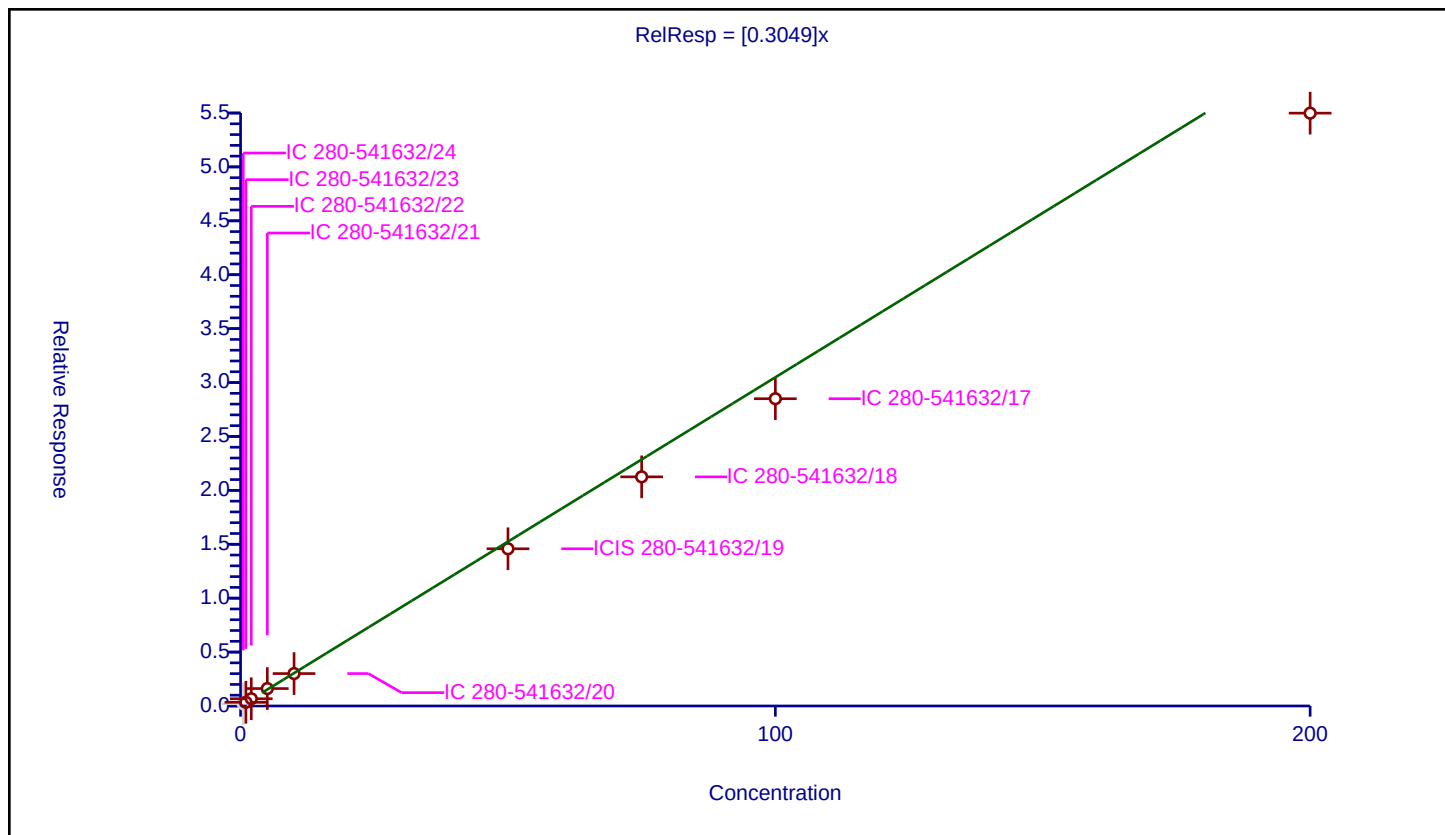
Curve Coefficients

Intercept: 0
 Slope: 0.3049

Error Coefficients

Standard Error: 1690000
 Relative Standard Error: 8.6
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.2084	50.0	3483680.0	0.416801	N
2	IC 280-541632/23	1.0	0.344829	50.0	3449974.0	0.344829	Y
3	IC 280-541632/22	2.0	0.670274	50.0	3431058.0	0.335137	Y
4	IC 280-541632/21	5.0	1.616697	50.0	3392101.0	0.323339	Y
5	IC 280-541632/20	10.0	3.006535	50.0	3457419.0	0.300653	Y
6	ICIS 280-541632/19	50.0	14.581009	50.0	3390105.0	0.29162	Y
7	IC 280-541632/18	75.0	21.251604	50.0	3284298.0	0.283355	Y
8	IC 280-541632/17	100.0	28.500413	50.0	3463720.0	0.285004	Y
9	IC 280-541632/16	200.0	54.987963	50.0	3278733.0	0.27494	Y



Calibration

/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

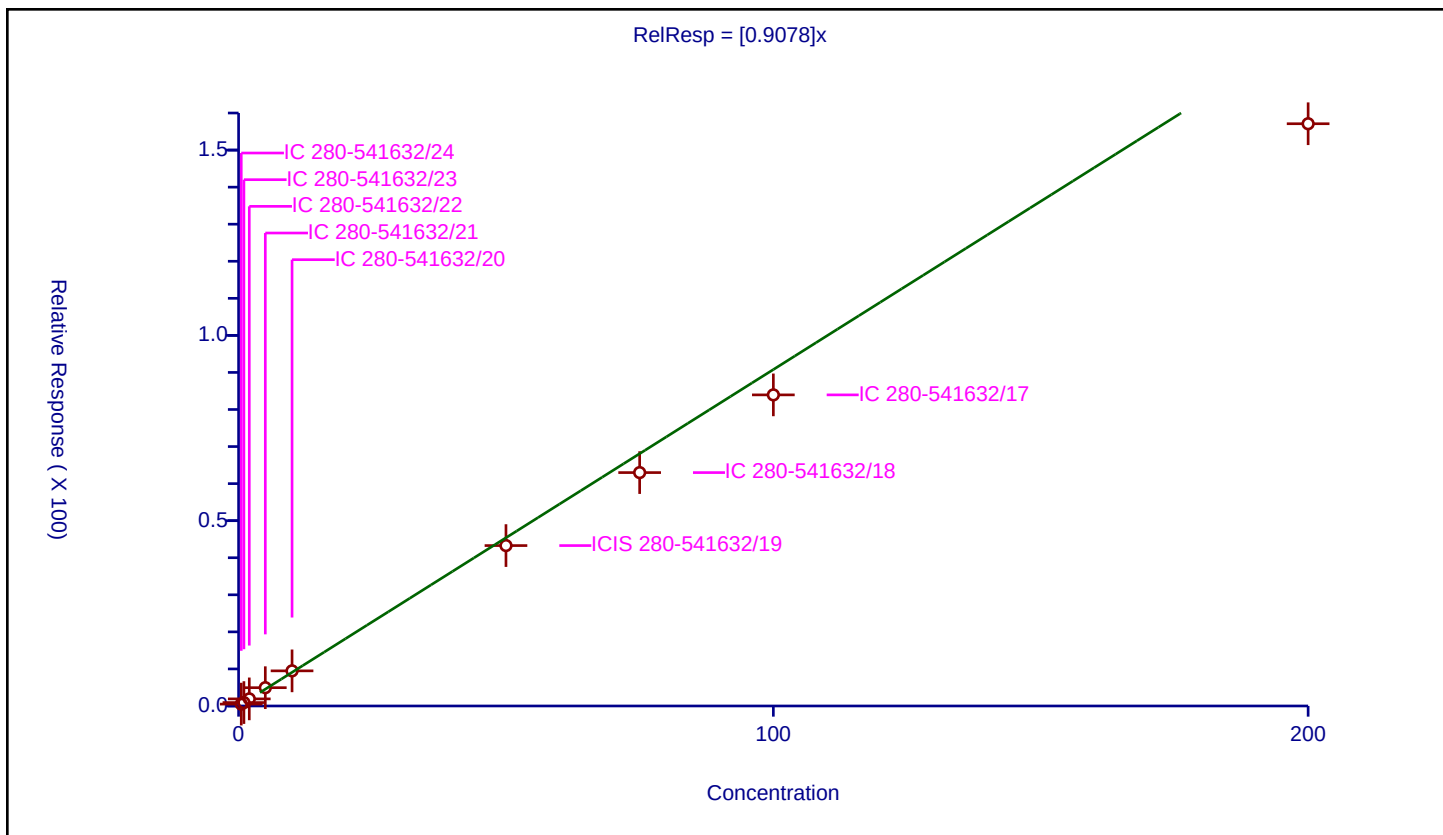
Curve Coefficients

Intercept: 0
 Slope: 0.9078

Error Coefficients

Standard Error: 1270000
 Relative Standard Error: 8.7
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.510193	50.0	960420.0	1.020387	Y
2	IC 280-541632/23	1.0	0.924779	50.0	934818.0	0.924779	Y
3	IC 280-541632/22	2.0	1.91923	50.0	940716.0	0.959615	Y
4	IC 280-541632/21	5.0	4.939122	50.0	934083.0	0.987824	Y
5	IC 280-541632/20	10.0	9.476525	50.0	932995.0	0.947652	Y
6	ICIS 280-541632/19	50.0	43.281341	50.0	938729.0	0.865627	Y
7	IC 280-541632/18	75.0	62.974597	50.0	909350.0	0.839661	Y
8	IC 280-541632/17	100.0	83.944314	50.0	953058.0	0.839443	Y
9	IC 280-541632/16	200.0	157.110626	50.0	922134.0	0.785553	Y



Calibration

/ 1,1,2-Trichloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

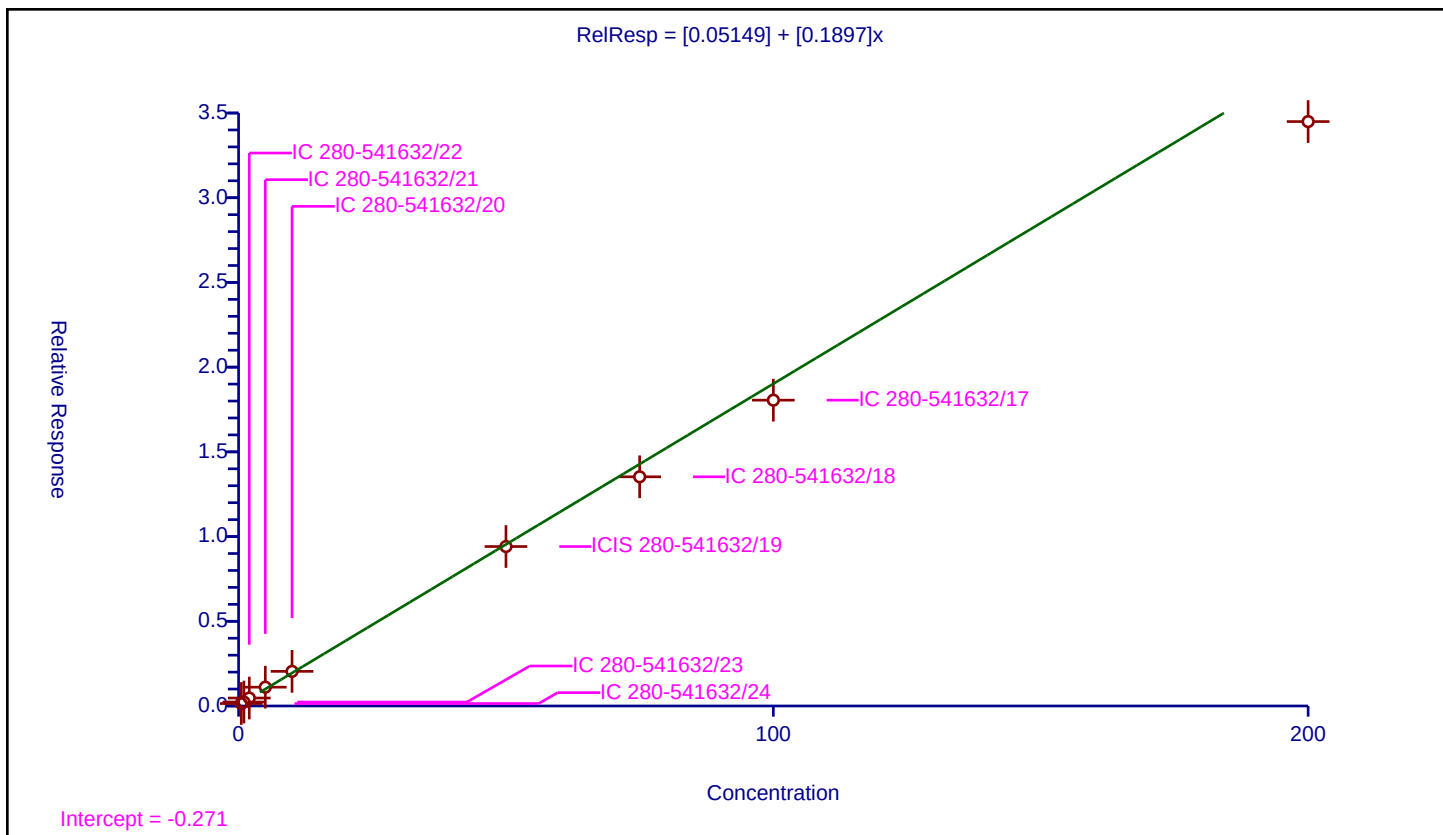
Curve Coefficients

Intercept: 0.05149
 Slope: 0.1897

Error Coefficients

Standard Error: 1060000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.144603	50.0	3483680.0	0.289206	Y
2	IC 280-541632/23	1.0	0.233466	50.0	3449974.0	0.233466	Y
3	IC 280-541632/22	2.0	0.469301	50.0	3431058.0	0.234651	Y
4	IC 280-541632/21	5.0	1.109902	50.0	3392101.0	0.22198	Y
5	IC 280-541632/20	10.0	2.043678	50.0	3457419.0	0.204368	Y
6	ICIS 280-541632/19	50.0	9.410903	50.0	3390105.0	0.188218	Y
7	IC 280-541632/18	75.0	13.527396	50.0	3284298.0	0.180365	Y
8	IC 280-541632/17	100.0	18.051546	50.0	3463720.0	0.180515	Y
9	IC 280-541632/16	200.0	34.494758	50.0	3278733.0	0.172474	Y



Calibration

/ Tetrachloroethene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

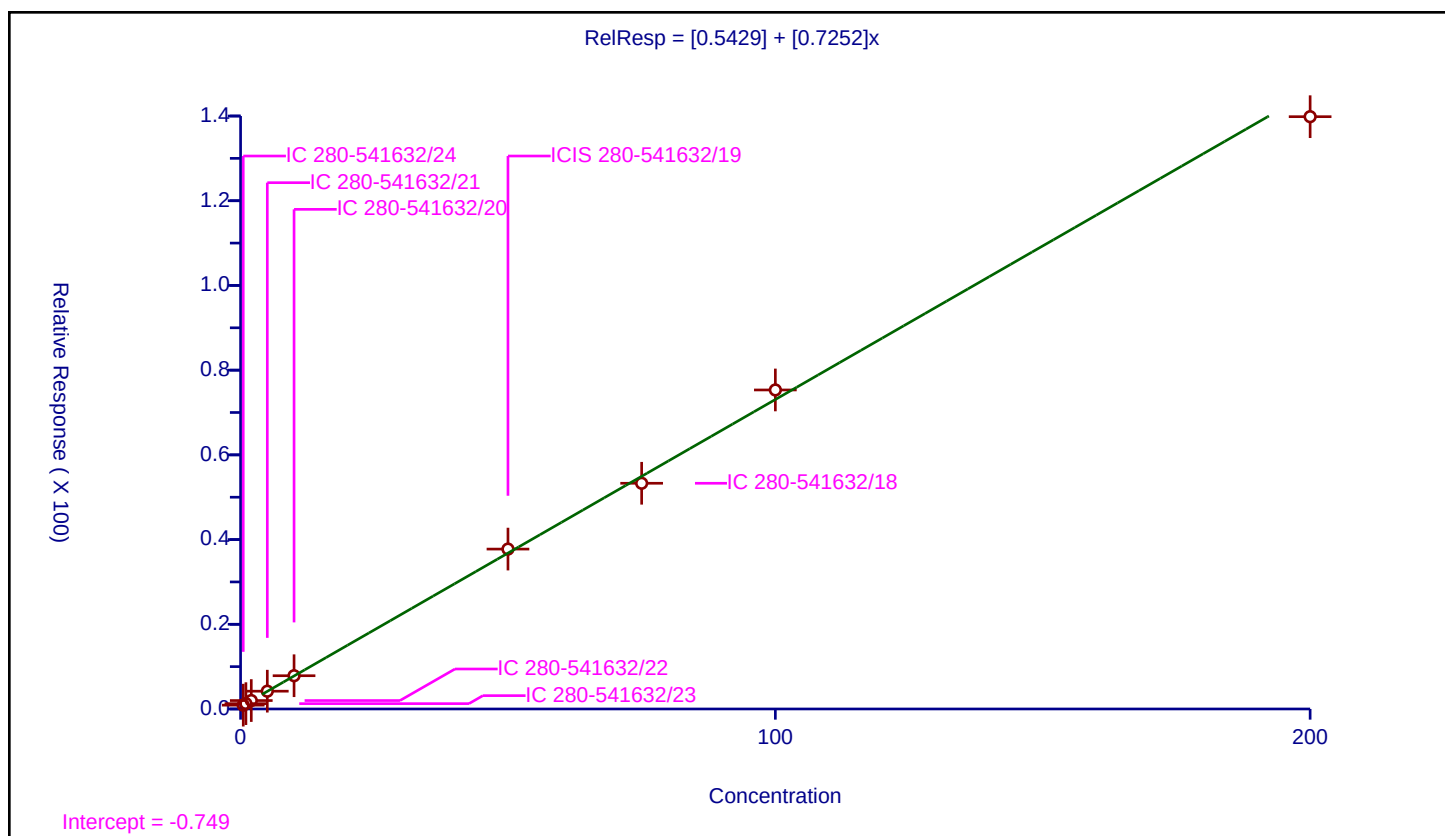
Curve Coefficients

Intercept: 0.5429
 Slope: 0.7252

Error Coefficients

Standard Error: 1210000
 Relative Standard Error: 2.5
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.906322	50.0	960420.0	1.812644	Y
2	IC 280-541632/23	1.0	1.263348	50.0	934818.0	1.263348	Y
3	IC 280-541632/22	2.0	1.991515	50.0	940716.0	0.995757	Y
4	IC 280-541632/21	5.0	4.204873	50.0	934083.0	0.840975	Y
5	IC 280-541632/20	10.0	7.85583	50.0	932995.0	0.785583	Y
6	ICIS 280-541632/19	50.0	37.756424	50.0	938729.0	0.755128	Y
7	IC 280-541632/18	75.0	53.293121	50.0	909350.0	0.710575	Y
8	IC 280-541632/17	100.0	75.320442	50.0	953058.0	0.753204	Y
9	IC 280-541632/16	200.0	139.843559	50.0	922134.0	0.699218	Y



Calibration

/ 1,3-Dichloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

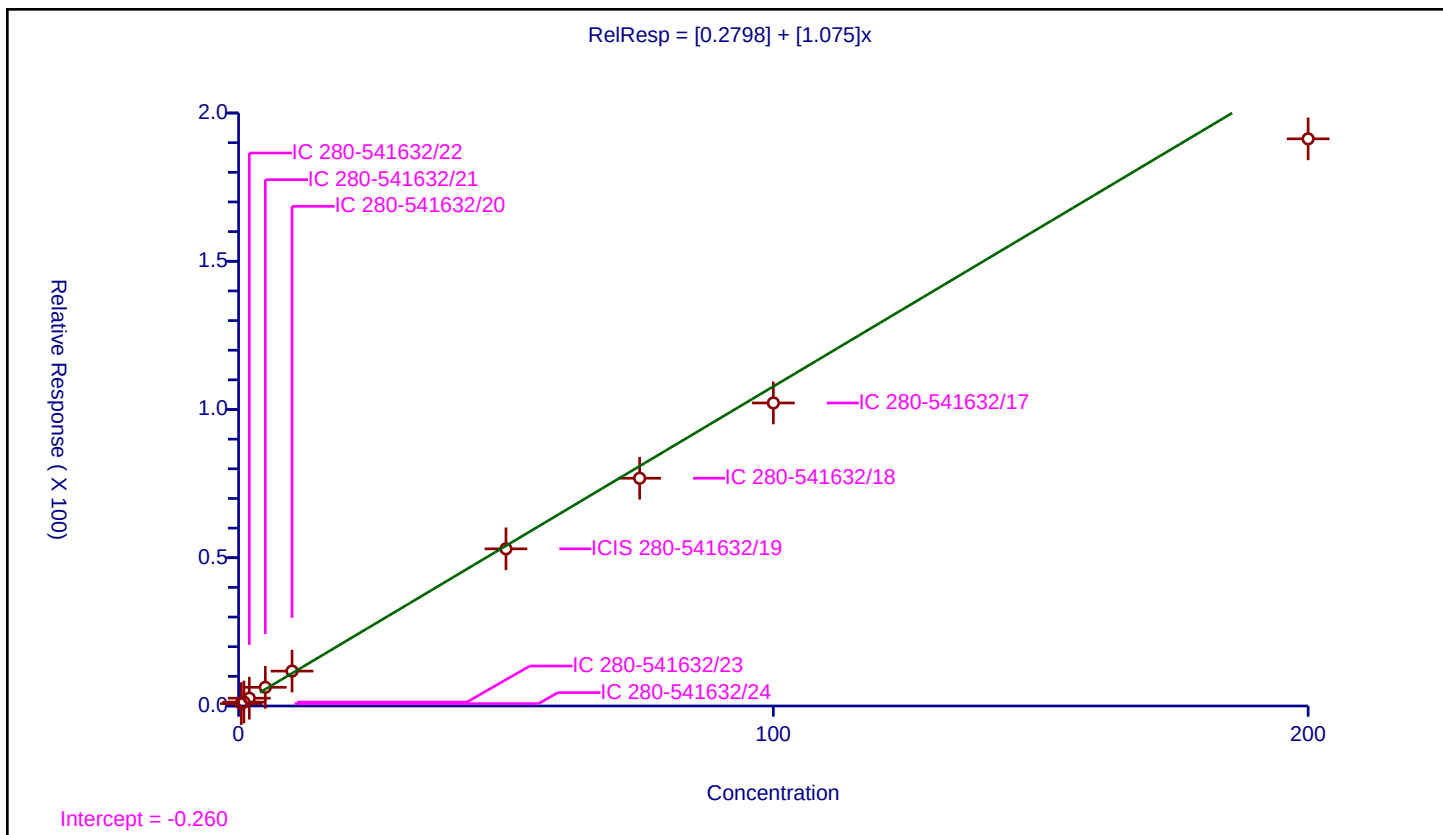
Curve Coefficients

Intercept: 0.2798
 Slope: 1.075

Error Coefficients

Standard Error: 1660000
 Relative Standard Error: 8.2
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.80319	50.0	960420.0	1.606381	Y
2	IC 280-541632/23	1.0	1.329403	50.0	934818.0	1.329403	Y
3	IC 280-541632/22	2.0	2.632197	50.0	940716.0	1.316099	Y
4	IC 280-541632/21	5.0	6.29853	50.0	934083.0	1.259706	Y
5	IC 280-541632/20	10.0	11.768123	50.0	932995.0	1.176812	Y
6	ICIS 280-541632/19	50.0	53.008643	50.0	938729.0	1.060173	Y
7	IC 280-541632/18	75.0	76.811129	50.0	909350.0	1.024148	Y
8	IC 280-541632/17	100.0	102.207263	50.0	953058.0	1.022073	Y
9	IC 280-541632/16	200.0	191.290799	50.0	922134.0	0.956454	Y



Calibration

/ 2-Hexanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

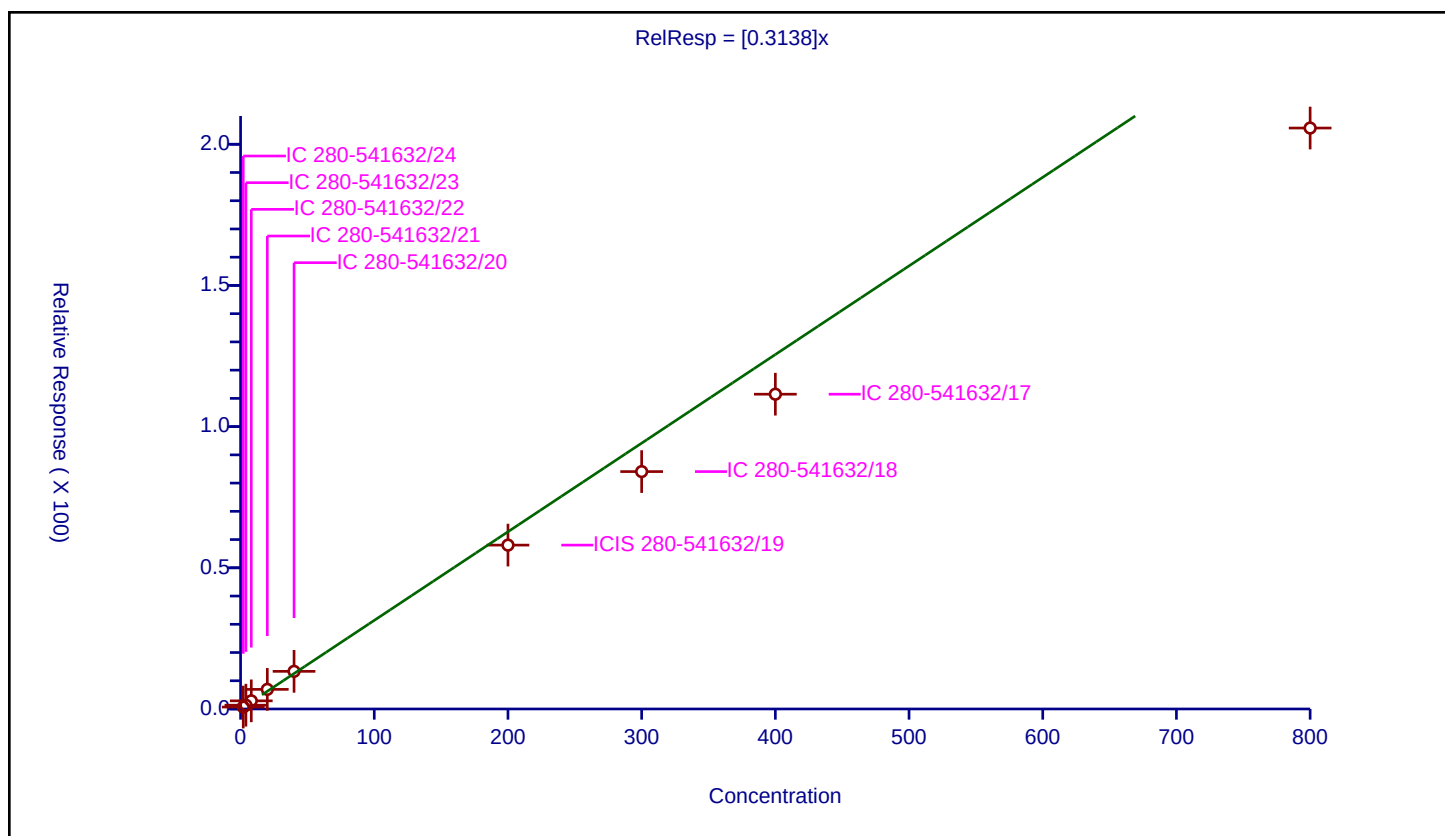
Curve Coefficients

Intercept: 0
Slope: 0.3138

Error Coefficients

Standard Error: 1680000
Relative Standard Error: 11.8
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	2.0	0.681421	50.0	960420.0	0.34071	Y
2	IC 280-541632/23	4.0	1.344486	50.0	934818.0	0.336122	Y
3	IC 280-541632/22	8.0	2.885621	50.0	940716.0	0.360703	Y
4	IC 280-541632/21	20.0	6.948098	50.0	934083.0	0.347405	Y
5	IC 280-541632/20	40.0	13.325795	50.0	932995.0	0.333145	Y
6	ICIS 280-541632/19	200.0	58.04018	50.0	938729.0	0.290201	Y
7	IC 280-541632/18	300.0	84.072469	50.0	909350.0	0.280242	Y
8	IC 280-541632/17	400.0	111.483981	50.0	953058.0	0.27871	Y
9	IC 280-541632/16	800.0	205.738645	50.0	922134.0	0.257173	Y



Calibration

/ Chlorodibromomethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

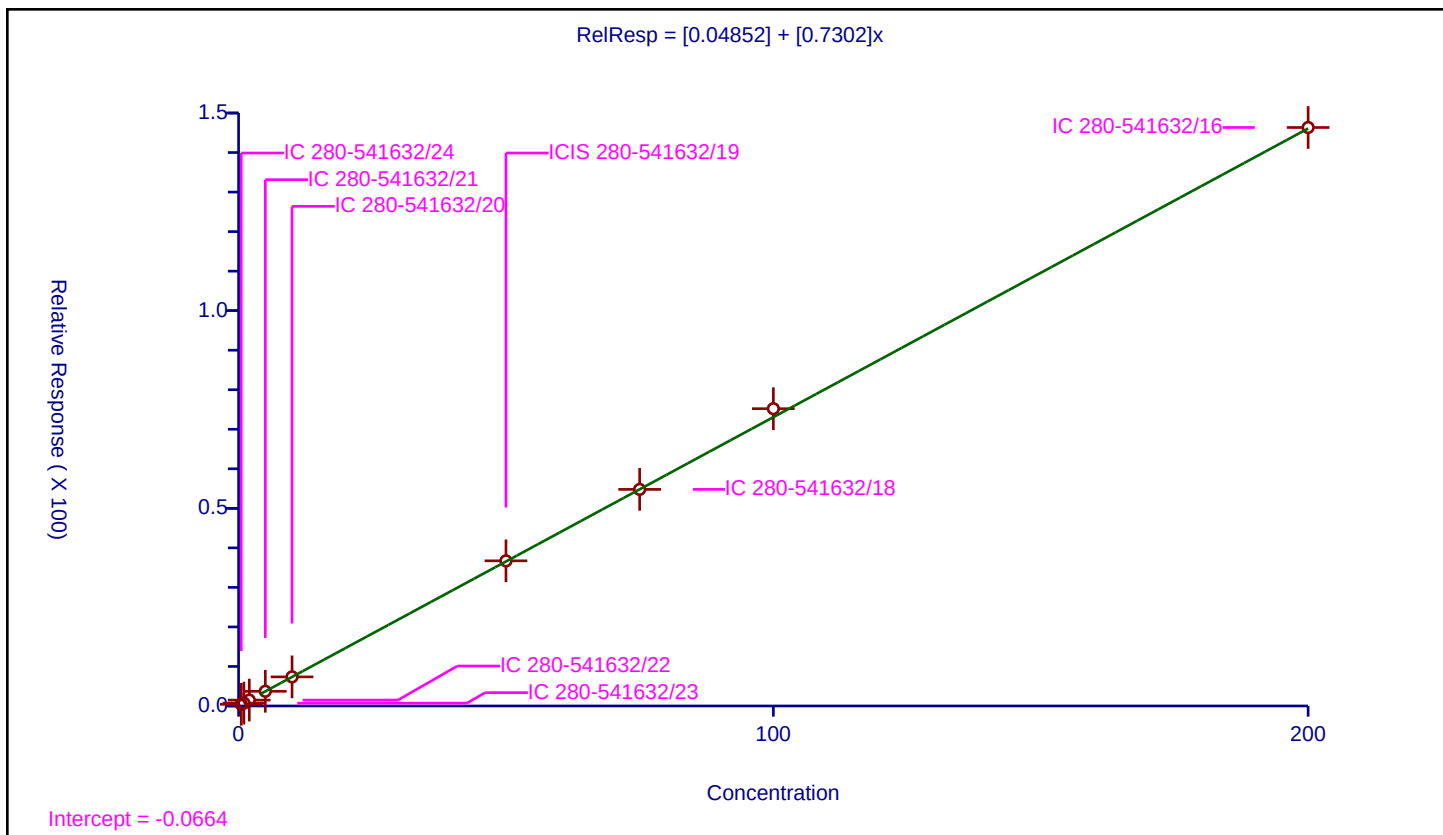
Curve Coefficients

Intercept: 0.04852
 Slope: 0.7302

Error Coefficients

Standard Error: 1240000
 Relative Standard Error: 3.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.426949	50.0	960420.0	0.853897	Y
2	IC 280-541632/23	1.0	0.727361	50.0	934818.0	0.727361	Y
3	IC 280-541632/22	2.0	1.495563	50.0	940716.0	0.747781	Y
4	IC 280-541632/21	5.0	3.722528	50.0	934083.0	0.744506	Y
5	IC 280-541632/20	10.0	7.361937	50.0	932995.0	0.736194	Y
6	ICIS 280-541632/19	50.0	36.716614	50.0	938729.0	0.734332	Y
7	IC 280-541632/18	75.0	54.791939	50.0	909350.0	0.730559	Y
8	IC 280-541632/17	100.0	75.204027	50.0	953058.0	0.75204	Y
9	IC 280-541632/16	200.0	146.336487	50.0	922134.0	0.731682	Y



Calibration

/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

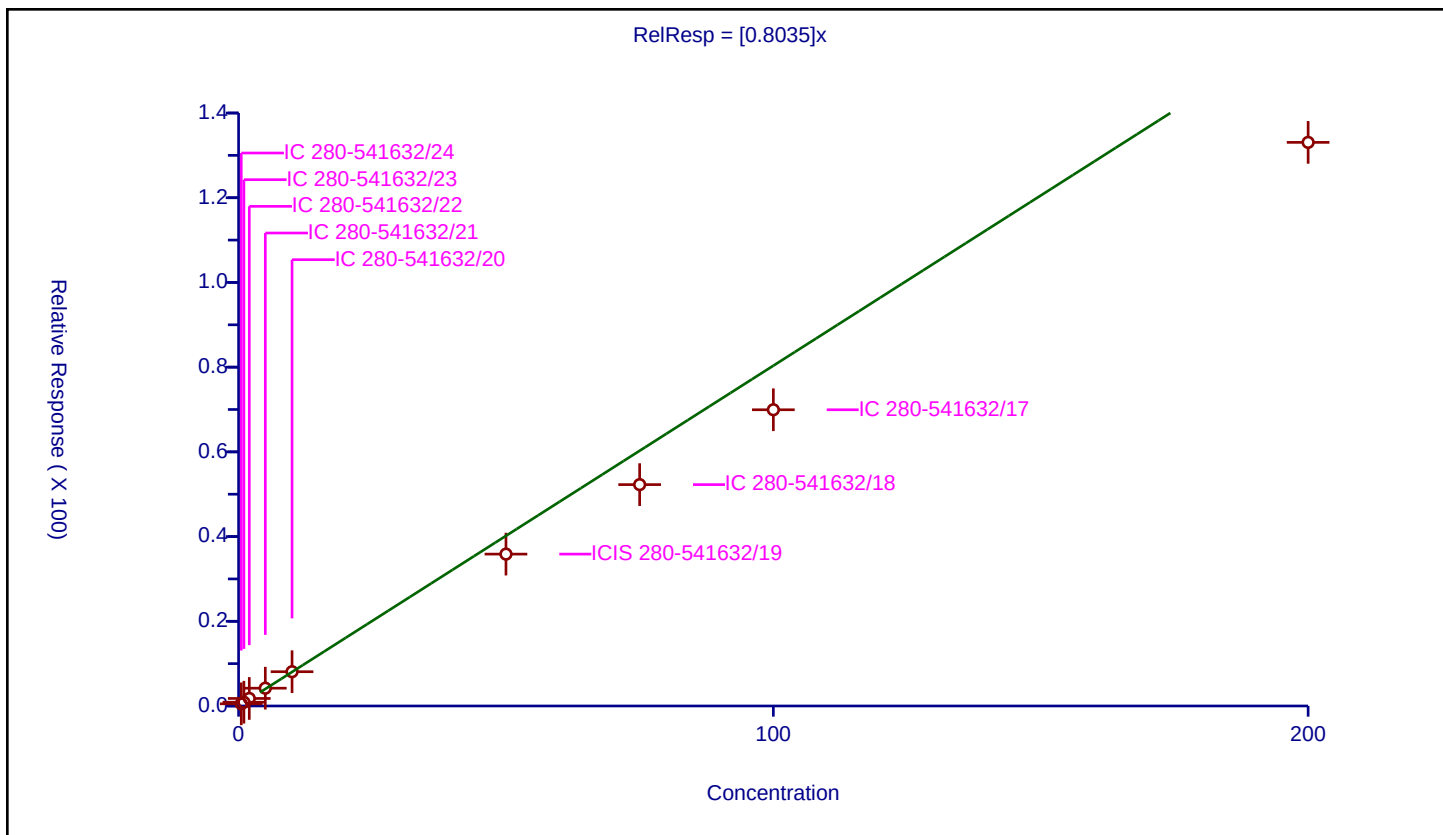
Curve Coefficients

Intercept: 0
 Slope: 0.8035

Error Coefficients

Standard Error: 1070000
 Relative Standard Error: 14.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.511859	50.0	960420.0	1.023719	Y
2	IC 280-541632/23	1.0	0.888087	50.0	934818.0	0.888087	Y
3	IC 280-541632/22	2.0	1.781303	50.0	940716.0	0.890651	Y
4	IC 280-541632/21	5.0	4.204605	50.0	934083.0	0.840921	Y
5	IC 280-541632/20	10.0	8.090504	50.0	932995.0	0.80905	Y
6	ICIS 280-541632/19	50.0	35.85987	50.0	938729.0	0.717197	Y
7	IC 280-541632/18	75.0	52.267389	50.0	909350.0	0.696899	Y
8	IC 280-541632/17	100.0	69.940182	50.0	953058.0	0.699402	Y
9	IC 280-541632/16	200.0	133.066344	50.0	922134.0	0.665332	Y



Calibration

/ 1-Chlorohexane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

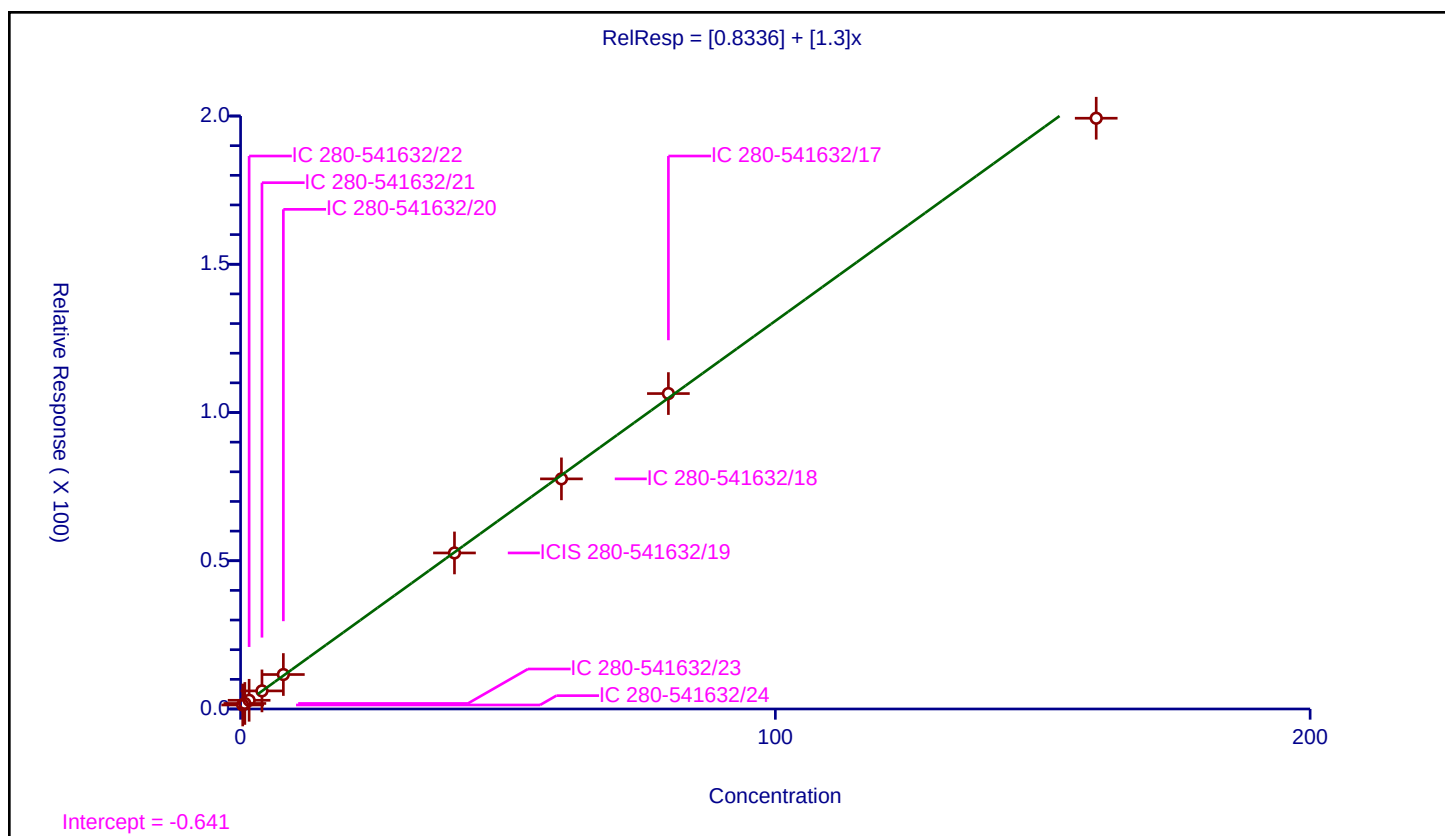
Curve Coefficients

Intercept: 0.8336
 Slope: 1.3

Error Coefficients

Standard Error: 1720000
 Relative Standard Error: 2.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.4	1.352429	50.0	960420.0	3.381073	Y
2	IC 280-541632/23	0.8	1.868599	50.0	934818.0	2.335749	Y
3	IC 280-541632/22	1.6	2.933776	50.0	940716.0	1.83361	Y
4	IC 280-541632/21	4.0	6.105239	50.0	934083.0	1.52631	Y
5	IC 280-541632/20	8.0	11.627233	50.0	932995.0	1.453404	Y
6	ICIS 280-541632/19	40.0	52.629513	50.0	938729.0	1.315738	Y
7	IC 280-541632/18	60.0	77.618684	50.0	909350.0	1.293645	Y
8	IC 280-541632/17	80.0	106.384186	50.0	953058.0	1.329802	Y
9	IC 280-541632/16	160.0	199.252712	50.0	922134.0	1.245329	Y



Calibration

/ Chlorobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

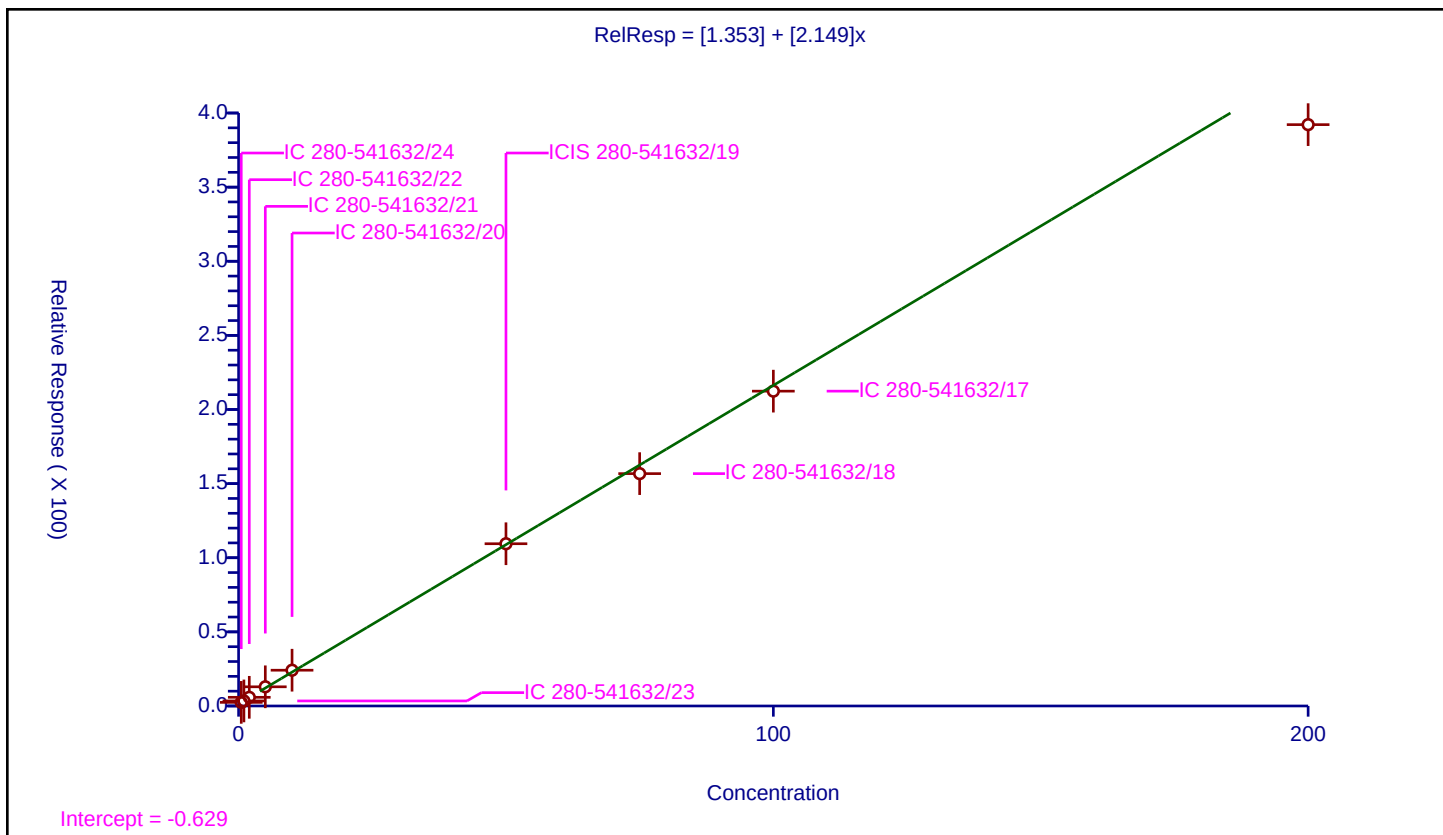
Curve Coefficients

Intercept: 1.353
 Slope: 2.149

Error Coefficients

Standard Error: 3410000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	2.429198	50.0	960420.0	4.858395	Y
2	IC 280-541632/23	1.0	3.400929	50.0	934818.0	3.400929	Y
3	IC 280-541632/22	2.0	5.853307	50.0	940716.0	2.926654	Y
4	IC 280-541632/21	5.0	12.942051	50.0	934083.0	2.58841	Y
5	IC 280-541632/20	10.0	24.124513	50.0	932995.0	2.412451	Y
6	ICIS 280-541632/19	50.0	109.458214	50.0	938729.0	2.189164	Y
7	IC 280-541632/18	75.0	156.739319	50.0	909350.0	2.089858	Y
8	IC 280-541632/17	100.0	212.376319	50.0	953058.0	2.123763	Y
9	IC 280-541632/16	200.0	392.148267	50.0	922134.0	1.960741	Y



Calibration

/ 1,1,1,2-Tetrachloroethane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

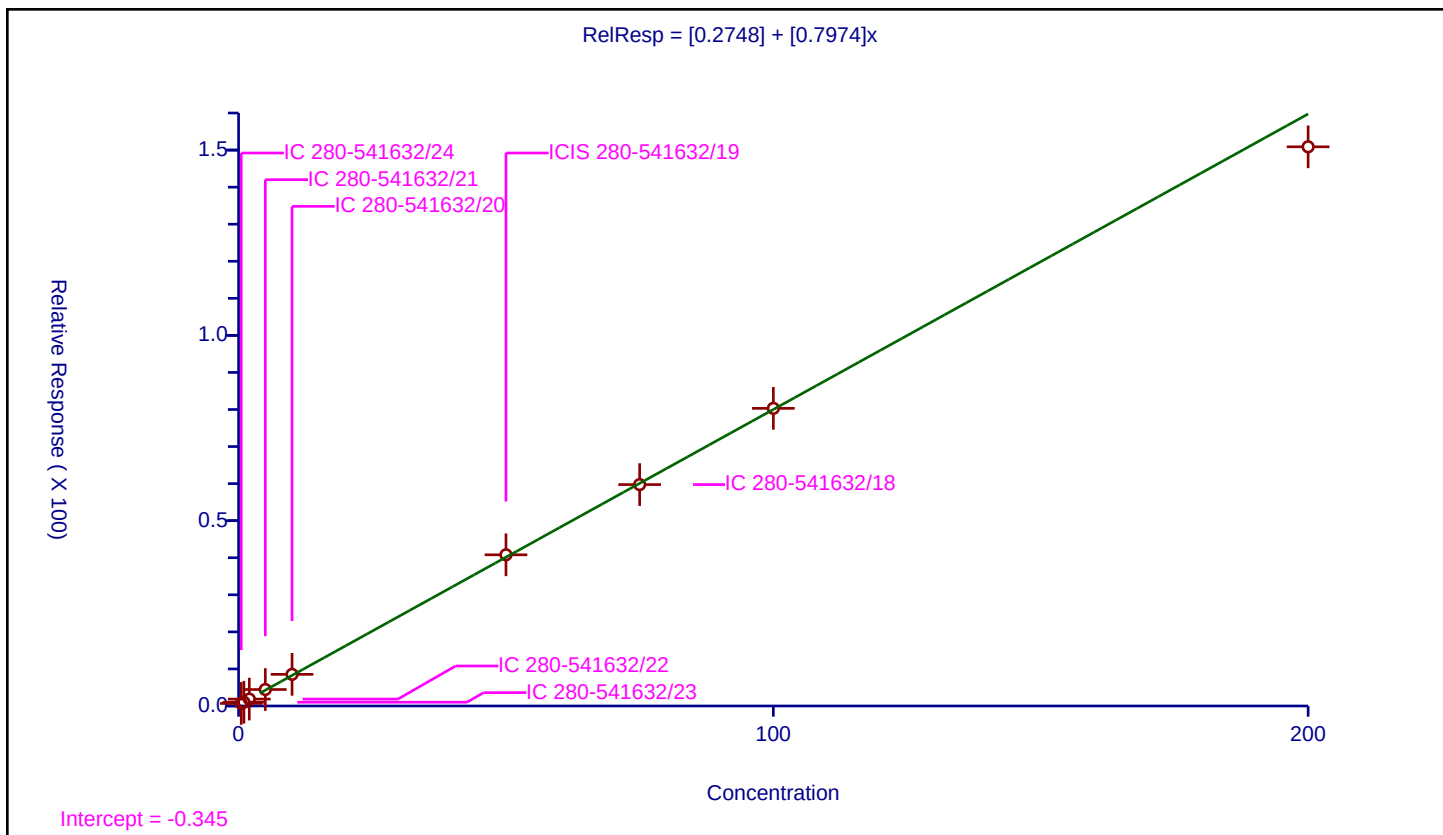
Curve Coefficients

Intercept: 0.2748
 Slope: 0.7974

Error Coefficients

Standard Error: 1300000
 Relative Standard Error: 4.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.68418	50.0	960420.0	1.36836	Y
2	IC 280-541632/23	1.0	1.020306	50.0	934818.0	1.020306	Y
3	IC 280-541632/22	2.0	1.865334	50.0	940716.0	0.932667	Y
4	IC 280-541632/21	5.0	4.443556	50.0	934083.0	0.888711	Y
5	IC 280-541632/20	10.0	8.539542	50.0	932995.0	0.853954	Y
6	ICIS 280-541632/19	50.0	40.794308	50.0	938729.0	0.815886	Y
7	IC 280-541632/18	75.0	59.739319	50.0	909350.0	0.796524	Y
8	IC 280-541632/17	100.0	80.309278	50.0	953058.0	0.803093	Y
9	IC 280-541632/16	200.0	150.883711	50.0	922134.0	0.754419	Y



Calibration

/ Ethylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

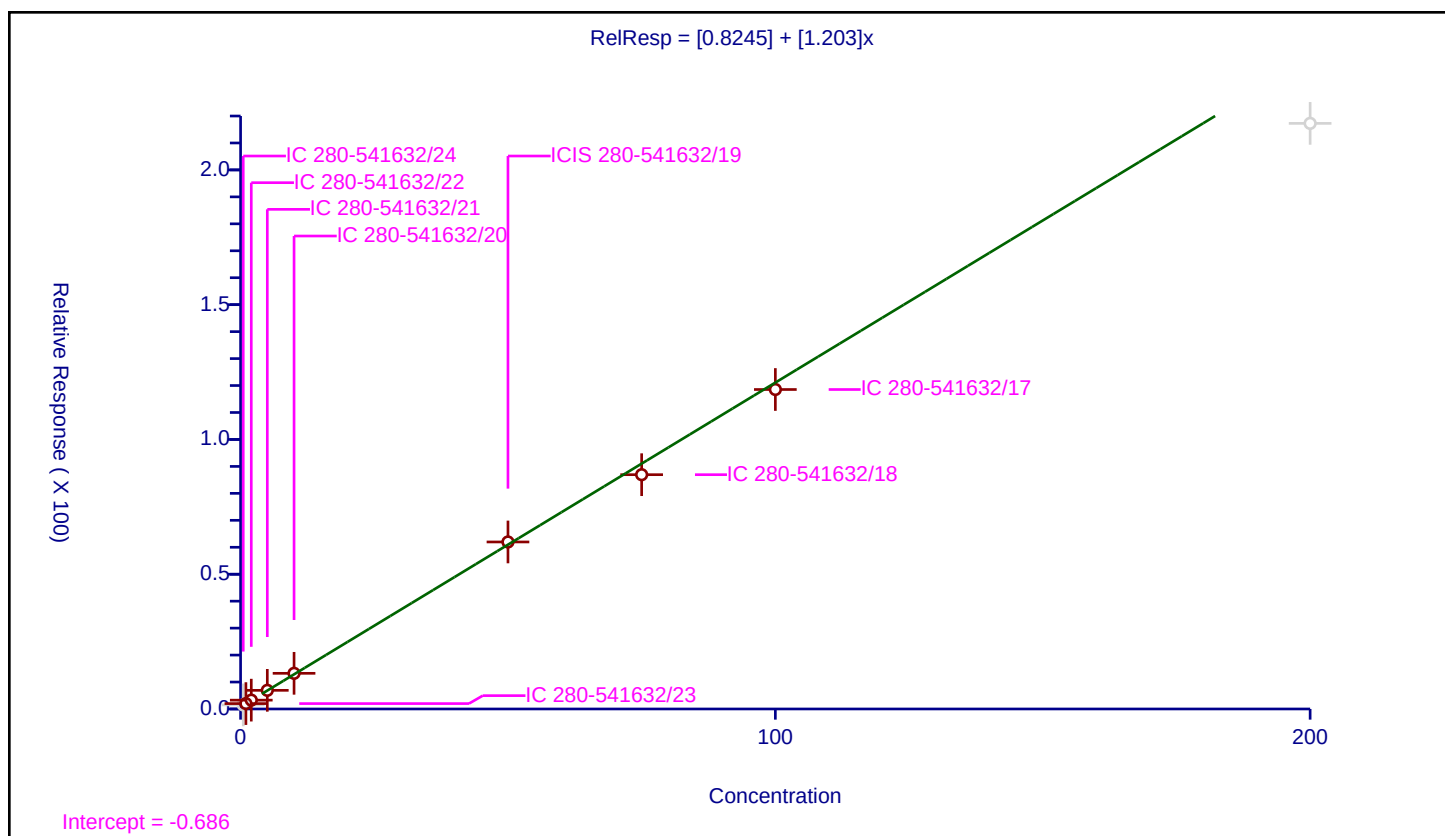
Curve Coefficients

Intercept: 0.8245
 Slope: 1.203

Error Coefficients

Standard Error: 1340000
 Relative Standard Error: 3.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.523188	50.0	960420.0	3.046376	N
2	IC 280-541632/23	1.0	2.007984	50.0	934818.0	2.007984	Y
3	IC 280-541632/22	2.0	3.281171	50.0	940716.0	1.640585	Y
4	IC 280-541632/21	5.0	6.917105	50.0	934083.0	1.383421	Y
5	IC 280-541632/20	10.0	13.231046	50.0	932995.0	1.323105	Y
6	ICIS 280-541632/19	50.0	61.965115	50.0	938729.0	1.239302	Y
7	IC 280-541632/18	75.0	86.927036	50.0	909350.0	1.159027	Y
8	IC 280-541632/17	100.0	118.53308	50.0	953058.0	1.185331	Y
9	IC 280-541632/16	200.0	217.269941	50.0	922134.0	1.08635	N



Calibration

/ m-Xylene & p-Xylene

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

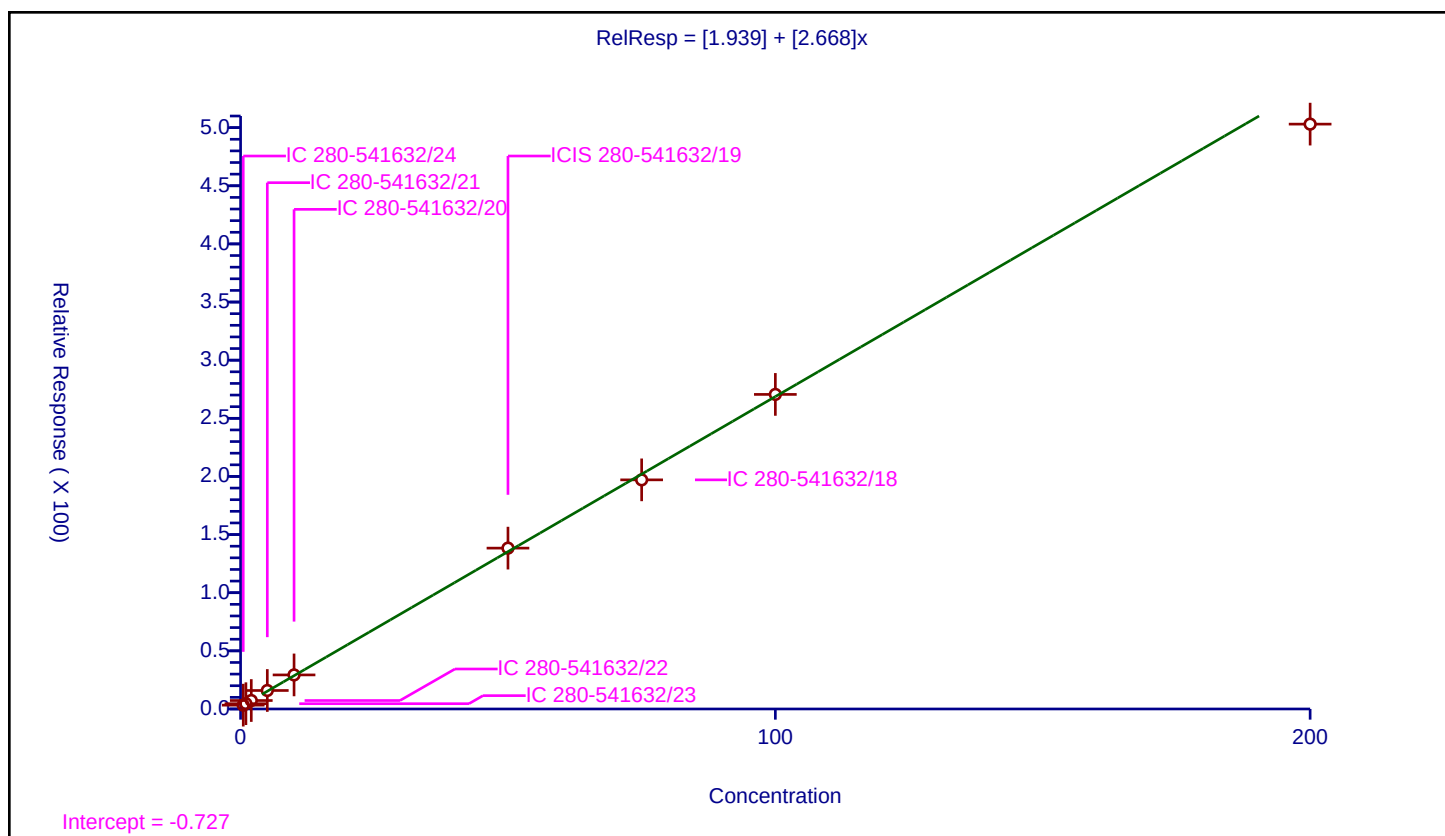
Curve Coefficients

Intercept: 1.939
Slope: 2.668

Error Coefficients

Standard Error: 4350000
Relative Standard Error: 3.5
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	3.280232	50.0	960420.0	6.560463	Y
2	IC 280-541632/23	1.0	4.545698	50.0	934818.0	4.545698	Y
3	IC 280-541632/22	2.0	7.271429	50.0	940716.0	3.635715	Y
4	IC 280-541632/21	5.0	15.916091	50.0	934083.0	3.183218	Y
5	IC 280-541632/20	10.0	29.293405	50.0	932995.0	2.92934	Y
6	ICIS 280-541632/19	50.0	138.366824	50.0	938729.0	2.767336	Y
7	IC 280-541632/18	75.0	197.076978	50.0	909350.0	2.627693	Y
8	IC 280-541632/17	100.0	270.561813	50.0	953058.0	2.705618	Y
9	IC 280-541632/16	200.0	503.030471	50.0	922134.0	2.515152	Y



Calibration

/ o-Xylene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

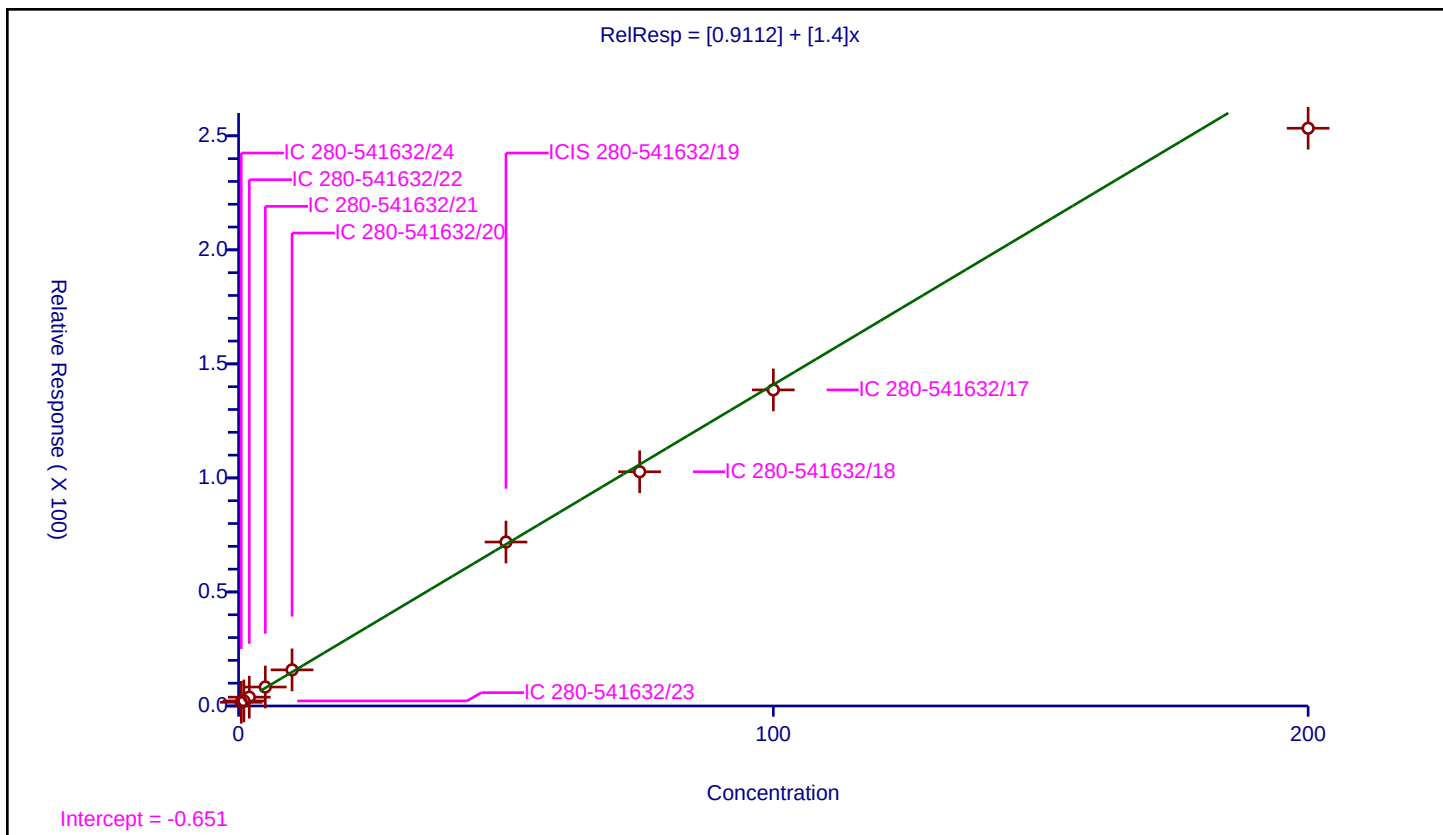
Curve Coefficients

Intercept: 0.9112
 Slope: 1.4

Error Coefficients

Standard Error: 2210000
 Relative Standard Error: 6.0
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.614502	50.0	960420.0	3.229004	Y
2	IC 280-541632/23	1.0	2.232788	50.0	934818.0	2.232788	Y
3	IC 280-541632/22	2.0	3.871307	50.0	940716.0	1.935653	Y
4	IC 280-541632/21	5.0	8.32244	50.0	934083.0	1.664488	Y
5	IC 280-541632/20	10.0	15.840492	50.0	932995.0	1.584049	Y
6	ICIS 280-541632/19	50.0	71.888905	50.0	938729.0	1.437778	Y
7	IC 280-541632/18	75.0	102.703689	50.0	909350.0	1.369383	Y
8	IC 280-541632/17	100.0	138.597389	50.0	953058.0	1.385974	Y
9	IC 280-541632/16	200.0	253.328529	50.0	922134.0	1.266643	Y



Calibration

/ Styrene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

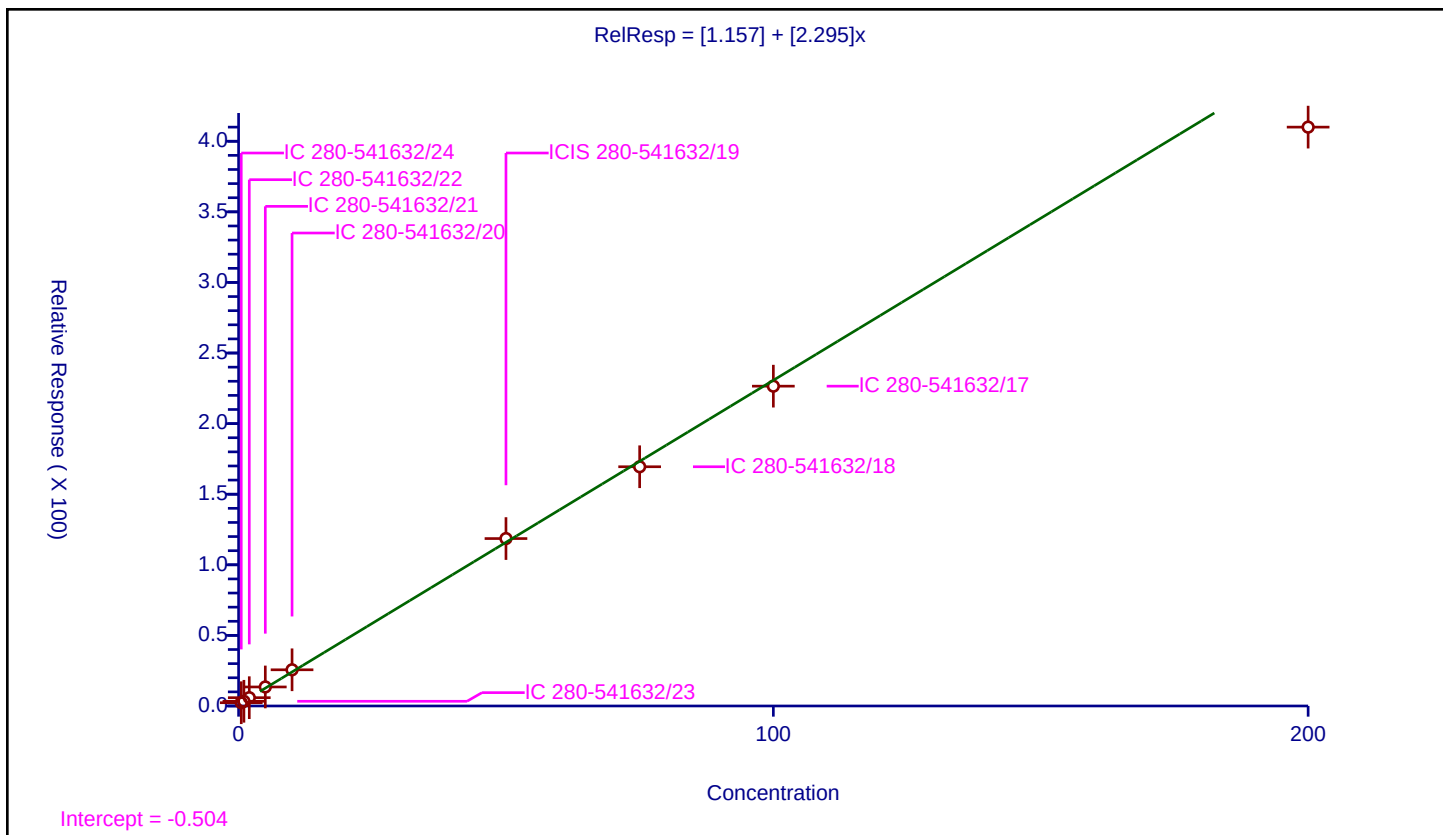
Curve Coefficients

Intercept: 1.157
 Slope: 2.295

Error Coefficients

Standard Error: 3600000
 Relative Standard Error: 6.2
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	2.313051	50.0	960420.0	4.626101	Y
2	IC 280-541632/23	1.0	3.338243	50.0	934818.0	3.338243	Y
3	IC 280-541632/22	2.0	5.885411	50.0	940716.0	2.942705	Y
4	IC 280-541632/21	5.0	13.477282	50.0	934083.0	2.695456	Y
5	IC 280-541632/20	10.0	25.634757	50.0	932995.0	2.563476	Y
6	ICIS 280-541632/19	50.0	118.591308	50.0	938729.0	2.371826	Y
7	IC 280-541632/18	75.0	169.445483	50.0	909350.0	2.259273	Y
8	IC 280-541632/17	100.0	226.527504	50.0	953058.0	2.265275	Y
9	IC 280-541632/16	200.0	410.005216	50.0	922134.0	2.050026	Y



Calibration

/ Bromoform

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

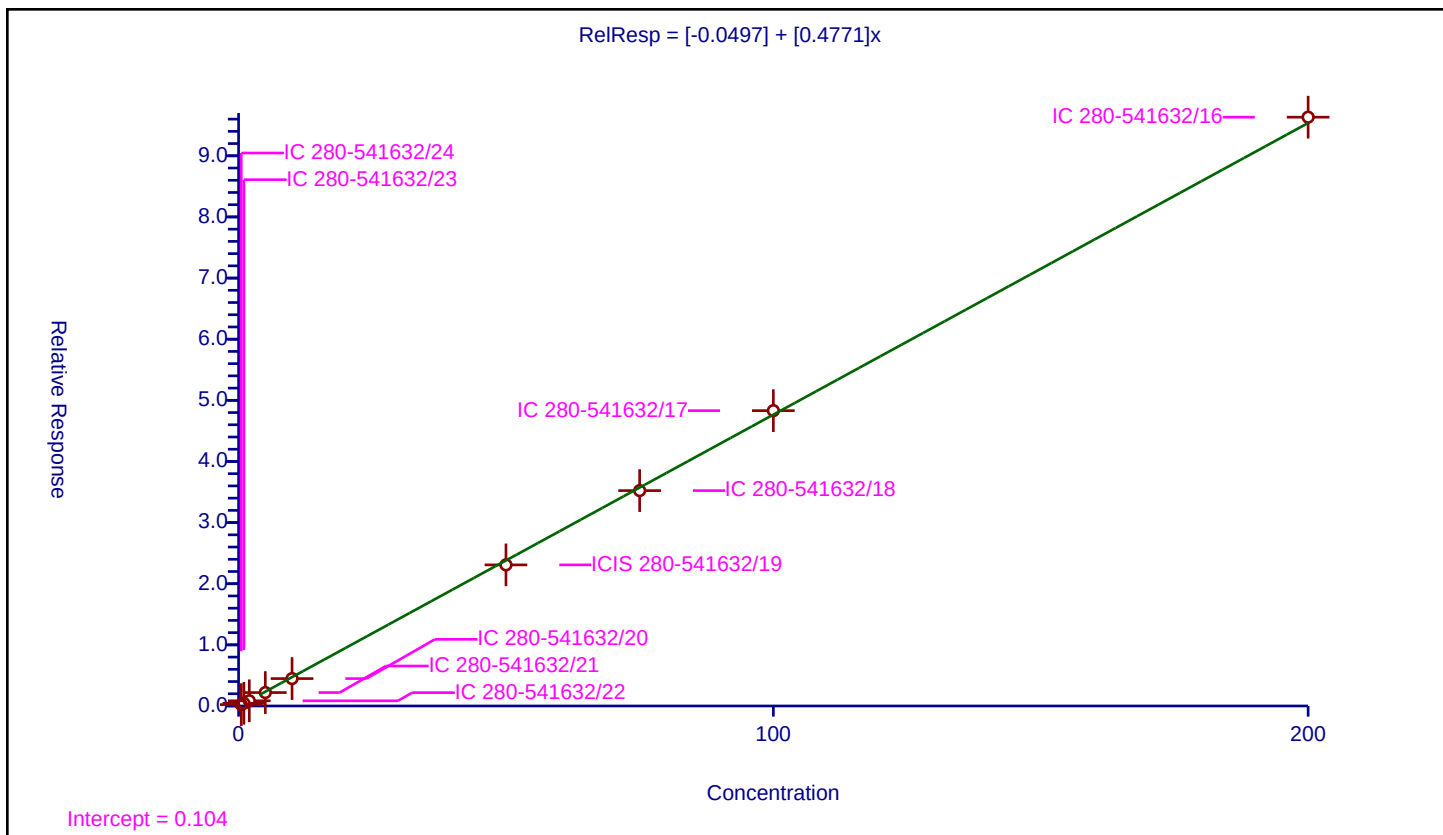
Curve Coefficients

Intercept: -0.0497
 Slope: 0.4771

Error Coefficients

Standard Error: 812000
 Relative Standard Error: 7.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.224954	50.0	960420.0	0.449907	Y
2	IC 280-541632/23	1.0	0.445702	50.0	934818.0	0.445702	Y
3	IC 280-541632/22	2.0	0.847333	50.0	940716.0	0.423667	Y
4	IC 280-541632/21	5.0	2.19504	50.0	934083.0	0.439008	Y
5	IC 280-541632/20	10.0	4.480946	50.0	932995.0	0.448095	Y
6	ICIS 280-541632/19	50.0	23.080889	50.0	938729.0	0.461618	Y
7	IC 280-541632/18	75.0	35.229395	50.0	909350.0	0.469725	Y
8	IC 280-541632/17	100.0	48.31154	50.0	953058.0	0.483115	Y
9	IC 280-541632/16	200.0	96.321142	50.0	922134.0	0.481606	Y



Calibration

/ Isopropylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

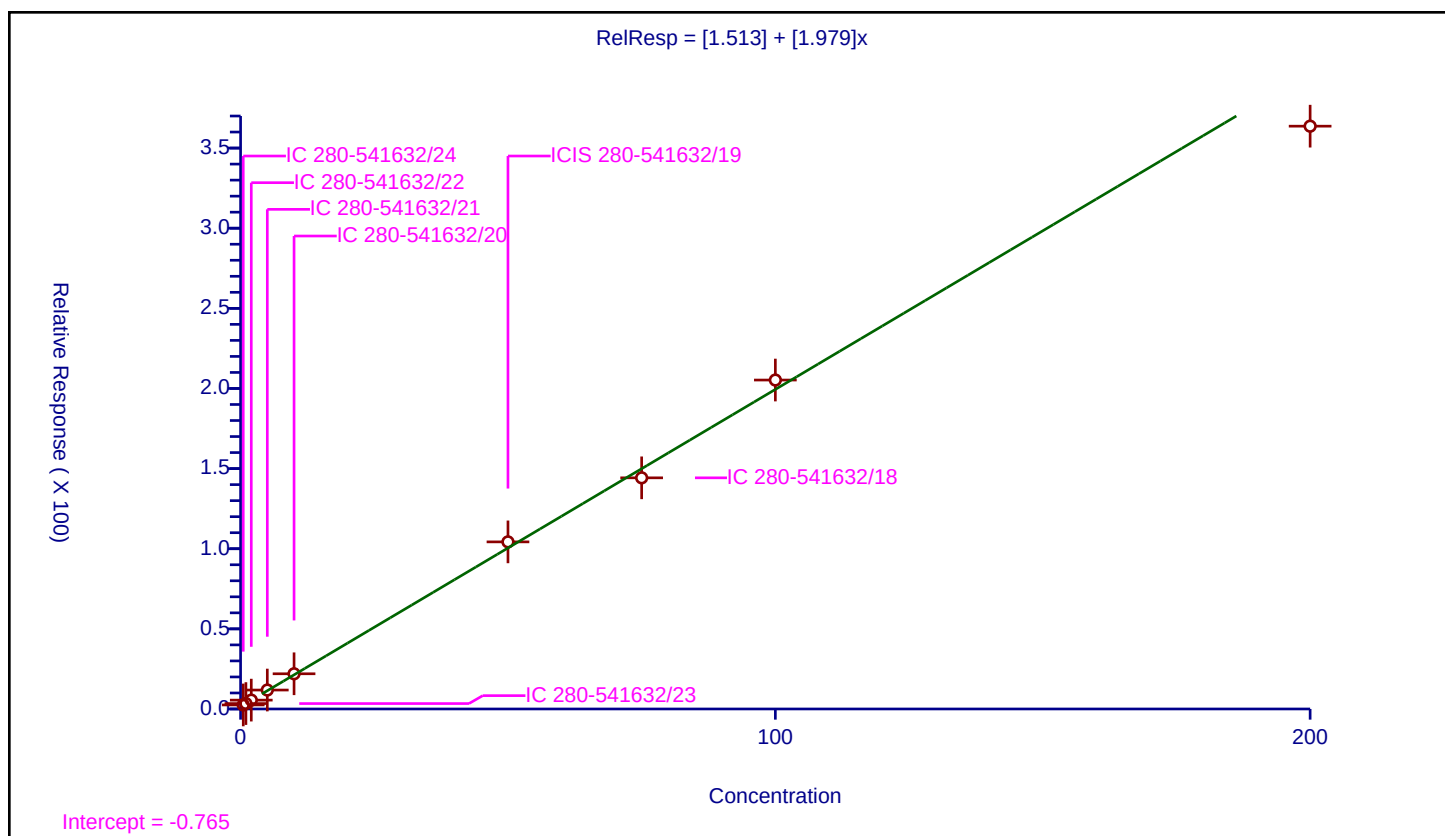
Curve Coefficients

Intercept: 1.513
 Slope: 1.979

Error Coefficients

Standard Error: 5140000
 Relative Standard Error: 5.0
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	2.519532	50.0	1526057.0	5.039065	Y
2	IC 280-541632/23	1.0	3.385609	50.0	1516064.0	3.385609	Y
3	IC 280-541632/22	2.0	5.537111	50.0	1511131.0	2.768555	Y
4	IC 280-541632/21	5.0	11.826802	50.0	1525442.0	2.36536	Y
5	IC 280-541632/20	10.0	21.965854	50.0	1533949.0	2.196585	Y
6	ICIS 280-541632/19	50.0	104.276658	50.0	1524660.0	2.085533	Y
7	IC 280-541632/18	75.0	144.230445	50.0	1513037.0	1.923073	Y
8	IC 280-541632/17	100.0	205.251612	50.0	1533491.0	2.052516	Y
9	IC 280-541632/16	200.0	363.66469	50.0	1477421.0	1.818323	Y



Calibration

/ Cyclohexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

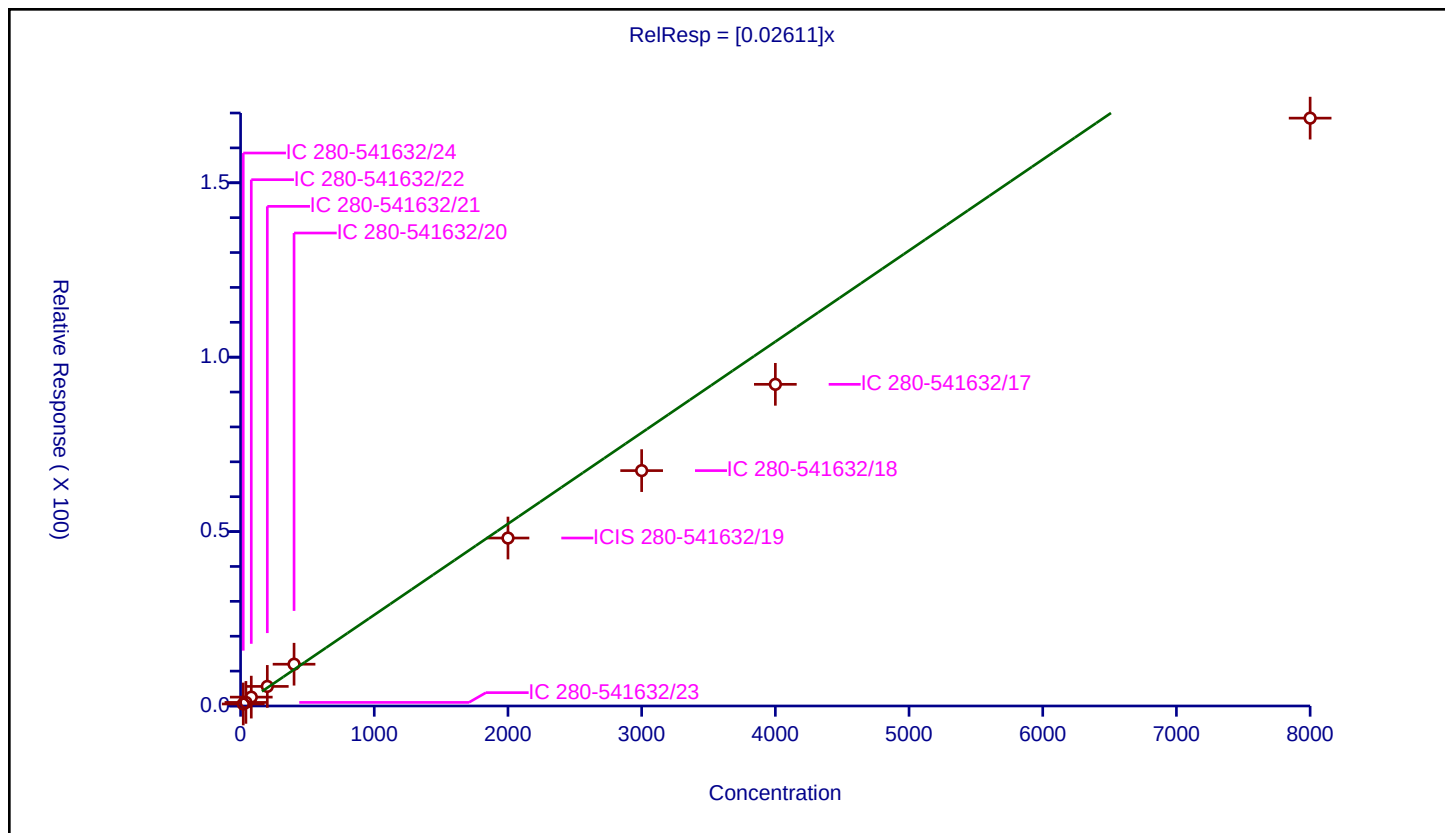
Curve Coefficients

Intercept: 0
 Slope: 0.02611

Error Coefficients

Standard Error: 1380000
 Relative Standard Error: 14.2
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	20.0	0.574957	50.0	960420.0	0.028748	Y
2	IC 280-541632/23	40.0	1.031163	50.0	934818.0	0.025779	Y
3	IC 280-541632/22	80.0	2.539874	50.0	940716.0	0.031748	Y
4	IC 280-541632/21	200.0	5.61904	50.0	934083.0	0.028095	Y
5	IC 280-541632/20	400.0	11.977556	50.0	932995.0	0.029944	Y
6	ICIS 280-541632/19	2000.0	48.15149	50.0	938729.0	0.024076	Y
7	IC 280-541632/18	3000.0	67.482433	50.0	909350.0	0.022494	Y
8	IC 280-541632/17	4000.0	92.222509	50.0	953058.0	0.023056	Y
9	IC 280-541632/16	8000.0	168.535864	50.0	922134.0	0.021067	Y



Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

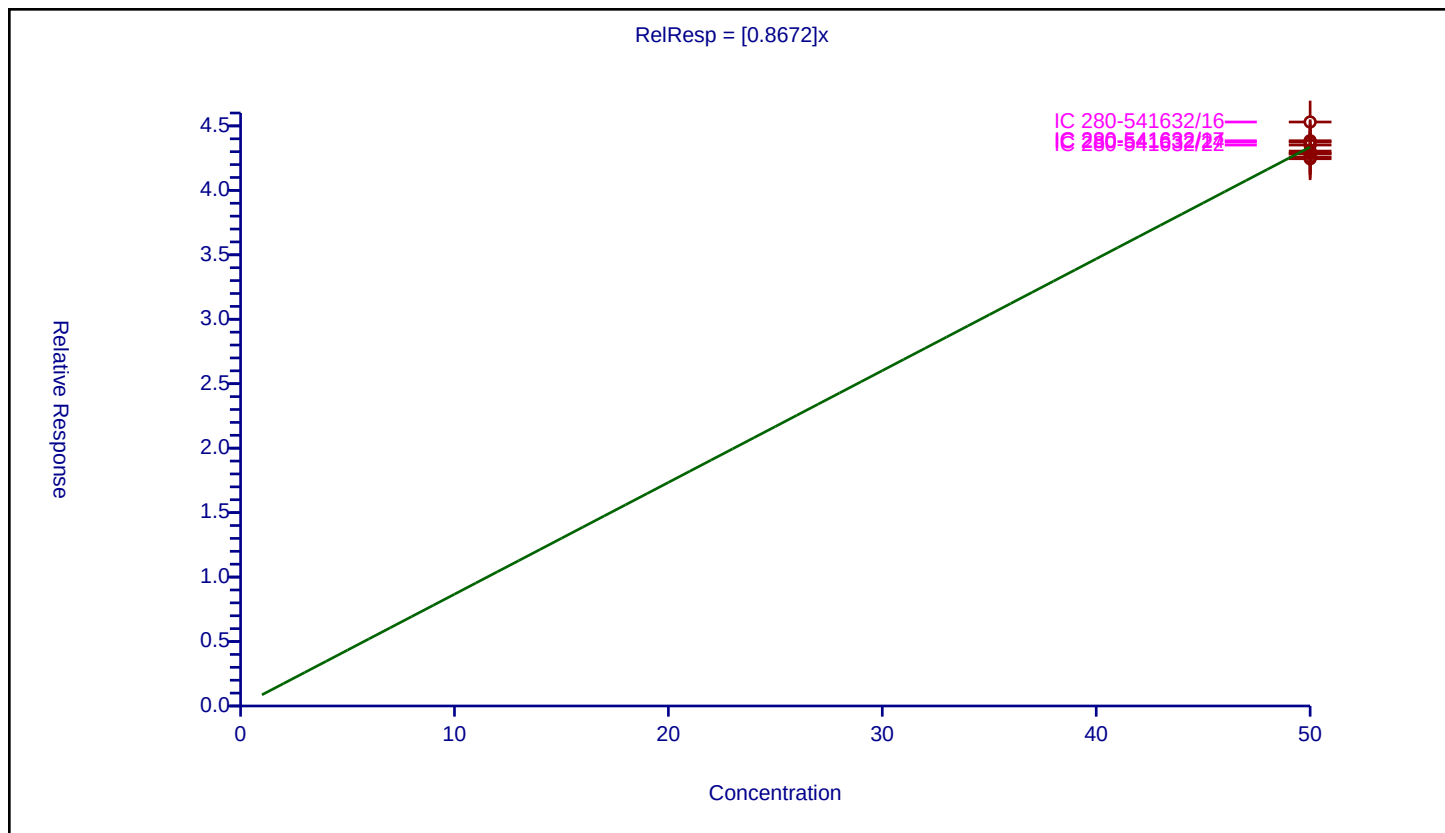
Curve Coefficients

Intercept: 0
Slope: 0.8672

Error Coefficients

Standard Error: 1400000
Relative Standard Error: 2.0
Correlation Coefficient: NA
Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/16	50.0	45.302964	50.0	1477421.0	0.906059	Y
2	IC 280-541632/17	50.0	43.851415	50.0	1533491.0	0.877028	Y
3	IC 280-541632/18	50.0	42.452861	50.0	1513037.0	0.849057	Y
4	ICIS 280-541632/19	50.0	43.048876	50.0	1524660.0	0.860978	Y
5	IC 280-541632/20	50.0	42.880761	50.0	1533949.0	0.857615	Y
6	IC 280-541632/21	50.0	42.843156	50.0	1525442.0	0.856863	Y
7	IC 280-541632/22	50.0	43.512905	50.0	1511131.0	0.870258	Y
8	IC 280-541632/23	50.0	42.593387	50.0	1516064.0	0.851868	Y
9	IC 280-541632/24	50.0	43.745909	50.0	1526057.0	0.874918	Y



Calibration

/ 1,1,2,2-Tetrachloroethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

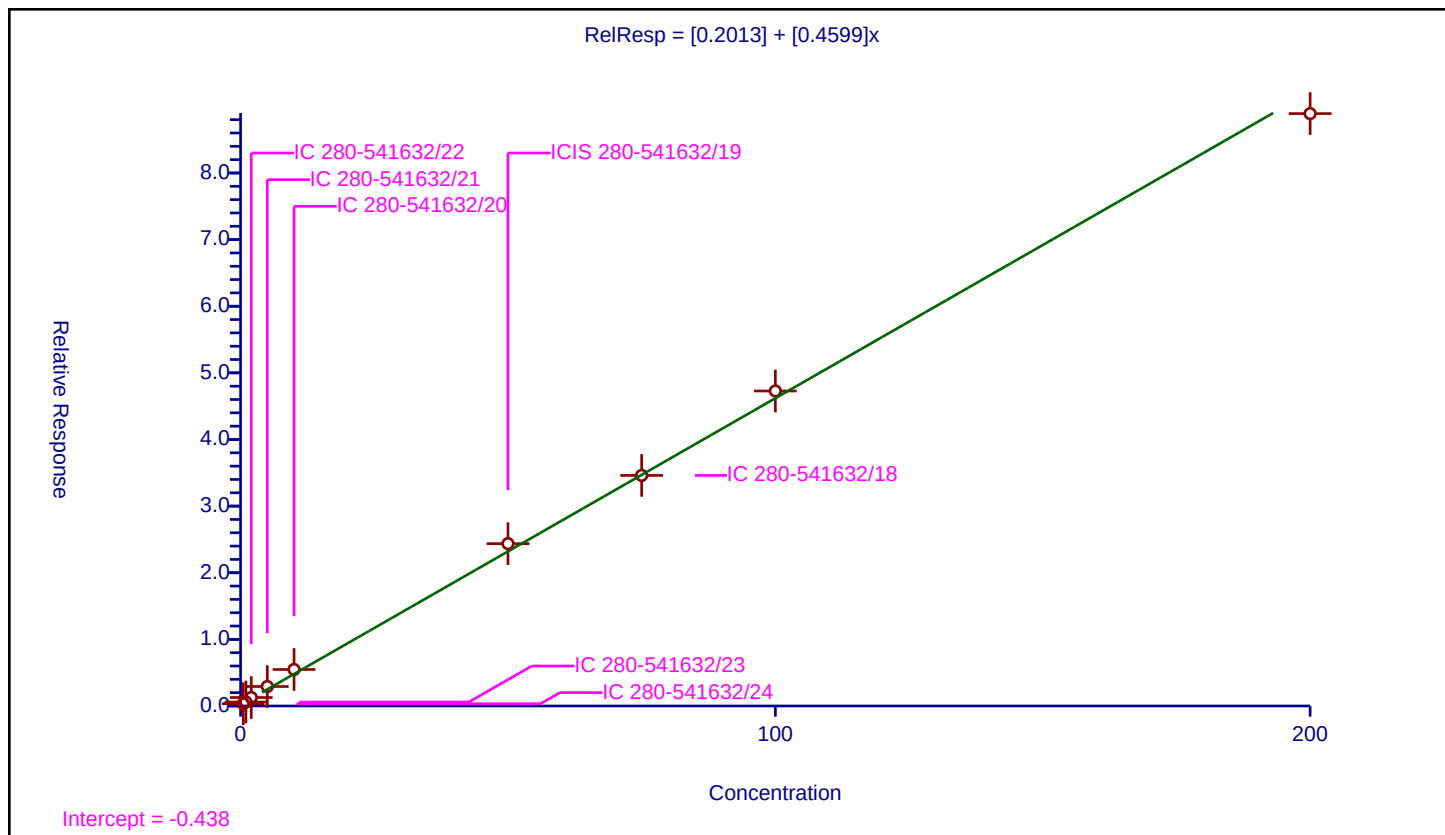
Curve Coefficients

Intercept: 0.2013
 Slope: 0.4599

Error Coefficients

Standard Error: 1240000
 Relative Standard Error: 19.2
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.341435	50.0	1526057.0	0.682871	Y
2	IC 280-541632/23	1.0	0.596446	50.0	1516064.0	0.596446	Y
3	IC 280-541632/22	2.0	1.271531	50.0	1511131.0	0.635766	Y
4	IC 280-541632/21	5.0	2.924497	50.0	1525442.0	0.584899	Y
5	IC 280-541632/20	10.0	5.476225	50.0	1533949.0	0.547623	Y
6	ICIS 280-541632/19	50.0	24.364809	50.0	1524660.0	0.487296	Y
7	IC 280-541632/18	75.0	34.607052	50.0	1513037.0	0.461427	Y
8	IC 280-541632/17	100.0	47.277486	50.0	1533491.0	0.472775	Y
9	IC 280-541632/16	200.0	88.911285	50.0	1477421.0	0.444556	Y



Calibration

/ Bromobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

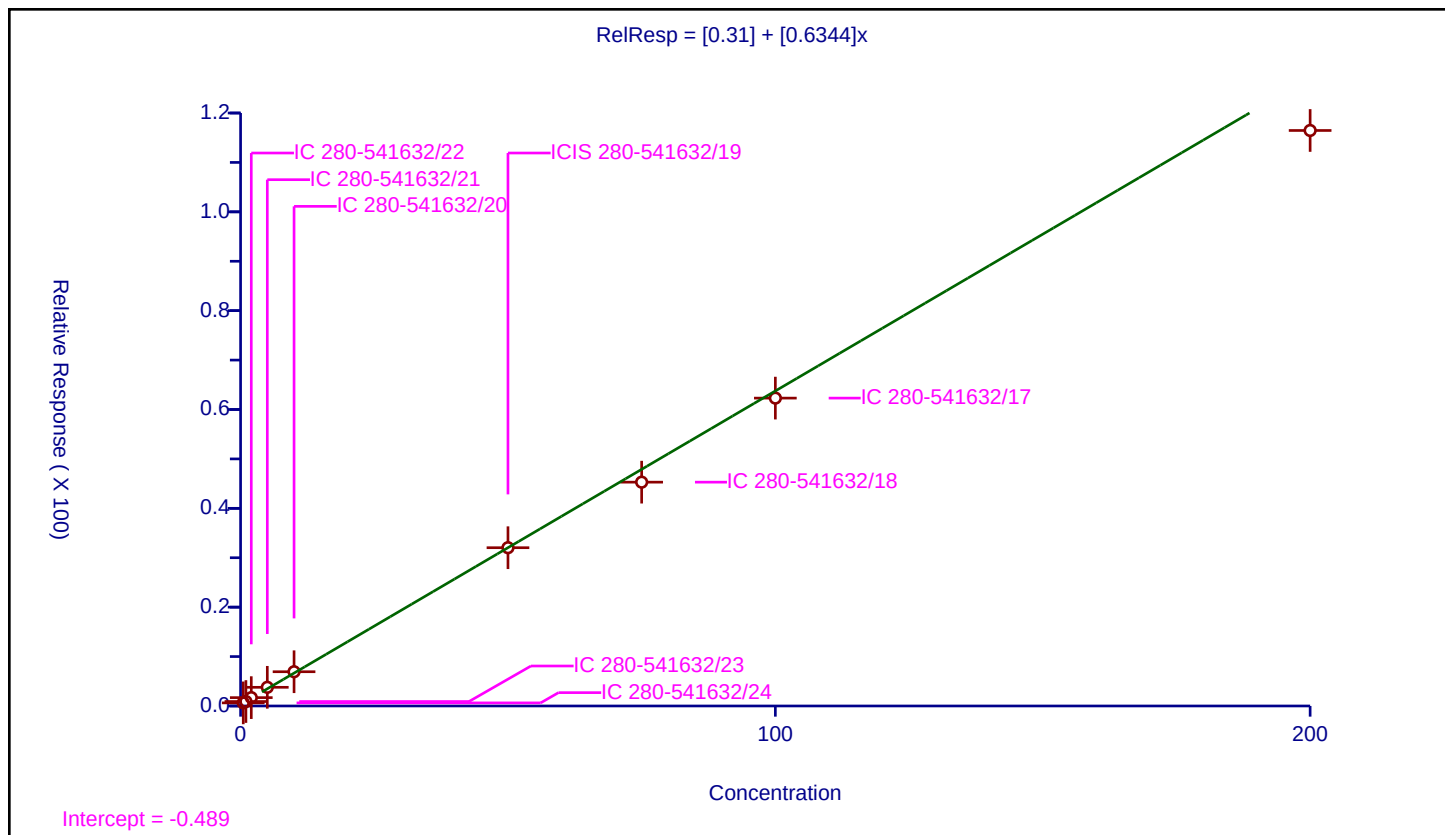
Curve Coefficients

Intercept: 0.31
 Slope: 0.6344

Error Coefficients

Standard Error: 1620000
 Relative Standard Error: 6.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.62691	50.0	1526057.0	1.253819	Y
2	IC 280-541632/23	1.0	0.90359	50.0	1516064.0	0.90359	Y
3	IC 280-541632/22	2.0	1.69211	50.0	1511131.0	0.846055	Y
4	IC 280-541632/21	5.0	3.780511	50.0	1525442.0	0.756102	Y
5	IC 280-541632/20	10.0	6.933477	50.0	1533949.0	0.693348	Y
6	ICIS 280-541632/19	50.0	32.031535	50.0	1524660.0	0.640631	Y
7	IC 280-541632/18	75.0	45.293737	50.0	1513037.0	0.603916	Y
8	IC 280-541632/17	100.0	62.306365	50.0	1533491.0	0.623064	Y
9	IC 280-541632/16	200.0	116.467581	50.0	1477421.0	0.582338	Y



Calibration

/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

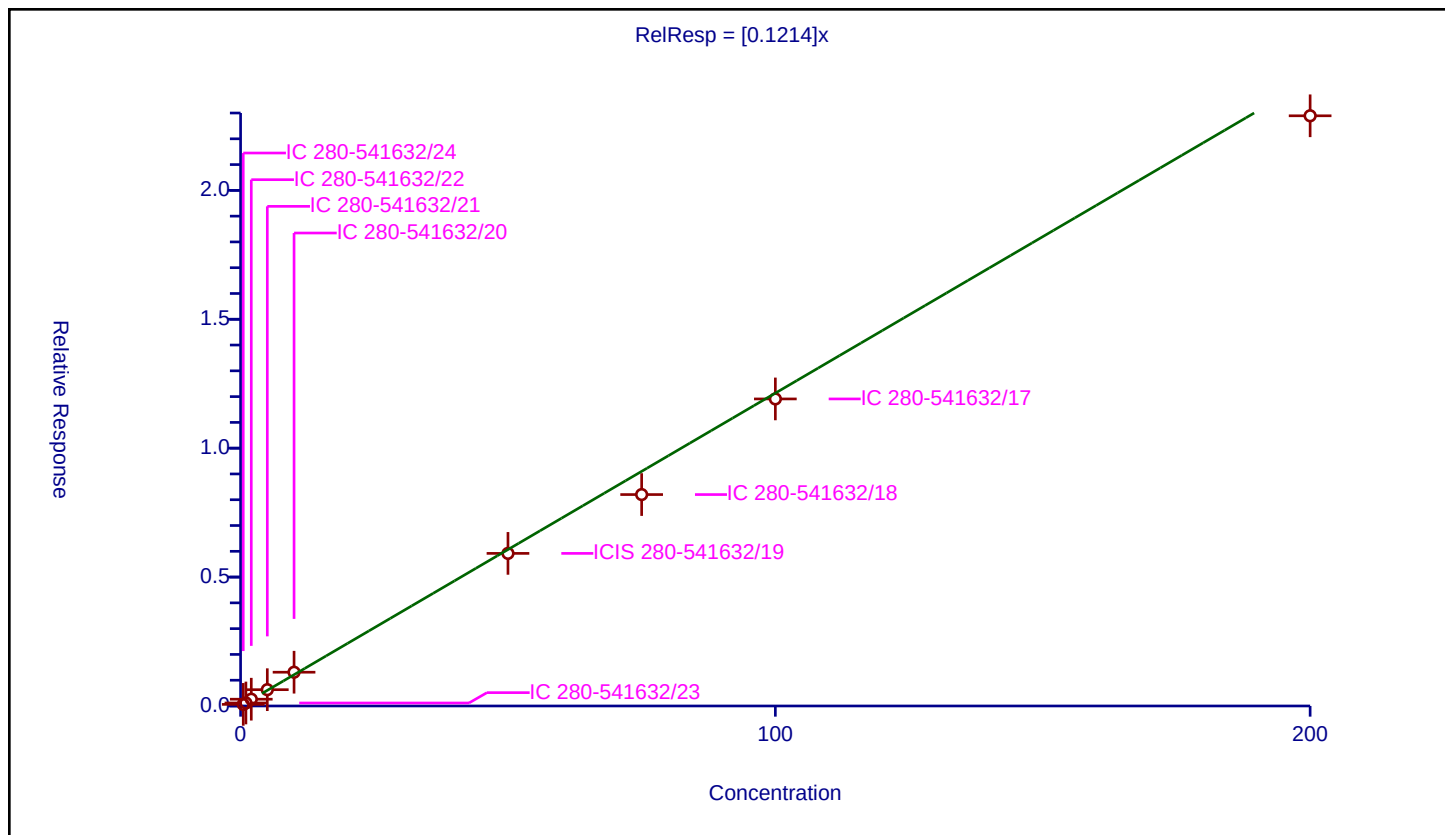
Curve Coefficients

Intercept: 0
 Slope: 0.1214

Error Coefficients

Standard Error: 293000
 Relative Standard Error: 6.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.062481	50.0	1526057.0	0.124963	Y
2	IC 280-541632/23	1.0	0.116717	50.0	1516064.0	0.116717	Y
3	IC 280-541632/22	2.0	0.263478	50.0	1511131.0	0.131739	Y
4	IC 280-541632/21	5.0	0.632472	50.0	1525442.0	0.126494	Y
5	IC 280-541632/20	10.0	1.309724	50.0	1533949.0	0.130972	Y
6	ICIS 280-541632/19	50.0	5.919418	50.0	1524660.0	0.118388	Y
7	IC 280-541632/18	75.0	8.200229	50.0	1513037.0	0.109336	Y
8	IC 280-541632/17	100.0	11.909721	50.0	1533491.0	0.119097	Y
9	IC 280-541632/16	200.0	22.892628	50.0	1477421.0	0.114463	Y



Calibration

/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

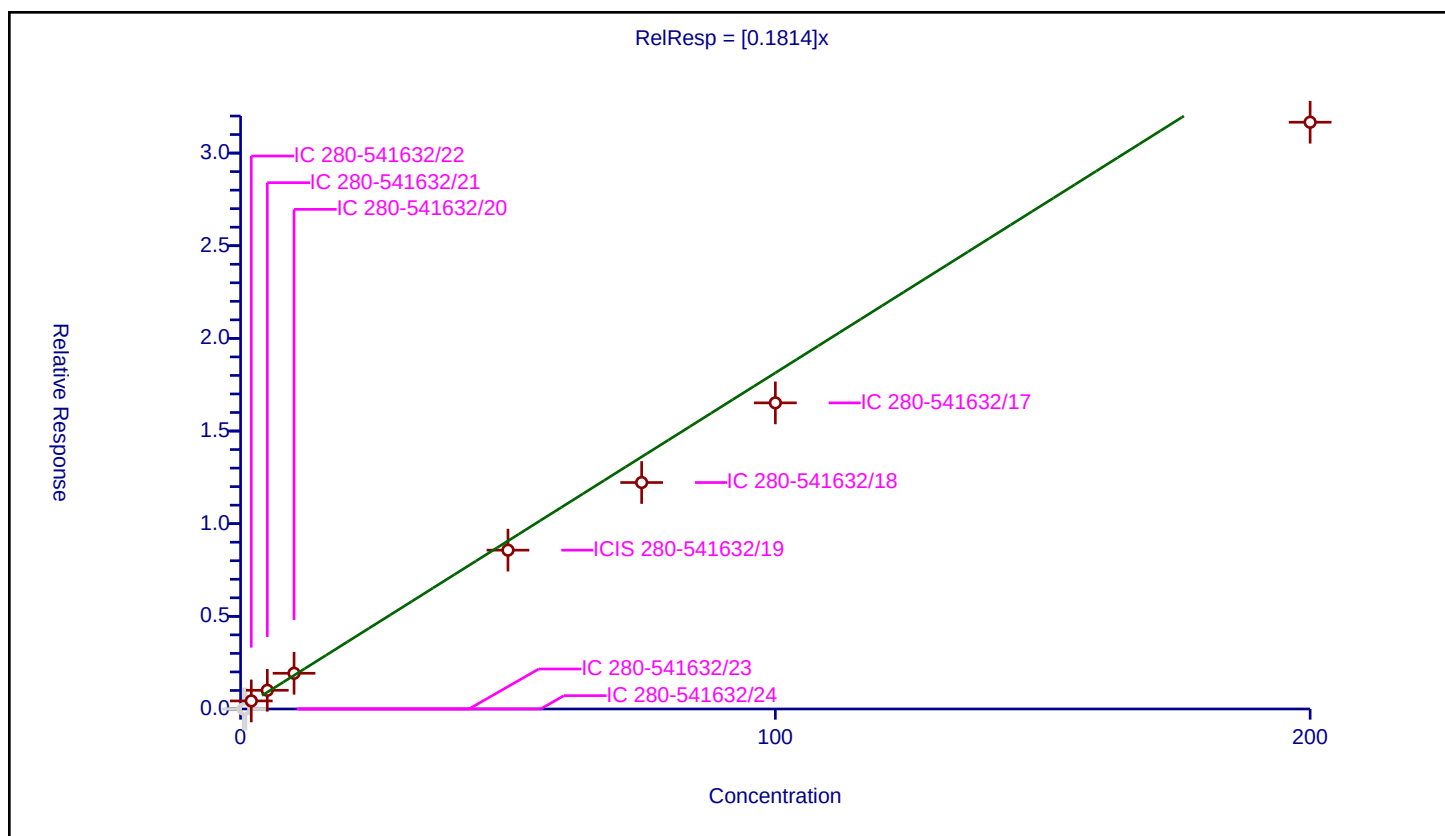
Curve Coefficients

Intercept: 0
 Slope: 0.1814

Error Coefficients

Standard Error: 473000
 Relative Standard Error: 12.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.0	50.0	1526057.0	0.0	N
2	IC 280-541632/23	1.0	0.0	50.0	1516064.0	0.0	N
3	IC 280-541632/22	2.0	0.434641	50.0	1511131.0	0.217321	Y
4	IC 280-541632/21	5.0	1.008921	50.0	1525442.0	0.201784	Y
5	IC 280-541632/20	10.0	1.928226	50.0	1533949.0	0.192823	Y
6	ICIS 280-541632/19	50.0	8.571911	50.0	1524660.0	0.171438	Y
7	IC 280-541632/18	75.0	12.22138	50.0	1513037.0	0.162952	Y
8	IC 280-541632/17	100.0	16.520149	50.0	1533491.0	0.165201	Y
9	IC 280-541632/16	200.0	31.664366	50.0	1477421.0	0.158322	Y



Calibration

/ N-Propylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

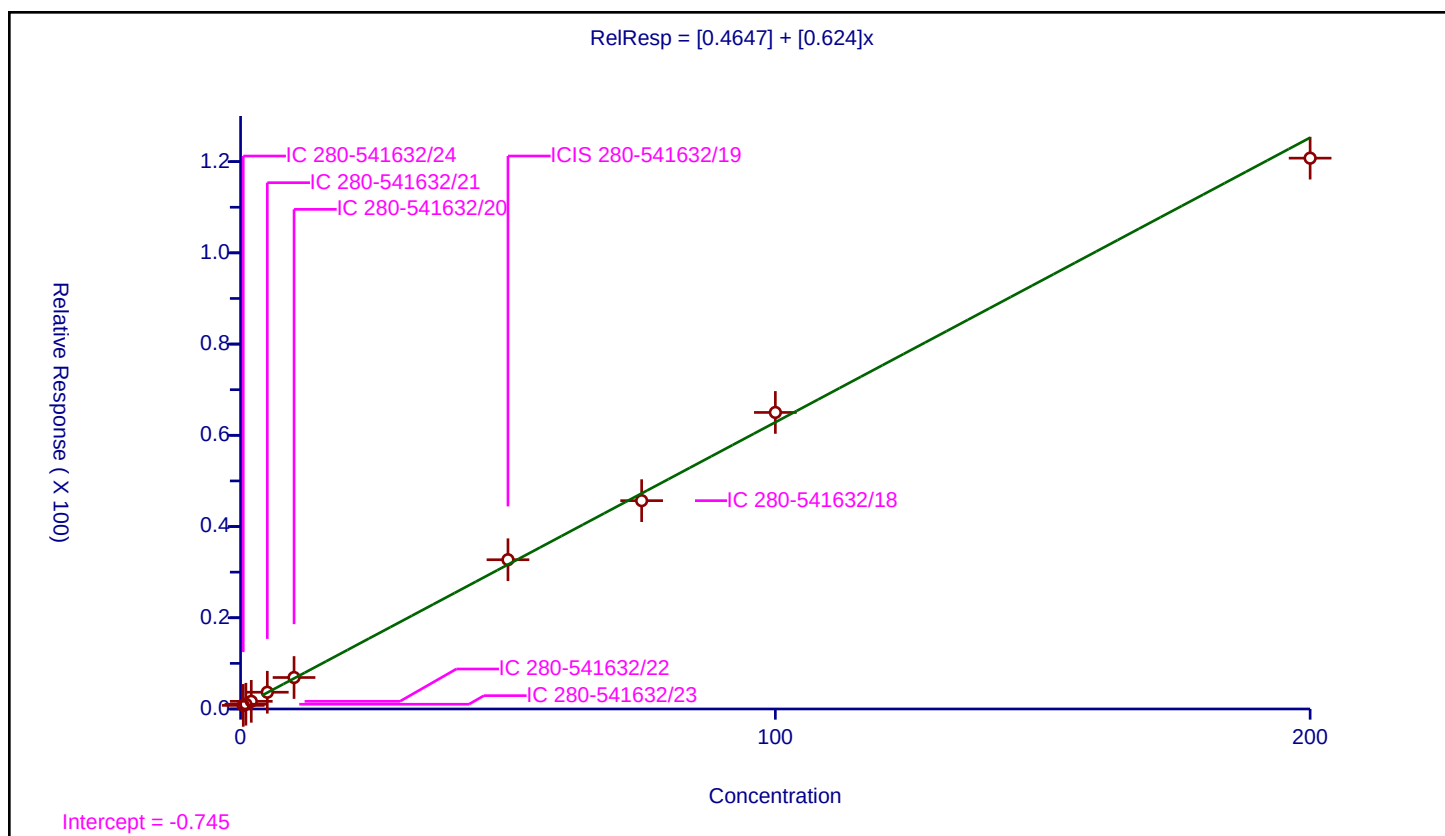
Curve Coefficients

Intercept: 0.4647
 Slope: 0.624

Error Coefficients

Standard Error: 1680000
 Relative Standard Error: 4.5
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.788798	50.0	1526057.0	1.577595	Y
2	IC 280-541632/23	1.0	1.041546	50.0	1516064.0	1.041546	Y
3	IC 280-541632/22	2.0	1.683507	50.0	1511131.0	0.841754	Y
4	IC 280-541632/21	5.0	3.676738	50.0	1525442.0	0.735348	Y
5	IC 280-541632/20	10.0	6.904043	50.0	1533949.0	0.690404	Y
6	ICIS 280-541632/19	50.0	32.726149	50.0	1524660.0	0.654523	Y
7	IC 280-541632/18	75.0	45.670826	50.0	1513037.0	0.608944	Y
8	IC 280-541632/17	100.0	65.013358	50.0	1533491.0	0.650134	Y
9	IC 280-541632/16	200.0	120.760399	50.0	1477421.0	0.603802	Y



Calibration

/ 2-Chlorotoluene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

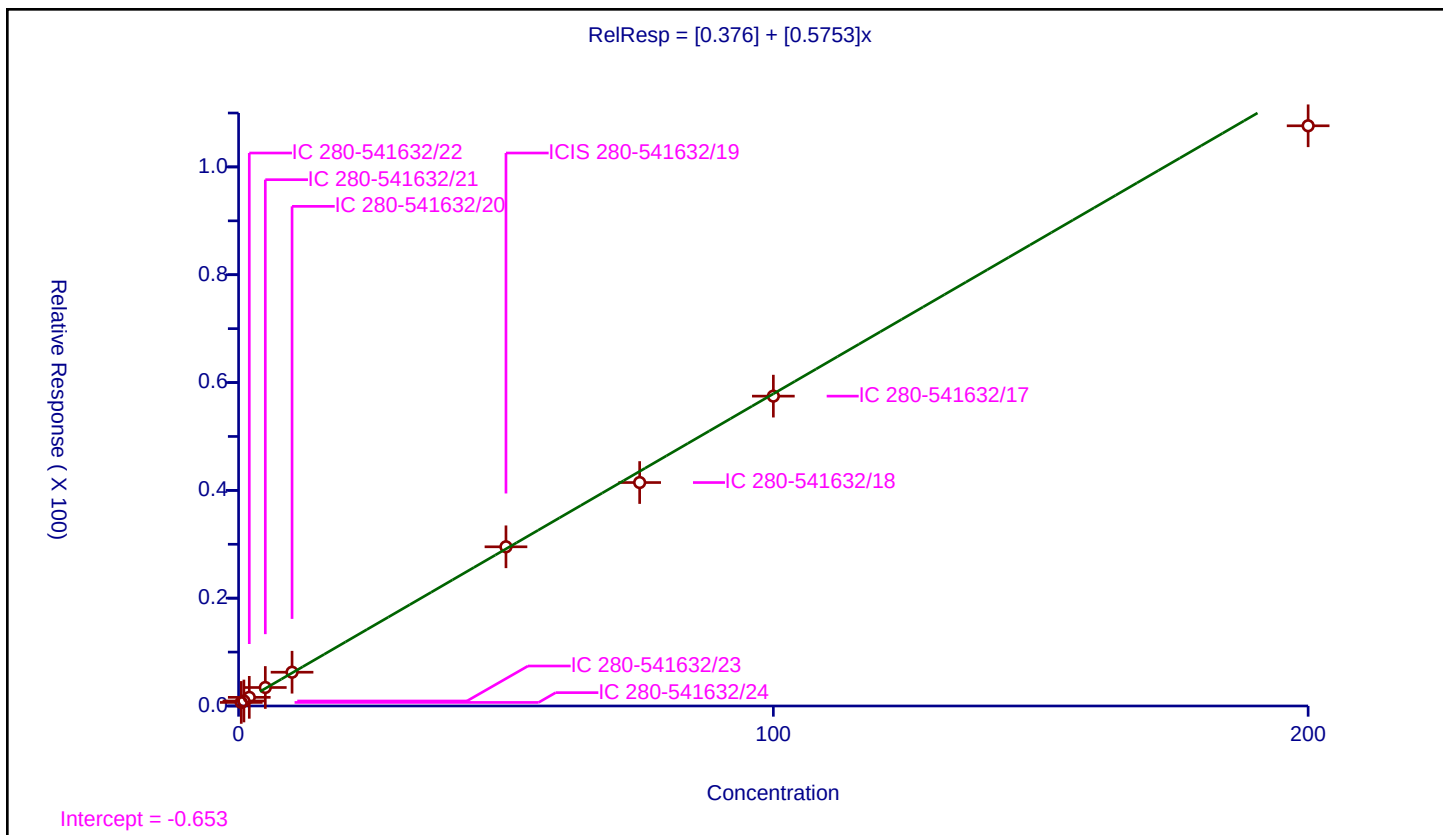
Curve Coefficients

Intercept: 0.376
 Slope: 0.5753

Error Coefficients

Standard Error: 1500000
 Relative Standard Error: 5.1
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.662721	50.0	1526057.0	1.325442	Y
2	IC 280-541632/23	1.0	0.926973	50.0	1516064.0	0.926973	Y
3	IC 280-541632/22	2.0	1.606479	50.0	1511131.0	0.803239	Y
4	IC 280-541632/21	5.0	3.43153	50.0	1525442.0	0.686306	Y
5	IC 280-541632/20	10.0	6.26644	50.0	1533949.0	0.626644	Y
6	ICIS 280-541632/19	50.0	29.530813	50.0	1524660.0	0.590616	Y
7	IC 280-541632/18	75.0	41.453282	50.0	1513037.0	0.55271	Y
8	IC 280-541632/17	100.0	57.480285	50.0	1533491.0	0.574803	Y
9	IC 280-541632/16	200.0	107.630696	50.0	1477421.0	0.538153	Y



Calibration

/ 1,3,5-Trimethylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

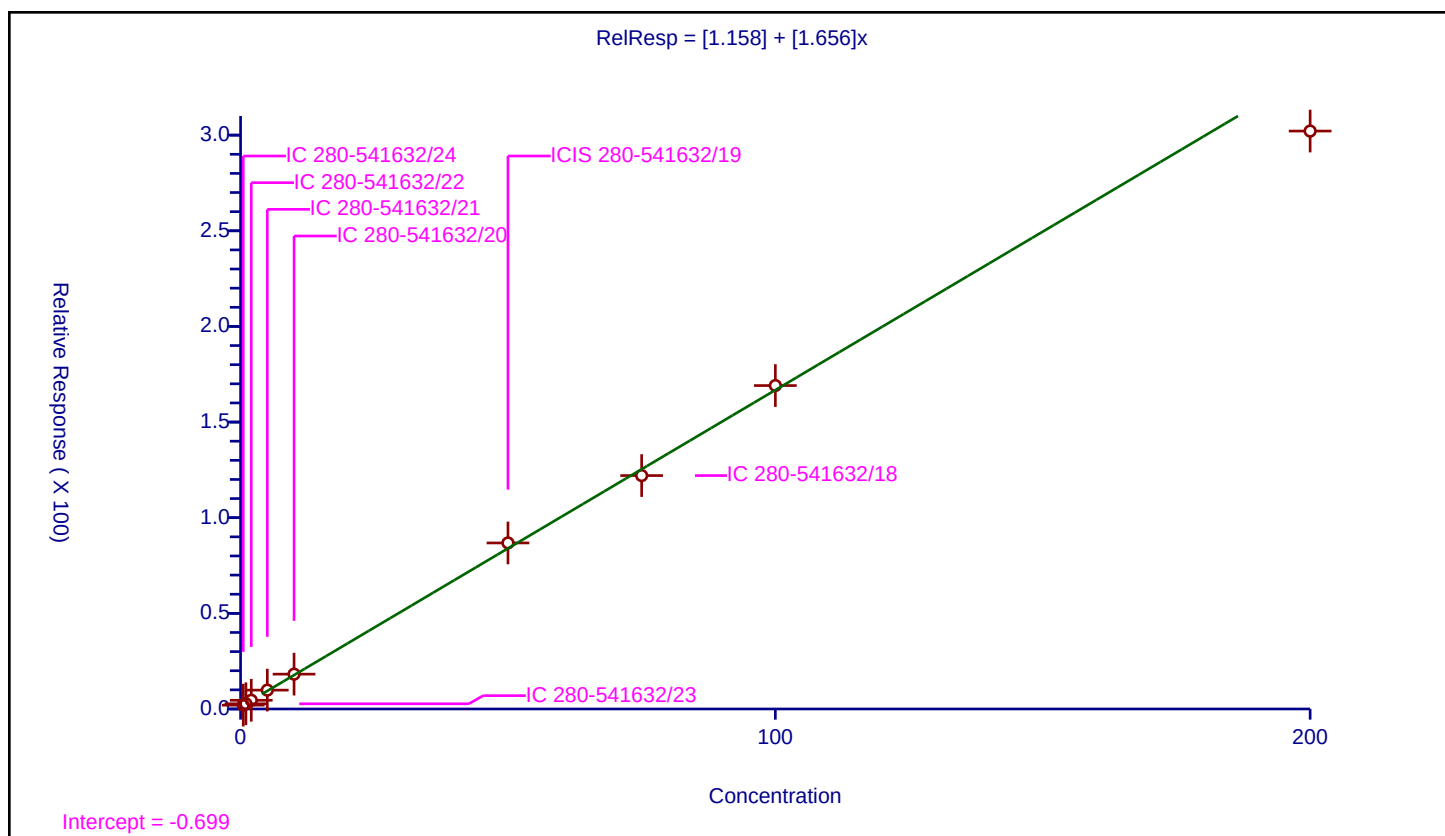
Curve Coefficients

Intercept: 1.158
 Slope: 1.656

Error Coefficients

Standard Error: 4270000
 Relative Standard Error: 4.9
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.995011	50.0	1526057.0	3.990021	Y
2	IC 280-541632/23	1.0	2.73191	50.0	1516064.0	2.73191	Y
3	IC 280-541632/22	2.0	4.556918	50.0	1511131.0	2.278459	Y
4	IC 280-541632/21	5.0	9.856586	50.0	1525442.0	1.971317	Y
5	IC 280-541632/20	10.0	18.215045	50.0	1533949.0	1.821504	Y
6	ICIS 280-541632/19	50.0	86.797975	50.0	1524660.0	1.735959	Y
7	IC 280-541632/18	75.0	122.028873	50.0	1513037.0	1.627052	Y
8	IC 280-541632/17	100.0	169.083777	50.0	1533491.0	1.690838	Y
9	IC 280-541632/16	200.0	302.141874	50.0	1477421.0	1.510709	Y



Calibration

/ 4-Chlorotoluene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

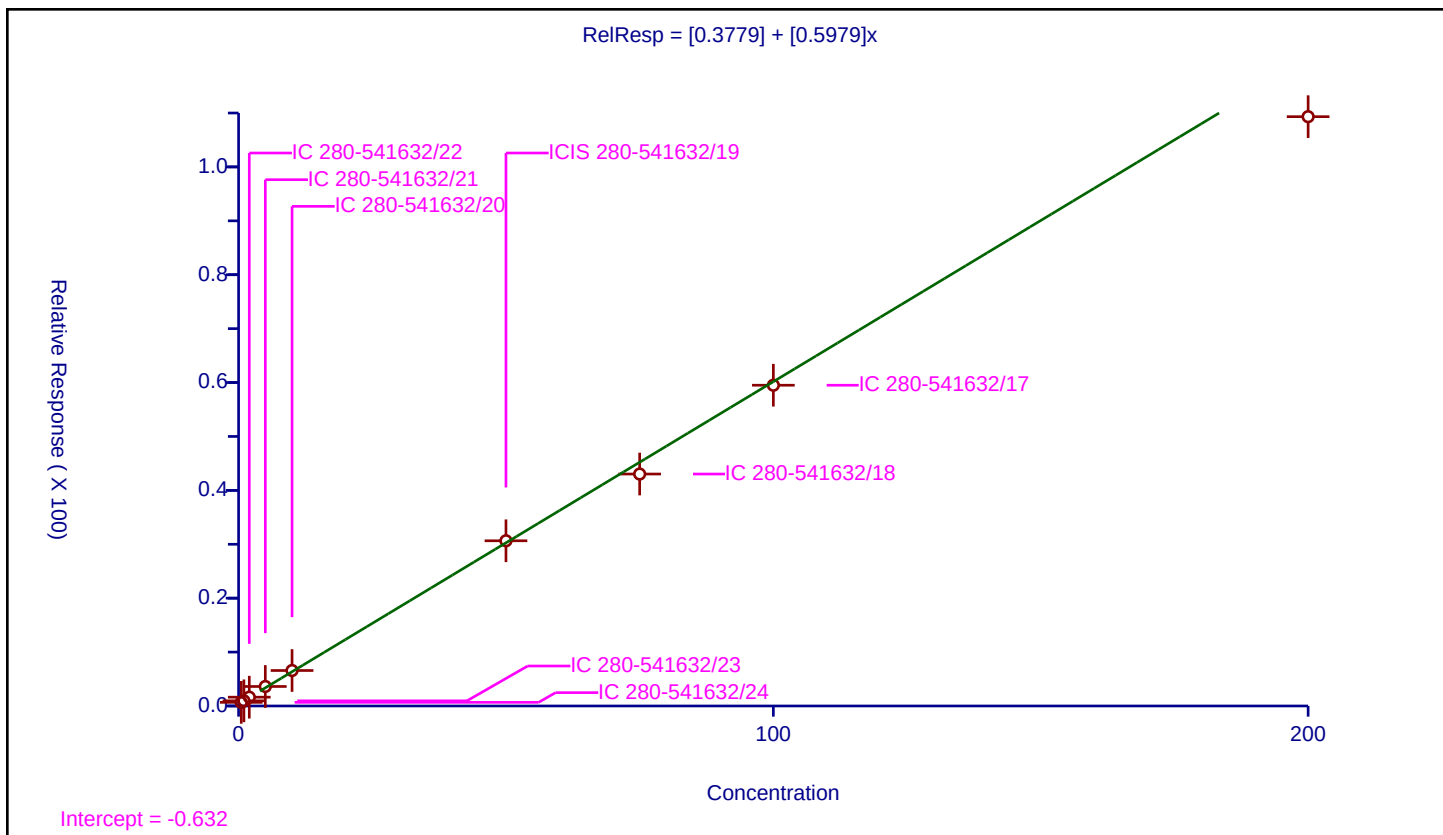
Curve Coefficients

Intercept: 0.3779
 Slope: 0.5979

Error Coefficients

Standard Error: 1530000
 Relative Standard Error: 5.7
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.674549	50.0	1526057.0	1.349098	Y
2	IC 280-541632/23	1.0	0.95771	50.0	1516064.0	0.95771	Y
3	IC 280-541632/22	2.0	1.635464	50.0	1511131.0	0.817732	Y
4	IC 280-541632/21	5.0	3.619181	50.0	1525442.0	0.723836	Y
5	IC 280-541632/20	10.0	6.583922	50.0	1533949.0	0.658392	Y
6	ICIS 280-541632/19	50.0	30.647193	50.0	1524660.0	0.612944	Y
7	IC 280-541632/18	75.0	43.02869	50.0	1513037.0	0.573716	Y
8	IC 280-541632/17	100.0	59.501458	50.0	1533491.0	0.595015	Y
9	IC 280-541632/16	200.0	109.323307	50.0	1477421.0	0.546617	Y



Calibration

/ tert-Butylbenzene

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

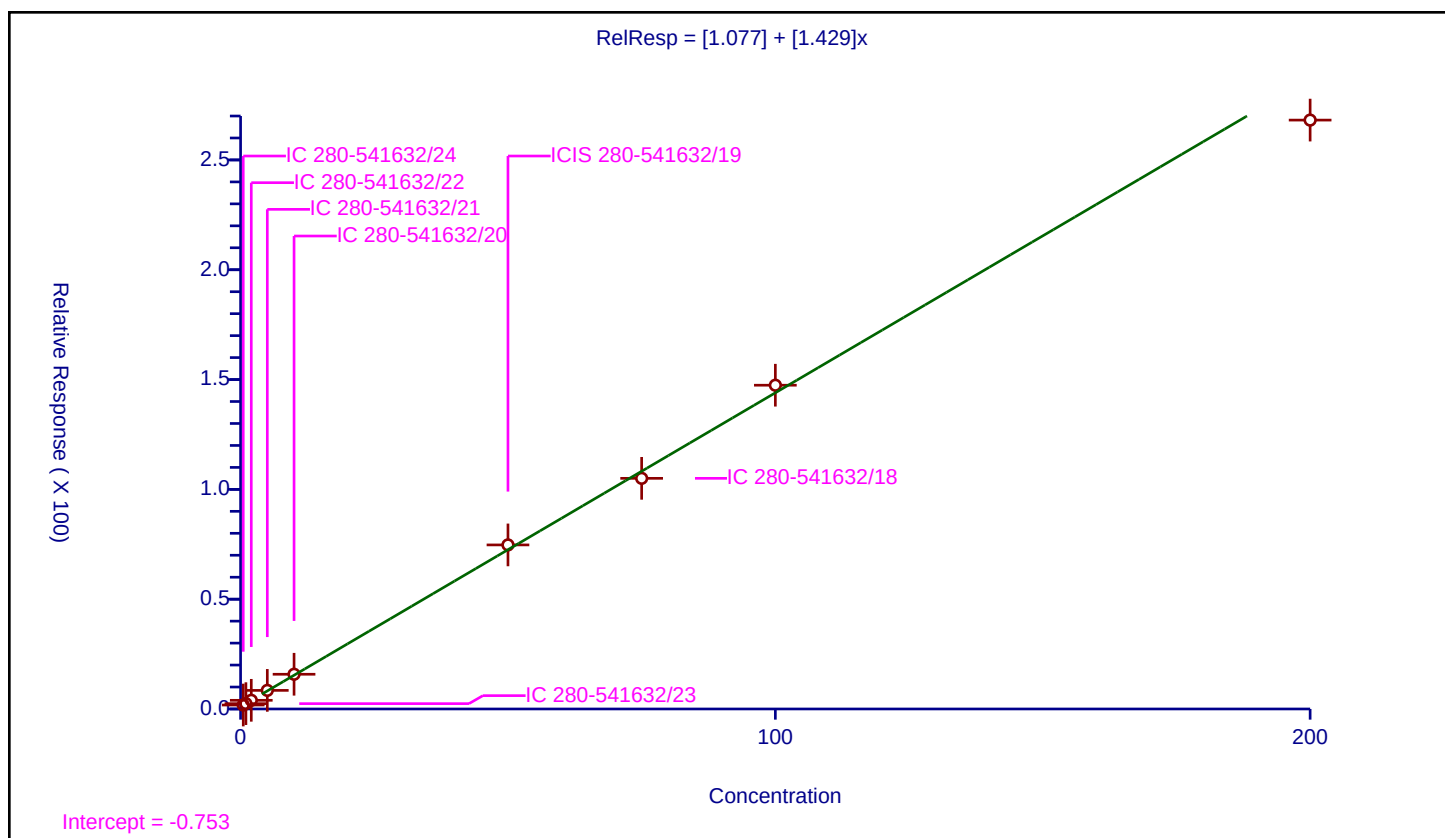
Curve Coefficients

Intercept: 1.077
Slope: 1.429

Error Coefficients

Standard Error: 3760000
Relative Standard Error: 4.2
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.804684	50.0	1526057.0	3.609367	Y
2	IC 280-541632/23	1.0	2.430537	50.0	1516064.0	2.430537	Y
3	IC 280-541632/22	2.0	3.95611	50.0	1511131.0	1.978055	Y
4	IC 280-541632/21	5.0	8.473315	50.0	1525442.0	1.694663	Y
5	IC 280-541632/20	10.0	15.813401	50.0	1533949.0	1.58134	Y
6	ICIS 280-541632/19	50.0	74.709542	50.0	1524660.0	1.494191	Y
7	IC 280-541632/18	75.0	105.023374	50.0	1513037.0	1.400312	Y
8	IC 280-541632/17	100.0	147.419776	50.0	1533491.0	1.474198	Y
9	IC 280-541632/16	200.0	268.145708	50.0	1477421.0	1.340729	Y



Calibration

/ 1,2,4-Trimethylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

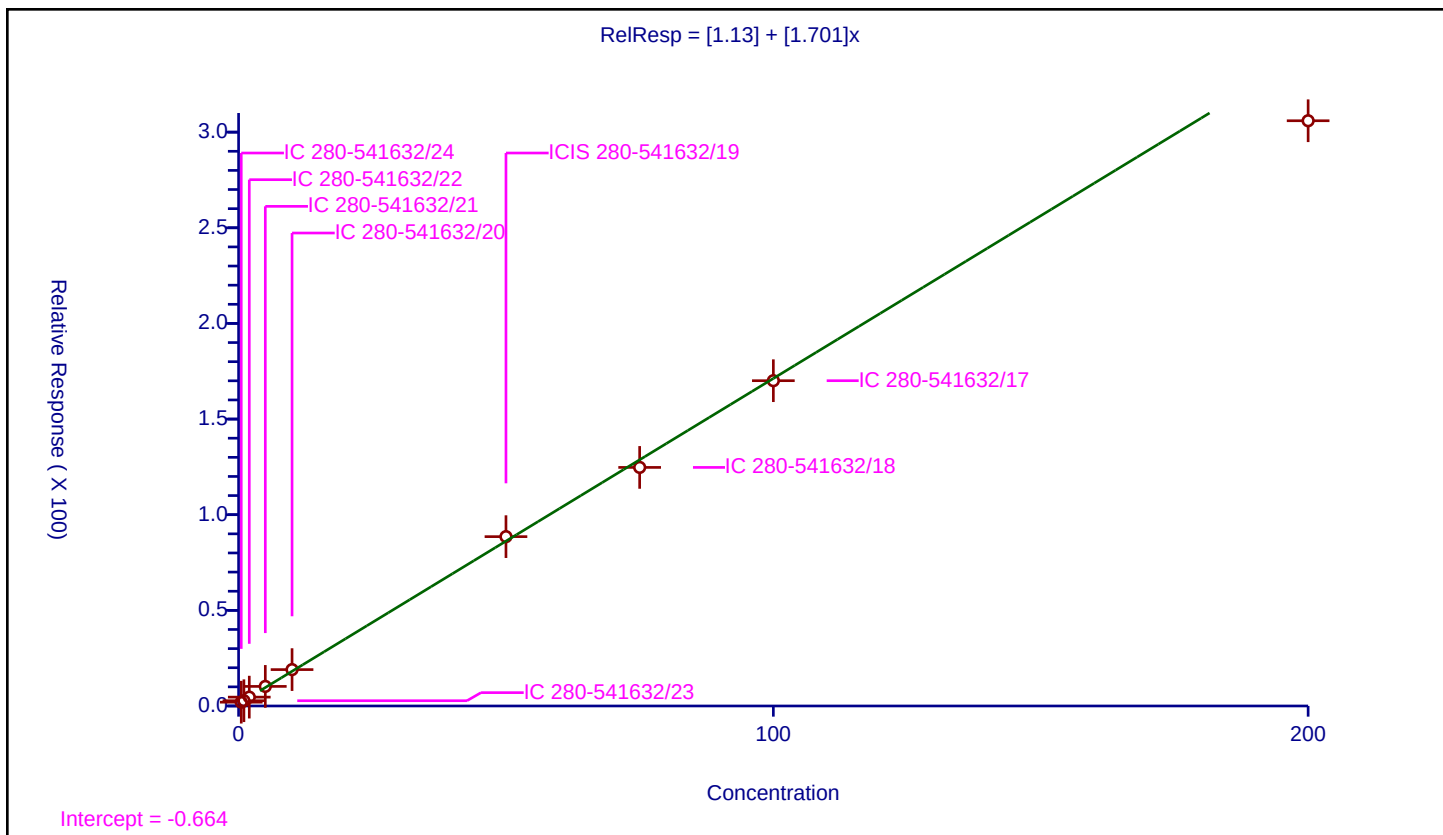
Curve Coefficients

Intercept: 1.13
 Slope: 1.701

Error Coefficients

Standard Error: 4320000
 Relative Standard Error: 5.7
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.983871	50.0	1526057.0	3.967742	Y
2	IC 280-541632/23	1.0	2.758822	50.0	1516064.0	2.758822	Y
3	IC 280-541632/22	2.0	4.630803	50.0	1511131.0	2.315402	Y
4	IC 280-541632/21	5.0	10.2449	50.0	1525442.0	2.04898	Y
5	IC 280-541632/20	10.0	19.019439	50.0	1533949.0	1.901944	Y
6	ICIS 280-541632/19	50.0	88.530656	50.0	1524660.0	1.770613	Y
7	IC 280-541632/18	75.0	124.728146	50.0	1513037.0	1.663042	Y
8	IC 280-541632/17	100.0	170.058253	50.0	1533491.0	1.700583	Y
9	IC 280-541632/16	200.0	305.956867	50.0	1477421.0	1.529784	Y



Calibration

/ sec-Butylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

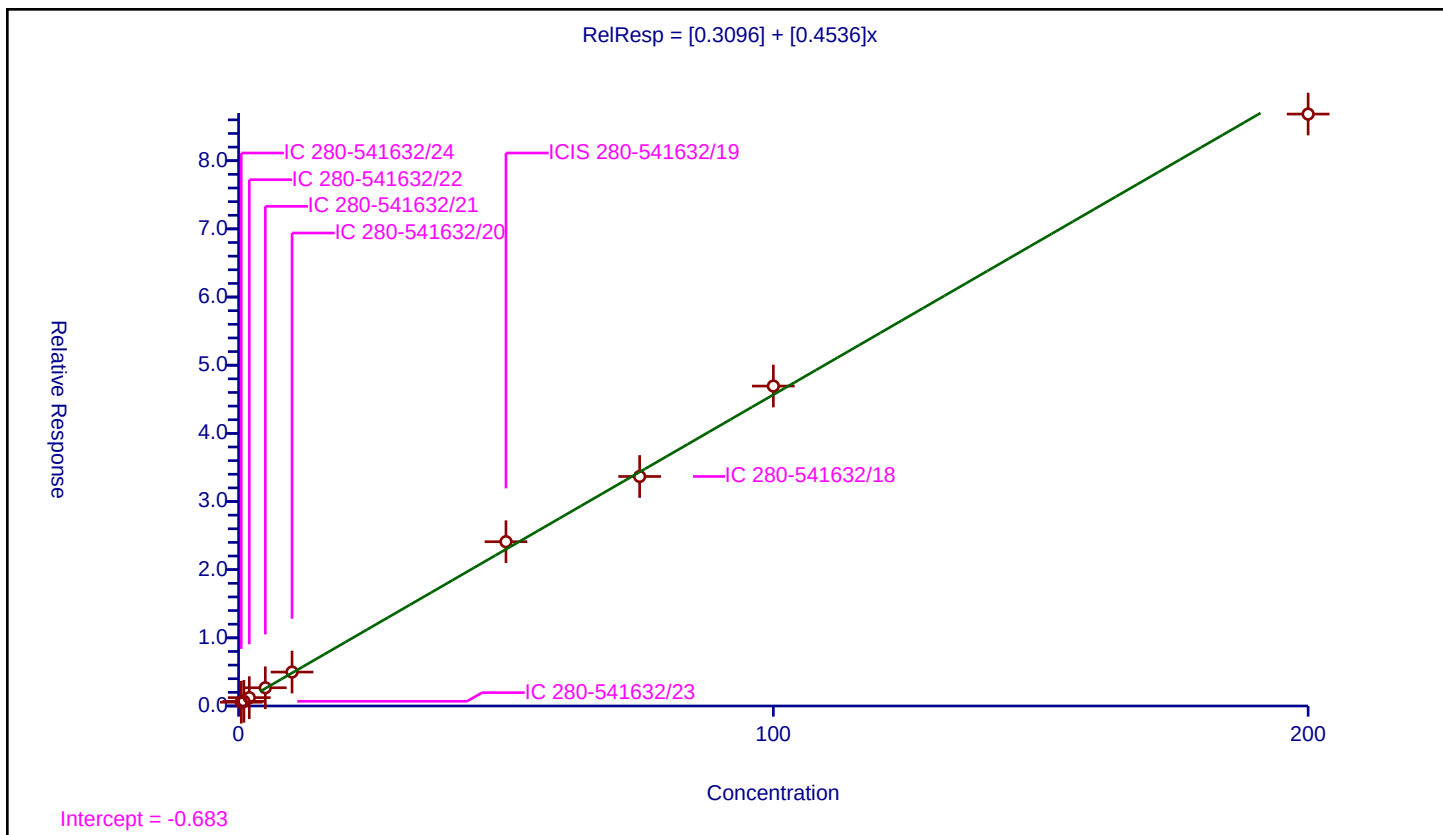
Curve Coefficients

Intercept: 0.3096
 Slope: 0.4536

Error Coefficients

Standard Error: 1210000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.553616	50.0	1526057.0	1.107233	Y
2	IC 280-541632/23	1.0	0.687042	50.0	1516064.0	0.687042	Y
3	IC 280-541632/22	2.0	1.224712	50.0	1511131.0	0.612356	Y
4	IC 280-541632/21	5.0	2.673356	50.0	1525442.0	0.534671	Y
5	IC 280-541632/20	10.0	4.980544	50.0	1533949.0	0.498054	Y
6	ICIS 280-541632/19	50.0	24.104358	50.0	1524660.0	0.482087	Y
7	IC 280-541632/18	75.0	33.67221	50.0	1513037.0	0.448963	Y
8	IC 280-541632/17	100.0	46.941097	50.0	1533491.0	0.469411	Y
9	IC 280-541632/16	200.0	86.845422	50.0	1477421.0	0.434227	Y



Calibration

/ 1,3-Dichlorobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

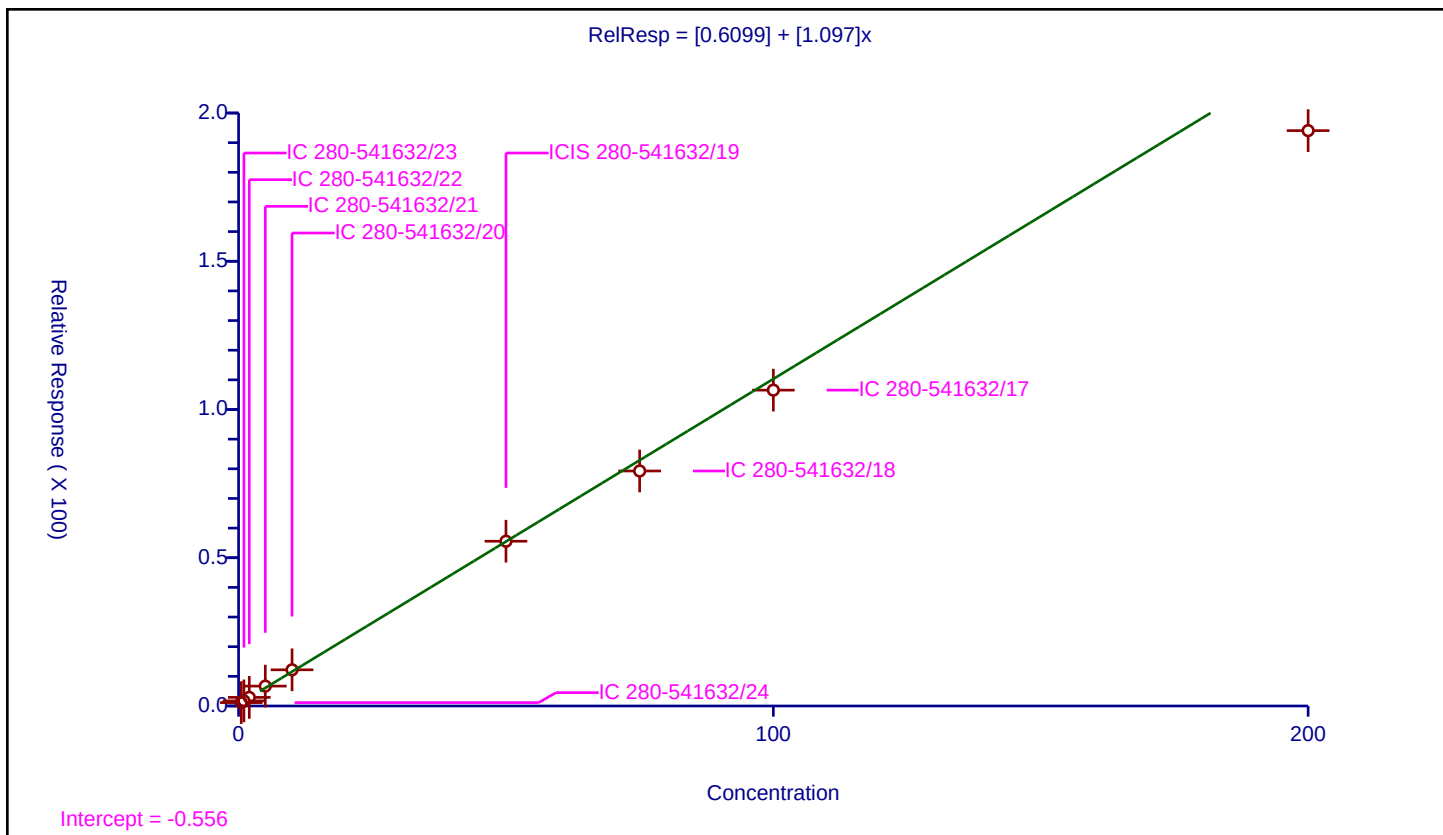
Curve Coefficients

Intercept: 0.6099
 Slope: 1.097

Error Coefficients

Standard Error: 2740000
 Relative Standard Error: 7.2
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.1417	50.0	1526057.0	2.283401	Y
2	IC 280-541632/23	1.0	1.720046	50.0	1516064.0	1.720046	Y
3	IC 280-541632/22	2.0	2.902826	50.0	1511131.0	1.451413	Y
4	IC 280-541632/21	5.0	6.706024	50.0	1525442.0	1.341205	Y
5	IC 280-541632/20	10.0	12.201318	50.0	1533949.0	1.220132	Y
6	ICIS 280-541632/19	50.0	55.568881	50.0	1524660.0	1.111378	Y
7	IC 280-541632/18	75.0	79.264486	50.0	1513037.0	1.05686	Y
8	IC 280-541632/17	100.0	106.535741	50.0	1533491.0	1.065357	Y
9	IC 280-541632/16	200.0	194.063507	50.0	1477421.0	0.970318	Y



Calibration

/ 4-Isopropyltoluene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

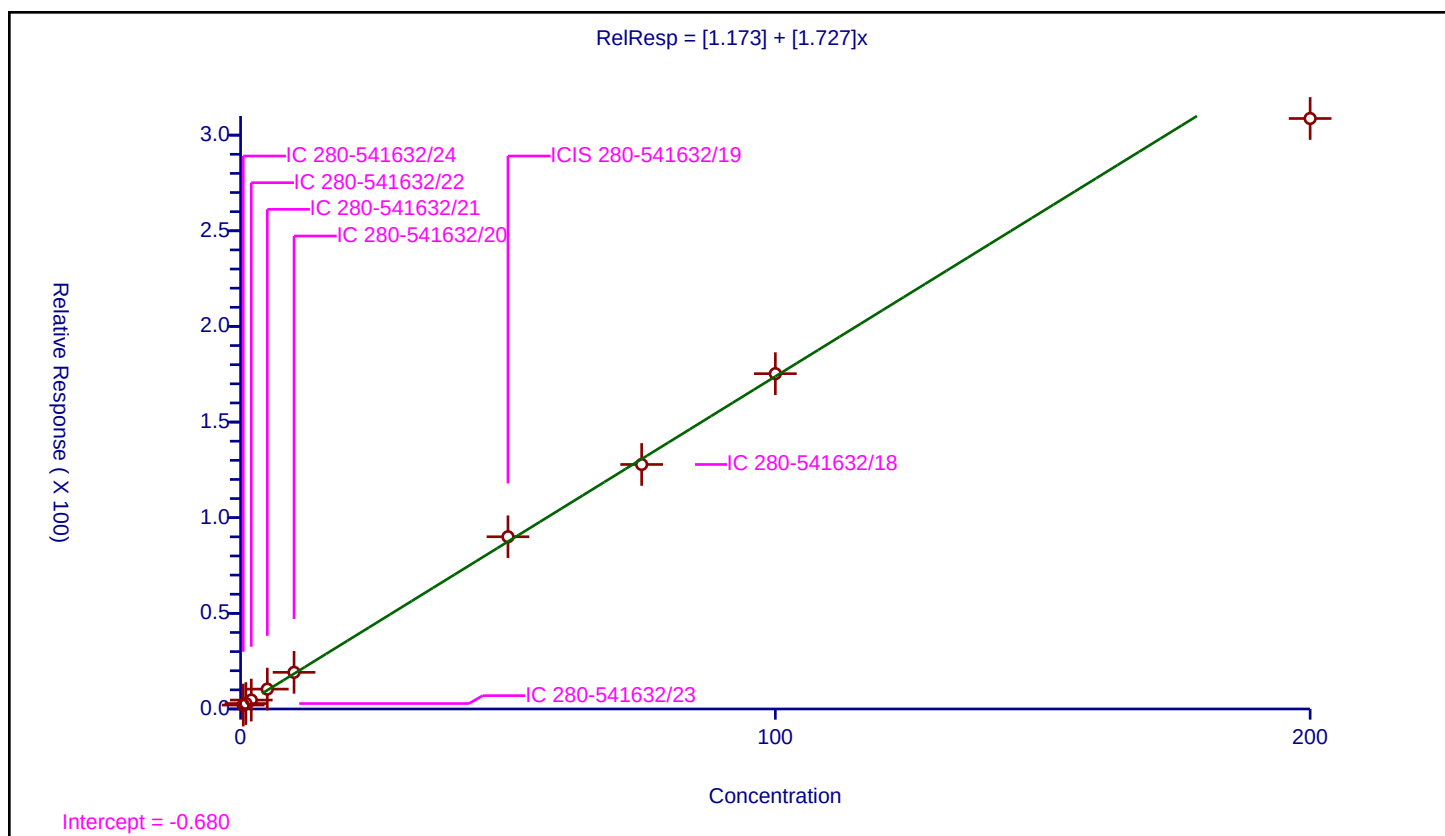
Curve Coefficients

Intercept: 1.173
 Slope: 1.727

Error Coefficients

Standard Error: 4390000
 Relative Standard Error: 5.4
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	2.038849	50.0	1526057.0	4.077698	Y
2	IC 280-541632/23	1.0	2.854233	50.0	1516064.0	2.854233	Y
3	IC 280-541632/22	2.0	4.658365	50.0	1511131.0	2.329183	Y
4	IC 280-541632/21	5.0	10.391021	50.0	1525442.0	2.078204	Y
5	IC 280-541632/20	10.0	19.161621	50.0	1533949.0	1.916162	Y
6	ICIS 280-541632/19	50.0	90.037484	50.0	1524660.0	1.80075	Y
7	IC 280-541632/18	75.0	127.826319	50.0	1513037.0	1.704351	Y
8	IC 280-541632/17	100.0	175.305691	50.0	1533491.0	1.753057	Y
9	IC 280-541632/16	200.0	308.701108	50.0	1477421.0	1.543506	Y



Calibration

/ 1,4-Dichlorobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

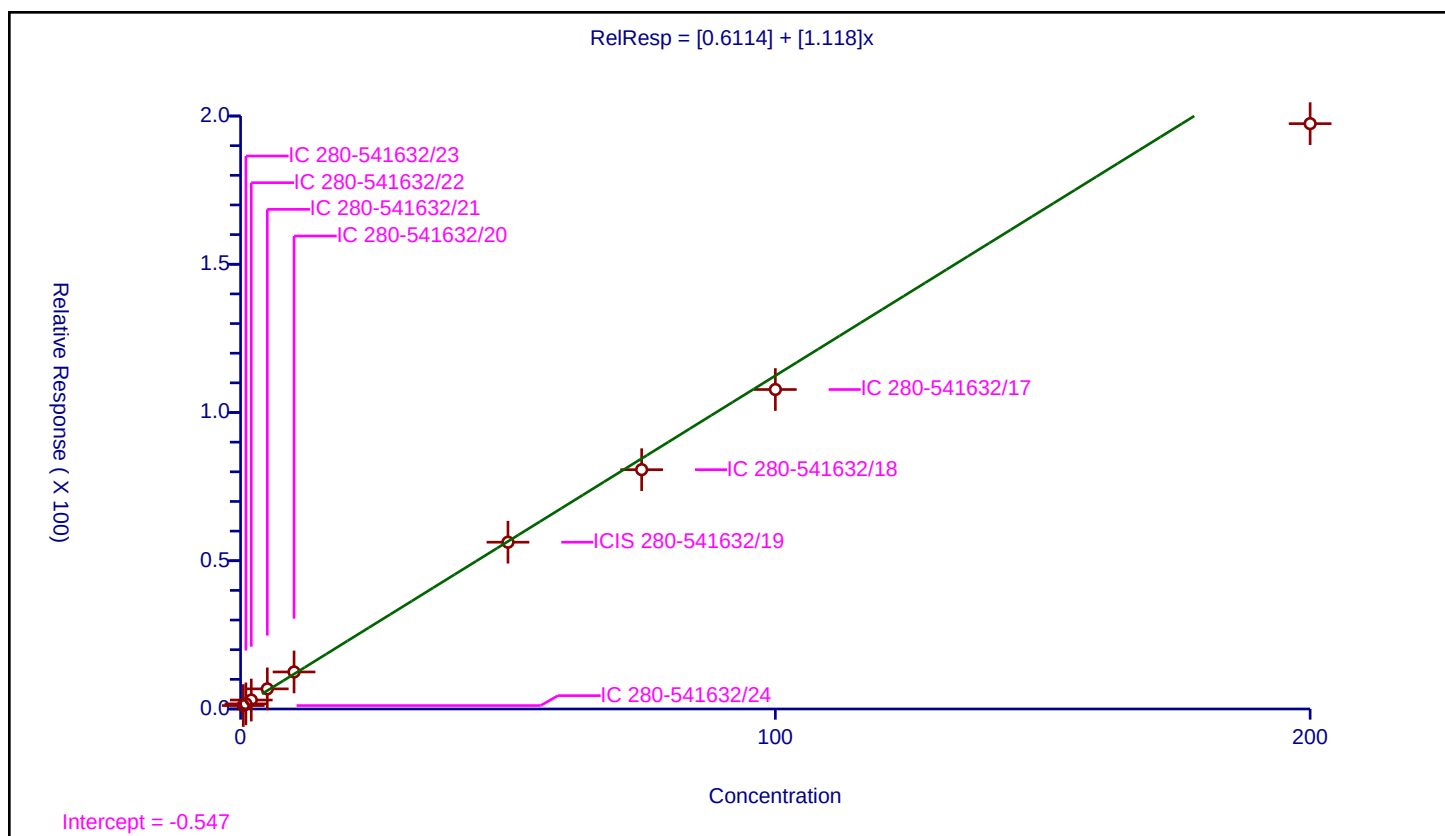
Curve Coefficients

Intercept: 0.6114
 Slope: 1.118

Error Coefficients

Standard Error: 2780000
 Relative Standard Error: 7.5
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.152349	50.0	1526057.0	2.304698	Y
2	IC 280-541632/23	1.0	1.731391	50.0	1516064.0	1.731391	Y
3	IC 280-541632/22	2.0	3.016549	50.0	1511131.0	1.508274	Y
4	IC 280-541632/21	5.0	6.781838	50.0	1525442.0	1.356368	Y
5	IC 280-541632/20	10.0	12.489235	50.0	1533949.0	1.248924	Y
6	ICIS 280-541632/19	50.0	56.255493	50.0	1524660.0	1.12511	Y
7	IC 280-541632/18	75.0	80.719209	50.0	1513037.0	1.076256	Y
8	IC 280-541632/17	100.0	107.754007	50.0	1533491.0	1.07754	Y
9	IC 280-541632/16	200.0	197.425175	50.0	1477421.0	0.987126	Y



Calibration

/ n-Butylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

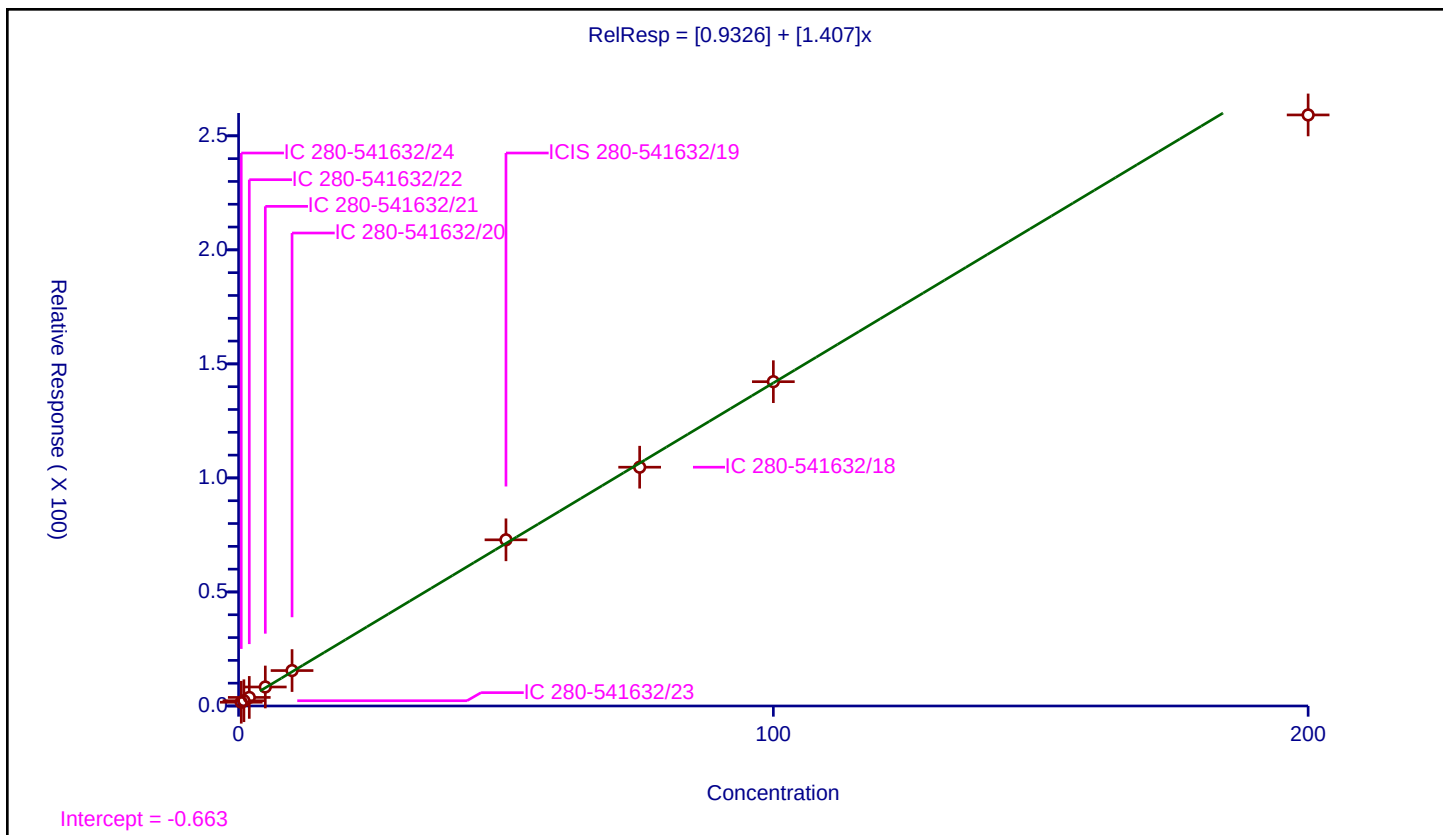
Curve Coefficients

Intercept: 0.9326
 Slope: 1.407

Error Coefficients

Standard Error: 3640000
 Relative Standard Error: 4.2
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	1.639421	50.0	1526057.0	3.278842	Y
2	IC 280-541632/23	1.0	2.303597	50.0	1516064.0	2.303597	Y
3	IC 280-541632/22	2.0	3.76162	50.0	1511131.0	1.88081	Y
4	IC 280-541632/21	5.0	8.330799	50.0	1525442.0	1.66616	Y
5	IC 280-541632/20	10.0	15.534284	50.0	1533949.0	1.553428	Y
6	ICIS 280-541632/19	50.0	72.864409	50.0	1524660.0	1.457288	Y
7	IC 280-541632/18	75.0	104.696118	50.0	1513037.0	1.395948	Y
8	IC 280-541632/17	100.0	142.202823	50.0	1533491.0	1.422028	Y
9	IC 280-541632/16	200.0	259.153687	50.0	1477421.0	1.295768	Y



Calibration

/ 1,2-Dichlorobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

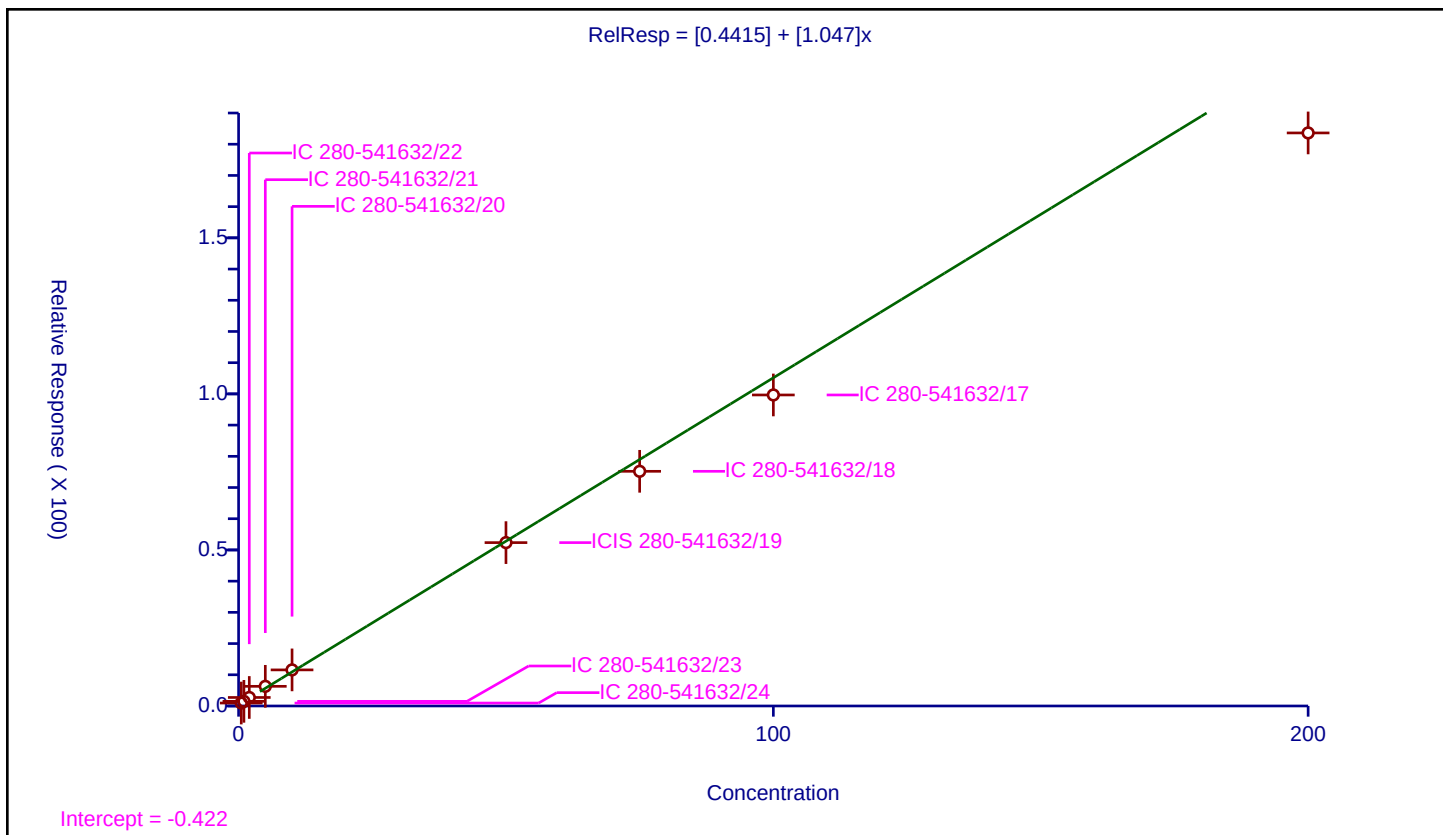
Curve Coefficients

Intercept: 0.4415
 Slope: 1.047

Error Coefficients

Standard Error: 2580000
 Relative Standard Error: 8.3
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.946131	50.0	1526057.0	1.892262	Y
2	IC 280-541632/23	1.0	1.487602	50.0	1516064.0	1.487602	Y
3	IC 280-541632/22	2.0	2.725905	50.0	1511131.0	1.362953	Y
4	IC 280-541632/21	5.0	6.297388	50.0	1525442.0	1.259478	Y
5	IC 280-541632/20	10.0	11.569126	50.0	1533949.0	1.156913	Y
6	ICIS 280-541632/19	50.0	52.350262	50.0	1524660.0	1.047005	Y
7	IC 280-541632/18	75.0	75.194427	50.0	1513037.0	1.002592	Y
8	IC 280-541632/17	100.0	99.658166	50.0	1533491.0	0.996582	Y
9	IC 280-541632/16	200.0	183.621155	50.0	1477421.0	0.918106	Y



Calibration

/ 1,2-Dibromo-3-Chloropropane

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

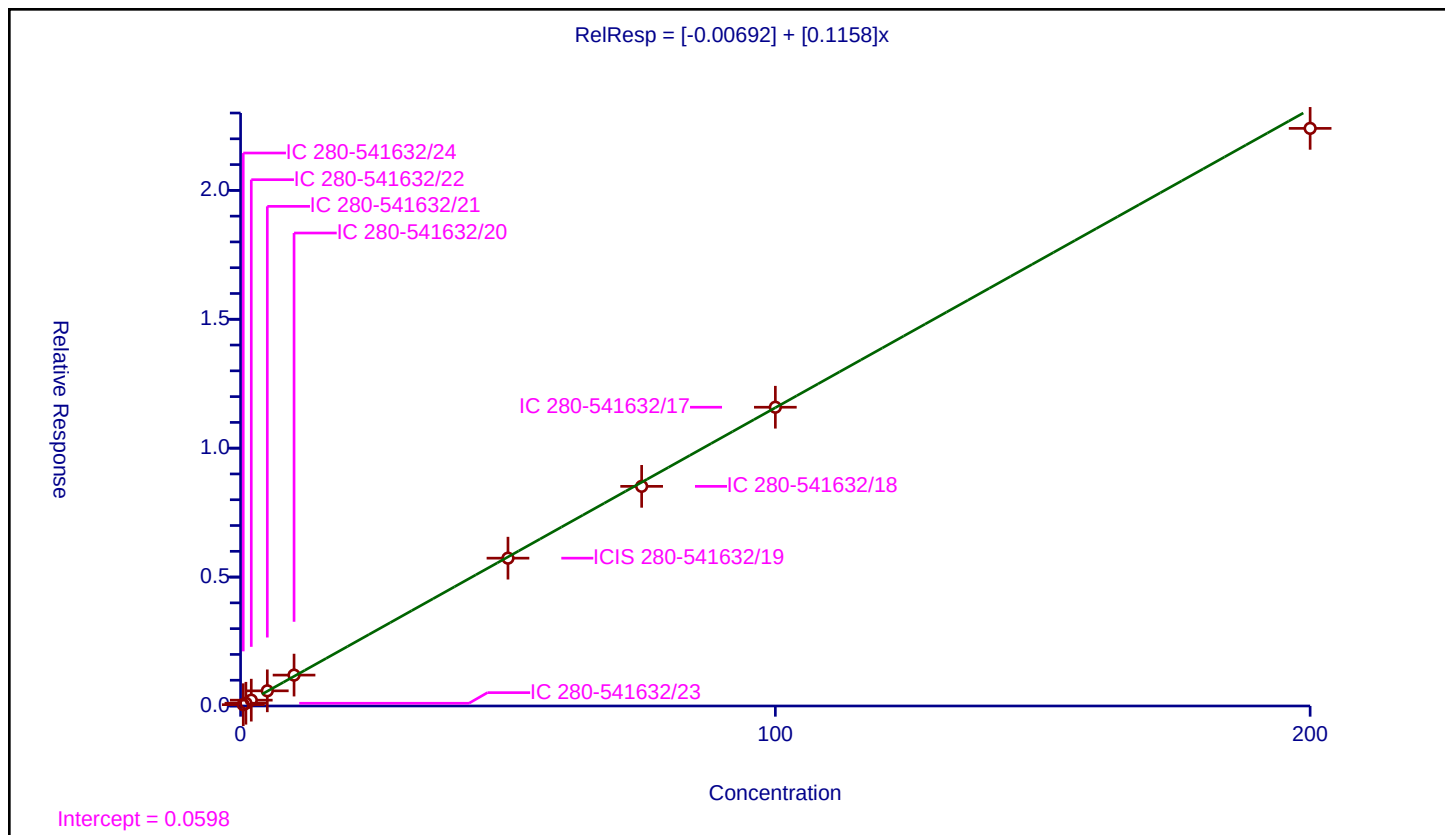
Curve Coefficients

Intercept: -0.00692
 Slope: 0.1158

Error Coefficients

Standard Error: 308000
 Relative Standard Error: 2.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.051309	50.0	1526057.0	0.102617	Y
2	IC 280-541632/23	1.0	0.106097	50.0	1516064.0	0.106097	Y
3	IC 280-541632/22	2.0	0.22589	50.0	1511131.0	0.112945	Y
4	IC 280-541632/21	5.0	0.588518	50.0	1525442.0	0.117704	Y
5	IC 280-541632/20	10.0	1.198052	50.0	1533949.0	0.119805	Y
6	ICIS 280-541632/19	50.0	5.733344	50.0	1524660.0	0.114667	Y
7	IC 280-541632/18	75.0	8.519256	50.0	1513037.0	0.11359	Y
8	IC 280-541632/17	100.0	11.588265	50.0	1533491.0	0.115883	Y
9	IC 280-541632/16	200.0	22.404074	50.0	1477421.0	0.11202	Y



Calibration

/ 1,2,4-Trichlorobenzene

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

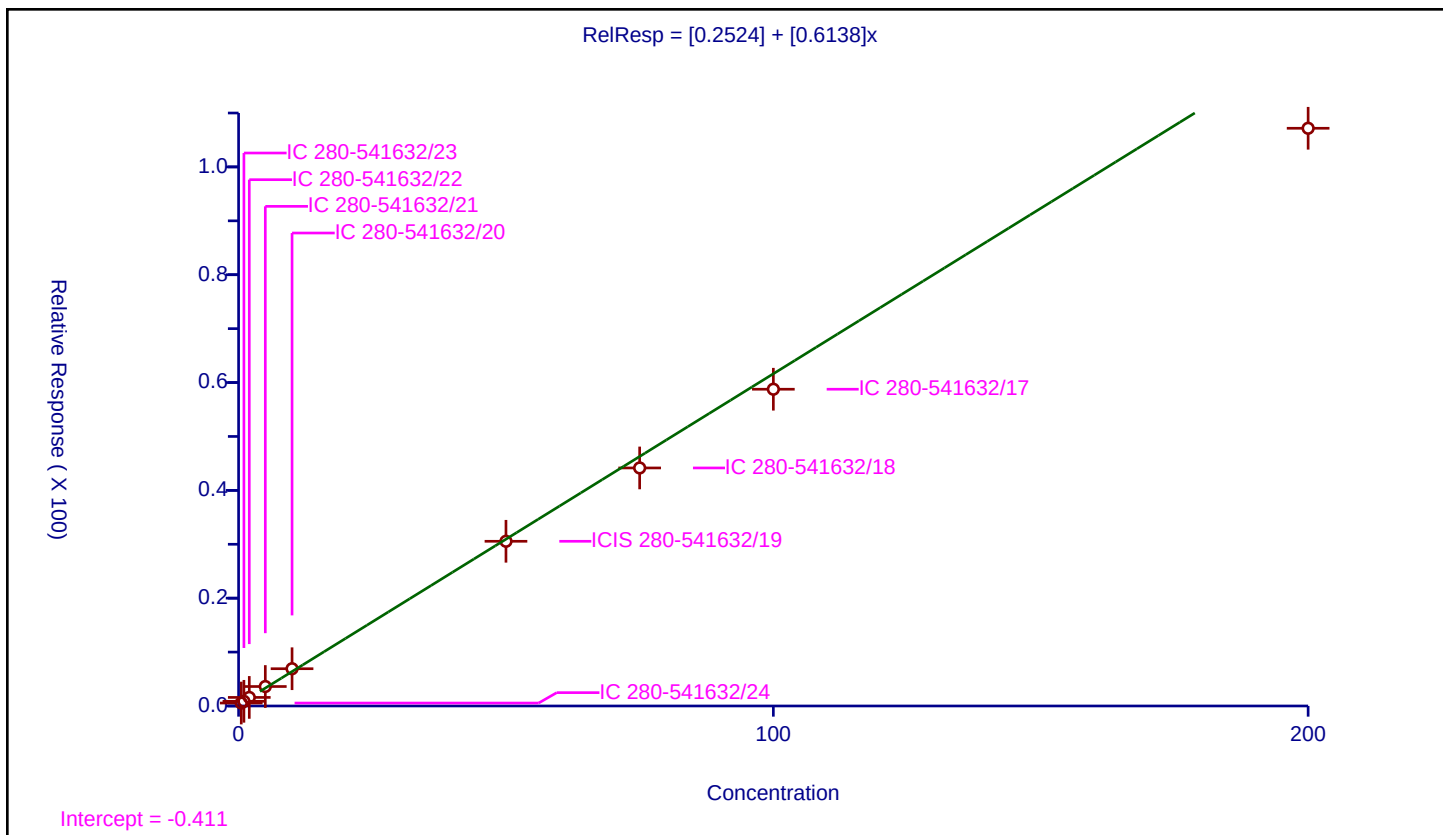
Curve Coefficients

Intercept: 0.2524
Slope: 0.6138

Error Coefficients

Standard Error: 1510000
Relative Standard Error: 8.2
Correlation Coefficient: 0.995
Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.548472	50.0	1526057.0	1.096945	Y
2	IC 280-541632/23	1.0	0.866817	50.0	1516064.0	0.866817	Y
3	IC 280-541632/22	2.0	1.588512	50.0	1511131.0	0.794256	Y
4	IC 280-541632/21	5.0	3.613346	50.0	1525442.0	0.722669	Y
5	IC 280-541632/20	10.0	6.915093	50.0	1533949.0	0.691509	Y
6	ICIS 280-541632/19	50.0	30.552156	50.0	1524660.0	0.611043	Y
7	IC 280-541632/18	75.0	44.15662	50.0	1513037.0	0.588755	Y
8	IC 280-541632/17	100.0	58.76161	50.0	1533491.0	0.587616	Y
9	IC 280-541632/16	200.0	107.170806	50.0	1477421.0	0.535854	Y



Calibration

/ Hexachlorobutadiene

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

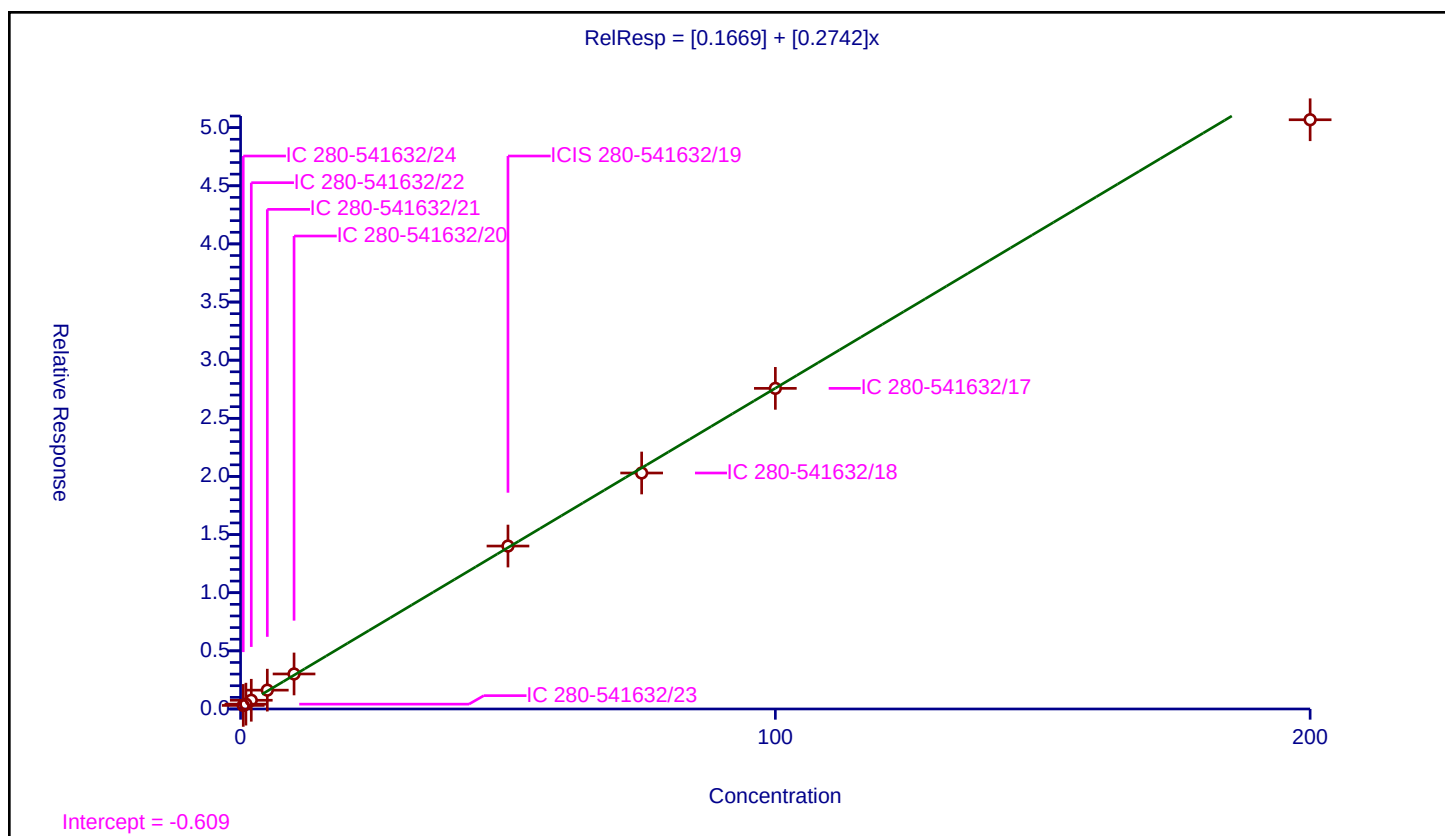
Curve Coefficients

Intercept: 0.1669
Slope: 0.2742

Error Coefficients

Standard Error: 710000
Relative Standard Error: 6.0
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.307262	50.0	1526057.0	0.614525	Y
2	IC 280-541632/23	1.0	0.415352	50.0	1516064.0	0.415352	Y
3	IC 280-541632/22	2.0	0.75063	50.0	1511131.0	0.375315	Y
4	IC 280-541632/21	5.0	1.620973	50.0	1525442.0	0.324195	Y
5	IC 280-541632/20	10.0	3.011508	50.0	1533949.0	0.301151	Y
6	ICIS 280-541632/19	50.0	14.013879	50.0	1524660.0	0.280278	Y
7	IC 280-541632/18	75.0	20.296926	50.0	1513037.0	0.270626	Y
8	IC 280-541632/17	100.0	27.576164	50.0	1533491.0	0.275762	Y
9	IC 280-541632/16	200.0	50.678615	50.0	1477421.0	0.253393	Y



Calibration

/ Naphthalene

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

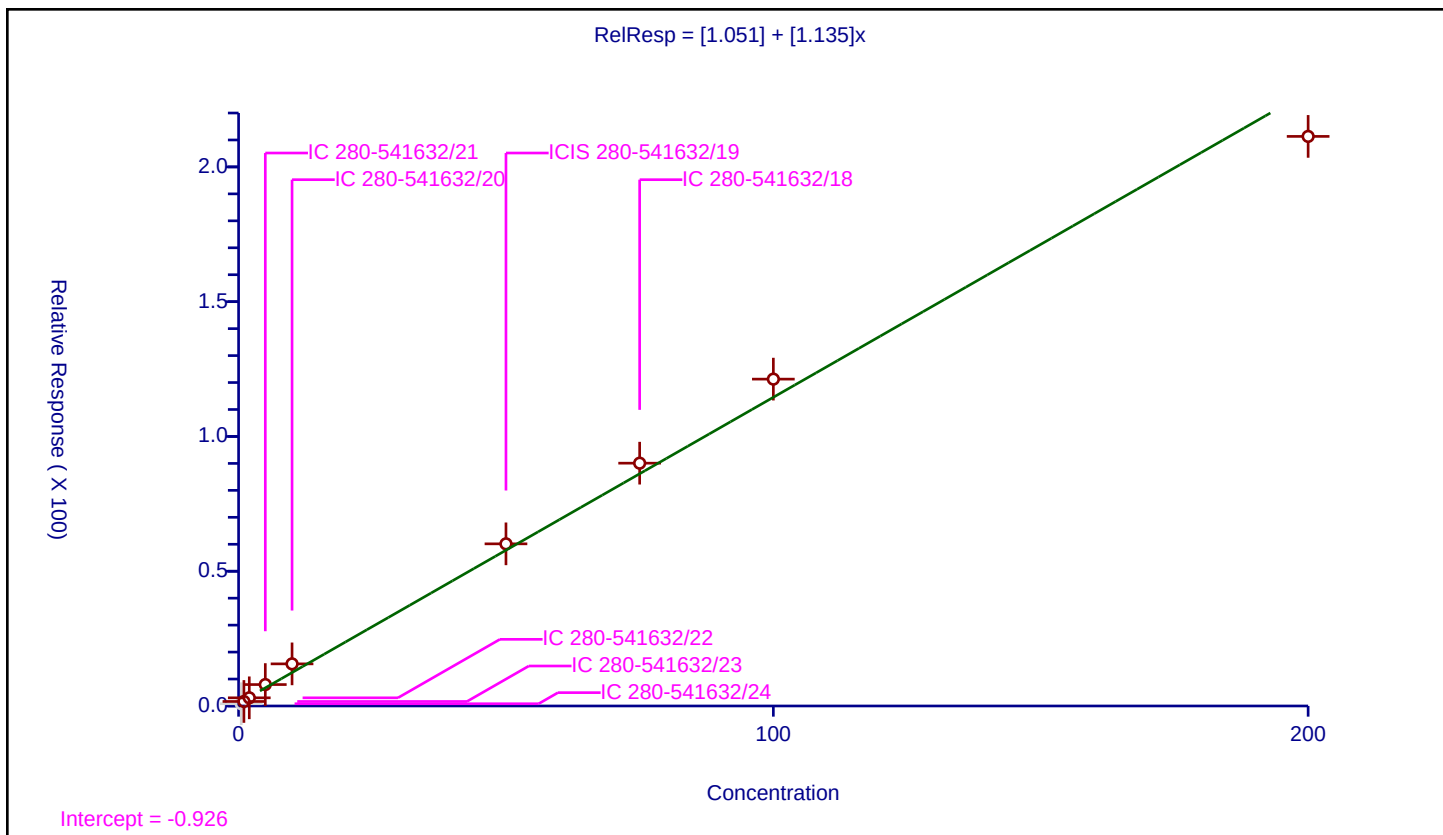
Curve Coefficients

Intercept: 1.051
Slope: 1.135

Error Coefficients

Standard Error: 3260000
Relative Standard Error: 24.4
Correlation Coefficient: 0.991
Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.838239	50.0	1526057.0	1.676477	N
2	IC 280-541632/23	1.0	1.677799	50.0	1516064.0	1.677799	Y
3	IC 280-541632/22	2.0	3.033423	50.0	1511131.0	1.516712	Y
4	IC 280-541632/21	5.0	7.946189	50.0	1525442.0	1.589238	Y
5	IC 280-541632/20	10.0	15.628486	50.0	1533949.0	1.562849	Y
6	ICIS 280-541632/19	50.0	60.15387	50.0	1524660.0	1.203077	Y
7	IC 280-541632/18	75.0	90.087354	50.0	1513037.0	1.201165	Y
8	IC 280-541632/17	100.0	121.269932	50.0	1533491.0	1.212699	Y
9	IC 280-541632/16	200.0	211.327442	50.0	1477421.0	1.056637	Y



Calibration

/ 1,2,3-Trichlorobenzene

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

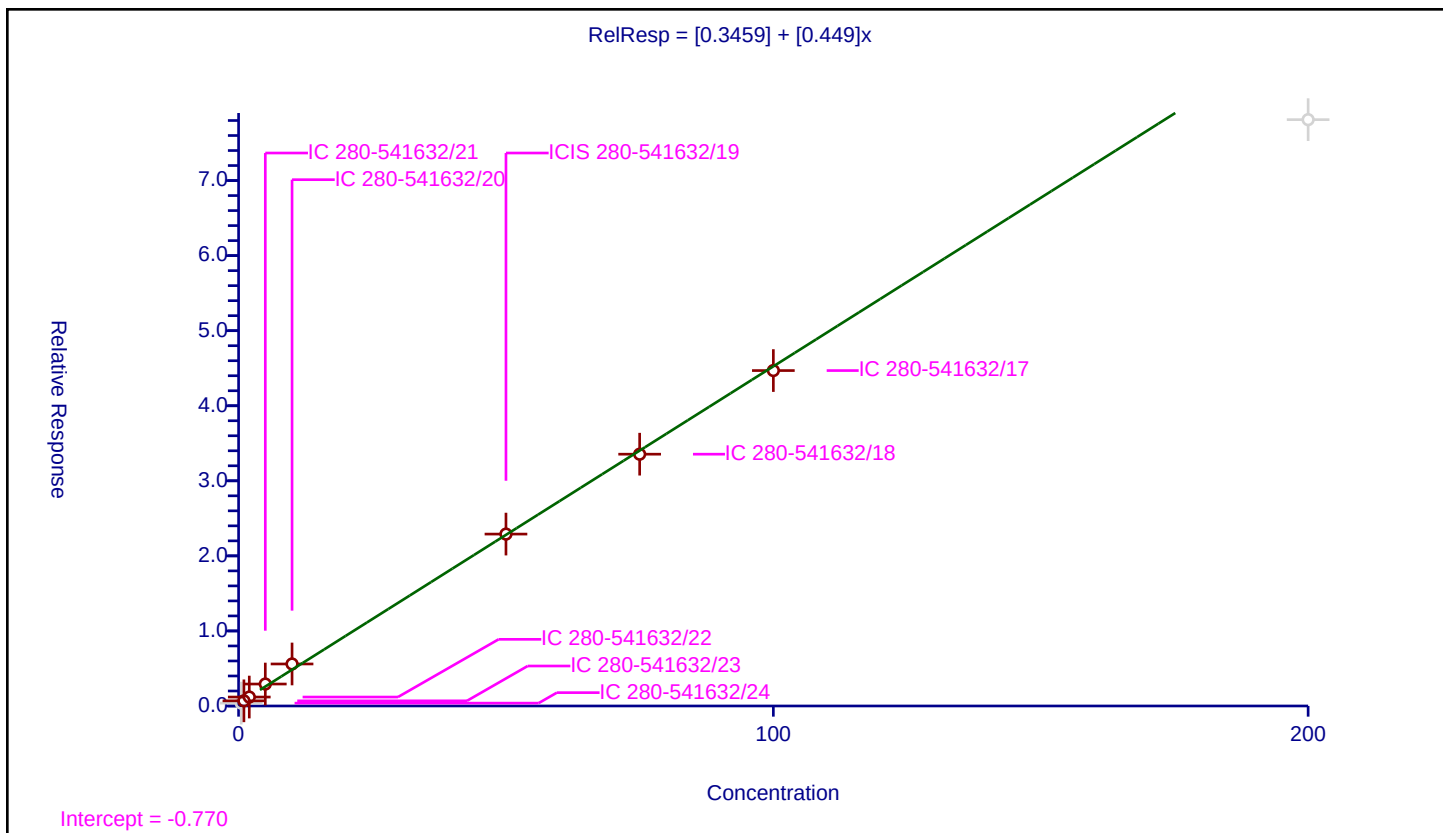
Curve Coefficients

Intercept: 0.3459
Slope: 0.449

Error Coefficients

Standard Error: 829000
Relative Standard Error: 14.9
Correlation Coefficient: 1.000
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541632/24	0.5	0.382849	50.0	1526057.0	0.765699	N
2	IC 280-541632/23	1.0	0.688988	50.0	1516064.0	0.688988	Y
3	IC 280-541632/22	2.0	1.190301	50.0	1511131.0	0.59515	Y
4	IC 280-541632/21	5.0	2.924398	50.0	1525442.0	0.58488	Y
5	IC 280-541632/20	10.0	5.596242	50.0	1533949.0	0.559624	Y
6	ICIS 280-541632/19	50.0	22.902122	50.0	1524660.0	0.458042	Y
7	IC 280-541632/18	75.0	33.54647	50.0	1513037.0	0.447286	Y
8	IC 280-541632/17	100.0	44.689274	50.0	1533491.0	0.446893	Y
9	IC 280-541632/16	200.0	78.11636	50.0	1477421.0	0.390582	N



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541805

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/30/2021 08:49 Calibration End Date: 06/30/2021 11:09 Calibration ID: 54932

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-541805/21	MS9_5694.d
Level 2	IC 280-541805/20	MS9_5693.d
Level 3	IC 280-541805/19	MS9_5692.d
Level 4	IC 280-541805/18	MS9_5691.d
Level 5	IC 280-541805/17	MS9_5690.d
Level 6	IC 280-541805/16	MS9_5689.d
Level 7	IC 280-541805/15	MS9_5688.d
Level 8	IC 280-541805/14	MS9_5687.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								
Ethylene oxide	+++++ 0.0027	0.0032 0.0028	0.0029 0.0020	0.0027	0.0028	Ave		0.002 7				13.2		15.0			
Ethanol	0.0025 0.0014	0.0021 0.0015	0.0017 0.0013	0.0017	0.0015	Lin2	0.034 5	0.001 5						0.9950			0.9900
Propene oxide	+++++ 0.0178	0.0183 0.0173	0.0183 0.0118	0.0180	0.0195	Ave		0.017 3				14.6		15.0			
2-Propanol	0.0121 0.0083	0.0129 0.0086	0.0098 0.0074	0.0096	0.0087	Lin1	0.037 3	0.007 9						0.9940			0.9900
Acetonitrile	0.0175 0.0139	0.0191 0.0142	0.0164 0.0122	0.0168	0.0146	Ave		0.015 6				14.4		15.0			
Di-isopropyl ether (DIPE)	0.2151 0.1846	0.1962 0.1852	0.2195 0.1663	0.2123	0.1889	Ave		0.196 0				9.4		15.0			
Chloroprene	0.4059 0.2776	0.3194 0.2931	0.3217 0.2631	0.3046	0.2870	Ave		0.309 1				14.2		15.0			
Tert-butyl ethyl ether	0.6679 0.4926	0.5936 0.4884	0.5531 0.4277	0.5461	0.4998	Ave		0.533 7				13.9		15.0			
Ethyl acetate	0.1371 0.1074	0.1336 0.1073	0.1235 0.0931	0.1236	0.1133	Ave		0.117 4				12.6		15.0			
Propionitrile	0.0264 0.0185	0.0245 0.0190	0.0215 0.0160	0.0213	0.0196	Lin2	0.042 8	0.018 9						0.9920			0.9900
Methacrylonitrile	0.0893 0.0644	0.0884 0.0650	0.0787 0.0535	0.0777	0.0687	Qua	0.121 9	0.073 4	-0.000020					1.0000			0.9900
Tert-amyl methyl ether	0.6179 0.4896	0.6135 0.4909	0.5469 0.4276	0.5668	0.5043	Ave		0.532 2				12.4		15.0			
n-Butanol	0.0058 0.0038	0.0049 0.0040	0.0035 0.0036	0.0040	0.0040	Lin2	0.026 0	0.003 7						0.9920			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.: 280-150290-1 Analy Batch No.: 541805

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/30/2021 08:49 Calibration End Date: 06/30/2021 11:09 Calibration ID: 54932

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Methyl methacrylate	0.0622 0.0554	0.0676 0.0579	0.0581 0.0494	0.0638	0.0580	Ave		0.059 1				9.4		15.0			
2-Nitropropane	0.0304 0.0296	0.0299 0.0311	0.0277 0.0293	0.0288	0.0296	Ave		0.029 5				3.5		15.0			
Tetrahydrothiophene	0.1319 0.1126	0.1477 0.1173	0.1221 0.1052	0.1307	0.1175	Ave		0.123 1				10.8		15.0			
cis-1,4-Dichloro-2-butene	0.1093 0.0983	0.1232 0.1077	0.1157 0.1086	0.1198	0.0992	Ave		0.110 2				8.1		15.0			
1,2,3-Trimethylbenzene	2.9110 1.8211	2.3189 1.8349	2.1762 1.6372	2.1035	1.8644	Lin2	0.545 6	1.831 3							0.9950		0.9900
1,3,5-Trichlorobenzene	1.2462 0.7512	0.9547 0.7616	0.8959 0.6671	0.8833	0.7630	Lin2	0.244 8	0.752 3							0.9940		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541805

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/30/2021 08:49 Calibration End Date: 06/30/2021 11:09 Calibration ID: 54932

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-541805/21	MS9_5694.d
Level 2	IC 280-541805/20	MS9_5693.d
Level 3	IC 280-541805/19	MS9_5692.d
Level 4	IC 280-541805/18	MS9_5691.d
Level 5	IC 280-541805/17	MS9_5690.d
Level 6	IC 280-541805/16	MS9_5689.d
Level 7	IC 280-541805/15	MS9_5688.d
Level 8	IC 280-541805/14	MS9_5687.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
Ethylene oxide	FB	Ave	+++++ 484312	15162 648598	34448 973708	64950	332983	+++++ 3750	100 5000	250 10000	500	2500
Ethanol	FB	Lin2	3437 149678	5958 207435	12417 381896	24291	103125	30.0 2250	60.0 3000	150 6000	300	1500
Propene oxide	FB	Ave	+++++ 3159223	86201 4074736	218100 5683743	426404	2279296	+++++ 3750	100 5000	250 10000	500	2500
2-Propanol	FB	Lin1	2722 148031	6056 202740	11633 355911	22790	101370	5.00 375	10.0 500	25.0 1000	50.0	250
Acetonitrile	FB	Ave	3944 245886	8975 334170	19527 589377	39814	170169	5.00 375	10.0 500	25.0 1000	50.0	250
Di-isopropyl ether (DIPE)	FB	Ave	4849 327509	9238 435307	26163 802437	50199	220694	0.500 37.5	1.00 50.0	2.50 100	5.00	25.0
Chloroprene	FB	Ave	9149 492622	15038 688934	38349 1269585	72013	335352	0.500 37.5	1.00 50.0	2.50 100	5.00	25.0
Tert-butyl ethyl ether	FB	Ave	15055 874207	27946 1147967	65939 2063583	129104	584019	0.500 37.5	1.00 50.0	2.50 100	5.00	25.0
Ethyl acetate	FB	Ave	6182 381082	12583 504658	29435 898198	58428	264705	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Propionitrile	FB	Lin2	5954 328619	11528 446309	25605 771050	50350	228464	5.00 375	10.0 500	25.0 1000	50.0	250
Methacrylonitrile	FB	Qua	20132 1142962	41607 1528341	93771 2582789	183731	802983	5.00 375	10.0 500	25.0 1000	50.0	250
Tert-amyl methyl ether	FB	Ave	13927 868769	28880 1153784	65203 2063136	133994	589289	0.500 37.5	1.00 50.0	2.50 100	5.00	25.0
n-Butanol	FB	Lin2	3285 170049	5814 234939	10428 430189	23688	115946	12.5 938	25.0 1250	62.5 2500	125	625

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541805

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/30/2021 08:49 Calibration End Date: 06/30/2021 11:09 Calibration ID: 54932

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
Methyl methacrylate	FB	Ave	2804 196677	6366 272112	13856 476741	30148	135625	1.00 75.0	2.00 100	5.00 200	10.0	50.0
2-Nitropropane	FB	Ave	1372 104937	2819 146128	6600 282676	13618	69107	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Tetrahydrothiophene	CBNZ d5	Ave	1702 110918	3945 154260	8280 280578	17513	77512	1.00 75.0	2.00 100	5.00 200	10.0	50.0
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	2351 164332	5498 238015	13095 485860	26852	110362	1.00 75.0	2.00 100	5.00 200	10.0	50.0
1,2,3-Trimethylbenzene	DCBd 4	Lin2	31296 1521617	51728 2028507	123104 3662881	235712	1036849	0.500 37.5	1.00 50.0	2.50 100	5.00	25.0
1,3,5-Trichlorobenzene	DCBd 4	Lin2	13398 627690	21296 841894	50682 1492494	98979	424361	0.500 37.5	1.00 50.0	2.50 100	5.00	25.0

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_MS9\20210630-102814.b\MS9_5687.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 30-Jun-2021 08:49:30 ALS Bottle#: 5 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:02 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 10:34:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2412566	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	666748	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1118619	50.0	50.0	
18 Ethylene oxide	43	2.287	2.287	0.000	97	973708	10000	7352.1	
23 Ethanol	45	2.867	2.867	0.000	99	381896	6000.0	5414.8	
27 Propene oxide	58	3.023	3.023	0.000	92	5683743	10000	6811.0	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	355911	1000.0	923.5	
37 Acetonitrile	41	3.499	3.499	0.000	98	589377	1000.0	784.0	
44 Isopropyl ether	87	4.318	4.318	0.000	88	802437	100.0	84.8	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	91	1269585	100.0	85.1	
48 Tert-butyl ethyl ether	59	4.629	4.629	0.000	95	2063583	100.0	80.1	
49 Ethyl acetate	43	4.805	4.805	0.000	96	898198	200.0	158.6	
54 Propionitrile	54	4.826	4.826	0.000	97	771050	1000.0	844.9	
55 Methacrylonitrile	41	4.961	4.961	0.000	83	2582789	1000.0	998.1	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	97	2063136	100.0	80.3	
64 n-Butanol	56	5.977	5.977	0.000	86	430189	2500.0	2386.4	
70 Methyl methacrylate	100	6.339	6.339	0.000	79	476741	200.0	167.3	
77 2-Nitropropane	41	6.730	6.730	0.000	99	282676	200.0	198.3	
88 Tetrahydrothiophene	60	7.950	7.950	0.000	88	280578	200.0	170.9	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.512	0.000	0	485860	200.0	197.0	
114 1,2,3-Trimethylbenzene	105	10.822	10.822	0.000	97	3662881	100.0	89.1	
119 1,3,5-Trichlorobenzene	180	12.138	12.138	0.000	97	1492494	100.0	88.4	
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

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5687.d

Injection Date: 30-Jun-2021 08:49:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

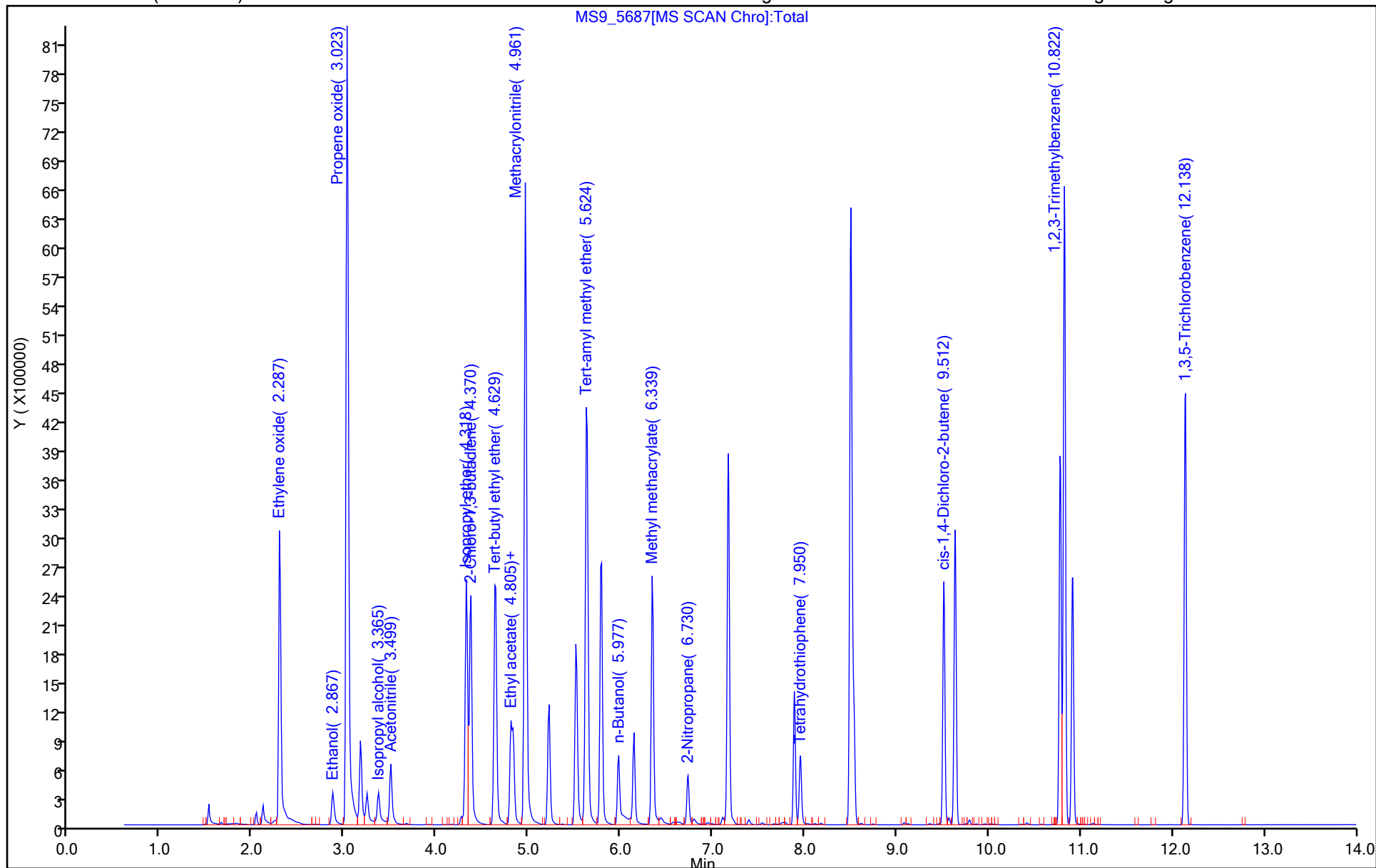
ALS Bottle#: 5

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5688.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 30-Jun-2021 09:09:30 ALS Bottle#: 6 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:04 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 09:55:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2350562	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	657802	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1105492	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	97	648598	5000.0	5026.5	
23 Ethanol	45	2.867	2.867	0.000	99	207435	3000.0	3008.3	
27 Propene oxide	58	3.023	3.023	0.000	95	4074736	5000.0	5011.6	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	202740	500.0	538.0	
37 Acetonitrile	41	3.499	3.499	0.000	98	334170	500.0	456.3	
44 Isopropyl ether	87	4.318	4.318	0.000	88	435307	50.0	47.2	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	91	688934	50.0	47.4	
48 Tert-butyl ethyl ether	59	4.629	4.629	0.000	95	1147967	50.0	45.8	
49 Ethyl acetate	43	4.805	4.805	0.000	96	504658	100.0	91.5	
54 Propionitrile	54	4.826	4.826	0.000	97	446309	500.0	501.0	
55 Methacrylonitrile	41	4.961	4.961	0.000	84	1528341	500.0	512.5	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	97	1153784	50.0	46.1	
64 n-Butanol	56	5.977	5.977	0.000	87	234939	1250.0	1334.6	
70 Methyl methacrylate	100	6.339	6.339	0.000	79	272112	100.0	98.0	
77 2-Nitropropane	41	6.730	6.730	0.000	100	146128	100.0	105.2	
88 Tetrahydrothiophene	60	7.950	7.950	0.000	88	154260	100.0	95.2	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.512	0.000	0	238015	100.0	97.7	
114 1,2,3-Trimethylbenzene	105	10.822	10.822	0.000	97	2028507	50.0	49.8	
119 1,3,5-Trichlorobenzene	180	12.133	12.133	0.000	97	841894	50.0	50.3	
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-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 50.00

Units: uL

Report Date: 30-Jun-2021 12:15:05

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5688.d

Injection Date: 30-Jun-2021 09:09:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

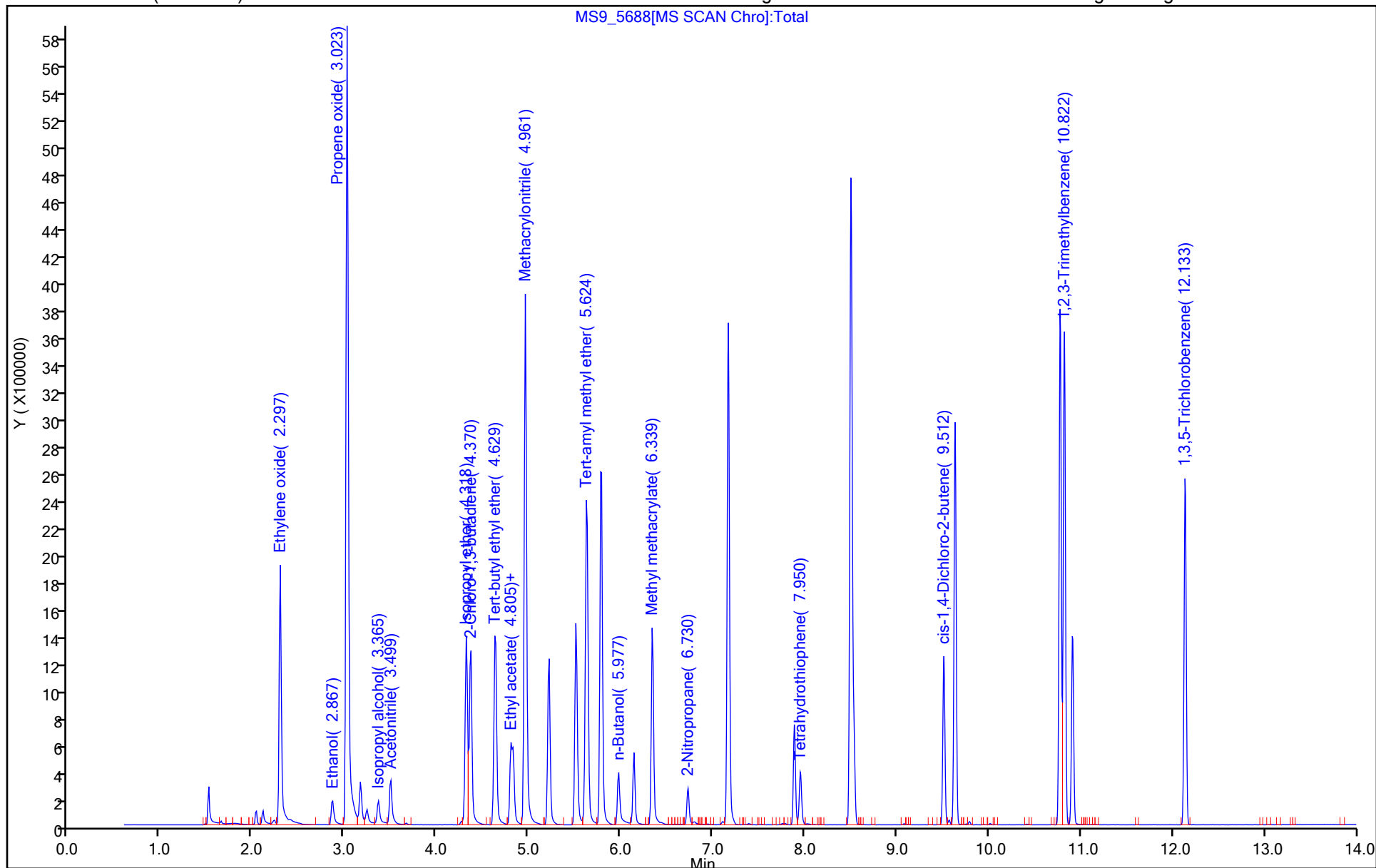
ALS Bottle#: 6

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5689.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 30-Jun-2021 09:29:30 ALS Bottle#: 7 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:06 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 10:14:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2366001	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	656701	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1114057	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	98	484312	3750.0	3728.8	
23 Ethanol	45	2.867	2.867	0.000	100	149678	2250.0	2149.8	
27 Propene oxide	58	3.023	3.023	0.000	95	3159223	3750.0	3860.3	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	148031	375.0	389.0	
37 Acetonitrile	41	3.499	3.499	0.000	99	245886	375.0	333.5	
44 Isopropyl ether	87	4.318	4.318	0.000	88	327509	37.5	35.3	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	91	492622	37.5	33.7	
48 Tert-butyl ethyl ether	59	4.640	4.640	0.000	95	874207	37.5	34.6	
49 Ethyl acetate	43	4.805	4.805	0.000	96	381082	75.0	68.6	
54 Propionitrile	54	4.826	4.826	0.000	97	328619	375.0	365.9	
55 Methacrylonitrile	41	4.961	4.961	0.000	83	1142962	375.0	363.1	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	97	868769	37.5	34.5	
64 n-Butanol	56	5.977	5.977	0.000	86	170049	937.5	957.7	
70 Methyl methacrylate	100	6.350	6.350	0.000	80	196677	75.0	70.4	
77 2-Nitropropane	41	6.730	6.730	0.000	99	104937	75.0	75.1	
88 Tetrahydrothiophene	60	7.955	7.955	0.000	86	110918	75.0	68.6	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.512	0.000	0	164332	75.0	66.9	
114 1,2,3-Trimethylbenzene	105	10.823	10.823	0.000	97	1521617	37.5	37.0	
119 1,3,5-Trichlorobenzene	180	12.139	12.139	0.000	98	627690	37.5	37.1	
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-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 37.50

Units: uL

Report Date: 30-Jun-2021 12:15:06

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5689.d

Injection Date: 30-Jun-2021 09:29:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

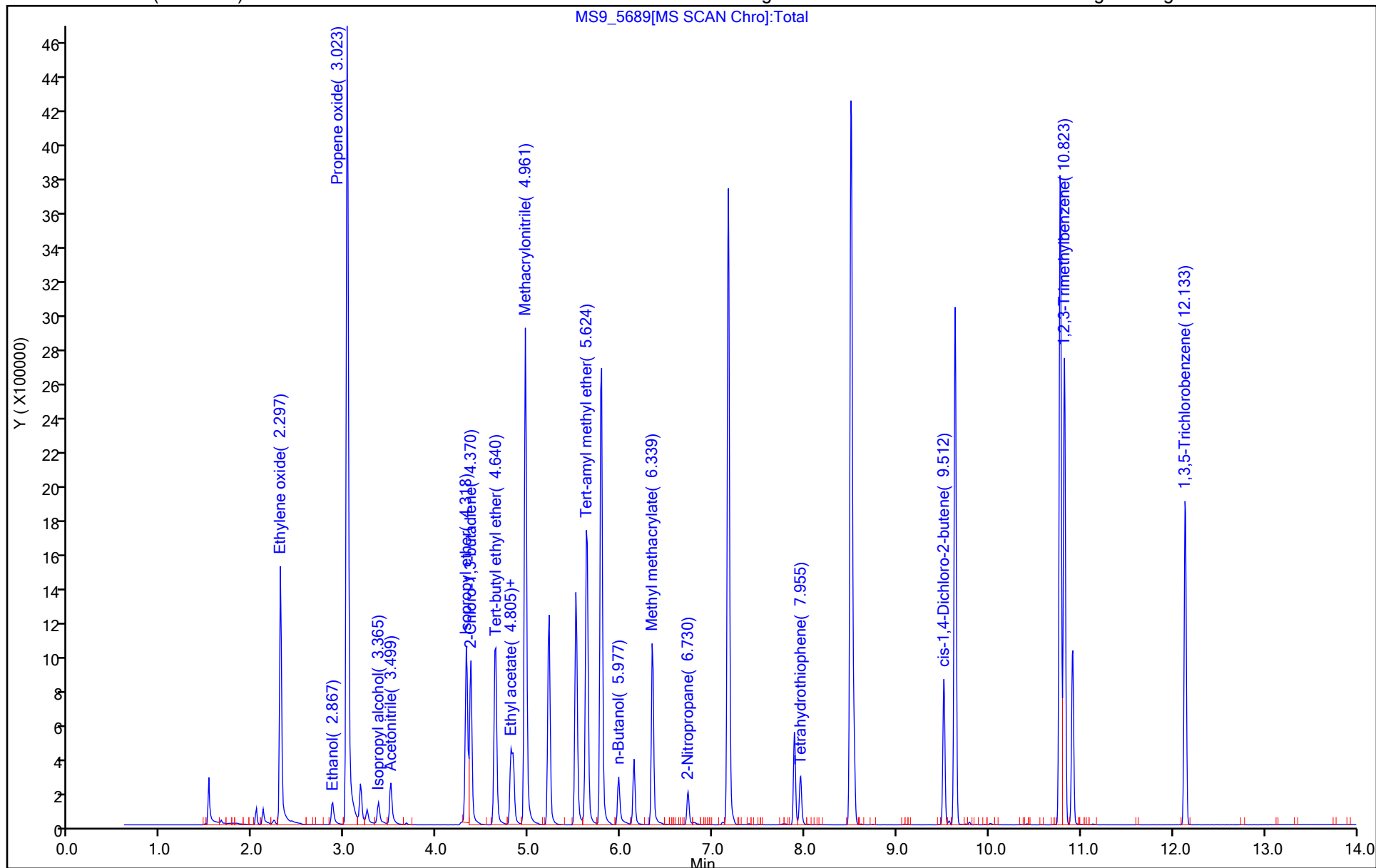
ALS Bottle#: 7

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5690.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 30-Jun-2021 09:49:30 ALS Bottle#: 8 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:07 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 10:15:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2337216	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	659407	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1112288	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	98	332983	2500.0	2595.3	
23 Ethanol	45	2.867	2.867	0.000	98	103125	1500.0	1492.2	
27 Propene oxide	58	3.023	3.023	0.000	96	2279296	2500.0	2819.4	
32 Isopropyl alcohol	45	3.365	3.365	0.000	96	101370	250.0	268.2	
37 Acetonitrile	41	3.499	3.499	0.000	99	170169	250.0	233.7	
44 Isopropyl ether	87	4.318	4.318	0.000	88	220694	25.0	24.1	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	91	335352	25.0	23.2	
48 Tert-butyl ethyl ether	59	4.629	4.629	0.000	95	584019	25.0	23.4	
49 Ethyl acetate	43	4.805	4.805	0.000	96	264705	50.0	48.3	
54 Propionitrile	54	4.826	4.826	0.000	97	228464	250.0	256.8	
55 Methacrylonitrile	41	4.961	4.961	0.000	84	802983	250.0	249.2	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	96	589289	25.0	23.7	
64 n-Butanol	56	5.977	5.977	0.000	86	115946	625.0	658.9	
70 Methyl methacrylate	100	6.350	6.350	0.000	80	135625	50.0	49.1	
77 2-Nitropropane	41	6.730	6.730	0.000	99	69107	50.0	50.0	
88 Tetrahydrothiophene	60	7.955	7.955	0.000	87	77512	50.0	47.7	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.512	0.000	0	110362	50.0	45.0	
114 1,2,3-Trimethylbenzene	105	10.822	10.822	0.000	97	1036849	25.0	25.2	
119 1,3,5-Trichlorobenzene	180	12.139	12.139	0.000	97	424361	25.0	25.0	
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-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 25.00

Units: uL

Report Date: 30-Jun-2021 12:15:08

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5690.d

Injection Date: 30-Jun-2021 09:49:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

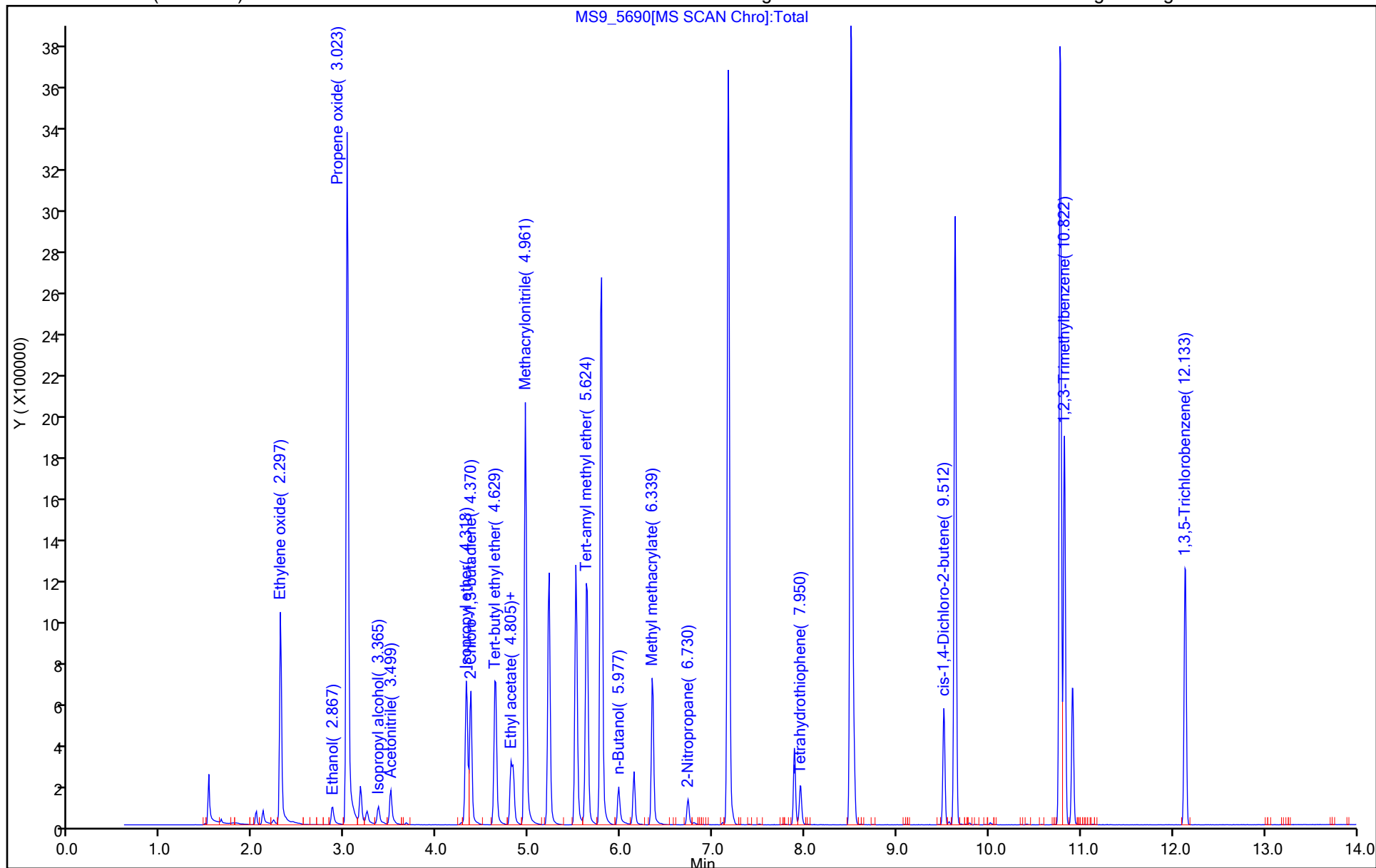
ALS Bottle#: 8

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5691.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 30-Jun-2021 10:09:30 ALS Bottle#: 9 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:10 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 10:58:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2364239	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	670117	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1120581	50.0	50.0	
18 Ethylene oxide	43	2.307	2.307	0.000	98	64950	500.0	500.4	
23 Ethanol	45	2.867	2.867	0.000	99	24291	300.0	329.3	
27 Propene oxide	58	3.023	3.023	0.000	96	426404	500.0	521.4	
32 Isopropyl alcohol	45	3.365	3.365	0.000	98	22790	50.0	56.0	
37 Acetonitrile	41	3.499	3.499	0.000	98	39814	50.0	54.0	
44 Isopropyl ether	87	4.318	4.318	0.000	88	50199	5.00	5.42	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	91	72013	5.00	4.93	
48 Tert-butyl ethyl ether	59	4.640	4.640	0.000	94	129104	5.00	5.12	
49 Ethyl acetate	43	4.805	4.805	0.000	96	58428	10.0	10.5	
54 Propionitrile	54	4.826	4.826	0.000	96	50350	50.0	54.2	
55 Methacrylonitrile	41	4.961	4.961	0.000	85	183731	50.0	52.0	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	91	133994	5.00	5.32	
64 n-Butanol	56	5.977	5.977	0.000	89	23688	125.0	127.5	
70 Methyl methacrylate	100	6.350	6.350	0.000	80	30148	10.0	10.8	
77 2-Nitropropane	41	6.730	6.730	0.000	99	13618	10.0	9.75	
88 Tetrahydrothiophene	60	7.955	7.955	0.000	87	17513	10.0	10.6	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.512	0.000	0	26852	10.0	10.9	
114 1,2,3-Trimethylbenzene	105	10.822	10.822	0.000	98	235712	5.00	5.45	
119 1,3,5-Trichlorobenzene	180	12.139	12.139	0.000	97	98979	5.00	5.55	
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-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 5.00

Units: uL

Report Date: 30-Jun-2021 12:15:11

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5691.d

Injection Date: 30-Jun-2021 10:09:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

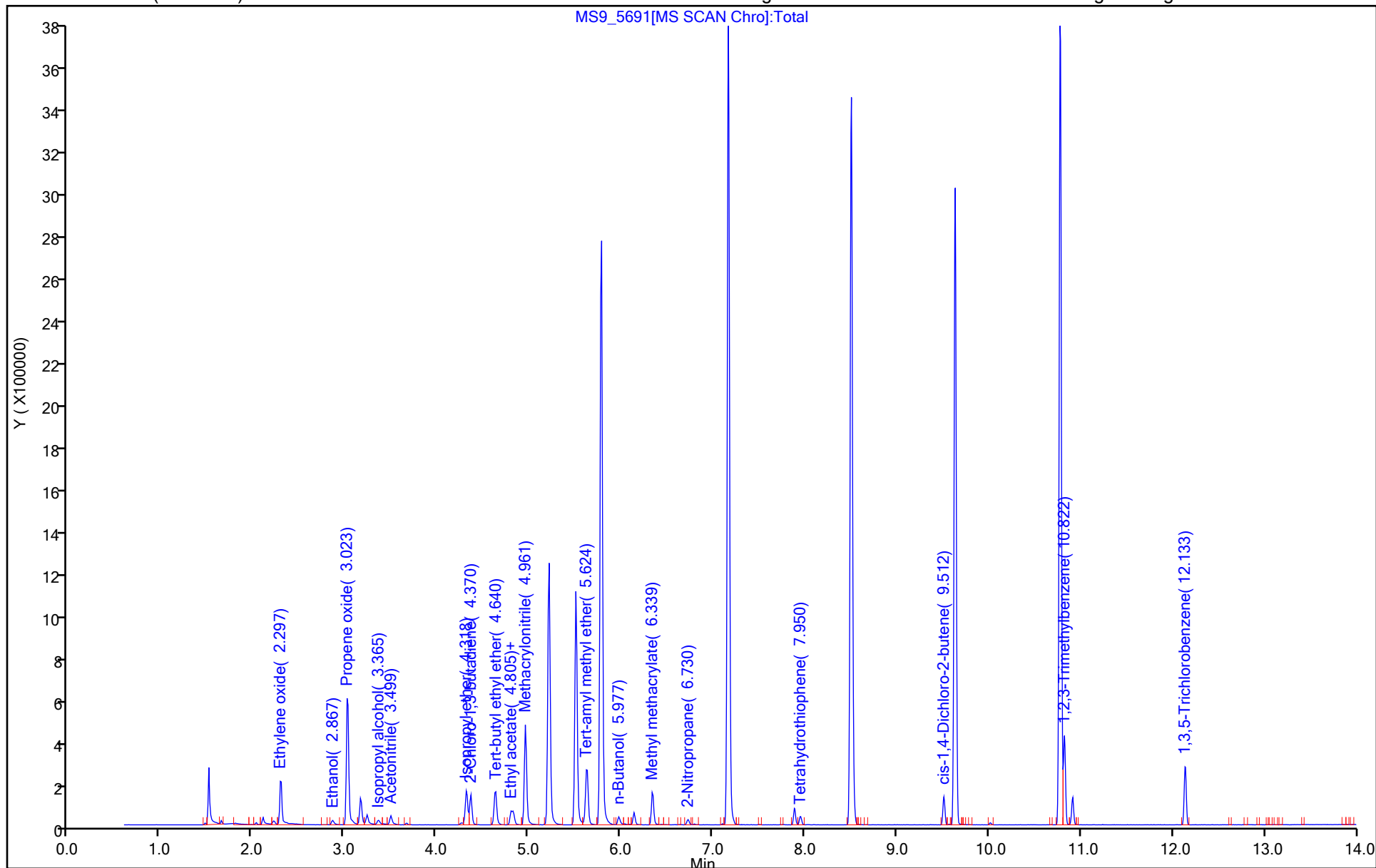
ALS Bottle#: 9

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5692.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 30-Jun-2021 10:29:30 ALS Bottle#: 10 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:12 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 11:08:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2384289	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	678222	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	95	1131378	50.0	50.0	
18 Ethylene oxide	43	2.307	2.307	0.000	98	34448	250.0	263.2	
23 Ethanol	45	2.867	2.867	0.000	99	12417	150.0	155.2	
27 Propene oxide	58	3.033	3.033	0.000	96	218100	250.0	264.5	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	11633	25.0	26.0	
37 Acetonitrile	41	3.499	3.499	0.000	97	19527	25.0	26.3	
44 Isopropyl ether	87	4.318	4.318	0.000	86	26163	2.50	2.80	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	90	38349	2.50	2.60	
48 Tert-butyl ethyl ether	59	4.640	4.640	0.000	94	65939	2.50	2.59	
49 Ethyl acetate	43	4.805	4.805	0.000	95	29435	5.00	5.26	
54 Propionitrile	54	4.836	4.836	0.000	97	25605	25.0	26.2	
55 Methacrylonitrile	41	4.961	4.961	0.000	85	93771	25.0	25.3	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	92	65203	2.50	2.57	
64 n-Butanol	56	5.977	5.977	0.000	86	10428	62.5	51.7	
70 Methyl methacrylate	100	6.350	6.350	0.000	81	13856	5.00	4.92	
77 2-Nitropropane	41	6.725	6.725	0.000	98	6600	5.00	4.68	
88 Tetrahydrothiophene	60	7.950	7.950	0.000	83	8280	5.00	4.96	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.512	0.000	0	13095	5.00	5.25	
114 1,2,3-Trimethylbenzene	105	10.822	10.822	0.000	97	123104	2.50	2.67	
119 1,3,5-Trichlorobenzene	180	12.133	12.133	0.000	97	50682	2.50	2.65	
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-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 2.50

Units: uL

Report Date: 30-Jun-2021 12:15:13

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5692.d

Injection Date: 30-Jun-2021 10:29:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

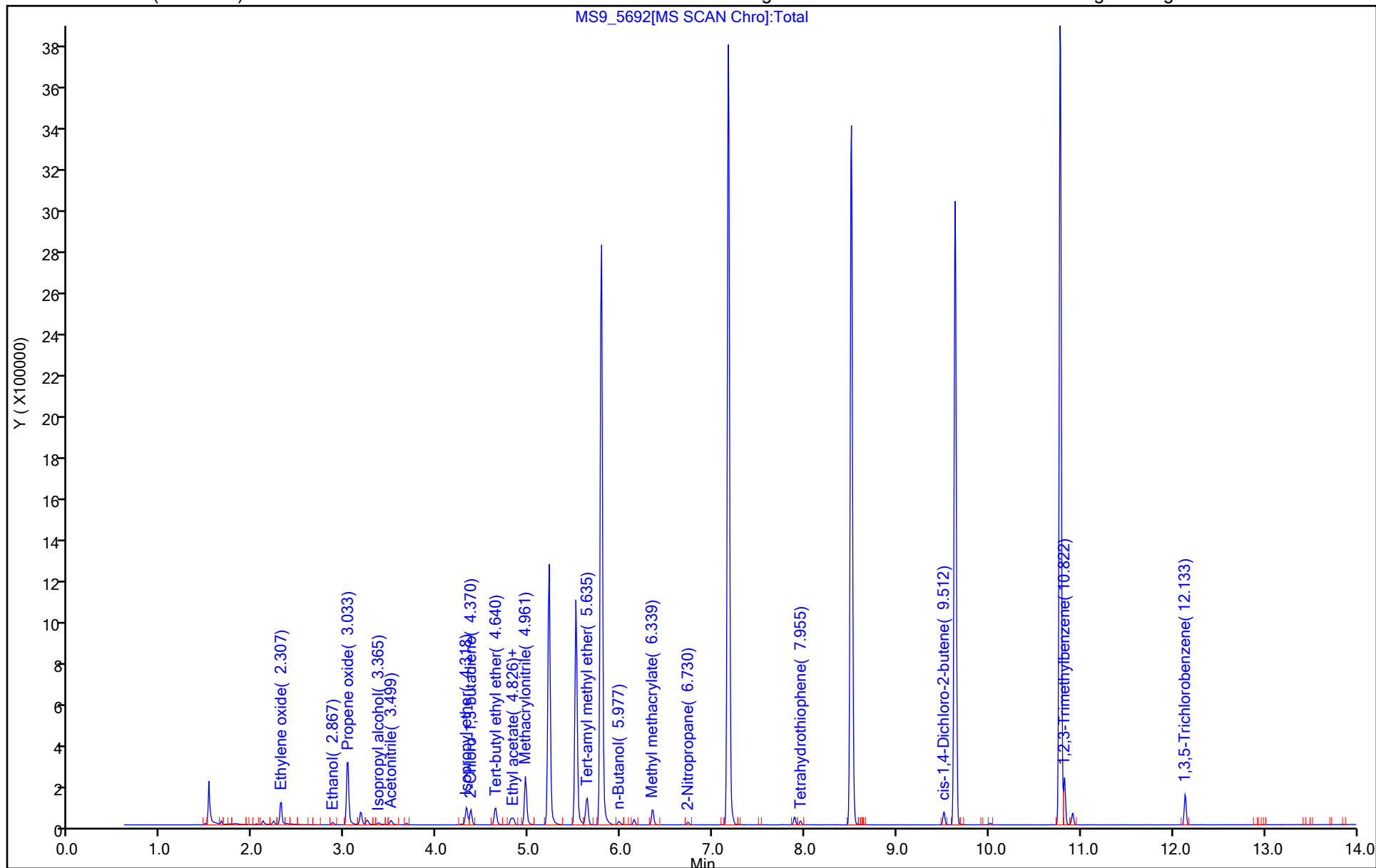
ALS Bottle#: 10

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5693.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 30-Jun-2021 10:49:30 ALS Bottle#: 11 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:15 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 11:59:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2353763	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	667934	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1115364	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	98	15162	100.0	117.3	
23 Ethanol	45	2.867	2.867	0.000	77	5958	60.0	63.3	M
27 Propene oxide	58	3.023	3.023	0.000	96	86201	100.0	105.9	
32 Isopropyl alcohol	45	3.365	3.365	0.000	95	6056	10.0	11.5	
37 Acetonitrile	41	3.499	3.499	0.000	95	8975	10.0	12.2	
44 Isopropyl ether	87	4.329	4.329	0.000	88	9238	1.00	1.00	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	88	15038	1.00	1.03	
48 Tert-butyl ethyl ether	59	4.640	4.640	0.000	95	27946	1.00	1.11	
49 Ethyl acetate	43	4.805	4.805	0.000	97	12583	2.00	2.28	
54 Propionitrile	54	4.826	4.826	0.000	97	11528	10.0	10.7	
55 Methacrylonitrile	41	4.961	4.961	0.000	83	41607	10.0	10.4	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	90	28880	1.00	1.15	
64 n-Butanol	56	5.977	5.977	0.000	79	5814	25.0	26.2	
70 Methyl methacrylate	100	6.350	6.350	0.000	80	6366	2.00	2.29	
77 2-Nitropropane	41	6.730	6.730	0.000	58	2819	2.00	2.03	
88 Tetrahydrothiophene	60	7.955	7.955	0.000	81	3945	2.00	2.40	
99 cis-1,4-Dichloro-2-butene	53	9.507	9.507	0.000	0	5498	2.00	2.24	
114 1,2,3-Trimethylbenzene	105	10.823	10.823	0.000	98	51728	1.00	0.9683	
119 1,3,5-Trichlorobenzene	180	12.139	12.139	0.000	95	21296	1.00	0.9436	
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

Review Flags

M - Manually Integrated

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 1.00

Units: uL

Report Date: 30-Jun-2021 12:15:16

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5693.d

Injection Date: 30-Jun-2021 10:49:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

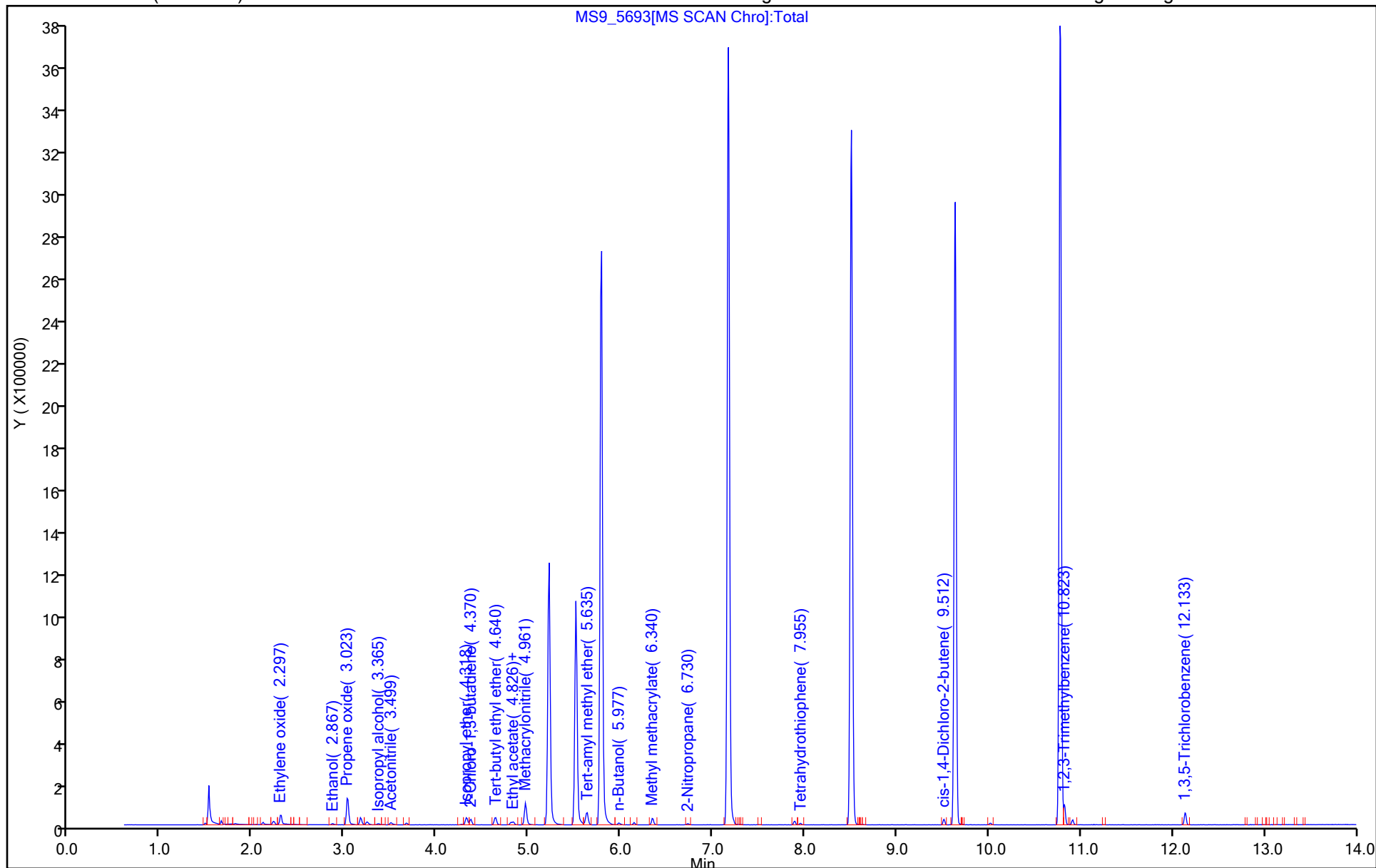
ALS Bottle#: 11

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5693.d

Injection Date: 30-Jun-2021 10:49:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

11

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

MS SCAN

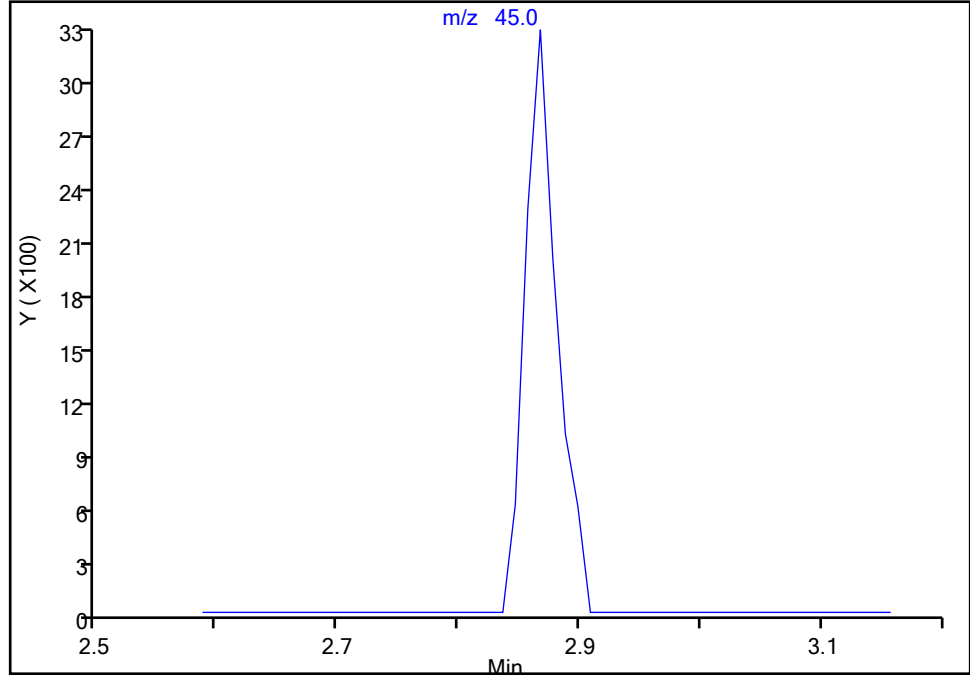
23 Ethanol, CAS: 64-17-5

Signal: 1

Not Detected

Expected RT: 2.87

Processing Integration Results



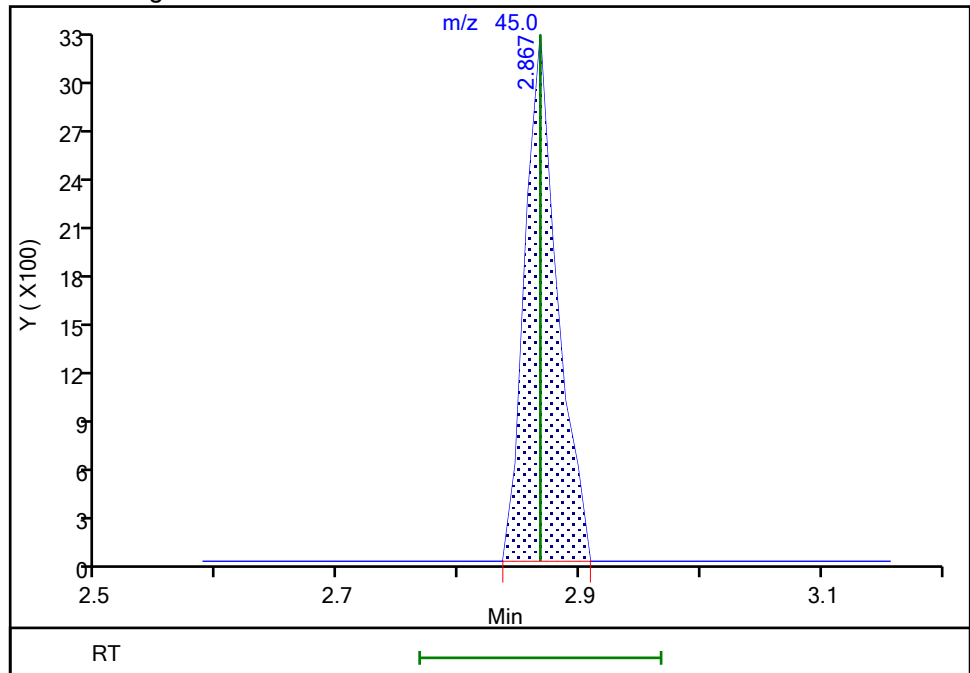
RT: 2.87

Area: 5958

Amount: 63.287032

Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 30-Jun-2021 11:08:45

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 30-Jun-2021 11:09:30 ALS Bottle#: 12 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:15:18 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 12:07:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2253983	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	645270	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	94	1075102	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	98	8272	50.0	66.9	
23 Ethanol	45	2.867	2.867	0.000	50	3437	30.0	28.7	M
27 Propene oxide	58	3.023	3.023	0.000	96	64617	50.0	82.9	
32 Isopropyl alcohol	45	3.365	3.365	0.000	36	2722	5.00	2.91	M
37 Acetonitrile	41	3.500	3.500	0.000	70	3944	5.00	5.62	
44 Isopropyl ether	87	4.318	4.318	0.000	83	4849	0.5000	0.5488	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	86	9149	0.5000	0.6567	
48 Tert-butyl ethyl ether	59	4.640	4.640	0.000	93	15055	0.5000	0.6258	
49 Ethyl acetate	43	4.806	4.806	0.000	94	6182	1.00	1.17	
54 Propionitrile	54	4.837	4.837	0.000	46	5954	5.00	4.73	M
55 Methacrylonitrile	41	4.961	4.961	0.000	82	20132	5.00	4.43	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	91	13927	0.5000	0.5805	
64 n-Butanol	56	5.977	5.977	0.000	33	3285	12.5	12.6	
70 Methyl methacrylate	100	6.350	6.350	0.000	27	2804	1.00	1.05	M
77 2-Nitropropane	41	6.719	6.719	0.000	57	1372	1.00	1.03	
88 Tetrahydrothiophene	60	7.955	7.955	0.000	1	1702	1.00	1.07	
99 cis-1,4-Dichloro-2-butene	53	9.501	9.501	0.000	0	2351	1.00	0.99	
114 1,2,3-Trimethylbenzene	105	10.823	10.823	0.000	95	31296	0.5000	0.4969	
119 1,3,5-Trichlorobenzene	180	12.139	12.139	0.000	96	13398	0.5000	0.5029	
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

M - Manually Integrated

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00053

Amount Added: 0.50

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d

Injection Date: 30-Jun-2021 11:09:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ic

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

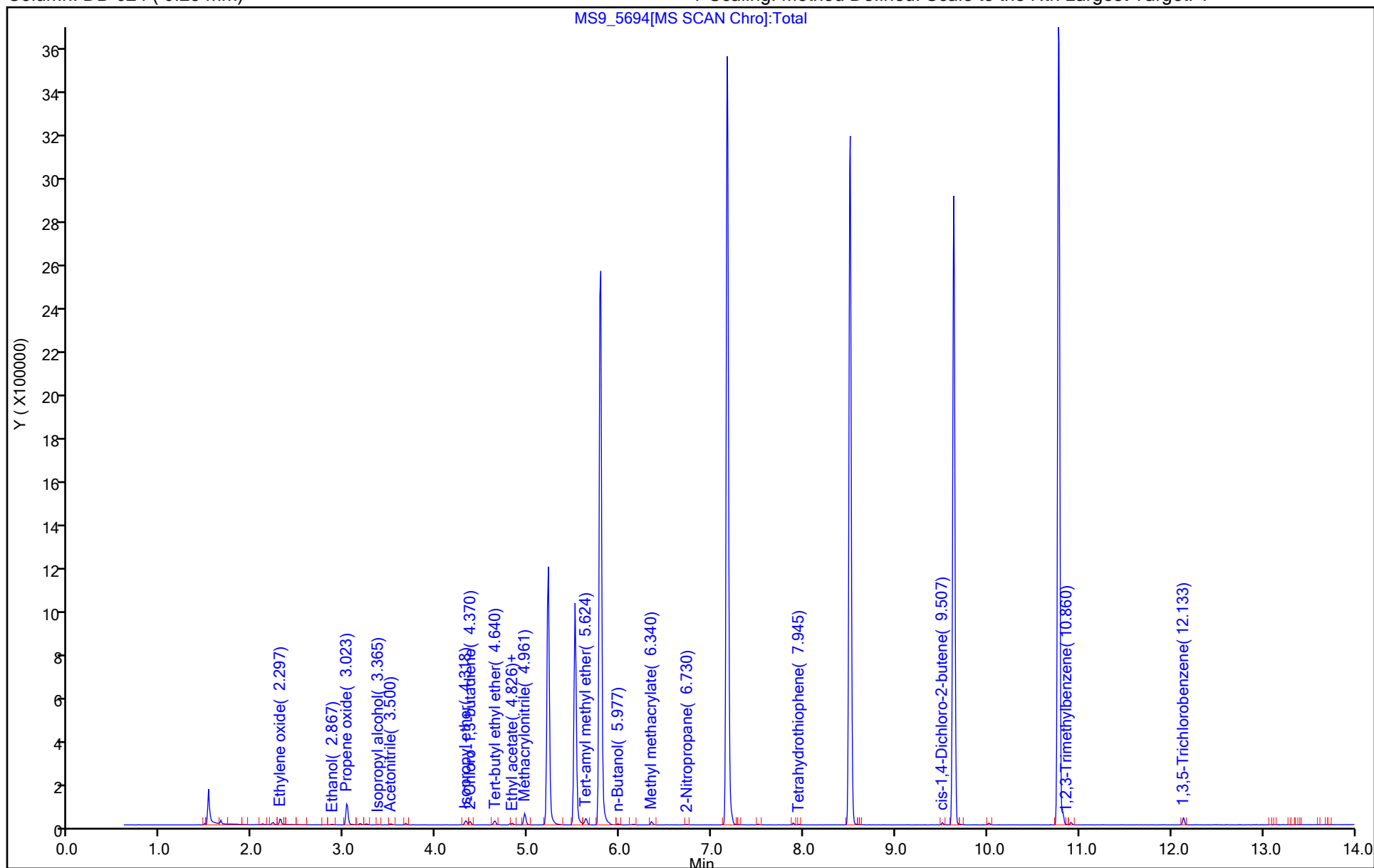
ALS Bottle#: 12

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d

Injection Date: 30-Jun-2021 11:09:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

12

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

MS SCAN

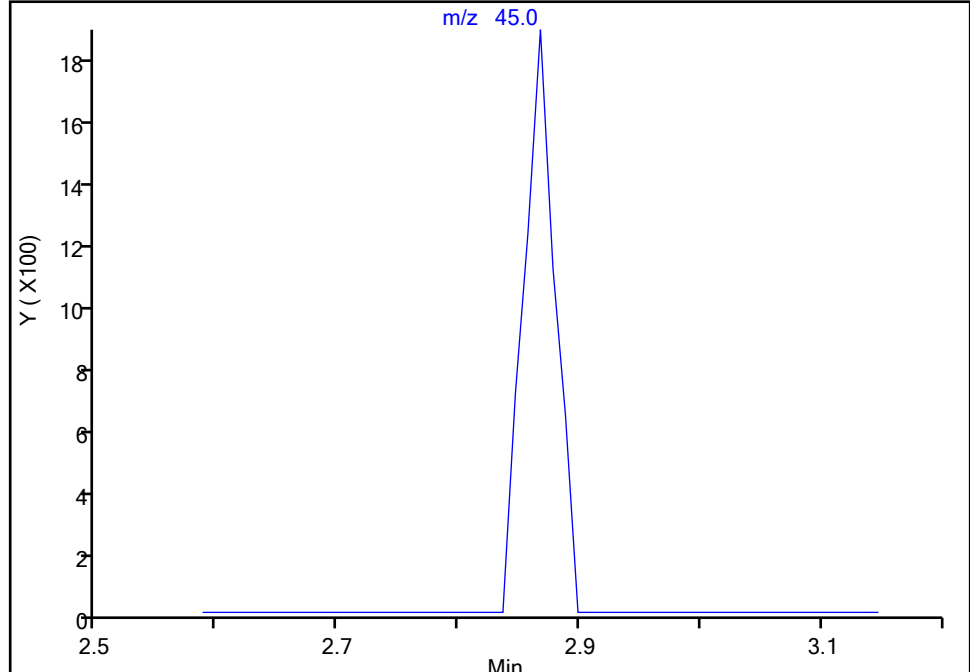
23 Ethanol, CAS: 64-17-5

Signal: 1

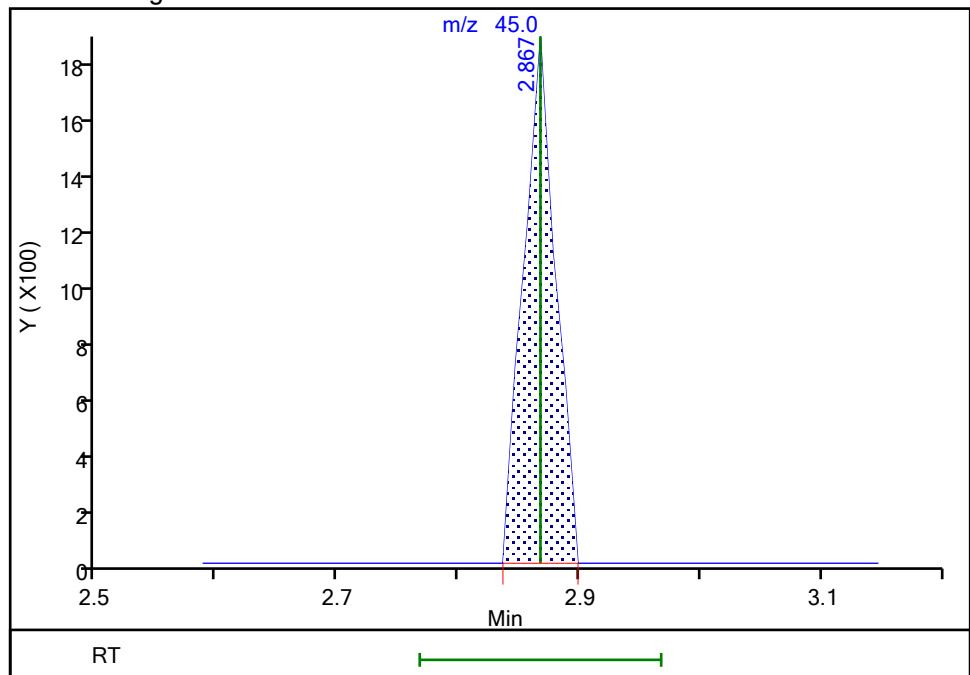
Not Detected

Expected RT: 2.87

Processing Integration Results



Manual Integration Results



Reviewer: wickhamt, 30-Jun-2021 12:00:07

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d

Injection Date: 30-Jun-2021 11:09:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

12

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

MS SCAN

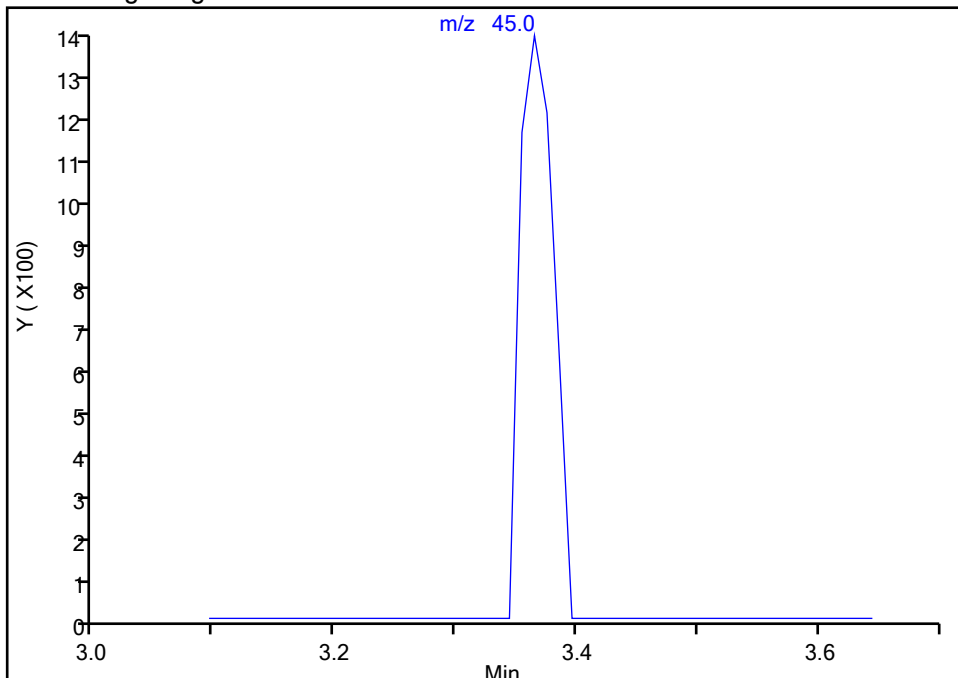
32 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

Not Detected

Expected RT: 3.36

Processing Integration Results



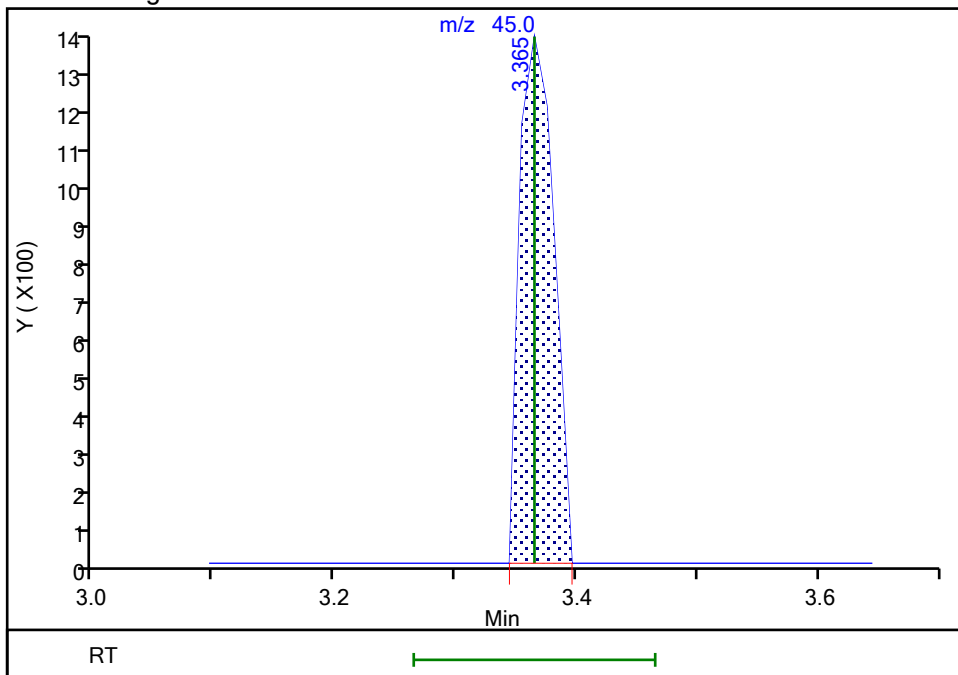
RT: 3.36

Area: 2722

Amount: 2.907071

Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 30-Jun-2021 12:00:18

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d

Injection Date: 30-Jun-2021 11:09:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: wickhamt

ALS Bottle#:

12

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

MS SCAN

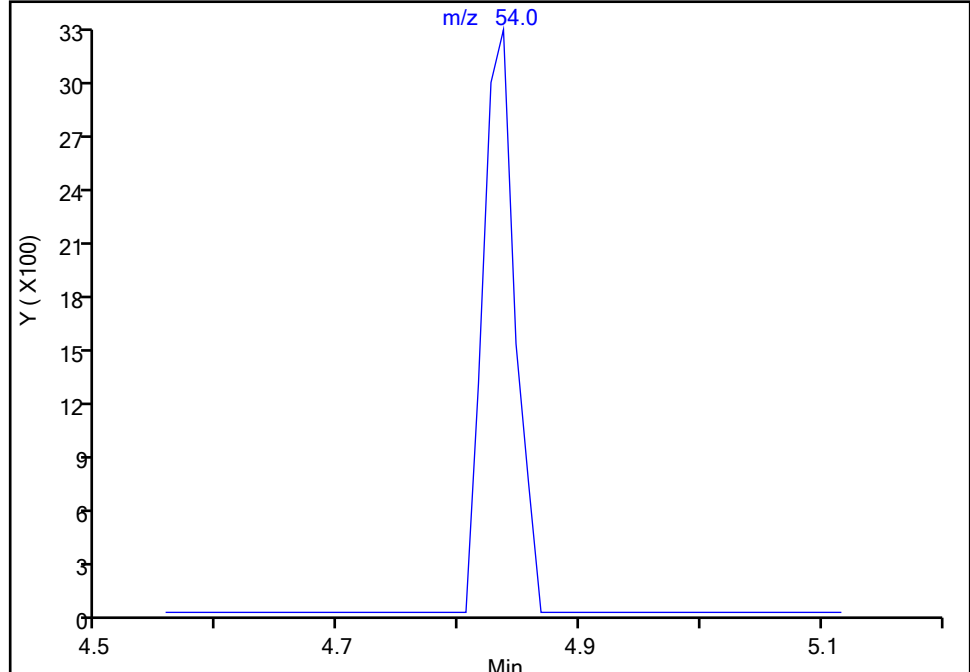
54 Propionitrile, CAS: 107-12-0

Signal: 1

Not Detected

Expected RT: 4.84

Processing Integration Results



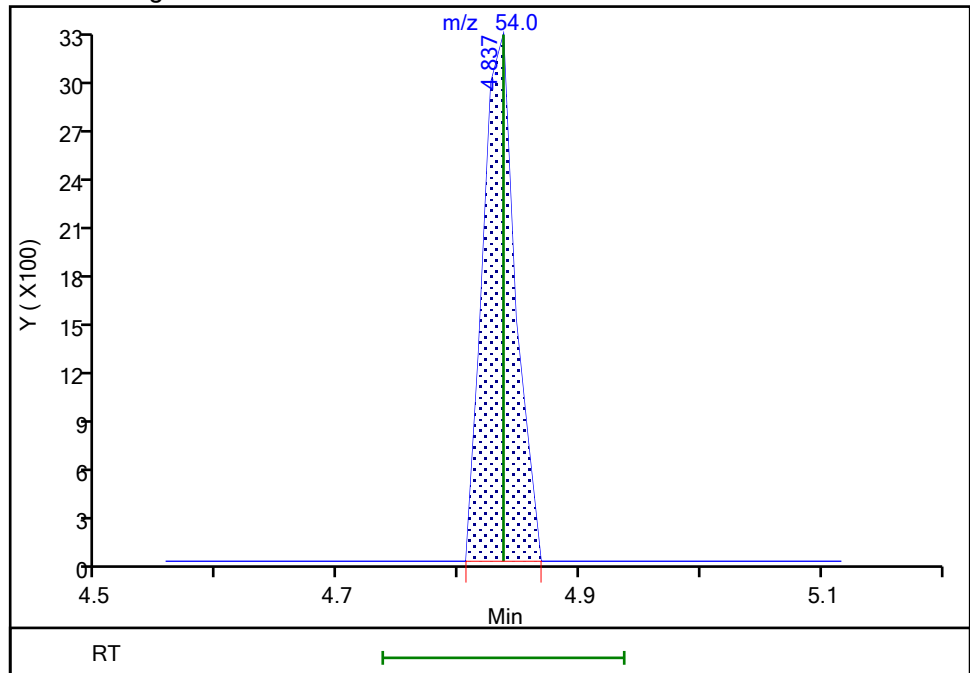
RT: 4.84

Area: 5954

Amount: 4.734212

Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 30-Jun-2021 12:00:30

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

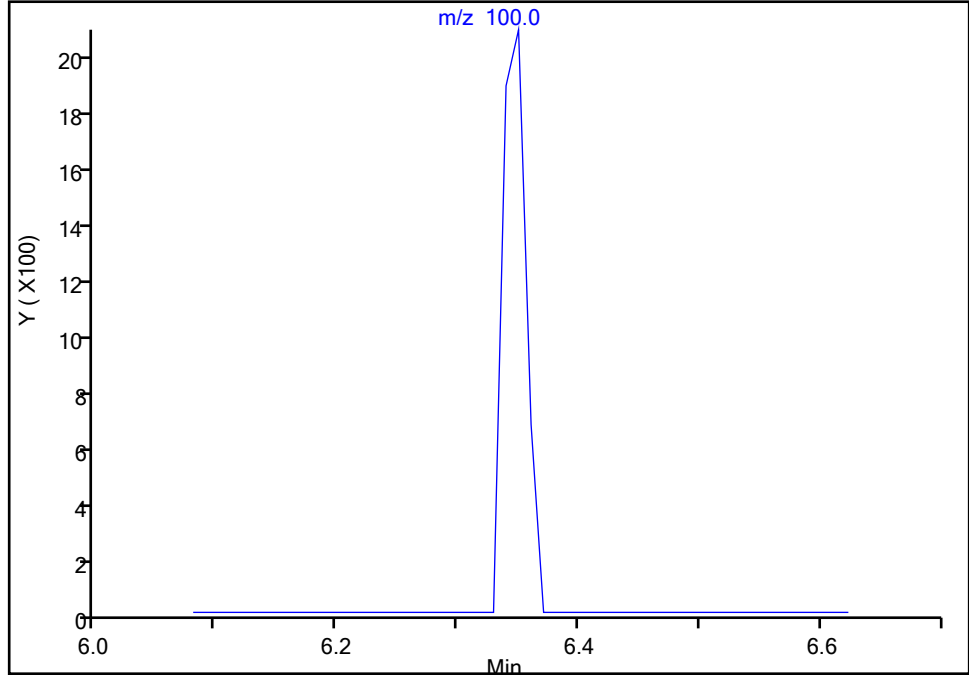
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
Injection Date: 30-Jun-2021 11:09:30 Instrument ID: VMS_MS9
Lims ID: ic
Client ID:
Operator ID: wickhamt ALS Bottle#: 12 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

70 Methyl methacrylate, CAS: 80-62-6

Signal: 1

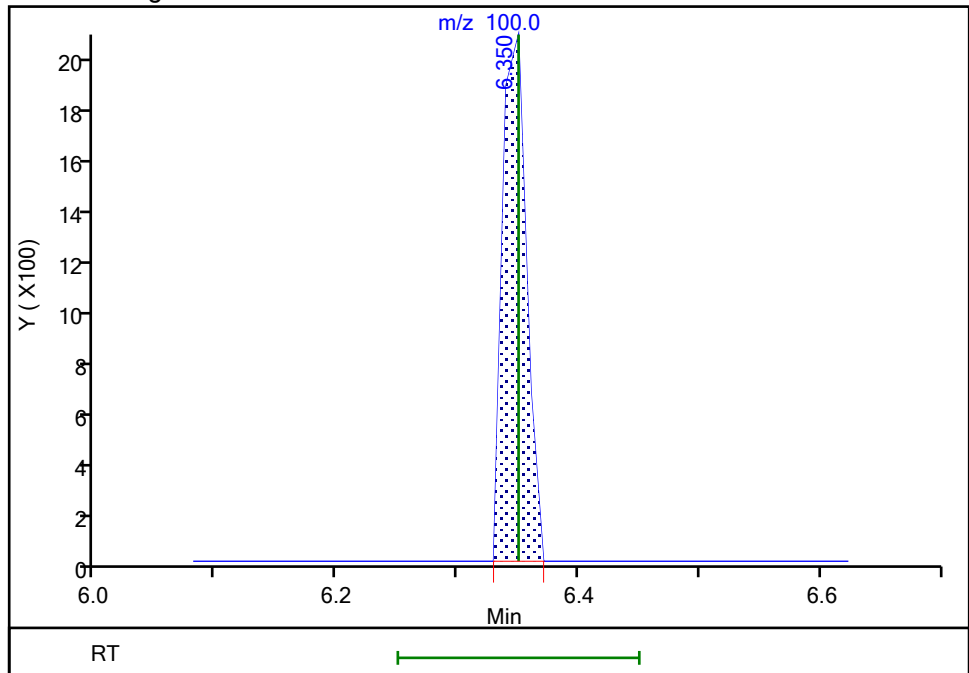
Not Detected
Expected RT: 6.35

Processing Integration Results



RT: 6.35
Area: 2804
Amount: 1.053320
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 30-Jun-2021 12:00:41
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Calibration

/ Ethylene oxide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

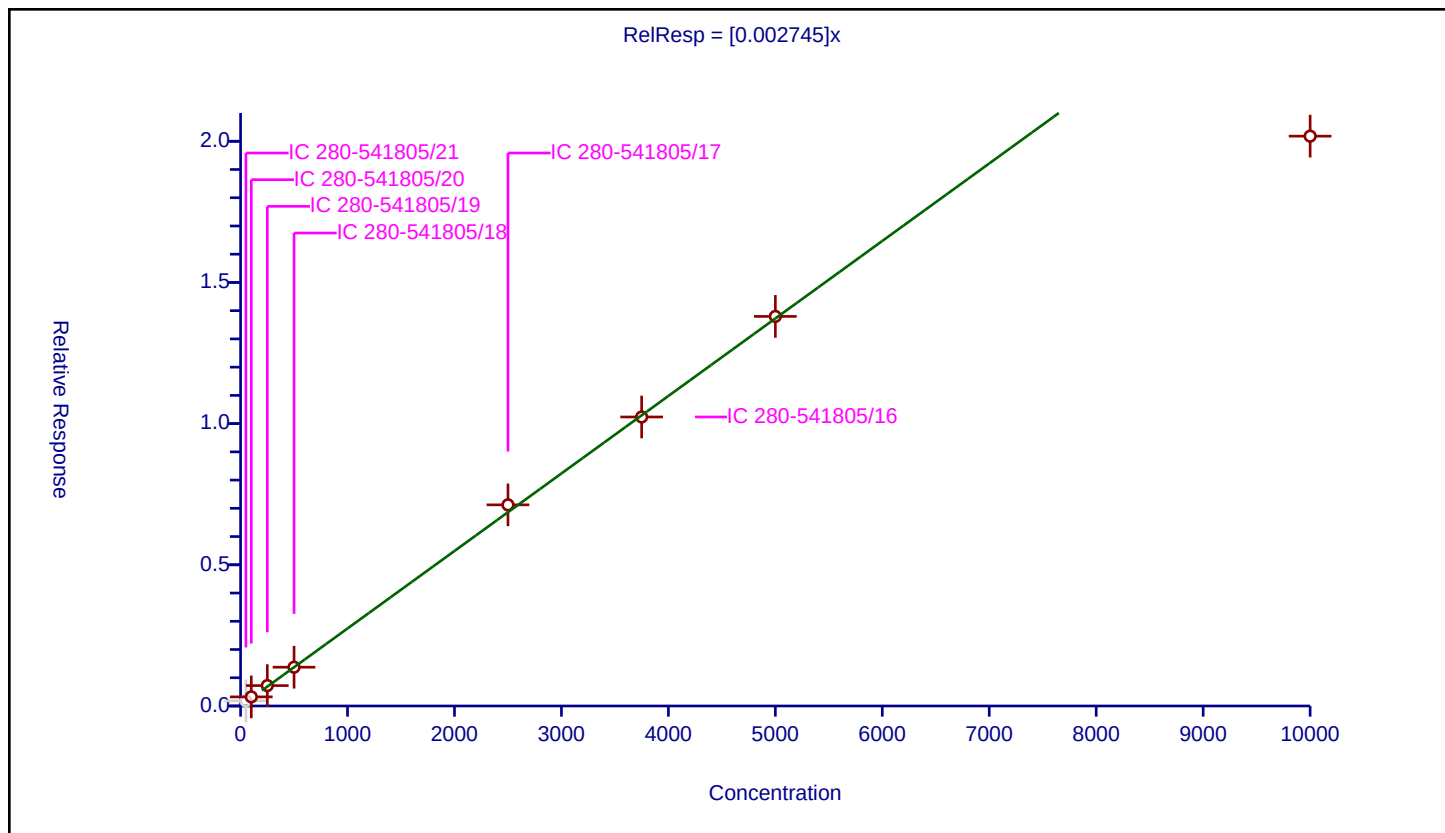
Curve Coefficients

Intercept: 0
 Slope: 0.002745

Error Coefficients

Standard Error: 535000
 Relative Standard Error: 13.2
 Correlation Coefficient: 0.968
 Coefficient of Determination (Adjusted): 0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	50.0	0.183497	50.0	2253983.0	0.00367	N
2	IC 280-541805/20	100.0	0.32208	50.0	2353763.0	0.003221	Y
3	IC 280-541805/19	250.0	0.722396	50.0	2384289.0	0.00289	Y
4	IC 280-541805/18	500.0	1.373592	50.0	2364239.0	0.002747	Y
5	IC 280-541805/17	2500.0	7.123497	50.0	2337216.0	0.002849	Y
6	IC 280-541805/16	3750.0	10.234822	50.0	2366001.0	0.002729	Y
7	IC 280-541805/15	5000.0	13.796658	50.0	2350562.0	0.002759	Y
8	IC 280-541805/14	10000.0	20.179925	50.0	2412566.0	0.002018	Y



Calibration

/ Ethanol

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

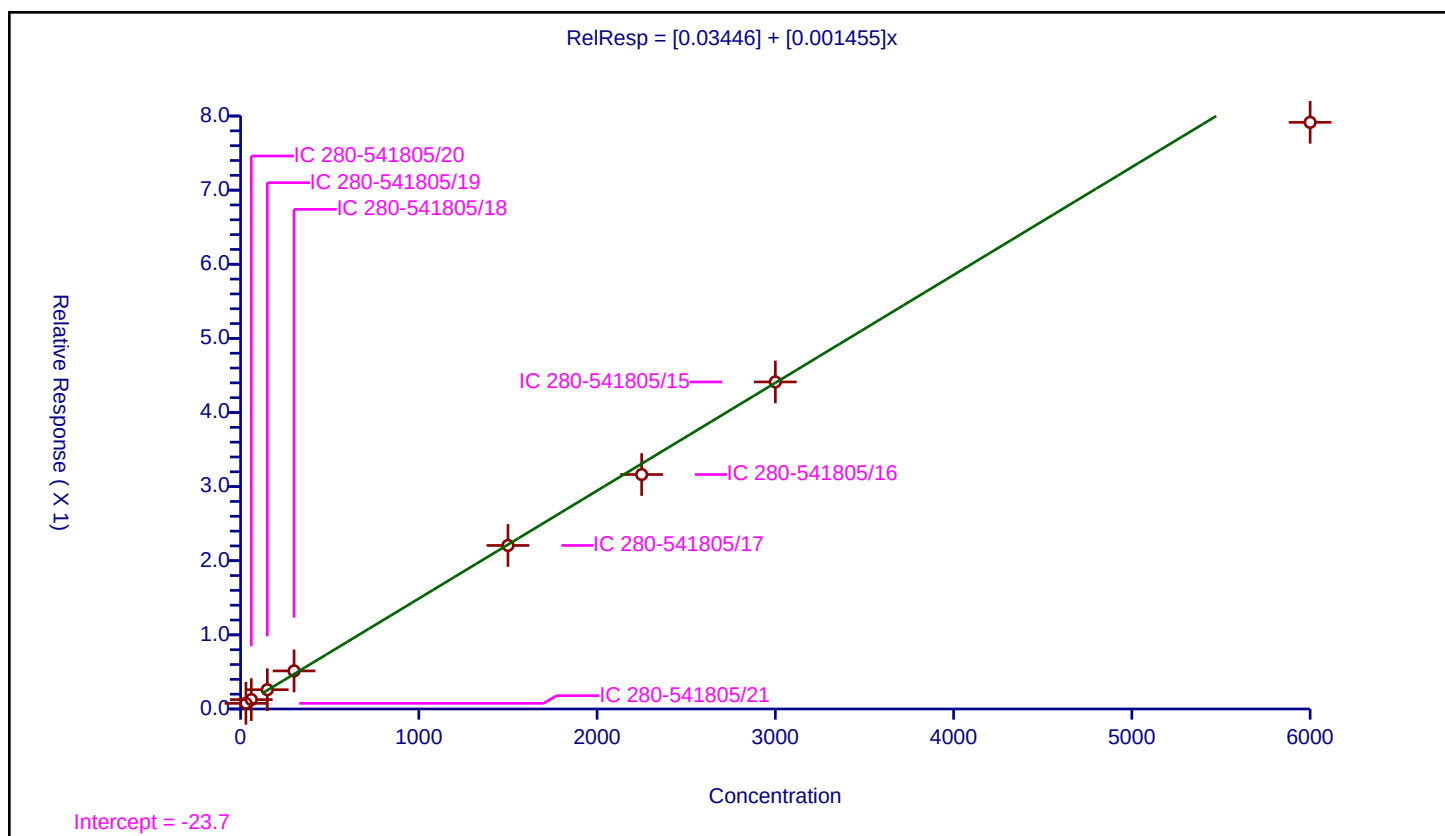
Curve Coefficients

Intercept: 0.03446
 Slope: 0.001455

Error Coefficients

Standard Error: 193000
 Relative Standard Error: 6.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	30.0	0.076243	50.0	2253983.0	0.002541	Y
2	IC 280-541805/20	60.0	0.126563	50.0	2353763.0	0.002109	Y
3	IC 280-541805/19	150.0	0.260392	50.0	2384289.0	0.001736	Y
4	IC 280-541805/18	300.0	0.513717	50.0	2364239.0	0.001712	Y
5	IC 280-541805/17	1500.0	2.20615	50.0	2337216.0	0.001471	Y
6	IC 280-541805/16	2250.0	3.163101	50.0	2366001.0	0.001406	Y
7	IC 280-541805/15	3000.0	4.412455	50.0	2350562.0	0.001471	Y
8	IC 280-541805/14	6000.0	7.914726	50.0	2412566.0	0.001319	Y



Calibration

/ Propene oxide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

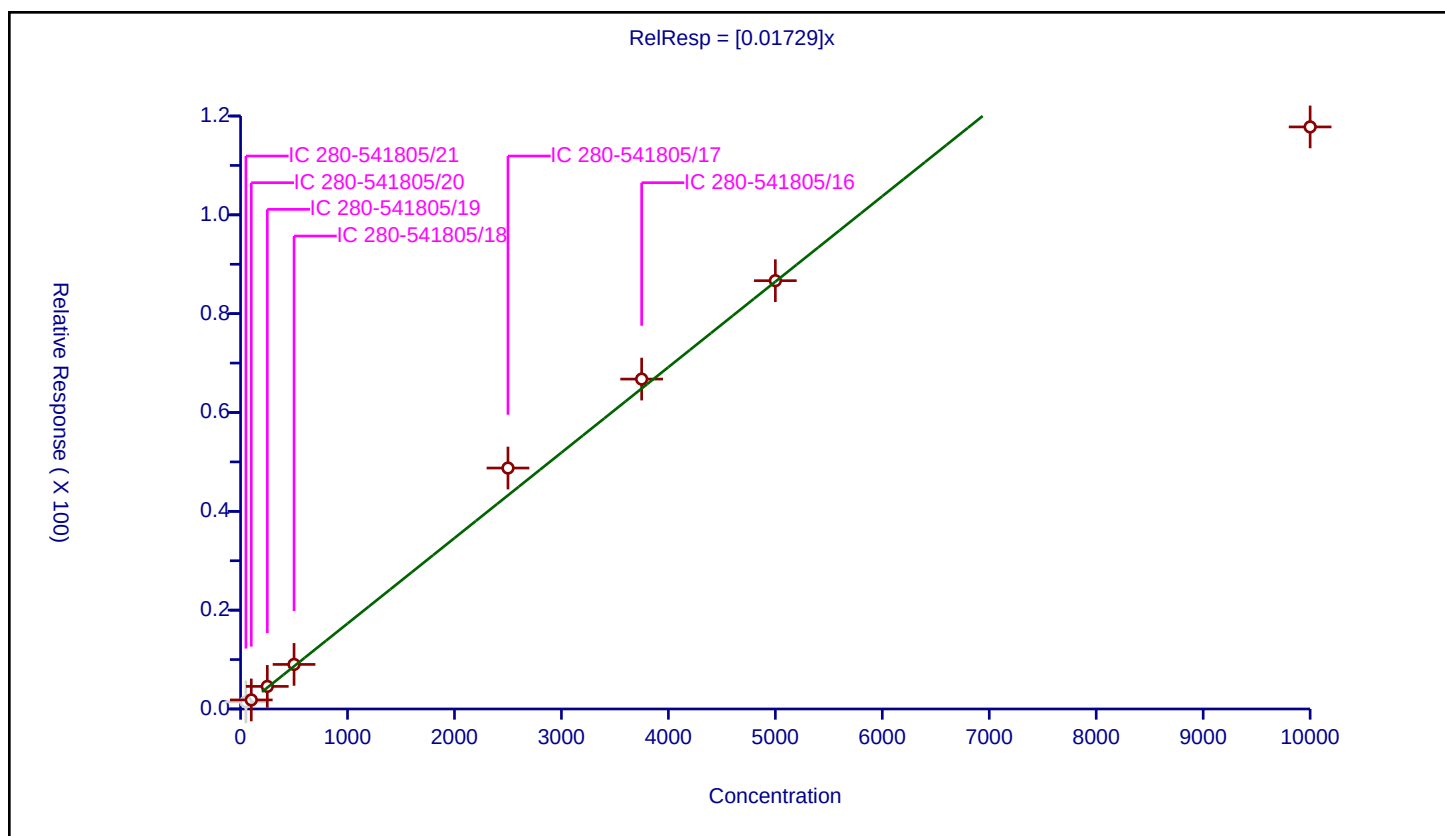
Curve Coefficients

Intercept: 0
 Slope: 0.01729

Error Coefficients

Standard Error: 3270000
 Relative Standard Error: 14.6
 Correlation Coefficient: 0.940
 Coefficient of Determination (Adjusted): 0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	50.0	1.433396	50.0	2253983.0	0.028668	N
2	IC 280-541805/20	100.0	1.831132	50.0	2353763.0	0.018311	Y
3	IC 280-541805/19	250.0	4.573691	50.0	2384289.0	0.018295	Y
4	IC 280-541805/18	500.0	9.017785	50.0	2364239.0	0.018036	Y
5	IC 280-541805/17	2500.0	48.760919	50.0	2337216.0	0.019504	Y
6	IC 280-541805/16	3750.0	66.762926	50.0	2366001.0	0.017803	Y
7	IC 280-541805/15	5000.0	86.675782	50.0	2350562.0	0.017335	Y
8	IC 280-541805/14	10000.0	117.79456	50.0	2412566.0	0.011779	Y



Calibration

/ Isopropyl alcohol

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

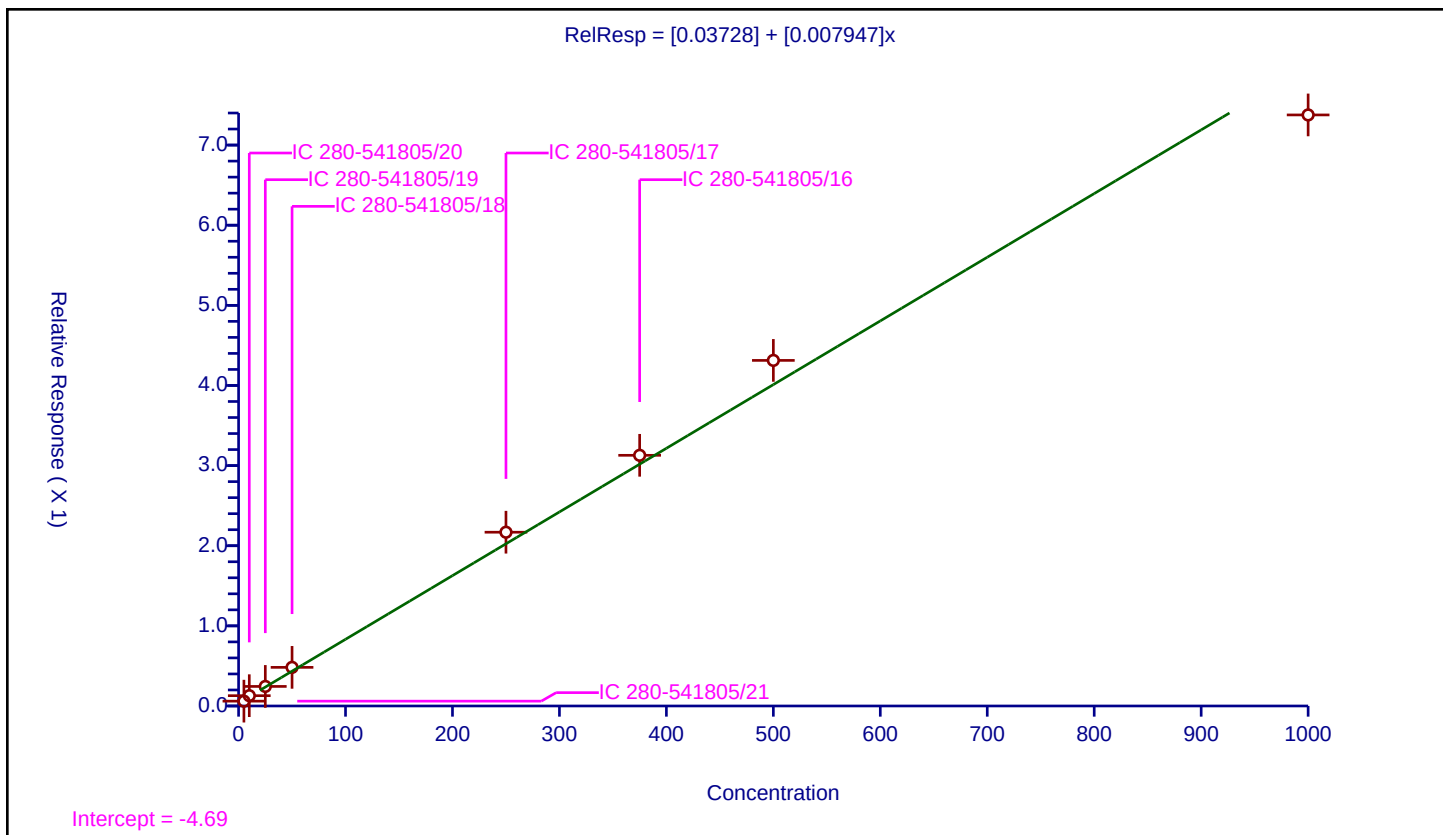
Curve Coefficients

Intercept: 0.03728
 Slope: 0.007947

Error Coefficients

Standard Error: 183000
 Relative Standard Error: 19.7
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	5.0	0.060382	50.0	2253983.0	0.012076	Y
2	IC 280-541805/20	10.0	0.128645	50.0	2353763.0	0.012865	Y
3	IC 280-541805/19	25.0	0.243951	50.0	2384289.0	0.009758	Y
4	IC 280-541805/18	50.0	0.481973	50.0	2364239.0	0.009639	Y
5	IC 280-541805/17	250.0	2.168606	50.0	2337216.0	0.008674	Y
6	IC 280-541805/16	375.0	3.128295	50.0	2366001.0	0.008342	Y
7	IC 280-541805/15	500.0	4.312586	50.0	2350562.0	0.008625	Y
8	IC 280-541805/14	1000.0	7.376192	50.0	2412566.0	0.007376	Y



Calibration

/ Acetonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

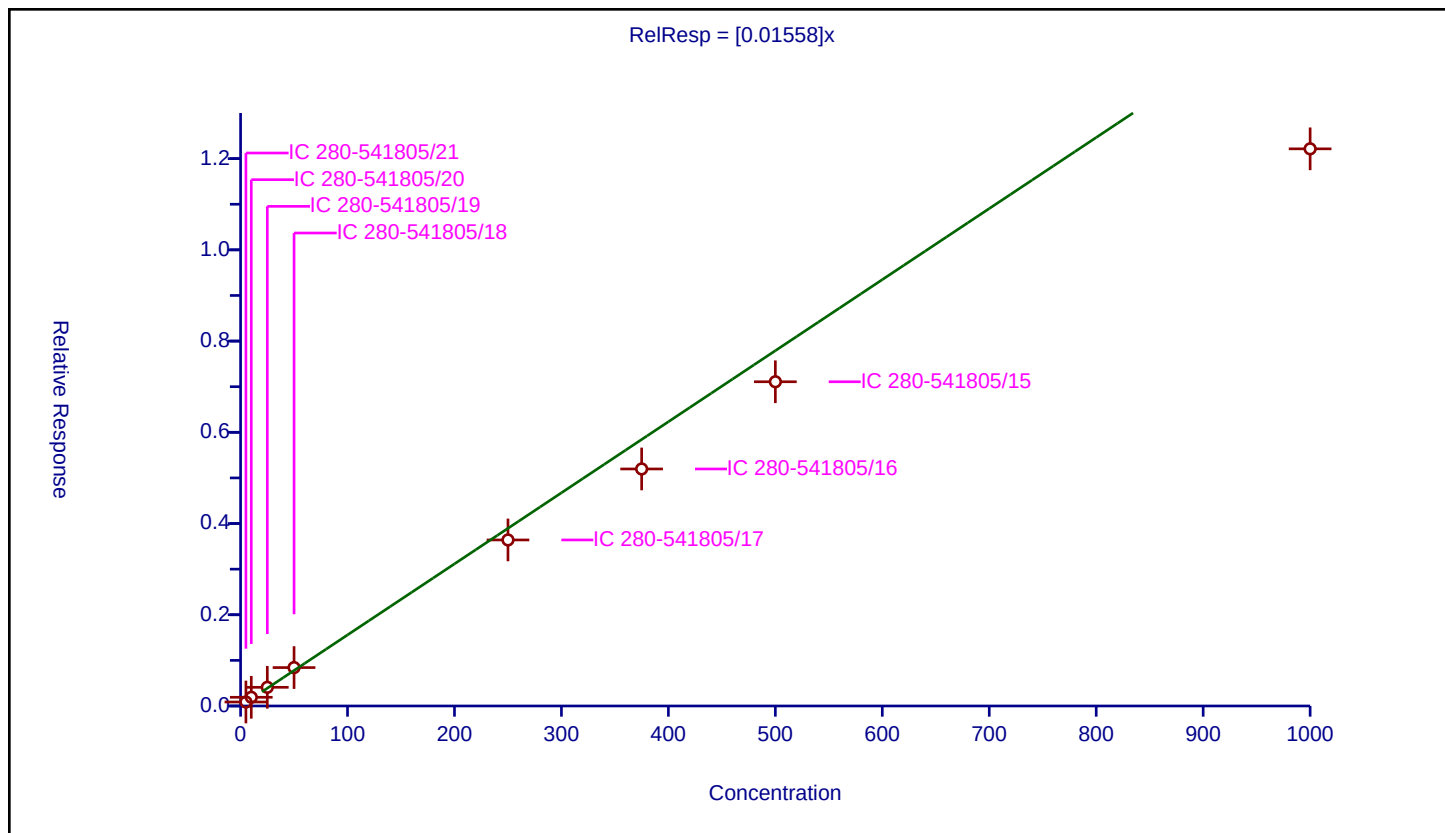
Curve Coefficients

Intercept: 0
 Slope: 0.01558

Error Coefficients

Standard Error: 280000
 Relative Standard Error: 14.4
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	5.0	0.08749	50.0	2253983.0	0.017498	Y
2	IC 280-541805/20	10.0	0.190652	50.0	2353763.0	0.019065	Y
3	IC 280-541805/19	25.0	0.409493	50.0	2384289.0	0.01638	Y
4	IC 280-541805/18	50.0	0.842005	50.0	2364239.0	0.01684	Y
5	IC 280-541805/17	250.0	3.640421	50.0	2337216.0	0.014562	Y
6	IC 280-541805/16	375.0	5.196236	50.0	2366001.0	0.013857	Y
7	IC 280-541805/15	500.0	7.1083	50.0	2350562.0	0.014217	Y
8	IC 280-541805/14	1000.0	12.214733	50.0	2412566.0	0.012215	Y



Calibration

/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

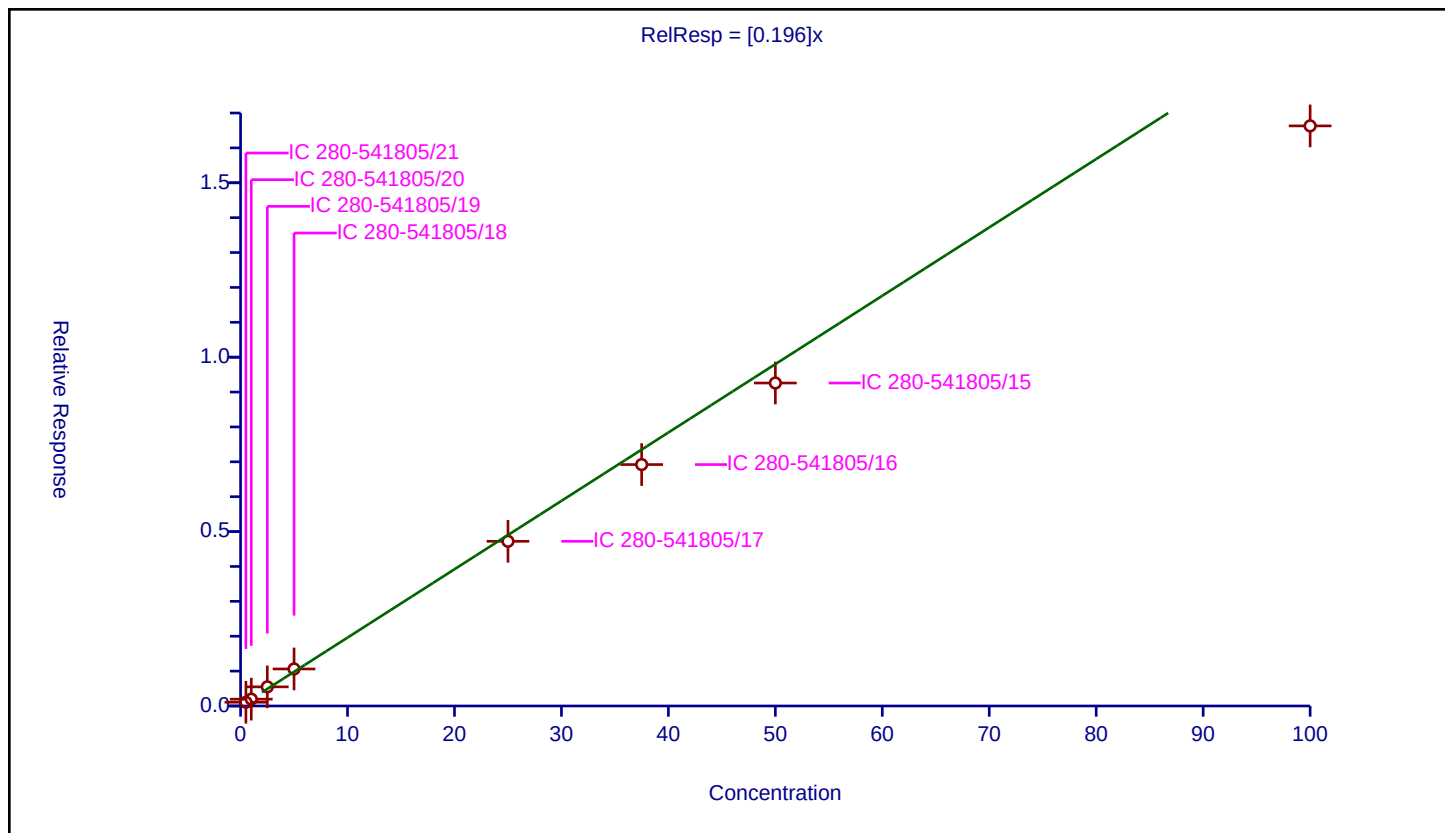
Curve Coefficients

Intercept: 0
 Slope: 0.196

Error Coefficients

Standard Error: 377000
 Relative Standard Error: 9.4
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	0.5	0.107565	50.0	2253983.0	0.21513	Y
2	IC 280-541805/20	1.0	0.196239	50.0	2353763.0	0.196239	Y
3	IC 280-541805/19	2.5	0.548654	50.0	2384289.0	0.219462	Y
4	IC 280-541805/18	5.0	1.061631	50.0	2364239.0	0.212326	Y
5	IC 280-541805/17	25.0	4.721301	50.0	2337216.0	0.188852	Y
6	IC 280-541805/16	37.5	6.921151	50.0	2366001.0	0.184564	Y
7	IC 280-541805/15	50.0	9.259637	50.0	2350562.0	0.185193	Y
8	IC 280-541805/14	100.0	16.630364	50.0	2412566.0	0.166304	Y



Calibration

/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

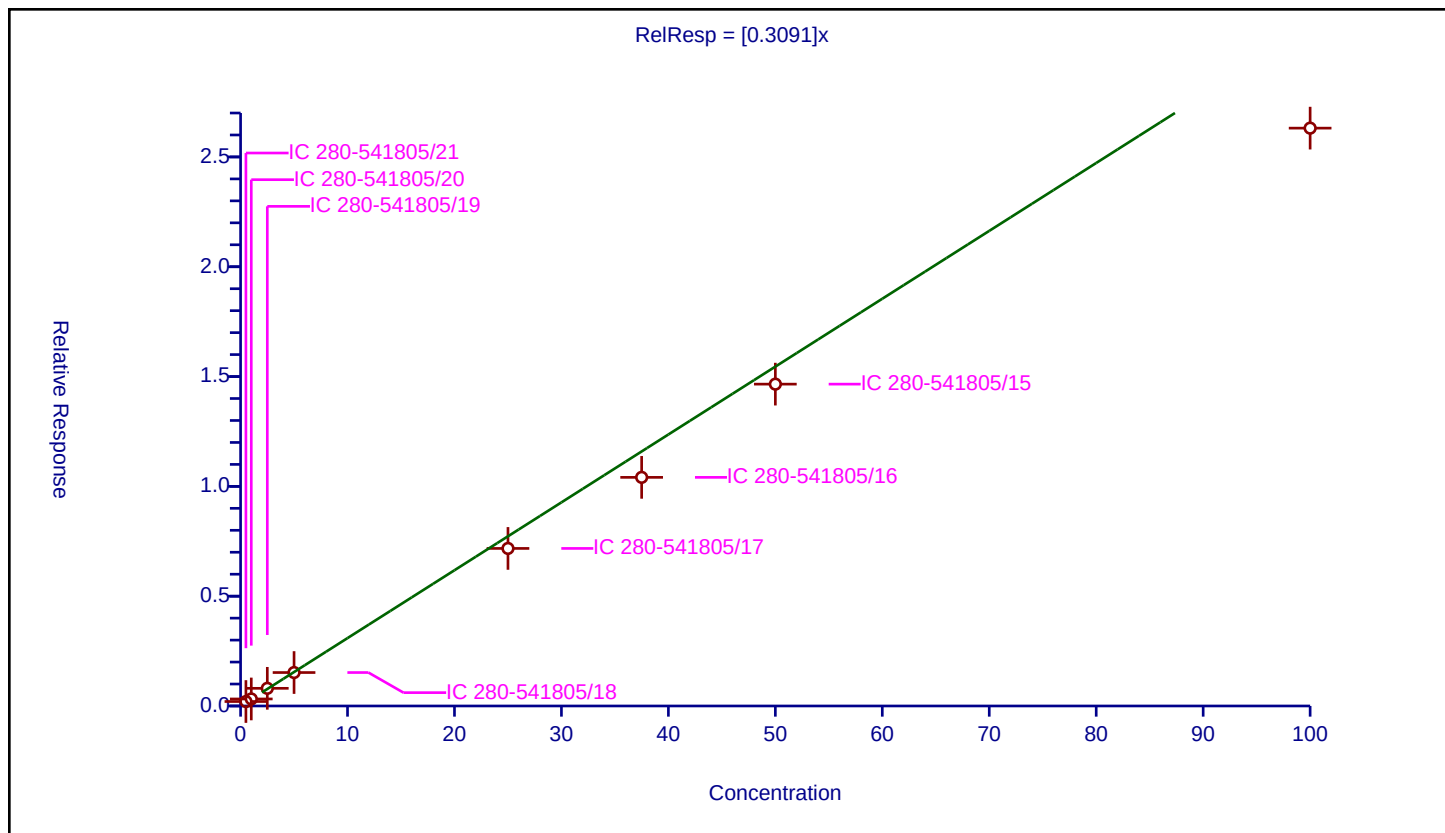
Curve Coefficients

Intercept: 0
 Slope: 0.3091

Error Coefficients

Standard Error: 591000
 Relative Standard Error: 14.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	0.5	0.202952	50.0	2253983.0	0.405904	Y
2	IC 280-541805/20	1.0	0.319446	50.0	2353763.0	0.319446	Y
3	IC 280-541805/19	2.5	0.804202	50.0	2384289.0	0.321681	Y
4	IC 280-541805/18	5.0	1.522964	50.0	2364239.0	0.304593	Y
5	IC 280-541805/17	25.0	7.174176	50.0	2337216.0	0.286967	Y
6	IC 280-541805/16	37.5	10.410435	50.0	2366001.0	0.277612	Y
7	IC 280-541805/15	50.0	14.654666	50.0	2350562.0	0.293093	Y
8	IC 280-541805/14	100.0	26.311923	50.0	2412566.0	0.263119	Y



Calibration

/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

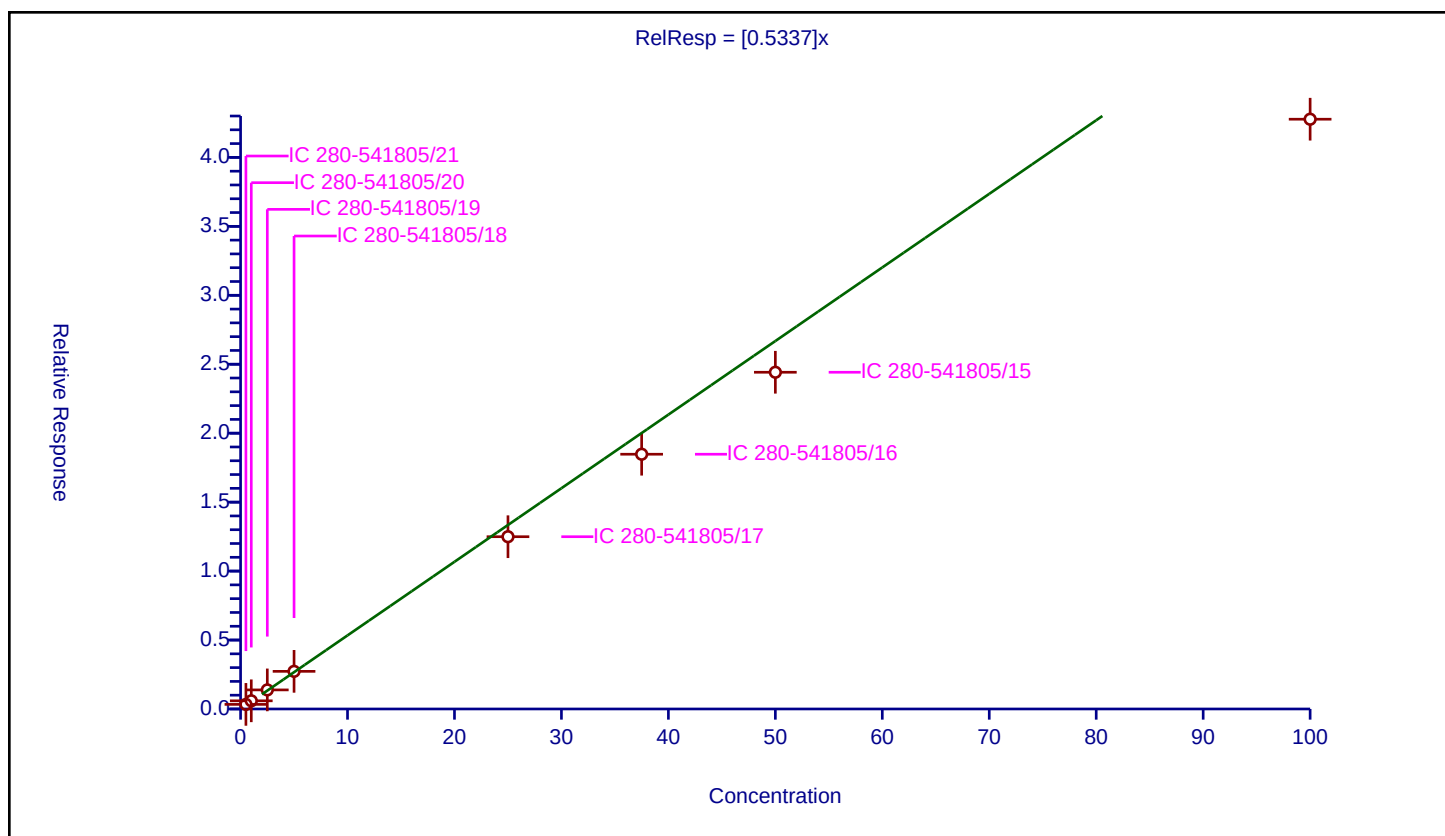
Curve Coefficients

Intercept: 0
 Slope: 0.5337

Error Coefficients

Standard Error: 979000
 Relative Standard Error: 13.9
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	0.5	0.333964	50.0	2253983.0	0.667929	Y
2	IC 280-541805/20	1.0	0.593645	50.0	2353763.0	0.593645	Y
3	IC 280-541805/19	2.5	1.382781	50.0	2384289.0	0.553112	Y
4	IC 280-541805/18	5.0	2.73035	50.0	2364239.0	0.54607	Y
5	IC 280-541805/17	25.0	12.493903	50.0	2337216.0	0.499756	Y
6	IC 280-541805/16	37.5	18.474358	50.0	2366001.0	0.49265	Y
7	IC 280-541805/15	50.0	24.41899	50.0	2350562.0	0.48838	Y
8	IC 280-541805/14	100.0	42.76739	50.0	2412566.0	0.427674	Y



Calibration

/ Ethyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

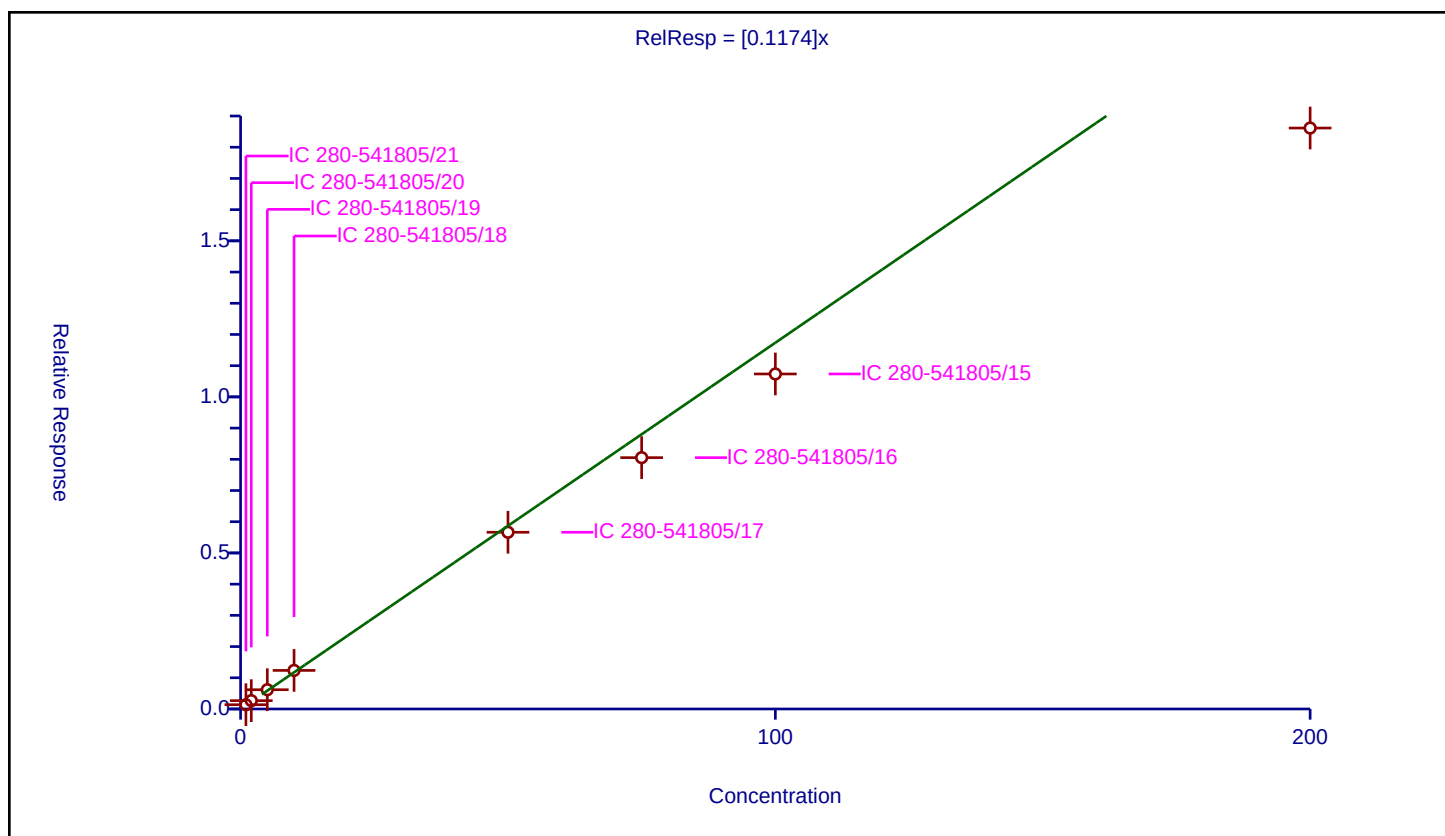
Curve Coefficients

Intercept: 0
 Slope: 0.1174

Error Coefficients

Standard Error: 428000
 Relative Standard Error: 12.6
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	1.0	0.137135	50.0	2253983.0	0.137135	Y
2	IC 280-541805/20	2.0	0.267295	50.0	2353763.0	0.133648	Y
3	IC 280-541805/19	5.0	0.61727	50.0	2384289.0	0.123454	Y
4	IC 280-541805/18	10.0	1.235662	50.0	2364239.0	0.123566	Y
5	IC 280-541805/17	50.0	5.662827	50.0	2337216.0	0.113257	Y
6	IC 280-541805/16	75.0	8.053293	50.0	2366001.0	0.107377	Y
7	IC 280-541805/15	100.0	10.734837	50.0	2350562.0	0.107348	Y
8	IC 280-541805/14	200.0	18.614993	50.0	2412566.0	0.093075	Y



Calibration

/ Propionitrile

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

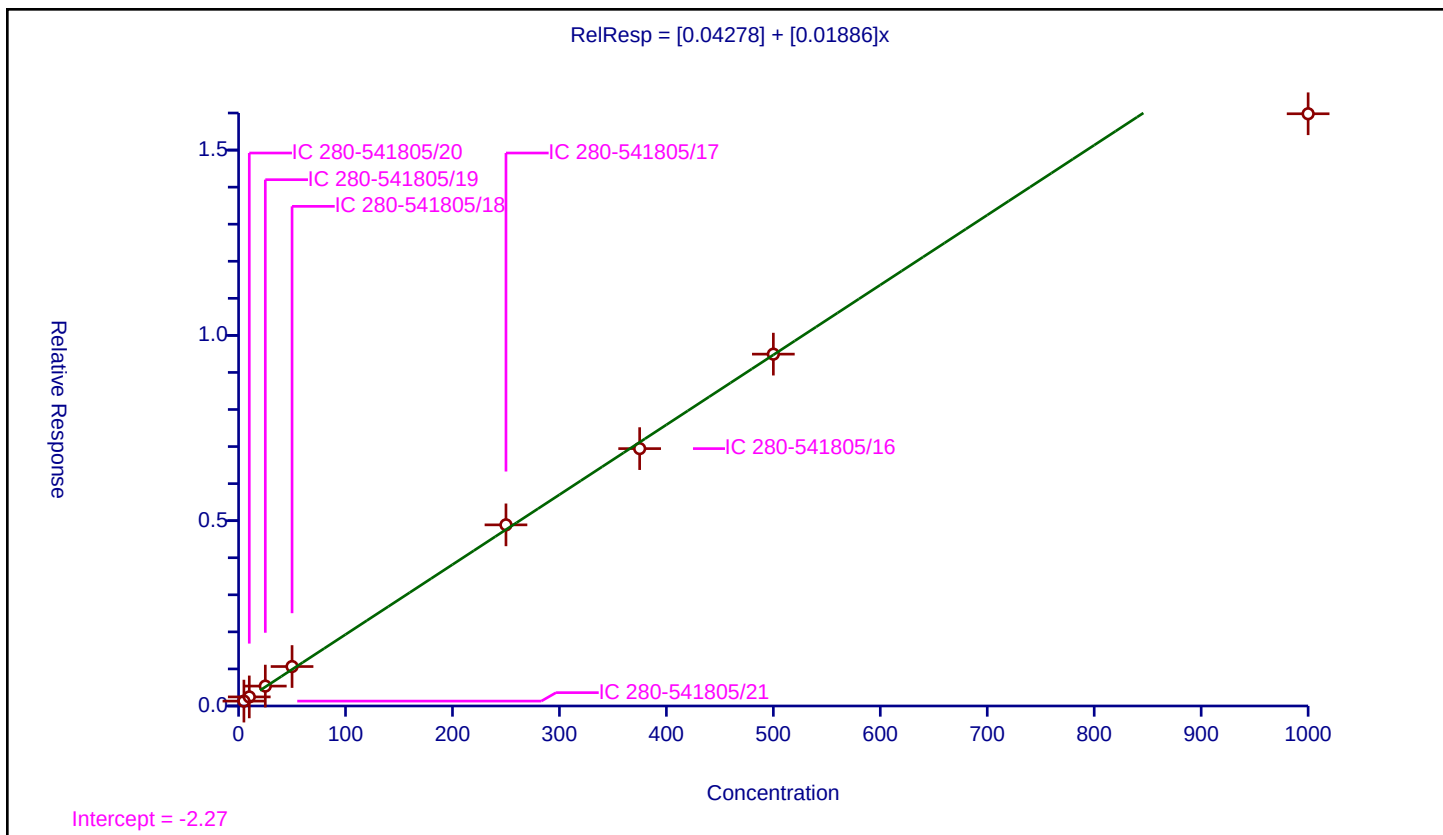
Curve Coefficients

Intercept: 0.04278
 Slope: 0.01886

Error Coefficients

Standard Error: 399000
 Relative Standard Error: 8.4
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	5.0	0.132077	50.0	2253983.0	0.026415	Y
2	IC 280-541805/20	10.0	0.244884	50.0	2353763.0	0.024488	Y
3	IC 280-541805/19	25.0	0.536953	50.0	2384289.0	0.021478	Y
4	IC 280-541805/18	50.0	1.064825	50.0	2364239.0	0.021296	Y
5	IC 280-541805/17	250.0	4.887524	50.0	2337216.0	0.01955	Y
6	IC 280-541805/16	375.0	6.944608	50.0	2366001.0	0.018519	Y
7	IC 280-541805/15	500.0	9.493666	50.0	2350562.0	0.018987	Y
8	IC 280-541805/14	1000.0	15.979874	50.0	2412566.0	0.01598	Y



Calibration

/ Methacrylonitrile

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

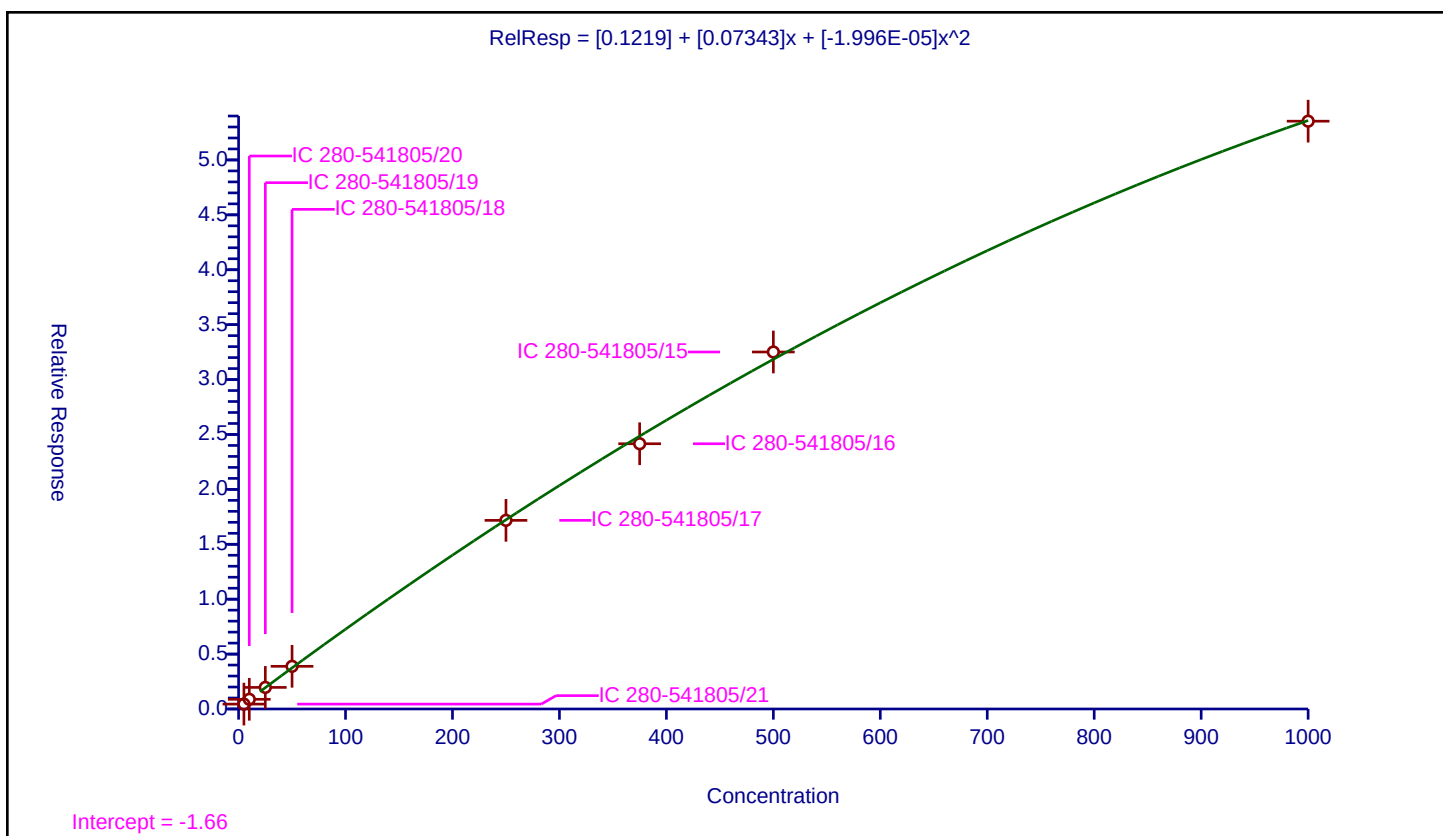
Curve Coefficients

Intercept: 0.1219
 Slope: 0.07343
 Second Order: -1.996E-05

Error Coefficients

Standard Error: 1480000
 Relative Standard Error: 6.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	5.0	0.446587	50.0	2253983.0	0.089317	Y
2	IC 280-541805/20	10.0	0.88384	50.0	2353763.0	0.088384	Y
3	IC 280-541805/19	25.0	1.966435	50.0	2384289.0	0.078657	Y
4	IC 280-541805/18	50.0	3.885627	50.0	2364239.0	0.077713	Y
5	IC 280-541805/17	250.0	17.178194	50.0	2337216.0	0.068713	Y
6	IC 280-541805/16	375.0	24.153878	50.0	2366001.0	0.06441	Y
7	IC 280-541805/15	500.0	32.510119	50.0	2350562.0	0.06502	Y
8	IC 280-541805/14	1000.0	53.527841	50.0	2412566.0	0.053528	Y



Calibration

/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

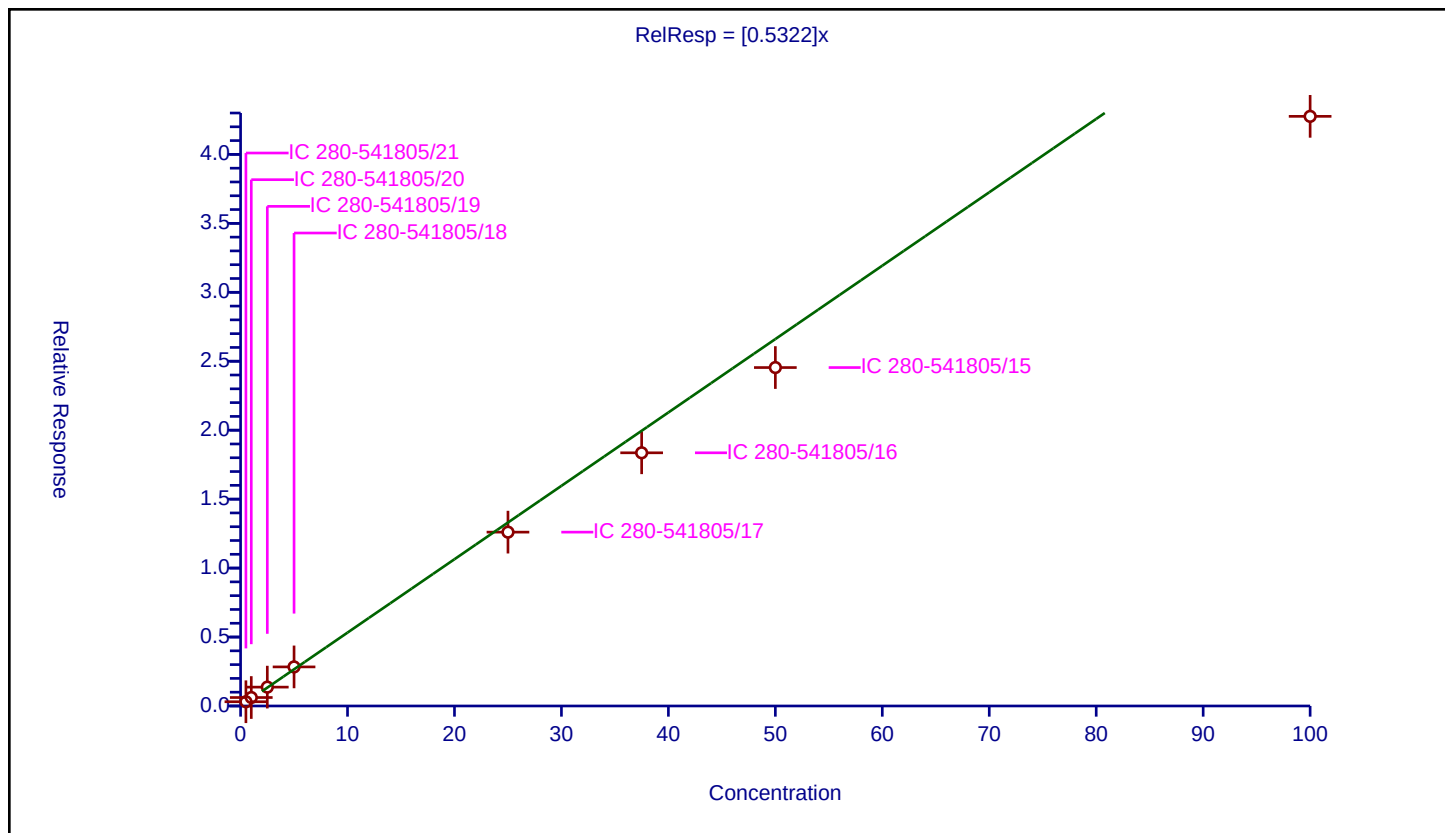
Curve Coefficients

Intercept: 0
 Slope: 0.5322

Error Coefficients

Standard Error: 979000
 Relative Standard Error: 12.4
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	0.5	0.308942	50.0	2253983.0	0.617884	Y
2	IC 280-541805/20	1.0	0.613486	50.0	2353763.0	0.613486	Y
3	IC 280-541805/19	2.5	1.367347	50.0	2384289.0	0.546939	Y
4	IC 280-541805/18	5.0	2.833766	50.0	2364239.0	0.566753	Y
5	IC 280-541805/17	25.0	12.606644	50.0	2337216.0	0.504266	Y
6	IC 280-541805/16	37.5	18.359439	50.0	2366001.0	0.489585	Y
7	IC 280-541805/15	50.0	24.542726	50.0	2350562.0	0.490855	Y
8	IC 280-541805/14	100.0	42.758126	50.0	2412566.0	0.427581	Y



Calibration

/ n-Butanol

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

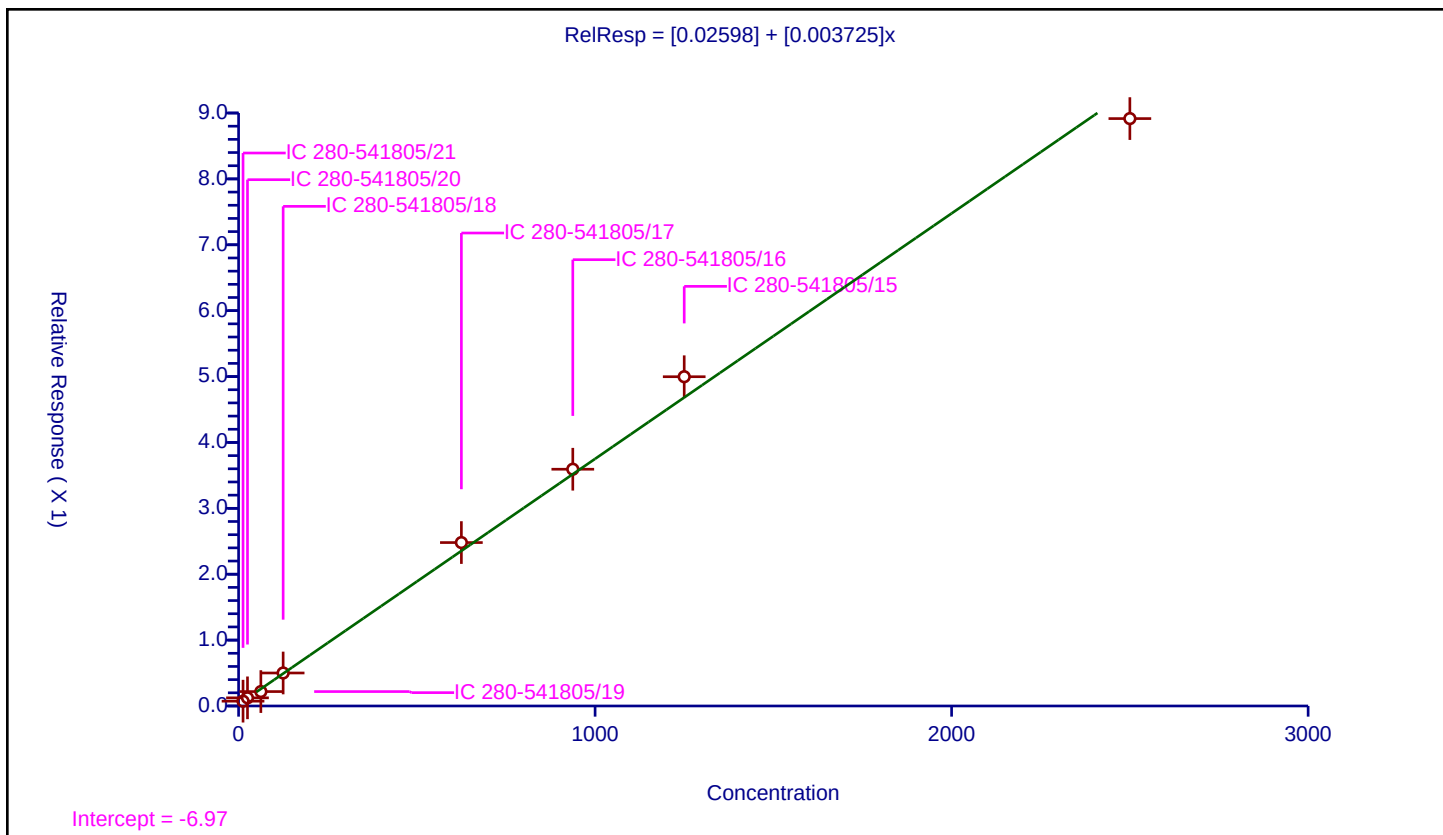
Curve Coefficients

Intercept: 0.02598
 Slope: 0.003725

Error Coefficients

Standard Error: 217000
 Relative Standard Error: 8.4
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	12.5	0.072871	50.0	2253983.0	0.00583	Y
2	IC 280-541805/20	25.0	0.123504	50.0	2353763.0	0.00494	Y
3	IC 280-541805/19	62.5	0.218682	50.0	2384289.0	0.003499	Y
4	IC 280-541805/18	125.0	0.500965	50.0	2364239.0	0.004008	Y
5	IC 280-541805/17	625.0	2.48043	50.0	2337216.0	0.003969	Y
6	IC 280-541805/16	937.5	3.593595	50.0	2366001.0	0.003833	Y
7	IC 280-541805/15	1250.0	4.997507	50.0	2350562.0	0.003998	Y
8	IC 280-541805/14	2500.0	8.91559	50.0	2412566.0	0.003566	Y



Calibration

/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

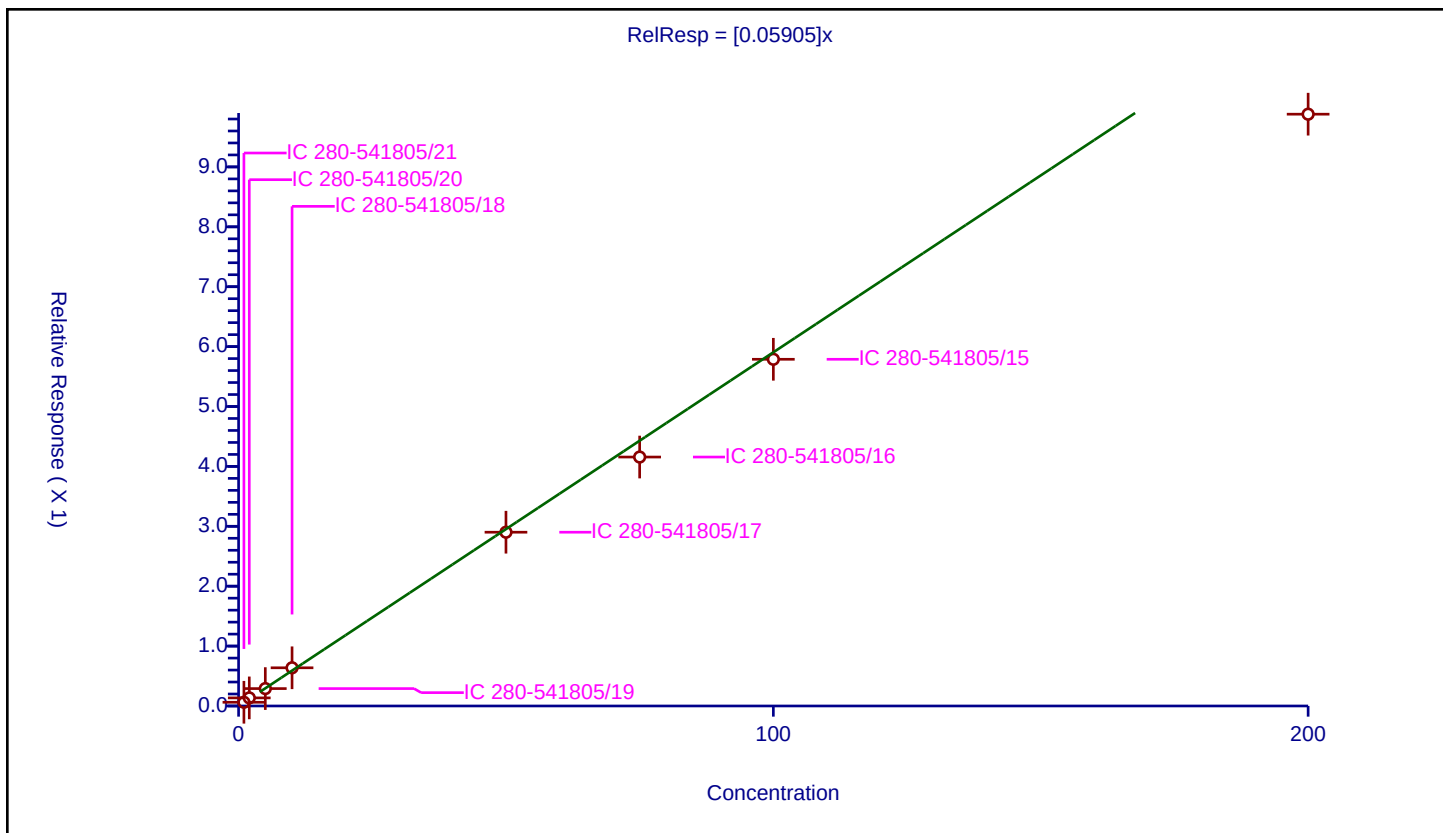
Curve Coefficients

Intercept: 0
 Slope: 0.05905

Error Coefficients

Standard Error: 227000
 Relative Standard Error: 9.4
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	1.0	0.062201	50.0	2253983.0	0.062201	Y
2	IC 280-541805/20	2.0	0.13523	50.0	2353763.0	0.067615	Y
3	IC 280-541805/19	5.0	0.290569	50.0	2384289.0	0.058114	Y
4	IC 280-541805/18	10.0	0.637584	50.0	2364239.0	0.063758	Y
5	IC 280-541805/17	50.0	2.901422	50.0	2337216.0	0.058028	Y
6	IC 280-541805/16	75.0	4.156317	50.0	2366001.0	0.055418	Y
7	IC 280-541805/15	100.0	5.788233	50.0	2350562.0	0.057882	Y
8	IC 280-541805/14	200.0	9.880372	50.0	2412566.0	0.049402	Y



Calibration

/ 2-Nitropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

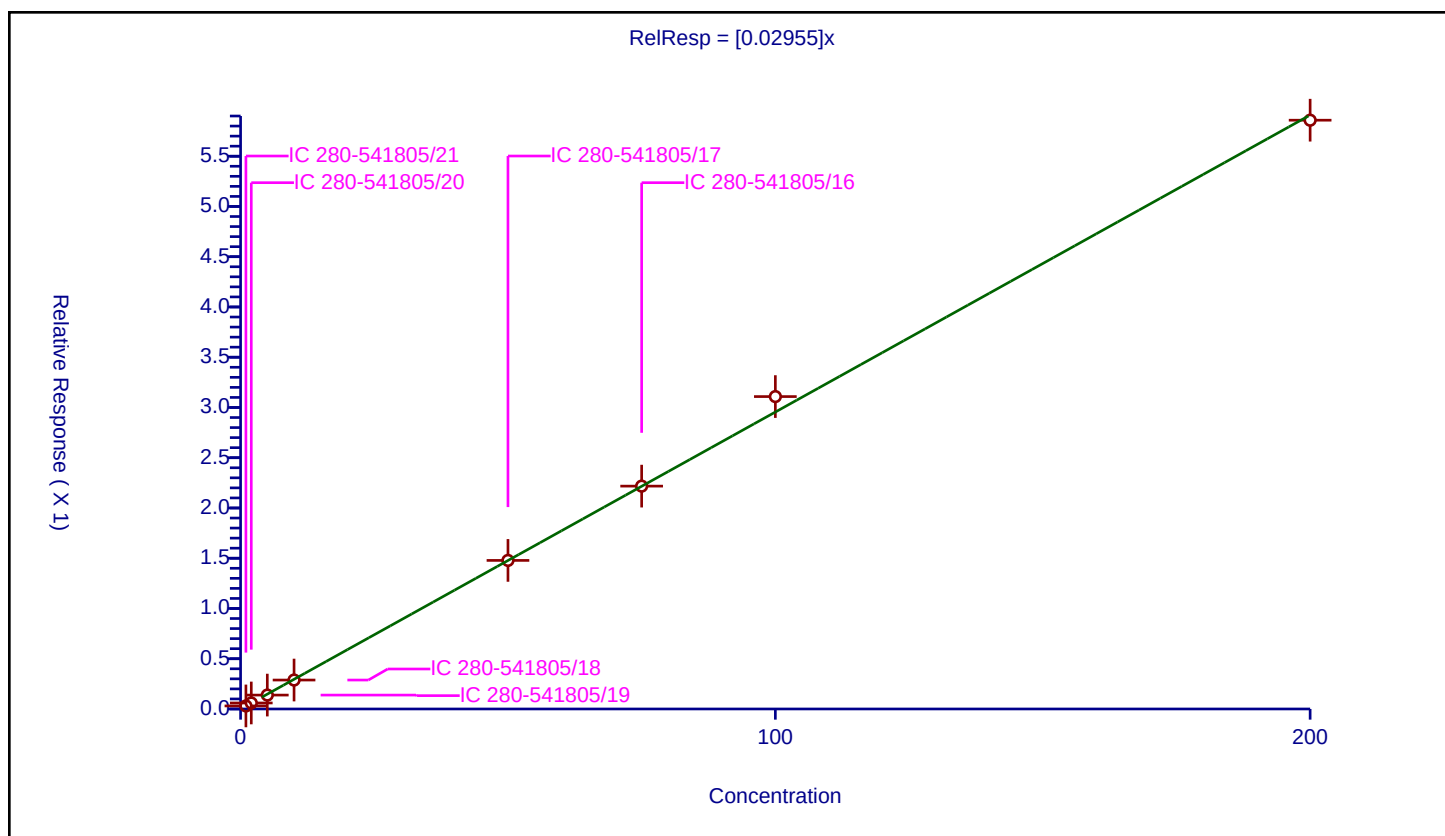
Curve Coefficients

Intercept: 0
 Slope: 0.02955

Error Coefficients

Standard Error: 129000
 Relative Standard Error: 3.5
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	1.0	0.030435	50.0	2253983.0	0.030435	Y
2	IC 280-541805/20	2.0	0.059883	50.0	2353763.0	0.029941	Y
3	IC 280-541805/19	5.0	0.138406	50.0	2384289.0	0.027681	Y
4	IC 280-541805/18	10.0	0.288	50.0	2364239.0	0.0288	Y
5	IC 280-541805/17	50.0	1.478404	50.0	2337216.0	0.029568	Y
6	IC 280-541805/16	75.0	2.217603	50.0	2366001.0	0.029568	Y
7	IC 280-541805/15	100.0	3.108363	50.0	2350562.0	0.031084	Y
8	IC 280-541805/14	200.0	5.85841	50.0	2412566.0	0.029292	Y



Calibration

/ Tetrahydrothiophene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

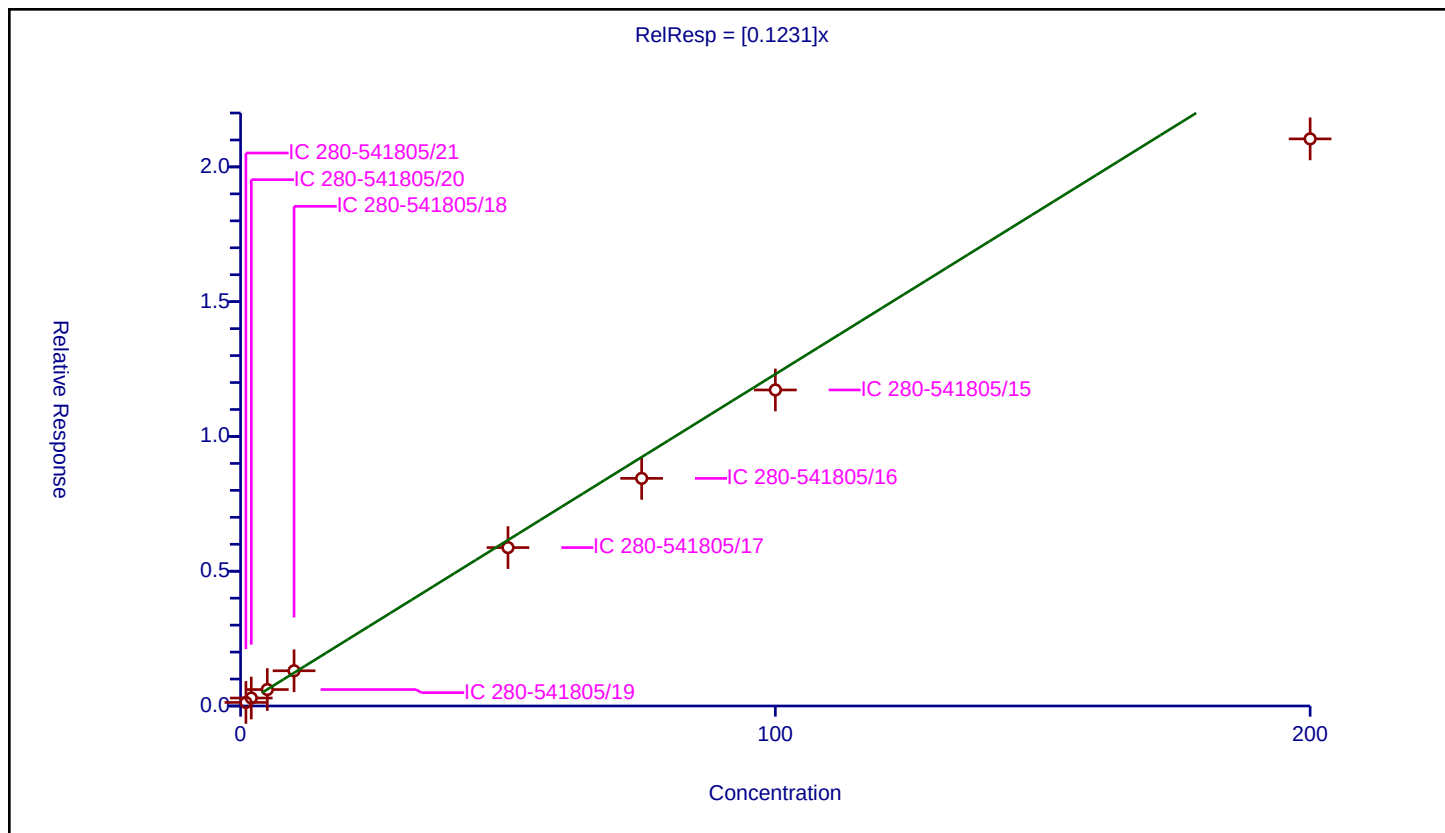
Curve Coefficients

Intercept: 0
 Slope: 0.1231

Error Coefficients

Standard Error: 132000
 Relative Standard Error: 10.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	1.0	0.131883	50.0	645270.0	0.131883	Y
2	IC 280-541805/20	2.0	0.295314	50.0	667934.0	0.147657	Y
3	IC 280-541805/19	5.0	0.61042	50.0	678222.0	0.122084	Y
4	IC 280-541805/18	10.0	1.306712	50.0	670117.0	0.130671	Y
5	IC 280-541805/17	50.0	5.877402	50.0	659407.0	0.117548	Y
6	IC 280-541805/16	75.0	8.445091	50.0	656701.0	0.112601	Y
7	IC 280-541805/15	100.0	11.725413	50.0	657802.0	0.117254	Y
8	IC 280-541805/14	200.0	21.040783	50.0	666748.0	0.105204	Y



Calibration

/ cis-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

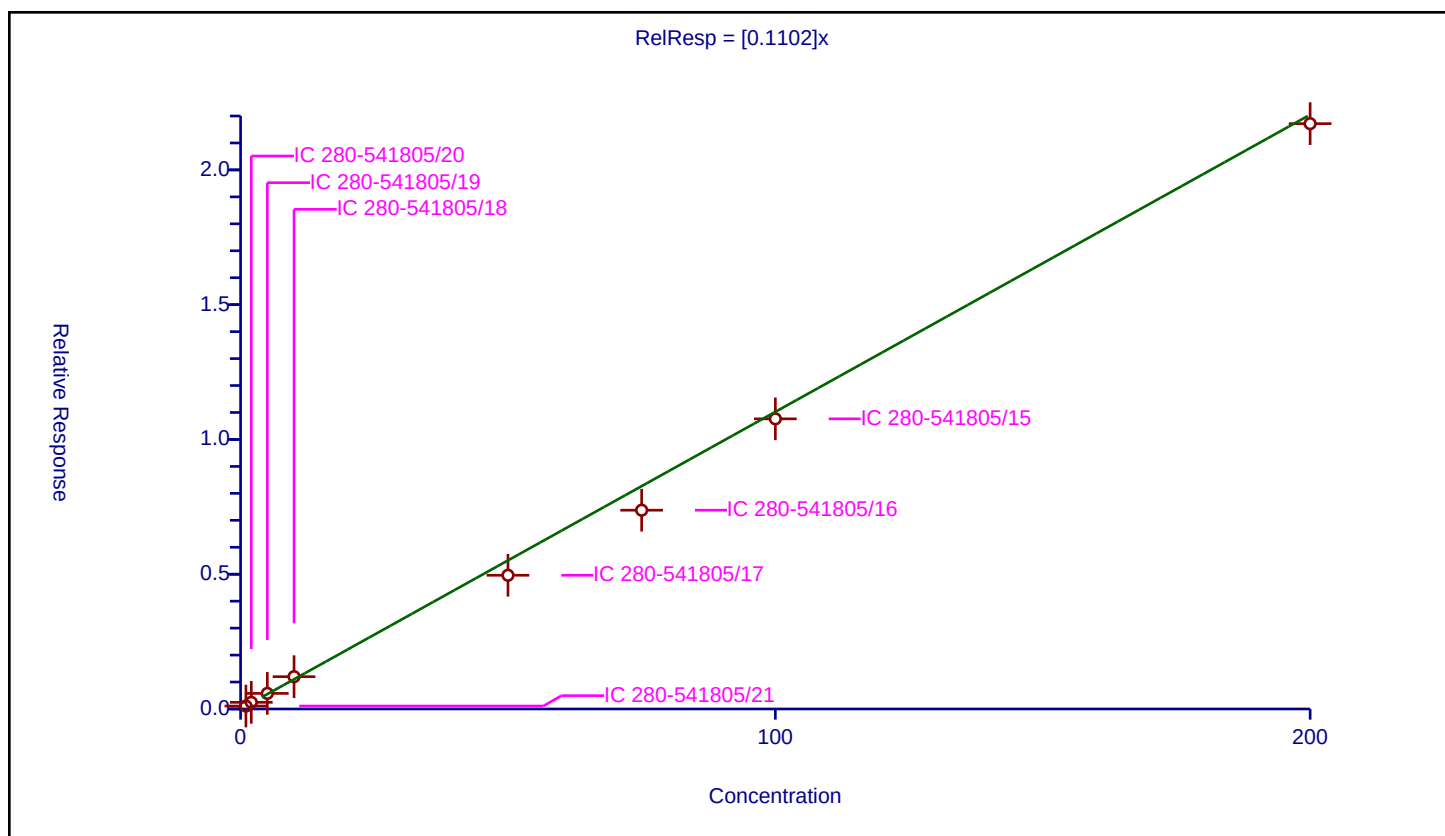
Curve Coefficients

Intercept: 0
 Slope: 0.1102

Error Coefficients

Standard Error: 218000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	1.0	0.109338	50.0	1075102.0	0.109338	Y
2	IC 280-541805/20	2.0	0.246467	50.0	1115364.0	0.123233	Y
3	IC 280-541805/19	5.0	0.578719	50.0	1131378.0	0.115744	Y
4	IC 280-541805/18	10.0	1.198128	50.0	1120581.0	0.119813	Y
5	IC 280-541805/17	50.0	4.961035	50.0	1112288.0	0.099221	Y
6	IC 280-541805/16	75.0	7.375386	50.0	1114057.0	0.098338	Y
7	IC 280-541805/15	100.0	10.765116	50.0	1105492.0	0.107651	Y
8	IC 280-541805/14	200.0	21.716956	50.0	1118619.0	0.108585	Y



Calibration

/ 1,2,3-Trimethylbenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

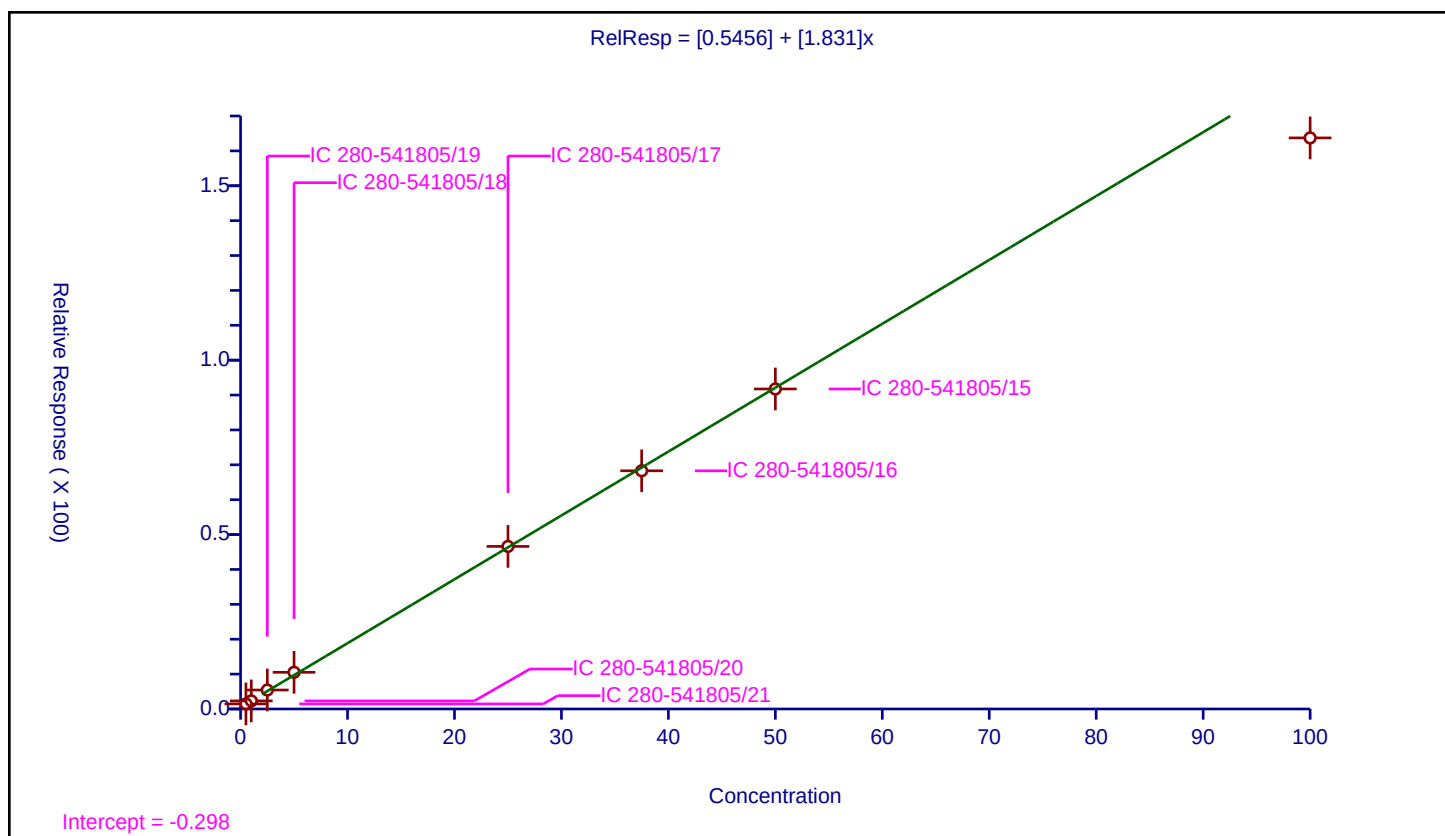
Curve Coefficients

Intercept: 0.5456
 Slope: 1.831

Error Coefficients

Standard Error: 1870000
 Relative Standard Error: 6.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	0.5	1.45549	50.0	1075102.0	2.91098	Y
2	IC 280-541805/20	1.0	2.318884	50.0	1115364.0	2.318884	Y
3	IC 280-541805/19	2.5	5.440445	50.0	1131378.0	2.176178	Y
4	IC 280-541805/18	5.0	10.517401	50.0	1120581.0	2.10348	Y
5	IC 280-541805/17	25.0	46.608837	50.0	1112288.0	1.864353	Y
6	IC 280-541805/16	37.5	68.291703	50.0	1114057.0	1.821112	Y
7	IC 280-541805/15	50.0	91.746797	50.0	1105492.0	1.834936	Y
8	IC 280-541805/14	100.0	163.72335	50.0	1118619.0	1.637233	Y



Calibration

/ 1,3,5-Trichlorobenzene

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

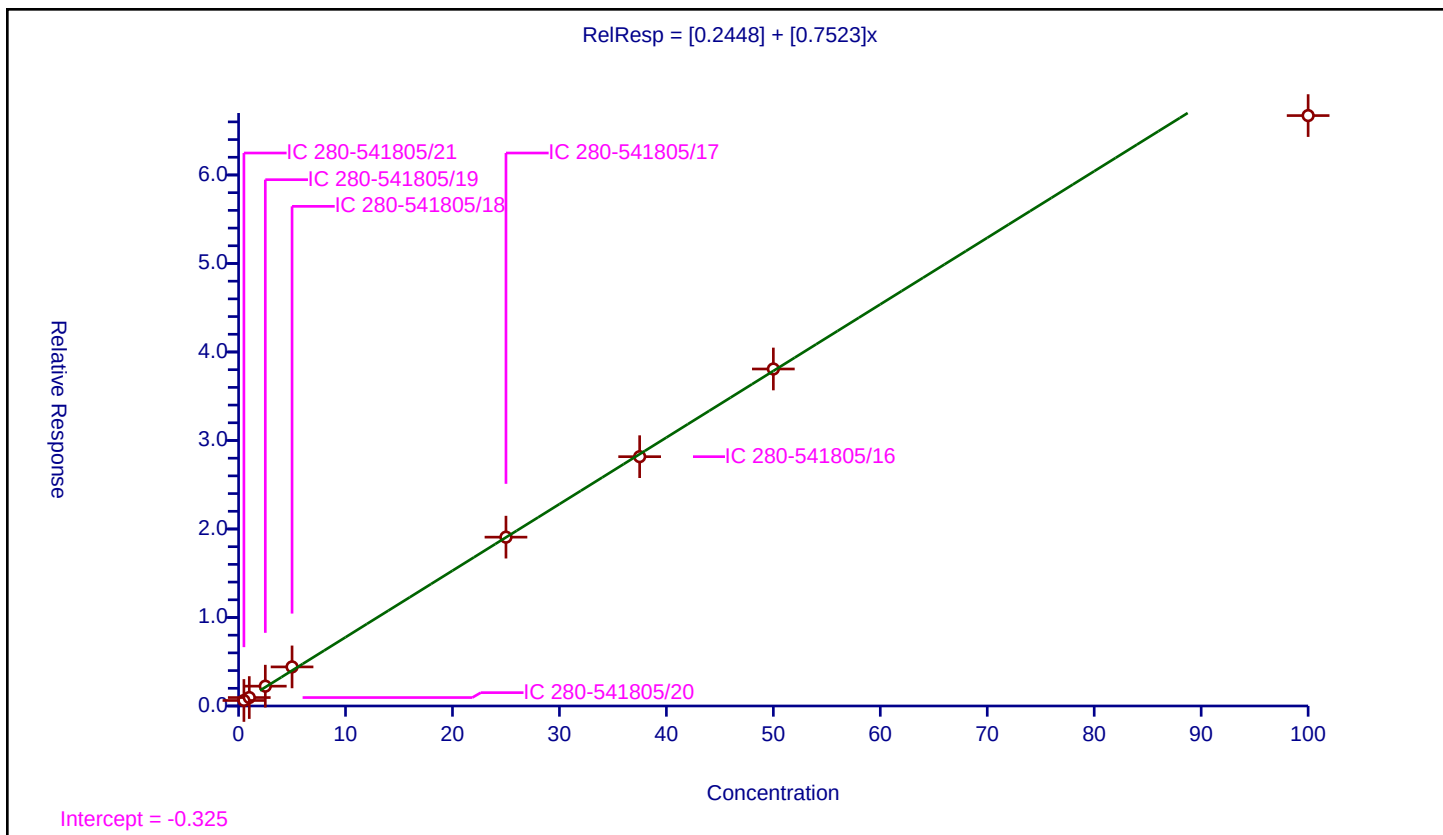
Curve Coefficients

Intercept: 0.2448
 Slope: 0.7523

Error Coefficients

Standard Error: 766000
 Relative Standard Error: 7.4
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541805/21	0.5	0.623104	50.0	1075102.0	1.246207	Y
2	IC 280-541805/20	1.0	0.954666	50.0	1115364.0	0.954666	Y
3	IC 280-541805/19	2.5	2.239835	50.0	1131378.0	0.895934	Y
4	IC 280-541805/18	5.0	4.416414	50.0	1120581.0	0.883283	Y
5	IC 280-541805/17	25.0	19.07604	50.0	1112288.0	0.763042	Y
6	IC 280-541805/16	37.5	28.171359	50.0	1114057.0	0.751236	Y
7	IC 280-541805/15	50.0	38.077797	50.0	1105492.0	0.761556	Y
8	IC 280-541805/14	100.0	66.711454	50.0	1118619.0	0.667115	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1 Analy Batch No.: 541956

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/30/2021 17:47 Calibration End Date: 06/30/2021 20:26 Calibration ID: 54966

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-541956/22	MS9_5713.d
Level 2	IC 280-541956/21	MS9_5712.d
Level 3	IC 280-541956/20	MS9_5711.d
Level 4	IC 280-541956/19	MS9_5710.d
Level 5	IC 280-541956/18	MS9_5709.d
Level 6	ICIS 280-541956/17	MS9_5708.d
Level 7	IC 280-541956/16	MS9_5707.d
Level 8	IC 280-541956/15	MS9_5706.d
Level 9	IC 280-541956/14	MS9_5714.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Dichlorodifluoromethane	0.2074 0.2260	0.2067 0.2176	0.1737 0.2182	0.2782 0.2201	0.2901	Lin1	0.011 2	0.221 7							0.9970		0.9900
Chloromethane	0.1179 0.1017	0.1070 0.0984	0.1183 0.0951	0.1289 0.0968	0.1282	Ave		0.110 3			0.1000	12.1		15.0			
Vinyl chloride	0.1360 0.1194	0.1224 0.1115	0.1146 0.1076	0.1438 0.1073	0.1427	Ave		0.122 8				11.8		30.0			
Bromomethane	++++ 0.1140	++++ 0.1111	0.2022 0.1027	0.1687 ++++	0.1527	Qua	0.222 8	0.123 3	-0.000224						0.9990		0.9900
Chloroethane	0.1128 0.1182	0.1284 0.1180	0.1384 0.1126	0.1478 0.1093	0.1476	Ave		0.125 9				12.1		15.0			
Dichlorofluoromethane	0.3820 0.3253	0.4046 0.3165	0.4047 0.3023	0.4058 0.2983	0.4109	Ave		0.361 2				13.6		15.0			
Trichlorofluoromethane	0.4198 0.3531	0.3943 0.3466	0.4169 0.3291	0.4222 0.3432	0.4483	Ave		0.385 9				11.2		15.0			
2-Chloroethyl vinyl ether	0.1121 0.1168	0.1235 0.1102	0.1174 0.1063	0.1256 0.1000	0.1260	Ave		0.115 3				7.8		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.: 280-150290-1 Analy Batch No.: 541956

SDG No.: _____

Instrument ID: VMS_MS9 GC Column: RXI-624SilM ID: 0.25 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/30/2021 17:47 Calibration End Date: 06/30/2021 20:26 Calibration ID: 54966

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-541956/22	MS9_5713.d
Level 2	IC 280-541956/21	MS9_5712.d
Level 3	IC 280-541956/20	MS9_5711.d
Level 4	IC 280-541956/19	MS9_5710.d
Level 5	IC 280-541956/18	MS9_5709.d
Level 6	ICIS 280-541956/17	MS9_5708.d
Level 7	IC 280-541956/16	MS9_5707.d
Level 8	IC 280-541956/15	MS9_5706.d
Level 9	IC 280-541956/14	MS9_5714.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	Lin1	4184 472184	8470 699005	13843 958675	57269 1784088	119970	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Ave	2378 212389	4384 316308	9431 417944	26538 784501	53025	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	2743 249341	5015 358396	9132 472567	29603 869415	59009	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Qua	++++ 238212	++++ 357091	16111 451279	34725 ++++	63147	++++ 50.0	++++ 75.0	2.00 100	5.00 ++++	10.0
Chloroethane	FB	Ave	2275 246969	5261 379113	11031 494809	30415 885828	61042	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	7706 679642	16581 1016758	32253 1328131	83520 2417843	169944	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	8468 737578	16160 1113684	33224 1445895	86910 2781868	185411	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	2261 244095	5060 354004	9354 466966	25863 810593	52121	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 30-Jun-2021 20:26:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic RR
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:33 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:13:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2026409	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	577907	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.775	10.775	0.000	95	964447	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	1784088	200.0	198.5	
15 Chloromethane	50	1.872	1.872	0.000	96	784501	200.0	175.6	
16 Vinyl chloride	62	1.997	1.997	0.000	96	869415	200.0	174.7	
19 Bromomethane	94	2.328	2.328	0.000	94	834882	200.0	NQ	
20 Chloroethane	64	2.442	2.442	0.000	98	885828	200.0	173.6	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	2417843	200.0	165.2	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	2781868	200.0	177.8	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	94	810593	200.0	173.4	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 40.00

Units: uL

Report Date: 01-Jul-2021 05:21:34

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d

Injection Date: 30-Jun-2021 20:26:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

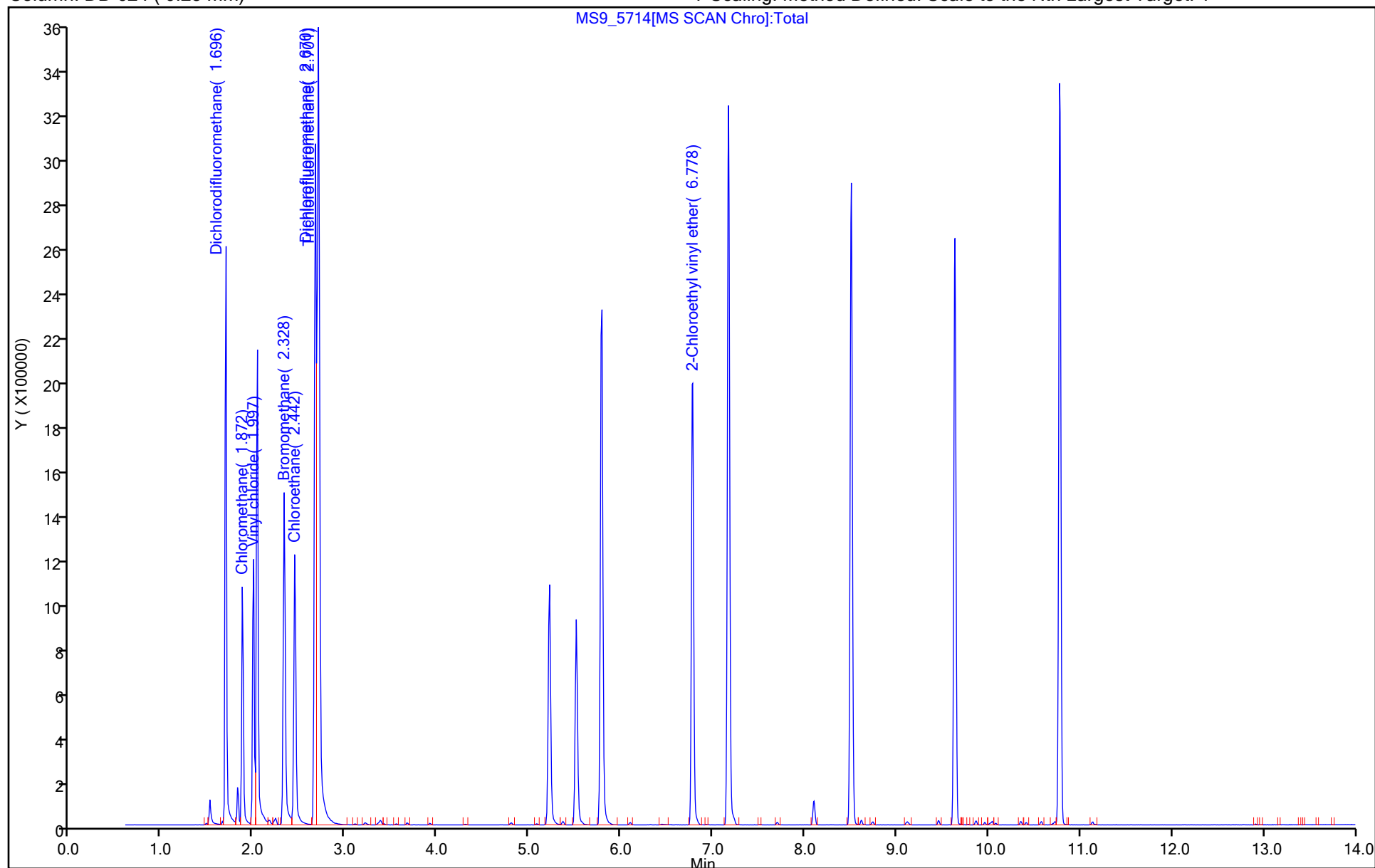
ALS Bottle#: 10

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\MS9_5706.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 30-Jun-2021 17:47:30 ALS Bottle#: 2 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:35 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: sumichrastr

Date: 30-Jun-2021 19:10:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2196837	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	625056	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	95	1035781	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	958675	100.0	98.4	
15 Chloromethane	50	1.872	1.872	0.000	96	417944	100.0	86.3	
16 Vinyl chloride	62	1.996	1.996	0.000	97	472567	100.0	87.6	
19 Bromomethane	94	2.328	2.328	0.000	94	451279	100.0	99.5	
20 Chloroethane	64	2.442	2.442	0.000	98	494809	100.0	89.5	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	1328131	100.0	83.7	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	1445895	100.0	85.3	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	94	466966	100.0	92.2	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 20.00

Units: uL

Report Date: 01-Jul-2021 05:21:35

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5706.d

Injection Date: 30-Jun-2021 17:47:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

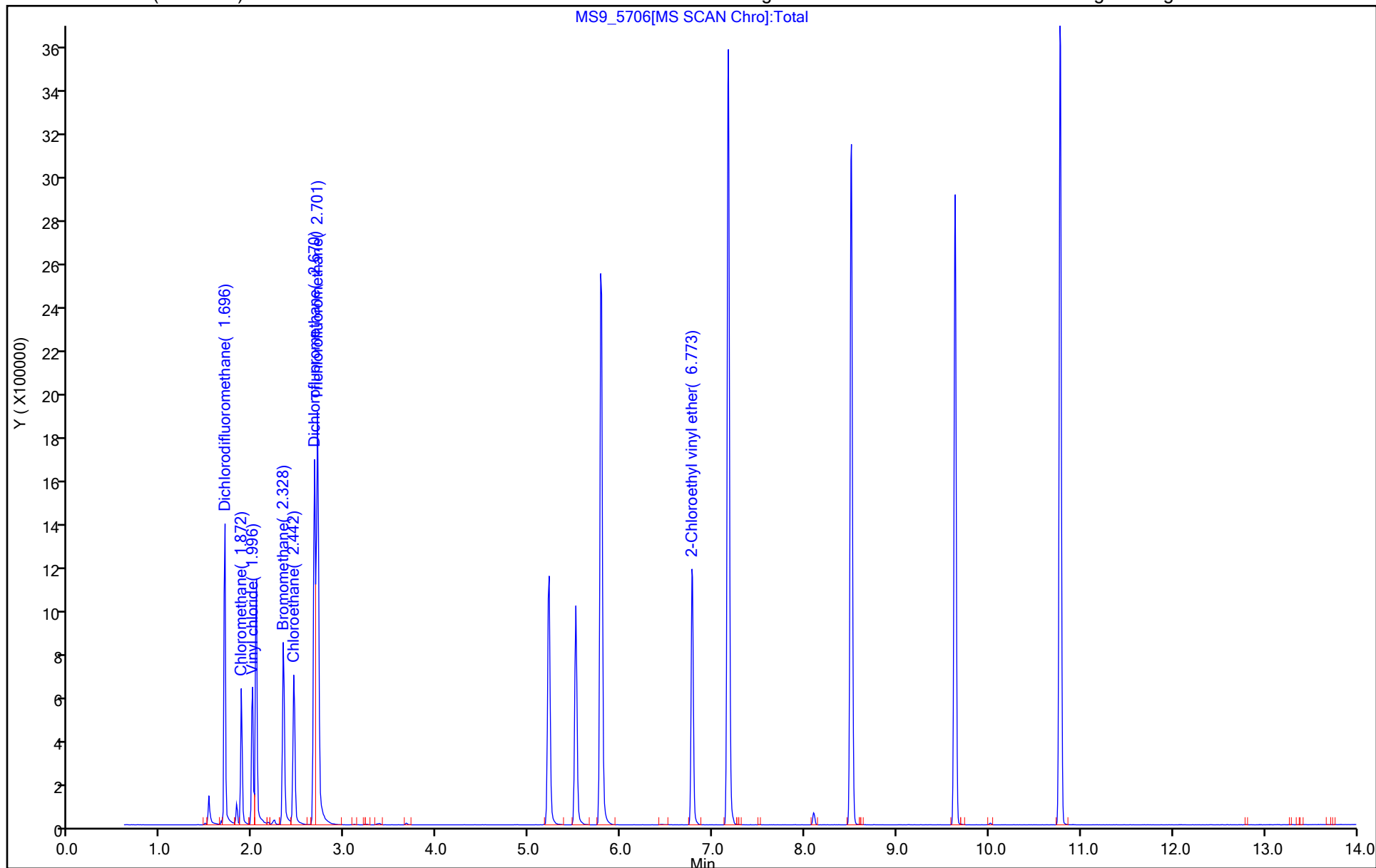
ALS Bottle#: 2

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\MS9_5707.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 30-Jun-2021 18:06:30 ALS Bottle#: 3 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:36 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:13:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2141987	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	605341	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.775	10.775	0.000	94	1020537	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	699005	75.0	73.6	
15 Chloromethane	50	1.872	1.872	0.000	96	316308	75.0	67.0	
16 Vinyl chloride	62	1.997	1.997	0.000	96	358396	75.0	68.1	
19 Bromomethane	94	2.328	2.328	0.000	94	357091	75.0	76.4	
20 Chloroethane	64	2.442	2.442	0.000	98	379113	75.0	70.3	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	1016758	75.0	65.7	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	1113684	75.0	67.4	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	94	354004	75.0	71.7	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006 Amount Added: 5.00 Units: uL
 MV-Gas A_00091 Amount Added: 15.00 Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5707.d

Injection Date: 30-Jun-2021 18:06:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

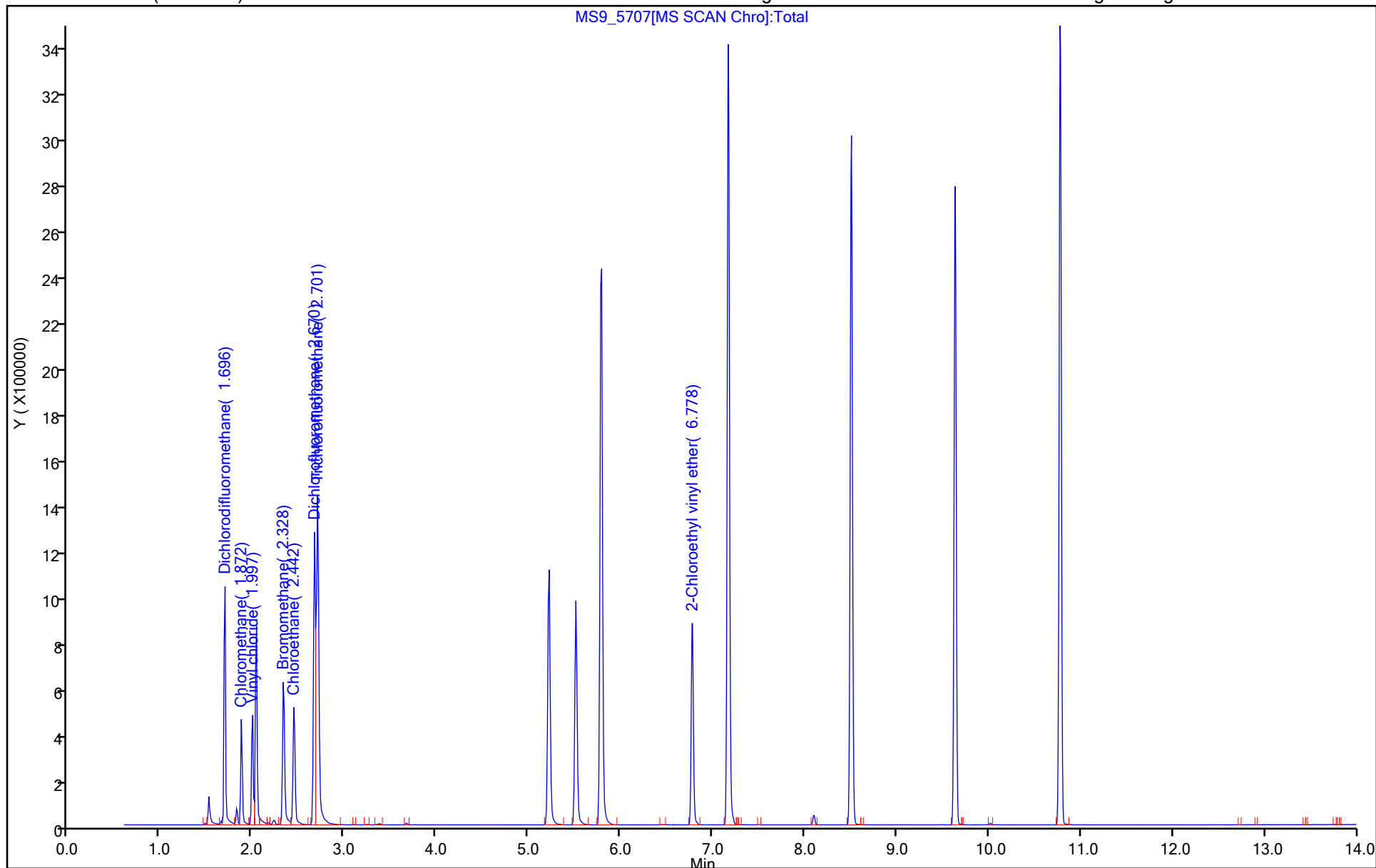
ALS Bottle#: 3

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\VMS9_5708.d
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 30-Jun-2021 18:26:30 ALS Bottle#: 4 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icis
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:37 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:13:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2089111	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	591194	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	95	1014129	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	472184	50.0	50.9	
15 Chloromethane	50	1.872	1.872	0.000	96	212389	50.0	46.1	
16 Vinyl chloride	62	1.997	1.997	0.000	96	249341	50.0	48.6	
19 Bromomethane	94	2.328	2.328	0.000	94	238212	50.0	48.8	
20 Chloroethane	64	2.442	2.442	0.000	98	246969	50.0	47.0	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	679642	50.0	45.0	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	737578	50.0	45.7	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	94	244095	50.0	50.7	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 10.00

Units: uL

Report Date: 01-Jul-2021 05:21:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5708.d

Injection Date: 30-Jun-2021 18:26:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: icis

Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

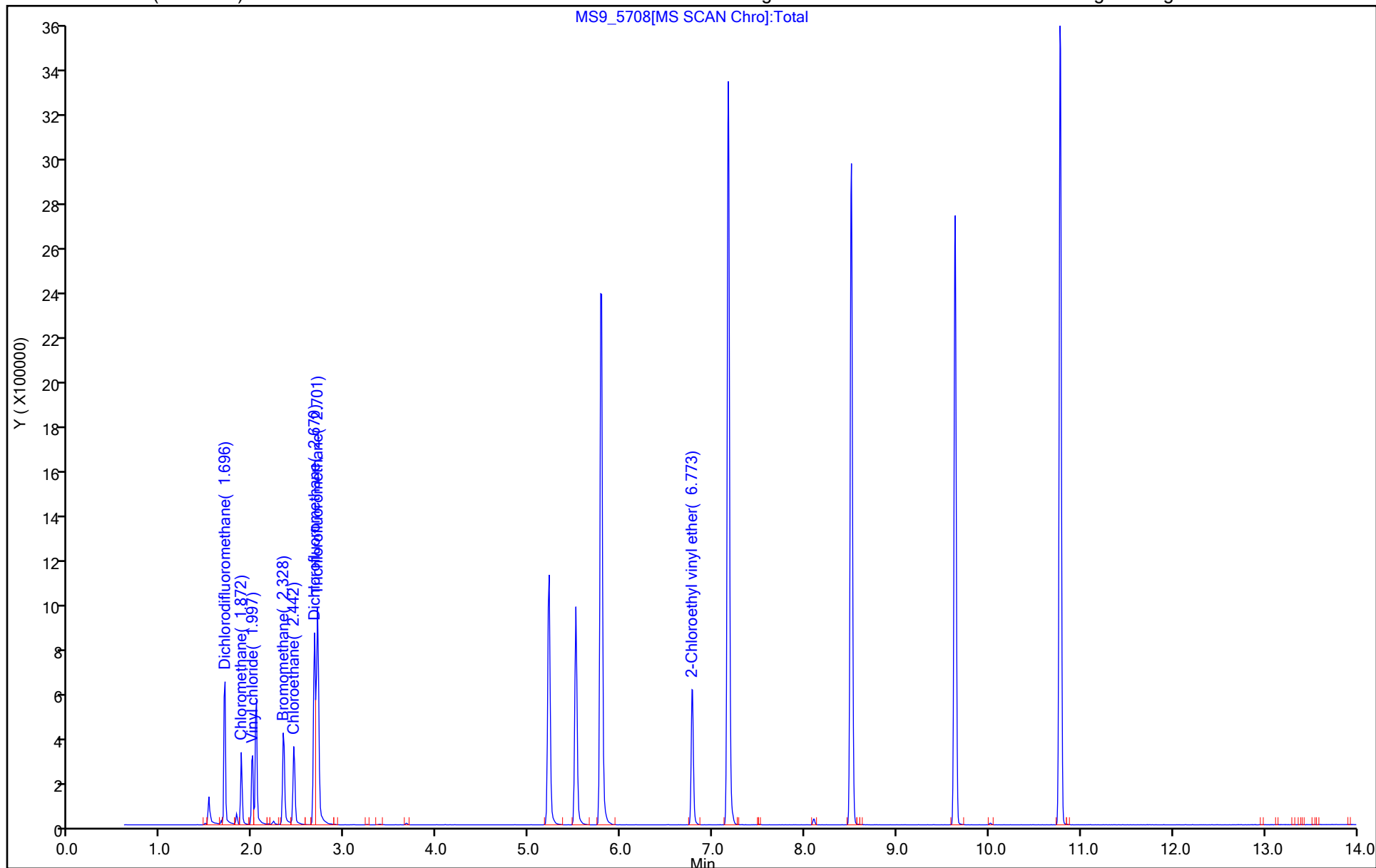
ALS Bottle#: 4

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\MS9_5709.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 30-Jun-2021 18:46:30 ALS Bottle#: 5 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:38 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:13:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2067737	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	594085	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	95	1000365	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	119970	10.0	13.0	
15 Chloromethane	50	1.872	1.872	0.000	96	53025	10.0	11.6	
16 Vinyl chloride	62	1.997	1.997	0.000	97	59009	10.0	11.6	
19 Bromomethane	94	2.339	2.339	0.000	94	63147	10.0	10.8	
20 Chloroethane	64	2.442	2.442	0.000	98	61042	10.0	11.7	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	169944	10.0	11.4	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	97	185411	10.0	11.6	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	93	52121	10.0	10.9	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006 Amount Added: 5.00 Units: uL
 MV-Gas A_00091 Amount Added: 2.00 Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5709.d

Injection Date: 30-Jun-2021 18:46:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

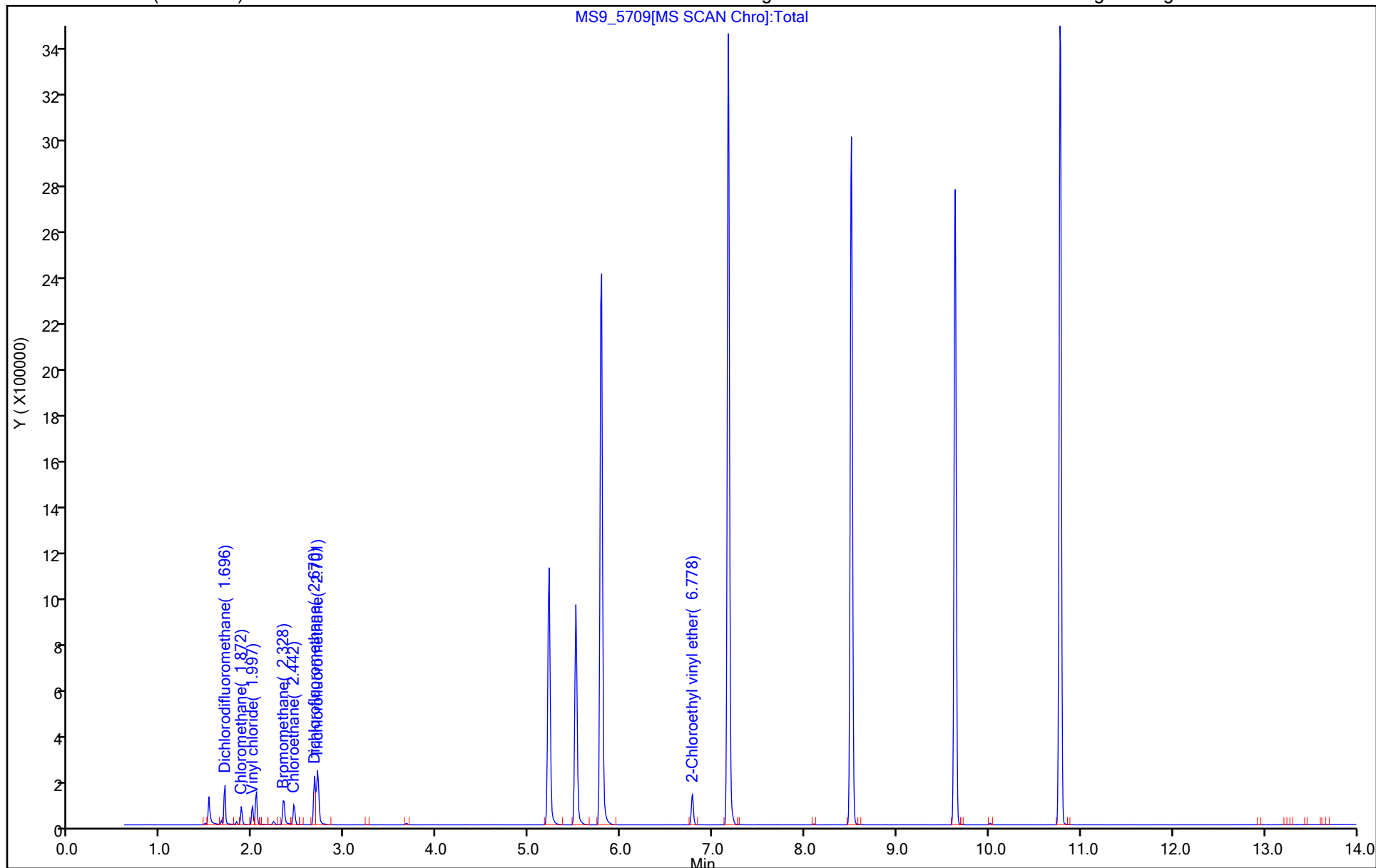
ALS Bottle#: 5

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\MS9_5710.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 30-Jun-2021 19:06:30 ALS Bottle#: 6 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:40 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: sumichrastr

Date: 30-Jun-2021 20:48:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2058393	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	583755	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	95	987617	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	57269	5.00	6.23	
15 Chloromethane	50	1.872	1.872	0.000	97	26538	5.00	5.85	
16 Vinyl chloride	62	1.997	1.997	0.000	96	29603	5.00	5.86	
19 Bromomethane	94	2.339	2.339	0.000	94	34725	5.00	5.08	
20 Chloroethane	64	2.453	2.453	0.000	98	30415	5.00	5.87	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	83520	5.00	5.62	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	97	86910	5.00	5.47	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	94	25863	5.00	5.45	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 1.00

Units: uL

Report Date: 01-Jul-2021 05:21:41

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5710.d

Injection Date: 30-Jun-2021 19:06:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

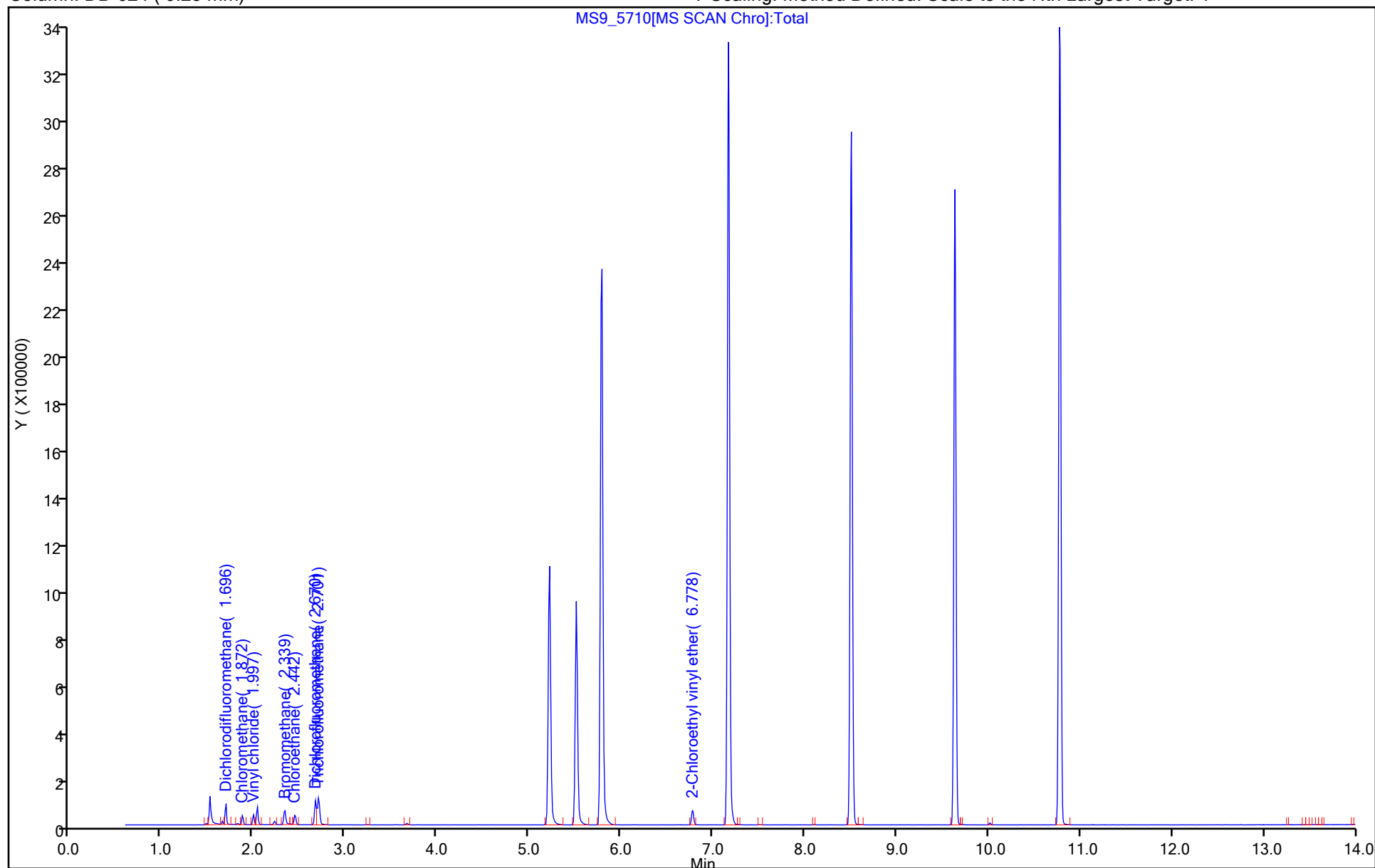
ALS Bottle#: 6

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\MS9_5711.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 30-Jun-2021 19:26:30 ALS Bottle#: 7 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:42 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:14:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	1992191	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	573133	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	95	968208	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	13843	2.00	1.52	
15 Chloromethane	50	1.872	1.872	0.000	69	9431	2.00	2.15	M
16 Vinyl chloride	62	1.997	1.997	0.000	95	9132	2.00	1.87	
19 Bromomethane	94	2.328	2.328	0.000	94	16111	2.00	1.48	
20 Chloroethane	64	2.442	2.442	0.000	98	11031	2.00	2.20	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	97	32253	2.00	2.24	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	33224	2.00	2.16	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	93	9354	2.00	2.04	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 0.40

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5711.d

Injection Date: 30-Jun-2021 19:26:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

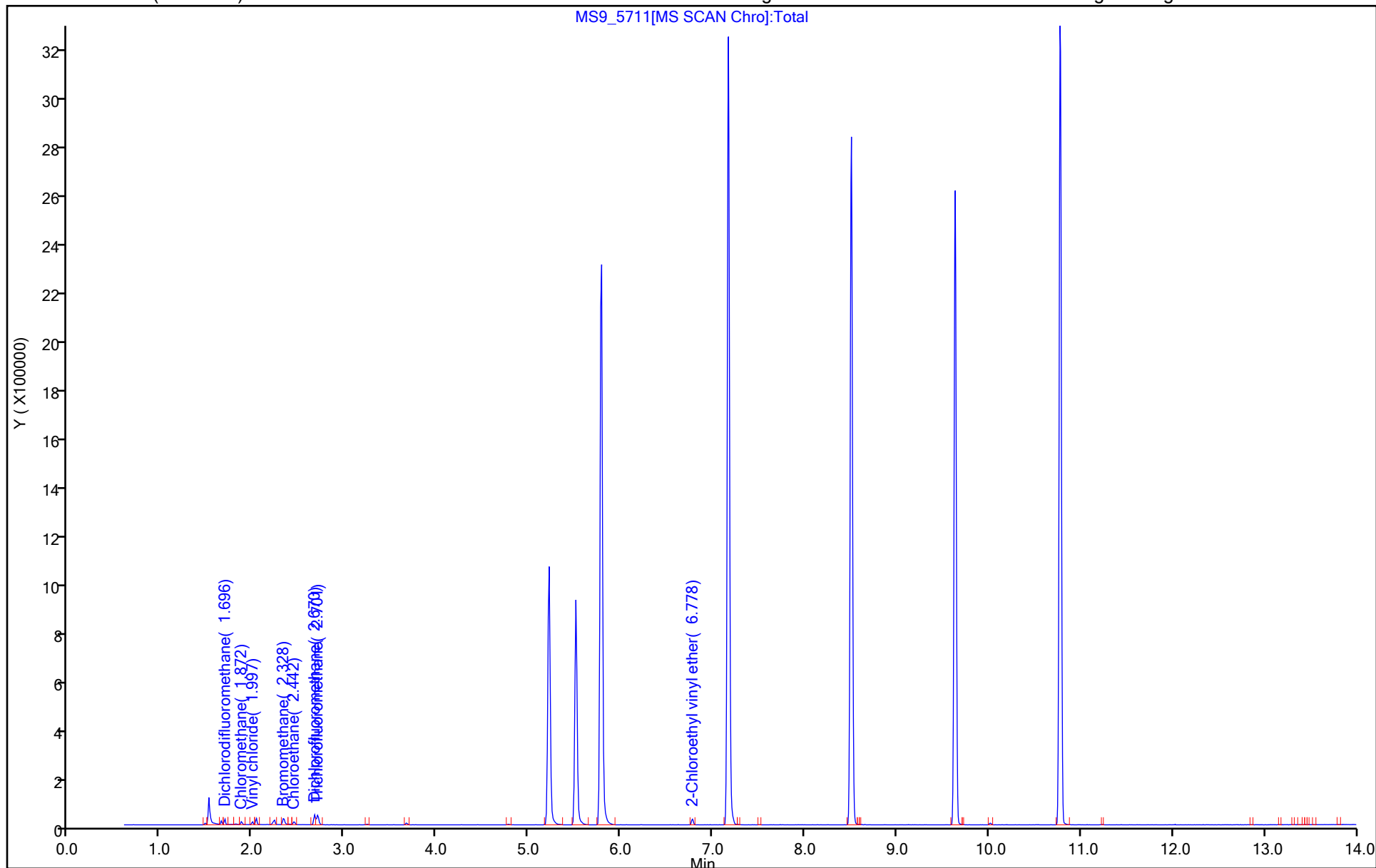
ALS Bottle#: 7

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5711.d

Injection Date: 30-Jun-2021 19:26:30

Instrument ID: VMS_MS9

Lims ID: ic

Client ID:

Operator ID: sumichrastr

ALS Bottle#:

7

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Detector

MS SCAN

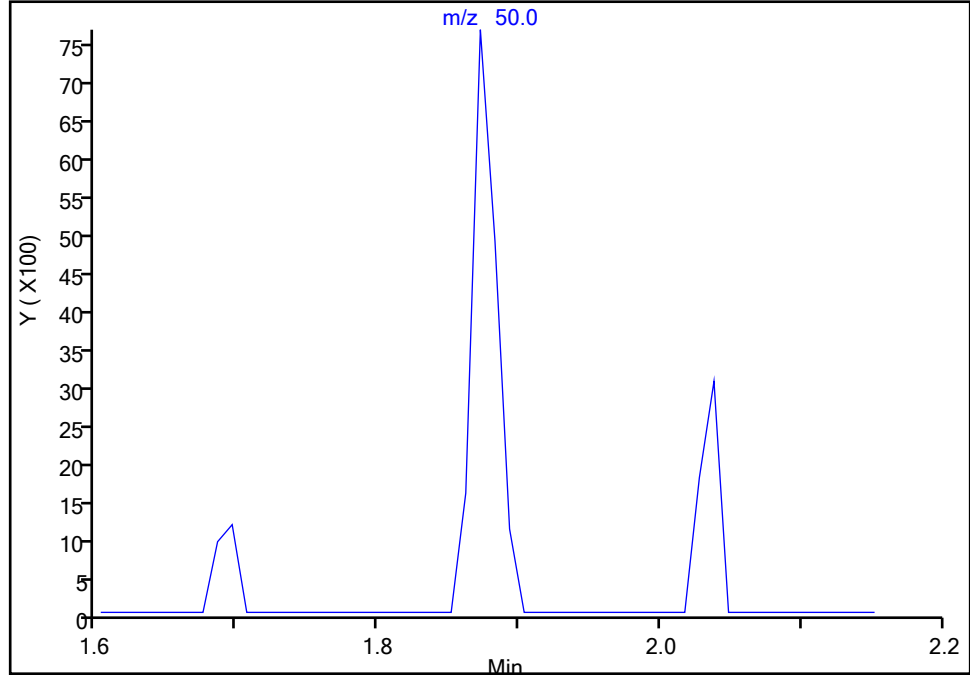
15 Chloromethane, CAS: 74-87-3

Signal: 1

Not Detected

Expected RT: 1.87

Processing Integration Results



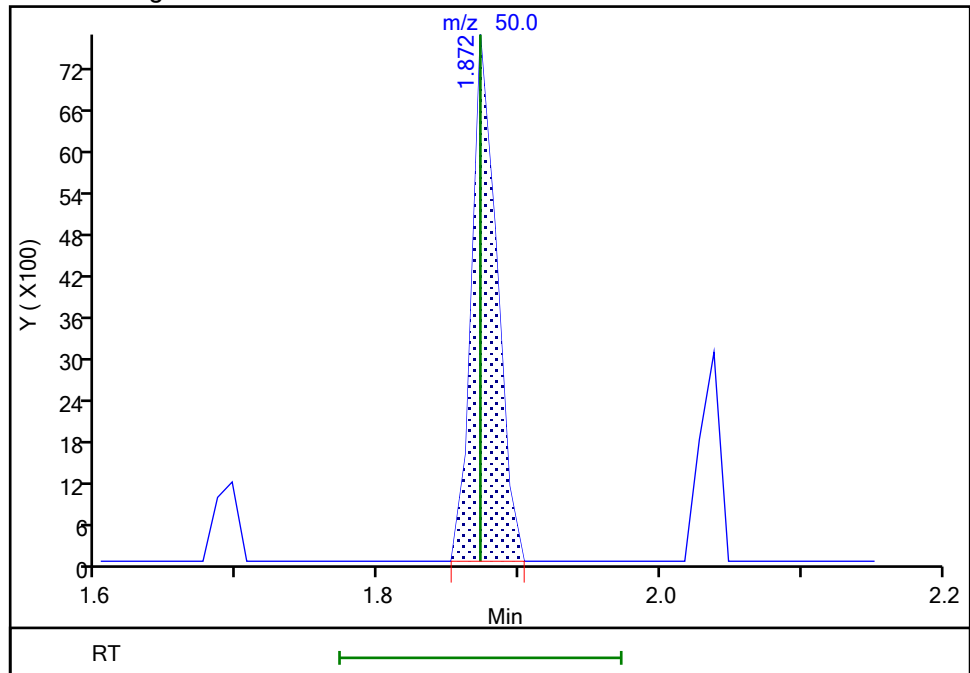
RT: 1.87

Area: 9431

Amount: 2.146673

Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 01-Jul-2021 05:14:10

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5712.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 30-Jun-2021 19:46:30 ALS Bottle#: 8 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:44 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:14:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2049226	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	579249	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	95	978596	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	8470	1.00	0.8819	
15 Chloromethane	50	1.872	1.872	0.000	55	4384	1.00	0.9701	M
16 Vinyl chloride	62	1.996	1.996	0.000	95	5015	1.00	1.00	
19 Bromomethane	94	2.338	2.338	0.000	89	8284	1.00	-0.1677	
20 Chloroethane	64	2.442	2.442	0.000	41	5261	1.00	1.02	M
21 Dichlorofluoromethane	67	2.670	2.670	0.000	97	16581	1.00	1.12	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	16160	1.00	1.02	
76 2-Chloroethyl vinyl ether	63	6.783	6.783	0.000	91	5060	1.00	1.07	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 0.20

Units: uL

Report Date: 01-Jul-2021 05:21:44

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5712.d

Injection Date: 30-Jun-2021 19:46:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 21

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

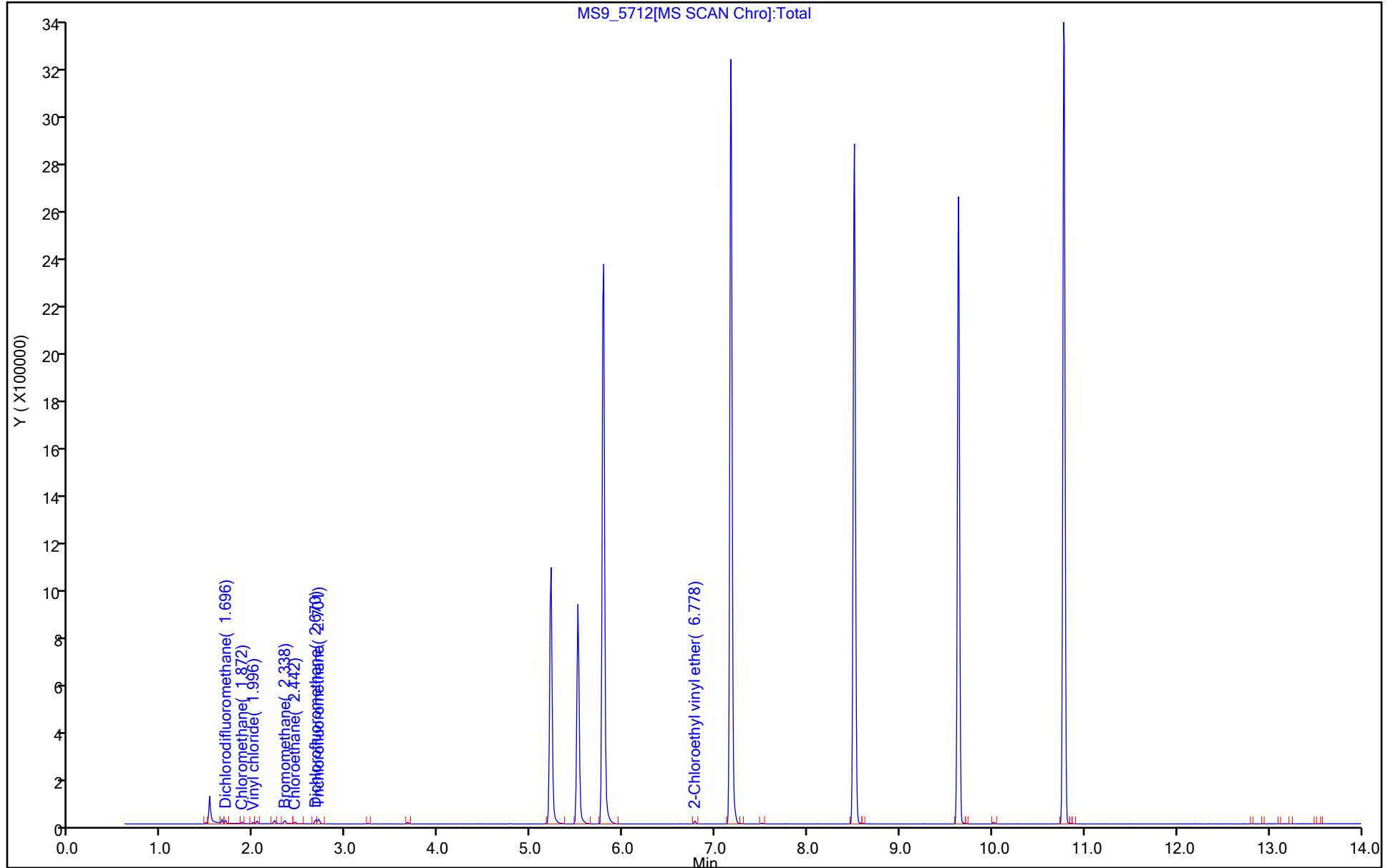
ALS Bottle#: 8

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

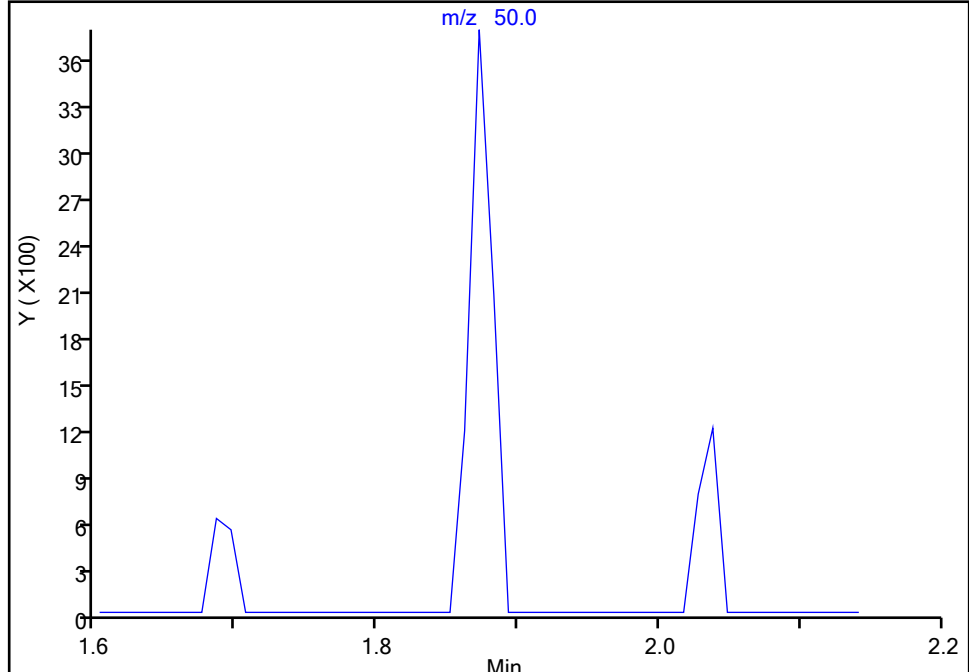
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5712.d
Injection Date: 30-Jun-2021 19:46:30 Instrument ID: VMS_MS9
Lims ID: ic
Client ID:
Operator ID: sumichrastr ALS Bottle#: 8 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

15 Chloromethane, CAS: 74-87-3

Signal: 1

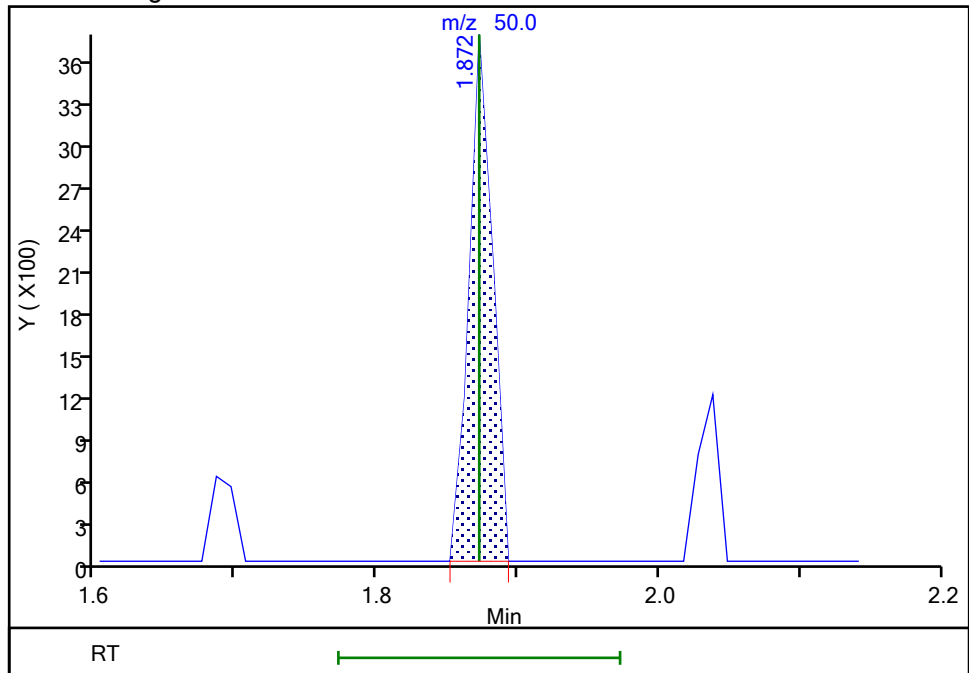
Not Detected
Expected RT: 1.87

Processing Integration Results



RT: 1.87
Area: 4384
Amount: 0.970107
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 01-Jul-2021 05:14:30
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

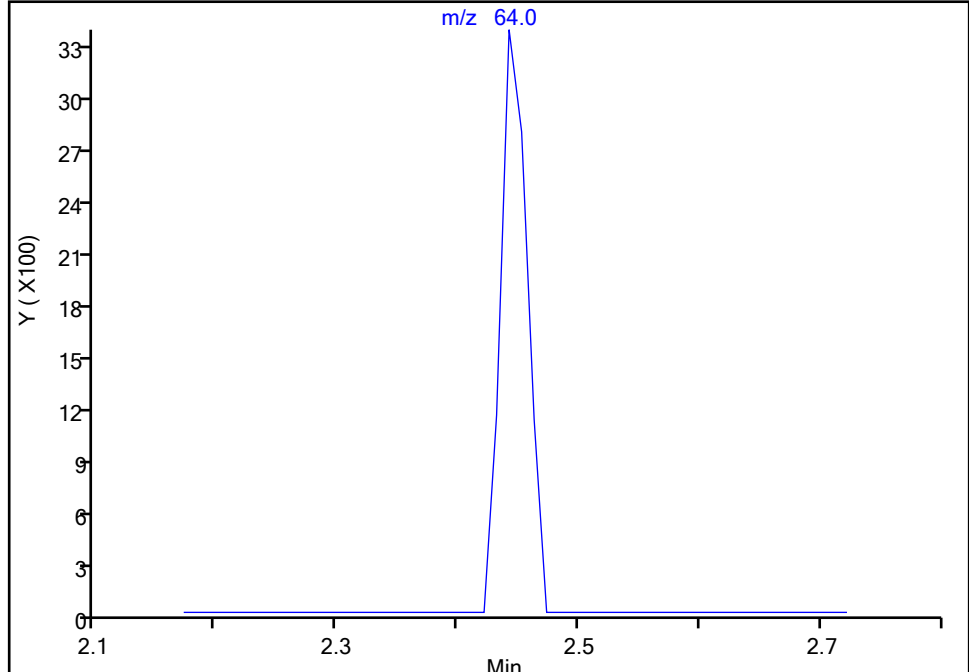
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5712.d
Injection Date: 30-Jun-2021 19:46:30 Instrument ID: VMS_MS9
Lims ID: ic
Client ID:
Operator ID: sumichrastr ALS Bottle#: 8 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

20 Chloroethane, CAS: 75-00-3

Signal: 1

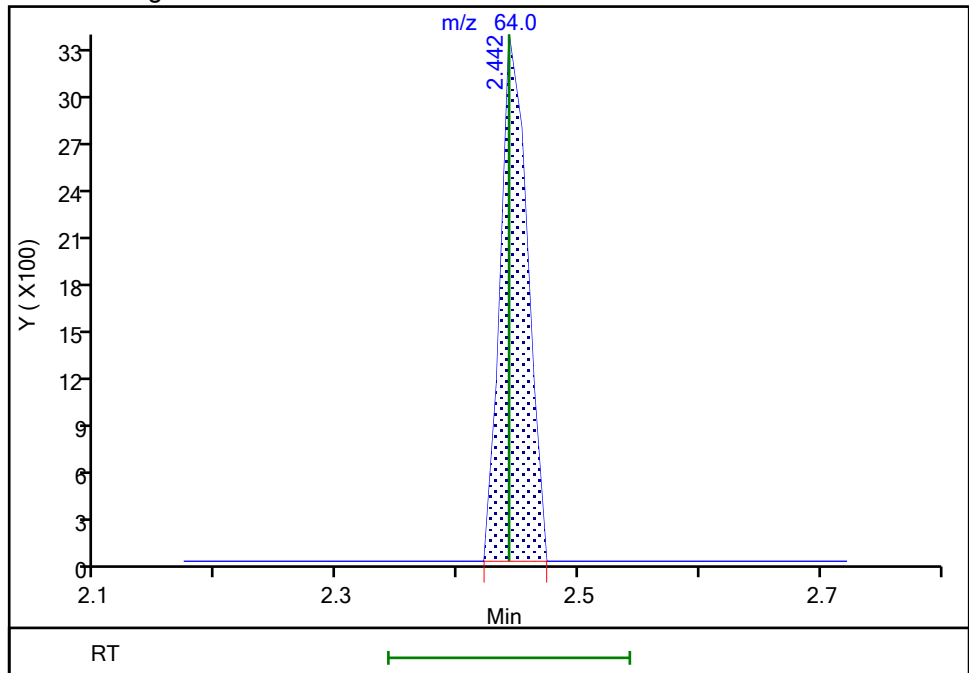
Not Detected
Expected RT: 2.44

Processing Integration Results



RT: 2.44
Area: 5261
Amount: 1.019623
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 01-Jul-2021 05:14:39
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5713.d
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 30-Jun-2021 20:06:30 ALS Bottle#: 9 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub51
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:21:45 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: wickhamt

Date: 01-Jul-2021 05:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2017190	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	572125	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	95	973016	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	96	4184	0.5000	0.4174	
15 Chloromethane	50	1.872	1.872	0.000	38	2378	0.5000	0.5346	M
16 Vinyl chloride	62	1.996	1.996	0.000	20	2743	0.5000	0.5537	
19 Bromomethane	94	2.338	2.338	0.000	92	5966	0.5000	-0.6071	
20 Chloroethane	64	2.452	2.452	0.000	16	2275	0.5000	0.4479	M
21 Dichlorofluoromethane	67	2.670	2.670	0.000	26	7706	0.5000	0.5289	M
22 Trichlorofluoromethane	101	2.701	2.701	0.000	94	8468	0.5000	0.5438	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	1	2261	0.5000	0.4860	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas A_00091

Amount Added: 0.10

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5713.d

Injection Date: 30-Jun-2021 20:06:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: ic

Worklist Smp#: 22

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

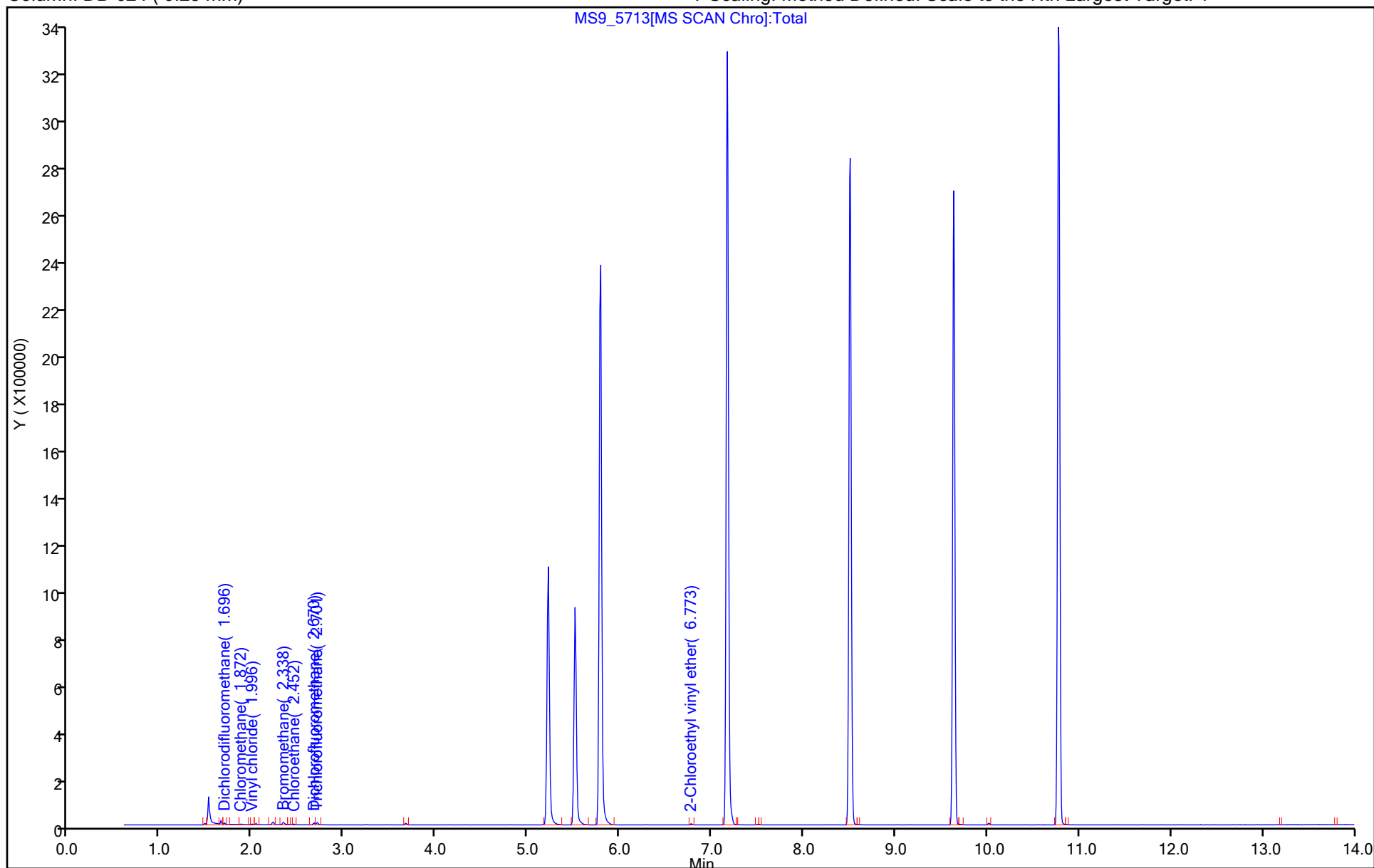
ALS Bottle#: 9

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

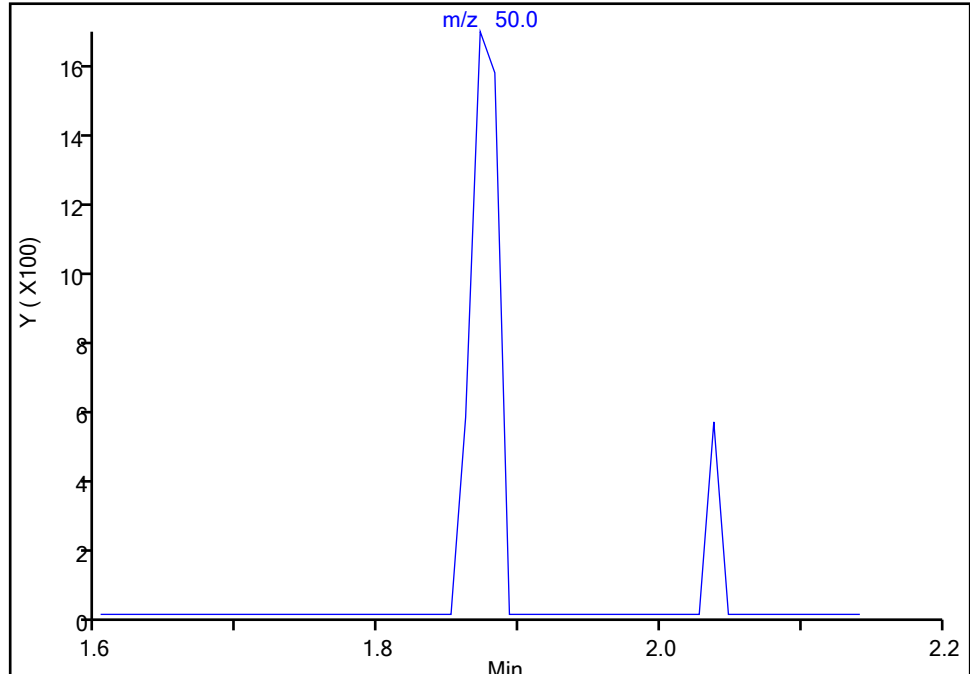
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5713.d
Injection Date: 30-Jun-2021 20:06:30 Instrument ID: VMS_MS9
Lims ID: ic
Client ID:
Operator ID: sumichrastr ALS Bottle#: 9 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

15 Chloromethane, CAS: 74-87-3

Signal: 1

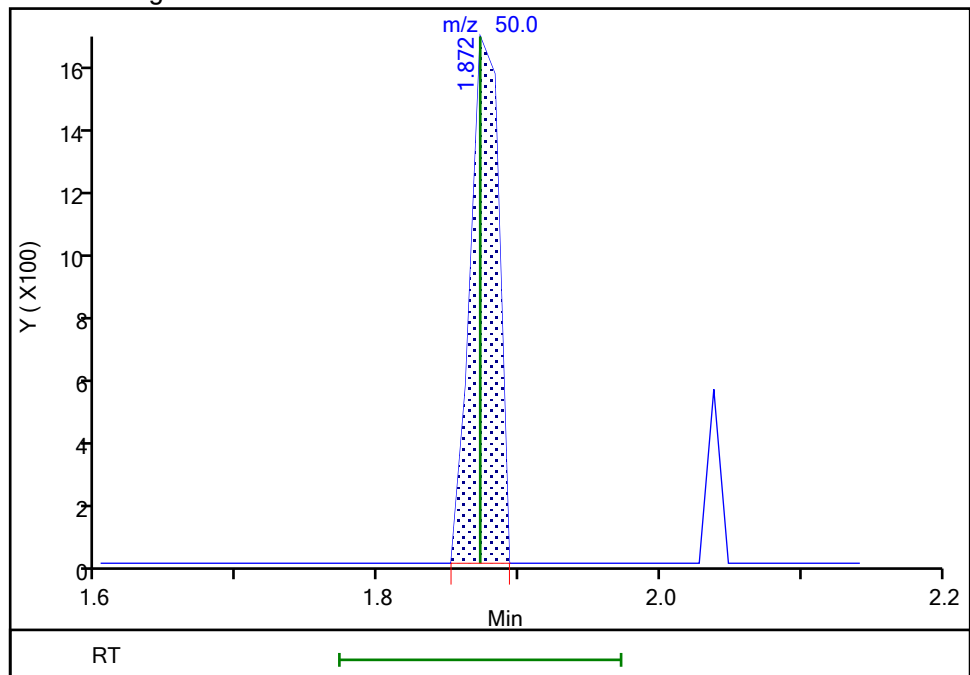
Not Detected
Expected RT: 1.87

Processing Integration Results



RT: 1.87
Area: 2378
Amount: 0.534569
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 01-Jul-2021 05:15:03
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

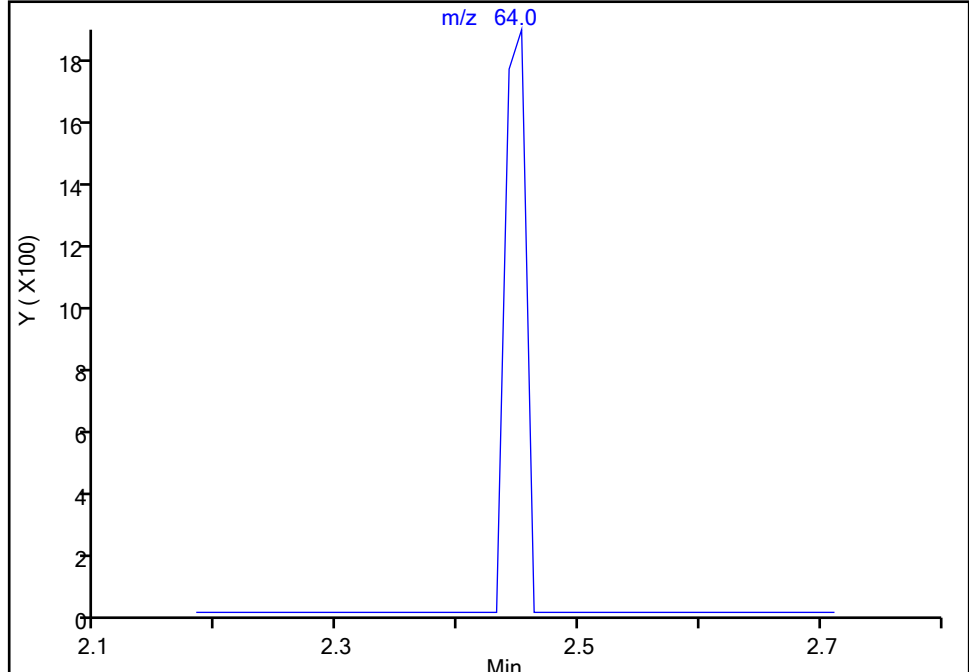
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5713.d
Injection Date: 30-Jun-2021 20:06:30 Instrument ID: VMS_MS9
Lims ID: ic
Client ID:
Operator ID: sumichrastr ALS Bottle#: 9 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

20 Chloroethane, CAS: 75-00-3

Signal: 1

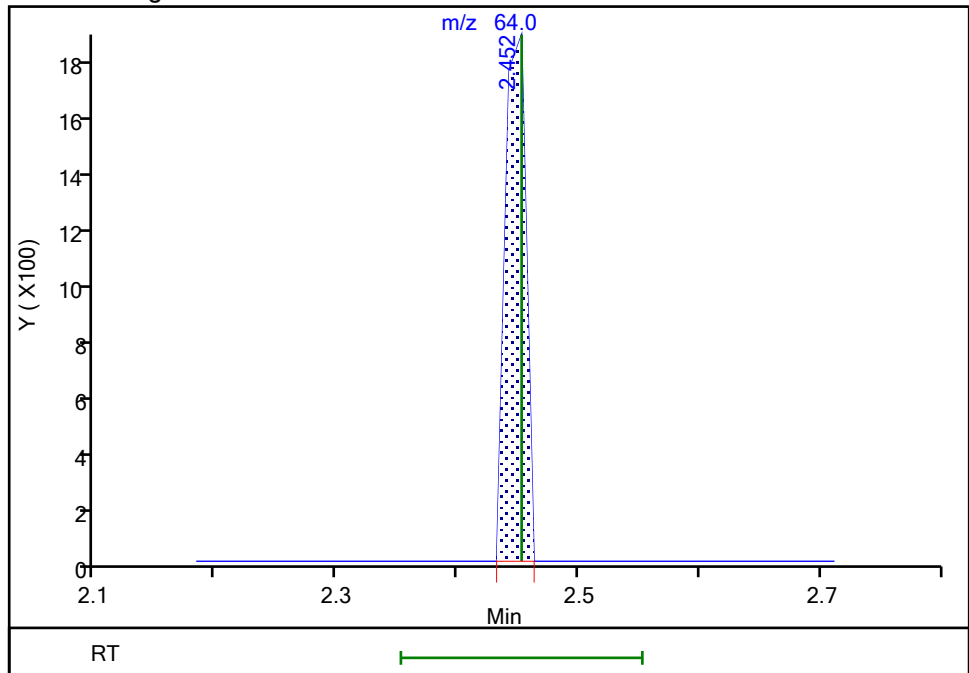
Not Detected
Expected RT: 2.45

Processing Integration Results



RT: 2.45
Area: 2275
Amount: 0.447915
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 01-Jul-2021 05:15:11
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Denver

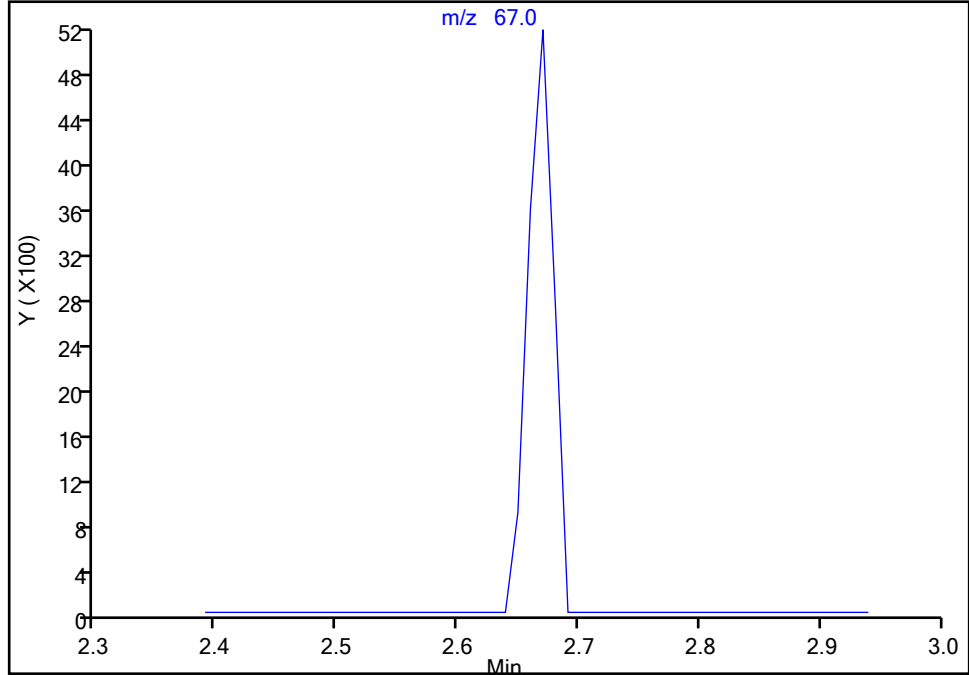
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5713.d
Injection Date: 30-Jun-2021 20:06:30 Instrument ID: VMS_MS9
Lims ID: ic
Client ID:
Operator ID: sumichrastr ALS Bottle#: 9 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

21 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

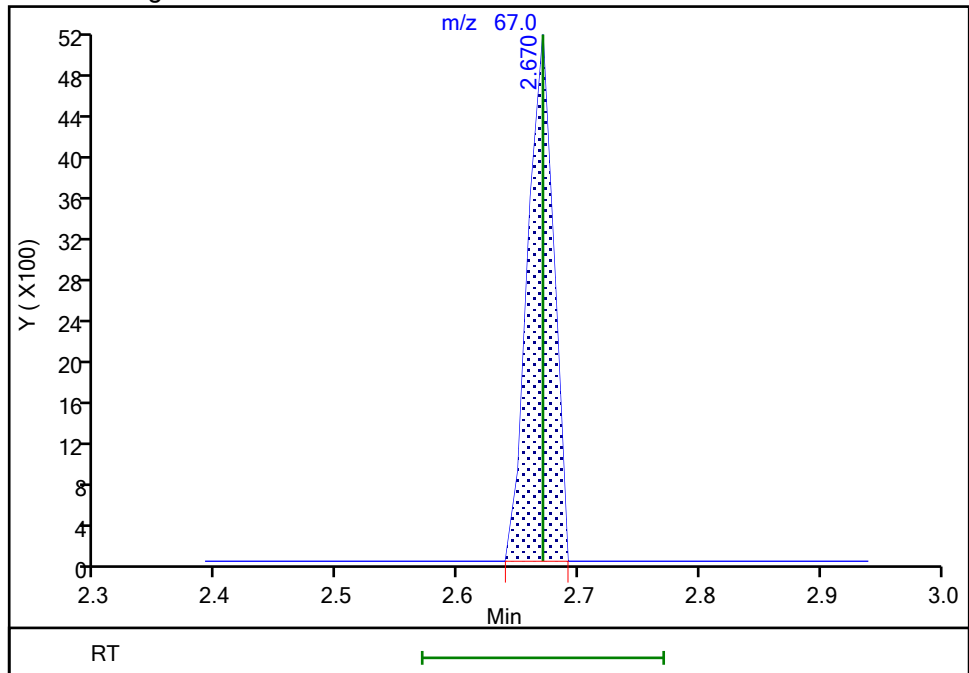
Not Detected
Expected RT: 2.67

Processing Integration Results



RT: 2.67
Area: 7706
Amount: 0.528885
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 01-Jul-2021 05:15:19
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Calibration

/ Dichlorodifluoromethane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

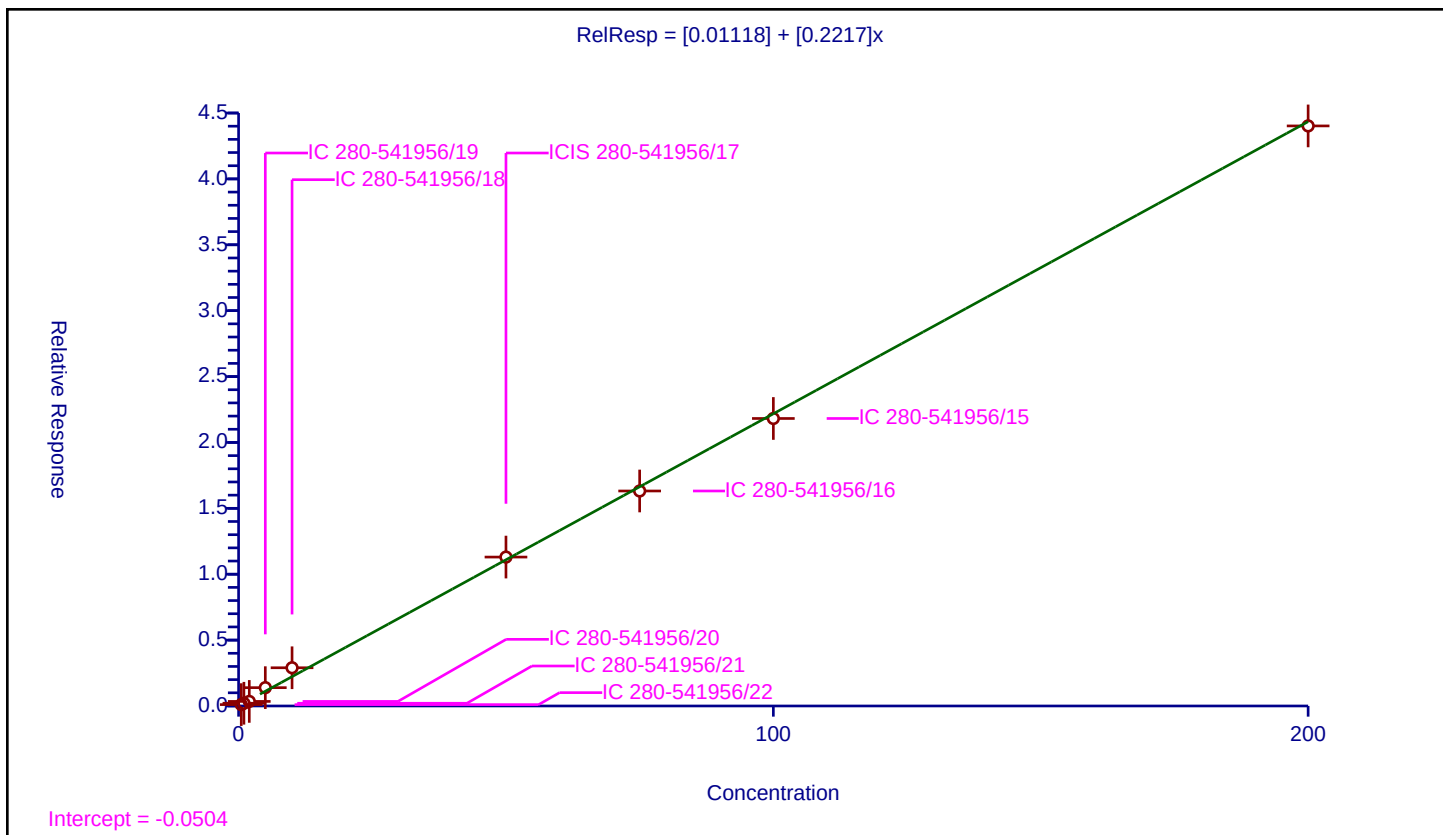
Curve Coefficients

Intercept: 0.01118
 Slope: 0.2217

Error Coefficients

Standard Error: 831000
 Relative Standard Error: 19.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.103709	50.0	2017190.0	0.207417	Y
2	IC 280-541956/21	1.0	0.206663	50.0	2049226.0	0.206663	Y
3	IC 280-541956/20	2.0	0.347432	50.0	1992191.0	0.173716	Y
4	IC 280-541956/19	5.0	1.391109	50.0	2058393.0	0.278222	Y
5	IC 280-541956/18	10.0	2.900998	50.0	2067737.0	0.2901	Y
6	ICIS 280-541956/17	50.0	11.301075	50.0	2089111.0	0.226021	Y
7	IC 280-541956/16	75.0	16.316742	50.0	2141987.0	0.217557	Y
8	IC 280-541956/15	100.0	21.819439	50.0	2196837.0	0.218194	Y
9	IC 280-541956/14	200.0	44.020926	50.0	2026409.0	0.220105	Y



Calibration

/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

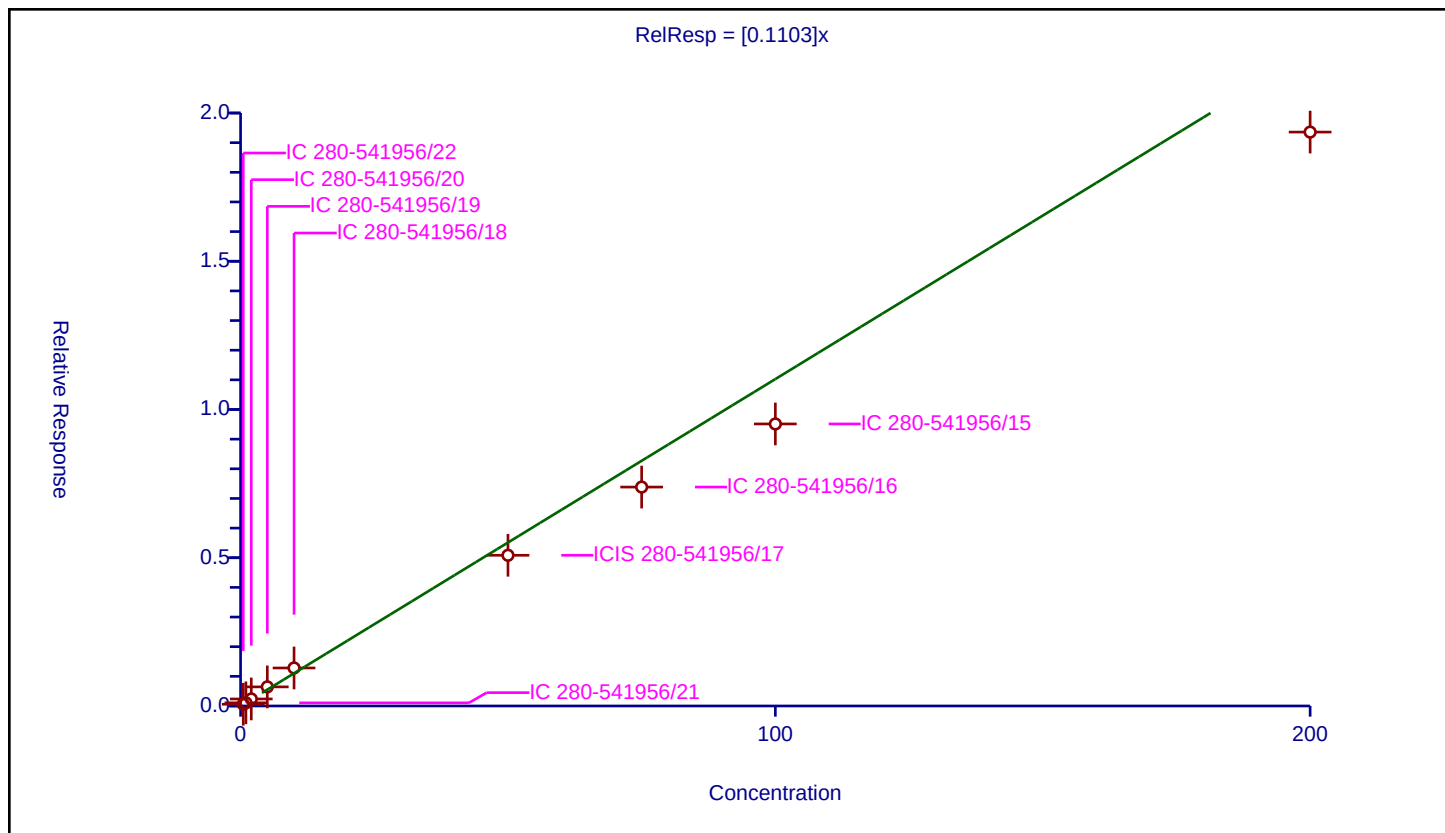
Curve Coefficients

Intercept: 0
 Slope: 0.1103

Error Coefficients

Standard Error: 343000
 Relative Standard Error: 12.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.058943	50.0	2017190.0	0.117887	Y
2	IC 280-541956/21	1.0	0.106967	50.0	2049226.0	0.106967	Y
3	IC 280-541956/20	2.0	0.236699	50.0	1992191.0	0.11835	Y
4	IC 280-541956/19	5.0	0.644629	50.0	2058393.0	0.128926	Y
5	IC 280-541956/18	10.0	1.282199	50.0	2067737.0	0.12822	Y
6	ICIS 280-541956/17	50.0	5.083239	50.0	2089111.0	0.101665	Y
7	IC 280-541956/16	75.0	7.383518	50.0	2141987.0	0.098447	Y
8	IC 280-541956/15	100.0	9.512404	50.0	2196837.0	0.095124	Y
9	IC 280-541956/14	200.0	19.356926	50.0	2026409.0	0.096785	Y



Calibration

/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

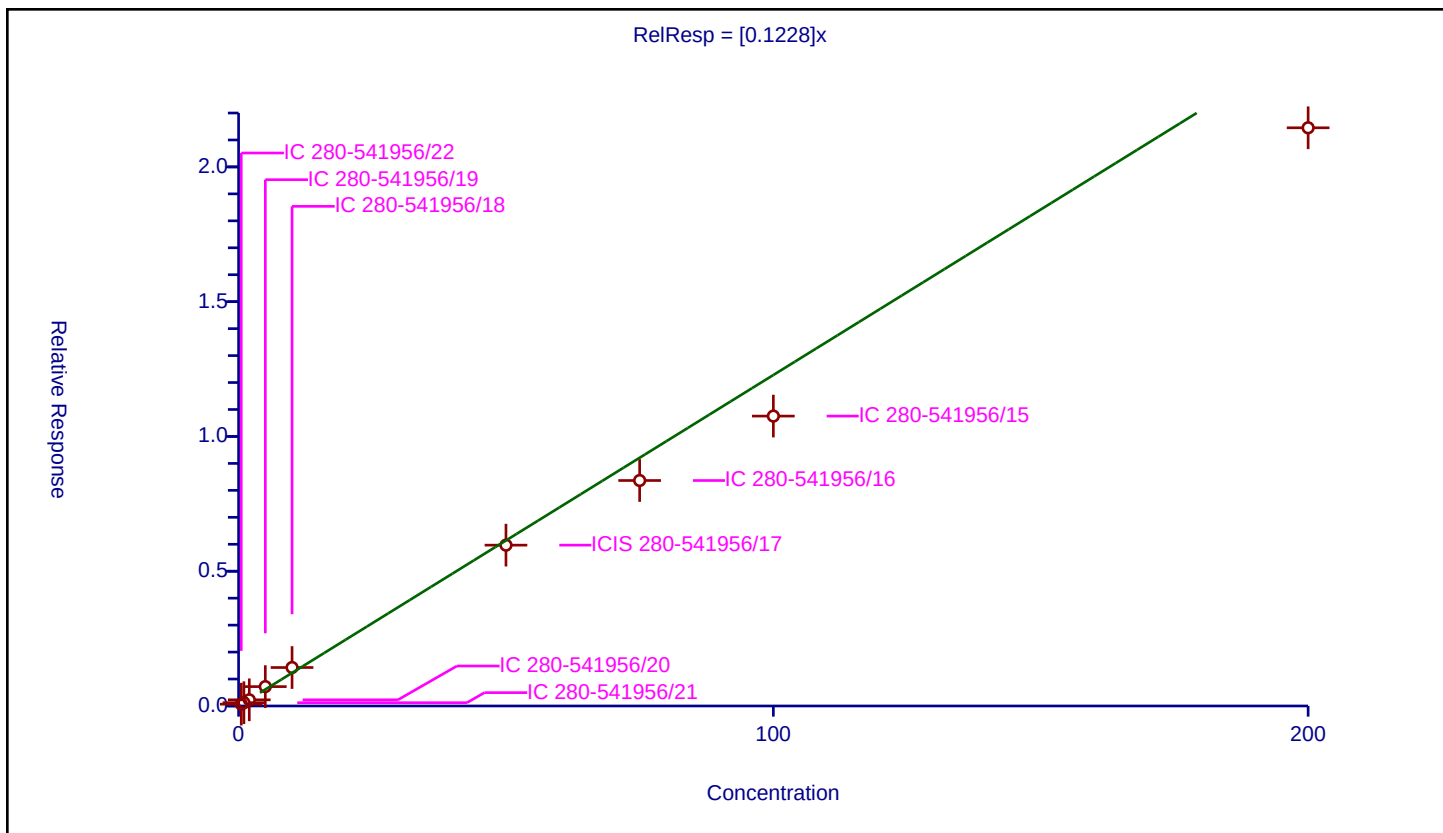
Curve Coefficients

Intercept: 0
 Slope: 0.1228

Error Coefficients

Standard Error: 383000
 Relative Standard Error: 11.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.067991	50.0	2017190.0	0.135981	Y
2	IC 280-541956/21	1.0	0.122363	50.0	2049226.0	0.122363	Y
3	IC 280-541956/20	2.0	0.229195	50.0	1992191.0	0.114597	Y
4	IC 280-541956/19	5.0	0.71908	50.0	2058393.0	0.143816	Y
5	IC 280-541956/18	10.0	1.426898	50.0	2067737.0	0.14269	Y
6	ICIS 280-541956/17	50.0	5.967634	50.0	2089111.0	0.119353	Y
7	IC 280-541956/16	75.0	8.36597	50.0	2141987.0	0.111546	Y
8	IC 280-541956/15	100.0	10.755623	50.0	2196837.0	0.107556	Y
9	IC 280-541956/14	200.0	21.452111	50.0	2026409.0	0.107261	Y



Calibration

/ Bromomethane

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

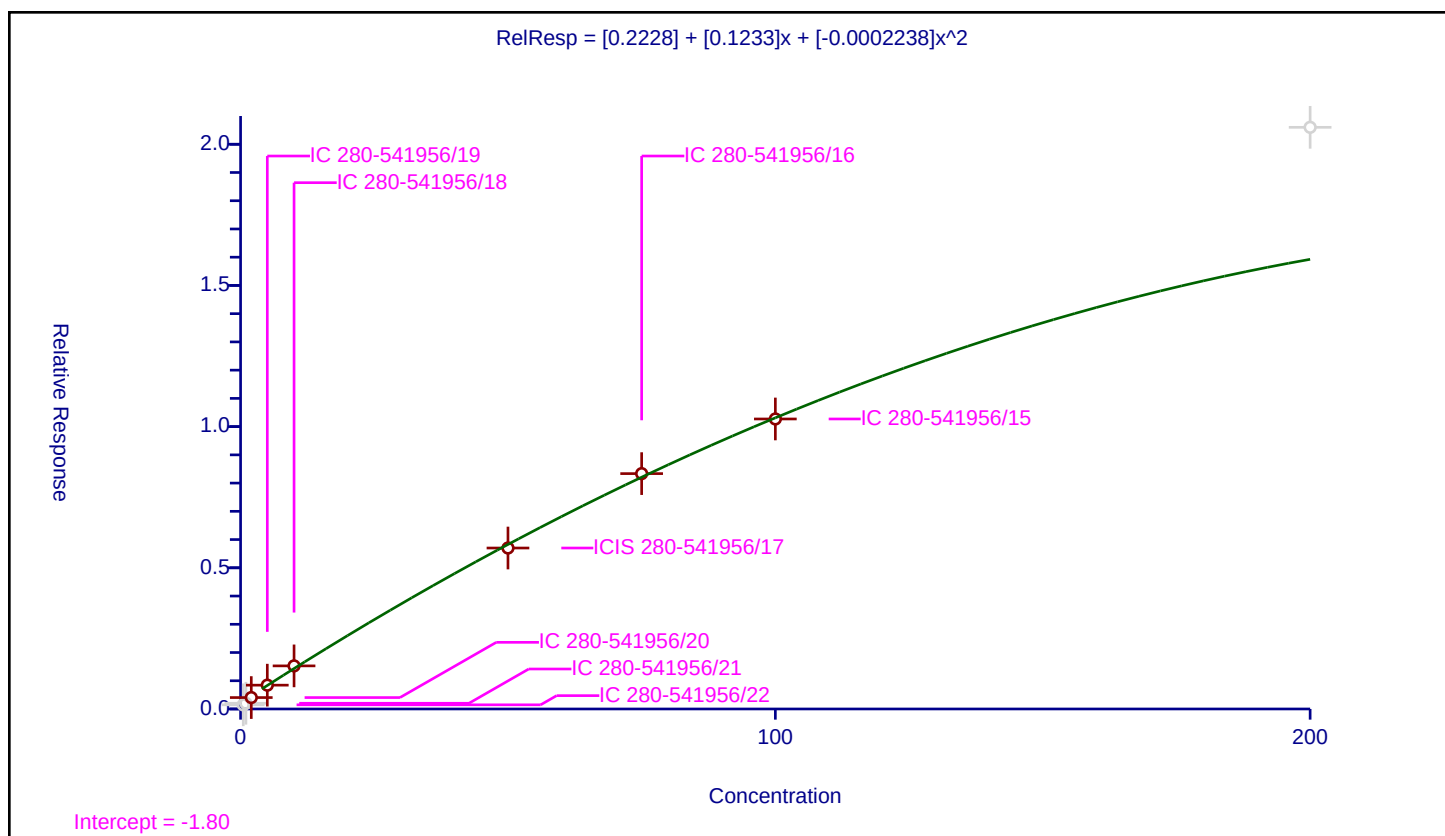
Curve Coefficients

Intercept: 0.2228
 Slope: 0.1233
 Second Order: -0.0002238

Error Coefficients

Standard Error: 362000
 Relative Standard Error: 15.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.147879	50.0	2017190.0	0.295758	N
2	IC 280-541956/21	1.0	0.202125	50.0	2049226.0	0.202125	N
3	IC 280-541956/20	2.0	0.404354	50.0	1992191.0	0.202177	Y
4	IC 280-541956/19	5.0	0.843498	50.0	2058393.0	0.1687	Y
5	IC 280-541956/18	10.0	1.526959	50.0	2067737.0	0.152696	Y
6	ICIS 280-541956/17	50.0	5.701277	50.0	2089111.0	0.114026	Y
7	IC 280-541956/16	75.0	8.335508	50.0	2141987.0	0.11114	Y
8	IC 280-541956/15	100.0	10.271108	50.0	2196837.0	0.102711	Y
9	IC 280-541956/14	200.0	20.600037	50.0	2026409.0	0.103	N



Calibration

/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

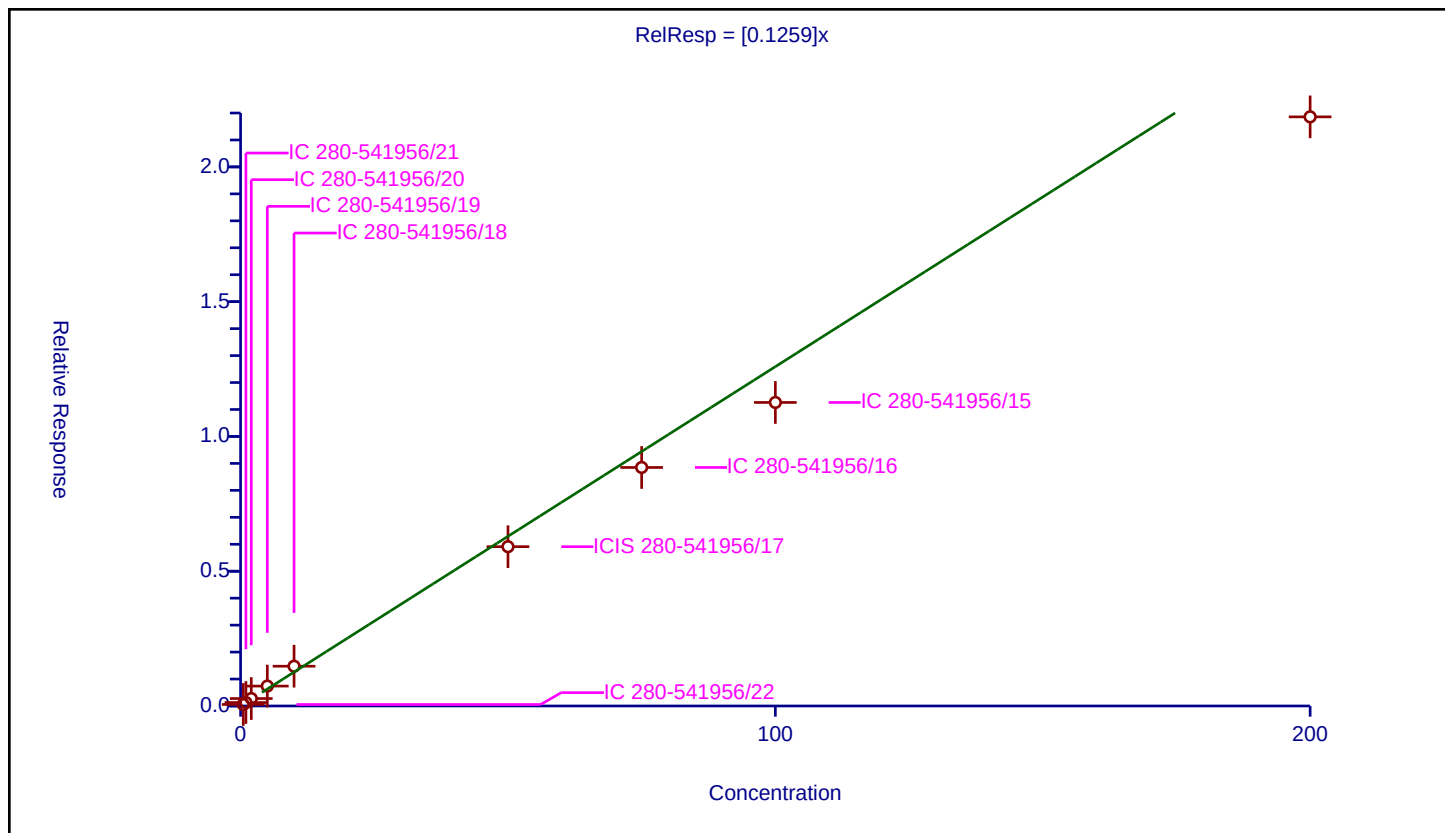
Curve Coefficients

Intercept: 0
 Slope: 0.1259

Error Coefficients

Standard Error: 394000
 Relative Standard Error: 12.1
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.05639	50.0	2017190.0	0.112781	Y
2	IC 280-541956/21	1.0	0.128366	50.0	2049226.0	0.128366	Y
3	IC 280-541956/20	2.0	0.276856	50.0	1992191.0	0.138428	Y
4	IC 280-541956/19	5.0	0.738804	50.0	2058393.0	0.147761	Y
5	IC 280-541956/18	10.0	1.476058	50.0	2067737.0	0.147606	Y
6	ICIS 280-541956/17	50.0	5.910864	50.0	2089111.0	0.118217	Y
7	IC 280-541956/16	75.0	8.849564	50.0	2141987.0	0.117994	Y
8	IC 280-541956/15	100.0	11.261851	50.0	2196837.0	0.112619	Y
9	IC 280-541956/14	200.0	21.857088	50.0	2026409.0	0.109285	Y



Calibration

/ Dichlorofluoromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

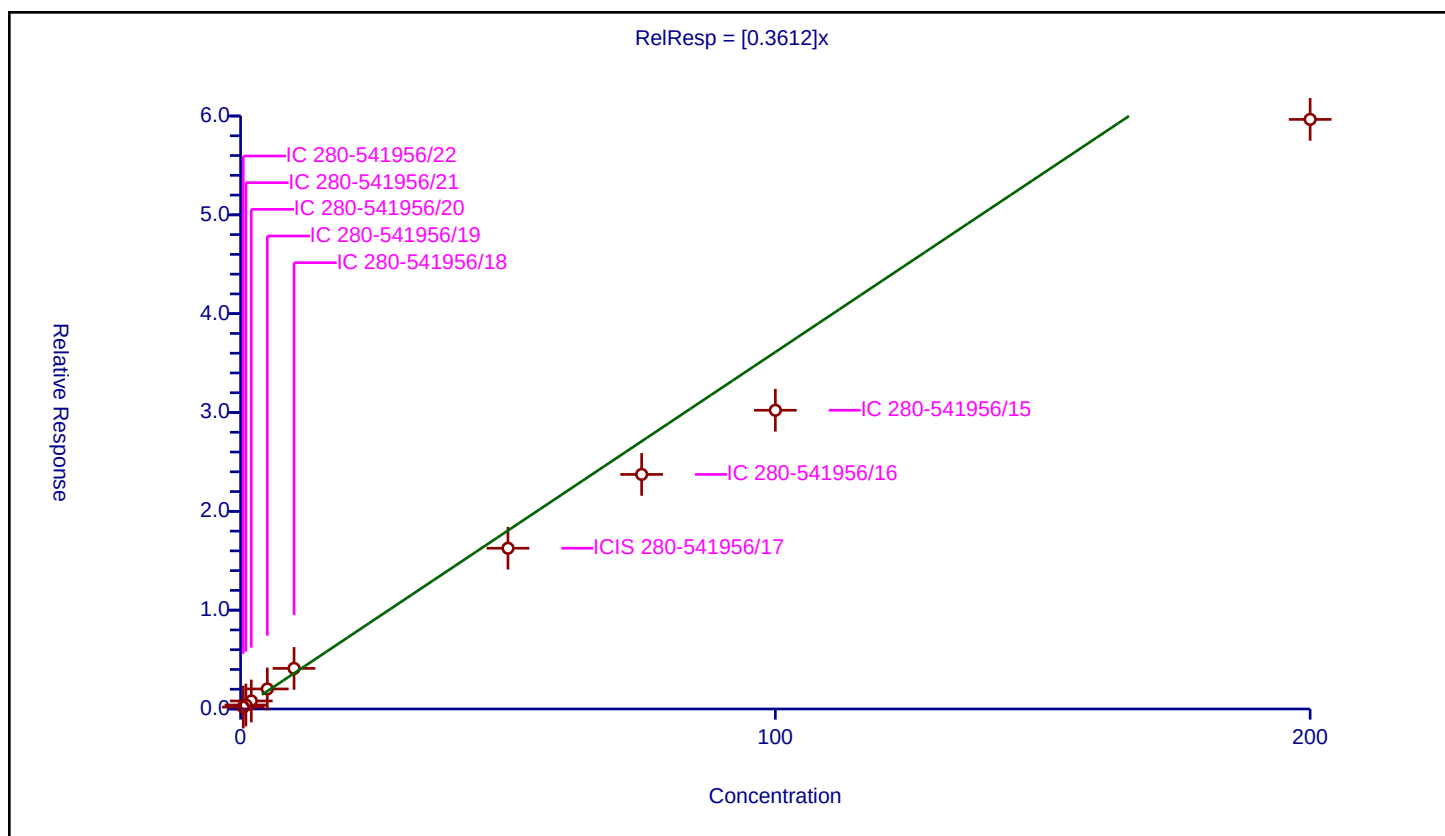
Curve Coefficients

Intercept: 0
Slope: 0.3612

Error Coefficients

Standard Error: 1070000
Relative Standard Error: 13.6
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.191008	50.0	2017190.0	0.382017	Y
2	IC 280-541956/21	1.0	0.404567	50.0	2049226.0	0.404567	Y
3	IC 280-541956/20	2.0	0.809486	50.0	1992191.0	0.404743	Y
4	IC 280-541956/19	5.0	2.028767	50.0	2058393.0	0.405753	Y
5	IC 280-541956/18	10.0	4.10942	50.0	2067737.0	0.410942	Y
6	ICIS 280-541956/17	50.0	16.266297	50.0	2089111.0	0.325326	Y
7	IC 280-541956/16	75.0	23.733991	50.0	2141987.0	0.316453	Y
8	IC 280-541956/15	100.0	30.228255	50.0	2196837.0	0.302283	Y
9	IC 280-541956/14	200.0	59.658317	50.0	2026409.0	0.298292	Y



Calibration

/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

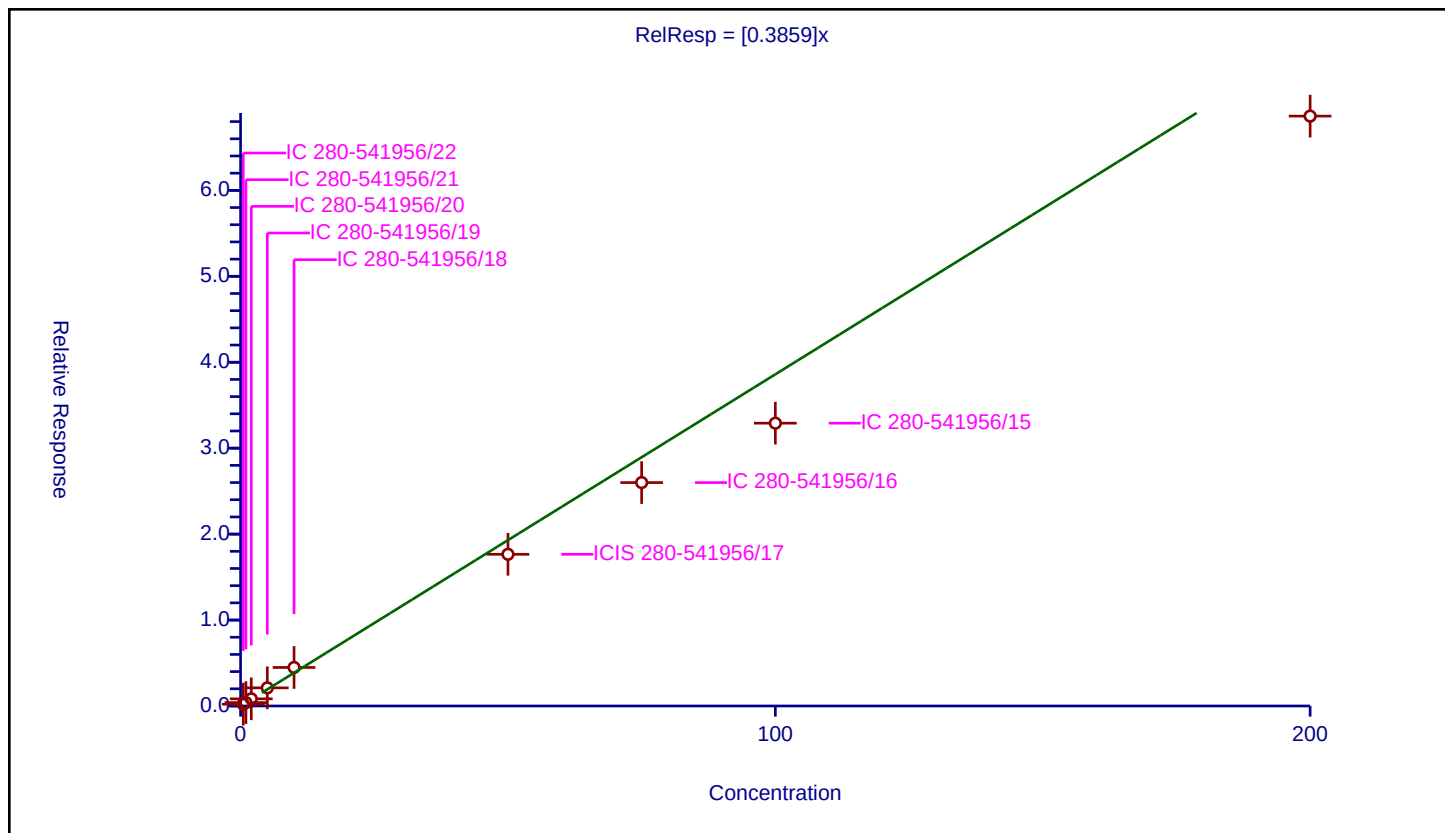
Curve Coefficients

Intercept: 0
 Slope: 0.3859

Error Coefficients

Standard Error: 1210000
 Relative Standard Error: 11.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.209896	50.0	2017190.0	0.419792	Y
2	IC 280-541956/21	1.0	0.394295	50.0	2049226.0	0.394295	Y
3	IC 280-541956/20	2.0	0.833856	50.0	1992191.0	0.416928	Y
4	IC 280-541956/19	5.0	2.111113	50.0	2058393.0	0.422223	Y
5	IC 280-541956/18	10.0	4.483428	50.0	2067737.0	0.448343	Y
6	ICIS 280-541956/17	50.0	17.652916	50.0	2089111.0	0.353058	Y
7	IC 280-541956/16	75.0	25.996516	50.0	2141987.0	0.34662	Y
8	IC 280-541956/15	100.0	32.908564	50.0	2196837.0	0.329086	Y
9	IC 280-541956/14	200.0	68.640339	50.0	2026409.0	0.343202	Y



Calibration

/ 2-Chloroethyl vinyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

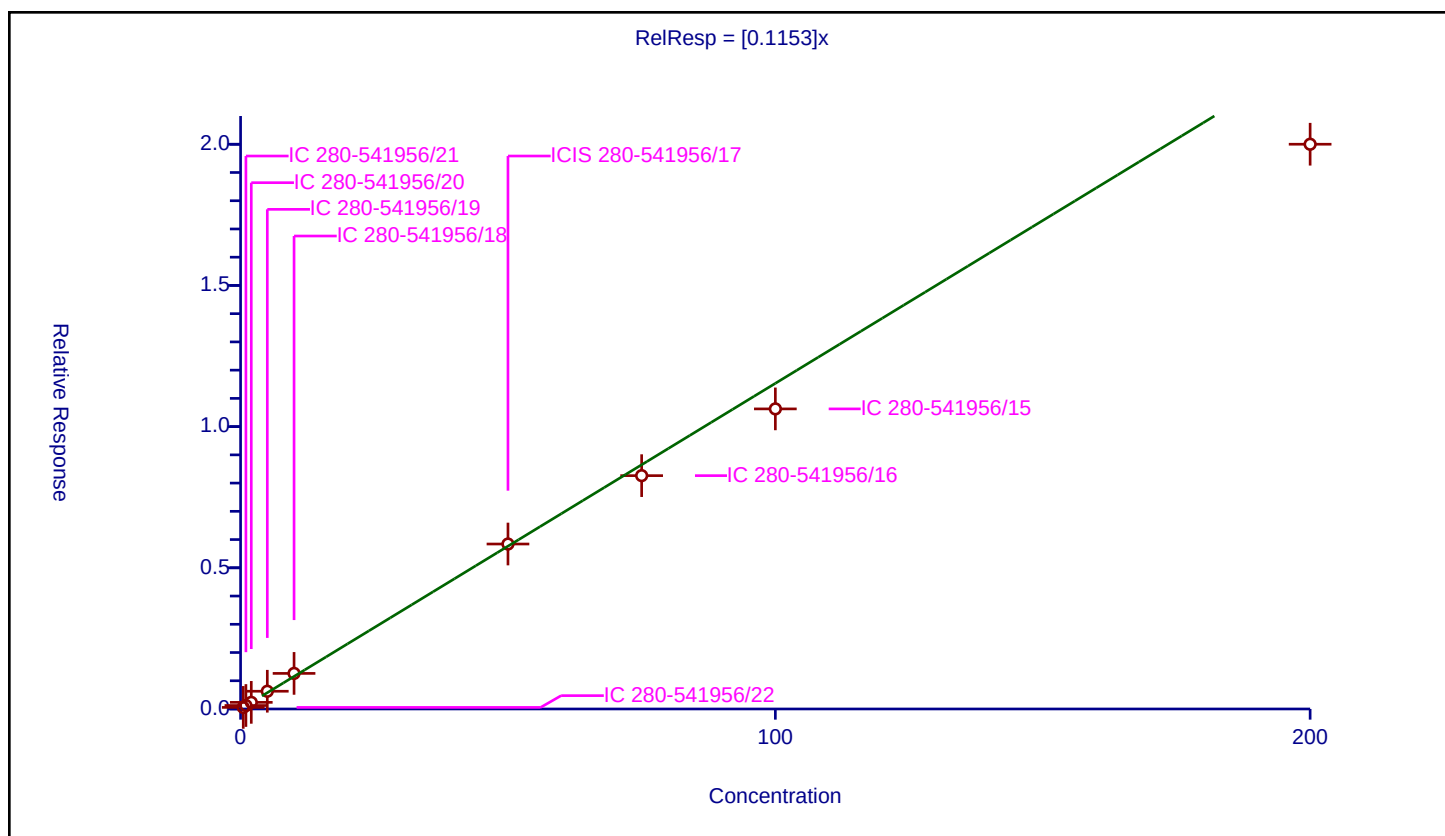
Curve Coefficients

Intercept: 0
 Slope: 0.1153

Error Coefficients

Standard Error: 365000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.993
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-541956/22	0.5	0.056043	50.0	2017190.0	0.112087	Y
2	IC 280-541956/21	1.0	0.123461	50.0	2049226.0	0.123461	Y
3	IC 280-541956/20	2.0	0.234767	50.0	1992191.0	0.117383	Y
4	IC 280-541956/19	5.0	0.628233	50.0	2058393.0	0.125647	Y
5	IC 280-541956/18	10.0	1.260339	50.0	2067737.0	0.126034	Y
6	ICIS 280-541956/17	50.0	5.842078	50.0	2089111.0	0.116842	Y
7	IC 280-541956/16	75.0	8.263449	50.0	2141987.0	0.110179	Y
8	IC 280-541956/15	100.0	10.628144	50.0	2196837.0	0.106281	Y
9	IC 280-541956/14	200.0	20.000725	50.0	2026409.0	0.100004	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: ICV 280-538548/32 Calibration Date: 06/04/2021 13:29
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 10:18
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 12:47
 Lab File ID: MS1_2721.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		0.0092		5000	5000	0.0	55.0
Ethanol	Lin1		0.0029		3040	2250	35.1	55.0
Propene oxide	Ave	0.0299	0.0313		5230	5000	4.7	
2-Propanol	Ave	0.0111	0.0106		478	500	-4.5	55.0
Acetonitrile	Lin2		0.0238		505	500	1.1	55.0
Di-isopropyl ether (DIPE)	Ave	0.1328	0.1376		51.8	50.0	3.7	35.0
Chloroprene	Ave	0.3106	0.2917		47.0	50.0	-6.1	35.0
Tert-butyl ethyl ether	Ave	0.5083	0.5277		51.9	50.0	3.8	35.0
Ethyl acetate	Ave	0.1300	0.1495		115	100	15.0	55.0
Propionitrile	Lin2		0.0237		514	500	2.7	55.0
Methacrylonitrile	Lin2		0.1010		536	500	7.1	55.0
Tert-amyl methyl ether	Ave	0.4421	0.4478		50.6	50.0	1.3	35.0
n-Butanol	Ave	0.0041	0.0040		1210	1250	-3.4	55.0
Methyl methacrylate	Ave	0.0386	0.0410		106	100	6.2	35.0
2-Nitropropane	Lin2		0.0480		114	100	13.8	55.0
Tetrahydrothiophene	Ave	0.2160	0.2036		94.2	100	-5.8	55.0
cis-1,4-Dichloro-2-butene	Ave	0.2443	0.2352		96.3	100	-3.7	55.0
1,2,3-Trimethylbenzene	Ave	1.901	1.952		51.4	50.0	2.7	35.0
1,3,5-Trichlorobenzene	Ave	0.5817	0.5884		50.6	50.0	1.1	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2721.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 04-Jun-2021 13:29:30 ALS Bottle#: 10 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0102067-032
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:26:36 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 11:26:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	768839	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	157682	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	253861	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	708893	5000.0	5002.8	
19 Ethanol	45	2.892	2.892	0.000	100	101239	2250.0	3039.8	
21 Propene oxide	58	3.059	3.059	0.000	87	2403731	5000.0	5232.6	
27 Isopropyl alcohol	45	3.395	3.395	0.000	99	81153	500.0	477.5	
29 Acetonitrile	41	3.534	3.534	0.000	99	182643	500.0	505.5	
41 Isopropyl ether	87	4.372	4.372	0.000	92	105799	50.0	51.8	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	224271	50.0	47.0	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	405746	50.0	51.9	
47 Ethyl acetate	43	4.847	4.847	0.000	100	229858	100.0	115.0	
50 Propionitrile	54	4.875	4.875	0.000	98	182407	500.0	513.7	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	776542	500.0	535.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	344296	50.0	50.6	
67 n-Butanol	56	6.034	6.034	0.000	90	75952	1250.0	1206.9	
72 Methyl methacrylate	100	6.397	6.397	0.000	90	62993	100.0	106.2	
76 2-Nitropropane	41	6.788	6.788	0.000	98	73781	100.0	113.8	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	64194	100.0	94.2	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	119427	100.0	96.3	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	495658	50.0	51.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	92	149369	50.0	50.6	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00033

Amount Added: 50.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 05-Jun-2021 11:26:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2721.D

Injection Date: 04-Jun-2021 13:29:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: ICV

Worklist Smp#: 32

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

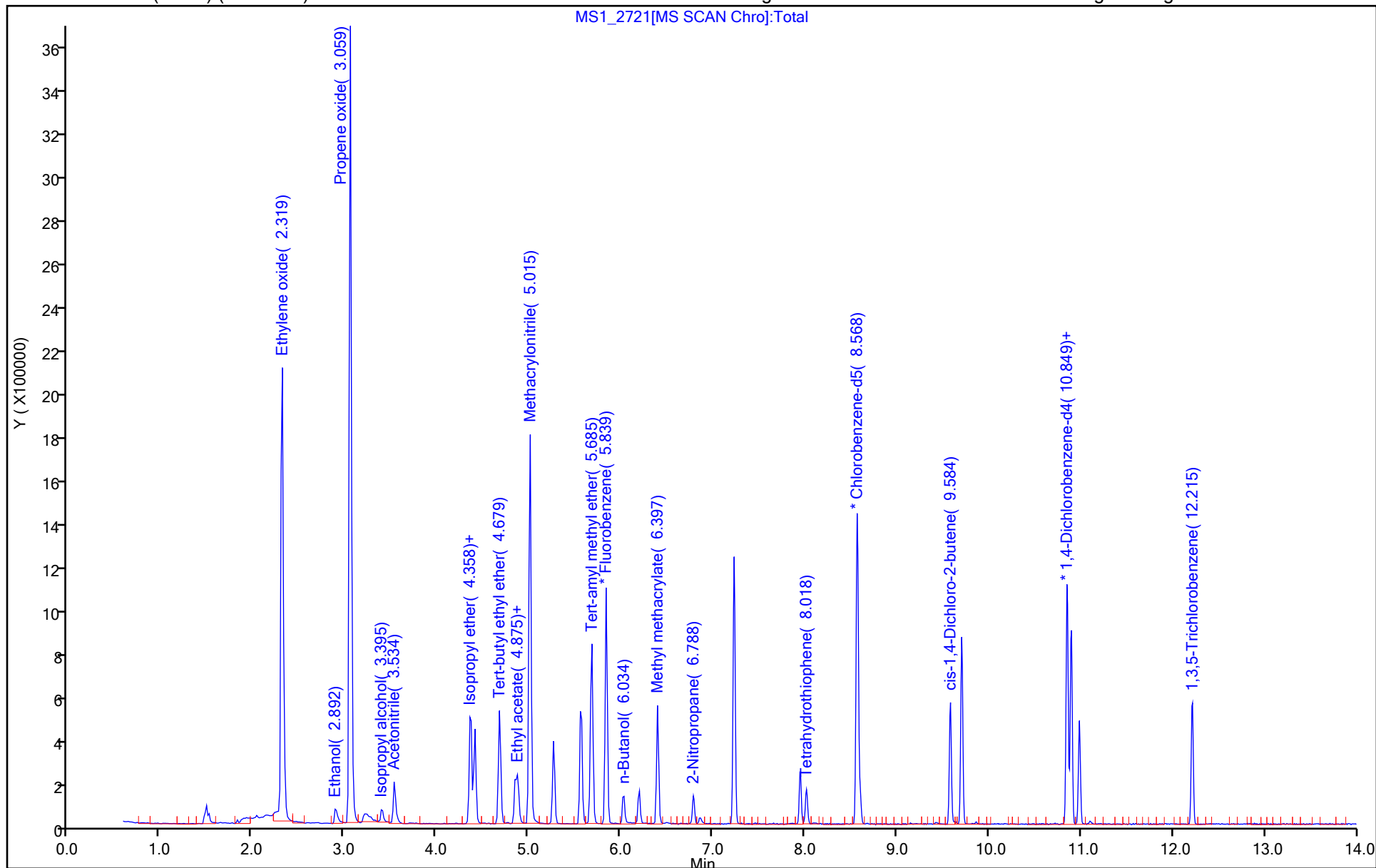
ALS Bottle#: 10

Method: AQ_VMS1_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.: 280-150290-1

SDG No.: _____

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	Lin1		0.1839		40.9	50.0	-18.1	55.0
Chloromethane	Ave	0.2172	0.1840	0.1000	42.4	50.0	-15.3	35.0
Vinyl chloride	Ave	0.1753	0.1664		47.5	50.0	-5.1	35.0
Bromomethane	Ave	0.1350	0.1342		49.7	50.0	-0.6	35.0
Chloroethane	Ave	0.1351	0.1265		46.8	50.0	-6.4	35.0
Dichlorofluoromethane	Lin2		0.3306		48.9	50.0	-2.2	55.0
Trichlorofluoromethane	Ave	0.2882	0.2597		45.1	50.0	-9.9	50.0
Ethyl ether	Ave	0.1409	0.1402		49.7	50.0	-0.5	35.0
Acrolein	Lin1		0.0314		571	494	15.7	55.0
1,1-Dichloroethene	Ave	0.1444	0.1267		43.9	50.0	-12.3	35.0
Freon 113	Ave	0.0955	0.0904		47.4	50.0	-5.2	55.0
Acetone	Lin2		0.0539		188	200	-6.1	55.0
Iodomethane	Lin2		0.1811		41.7	50.0	-16.6	35.0
Carbon disulfide	Ave	0.4856	0.4422		45.5	50.0	-8.9	55.0
Methyl acetate	Ave	0.1367	0.1317		96.4	100	-3.6	55.0
Allyl chloride	Ave	0.2908	0.2719		46.8	50.0	-6.5	35.0
Methylene Chloride	Lin2		0.1699		47.7	50.0	-4.5	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0174	0.0179		514	500	2.7	55.0
Acrylonitrile	Ave	0.0691	0.0690		499	500	-0.2	55.0
Methyl tert-butyl ether	Ave	0.5094	0.5122		50.3	50.0	0.5	35.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1487		42.4	50.0	-15.2	35.0
Hexane	Lin2		0.9001		42.8	50.0	-14.3	35.0
1,1-Dichloroethane	Ave	0.3389	0.3134	0.1000	46.2	50.0	-7.5	35.0
Vinyl acetate	Ave	0.3923	0.4035		103	100	2.9	55.0
2-Butanone (MEK)	Lin2		0.0811		191	200	-4.7	55.0
2,2-Dichloropropane	Ave	0.2998	0.2601		43.4	50.0	-13.2	35.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1726		44.9	50.0	-10.2	35.0
sec-Butyl Alcohol	Lin2		0.0139		1160	1200	-3.0	55.0
Chlorobromomethane	Lin2		0.0813		46.6	50.0	-6.7	35.0
Tetrahydrofuran	Lin1		0.0545		95.7	100	-4.3	55.0
Chloroform	Ave	0.3516	0.3117		44.3	50.0	-11.4	35.0
1,1,1-Trichloroethane	Ave	0.3094	0.2518		40.7	50.0	-18.6	35.0
Cyclohexane	Lin1		0.2634		42.4	50.0	-15.1	35.0
1,1-Dichloropropene	Ave	0.2498	0.2249		45.0	50.0	-10.0	35.0
Carbon tetrachloride	Ave	0.2276	0.2062		45.3	50.0	-9.4	35.0
Isobutyl alcohol	Ave	0.0062	0.0056		1120	1250	-10.5	55.0
Benzene	Ave	0.6919	0.6544		47.3	50.0	-5.4	35.0
1,2-Dichloroethane	Ave	0.2917	0.2813		48.2	50.0	-3.6	35.0
n-Heptane	Lin1		0.1729		42.4	50.0	-15.2	50.0
Trichloroethene	Ave	0.9271	0.8137		43.9	50.0	-12.2	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	0.1343	0.1311		156	160	-2.4	55.0
Methylcyclohexane	Lin1		0.2034		42.0	50.0	-16.0	35.0
1,2-Dichloropropane	Ave	0.1881	0.1840		48.9	50.0	-2.2	35.0
1,4-Dioxane	Lin2		0.0022		1020	1000	1.9	55.0
Dibromomethane	Ave	0.1179	0.1171		49.6	50.0	-0.7	35.0
Dichlorobromomethane	Ave	0.2580	0.2306		44.7	50.0	-10.6	35.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.1209		52.5	50.0	5.1	55.0
cis-1,3-Dichloropropene	Ave	1.351	1.357		50.2	50.0	0.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1554		200	200	-0.2	55.0
Toluene	Ave	0.6902	0.6210		45.0	50.0	-10.0	35.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2779		50.4	50.0	0.7	35.0
Ethyl methacrylate	Ave	0.996	1.064		53.4	50.0	6.9	35.0
1,1,2-Trichloroethane	Lin2		0.1407		48.6	50.0	-2.9	35.0
Tetrachloroethene	Ave	0.5176	0.5006		48.4	50.0	-3.3	35.0
1,3-Dichloropropane	Ave	1.267	1.282		50.6	50.0	1.1	35.0
2-Hexanone	Lin2		0.5219		197	200	-1.3	55.0
Chlorodibromomethane	Ave	0.7473	0.7821		52.3	50.0	4.7	35.0
1,2-Dibromoethane	Ave	0.7193	0.7102		49.4	50.0	-1.3	35.0
1-Chlorohexane	Lin2		0.9422		35.7	40.0	-10.8	35.0
Chlorobenzene	Ave	2.041	1.949	0.3000	47.7	50.0	-4.5	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.7015		48.7	50.0	-2.7	35.0
Ethylbenzene	Ave	1.085	1.040		47.9	50.0	-4.1	35.0
m-Xylene & p-Xylene	Ave	1.367	1.278		46.7	50.0	-6.5	35.0
o-Xylene	Ave	1.277	1.278		50.1	50.0	0.1	35.0
Styrene	Ave	2.334	2.277		48.8	50.0	-2.4	35.0
Bromoform	Lin2		0.4720	0.1000	48.1	50.0	-3.7	35.0
Isopropylbenzene	Ave	2.187	1.997		45.7	50.0	-8.7	35.0
Cyclohexanone	Ave	0.0560	0.0315		1130	2000	-43.7*	35.0
1,1,2,2-Tetrachloroethane	Lin2		0.6010	0.3000	49.6	50.0	-0.9	35.0
Bromobenzene	Ave	0.4965	0.4947		49.8	50.0	-0.4	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.2228		51.0	50.0	2.1	55.0
1,2,3-Trichloropropane	Lin2		0.1702		50.5	50.0	1.0	35.0
N-Propylbenzene	Ave	0.6077	0.5410		44.5	50.0	-11.0	35.0
2-Chlorotoluene	Ave	0.4970	0.4793		48.2	50.0	-3.5	35.0
1,3,5-Trimethylbenzene	Ave	1.953	1.810		46.3	50.0	-7.3	35.0
4-Chlorotoluene	Ave	0.5470	0.5046		46.1	50.0	-7.7	35.0
tert-Butylbenzene	Ave	1.601	1.458		45.5	50.0	-8.9	35.0
1,2,4-Trimethylbenzene	Ave	2.003	1.851		46.2	50.0	-7.6	35.0
sec-Butylbenzene	Lin2		0.4150		44.8	50.0	-10.3	35.0
1,3-Dichlorobenzene	Ave	0.9698	0.9324		48.1	50.0	-3.9	35.0
4-Isopropyltoluene	Ave	1.986	1.809		45.5	50.0	-8.9	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41
 Lab File ID: MS1_2732.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	1.018	0.9868		48.5	50.0	-3.1	35.0
n-Butylbenzene	Ave	1.915	1.721		44.9	50.0	-10.1	35.0
1,2-Dichlorobenzene	Ave	0.9122	0.9043		49.6	50.0	-0.9	35.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1188		46.3	50.0	-7.4	55.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5757		48.2	50.0	-3.6	35.0
Hexachlorobutadiene	Lin2		0.1871		45.1	50.0	-9.9	35.0
Naphthalene	Ave	1.773	1.793		50.6	50.0	1.1	35.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.5360		49.2	50.0	-1.7	35.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2619		49.4	50.0	-1.2	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3483		49.0	50.0	-1.9	35.0
Toluene-d8 (Surr)	Ave	4.332	4.397		50.8	50.0	1.5	35.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.073		49.4	50.0	-1.1	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2732.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 04-Jun-2021 17:24:30 ALS Bottle#: 21 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0102067-023
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 11:42:23 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 05-Jun-2021 11:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.838	0.000	97	749174	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	154032	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	248786	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	196215	50.0	49.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	260905	50.0	49.0	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	677298	50.0	50.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	266969	50.0	49.4	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	98	137806	50.0	40.9	
12 Chloromethane	50	1.900	1.900	0.000	99	137830	50.0	42.4	
13 Vinyl chloride	62	1.998	1.998	0.000	100	124637	50.0	47.5	
15 Bromomethane	94	2.347	2.347	0.000	93	100513	50.0	49.7	
16 Chloroethane	64	2.459	2.459	0.000	98	94749	50.0	46.8	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	247680	50.0	48.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	194553	50.0	45.1	
20 Ethyl ether	59	3.003	3.003	0.000	93	105050	50.0	49.7	
22 Acrolein	56	3.143	3.143	0.000	98	232479	493.8	571.4	a
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	94893	50.0	43.9	
24 112TCTFE	151	3.255	3.255	0.000	95	67761	50.0	47.4	
25 Acetone	43	3.269	3.269	0.000	98	161480	200.0	187.7	
26 Iodomethane	142	3.380	3.380	0.000	98	135641	50.0	41.7	
28 Carbon disulfide	76	3.450	3.450	0.000	99	331299	50.0	45.5	
30 Methyl acetate	43	3.576	3.576	0.000	98	197354	100.0	96.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	203702	50.0	46.8	
32 Methylene Chloride	84	3.716	3.716	0.000	97	127274	50.0	47.7	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	134139	500.0	513.6	
34 Acrylonitrile	53	3.911	3.911	0.000	97	516763	500.0	498.9	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	383730	50.0	50.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	111423	50.0	42.4	
37 Hexane	57	4.204	4.204	0.000	94	138643	50.0	42.8	
39 Vinyl acetate	43	4.344	4.344	0.000	98	604607	100.0	102.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	234818	50.0	46.2	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	243087	200.0	190.6	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	194894	50.0	43.4	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	129274	50.0	44.9	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	249046	1200.0	1163.4	
54 Tetrahydrofuran	42	5.056	5.056	0.000	87	81589	100.0	95.7	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	60892	50.0	46.6	
55 Chloroform	83	5.126	5.126	0.000	98	233531	50.0	44.3	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	188632	50.0	40.7	
57 Cyclohexane	56	5.350	5.350	0.000	94	197345	50.0	42.4	
58 1,1-Dichloropropene	75	5.419	5.419	0.000	91	168483	50.0	45.0	
59 Carbon tetrachloride	117	5.419	5.419	0.000	84	154474	50.0	45.3	
60 Isobutyl alcohol	41	5.461	5.461	0.000	94	104463	1250.0	1118.5	
63 Benzene	78	5.587	5.587	0.000	99	490289	50.0	47.3	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	210764	50.0	48.2	
66 n-Heptane	43	5.824	5.824	0.000	93	129529	50.0	42.4	
68 Trichloroethene	95	6.146	6.146	0.000	93	125331	50.0	43.9	
69 2-Pentanone	43	6.271	6.271	0.000	98	314197	160.0	156.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	152377	50.0	42.0	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	137831	50.0	48.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	32705	1000.0	1019.1	
74 Dibromomethane	93	6.453	6.453	0.000	89	87722	50.0	49.6	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	172789	50.0	44.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	90576	50.0	52.5	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	208971	50.0	50.2	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	465669	200.0	199.5	
82 Toluene	91	7.295	7.295	0.000	97	465232	50.0	45.0	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	99	208177	50.0	50.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	163928	50.0	53.4	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	95	105406	50.0	48.6	
89 Tetrachloroethene	164	7.767	7.767	0.000	86	77111	50.0	48.4	
90 1,3-Dichloropropane	76	7.824	7.824	0.000	95	197428	50.0	50.6	
91 2-Hexanone	43	7.853	7.853	0.000	99	321572	200.0	197.4	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	120461	50.0	52.3	
96 Ethylene Dibromide	107	8.146	8.146	0.000	96	109392	50.0	49.4	
98 1-Chlorohexane	91	8.568	8.568	0.000	94	116109	40.0	35.7	
99 Chlorobenzene	112	8.604	8.604	0.000	90	300182	50.0	47.7	
100 1,1,1,2-Tetrachloroethane	131	8.682	8.682	0.000	91	108061	50.0	48.7	
101 Ethylbenzene	106	8.682	8.682	0.000	99	160135	50.0	47.9	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	196849	50.0	46.7	
103 o-Xylene	106	9.176	9.176	0.000	99	196851	50.0	50.1	
104 Styrene	104	9.197	9.197	0.000	95	350770	50.0	48.8	
106 Bromoform	173	9.383	9.383	0.000	89	72696	50.0	48.1	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	496911	50.0	45.7	
109 Cyclohexanone	55	9.626	9.626	0.000	95	194155	2000.0	1125.1	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	149523	50.0	49.6	
111 Bromobenzene	156	9.855	9.855	0.000	96	123063	50.0	49.8	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	74	55427	50.0	51.0	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	42332	50.0	50.5	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	134588	50.0	44.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	119253	50.0	48.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	450332	50.0	46.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	99	125546	50.0	46.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	362761	50.0	45.5	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	460459	50.0	46.2	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	103236	50.0	44.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	231970	50.0	48.1	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	450072	50.0	45.5	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	245500	50.0	48.5	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	428125	50.0	44.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	224969	50.0	49.6	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	75	29554	50.0	46.3	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	143218	50.0	48.2	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	46558	50.0	45.1	
132 Naphthalene	128	13.123	13.123	0.000	98	446124	50.0	50.6	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	92	133359	50.0	49.2	
S 149 1,2-Dichloroethene, Total (URS)	93				0		100.0	87.3	
S 150 1,2-Dichloroethene, Total	1				0		100.0	87.3	
S 151 Trihalomethanes, Total	1				0		200.0	189.5	
S 152 Total BTEX	1				0			237.0	
S 153 Xylenes, Total (URS)	1				0		100.0	96.8	
S 155 Xylenes, Total	106				0		100.0	96.8	
S 156 1,3-Dichloropropene, Total	1				0		100.0	100.5	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-Gas B_00091

Amount Added: 10.00

Units: uL

MV-MegaMain B_00047

Amount Added: 25.00

Units: uL

Acrolein_B_00005

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 05-Jun-2021 11:42:24

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2732.D

Injection Date: 04-Jun-2021 17:24:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: ICV

Worklist Smp#: 23

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

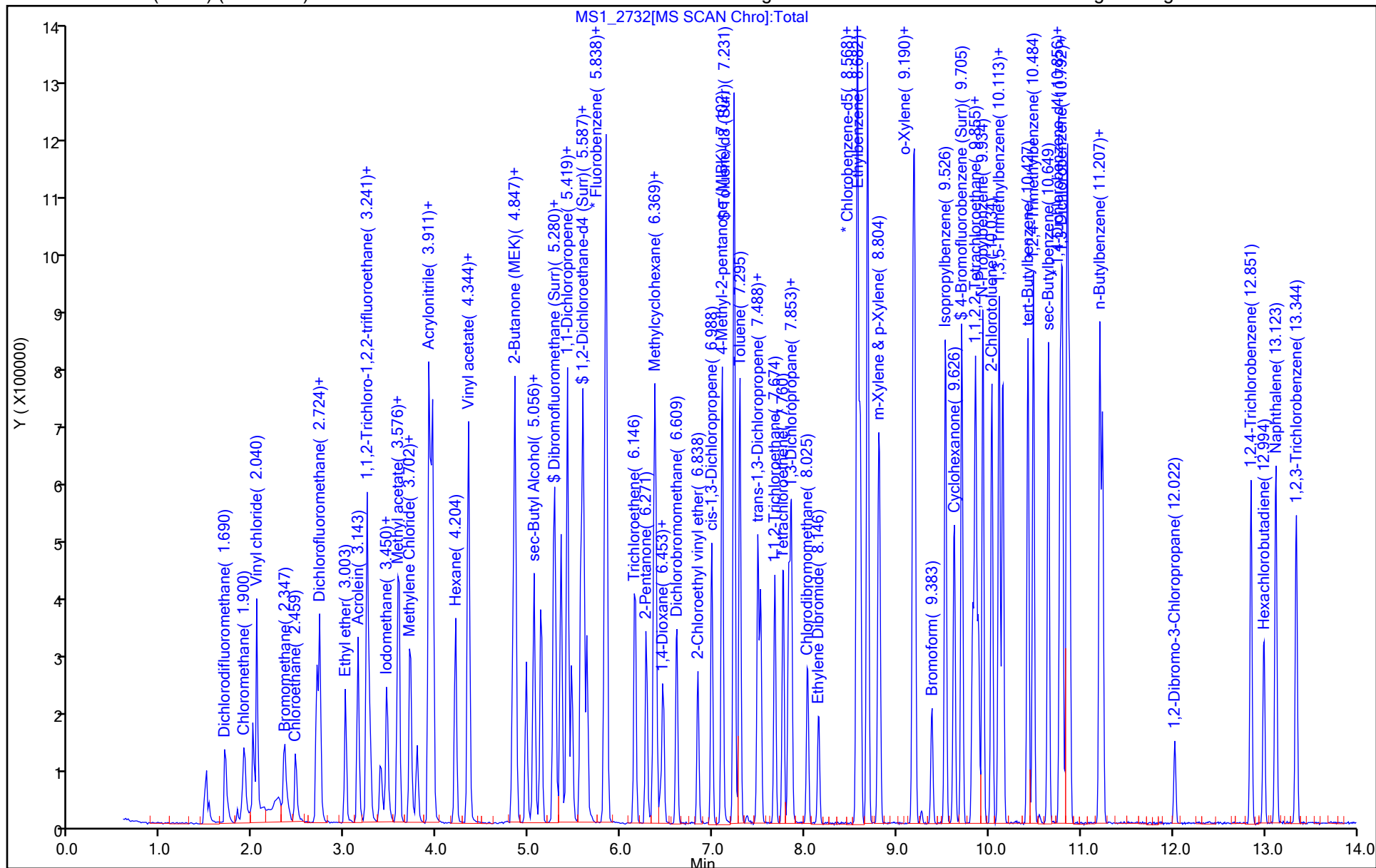
ALS Bottle#: 21

Method: AQ_VMS1_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_MS1\20210604-102067.b\MS1_2732.D

Injection Date: 04-Jun-2021 17:24:30

Instrument ID: VMS_MS1

Lims ID: ICV

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#:

21

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: AQ_VMS1_8260

Limit Group:

MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm)

Detector

MS SCAN

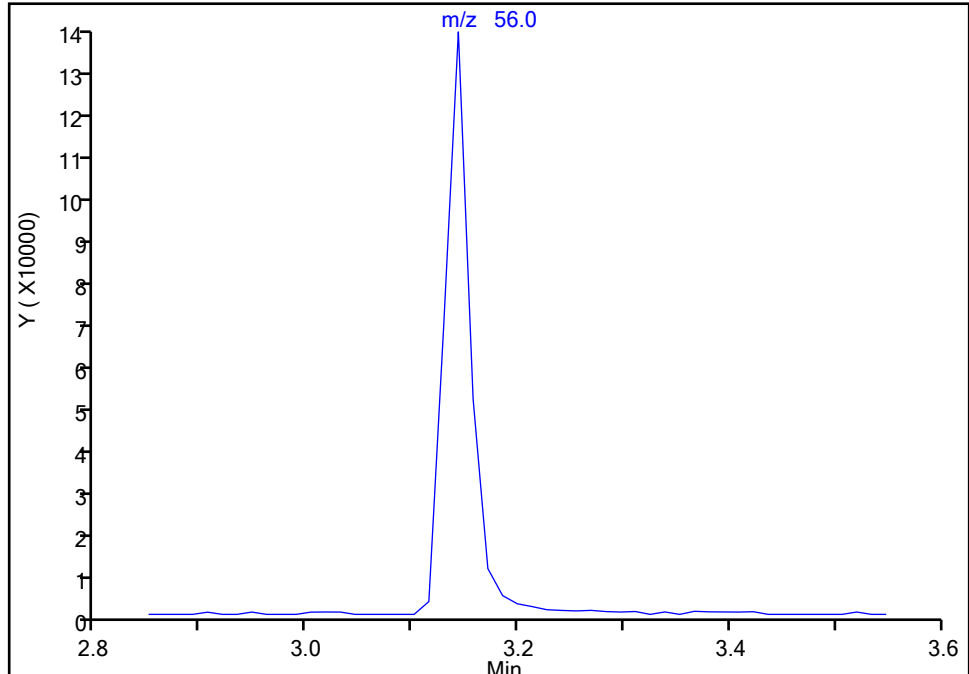
[22 Acrolein, CAS: 107-02-8](#)

Signal: 1

Not Detected

Expected RT: 3.14

Processing Integration Results



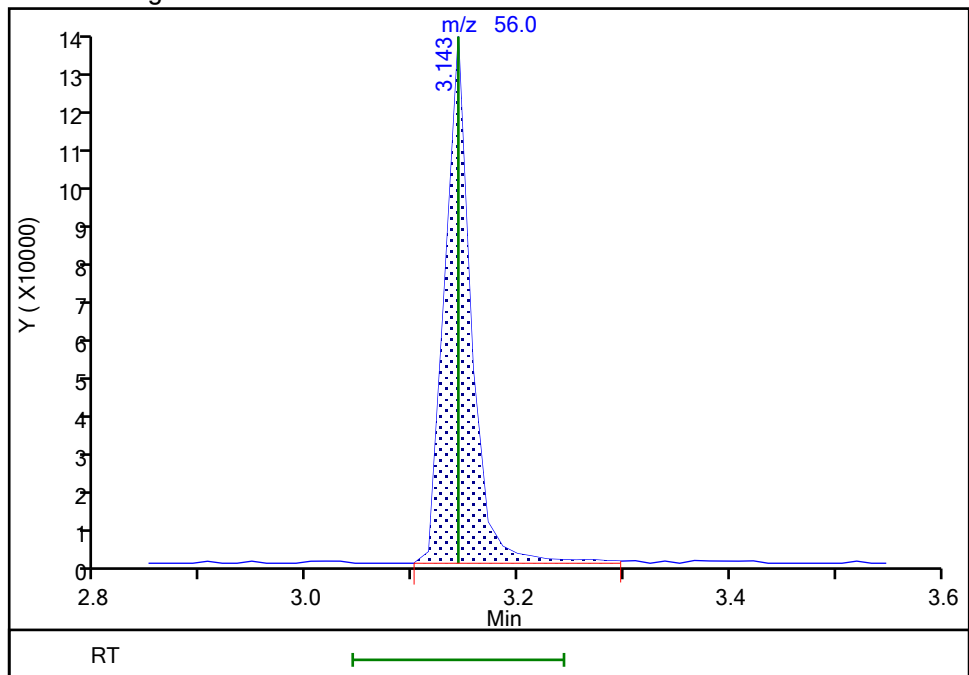
RT: 3.14

Area: 232479

Amount: 571.4472

Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 11:42:07

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542394/3 Calibration Date: 07/06/2021 21:15
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 10:18
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 12:47
 Lab File ID: MS1_4131.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		0.0079		4210	5000	-15.8	50.0
Ethanol	Lin1		0.0022		3040	3000	1.2	50.0
Propene oxide	Ave	0.0299	0.0289		4840	5000	-3.3	50.0
2-Propanol	Ave	0.0111	0.0103		468	500	-6.4	50.0
Acetonitrile	Lin2		0.0246		523	500	4.7	50.0
Di-isopropyl ether (DIPE)	Ave	0.1328	0.1339		50.4	50.0	0.9	35.0
Chloroprene	Ave	0.3106	0.3065		49.3	50.0	-1.3	35.0
Tert-butyl ethyl ether	Ave	0.5083	0.5362		52.7	50.0	5.5	35.0
Ethyl acetate	Ave	0.1300	0.1481		114	100	13.9	50.0
Propionitrile	Lin2		0.0241		522	500	4.4	50.0
Methacrylonitrile	Lin2		0.1062		563	500	12.7	50.0
Tert-amyl methyl ether	Ave	0.4421	0.4546		51.4	50.0	2.8	35.0
Methyl methacrylate	Ave	0.0386	0.0411		106	100	6.5	35.0
2-Nitropropane	Lin2		0.0249		56.5	100	-43.5	50.0
Tetrahydrothiophene	Ave	0.2160	0.1420		65.7	100	-34.3	50.0
cis-1,4-Dichloro-2-butene	Ave	0.2443	0.1812		74.2	100	-25.8	50.0
1,2,3-Trimethylbenzene	Ave	1.901	1.993		52.4	50.0	4.8	35.0
1,3,5-Trichlorobenzene	Ave	0.5817	0.6385		54.9	50.0	9.8	50.0
n-Butanol	Ave	0.0041				1250		

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4131.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 06-Jul-2021 21:15:30 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_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	743484	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	89	162198	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	270923	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	585489	5000.0	4207.8	
19 Ethanol	45	2.906	2.906	0.000	98	97779	3000.0	3035.9	
21 Propene oxide	58	3.059	3.059	0.000	84	2148865	5000.0	4837.3	
27 Isopropyl alcohol	45	3.409	3.409	0.000	99	76943	500.0	468.2	
29 Acetonitrile	41	3.534	3.534	0.000	100	182775	500.0	523.3	
67 n-Butanol	56		3.597				ND	ND	
41 Isopropyl ether	87	4.372	4.372	0.000	93	99563	50.0	50.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	227864	50.0	49.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	398680	50.0	52.7	
47 Ethyl acetate	43	4.847	4.847	0.000	100	220267	100.0	113.9	
50 Propionitrile	54	4.875	4.875	0.000	98	179272	500.0	522.2	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	789556	500.0	563.5	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	84	338017	50.0	51.4	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	61068	100.0	106.5	
76 2-Nitropropane	41	6.788	6.788	0.000	99	36962	100.0	56.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	92	46062	100.0	65.7	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	90	98165	100.0	74.2	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	539883	50.0	52.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	172982	50.0	54.9	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00051

Amount Added: 50.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4131.D

Injection Date: 06-Jul-2021 21:15:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: CCV

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

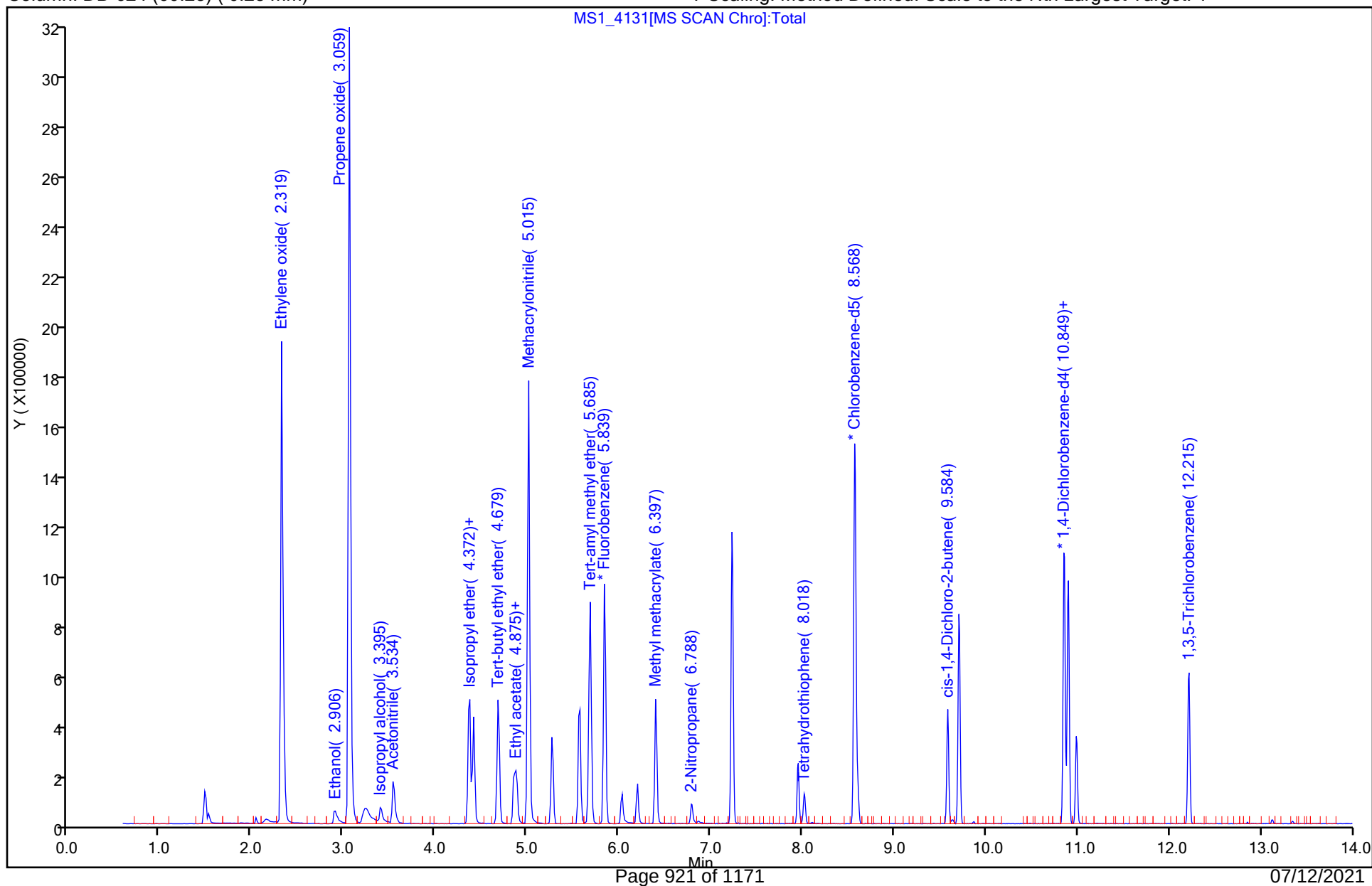
ALS Bottle#: 2

Method: AQ_VMS1_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.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542394/2 Calibration Date: 07/06/2021 22:15
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41
 Lab File ID: MS1_4133.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	Lin1		0.1710		38.1	50.0	-23.8	50.0
Chloromethane	Ave	0.2172	0.1896	0.1000	43.7	50.0	-12.7	35.0
Vinyl chloride	Ave	0.1753	0.1959		55.9	50.0	11.8	20.0
Bromomethane	Ave	0.1350	0.1232		45.6	50.0	-8.7	35.0
Chloroethane	Ave	0.1351	0.1305		48.3	50.0	-3.4	35.0
Dichlorofluoromethane	Lin2		0.3374		49.9	50.0	-0.2	50.0
Trichlorofluoromethane	Ave	0.2882	0.2972		51.6	50.0	3.1	50.0
Ethyl ether	Ave	0.1409	0.1445		51.3	50.0	2.5	35.0
Acrolein	Lin1		0.0249		451	494	-8.7	50.0
1,1-Dichloroethene	Ave	0.1444	0.1490		51.6	50.0	3.2	20.0
Freon 113	Ave	0.0955	0.1198		62.8	50.0	25.5	50.0
Acetone	Lin2		0.0480		167	200	-16.6	50.0
Iodomethane	Lin2		0.2054		47.2	50.0	-5.6	35.0
Carbon disulfide	Ave	0.4856	0.5289		54.5	50.0	8.9	50.0
Methyl acetate	Ave	0.1367	0.1245		91.1	100	-8.9	50.0
Allyl chloride	Ave	0.2908	0.3112		53.5	50.0	7.0	35.0
Methylene Chloride	Lin2		0.1808		50.8	50.0	1.7	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0174	0.0151		434	500	-13.3	50.0
Acrylonitrile	Ave	0.0691	0.0666		482	500	-3.7	50.0
Methyl tert-butyl ether	Ave	0.5094	0.5080		49.9	50.0	-0.3	35.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1688		48.1	50.0	-3.7	35.0
Hexane	Lin2		1.218		57.8	50.0	15.6	35.0
1,1-Dichloroethane	Ave	0.3389	0.3398	0.1000	50.1	50.0	0.3	35.0
Vinyl acetate	Ave	0.3923	0.4077		104	100	3.9	50.0
2-Butanone (MEK)	Lin2		0.0790		185	200	-7.3	50.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1914		49.8	50.0	-0.4	35.0
2,2-Dichloropropane	Ave	0.2998	0.3125		52.1	50.0	4.2	35.0
Chlorobromomethane	Lin2		0.0839		48.2	50.0	-3.7	35.0
Tetrahydrofuran	Lin1		0.0513		89.8	100	-10.2	50.0
Chloroform	Ave	0.3516	0.3393		48.3	50.0	-3.5	20.0
1,1,1-Trichloroethane	Ave	0.3094	0.2995		48.4	50.0	-3.2	35.0
Cyclohexane	Lin1		0.3421		55.3	50.0	10.6	35.0
1,1-Dichloropropene	Ave	0.2498	0.2620		52.5	50.0	4.9	35.0
Carbon tetrachloride	Ave	0.2276	0.2331		51.2	50.0	2.4	35.0
Isobutyl alcohol	Ave	0.0062	0.0052		1040	1250	-16.5	50.0
Benzene	Ave	0.6919	0.7272		52.5	50.0	5.1	35.0
1,2-Dichloroethane	Ave	0.2917	0.2857		49.0	50.0	-2.1	35.0
n-Heptane	Lin1		0.2488		61.2	50.0	22.4	50.0
Trichloroethene	Ave	0.9271	0.8535		46.0	50.0	-7.9	35.0
Methylcyclohexane	Lin1		0.2636		54.6	50.0	9.1	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Lab Sample ID: CCV 280-542394/2 Calibration Date: 07/06/2021 22:15

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_4133.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
1,2-Dichloropropane	Ave	0.1881	0.1974		52.5	50.0	5.0	20.0
1,4-Dioxane	Lin2		0.0020		937	1000	-6.3	50.0
Dibromomethane	Ave	0.1179	0.1210		51.3	50.0	2.6	35.0
Dichlorobromomethane	Ave	0.2580	0.2336		45.3	50.0	-9.5	35.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.1109		48.2	50.0	-3.6	50.0
cis-1,3-Dichloropropene	Ave	1.351	1.322		48.9	50.0	-2.2	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1532		197	200	-1.7	50.0
Toluene	Ave	0.6902	0.7067		51.2	50.0	2.4	20.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2723		49.3	50.0	-1.3	35.0
Ethyl methacrylate	Ave	0.996	0.9343		46.9	50.0	-6.2	35.0
1,1,2-Trichloroethane	Lin2		0.1401		48.4	50.0	-3.3	35.0
Tetrachloroethene	Ave	0.5176	0.5794		56.0	50.0	11.9	35.0
1,3-Dichloropropane	Ave	1.267	1.227		48.4	50.0	-3.2	35.0
2-Hexanone	Lin2		0.4680		177	200	-11.5	50.0
Chlorodibromomethane	Ave	0.7473	0.6630		44.4	50.0	-11.3	35.0
1,2-Dibromoethane	Ave	0.7193	0.6859		47.7	50.0	-4.6	35.0
1-Chlorohexane	Lin2		0.0080			40.0	-101.1*	35.0
Chlorobenzene	Ave	2.041	2.022	0.3000	49.5	50.0	-1.0	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.6697		46.4	50.0	-7.1	35.0
Ethylbenzene	Ave	1.085	1.087		50.1	50.0	0.3	20.0
m-Xylene & p-Xylene	Ave	1.367	1.407		51.5	50.0	2.9	35.0
o-Xylene	Ave	1.277	1.295		50.7	50.0	1.4	35.0
Styrene	Ave	2.334	2.257		48.4	50.0	-3.3	35.0
Bromoform	Lin2		0.3961	0.1000	40.5	50.0	-19.0	35.0
Isopropylbenzene	Ave	2.187	2.201		50.3	50.0	0.6	35.0
Cyclohexanone	Ave	0.0560	0.0371		1320	2000	-33.8	50.0
1,1,2,2-Tetrachloroethane	Lin2		0.5097	0.3000	42.0	50.0	-16.1	35.0
Bromobenzene	Ave	0.4965	0.4938		49.7	50.0	-0.5	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.1710		39.2	50.0	-21.6	50.0
1,2,3-Trichloropropane	Lin2		0.1591		47.2	50.0	-5.6	35.0
N-Propylbenzene	Ave	0.6077	0.5914		48.7	50.0	-2.7	35.0
2-Chlorotoluene	Ave	0.4970	0.4955		49.9	50.0	-0.3	35.0
1,3,5-Trimethylbenzene	Ave	1.953	1.873		47.9	50.0	-4.1	35.0
4-Chlorotoluene	Ave	0.5470	0.5155		47.1	50.0	-5.7	35.0
tert-Butylbenzene	Ave	1.601	1.551		48.5	50.0	-3.1	35.0
1,2,4-Trimethylbenzene	Ave	2.003	1.923		48.0	50.0	-4.0	35.0
sec-Butylbenzene	Lin2		0.4337		46.8	50.0	-6.3	35.0
1,3-Dichlorobenzene	Ave	0.9698	0.9646		49.7	50.0	-0.5	35.0
4-Isopropyltoluene	Ave	1.986	1.884		47.4	50.0	-5.2	35.0
1,4-Dichlorobenzene	Ave	1.018	0.9759		47.9	50.0	-4.2	35.0
n-Butylbenzene	Ave	1.915	1.807		47.2	50.0	-5.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542394/2 Calibration Date: 07/06/2021 22:15
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41
 Lab File ID: MS1_4133.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
1,2-Dichlorobenzene	Ave	0.9122	0.9134		50.1	50.0	0.1	35.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0990		38.7	50.0	-22.7	50.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5861		49.1	50.0	-1.9	35.0
Hexachlorobutadiene	Lin2		0.2127		51.1	50.0	2.3	35.0
Naphthalene	Ave	1.773	1.544		43.5	50.0	-12.9	35.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.4984		45.7	50.0	-8.6	35.0
2-Pentanone	Ave	0.1343				160		
sec-Butyl Alcohol	Lin2					1200	-100.0*	50.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2602		49.1	50.0	-1.8	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3473		48.9	50.0	-2.2	35.0
Toluene-d8 (Surr)	Ave	4.332	4.139		47.8	50.0	-4.4	35.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.020		47.0	50.0	-6.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4133.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 06-Jul-2021 22:15:30 ALS Bottle#: 4 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:46 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	737075	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	163764	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	266568	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	191785	50.0	49.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.573	5.573	0.000	98	255977	50.0	48.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	677825	50.0	47.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	271903	50.0	47.0	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	126072	50.0	38.1	
12 Chloromethane	50	1.914	1.914	0.000	99	139754	50.0	43.7	
13 Vinyl chloride	62	2.012	2.012	0.000	97	144410	50.0	55.9	
15 Bromomethane	94	2.361	2.361	0.000	92	90790	50.0	45.6	
16 Chloroethane	64	2.473	2.473	0.000	99	96179	50.0	48.3	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	248683	50.0	49.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	219048	50.0	51.6	
20 Ethyl ether	59	3.003	3.003	0.000	94	106501	50.0	51.3	
22 Acrolein	56	3.143	3.143	0.000	99	181019	493.8	450.8	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	109820	50.0	51.6	
24 112TCTFE	151	3.255	3.255	0.000	94	88313	50.0	62.8	
25 Acetone	43	3.269	3.269	0.000	98	141640	200.0	166.7	
26 Iodomethane	142	3.394	3.394	0.000	100	151395	50.0	47.2	
28 Carbon disulfide	76	3.464	3.464	0.000	100	389851	50.0	54.5	
30 Methyl acetate	43	3.576	3.576	0.000	99	183567	100.0	91.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	229379	50.0	53.5	
32 Methylene Chloride	84	3.716	3.716	0.000	96	133247	50.0	50.8	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	111426	500.0	433.6	
34 Acrylonitrile	53	3.911	3.911	0.000	97	490873	500.0	481.7	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	374449	50.0	49.9	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	95	124444	50.0	48.1	
37 Hexane	57	4.204	4.204	0.000	94	199403	50.0	57.8	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	250483	50.0	50.1	
39 Vinyl acetate	43	4.344	4.344	0.000	98	601067	100.0	103.9	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	232821	200.0	185.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	141104	50.0	49.8	
49 2,2-Dichloropropane	77	4.861	4.861	0.000	91	230344	50.0	52.1	
51 sec-Butyl Alcohol	45		4.973				ND	ND	
53 Chlorobromomethane	128	5.056	5.056	0.000	96	61860	50.0	48.2	
54 Tetrahydrofuran	42	5.056	5.056	0.000	88	75602	100.0	89.8	
55 Chloroform	83	5.140	5.140	0.000	94	250108	50.0	48.3	
56 1,1,1-Trichloroethane	97	5.294	5.294	0.000	97	220761	50.0	48.4	
57 Cyclohexane	56	5.350	5.350	0.000	95	252141	50.0	55.3	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	193124	50.0	52.5	
59 Carbon tetrachloride	117	5.420	5.420	0.000	84	171780	50.0	51.2	
60 Isobutyl alcohol	41	5.461	5.461	0.000	91	95874	1250.0	1043.4	
63 Benzene	78	5.587	5.587	0.000	99	535976	50.0	52.5	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	210604	50.0	49.0	
66 n-Heptane	43	5.825	5.825	0.000	94	183356	50.0	61.2	
68 Trichloroethene	95	6.160	6.160	0.000	95	139768	50.0	46.0	
69 2-Pentanone	43		6.272				ND	ND	
70 Methylcyclohexane	55	6.369	6.369	0.000	94	194298	50.0	54.6	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	145482	50.0	52.5	
73 1,4-Dioxane	88	6.425	6.425	0.000	97	29515	1000.0	936.6	
74 Dibromomethane	93	6.467	6.467	0.000	90	89187	50.0	51.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	172159	50.0	45.3	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	81728	50.0	48.2	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	216532	50.0	48.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	451616	200.0	196.7	
82 Toluene	91	7.295	7.295	0.000	98	520880	50.0	51.2	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	98	200705	50.0	49.3	
85 Ethyl methacrylate	69	7.524	7.524	0.000	90	152999	50.0	46.9	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	96	103274	50.0	48.4	
89 Tetrachloroethene	164	7.767	7.767	0.000	92	94890	50.0	56.0	
90 1,3-Dichloropropane	76	7.832	7.832	0.000	96	200979	50.0	48.4	
91 2-Hexanone	43	7.853	7.853	0.000	98	306565	200.0	177.1	
95 Chlorodibromomethane	129	8.032	8.032	0.000	90	108576	50.0	44.4	
96 Ethylene Dibromide	107	8.153	8.153	0.000	98	112328	50.0	47.7	
98 1-Chlorohexane	91	8.575	8.575	0.000	40	1053	40.0	-0.4262	
99 Chlorobenzene	112	8.604	8.604	0.000	90	331111	50.0	49.5	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	109673	50.0	46.4	
101 Ethylbenzene	106	8.690	8.690	0.000	99	178047	50.0	50.1	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	230393	50.0	51.5	
103 o-Xylene	106	9.183	9.183	0.000	98	212059	50.0	50.7	
104 Styrene	104	9.197	9.197	0.000	93	369666	50.0	48.4	
106 Bromoform	173	9.383	9.383	0.000	90	64866	50.0	40.5	
107 Isopropylbenzene	105	9.533	9.533	0.000	97	586732	50.0	50.3	
109 Cyclohexanone	55	9.626	9.626	0.000	95	242831	2000.0	1323.5	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	135880	50.0	42.0	
111 Bromobenzene	156	9.855	9.855	0.000	98	131642	50.0	49.7	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	82	45594	50.0	39.2	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	87	42414	50.0	47.2	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	157649	50.0	48.7	
115 2-Chlorotoluene	126	10.041	10.041	0.000	95	132095	50.0	49.9	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	499213	50.0	47.9	
117 4-Chlorotoluene	126	10.156	10.156	0.000	100	137426	50.0	47.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	413537	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
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	512582	50.0	48.0	
120 sec-Butylbenzene	134	10.649	10.649	0.000	95	115611	50.0	46.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	257138	50.0	49.7	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	502191	50.0	47.4	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	92	260153	50.0	47.9	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	481580	50.0	47.2	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	94	243476	50.0	50.1	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.029	0.000	74	26384	50.0	38.7	
130 1,2,4-Trichlorobenzene	180	12.858	12.858	0.000	93	156223	50.0	49.1	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	93	56699	50.0	51.1	
132 Naphthalene	128	13.123	13.123	0.000	98	411550	50.0	43.5	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	132854	50.0	45.7	
S 149 1,2-Dichloroethene, Total (URS)	95				0		100.0	97.9	
S 150 1,2-Dichloroethene, Total	1				0		100.0	97.9	
S 151 Trihalomethanes, Total	1				0		200.0	178.4	
S 153 Xylenes, Total (URS)	1				0		100.0	102.2	
S 155 Xylenes, Total	106				0		100.0	102.2	
S 156 1,3-Dichloropropene, Total	1				0		100.0	98.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Gas A_00093	Amount Added: 10.00	Units: uL	
MV-MegaMainA_00052	Amount Added: 25.00	Units: uL	
MV-Main add A_00001	Amount Added: 25.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4133.D

Injection Date: 06-Jul-2021 22:15:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

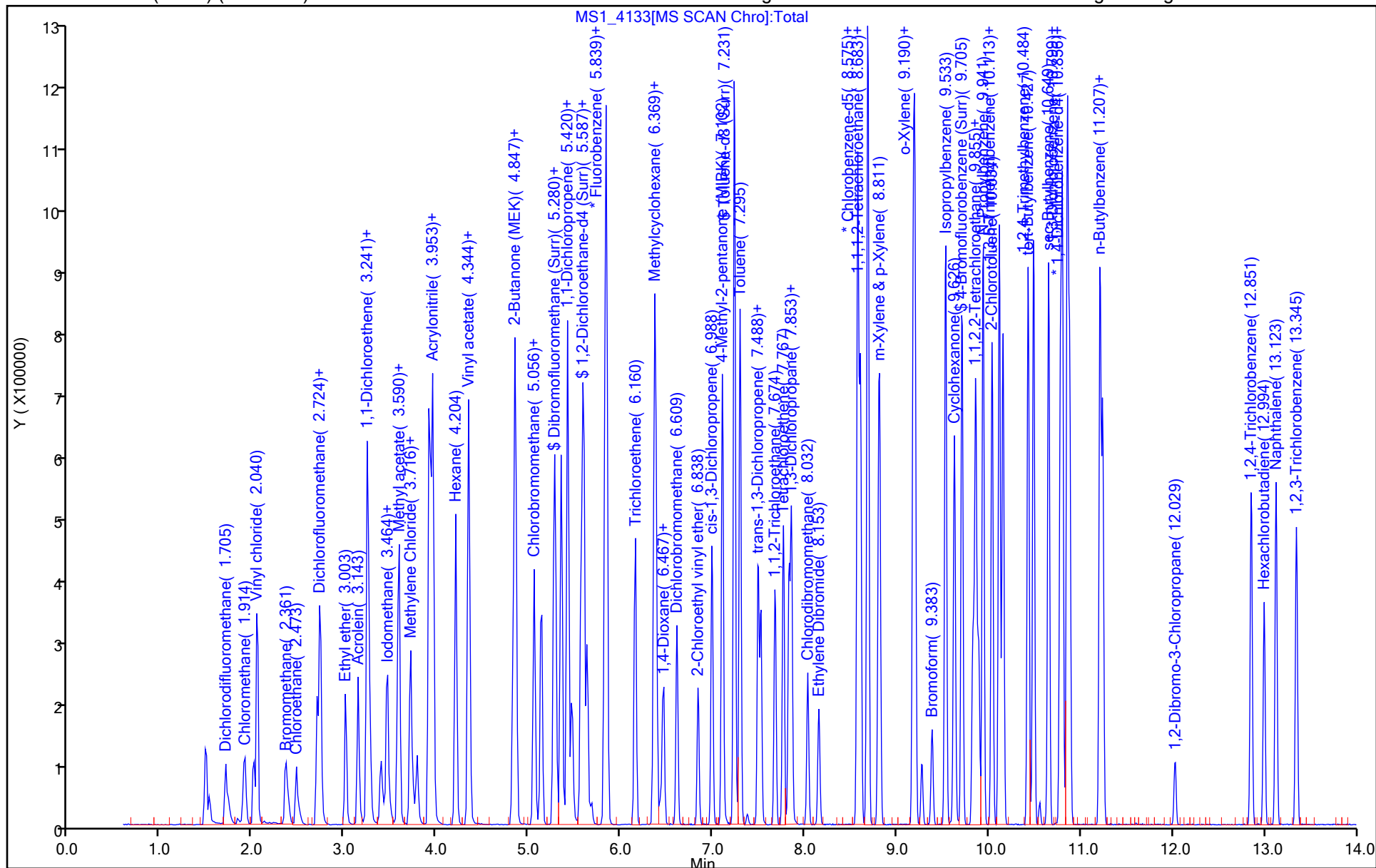
ALS Bottle#: 4

Method: AQ_VMS1_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.: 280-150290-1

SDG No.: _____

Lab Sample ID: CCV 280-542686/2 Calibration Date: 07/09/2021 07:26

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_4282.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	Lin1		0.1177		26.2	50.0	-47.5	50.0
Chloromethane	Ave	0.2172	0.1589	0.1000	36.6	50.0	-26.8	35.0
Vinyl chloride	Ave	0.1753	0.1504		42.9	50.0	-14.2	20.0
Bromomethane	Ave	0.1350	0.1096		40.6	50.0	-18.8	35.0
Chloroethane	Ave	0.1351	0.1178		43.6	50.0	-12.8	35.0
Dichlorofluoromethane	Lin2		0.2980		44.0	50.0	-12.0	50.0
Trichlorofluoromethane	Ave	0.2882	0.2319		40.2	50.0	-19.5	50.0
Ethyl ether	Ave	0.1409	0.1309		46.4	50.0	-7.1	35.0
Acrolein	Lin1		0.0233		422	494	-14.5	50.0
1,1-Dichloroethene	Ave	0.1444	0.1205		41.7	50.0	-16.5	20.0
Freon 113	Ave	0.0955	0.0928		48.6	50.0	-2.8	50.0
Acetone	Lin2		0.0454		157	200	-21.4	50.0
Iodomethane	Lin2		0.1527		35.2	50.0	-29.5	35.0
Carbon disulfide	Ave	0.4856	0.4202		43.3	50.0	-13.5	50.0
Methyl acetate	Ave	0.1367	0.1139		83.4	100	-16.6	50.0
Allyl chloride	Ave	0.2908	0.2572		44.2	50.0	-11.5	35.0
Methylene Chloride	Lin2		0.1652		46.4	50.0	-7.2	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0174	0.0117		337	500	-32.6	50.0
Acrylonitrile	Ave	0.0691	0.0619		448	500	-10.4	50.0
Methyl tert-butyl ether	Ave	0.5094	0.4460		43.8	50.0	-12.5	35.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1422		40.5	50.0	-18.9	35.0
Hexane	Lin2		0.9675		46.0	50.0	-8.0	35.0
1,1-Dichloroethane	Ave	0.3389	0.3085	0.1000	45.5	50.0	-9.0	35.0
Vinyl acetate	Ave	0.3923	0.3561		90.8	100	-9.2	50.0
2-Butanone (MEK)	Lin2		0.0713		167	200	-16.3	50.0
2,2-Dichloropropane	Ave	0.2998	0.2485		41.5	50.0	-17.1	35.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1688		43.9	50.0	-12.2	35.0
sec-Butyl Alcohol	Lin2		0.0125		1050	1200	-12.3	50.0
Chlorobromomethane	Lin2		0.0761		43.7	50.0	-12.6	35.0
Tetrahydrofuran	Lin1		0.0472		82.1	100	-17.9	50.0
Chloroform	Ave	0.3516	0.3057		43.5	50.0	-13.1	20.0
1,1,1-Trichloroethane	Ave	0.3094	0.2445		39.5	50.0	-21.0	35.0
Cyclohexane	Lin1		0.2743		44.2	50.0	-11.5	35.0
1,1-Dichloropropene	Ave	0.2498	0.2195		43.9	50.0	-12.1	35.0
Carbon tetrachloride	Ave	0.2276	0.1791		39.3	50.0	-21.3	35.0
Isobutyl alcohol	Ave	0.0062	0.0041		825	1250	-34.0	50.0
Benzene	Ave	0.6919	0.6458		46.7	50.0	-6.7	35.0
1,2-Dichloroethane	Ave	0.2917	0.2540		43.5	50.0	-12.9	35.0
n-Heptane	Lin1		0.1935		47.5	50.0	-5.0	50.0
Trichloroethene	Ave	0.9271	0.7793		42.0	50.0	-15.9	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Lab Sample ID: CCV 280-542686/2 Calibration Date: 07/09/2021 07:26

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_4282.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	0.1343	0.1474		176	160	9.8	50.0
Methylcyclohexane	Lin1		0.2136		44.1	50.0	-11.8	35.0
1,2-Dichloropropane	Ave	0.1881	0.1732		46.0	50.0	-7.9	20.0
1,4-Dioxane	Lin2		0.0018		855	1000	-14.5	50.0
Dibromomethane	Ave	0.1179	0.1074		45.5	50.0	-9.0	35.0
Dichlorobromomethane	Ave	0.2580	0.2156		41.8	50.0	-16.4	35.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.0935		40.6	50.0	-18.7	50.0
cis-1,3-Dichloropropene	Ave	1.351	1.216		45.0	50.0	-10.0	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1425		183	200	-8.5	50.0
Toluene	Ave	0.6902	0.6463		46.8	50.0	-6.4	20.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2358		42.7	50.0	-14.5	35.0
Ethyl methacrylate	Ave	0.996	0.8663		43.5	50.0	-13.0	35.0
1,1,2-Trichloroethane	Lin2		0.1300		44.9	50.0	-10.3	35.0
Tetrachloroethene	Ave	0.5176	0.5167		49.9	50.0	-0.2	35.0
1,3-Dichloropropane	Ave	1.267	1.187		46.8	50.0	-6.4	35.0
2-Hexanone	Lin2		0.4589		174	200	-13.2	50.0
Chlorodibromomethane	Ave	0.7473	0.6361		42.6	50.0	-14.9	35.0
1,2-Dibromoethane	Ave	0.7193	0.6568		45.7	50.0	-8.7	35.0
1-Chlorohexane	Lin2		1.225		46.6	40.0	16.5	35.0
Chlorobenzene	Ave	2.041	1.919	0.3000	47.0	50.0	-6.0	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.6396		44.4	50.0	-11.3	35.0
Ethylbenzene	Ave	1.085	1.023		47.2	50.0	-5.7	20.0
m-Xylene & p-Xylene	Ave	1.367	1.297		47.4	50.0	-5.1	35.0
o-Xylene	Ave	1.277	1.268		49.6	50.0	-0.7	35.0
Styrene	Ave	2.334	2.176		46.6	50.0	-6.8	35.0
Bromoform	Lin2		0.3631	0.1000	37.2	50.0	-25.6	35.0
Isopropylbenzene	Ave	2.187	2.070		47.3	50.0	-5.3	35.0
Cyclohexanone	Ave	0.0560	0.0315		1120	2000	-43.8	50.0
1,1,2,2-Tetrachloroethane	Lin2		0.5015	0.3000	41.3	50.0	-17.4	35.0
Bromobenzene	Ave	0.4965	0.4807		48.4	50.0	-3.2	35.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.1482		34.0	50.0	-32.1	50.0
1,2,3-Trichloropropane	Lin2		0.1570		46.6	50.0	-6.9	35.0
N-Propylbenzene	Ave	0.6077	0.5523		45.4	50.0	-9.1	35.0
2-Chlorotoluene	Ave	0.4970	0.4934		49.6	50.0	-0.7	35.0
1,3,5-Trimethylbenzene	Ave	1.953	1.833		46.9	50.0	-6.1	35.0
4-Chlorotoluene	Ave	0.5470	0.5209		47.6	50.0	-4.8	35.0
tert-Butylbenzene	Ave	1.601	1.438		44.9	50.0	-10.2	35.0
1,2,4-Trimethylbenzene	Ave	2.003	1.879		46.9	50.0	-6.2	35.0
sec-Butylbenzene	Lin2		0.4231		45.7	50.0	-8.6	35.0
1,3-Dichlorobenzene	Ave	0.9698	0.9433		48.6	50.0	-2.7	35.0
4-Isopropyltoluene	Ave	1.986	1.805		45.4	50.0	-9.1	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542686/2 Calibration Date: 07/09/2021 07:26
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 16:41
 Lab File ID: MS1_4282.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	1.018	0.9609		47.2	50.0	-5.6	35.0
n-Butylbenzene	Ave	1.915	1.708		44.6	50.0	-10.8	35.0
1,2-Dichlorobenzene	Ave	0.9122	0.8864		48.6	50.0	-2.8	35.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0937		36.7	50.0	-26.7	50.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5290		44.3	50.0	-11.4	35.0
Hexachlorobutadiene	Lin2		0.1971		47.4	50.0	-5.1	35.0
Naphthalene	Ave	1.773	1.378		38.9	50.0	-22.3	35.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.4623		42.4	50.0	-15.2	35.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2496		47.1	50.0	-5.8	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3214		45.3	50.0	-9.5	35.0
Toluene-d8 (Surr)	Ave	4.332	4.332		50.0	50.0	0.0	35.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.038		47.8	50.0	-4.4	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4282.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Jul-2021 07:26:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccv m
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub164
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:22 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 08:03:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	794587	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.576	0.000	90	166551	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	266068	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	198351	50.0	47.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	100	255417	50.0	45.3	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	721416	50.0	50.0	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	85	276142	50.0	47.8	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	100	93543	50.0	26.2	
12 Chloromethane	50	1.900	1.900	0.000	99	126238	50.0	36.6	
13 Vinyl chloride	62	1.998	1.998	0.000	99	119506	50.0	42.9	
15 Bromomethane	94	2.347	2.347	0.000	93	87069	50.0	40.6	
16 Chloroethane	64	2.473	2.473	0.000	99	93595	50.0	43.6	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	98	236811	50.0	44.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	100	184290	50.0	40.2	
20 Ethyl ether	59	3.004	3.004	0.000	93	104013	50.0	46.4	
22 Acrolein	56	3.143	3.143	0.000	99	182947	493.8	422.2	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	94	95746	50.0	41.7	
24 112TCTFE	151	3.255	3.255	0.000	95	73741	50.0	48.6	
25 Acetone	43	3.269	3.269	0.000	99	144314	200.0	157.3	
26 Iodomethane	142	3.395	3.395	0.000	98	121328	50.0	35.2	
28 Carbon disulfide	76	3.451	3.451	0.000	100	333890	50.0	43.3	
30 Methyl acetate	43	3.576	3.576	0.000	99	181050	100.0	83.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	204383	50.0	44.2	
32 Methylene Chloride	84	3.716	3.716	0.000	96	131303	50.0	46.4	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	96	93317	500.0	336.9	
34 Acrylonitrile	53	3.911	3.911	0.000	98	492021	500.0	447.9	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	354347	50.0	43.8	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	95	112989	50.0	40.5	
37 Hexane	57	4.205	4.205	0.000	96	161141	50.0	46.0	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	245131	50.0	45.5	
39 Vinyl acetate	43	4.344	4.344	0.000	97	565911	100.0	90.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	226735	200.0	167.3	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	134152	50.0	43.9	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	197485	50.0	41.5	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	97	238690	1200.0	1052.2	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	60453	50.0	43.7	
54 Tetrahydrofuran	42	5.057	5.057	0.000	87	74951	100.0	82.1	
55 Chloroform	83	5.126	5.126	0.000	98	242889	50.0	43.5	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	194241	50.0	39.5	
57 Cyclohexane	56	5.350	5.350	0.000	94	217984	50.0	44.2	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	174412	50.0	43.9	
59 Carbon tetrachloride	117	5.420	5.420	0.000	83	142285	50.0	39.3	
60 Isobutyl alcohol	41	5.462	5.462	0.000	95	81742	1250.0	825.2	
63 Benzene	78	5.587	5.587	0.000	99	513128	50.0	46.7	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	201801	50.0	43.5	
66 n-Heptane	43	5.825	5.825	0.000	93	153788	50.0	47.5	
68 Trichloroethene	95	6.160	6.160	0.000	94	129799	50.0	42.0	
69 2-Pentanone	43	6.272	6.272	0.000	98	374869	160.0	175.6	
70 Methylcyclohexane	55	6.355	6.355	0.000	96	169689	50.0	44.1	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	137589	50.0	46.0	
73 1,4-Dioxane	88	6.425	6.425	0.000	97	28995	1000.0	855.5	
74 Dibromomethane	93	6.453	6.453	0.000	93	85302	50.0	45.5	
75 Dichlorobromomethane	83	6.609	6.609	0.000	98	171340	50.0	41.8	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	74292	50.0	40.6	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	202498	50.0	45.0	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.103	0.000	98	452890	200.0	182.9	
82 Toluene	91	7.296	7.296	0.000	97	513562	50.0	46.8	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	93	187353	50.0	42.7	
85 Ethyl methacrylate	69	7.517	7.517	0.000	91	144278	50.0	43.5	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	95	103282	50.0	44.9	
89 Tetrachloroethene	164	7.768	7.768	0.000	90	86055	50.0	49.9	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	197629	50.0	46.8	
91 2-Hexanone	43	7.853	7.853	0.000	97	305715	200.0	173.7	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	105940	50.0	42.6	
96 Ethylene Dibromide	107	8.147	8.147	0.000	98	109386	50.0	45.7	
98 1-Chlorohexane	91	8.561	8.561	0.000	91	163270	40.0	46.6	
99 Chlorobenzene	112	8.604	8.604	0.000	91	319602	50.0	47.0	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	89	106530	50.0	44.4	
101 Ethylbenzene	106	8.683	8.683	0.000	99	170333	50.0	47.2	
102 m-Xylene & p-Xylene	106	8.811	8.811	0.000	99	216008	50.0	47.4	
103 o-Xylene	106	9.176	9.176	0.000	98	211125	50.0	49.6	
104 Styrene	104	9.198	9.198	0.000	93	362384	50.0	46.6	
106 Bromoform	173	9.384	9.384	0.000	92	60468	50.0	37.2	
107 Isopropylbenzene	105	9.527	9.527	0.000	97	550878	50.0	47.3	
109 Cyclohexanone	55	9.627	9.627	0.000	95	209772	2000.0	1124.2	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	95	133436	50.0	41.3	
111 Bromobenzene	156	9.855	9.855	0.000	98	127892	50.0	48.4	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.863	0.000	77	39443	50.0	34.0	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	41763	50.0	46.6	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	146951	50.0	45.4	
115 2-Chlorotoluene	126	10.034	10.034	0.000	95	131286	50.0	49.6	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	487799	50.0	46.9	
117 4-Chlorotoluene	126	10.149	10.149	0.000	99	138587	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
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	382627	50.0	44.9	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	98	500065	50.0	46.9	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	112579	50.0	45.7	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	95	250992	50.0	48.6	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	480370	50.0	45.4	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	94	255657	50.0	47.2	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	454452	50.0	44.6	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	94	235853	50.0	48.6	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	75	24942	50.0	36.7	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	93	140763	50.0	44.3	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	93	52450	50.0	47.4	
132 Naphthalene	128	13.123	13.123	0.000	98	366699	50.0	38.9	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	123008	50.0	42.4	
S 149 1,2-Dichloroethene, Total (URS)	95				0		100.0	84.5	
S 150 1,2-Dichloroethene, Total	1				0		100.0	84.5	
S 151 Trihalomethanes, Total	1				0		200.0	165.0	
S 153 Xylenes, Total (URS)	1				0		100.0	97.1	
S 155 Xylenes, Total	106				0		100.0	97.1	
S 156 1,3-Dichloropropene, Total	1				0		100.0	87.7	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00093	Amount Added: 10.00	Units: uL	
MV-MegaMainA_00052	Amount Added: 25.00	Units: uL	
MV-Main add A_00001	Amount Added: 25.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4282.D

Injection Date: 09-Jul-2021 07:26:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

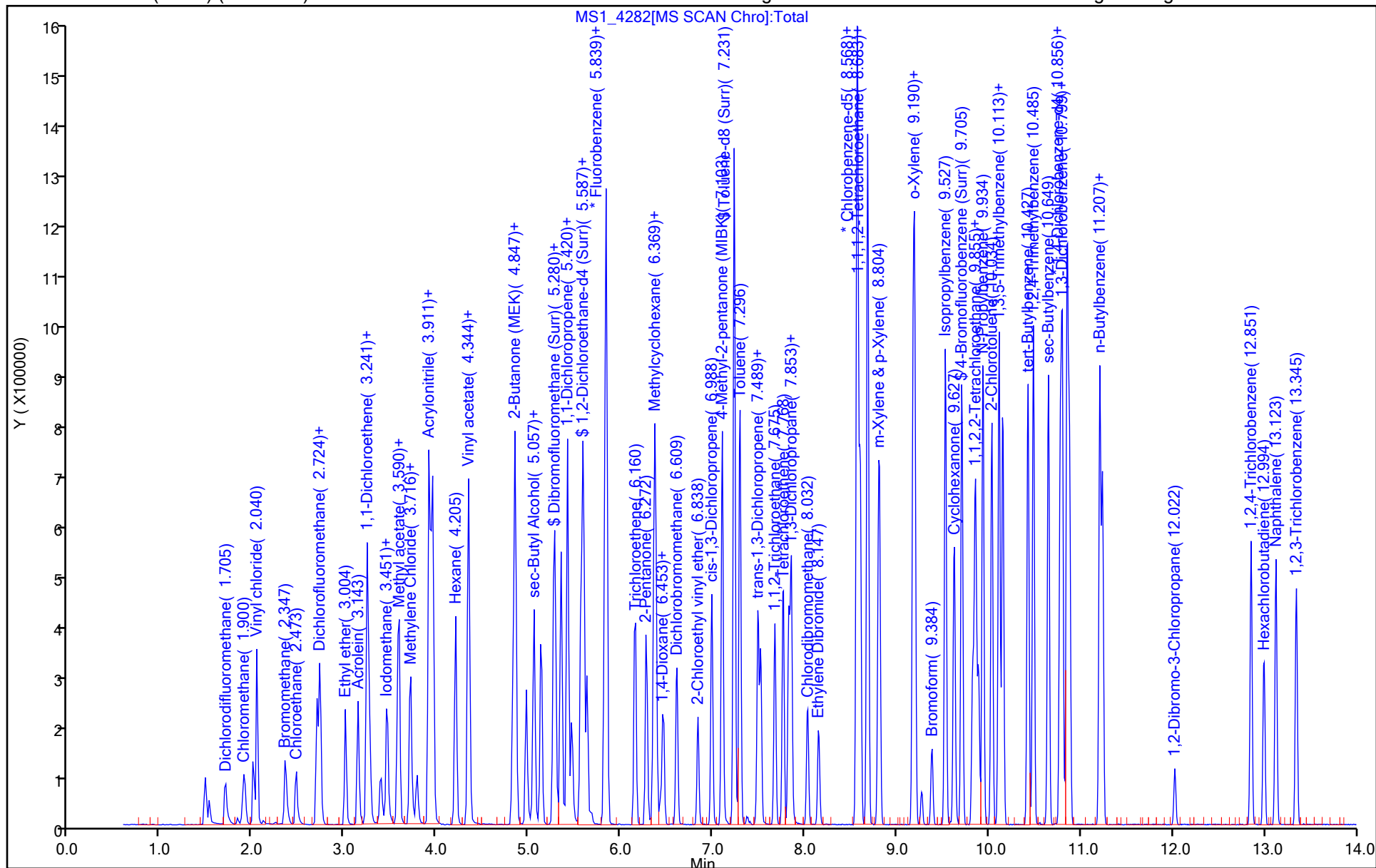
ALS Bottle#: 2

Method: AQ_VMS1_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.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542686/3 Calibration Date: 07/09/2021 07:47
 Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 10:18
 GC Column: DB-624 (60.25) ID: 0.25 (mm) Calib End Date: 06/04/2021 12:47
 Lab File ID: MS1_4283.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		0.0092		2360	2500	-5.7	50.0
Ethanol	Lin1		0.0019		1280	1500	-14.5	50.0
Propene oxide	Ave	0.0299	0.0289		2420	2500	-3.3	50.0
2-Propanol	Ave	0.0111	0.0090		203	250	-18.6	50.0
Acetonitrile	Lin2		0.0237		250	250	-0.0	50.0
Di-isopropyl ether (DIPE)	Ave	0.1328	0.1347		25.4	25.0	1.4	35.0
Chloroprene	Ave	0.3106	0.2927		23.6	25.0	-5.8	35.0
Tert-butyl ethyl ether	Ave	0.5083	0.4765		23.4	25.0	-6.3	35.0
Ethyl acetate	Ave	0.1300	0.1338		51.4	50.0	2.9	50.0
Propionitrile	Lin2		0.0226		240	250	-4.0	50.0
Methacrylonitrile	Lin2		0.0996		262	250	4.7	50.0
Tert-amyl methyl ether	Ave	0.4421	0.4026		22.8	25.0	-9.0	35.0
Methyl methacrylate	Ave	0.0386	0.0371		48.1	50.0	-3.7	35.0
2-Nitropropane	Lin2		0.0188		18.2	50.0	-63.6*	50.0
Tetrahydrothiophene	Ave	0.2160	0.1395		32.3	50.0	-35.4	50.0
cis-1,4-Dichloro-2-butene	Ave	0.2443	0.1599		32.7	50.0	-34.5	50.0
1,2,3-Trimethylbenzene	Ave	1.901	2.033		26.7	25.0	7.0	35.0
1,3,5-Trichlorobenzene	Ave	0.5817	0.6599		28.4	25.0	13.4	50.0
n-Butanol	Ave	0.0041				625		

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4283.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-Jul-2021 07:47:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccv s
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Sublist: chrom-AQ_VMS1_8260*sub157
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 08:28:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	768609	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	160017	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	254950	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	99	353235	2500.0	2357.5	
19 Ethanol	45	2.906	2.906	0.000	98	43447	1500.0	1281.9	
21 Propene oxide	58	3.059	3.059	0.000	83	1110485	2500.0	2418.1	
27 Isopropyl alcohol	45	3.395	3.395	0.000	97	34562	250.0	203.4	
29 Acetonitrile	41	3.534	3.534	0.000	100	91245	250.0	249.9	
67 n-Butanol	56		3.597				ND	ND	
41 Isopropyl ether	87	4.372	4.372	0.000	93	51750	25.0	25.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	112492	25.0	23.6	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	183110	25.0	23.4	
47 Ethyl acetate	43	4.847	4.847	0.000	100	102821	50.0	51.4	
50 Propionitrile	54	4.875	4.875	0.000	98	86907	250.0	240.1	
52 Methacrylonitrile	41	5.015	5.015	0.000	94	382583	250.0	261.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	82	154705	25.0	22.8	
72 Methyl methacrylate	100	6.397	6.397	0.000	90	28538	50.0	48.1	
76 2-Nitropropane	41	6.788	6.788	0.000	98	14487	50.0	18.2	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	94	22330	50.0	32.3	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	92	40759	50.0	32.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	259197	25.0	26.7	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	92	84119	25.0	28.4	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Supp A_00051

Amount Added: 25.00

Units: uL

Report Date: 09-Jul-2021 12:10:24

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4283.D

Injection Date: 09-Jul-2021 07:47:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: CCV

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

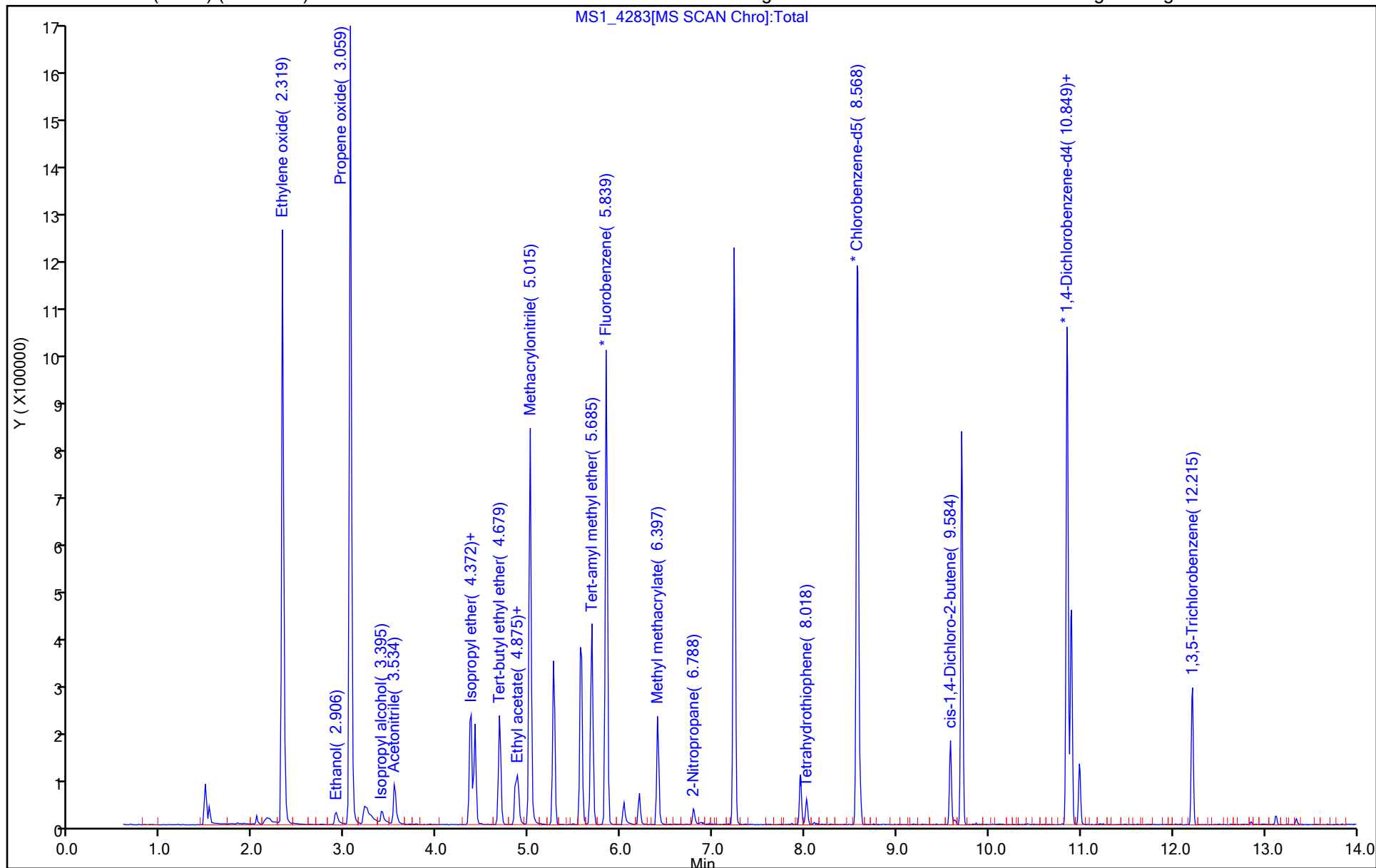
ALS Bottle#: 3

Method: AQ_VMS1_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.: 280-150290-1

SDG No.: _____

Lab Sample ID: ICV 280-541632/25 Calibration Date: 06/29/2021 14:07

Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08

GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47

Lab File ID: MS9_5646.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1987	0.2343		59.0	50.0	17.9	55.0
Chloromethane	Lin2		0.1363	0.1000	59.6	50.0	19.2	35.0
Vinyl chloride	Lin1		0.1381		59.2	50.0	18.4	35.0
Bromomethane	Qua		0.1181		49.9	50.0	-0.1	35.0
Chloroethane	Lin1		0.1131		49.8	50.0	-0.4	35.0
Dichlorofluoromethane	Lin2		0.3353		53.0	50.0	6.1	55.0
Trichlorofluoromethane	Lin1		0.3191		58.5	50.0	17.0	50.0
Ethyl ether	Lin2		0.1398		50.2	50.0	0.3	35.0
Acrolein	Ave	0.0232	0.0178		380	494	-23.1	55.0
1,1-Dichloroethene	Lin1		0.1821		51.3	50.0	2.6	35.0
Freon 113	Ave	0.1616	0.1524		47.2	50.0	-5.6	55.0
Acetone	Lin1		0.0373		212	200	6.2	55.0
Iodomethane	Lin1		0.2623		46.7	50.0	-6.6	35.0
Carbon disulfide	Lin2		0.4314		44.5	50.0	-10.9	55.0
Methyl acetate	Ave	0.0969	0.0891		92.0	100	-8.0	55.0
Allyl chloride	Lin2		0.2098		51.5	50.0	2.9	35.0
Methylene Chloride	Lin2		0.2141		50.7	50.0	1.5	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0180	0.0167		463	500	-7.4	55.0
Acrylonitrile	Lin1		0.0491		555	500	11.0	55.0
Methyl tert-butyl ether	Ave	0.5538	0.5122		46.2	50.0	-7.5	35.0
trans-1,2-Dichloroethene	Lin2		0.2131		51.8	50.0	3.6	35.0
Hexane	Ave	0.7115	0.5868		41.2	50.0	-17.5	35.0
Vinyl acetate	Ave	0.2781	0.2431		87.4	100	-12.6	55.0
1,1-Dichloroethane	Lin2		0.3199	0.1000	51.4	50.0	2.8	35.0
2-Butanone (MEK)	Lin1		0.0545		215	200	7.3	55.0
cis-1,2-Dichloroethene	Lin2		0.2428		51.9	50.0	3.8	35.0
2,2-Dichloropropane	Lin2		0.2817		49.9	50.0	-0.2	35.0
sec-Butyl Alcohol	Ave	0.0141	0.0100		845	1200	-29.6	
Chlorobromomethane	Lin2		0.1300		50.1	50.0	0.2	35.0
Tetrahydrofuran	Lin2		0.0397		96.5	100	-3.5	55.0
Chloroform	Lin1		0.3636		53.8	50.0	7.6	35.0
1,1,1-Trichloroethane	Lin2		0.3173		51.3	50.0	2.5	35.0
Cyclohexane	Ave	0.2791	0.2476		44.4	50.0	-11.3	35.0
1,1-Dichloropropene	Lin2		0.2688		50.3	50.0	0.5	35.0
Carbon tetrachloride	Lin2		0.2703		50.8	50.0	1.6	35.0
Isobutyl alcohol	Ave	0.0063	0.0058		1160	1250	-7.2	55.0
Benzene	Lin2		0.7762		52.1	50.0	4.2	35.0
1,2-Dichloroethane	Lin2		0.2523		49.2	50.0	-1.5	35.0
n-Heptane	Ave	0.1559	0.1312		42.1	50.0	-15.9	50.0
Trichloroethene	Lin2		0.9388		52.8	50.0	5.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Lab Sample ID: ICV 280-541632/25 Calibration Date: 06/29/2021 14:07

Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08

GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47

Lab File ID: MS9_5646.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.1297	0.0883		109	160	-31.9	55.0
Methylcyclohexane	Ave	0.2023	0.1881		46.5	50.0	-7.0	35.0
1,2-Dichloropropane	Lin2		0.1904		51.0	50.0	1.9	35.0
1,4-Dioxane	Ave	0.0029	0.0027		922	1000	-7.8	55.0
Dibromomethane	Lin2		0.1337		49.5	50.0	-1.1	35.0
Dichlorobromomethane	Lin2		0.2540		50.8	50.0	1.7	35.0
2-Chloroethyl vinyl ether	Ave	0.1300	0.1302		50.1	50.0	0.1	55.0
cis-1,3-Dichloropropene	Lin2		1.142		49.3	50.0	-1.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1209	0.1097		182	200	-9.2	55.0
Toluene	Lin2		0.8515		51.7	50.0	3.4	35.0
trans-1,3-Dichloropropene	Ave	0.3049	0.2857		46.9	50.0	-6.3	35.0
Ethyl methacrylate	Ave	0.9078	0.8934		49.2	50.0	-1.6	35.0
1,1,2-Trichloroethane	Lin2		0.1917		50.3	50.0	0.5	35.0
Tetrachloroethene	Lin2		0.7673		52.2	50.0	4.3	35.0
1,3-Dichloropropane	Lin2		1.081		50.0	50.0	0.0	35.0
2-Hexanone	Ave	0.3138	0.2904		185	200	-7.5	55.0
Chlorodibromomethane	Lin2		0.7421		50.8	50.0	1.5	35.0
1,2-Dibromoethane	Ave	0.8035	0.7301		45.4	50.0	-9.1	35.0
1-Chlorohexane	Lin2		1.027		30.9	40.0	-22.6	35.0
Chlorobenzene	Lin2		2.270	0.3000	52.2	50.0	4.4	35.0
1,1,1,2-Tetrachloroethane	Lin2		0.8353		52.0	50.0	4.1	35.0
Ethylbenzene	Lin2		1.280		52.5	50.0	5.1	35.0
m-Xylene & p-Xylene	Lin2		2.890		53.5	50.0	6.9	35.0
o-Xylene	Lin2		1.523		53.7	50.0	7.5	35.0
Styrene	Lin2		2.495		53.8	50.0	7.7	35.0
Bromoform	Lin1		0.4576	0.1000	48.1	50.0	-3.9	35.0
Isopropylbenzene	Lin2		2.111		52.6	50.0	5.1	35.0
Cyclohexanone	Ave	0.0261	0.0313		2400	2000	19.9	35.0
1,1,2,2-Tetrachloroethane	Lin1		0.5023	0.3000	54.2	50.0	8.3	35.0
Bromobenzene	Lin2		0.6515		50.9	50.0	1.7	35.0
trans-1,4-Dichloro-2-butene	Ave	0.1214	0.1110		45.7	50.0	-8.6	55.0
1,2,3-Trichloropropane	Ave	0.1814	0.1727		47.6	50.0	-4.8	35.0
N-Propylbenzene	Lin2		0.6644		52.5	50.0	5.0	35.0
2-Chlorotoluene	Lin2		0.6050		51.9	50.0	3.9	35.0
1,3,5-Trimethylbenzene	Lin2		1.787		53.3	50.0	6.5	35.0
4-Chlorotoluene	Lin2		0.6248		51.6	50.0	3.2	35.0
tert-Butylbenzene	Lin2		1.541		53.2	50.0	6.4	35.0
1,2,4-Trimethylbenzene	Lin2		1.834		53.2	50.0	6.5	35.0
sec-Butylbenzene	Lin2		0.4863		52.9	50.0	5.8	35.0
1,3-Dichlorobenzene	Lin2		1.137		51.3	50.0	2.6	35.0
4-Isopropyltoluene	Lin2		1.862		53.2	50.0	6.5	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: ICV 280-541632/25 Calibration Date: 06/29/2021 14:07
 Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47
 Lab File ID: MS9_5646.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Lin2		1.168		51.7	50.0	3.4	35.0
n-Butylbenzene	Lin2		1.489		52.2	50.0	4.5	35.0
1,2-Dichlorobenzene	Lin2		1.086		51.4	50.0	2.8	35.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1083		46.8	50.0	-6.3	55.0
1,2,4-Trichlorobenzene	Lin2		0.6243		50.4	50.0	0.9	35.0
Hexachlorobutadiene	Lin2		0.2926		52.7	50.0	5.5	35.0
Naphthalene	Lin1		1.238		53.6	50.0	7.3	35.0
1,2,3-Trichlorobenzene	Lin1		0.4644		50.9	50.0	1.9	35.0
Dibromofluoromethane (Surr)	Ave	0.2779	0.2782		50.0	50.0	0.0	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2558	0.2526		49.4	50.0	-1.3	35.0
Toluene-d8 (Surr)	Ave	3.577	3.569		49.9	50.0	-0.2	35.0
4-Bromofluorobenzene (Surr)	Ave	0.8672	0.8499		49.0	50.0	-2.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5646.d
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 29-Jun-2021 14:07:30 ALS Bottle#: 11 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icv
 Operator ID: wickham Instrument ID: VMS_MS9
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:23:55 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: sumichrastr

Date: 29-Jun-2021 16:50:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	3373379	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	924259	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.780	0.000	93	1538772	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.220	0.000	95	938348	50.0	50.0	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	98	851955	50.0	49.4	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	3299056	50.0	49.9	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.635	0.000	95	1307860	50.0	49.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	790480	50.0	59.0	
15 Chloromethane	50	1.872	1.872	0.000	97	459636	50.0	59.6	
16 Vinyl chloride	62	1.997	1.996	0.001	96	465807	50.0	59.2	
19 Bromomethane	94	2.328	2.339	-0.011	92	398475	50.0	49.9	
20 Chloroethane	64	2.442	2.442	0.000	98	381696	50.0	49.8	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	1131029	50.0	53.0	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	1076438	50.0	58.5	
24 Ethyl ether	59	2.971	2.981	-0.010	88	471677	50.0	50.2	
28 Acrolein	56	3.106	3.106	0.000	99	593885	493.8	379.6	
30 1,1-Dichloroethene	96	3.209	3.209	0.000	94	614400	50.0	51.3	
29 112TCTFE	151	3.220	3.220	0.000	90	514236	50.0	47.2	
31 Acetone	43	3.240	3.240	0.000	97	503175	200.0	212.3	
33 Iodomethane	142	3.354	3.354	0.000	99	884801	50.0	46.7	
35 Carbon disulfide	76	3.417	3.417	0.001	98	1455303	50.0	44.5	
34 Methyl acetate	43	3.531	3.531	0.000	93	601274	100.0	92.0	
36 3-Chloro-1-propene	41	3.551	3.551	0.000	86	707691	50.0	51.5	
39 Methylene Chloride	84	3.665	3.665	0.000	80	722331	50.0	50.7	
38 2-Methyl-2-propanol	59	3.748	3.748	0.000	99	563120	500.0	463.0	
42 Acrylonitrile	53	3.873	3.873	0.000	98	1657044	500.0	554.8	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	1727689	50.0	46.2	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	94	718959	50.0	51.8	
43 Hexane	57	4.163	4.163	0.000	88	542351	50.0	41.2	
45 Vinyl acetate	43	4.298	4.298	0.000	97	1640460	100.0	87.4	
46 1,1-Dichloroethane	63	4.308	4.308	0.000	95	1079270	50.0	51.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
50 2-Butanone (MEK)	43	4.774	4.774	0.000	95	735952	200.0	214.5	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	77	818907	50.0	51.9	
53 2,2-Dichloropropane	77	4.806	4.805	0.001	87	950285	50.0	49.9	
51 sec-Butyl Alcohol	45	4.920	4.919	0.001	96	805965	1200.0	845.2	
59 Chlorobromomethane	128	5.002	5.002	0.000	81	438376	50.0	50.1	
57 Tetrahydrofuran	42	5.013	5.013	0.000	78	267650	100.0	96.5	
56 Chloroform	83	5.085	5.085	0.000	91	1226457	50.0	53.8	
60 1,1,1-Trichloroethane	97	5.231	5.230	0.001	97	1070209	50.0	51.3	
61 Cyclohexane	56	5.293	5.293	0.000	84	835346	50.0	44.4	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	906859	50.0	50.3	
63 Carbon tetrachloride	117	5.365	5.365	0.000	93	911784	50.0	50.8	
58 Isobutyl alcohol	43	5.417	5.417	0.000	91	489919	1250.0	1159.8	
66 Benzene	78	5.541	5.541	0.000	97	2618296	50.0	52.1	
67 1,2-Dichloroethane	62	5.573	5.583	-0.010	97	851213	50.0	49.2	
135 n-Heptane	43	5.770	5.769	0.001	81	442453	50.0	42.1	
68 Trichloroethene	130	6.101	6.101	0.000	96	867661	50.0	52.8	
69 2-Pentanone	43	6.215	6.225	-0.010	95	953095	160.0	108.9	
71 Methylcyclohexane	55	6.298	6.308	-0.010	87	634503	50.0	46.5	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	642212	50.0	51.0	
73 1,4-Dioxane	88	6.371	6.371	0.001	90	178817	1000.0	921.6	
74 Dibromomethane	93	6.402	6.402	0.000	92	451110	50.0	49.5	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	856893	50.0	50.8	
76 2-Chloroethyl vinyl ether	63	6.778	6.773	0.005	92	439133	50.0	50.1	
78 cis-1,3-Dichloropropene	75	6.928	6.923	0.005	97	1055792	50.0	49.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	94	1480388	200.0	181.5	
80 Toluene	91	7.228	7.233	-0.005	99	2872470	50.0	51.7	
82 trans-1,3-Dichloropropene	75	7.426	7.425	0.001	89	963669	50.0	46.9	
81 Ethyl methacrylate	69	7.458	7.463	-0.005	86	825761	50.0	49.2	
83 1,1,2-Trichloroethane	97	7.607	7.613	-0.006	91	646817	50.0	50.3	
85 Tetrachloroethene	164	7.698	7.704	-0.006	96	709221	50.0	52.2	
86 1,3-Dichloropropane	76	7.763	7.757	0.006	86	999190	50.0	50.0	
84 2-Hexanone	43	7.789	7.789	0.000	88	1073441	200.0	185.0	
87 Chlorodibromomethane	129	7.966	7.960	0.006	89	685910	50.0	50.8	
89 Ethylene Dibromide	107	8.084	8.078	0.006	99	674773	50.0	45.4	
90 1-Chlorohexane	91	8.496	8.501	-0.005	91	759307	40.0	30.9	
91 Chlorobenzene	112	8.533	8.533	0.000	96	2098211	50.0	52.2	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.613	0.000	96	772021	50.0	52.0	
92 Ethylbenzene	106	8.619	8.618	0.001	97	1183023	50.0	52.5	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	2671533	50.0	53.5	
95 o-Xylene	106	9.105	9.105	0.000	95	1407408	50.0	53.7	
96 Styrene	104	9.127	9.127	0.000	93	2306281	50.0	53.8	
97 Bromoform	173	9.309	9.309	0.000	96	422915	50.0	48.1	
98 Isopropylbenzene	105	9.458	9.458	0.000	96	3247810	50.0	52.6	
100 Cyclohexanone	55	9.549	9.555	-0.006	86	1157217	2000.0	2397.5	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	772896	50.0	54.2	
105 Bromobenzene	156	9.779	9.779	0.000	87	1002546	50.0	50.9	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.785	0.005	87	170759	50.0	45.7	
104 1,2,3-Trichloropropane	110	9.817	9.817	0.000	83	265754	50.0	47.6	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	1022348	50.0	52.5	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	930975	50.0	51.9	
106 1,3,5-Trimethylbenzene	105	10.042	10.041	0.001	96	2749816	50.0	53.3	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	961460	50.0	51.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	2371639	50.0	53.2	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	2821865	50.0	53.2	
111 sec-Butylbenzene	134	10.577	10.576	0.001	94	748255	50.0	52.9	
113 1,3-Dichlorobenzene	146	10.700	10.705	-0.005	97	1750280	50.0	51.3	
112 4-Isopropyltoluene	119	10.726	10.726	0.000	95	2864766	50.0	53.2	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	1797968	50.0	51.7	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	2291061	50.0	52.2	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	97	1670442	50.0	51.4	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	90	166629	50.0	46.8	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	960623	50.0	50.4	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	97	450296	50.0	52.7	
122 Naphthalene	128	13.043	13.043	0.000	97	1905669	50.0	53.6	
123 1,2,3-Trichlorobenzene	180	13.262	13.267	-0.005	95	714564	50.0	50.9	
S 141 1,2-Dichloroethene, Total	1				0		100.0	103.7	
S 140 1,3-Dichloropropene, Total	1				0		100.0	96.1	
S 142 Xylenes, Total	106				0		100.0	107.2	
S 137 Trihalomethanes, Total	1				0		200.0	203.4	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMain B_00049

Amount Added: 25.00

Units: uL

MV-Gas B_00092

Amount Added: 10.00

Units: uL

Acrolein_B_00006

Amount Added: 25.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5646.d

Injection Date: 29-Jun-2021 14:07:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: icv

Worklist Smp#: 25

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

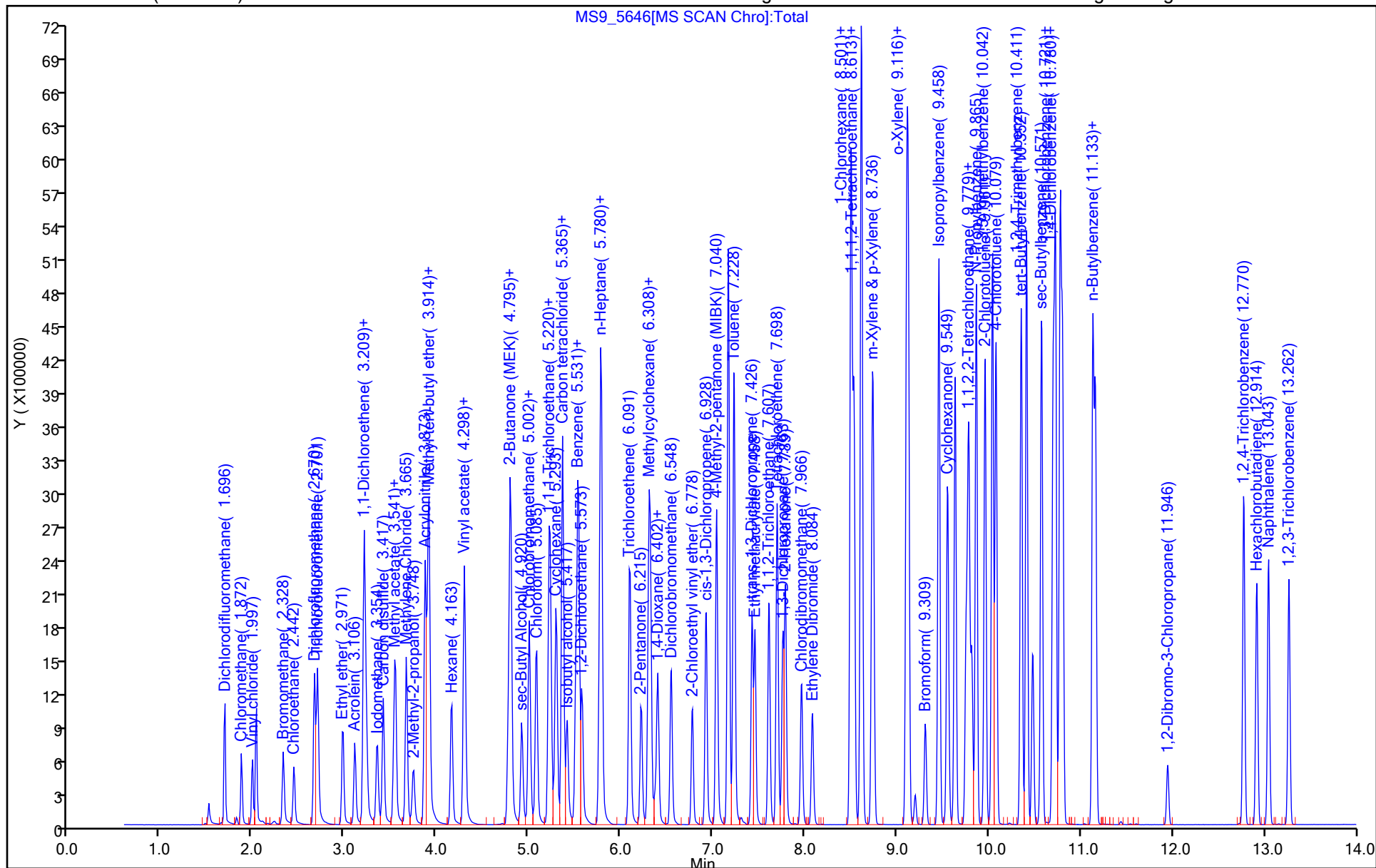
ALS Bottle#: 11

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: ICV 280-541805/22 Calibration Date: 06/30/2021 11:29
 Instrument ID: VMS_MS9 Calib Start Date: 06/30/2021 08:49
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/30/2021 11:09
 Lab File ID: MS9_5695.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Ave	0.0027	0.0028		2590	2500	3.5	55.0
Ethanol	Lin2		0.0016		1640	1500	9.1	55.0
Propene oxide	Ave	0.0173	0.0169		2440	2500	-2.3	
2-Propanol	Lin1		0.0085		262	250	4.8	55.0
Acetonitrile	Ave	0.0156	0.0148		237	250	-5.2	55.0
Di-isopropyl ether (DIPE)	Ave	0.1960	0.1855		23.7	25.0	-5.4	35.0
Chloroprene	Ave	0.3091	0.2830		22.9	25.0	-8.4	35.0
Tert-butyl ethyl ether	Ave	0.5337	0.4879		22.9	25.0	-8.6	35.0
Ethyl acetate	Ave	0.1174	0.0994		42.3	50.0	-15.3	55.0
Propionitrile	Lin2		0.0195		256	250	2.5	55.0
Methacrylonitrile	Qua		0.0685		248	250	-0.7	55.0
Tert-amyl methyl ether	Ave	0.5322	0.4974		23.4	25.0	-6.5	35.0
n-Butanol	Lin2		0.0042		695	625	11.2	55.0
Methyl methacrylate	Ave	0.0591	0.0602		50.9	50.0	1.9	35.0
2-Nitropropane	Ave	0.0295	0.0295		49.9	50.0	-0.3	55.0
Tetrahydrothiophene	Ave	0.1231	0.1315		53.4	50.0	6.8	55.0
cis-1,4-Dichloro-2-butene	Ave	0.1102	0.1196		54.2	50.0	8.5	55.0
1,2,3-Trimethylbenzene	Lin2		1.844		24.9	25.0	-0.5	35.0
1,3,5-Trichlorobenzene	Lin2		0.7453		24.4	25.0	-2.2	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5695.d
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 30-Jun-2021 11:29:30 ALS Bottle#: 13 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icv
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:55:04 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 12:13:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	2259039	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	635178	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.780	-0.006	94	1059236	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	98	320785	2500.0	2586.7	
23 Ethanol	45	2.867	2.867	0.000	99	109142	1500.0	1636.2	
27 Propene oxide	58	3.023	3.023	0.000	96	1909119	2500.0	2443.2	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	95719	250.0	261.9	
37 Acetonitrile	41	3.499	3.500	-0.001	98	166779	250.0	236.9	
44 Isopropyl ether	87	4.318	4.318	0.000	88	209541	25.0	23.7	
47 2-Chloro-1,3-butadiene	53	4.370	4.370	0.000	91	319632	25.0	22.9	
48 Tert-butyl ethyl ether	59	4.640	4.640	0.000	94	551130	25.0	22.9	
49 Ethyl acetate	43	4.805	4.806	-0.001	96	224534	50.0	42.3	
54 Propionitrile	54	4.826	4.837	-0.011	97	220330	250.0	256.3	
55 Methacrylonitrile	41	4.961	4.961	0.000	84	773219	250.0	248.1	
65 Tert-amyl methyl ether	73	5.635	5.635	0.000	96	561864	25.0	23.4	
64 n-Butanol	56	5.977	5.977	0.000	86	118179	625.0	695.2	
70 Methyl methacrylate	100	6.350	6.350	0.000	80	135928	50.0	50.9	
77 2-Nitropropane	41	6.730	6.719	0.011	98	66551	50.0	49.9	
88 Tetrahydrothiophene	60	7.950	7.955	-0.005	87	83539	50.0	53.4	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.501	0.011	0	126638	50.0	54.2	
114 1,2,3-Trimethylbenzene	105	10.822	10.823	-0.001	97	976453	25.0	24.9	
119 1,3,5-Trichlorobenzene	180	12.138	12.139	-0.001	98	394745	25.0	24.4	
166 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00034

Amount Added: 25.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Report Date: 30-Jun-2021 12:55:06

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5695.d

Injection Date: 30-Jun-2021 11:29:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: icv

Worklist Smp#: 22

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

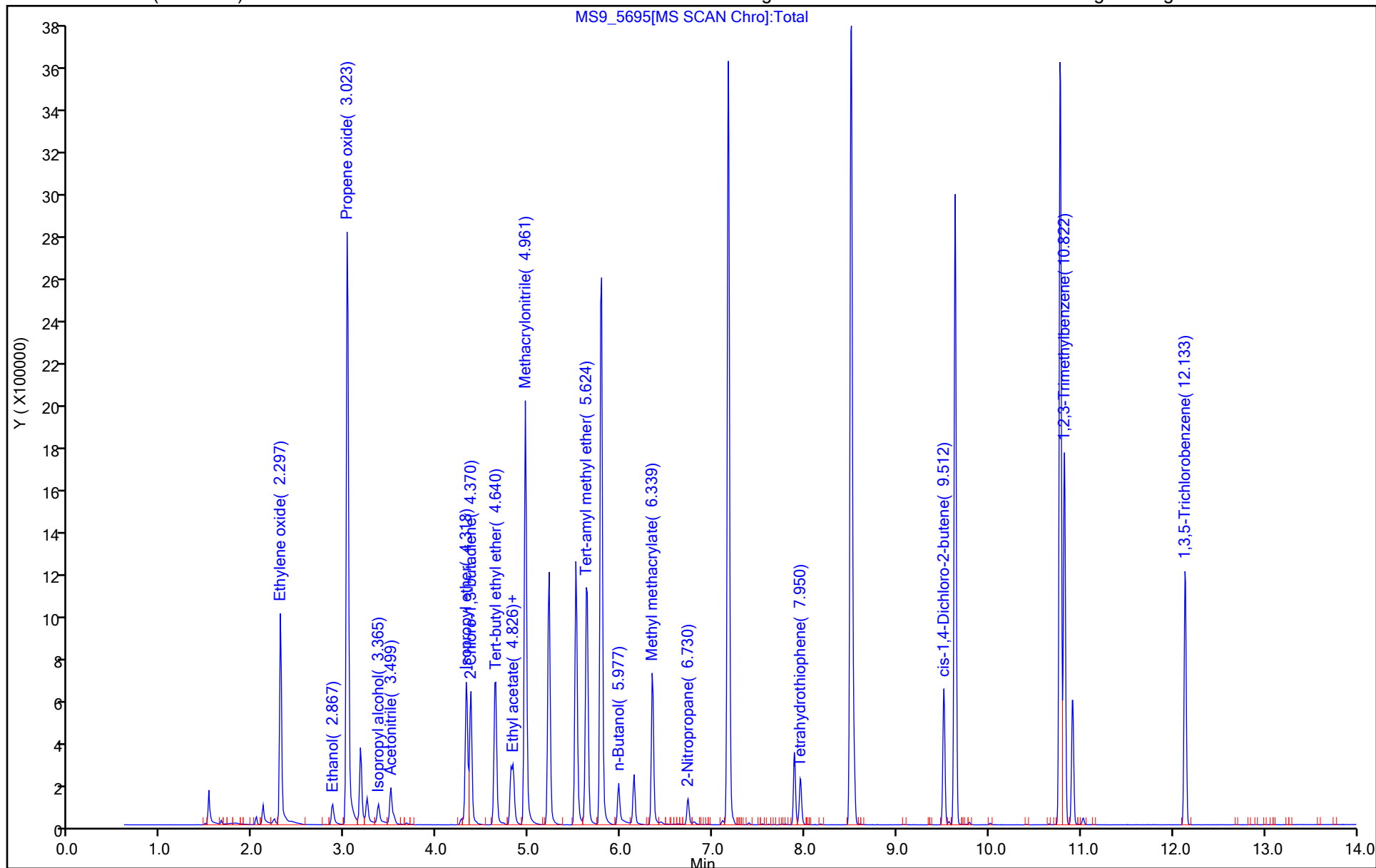
ALS Bottle#: 13

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: ICV 280-541956/23 Calibration Date: 06/30/2021 21:06
 Instrument ID: VMS_MS9 Calib Start Date: 06/30/2021 17:47
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/30/2021 20:26
 Lab File ID: MS9_5716.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.2748		61.9	50.0	23.9	55.0
Chloromethane	Ave	0.1103	0.1369	0.1000	62.1	50.0	24.2	35.0
Vinyl chloride	Ave	0.1228	0.1281		52.1	50.0	4.3	35.0
Bromomethane	Qua		0.1209		52.2	50.0	4.3	35.0
Chloroethane	Ave	0.1259	0.1232		48.9	50.0	-2.1	35.0
Dichlorofluoromethane	Ave	0.3612	0.3422		47.4	50.0	-5.2	55.0
Trichlorofluoromethane	Ave	0.3859	0.4161		53.9	50.0	7.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1153	0.1134		49.2	50.0	-1.6	55.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5716.d
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 30-Jun-2021 21:06:30 ALS Bottle#: 12 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icv
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Sublist:
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:49:35 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1637

First Level Reviewer: peppinga

Date: 01-Jul-2021 12:47:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.790	5.790	0.000	98	1995956	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	568556	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	95	945217	50.0	50.0	
13 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	548437	50.0	61.9	
15 Chloromethane	50	1.872	1.872	0.000	96	273286	50.0	62.1	
16 Vinyl chloride	62	1.997	1.996	0.001	96	255600	50.0	52.1	
19 Bromomethane	94	2.318	2.338	-0.020	94	241288	50.0	52.2	
20 Chloroethane	64	2.442	2.452	-0.010	97	245942	50.0	48.9	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	683102	50.0	47.4	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	830469	50.0	53.9	
76 2-Chloroethyl vinyl ether	63	6.778	6.778	0.000	94	226408	50.0	49.2	

QC Flag Legend

Processing Flags

Reagents:

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

MV-Gas B_00092

Amount Added: 10.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5716.d

Injection Date: 30-Jun-2021 21:06:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: icv

Worklist Smp#: 23

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

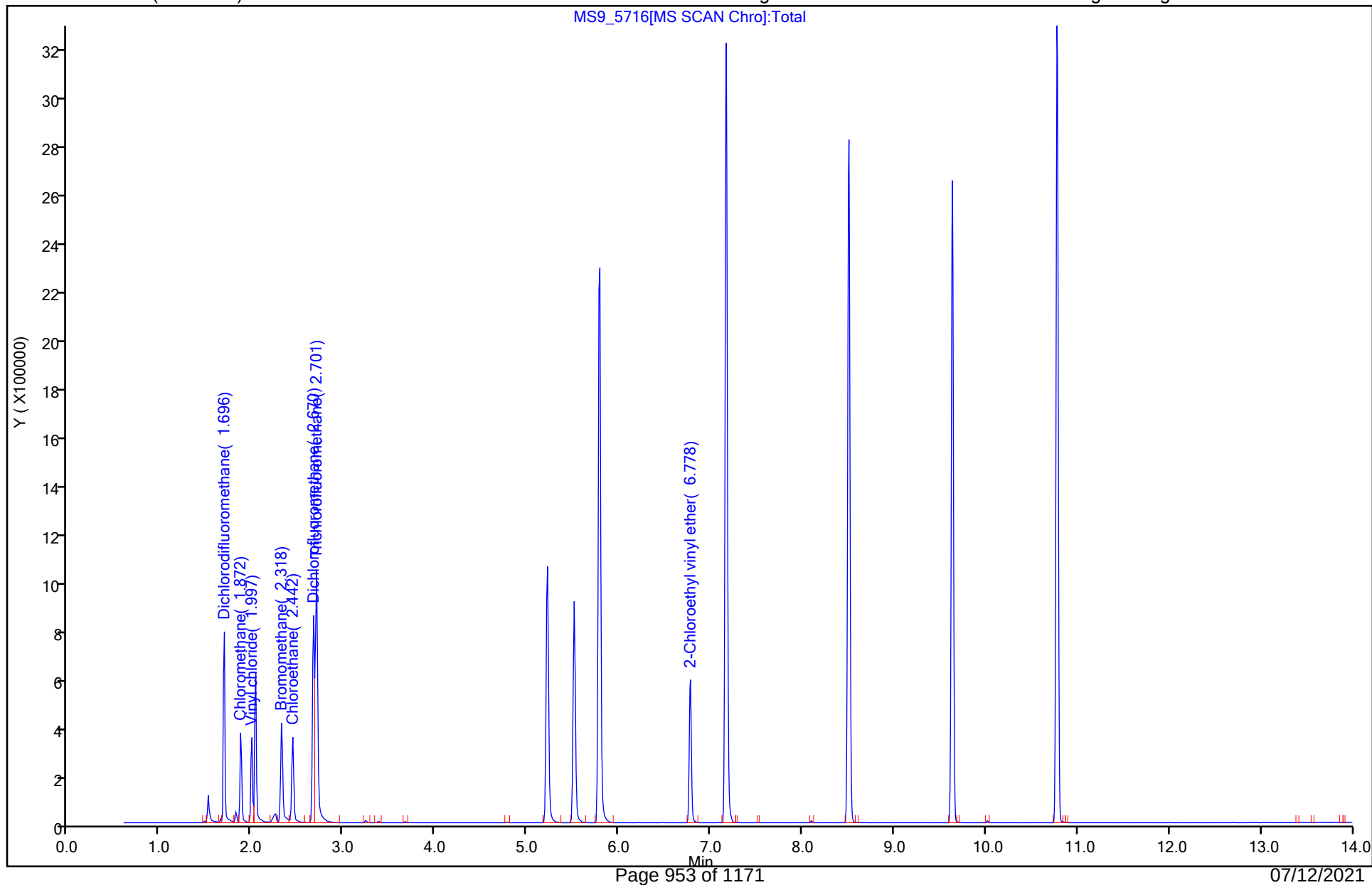
ALS Bottle#: 12

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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.: 280-150290-1

SDG No.: _____

Lab Sample ID: CCV 280-542401/2 Calibration Date: 07/07/2021 06:43

Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08

GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47

Lab File ID: MS9_5878.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Lin2		0.1398		25.0	25.0	-0.2	35.0
Acrolein	Ave	0.0232	0.0237		252	247	2.0	50.0
1,1-Dichloroethene	Lin1		0.1824		25.3	25.0	1.3	20.0
Freon 113	Ave	0.1616	0.1676		25.9	25.0	3.7	50.0
Acetone	Lin1		0.0513		145	100	44.6	50.0
Iodomethane	Lin1		0.2635		23.1	25.0	-7.5	35.0
Carbon disulfide	Lin2		0.4458		22.6	25.0	-9.5	50.0
Methyl acetate	Ave	0.0969	0.1128		58.2	50.0	16.4	50.0
Allyl chloride	Lin2		0.2046		24.6	25.0	-1.5	35.0
Methylene Chloride	Lin2		0.2162		25.0	25.0	-0.0	35.0
Tert-butyl alcohol (2-methyl-2-propanol)	Ave	0.0180	0.0210		291	250	16.5	50.0
Acrylonitrile	Lin1		0.0603		338	250	35.4	50.0
Methyl tert-butyl ether	Ave	0.5538	0.5580		25.2	25.0	0.8	35.0
trans-1,2-Dichloroethene	Lin2		0.2159		25.8	25.0	3.1	35.0
Hexane	Ave	0.7115	0.5957		20.9	25.0	-16.3	35.0
Vinyl acetate	Ave	0.2781	0.2499		44.9	50.0	-10.2	50.0
1,1-Dichloroethane	Lin2		0.3212	0.1000	25.5	25.0	1.8	35.0
2-Butanone (MEK)	Lin1		0.0693		135	100	35.4	50.0
cis-1,2-Dichloroethene	Lin2		0.2434		25.7	25.0	2.8	35.0
2,2-Dichloropropane	Lin2		0.2399		20.9	25.0	-16.4	35.0
sec-Butyl Alcohol	Ave	0.0141	0.0155		659	600	9.8	50.0
Chlorobromomethane	Lin2		0.1395		26.8	25.0	7.1	35.0
Tetrahydrofuran	Lin2		0.0491		59.5	50.0	19.1	50.0
Chloroform	Lin1		0.3824		27.9	25.0	11.7	20.0
1,1,1-Trichloroethane	Lin2		0.3491		27.9	25.0	11.7	35.0
Cyclohexane	Ave	0.2791	0.2563		23.0	25.0	-8.2	35.0
1,1-Dichloropropene	Lin2		0.2855		26.4	25.0	5.5	35.0
Carbon tetrachloride	Lin2		0.3011		28.1	25.0	12.5	35.0
Isobutyl alcohol	Ave	0.0063	0.0070		694	625	11.0	50.0
Benzene	Lin2		0.7697		25.4	25.0	1.7	35.0
1,2-Dichloroethane	Lin2		0.2851		27.7	25.0	10.6	35.0
n-Heptane	Ave	0.1559	0.1471		23.6	25.0	-5.6	50.0
Trichloroethene	Lin2		0.9194		25.5	25.0	1.8	35.0
2-Pentanone	Ave	0.1297	0.1446		89.2	80.0	11.5	50.0
Methylcyclohexane	Ave	0.2023	0.1974		24.4	25.0	-2.4	35.0
1,2-Dichloropropane	Lin2		0.1884		25.0	25.0	-0.2	20.0
1,4-Dioxane	Ave	0.0029	0.0034		592	500	18.5	50.0
Dibromomethane	Lin2		0.1485		27.3	25.0	9.3	35.0
Dichlorobromomethane	Lin2		0.2698		26.9	25.0	7.4	35.0
cis-1,3-Dichloropropene	Lin2		1.136		24.3	25.0	-2.6	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542401/2 Calibration Date: 07/07/2021 06:43
 Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47
 Lab File ID: MS9_5878.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Methyl-2-pentanone (MIBK)	Ave	0.1209	0.1366		113	100	13.0	50.0
Toluene	Lin2		0.8913		26.7	25.0	6.7	20.0
trans-1,3-Dichloropropene	Ave	0.3049	0.3075		25.2	25.0	0.9	35.0
Ethyl methacrylate	Ave	0.9078	0.9296		25.6	25.0	2.4	35.0
1,1,2-Trichloroethane	Lin2		0.2141		27.9	25.0	11.8	35.0
Tetrachloroethene	Lin2		0.8025		26.9	25.0	7.7	35.0
1,3-Dichloropropane	Lin2		1.108		25.5	25.0	2.0	35.0
2-Hexanone	Ave	0.3138	0.3424		109	100	9.1	50.0
Chlorodibromomethane	Lin2		0.7775		26.6	25.0	6.2	35.0
1,2-Dibromoethane	Ave	0.8035	0.8004		24.9	25.0	-0.4	35.0
1-Chlorohexane	Lin2		1.270		18.9	20.0	-5.6	35.0
Chlorobenzene	Lin2		2.252	0.3000	25.6	25.0	2.2	35.0
1,1,1,2-Tetrachloroethane	Lin2		0.8572		26.5	25.0	6.1	35.0
Ethylbenzene	Lin2		1.250		25.3	25.0	1.2	20.0
m-Xylene & p-Xylene	Lin2		2.842		25.9	25.0	3.6	35.0
o-Xylene	Lin2		1.475		25.7	25.0	2.8	35.0
Styrene	Lin2		2.424		25.9	25.0	3.6	35.0
Bromoform	Lin1		0.5192	0.1000	27.3	25.0	9.2	35.0
Isopropylbenzene	Lin2		2.028		24.9	25.0	-0.6	35.0
Cyclohexanone	Ave	0.0261	0.0305		1170	1000	16.7	50.0
1,1,2,2-Tetrachloroethane	Lin1		0.5171	0.3000	27.7	25.0	10.7	35.0
Bromobenzene	Lin2		0.6544		25.3	25.0	1.2	35.0
trans-1,4-Dichloro-2-butene	Ave	0.1214	0.1279		26.3	25.0	5.4	50.0
1,2,3-Trichloropropane	Ave	0.1814	0.2000		27.6	25.0	10.2	35.0
N-Propylbenzene	Lin2		0.6424		25.0	25.0	-0.0	35.0
2-Chlorotoluene	Lin2		0.5841		24.7	25.0	-1.1	35.0
1,3,5-Trimethylbenzene	Lin2		1.719		25.3	25.0	1.0	35.0
4-Chlorotoluene	Lin2		0.6012		24.5	25.0	-2.0	35.0
tert-Butylbenzene	Lin2		1.497		25.4	25.0	1.7	35.0
1,2,4-Trimethylbenzene	Lin2		1.767		25.3	25.0	1.2	35.0
sec-Butylbenzene	Lin2		0.4755		25.5	25.0	2.1	35.0
1,3-Dichlorobenzene	Lin2		1.131		25.2	25.0	0.9	35.0
4-Isopropyltoluene	Lin2		1.813		25.6	25.0	2.3	35.0
1,4-Dichlorobenzene	Lin2		1.151		25.2	25.0	0.8	35.0
n-Butylbenzene	Lin2		1.421		24.6	25.0	-1.7	35.0
1,2-Dichlorobenzene	Lin2		1.077		25.3	25.0	1.2	35.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1396		30.2	25.0	20.8	50.0
1,2,4-Trichlorobenzene	Lin2		0.6415		25.7	25.0	2.9	35.0
Hexachlorobutadiene	Lin2		0.3055		27.2	25.0	9.0	35.0
Naphthalene	Lin1		1.459		31.2	25.0	24.8	35.0
1,2,3-Trichlorobenzene	Lin1		0.5036		27.3	25.0	9.1	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
SDG No.: _____
Lab Sample ID: CCV 280-542401/2 Calibration Date: 07/07/2021 06:43
Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08
GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47
Lab File ID: MS9_5878.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2779	0.2908		52.3	50.0	4.6	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2558	0.2846		55.6	50.0	11.3	35.0
Toluene-d8 (Surr)	Ave	3.577	3.462		48.4	50.0	-3.2	35.0
4-Bromofluorobenzene (Surr)	Ave	0.8672	0.8241		47.5	50.0	-5.0	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Jul-2021 06:43:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccv m
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub69
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:26 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 07:29:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2766158	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	806817	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	93	1398402	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	804314	50.0	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	787294	50.0	55.6	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2792938	50.0	48.4	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.630	9.630	0.000	96	1152415	50.0	47.5	
24 Ethyl ether	59	2.971	2.971	0.000	86	193321	25.0	25.0	
28 Acrolein	56	3.106	3.106	0.000	99	323164	246.9	251.9	
30 1,1-Dichloroethene	96	3.199	3.199	0.000	94	252342	25.0	25.3	
29 112TCTFE	151	3.209	3.209	0.000	89	231755	25.0	25.9	
31 Acetone	43	3.230	3.230	0.000	99	283838	100.0	144.6	
33 Iodomethane	142	3.344	3.344	0.000	100	364379	25.0	23.1	
35 Carbon disulfide	76	3.417	3.417	0.000	98	616573	25.0	22.6	
34 Methyl acetate	43	3.531	3.531	0.000	93	311928	50.0	58.2	
36 3-Chloro-1-propene	41	3.541	3.541	0.000	84	282957	25.0	24.6	
39 Methylene Chloride	84	3.665	3.665	0.000	80	299033	25.0	25.0	
38 2-Methyl-2-propanol	59	3.738	3.738	0.000	98	290337	250.0	291.1	
42 Acrylonitrile	53	3.873	3.873	0.000	97	834284	250.0	338.4	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	771721	25.0	25.2	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	93	298590	25.0	25.8	
43 Hexane	57	4.153	4.153	0.000	89	240293	25.0	20.9	
45 Vinyl acetate	43	4.287	4.287	0.000	97	691210	50.0	44.9	
46 1,1-Dichloroethane	63	4.298	4.298	0.000	95	444226	25.0	25.5	
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	383279	100.0	135.4	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	336635	25.0	25.7	
53 2,2-Dichloropropane	77	4.806	4.806	0.000	84	331770	25.0	20.9	
51 sec-Butyl Alcohol	45	4.920	4.920	0.000	95	515044	600.0	658.7	
57 Tetrahydrofuran	42	5.002	5.002	0.000	75	135783	50.0	59.5	
59 Chlorobromomethane	128	5.002	5.002	0.000	78	192976	25.0	26.8	
56 Chloroform	83	5.075	5.075	0.000	91	528872	25.0	27.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
60 1,1,1-Trichloroethane	97	5.231	5.231	0.000	97	482893	25.0	27.9	
61 Cyclohexane	56	5.293	5.293	0.000	83	354456	25.0	23.0	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	394824	25.0	26.4	
63 Carbon tetrachloride	117	5.365	5.365	0.000	95	416485	25.0	28.1	
58 Isobutyl alcohol	43	5.417	5.417	0.000	92	240406	625.0	694.0	
66 Benzene	78	5.531	5.531	0.000	97	1064499	25.0	25.4	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	98	394317	25.0	27.7	
135 n-Heptane	43	5.769	5.769	0.000	81	203481	25.0	23.6	
68 Trichloroethene	130	6.091	6.091	0.000	96	370899	25.0	25.5	
69 2-Pentanone	43	6.215	6.215	0.000	94	640089	80.0	89.2	
71 Methylcyclohexane	55	6.298	6.298	0.000	87	273042	25.0	24.4	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	260562	25.0	25.0	
73 1,4-Dioxane	88	6.371	6.371	0.000	88	94231	500.0	592.3	
74 Dibromomethane	93	6.391	6.391	0.000	91	205319	25.0	27.3	
75 Dichlorobromomethane	83	6.543	6.543	0.000	98	373150	25.0	26.9	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	96	458120	25.0	24.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	755854	100.0	113.0	
80 Toluene	91	7.228	7.228	0.000	99	1232698	25.0	26.7	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	425312	25.0	25.2	
81 Ethyl methacrylate	69	7.458	7.458	0.000	85	375014	25.0	25.6	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	296085	25.0	27.9	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	323721	25.0	26.9	
86 1,3-Dichloropropane	76	7.757	7.757	0.000	87	446914	25.0	25.5	
84 2-Hexanone	43	7.784	7.784	0.000	87	552455	100.0	109.1	
87 Chlorodibromomethane	129	7.961	7.961	0.000	89	313630	25.0	26.6	
89 Ethylene Dibromide	107	8.078	8.078	0.000	98	322890	25.0	24.9	
90 1-Chlorohexane	91	8.496	8.496	0.000	91	409822	20.0	18.9	
91 Chlorobenzene	112	8.533	8.533	0.000	96	908309	25.0	25.6	
93 1,1,1,2-Tetrachloroethane	131	8.608	8.608	0.000	94	345805	25.0	26.5	
92 Ethylbenzene	106	8.613	8.613	0.000	97	504262	25.0	25.3	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	1146379	25.0	25.9	
95 o-Xylene	106	9.105	9.105	0.000	95	594980	25.0	25.7	
96 Styrene	104	9.121	9.121	0.000	93	977730	25.0	25.9	
97 Bromoform	173	9.309	9.309	0.000	97	209444	25.0	27.3	
98 Isopropylbenzene	105	9.453	9.453	0.000	96	1418281	25.0	24.9	
100 Cyclohexanone	55	9.549	9.549	0.000	87	491846	1000.0	1167.3	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	97	361565	25.0	27.7	
105 Bromobenzene	156	9.779	9.779	0.000	85	457535	25.0	25.3	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	74	89425	25.0	26.3	
104 1,2,3-Trichloropropane	110	9.812	9.812	0.000	82	139808	25.0	27.6	a
103 N-Propylbenzene	120	9.865	9.865	0.000	97	449199	25.0	25.0	
107 2-Chlorotoluene	126	9.961	9.961	0.000	97	408394	25.0	24.7	
106 1,3,5-Trimethylbenzene	105	10.036	10.036	0.000	95	1201809	25.0	25.3	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	420377	25.0	24.5	
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	1046711	25.0	25.4	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	1235719	25.0	25.3	
111 sec-Butylbenzene	134	10.577	10.577	0.000	94	332456	25.0	25.5	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	791052	25.0	25.2	
112 4-Isopropyltoluene	119	10.721	10.721	0.000	95	1267649	25.0	25.6	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	95	804896	25.0	25.2	
116 n-Butylbenzene	91	11.133	11.133	0.000	95	993254	25.0	24.6	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	98	753144	25.0	25.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	89	97587	25.0	30.2	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	448548	25.0	25.7	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	96	213598	25.0	27.2	
122 Naphthalene	128	13.043	13.043	0.000	97	1019911	25.0	31.2	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	96	352121	25.0	27.3	
S 141 1,2-Dichloroethene, Total	1				0		50.0	51.5	
S 140 1,3-Dichloropropene, Total	1				0		50.0	49.6	
S 142 Xylenes, Total	106				0		50.0	51.6	
S 137 Trihalomethanes, Total	1				0		100.0	108.7	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878.d

Injection Date: 07-Jul-2021 06:43:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

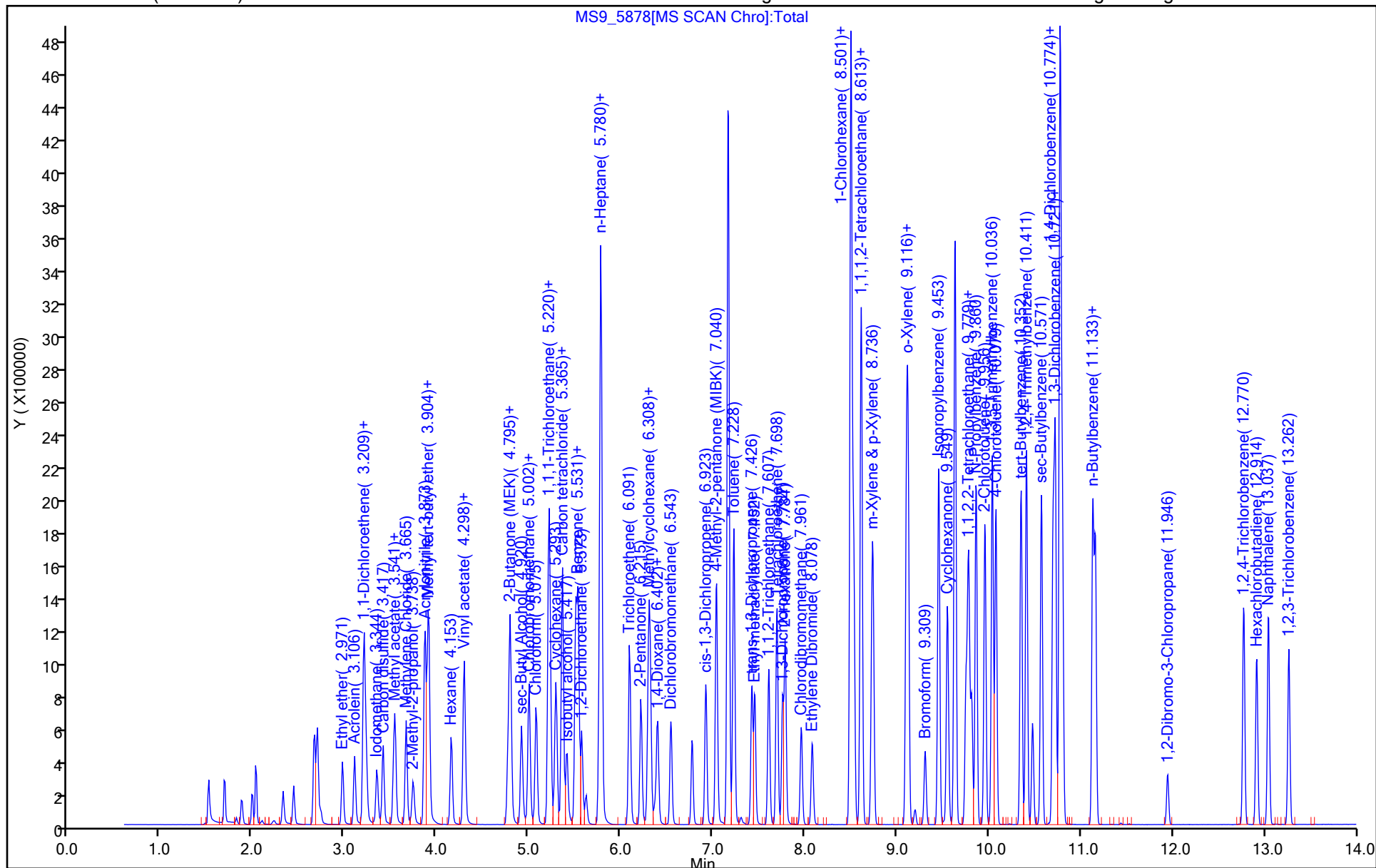
ALS Bottle#: 2

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



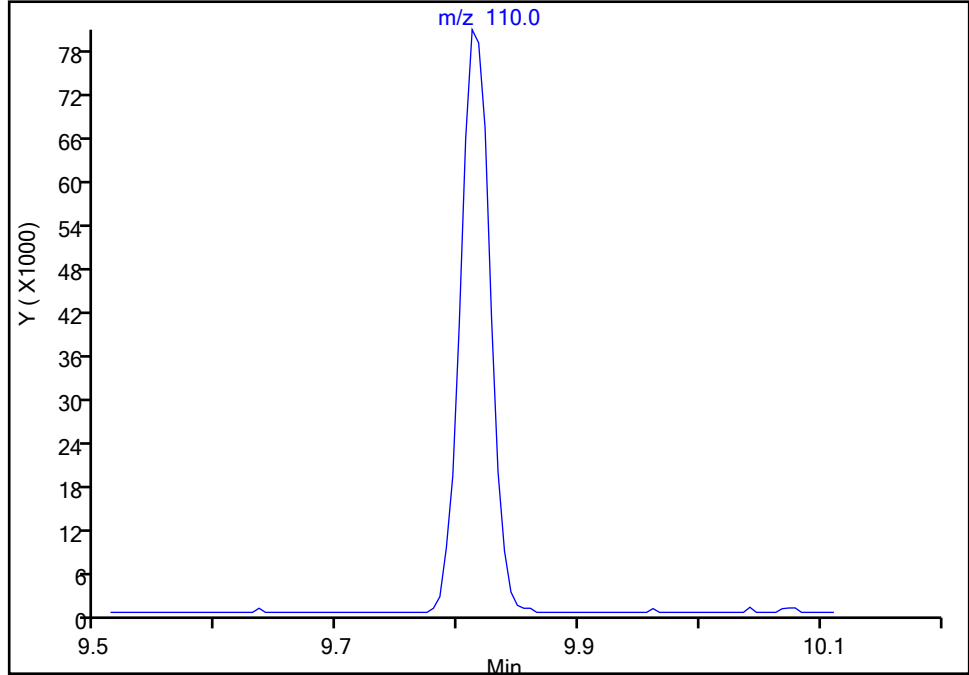
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878.d
Injection Date: 07-Jul-2021 06:43:30 Instrument ID: VMS_MS9
Lims ID: CCV
Client ID:
Operator ID: wickhamt ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

104 1,2,3-Trichloropropane, CAS: 96-18-4
Signal: 1

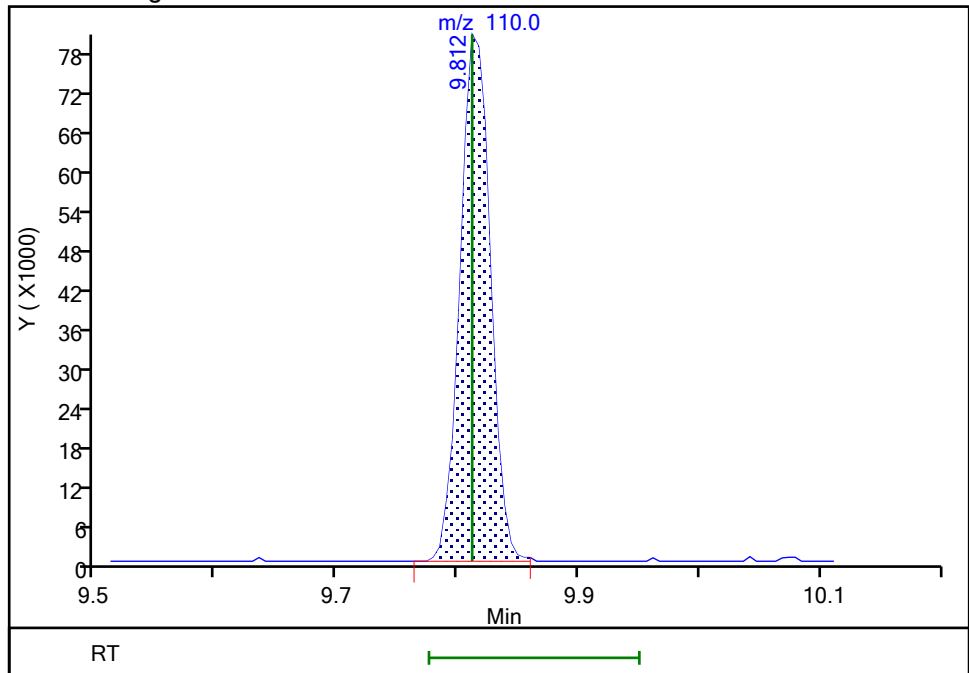
Not Detected
Expected RT: 9.81

Processing Integration Results



RT: 9.81
Area: 139808
Amount: 27.556167
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 07-Jul-2021 07:00:16
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542401/3 Calibration Date: 07/07/2021 07:05
 Instrument ID: VMS_MS9 Calib Start Date: 06/30/2021 08:49
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/30/2021 11:09
 Lab File ID: MS9_5879.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene oxide	Ave	0.0027	0.0009		786	2500	-68.6*	50.0
Ethanol	Lin2		0.0021		2090	1500	39.3	50.0
Propene oxide	Ave	0.0173	0.0059		853	2500	-65.9*	50.0
2-Propanol	Lin1		0.0115		357	250	42.9	50.0
Acetonitrile	Ave	0.0156	0.0186		298	250	19.3	50.0
Di-isopropyl ether (DIPE)	Ave	0.1960	0.1826		23.3	25.0	-6.8	35.0
Chloroprene	Ave	0.3091	0.2395		19.4	25.0	-22.5	35.0
Tert-butyl ethyl ether	Ave	0.5337	0.4908		23.0	25.0	-8.0	35.0
Ethyl acetate	Ave	0.1174	0.1307		55.7	50.0	11.3	50.0
Propionitrile	Lin2		0.0250		329	250	31.5	50.0
Methacrylonitrile	Qua		0.0795		292	250	16.9	50.0
Tert-amyl methyl ether	Ave	0.5322	0.5215		24.5	25.0	-2.0	35.0
n-Butanol	Lin2		0.0055		922	625	47.5	50.0
Methyl methacrylate	Ave	0.0591	0.0725		61.4	50.0	22.8	35.0
2-Nitropropane	Ave	0.0295	0.0324		54.9	50.0	9.7	50.0
Tetrahydrothiophene	Ave	0.1231	0.1384		56.2	50.0	12.4	50.0
cis-1,4-Dichloro-2-butene	Ave	0.1102	0.1249		56.6	50.0	13.3	50.0
1,2,3-Trimethylbenzene	Lin2		1.829		24.7	25.0	-1.3	35.0
1,3,5-Trichlorobenzene	Lin2		0.7674		25.2	25.0	0.7	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5879.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Jul-2021 07:05:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccv s
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub61
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:28 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 07:29:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481				1000.0	ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2745012	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	802434	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1405562	50.0	50.0	
18 Ethylene oxide	43	2.297	2.297	0.000	98	118467	2500.0	786.2	
23 Ethanol	45	2.857	2.867	-0.010	100	168828	1500.0	2089.4	
27 Propene oxide	58	3.023	3.023	-0.001	96	809455	2500.0	852.5	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	157899	250.0	357.2	
37 Acetonitrile	41	3.499	3.500	-0.001	98	255006	250.0	298.1	
44 Isopropyl ether	87	4.318	4.318	0.000	88	250661	25.0	23.3	
47 2-Chloro-1,3-butadiene	53	4.360	4.370	-0.010	90	328674	25.0	19.4	
48 Tert-butyl ethyl ether	59	4.629	4.640	-0.011	94	673562	25.0	23.0	
49 Ethyl acetate	43	4.805	4.806	-0.001	96	358649	50.0	55.7	
54 Propionitrile	54	4.826	4.837	-0.011	97	342734	250.0	328.7	
55 Methacrylonitrile	41	4.961	4.961	0.000	83	1090992	250.0	292.2	
65 Tert-amyl methyl ether	73	5.624	5.635	-0.011	96	715715	25.0	24.5	
64 n-Butanol	56	5.977	5.977	0.000	85	189992	625.0	922.0	
70 Methyl methacrylate	100	6.339	6.350	-0.011	80	199106	50.0	61.4	
77 2-Nitropropane	41	6.730	6.719	0.011	99	88977	50.0	54.9	
88 Tetrahydrothiophene	60	7.950	7.955	-0.005	87	111021	50.0	56.2	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.501	0.011	0	175513	50.0	56.6	
114 1,2,3-Trimethylbenzene	105	10.822	10.823	-0.001	97	1285445	25.0	24.7	
119 1,3,5-Trichlorobenzene	180	12.133	12.139	-0.006	98	539302	25.0	25.2	
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_00051

Amount Added: 25.00

Units: uL

mv-Cent IS_00006

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5879.d

Injection Date: 07-Jul-2021 07:05:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: CCV

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

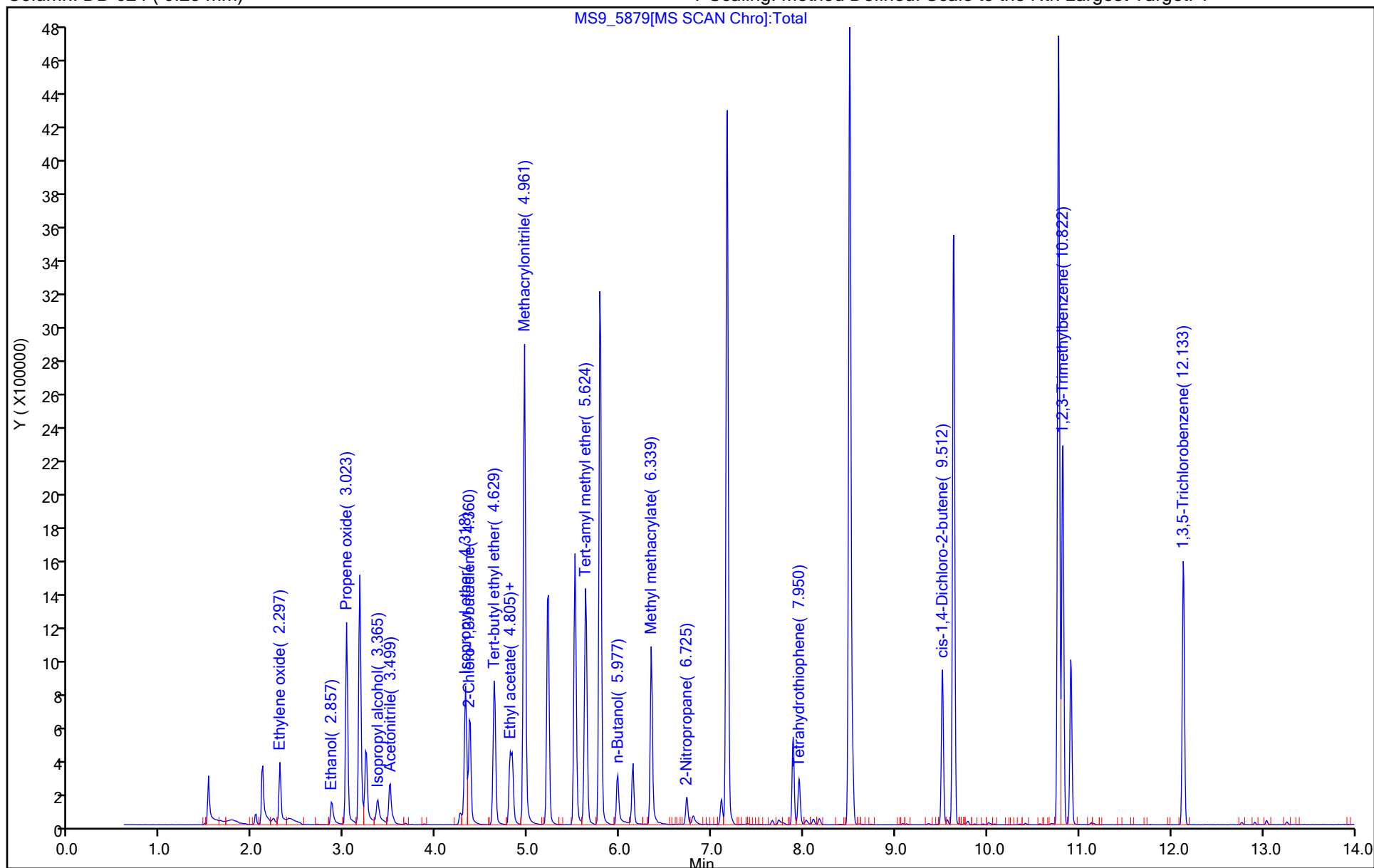
ALS Bottle#: 3

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542401/14 Calibration Date: 07/07/2021 07:28
 Instrument ID: VMS_MS9 Calib Start Date: 06/29/2021 11:08
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/29/2021 13:47
 Lab File ID: MS9_5880.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2779	0.2908		52.3	50.0	4.6	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2558	0.2864		56.0	50.0	12.0	35.0
Toluene-d8 (Surr)	Ave	3.577	3.439		48.1	50.0	-3.9	35.0
4-Bromofluorobenzene (Surr)	Ave	0.8672	0.8105		46.7	50.0	-6.5	35.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5880.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Jul-2021 07:28:30 ALS Bottle#: 4 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccv g
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub66
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 08:08:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2784052	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	809121	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1414929	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	809539	50.0	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	797432	50.0	56.0	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2782220	50.0	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.629	9.630	-0.001	96	1146787	50.0	46.7	
13 Dichlorodifluoromethane	85	1.685	1.686	-0.001	98	667215	50.0	54.0	
15 Chloromethane	50	1.872	1.872	0.000	97	349400	50.0	56.9	
16 Vinyl chloride	62	1.986	1.986	0.000	97	352729	50.0	51.6	
19 Bromomethane	94	2.328	2.328	0.000	93	249158	50.0	37.0	
20 Chloroethane	64	2.442	2.442	0.000	98	341449	50.0	48.7	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	904655	50.0	45.0	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	951909	50.0	44.3	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	93	370192	50.0	57.7	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00093

Amount Added: 10.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 12:09:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5880.d

Injection Date: 07-Jul-2021 07:28:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ccv

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

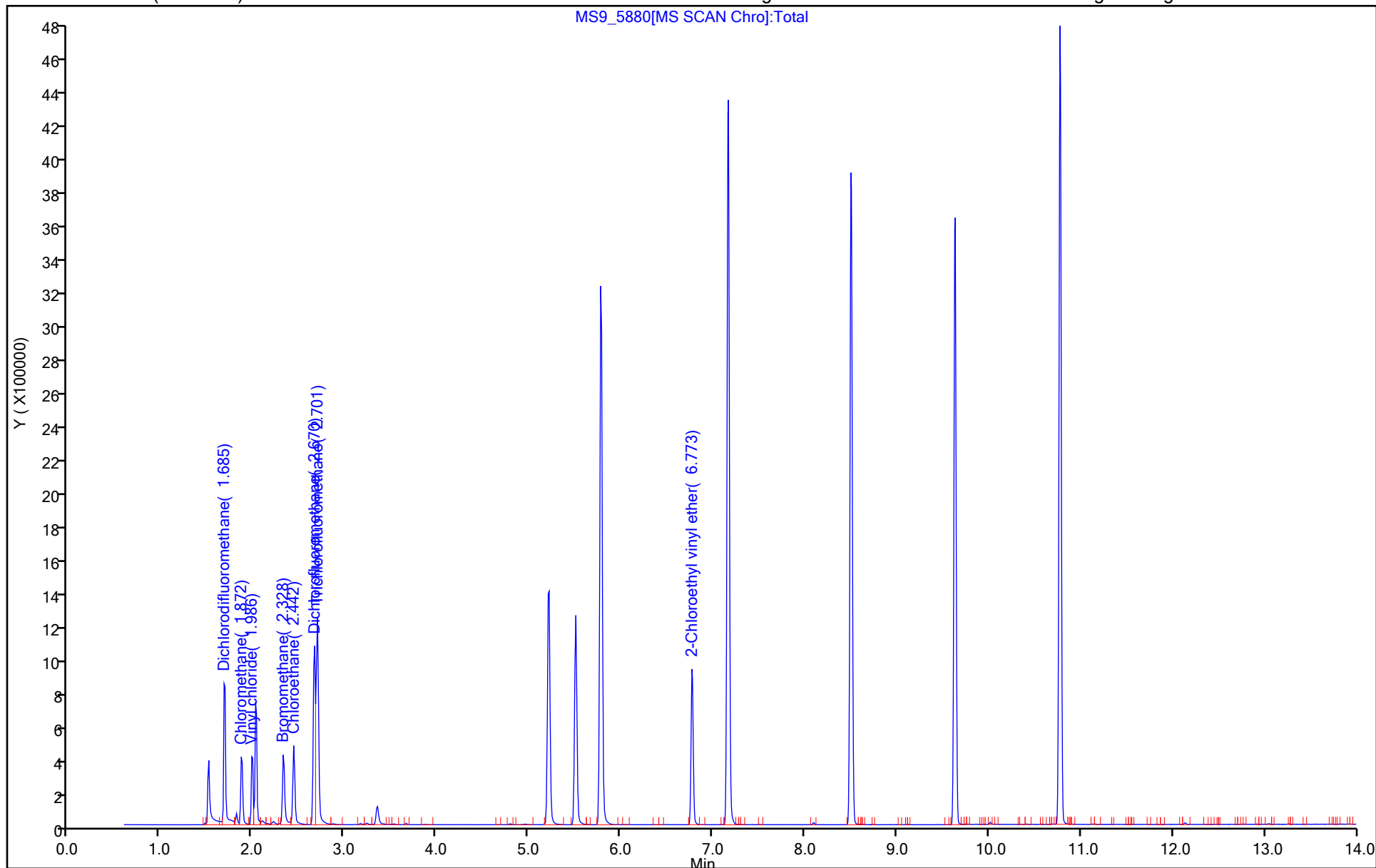
ALS Bottle#: 4

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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.: 280-150290-1
 SDG No.: _____
 Lab Sample ID: CCV 280-542401/14 Calibration Date: 07/07/2021 07:28
 Instrument ID: VMS_MS9 Calib Start Date: 06/30/2021 17:47
 GC Column: RXI-624SilMS ID: 0.25 (mm) Calib End Date: 06/30/2021 20:26
 Lab File ID: MS9_5880.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.2397		54.0	50.0	8.0	50.0
Chloromethane	Ave	0.1103	0.1255	0.1000	56.9	50.0	13.8	35.0
Vinyl chloride	Ave	0.1228	0.1267		51.6	50.0	3.2	20.0
Bromomethane	Qua		0.0895		37.0	50.0	-26.0	35.0
Chloroethane	Ave	0.1259	0.1226		48.7	50.0	-2.6	35.0
Dichlorofluoromethane	Ave	0.3612	0.3249		45.0	50.0	-10.0	50.0
Trichlorofluoromethane	Ave	0.3859	0.3419		44.3	50.0	-11.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1153	0.1330		57.7	50.0	15.3	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5880.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 07-Jul-2021 07:28:30 ALS Bottle#: 4 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ccv g
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Sublist: chrom-AQ_VMSMS9_8260*sub66
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 08:08:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2784052	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	809121	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1414929	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	809539	50.0	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	797432	50.0	56.0	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2782220	50.0	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.629	9.630	-0.001	96	1146787	50.0	46.7	
13 Dichlorodifluoromethane	85	1.685	1.686	-0.001	98	667215	50.0	54.0	
15 Chloromethane	50	1.872	1.872	0.000	97	349400	50.0	56.9	
16 Vinyl chloride	62	1.986	1.986	0.000	97	352729	50.0	51.6	
19 Bromomethane	94	2.328	2.328	0.000	93	249158	50.0	37.0	
20 Chloroethane	64	2.442	2.442	0.000	98	341449	50.0	48.7	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	904655	50.0	45.0	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	951909	50.0	44.3	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	93	370192	50.0	57.7	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00093

Amount Added: 10.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 12:09:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5880.d

Injection Date: 07-Jul-2021 07:28:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: ccv

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

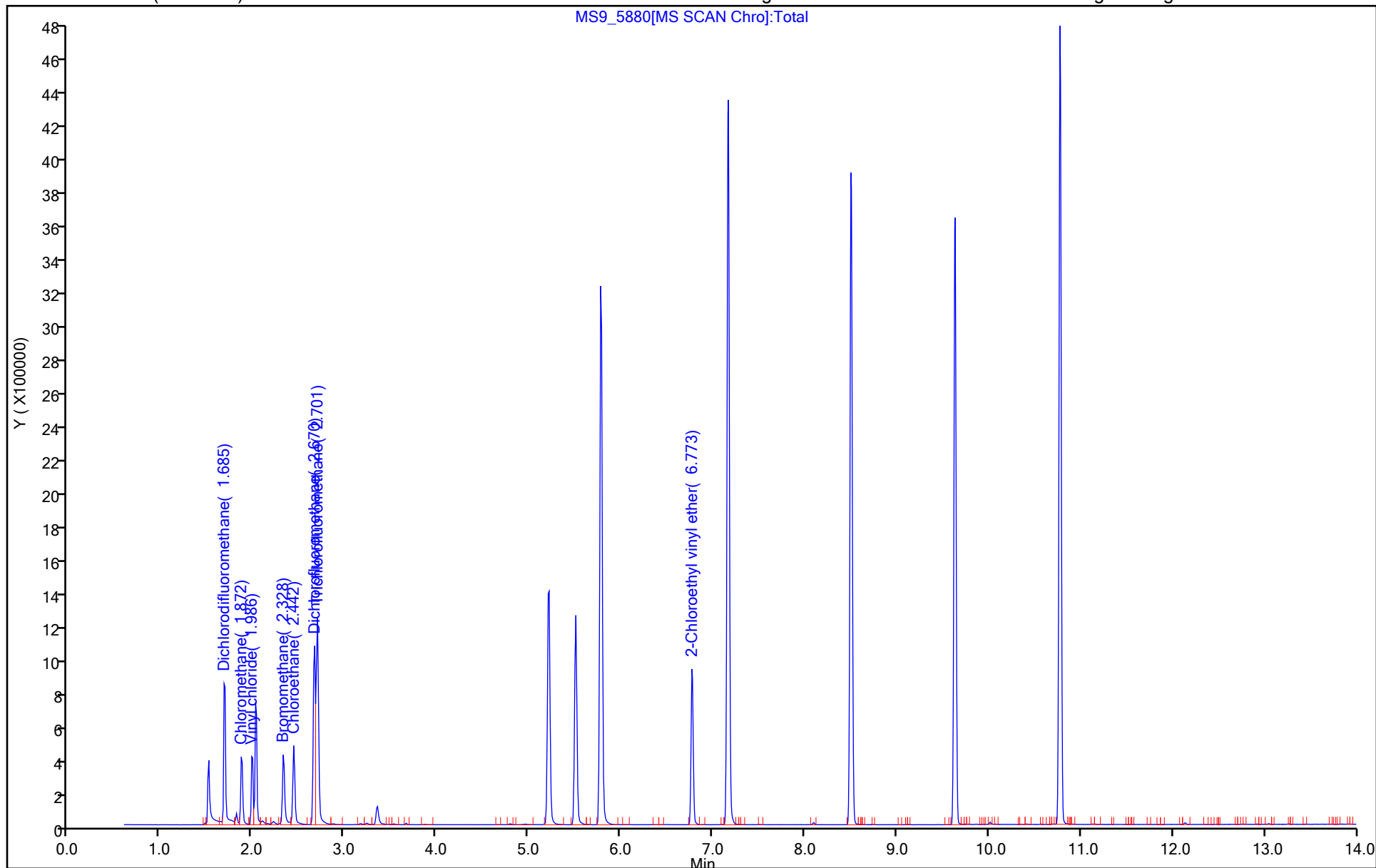
ALS Bottle#: 4

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS1\20210604-102067.b\MS1_2711.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 04-Jun-2021 09:51:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: SEIFERTJ Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 05-Jun-2021 10:10:29 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1680

First Level Reviewer: seifertj

Date: 04-Jun-2021 10:07:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 10 BFB	95	3.579	3.579	0.000	0	285505	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D

Injection Date: 04-Jun-2021 09:51:30

Instrument ID: VMS_MS1

Lims ID: BFB

Client ID:

Operator ID: SEIFERTJ

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

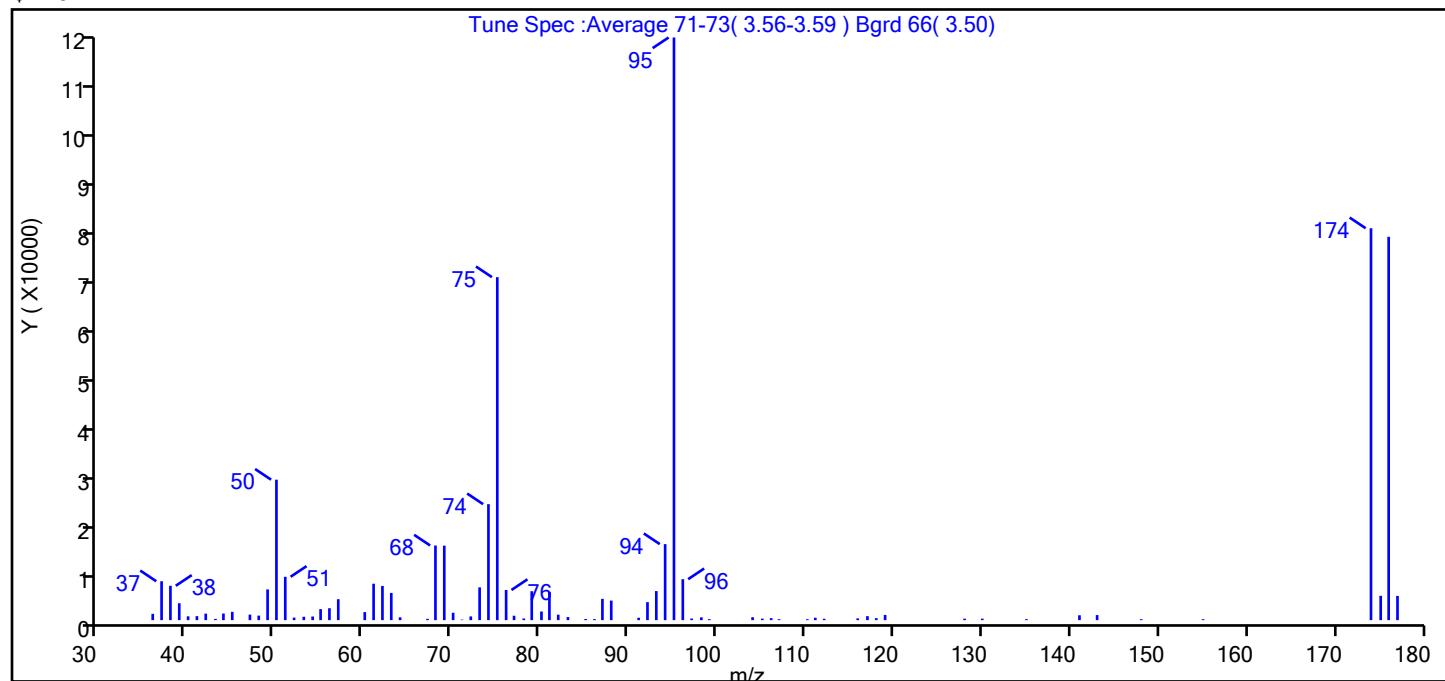
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.1
75	30 to 60% of m/z 95	58.9
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	67.3
175	5 to 9% of m/z 174	4.2 (6.2)
176	Greater than 95% but less than 101% of m/z 174	65.8 (97.8)
177	5 to 9% of m/z 176	4.2 (6.3)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D\AQ_VMS1_8260.rslt\spectra.o
Injection Date: 04-Jun-2021 09:51:30
Spectrum: Tune Spec :Average 71-73(3.56-3.59) Bgrd 66(3.50)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1192	57.00	3972	81.00	5340	110.00	177
37.00	7372	60.00	1526	82.00	1030	111.00	460
38.00	6514	61.00	6904	83.00	586	112.00	256
39.00	3207	62.00	6480	85.00	221	116.00	336
40.00	725	63.00	5163	86.00	201	117.00	755
41.00	757	64.00	539	87.00	4038	118.00	377
42.00	1236	67.00	246	88.00	3708	119.00	988
43.00	235	68.00	14151	91.00	454	128.00	278
44.00	1257	69.00	14121	92.00	3418	130.00	283
45.00	1577	70.00	1398	93.00	5513	135.00	191
47.00	1049	71.00	98	94.00	14409	141.00	929
48.00	859	72.00	707	95.00	110448	143.00	962
49.00	5820	73.00	6213	96.00	7764	148.00	180
50.00	26624	74.00	21984	97.00	308	155.00	178
51.00	8219	75.00	65016	98.00	531	174.00	74288
52.00	483	76.00	5715	99.00	187	175.00	4611
53.00	643	77.00	833	104.00	556	176.00	72664
54.00	691	78.00	315	105.00	284	177.00	4592
55.00	2093	79.00	5485	106.00	378		
56.00	2260	80.00	1640	107.00	175		

Report Date: 05-Jun-2021 10:10:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2711.D

Injection Date: 04-Jun-2021 09:51:30

Instrument ID: VMS_MS1

Operator ID: SEIFERTJ

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

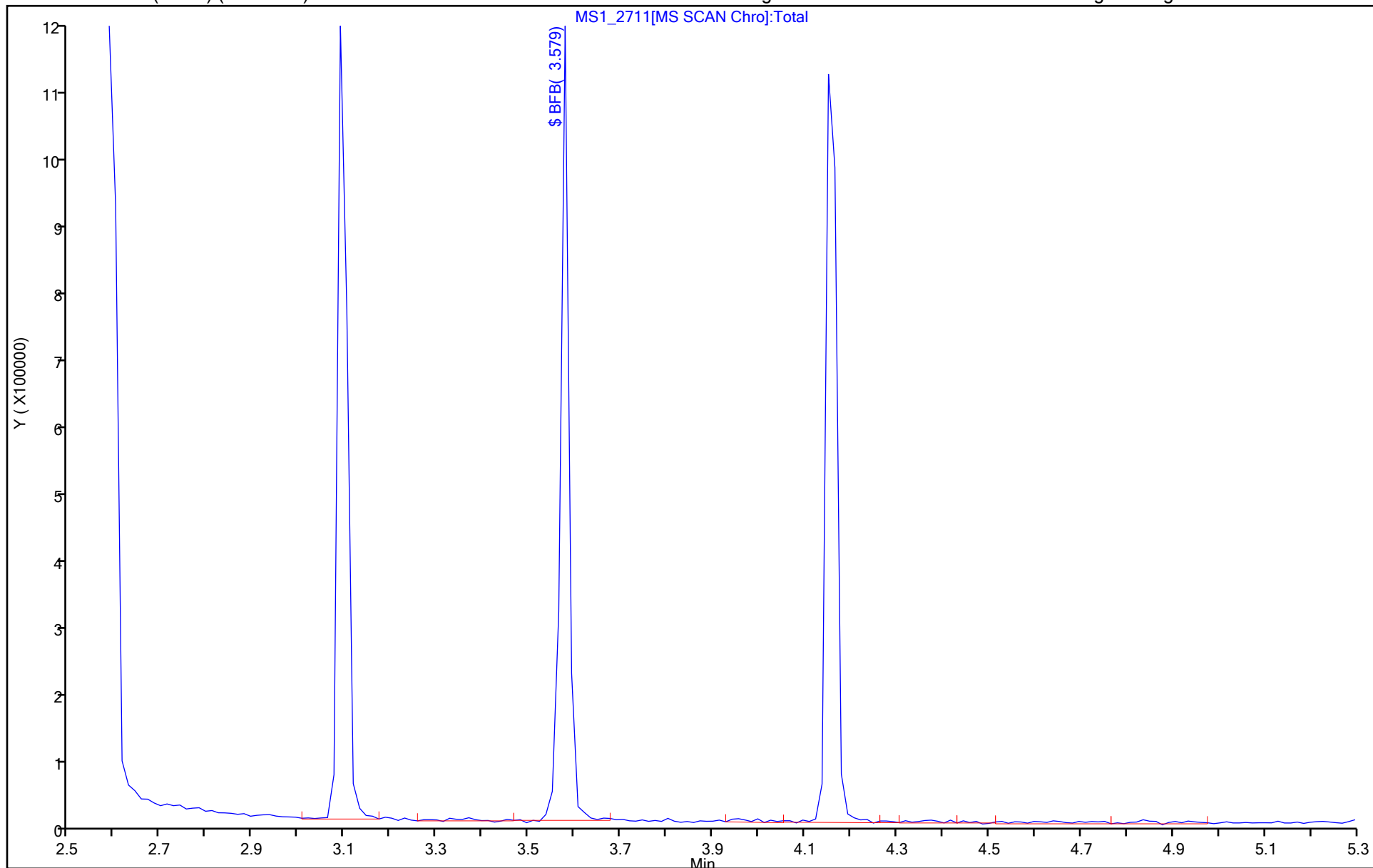
ALS Bottle#: 100

Method: AQ_VMS1_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_MS1\20210706-102962.b\MS1_4129.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Jul-2021 20:31:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: PETUNINP Instrument ID: VMS_MS1
Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2021 08:05:44 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 10 BFB	95	3.579	3.579	0.000	0	268198	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4129.D

Injection Date: 06-Jul-2021 20:31:30

Instrument ID: VMS_MS1

Lims ID: BFB

Client ID:

Operator ID: PETUNINP

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

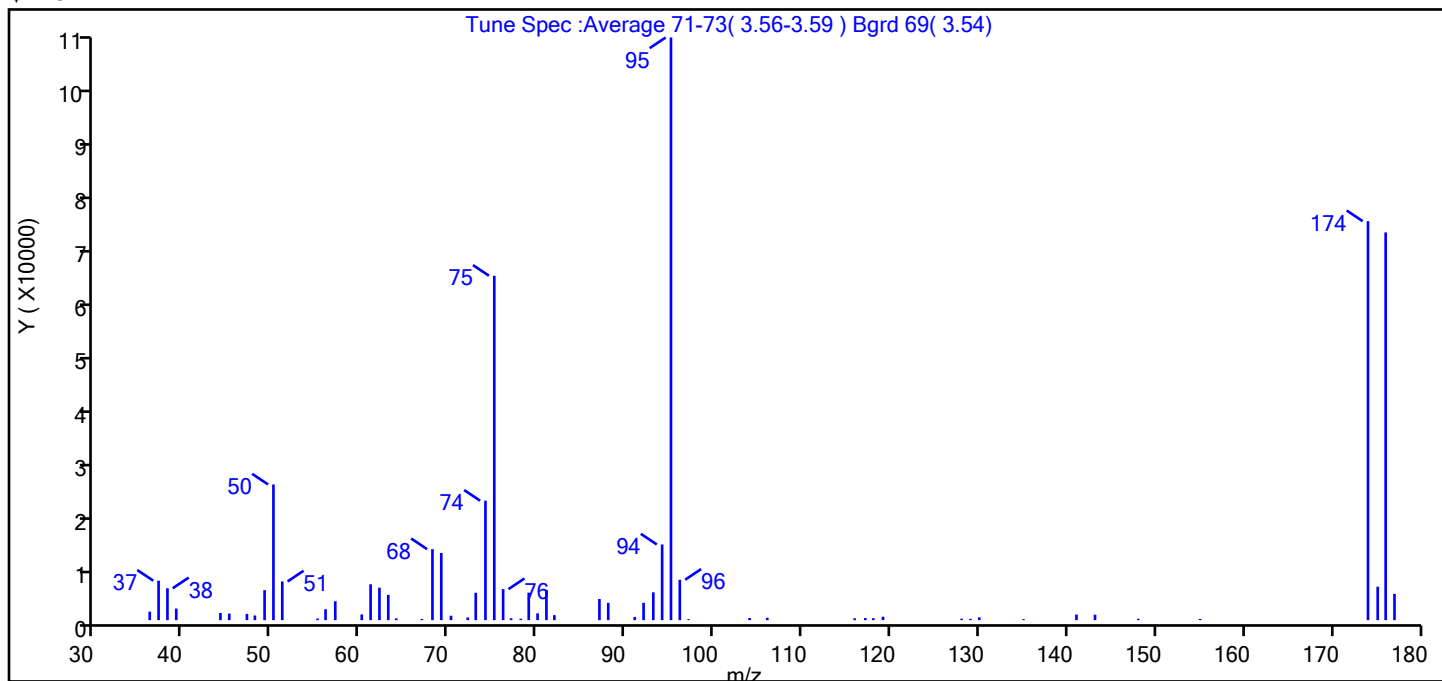
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.3
75	30 to 60% of m/z 95	59.1
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	68.5
175	5 to 9% of m/z 174	5.7 (8.4)
176	Greater than 95% but less than 101% of m/z 174	66.5 (97.2)
177	5 to 9% of m/z 176	4.5 (6.8)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4129.D\AQ_VMS1_8260.rslt\spectra.o
 Injection Date: 06-Jul-2021 20:31:30
 Spectrum: Tune Spec :Average 71-73(3.56-3.59) Bgrd 69(3.54)
 Base Peak: 95.10
 Minimum % Base Peak: 0
 Number of Points: 61

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1530	62.00	5833	81.00	5446	119.00	611
37.00	7081	63.00	4535	82.00	902	128.00	254
38.00	5730	64.00	317	87.00	3795	129.00	229
39.00	2081	67.00	208	88.00	3100	130.00	508
44.00	1285	68.00	12742	91.00	576	135.00	176
45.00	1184	69.00	12060	92.00	3114	141.00	999
47.00	1120	70.00	797	93.00	4989	143.00	975
48.00	839	72.00	494	94.00	13584	148.00	249
49.00	5378	73.00	4908	95.00	104584	155.00	209
50.00	24352	74.00	21440	96.00	7252	174.00	71616
51.00	6948	75.00	61816	97.00	167	175.00	6001
55.00	290	76.00	5569	104.00	378	176.00	69592
56.00	1960	77.00	336	106.00	427	177.00	4715
57.00	3394	78.00	256	116.00	332		
60.00	1027	79.00	4931	117.00	377		
61.00	6434	80.00	1217	118.00	339		

Report Date: 07-Jul-2021 08:05:45

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\VMS1_4129.D

Injection Date: 06-Jul-2021 20:31:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

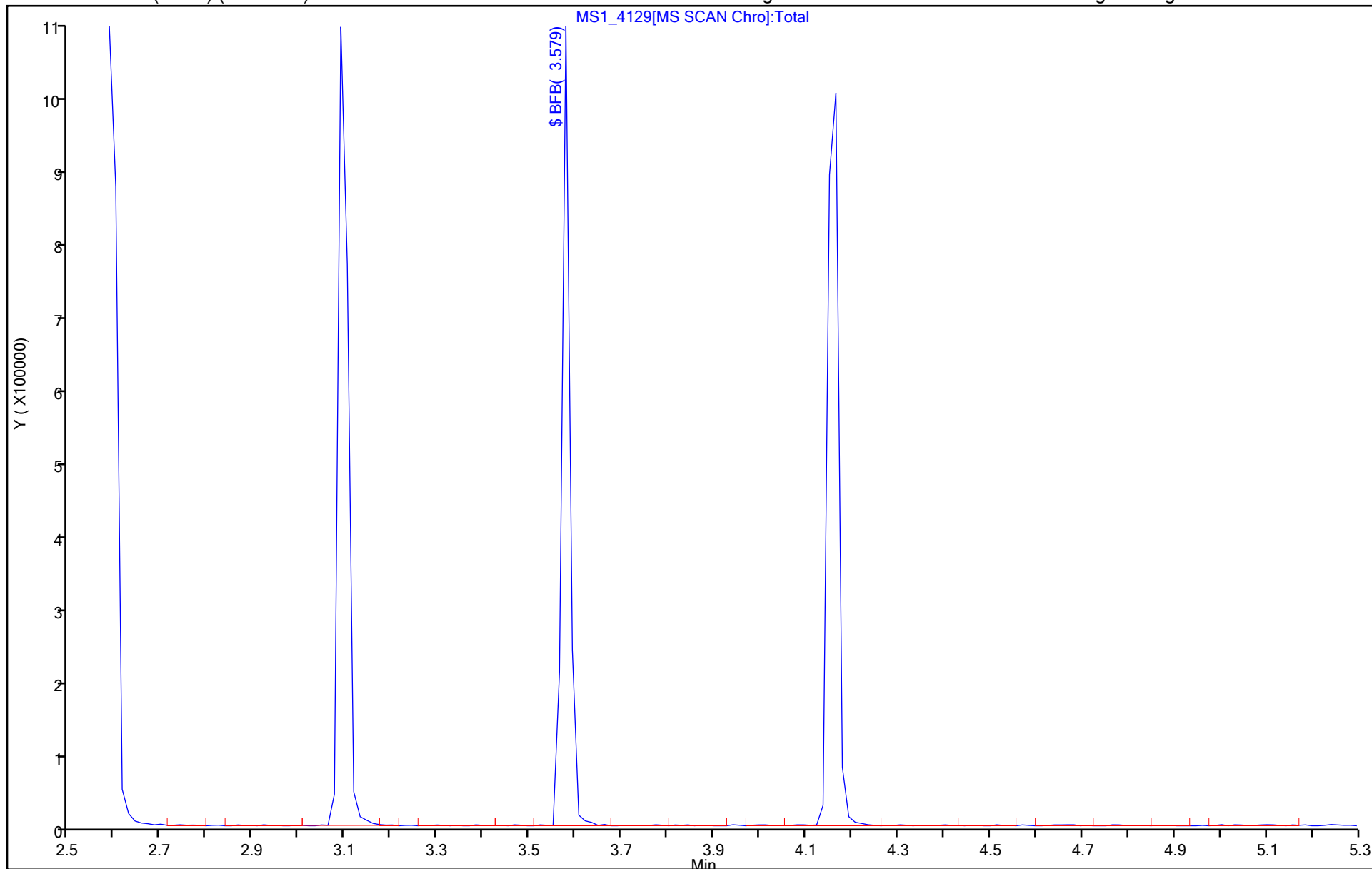
ALS Bottle#: 100

Method: AQ_VMS1_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_MS1\20210709-103023.b\MS1_4280.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 09-Jul-2021 06:39:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: bfb
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:21 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 07:49:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 10 BFB	95	3.579	3.579	0.000	0	273802	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4280.D

Injection Date: 09-Jul-2021 06:39:30

Instrument ID: VMS_MS1

Lims ID: BFB

Client ID:

Operator ID: wickhamt

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

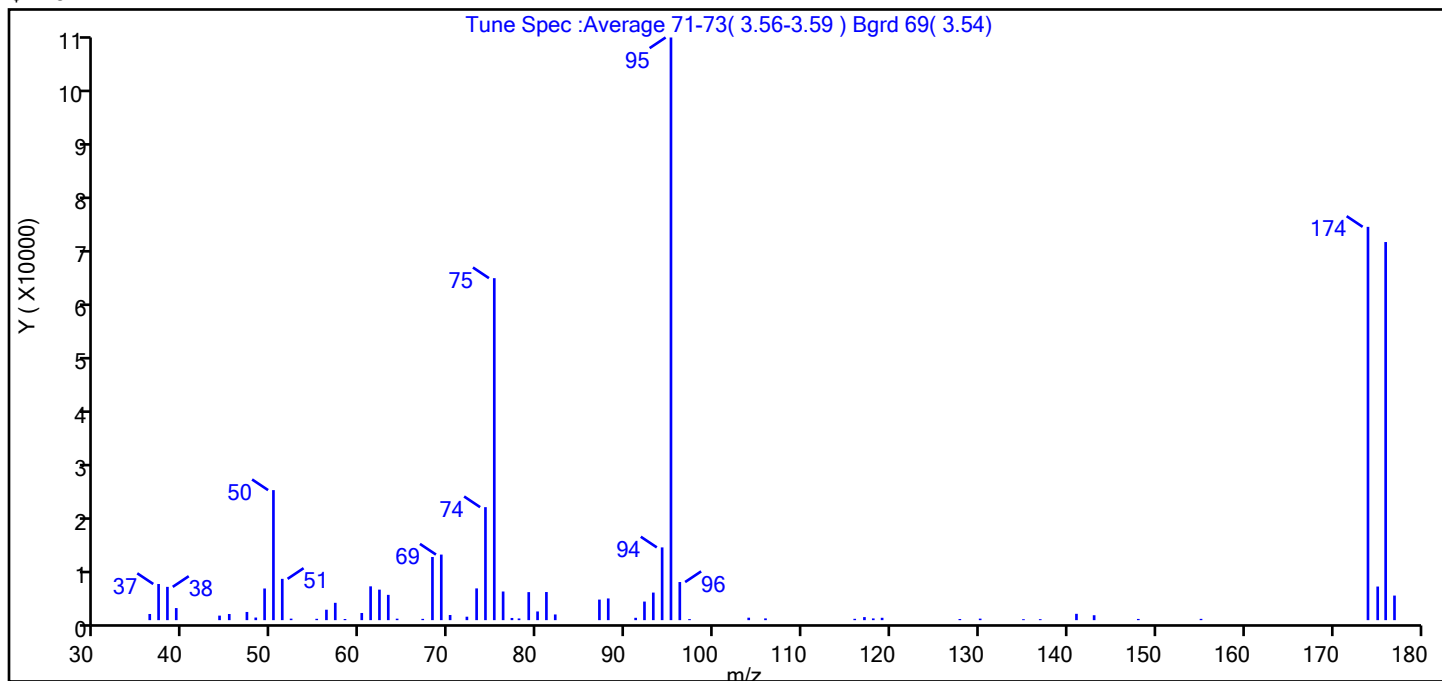
Dil. Factor: 1.0000

Method: AQ_VMS1_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.3
75	30 to 60% of m/z 95	58.7
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	67.5
175	5 to 9% of m/z 174	5.8 (8.5)
176	Greater than 95% but less than 101% of m/z 174	64.9 (96.1)
177	5 to 9% of m/z 176	4.2 (6.5)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4280.D\AQ_VMS1_8260.rslt\spectra.o
Injection Date: 09-Jul-2021 06:39:30
Spectrum: Tune Spec :Average 71-73(3.56-3.59) Bgrd 69(3.54)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1126	60.00	1308	79.00	5118	117.00	556
37.00	6605	61.00	6175	80.00	1586	118.00	313
38.00	6080	62.00	5574	81.00	5137	119.00	432
39.00	2205	63.00	4619	82.00	1040	128.00	205
44.00	826	64.00	268	87.00	3755	130.00	275
45.00	1123	67.00	234	88.00	3964	135.00	170
47.00	1496	68.00	11535	91.00	429	137.00	176
48.00	475	69.00	11977	92.00	3393	141.00	1156
49.00	5782	70.00	938	93.00	5035	143.00	898
50.00	23752	72.00	629	94.00	13289	148.00	220
51.00	7544	73.00	5799	95.00	106440	155.00	236
52.00	275	74.00	20640	96.00	6960	174.00	71848
55.00	244	75.00	62472	97.00	189	175.00	6140
56.00	1906	76.00	5232	104.00	448	176.00	69072
57.00	3166	77.00	399	106.00	319	177.00	4489
58.00	206	78.00	306	116.00	244		

Report Date: 09-Jul-2021 12:10:21

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4280.D

Injection Date: 09-Jul-2021 06:39:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

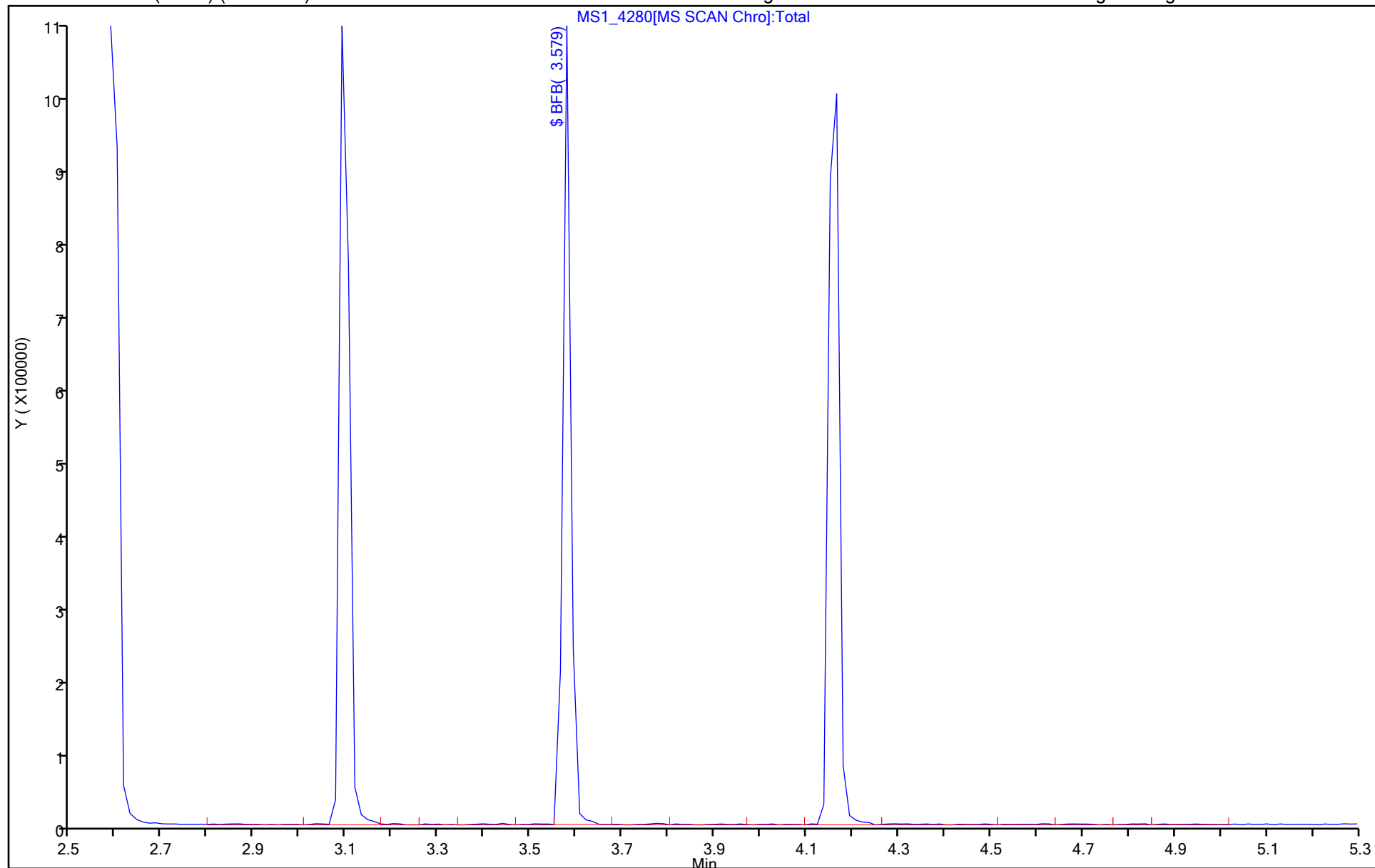
ALS Bottle#: 100

Method: AQ_VMS1_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_MS9\20210629-102775.b\MS9_5635.d
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 29-Jun-2021 10:26:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 10:23:55 Calib Date: 29-Jun-2021 13:47:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5645.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 29-Jun-2021 10:33:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 11 BFB	95	3.501	3.501	0.000	88	1376862	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5635.d

Injection Date: 29-Jun-2021 10:26:30

Instrument ID: VMS_MS9

Lims ID: BFB

Client ID:

Operator ID: wickhamt

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

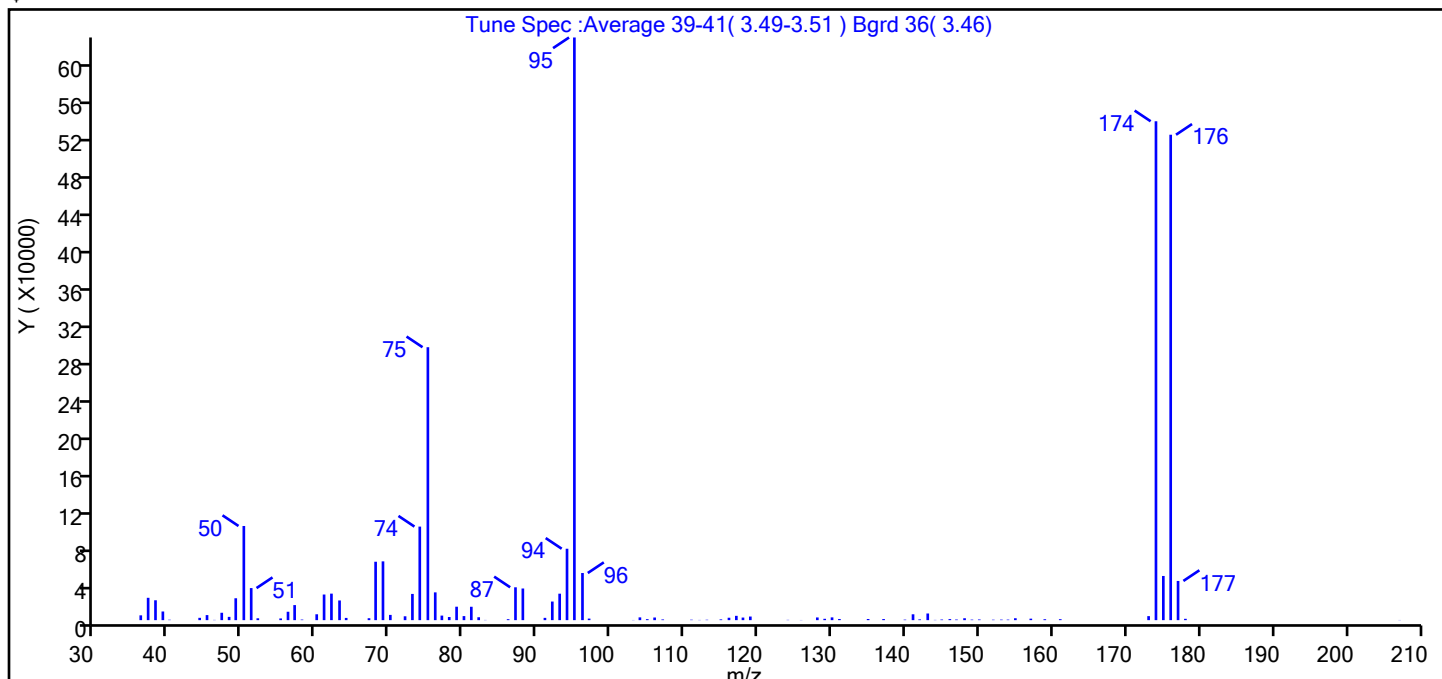
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	46.8
96	5 to 9% of m/z 95	8.1
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	85.6
175	5 to 9% of m/z 174	7.6 (8.9)
176	Greater than 95% but less than 101% of m/z 174	83.3 (97.3)
177	5 to 9% of m/z 176	6.7 (8.1)

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\MS9_5635.d\AQ_VMSMS9_8260.rslt\spect
Injection Date: 29-Jun-2021 10:26:30
Spectrum: Tune Spec :Average 39-41(3.49-3.51) Bgrd 36(3.46)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5107	68.00	62152	97.00	1651	142.00	795
37.00	23768	69.00	62552	103.00	178	143.00	7078
38.00	21144	70.00	5582	104.00	2950	144.00	256
39.00	9211	72.00	4105	105.00	1035	145.00	652
40.00	428	73.00	27904	106.00	2800	146.00	1115
44.00	2464	74.00	99544	107.00	744	147.00	655
45.00	5367	75.00	290432	111.00	474	148.00	2027
46.00	262	76.00	29552	112.00	221	149.00	559
47.00	7852	77.00	4843	113.00	427	150.00	708
48.00	3476	78.00	3317	115.00	803	152.00	469
49.00	23288	79.00	14304	116.00	2559	153.00	565
50.00	100192	80.00	4305	117.00	4580	154.00	571
51.00	34128	81.00	14241	118.00	2756	155.00	2031
52.00	1967	82.00	3083	119.00	3841	157.00	1575
55.00	1806	83.00	220	124.00	301	159.00	969
56.00	8926	86.00	1012	126.00	170	161.00	1008
57.00	16017	87.00	34952	128.00	2865	173.00	4277
58.00	599	88.00	33672	129.00	1432	174.00	530880
60.00	6246	91.00	2433	130.00	2932	175.00	47008
61.00	27272	92.00	19792	131.00	1194	176.00	516544
62.00	28216	93.00	28160	135.00	1204	177.00	41712
63.00	20944	94.00	75992	137.00	1148	178.00	1423
64.00	2370	95.00	620032	140.00	533	207.00	181
67.00	2046	96.00	50152	141.00	6231		

Report Date: 30-Jun-2021 10:23:56

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210629-102775.b\VMS9_5635.d

Injection Date: 29-Jun-2021 10:26:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

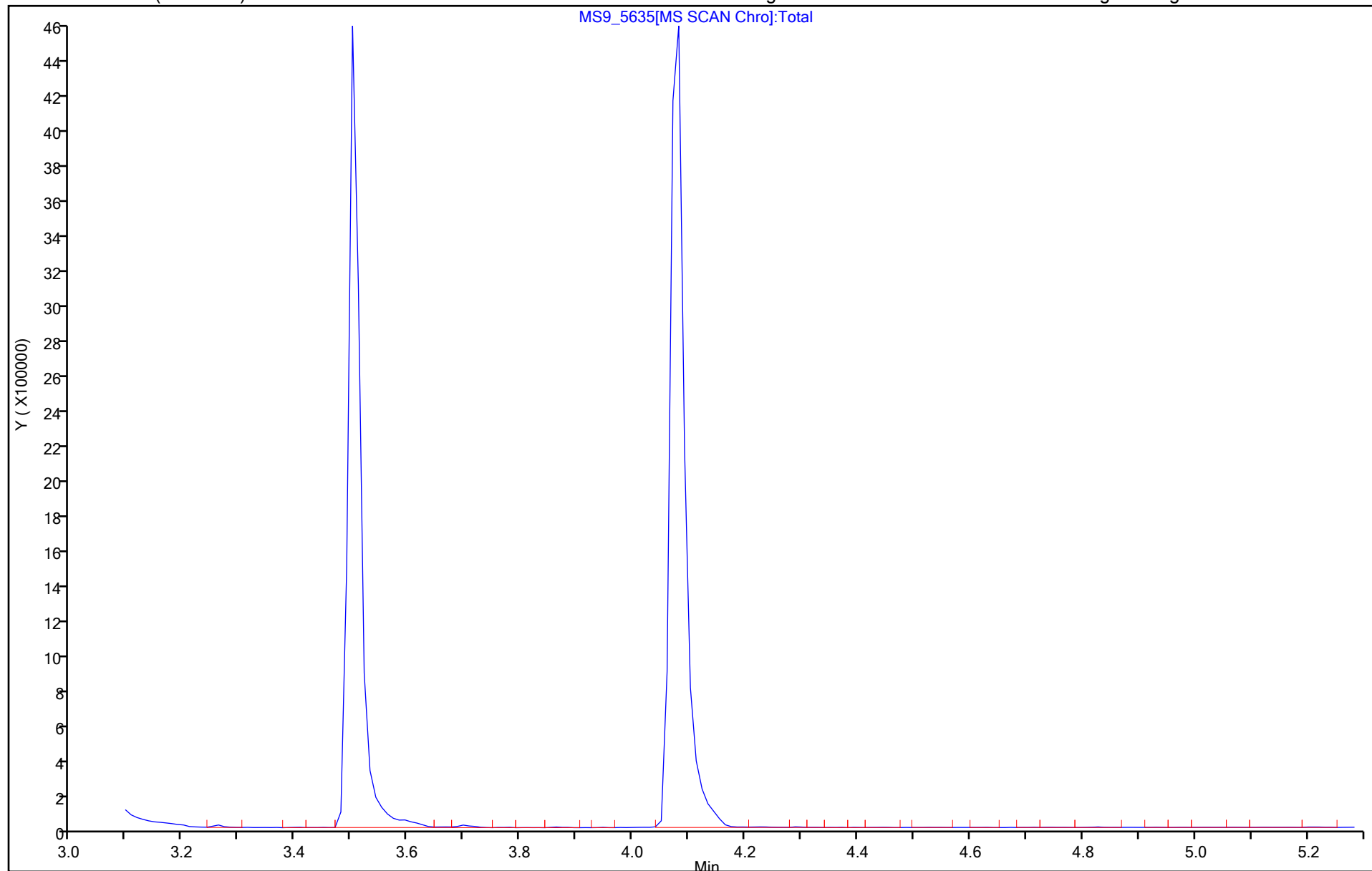
ALS Bottle#: 100

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102814.b\MS9_5682.d
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 30-Jun-2021 06:05:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 30-Jun-2021 12:55:04 Calib Date: 30-Jun-2021 11:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5694.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1644

First Level Reviewer: wickhamt

Date: 30-Jun-2021 07:51:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 11 BFB	95	3.502	3.502	0.000	90	1000527	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5682.d

Injection Date: 30-Jun-2021 06:05:30

Instrument ID: VMS_MS9

Lims ID: BFB

Client ID:

Operator ID: wickhamt

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

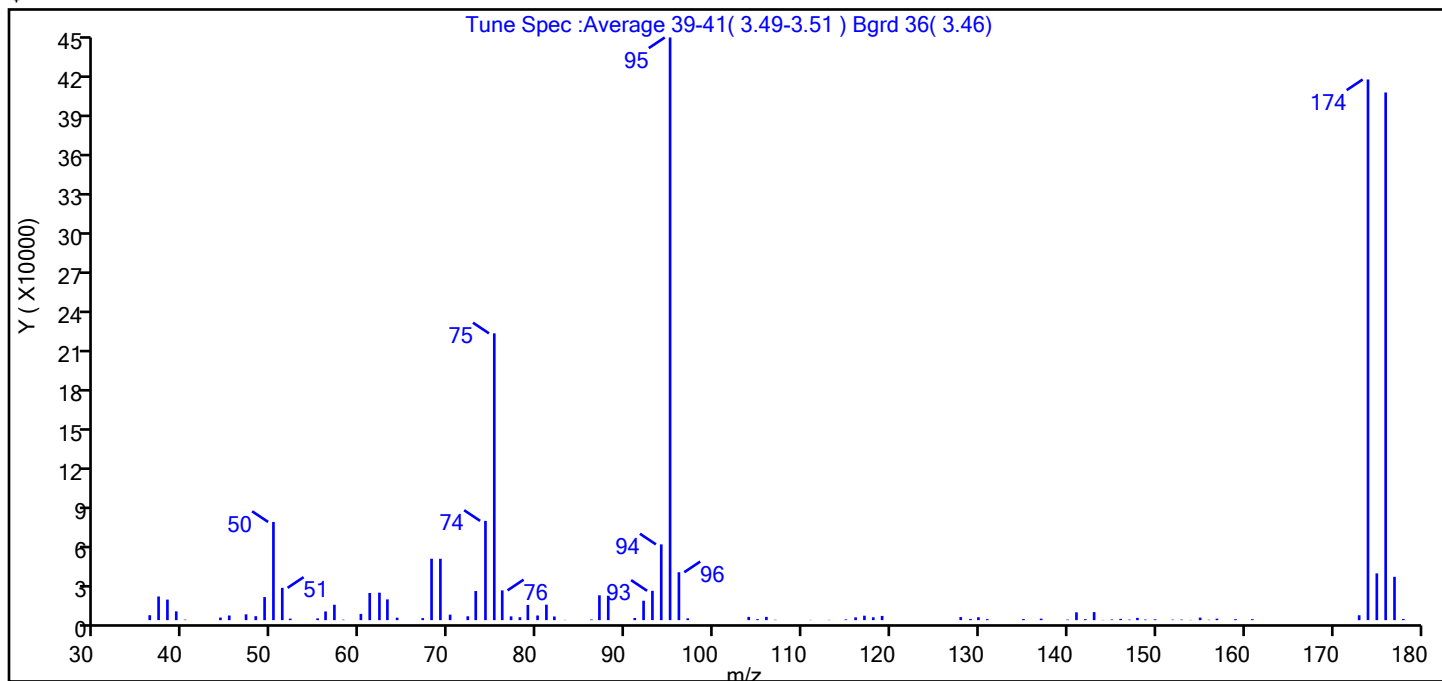
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 11 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	49.2
96	5 to 9% of m/z 95	8.2
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	92.8
175	5 to 9% of m/z 174	8.0 (8.6)
176	Greater than 95% but less than 101% of m/z 174	90.6 (97.6)
177	5 to 9% of m/z 176	7.4 (8.2)

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5682.d\AQ_VMSMS9_8260.rslt\spect
Injection Date: 30-Jun-2021 06:05:30
Spectrum: Tune Spec :Average 39-41(3.49-3.51) Bgrd 36(3.46)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3793	68.00	47176	96.00	36800	144.00	170
37.00	18176	69.00	47120	97.00	1385	145.00	503
38.00	15790	70.00	4212	104.00	2487	146.00	995
39.00	6743	72.00	2979	105.00	752	147.00	394
40.00	378	73.00	22352	106.00	2509	148.00	1741
44.00	1981	74.00	76224	107.00	288	149.00	464
45.00	3576	75.00	220224	111.00	170	150.00	661
47.00	4464	76.00	22864	113.00	230	152.00	372
48.00	3040	77.00	2901	115.00	586	153.00	423
49.00	17728	78.00	2233	116.00	2143	154.00	174
50.00	75408	79.00	11660	117.00	3419	155.00	1939
51.00	24800	80.00	3579	118.00	2218	156.00	274
52.00	1178	81.00	11873	119.00	3231	157.00	1136
55.00	1357	82.00	2806	128.00	2350	159.00	769
56.00	6702	83.00	180	129.00	938	161.00	747
57.00	11811	86.00	513	130.00	2251	173.00	3749
58.00	326	87.00	19064	131.00	815	174.00	415168
60.00	4776	88.00	18752	135.00	858	175.00	35904
61.00	20840	91.00	1682	137.00	1146	176.00	405184
62.00	21104	92.00	14914	140.00	441	177.00	33264
63.00	15940	93.00	22528	141.00	6035	178.00	885
64.00	1891	94.00	58176	142.00	779		
67.00	1551	95.00	447424	143.00	6168		

Report Date: 30-Jun-2021 12:55:04

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b\MS9_5682.d

Injection Date: 30-Jun-2021 06:05:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

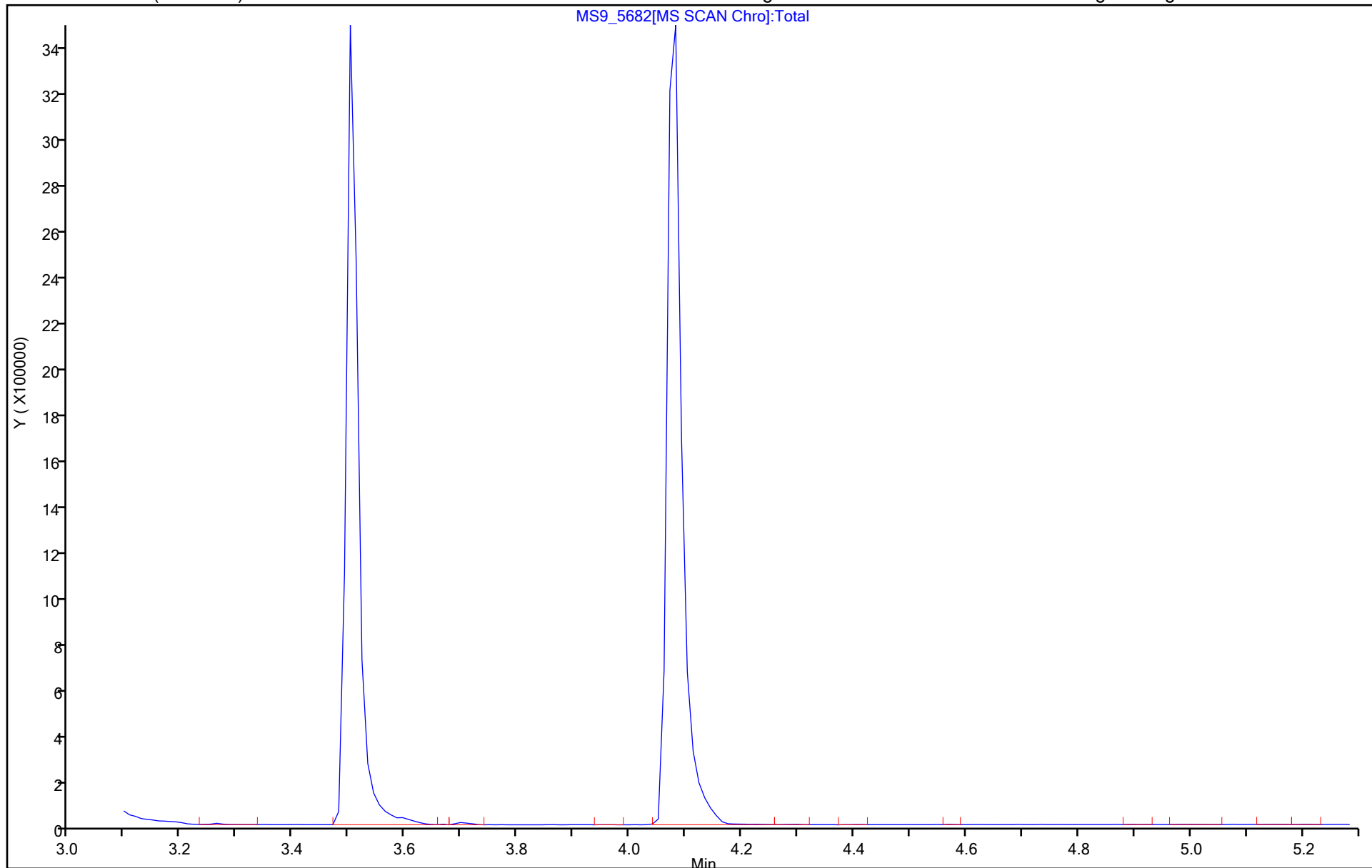
ALS Bottle#: 100

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210630-102839.b\MS9_5703.d
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 30-Jun-2021 17:00:30 ALS Bottle#: 100 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Operator ID: sumichrastr Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 01-Jul-2021 05:49:35 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1642

First Level Reviewer: sumichrastr

Date: 30-Jun-2021 19:10:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 11 BFB	95	3.501	3.501	0.000	89	834920	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5703.d

Injection Date: 30-Jun-2021 17:00:30

Instrument ID: VMS_MS9

Lims ID: BFB

Client ID:

Operator ID: sumichrastr

ALS Bottle#: 100

Worklist Smp#: 1

Injection Vol: 2.0 uL

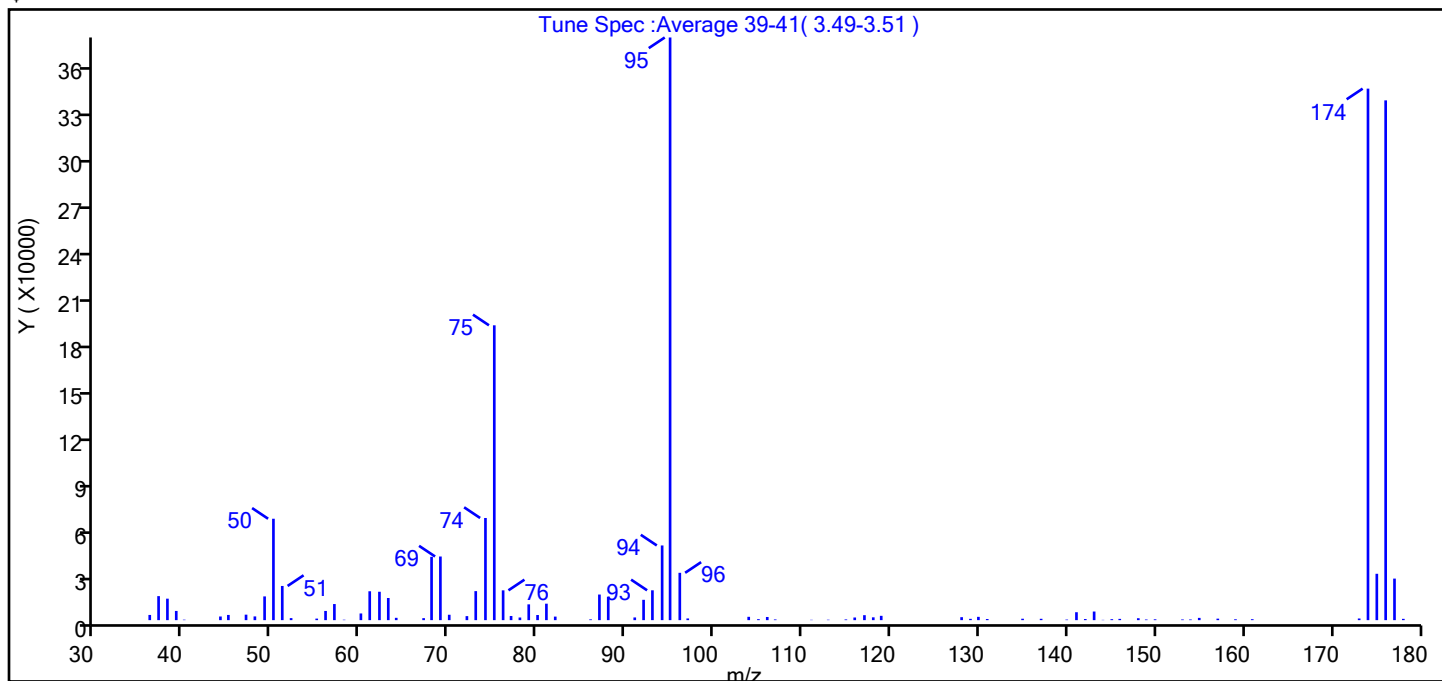
Dil. Factor: 1.0000

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.4
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	8.1
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	91.2
175	5 to 9% of m/z 174	8.0 (8.7)
176	Greater than 95% but less than 101% of m/z 174	89.2 (97.8)
177	5 to 9% of m/z 176	7.1 (8.0)

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5703.d\AQ_VMSMS9_8260.rslt\spect
Injection Date: 30-Jun-2021 17:00:30
Spectrum: Tune Spec :Average 39-41(3.49-3.51)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3380	67.00	1294	95.00	378304	142.00	715
37.00	15593	68.00	41120	96.00	30736	143.00	5595
38.00	13940	69.00	41320	97.00	1099	144.00	178
39.00	5973	70.00	3502	104.00	2160	145.00	623
40.00	301	72.00	2612	105.00	642	146.00	821
44.00	2372	73.00	18840	106.00	2051	148.00	1242
45.00	3380	74.00	66328	107.00	456	149.00	419
47.00	3558	75.00	191424	111.00	213	150.00	543
48.00	2417	76.00	19352	113.00	279	153.00	441
49.00	15412	77.00	2697	115.00	464	154.00	428
50.00	65840	78.00	1711	116.00	1716	155.00	1467
51.00	22192	79.00	10249	117.00	3226	157.00	961
52.00	1319	80.00	3330	118.00	1831	159.00	556
55.00	998	81.00	10684	119.00	2802	161.00	609
56.00	5970	82.00	2301	128.00	1929	173.00	1070
57.00	10450	86.00	506	129.00	851	174.00	345088
58.00	272	87.00	16624	130.00	2141	175.00	30096
60.00	4340	88.00	15121	131.00	728	176.00	337472
61.00	18752	91.00	1749	135.00	921	177.00	26976
62.00	18432	92.00	13202	137.00	879	178.00	844
63.00	14377	93.00	19376	140.00	367		
64.00	1509	94.00	48488	141.00	5144		

Report Date: 01-Jul-2021 05:49:36

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5703.d

Injection Date: 30-Jun-2021 17:00:30

Instrument ID: VMS_MS9

Operator ID: sumichrastr

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

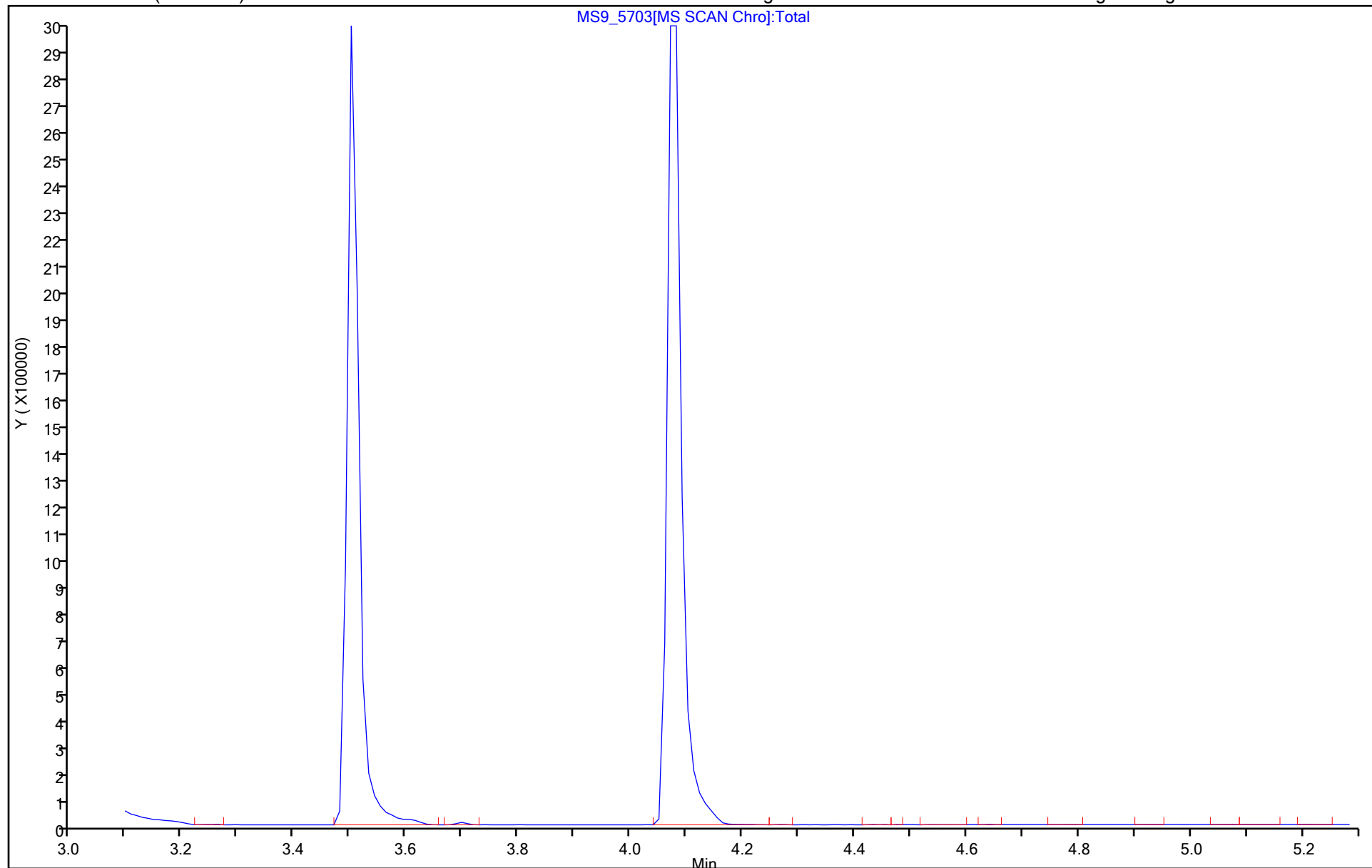
ALS Bottle#: 100

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\MS9_5878B.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 07-Jul-2021 06:43:30 ALS Bottle#: 2 Worklist Smp#: 1
 Injection Vol: 2.0 uL Dil. Factor: 1.0000
 Sample Info: bfb
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:44 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 19:11:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 11 BFB	95	9.630	9.630	0.000	0	1152415	NR	NR	a

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

mv-Cent BFB_00003

Amount Added: 5.00

Units: uL

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878B.D

Injection Date: 07-Jul-2021 06:43:30

Instrument ID: VMS_MS9

Lims ID: BFB

Client ID:

Operator ID: wickhamt

ALS Bottle#:

2

Worklist Smp#:

1

Injection Vol: 2.0 uL

Dil. Factor:

1.0000

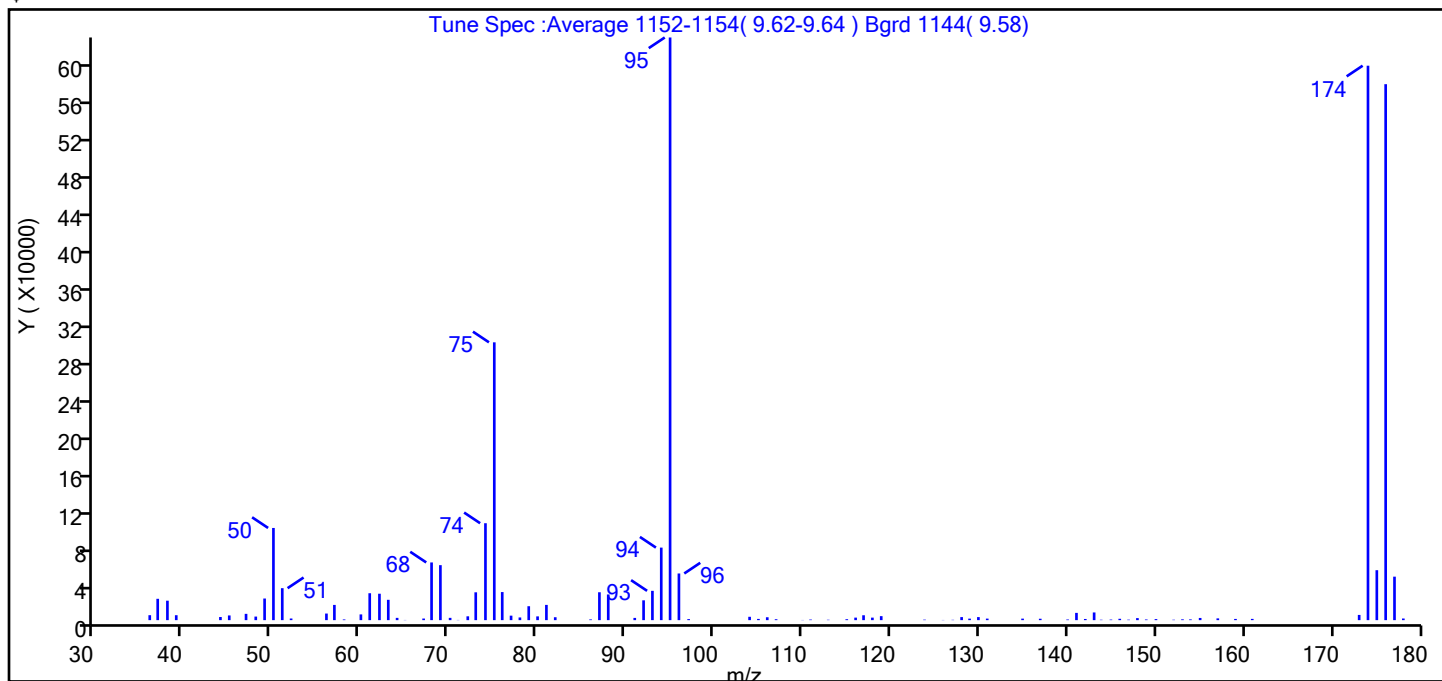
Method: AQ_VMSMS9_8260

Limit Group:

MSV - 8260B Water and Solid

Tune Method: BFB Method 8260

\$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.8
75	30 to 60% of m/z 95	47.7
96	5 to 9% of m/z 95	8.0
173	Less than 2% of m/z 174	0.9 (0.9)
174	50 to 120% of m/z 95	95.2
175	5 to 9% of m/z 174	8.6 (9.0)
176	Greater than 95% but less than 101% of m/z 174	92.0 (96.7)
177	5 to 9% of m/z 176	7.5 (8.1)

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878B.D\AQ_VMSMS9_8260.rslt\spe
Injection Date: 07-Jul-2021 06:43:30
Spectrum: Tune Spec :Average 1152-1154(9.62-9.64) Bgrd 1144(9.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5334	69.00	59216	97.00	1116	141.00	7818
37.00	22976	70.00	2467	104.00	3611	142.00	1258
38.00	20944	71.00	208	105.00	1327	143.00	8283
39.00	5313	72.00	4131	106.00	3114	144.00	444
44.00	3378	73.00	29976	107.00	980	145.00	619
45.00	5058	74.00	104384	110.00	190	146.00	1459
47.00	6778	75.00	299200	111.00	646	147.00	517
48.00	3846	76.00	30240	113.00	429	148.00	2193
49.00	23288	77.00	4834	115.00	1009	149.00	728
50.00	99280	78.00	2894	116.00	2716	150.00	1124
51.00	34424	79.00	14999	117.00	5257	152.00	446
52.00	1769	80.00	4052	118.00	2715	153.00	876
56.00	7105	81.00	16416	119.00	4302	154.00	805
57.00	16400	82.00	3134	124.00	536	155.00	2358
58.00	757	86.00	791	126.00	195	157.00	1891
60.00	6177	87.00	30032	127.00	351	159.00	1309
61.00	28984	88.00	27672	128.00	3279	161.00	1352
62.00	28456	91.00	2414	129.00	1634	173.00	5624
63.00	21904	92.00	21344	130.00	3290	174.00	597120
64.00	2446	93.00	31568	131.00	1648	175.00	53792
65.00	203	94.00	78136	135.00	1639	176.00	577216
67.00	1730	95.00	627520	137.00	1509	177.00	46832
68.00	62144	96.00	50256	140.00	700	178.00	1760

Eurofins TestAmerica, Denver

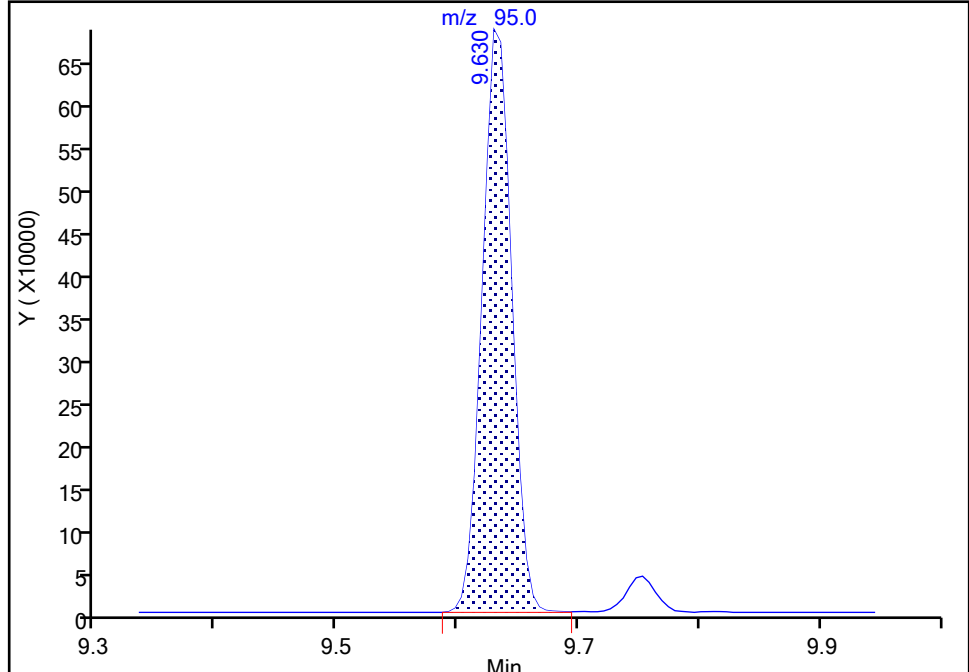
Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878B.D
Injection Date: 07-Jul-2021 06:43:30 Instrument ID: VMS_MS9
Lims ID: BFB
Client ID:
Operator ID: wickhamt ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector: MS SCAN

\$ 11 BFB, CAS: 460-00-4

Signal: 1

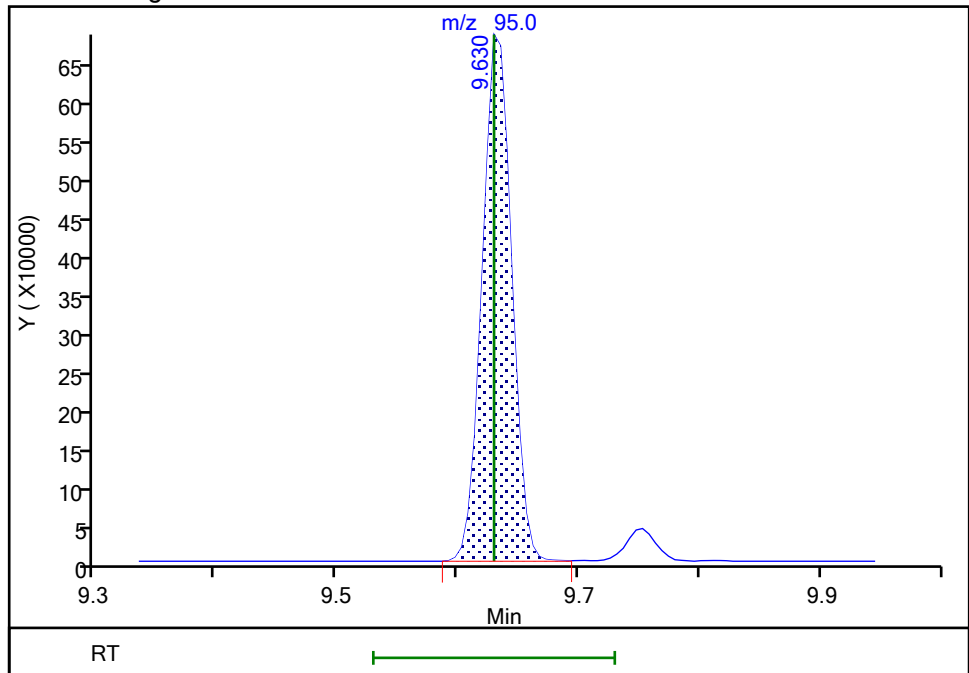
RT: 9.63
Area: 1152415
Amount: 0
Amount Units: ug/l

Processing Integration Results



RT: 9.63
Area: 1152415
Amount: 0
Amount Units: ug/l

Manual Integration Results



Reviewer: petuninp, 07-Jul-2021 19:10:58

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Report Date: 07-Jul-2021 19:11:45

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5878B.D

Injection Date: 07-Jul-2021 06:43:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 2.0 uL

Dil. Factor: 1.0000

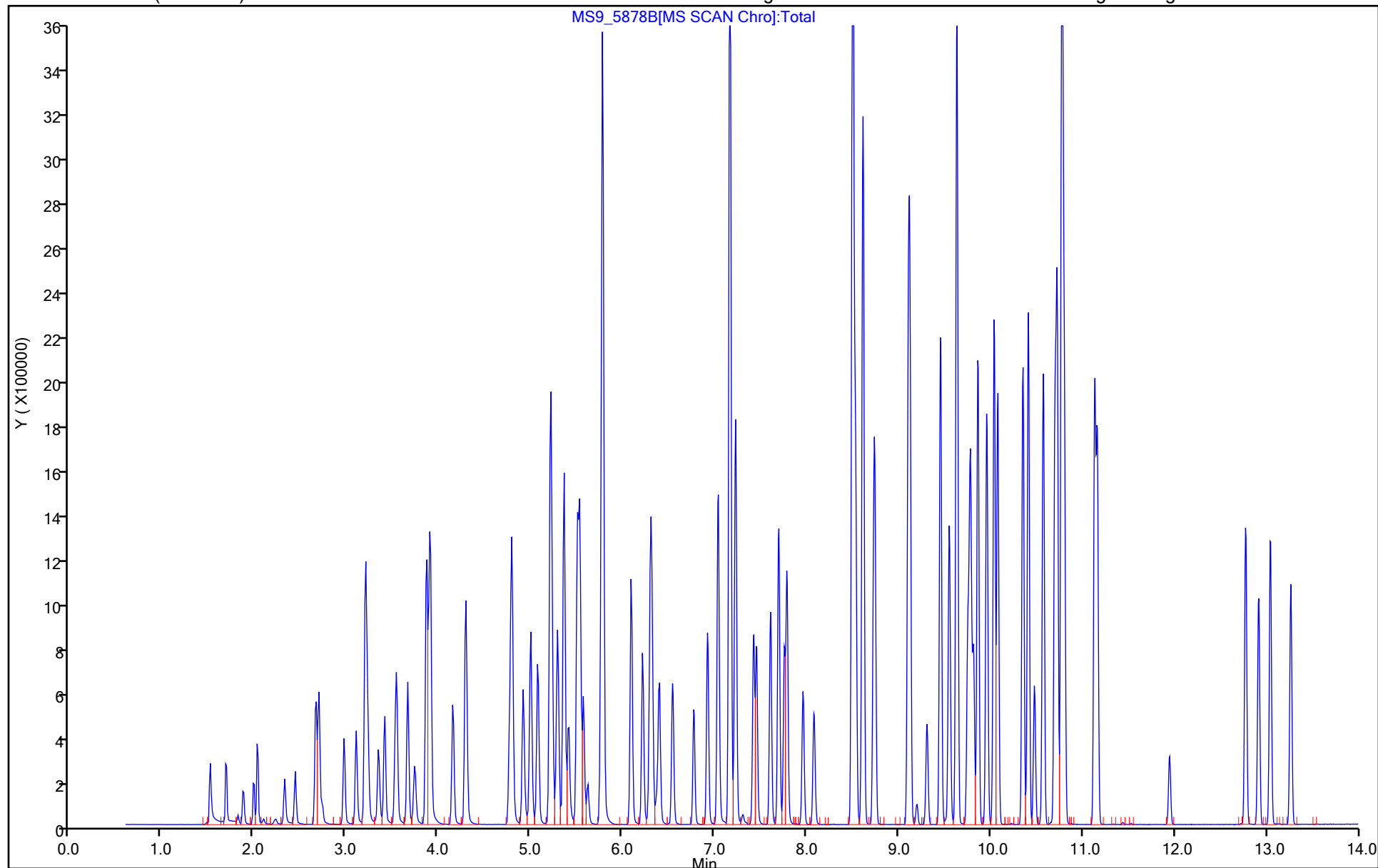
ALS Bottle#: 2

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-542394/9
 Matrix: Water Lab File ID: MS1_4139.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 00:34
 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.: 542394 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-542394/9
 Matrix: Water Lab File ID: MS1_4139.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 00:34
 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.: 542394 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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4139.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Jul-2021 00:34:30 ALS Bottle#: 10 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: petuninp

Date: 07-Jul-2021 01:12:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	735791	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	165412	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	273102	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	190557	50.0	48.9	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	98	250494	50.0	47.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	686645	50.0	47.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	282113	50.0	47.6	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95		3.579					ND	
11 Dichlorodifluoromethane	85		1.705					ND	
12 Chloromethane	50		1.914					ND	
13 Vinyl chloride	62		2.012					ND	
14 Ethylene oxide	43		2.319					ND	
15 Bromomethane	94		2.361					ND	
16 Chloroethane	64		2.473					ND	
17 Dichlorofluoromethane	67		2.696					ND	
18 Trichlorofluoromethane	101		2.724					ND	
19 Ethanol	45		2.906					ND	
20 Ethyl ether	59		3.003					ND	
21 Propene oxide	58		3.059					ND	
22 Acrolein	56		3.143					ND	
23 1,1-Dichloroethene	96		3.241					ND	
24 112TCTFE	151		3.255					ND	
25 Acetone	43		3.269					ND	
26 Iodomethane	142		3.394					ND	
27 Isopropyl alcohol	45		3.409					ND	
28 Carbon disulfide	76		3.464					ND	
29 Acetonitrile	41		3.534					ND	
30 Methyl acetate	43		3.576					ND	
31 3-Chloro-1-propene	41		3.590					ND	
67 n-Butanol	56		3.597					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Methylene Chloride	84		3.716					ND	
33 2-Methyl-2-propanol	59		3.785					ND	
34 Acrylonitrile	53		3.911					ND	
35 Methyl tert-butyl ether	73		3.939					ND	
36 trans-1,2-Dichloroethene	96		3.953					ND	
37 Hexane	57		4.204					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
40 1,1-Dichloroethane	63		4.344					ND	
39 Vinyl acetate	43		4.344					ND	
41 Isopropyl ether	87		4.372					ND	
42 2-Chloro-1,3-butadiene	53		4.414					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.679					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.819					ND	
48 cis-1,2-Dichloroethene	96		4.847					ND	
47 Ethyl acetate	43		4.847					ND	
49 2,2-Dichloropropane	77		4.861					ND	
50 Propionitrile	54		4.875					ND	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41		5.015					ND	
53 Chlorobromomethane	128		5.056					ND	
54 Tetrahydrofuran	42		5.056					ND	
55 Chloroform	83		5.140					ND	
56 1,1,1-Trichloroethane	97		5.294					ND	
57 Cyclohexane	56		5.350					ND	
58 1,1-Dichloropropene	75		5.420					ND	
59 Carbon tetrachloride	117		5.420					ND	
60 Isobutyl alcohol	41		5.461					ND	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78		5.587					ND	
64 1,2-Dichloroethane	62		5.629					ND	
65 Tert-amyl methyl ether	73		5.685					ND	
66 n-Heptane	43		5.825					ND	
68 Trichloroethene	95		6.160					ND	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55		6.369					ND	
71 1,2-Dichloropropane	63		6.383					ND	
72 Methyl methacrylate	100		6.397					ND	
73 1,4-Dioxane	88		6.425					ND	
74 Dibromomethane	93		6.467					ND	
75 Dichlorobromomethane	83		6.609					ND	
76 2-Nitropropane	41		6.788					ND	
77 2-Chloroethyl vinyl ether	63		6.838					ND	
78 cis-1,3-Dichloropropene	75		6.988					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102					ND	
80 2,2-Dimethylpentane	57		7.251					ND	
81 2,4-Dimethylpentane	43		7.293					ND	
82 Toluene	91		7.295					ND	
84 trans-1,3-Dichloropropene	75		7.488					ND	
83 2,2,3-Trimethylbutane	57		7.502					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 Ethyl methacrylate	69		7.524					ND	
87 1,1,2-Trichloroethane	97		7.674					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164		7.767					ND	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76		7.832					ND	
91 2-Hexanone	43		7.853					ND	
92 3-Methylhexane	43		7.949					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
94 Tetrahydrothiophene	60		8.018					ND	
95 Chlorodibromomethane	129		8.032					ND	
96 Ethylene Dibromide	107		8.153					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.575					ND	
99 Chlorobenzene	112		8.604					ND	
100 1,1,1,2-Tetrachloroethane	131		8.683					ND	
101 Ethylbenzene	106		8.690					ND	
102 m-Xylene & p-Xylene	106		8.804					ND	
103 o-Xylene	106		9.183					ND	
104 Styrene	104		9.197					ND	
106 Bromoform	173		9.383					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.533					ND	
108 cis-1,4-Dichloro-2-butene	53		9.584					ND	
109 Cyclohexanone	55		9.626					ND	
110 1,1,2,2-Tetrachloroethane	83		9.827					ND	
111 Bromobenzene	156		9.855					ND	
112 trans-1,4-Dichloro-2-butene	53		9.862					ND	
113 1,2,3-Trichloropropane	110		9.891					ND	
114 N-Propylbenzene	120		9.941					ND	
115 2-Chlorotoluene	126		10.041					ND	
116 1,3,5-Trimethylbenzene	105		10.113					ND	
117 4-Chlorotoluene	126		10.156					ND	
118 tert-Butylbenzene	119		10.427					ND	
119 1,2,4-Trimethylbenzene	105		10.484					ND	
120 sec-Butylbenzene	134		10.649					ND	
121 1,3-Dichlorobenzene	146		10.778					ND	
122 4-Isopropyltoluene	119		10.799					ND	
123 1,4-Dichlorobenzene	146		10.878					ND	
124 1,2,3-Trimethylbenzene	105		10.899					ND	
125 n-Butylbenzene	91		11.207					ND	
127 1,2-Dichlorobenzene	146		11.235					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029					ND	
129 1,3,5-Trichlorobenzene	180		12.215					ND	
130 1,2,4-Trichlorobenzene	180		12.858					ND	
131 Hexachlorobutadiene	225		12.994					ND	
132 Naphthalene	128		13.123					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180		13.345					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	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
141 4-Chlorobenzotrifluoride	1		0.000					ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
146 t-Amyl alcohol	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
144 1-Chlorohexane TIC	1		0.000					ND	
136 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
135 Pentachloroethane TIC	1		0.000					ND	
145 Ethyl acrylate	55		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95		2.000					ND	7
S 150 1,2-Dichloroethene, Total	1		0.000					ND	7
S 151 Trihalomethanes, Total	1		0.000					ND	7
S 152 Total BTEX	1		0.000					ND	7
S 153 Xylenes, Total (URS)	1		0.000					ND	7
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106		0.000					ND	7
S 156 1,3-Dichloropropene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:55

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4139.D

Injection Date: 07-Jul-2021 00:34:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

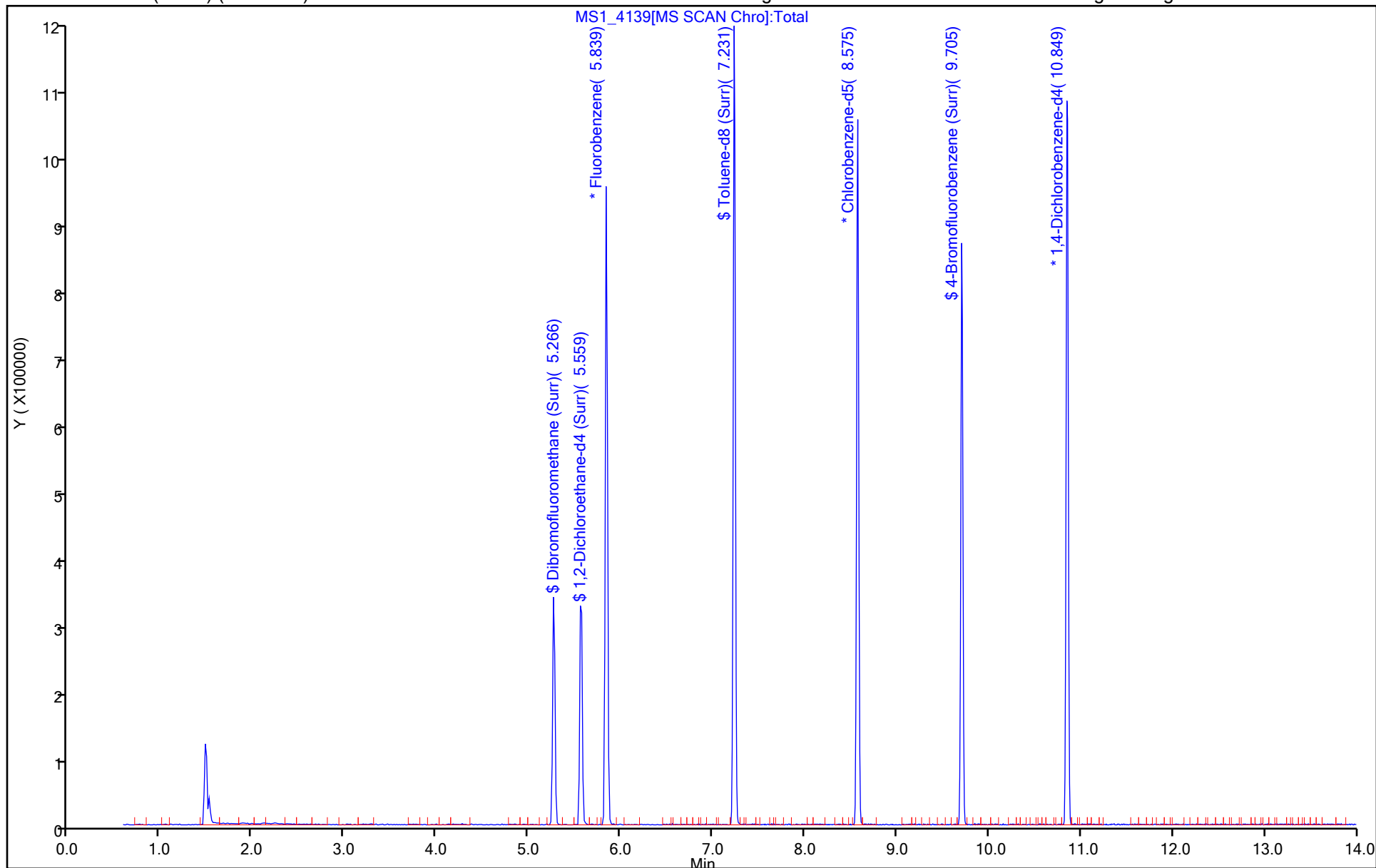
ALS Bottle#: 10

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4139.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Jul-2021 00:34:30 ALS Bottle#: 10 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: petuninp

Date: 07-Jul-2021 01:12:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.9	97.71
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.9	95.88
\$ 7 Toluene-d8 (Surr)	50.0	47.9	95.84
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.6	95.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 280-542401/9

Matrix: Water Lab File ID: MS9_5884.d

Analysis Method: 8260B Date Collected: _____

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 08:59

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25(mm)

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

Analysis Batch No.: 542401 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-542401/9
 Matrix: Water Lab File ID: MS9_5884.d
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 08:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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)	111		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5884.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Jul-2021 08:59:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: mb
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 09:16:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481					ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2844256	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	827894	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1417131	50.0	50.0	
* 174 Fluorobenzene (IS)	96		0.000					ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.220	5.210	0.010	95	823530	50.0	52.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	810676	50.0	55.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2843096	50.0	48.0	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.629	9.630	-0.001	96	1172189	50.0	47.7	
\$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 11 BFB	95		3.501					ND	
13 Dichlorodifluoromethane	85		1.686					ND	
15 Chloromethane	50		1.872					ND	
16 Vinyl chloride	62		1.986					ND	
18 Ethylene oxide	43		2.297					ND	U
19 Bromomethane	94		2.328					ND	7
20 Chloroethane	64		2.442					ND	
21 Dichlorofluoromethane	67		2.670					ND	
22 Trichlorofluoromethane	101		2.701					ND	
23 Ethanol	45		2.867					ND	
24 Ethyl ether	59		2.971					ND	
27 Propene oxide	58		3.023					ND	
28 Acrolein	56		3.106					ND	
30 1,1-Dichloroethene	96		3.199					ND	
29 112TCTFE	151		3.209					ND	
31 Acetone	43		3.230					ND	7
33 Iodomethane	142	3.354	3.344	0.010	97	12949		0.1508	
32 Isopropyl alcohol	45		3.365					ND	
35 Carbon disulfide	76		3.417					ND	
37 Acetonitrile	41		3.500					ND	
34 Methyl acetate	43		3.531					ND	
36 3-Chloro-1-propene	41		3.541					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Methylene Chloride	84		3.665					ND	
38 2-Methyl-2-propanol	59		3.738					ND	
12 Chlorotrifluoroethene	116		3.859					ND	
42 Acrylonitrile	53		3.873					ND	
40 Methyl tert-butyl ether	73		3.904					ND	
41 trans-1,2-Dichloroethene	96		3.914					ND	
43 Hexane	57		4.153					ND	
45 Vinyl acetate	43		4.287					ND	
46 1,1-Dichloroethane	63		4.298					ND	
44 Isopropyl ether	87		4.318					ND	
47 2-Chloro-1,3-butadiene	53		4.370					ND	
17 2-Chloro-1,1,1-Trifluoroethane	118		4.471					ND	
48 Tert-butyl ethyl ether	59		4.640					ND	
50 2-Butanone (MEK)	43		4.774					ND	
52 cis-1,2-Dichloroethene	96		4.795					ND	
53 2,2-Dichloropropane	77		4.806					ND	
49 Ethyl acetate	43		4.806					ND	
54 Propionitrile	54		4.837					ND	
51 sec-Butyl Alcohol	45		4.920					ND	
55 Methacrylonitrile	41		4.961					ND	
57 Tetrahydrofuran	42		5.002					ND	
59 Chlorobromomethane	128		5.002					ND	
25 1,2-Dichloro-1,1,2-trifluoroethane	117		5.006					ND	
56 Chloroform	83		5.075					ND	
26 1,1,1-Trifluoro-2,2-dichloroethane	83		5.097					ND	
60 1,1,1-Trichloroethane	97		5.231					ND	
61 Cyclohexane	56		5.293					ND	
62 1,1-Dichloropropene	75		5.365					ND	
63 Carbon tetrachloride	117		5.365					ND	
58 Isobutyl alcohol	43		5.417					ND	
66 Benzene	78		5.531					ND	
67 1,2-Dichloroethane	62		5.573					ND	7
65 Tert-amyl methyl ether	73		5.635					ND	
135 n-Heptane	43		5.769					ND	
64 n-Butanol	56		5.977					ND	
68 Trichloroethene	130		6.091					ND	
69 2-Pentanone	43		6.215					ND	
71 Methylcyclohexane	55		6.298					ND	
72 1,2-Dichloropropane	63		6.319					ND	
70 Methyl methacrylate	100		6.350					ND	
73 1,4-Dioxane	88		6.371					ND	
74 Dibromomethane	93		6.391					ND	
75 Dichlorobromomethane	83		6.543					ND	
77 2-Nitropropane	41		6.719					ND	
76 2-Chloroethyl vinyl ether	63		6.773					ND	
78 cis-1,3-Dichloropropene	75		6.923					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.040					ND	
80 Toluene	91		7.228					ND	
82 trans-1,3-Dichloropropene	75		7.426					ND	
81 Ethyl methacrylate	69		7.458					ND	
83 1,1,2-Trichloroethane	97		7.607					ND	
85 Tetrachloroethene	164		7.698					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 1,3-Dichloropropane	76		7.757					ND	
84 2-Hexanone	43		7.784					ND	
88 Tetrahydrothiophene	60		7.955					ND	
87 Chlorodibromomethane	129		7.961					ND	
89 Ethylene Dibromide	107		8.078					ND	
90 1-Chlorohexane	91		8.496					ND	7
91 Chlorobenzene	112		8.533					ND	
93 1,1,1,2-Tetrachloroethane	131		8.608					ND	
92 Ethylbenzene	106		8.613					ND	
94 m-Xylene & p-Xylene	91		8.736					ND	
95 o-Xylene	106		9.105					ND	
96 Styrene	104		9.121					ND	
97 Bromoform	173		9.309					ND	
98 Isopropylbenzene	105		9.453					ND	
99 cis-1,4-Dichloro-2-butene	53		9.501					ND	
100 Cyclohexanone	55		9.549					ND	
101 1,1,2,2-Tetrachloroethane	83		9.753					ND	
105 Bromobenzene	156		9.779					ND	
102 trans-1,4-Dichloro-2-butene	53		9.790					ND	
104 1,2,3-Trichloropropane	110		9.812					ND	
103 N-Propylbenzene	120		9.865					ND	
107 2-Chlorotoluene	126		9.961					ND	
106 1,3,5-Trimethylbenzene	105		10.036					ND	
108 4-Chlorotoluene	126		10.079					ND	
109 tert-Butylbenzene	119		10.352					ND	
110 1,2,4-Trimethylbenzene	105		10.411					ND	
111 sec-Butylbenzene	134		10.577					ND	
113 1,3-Dichlorobenzene	146		10.700					ND	
112 4-Isopropyltoluene	119		10.721					ND	
115 1,4-Dichlorobenzene	146		10.801					ND	
114 1,2,3-Trimethylbenzene	105		10.823					ND	
116 n-Butylbenzene	91		11.133					ND	
117 1,2-Dichlorobenzene	146		11.160					ND	
118 1,2-Dibromo-3-Chloropropane	157		11.946					ND	
119 1,3,5-Trichlorobenzene	180		12.139					ND	
120 1,2,4-Trichlorobenzene	180		12.775					ND	7
121 Hexachlorobutadiene	225		12.914					ND	
122 Naphthalene	128		13.043					ND	
123 1,2,3-Trichlorobenzene	180		13.262					ND	7
134 3-Methylhexane	1		0.000					ND	
163 n-Nonane TIC	1		0.000					ND	
162 Cyclohexane TIC	1		0.000					ND	
133 2,4-Dimethylpentane	1		0.000					ND	
128 Pentachloroethane	167		0.000					ND	
160 1-Chlorohexane TIC	1		0.000					ND	
126 2,2,3-Trimethylbutane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
161 Methyl cyclohexane TIC	1		0.000					ND	
130 Dimethyl disulfide	1		0.000					ND	
127 3,3-Dimethylpentane	1		0.000					ND	
131 3-Ethylpentane	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
166 Ethyl acrylate	55		0.000					ND	
125 2,2-Dimethylpentane	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
167 Pentachloroethane TIC	1		0.000					ND	
164 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
S 143 TAH	1				0			0	7
S 141 1,2-Dichloroethene, Total	1		0.000					ND	7
S 140 1,3-Dichloropropene, Total	1		0.000					ND	7
S 142 Xylenes, Total	106		0.000					ND	7
S 137 Trihalomethanes, Total	1		0.000					ND	7
S 139 Total BTEX	1		0.000					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 12:09:37

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5884.d

Injection Date: 07-Jul-2021 08:59:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

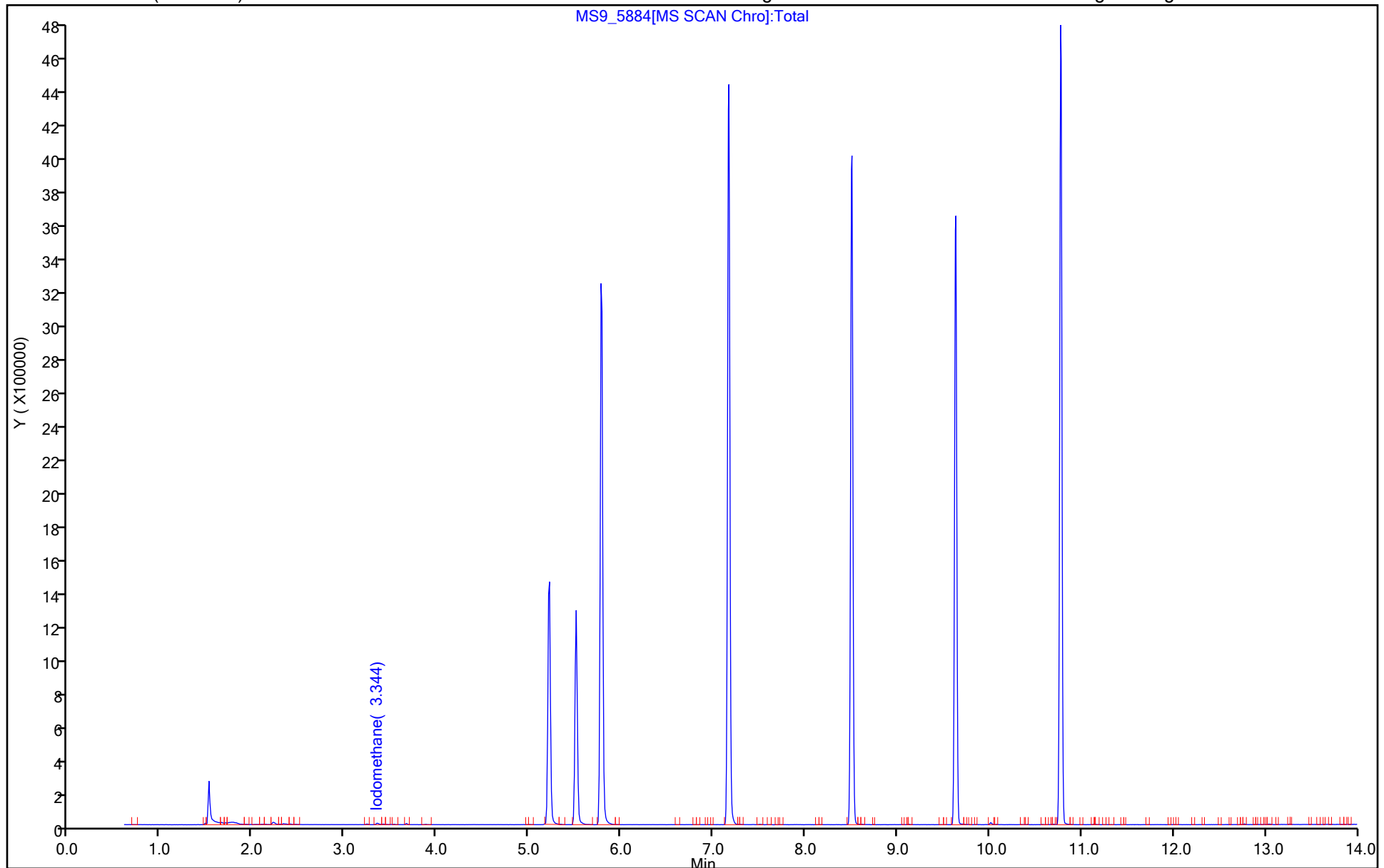
ALS Bottle#: 8

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\MS9_5884.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Jul-2021 08:59:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: mb
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 09:16:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.1	104.19
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	55.7	111.42
\$ 8 Toluene-d8 (Surr)	50.0	48.0	96.01
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.7	95.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-542686/9
 Matrix: Water Lab File ID: MS1_4289.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 07/09/2021 09:55
 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.: 542686 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.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 280-542686/9
 Matrix: Water Lab File ID: MS1_4289.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 09:55
 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.: 542686 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)	92		70-127
2037-26-5	Toluene-d8 (Surr)	101		80-125
460-00-4	4-Bromofluorobenzene (Surr)	94		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4289.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 09-Jul-2021 09:55:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: mb
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 10:39:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	773756	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	162350	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	269598	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	194561	50.0	47.4	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	253715	50.0	46.2	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	707467	50.0	50.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	274206	50.0	46.9	
\$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 10 BFB	95		3.579					ND	
11 Dichlorodifluoromethane	85		1.705					ND	
12 Chloromethane	50		1.900					ND	
13 Vinyl chloride	62		1.998					ND	
14 Ethylene oxide	43		2.319					ND	
15 Bromomethane	94		2.347					ND	
16 Chloroethane	64		2.473					ND	
17 Dichlorofluoromethane	67		2.696					ND	
18 Trichlorofluoromethane	101		2.724					ND	
19 Ethanol	45		2.906					ND	
20 Ethyl ether	59		3.004					ND	
21 Propene oxide	58		3.059					ND	
22 Acrolein	56		3.143					ND	
23 1,1-Dichloroethene	96		3.241					ND	
24 112TCTFE	151		3.255					ND	
25 Acetone	43		3.269					ND	
27 Isopropyl alcohol	45		3.395					ND	
26 Iodomethane	142		3.395					ND	
28 Carbon disulfide	76		3.451					ND	
29 Acetonitrile	41		3.534					ND	
30 Methyl acetate	43		3.576					ND	
31 3-Chloro-1-propene	41		3.590					ND	
67 n-Butanol	56		3.597					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Methylene Chloride	84		3.716					ND	
33 2-Methyl-2-propanol	59		3.786					ND	
34 Acrylonitrile	53		3.911					ND	
35 Methyl tert-butyl ether	73		3.939					ND	
36 trans-1,2-Dichloroethene	96		3.953					ND	
37 Hexane	57		4.205					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
40 1,1-Dichloroethane	63		4.344					ND	
39 Vinyl acetate	43		4.344					ND	
41 Isopropyl ether	87		4.372					ND	
42 2-Chloro-1,3-butadiene	53		4.414					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.679					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.819					ND	
47 Ethyl acetate	43		4.847					ND	
48 cis-1,2-Dichloroethene	96		4.847					ND	
49 2,2-Dichloropropane	77		4.847					ND	
50 Propionitrile	54		4.875					ND	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41		5.015					ND	
53 Chlorobromomethane	128		5.057					ND	
54 Tetrahydrofuran	42		5.057					ND	
55 Chloroform	83		5.126					ND	
56 1,1,1-Trichloroethane	97		5.280					ND	
57 Cyclohexane	56		5.350					ND	
58 1,1-Dichloropropene	75		5.420					ND	
59 Carbon tetrachloride	117		5.420					ND	
60 Isobutyl alcohol	41		5.462					ND	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78		5.587					ND	
64 1,2-Dichloroethane	62		5.629					ND	
65 Tert-amyl methyl ether	73		5.685					ND	
66 n-Heptane	43		5.825					ND	
68 Trichloroethene	95		6.160					ND	
69 2-Pentanone	43		6.272					ND	
70 Methylcyclohexane	55		6.355					ND	
71 1,2-Dichloropropane	63		6.383					ND	
72 Methyl methacrylate	100		6.397					ND	
73 1,4-Dioxane	88		6.425					ND	
74 Dibromomethane	93		6.453					ND	
75 Dichlorobromomethane	83		6.609					ND	
76 2-Nitropropane	41		6.788					ND	
77 2-Chloroethyl vinyl ether	63		6.838					ND	
78 cis-1,3-Dichloropropene	75		6.988					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.103					ND	
80 2,2-Dimethylpentane	57		7.251					ND	
81 2,4-Dimethylpentane	43		7.293					ND	
82 Toluene	91		7.296					ND	
84 trans-1,3-Dichloropropene	75		7.489					ND	
83 2,2,3-Trimethylbutane	57		7.502					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 Ethyl methacrylate	69		7.517					ND	
87 1,1,2-Trichloroethane	97		7.675					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164		7.768					ND	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76		7.825					ND	
91 2-Hexanone	43		7.853					ND	
92 3-Methylhexane	43		7.949					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
94 Tetrahydrothiophene	60		8.018					ND	
95 Chlorodibromomethane	129		8.032					ND	
96 Ethylene Dibromide	107		8.147					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.561					ND	
99 Chlorobenzene	112		8.604					ND	
100 1,1,1,2-Tetrachloroethane	131		8.683					ND	
101 Ethylbenzene	106		8.683					ND	
102 m-Xylene & p-Xylene	106		8.811					ND	
103 o-Xylene	106		9.176					ND	
104 Styrene	104		9.198					ND	
106 Bromoform	173		9.384					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.527					ND	
108 cis-1,4-Dichloro-2-butene	53		9.584					ND	
109 Cyclohexanone	55		9.627					ND	
110 1,1,2,2-Tetrachloroethane	83		9.827					ND	
111 Bromobenzene	156		9.855					ND	
112 trans-1,4-Dichloro-2-butene	53		9.863					ND	
113 1,2,3-Trichloropropane	110		9.891					ND	
114 N-Propylbenzene	120		9.934					ND	
115 2-Chlorotoluene	126		10.034					ND	
116 1,3,5-Trimethylbenzene	105		10.113					ND	
117 4-Chlorotoluene	126		10.149					ND	
118 tert-Butylbenzene	119		10.427					ND	
119 1,2,4-Trimethylbenzene	105		10.485					ND	
120 sec-Butylbenzene	134		10.649					ND	
121 1,3-Dichlorobenzene	146		10.778					ND	
122 4-Isopropyltoluene	119		10.799					ND	
123 1,4-Dichlorobenzene	146		10.878					ND	
124 1,2,3-Trimethylbenzene	105		10.899					ND	
125 n-Butylbenzene	91		11.207					ND	
127 1,2-Dichlorobenzene	146		11.235					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		12.022					ND	
129 1,3,5-Trichlorobenzene	180		12.215					ND	
130 1,2,4-Trichlorobenzene	180		12.851					ND	
131 Hexachlorobutadiene	225		12.994					ND	
132 Naphthalene	128		13.123					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180		13.345					ND	
145 Ethyl acrylate	55		0.000					ND	
135 Pentachloroethane 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
141 4-Chlorobenzotrifluoride	1		0.000					ND	
143 Benzene, 1-bromo-3-fluoro-	1		0.000					ND	
146 t-Amyl alcohol	1		0.000					ND	
148 1-Bromo-2-chloroethane	1		0.000					ND	
147 n-Nonane TIC	1		0.000					ND	
140 4-Bromofluorobenzene	95		0.000					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
144 1-Chlorohexane TIC	1		0.000					ND	
136 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
139 1,3-Dibromobenzene	1		0.000					ND	
142 Benzene, 1-bromo-4-ethyl-	1		0.000					ND	
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000					ND	
S 149 1,2-Dichloroethene, Total (URS)	95		2.000					ND	7
S 150 1,2-Dichloroethene, Total	1		0.000					ND	7
S 151 Trihalomethanes, Total	1		0.000					ND	7
S 152 Total BTEX	1		0.000					ND	7
S 153 Xylenes, Total (URS)	1		0.000					ND	7
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106		0.000					ND	7
S 156 1,3-Dichloropropene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Jul-2021 12:10:30

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4289.D

Injection Date: 09-Jul-2021 09:55:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

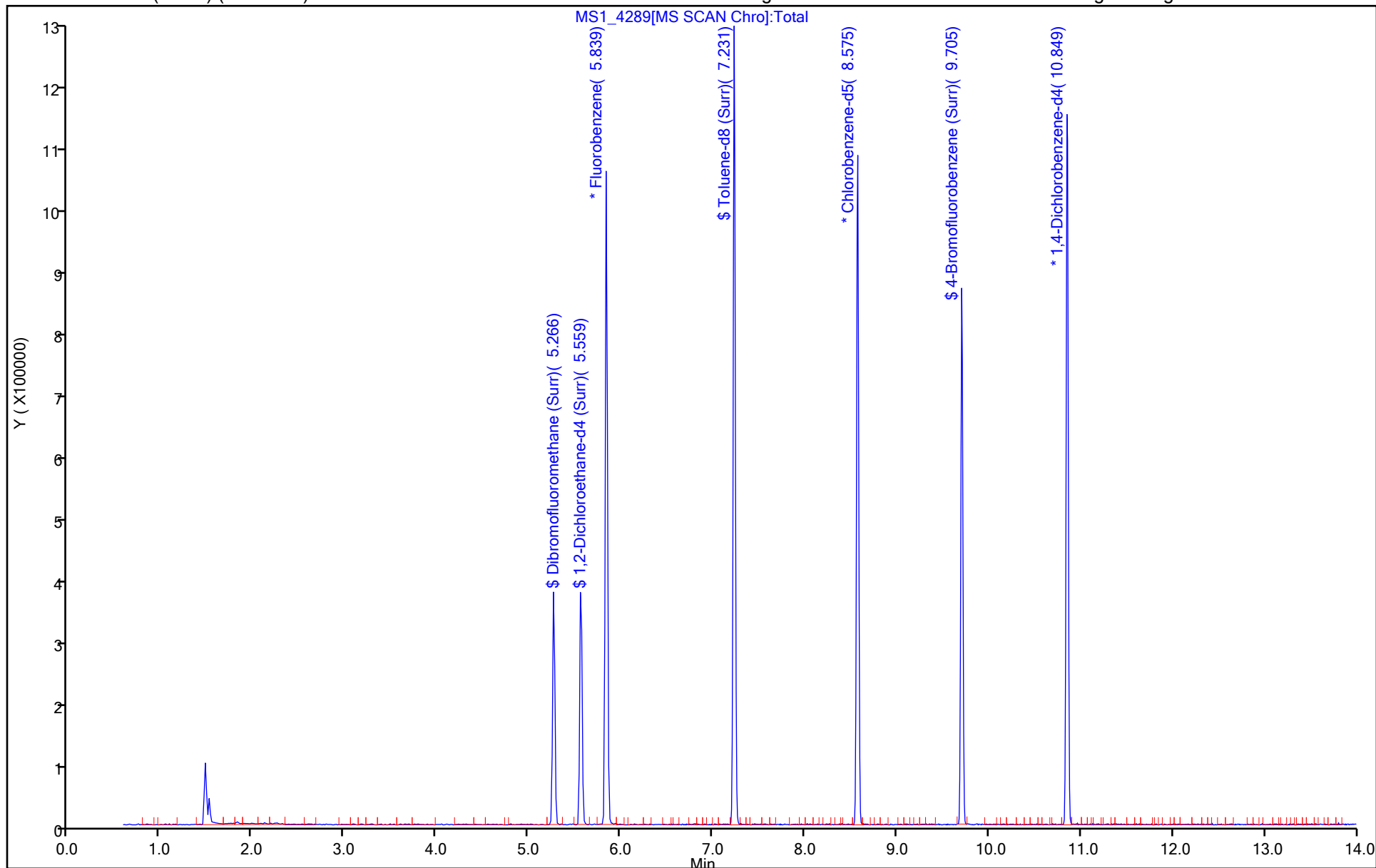
ALS Bottle#: 9

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4289.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 09-Jul-2021 09:55:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: mb
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 10:39:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.4	94.87
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.2	92.35
\$ 7 Toluene-d8 (Surr)	50.0	50.3	100.60
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.9	93.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-542394/4

Matrix: Water Lab File ID: MS1_4134.D

Analysis Method: 8260B Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 07/06/2021 22:48

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.: 542394 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	89.3		10	1.9
107-02-8	Acrolein	222		20	2.8
107-13-1	Acrylonitrile	237		20	1.4
71-43-2	Benzene	25.8		1.0	0.16
74-97-5	Chlorobromomethane	24.2		1.0	0.10
75-27-4	Dichlorobromomethane	22.2		1.0	0.17
75-25-2	Bromoform	19.1		1.0	0.46
74-83-9	Bromomethane	23.6		2.0	0.21
78-93-3	2-Butanone (MEK)	86.1		6.0	2.0
75-15-0	Carbon disulfide	26.0		2.0	0.17
56-23-5	Carbon tetrachloride	24.0		1.0	0.19
108-90-7	Chlorobenzene	24.4		1.0	0.17
124-48-1	Chlorodibromomethane	21.3		1.0	0.17
75-00-3	Chloroethane	24.9		2.0	0.41
67-66-3	Chloroform	24.6		1.0	0.16
74-87-3	Chloromethane	21.2		2.0	0.30
107-05-1	Allyl chloride	26.1		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	19.2		5.0	0.47
74-95-3	Dibromomethane	24.1		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.8		1.0	0.15
541-73-1	1,3-Dichlorobenzene	26.4		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.3		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	19.9		3.0	0.80
75-71-8	Dichlorodifluoromethane	19.4		2.0	0.31
75-34-3	1,1-Dichloroethane	25.0		1.0	0.22
107-06-2	1,2-Dichloroethane	23.7		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.8		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.2		1.0	0.15
75-35-4	1,1-Dichloroethene	25.9		1.0	0.23
78-87-5	1,2-Dichloropropane	24.6		1.0	0.18
142-28-9	1,3-Dichloropropane	23.8		1.0	0.090
594-20-7	2,2-Dichloropropane	25.2		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.9		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.0		3.0	0.19
563-58-6	1,1-Dichloropropene	26.0		1.0	0.19
100-41-4	Ethylbenzene	24.9		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542394/4
 Matrix: Water Lab File ID: MS1_4134.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/06/2021 22:48
 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.: 542394 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	22.8		3.0	0.86
591-78-6	2-Hexanone	89.7		5.0	1.7
74-88-4	Iodomethane	22.2		1.0	0.23
78-83-1	Isobutyl alcohol	500		110	37
75-09-2	Methylene Chloride	26.1		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	96.3		5.0	0.98
100-42-5	Styrene	23.6		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	23.0		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	21.7		1.0	0.21
127-18-4	Tetrachloroethene	27.8		1.0	0.20
108-88-3	Toluene	25.4		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	25.3		1.0	0.21
71-55-6	1,1,1-Trichloroethane	23.6		1.0	0.16
79-00-5	1,1,2-Trichloroethane	23.8		1.0	0.27
79-01-6	Trichloroethene	22.0		1.0	0.16
75-69-4	Trichlorofluoromethane	25.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.1		2.5	0.33
108-05-4	Vinyl acetate	49.9		3.0	0.94
75-01-4	Vinyl chloride	26.9		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.3		2.0	0.15
95-47-6	o-Xylene	25.7		1.0	0.19
1330-20-7	Xylenes, Total	50.0		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)	98		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)	97		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4134.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Jul-2021 22:48:30 ALS Bottle#: 5 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	754544	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	167347	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	262685	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	194094	50.0	48.5	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.573	5.573	0.000	97	262278	50.0	48.9	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	97	692283	50.0	47.8	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	84	278839	50.0	48.9	
11 Dichlorodifluoromethane	85	1.705	1.705	0.001	100	65572	25.0	19.4	
12 Chloromethane	50	1.914	1.914	0.000	99	69534	25.0	21.2	
13 Vinyl chloride	62	2.012	2.012	0.000	97	71071	25.0	26.9	
15 Bromomethane	94	2.347	2.361	-0.014	93	48001	25.0	23.6	
16 Chloroethane	64	2.473	2.473	0.000	99	50691	25.0	24.9	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	96	129844	25.0	25.1	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	110948	25.0	25.5	
20 Ethyl ether	59	3.003	3.003	0.000	94	53441	25.0	25.1	
22 Acrolein	56	3.143	3.143	0.000	98	92544	246.9	221.8	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	96	56402	25.0	25.9	
24 112TCTFE	151	3.255	3.255	0.000	91	43704	25.0	30.3	
25 Acetone	43	3.269	3.269	0.000	98	79890	100.0	89.3	
26 Iodomethane	142	3.394	3.394	0.000	99	72045	25.0	22.2	
28 Carbon disulfide	76	3.464	3.464	0.000	100	190894	25.0	26.0	
30 Methyl acetate	43	3.576	3.576	0.000	98	89232	50.0	43.3	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	114659	25.0	26.1	
32 Methylene Chloride	84	3.716	3.716	0.000	95	70905	25.0	26.1	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	97	55531	250.0	211.1	
34 Acrylonitrile	53	3.911	3.911	0.000	98	247549	250.0	237.3	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	187357	25.0	24.4	
36 trans-1,2-Dichloroethene	96	3.967	3.953	0.014	97	63995	25.0	24.2	
37 Hexane	57	4.205	4.204	0.001	95	97116	25.0	27.8	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	128025	25.0	25.0	
39 Vinyl acetate	43	4.344	4.344	0.000	98	295709	50.0	49.9	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	112362	100.0	86.1	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	71828	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
49 2,2-Dichloropropane	77	4.861	4.861	0.000	89	114141	25.0	25.2	
51 sec-Butyl Alcohol	45		4.973				ND	ND	
53 Chlorobromomethane	128	5.056	5.056	0.000	96	31474	25.0	24.2	
54 Tetrahydrofuran	42	5.056	5.056	0.000	86	37809	50.0	40.8	
55 Chloroform	83	5.140	5.140	0.000	96	130785	25.0	24.6	
56 1,1,1-Trichloroethane	97	5.294	5.294	0.000	98	110298	25.0	23.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	128283	25.0	27.2	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	97891	25.0	26.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	82	82379	25.0	24.0	
60 Isobutyl alcohol	41	5.462	5.461	0.001	93	47018	625.0	499.8	
63 Benzene	78	5.587	5.587	0.000	97	269546	25.0	25.8	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	104170	25.0	23.7	
66 n-Heptane	43	5.825	5.825	0.000	92	91557	25.0	29.6	
68 Trichloroethene	95	6.160	6.160	0.000	96	68279	25.0	22.0	
69 2-Pentanone	43		6.272				ND	ND	
70 Methylcyclohexane	55	6.369	6.369	0.000	95	97984	25.0	26.7	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	89	69762	25.0	24.6	
73 1,4-Dioxane	88	6.439	6.425	0.014	95	15789	500.0	499.9	
74 Dibromomethane	93	6.453	6.467	-0.014	94	42961	25.0	24.1	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	86308	25.0	22.2	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	37958	25.0	21.9	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	103676	25.0	22.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	99	226469	100.0	96.3	
82 Toluene	91	7.295	7.295	0.000	97	264404	25.0	25.4	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	97	95797	25.0	23.0	
85 Ethyl methacrylate	69	7.524	7.524	0.000	89	76070	25.0	22.8	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	94	52363	25.0	23.8	
89 Tetrachloroethene	164	7.767	7.767	0.000	92	48154	25.0	27.8	
90 1,3-Dichloropropane	76	7.825	7.832	-0.007	95	100786	25.0	23.8	
91 2-Hexanone	43	7.853	7.853	0.000	99	157844	100.0	89.7	
95 Chlorodibromomethane	129	8.032	8.032	0.000	88	53289	25.0	21.3	
96 Ethylene Dibromide	107	8.154	8.153	0.001	98	54839	25.0	22.8	
98 1-Chlorohexane	91		8.575				ND	ND	
99 Chlorobenzene	112	8.604	8.604	0.000	90	166891	25.0	24.4	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	90	55408	25.0	23.0	
101 Ethylbenzene	106	8.690	8.690	0.000	100	90265	25.0	24.9	
102 m-Xylene & p-Xylene	106	8.811	8.804	0.007	99	111330	25.0	24.3	
103 o-Xylene	106	9.176	9.183	-0.007	98	109692	25.0	25.7	
104 Styrene	104	9.197	9.197	0.000	94	184580	25.0	23.6	
106 Bromoform	173	9.391	9.383	0.007	91	30716	25.0	19.1	
107 Isopropylbenzene	105	9.526	9.533	-0.007	97	296904	25.0	25.8	
109 Cyclohexanone	55	9.626	9.626	0.000	95	117910	1000.0	628.9	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	69788	25.0	21.7	
111 Bromobenzene	156	9.855	9.855	0.000	98	67818	25.0	26.0	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	79	22823	25.0	19.9	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	88	20562	25.0	23.1	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	78369	25.0	24.5	
115 2-Chlorotoluene	126	10.034	10.041	-0.007	94	65351	25.0	25.0	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	96	248931	25.0	24.3	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	71808	25.0	25.0	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	202254	25.0	24.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.000	98	262268	25.0	24.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	57471	25.0	23.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	95	134747	25.0	26.4	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	97	255713	25.0	24.5	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	93	130078	25.0	24.3	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	240262	25.0	23.9	
127 1,2-Dichlorobenzene	146	11.242	11.235	0.007	94	123427	25.0	25.8	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.029	-0.007	90	12672	25.0	19.2	
130 1,2,4-Trichlorobenzene	180	12.851	12.858	-0.007	93	79401	25.0	25.3	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	92	28656	25.0	26.6	
132 Naphthalene	128	13.123	13.123	0.000	98	219997	25.0	23.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	68914	25.0	24.1	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	48.9	
S 150 1,2-Dichloroethene, Total	1				0		50.0	48.9	
S 151 Trihalomethanes, Total	1				0		100.0	87.2	
S 153 Xylenes, Total (URS)	1				0		50.0	50.0	
S 155 Xylenes, Total	106				0		50.0	50.0	
S 156 1,3-Dichloropropene, Total	1				0		50.0	45.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Gas A_00093

Amount Added: 5.00

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4134.D

Injection Date: 06-Jul-2021 22:48:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

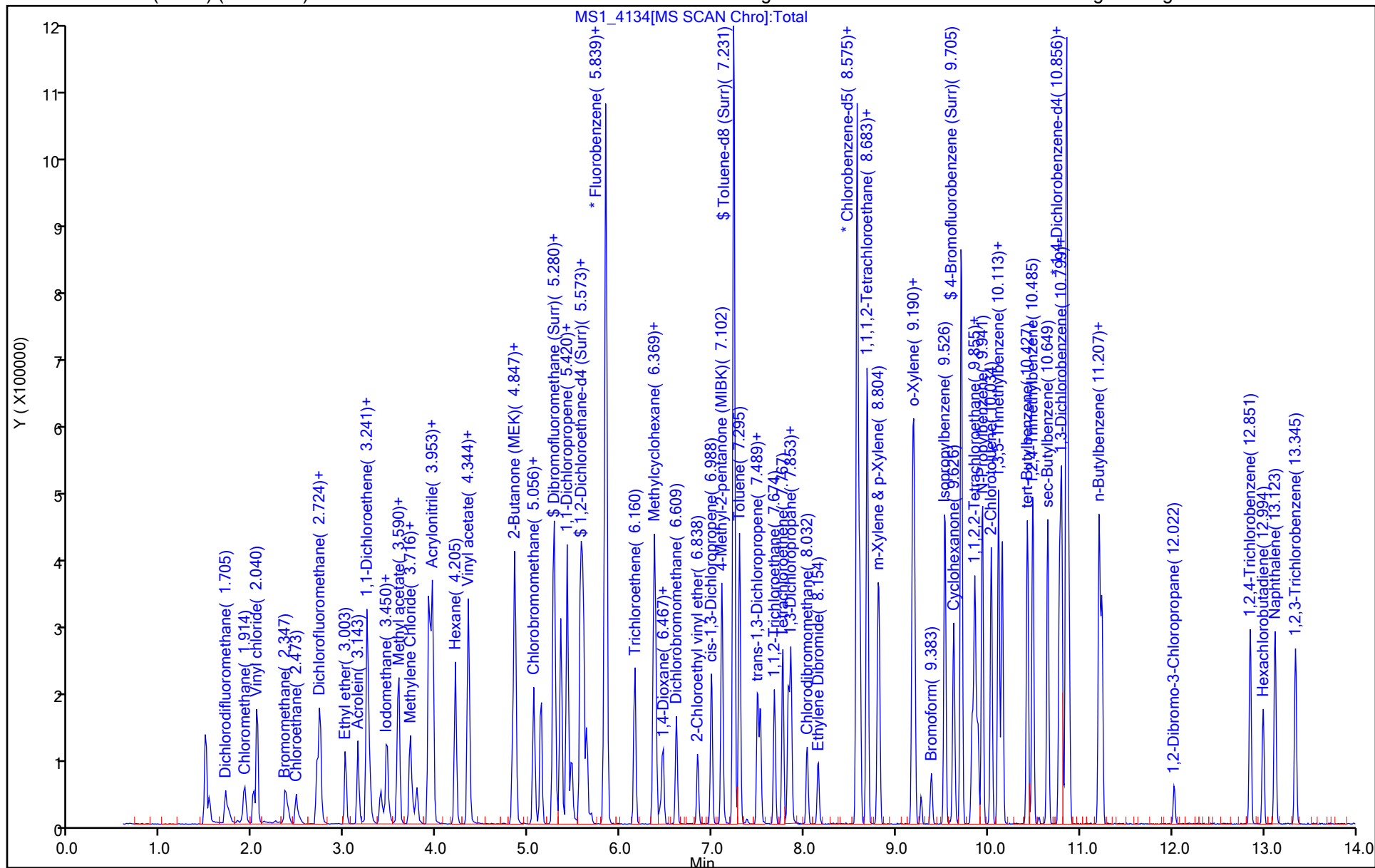
ALS Bottle#: 5

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4134.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Jul-2021 22:48:30 ALS Bottle#: 5 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.5	97.05
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.9	97.90
\$ 7 Toluene-d8 (Surr)	50.0	47.8	95.51
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.9	97.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542394/6
 Matrix: Water Lab File ID: MS1_4136.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/06/2021 23:30
 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.: 542394 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	239		30	9.6
126-99-8	Chloroprene	21.3		1.0	0.21
126-98-7	Methacrylonitrile	270		10	1.6
80-62-6	Methyl methacrylate	49.1		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)	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)	96		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4136.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Jul-2021 23:30:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS S
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	98	745215	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	163221	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	263875	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	188766	50.0	47.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	100	251869	50.0	47.6	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	682864	50.0	48.3	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	278644	50.0	48.7	
14 Ethylene oxide	43	2.319	2.319	0.000	100	274476	2500.0	1862.4	
19 Ethanol	45	2.906	2.906	0.000	99	45095	1500.0	1375.2	
21 Propene oxide	58	3.059	3.059	0.000	84	990347	2500.0	2224.2	
27 Isopropyl alcohol	45	3.408	3.409	-0.001	96	33571	250.0	203.8	
29 Acetonitrile	41	3.548	3.534	0.014	100	84702	250.0	239.0	
67 n-Butanol	56		3.597				ND	ND	
41 Isopropyl ether	87	4.372	4.372	0.000	92	49272	25.0	24.9	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	98827	25.0	21.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	180680	25.0	23.8	
47 Ethyl acetate	43	4.847	4.847	0.000	99	102191	50.0	52.7	
50 Propionitrile	54	4.875	4.875	0.000	99	87102	250.0	248.5	
52 Methacrylonitrile	41	5.014	5.015	-0.001	93	381977	250.0	269.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	84	157796	25.0	23.9	
72 Methyl methacrylate	100	6.397	6.397	0.000	93	28202	50.0	49.1	
76 2-Nitropropane	41	6.788	6.788	0.000	95	16421	50.0	22.2	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	92	21185	50.0	30.0	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	89	46283	50.0	35.9	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	255364	25.0	25.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	82860	25.0	27.0	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

[QC Flag Legend](#)

Processing Flags

ND - Not Detected or Marked ND

[Reagents:](#)

MV-Supp A_00051

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4136.D

Injection Date: 06-Jul-2021 23:30:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCS

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

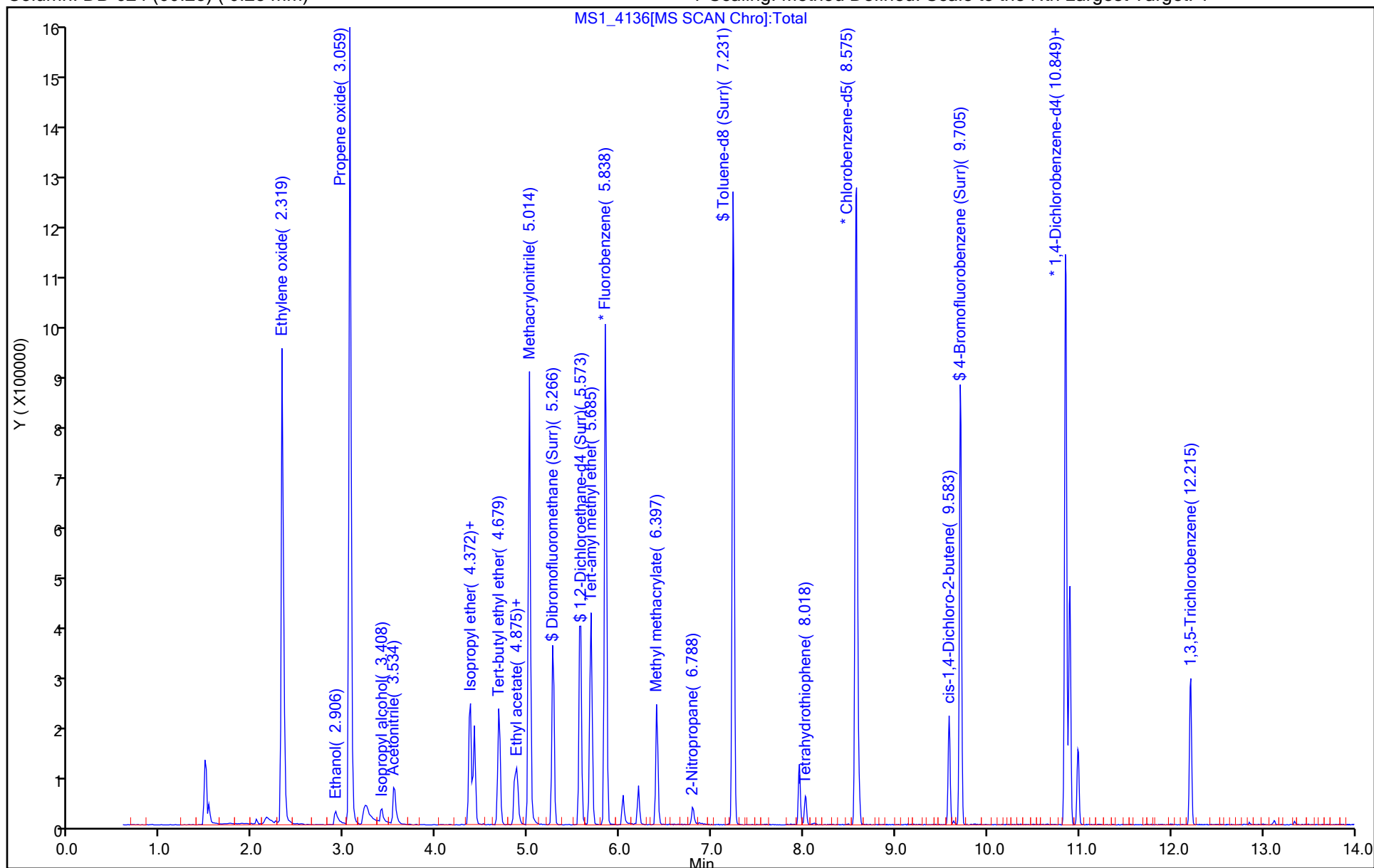
ALS Bottle#: 7

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4136.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Jul-2021 23:30:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS S
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.8	95.57
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.19
\$ 7 Toluene-d8 (Surr)	50.0	48.3	96.59
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.7	97.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542401/4
 Matrix: Water Lab File ID: MS9_5881.d
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 07:51
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	153		10	1.9
107-02-8	Acrolein	258		20	2.8
107-13-1	Acrylonitrile	336		20	1.4
71-43-2	Benzene	24.0		1.0	0.16
74-97-5	Chlorobromomethane	26.2		1.0	0.10
75-27-4	Dichlorobromomethane	25.7		1.0	0.17
75-25-2	Bromoform	26.4		1.0	0.46
74-83-9	Bromomethane	19.3		2.0	0.21
78-93-3	2-Butanone (MEK)	135		6.0	2.0
75-15-0	Carbon disulfide	20.7		2.0	0.17
56-23-5	Carbon tetrachloride	25.3		1.0	0.19
108-90-7	Chlorobenzene	24.1		1.0	0.17
124-48-1	Chlorodibromomethane	25.1		1.0	0.17
75-00-3	Chloroethane	23.5		2.0	0.41
67-66-3	Chloroform	26.2		1.0	0.16
74-87-3	Chloromethane	21.5		2.0	0.30
107-05-1	Allyl chloride	23.4		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	29.6		5.0	0.47
74-95-3	Dibromomethane	26.6		1.0	0.17
95-50-1	1,2-Dichlorobenzene	24.4		1.0	0.15
541-73-1	1,3-Dichlorobenzene	23.9		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	25.2		3.0	0.80
75-71-8	Dichlorodifluoromethane	15.4		2.0	0.31
75-34-3	1,1-Dichloroethane	24.0		1.0	0.22
107-06-2	1,2-Dichloroethane	27.3		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.4		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	23.9		1.0	0.15
75-35-4	1,1-Dichloroethene	23.1		1.0	0.23
78-87-5	1,2-Dichloropropane	23.8		1.0	0.18
142-28-9	1,3-Dichloropropane	24.4		1.0	0.090
594-20-7	2,2-Dichloropropane	17.9		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.8		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.4		3.0	0.19
563-58-6	1,1-Dichloropropene	24.0		1.0	0.19
100-41-4	Ethylbenzene	23.5		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542401/4
 Matrix: Water Lab File ID: MS9_5881.d
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 07:51
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	24.9		3.0	0.86
591-78-6	2-Hexanone	108		5.0	1.7
74-88-4	Iodomethane	19.7		1.0	0.23
78-83-1	Isobutyl alcohol	709		110	37
75-09-2	Methylene Chloride	23.7		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	113		5.0	0.98
100-42-5	Styrene	24.5		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	25.3		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	27.6		1.0	0.21
127-18-4	Tetrachloroethene	24.6		1.0	0.20
108-88-3	Toluene	24.9		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.7		1.0	0.21
71-55-6	1,1,1-Trichloroethane	25.9		1.0	0.16
79-00-5	1,1,2-Trichloroethane	27.0		1.0	0.27
79-01-6	Trichloroethene	23.5		1.0	0.16
75-69-4	Trichlorofluoromethane	20.0		2.0	0.29
96-18-4	1,2,3-Trichloropropane	27.2		2.5	0.33
108-05-4	Vinyl acetate	47.0		3.0	0.94
75-01-4	Vinyl chloride	21.8		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.2		2.0	0.15
95-47-6	o-Xylene	24.1		1.0	0.19
1330-20-7	Xylenes, Total	48.3		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)	111		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5881.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Jul-2021 07:51:30 ALS Bottle#: 5 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 08:10:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2740488	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	807664	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.775	10.774	0.001	93	1403609	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	799889	50.0	52.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	781302	50.0	55.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2779201	50.0	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.630	9.630	0.000	97	1155460	50.0	47.5	
13 Dichlorodifluoromethane	85	1.696	1.686	0.010	98	187618	25.0	15.4	
15 Chloromethane	50	1.883	1.872	0.011	97	129920	25.0	21.5	
16 Vinyl chloride	62	1.986	1.986	0.000	96	146918	25.0	21.8	
19 Bromomethane	94	2.328	2.328	0.000	92	138186	25.0	19.3	
20 Chloroethane	64	2.442	2.442	0.000	98	161860	25.0	23.5	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	459154	25.0	23.2	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	422177	25.0	20.0	
24 Ethyl ether	59	2.971	2.971	0.000	86	191836	25.0	25.0	
28 Acrolein	56	3.106	3.106	0.000	99	328276	246.9	258.3	
30 1,1-Dichloroethene	96	3.199	3.199	0.000	93	228982	25.0	23.1	
29 112TCTFE	151	3.209	3.209	0.000	90	204711	25.0	23.1	
31 Acetone	43	3.230	3.230	0.000	99	297705	100.0	153.3	
33 Iodomethane	142	3.344	3.344	0.000	100	309469	25.0	19.7	
35 Carbon disulfide	76	3.417	3.417	0.000	98	561719	25.0	20.7	
34 Methyl acetate	43	3.531	3.531	0.000	93	308911	50.0	58.2	
36 3-Chloro-1-propene	41	3.541	3.541	0.000	85	266805	25.0	23.4	
39 Methylene Chloride	84	3.665	3.665	0.000	80	281608	25.0	23.7	
38 2-Methyl-2-propanol	59	3.738	3.738	0.000	98	292250	250.0	295.8	
42 Acrylonitrile	53	3.873	3.873	0.000	97	821612	250.0	336.4	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	745132	25.0	24.5	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	93	275379	25.0	23.9	
43 Hexane	57	4.153	4.153	0.000	89	209455	25.0	18.2	
45 Vinyl acetate	43	4.287	4.287	0.000	97	716564	50.0	47.0	
46 1,1-Dichloroethane	63	4.298	4.298	0.000	95	415311	25.0	24.0	
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	378543	100.0	135.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	316440	25.0	24.4	
53 2,2-Dichloropropane	77	4.806	4.806	0.000	85	282836	25.0	17.9	
51 sec-Butyl Alcohol	45	4.920	4.920	0.000	95	525365	600.0	678.2	
57 Tetrahydrofuran	42	5.003	5.002	0.000	76	134046	50.0	59.3	
59 Chlorobromomethane	128	5.003	5.002	0.000	78	187084	25.0	26.2	
56 Chloroform	83	5.075	5.075	0.000	91	493054	25.0	26.2	
60 1,1,1-Trichloroethane	97	5.231	5.231	0.001	97	444333	25.0	25.9	
61 Cyclohexane	56	5.293	5.293	0.000	84	313720	25.0	20.5	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	356676	25.0	24.0	
63 Carbon tetrachloride	117	5.365	5.365	0.000	93	372064	25.0	25.3	
58 Isobutyl alcohol	43	5.417	5.417	0.000	91	243194	625.0	708.7	
66 Benzene	78	5.531	5.531	0.000	97	998215	25.0	24.0	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	98	385745	25.0	27.3	
135 n-Heptane	43	5.770	5.769	0.001	80	177302	25.0	20.7	
68 Trichloroethene	130	6.091	6.091	0.000	96	342972	25.0	23.5	
69 2-Pentanone	43	6.215	6.215	0.000	94	632936	80.0	89.0	
71 Methylcyclohexane	55	6.298	6.298	0.000	89	246032	25.0	22.2	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	246400	25.0	23.8	
73 1,4-Dioxane	88	6.371	6.371	0.000	89	95823	500.0	607.9	
74 Dibromomethane	93	6.402	6.391	0.011	90	197918	25.0	26.6	
75 Dichlorobromomethane	83	6.543	6.543	0.000	97	353550	25.0	25.7	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	93	188530	25.0	29.8	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	96	429834	25.0	22.8	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	749739	100.0	113.2	
80 Toluene	91	7.228	7.228	0.000	99	1143875	25.0	24.9	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	407596	25.0	24.4	
81 Ethyl methacrylate	69	7.458	7.458	0.000	86	364922	25.0	24.9	
83 1,1,2-Trichloroethane	97	7.608	7.607	0.001	90	283529	25.0	27.0	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	297314	25.0	24.6	
86 1,3-Dichloropropane	76	7.757	7.757	0.000	87	428913	25.0	24.4	
84 2-Hexanone	43	7.789	7.784	0.005	87	549738	100.0	108.4	
87 Chlorodibromomethane	129	7.961	7.961	0.000	89	297359	25.0	25.1	
89 Ethylene Dibromide	107	8.078	8.078	0.000	99	309721	25.0	23.9	
90 1-Chlorohexane	91	8.496	8.496	0.000	92	410471	20.0	18.9	
91 Chlorobenzene	112	8.533	8.533	0.000	96	858465	25.0	24.1	
93 1,1,1,2-Tetrachloroethane	131	8.608	8.608	0.000	94	330246	25.0	25.3	
92 Ethylbenzene	106	8.613	8.613	0.000	97	470577	25.0	23.5	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	1072055	25.0	24.2	
95 o-Xylene	106	9.105	9.105	0.000	95	559596	25.0	24.1	
96 Styrene	104	9.121	9.121	0.000	93	926407	25.0	24.5	
97 Bromoform	173	9.309	9.309	0.000	97	202501	25.0	26.4	
98 Isopropylbenzene	105	9.459	9.453	0.005	96	1313194	25.0	22.9	
100 Cyclohexanone	55	9.549	9.549	0.000	86	458102	1000.0	1086.1	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	362229	25.0	27.6	
105 Bromobenzene	156	9.779	9.779	0.000	85	445542	25.0	24.5	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	74	85790	25.0	25.2	
104 1,2,3-Trichloropropane	110	9.812	9.812	0.000	82	138508	25.0	27.2	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	418403	25.0	23.1	
107 2-Chlorotoluene	126	9.961	9.961	0.000	97	381896	25.0	23.0	
106 1,3,5-Trimethylbenzene	105	10.036	10.036	0.000	95	1134418	25.0	23.7	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	400460	25.0	23.2	
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	984628	25.0	23.8	

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	10.411	10.411	0.000	97	1165330	25.0	23.7	
111 sec-Butylbenzene	134	10.571	10.577	-0.006	95	310015	25.0	23.7	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	754194	25.0	23.9	
112 4-Isopropyltoluene	119	10.721	10.721	0.000	95	1185659	25.0	23.8	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	95	770587	25.0	24.0	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	924466	25.0	22.7	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	98	728965	25.0	24.4	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	90	96155	25.0	29.6	
120 1,2,4-Trichlorobenzene	180	12.770	12.775	-0.005	95	432543	25.0	24.7	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	96	201765	25.0	25.6	
122 Naphthalene	128	13.043	13.043	0.000	97	1007402	25.0	30.7	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	96	347696	25.0	26.8	
S 141 1,2-Dichloroethene, Total	1				0		50.0	48.3	
S 140 1,3-Dichloropropene, Total	1				0		50.0	47.2	
S 142 Xylenes, Total	106				0		50.0	48.2	
S 137 Trihalomethanes, Total	1				0		100.0	103.4	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Gas A_00093

Amount Added: 5.00

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5881.d

Injection Date: 07-Jul-2021 07:51:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

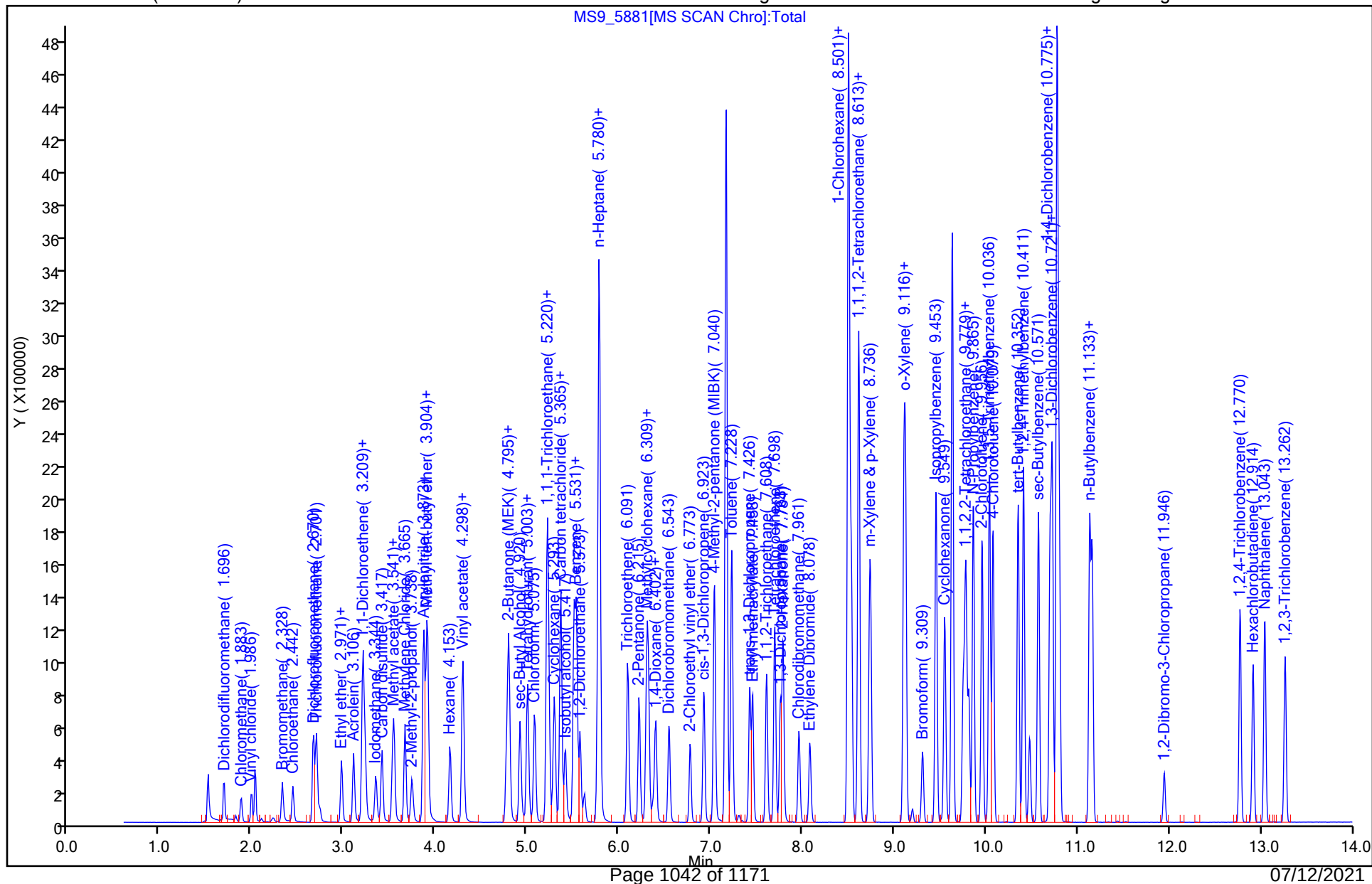
ALS Bottle#: 5

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5881.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Jul-2021 07:51:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: wickhamt Instrument ID: VMS_MS9
Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
Column 1 : DB-624 (0.25 mm) Det: MS SCAN
Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 08:10:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.5	105.03
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	55.7	111.45
\$ 8 Toluene-d8 (Surr)	50.0	48.1	96.20
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.5	94.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542401/6
 Matrix: Water Lab File ID: MS9_5885.d
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 09:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	301		30	9.6
126-99-8	Chloroprene	18.7		1.0	0.21
126-98-7	Methacrylonitrile	295		10	1.6
80-62-6	Methyl methacrylate	61.7		4.0	1.1
107-12-0	Propionitrile	338		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5885.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Jul-2021 09:22:30 ALS Bottle#: 9 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs s
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 10:08:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2758023	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	86	810368	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.775	10.774	0.001	94	1397287	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	801751	50.0	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	801310	50.0	56.8	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2789311	50.0	48.1	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1153348	50.0	47.6	
18 Ethylene oxide	43	2.297	2.297	0.000	98	109217	2500.0	721.4	
23 Ethanol	45	2.857	2.867	-0.010	100	189332	1500.0	2334.8	
27 Propene oxide	58	3.023	3.023	0.000	96	749630	2500.0	785.8	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	164241	250.0	370.0	
37 Acetonitrile	41	3.489	3.500	-0.011	99	259092	250.0	301.5	
44 Isopropyl ether	87	4.318	4.318	0.000	88	249782	25.0	23.1	
47 2-Chloro-1,3-butadiene	53	4.360	4.370	-0.010	89	319255	25.0	18.7	
48 Tert-butyl ethyl ether	59	4.629	4.640	-0.011	95	660122	25.0	22.4	
49 Ethyl acetate	43	4.806	4.806	0.000	95	359430	50.0	55.5	
54 Propionitrile	54	4.826	4.837	-0.011	97	353972	250.0	337.9	
55 Methacrylonitrile	41	4.961	4.961	0.000	83	1105948	250.0	295.1	
65 Tert-amyl methyl ether	73	5.624	5.635	-0.011	96	702939	25.0	23.9	
64 n-Butanol	56	5.977	5.977	0.000	86	198789	625.0	960.5	
70 Methyl methacrylate	100	6.340	6.350	-0.010	79	200873	50.0	61.7	
77 2-Nitropropane	41	6.730	6.719	0.011	99	90234	50.0	55.4	
88 Tetrahydrothiophene	60	7.950	7.955	-0.005	87	110155	50.0	55.2	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.501	0.011	0	171836	50.0	55.8	
114 1,2,3-Trimethylbenzene	105	10.823	10.823	0.000	97	1262949	25.0	24.4	
119 1,3,5-Trichlorobenzene	180	12.133	12.139	-0.006	98	539579	25.0	25.3	
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_00051

Amount Added: 25.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5885.d

Injection Date: 07-Jul-2021 09:22:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: LCS

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

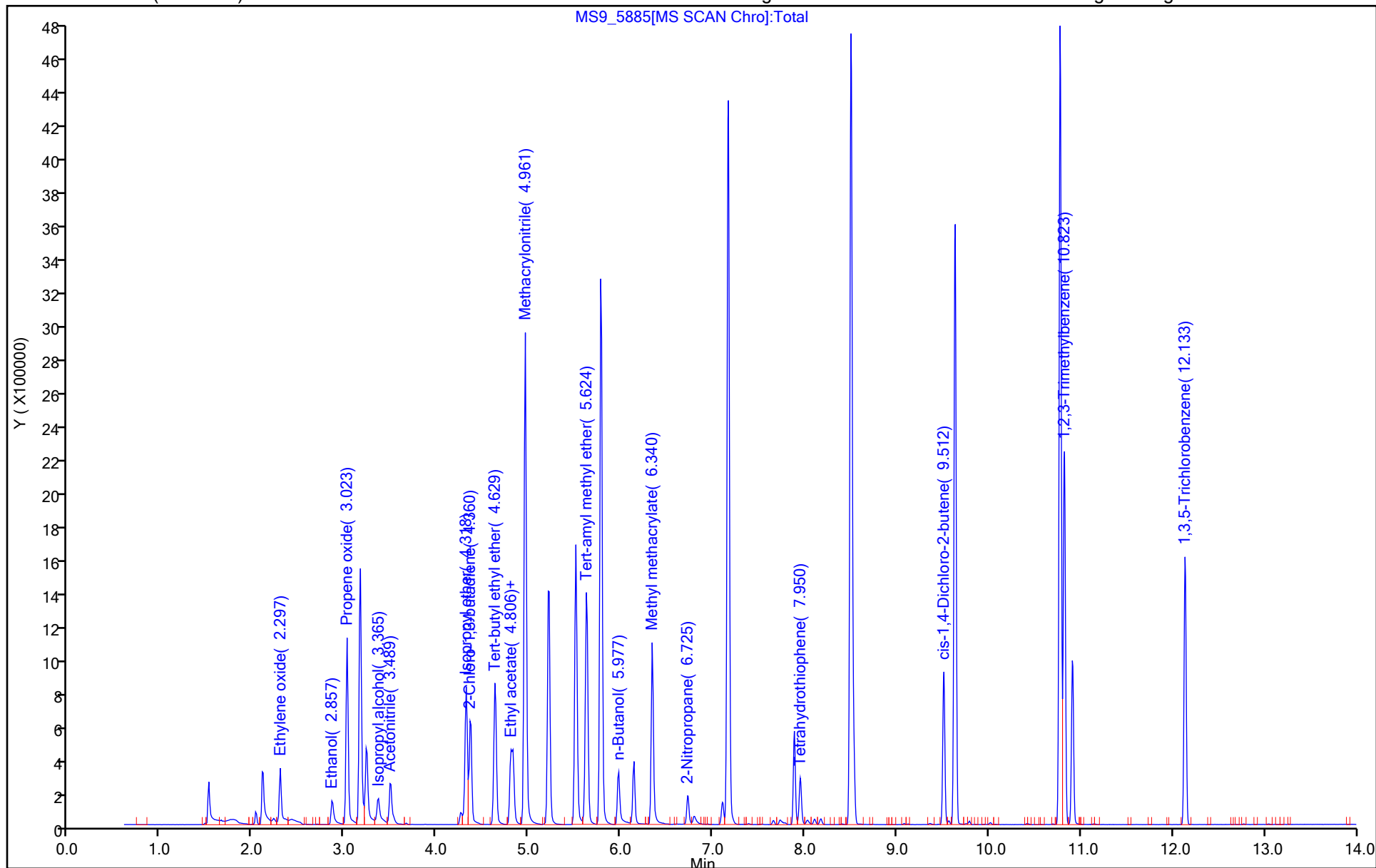
ALS Bottle#: 9

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5885.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Jul-2021 09:22:30 ALS Bottle#: 9 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs s
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 10:08:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.3	104.60
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.8	113.57
\$ 8 Toluene-d8 (Surr)	50.0	48.1	96.23
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.6	95.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542686/4
 Matrix: Water Lab File ID: MS1_4284.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 08:08
 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.: 542686 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	77.9		10	1.9
107-02-8	Acrolein	204		20	2.8
107-13-1	Acrylonitrile	228		20	1.4
71-43-2	Benzene	25.0		1.0	0.16
74-97-5	Chlorobromomethane	23.6		1.0	0.10
75-27-4	Dichlorobromomethane	21.0		1.0	0.17
75-25-2	Bromoform	17.4		1.0	0.46
74-83-9	Bromomethane	20.1		2.0	0.21
78-93-3	2-Butanone (MEK)	85.1		6.0	2.0
75-15-0	Carbon disulfide	23.1		2.0	0.17
56-23-5	Carbon tetrachloride	20.2		1.0	0.19
108-90-7	Chlorobenzene	24.2		1.0	0.17
124-48-1	Chlorodibromomethane	22.1		1.0	0.17
75-00-3	Chloroethane	21.4		2.0	0.41
67-66-3	Chloroform	21.5		1.0	0.16
74-87-3	Chloromethane	17.6		2.0	0.30
107-05-1	Allyl chloride	23.6		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	17.0		5.0	0.47
74-95-3	Dibromomethane	22.3		1.0	0.17
95-50-1	1,2-Dichlorobenzene	24.2		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.3		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.7		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	16.3		3.0	0.80
75-71-8	Dichlorodifluoromethane	13.4		2.0	0.31
75-34-3	1,1-Dichloroethane	22.8		1.0	0.22
107-06-2	1,2-Dichloroethane	23.1		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.8		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	21.9		1.0	0.15
75-35-4	1,1-Dichloroethene	22.7		1.0	0.23
78-87-5	1,2-Dichloropropane	23.1		1.0	0.18
142-28-9	1,3-Dichloropropane	23.8		1.0	0.090
594-20-7	2,2-Dichloropropane	21.3		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.6		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	20.7		3.0	0.19
563-58-6	1,1-Dichloropropene	24.0		1.0	0.19
100-41-4	Ethylbenzene	24.9		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542686/4
 Matrix: Water Lab File ID: MS1_4284.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 08:08
 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.: 542686 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	22.5		3.0	0.86
591-78-6	2-Hexanone	90.5		5.0	1.7
74-88-4	Iodomethane	19.8		1.0	0.23
78-83-1	Isobutyl alcohol	434		110	37
75-09-2	Methylene Chloride	23.6		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	93.8		5.0	0.98
100-42-5	Styrene	24.2		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	22.9		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	21.0		1.0	0.21
127-18-4	Tetrachloroethene	24.6		1.0	0.20
108-88-3	Toluene	23.9		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	22.6		1.0	0.21
71-55-6	1,1,1-Trichloroethane	21.8		1.0	0.16
79-00-5	1,1,2-Trichloroethane	22.5		1.0	0.27
79-01-6	Trichloroethene	22.7		1.0	0.16
75-69-4	Trichlorofluoromethane	20.1		2.0	0.29
96-18-4	1,2,3-Trichloropropane	23.8		2.5	0.33
108-05-4	Vinyl acetate	46.1		3.0	0.94
75-01-4	Vinyl chloride	21.1		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.6		2.0	0.15
95-47-6	o-Xylene	26.0		1.0	0.19
1330-20-7	Xylenes, Total	50.6		2.0	0.19
106-93-4	1,2-Dibromoethane	22.9		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)	100		80-125
460-00-4	4-Bromofluorobenzene (Surr)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4284.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Jul-2021 08:08:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 08:50:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	797717	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	165668	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	264664	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	199824	50.0	47.3	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	257878	50.0	45.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	720037	50.0	50.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	275466	50.0	48.0	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	47783	25.0	13.4	
12 Chloromethane	50	1.914	1.900	0.014	99	60990	25.0	17.6	
13 Vinyl chloride	62	1.998	1.998	0.000	99	59031	25.0	21.1	
15 Bromomethane	94	2.347	2.347	0.000	94	43187	25.0	20.1	
16 Chloroethane	64	2.473	2.473	0.000	98	46124	25.0	21.4	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	97	119632	25.0	21.8	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	92327	25.0	20.1	
20 Ethyl ether	59	3.003	3.004	-0.001	92	55435	25.0	24.7	
22 Acrolein	56	3.143	3.143	0.000	98	90066	246.9	203.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	97	52350	25.0	22.7	
24 112TCTFE	151	3.255	3.255	0.000	97	40208	25.0	26.4	
25 Acetone	43	3.269	3.269	0.000	98	74365	100.0	77.9	
26 Iodomethane	142	3.395	3.395	0.000	99	67557	25.0	19.8	
28 Carbon disulfide	76	3.450	3.451	0.000	100	179188	25.0	23.1	
30 Methyl acetate	43	3.576	3.576	0.000	99	94398	50.0	43.3	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	89	109644	25.0	23.6	
32 Methylene Chloride	84	3.716	3.716	0.000	94	67821	25.0	23.6	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	97	49966	250.0	179.7	
34 Acrylonitrile	53	3.911	3.911	0.000	99	251154	250.0	227.7	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	184924	25.0	22.8	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	95	61180	25.0	21.9	
37 Hexane	57	4.205	4.205	0.000	94	83913	25.0	24.3	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	96	123081	25.0	22.8	
39 Vinyl acetate	43	4.344	4.344	0.000	97	288326	50.0	46.1	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	117407	100.0	85.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	70051	25.0	22.8	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	90	101922	25.0	21.3	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	98	116888	600.0	518.0	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	32466	25.0	23.6	
54 Tetrahydrofuran	42	5.057	5.057	0.000	88	39078	50.0	39.8	
55 Chloroform	83	5.140	5.126	0.014	97	120352	25.0	21.5	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	98	107585	25.0	21.8	
57 Cyclohexane	56	5.350	5.350	0.000	94	115776	25.0	23.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	95640	25.0	24.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	80	73506	25.0	20.2	
60 Isobutyl alcohol	41	5.462	5.462	0.000	92	43121	625.0	433.6	
63 Benzene	78	5.587	5.587	0.000	98	275905	25.0	25.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	107559	25.0	23.1	
66 n-Heptane	43	5.825	5.825	0.000	94	82203	25.0	25.1	
68 Trichloroethene	95	6.160	6.160	0.000	94	69708	25.0	22.7	
69 2-Pentanone	43	6.272	6.272	0.000	98	186081	80.0	86.8	
70 Methylcyclohexane	55	6.369	6.355	0.014	96	88371	25.0	22.7	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	69356	25.0	23.1	
73 1,4-Dioxane	88	6.425	6.425	0.000	97	14235	500.0	429.5	
74 Dibromomethane	93	6.453	6.453	0.000	90	42009	25.0	22.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	86403	25.0	21.0	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	36540	25.0	19.9	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	101293	25.0	22.6	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.103	-0.001	98	233168	100.0	93.8	
82 Toluene	91	7.296	7.296	0.000	98	262936	25.0	23.9	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	91071	25.0	20.7	
85 Ethyl methacrylate	69	7.517	7.517	0.000	92	74276	25.0	22.5	
87 1,1,2-Trichloroethane	97	7.675	7.675	-0.001	94	52191	25.0	22.5	
89 Tetrachloroethene	164	7.767	7.768	-0.001	87	42196	25.0	24.6	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	96	99832	25.0	23.8	
91 2-Hexanone	43	7.853	7.853	0.000	96	157793	100.0	90.5	
95 Chlorodibromomethane	129	8.032	8.032	0.000	88	54718	25.0	22.1	
96 Ethylene Dibromide	107	8.146	8.147	-0.001	98	54586	25.0	22.9	
98 1-Chlorohexane	91	8.568	8.561	0.007	92	80384	20.0	22.7	
99 Chlorobenzene	112	8.604	8.604	0.000	95	163554	25.0	24.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	54595	25.0	22.9	
101 Ethylbenzene	106	8.683	8.683	0.000	99	89490	25.0	24.9	
102 m-Xylene & p-Xylene	106	8.811	8.811	0.000	99	111604	25.0	24.6	
103 o-Xylene	106	9.176	9.176	0.000	98	109825	25.0	26.0	
104 Styrene	104	9.198	9.198	0.000	95	187307	25.0	24.2	
106 Bromoform	173	9.376	9.384	-0.008	91	27647	25.0	17.4	
107 Isopropylbenzene	105	9.526	9.527	0.000	98	279986	25.0	24.2	
109 Cyclohexanone	55	9.619	9.627	-0.008	95	125865	1000.0	678.1	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	95	68204	25.0	21.0	
111 Bromobenzene	156	9.855	9.855	0.000	98	68496	25.0	26.1	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.863	-0.001	72	18852	25.0	16.3	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	87	21354	25.0	23.8	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	78018	25.0	24.3	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	66265	25.0	25.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	245595	25.0	23.8	
117 4-Chlorotoluene	126	10.156	10.149	0.007	99	68885	25.0	23.8	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	201298	25.0	23.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	246510	25.0	23.2	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	56377	25.0	23.2	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	95	130083	25.0	25.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	251796	25.0	23.9	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	93	133155	25.0	24.7	
125 n-Butylbenzene	91	11.207	11.207	0.000	97	229021	25.0	22.6	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	116956	25.0	24.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	78	11246	25.0	17.0	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	71436	25.0	22.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	92	25705	25.0	23.7	
132 Naphthalene	128	13.123	13.123	0.000	98	195587	25.0	20.8	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	95	64609	25.0	22.4	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	44.7	
S 150 1,2-Dichloroethene, Total	1				0		50.0	44.7	
S 151 Trihalomethanes, Total	1				0		100.0	82.0	
S 153 Xylenes, Total (URS)	1				0		50.0	50.6	
S 155 Xylenes, Total	106				0		50.0	50.6	
S 156 1,3-Dichloropropene, Total	1				0		50.0	43.3	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMain B_00050

Amount Added: 12.50

Units: uL

Acrolein_B_00006

Amount Added: 12.50

Units: uL

MV-Gas B_00093

Amount Added: 5.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4284.D

Injection Date: 09-Jul-2021 08:08:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

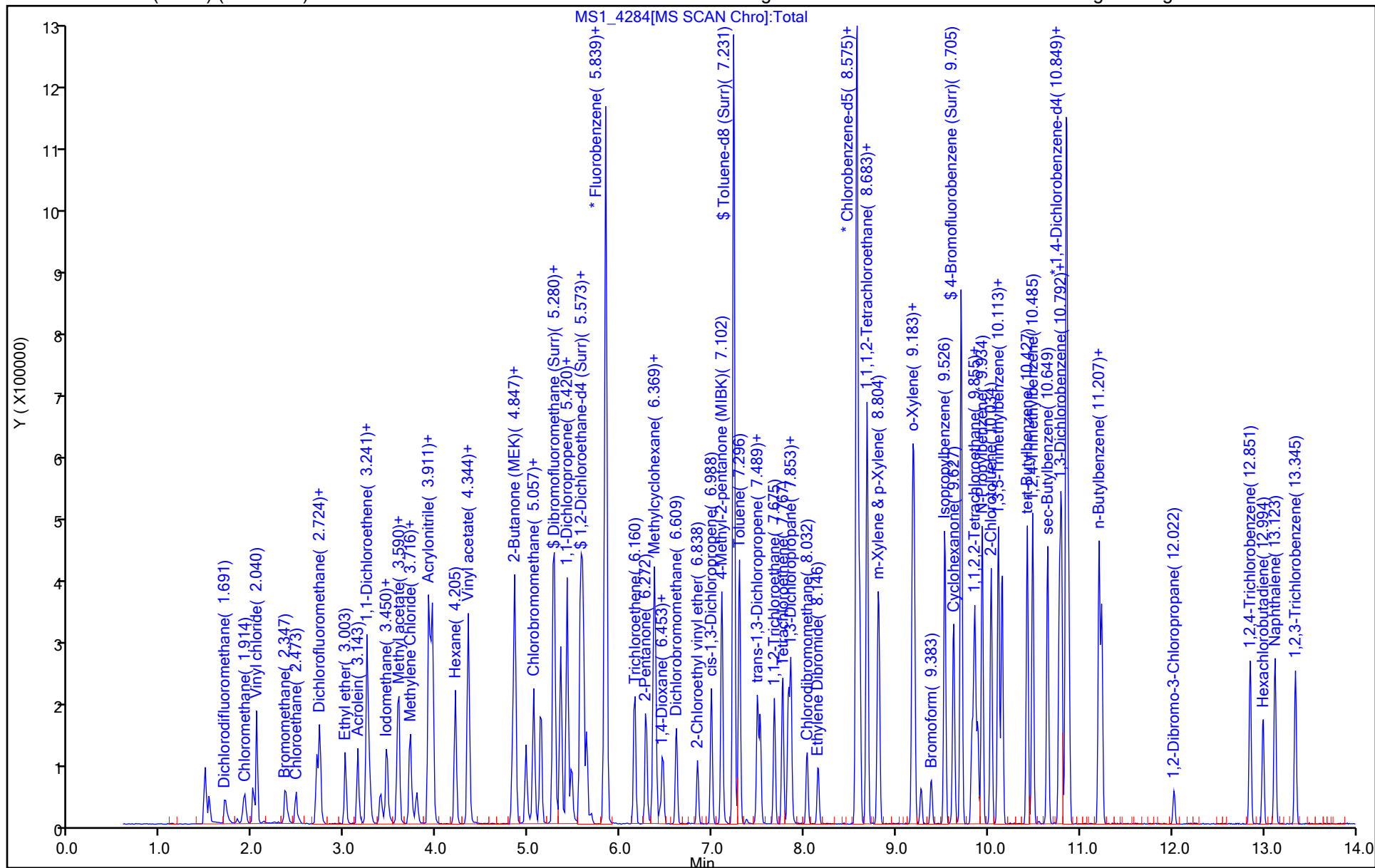
ALS Bottle#: 4

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4284.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Jul-2021 08:08:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 08:50:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.3	94.51
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.5	91.05
\$ 7 Toluene-d8 (Surr)	50.0	50.2	100.34
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.0	95.92

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 280-542686/6
 Matrix: Water Lab File ID: MS1_4286.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 08:51
 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.: 542686 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	248		30	9.6
126-99-8	Chloroprene	22.6		1.0	0.21
126-98-7	Methacrylonitrile	255		10	1.6
80-62-6	Methyl methacrylate	47.2		4.0	1.1
107-12-0	Propionitrile	233		20	3.7

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)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4286.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Jul-2021 08:51:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs s
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 09:32:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	98	772625	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	165914	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	261927	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	195039	50.0	47.6	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	253990	50.0	46.3	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	695513	50.0	48.4	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	269341	50.0	47.4	
14 Ethylene oxide	43	2.319	2.319	0.000	99	339362	2500.0	2246.5	
19 Ethanol	45	2.892	2.906	-0.014	99	43759	1500.0	1284.5	
21 Propene oxide	58	3.059	3.059	0.000	83	1120703	2500.0	2427.7	
27 Isopropyl alcohol	45	3.394	3.395	-0.001	96	32167	250.0	188.4	
29 Acetonitrile	41	3.534	3.534	0.000	99	91122	250.0	248.2	
67 n-Butanol	56		3.597				ND	ND	
41 Isopropyl ether	87	4.372	4.372	0.000	94	49606	25.0	24.2	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	108649	25.0	22.6	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	185723	25.0	23.6	
47 Ethyl acetate	43	4.847	4.847	0.000	99	98566	50.0	49.1	
50 Propionitrile	54	4.875	4.875	0.000	97	84710	250.0	232.5	
52 Methacrylonitrile	41	5.014	5.015	-0.001	94	375183	250.0	255.2	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	81	156788	25.0	22.9	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	28157	50.0	47.2	
76 2-Nitropropane	41	6.788	6.788	0.000	98	14990	50.0	18.9	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	20839	50.0	29.1	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	94	42882	50.0	33.5	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	257412	25.0	25.8	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	87159	25.0	28.6	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

[QC Flag Legend](#)

Processing Flags

ND - Not Detected or Marked ND

[Reagents:](#)

MV-Supp A_00051

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Jul-2021 12:10:28

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4286.D

Injection Date: 09-Jul-2021 08:51:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: LCS

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

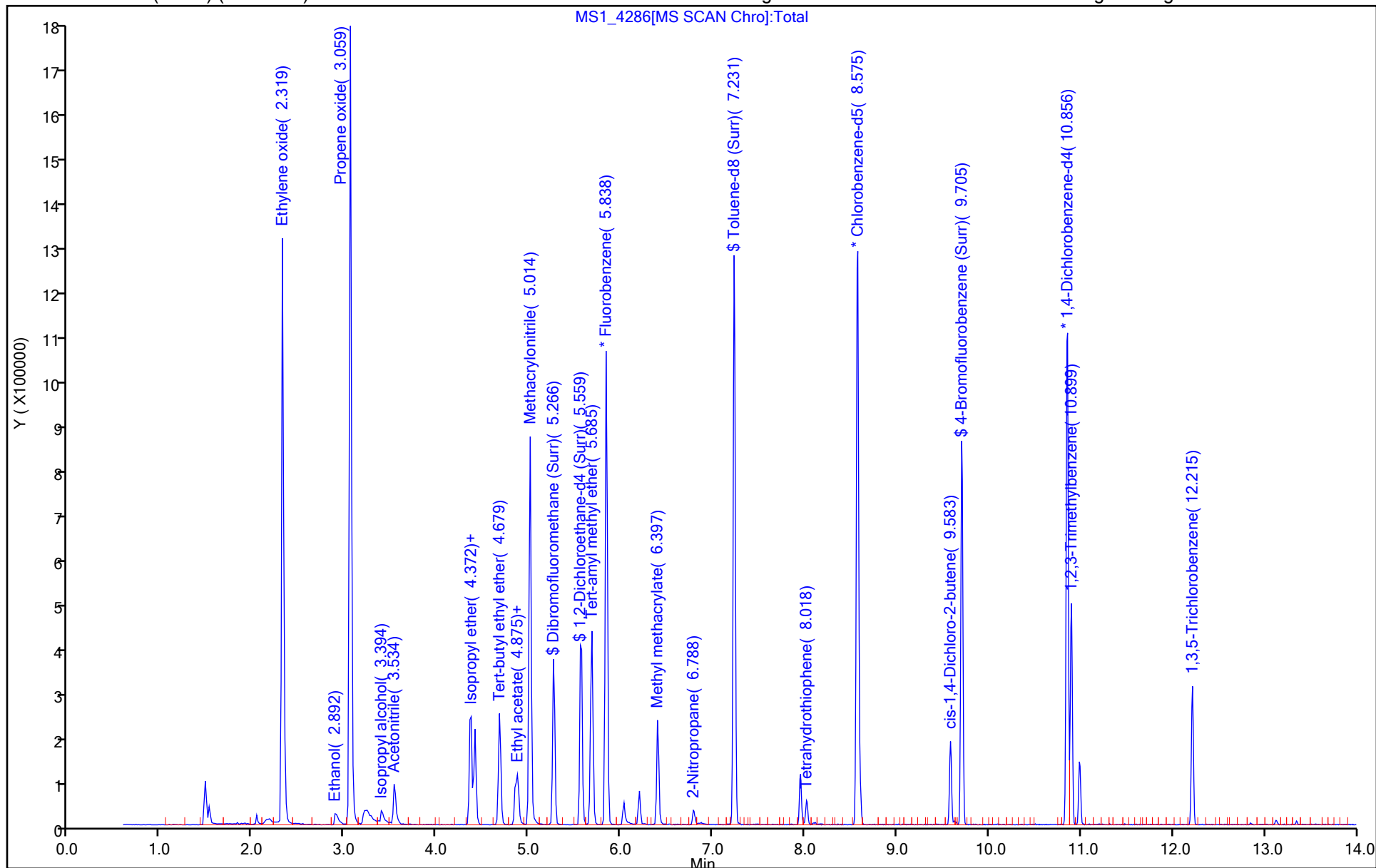
ALS Bottle#: 6

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4286.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 09-Jul-2021 08:51:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcs s
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 09:32:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.6	95.25
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.3	92.59
\$ 7 Toluene-d8 (Surr)	50.0	48.4	96.78
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.4	94.77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542394/5
 Matrix: Water Lab File ID: MS1_4135.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/06/2021 23:09
 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.: 542394 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	81.0		10	1.9
107-02-8	Acrolein	223		20	2.8
107-13-1	Acrylonitrile	235		20	1.4
71-43-2	Benzene	25.2		1.0	0.16
74-97-5	Chlorobromomethane	24.2		1.0	0.10
75-27-4	Dichlorobromomethane	22.0		1.0	0.17
75-25-2	Bromoform	19.5		1.0	0.46
74-83-9	Bromomethane	22.4		2.0	0.21
78-93-3	2-Butanone (MEK)	84.1		6.0	2.0
75-15-0	Carbon disulfide	24.0		2.0	0.17
56-23-5	Carbon tetrachloride	23.4		1.0	0.19
108-90-7	Chlorobenzene	23.2		1.0	0.17
124-48-1	Chlorodibromomethane	21.9		1.0	0.17
75-00-3	Chloroethane	22.8		2.0	0.41
67-66-3	Chloroform	23.1		1.0	0.16
74-87-3	Chloromethane	20.3		2.0	0.30
107-05-1	Allyl chloride	25.1		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	19.0		5.0	0.47
74-95-3	Dibromomethane	24.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.6		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.8		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.4		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	19.7		3.0	0.80
75-71-8	Dichlorodifluoromethane	17.4		2.0	0.31
75-34-3	1,1-Dichloroethane	23.6		1.0	0.22
107-06-2	1,2-Dichloroethane	24.8		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	24.9		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	23.6		1.0	0.15
75-35-4	1,1-Dichloroethene	24.9		1.0	0.23
78-87-5	1,2-Dichloropropane	24.4		1.0	0.18
142-28-9	1,3-Dichloropropane	23.4		1.0	0.090
594-20-7	2,2-Dichloropropane	23.7		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	22.9		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	23.0		3.0	0.19
563-58-6	1,1-Dichloropropene	24.7		1.0	0.19
100-41-4	Ethylbenzene	24.6		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542394/5
 Matrix: Water Lab File ID: MS1_4135.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/06/2021 23:09
 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.: 542394 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	22.4		3.0	0.86
591-78-6	2-Hexanone	86.8		5.0	1.7
74-88-4	Iodomethane	21.5		1.0	0.23
78-83-1	Isobutyl alcohol	502		110	37
75-09-2	Methylene Chloride	24.4		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	95.4		5.0	0.98
100-42-5	Styrene	23.9		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	22.6		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	20.7		1.0	0.21
127-18-4	Tetrachloroethene	26.2		1.0	0.20
108-88-3	Toluene	24.4		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.0		1.0	0.21
71-55-6	1,1,1-Trichloroethane	22.0		1.0	0.16
79-00-5	1,1,2-Trichloroethane	22.9		1.0	0.27
79-01-6	Trichloroethene	22.3		1.0	0.16
75-69-4	Trichlorofluoromethane	23.8		2.0	0.29
96-18-4	1,2,3-Trichloropropane	21.4		2.5	0.33
108-05-4	Vinyl acetate	48.2		3.0	0.94
75-01-4	Vinyl chloride	24.7		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.8		2.0	0.15
95-47-6	o-Xylene	25.1		1.0	0.19
1330-20-7	Xylenes, Total	49.9		2.0	0.19
106-93-4	1,2-Dibromoethane	23.0		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)	100		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4135.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-Jul-2021 23:09:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	-0.001	99	755254	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	166325	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	261427	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	92	190936	50.0	47.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	98	257700	50.0	48.0	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	704381	50.0	48.9	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	283926	50.0	50.0	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	98	58709	25.0	17.4	
12 Chloromethane	50	1.914	1.914	0.000	98	66590	25.0	20.3	
13 Vinyl chloride	62	1.998	2.012	-0.014	99	65501	25.0	24.7	
15 Bromomethane	94	2.347	2.361	-0.014	95	45772	25.0	22.4	
16 Chloroethane	64	2.473	2.473	0.000	99	46474	25.0	22.8	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	98	121499	25.0	23.4	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	103656	25.0	23.8	
20 Ethyl ether	59	3.003	3.003	0.000	94	52347	25.0	24.6	
22 Acrolein	56	3.143	3.143	0.000	98	93180	246.9	223.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	96	54410	25.0	24.9	
24 112TCTFE	151	3.255	3.255	0.000	96	39364	25.0	27.3	
25 Acetone	43	3.269	3.269	0.000	99	72987	100.0	81.0	
26 Iodomethane	142	3.394	3.394	0.000	100	69663	25.0	21.5	
28 Carbon disulfide	76	3.450	3.464	-0.014	100	176076	25.0	24.0	
30 Methyl acetate	43	3.576	3.576	0.000	98	89014	50.0	43.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	89	110447	25.0	25.1	
32 Methylene Chloride	84	3.716	3.716	0.000	96	66398	25.0	24.4	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	97	54271	250.0	206.1	
34 Acrylonitrile	53	3.911	3.911	0.000	97	245470	250.0	235.1	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	184996	25.0	24.0	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	62454	25.0	23.6	
37 Hexane	57	4.204	4.204	0.000	95	89684	25.0	25.8	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	120886	25.0	23.6	
39 Vinyl acetate	43	4.344	4.344	0.000	98	285637	50.0	48.2	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	109936	100.0	84.1	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	84	72268	25.0	24.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
49 2,2-Dichloropropane	77	4.861	4.861	0.000	91	107213	25.0	23.7	
51 sec-Butyl Alcohol	45		4.973				ND	ND	
53 Chlorobromomethane	128	5.056	5.056	0.000	97	31578	25.0	24.2	
54 Tetrahydrofuran	42	5.056	5.056	0.000	89	38200	50.0	41.3	
55 Chloroform	83	5.140	5.140	0.000	97	122734	25.0	23.1	
56 1,1,1-Trichloroethane	97	5.294	5.294	0.000	97	102746	25.0	22.0	
57 Cyclohexane	56	5.350	5.350	0.000	94	118710	25.0	25.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	93084	25.0	24.7	
59 Carbon tetrachloride	117	5.420	5.420	0.000	81	80554	25.0	23.4	
60 Isobutyl alcohol	41	5.475	5.461	0.014	91	47247	625.0	501.8	
63 Benzene	78	5.587	5.587	0.000	98	263505	25.0	25.2	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	109113	25.0	24.8	
66 n-Heptane	43	5.825	5.825	0.000	93	85687	25.0	27.7	
68 Trichloroethene	95	6.160	6.160	0.000	94	68668	25.0	22.3	
69 2-Pentanone	43		6.272				ND	ND	
70 Methylcyclohexane	55	6.369	6.369	0.000	96	93358	25.0	25.4	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	69180	25.0	24.4	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	14943	500.0	473.9	
74 Dibromomethane	93	6.453	6.467	-0.014	90	43418	25.0	24.4	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	85899	25.0	22.0	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	95	35501	25.0	20.4	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	103011	25.0	22.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	224575	100.0	95.4	
82 Toluene	91	7.295	7.295	0.000	97	254530	25.0	24.4	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	97	95691	25.0	23.0	
85 Ethyl methacrylate	69	7.524	7.524	0.000	91	74099	25.0	22.4	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	96	50419	25.0	22.9	
89 Tetrachloroethene	164	7.767	7.767	0.000	92	45139	25.0	26.2	
90 1,3-Dichloropropane	76	7.825	7.832	-0.007	95	98704	25.0	23.4	
91 2-Hexanone	43	7.853	7.853	0.000	98	151779	100.0	86.8	
95 Chlorodibromomethane	129	8.032	8.032	0.000	90	54331	25.0	21.9	
96 Ethylene Dibromide	107	8.153	8.153	0.000	98	54920	25.0	23.0	
98 1-Chlorohexane	91		8.575				ND	ND	
99 Chlorobenzene	112	8.604	8.604	0.000	92	157496	25.0	23.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	88	54156	25.0	22.6	
101 Ethylbenzene	106	8.683	8.690	-0.007	99	88731	25.0	24.6	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	112689	25.0	24.8	
103 o-Xylene	106	9.176	9.183	-0.007	98	106605	25.0	25.1	
104 Styrene	104	9.197	9.197	0.000	95	185724	25.0	23.9	
106 Bromoform	173	9.383	9.383	0.000	92	31212	25.0	19.5	
107 Isopropylbenzene	105	9.526	9.533	-0.007	97	283705	25.0	24.8	
109 Cyclohexanone	55	9.626	9.626	0.000	95	106924	1000.0	573.8	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	66300	25.0	20.7	
111 Bromobenzene	156	9.855	9.855	0.000	98	67882	25.0	26.2	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	73	22425	25.0	19.7	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	91	18981	25.0	21.4	
114 N-Propylbenzene	120	9.934	9.941	-0.007	99	75484	25.0	23.8	
115 2-Chlorotoluene	126	10.034	10.041	-0.007	95	65329	25.0	25.1	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	250319	25.0	24.5	
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	72157	25.0	25.2	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	201794	25.0	24.1	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	250382	25.0	23.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	58645	25.0	24.4	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	95	125651	25.0	24.8	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	242467	25.0	23.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	94	130129	25.0	24.4	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	230756	25.0	23.0	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	94	121955	25.0	25.6	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.029	-0.007	71	12514	25.0	19.0	
130 1,2,4-Trichlorobenzene	180	12.851	12.858	-0.007	92	74898	25.0	24.0	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	92	29667	25.0	27.6	
132 Naphthalene	128	13.123	13.123	0.000	98	206885	25.0	22.3	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	94	69796	25.0	24.5	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	48.5	
S 150 1,2-Dichloroethene, Total	1				0		50.0	48.5	
S 151 Trihalomethanes, Total	1				0		100.0	86.5	
S 153 Xylenes, Total (URS)	1				0		50.0	49.9	
S 155 Xylenes, Total	106				0		50.0	49.9	
S 156 1,3-Dichloropropene, Total	1				0		50.0	45.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Gas A_00093

Amount Added: 5.00

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4135.D

Injection Date: 06-Jul-2021 23:09:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

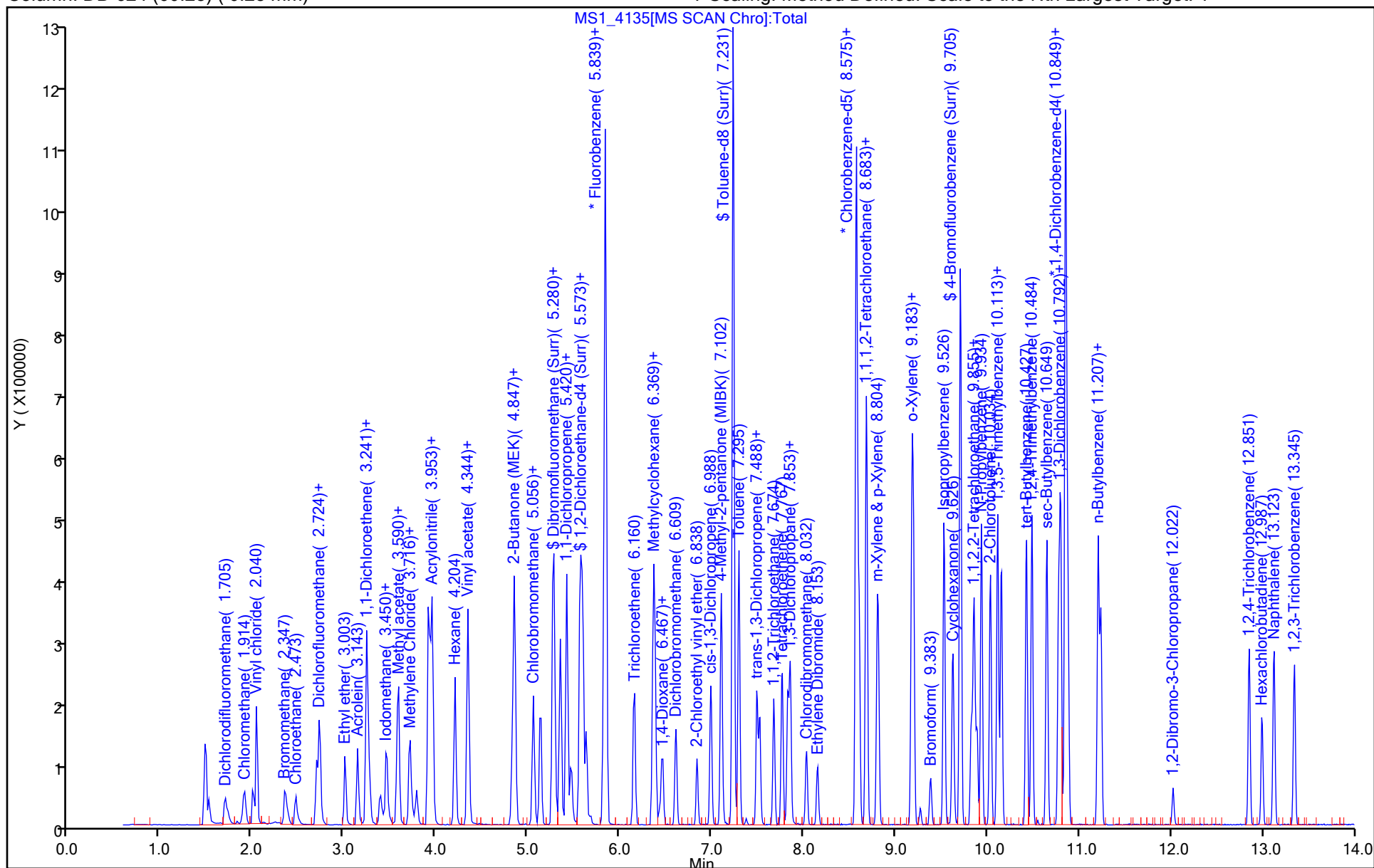
ALS Bottle#: 6

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4135.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-Jul-2021 23:09:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.7	95.39
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	96.10
\$ 7 Toluene-d8 (Surr)	50.0	48.9	97.77
\$ 8 4-Bromofluorobenzene (Surr)	50.0	50.0	100.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542394/7
 Matrix: Water Lab File ID: MS1_4137.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/06/2021 23:51
 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.: 542394 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	251		30	9.6
126-99-8	Chloroprene	21.0		1.0	0.21
126-98-7	Methacrylonitrile	267		10	1.6
80-62-6	Methyl methacrylate	50.5		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)	95		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4137.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-Jul-2021 23:51:30 ALS Bottle#: 8 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD S
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	98	757348	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	169870	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	266813	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	195794	50.0	48.8	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.573	-0.014	98	255203	50.0	47.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	697902	50.0	47.4	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	81	283956	50.0	49.0	
14 Ethylene oxide	43	2.319	2.319	0.000	99	277713	2500.0	1853.6	
19 Ethanol	45	2.892	2.906	-0.014	98	46843	1500.0	1406.5	
21 Propene oxide	58	3.059	3.059	0.000	84	1003296	2500.0	2217.2	
27 Isopropyl alcohol	45	3.408	3.409	-0.001	99	38406	250.0	229.4	
29 Acetonitrile	41	3.534	3.534	0.000	98	90149	250.0	250.6	
67 n-Butanol	56		3.597				ND	ND	
41 Isopropyl ether	87	4.372	4.372	0.000	94	47769	25.0	23.8	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	98769	25.0	21.0	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	182940	25.0	23.8	
47 Ethyl acetate	43	4.847	4.847	0.000	100	102717	50.0	52.1	
50 Propionitrile	54	4.875	4.875	0.000	98	87589	250.0	245.8	
52 Methacrylonitrile	41	5.014	5.015	-0.001	94	384062	250.0	266.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	162697	25.0	24.3	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	29516	50.0	50.5	
76 2-Nitropropane	41	6.788	6.788	0.000	98	15759	50.0	20.6	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	21235	50.0	28.9	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	92	47224	50.0	36.2	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	249278	25.0	24.6	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	81797	25.0	26.4	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

[QC Flag Legend](#)

Processing Flags

ND - Not Detected or Marked ND

[Reagents:](#)

MV-Supp A_00051

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 08:05:54

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\MS1_4137.D

Injection Date: 06-Jul-2021 23:51:30

Instrument ID: VMS_MS1

Operator ID: PETUNINP

Lims ID: LCSD

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

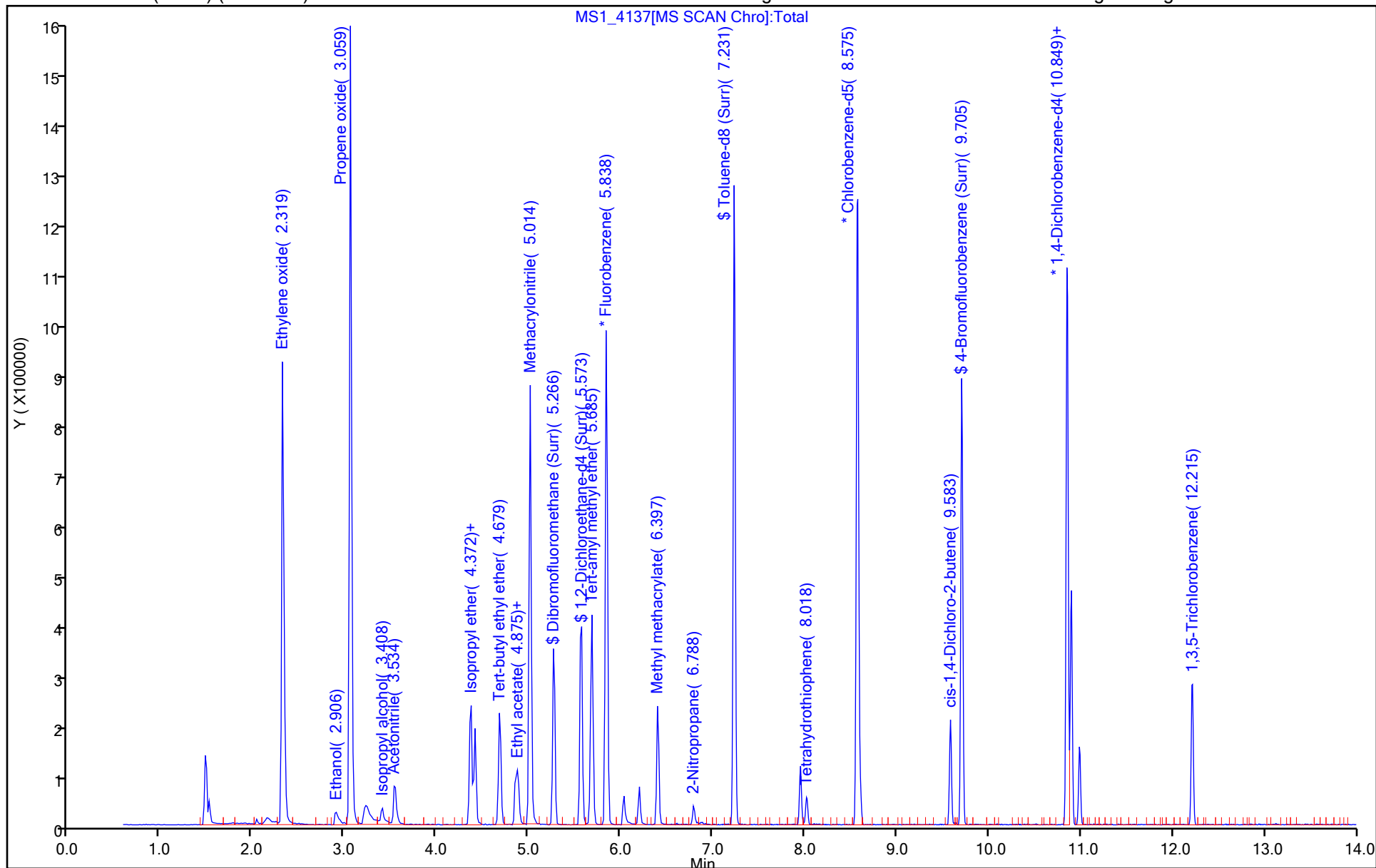
ALS Bottle#: 8

Method: AQ_VMS1_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_MS1\20210706-102962.b\VMS1_4137.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-Jul-2021 23:51:30 ALS Bottle#: 8 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD S
 Operator ID: PETUNINP Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 08:05:48 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.54
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.5	94.90
\$ 7 Toluene-d8 (Surr)	50.0	47.4	94.85
\$ 8 4-Bromofluorobenzene (Surr)	50.0	49.0	98.08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 280-542401/5

Matrix: Water Lab File ID: MS9_5882.d

Analysis Method: 8260B Date Collected: _____

Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 08:14

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	148		10	1.9
107-02-8	Acrolein	261		20	2.8
107-13-1	Acrylonitrile	345		20	1.4
71-43-2	Benzene	24.5		1.0	0.16
74-97-5	Chlorobromomethane	26.9		1.0	0.10
75-27-4	Dichlorobromomethane	26.3		1.0	0.17
75-25-2	Bromoform	27.3		1.0	0.46
74-83-9	Bromomethane	19.1		2.0	0.21
78-93-3	2-Butanone (MEK)	137		6.0	2.0
75-15-0	Carbon disulfide	20.9		2.0	0.17
56-23-5	Carbon tetrachloride	25.4		1.0	0.19
108-90-7	Chlorobenzene	25.0		1.0	0.17
124-48-1	Chlorodibromomethane	25.5		1.0	0.17
75-00-3	Chloroethane	23.2		2.0	0.41
67-66-3	Chloroform	27.2		1.0	0.16
74-87-3	Chloromethane	21.4		2.0	0.30
107-05-1	Allyl chloride	23.9		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	30.2		5.0	0.47
74-95-3	Dibromomethane	27.6		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.2		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	25.6		3.0	0.80
75-71-8	Dichlorodifluoromethane	14.1		2.0	0.31
75-34-3	1,1-Dichloroethane	24.5		1.0	0.22
107-06-2	1,2-Dichloroethane	27.7		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	25.2		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	24.5		1.0	0.15
75-35-4	1,1-Dichloroethene	23.6		1.0	0.23
78-87-5	1,2-Dichloropropane	24.6		1.0	0.18
142-28-9	1,3-Dichloropropane	25.2		1.0	0.090
594-20-7	2,2-Dichloropropane	18.8		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	23.5		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.8		3.0	0.19
563-58-6	1,1-Dichloropropene	24.2		1.0	0.19
100-41-4	Ethylbenzene	24.2		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542401/5
 Matrix: Water Lab File ID: MS9_5882.d
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 08:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 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	113		5.0	1.7
74-88-4	Iodomethane	23.3		1.0	0.23
78-83-1	Isobutyl alcohol	725		110	37
75-09-2	Methylene Chloride	24.7		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	115		5.0	0.98
100-42-5	Styrene	25.4		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	26.0		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	28.7		1.0	0.21
127-18-4	Tetrachloroethene	25.2		1.0	0.20
108-88-3	Toluene	25.6		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	26.3		1.0	0.21
71-55-6	1,1,1-Trichloroethane	26.2		1.0	0.16
79-00-5	1,1,2-Trichloroethane	27.9		1.0	0.27
79-01-6	Trichloroethene	24.2		1.0	0.16
75-69-4	Trichlorofluoromethane	18.9		2.0	0.29
96-18-4	1,2,3-Trichloropropane	27.4		2.5	0.33
108-05-4	Vinyl acetate	48.4		3.0	0.94
75-01-4	Vinyl chloride	21.4		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	24.7		2.0	0.15
95-47-6	o-Xylene	24.8		1.0	0.19
1330-20-7	Xylenes, Total	49.5		2.0	0.19
106-93-4	1,2-Dibromoethane	25.0		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5882.d
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Jul-2021 08:14:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 08:30:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	99	2741317	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	804242	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1392621	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	799184	50.0	52.5	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	774884	50.0	55.2	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2758830	50.0	48.0	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.630	9.630	0.000	97	1142718	50.0	47.3	
13 Dichlorodifluoromethane	85	1.696	1.686	0.010	98	172258	25.0	14.1	
15 Chloromethane	50	1.882	1.872	0.010	96	129201	25.0	21.4	
16 Vinyl chloride	62	1.996	1.986	0.010	97	144043	25.0	21.4	
19 Bromomethane	94	2.328	2.328	0.000	93	137035	25.0	19.1	
20 Chloroethane	64	2.442	2.442	0.000	98	160308	25.0	23.2	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	455915	25.0	23.0	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	399312	25.0	18.9	
24 Ethyl ether	59	2.971	2.971	0.000	86	194113	25.0	25.3	
28 Acrolein	56	3.106	3.106	0.000	99	331238	246.9	260.5	
30 1,1-Dichloroethene	96	3.199	3.199	0.000	94	233019	25.0	23.6	
29 112TCTFE	151	3.220	3.209	0.011	89	204147	25.0	23.0	
31 Acetone	43	3.230	3.230	0.000	98	287017	100.0	147.6	
33 Iodomethane	142	3.344	3.344	0.000	100	364377	25.0	23.3	
35 Carbon disulfide	76	3.417	3.417	0.000	98	565897	25.0	20.9	
34 Methyl acetate	43	3.531	3.531	0.000	93	311918	50.0	58.7	
36 3-Chloro-1-propene	41	3.541	3.541	0.000	84	272618	25.0	23.9	
39 Methylene Chloride	84	3.665	3.665	0.000	79	293083	25.0	24.7	
38 2-Methyl-2-propanol	59	3.738	3.738	0.000	98	300594	250.0	304.2	
42 Acrylonitrile	53	3.873	3.873	0.000	97	842553	250.0	345.0	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	775703	25.0	25.5	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	93	281574	25.0	24.5	
43 Hexane	57	4.152	4.153	-0.001	89	206403	25.0	18.0	
45 Vinyl acetate	43	4.287	4.287	0.000	97	738248	50.0	48.4	
46 1,1-Dichloroethane	63	4.298	4.298	0.000	95	424199	25.0	24.5	
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	383791	100.0	136.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	326778	25.0	25.2	
53 2,2-Dichloropropane	77	4.805	4.806	-0.001	84	296966	25.0	18.8	
51 sec-Butyl Alcohol	45	4.919	4.920	-0.001	95	534982	600.0	690.4	
57 Tetrahydrofuran	42	5.002	5.002	0.000	75	137574	50.0	60.9	
59 Chlorobromomethane	128	5.002	5.002	0.000	78	191928	25.0	26.9	
56 Chloroform	83	5.075	5.075	0.000	92	510653	25.0	27.2	
60 1,1,1-Trichloroethane	97	5.230	5.231	0.000	97	449536	25.0	26.2	
61 Cyclohexane	56	5.293	5.293	0.000	83	311182	25.0	20.3	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	93	359850	25.0	24.2	
63 Carbon tetrachloride	117	5.365	5.365	0.000	95	373229	25.0	25.4	
58 Isobutyl alcohol	43	5.417	5.417	0.000	91	248940	625.0	725.2	
66 Benzene	78	5.531	5.531	0.000	97	1017803	25.0	24.5	
67 1,2-Dichloroethane	62	5.572	5.573	-0.001	98	391292	25.0	27.7	
135 n-Heptane	43	5.769	5.769	0.000	81	173854	25.0	20.3	
68 Trichloroethene	130	6.091	6.091	0.000	95	351863	25.0	24.2	
69 2-Pentanone	43	6.215	6.215	0.000	95	660941	80.0	93.0	
71 Methylcyclohexane	55	6.298	6.298	0.000	88	241388	25.0	21.8	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	94	254884	25.0	24.6	
73 1,4-Dioxane	88	6.371	6.371	0.000	87	97465	500.0	618.2	
74 Dibromomethane	93	6.402	6.391	0.011	90	205212	25.0	27.6	
75 Dichlorobromomethane	83	6.543	6.543	0.000	97	362625	25.0	26.3	
76 2-Chloroethyl vinyl ether	63	6.773	6.773	0.000	93	188886	25.0	29.9	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	96	441822	25.0	23.5	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	763584	100.0	115.2	
80 Toluene	91	7.228	7.228	0.000	99	1172797	25.0	25.6	
82 trans-1,3-Dichloropropene	75	7.425	7.426	-0.001	89	415239	25.0	24.8	
81 Ethyl methacrylate	69	7.458	7.458	0.000	86	374694	25.0	25.7	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	292513	25.0	27.9	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	303050	25.0	25.2	
86 1,3-Dichloropropane	76	7.757	7.757	0.000	87	440340	25.0	25.2	
84 2-Hexanone	43	7.789	7.784	0.005	88	569862	100.0	112.9	
87 Chlorodibromomethane	129	7.960	7.961	-0.001	90	300808	25.0	25.5	
89 Ethylene Dibromide	107	8.078	8.078	0.000	98	322528	25.0	25.0	
90 1-Chlorohexane	91	8.495	8.496	-0.001	90	411628	20.0	19.0	
91 Chlorobenzene	112	8.533	8.533	0.000	96	884395	25.0	25.0	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.608	0.005	95	338074	25.0	26.0	
92 Ethylbenzene	106	8.618	8.613	0.005	97	481644	25.0	24.2	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	1089221	25.0	24.7	
95 o-Xylene	106	9.105	9.105	0.000	95	573545	25.0	24.8	
96 Styrene	104	9.127	9.121	0.006	93	956029	25.0	25.4	
97 Bromoform	173	9.309	9.309	0.000	98	208880	25.0	27.3	
98 Isopropylbenzene	105	9.458	9.453	0.005	96	1344098	25.0	23.6	
100 Cyclohexanone	55	9.549	9.549	0.000	86	461232	1000.0	1098.2	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	373353	25.0	28.7	
105 Bromobenzene	156	9.779	9.779	0.000	85	451164	25.0	25.0	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	79	86569	25.0	25.6	
104 1,2,3-Trichloropropane	110	9.817	9.812	0.005	83	138630	25.0	27.4	a
103 N-Propylbenzene	120	9.865	9.865	0.000	97	424058	25.0	23.7	
107 2-Chlorotoluene	126	9.961	9.961	0.000	97	390975	25.0	23.7	
106 1,3,5-Trimethylbenzene	105	10.041	10.036	0.005	95	1163345	25.0	24.5	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	410550	25.0	24.0	
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	1000331	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 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	1195360	25.0	24.6	
111 sec-Butylbenzene	134	10.571	10.577	-0.006	94	318649	25.0	24.5	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	777164	25.0	24.9	
112 4-Isopropyltoluene	119	10.726	10.721	0.005	95	1212057	25.0	24.5	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	95	790282	25.0	24.8	
116 n-Butylbenzene	91	11.133	11.133	0.000	95	936347	25.0	23.2	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	97	746628	25.0	25.2	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	89	97142	25.0	30.2	
120 1,2,4-Trichlorobenzene	180	12.770	12.775	-0.005	95	457128	25.0	26.3	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	96	206906	25.0	26.5	
122 Naphthalene	128	13.043	13.043	0.000	97	1061916	25.0	32.7	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	97	360896	25.0	28.1	
S 141 1,2-Dichloroethene, Total	1				0		50.0	49.7	
S 140 1,3-Dichloropropene, Total	1				0		50.0	48.4	
S 142 Xylenes, Total	106				0		50.0	49.5	
S 137 Trihalomethanes, Total	1				0		100.0	106.4	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Gas A_00093

Amount Added: 5.00

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5882.d

Injection Date: 07-Jul-2021 08:14:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

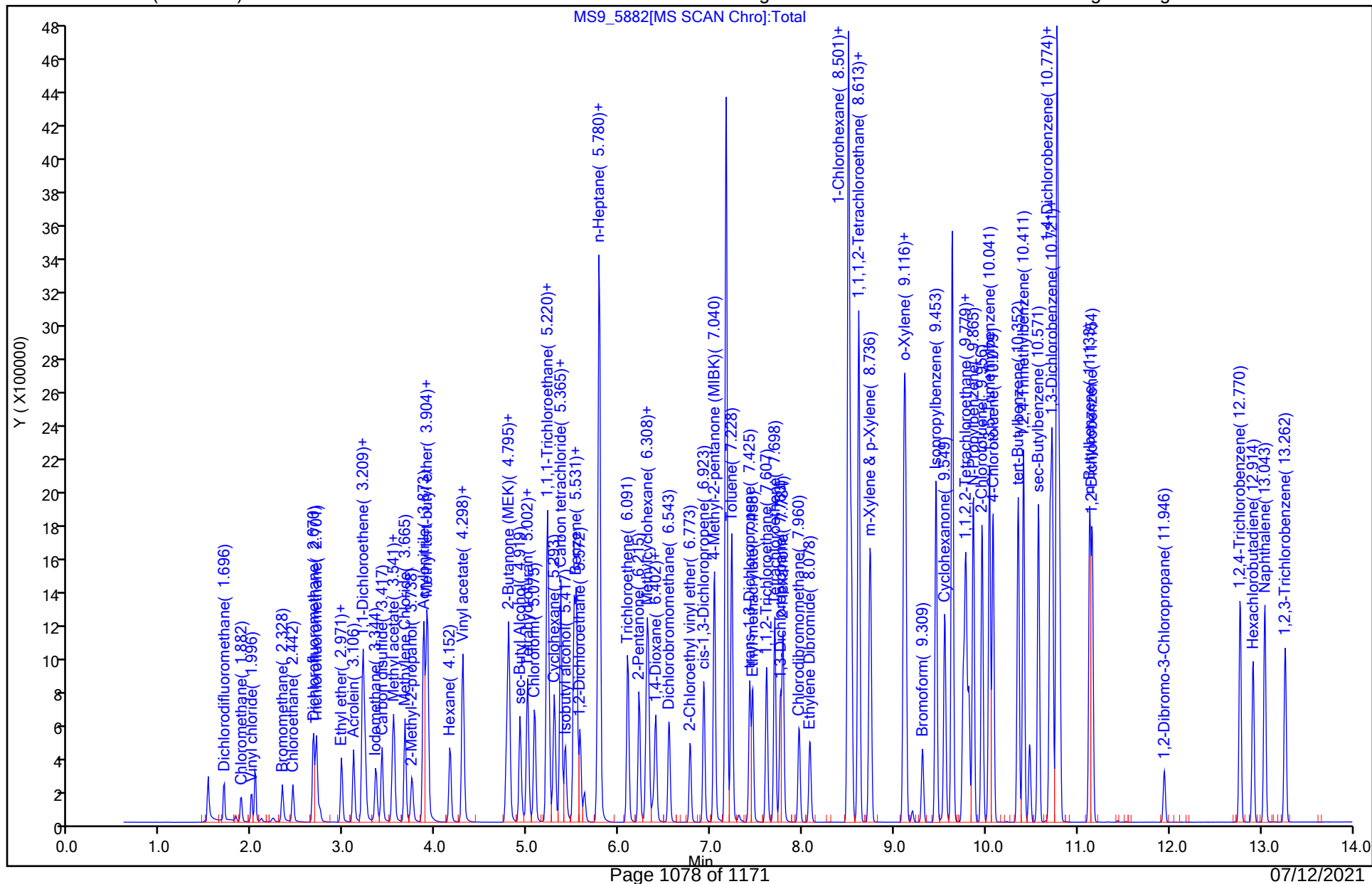
ALS Bottle#: 6

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\MS9_5882.d
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Jul-2021 08:14:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 08:30:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.5	104.90
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	55.2	110.50
\$ 8 Toluene-d8 (Surr)	50.0	48.0	95.91
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.3	94.62

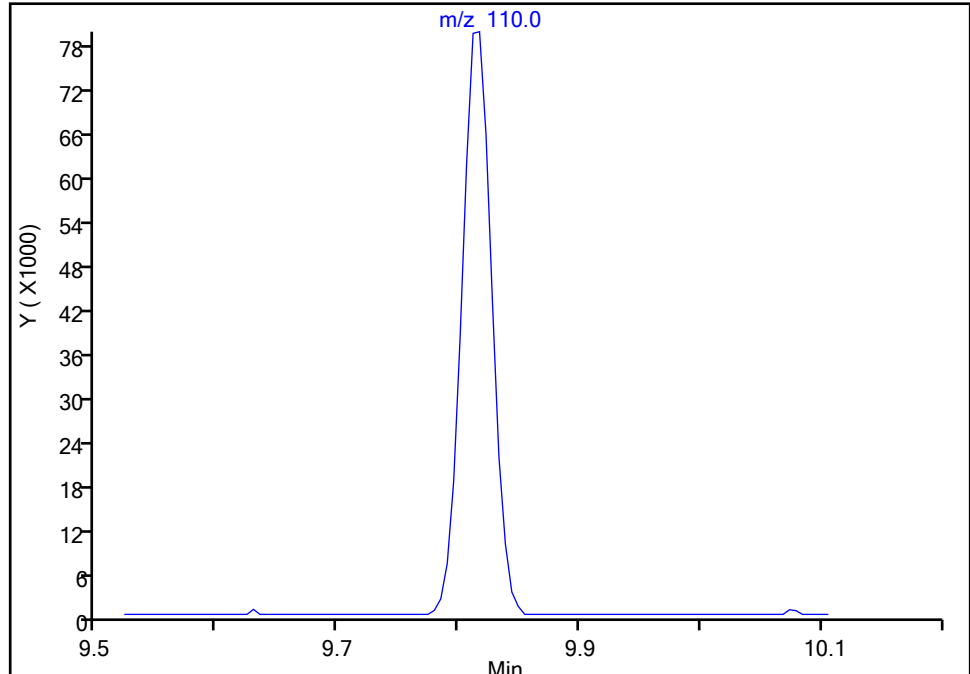
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5882.d
Injection Date: 07-Jul-2021 08:14:30 Instrument ID: VMS_MS9
Lims ID: LCSD
Client ID:
Operator ID: wickhamt ALS Bottle#: 6 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSMS9_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (0.25 mm) Detector MS SCAN

104 1,2,3-Trichloropropane, CAS: 96-18-4
Signal: 1

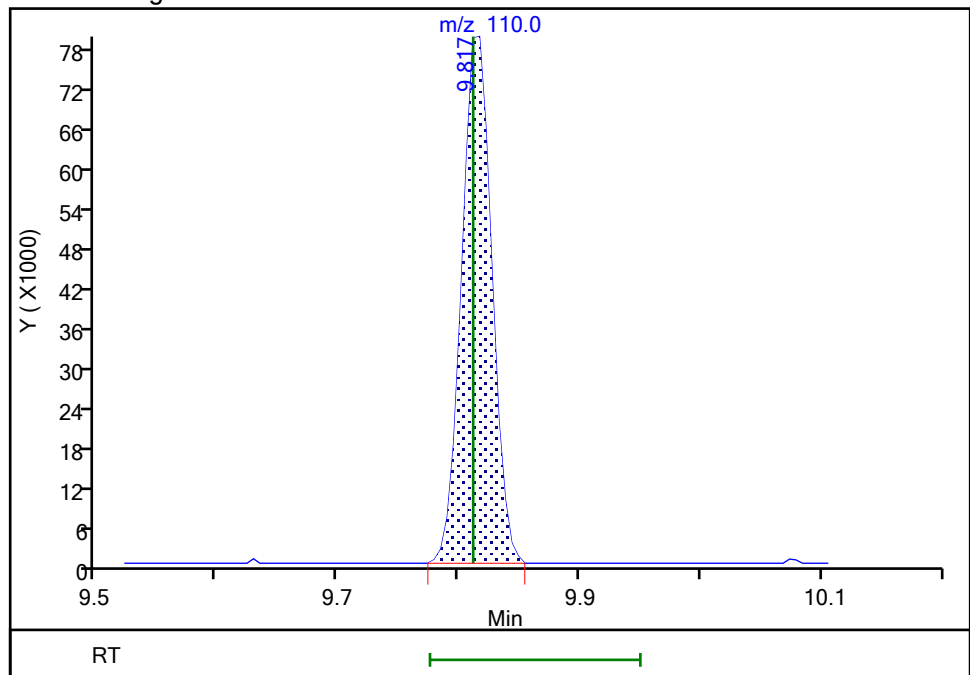
Not Detected
Expected RT: 9.81

Processing Integration Results



RT: 9.82
Area: 138630
Amount: 27.437409
Amount Units: ug/l

Manual Integration Results



Reviewer: wickhamt, 07-Jul-2021 08:30:31
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak
Page 1080 of 1171

07/12/2021

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542401/7
 Matrix: Water Lab File ID: MS9_5886.d
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/07/2021 09:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	298		30	9.6
126-99-8	Chloroprene	18.4		1.0	0.21
126-98-7	Methacrylonitrile	294		10	1.6
80-62-6	Methyl methacrylate	61.0		4.0	1.1
107-12-0	Propionitrile	330		20	3.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		70-127
2037-26-5	Toluene-d8 (Surr)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	95		78-120
1868-53-7	Dibromofluoromethane (Surr)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5886.d
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Jul-2021 09:45:30 ALS Bottle#: 10 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd s
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 10:41:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2818260	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	85	827268	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.774	10.774	0.000	94	1423987	50.0	50.0	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	818830	50.0	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	818861	50.0	56.8	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2838747	50.0	48.0	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1178492	50.0	47.7	
18 Ethylene oxide	43	2.297	2.297	0.000	98	128506	2500.0	830.6	
23 Ethanol	45	2.857	2.867	-0.010	99	173568	1500.0	2092.3	
27 Propene oxide	58	3.022	3.023	-0.001	96	807969	2500.0	828.8	
32 Isopropyl alcohol	45	3.365	3.365	0.000	97	168993	250.0	372.6	
37 Acetonitrile	41	3.499	3.500	-0.001	99	261791	250.0	298.1	
44 Isopropyl ether	87	4.318	4.318	0.000	88	253558	25.0	23.0	
47 2-Chloro-1,3-butadiene	53	4.360	4.370	-0.010	90	320863	25.0	18.4	
48 Tert-butyl ethyl ether	59	4.629	4.640	-0.011	95	676002	25.0	22.5	
49 Ethyl acetate	43	4.805	4.806	-0.001	96	370235	50.0	56.0	
54 Propionitrile	54	4.826	4.837	-0.011	97	353099	250.0	329.8	
55 Methacrylonitrile	41	4.961	4.961	0.000	84	1125340	250.0	293.7	
65 Tert-amyl methyl ether	73	5.624	5.635	-0.011	96	721609	25.0	24.1	
64 n-Butanol	56	5.977	5.977	0.000	86	204786	625.0	968.3	
70 Methyl methacrylate	100	6.339	6.350	-0.011	79	203104	50.0	61.0	
77 2-Nitropropane	41	6.730	6.719	0.011	99	93523	50.0	56.2	
88 Tetrahydrothiophene	60	7.950	7.955	-0.005	87	112905	50.0	55.4	
99 cis-1,4-Dichloro-2-butene	53	9.512	9.501	0.011	0	176279	50.0	56.1	
114 1,2,3-Trimethylbenzene	105	10.822	10.823	-0.001	97	1278904	25.0	24.2	
119 1,3,5-Trichlorobenzene	180	12.133	12.139	-0.006	97	550541	25.0	25.4	
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

[Reagents:](#)

MV-Supp A_00051

Amount Added: 25.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 07-Jul-2021 12:09:35

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5886.d

Injection Date: 07-Jul-2021 09:45:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: LCSD

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

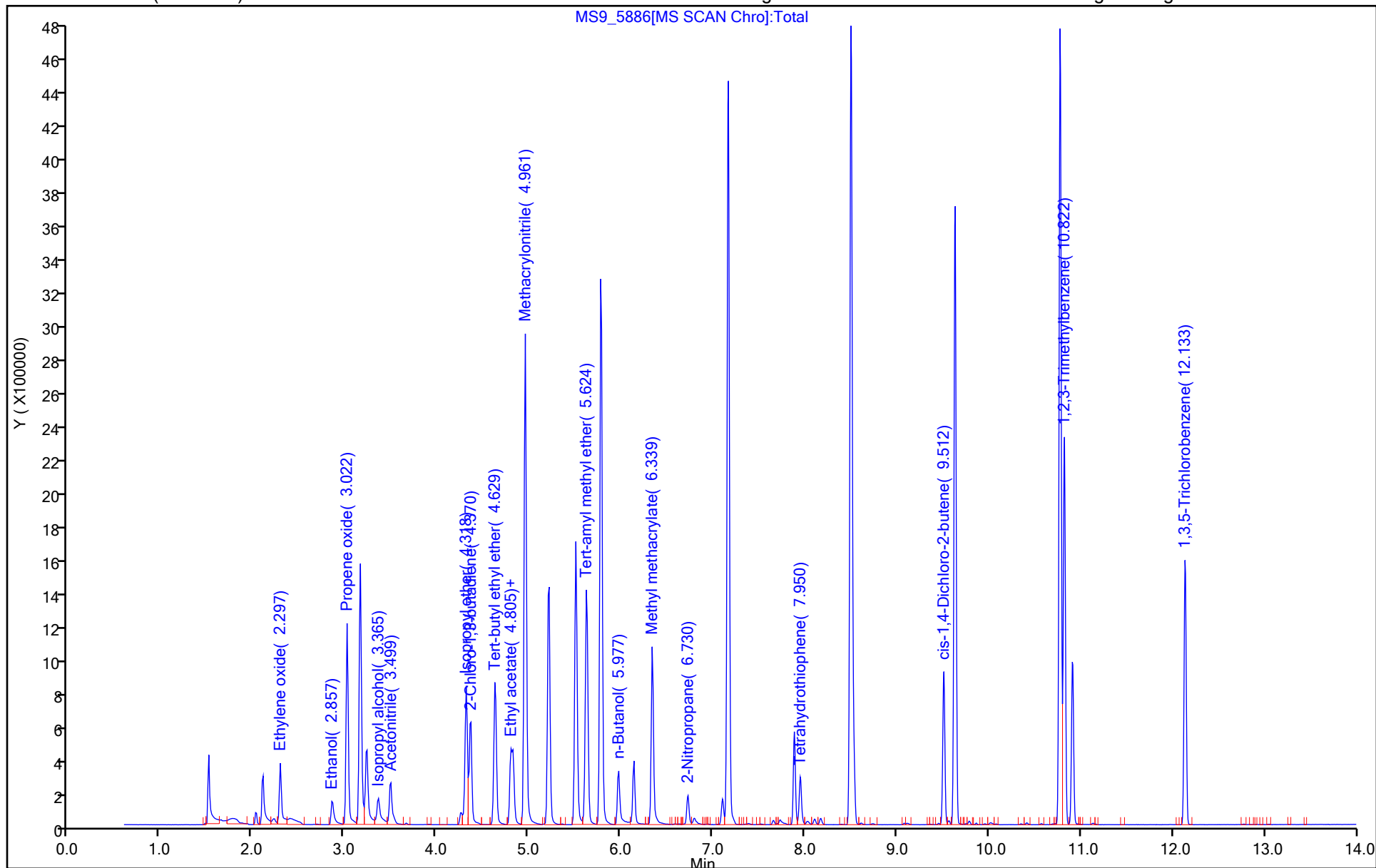
ALS Bottle#: 10

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5886.d
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Jul-2021 09:45:30 ALS Bottle#: 10 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd s
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 12:09:29 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1643

First Level Reviewer: wickhamt

Date: 07-Jul-2021 10:41:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.3	104.55
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.8	113.58
\$ 8 Toluene-d8 (Surr)	50.0	48.0	95.94
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.7	95.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542686/5
 Matrix: Water Lab File ID: MS1_4285.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 08:30
 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.: 542686 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	74.4		10	1.9
107-02-8	Acrolein	201		20	2.8
107-13-1	Acrylonitrile	234		20	1.4
71-43-2	Benzene	23.6		1.0	0.16
74-97-5	Chlorobromomethane	23.5		1.0	0.10
75-27-4	Dichlorobromomethane	20.6		1.0	0.17
75-25-2	Bromoform	17.9		1.0	0.46
74-83-9	Bromomethane	20.5		2.0	0.21
78-93-3	2-Butanone (MEK)	82.2		6.0	2.0
75-15-0	Carbon disulfide	22.2		2.0	0.17
56-23-5	Carbon tetrachloride	20.1		1.0	0.19
108-90-7	Chlorobenzene	23.7		1.0	0.17
124-48-1	Chlorodibromomethane	20.8		1.0	0.17
75-00-3	Chloroethane	21.6		2.0	0.41
67-66-3	Chloroform	22.2		1.0	0.16
74-87-3	Chloromethane	18.1		2.0	0.30
107-05-1	Allyl chloride	23.1		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	18.9		5.0	0.47
74-95-3	Dibromomethane	22.4		1.0	0.17
95-50-1	1,2-Dichlorobenzene	26.0		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.2		1.0	0.13
106-46-7	1,4-Dichlorobenzene	24.2		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	15.2		3.0	0.80
75-71-8	Dichlorodifluoromethane	13.7		2.0	0.31
75-34-3	1,1-Dichloroethane	22.4		1.0	0.22
107-06-2	1,2-Dichloroethane	22.0		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	22.8		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	20.8		1.0	0.15
75-35-4	1,1-Dichloroethene	22.4		1.0	0.23
78-87-5	1,2-Dichloropropane	23.8		1.0	0.18
142-28-9	1,3-Dichloropropane	23.6		1.0	0.090
594-20-7	2,2-Dichloropropane	20.2		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	21.4		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	20.6		3.0	0.19
563-58-6	1,1-Dichloropropene	23.1		1.0	0.19
100-41-4	Ethylbenzene	24.3		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542686/5
 Matrix: Water Lab File ID: MS1_4285.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 08:30
 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.: 542686 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
97-63-2	Ethyl methacrylate	20.8		3.0	0.86
591-78-6	2-Hexanone	88.6		5.0	1.7
74-88-4	Iodomethane	19.8		1.0	0.23
78-83-1	Isobutyl alcohol	429		110	37
75-09-2	Methylene Chloride	23.3		2.0	0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	93.7		5.0	0.98
100-42-5	Styrene	23.2		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	22.4		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	21.2		1.0	0.21
127-18-4	Tetrachloroethene	23.6		1.0	0.20
108-88-3	Toluene	23.2		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	24.6		1.0	0.21
71-55-6	1,1,1-Trichloroethane	20.5		1.0	0.16
79-00-5	1,1,2-Trichloroethane	22.4		1.0	0.27
79-01-6	Trichloroethene	20.1		1.0	0.16
75-69-4	Trichlorofluoromethane	20.5		2.0	0.29
96-18-4	1,2,3-Trichloropropane	22.1		2.5	0.33
108-05-4	Vinyl acetate	45.7		3.0	0.94
75-01-4	Vinyl chloride	21.7		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	23.7		2.0	0.15
95-47-6	o-Xylene	24.7		1.0	0.19
1330-20-7	Xylenes, Total	48.4		2.0	0.19
106-93-4	1,2-Dibromoethane	22.7		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)	96		80-125
460-00-4	4-Bromofluorobenzene (Surr)	98		78-120
1868-53-7	Dibromofluoromethane (Surr)	94		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4285.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 09-Jul-2021 08:30:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 09:07:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	784549	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	90	167927	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	97	261171	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	195950	50.0	47.1	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	253356	50.0	45.5	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	700126	50.0	48.1	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	86	276777	50.0	48.8	
11 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	47981	25.0	13.7	
12 Chloromethane	50	1.914	1.900	0.014	98	61615	25.0	18.1	
13 Vinyl chloride	62	1.998	1.998	0.000	97	59589	25.0	21.7	
15 Bromomethane	94	2.347	2.347	0.000	91	43330	25.0	20.5	
16 Chloroethane	64	2.473	2.473	0.000	99	45736	25.0	21.6	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	120529	25.0	22.4	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	100	92509	25.0	20.5	
20 Ethyl ether	59	3.003	3.004	-0.001	94	51949	25.0	23.5	
22 Acrolein	56	3.143	3.143	0.000	99	87643	246.9	201.4	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	97	50813	25.0	22.4	
24 112TCTFE	151	3.255	3.255	0.000	95	36837	25.0	24.6	
25 Acetone	43	3.269	3.269	0.000	98	70108	100.0	74.4	
26 Iodomethane	142	3.394	3.395	-0.001	98	66547	25.0	19.8	
28 Carbon disulfide	76	3.450	3.451	0.000	100	169324	25.0	22.2	
30 Methyl acetate	43	3.576	3.576	0.000	99	93866	50.0	43.8	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	89	105566	25.0	23.1	
32 Methylene Chloride	84	3.716	3.716	0.000	95	65843	25.0	23.3	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	97	50676	250.0	185.3	
34 Acrylonitrile	53	3.911	3.911	0.000	98	254153	250.0	234.3	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	178295	25.0	22.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	96	57149	25.0	20.8	
37 Hexane	57	4.205	4.205	0.000	95	82870	25.0	23.7	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	119076	25.0	22.4	
39 Vinyl acetate	43	4.344	4.344	0.000	97	281097	50.0	45.7	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	111601	100.0	82.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	85	68909	25.0	22.8	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	90	94974	25.0	20.2	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	96	116265	600.0	523.7	
53 Chlorobromomethane	128	5.056	5.057	-0.001	96	31801	25.0	23.5	
54 Tetrahydrofuran	42	5.056	5.057	-0.001	88	36002	50.0	36.9	
55 Chloroform	83	5.126	5.126	0.000	97	122697	25.0	22.2	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	98	99552	25.0	20.5	
57 Cyclohexane	56	5.350	5.350	0.000	93	109077	25.0	22.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	91	90664	25.0	23.1	
59 Carbon tetrachloride	117	5.420	5.420	0.000	83	71933	25.0	20.1	
60 Isobutyl alcohol	41	5.461	5.462	-0.001	92	41979	625.0	429.2	
63 Benzene	78	5.587	5.587	0.000	98	256451	25.0	23.6	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	100643	25.0	22.0	
66 n-Heptane	43	5.825	5.825	0.000	95	80451	25.0	25.0	
68 Trichloroethene	95	6.160	6.160	0.000	95	62682	25.0	20.1	
69 2-Pentanone	43	6.272	6.272	0.000	98	183704	80.0	87.2	
70 Methylcyclohexane	55	6.369	6.355	0.014	96	86344	25.0	22.5	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	92	70249	25.0	23.8	
73 1,4-Dioxane	88	6.425	6.425	0.000	95	14518	500.0	444.6	
74 Dibromomethane	93	6.453	6.453	0.000	90	41471	25.0	22.4	
75 Dichlorobromomethane	83	6.609	6.609	0.000	98	83268	25.0	20.6	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	35109	25.0	19.4	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	97093	25.0	21.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.103	-0.001	98	228973	100.0	93.7	
82 Toluene	91	7.295	7.296	-0.001	97	250968	25.0	23.2	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	89338	25.0	20.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	92	69672	25.0	20.8	
87 1,1,2-Trichloroethane	97	7.674	7.675	-0.001	94	51228	25.0	22.4	
89 Tetrachloroethene	164	7.760	7.768	-0.008	92	40971	25.0	23.6	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	100252	25.0	23.6	
91 2-Hexanone	43	7.853	7.853	0.000	98	156534	100.0	88.6	
95 Chlorodibromomethane	129	8.032	8.032	0.000	91	52291	25.0	20.8	
96 Ethylene Dibromide	107	8.146	8.147	-0.001	95	54952	25.0	22.7	
98 1-Chlorohexane	91	8.568	8.561	0.007	93	86728	20.0	24.2	
99 Chlorobenzene	112	8.604	8.604	0.000	92	162725	25.0	23.7	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	54278	25.0	22.4	
101 Ethylbenzene	106	8.683	8.683	0.000	99	88639	25.0	24.3	
102 m-Xylene & p-Xylene	106	8.811	8.811	0.000	99	108800	25.0	23.7	
103 o-Xylene	106	9.176	9.176	0.000	98	106008	25.0	24.7	
104 Styrene	104	9.197	9.198	-0.001	94	181893	25.0	23.2	
106 Bromoform	173	9.383	9.384	-0.001	90	28741	25.0	17.9	
107 Isopropylbenzene	105	9.526	9.527	0.000	97	280129	25.0	24.5	
109 Cyclohexanone	55	9.626	9.627	-0.001	96	117647	1000.0	625.3	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	67897	25.0	21.2	
111 Bromobenzene	156	9.855	9.855	0.000	97	66157	25.0	25.5	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.863	-0.001	71	17273	25.0	15.2	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	88	19637	25.0	22.1	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	74393	25.0	23.4	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	64500	25.0	24.8	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	244053	25.0	23.9	
117 4-Chlorotoluene	126	10.156	10.149	0.007	99	69656	25.0	24.4	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	196738	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
119 1,2,4-Trimethylbenzene	105	10.484	10.485	-0.001	98	245281	25.0	23.4	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	55354	25.0	23.1	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	95	127631	25.0	25.2	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	97	243080	25.0	23.4	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	93	128941	25.0	24.2	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	228113	25.0	22.8	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	95	124046	25.0	26.0	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	75	12437	25.0	18.9	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	93	76612	25.0	24.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	24904	25.0	23.3	
132 Naphthalene	128	13.123	13.123	0.000	98	198279	25.0	21.4	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	65132	25.0	22.9	
S 149 1,2-Dichloroethene, Total (URS)	95				0		50.0	43.6	
S 150 1,2-Dichloroethene, Total	1				0		50.0	43.6	
S 151 Trihalomethanes, Total	1				0		100.0	81.5	
S 153 Xylenes, Total (URS)	1				0		50.0	48.4	
S 155 Xylenes, Total	106				0		50.0	48.4	
S 156 1,3-Dichloropropene, Total	1				0		50.0	42.0	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMain B_00050

Amount Added: 12.50

Units: uL

Acrolein_B_00006

Amount Added: 12.50

Units: uL

MV-Gas B_00093

Amount Added: 5.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Jul-2021 12:10:27

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4285.D

Injection Date: 09-Jul-2021 08:30:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

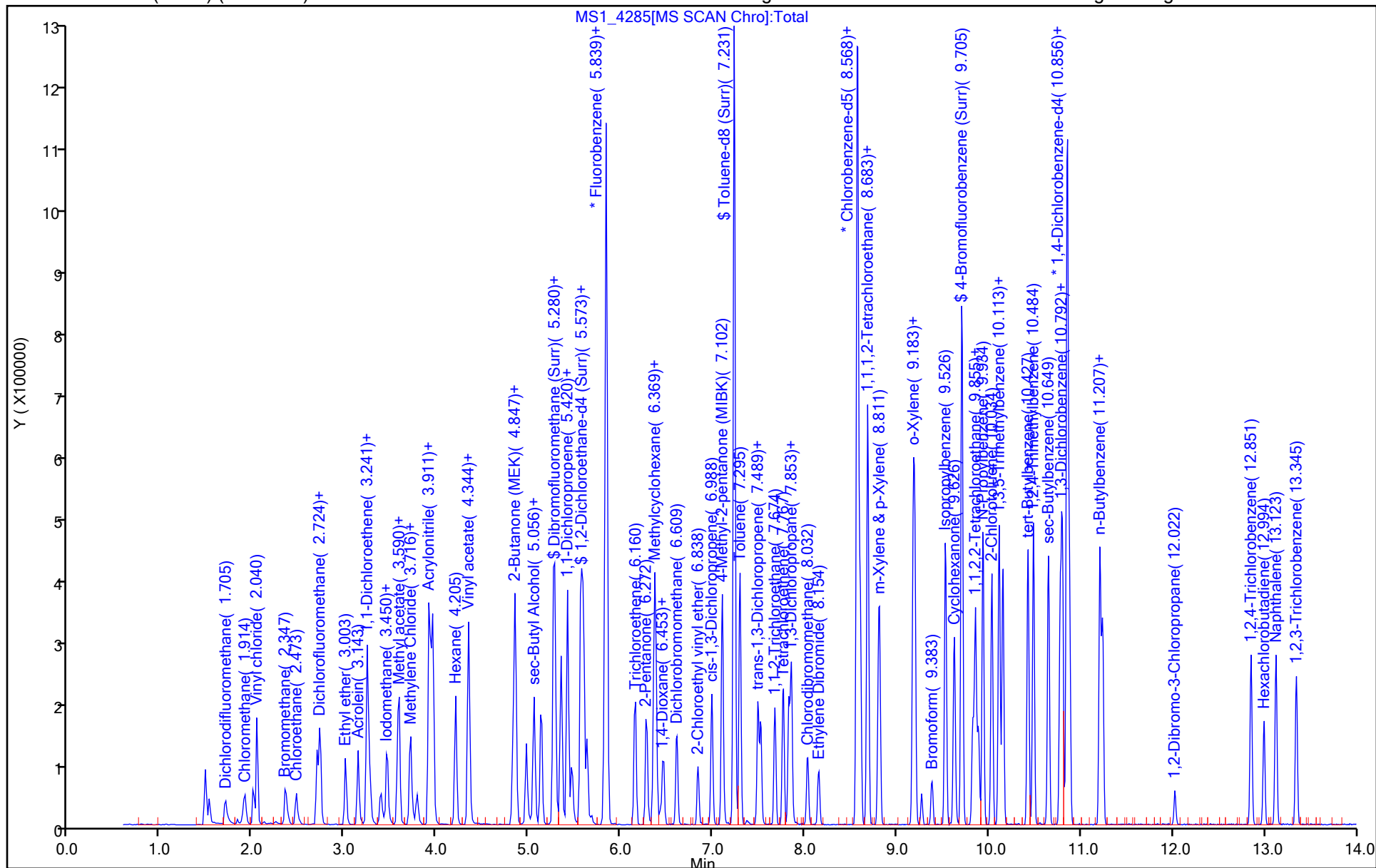
ALS Bottle#: 5

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4285.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 09-Jul-2021 08:30:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 09:07:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.1	94.24
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.5	90.95
\$ 7 Toluene-d8 (Surr)	50.0	48.1	96.25
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.8	97.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 280-542686/7
 Matrix: Water Lab File ID: MS1_4287.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/09/2021 09:12
 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.: 542686 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-05-8	Acetonitrile	236		30	9.6
126-99-8	Chloroprene	21.8		1.0	0.21
126-98-7	Methacrylonitrile	253		10	1.6
80-62-6	Methyl methacrylate	48.3		4.0	1.1
107-12-0	Propionitrile	232		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)	96		78-120
1868-53-7	Dibromofluoromethane (Surr)	95		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4287.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 09-Jul-2021 09:12:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd s
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 09:33:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	790409	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.576	8.575	0.001	90	171888	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	267842	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	199853	50.0	47.7	
\$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	264327	50.0	47.1	
\$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	718415	50.0	48.2	
\$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	82	278951	50.0	48.0	
14 Ethylene oxide	43	2.319	2.319	0.000	99	344316	2500.0	2226.8	
19 Ethanol	45	2.892	2.906	-0.014	97	42029	1500.0	1203.5	
21 Propene oxide	58	3.059	3.059	0.000	83	1133963	2500.0	2401.1	
27 Isopropyl alcohol	45	3.395	3.395	0.000	98	32851	250.0	188.0	
29 Acetonitrile	41	3.534	3.534	0.000	100	88699	250.0	235.9	
67 n-Butanol	56		3.597				ND	ND	
41 Isopropyl ether	87	4.372	4.372	0.000	93	51138	25.0	24.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	107249	25.0	21.8	
44 Tert-butyl ethyl ether	59	4.680	4.679	0.001	98	188252	25.0	23.4	
47 Ethyl acetate	43	4.847	4.847	0.000	100	101813	50.0	49.5	
50 Propionitrile	54	4.875	4.875	0.000	98	86636	250.0	232.5	
52 Methacrylonitrile	41	5.015	5.015	0.000	94	381182	250.0	253.5	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	83	157578	25.0	22.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	93	29421	50.0	48.3	
76 2-Nitropropane	41	6.788	6.788	0.000	98	13839	50.0	16.6	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	94	20845	50.0	28.1	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	93	40734	50.0	31.1	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	258560	25.0	25.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	82375	25.0	26.4	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

[QC Flag Legend](#)

Processing Flags

ND - Not Detected or Marked ND

[Reagents:](#)

MV-Supp A_00051

Amount Added: 25.00

Units: uL

mv-IS_SS_00018

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Jul-2021 12:10:29

Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\MS1_4287.D

Injection Date: 09-Jul-2021 09:12:30

Instrument ID: VMS_MS1

Operator ID: wickhamt

Lims ID: LCSD

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

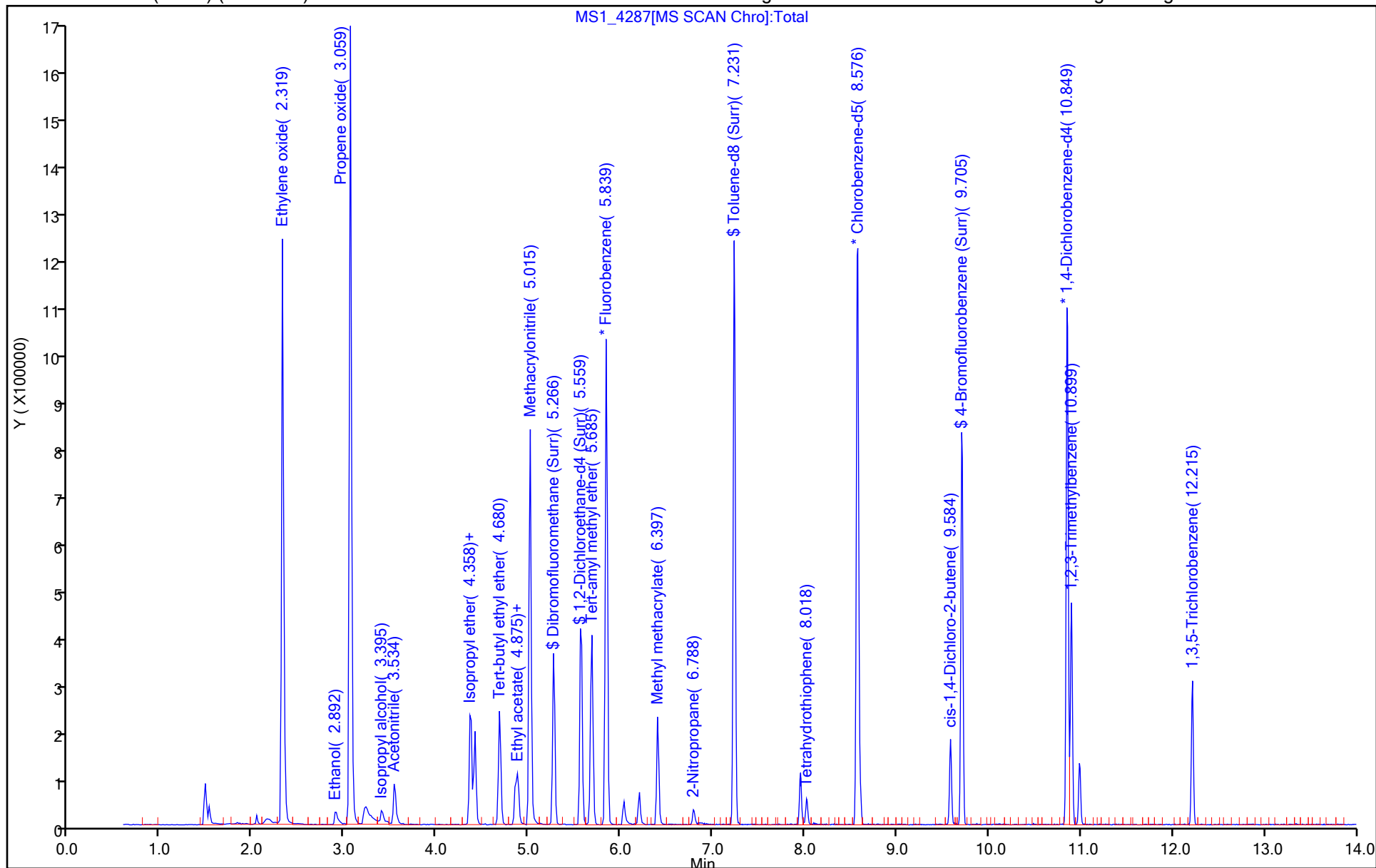
ALS Bottle#: 7

Method: AQ_VMS1_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_MS1\20210709-103023.b\VMS1_4287.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 09-Jul-2021 09:12:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: lcsd s
 Operator ID: wickhamt Instrument ID: VMS_MS1
 Method: \\chromfs\Denver\ChromData\VMS_MS1\20210709-103023.b\AQ_VMS1_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 09-Jul-2021 12:10:24 Calib Date: 04-Jun-2021 16:41:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\VMS1_2730.D
 Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
 Process Host: CTX1617

First Level Reviewer: wickhamt

Date: 09-Jul-2021 09:33:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.7	95.40
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.1	94.19
\$ 7 Toluene-d8 (Surr)	50.0	48.2	96.49
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.0	95.98

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Client Sample ID: RW-2172F-20210625 MS Lab Sample ID: 280-150306-2 MS

Matrix: Water Lab File ID: MS9_5907.d

Analysis Method: 8260B Date Collected: 06/25/2021 12:55

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 17:45

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)

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

Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	148		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	270		20	2.8
107-13-1	Acrylonitrile	356		20	1.4
71-43-2	Benzene	25.9		1.0	0.16
74-97-5	Chlorobromomethane	27.0		1.0	0.10
75-27-4	Dichlorobromomethane	26.5		1.0	0.17
75-25-2	Bromoform	25.6		1.0	0.46
74-83-9	Bromomethane	18.4		2.0	0.21
78-93-3	2-Butanone (MEK)	145		6.0	2.0
75-15-0	Carbon disulfide	21.9		2.0	0.17
56-23-5	Carbon tetrachloride	26.6		1.0	0.19
108-90-7	Chlorobenzene	25.5		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	25.3		1.0	0.17
75-00-3	Chloroethane	24.7		2.0	0.41
67-66-3	Chloroform	28.2		1.0	0.16
74-87-3	Chloromethane	31.3		2.0	0.30
107-05-1	Allyl chloride	24.6		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	30.2		5.0	0.47
74-95-3	Dibromomethane	28.1		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.3		1.0	0.15
541-73-1	1,3-Dichlorobenzene	24.8		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	23.4		3.0	0.80
75-71-8	Dichlorodifluoromethane	27.6		2.0	0.31
75-34-3	1,1-Dichloroethane	26.1		1.0	0.22
107-06-2	1,2-Dichloroethane	28.4		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	26.5		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	26.0		1.0	0.15
75-35-4	1,1-Dichloroethene	24.7		1.0	0.23
78-87-5	1,2-Dichloropropane	25.3		1.0	0.18
142-28-9	1,3-Dichloropropane	26.1		1.0	0.090
594-20-7	2,2-Dichloropropane	18.8		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	23.3		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.3		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2172F-20210625 MS Lab Sample ID: 280-150306-2 MS
 Matrix: Water Lab File ID: MS9_5907.d
 Analysis Method: 8260B Date Collected: 06/25/2021 12:55
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 17:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	25.8		1.0	0.19
100-41-4	Ethylbenzene	25.1		1.0	0.16
97-63-2	Ethyl methacrylate	26.0		3.0	0.86
591-78-6	2-Hexanone	116		5.0	1.7
74-88-4	Iodomethane	18.1		1.0	0.23
78-83-1	Isobutyl alcohol	782		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	25.5		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	119		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	25.8		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	26.1		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	28.9		1.0	0.21
127-18-4	Tetrachloroethene	26.2		1.0	0.20
108-88-3	Toluene	26.5		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	25.0		1.0	0.21
71-55-6	1,1,1-Trichloroethane	27.5		1.0	0.16
79-00-5	1,1,2-Trichloroethane	28.0		1.0	0.27
79-01-6	Trichloroethene	25.0		1.0	0.16
75-69-4	Trichlorofluoromethane	22.6		2.0	0.29
96-18-4	1,2,3-Trichloropropane	28.9		2.5	0.33
108-05-4	Vinyl acetate	43.4		3.0	0.94
75-01-4	Vinyl chloride	27.9		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	25.3		2.0	0.15
95-47-6	o-Xylene	25.6		1.0	0.19
1330-20-7	Xylenes, Total	50.9		2.0	0.19
106-93-4	1,2-Dibromoethane	25.0		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		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)	105		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5907.d
 Lims ID: 280-150306-C-2 MS
 Client ID: RW-2172F-20210625
 Sample Type: MS
 Inject. Date: 07-Jul-2021 17:45:30 ALS Bottle#: 31 Worklist Smp#: 35
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-2 MS 1x ph<2
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:56:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481					ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2698812	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	787723	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.780	10.774	0.006	94	1367397	50.0	50.0	
* 174 Fluorobenzene (IS)	96		0.000					ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	783940	50.0	52.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	783110	50.0	56.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2721771	50.0	48.3	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	97	1123845	50.0	47.4	
\$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 11 BFB	95	3.209	9.630	-6.421	0	6615		NR	
13 Dichlorodifluoromethane	85	1.696	1.686	0.010	98	331154	25.0	27.6	
15 Chloromethane	50	1.883	1.872	0.011	96	186026	25.0	31.3	
16 Vinyl chloride	62	1.997	1.986	0.011	97	184740	25.0	27.9	
18 Ethylene oxide	43		2.297					ND	U
19 Bromomethane	94	2.328	2.328	0.000	94	130646	25.0	18.4	
20 Chloroethane	64	2.442	2.442	0.000	98	167832	25.0	24.7	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	467288	25.0	24.0	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	98	469798	25.0	22.6	
23 Ethanol	45		2.867					ND	U
24 Ethyl ether	59	2.971	2.971	0.000	87	197315	25.0	26.1	
27 Propene oxide	58		3.023					ND	U
28 Acrolein	56	3.106	3.106	0.000	99	338172	246.9	270.2	
30 1,1-Dichloroethene	96	3.209	3.199	0.010	94	240548	25.0	24.7	
29 112TCTFE	151	3.220	3.209	0.011	90	204404	25.0	23.4	
31 Acetone	43	3.230	3.230	0.000	98	284182	100.0	148.5	
33 Iodomethane	142	3.344	3.344	0.000	100	280751	25.0	18.1	
32 Isopropyl alcohol	45		3.365					ND	
35 Carbon disulfide	76	3.417	3.417	0.000	98	582828	25.0	21.9	
37 Acetonitrile	41		3.500					ND	
34 Methyl acetate	43	3.531	3.531	0.000	94	304975	50.0	58.3	
36 3-Chloro-1-propene	41	3.541	3.541	0.000	85	275772	25.0	24.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Methylene Chloride	84	3.665	3.665	0.000	80	296981	25.0	25.5	
38 2-Methyl-2-propanol	59	3.738	3.738	0.000	98	300335	250.0	308.7	
12 Chlorotrifluoroethene	116		3.859					ND	
42 Acrylonitrile	53	3.873	3.873	0.000	97	855647	250.0	356.0	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	764529	25.0	25.6	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	94	293282	25.0	26.0	
43 Hexane	57	4.153	4.153	0.000	89	195512	25.0	17.4	
45 Vinyl acetate	43	4.287	4.287	0.000	97	651428	50.0	43.4	
46 1,1-Dichloroethane	63	4.298	4.298	0.000	95	444219	25.0	26.1	
44 Isopropyl ether	87		4.318					ND	U
47 2-Chloro-1,3-butadiene	53		4.370					ND	
17 2-Chloro-1,1,1-Trifluoroethane	118		4.471					ND	
48 Tert-butyl ethyl ether	59		4.640					ND	
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	400899	100.0	145.3	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	338511	25.0	26.5	
53 2,2-Dichloropropane	77	4.806	4.806	0.000	85	291854	25.0	18.8	
49 Ethyl acetate	43		4.806					ND	
54 Propionitrile	54		4.837					ND	
51 sec-Butyl Alcohol	45		4.920				ND	ND	
55 Methacrylonitrile	41		4.961					ND	
57 Tetrahydrofuran	42	5.002	5.002	0.000	75	141775	50.0	63.7	
59 Chlorobromomethane	128	5.002	5.002	0.000	79	190212	25.0	27.0	
25 1,2-Dichloro-1,1,2-trifluoroethane	117		5.006					ND	
56 Chloroform	83	5.075	5.075	0.000	92	520332	25.0	28.2	
26 1,1,1-Trifluoro-2,2-dichloroethane	83		5.097					ND	
60 1,1,1-Trichloroethane	97	5.231	5.231	0.001	97	464411	25.0	27.5	
61 Cyclohexane	56	5.293	5.293	0.000	84	322170	25.0	21.4	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	377449	25.0	25.8	
63 Carbon tetrachloride	117	5.365	5.365	0.000	95	384464	25.0	26.6	
58 Isobutyl alcohol	43	5.417	5.417	0.000	92	264342	625.0	782.2	
66 Benzene	78	5.531	5.531	0.000	97	1058896	25.0	25.9	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	98	394394	25.0	28.4	
65 Tert-amyl methyl ether	73		5.635					ND	
135 n-Heptane	43	5.770	5.769	0.001	81	160520	25.0	19.1	
64 n-Butanol	56		5.977					ND	
68 Trichloroethene	130	6.091	6.091	0.000	96	355311	25.0	25.0	
69 2-Pentanone	43		6.215				ND	ND	
71 Methylcyclohexane	55	6.298	6.298	0.000	89	242492	25.0	22.2	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	257907	25.0	25.3	
70 Methyl methacrylate	100		6.350					ND	
73 1,4-Dioxane	88	6.371	6.371	0.000	90	97047	500.0	625.2	
74 Dibromomethane	93	6.402	6.391	0.011	91	205663	25.0	28.1	
75 Dichlorobromomethane	83	6.543	6.543	0.000	98	358881	25.0	26.5	
77 2-Nitropropane	41		6.719					ND	
76 2-Chloroethyl vinyl ether	63		6.773				ND	ND	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	96	427345	25.0	23.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	774085	100.0	118.7	
80 Toluene	91	7.228	7.228	0.000	99	1195258	25.0	26.5	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	400358	25.0	24.3	
81 Ethyl methacrylate	69	7.458	7.458	0.000	85	371425	25.0	26.0	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	289549	25.0	28.0	
85 Tetrachloroethene	164	7.698	7.698	0.000	96	307536	25.0	26.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 1,3-Dichloropropane	76	7.757	7.757	0.000	86	447196	25.0	26.1	
84 2-Hexanone	43	7.789	7.784	0.005	88	575340	100.0	116.4	
88 Tetrahydrothiophene	60		7.955					ND	
87 Chlorodibromomethane	129	7.961	7.961	0.000	90	291329	25.0	25.3	
89 Ethylene Dibromide	107	8.078	8.078	0.000	99	315837	25.0	25.0	
90 1-Chlorohexane	91		8.496				ND	ND	U
91 Chlorobenzene	112	8.533	8.533	0.000	96	885198	25.0	25.5	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.608	0.005	94	332258	25.0	26.1	
92 Ethylbenzene	106	8.613	8.613	0.000	97	488223	25.0	25.1	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	1094653	25.0	25.3	
95 o-Xylene	106	9.105	9.105	0.000	95	579534	25.0	25.6	
96 Styrene	104	9.127	9.121	0.006	94	950866	25.0	25.8	
97 Bromoform	173	9.309	9.309	0.000	97	191821	25.0	25.6	
98 Isopropylbenzene	105	9.458	9.453	0.005	96	1343711	25.0	24.1	
99 cis-1,4-Dichloro-2-butene	53	9.507	9.501	0.006	0	3814		1.27	
100 Cyclohexanone	55	9.549	9.549	0.000	87	340902	1000.0	828.7	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	369335	25.0	28.9	
105 Bromobenzene	156	9.779	9.779	0.000	85	442695	25.0	25.0	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	66	77578	25.0	23.4	
104 1,2,3-Trichloropropane	110	9.817	9.812	0.005	84	143221	25.0	28.9	
103 N-Propylbenzene	120	9.860	9.865	-0.005	97	420317	25.0	23.9	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	392793	25.0	24.3	
106 1,3,5-Trimethylbenzene	105	10.042	10.036	0.006	96	1147667	25.0	24.6	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	403633	25.0	24.1	
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	984802	25.0	24.4	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	1186144	25.0	24.8	
111 sec-Butylbenzene	134	10.577	10.577	0.000	94	308569	25.0	24.2	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	760462	25.0	24.8	
112 4-Isopropyltoluene	119	10.726	10.721	0.005	95	1180567	25.0	24.3	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	94	776295	25.0	24.8	
114 1,2,3-Trimethylbenzene	105		10.823					ND	
116 n-Butylbenzene	91	11.133	11.133	0.000	96	912576	25.0	23.0	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	98	736021	25.0	25.3	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	90	95413	25.0	30.2	
119 1,3,5-Trichlorobenzene	180		12.139					ND	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	426402	25.0	25.0	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	96	189685	25.0	24.7	
122 Naphthalene	128	13.043	13.043	0.000	97	1041346	25.0	32.6	
123 1,2,3-Trichlorobenzene	180	13.262	13.262	0.000	96	351934	25.0	27.9	
162 Cyclohexane TIC	1		0.000					ND	
133 2,4-Dimethylpentane	1		0.000					ND	
128 Pentachloroethane	167		0.000					ND	
160 1-Chlorohexane TIC	1		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
164 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
126 2,2,3-Trimethylbutane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
161 Methyl cyclohexane TIC	1		0.000					ND	
130 Dimethyl disulfide	1		0.000					ND	
127 3,3-Dimethylpentane	1		0.000					ND	
163 n-Nonane 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 3-Methylhexane	1		0.000					ND	
131 3-Ethylpentane	1		0.000					ND	
166 Ethyl acrylate	55		0.000					ND	
125 2,2-Dimethylpentane	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
167 Pentachloroethane TIC	1		0.000					ND	
S 143 TAH	1				0			0	7
S 141 1,2-Dichloroethene, Total	1				0		50.0	52.5	
S 140 1,3-Dichloropropene, Total	1				0		50.0	47.6	
S 142 Xylenes, Total	106				0		50.0	50.9	
S 137 Trihalomethanes, Total	1				0		100.0	105.5	
S 139 Total BTEX	1				0			128.5	

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

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

MV-Gas A_00093

Amount Added: 5.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5907.d

Injection Date: 07-Jul-2021 17:45:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-2 MS

Worklist Smp#: 35

Client ID: RW-2172F-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

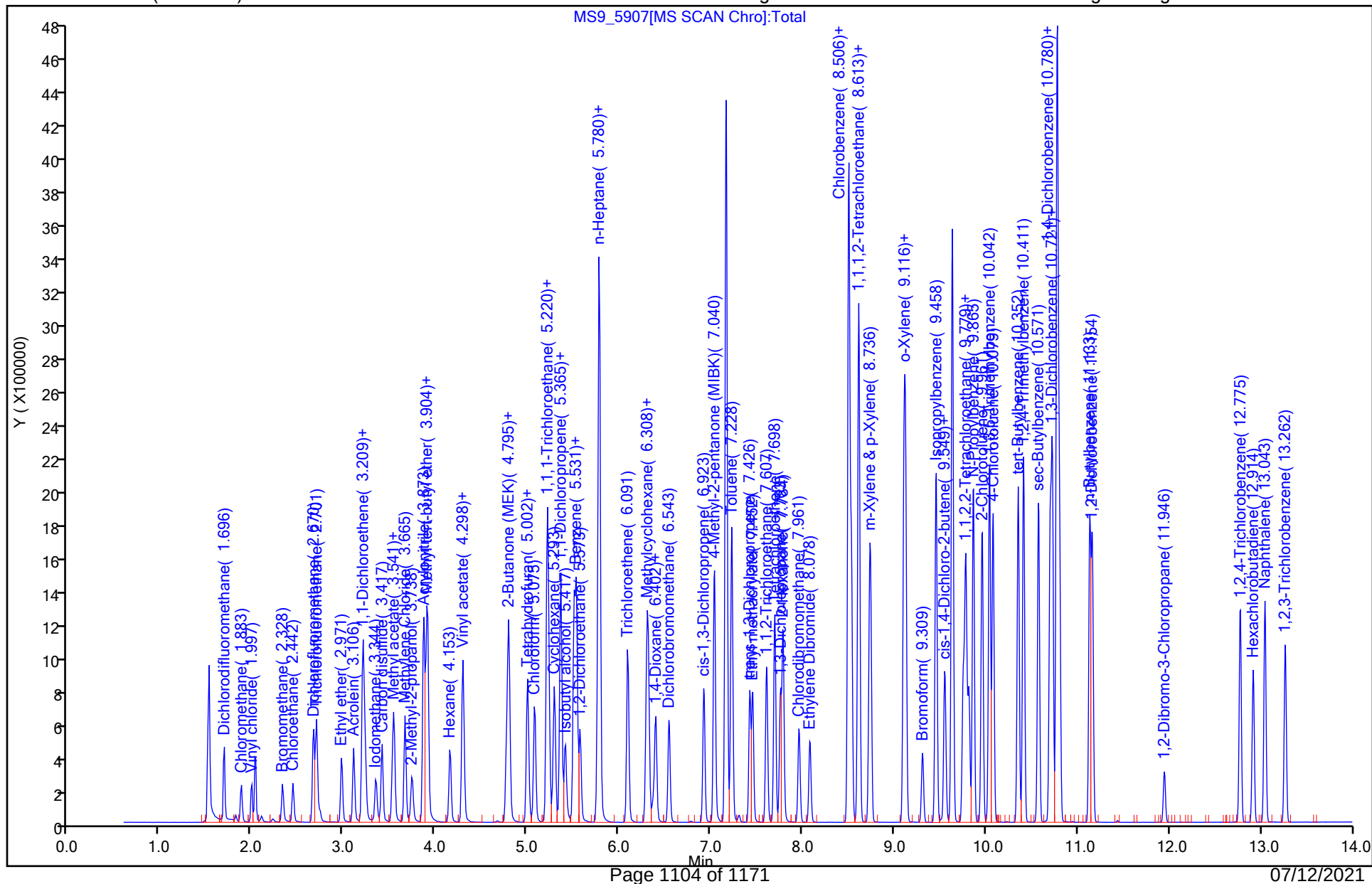
ALS Bottle#: 31

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\VMS9_5907.d
 Lims ID: 280-150306-C-2 MS
 Client ID: RW-2172F-20210625
 Sample Type: MS
 Inject. Date: 07-Jul-2021 17:45:30 ALS Bottle#: 31 Worklist Smp#: 35
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-2 MS 1x ph<2
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\VMS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:56:08

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.3	104.52
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	56.7	113.43
\$ 8 Toluene-d8 (Surr)	50.0	48.3	96.60
\$ 9 4-Bromofluorobenzene (Surr)	50.0	47.4	94.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1
 SDG No.: _____
 Client Sample ID: RW-2172F-20210625 MSD Lab Sample ID: 280-150306-2 MSD
 Matrix: Water Lab File ID: MS9_5908.d
 Analysis Method: 8260B Date Collected: 06/25/2021 12:55
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2021 18:08
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RXI-624SilMS ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 542401 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	151		10	1.9
75-05-8	Acetonitrile	ND		30	9.6
107-02-8	Acrolein	278		20	2.8
107-13-1	Acrylonitrile	362		20	1.4
71-43-2	Benzene	26.4		1.0	0.16
74-97-5	Chlorobromomethane	27.3		1.0	0.10
75-27-4	Dichlorobromomethane	27.2		1.0	0.17
75-25-2	Bromoform	26.1		1.0	0.46
74-83-9	Bromomethane	19.1		2.0	0.21
78-93-3	2-Butanone (MEK)	147		6.0	2.0
75-15-0	Carbon disulfide	23.0		2.0	0.17
56-23-5	Carbon tetrachloride	28.0		1.0	0.19
108-90-7	Chlorobenzene	25.8		1.0	0.17
126-99-8	Chloroprene	ND		1.0	0.21
124-48-1	Chlorodibromomethane	25.6		1.0	0.17
75-00-3	Chloroethane	25.2		2.0	0.41
67-66-3	Chloroform	28.7		1.0	0.16
74-87-3	Chloromethane	31.6		2.0	0.30
107-05-1	Allyl chloride	25.7		2.0	0.17
96-12-8	1,2-Dibromo-3-Chloropropane	31.0		5.0	0.47
74-95-3	Dibromomethane	28.1		1.0	0.17
95-50-1	1,2-Dichlorobenzene	25.9		1.0	0.15
541-73-1	1,3-Dichlorobenzene	25.5		1.0	0.13
106-46-7	1,4-Dichlorobenzene	25.4		1.0	0.16
110-57-6	trans-1,4-Dichloro-2-butene	23.7		3.0	0.80
75-71-8	Dichlorodifluoromethane	28.2		2.0	0.31
75-34-3	1,1-Dichloroethane	26.4		1.0	0.22
107-06-2	1,2-Dichloroethane	28.8		1.0	0.13
156-59-2	cis-1,2-Dichloroethene	26.4		1.0	0.15
156-60-5	trans-1,2-Dichloroethene	26.2		1.0	0.15
75-35-4	1,1-Dichloroethene	26.1		1.0	0.23
78-87-5	1,2-Dichloropropane	25.9		1.0	0.18
142-28-9	1,3-Dichloropropane	26.3		1.0	0.090
594-20-7	2,2-Dichloropropane	19.2		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	23.8		1.0	0.16
10061-02-6	trans-1,3-Dichloropropene	24.9		3.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins TestAmerica, Denver</u>	Job No.: <u>280-150290-1</u>
SDG No.: _____	
Client Sample ID: <u>RW-2172F-20210625 MSD</u>	Lab Sample ID: <u>280-150306-2 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>MS9_5908.d</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>06/25/2021 12:55</u>
Sample wt/vol: <u>5(mL)</u>	Date Analyzed: <u>07/07/2021 18:08</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>RXI-624SilMS</u> ID: <u>0.25 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>542401</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
563-58-6	1,1-Dichloropropene	26.8		1.0	0.19
100-41-4	Ethylbenzene	25.8		1.0	0.16
97-63-2	Ethyl methacrylate	26.7		3.0	0.86
591-78-6	2-Hexanone	120		5.0	1.7
74-88-4	Iodomethane	22.5		1.0	0.23
78-83-1	Isobutyl alcohol	794		110	37
126-98-7	Methacrylonitrile	ND		10	1.6
75-09-2	Methylene Chloride	25.3		2.0	0.94
80-62-6	Methyl methacrylate	ND		4.0	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	122		5.0	0.98
107-12-0	Propionitrile	ND		20	3.7
100-42-5	Styrene	25.8		1.0	0.36
630-20-6	1,1,1,2-Tetrachloroethane	26.6		1.0	0.21
79-34-5	1,1,2,2-Tetrachloroethane	30.1		1.0	0.21
127-18-4	Tetrachloroethene	26.8		1.0	0.20
108-88-3	Toluene	27.2		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	26.3		1.0	0.21
71-55-6	1,1,1-Trichloroethane	28.6		1.0	0.16
79-00-5	1,1,2-Trichloroethane	28.2		1.0	0.27
79-01-6	Trichloroethene	25.8		1.0	0.16
75-69-4	Trichlorofluoromethane	23.1		2.0	0.29
96-18-4	1,2,3-Trichloropropane	29.8		2.5	0.33
108-05-4	Vinyl acetate	44.2		3.0	0.94
75-01-4	Vinyl chloride	28.9		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	26.0		2.0	0.15
95-47-6	o-Xylene	25.9		1.0	0.19
1330-20-7	Xylenes, Total	51.9		2.0	0.19
106-93-4	1,2-Dibromoethane	25.4		1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		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)	104		77-120

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5908.d
 Lims ID: 280-150306-C-2 MSD
 Client ID: RW-2172F-20210625
 Sample Type: MSD
 Inject. Date: 07-Jul-2021 18:08:30 ALS Bottle#: 32 Worklist Smp#: 36
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-2 MSD 1x ph<2
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:58:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.481					ND	
* 1 Fluorobenzene	96	5.780	5.780	0.000	98	2741350	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.506	8.506	0.000	84	796975	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.775	10.774	0.000	94	1338676	50.0	50.0	
* 174 Fluorobenzene (IS)	96		0.000					ND	
\$ 6 Dibromofluoromethane (Surr)	111	5.210	5.210	0.000	95	793846	50.0	52.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.510	5.510	0.000	97	780952	50.0	55.7	
\$ 8 Toluene-d8 (Surr)	98	7.169	7.169	0.000	93	2761229	50.0	48.4	
\$ 9 4-Bromofluorobenzene (Surr)	95	9.635	9.630	0.005	96	1118383	50.0	48.2	
\$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
\$ 11 BFB	95	3.199	9.630	-6.431	0	6220		NR	
13 Dichlorodifluoromethane	85	1.696	1.686	0.010	98	343866	25.0	28.2	
15 Chloromethane	50	1.883	1.872	0.011	96	190927	25.0	31.6	
16 Vinyl chloride	62	1.986	1.986	0.000	97	194274	25.0	28.9	
18 Ethylene oxide	43		2.297					ND	U
19 Bromomethane	94	2.328	2.328	0.000	93	136554	25.0	19.1	
20 Chloroethane	64	2.442	2.442	0.000	99	174058	25.0	25.2	
21 Dichlorofluoromethane	67	2.670	2.670	0.000	96	482286	25.0	24.4	
22 Trichlorofluoromethane	101	2.701	2.701	0.000	97	488561	25.0	23.1	
23 Ethanol	45		2.867					ND	
24 Ethyl ether	59	2.971	2.971	0.000	86	201541	25.0	26.3	
27 Propene oxide	58		3.023					ND	U
28 Acrolein	56	3.106	3.106	0.000	99	353191	246.9	277.8	
30 1,1-Dichloroethene	96	3.199	3.199	0.000	94	257102	25.0	26.1	
29 112TCTFE	151	3.209	3.209	0.000	90	218674	25.0	24.7	
31 Acetone	43	3.230	3.230	0.000	99	294210	100.0	151.4	
33 Iodomethane	142	3.344	3.344	0.000	100	351991	25.0	22.5	
32 Isopropyl alcohol	45		3.365					ND	
35 Carbon disulfide	76	3.417	3.417	0.000	98	620001	25.0	23.0	
37 Acetonitrile	41		3.500					ND	
34 Methyl acetate	43	3.531	3.531	0.000	93	311106	50.0	58.5	
36 3-Chloro-1-propene	41	3.541	3.541	0.000	85	292336	25.0	25.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Methylene Chloride	84	3.665	3.665	0.000	80	300427	25.0	25.3	
38 2-Methyl-2-propanol	59	3.738	3.738	0.000	97	311792	250.0	315.5	
12 Chlorotrifluoroethene	116		3.859					ND	
42 Acrylonitrile	53	3.873	3.873	0.000	97	883878	250.0	362.2	
40 Methyl tert-butyl ether	73	3.904	3.904	0.000	94	781165	25.0	25.7	
41 trans-1,2-Dichloroethene	96	3.914	3.914	0.000	93	300160	25.0	26.2	
43 Hexane	57	4.153	4.153	0.000	89	212078	25.0	18.7	
45 Vinyl acetate	43	4.287	4.287	0.000	97	674182	50.0	44.2	
46 1,1-Dichloroethane	63	4.298	4.298	0.000	95	455477	25.0	26.4	
44 Isopropyl ether	87		4.318					ND	U
47 2-Chloro-1,3-butadiene	53		4.370					ND	
17 2-Chloro-1,1,1-Trifluoroethane	118		4.471					ND	
48 Tert-butyl ethyl ether	59		4.640					ND	
50 2-Butanone (MEK)	43	4.774	4.774	0.000	94	412387	100.0	147.2	
52 cis-1,2-Dichloroethene	96	4.795	4.795	0.000	76	341914	25.0	26.4	
53 2,2-Dichloropropane	77	4.806	4.806	0.000	85	301976	25.0	19.2	
49 Ethyl acetate	43		4.806					ND	
54 Propionitrile	54		4.837					ND	
51 sec-Butyl Alcohol	45		4.920				ND	ND	
55 Methacrylonitrile	41		4.961					ND	
57 Tetrahydrofuran	42	5.002	5.002	0.000	76	143837	50.0	63.7	
59 Chlorobromomethane	128	5.002	5.002	0.000	80	195076	25.0	27.3	
25 1,2-Dichloro-1,1,2-trifluoroethane	117		5.006					ND	
56 Chloroform	83	5.075	5.075	0.000	91	537238	25.0	28.7	
26 1,1,1-Trifluoro-2,2-dichloroethane	83		5.097					ND	
60 1,1,1-Trichloroethane	97	5.231	5.231	0.001	97	490759	25.0	28.6	
61 Cyclohexane	56	5.293	5.293	0.000	83	346396	25.0	22.6	
62 1,1-Dichloropropene	75	5.365	5.365	0.000	92	397490	25.0	26.8	
63 Carbon tetrachloride	117	5.365	5.365	0.000	95	410321	25.0	28.0	
58 Isobutyl alcohol	43	5.417	5.417	0.000	91	272694	625.0	794.4	
66 Benzene	78	5.531	5.531	0.000	97	1092261	25.0	26.4	
67 1,2-Dichloroethane	62	5.573	5.573	0.000	98	406296	25.0	28.8	
65 Tert-amyl methyl ether	73		5.635					ND	
135 n-Heptane	43	5.770	5.769	0.001	82	176685	25.0	20.7	
64 n-Butanol	56		5.977					ND	
68 Trichloroethene	130	6.091	6.091	0.000	96	371195	25.0	25.8	
69 2-Pentanone	43		6.215				ND	ND	
71 Methylcyclohexane	55	6.298	6.298	0.000	89	260057	25.0	23.4	
72 1,2-Dichloropropane	63	6.319	6.319	0.000	93	267357	25.0	25.9	
70 Methyl methacrylate	100		6.350					ND	
73 1,4-Dioxane	88	6.371	6.371	0.000	88	99765	500.0	632.7	
74 Dibromomethane	93	6.391	6.391	0.000	92	209022	25.0	28.1	
75 Dichlorobromomethane	83	6.543	6.543	0.000	98	374446	25.0	27.2	
77 2-Nitropropane	41		6.719					ND	
76 2-Chloroethyl vinyl ether	63		6.773				ND	ND	
78 cis-1,3-Dichloropropene	75	6.923	6.923	0.000	96	441715	25.0	23.8	
79 4-Methyl-2-pentanone (MIBK)	43	7.040	7.040	0.000	88	808342	100.0	122.0	
80 Toluene	91	7.228	7.228	0.000	99	1243642	25.0	27.2	
82 trans-1,3-Dichloropropene	75	7.426	7.426	0.000	89	416374	25.0	24.9	
81 Ethyl methacrylate	69	7.458	7.458	0.000	85	386063	25.0	26.7	
83 1,1,2-Trichloroethane	97	7.607	7.607	0.000	91	296258	25.0	28.2	
85 Tetrachloroethene	164	7.698	7.698	0.000	97	317996	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
86 1,3-Dichloropropane	76	7.757	7.757	0.000	88	454516	25.0	26.3	
84 2-Hexanone	43	7.789	7.784	0.005	92	599423	100.0	119.8	
88 Tetrahydrothiophene	60		7.955					ND	
87 Chlorodibromomethane	129	7.961	7.961	0.000	90	298742	25.0	25.6	
89 Ethylene Dibromide	107	8.078	8.078	0.000	98	324679	25.0	25.4	
90 1-Chlorohexane	91		8.496				ND	ND	U
91 Chlorobenzene	112	8.533	8.533	0.000	96	906261	25.0	25.8	
93 1,1,1,2-Tetrachloroethane	131	8.613	8.608	0.005	94	341834	25.0	26.6	
92 Ethylbenzene	106	8.613	8.613	0.000	97	507180	25.0	25.8	
94 m-Xylene & p-Xylene	91	8.736	8.736	0.000	97	1137787	25.0	26.0	
95 o-Xylene	106	9.105	9.105	0.000	95	593285	25.0	25.9	
96 Styrene	104	9.121	9.121	0.000	93	962363	25.0	25.8	
97 Bromoform	173	9.309	9.309	0.000	97	197743	25.0	26.1	
98 Isopropylbenzene	105	9.458	9.453	0.005	96	1396062	25.0	25.6	
99 cis-1,4-Dichloro-2-butene	53		9.501					ND	U
100 Cyclohexanone	55	9.549	9.549	0.000	87	347986	1000.0	836.1	
101 1,1,2,2-Tetrachloroethane	83	9.753	9.753	0.000	96	375892	25.0	30.1	
105 Bromobenzene	156	9.779	9.779	0.000	85	453475	25.0	26.2	
102 trans-1,4-Dichloro-2-butene	53	9.790	9.790	0.000	82	77019	25.0	23.7	
104 1,2,3-Trichloropropane	110	9.812	9.812	0.000	84	144926	25.0	29.8	
103 N-Propylbenzene	120	9.865	9.865	0.000	97	435954	25.0	25.4	
107 2-Chlorotoluene	126	9.961	9.961	0.000	98	400331	25.0	25.3	
106 1,3,5-Trimethylbenzene	105	10.042	10.036	0.006	95	1174412	25.0	25.8	
108 4-Chlorotoluene	126	10.079	10.079	0.000	96	414121	25.0	25.2	
109 tert-Butylbenzene	119	10.352	10.352	0.000	92	1021953	25.0	26.0	
110 1,2,4-Trimethylbenzene	105	10.411	10.411	0.000	97	1205207	25.0	25.8	
111 sec-Butylbenzene	134	10.577	10.577	0.000	94	322382	25.0	25.9	
113 1,3-Dichlorobenzene	146	10.700	10.700	0.000	97	764522	25.0	25.5	
112 4-Isopropyltoluene	119	10.726	10.721	0.005	95	1212147	25.0	25.5	
115 1,4-Dichlorobenzene	146	10.801	10.801	0.000	95	775980	25.0	25.4	
114 1,2,3-Trimethylbenzene	105		10.823					ND	7
116 n-Butylbenzene	91	11.133	11.133	0.000	95	934003	25.0	24.1	
117 1,2-Dichlorobenzene	146	11.160	11.160	0.000	98	737656	25.0	25.9	
118 1,2-Dibromo-3-Chloropropane	157	11.946	11.946	0.000	89	96019	25.0	31.0	
119 1,3,5-Trichlorobenzene	180		12.139					ND	
120 1,2,4-Trichlorobenzene	180	12.775	12.775	0.000	95	438254	25.0	26.3	
121 Hexachlorobutadiene	225	12.914	12.914	0.000	96	198989	25.0	26.5	
122 Naphthalene	128	13.043	13.043	0.000	97	1073921	25.0	34.4	
123 1,2,3-Trichlorobenzene	180	13.267	13.262	0.005	96	364207	25.0	29.5	
162 Cyclohexane TIC	1		0.000					ND	
133 2,4-Dimethylpentane	1		0.000					ND	
128 Pentachloroethane	167		0.000					ND	
160 1-Chlorohexane TIC	1		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
164 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
126 2,2,3-Trimethylbutane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
161 Methyl cyclohexane TIC	1		0.000					ND	
130 Dimethyl disulfide	1		0.000					ND	
127 3,3-Dimethylpentane	1		0.000					ND	
163 n-Nonane 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 3-Methylhexane	1		0.000					ND	
131 3-Ethylpentane	1		0.000					ND	
166 Ethyl acrylate	55		0.000					ND	
125 2,2-Dimethylpentane	1		0.000					ND	
165 t-Amyl alcohol	1		0.000					ND	
167 Pentachloroethane TIC	1		0.000					ND	
S 143 TAH	1				0			0	7
S 141 1,2-Dichloroethene, Total	1				0		50.0	52.5	
S 140 1,3-Dichloropropene, Total	1				0		50.0	48.7	
S 142 Xylenes, Total	106				0		50.0	52.0	
S 137 Trihalomethanes, Total	1				0		100.0	107.6	
S 139 Total BTEX	1				0			131.3	

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

Reagents:

MV-MegaMainA_00052

Amount Added: 12.50

Units: uL

MV-Main add A_00001

Amount Added: 12.50

Units: uL

MV-Gas A_00093

Amount Added: 5.00

Units: uL

mv-IS_SS_00023

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\MS9_5908.d

Injection Date: 07-Jul-2021 18:08:30

Instrument ID: VMS_MS9

Operator ID: wickhamt

Lims ID: 280-150306-C-2 MSD

Worklist Smp#: 36

Client ID: RW-2172F-20210625

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

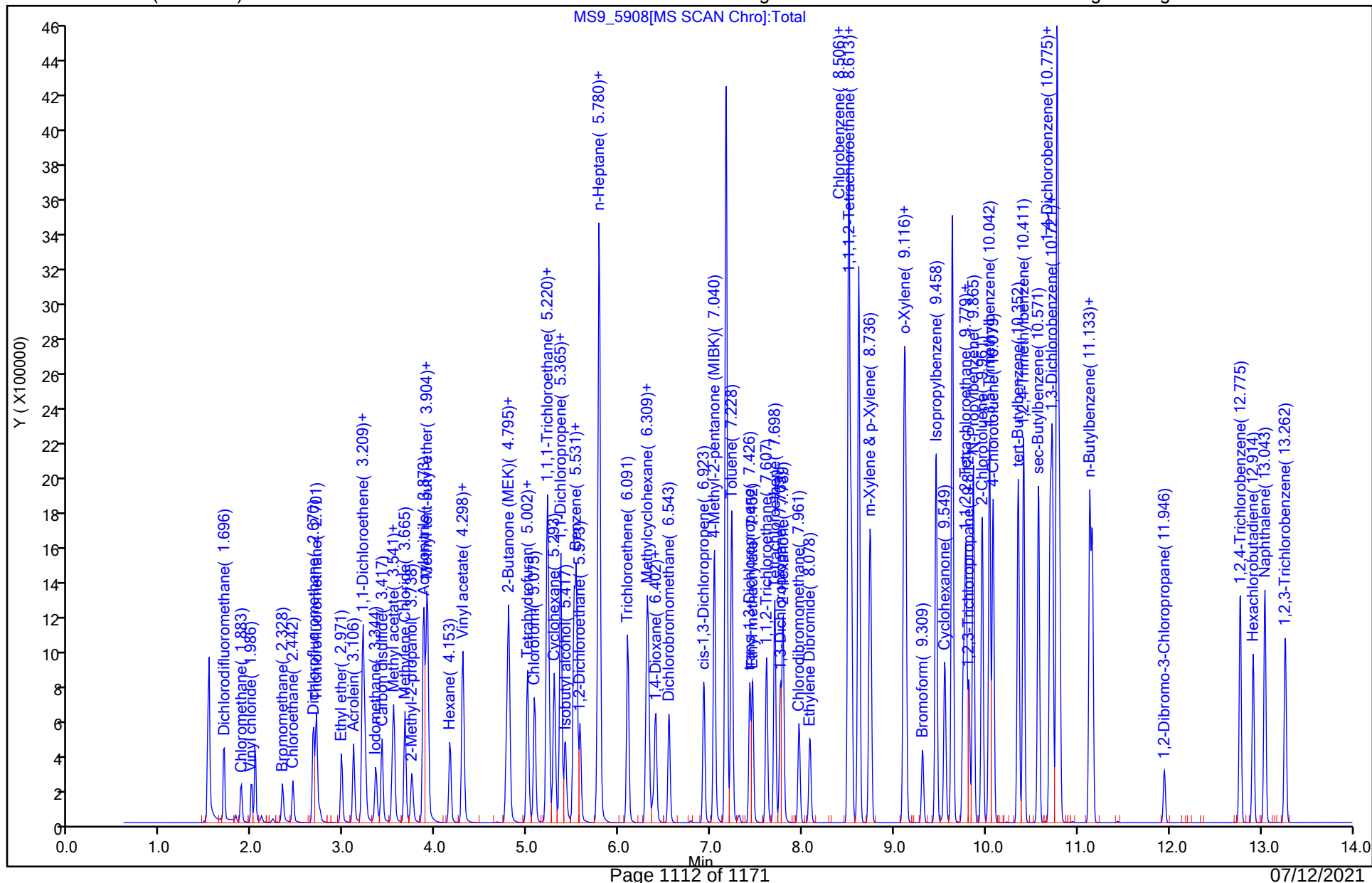
ALS Bottle#: 32

Method: AQ_VMSMS9_8260

Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (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_MS9\20210707-102965.b\MS9_5908.d
 Lims ID: 280-150306-C-2 MSD
 Client ID: RW-2172F-20210625
 Sample Type: MSD
 Inject. Date: 07-Jul-2021 18:08:30 ALS Bottle#: 32 Worklist Smp#: 36
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 280-150306-C-2 MSD 1x ph<2
 Operator ID: wickhamt Instrument ID: VMS_MS9
 Method: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b\AQ_VMSMS9_8260.m
 Limit Group: MSV - 8260B Water and Solid
 Last Update: 07-Jul-2021 19:11:02 Calib Date: 30-Jun-2021 20:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b\MS9_5714.d
 Column 1 : DB-624 (0.25 mm) Det: MS SCAN
 Process Host: CTX1627

First Level Reviewer: petuninp

Date: 07-Jul-2021 18:58:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	50.0	52.1	104.20
\$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	55.7	111.36
\$ 8 Toluene-d8 (Surr)	50.0	48.4	96.86
\$ 9 4-Bromofluorobenzene (Surr)	50.0	48.2	96.34

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.:

Instrument ID: VMS_MS1

Start Date: 06/04/2021 09:51

Analysis Batch Number: 538548

End Date: 06/04/2021 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-538548/1		06/04/2021 09:51	1	MS1_2711.D	DB-624 (60.25) 0.25 (mm)
STD010 280-538548/24 IC		06/04/2021 10:18	1	MS1_2712.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 10:18	1		DB-624 (60.25) 0.25 (mm)
STD020 280-538548/25 IC		06/04/2021 10:39	1	MS1_2713.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 10:39	1		DB-624 (60.25) 0.25 (mm)
STD050 280-538548/26 IC		06/04/2021 11:00	1	MS1_2714.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 11:00	1		DB-624 (60.25) 0.25 (mm)
STD10 280-538548/27 IC		06/04/2021 11:21	1	MS1_2715.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 11:21	1		DB-624 (60.25) 0.25 (mm)
STD50 280-538548/28 IC		06/04/2021 11:42	1	MS1_2716.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 11:42	1		DB-624 (60.25) 0.25 (mm)
STD75 280-538548/29 IC		06/04/2021 12:04	1	MS1_2717.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 12:04	1		DB-624 (60.25) 0.25 (mm)
STD100 280-538548/30 IC		06/04/2021 12:25	1	MS1_2718.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 12:25	1		DB-624 (60.25) 0.25 (mm)
STD200 280-538548/31 IC		06/04/2021 12:47	1	MS1_2719.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 12:47	1		DB-624 (60.25) 0.25 (mm)
ICV 280-538548/32		06/04/2021 13:29	1	MS1_2721.D	DB-624 (60.25) 0.25 (mm)
STD005 280-538548/14 IC		06/04/2021 13:50	1	MS1_2722.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 13:50	1		DB-624 (60.25) 0.25 (mm)
STD010 280-538548/15 IC		06/04/2021 14:11	1	MS1_2723.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 14:11	1		DB-624 (60.25) 0.25 (mm)
STD020 280-538548/16 IC		06/04/2021 14:33	1	MS1_2724.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 14:33	1		DB-624 (60.25) 0.25 (mm)
STD10 280-538548/18 IC		06/04/2021 15:16	1	MS1_2726.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 15:16	1		DB-624 (60.25) 0.25 (mm)
ICIS 280-538548/19		06/04/2021 15:37	1	MS1_2727.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 15:37	1		DB-624 (60.25) 0.25 (mm)
STD75 280-538548/20 IC		06/04/2021 15:58	1	MS1_2728.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 15:58	1		DB-624 (60.25) 0.25 (mm)
STD100 280-538548/21 IC		06/04/2021 16:20	1	MS1_2729.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 16:20	1		DB-624 (60.25) 0.25 (mm)
STD200 280-538548/22 IC		06/04/2021 16:41	1	MS1_2730.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		06/04/2021 16:41	1		DB-624 (60.25) 0.25 (mm)
ICV 280-538548/23		06/04/2021 17:24	1	MS1_2732.D	DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 17:45	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 18:06	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 18:27	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS1 Start Date: 06/04/2021 09:51Analysis Batch Number: 538548 End Date: 06/04/2021 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-149476-A-14 MDLV		06/04/2021 18:49	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 19:10	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-14 MDLV		06/04/2021 19:31	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 19:52	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 20:14	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 20:35	1		DB-624 (60.25) 0.25 (mm)
280-149476-A-15 MDLV		06/04/2021 20:56	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.:

Instrument ID: VMS_MS9

Start Date: 06/29/2021 10:26

Analysis Batch Number: 541632

End Date: 06/29/2021 16:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541632/1		06/29/2021 10:26	1	MS9_5635.d	RXI-624SilMS 0.25 (mm)
IC 280-541632/16		06/29/2021 11:08	1	MS9_5637.D	RXI-624SilMS 0.25 (mm)
IC 280-541632/17		06/29/2021 11:27	1	MS9_5638.d	RXI-624SilMS 0.25 (mm)
IC 280-541632/18		06/29/2021 11:47	1	MS9_5639.d	RXI-624SilMS 0.25 (mm)
ICIS 280-541632/19		06/29/2021 12:07	1	MS9_5640.d	RXI-624SilMS 0.25 (mm)
IC 280-541632/20		06/29/2021 12:27	1	MS9_5641.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/29/2021 12:27	1		RXI-624SilMS 0.25 (mm)
IC 280-541632/21		06/29/2021 12:47	1	MS9_5642.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/29/2021 12:47	1		RXI-624SilMS 0.25 (mm)
IC 280-541632/22		06/29/2021 13:07	1	MS9_5643.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/29/2021 13:07	1		RXI-624SilMS 0.25 (mm)
IC 280-541632/23		06/29/2021 13:27	1	MS9_5644.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/29/2021 13:27	1		RXI-624SilMS 0.25 (mm)
IC 280-541632/24		06/29/2021 13:47	1	MS9_5645.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/29/2021 13:47	1		RXI-624SilMS 0.25 (mm)
ICV 280-541632/25		06/29/2021 14:07	1	MS9_5646.d	RXI-624SilMS 0.25 (mm)
MDLV 280-541632/27		06/29/2021 14:46	1		RXI-624SilMS 0.25 (mm)
MDLV 280-541632/28		06/29/2021 15:06	1		RXI-624SilMS 0.25 (mm)
MDLV 280-541632/29		06/29/2021 15:26	1		RXI-624SilMS 0.25 (mm)
MDLV 280-541632/30		06/29/2021 15:46	1		RXI-624SilMS 0.25 (mm)
MDLV 280-541632/31		06/29/2021 16:06	1		RXI-624SilMS 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9Start Date: 06/30/2021 06:05Analysis Batch Number: 541805End Date: 06/30/2021 11:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541805/1		06/30/2021 06:05	1	MS9_5682.d	RXI-624SilMS 0.25 (mm)
IC 280-541805/14		06/30/2021 08:49	1	MS9_5687.d	RXI-624SilMS 0.25 (mm)
IC 280-541805/15		06/30/2021 09:09	1	MS9_5688.d	RXI-624SilMS 0.25 (mm)
IC 280-541805/16		06/30/2021 09:29	1	MS9_5689.d	RXI-624SilMS 0.25 (mm)
IC 280-541805/17		06/30/2021 09:49	1	MS9_5690.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 09:49	1		RXI-624SilMS 0.25 (mm)
IC 280-541805/18		06/30/2021 10:09	1	MS9_5691.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 10:09	1		RXI-624SilMS 0.25 (mm)
IC 280-541805/19		06/30/2021 10:29	1	MS9_5692.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 10:29	1		RXI-624SilMS 0.25 (mm)
IC 280-541805/20		06/30/2021 10:49	1	MS9_5693.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 10:49	1		RXI-624SilMS 0.25 (mm)
IC 280-541805/21		06/30/2021 11:09	1	MS9_5694.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 11:09	1		RXI-624SilMS 0.25 (mm)
ICV 280-541805/22		06/30/2021 11:29	1	MS9_5695.d	RXI-624SilMS 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS9Start Date: 06/30/2021 17:00Analysis Batch Number: 541956End Date: 06/30/2021 21:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-541956/1		06/30/2021 17:00	1	MS9_5703.d	RXI-624SilMS 0.25 (mm)
IC 280-541956/15		06/30/2021 17:47	1	MS9_5706.d	RXI-624SilMS 0.25 (mm)
IC 280-541956/16		06/30/2021 18:06	1	MS9_5707.d	RXI-624SilMS 0.25 (mm)
ICIS 280-541956/17		06/30/2021 18:26	1	MS9_5708.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 18:26	1		RXI-624SilMS 0.25 (mm)
IC 280-541956/18		06/30/2021 18:46	1	MS9_5709.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 18:46	1		RXI-624SilMS 0.25 (mm)
IC 280-541956/19		06/30/2021 19:06	1	MS9_5710.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 19:06	1		RXI-624SilMS 0.25 (mm)
IC 280-541956/20		06/30/2021 19:26	1	MS9_5711.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 19:26	1		RXI-624SilMS 0.25 (mm)
IC 280-541956/21		06/30/2021 19:46	1	MS9_5712.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		06/30/2021 19:46	1		RXI-624SilMS 0.25 (mm)
IC 280-541956/22		06/30/2021 20:06	1	MS9_5713.d	RXI-624SilMS 0.25 (mm)
IC 280-541956/14		06/30/2021 20:26	1	MS9_5714.d	RXI-624SilMS 0.25 (mm)
ICV 280-541956/23		06/30/2021 21:06	1	MS9_5716.d	RXI-624SilMS 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.:

Instrument ID: VMS_MS1

Start Date: 07/06/2021 20:31

Analysis Batch Number: 542394

End Date: 07/07/2021 07:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-542394/1		07/06/2021 20:31	1	MS1_4129.D	DB-624 (60.25) 0.25 (mm)
CCV 280-542394/3		07/06/2021 21:15	1	MS1_4131.D	DB-624 (60.25) 0.25 (mm)
CCV 280-542394/2		07/06/2021 22:15	1	MS1_4133.D	DB-624 (60.25) 0.25 (mm)
LCS 280-542394/4		07/06/2021 22:48	1	MS1_4134.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-542394/5		07/06/2021 23:09	1	MS1_4135.D	DB-624 (60.25) 0.25 (mm)
LCS 280-542394/6		07/06/2021 23:30	1	MS1_4136.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-542394/7		07/06/2021 23:51	1	MS1_4137.D	DB-624 (60.25) 0.25 (mm)
MB 280-542394/9		07/07/2021 00:34	1	MS1_4139.D	DB-624 (60.25) 0.25 (mm)
280-150290-1	TB-03-20210627	07/07/2021 00:55	1	MS1_4140.D	DB-624 (60.25) 0.25 (mm)
280-150290-2	PA-5-20210627	07/07/2021 01:16	1	MS1_4141.D	DB-624 (60.25) 0.25 (mm)
280-150290-3	MW-38-60-100-20210627	07/07/2021 01:37	1	MS1_4142.D	DB-624 (60.25) 0.25 (mm)
280-150290-4	RW-2879M-20210624	07/07/2021 01:58	1	MS1_4143.D	DB-624 (60.25) 0.25 (mm)
280-150290-5	RW-7505P-20210624	07/07/2021 02:19	1	MS1_4144.D	DB-624 (60.25) 0.25 (mm)
280-150290-6	RW-8048P-20210624	07/07/2021 02:41	1	MS1_4145.D	DB-624 (60.25) 0.25 (mm)
280-150290-7	RW-8035P-20210624	07/07/2021 03:02	1	MS1_4146.D	DB-624 (60.25) 0.25 (mm)
280-150290-8	PA-10-20210624	07/07/2021 03:23	1	MS1_4147.D	DB-624 (60.25) 0.25 (mm)
280-150290-9	RW-7350P-20210624	07/07/2021 03:44	1	MS1_4148.D	DB-624 (60.25) 0.25 (mm)
280-150290-10	PA-9-58-68-20210624	07/07/2021 04:05	1	MS1_4149.D	DB-624 (60.25) 0.25 (mm)
280-150290-11	PA-9-88-98-20210624	07/07/2021 04:27	1	MS1_4150.D	DB-624 (60.25) 0.25 (mm)
280-150290-12	RW-7549P-20210624	07/07/2021 04:48	1	MS1_4151.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 05:09	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 05:30	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 05:51	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 06:13	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 06:34	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 06:55	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 07:16	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/07/2021 07:37	1		DB-624 (60.25) 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-150290-1

SDG No.:

Instrument ID: VMS_MS9

Start Date: 07/07/2021 06:43

Analysis Batch Number: 542401

End Date: 07/07/2021 18:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-542401/1		07/07/2021 06:43	1	MS9_5878B.D	RXI-624SilMS 0.25 (mm)
CCV 280-542401/2		07/07/2021 06:43	1	MS9_5878.d	RXI-624SilMS 0.25 (mm)
CCV 280-542401/3		07/07/2021 07:05	1	MS9_5879.d	RXI-624SilMS 0.25 (mm)
CCV 280-542401/14		07/07/2021 07:28	1	MS9_5880.d	RXI-624SilMS 0.25 (mm)
LCS 280-542401/4		07/07/2021 07:51	1	MS9_5881.d	RXI-624SilMS 0.25 (mm)
LCSD 280-542401/5		07/07/2021 08:14	1	MS9_5882.d	RXI-624SilMS 0.25 (mm)
MB 280-542401/9		07/07/2021 08:59	1	MS9_5884.d	RXI-624SilMS 0.25 (mm)
LCS 280-542401/6		07/07/2021 09:22	1	MS9_5885.d	RXI-624SilMS 0.25 (mm)
LCSD 280-542401/7		07/07/2021 09:45	1	MS9_5886.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		07/07/2021 10:08	1		RXI-624SilMS 0.25 (mm)
280-150306-11	EB-07-20210627	07/07/2021 10:31	1	MS9_5888.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		07/07/2021 10:53	1		RXI-624SilMS 0.25 (mm)
ZZZZZ		07/07/2021 11:16	1		RXI-624SilMS 0.25 (mm)
280-150306-1	RW-8284P-20210625	07/07/2021 11:39	1	MS9_5891.d	RXI-624SilMS 0.25 (mm)
280-150306-2	RW-2172F-20210625	07/07/2021 12:02	1	MS9_5892.d	RXI-624SilMS 0.25 (mm)
280-150306-3	RW-7588P-20210625	07/07/2021 12:25	1	MS9_5893.d	RXI-624SilMS 0.25 (mm)
280-150306-4	RW-8209P-20210625	07/07/2021 12:48	1	MS9_5894.d	RXI-624SilMS 0.25 (mm)
280-150306-5	RW-7688P-20210625	07/07/2021 13:11	1	MS9_5895.d	RXI-624SilMS 0.25 (mm)
280-150306-6	RW-5898BI-20210625	07/07/2021 13:34	1	MS9_5896.d	RXI-624SilMS 0.25 (mm)
280-150306-7	RW-2140H-20210626	07/07/2021 13:57	1	MS9_5897.d	RXI-624SilMS 0.25 (mm)
280-150306-8	MW-116S-20210626	07/07/2021 14:19	1	MS9_5898.d	RXI-624SilMS 0.25 (mm)
280-150306-9	RW-2076F-20210626	07/07/2021 14:42	1	MS9_5899.d	RXI-624SilMS 0.25 (mm)
280-150306-10	RW-8012P-20210626	07/07/2021 15:05	1	MS9_5900.d	RXI-624SilMS 0.25 (mm)
280-150306-12	RW-7244P-20210624	07/07/2021 15:28	1	MS9_5901.d	RXI-624SilMS 0.25 (mm)
280-150306-13	RW-2237H-20210624	07/07/2021 15:51	1	MS9_5902.d	RXI-624SilMS 0.25 (mm)
280-150306-14	RW-7070B-20210624	07/07/2021 16:14	1	MS9_5903.d	RXI-624SilMS 0.25 (mm)
280-150306-15	RW-8105PS-20210625	07/07/2021 16:37	1	MS9_5904.d	RXI-624SilMS 0.25 (mm)
ZZZZZ		07/07/2021 17:00	1		RXI-624SilMS 0.25 (mm)
ZZZZZ		07/07/2021 17:22	1		RXI-624SilMS 0.25 (mm)
280-150306-2 MS	RW-2172F-20210625 MS	07/07/2021 17:45	1	MS9_5907.d	RXI-624SilMS 0.25 (mm)
280-150306-2 MSD	RW-2172F-20210625 MSD	07/07/2021 18:08	1	MS9_5908.d	RXI-624SilMS 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-150290-1

SDG No.: _____

Instrument ID: VMS_MS1Start Date: 07/09/2021 06:39Analysis Batch Number: 542686End Date: 07/09/2021 17:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-542686/1		07/09/2021 06:39	1	MS1_4280.D	DB-624 (60.25) 0.25 (mm)
CCV 280-542686/2		07/09/2021 07:26	1	MS1_4282.D	DB-624 (60.25) 0.25 (mm)
CCV 280-542686/3		07/09/2021 07:47	1	MS1_4283.D	DB-624 (60.25) 0.25 (mm)
LCS 280-542686/4		07/09/2021 08:08	1	MS1_4284.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-542686/5		07/09/2021 08:30	1	MS1_4285.D	DB-624 (60.25) 0.25 (mm)
LCS 280-542686/6		07/09/2021 08:51	1	MS1_4286.D	DB-624 (60.25) 0.25 (mm)
LCSD 280-542686/7		07/09/2021 09:12	1	MS1_4287.D	DB-624 (60.25) 0.25 (mm)
MB 280-542686/9		07/09/2021 09:55	1	MS1_4289.D	DB-624 (60.25) 0.25 (mm)
280-150306-17	TB-02-20210627	07/09/2021 10:16	1	MS1_4290.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 10:37	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 10:59	1		DB-624 (60.25) 0.25 (mm)
280-150306-16	MW-38-105-115-20210627	07/09/2021 11:20	1	MS1_4293.D	DB-624 (60.25) 0.25 (mm)
280-150306-18	MW-38-121-130-20210627	07/09/2021 11:41	1	MS1_4294.D	DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 12:03	100		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 12:25	10		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 12:47	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 13:08	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 13:30	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 13:51	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 14:12	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 14:34	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 14:55	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 15:17	1		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 15:38	5		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 16:00	5		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 16:21	5		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 16:43	5		DB-624 (60.25) 0.25 (mm)
ZZZZZ		07/09/2021 17:05	5		DB-624 (60.25) 0.25 (mm)

Sequence Name: C:\msdchem\1\sequence\070621PM.s

Comment:

Operator: PETUNINP

Data Path: C:\MSDCHEM\1\DATA\070621PM\

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: MS1

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water) / Soil / Waste)

Tune Time: 20:31-07:37

TALs Batch: 542394

Method Sections To Run

Sequence Barcode Options

(X) Full Method

(X) On Mismatch, Inject Anyway

() Reprocessing Only

() On Mismatch, Don't Inject

() Barcode Disabled

Line	Sample Name/Misc Info
1) Sample	100 MS1_4127 8260 PRIMER
2) Sample	100 MS1_4128 BFB BFB
3) Sample	100 MS1_4129 BFB BFB
4) Sample	1 MS1_4130 8260 CCV
5) Sample	2 MS1_4131 8260 CCV S
6) Sample	3 MS1_4132 8260 CCV RR
7) Sample	4 MS1_4133 8260 CCV RR
8) Sample	5 MS1_4134 8260 LCS
9) Sample	6 MS1_4135 8260 LCSD
10) Sample	7 MS1_4136 8260 LCS S
11) Sample	8 MS1_4137 8260 LCSD S
12) Sample	9 MS1_4138 8260 RINSE
13) Sample	10 MS1_4139 8260 MB
14) Sample	11 MS1_4140 8260 280-150290-A-1 pH <2
15) Sample	12 MS1_4141 8260 280-150290-A-2 pH <2
16) Sample	13 MS1_4142 8260 280-150290-A-3 pH <2
17) Sample	14 MS1_4143 8260 280-150290-C-4 pH <2
18) Sample	15 MS1_4144 8260 280-150290-C-5 pH <2
19) Sample	16 MS1_4145 8260 280-150290-B-6 pH <2
20) Sample	17 MS1_4146 8260 280-150290-C-7 pH <2
21) Sample	18 MS1_4147 8260 280-150290-B-8 pH <2
22) Sample	19 MS1_4148 8260 280-150290-C-9 pH <2
23) Sample	20 MS1_4149 8260 280-150290-A-10 pH <2
24) Sample	21 MS1_4150 8260 280-150290-A-11 pH <2
25) Sample	22 MS1_4151 8260 280-150290-A-12 pH <2
26) Sample	23 MS1_4152 8260 280-150189-E-1 pH <2
27) Sample	24 MS1_4153 8260 280-150189-E-2 pH <2
28) Sample	25 MS1_4154 8260 280-150189-D-3 pH <2
29) Sample	26 MS1_4155 8260 280-150234-E-1 pH <2
30) Sample	27 MS1_4156 8260 280-150234-F-2 pH <2
31) Sample	28 MS1_4157 8260 280-150234-E-3 pH <2
32) Sample	29 MS1_4158 8260 280-150235-O-1 pH <2
33) Sample	30 MS1_4159 8260 280-150235-A-2 pH <2

7-7-21
Tam

✓ dil 7-7-21
Tam

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070621PM

Worklist Number: 102962

Instrument Name: VMS_MS1

Chrom Method: AQ_VMS1_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018

Amount Added: 5.000, Units: uL

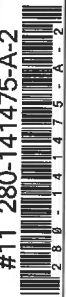
Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00003		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-Gas A_00093 MV-MegaMainA_00052 MV-Main add A_00001		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp A_00051		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp A_00051		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client	1.000	voaWater	5.000	mL			
14	#14 280-150290-A-1	Client	1.000	voaWater	5.000	mL			
15	#15 280-150290-A-2	Client	1.000	voaWater	5.000	mL			
16	#16 280-150290-A-3	Client	1.000	voaWater	5.000	mL			
17	#17 280-150290-C-4	Client	1.000	voaWater	5.000	mL			
18	#18 280-150290-C-5	Client	1.000	voaWater	5.000	mL			
19	#19 280-150290-B-6	Client	1.000	voaWater	5.000	mL			
20	#20 280-150290-C-7	Client	1.000	voaWater	5.000	mL			
21	#21 280-150290-B-8	Client	1.000	voaWater	5.000	mL			
22	#22 280-150290-C-9	Client	1.000	voaWater	5.000	mL			
23	#23 280-150290-A-10	Client	1.000	voaWater	5.000	mL			
24	#24 280-150290-A-11	Client	1.000	voaWater	5.000	mL			
25	#25 280-150290-A-12	Client	1.000	voaWater	5.000	mL			
26	#26 280-150189-E-1	Client	1.000	voaWater	5.000	mL			
27	#27 280-150189-E-2	Client	1.000	voaWater	5.000	mL			
28	#28 280-150189-D-3	Client	1.000	voaWater	5.000	mL			
29	#29 280-150234-E-1	Client	1.000	voaWater	5.000	mL			
30	#30 280-150234-F-2	Client	1.000	voaWater	5.000	mL			
31	#31 280-150234-E-3	Client	1.000	voaWater	5.000	mL			
32	#32 280-150235-O-1	Client	1.000	voaWater	5.000	mL			
33	#33 280-150235-A-2	Client	1.000	voaWater	5.000	mL			

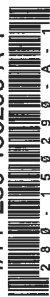
Eurofins Environment Testing America
Worklist Report

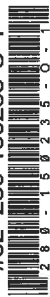
Worklist Name: 070621PM
Instrument Name: VMS_MS1
Purge Volume: 5.000
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210706-102962.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\VMS\VMS_MS1
Run Reagent: mv-IS_SS_00018
Batch #: 542394

Worklist Number: 102962
Chrom Method: AQ_VMS1_8260
Units: mL

Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
 280-0102962-001	# 1 BFB 	mv-Cent BFB_00003	BFB	voaWater	2.000	uL	1.000
 280-0102962-002	# 2 CCV 	MV-Gas A_00093 MV-MegaMainA_00052 MV-Main add A_00001	CCV	voaWater	5.000	mL	1.000
 280-0102962-003	# 3 CCV 	mv-Cent IS_00006 MV-Supp A_00051	CCV	voaWater	5.000	mL	1.000
 280-0102962-004	# 4 LCS 	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001	LCS	voaWater	5.000	mL	1.000
 280-0102962-005	# 5 LCSD 	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001	LCSD	voaWater	5.000	mL	1.000
 280-0102962-006	# 6 LCS 	MV-Supp A_00051	LCS	voaWater	5.000	mL	1.000
 280-0102962-007	# 7 LCSD 	MV-Supp A_00051	LCSD	voaWater	5.000	mL	1.000
 280-0102962-008	# 8 RINSE 		Client	voaWater	5.000	mL	1.000
 280-0102962-009	# 9 MB 		MB	voaWater	5.000	mL	1.000
 280-0102962-010	#10 280-141475-A-1 		Client	voaWater	5.000	mL	1.000
 280-0102962-011	#11 280-141475-A-2 		Client	voaWater	5.000	mL	1.000
 280-0102962-012	#12 280-141475-A-3 		Client	voaWater	5.000	mL	1.000
 280-0102962-013	#13 280-141475-A-7 		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102962-014 	#14 280-150290-A-1 		Client	voaWater	5,000	mL	1,000
280-0102962-015 	#15 280-150290-A-2 		Client	voaWater	5,000	mL	1,000
280-0102962-016 	#16 280-150290-A-3 		Client	voaWater	5,000	mL	1,000
280-0102962-017 	#17 280-150290-C-4 		Client	voaWater	5,000	mL	1,000
280-0102962-018 	#18 280-150290-C-5 		Client	voaWater	5,000	mL	1,000
280-0102962-019 	#19 280-150290-B-6 		Client	voaWater	5,000	mL	1,000
280-0102962-020 	#20 280-150290-C-7 		Client	voaWater	5,000	mL	1,000
280-0102962-021 	#21 280-150290-B-8 		Client	voaWater	5,000	mL	1,000
280-0102962-022 	#22 280-150290-C-9 		Client	voaWater	5,000	mL	1,000
280-0102962-023 	#23 280-150290-A-10 		Client	voaWater	5,000	mL	1,000
280-0102962-024 	#24 280-150290-A-11 		Client	voaWater	5,000	mL	1,000
280-0102962-025 	#25 280-150290-A-12 		Client	voaWater	5,000	mL	1,000
280-0102962-026 	#26 280-150189-E-1 		Client	voaWater	5,000	mL	1,000
280-0102962-027 	#27 280-150189-E-2 		Client	voaWater	5,000	mL	1,000
280-0102962-028 	#28 280-150189-D-3 		Client	voaWater	5,000	mL	1,000
280-0102962-029 	#29 280-150234-E-1 		Client	voaWater	5,000	mL	1,000
280-0102962-030 	#30 280-150234-F-2 		Client	voaWater	5,000	mL	1,000
280-0102962-031 	#31 280-150234-E-3 		Client	voaWater	5,000	mL	1,000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102962-032 	#32 280-150235-O-1 		Client	voaWater	5.000	mL	1.000
280-0102962-033 	#33 280-150235-A-2 		Client	voaWater	5.000	mL	1.000

Sample Request Form: 68855

den_msvoa_totalbacklog Gabe 7/7/2021 12:01:30 AM Assigned to: Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-150290-1	TB-03-20210627	1X	8260B	8260B	07/11 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-2	PA-5-20210627		8260B	8260B	07/11 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-3	MW-38-60-100-20210627		8260B	8260B	07/11 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-4	RW-2879M-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-5	RW-7505P-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-6	RW-8048P-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-7	RW-8035P-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-8	PA-10-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-9	RW-7350P-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-10	PA-9-58-68-20210624		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed

7/7/2021
12:01AM

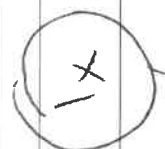
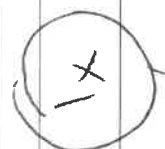
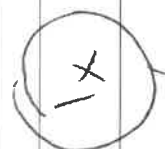
Sample Request Form: 68855

Page 2 of 2

den_msvoa_totalbacklog Gabe 7/7/2021 12:01:30 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										
280-150290-11	PA-9-88-98-202106 24		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150290-12	RW-7549P-202106 24		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										

den_msvoa_totalbacklog Gabe 7/7/2021 12:03:04 AM Assigned to: Petunin, Peter

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-150189-1 M TXQAS	N		8260B	8260B	07/08 23:59	07/14/21	DMH	TX	MtIs-Strge & 210 & VS-13	Unconfirmed
280-150189-2 M TXQAS	G-R		8260B	8260B	07/08 23:59	07/14/21	DMH	TX	MtIs-Strge & VS-13 & 210	Unconfirmed
280-150189-3 M TXQAS	DD		8260B	8260B	07/08 23:59	07/14/21	DMH	TX	210 & VS-13 & MtIs-Strge	Unconfirmed
280-150234-1 M TXQAS	S		8260B	8260B	07/09 23:59	07/14/21	DMH	TX	215 & MtIs-Strge & VS-9	Unconfirmed
280-150234-2 M TXQAS	DUP		8260B	8260B	07/09 23:59	07/14/21	DMH	TX	MtIs-Strge & 215 & VS-9	Unconfirmed
280-150234-3 M TXQAS	FIELD BLANK		8260B	8260B	07/09 23:59	07/14/21	DMH	TX	215 & VS-9 & MtIs-Strge	Unconfirmed
280-150235-1	E01		8260B	8260B	07/09 23:59	07/14/21	BAS	CA	MtIs-Strge & Shared Samples In-Transit & 216 & Marked as Disposed & VS-9	Unconfirmed
280-150235-2	TBE01		8260B	8260B	07/09 23:59	07/14/21	BAS	CA	VS-9	Unconfirmed

Sequence Name: C:\msdchem\1\sequence\070721am. S

Comment:

Operator: wickhamt

Data Path: C:\MSDCHEM\1\DATA\070721am\

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: USA

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL 5mL)

Matrix: (Water / Soil / Waste)

Tune Time: 0643-1808

TALs Batch: 54249

Method Sections To Run

☒ Full Method

☐ Reprocessing Only

Sequence Barcode Options

☐ On Mismatch, Inject Anyway

☐ On Mismatch, Don't Inject

☒ Barcode Disabled

Line	Sample Name/Misc Info
1) Sample	100 MS9_5876 BFB bfb
2) Sample	1 MS9_5877 8260 blank
3) Sample	2 MS9_5878 8260 ccv m
4) Sample	3 MS9_5879 8260 ccv s
5) Sample	4 MS9_5880 8260 ccv g
6) Sample	5 MS9_5881 8260 lcs
7) Sample	6 MS9_5882 8260 lcsd
8) Sample	7 MS9_5883 8260 blank
9) Sample	8 MS9_5884 8260 mb
10) Sample	9 MS9_5885 8260 lcs s
11) Sample	10 MS9_5886 8260 lcsd s
12) Sample	11 MS9_5887 8260 280-150190-A-2 1x ph<2
13) Sample	12 MS9_5888 8260 280-150306-C-11 1x ph<2
14) Sample	13 MS9_5889 8260 280-150204-B-2 1x ph<2
15) Sample	14 MS9_5890 8260 280-150204-A-3 1x ph<2
16) Sample	15 MS9_5891 8260 280-150306-C-1 1x ph<2
17) Sample	16 MS9_5892 8260 280-150306-C-2 1x ph<2
18) Sample	17 MS9_5893 8260 280-150306-B-3 1x ph<2
19) Sample	18 MS9_5894 8260 280-150306-A-4 1x ph<2
20) Sample	19 MS9_5895 8260 280-150306-B-5 1x ph<2
21) Sample	20 MS9_5896 8260 280-150306-C-6 1x ph<2
22) Sample	21 MS9_5897 8260 280-150306-C-7 1x ph<2
23) Sample	22 MS9_5898 8260 280-150306-B-8 1x ph<2
24) Sample	23 MS9_5899 8260 280-150306-A-9 1x ph<2
25) Sample	24 MS9_5900 8260 280-150306-B-10 1x ph<2
26) Sample	25 MS9_5901 8260 280-150306-C-12 1x ph<2
27) Sample	26 MS9_5902 8260 280-150306-A-13 1x ph<2
28) Sample	27 MS9_5903 8260 280-150306-B-14 1x ph<2
29) Sample	28 MS9_5904 8260 280-150306-B-15 1x ph<2
30) Sample	29 MS9_5905 8260 280-150190-G-1 1x ph<2
31) Sample	30 MS9_5906 8260 280-150427-J-1 1x ph=7
32) Sample	31 MS9_5907 8260 280-150306-C-2 MS 1x ph<2
33) Sample	32 MS9_5908 8260 280-150306-C-2 MSD 1x ph<2

ALL ID
RWP 070721

Preliminary Report

Eurofins Environment Testing America
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b

Worklist Name: 070721am

Worklist Num:

102965

Instrument: VMS_MS9

Method:

AQ_VMSMS9_8260

Analysis Type: VOA

Creator:

Wickham, Tom A

Inj Volume: 5

Inj Vol Units:

mL

QC Batching: Disabled

Limit Group Batching:

Enabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 542401	MSV - 624 Raw Batch: 542402
# 1 BFB	# 1 BFB	
# 2 CCV	# 2 CCV	
# 3 CCV	# 3 CCV	
# 14 ccv	# 14 ccv	
# 4 LCS	# 4 LCS	
# 5 LCSD	# 5 LCSD	
# 6 LCS	# 6 LCS	
# 7 LCSD	# 7 LCSD	
# 8 RINSE	# 8 RINSE	
# 9 MB	# 9 MB	
# 10 280-141475-A-1	# 10 280-141475-A-1	
# 11 280-141475-A-2	# 11 280-141475-A-2	
# 12 280-141475-A-3	# 12 280-141475-A-3	
# 13 280-141475-A-7		# 13 280-141475-A-7
# 15 280-150190-A-2	# 15 280-150190-A-2	
# 16 280-150306-C-11	# 16 280-150306-C-11	
# 17 280-150204-B-2	# 17 280-150204-B-2	
# 18 280-150204-A-3	# 18 280-150204-A-3	
# 19 280-150306-C-1	# 19 280-150306-C-1	
# 20 280-150306-C-2	# 20 280-150306-C-2	
# 21 280-150306-B-3	# 21 280-150306-B-3	
# 22 280-150306-A-4	# 22 280-150306-A-4	
# 23 280-150306-B-5	# 23 280-150306-B-5	
# 24 280-150306-C-6	# 24 280-150306-C-6	
# 25 280-150306-C-7	# 25 280-150306-C-7	
# 26 280-150306-B-8	# 26 280-150306-B-8	
# 27 280-150306-A-9	# 27 280-150306-A-9	
# 28 280-150306-B-10	# 28 280-150306-B-10	
# 29 280-150306-C-12	# 29 280-150306-C-12	
# 30 280-150306-A-13	# 30 280-150306-A-13	
# 31 280-150306-B-14	# 31 280-150306-B-14	
# 32 280-150306-B-15	# 32 280-150306-B-15	
# 33 280-150190-G-1	# 33 280-150190-G-1	
# 34 280-150427-J-1	# 34 280-150427-J-1	
# 35 280-150306-C-2 MS	# 35 280-150306-C-2 MS	
# 36 280-150306-C-2 MSD	# 36 280-150306-C-2 MSD	
# 37 Samp 37	# 37 Samp 37	

Eurofins Environment Testing America
Worklist Report

Worklist Name: 070721am

Worklist Number: 102965

Instrument Name: VMS_MS9

Chrom Method: AQ_VMSMS9_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS9\20210707-102965.b

Upload Directory: \\CORPTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS9

Run Reagent: mv-IS_SS_00023

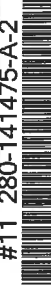
Amount Added: 5.000, Units: uL

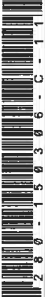
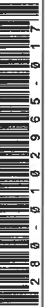
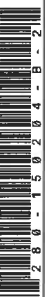
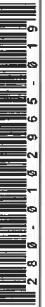
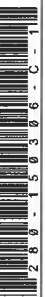
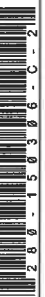
Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00003		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Main add A_00001		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
14	#14 ccv	CCV	1.000	voaWater	5.000	mL	MV-Gas A_00093		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp A_00051		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp A_00051		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client	2.000	voaWater	5.000	mL			
15	#15 280-150190-A-2	Client	1.000	voaWater	5.000	mL			
16	#16 280-150306-C-11	Client	1.000	voaWater	5.000	mL			
17	#17 280-150204-B-2	Client	1.000	voaWater	5.000	mL			
18	#18 280-150204-A-3	Client	1.000	voaWater	5.000	mL			
19	#19 280-150306-C-1	Client	1.000	voaWater	5.000	mL			
20	#20 280-150306-C-2	Client	1.000	voaWater	5.000	mL			
21	#21 280-150306-B-3	Client	1.000	voaWater	5.000	mL			
22	#22 280-150306-A-4	Client	1.000	voaWater	5.000	mL			
23	#23 280-150306-B-5	Client	1.000	voaWater	5.000	mL			
24	#24 280-150306-C-6	Client	1.000	voaWater	5.000	mL			
25	#25 280-150306-C-7	Client	1.000	voaWater	5.000	mL			
26	#26 280-150306-B-8	Client	1.000	voaWater	5.000	mL			
27	#27 280-150306-A-9	Client	1.000	voaWater	5.000	mL			
28	#28 280-150306-B-10	Client	1.000	voaWater	5.000	mL			
29	#29 280-150306-C-12	Client	1.000	voaWater	5.000	mL			
30	#30 280-150306-A-13	Client	1.000	voaWater	5.000	mL			
31	#31 280-150306-B-14	Client	1.000	voaWater	5.000	mL			
32	#32 280-150306-B-15	Client	1.000	voaWater	5.000	mL			
33	#33 280-150190-G-1	Client	1.000	voaWater	5.000	mL			
34	#34 280-150427-J-1	Client	1.000	voaWater	5.000	mL			
35	#35 280-150306-C-2 MS	MS	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Main add A_00001 MV-Gas A_00093		
36	#36 280-150306-C-2 MSD	MSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Main add A_00001 MV-Gas A_00093		
37	#37 Samp 37	Client	1.000	voaWater	5.000	mL			

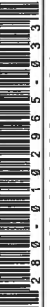
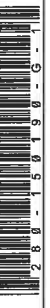
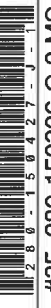
Eurofins Environment Testing America
Worklist Report

Worklist Name: 070721am
Instrument Name: VMS_MS9
Purge Volume: 5.000
Analysis Type: VOA
Batch Directory: \\chromf\Denver\ChromData\VMS_MS9\20210707-102965.b
Upload Directory: \\CORPTAL\SAPP16\280-DN-RawData\Organics\MS\VMS_MS9
Run Reagent: mv-IS_SS_00023
Batch #: 542401, 542402

Worklist Number: 102965
Chrom Method: AQ_VMSMS9_8260
Units: mL
Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102965-001 	#1 BFB 	mv-Cent BFB_00003	BFB	voaWater	2.000	uL	1.000
280-0102965-002 	#2 CCV 	MV-MegaMainA_00052 MV-Main add A_00001	CCV	voaWater	5.000	mL	1.000
280-0102965-003 	#3 CCV 	MV-Supp A_00051 mv-Cent IS_00006	CCV	voaWater	5.000	mL	1.000
280-0102965-014 	#14 ccv 	MV-Gas A_00093	CCV	voaWater	5.000	mL	1.000
280-0102965-004 	#4 LCS 	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001	LCS	voaWater	5.000	mL	1.000
280-0102965-005 	#5 LCSD 	MV-MegaMainA_00052 MV-Gas A_00093 MV-Main add A_00001	LCSD	voaWater	5.000	mL	1.000
280-0102965-006 	#6 LCS 	MV-Supp A_00051	LCS	voaWater	5.000	mL	1.000
280-0102965-007 	#7 LCSD 	MV-Supp A_00051	LCSD	voaWater	5.000	mL	1.000
280-0102965-008 	#8 RINSE 		Client	voaWater	5.000	mL	1.000
280-0102965-009 	#9 MB 		MB	voaWater	5.000	mL	1.000
280-0102965-010 	#10 280-141475-A-1 		Client	voaWater	5.000	mL	1.000
280-0102965-011 	#11 280-141475-A-2 		Client	voaWater	5.000	mL	1.000
280-0102965-012 	#12 280-141475-A-3 		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102965-013 	#13 280-141475-A-7 		Client	voaWater	5,000	mL	2,000
280-0102965-015 	#15 280-150190-A-2 		Client	voaWater	5,000	mL	1,000
280-0102965-016 	#16 280-150306-C-11 		Client	voaWater	5,000	mL	1,000
280-0102965-017 	#17 280-150204-B-2 		Client	voaWater	5,000	mL	1,000
280-0102965-018 	#18 280-150204-A-3 		Client	voaWater	5,000	mL	1,000
280-0102965-019 	#19 280-150306-C-1 		Client	voaWater	5,000	mL	1,000
280-0102965-020 	#20 280-150306-C-2 		Client	voaWater	5,000	mL	1,000
280-0102965-021 	#21 280-150306-B-3 		Client	voaWater	5,000	mL	1,000
280-0102965-022 	#22 280-150306-A-4 		Client	voaWater	5,000	mL	1,000
280-0102965-023 	#23 280-150306-B-5 		Client	voaWater	5,000	mL	1,000
280-0102965-024 	#24 280-150306-C-6 		Client	voaWater	5,000	mL	1,000
280-0102965-025 	#25 280-150306-C-7 		Client	voaWater	5,000	mL	1,000
280-0102965-026 	#26 280-150306-B-8 		Client	voaWater	5,000	mL	1,000
280-0102965-027 	#27 280-150306-A-9 		Client	voaWater	5,000	mL	1,000
280-0102965-028 	#28 280-150306-B-10 		Client	voaWater	5,000	mL	1,000
280-0102965-029 	#29 280-150306-C-12 		Client	voaWater	5,000	mL	1,000
280-0102965-030 	#30 280-150306-A-13 		Client	voaWater	5,000	mL	1,000
280-0102965-031 	#31 280-150306-B-14 		Client	voaWater	5,000	mL	1,000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102965-032 	#32 280-150306-B-15 		Client	voaWater	5.000	mL	1.000
280-0102965-033 	#33 280-150190-G-1 		Client	voaWater	5.000	mL	1.000
280-0102965-034 	#34 280-150427-J-1 		Client	voaWater	5.000	mL	1.000
280-0102965-035 	#35 280-150306-C-2 MS 	MV-MegaMainA_00052 MV-Main add A_00001 MV-Gas A_00093	MS	voaWater	5.000	mL	1.000
280-0102965-036 	#36 280-150306-C-2 MSD 	MV-MegaMainA_00052 MV-Main add A_00001 MV-Gas A_00093	MSD	voaWater	5.000	mL	1.000
280-0102965-037 	#37 Samp 37 		Client	voaWater	5.000	mL	1.000

den_msvoa_totalbacklog Gabe 7/7/2021 8:33:52 AM Assigned to: Wickham, Tom A

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-150190-1 <i>✓</i>	304-062421-21		8260B	8260B	07/08 23:59	07/14/21	BAS	WA	VS-9 & 210 & Mils-Strge	Unconfirmed
280-150190-2 <i>✓</i>	Trip Blank		8260B	8260B	07/08 23:59	07/14/21	BAS	WA	VS-9	Unconfirmed
280-150306-1 <i>✓</i>	RW-8284P-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-2 <i>✓</i>	RW-2172F-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-2MS <i>✓</i>	RW-2172F-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-2MSD <i>✓</i>	RW-2172F-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-3 <i>✓</i>	RW-7588P-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-4 <i>✓</i>	RW-8209P-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-5 <i>✓</i>	RW-7688P-202106 25		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-6 <i>✓</i>	RW-5898BI-20210 625		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-7 <i>✓</i>	RW-2140H-202106 26		8260B	8260B	07/10 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										

7/7/2021
8:33AM

MS9 *ast* Sample Request Form: 68857

Page 2 of 2

den_msvoa_totalbacklog Gabe 7/7/2021 8:33:52 AM Assigned to: Wickham, Tom A

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
M 8260 Supp Spk DIL2										
280-150306-8 <i>1x</i>	MW-116S-2021062 6		8260B	8260B	07/10 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-9 <i>1x</i>	RW-2076F-202106 26		8260B	8260B	07/10 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-10 <i>1x</i>	RW-8012P-202106 26		8260B	8260B	07/10 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-11 <i>1x</i>	EB-07-20210627		8260B	8260B	07/11 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-12 <i>1x</i>	RW-7244P-202106 24		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-13 <i>1x</i>	RW-2237H-202106 24		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-14 <i>1x</i>	RW-7070B-202106 24		8260B	8260B	07/08 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150306-15 <i>1x</i>	RW-8105PS-20210 625		8260B	8260B	07/09 23:59	07/16/21	DTB	ID	VS-9	Unconfirmed
M 8260 Supp Spk DIL2										
280-150427-1 <i>1x</i>	FD Sump		8260B	8260B	07/08 23:59	07/15/21	BAS	CO	VS-12 & WC Dpt & Mtlis-Use & 11	Unconfirmed

07/12/2021

20204-2
-3

1x
1x

Sequence Name: C:\msdchem\1\sequence\060421I.s

Comment:

Operator: SEIFERTJ

Data Path: C:\MSDCHEM\1\DATA\060421I\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run

(X) Full Method

() Reprocessing Only

Sequence Barcode Options

(X) On Mismatch, Inject Anyway

() On Mismatch, Don't Inject

() Barcode Disabled

Equipment: TestAmerica Denver

Instrument ID: MS1

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Run Time: 0951-2054

ALS Batch: 538548

Main / GAS / SS / Supp

Line Sample Name/Misc Info

1) Sample	100	MS1_2711	BFB	BFB 0951
2) Sample	1	MS1_2712	8260	STD010
3) Sample	2	MS1_2713	8260	STD020
4) Sample	3	MS1_2714	8260	STD050
5) Sample	4	MS1_2715	8260	STD10
6) Sample	5	MS1_2716	8260	STD50
7) Sample	6	MS1_2717	8260	STD75
8) Sample	7	MS1_2718	8260	STD100
9) Sample	8	MS1_2719	8260	STD200
10) Sample	9	MS1_2720	8260	BLK
11) Sample	10	MS1_2721	8260	ICV
12) Sample	11	MS1_2722	8260	STD005
13) Sample	12	MS1_2723	8260	STD010
14) Sample	13	MS1_2724	8260	STD020
15) Sample	14	MS1_2725	8260	STD050
16) Sample	15	MS1_2726	8260	STD10
17) Sample	16	MS1_2727	8260	ICIS
18) Sample	17	MS1_2728	8260	STD75
19) Sample	18	MS1_2729	8260	STD100
20) Sample	19	MS1_2730	8260	STD200
21) Sample	20	MS1_2731	8260	BLK
22) Sample	21	MS1_2732	8260	ICV
23) Sample	22	MS1_2733	8260	MDLV 025
24) Sample	23	MS1_2734	8260	MDLV 005
25) Sample	24	MS1_2735	8260	MDLV 01
26) Sample	25	MS1_2736	8260	MDLV 02
27) Sample	26	MS1_2737	8260	MDLV 03
28) Sample	27	MS1_2738	8260	MDLV 05
29) Sample	28	MS1_2739	8260	MDLV 01
30) Sample	29	MS1_2740	8260	MDLV 02
31) Sample	30	MS1_2741	8260	MDLV 03
32) Sample	31	MS1_2742	8260	MDLV 05

WL 102067

Supp Calib: 54225

ICV: 23 32

JK

DNR Removed From Calibration JK 6/5/21

Main / GAS 54226

ICIS: 19 ICV: 23

1st JK 6/5/21

All < 20% D Except

Cyclohexanone - 43.7%

Ethanol + 35.1%

Last Modified: Fri Jun 04 14:05:55 2021

Page: 1

Eurofins Environment Testing America
Worklist Report

Worklist Name: 0604211

Worklist Number: 102067

Instrument Name: VMS_MS1

Chrom Method: AQ_VMS1_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00005 MV-MegaMain B_00047 MV-Gas B_00091		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00091 Acrolein_B_00005 MV-MegaMain B_00047		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00033		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00033		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
18	#18 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
19	#19 ICIS	ICIS	5	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
20	#20 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
21	#21 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
22	#22 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
24	#24 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
25	#25 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
26	#26 STD050	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
27	#27 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
28	#28 STD50	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
29	#29 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
30	#30 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
31	#31 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
32	#32 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00033 mv-Cent IS_00006		
33	#33 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
34	#34 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
35	#35 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		

Sequence Name: C:\msdchem\1\sequence\0604211.s

Comment:

Operator: SEIFERTJ

Data Path: C:\MSDCHEM\1\DATA\0604211\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run

(X) Full Method

() Reprocessing Only

Sequence Barcode Options

(X) On Mismatch, Inject Anyway

() On Mismatch, Don't Inject

() Barcode Disabled

Eurofins TestAmerica Denver

Instrument ID: MS1

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Run Time: 0951-2054

ALS Batch: 538548

Main / GAS / SS / Supp

Line Sample Name/Misc Info

1) Sample	100	MS1_2711	BFB	BFB 0951
2) Sample	1	MS1_2712	8260	STD010
3) Sample	2	MS1_2713	8260	STD020
4) Sample	3	MS1_2714	8260	STD050
5) Sample	4	MS1_2715	8260	STD10
6) Sample	5	MS1_2716	8260	STD50
7) Sample	6	MS1_2717	8260	STD75
8) Sample	7	MS1_2718	8260	STD100
9) Sample	8	MS1_2719	8260	STD200
10) Sample	9	MS1_2720	8260	BLK
11) Sample	10	MS1_2721	8260	ICV
12) Sample	11	MS1_2722	8260	STD005
13) Sample	12	MS1_2723	8260	STD010
14) Sample	13	MS1_2724	8260	STD020
15) Sample	14	MS1_2725	8260	STD050
16) Sample	15	MS1_2726	8260	STD10
17) Sample	16	MS1_2727	8260	ICIS
18) Sample	17	MS1_2728	8260	STD75
19) Sample	18	MS1_2729	8260	STD100
20) Sample	19	MS1_2730	8260	STD200
21) Sample	20	MS1_2731	8260	BLK
22) Sample	21	MS1_2732	8260	ICV
23) Sample	22	MS1_2733	8260	MDLV 025
24) Sample	23	MS1_2734	8260	MDLV 005
25) Sample	24	MS1_2735	8260	MDLV 01
26) Sample	25	MS1_2736	8260	MDLV 02
27) Sample	26	MS1_2737	8260	MDLV 03
28) Sample	27	MS1_2738	8260	MDLV 05
29) Sample	28	MS1_2739	8260	MDLV 01
30) Sample	29	MS1_2740	8260	MDLV 02
31) Sample	30	MS1_2741	8260	MDLV 03
32) Sample	31	MS1_2742	8260	MDLV 05

WL 102067

Supp Calib: 54225

ICV: 23 32

JK

DNR Removed From Calibration JK 6/5/21

Main / GAS 54226

ICIS: 19 ICV: 23

1st JK 6/5/21

All < 20% D Except

Cyclohexanone - 43.7%

Ethanol + 35.1%

Last Modified: Fri Jun 04 14:05:55 2021

Page: 1

Eurofins Environment Testing America
Worklist Report

Worklist Name: 0604211

Worklist Number: 102067

Instrument Name: VMS_MS1

Chrom Method: AQ_VMS1_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b

Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00005 MV-MegaMain B_00047 MV-Gas B_00091		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00091 Acrolein_B_00005 MV-MegaMain B_00047		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00033		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00033		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
18	#18 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
19	#19 ICIS	ICIS	5	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
20	#20 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
21	#21 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
22	#22 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
24	#24 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
25	#25 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
26	#26 STD050	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
27	#27 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
28	#28 STD50	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
29	#29 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
30	#30 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
31	#31 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
32	#32 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00033 mv-Cent IS_00006		
33	#33 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
34	#34 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
35	#35 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		

Eurofins Environment Testing America
Worklist Report

Worklist Name: 063021am

Worklist Number: 102814

Instrument Name: VMS_MS9

Chrom Method: AQ_VMSMS9_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b

Upload Directory: \\CORPTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS9

Run Reagent: mv-IS_SS_00023

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_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp A_00051		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp A_00051		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		2.000	voaWater	5.000	mL			
14	#14 ic	IC	9	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
15	#15 ic	IC	8	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
16	#16 ic	IC	7	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
17	#17 ic	IC	6	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
18	#18 ic	IC	5	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
19	#19 ic	IC	4	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
20	#20 ic	IC	3	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
21	#21 ic	IC	2	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00053		
22	#22 icv	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00034 mv-Cent IS_00006		
23	#23 mdlv	MDLV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
24	#24 mdlv	MDLV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
25	#25 mdlv	MDLV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
26	#26 mdlv	MDLV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
27	#27 mdlv	MDLV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		

SUPP ICAL

calib ID: 54932

ICV: line 22

all within 2020

8260B only
worked up

1st: Jan 7-1-21

2nd: AP 7/1/21

Eurofins TestAmerica Denver

Instrument ID: MS9

SOP: DV-MS-0010 Rev. 27

Method: (524 / 624 / 8260B / 8260C)

Purge Volume (20mL / 5mL)

Matrix: (Water / Soil / Waste)

Tune Time: 06:05-13:29

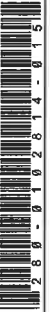
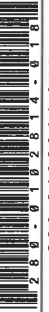
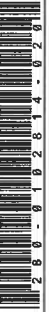
TALs Batch: 541805

Eurofins Environment Testing America
Worklist Report

Worklist Name: 063021am
Instrument Name: VMS_MS9
Purge Volume: 5.000
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102814.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS9
Run Reagent: mv-IS_SS_00023
Batch #s: 541805, 541806, 541824

Worklist Number: 102814
Chrom Method: AQ_VMSMS9_8260
Units: mL
Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102814-001 	# 1 BFB 	mv-Cent BFB_00003	BFB		voaWater	2.000	uL	1.000
280-0102814-002 	# 2 CCV 	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001	CCV		voaWater	5.000	mL	1.000
280-0102814-003 	# 3 CCV 	MV-Supp A_00051 mv-Cent IS_00006	CCV		voaWater	5.000	mL	1.000
280-0102814-004 	# 4 LCS 	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001	LCS		voaWater	5.000	mL	1.000
280-0102814-005 	# 5 LCSD 	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001	LCSD		voaWater	5.000	mL	1.000
280-0102814-006 	# 6 LCS 	MV-Supp A_00051	LCS		voaWater	5.000	mL	1.000
280-0102814-007 	# 7 LCSD 	MV-Supp A_00051	LCSD		voaWater	5.000	mL	1.000
280-0102814-008 	# 8 RINSE 		Client		voaWater	5.000	mL	1.000
280-0102814-009 	# 9 MB 		MB		voaWater	5.000	mL	1.000
280-0102814-010 	#10 280-141475-A-1 		Client		voaWater	5.000	mL	1.000
280-0102814-011 	#11 280-141475-A-2 		Client		voaWater	5.000	mL	1.000
280-0102814-012 	#12 280-141475-A-3 		Client		voaWater	5.000	mL	1.000
280-0102814-013 	#13 280-141475-A-7 		Client		voaWater	5.000	mL	2.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102814-014 	#14 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		9 voaWater	5.000	mL	1.000
280-0102814-015 	#15 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		8 voaWater	5.000	mL	1.000
280-0102814-016 	#16 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		7 voaWater	5.000	mL	1.000
280-0102814-017 	#17 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		6 voaWater	5.000	mL	1.000
280-0102814-018 	#18 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		5 voaWater	5.000	mL	1.000
280-0102814-019 	#19 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		4 voaWater	5.000	mL	1.000
280-0102814-020 	#20 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		3 voaWater	5.000	mL	1.000
280-0102814-021 	#21 ic 	mv-Cent IS_00006 MV-Supp A_00053	IC		2 voaWater	5.000	mL	1.000
280-0102814-022 	#22 icv 	MV-Supp B_00034 mv-Cent IS_00006	ICV		voaWater	5.000	mL	1.000
280-0102814-023 	#23 mdlv 	mv-Cent IS_00006 MV-Supp A_00051	MDLV		voaWater	5.000	mL	1.000
280-0102814-024 	#24 mdlv 	mv-Cent IS_00006 MV-Supp A_00051	MDLV		voaWater	5.000	mL	1.000
280-0102814-025 	#25 mdlv 	mv-Cent IS_00006 MV-Supp A_00051	MDLV		voaWater	5.000	mL	1.000
280-0102814-026 	#26 mdlv 	mv-Cent IS_00006 MV-Supp A_00051	MDLV		voaWater	5.000	mL	1.000
280-0102814-027 	#27 mdlv 	mv-Cent IS_00006 MV-Supp A_00051	MDLV		voaWater	5.000	mL	1.000

Sequence Name: C:\msdchem\1\sequence\063021pm.s

Comment:

Operator: sumichrastr

Data Path: C:\MSDCHEM\1\DATA\063021pm\

Instrument Control Pre-Seq Cmd:

Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:

Data Analysis Post-Seq Cmd:

Method Sections To Run

- (X) Full Method
() Reprocessing Only

Sequence Barcode Options

- () On Mismatch, Inject Anyway
() On Mismatch, Don't Inject
(X) Barcode Disabled

Eurefins TestAmerica Denver

Instrument ID: MS9

SOP: DV-MS-0010 Rev. 27

Method: (524 / 824 / 8260B / 8260C)

Purge Volume (20mL) (5mL)

Matrix: (Water) Soil / Waste

Tune Time: 17:00 - 21:06

FALS Batch: 549 7-1-21
Tan

541956 -82608

Line	Sample Name/Misc Info
1) Sample	1 MS9_5702 8260 blank
2) Sample	100 MS9_5703 BFB BFB
3) Sample	1 MS9_5704 BFB ic
4) Sample	2 MS9_5705 BFB ic
5) Sample	2 MS9_5706 8260 ic
6) Sample	3 MS9_5707 8260 ic
7) Sample	4 MS9_5708 8260 icis
8) Sample	5 MS9_5709 8260 ic
9) Sample	6 MS9_5710 8260 ic
10) Sample	7 MS9_5711 8260 ic
11) Sample	8 MS9_5712 8260 ic
12) Sample	9 MS9_5713 8260 ic
13) Sample	10 MS9_5714 8260 ic RR
14) Sample	11 MS9_5715 8260 blank
15) Sample	12 MS9_5716 8260 icv

8260B only
worked up

Gas/SS ICAL

Calib ID: 54966

ICIS: line 17

ICV: line 23

ICV: dedfm +24%

Chloromethane +24%

1st: Tan 7-1-21

2nd: R.L. 7-1-21

Eurofins Environment Testing America
Worklist Report

Worklist Name: 063021pm

Worklist Number: 102839

Instrument Name: VMS_MS9

Chrom Method: AQ_VMSMS9_8260

Purge Volume: 5.000

Units: mL

Analysis Type: VOA

Batch Directory: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b

Upload Directory: \\CORPTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS9

Run Reagent: mv-IS_SS_00023

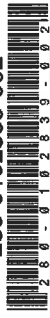
Amount Added: 5.000, Units: uL

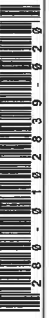
Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00003		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp A_00051		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp A_00051		
8	# 8 RINSE	Client		1.000	voaWater	5.000	mL			
9	# 9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		2.000	voaWater	5.000	mL			
14	#14 ic	IC	9	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
15	#15 ic	IC	8	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
16	#16 ic	IC	7	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
17	#17 icis	ICIS	6	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
18	#18 ic	IC	5	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
19	#19 ic	IC	4	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
20	#20 ic	IC	3	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
21	#21 ic	IC	2	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
22	#22 ic	IC	1	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas A_00091		
23	#23 icv	ICV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Gas B_00092		

Eurofins Environment Testing America
Worklist Report

Worklist Name: 063021pm
Instrument Name: VMS_MS9
Purge Volume: 5.000
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS9\20210630-102839.b
Upload Directory: \\CORPTAL\SAPP16\280-DN-RawData\Organics\MS\MS9
Run Reagent: mv-IS_SS_00023
Batch #: 541956, 541957, 541958

Worklist Number: 102839
Chrom Method: AQ_VMSMS9_8260
Units: mL
Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102839-001 	# 1 BFB 	mv-Cent BFB_00003	BFB		voaWater	2.000	uL	1.000
280-0102839-002 	# 2 CCV 	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001	CCV		voaWater	5.000	mL	1.000
280-0102839-003 	# 3 CCV 	MV-Supp A_00051 mv-Cent IS_00006	CCV		voaWater	5.000	mL	1.000
280-0102839-004 	# 4 LCS 	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001	LCS		voaWater	5.000	mL	1.000
280-0102839-005 	# 5 LCSD 	MV-MegaMainA_00052 MV-Gas A_00091 MV-Main add A_00001	LCSD		voaWater	5.000	mL	1.000
280-0102839-006 	# 6 LCS 	MV-Supp A_00051	LCS		voaWater	5.000	mL	1.000
280-0102839-007 	# 7 LCSD 	MV-Supp A_00051	LCSD		voaWater	5.000	mL	1.000
280-0102839-008 	# 8 RINSE 		Client		voaWater	5.000	mL	1.000
280-0102839-009 	# 9 MB 		MB		voaWater	5.000	mL	1.000
280-0102839-010 	#10 280-141475-A-1 		Client		voaWater	5.000	mL	1.000
280-0102839-011 	#11 280-141475-A-2 		Client		voaWater	5.000	mL	1.000
280-0102839-012 	#12 280-141475-A-3 		Client		voaWater	5.000	mL	1.000
280-0102839-013 	#13 280-141475-A-7 		Client		voaWater	5.000	mL	2.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0102839-014 	#14 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		9 voaWater	5.000	mL	1.000
280-0102839-015 	#15 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		8 voaWater	5.000	mL	1.000
280-0102839-016 	#16 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		7 voaWater	5.000	mL	1.000
280-0102839-017 	#17 icis 	mv-Cent IS_00006 MV-Gas A_00091	ICIS		6 voaWater	5.000	mL	1.000
280-0102839-018 	#18 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		5 voaWater	5.000	mL	1.000
280-0102839-019 	#19 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		4 voaWater	5.000	mL	1.000
280-0102839-020 	#20 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		3 voaWater	5.000	mL	1.000
280-0102839-021 	#21 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		2 voaWater	5.000	mL	1.000
280-0102839-022 	#22 ic 	mv-Cent IS_00006 MV-Gas A_00091	IC		1 voaWater	5.000	mL	1.000
280-0102839-023 	#23 icv 	mv-Cent IS_00006 MV-Gas B_00092	ICV		voaWater	5.000	mL	1.000

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00089
BFB 280-538548/1		8260B		2 uL	2 uL		5 uL		
STD005 280-538548/14 IC		8260B		5 mL	5 mL				0.1 uL
STD010 280-538548/15 IC		8260B		5 mL	5 mL				0.2 uL
STD020 280-538548/16 IC		8260B		5 mL	5 mL				0.4 uL
STD10 280-538548/18 IC		8260B		5 mL	5 mL				2 uL
ICIS 280-538548/19		8260B		5 mL	5 mL				10 uL
STD75 280-538548/20 IC		8260B		5 mL	5 mL				15 uL
STD100 280-538548/21 IC		8260B		5 mL	5 mL				20 uL
STD200 280-538548/22 IC		8260B		5 mL	5 mL				40 uL
ICV 280-538548/23		8260B		5 mL	5 mL	25 uL			
STD010 280-538548/24 IC		8260B		5 mL	5 mL			5 uL	
STD020 280-538548/25 IC		8260B		5 mL	5 mL			5 uL	
STD050 280-538548/26 IC		8260B		5 mL	5 mL			5 uL	
STD10 280-538548/27 IC		8260B		5 mL	5 mL			5 uL	
STD50 280-538548/28 IC		8260B		5 mL	5 mL			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.

8260B

Page 1 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00089
STD75 280-538548/29 IC		8260B		5 mL	5 mL			5 uL	
STD100 280-538548/30 IC		8260B		5 mL	5 mL			5 uL	
STD200 280-538548/31 IC		8260B		5 mL	5 mL			5 uL	
ICV 280-538548/32		8260B		5 mL	5 mL			5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00091	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050	MV-Supp A 00051	MV-Supp B 00033
BFB 280-538548/1		8260B							
STD005 280-538548/14 IC		8260B			5 uL		0.25 uL		
STD010 280-538548/15 IC		8260B			5 uL		0.5 uL		
STD020 280-538548/16 IC		8260B			5 uL		1 uL		
STD10 280-538548/18 IC		8260B			5 uL		5 uL		
ICIS 280-538548/19		8260B			5 uL		25 uL		
STD75 280-538548/20 IC		8260B			5 uL		37.5 uL		
STD100 280-538548/21 IC		8260B			5 uL		50 uL		
STD200 280-538548/22 IC		8260B			5 uL		100 uL		
ICV 280-538548/23		8260B		10 uL	5 uL	25 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.

8260B

Page 2 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy LBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00091	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050	MV-Supp A 00051	MV-Supp B 00033
STD010 280-538548/24 IC		8260B						1 uL	
STD020 280-538548/25 IC		8260B						2 uL	
STD050 280-538548/26 IC		8260B						5 uL	
STD10 280-538548/27 IC		8260B						10 uL	
STD50 280-538548/28 IC		8260B						50 uL	
STD75 280-538548/29 IC		8260B						75 uL	
STD100 280-538548/30 IC		8260B						100 uL	
STD200 280-538548/31 IC		8260B						200 uL	
ICV 280-538548/32		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.: 280-150290-1

SDG No.: _____

Batch Number: 541632 Batch Start Date: 06/29/21 10:26 Batch Analyst: Sumichrast, Ryan JBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00006	mv-Cent BFB 00003	MV-Gas A 00093	MV-Gas B 00092
BFB 280-541632/1		8260B		2 uL	2 uL		5 uL		
IC 280-541632/16		8260B		5 mL	5 mL			40 uL	
IC 280-541632/17		8260B		5 mL	5 mL			20 uL	
IC 280-541632/18		8260B		5 mL	5 mL			15 uL	
ICIS 280-541632/19		8260B		5 mL	5 mL			10 uL	
IC 280-541632/20		8260B		5 mL	5 mL			2 uL	
IC 280-541632/21		8260B		5 mL	5 mL			1 uL	
IC 280-541632/22		8260B		5 mL	5 mL			0.4 uL	
IC 280-541632/23		8260B		5 mL	5 mL			0.2 uL	
IC 280-541632/24		8260B		5 mL	5 mL			0.1 uL	
ICV 280-541632/25		8260B		5 mL	5 mL	25 uL			10 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00023	MV-Main add A 00001	MV-MegaMain B 00049	MV-MegaMainA 00052		
BFB 280-541632/1		8260B							
IC 280-541632/16		8260B		5 uL	100 uL		100 uL		
IC 280-541632/17		8260B		5 uL	50 uL		50 uL		
IC 280-541632/18		8260B		5 uL	37.5 uL		37.5 uL		
ICIS 280-541632/19		8260B		5 uL	25 uL		25 uL		
IC 280-541632/20		8260B		5 uL	5 uL		5 uL		
IC 280-541632/21		8260B		5 uL	2.5 uL		2.5 uL		
IC 280-541632/22		8260B		5 uL	1 uL		1 uL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260B

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 541632 Batch Start Date: 06/29/21 10:26 Batch Analyst: Sumichrast, Ryan JBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00023	MV-Main add A 00001	MV-MegaMain B 00049	MV-MegaMainA 00052		
IC 280-541632/23		8260B		5 uL	0.5 uL		0.5 uL		
IC 280-541632/24		8260B		5 uL	0.25 uL		0.25 uL		
ICV 280-541632/25		8260B		5 uL		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.: 280-150290-1

SDG No.: _____

Batch Number: 541805 Batch Start Date: 06/30/21 06:05 Batch Analyst: Wickham, Tom ABatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Supp A 00053	MV-Supp B 00034
BFB 280-541805/1		8260B		2 uL	2 uL	5 uL			
IC 280-541805/14		8260B		5 mL	5 mL		5 uL	100 uL	
IC 280-541805/15		8260B		5 mL	5 mL		5 uL	50 uL	
IC 280-541805/16		8260B		5 mL	5 mL		5 uL	37.5 uL	
IC 280-541805/17		8260B		5 mL	5 mL		5 uL	25 uL	
IC 280-541805/18		8260B		5 mL	5 mL		5 uL	5 uL	
IC 280-541805/19		8260B		5 mL	5 mL		5 uL	2.5 uL	
IC 280-541805/20		8260B		5 mL	5 mL		5 uL	1 uL	
IC 280-541805/21		8260B		5 mL	5 mL		5 uL	0.5 uL	
ICV 280-541805/22		8260B		5 mL	5 mL		5 uL		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.: 280-150290-1

SDG No.: _____

Batch Number: 541956 Batch Start Date: 06/30/21 17:00 Batch Analyst: Sumichrast, Ryan JBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00091	MV-Gas B 00092
BFB 280-541956/1		8260B		2 uL	2 uL	5 uL			
IC 280-541956/14		8260B		5 mL	5 mL		5 uL	40 uL	
IC 280-541956/15		8260B		5 mL	5 mL		5 uL	20 uL	
IC 280-541956/16		8260B		5 mL	5 mL		5 uL	15 uL	
ICIS 280-541956/17		8260B		5 mL	5 mL		5 uL	10 uL	
IC 280-541956/18		8260B		5 mL	5 mL		5 uL	2 uL	
IC 280-541956/19		8260B		5 mL	5 mL		5 uL	1 uL	
IC 280-541956/20		8260B		5 mL	5 mL		5 uL	0.4 uL	
IC 280-541956/21		8260B		5 mL	5 mL		5 uL	0.2 uL	
IC 280-541956/22		8260B		5 mL	5 mL		5 uL	0.1 uL	
ICV 280-541956/23		8260B		5 mL	5 mL		5 uL		10 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.: 280-150290-1

SDG No.: _____

Batch Number: 542394 Batch Start Date: 07/06/21 20:31 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00093	mv-IS_SS 00018
BFB 280-542394/1		8260B		2 uL	2 uL	5 uL			
CCV 280-542394/2		8260B		5 mL	5 mL			10 uL	5 uL
CCV 280-542394/3		8260B		5 mL	5 mL		5 uL		
LCS 280-542394/4		8260B		5 mL	5 mL			5 uL	5 uL
LCSD 280-542394/5		8260B		5 mL	5 mL			5 uL	5 uL
LCS 280-542394/6		8260B		5 mL	5 mL				5 uL
LCSD 280-542394/7		8260B		5 mL	5 mL				5 uL
MB 280-542394/9		8260B		5 mL	5 mL				5 uL
280-150290-A-1	TB-03-20210627	8260B	T	5 mL	5 mL				5 uL
280-150290-A-2	PA-5-20210627	8260B	T	5 mL	5 mL				5 uL
280-150290-A-3	MW-38-60-100-20210627	8260B	T	5 mL	5 mL				5 uL
280-150290-C-4	RW-2879M-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-C-5	RW-7505P-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-B-6	RW-8048P-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-C-7	RW-8035P-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-B-8	PA-10-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-C-9	RW-7350P-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-A-10	PA-9-58-68-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-A-11	PA-9-88-98-20210624	8260B	T	5 mL	5 mL				5 uL
280-150290-A-12	RW-7549P-20210624	8260B	T	5 mL	5 mL				5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Main add A 00001	MV-MegaMainA 00052	MV-Supp A 00051			
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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.: 280-150290-1

SDG No.: _____

Batch Number: 542394 Batch Start Date: 07/06/21 20:31 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Main add A 00001	MV-MegaMainA 00052	MV-Supp A 00051			
BFB 280-542394/1		8260B							
CCV 280-542394/2		8260B		25 uL	25 uL				
CCV 280-542394/3		8260B				50 uL			
LCS 280-542394/4		8260B		12.5 uL	12.5 uL				
LCSD 280-542394/5		8260B		12.5 uL	12.5 uL				
LCS 280-542394/6		8260B				25 uL			
LCSD 280-542394/7		8260B				25 uL			
MB 280-542394/9		8260B							
280-150290-A-1	TB-03-20210627	8260B	T						
280-150290-A-2	PA-5-20210627	8260B	T						
280-150290-A-3	MW-38-60-100-202 10627	8260B	T						
280-150290-C-4	RW-2879M-2021062 4	8260B	T						
280-150290-C-5	RW-7505P-2021062 4	8260B	T						
280-150290-B-6	RW-8048P-2021062 4	8260B	T						
280-150290-C-7	RW-8035P-2021062 4	8260B	T						
280-150290-B-8	PA-10-20210624	8260B	T						
280-150290-C-9	RW-7350P-2021062 4	8260B	T						
280-150290-A-10	PA-9-58-68-20210 624	8260B	T						
280-150290-A-11	PA-9-88-98-20210 624	8260B	T						
280-150290-A-12	RW-7549P-2021062 4	8260B	T						

Batch Notes	

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.

8260B

Page 2 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 542394 Batch Start Date: 07/06/21 20:31 Batch Analyst: Petunin, PeterBatch Method: 8260B Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 542401 Batch Start Date: 07/07/21 06:43 Batch Analyst: Wickham, Tom ABatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00093	mv-IS_SS 00023
BFB 280-542401/1		8260B		2 uL	2 uL	5 uL			
CCV 280-542401/2		8260B		5 mL	5 mL				5 uL
CCV 280-542401/3		8260B		5 mL	5 mL		5 uL		
LCS 280-542401/4		8260B		5 mL	5 mL			5 uL	5 uL
LCSD 280-542401/5		8260B		5 mL	5 mL			5 uL	5 uL
LCS 280-542401/6		8260B		5 mL	5 mL				5 uL
LCSD 280-542401/7		8260B		5 mL	5 mL				5 uL
MB 280-542401/9		8260B		5 mL	5 mL				5 uL
CCV 280-542401/14		8260B		5 mL	5 mL			10 uL	5 uL
280-150306-C-11	EB-07-20210627	8260B	T	5 mL	5 mL				5 uL
280-150306-C-1	RW-8284P-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-C-2	RW-2172F-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-B-3	RW-7588P-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-A-4	RW-8209P-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-B-5	RW-7688P-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-C-6	RW-5898BI-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-C-7	RW-2140H-20210626	8260B	T	5 mL	5 mL				5 uL
280-150306-B-8	MW-116S-20210626	8260B	T	5 mL	5 mL				5 uL
280-150306-A-9	RW-2076F-20210626	8260B	T	5 mL	5 mL				5 uL
280-150306-B-10	RW-8012P-20210626	8260B	T	5 mL	5 mL				5 uL
280-150306-C-12	RW-7244P-20210624	8260B	T	5 mL	5 mL				5 uL
280-150306-A-13	RW-2237H-20210624	8260B	T	5 mL	5 mL				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.

8260B

Page 1 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 542401 Batch Start Date: 07/07/21 06:43 Batch Analyst: Wickham, Tom ABatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00093	mv-IS_SS 00023
280-150306-B-14	RW-7070B-20210624	8260B	T	5 mL	5 mL				5 uL
280-150306-B-15	RW-8105PS-20210625	8260B	T	5 mL	5 mL				5 uL
280-150306-C-2 MS	RW-2172F-20210625	8260B	T	5 mL	5 mL			5 uL	5 uL
280-150306-C-2 MSD	RW-2172F-20210625	8260B	T	5 mL	5 mL			5 uL	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Main add A 00001	MV-MegaMainA 00052	MV-Supp A 00051			
BFB 280-542401/1		8260B							
CCV 280-542401/2		8260B		12.5 uL	12.5 uL				
CCV 280-542401/3		8260B				25 uL			
LCS 280-542401/4		8260B		12.5 uL	12.5 uL				
LCSD 280-542401/5		8260B		12.5 uL	12.5 uL				
LCS 280-542401/6		8260B				25 uL			
LCSD 280-542401/7		8260B				25 uL			
MB 280-542401/9		8260B							
CCV 280-542401/14		8260B							
280-150306-C-11	EB-07-20210627	8260B	T						
280-150306-C-1	RW-8284P-20210625	8260B	T						
280-150306-C-2	RW-2172F-20210625	8260B	T						
280-150306-B-3	RW-7588P-20210625	8260B	T						
280-150306-A-4	RW-8209P-20210625	8260B	T						
280-150306-B-5	RW-7688P-20210625	8260B	T						
280-150306-C-6	RW-5898BI-20210625	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260B

Page 2 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 542401 Batch Start Date: 07/07/21 06:43 Batch Analyst: Wickham, Tom ABatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Main add A 00001	MV-MegaMainA 00052	MV-Supp A 00051			
280-150306-C-7	RW-2140H-20210626	8260B	T						
280-150306-B-8	MW-116S-20210626	8260B	T						
280-150306-A-9	RW-2076F-20210626	8260B	T						
280-150306-B-10	RW-8012P-20210626	8260B	T						
280-150306-C-12	RW-7244P-20210624	8260B	T						
280-150306-A-13	RW-2237H-20210624	8260B	T						
280-150306-B-14	RW-7070B-20210624	8260B	T						
280-150306-B-15	RW-8105PS-20210625	8260B	T						
280-150306-C-2 MS	RW-2172F-20210625	8260B	T	12.5 uL	12.5 uL				
280-150306-C-2 MSD	RW-2172F-20210625	8260B	T	12.5 uL	12.5 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.: 280-150290-1

SDG No.: _____

Batch Number: 542686 Batch Start Date: 07/09/21 06:39 Batch Analyst: Wickham, Tom ABatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00006	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00093
BFB 280-542686/1		8260B		2 uL	2 uL		5 uL		
CCV 280-542686/2		8260B		5 mL	5 mL				10 uL
CCV 280-542686/3		8260B		5 mL	5 mL			5 uL	
LCS 280-542686/4		8260B		5 mL	5 mL	12.5 uL			
LCSD 280-542686/5		8260B		5 mL	5 mL	12.5 uL			
LCS 280-542686/6		8260B		5 mL	5 mL				
LCSD 280-542686/7		8260B		5 mL	5 mL				
MB 280-542686/9		8260B		5 mL	5 mL				
280-150306-A-17	TB-02-20210627	8260B	T	5 mL	5 mL				
280-150306-B-16	MW-38-105-115-20 210627	8260B	T	5 mL	5 mL				
280-150306-C-18	MW-38-121-130-20 210627	8260B	T	5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00093	mv-IS_SS 00018	MV-Main add A 00001	MV-MegaMain B 00050	MV-MegaMainA 00052	MV-Supp A 00051
BFB 280-542686/1		8260B							
CCV 280-542686/2		8260B			5 uL	25 uL		25 uL	
CCV 280-542686/3		8260B							25 uL
LCS 280-542686/4		8260B		5 uL	5 uL		12.5 uL		
LCSD 280-542686/5		8260B		5 uL	5 uL		12.5 uL		
LCS 280-542686/6		8260B			5 uL				25 uL
LCSD 280-542686/7		8260B			5 uL				25 uL
MB 280-542686/9		8260B			5 uL				
280-150306-A-17	TB-02-20210627	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.

8260B

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-150290-1

SDG No.: _____

Batch Number: 542686 Batch Start Date: 07/09/21 06:39 Batch Analyst: Wickham, Tom ABatch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00093	mv-IS_SS 00018	MV-Main add A 00001	MV-MegaMain B 00050	MV-MegaMainA 00052	MV-Supp A 00051
280-150306-B-16	MW-38-105-115-20 210627	8260B	T		5 uL				
280-150306-C-18	MW-38-121-130-20 210627	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

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

Chain of Custody Record

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

Client Information Client Contact: <u>Mary Lou Fox</u> Company: <u>CDM Smith, Inc.</u> Address: <u>14432 S.E. Eastgate Way Suite 100</u> City: <u>Bellevue</u> State, Zip: <u>WA, 98007</u> Phone: <u>425-519-8300</u> Email: <u>FoxML@cdmsmith.com</u> Project Name: <u>Barnock Ft. Hall Mine LF, Idaho</u> Site: <u>Offsite GW Sampling</u>		Sampler: <u>Emma Ehret</u> Lab PM: <u>Bienilius, Dylan T.</u> Phone: <u>208-310-0192</u> E-Mail: <u>Dylan.Bienilius@testamericainc.com</u>		Carrier Tracking No(s): COC No: Page: <u>2 of 2</u> Job #:		Analysis Requested Due Date Requested: TAT Requested (days): <u>15 business days</u> PO #: <u>TBD</u> WO #: <u></u> Project #: <u>28018772</u> SSOW#:	
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 Other:		Total Number of containers					
Special Instructions/Note:		Special Instructions/Note:					
Sample Identification PA-5-20210627 MW-38-60-100-20210627 RW-2899M-20210624 RW-7505P-20210624 RW-8048P-20210624 RW-8035P-20210624 PA-10-20210624 RW-7350P-20210624 PA-9-58-68-20210624 PA-9-88-98-20210624 RW-7549P-20210624		Sample Date 6/27/21 6/27/21 6/24/21 6/24/21 6/24/21 6/24/21 6/24/21 6/24/21 6/24/21 6/24/21 6/24/21		Sample Time 11:50 1505 09:10 08:44 10:29 11:33 12:20 12:48 14:20 15:30 14:33		Matrix (New site, Transfer, On-site, BT or Hach) G W G W G W G W G W G W G W G W G W G W	
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 Special Instructions/QC Requirements:					
Deliverable Requested: I, II, III, IV, Other (specify)		Date:					
Empty Kit Relinquished by:		Date:					
Relinquished by:		Date/Time:					
Relinquished by:		Date/Time:					
Relinquished by:		Date/Time:					
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:					

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

Chain of Custody Record

Denver #280

eurofins | Environment Testing
TestAmerica

Client Information		Sampler		Lab PM		Canner Tracking No(s)		COC No	
Client Contact Mary Lou Fox Company CDM Smith, Inc.		Phone 208-310-0192		E-Mail Dylan.Bienulis@testamcinc.com		Bienulis, Dylan T		Page 1 of 2	
Address 14432 S.E. Eastgate Way Suite 100 City Bellyue State, Zip WA, 98007 Phone 425-519-8300 Email FoxML@cdmsmith.com		Due Date Requested: TAT Requested (days): 15 business days		PO # TBD WO #		Project # 28018772 SSOW#		Job #	
Site offsite GW Sampling		Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
		Matrix (Inorganic, Organic, Metals, BT+Trace, etc)		Preservation Code:					
RW-3284P-20210625		6/25/21 12:06		G		W			
RW-2172F-20210625		6/25/21 12:55		G		W			
RW-7588P-20210625		6/25/21 14:31		G		W			
RW-8209P-20210625		6/25/21 15:51		G		W			
RW-7688P-20210625		6/25/21 16:38		G		W			
RW-5898BI-20210625		6/25/21 18:00		G		W			
RW-2140H-20210626		6/26/21 11:20		G		W			
MW-1165-20210626		6/26/21 12:30		G		W			
RW-2076F-20210626		6/26/21 14:55		G		W			
RW-9012P-20210626		6/26/21 15:40		G		W			
EB-09-20210627		6/27/21 08:50		G		W			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		☐ Poison B ☐ Unknown ☐ Radiological							
Empty Kit Relinquished by		Date:		Time:		Method of Shipment			
Relinquished by		Date/Time		Date/Time		Received by		Date/Time	
Relinquished by		Date/Time		Date/Time		Received by		Date/Time	
Relinquished by		Date/Time		Date/Time		Received by		Date/Time	
Custody Seals Intact: A Yes Δ No		Custody Seal No.: 1563118		1563119		Cooler Temperature(s) °C and Other Remarks: 1-1 IR 12 CF+0.6		Company	

Denver #280

Chain of Custody Record

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



Environment Testing
TestAmerica

Client Information Client Contact: Mary Lou Fox Company: CDM Smith, Inc. Address: 14432 S.E. Eastgate Way Suite 100 City: Bellevue State: WA, Zip: 98007 Phone: 425-519-8300 Email: FoxML@cdmsmith.com Project Name: Bannock Fl. Hall Mine LF, Idaho Site: <u>Offsite GW Sampling</u>		Lab PM: Bieniulis, Dylan T. E-Mail: Dylan.Bieniulis@testamericainc.com Sampler: Emma Ehret Phone: 208-310-0192 Due Date Requested: 15 business days TAT Requested (days): 15 business days PO #: TBD TBD: WO #: Project #: 28018772 SSOW #:		Carrier Tracking No(s): Job #: <u>20f2</u> COC No:	
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 Other:		Total Number of containers: <u>33</u>			
Sample Identification Sample ID: <u>RW-7244P-20210624</u> Sample Date: <u>6/24/21</u> Sample Time: <u>15:03</u> Sample Type: <u>G</u> Matrix: <u>W</u>		Special Instructions/Note:			
<u>RW-2237H-20210624</u> <u>RW-7070B-20210624</u> <u>RW-8105PS-20210624</u> <u>MW-38-105-115-20210627</u> <u>TB-02-20210627</u> <u>MW-38-121-130-20210627</u> <u>TB-03-20210627</u>		Special Instructions/Note:			
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			
Empty Kit Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u>		Special Instructions/OC Requirements: Date: <u>6/23/21</u> Date/Time: <u>9:00am</u> Date/Time: <u>[Signature]</u> Date/Time: <u>[Signature]</u> Date/Time: <u>[Signature]</u> Cooler Temperature(s) °C and Other Remarks:			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:			



280-150306 Waybill

FedEx
Express
Expanded Billable Stamp

Use SurePost

1 From See optional release to:
ORDER: 00851499

1563118

DECLARED VALUE \$100
PACKAGE WEIGHT 0 lbs

2 To Shipment will not be accepted if address is:
SAMPLE RECEIVING 1563119
TESTAMERICA DENVER

4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

SATURDAY DELIVERY

Shipments tendered on Friday
are delivered on Saturday to
most locations.

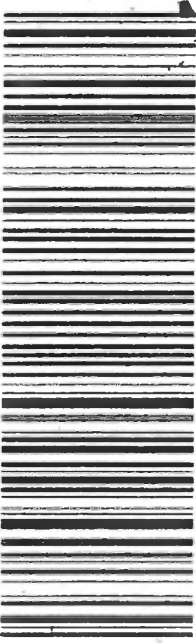
FedEx

TRK# 0667 8156 5957 9228

TUE - 29 JUN AA
PRIORITY OVERNIGHT

XH LAAA

1.1 80002
DEN



FTD: 613336 28Jun2021 PHA 560X2/0265/1R23

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 280-150290-1

Login Number: 150290

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Rystrom, Joshua R

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 280-150290-1

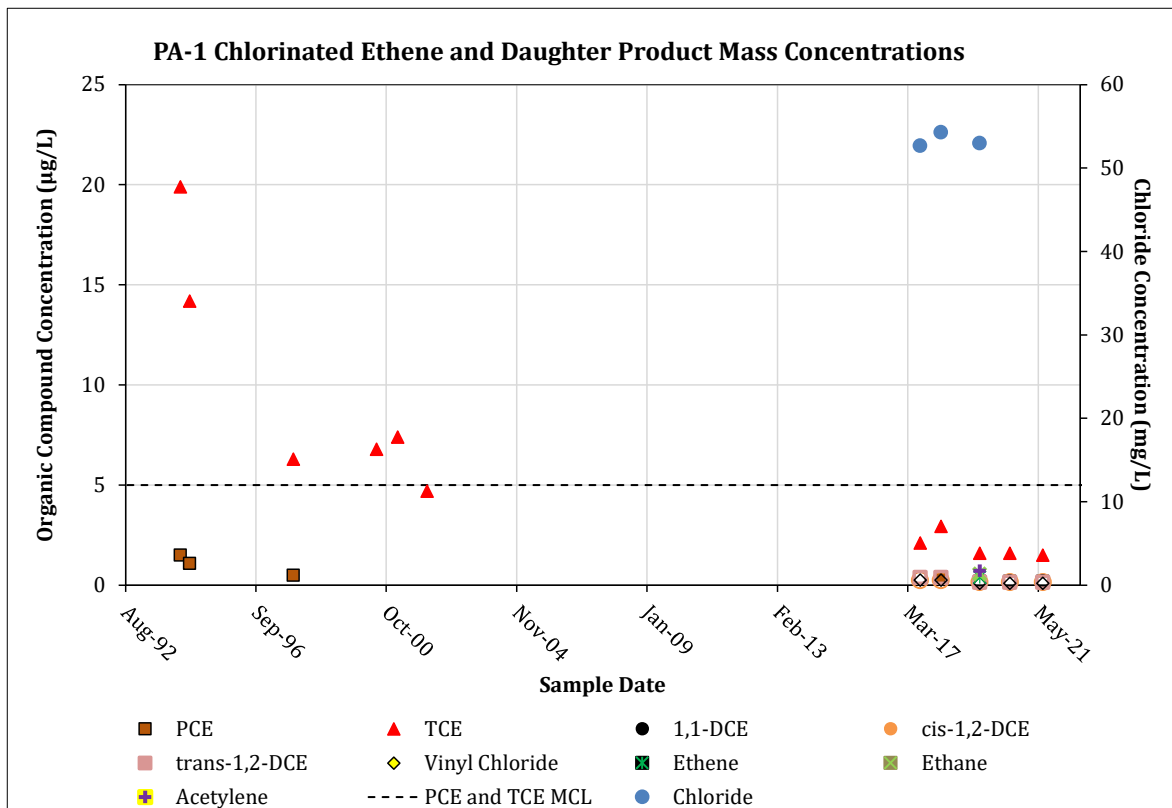
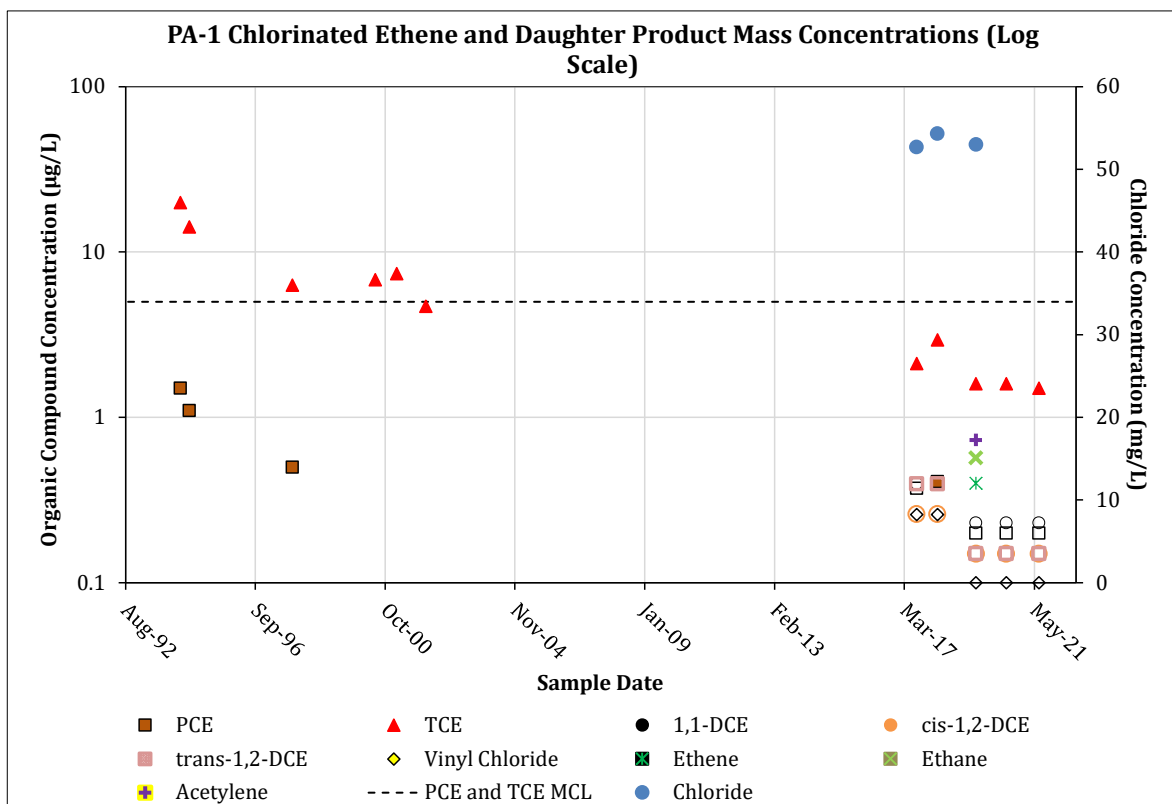
Login Number: 150306
List Number: 1
Creator: Dubicki, Adam L

List Source: Eurofins TestAmerica, Denver

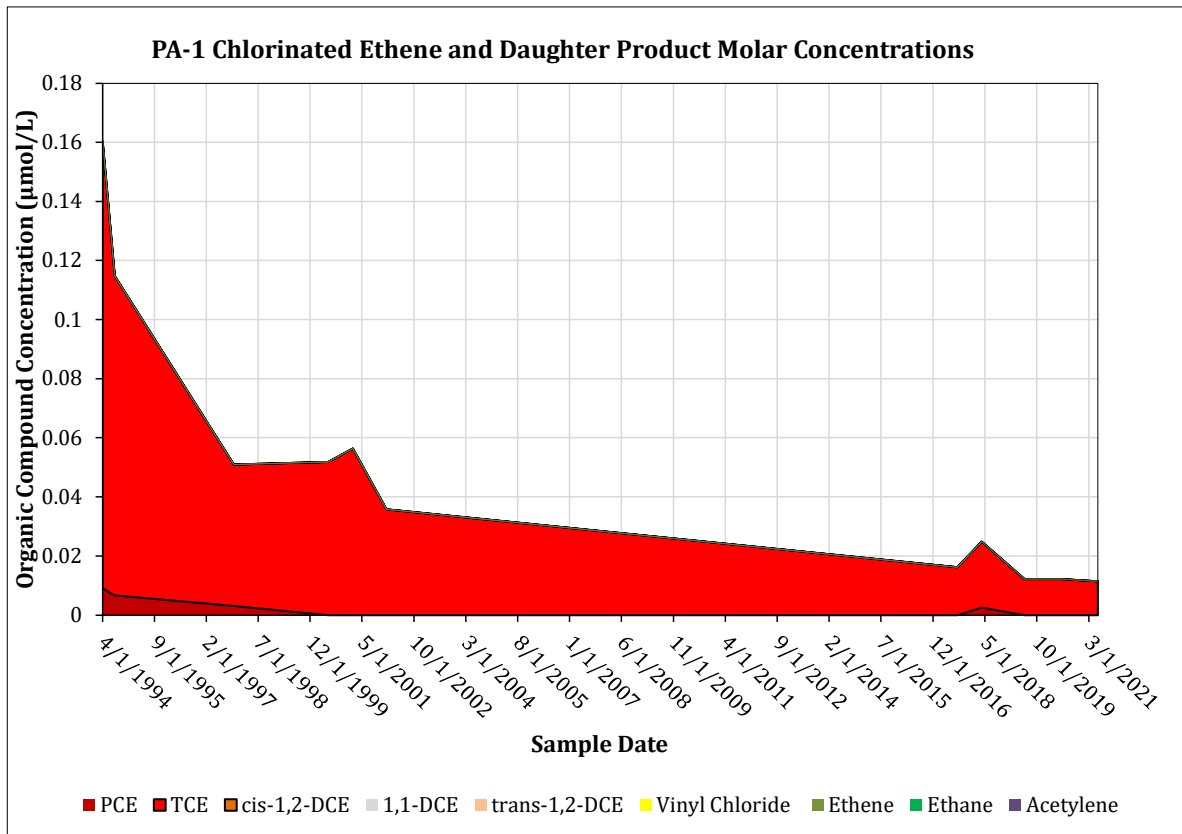
Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

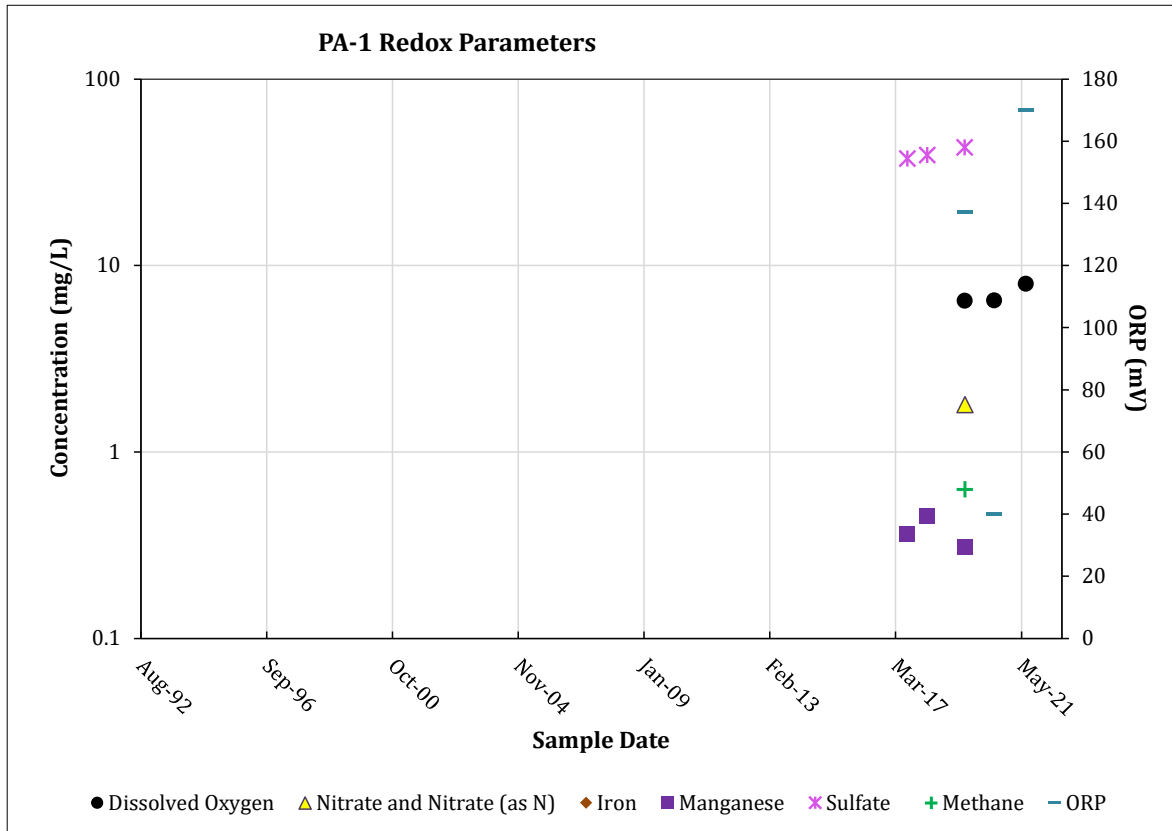
Appendix F

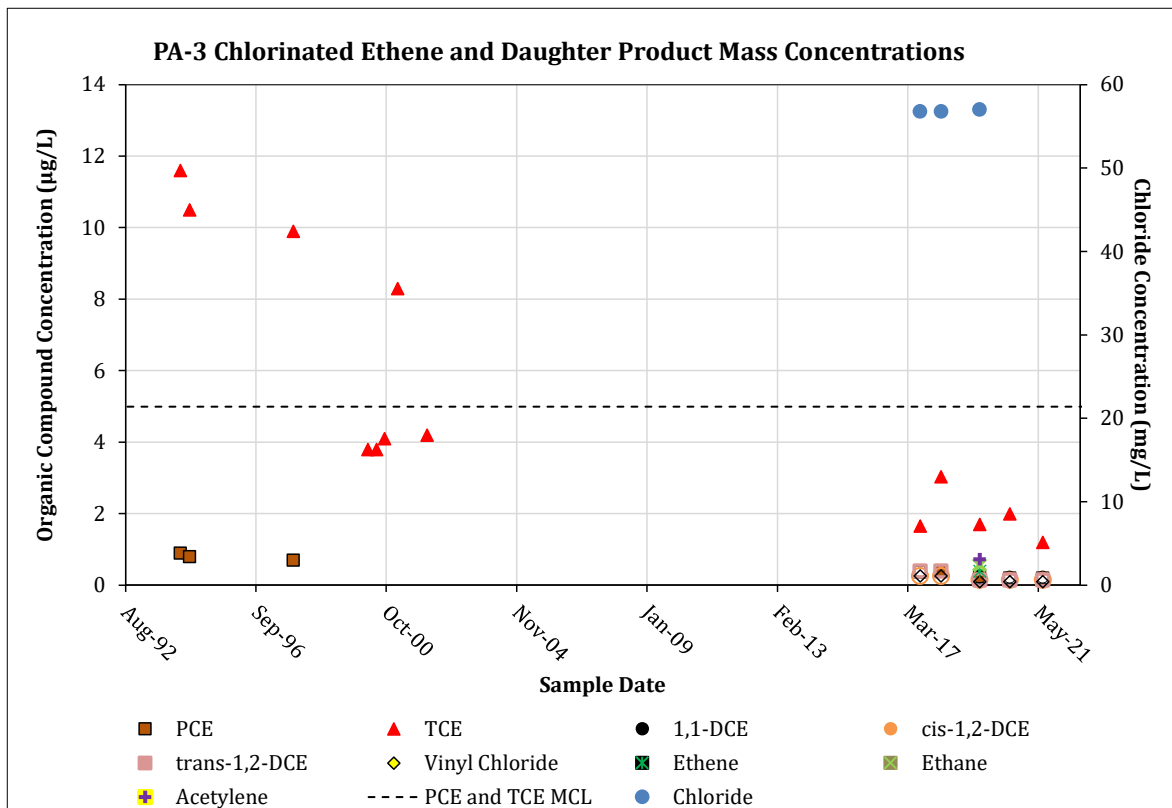
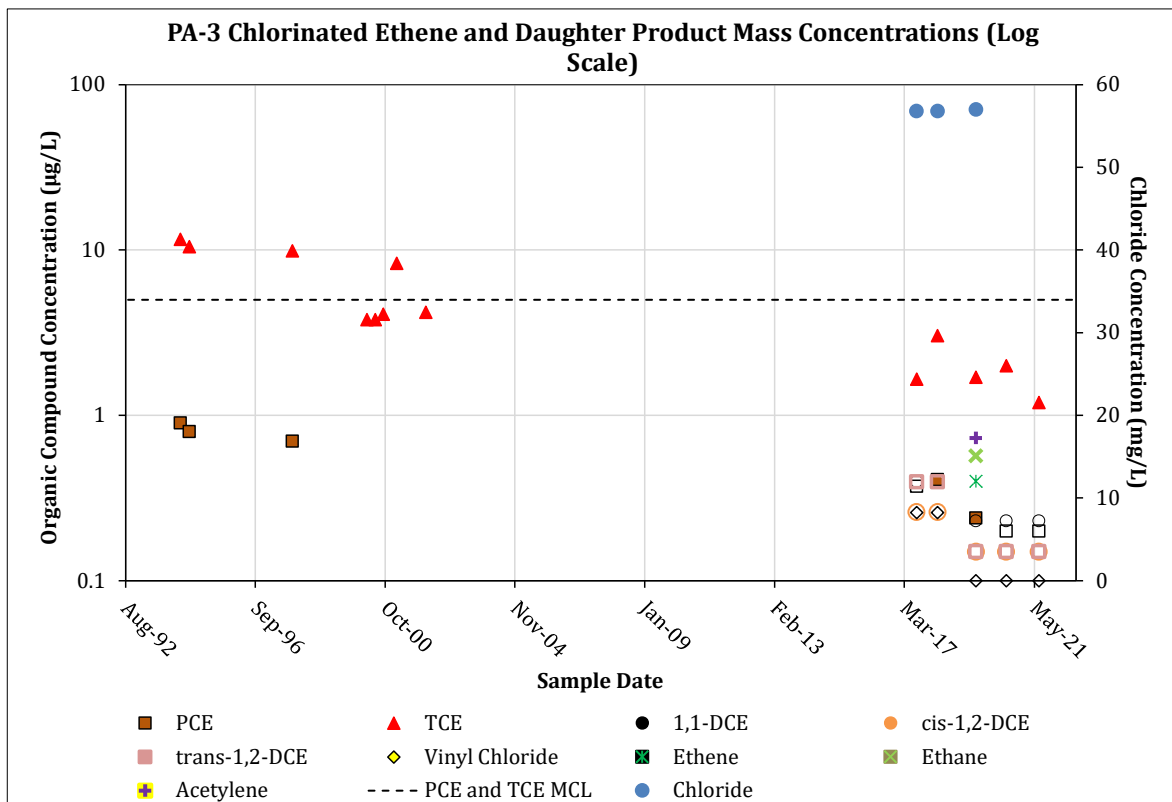
City and Domestic Well Chlorinated Ethene and Geochemistry Time Series Plots



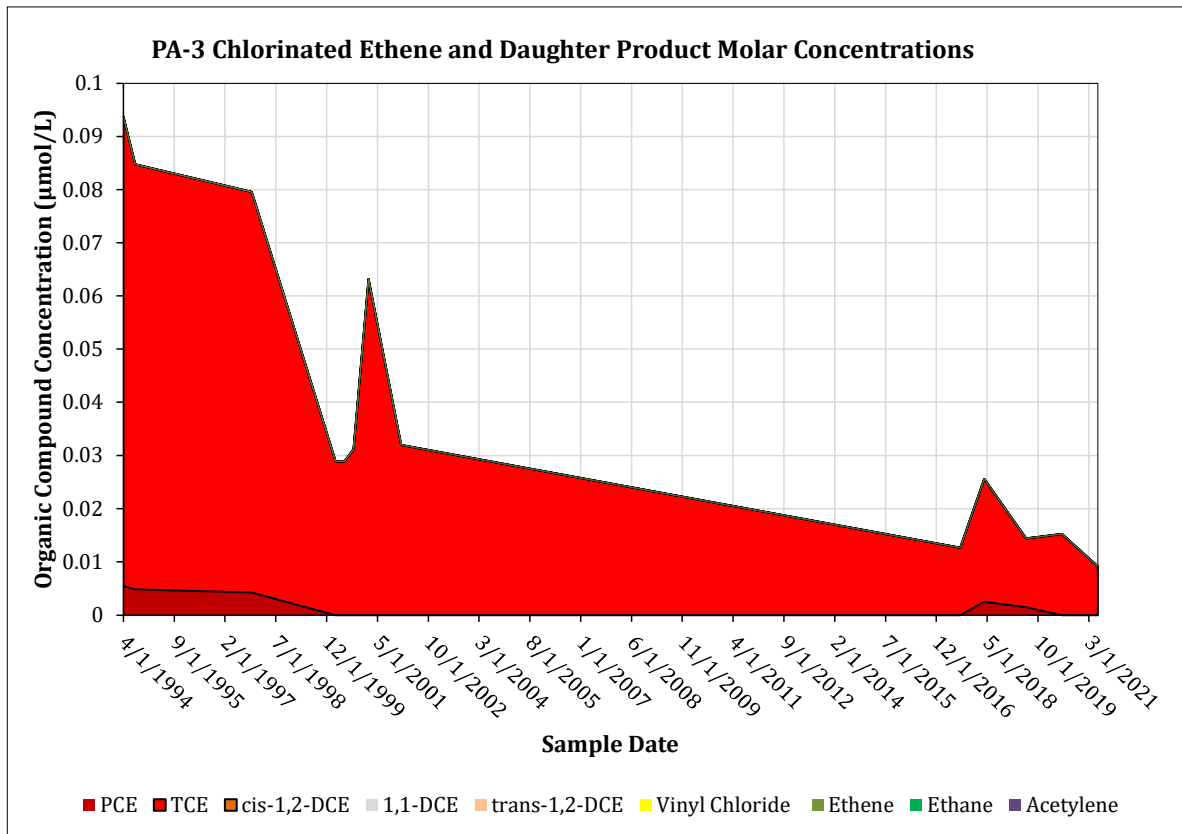
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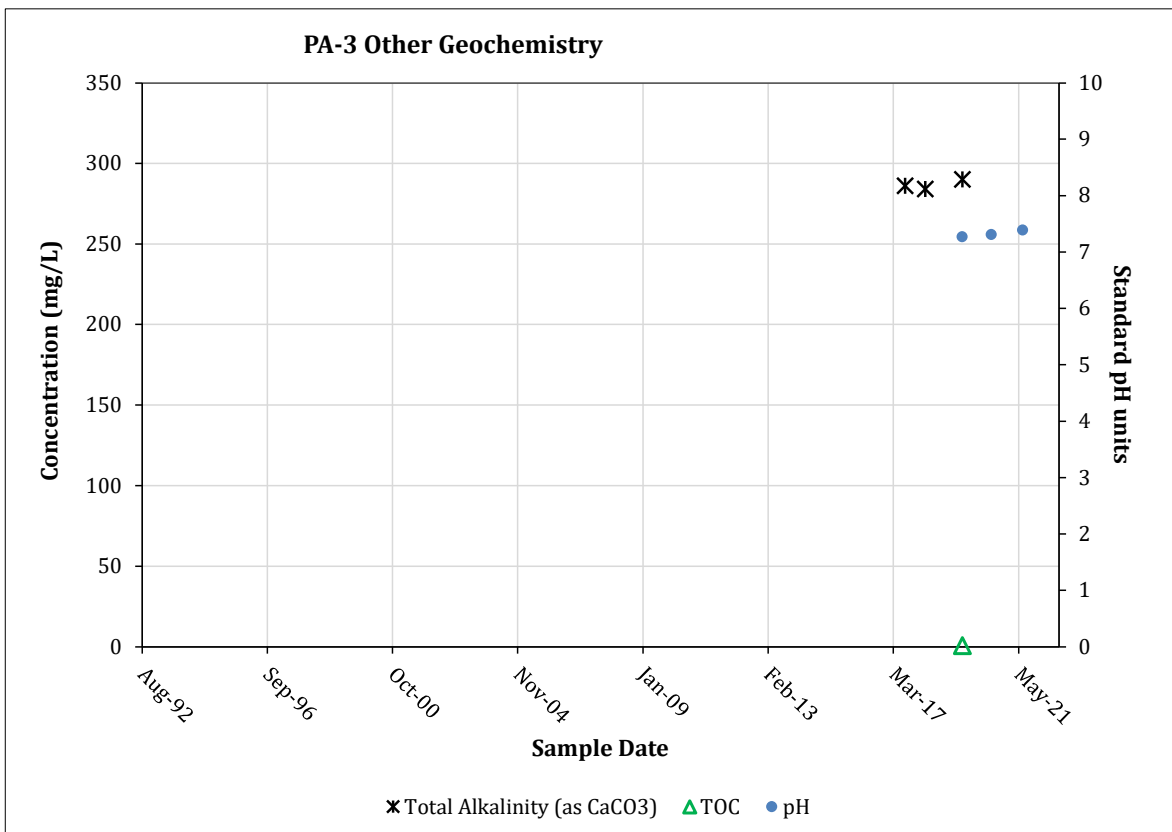
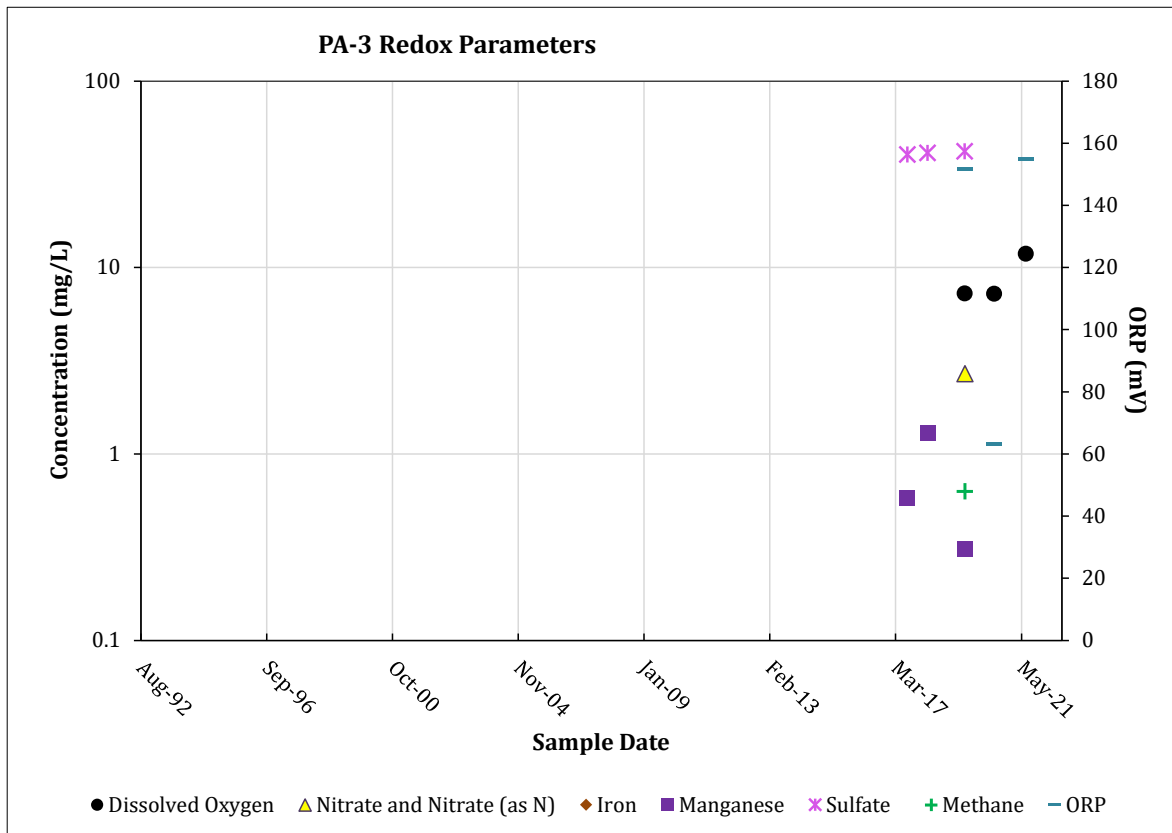


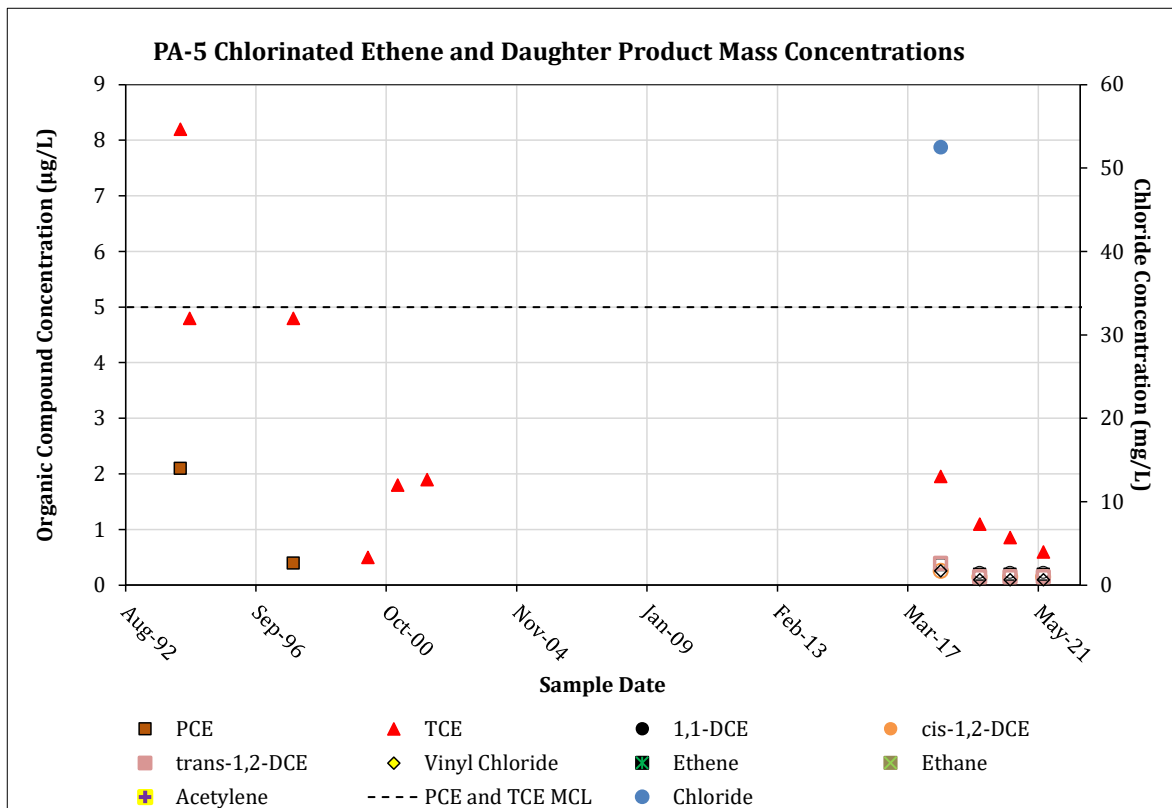
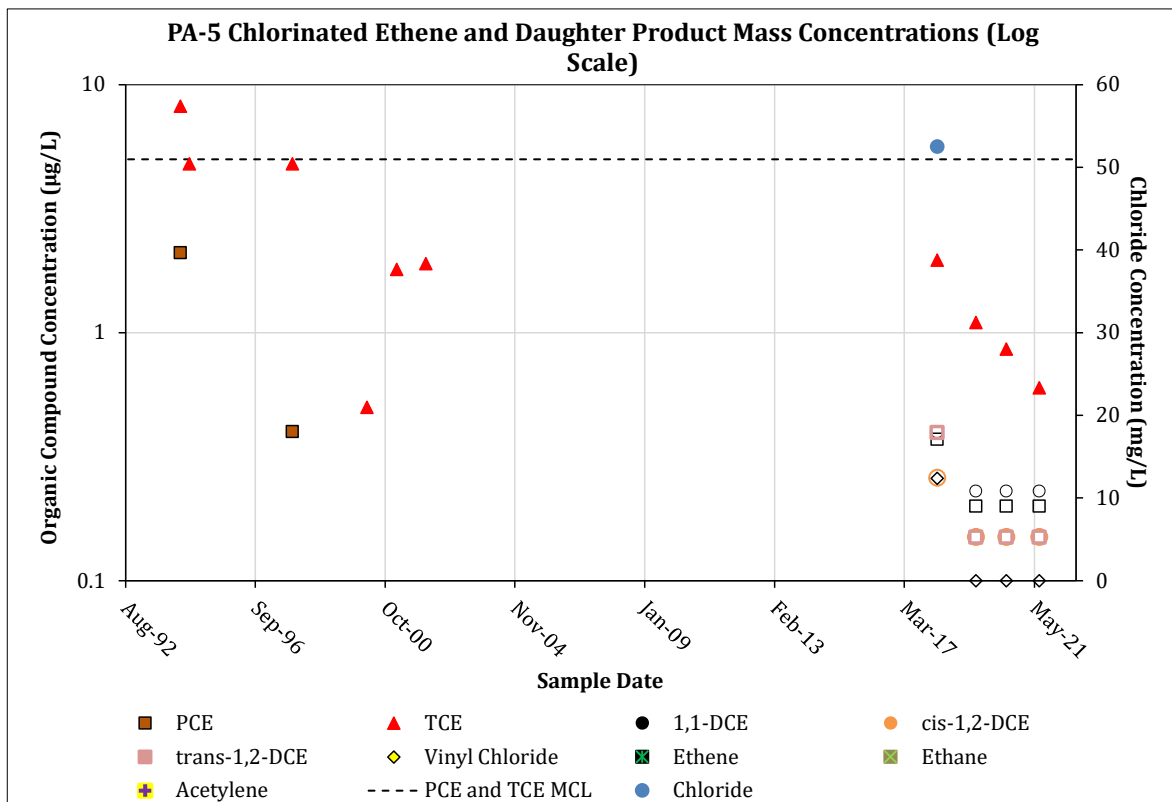




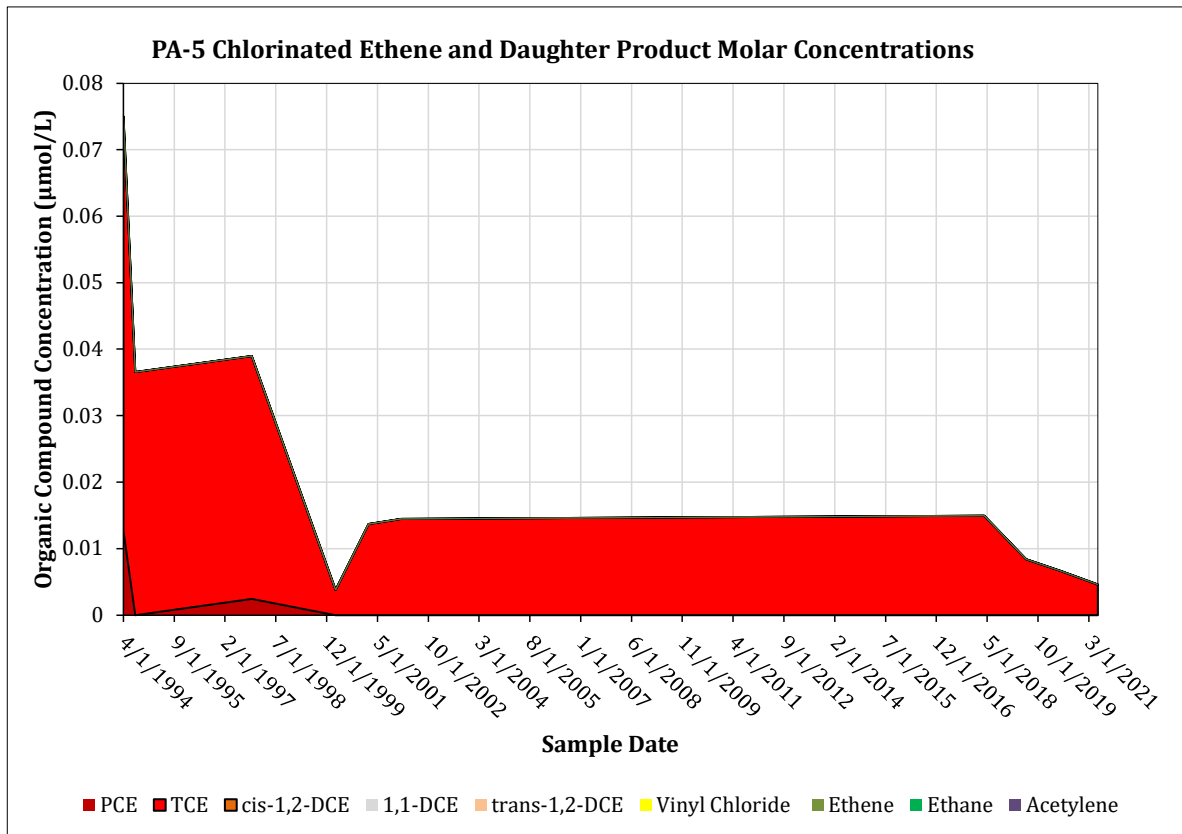
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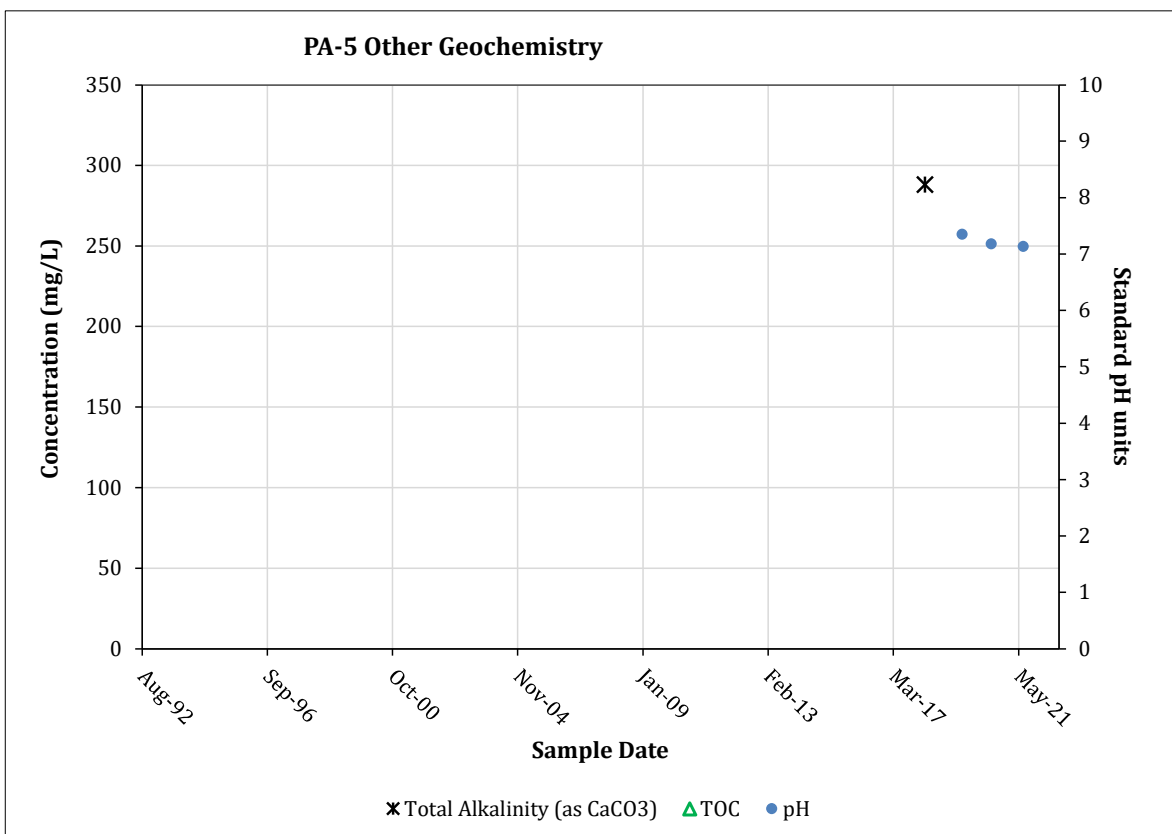
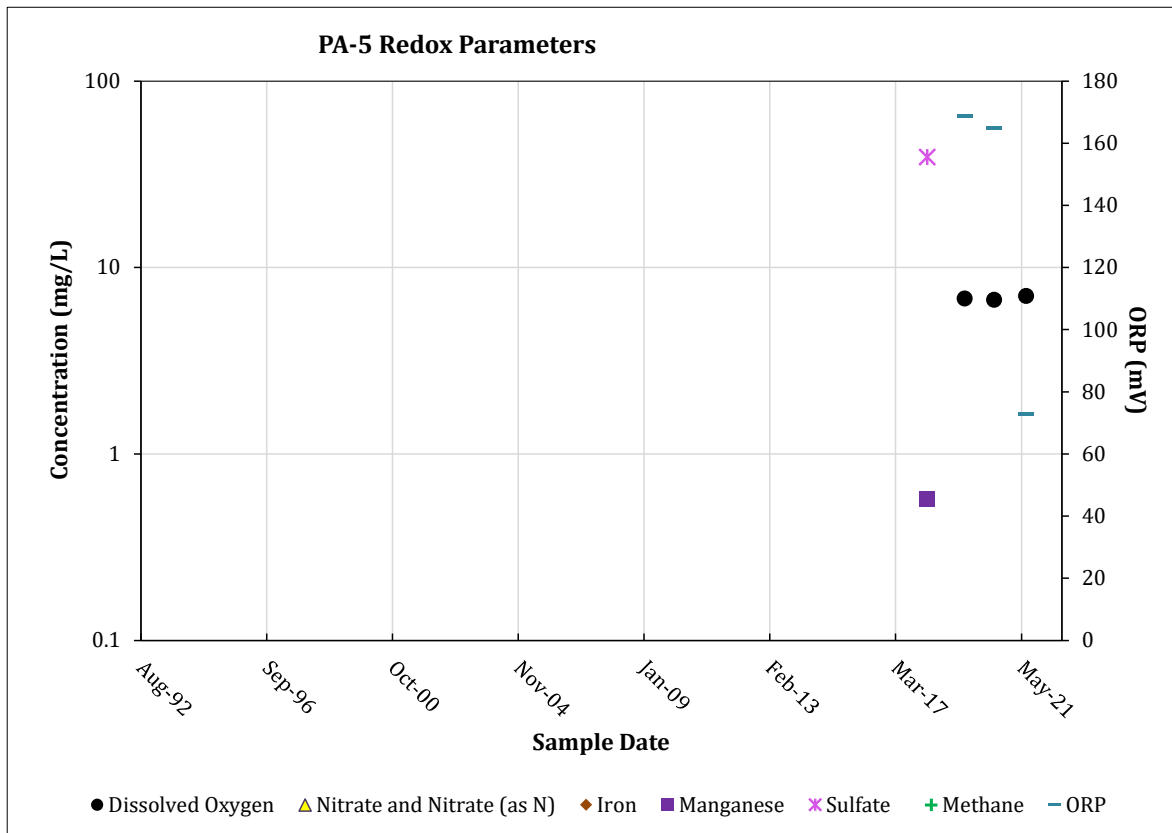


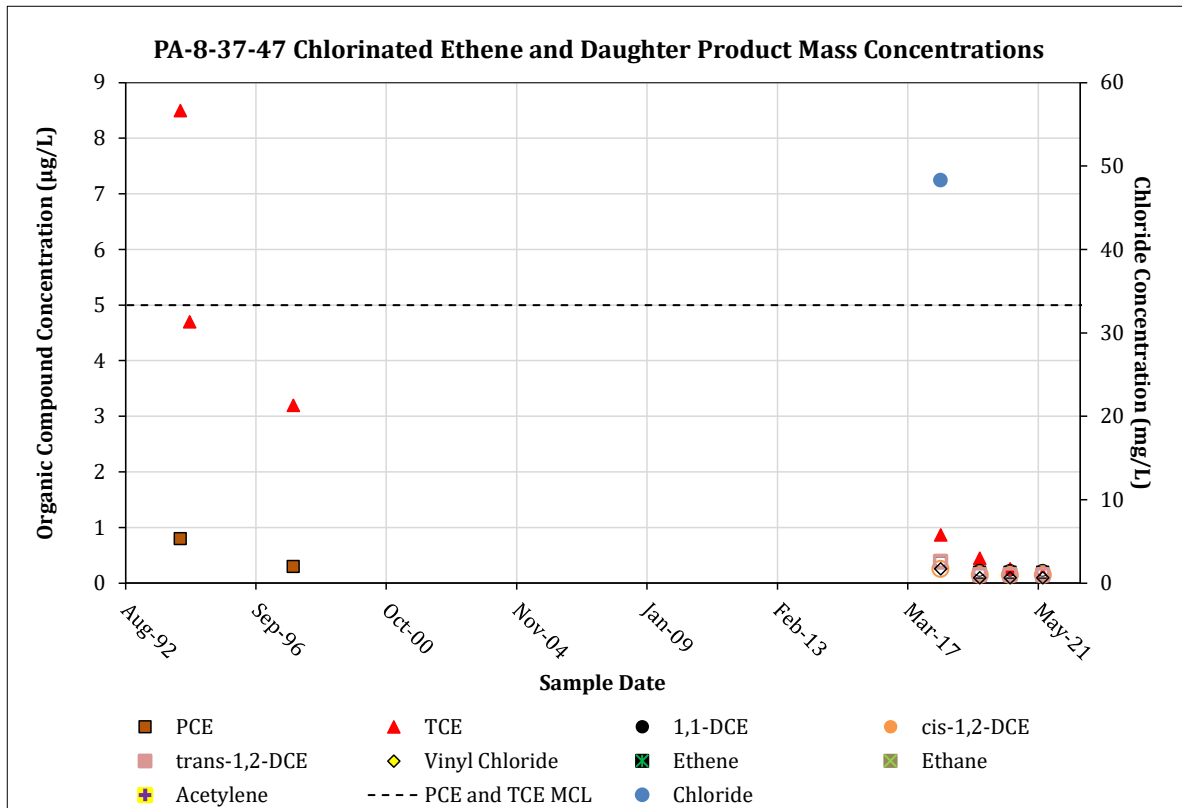
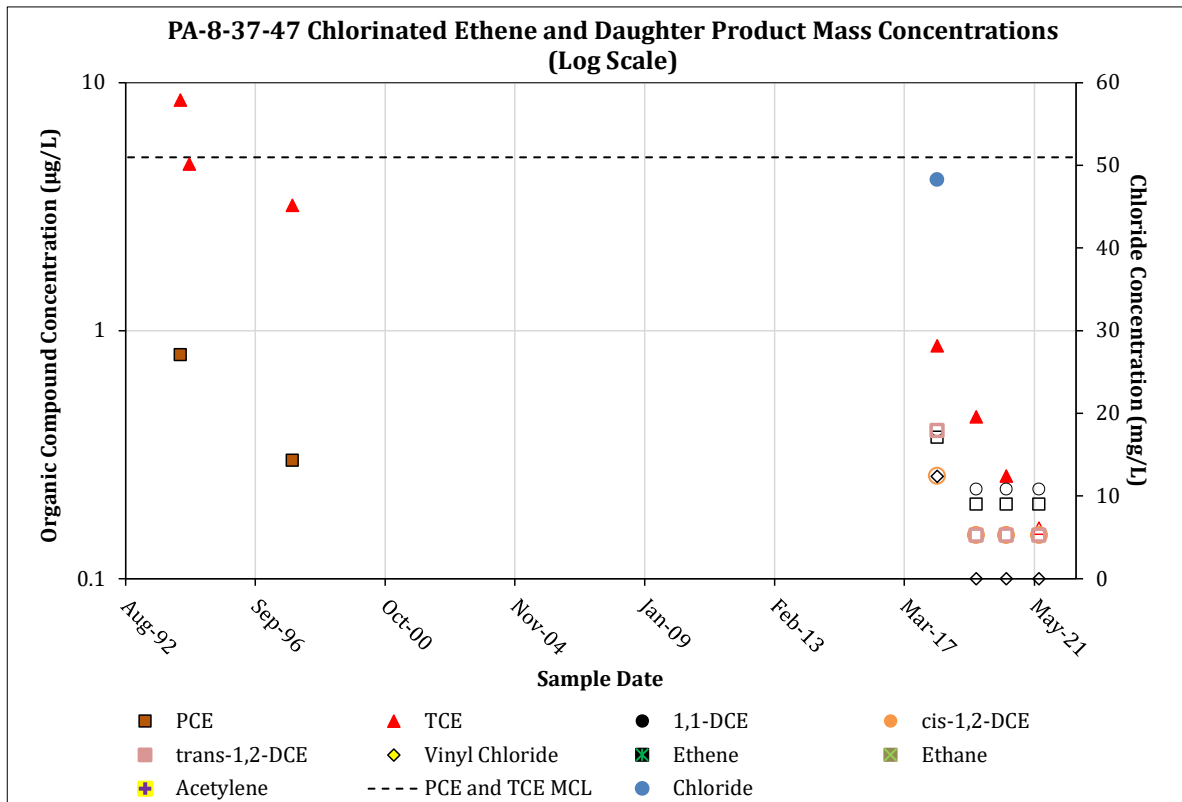




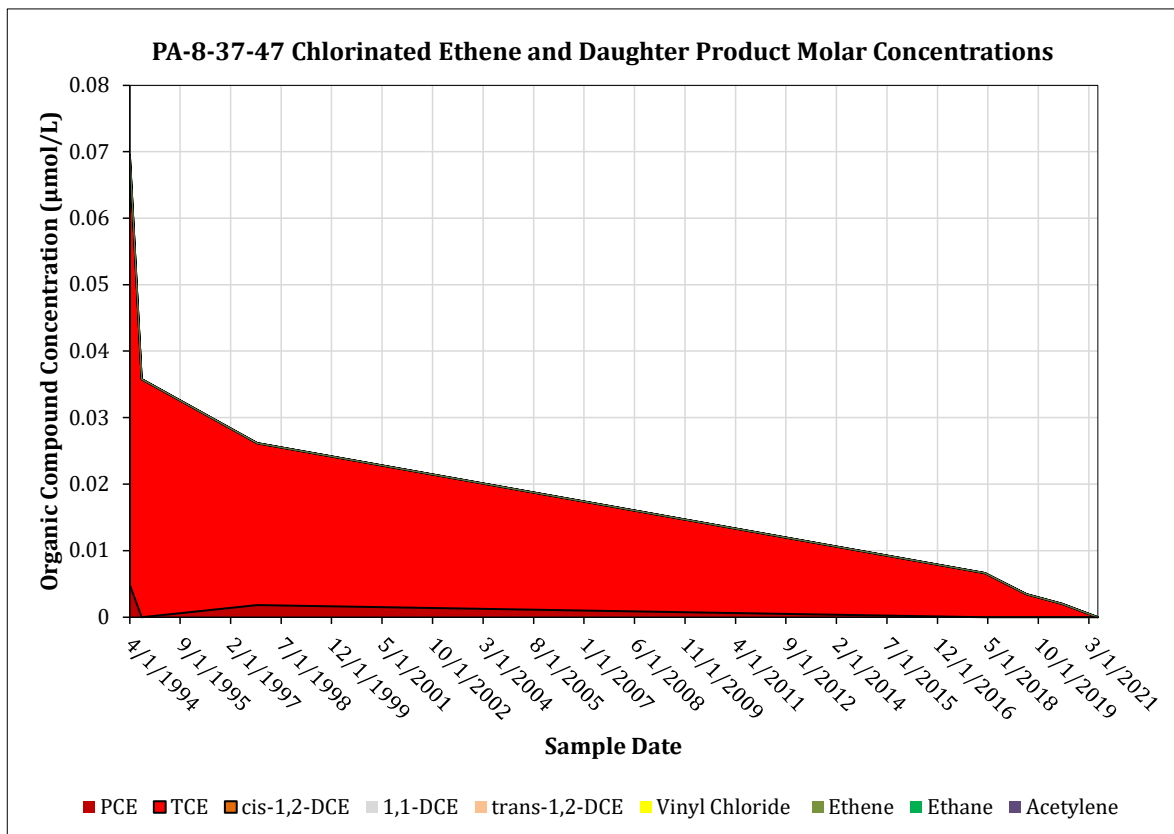
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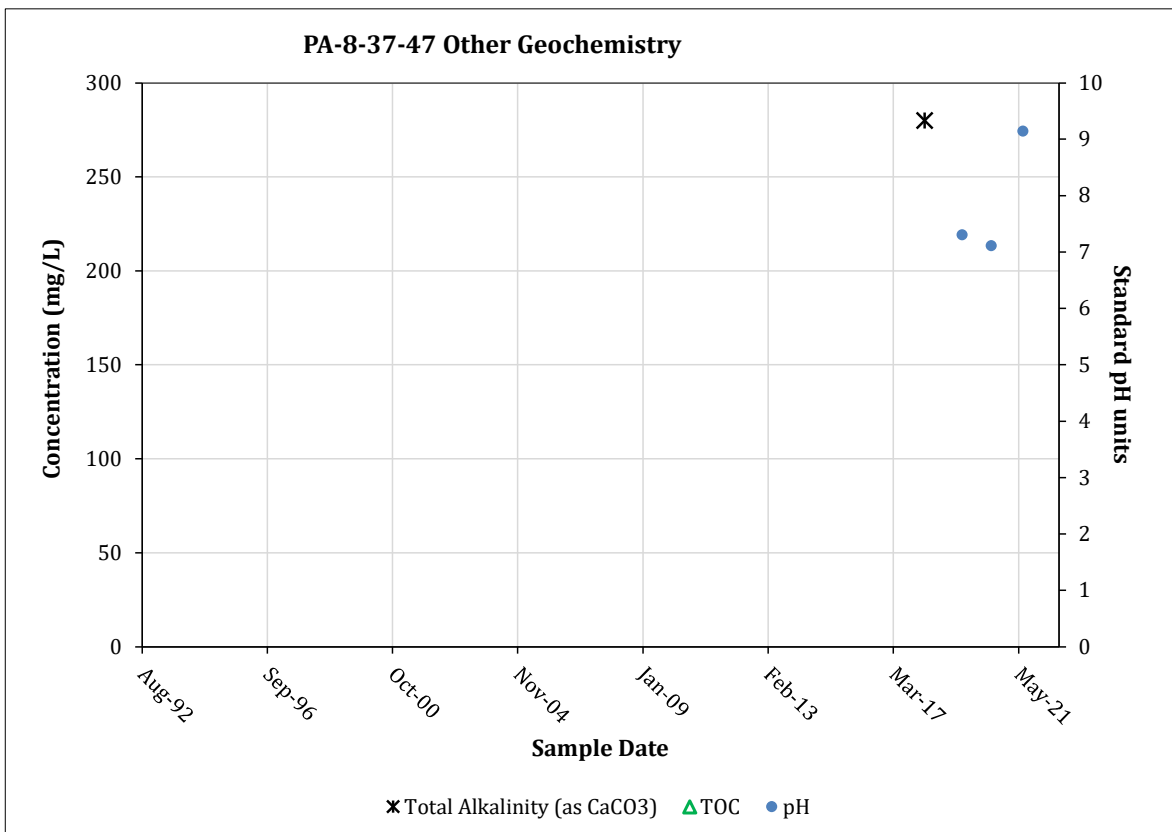
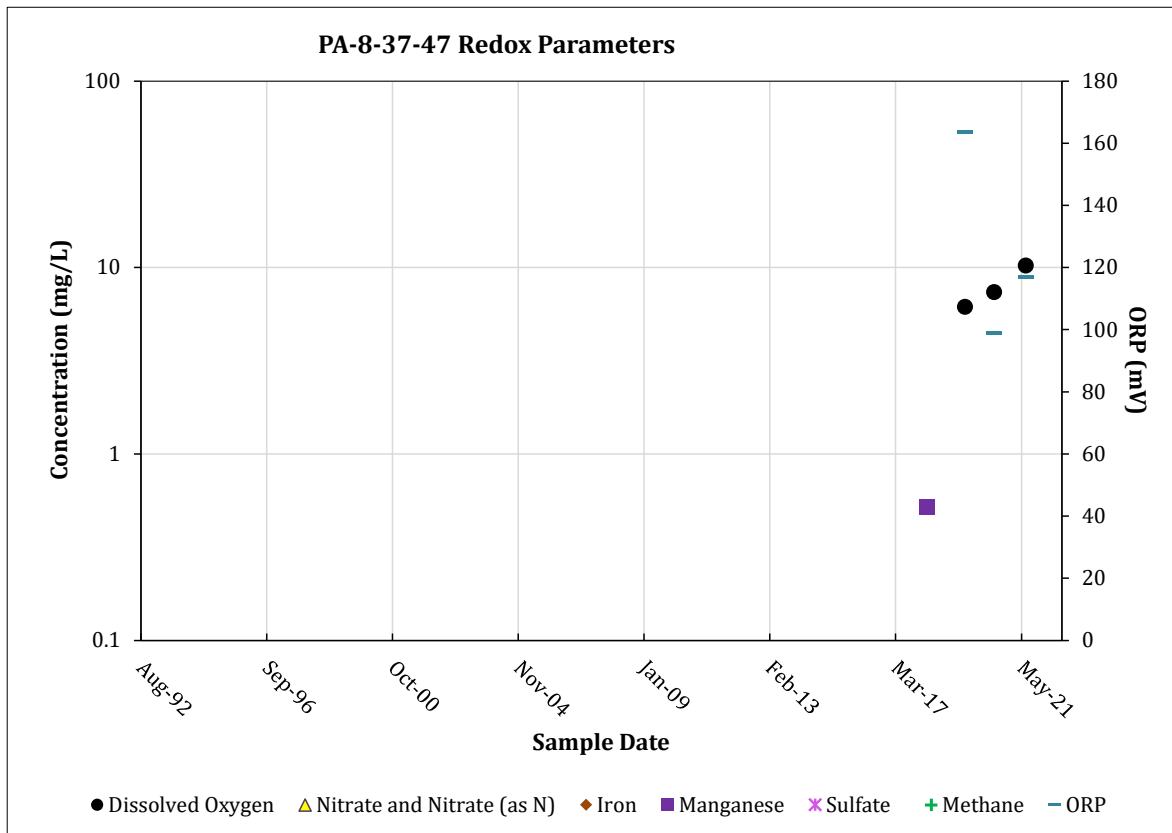


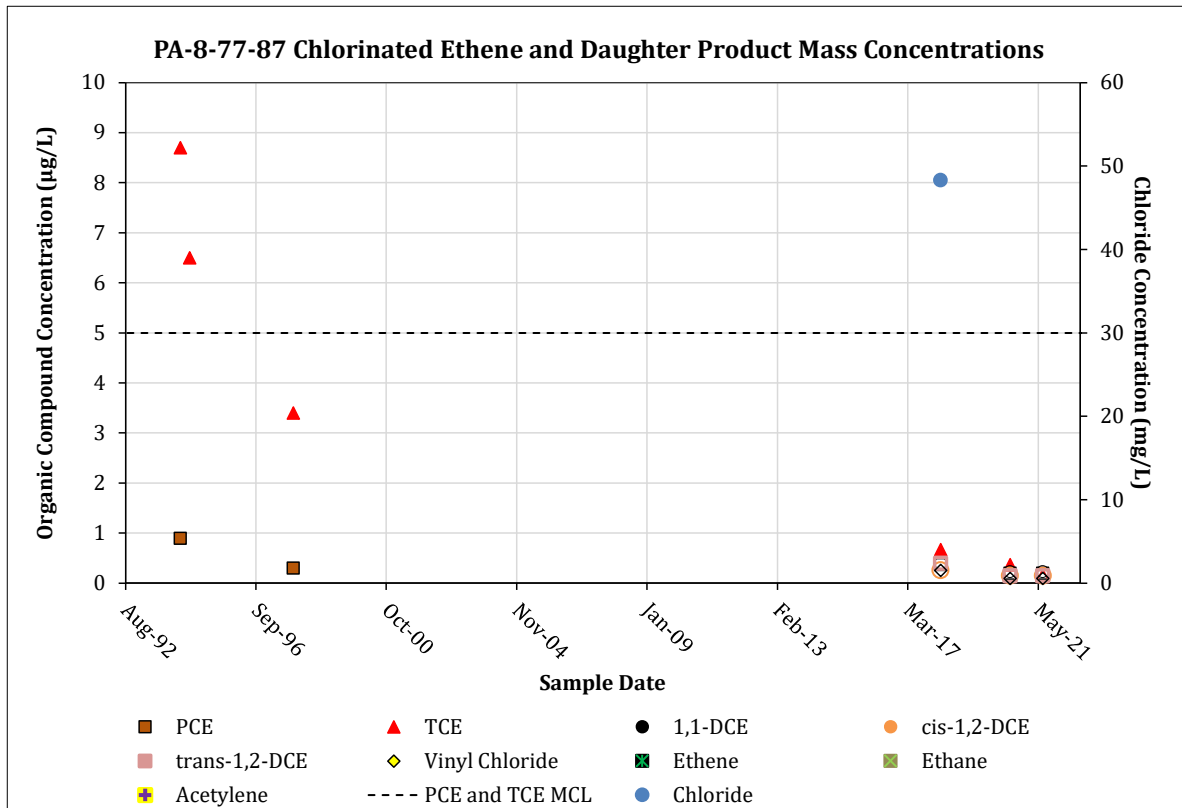
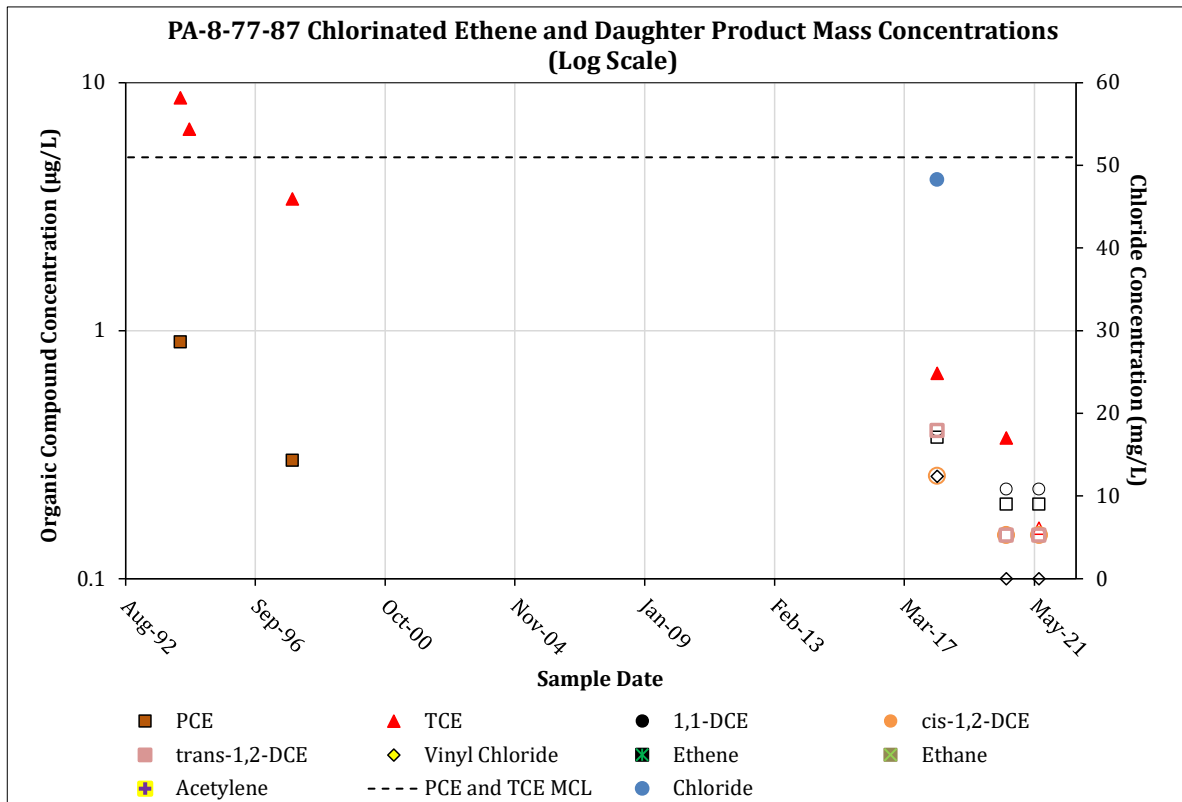




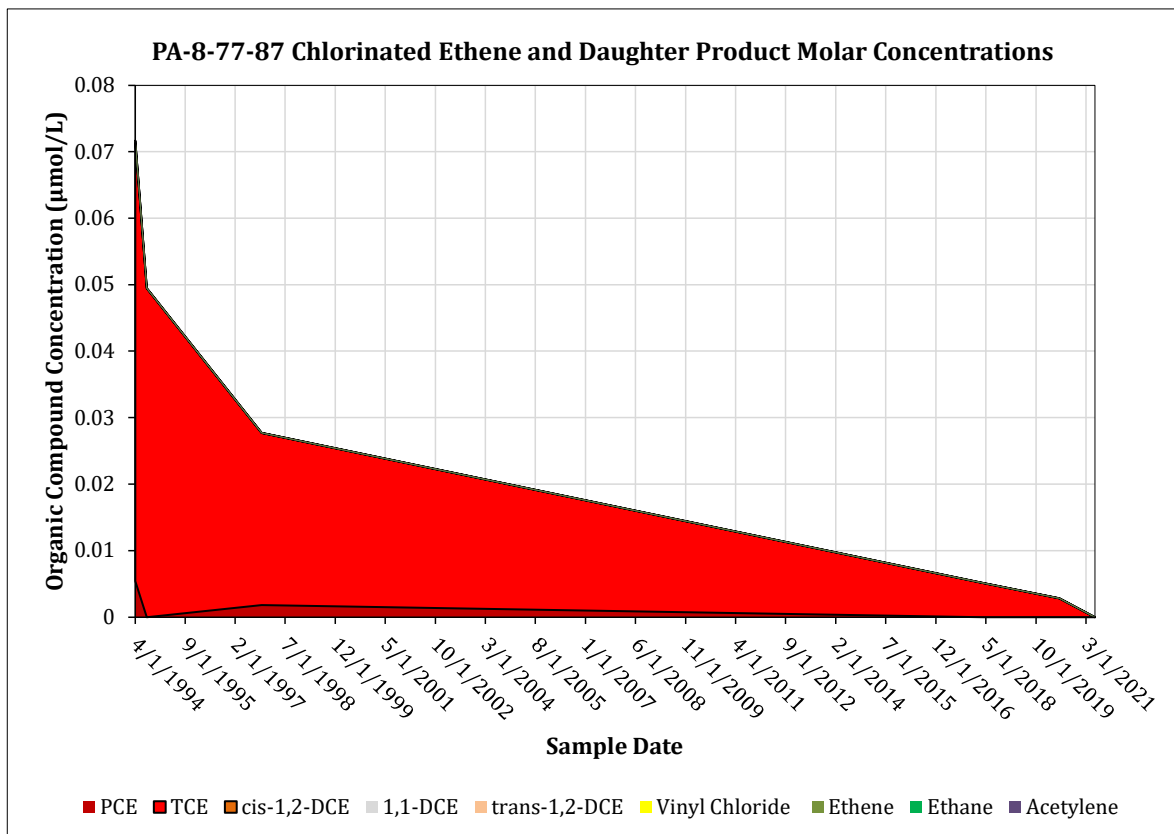
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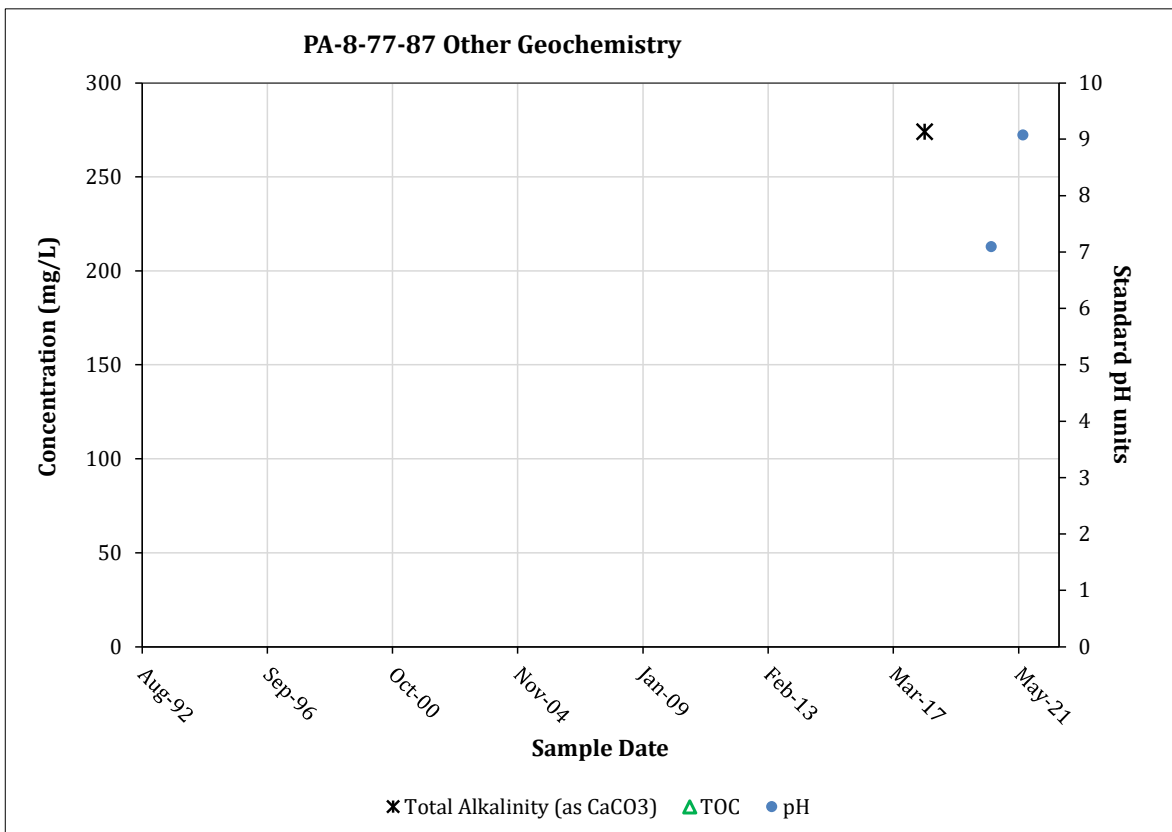
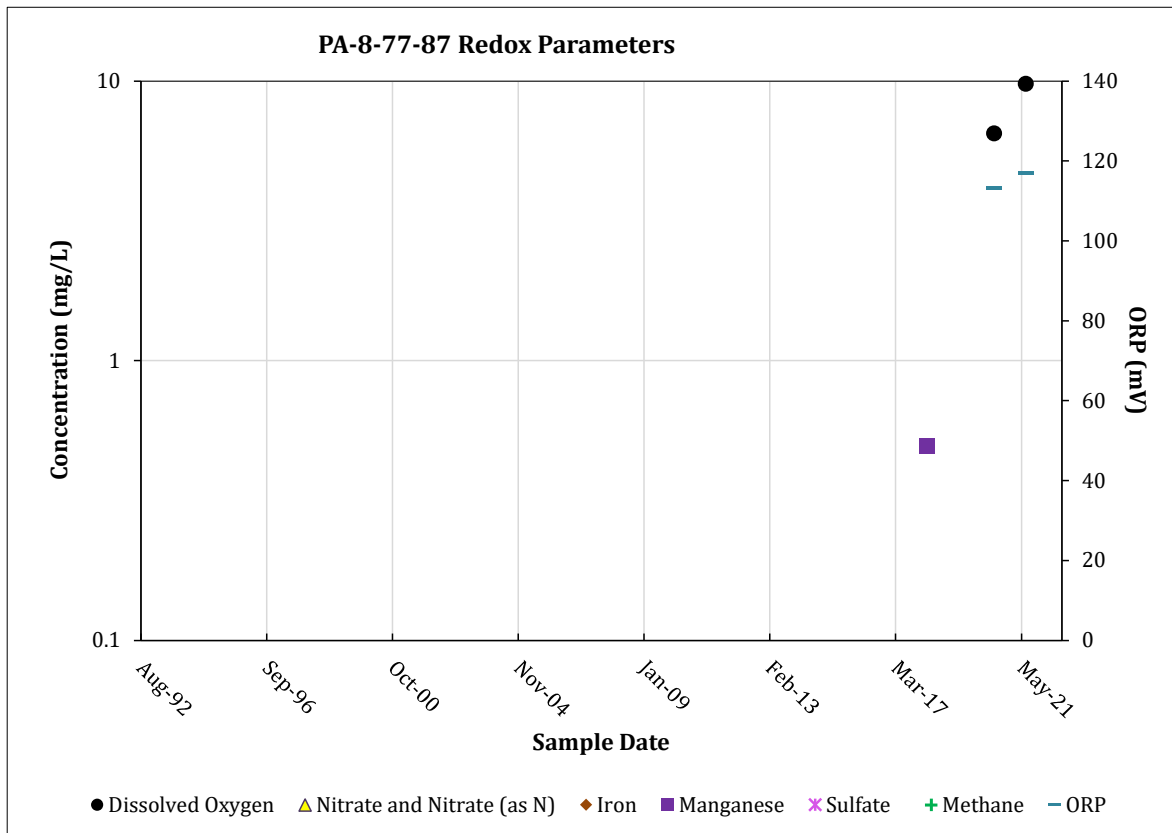


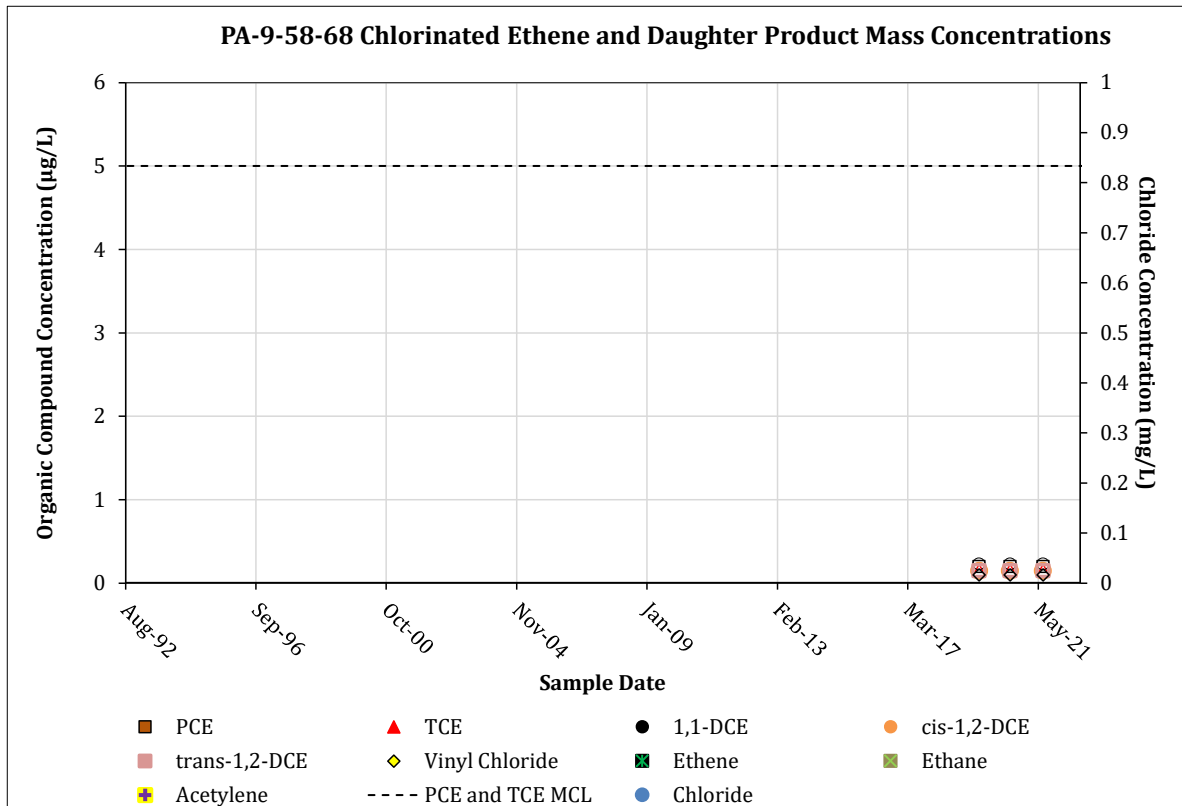
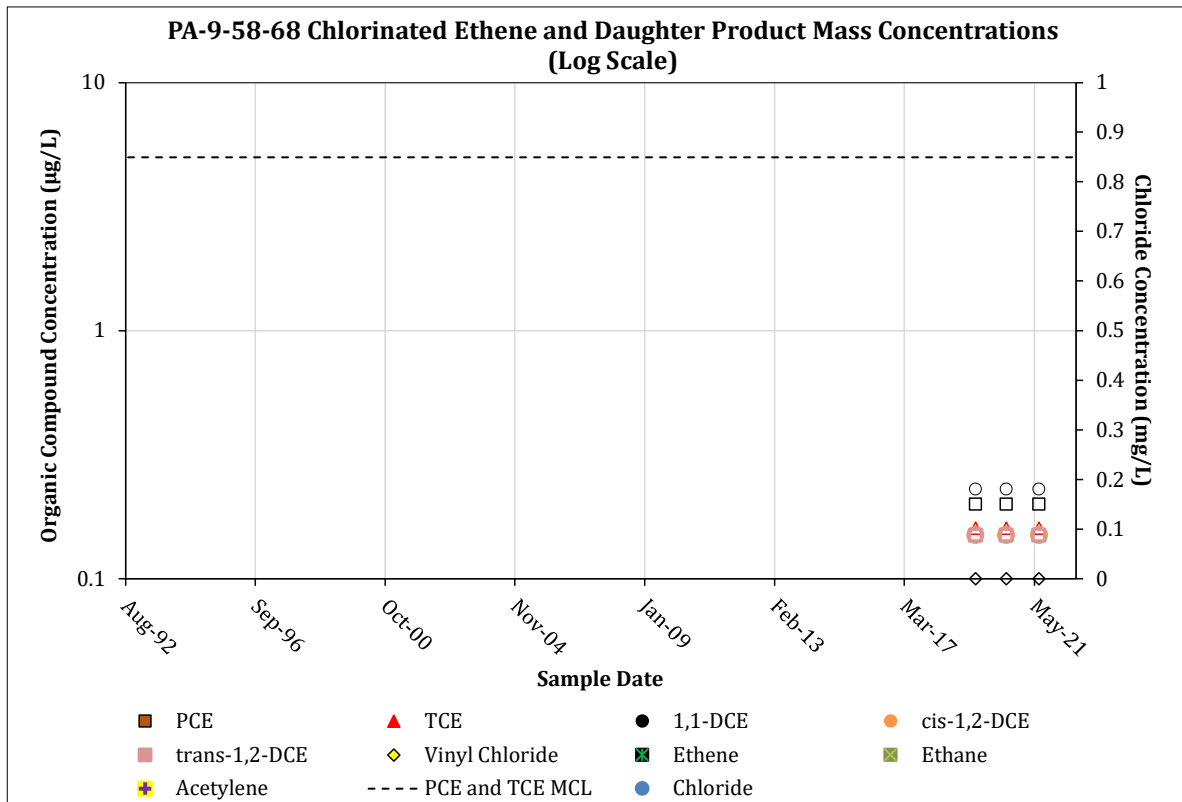




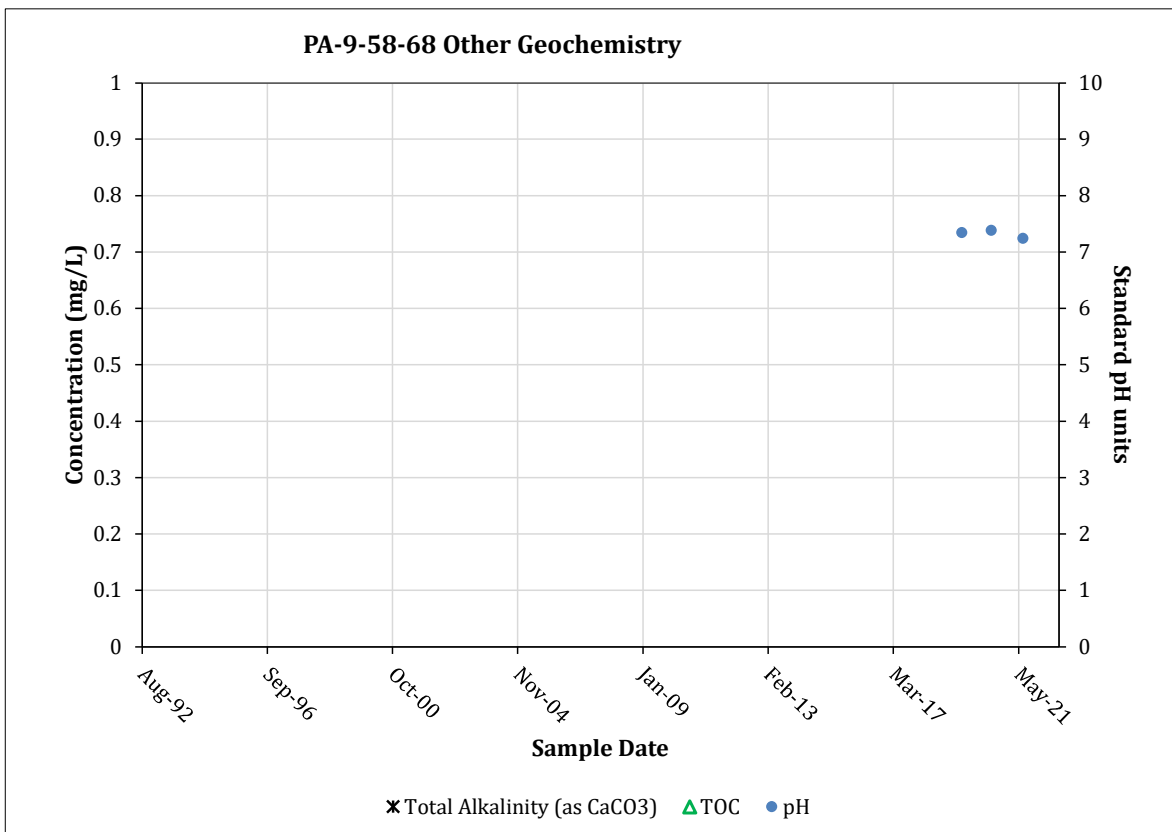
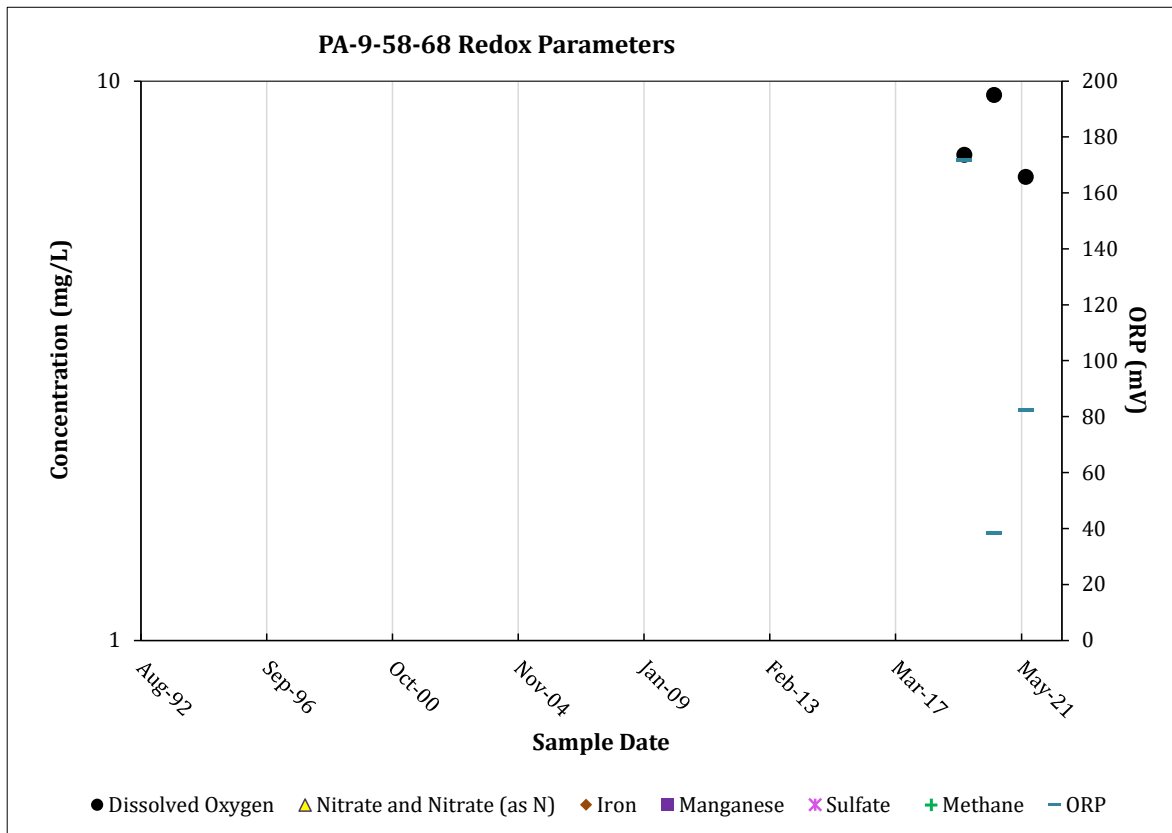
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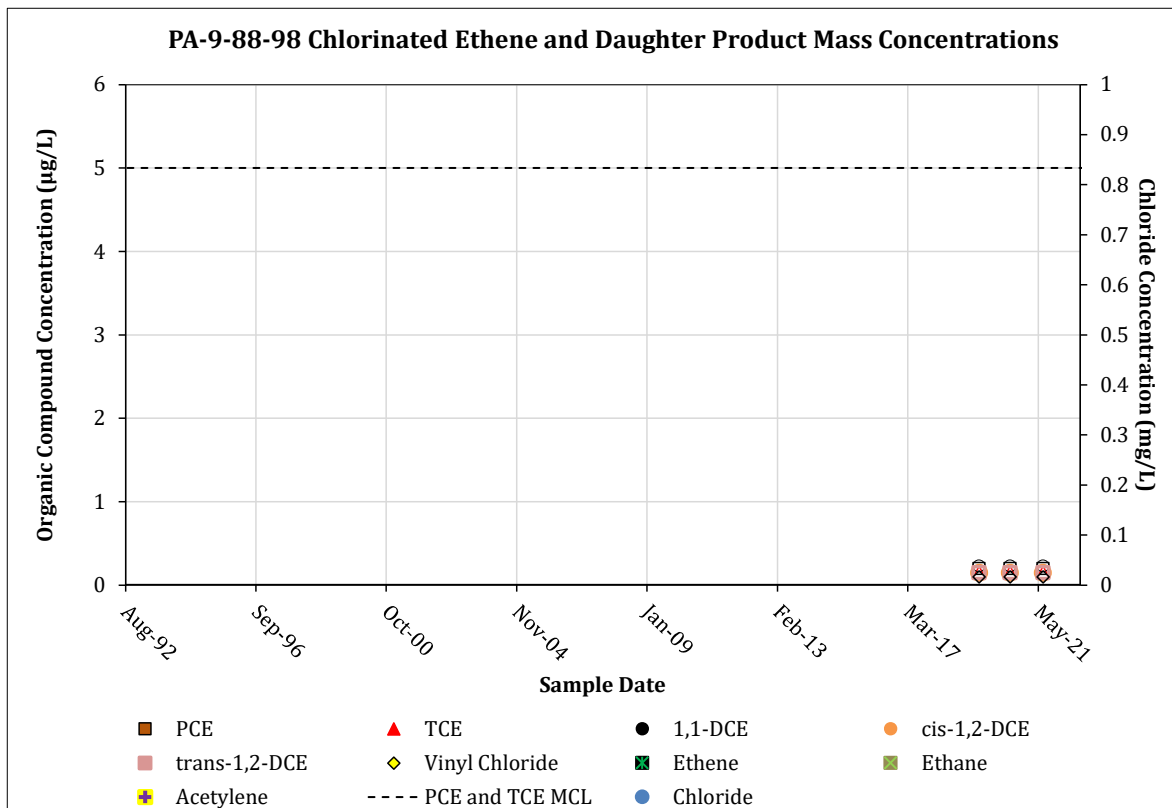
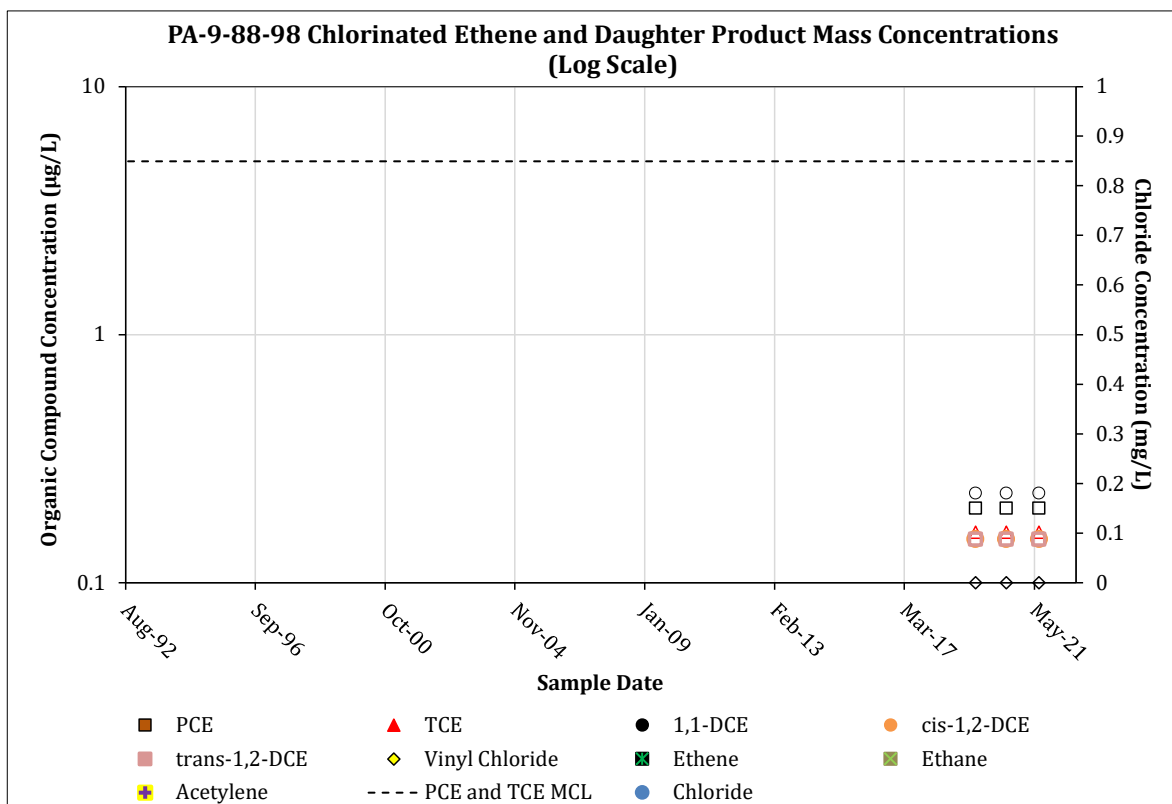




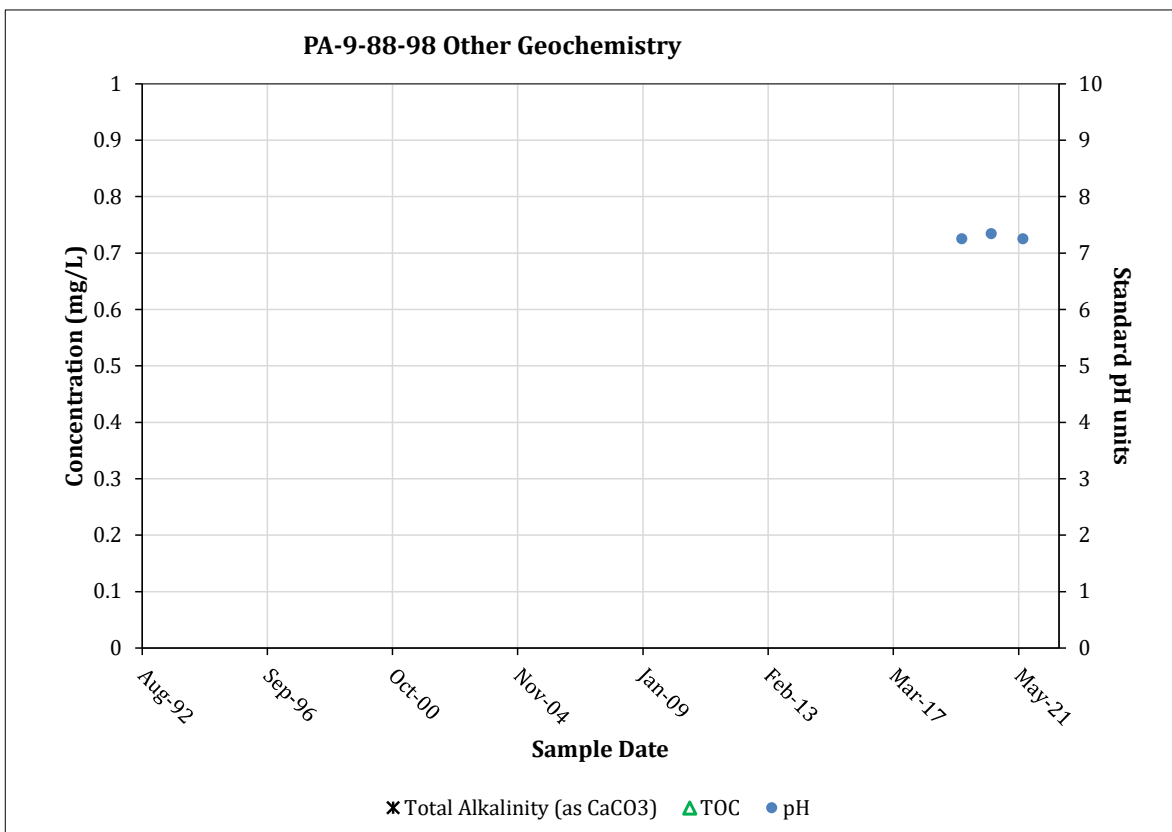
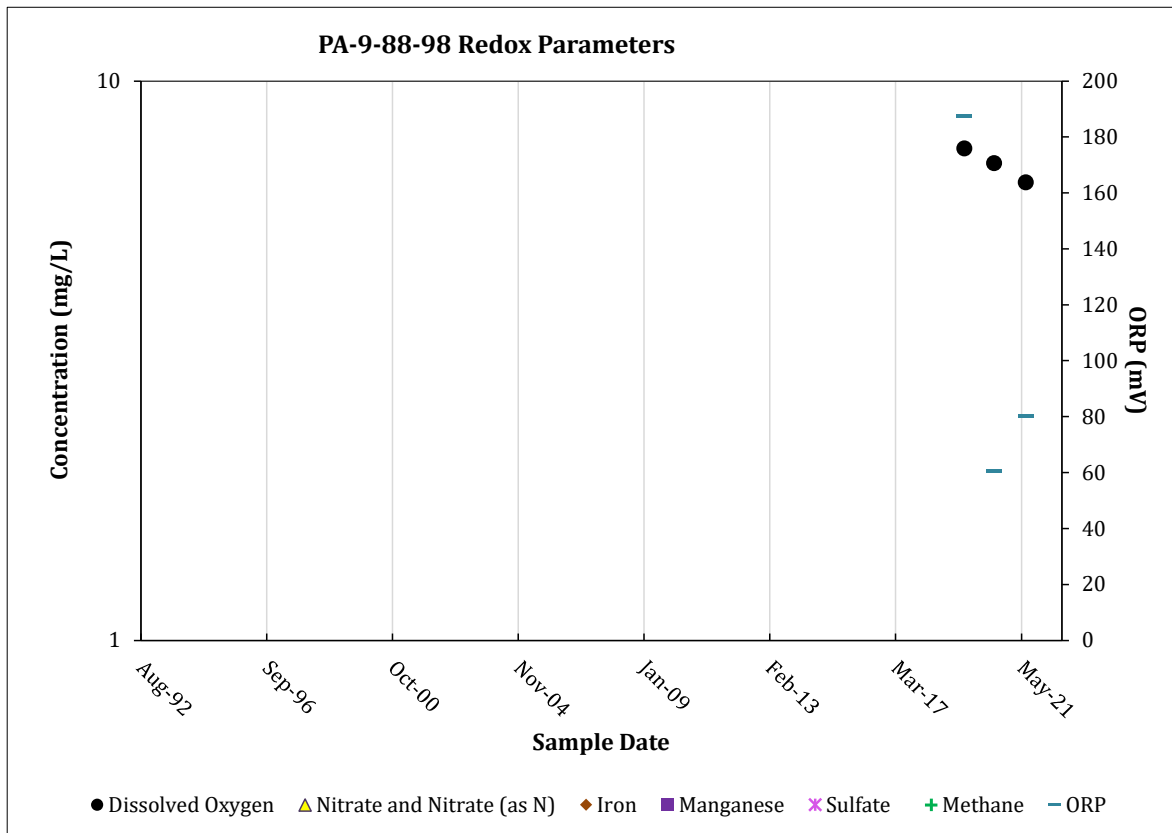


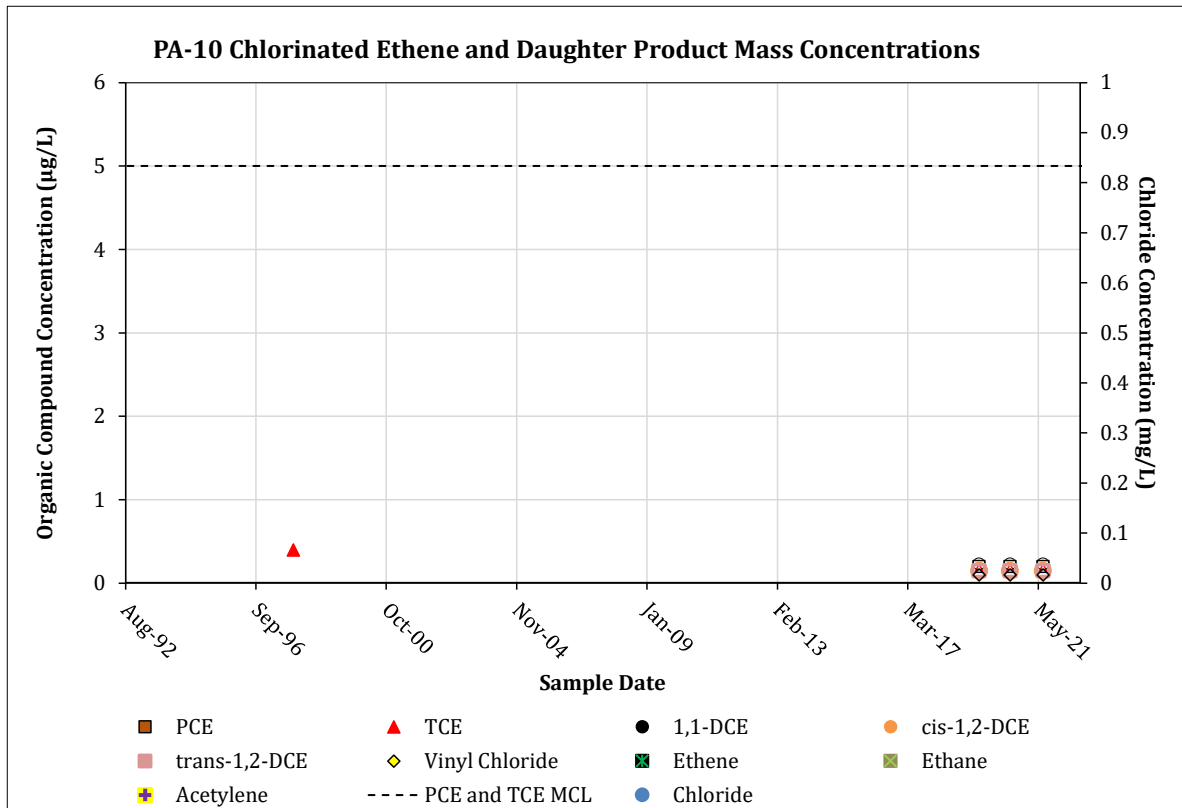
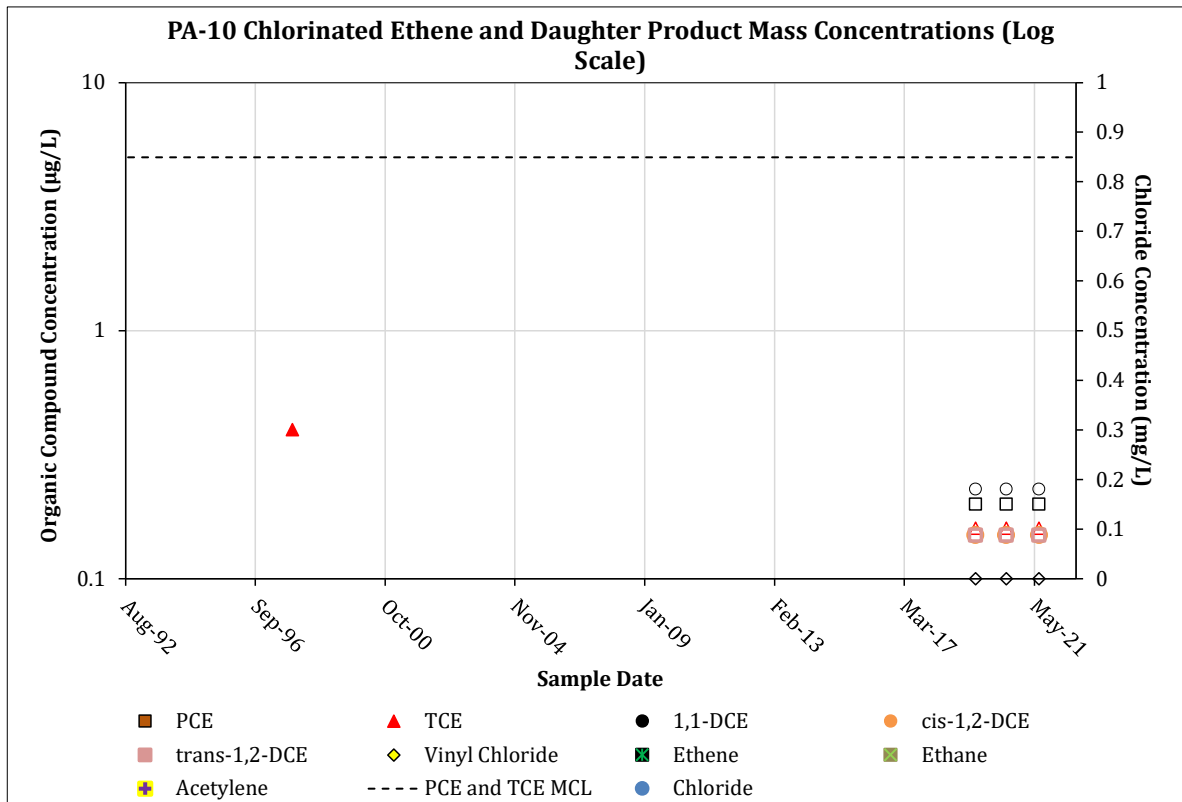
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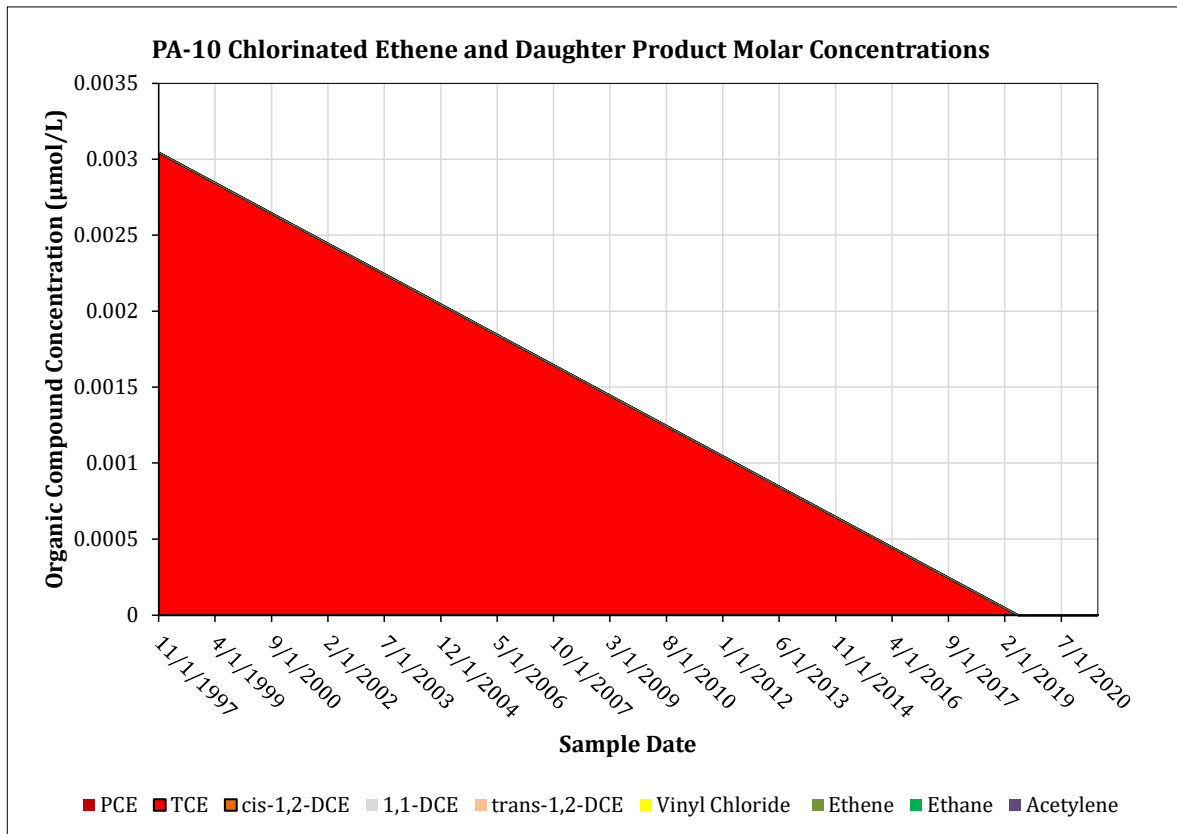


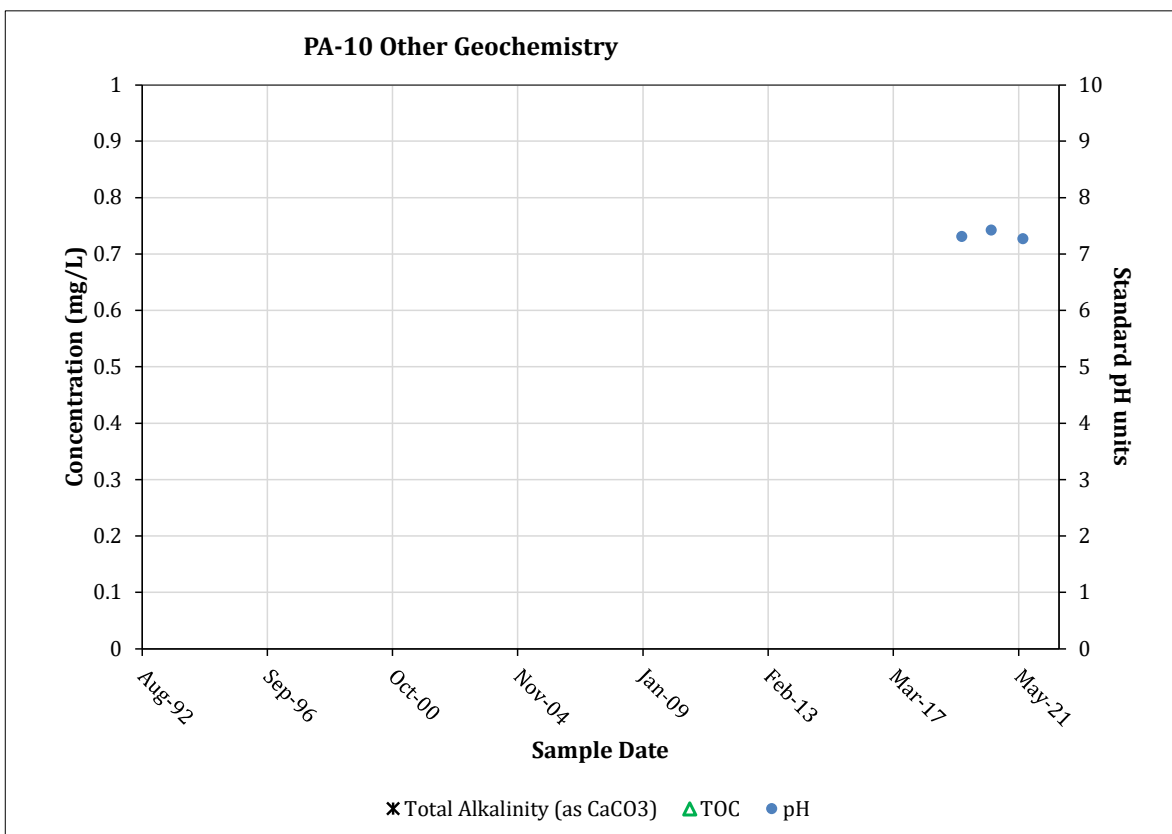
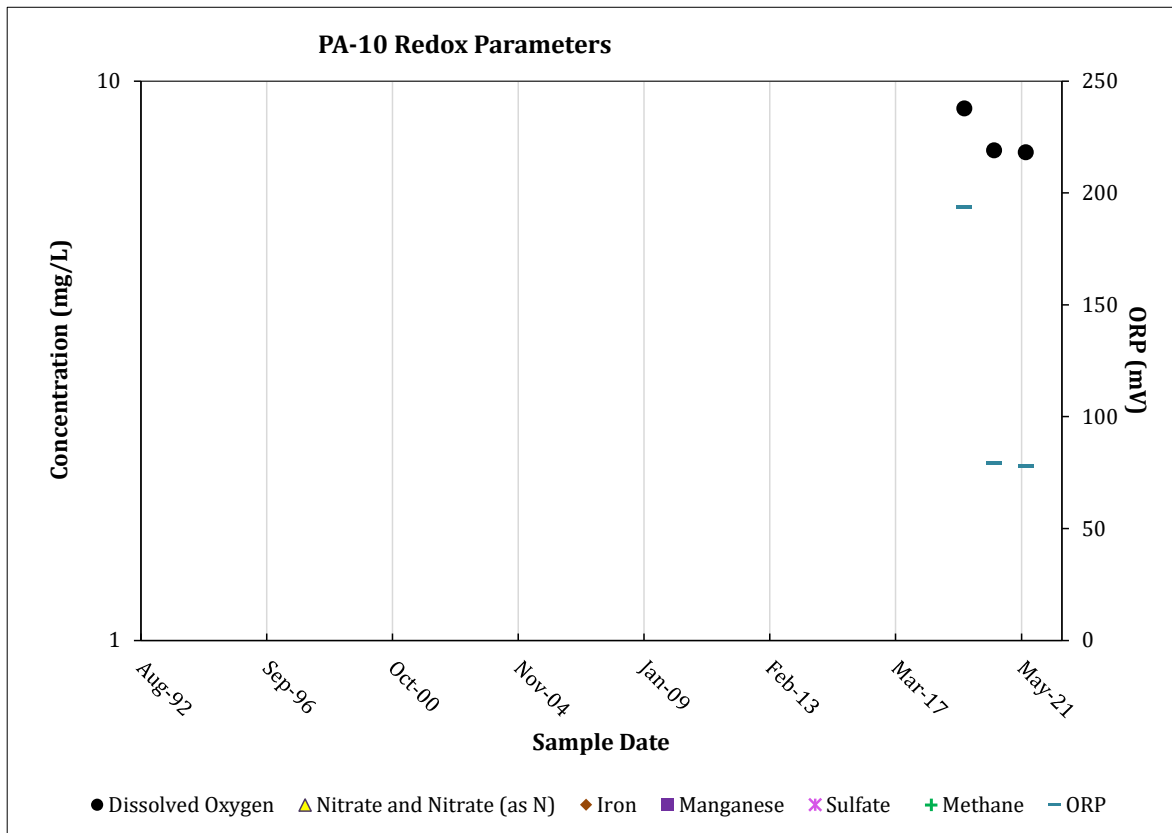
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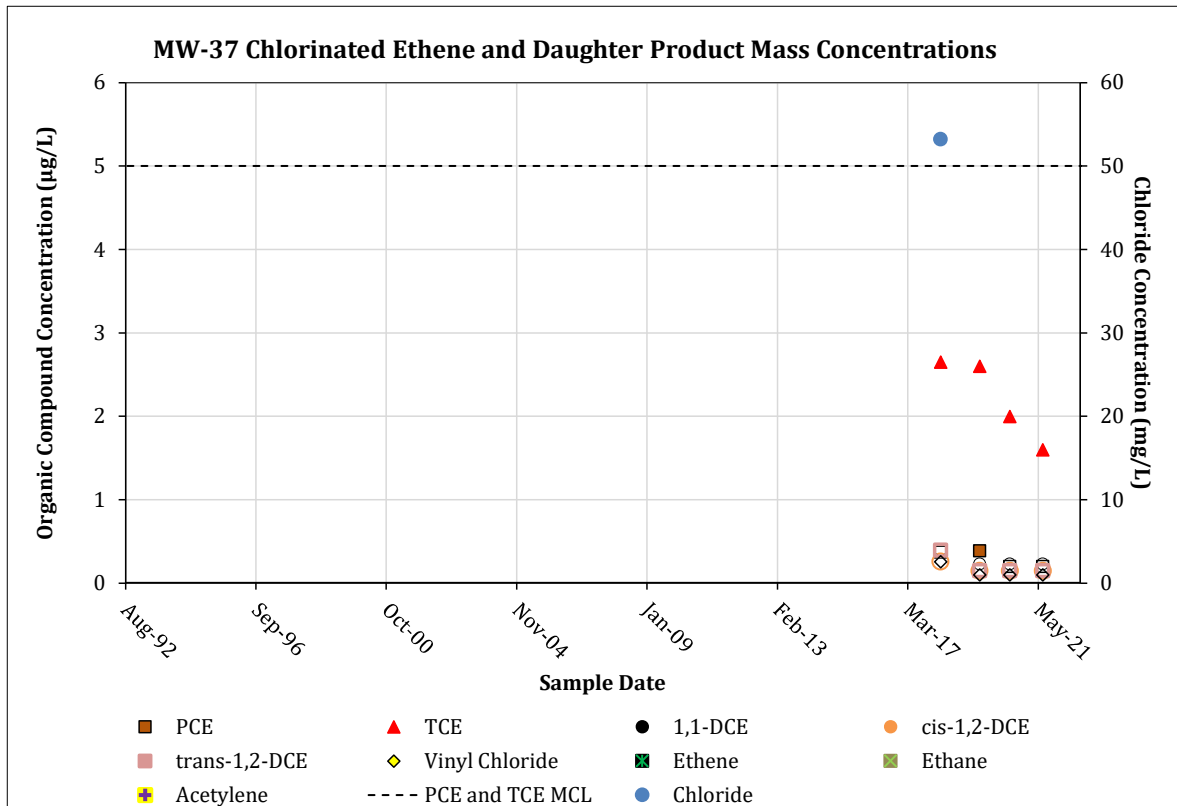
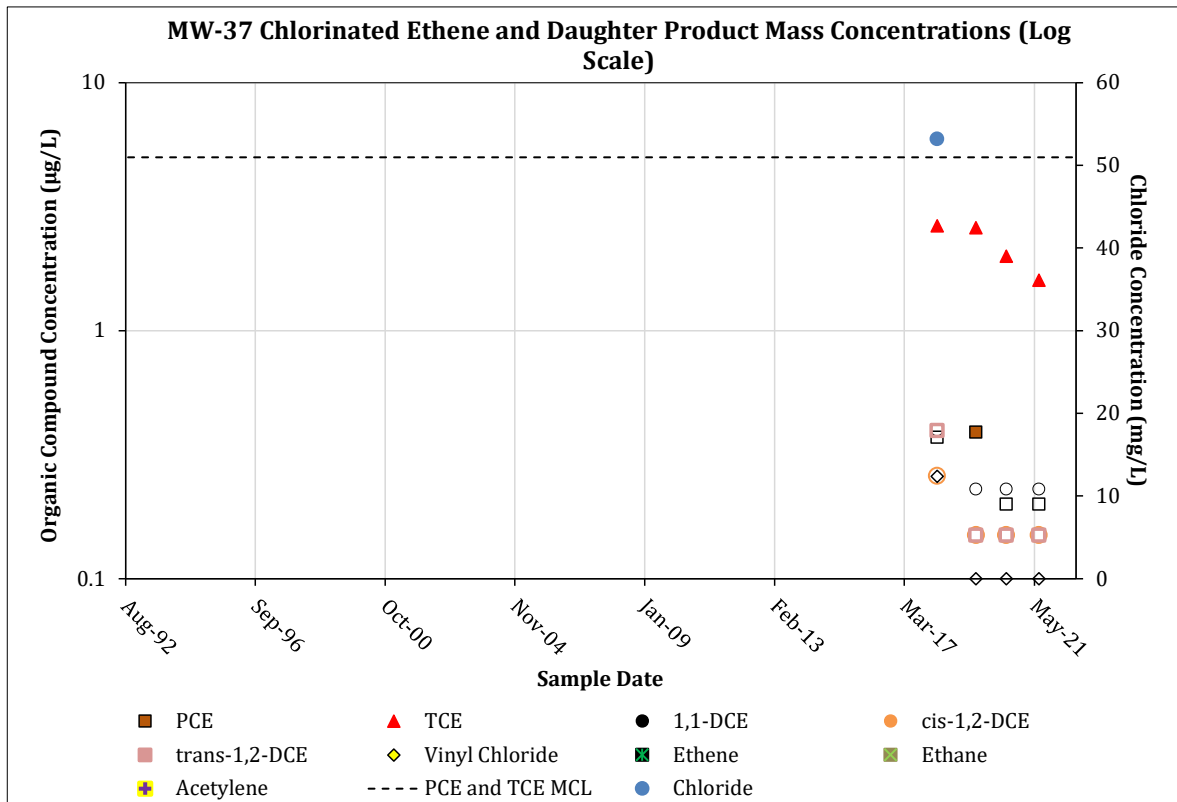




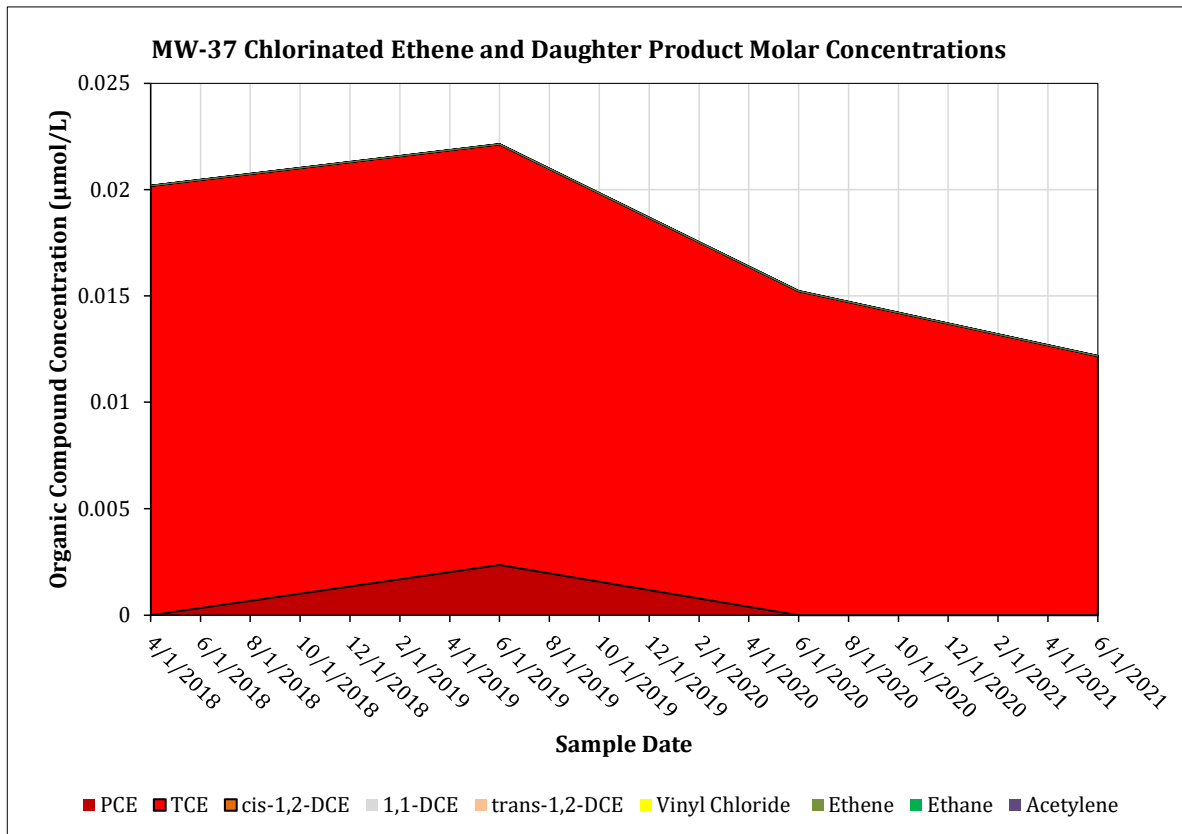
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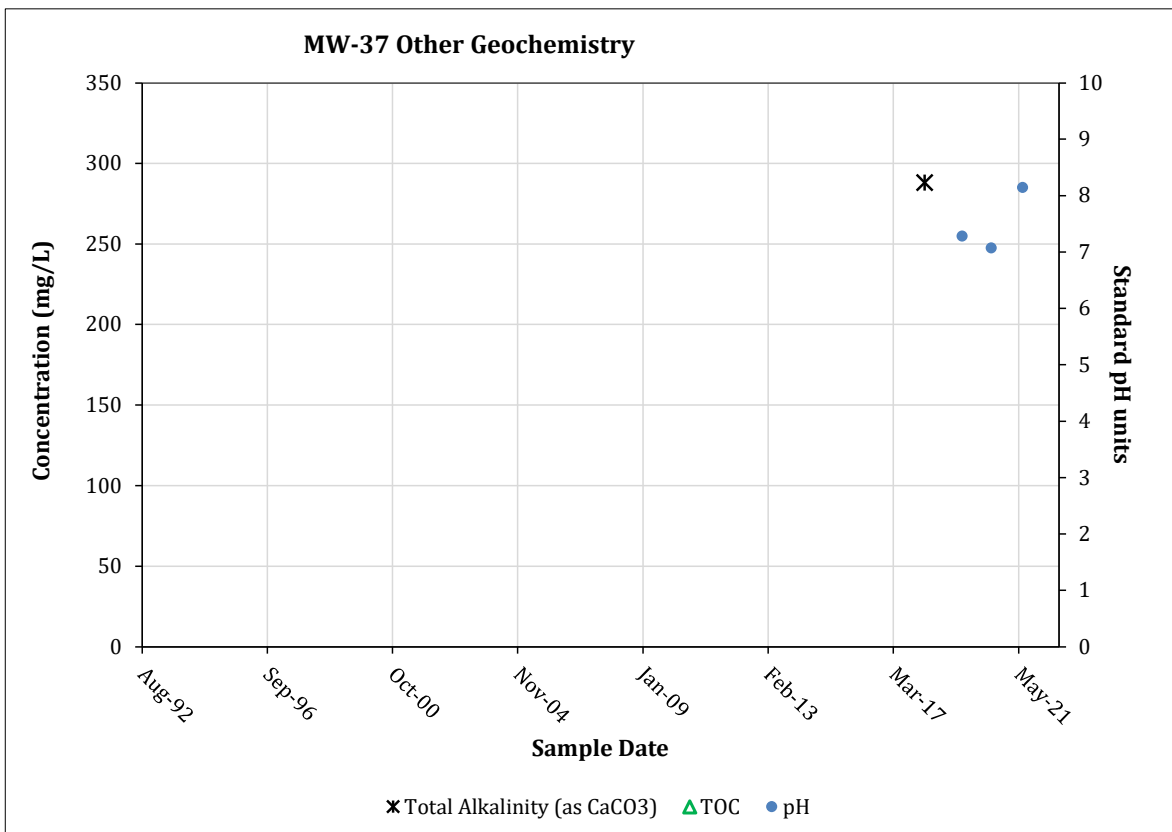
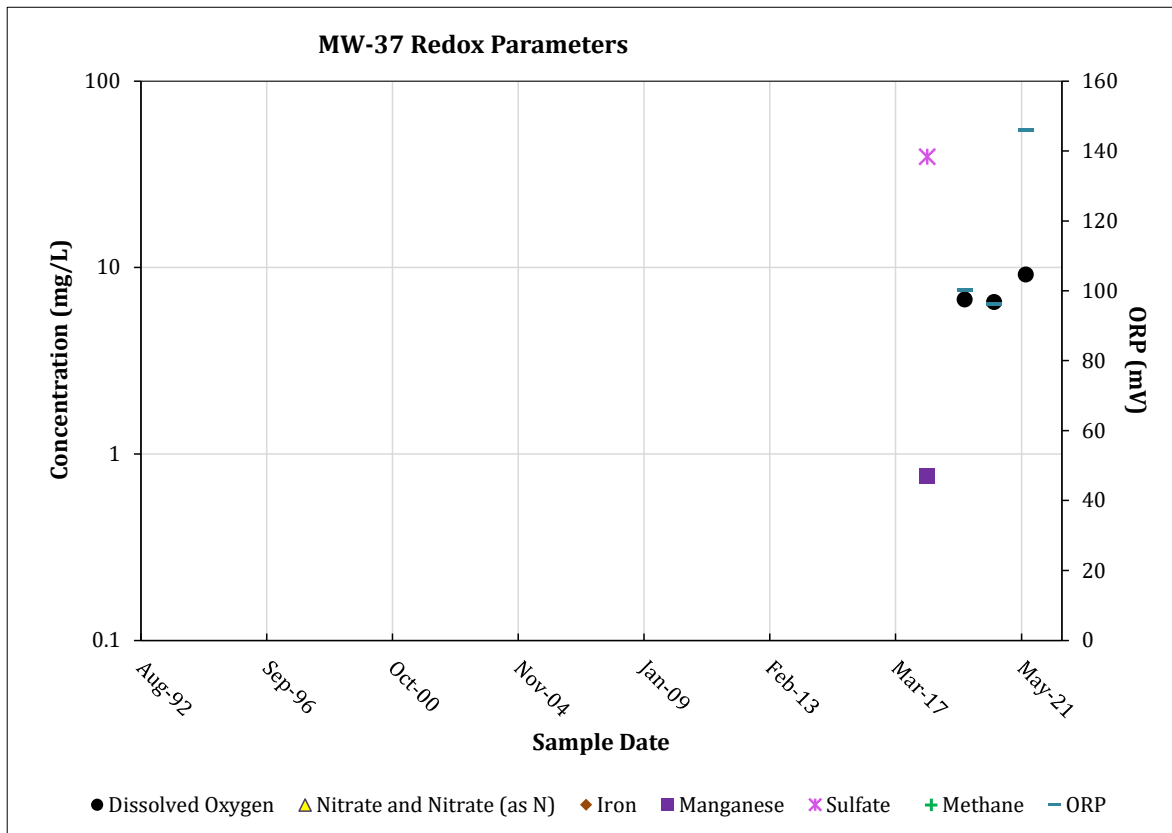


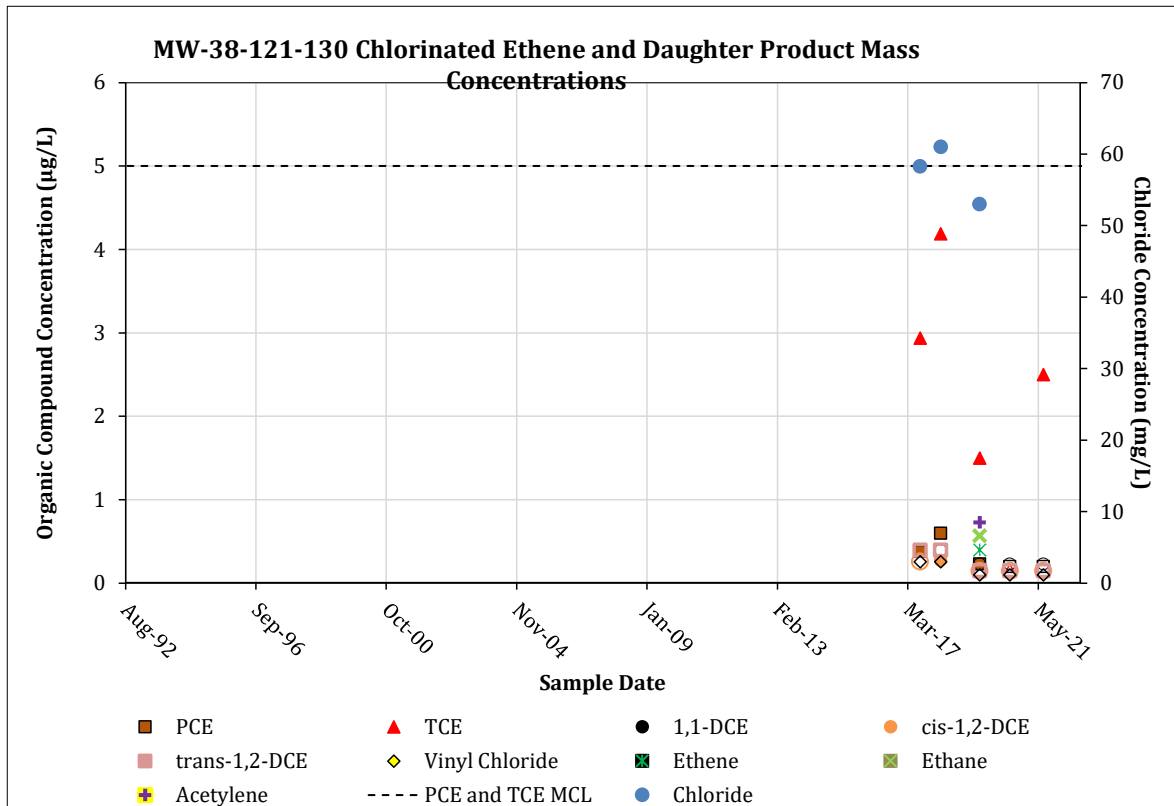
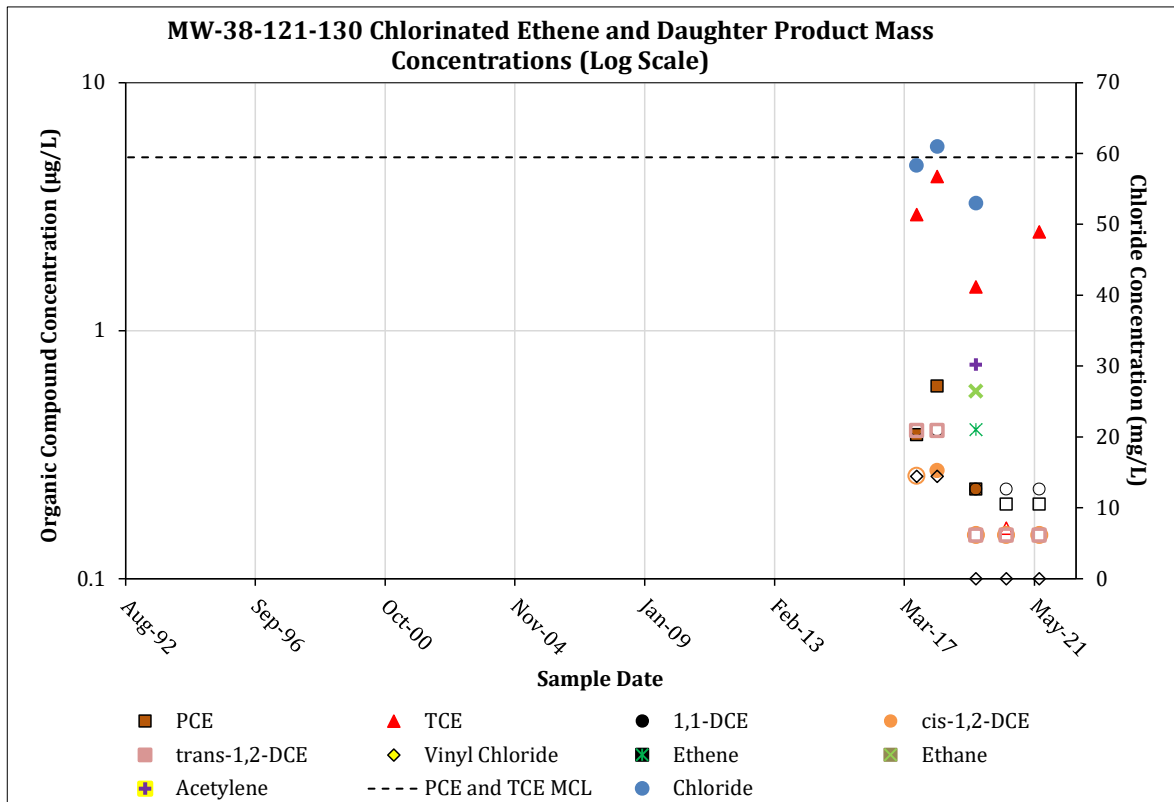




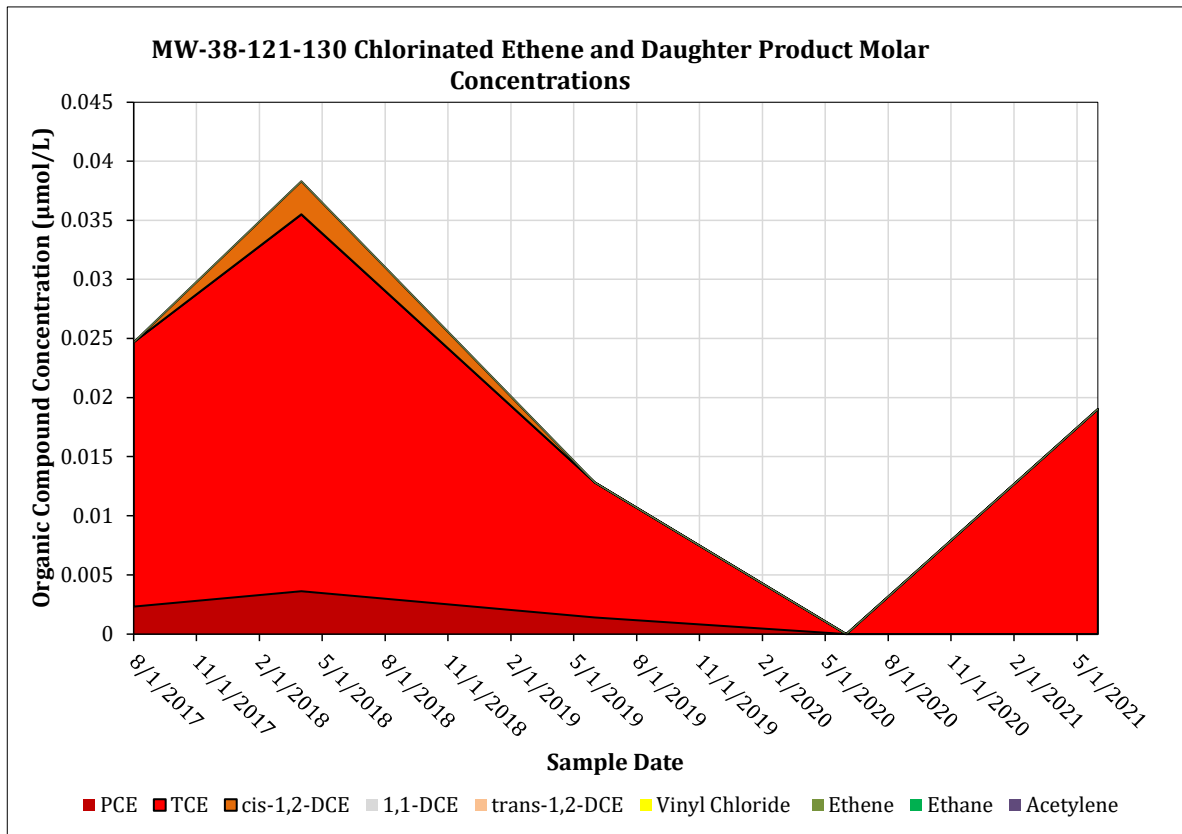
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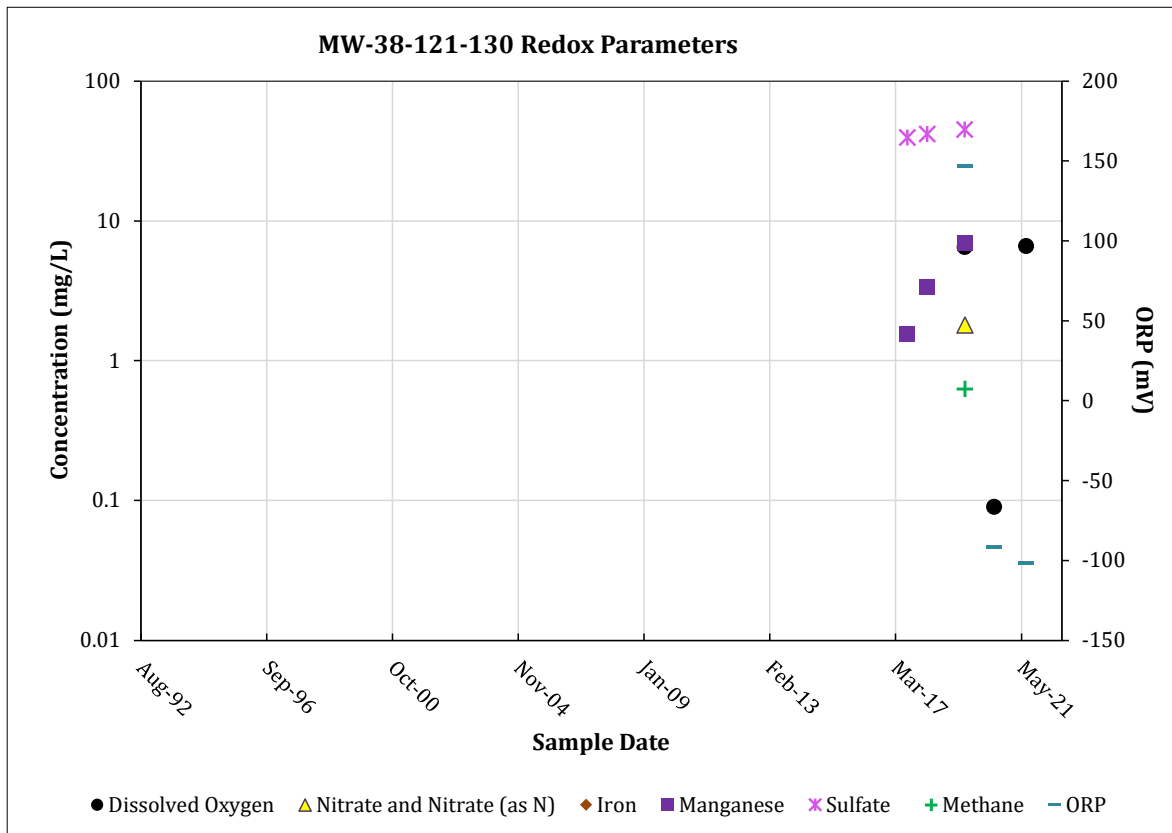


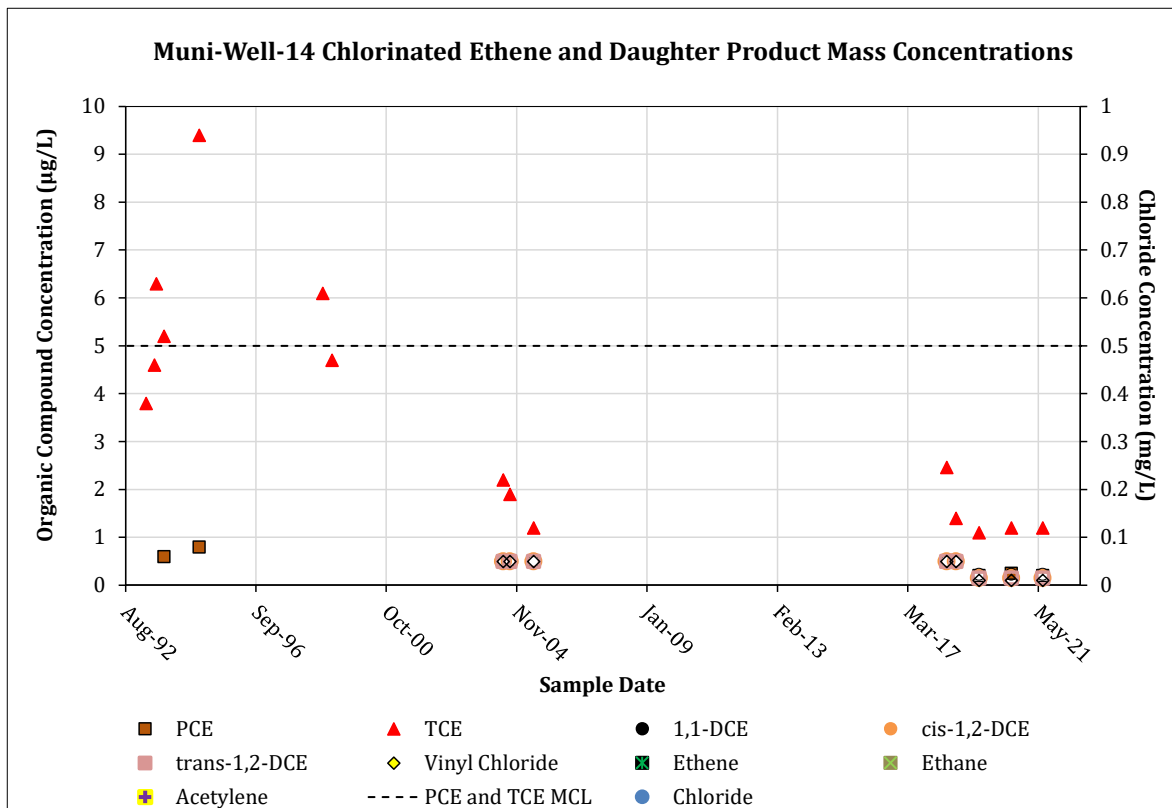
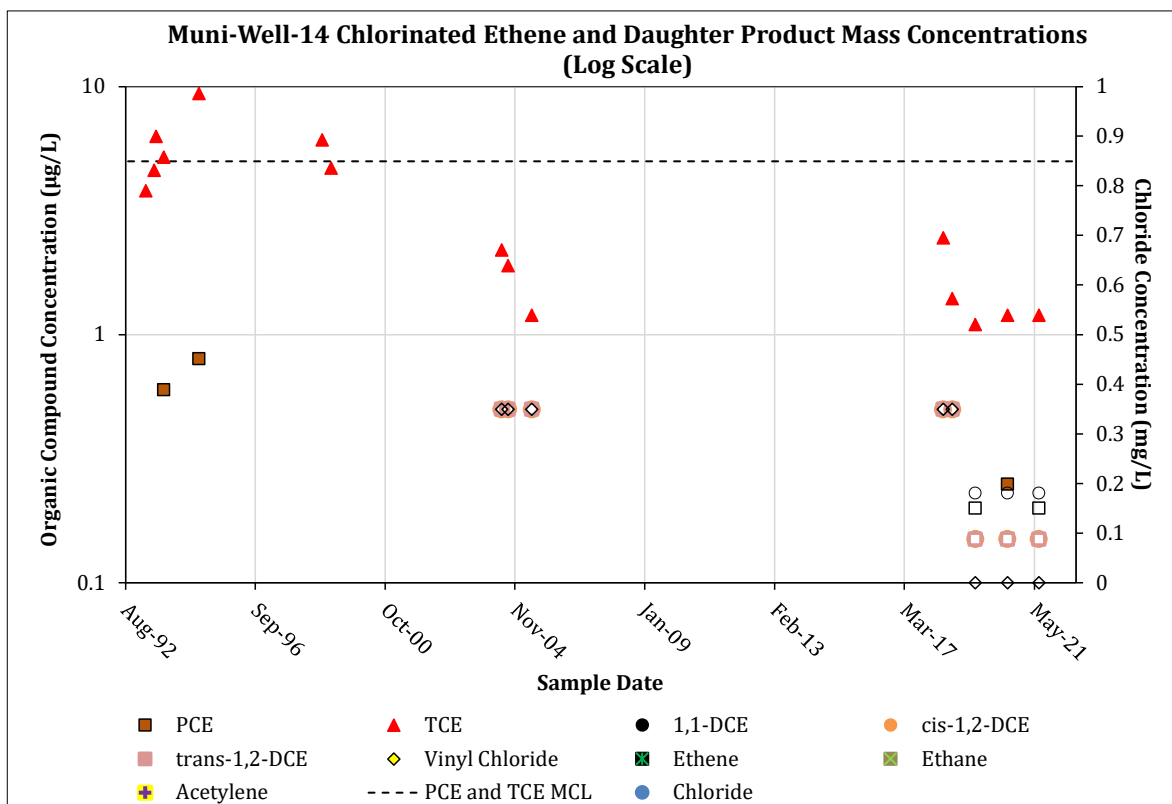




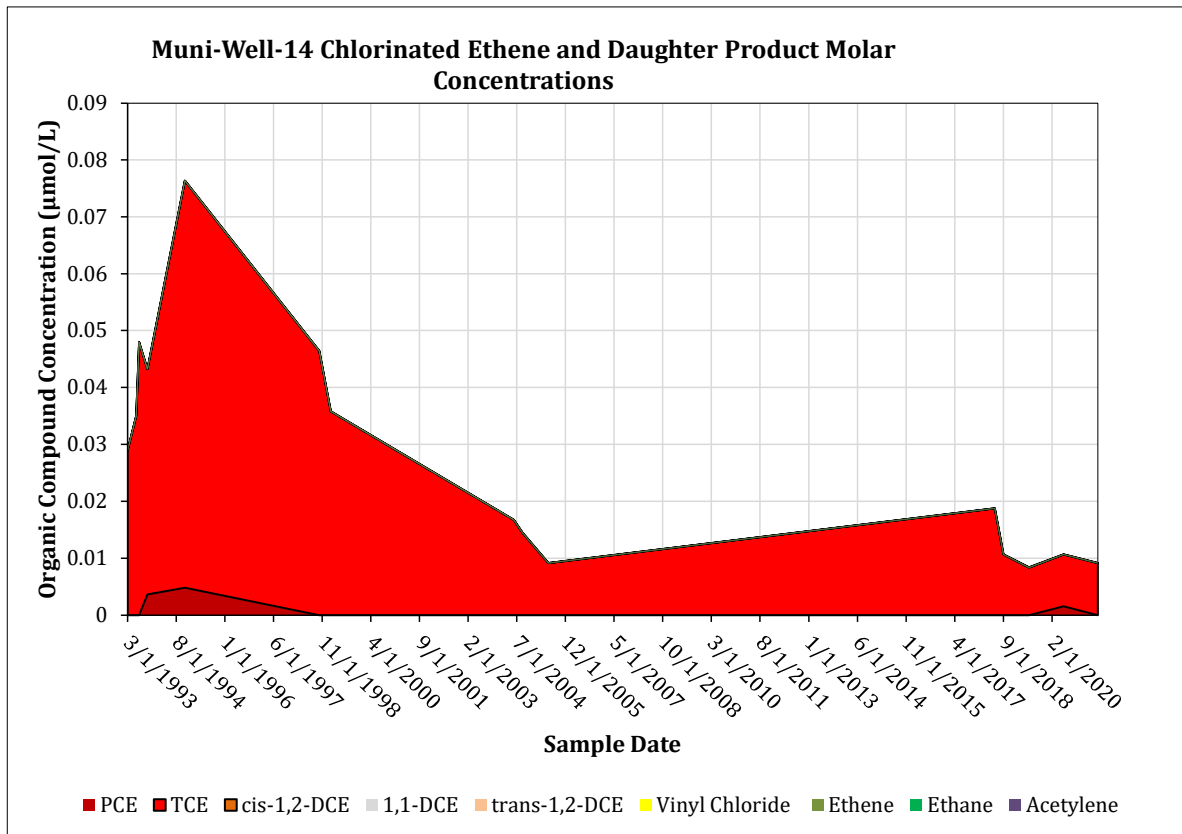
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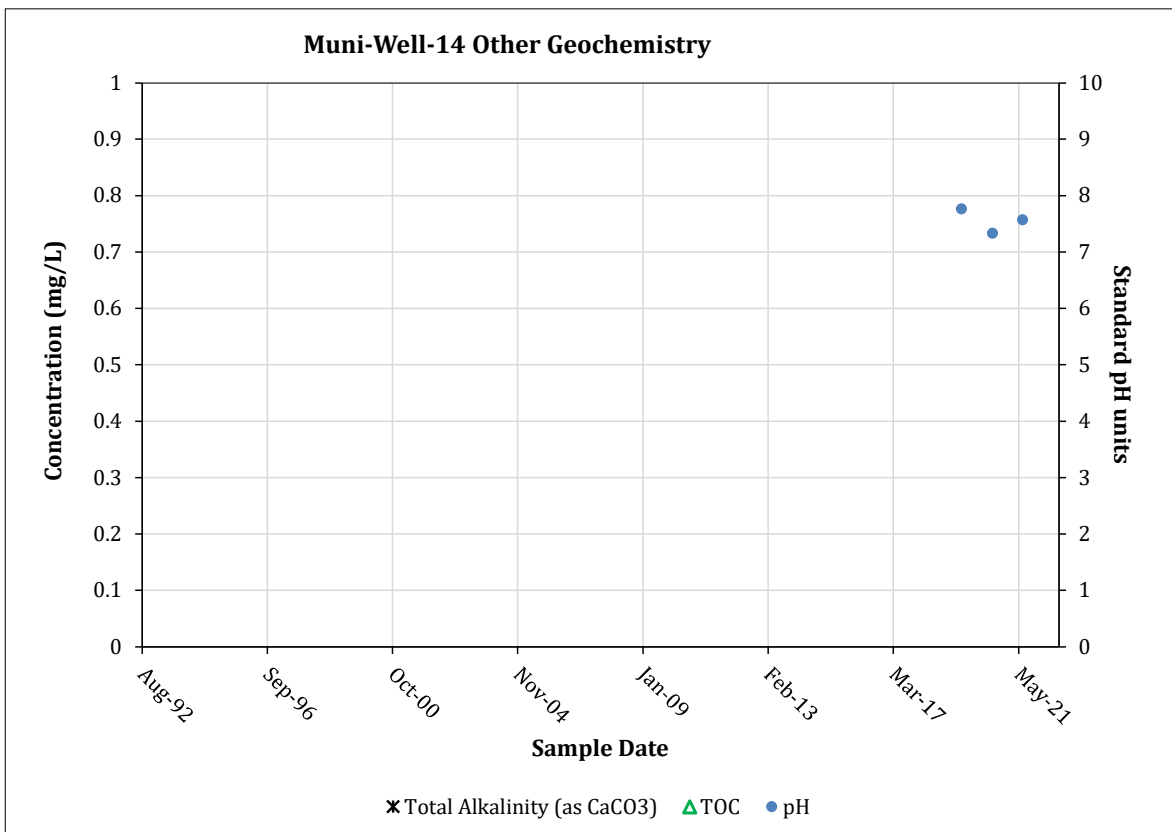
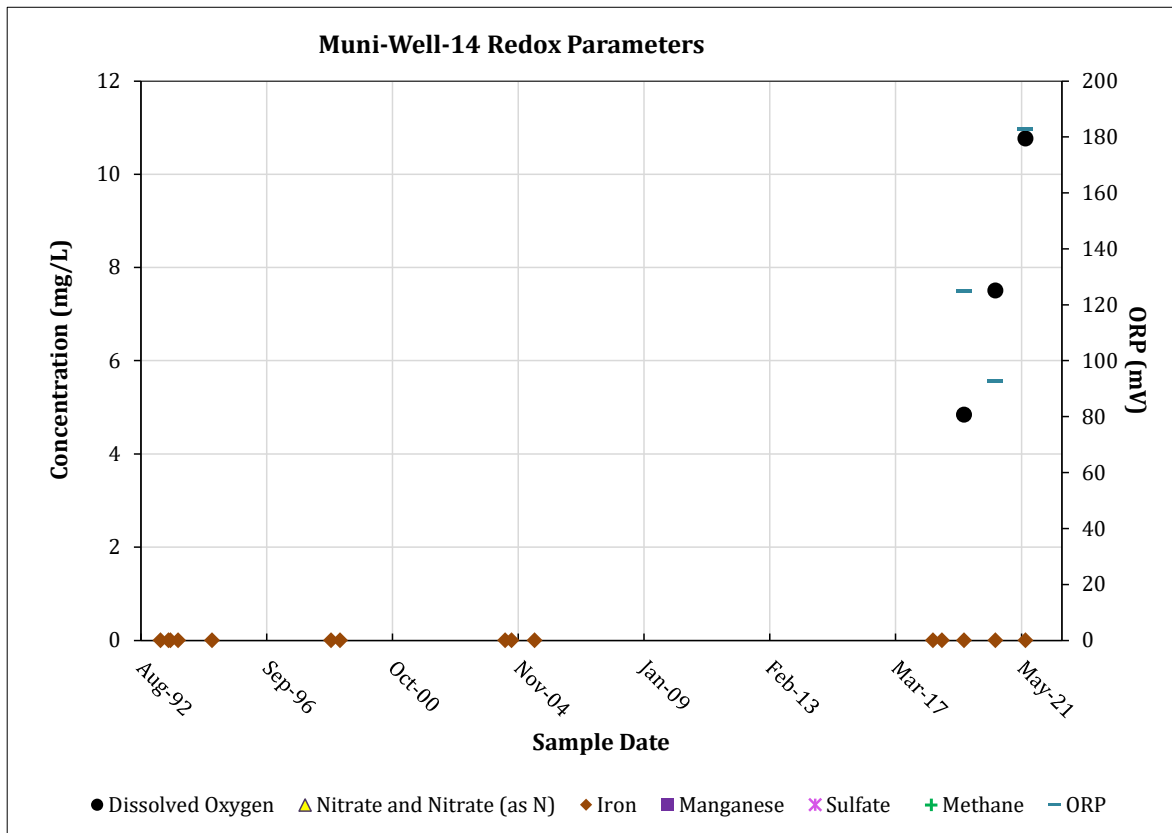


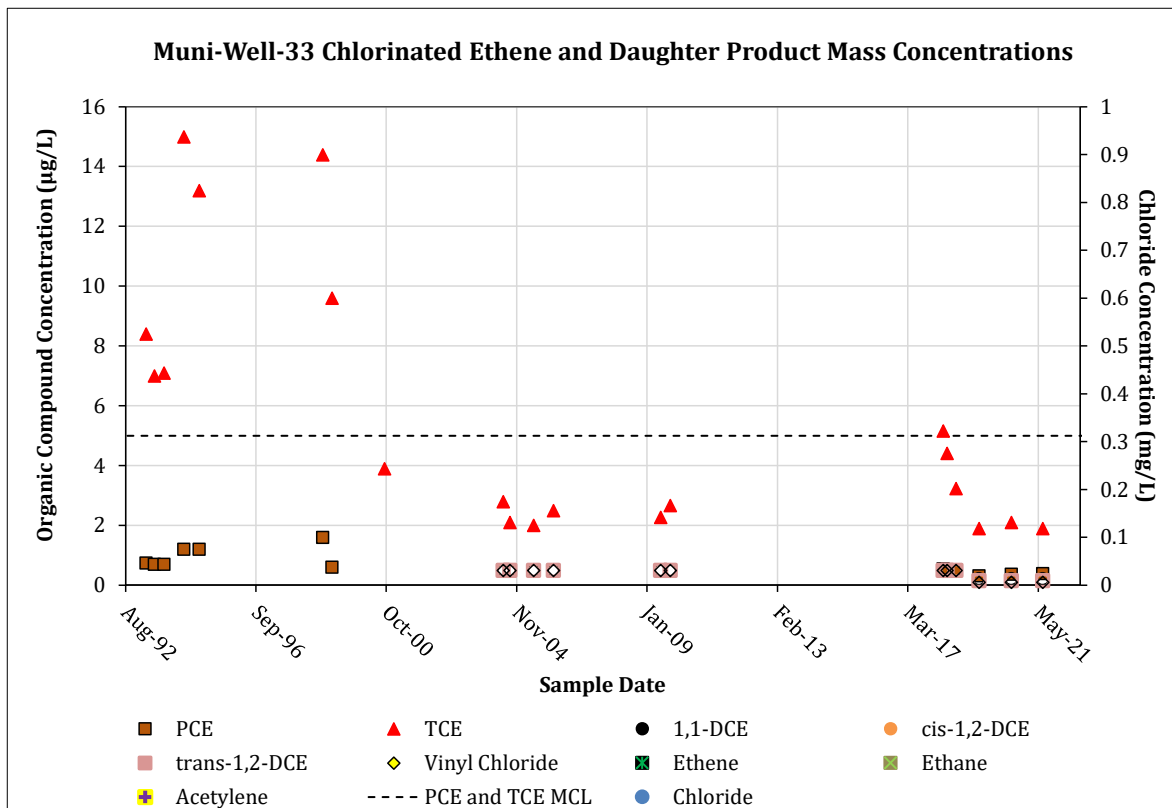
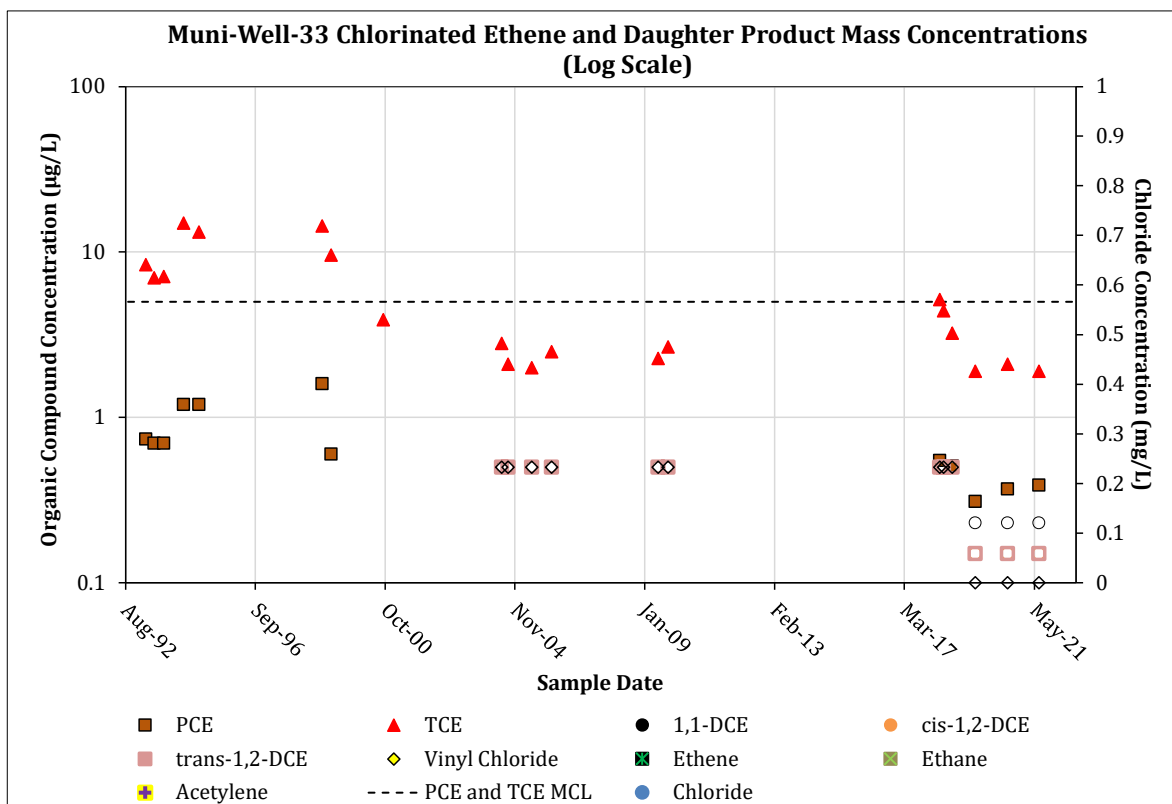




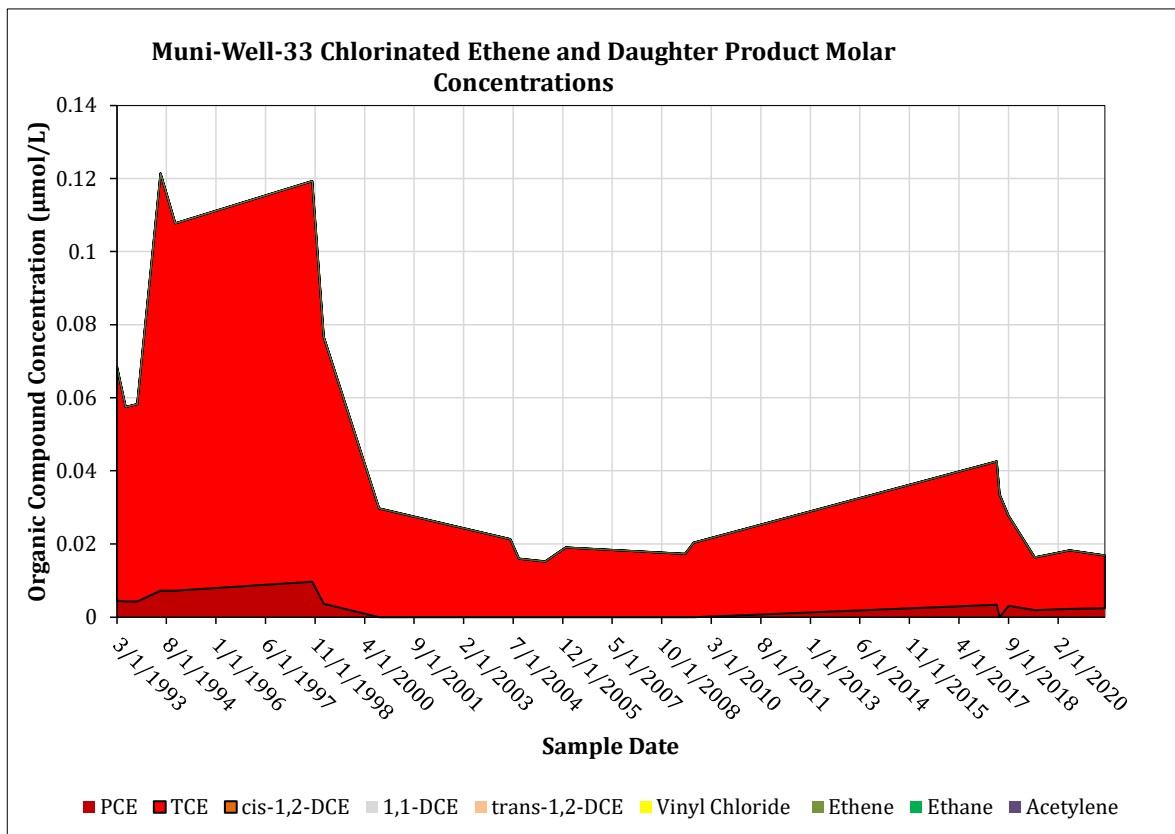
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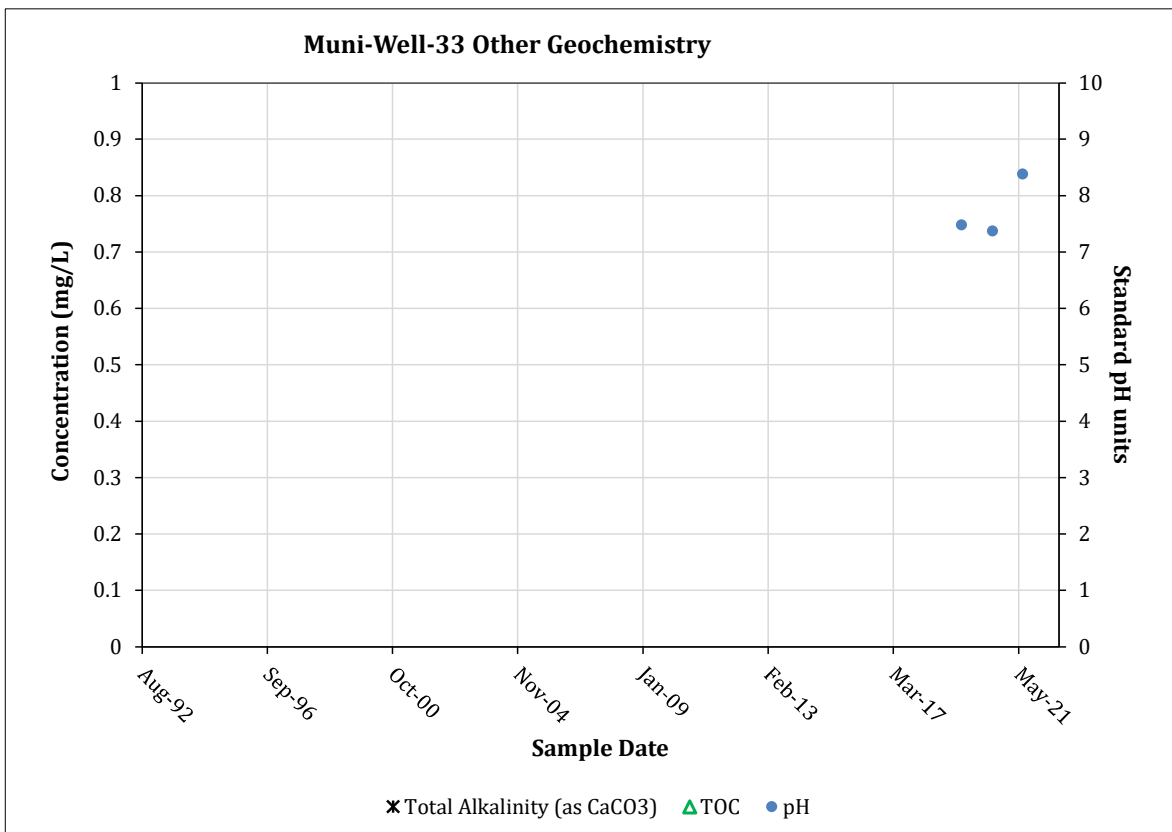
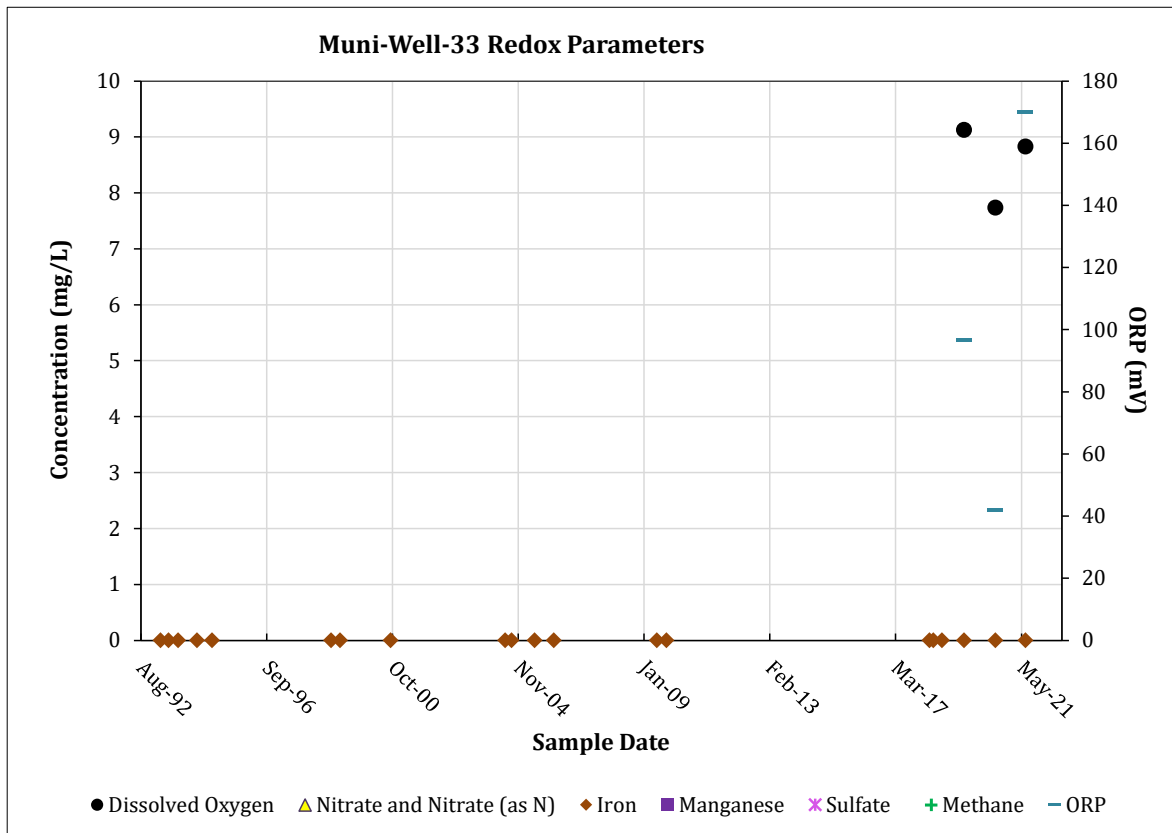


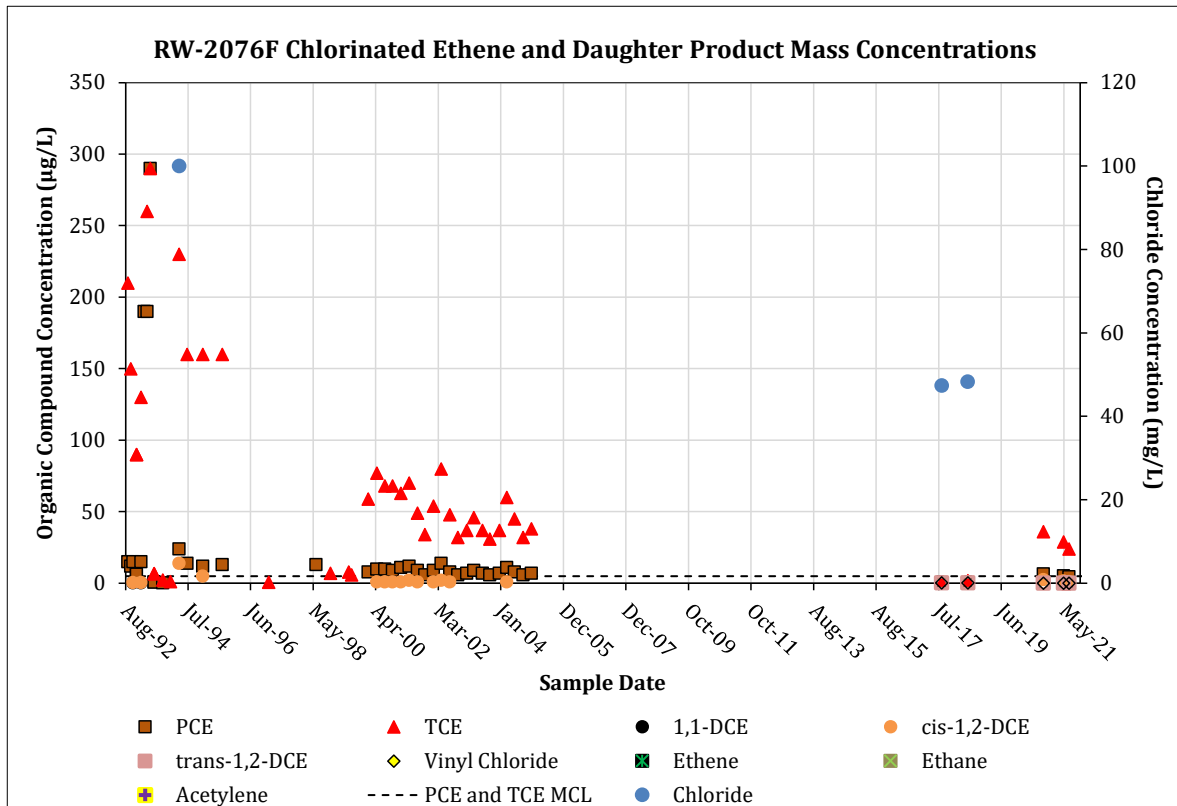
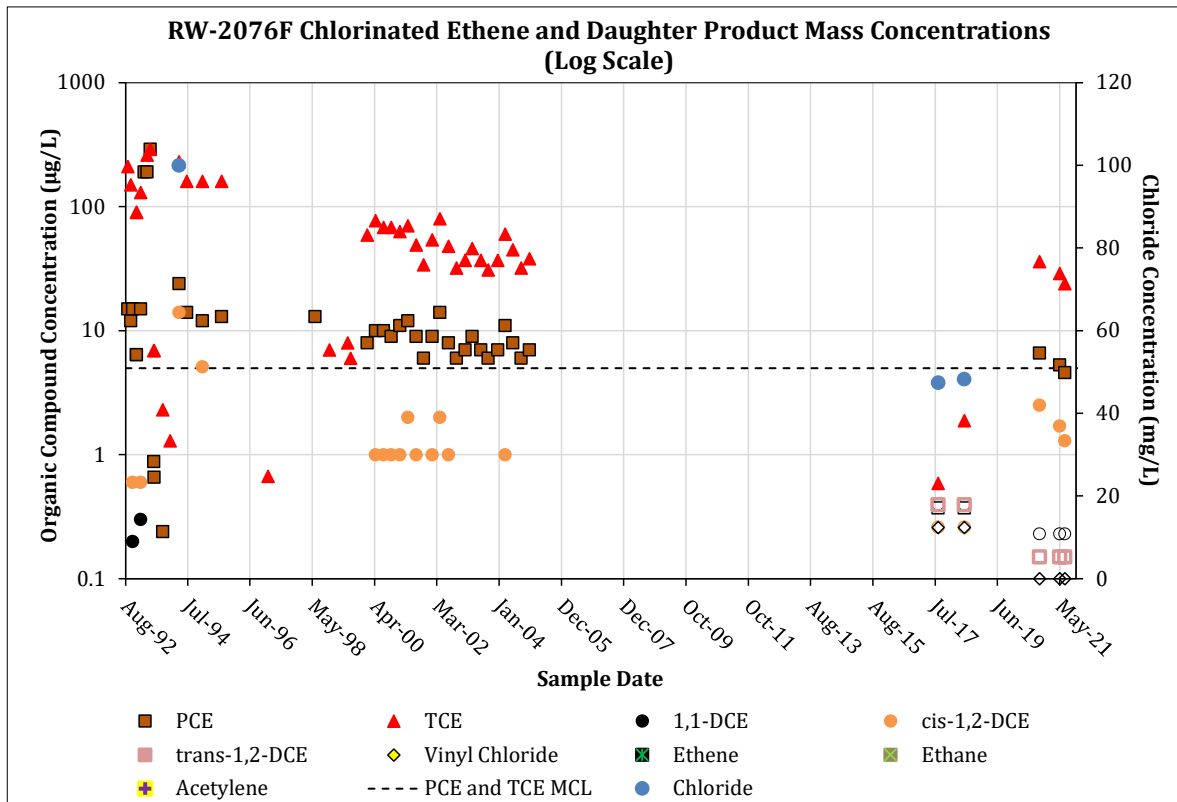




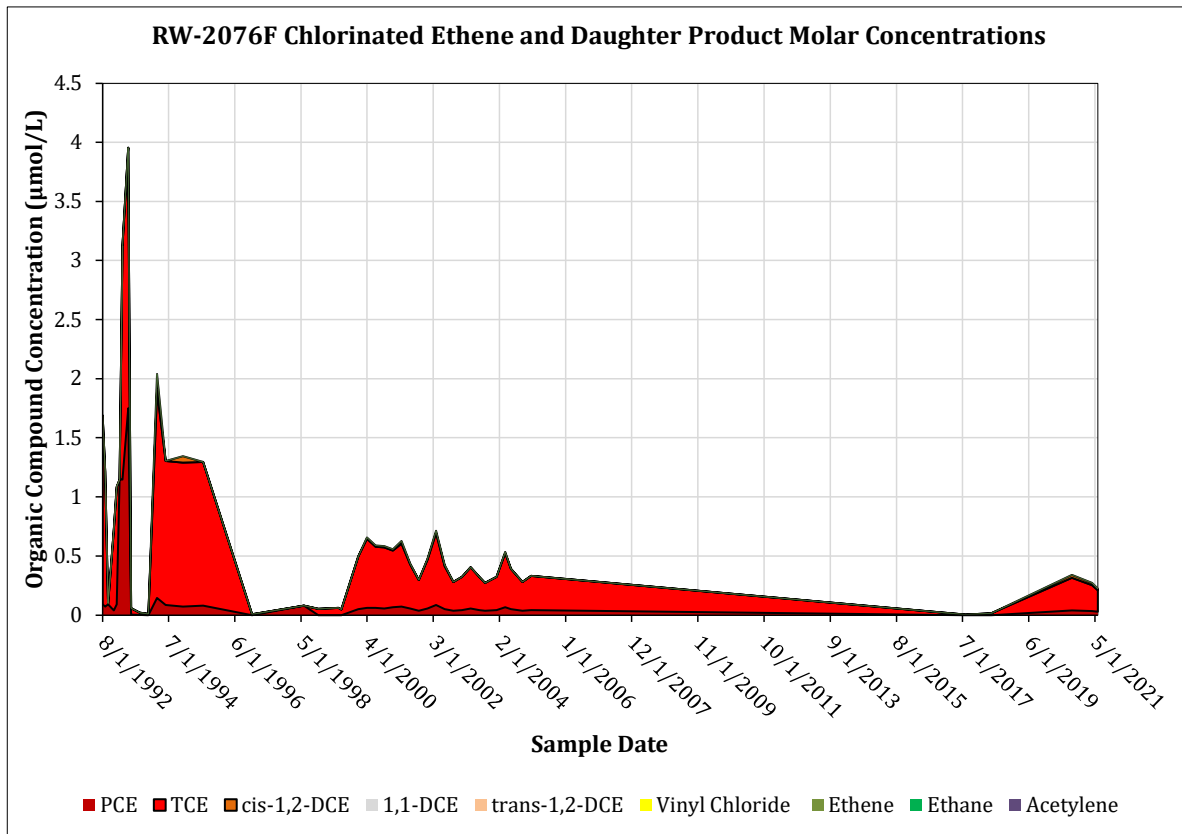
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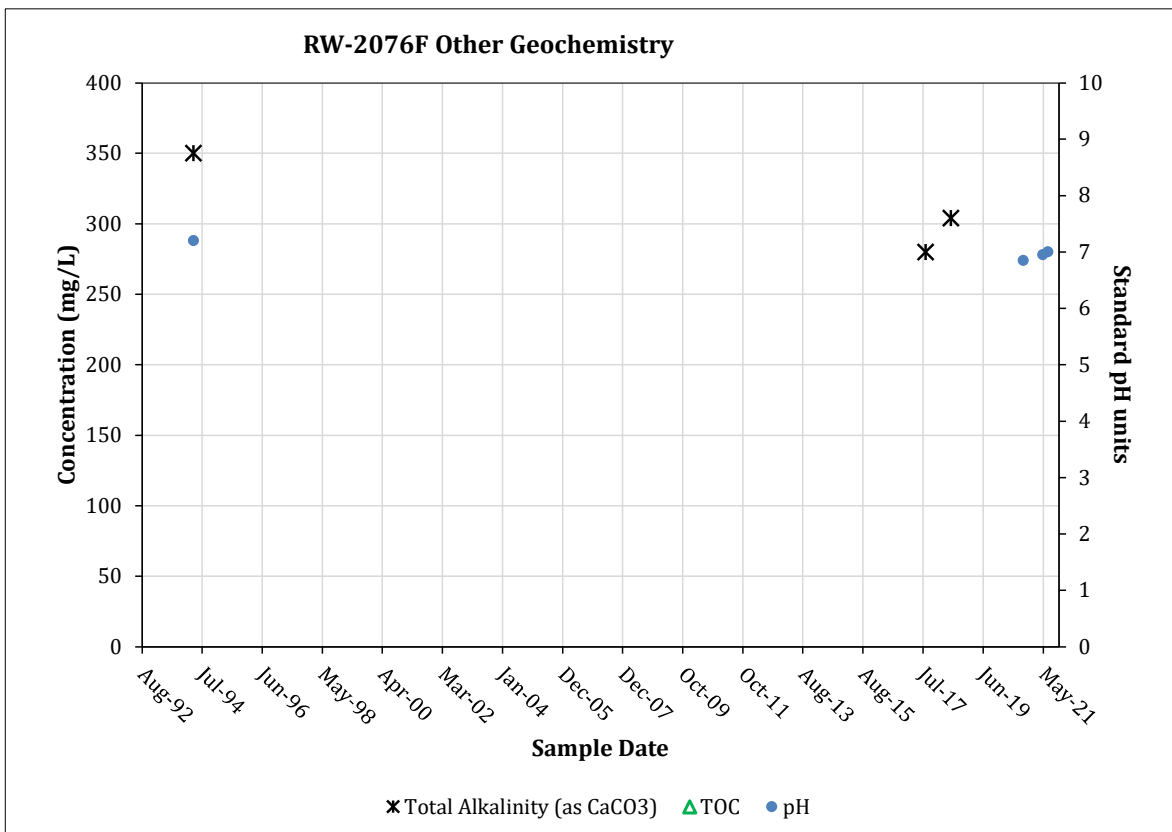
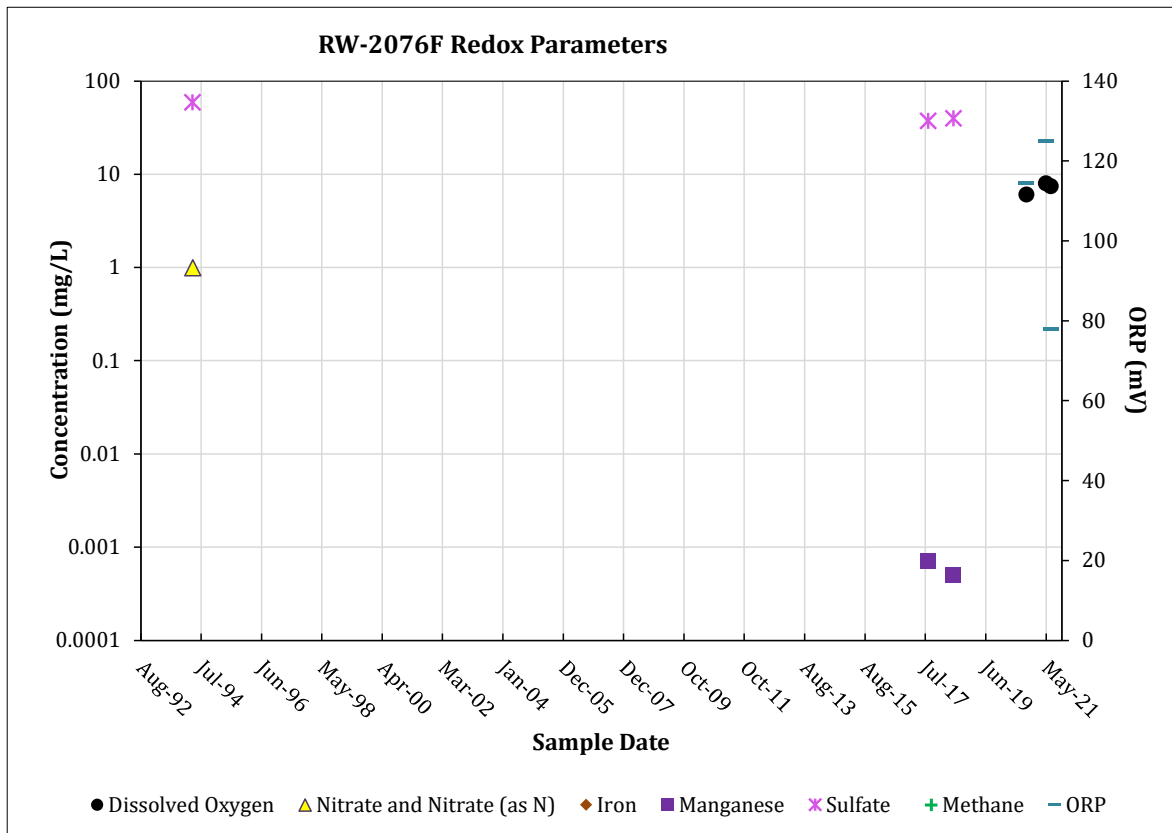


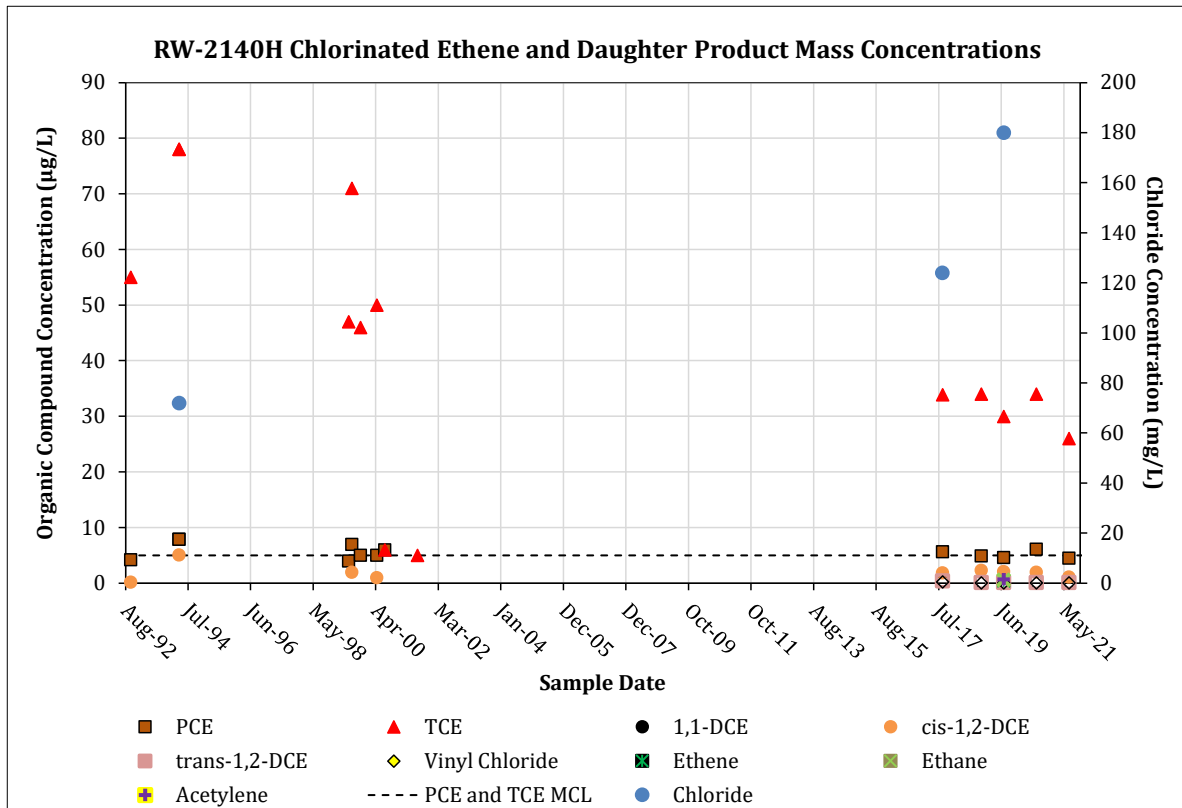
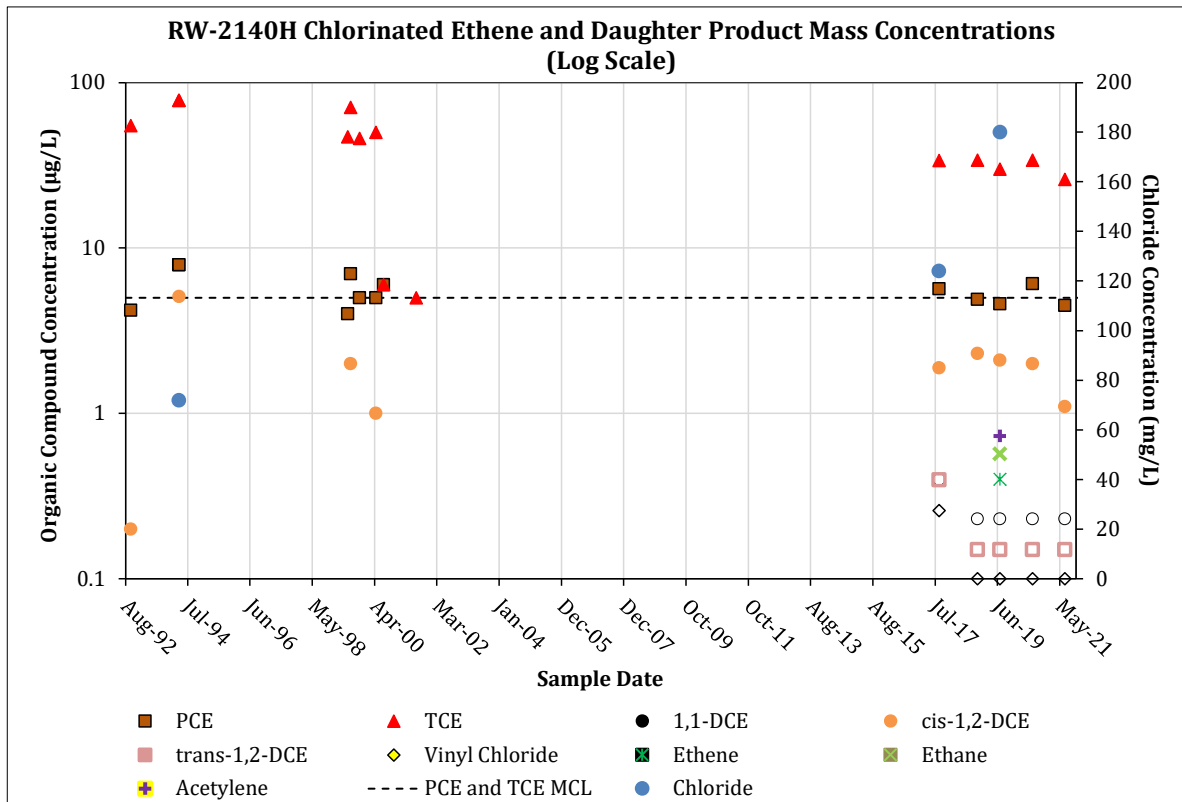




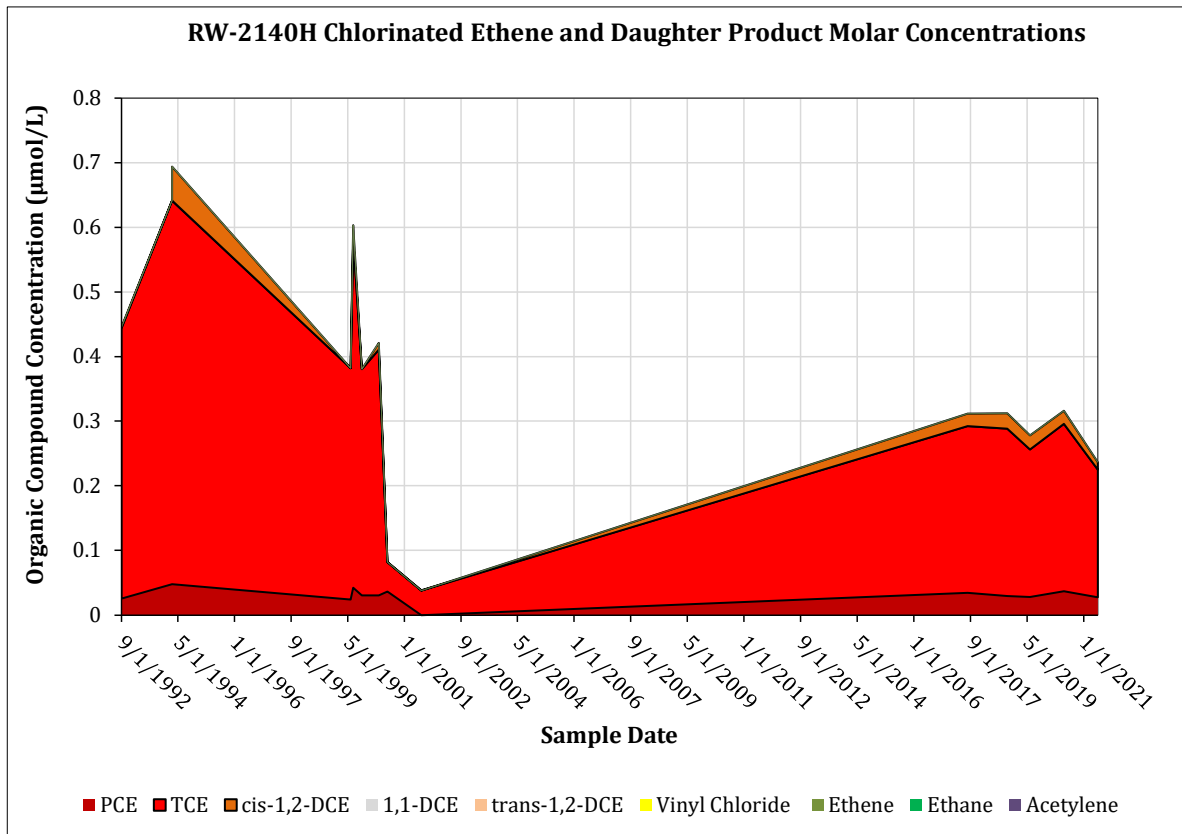
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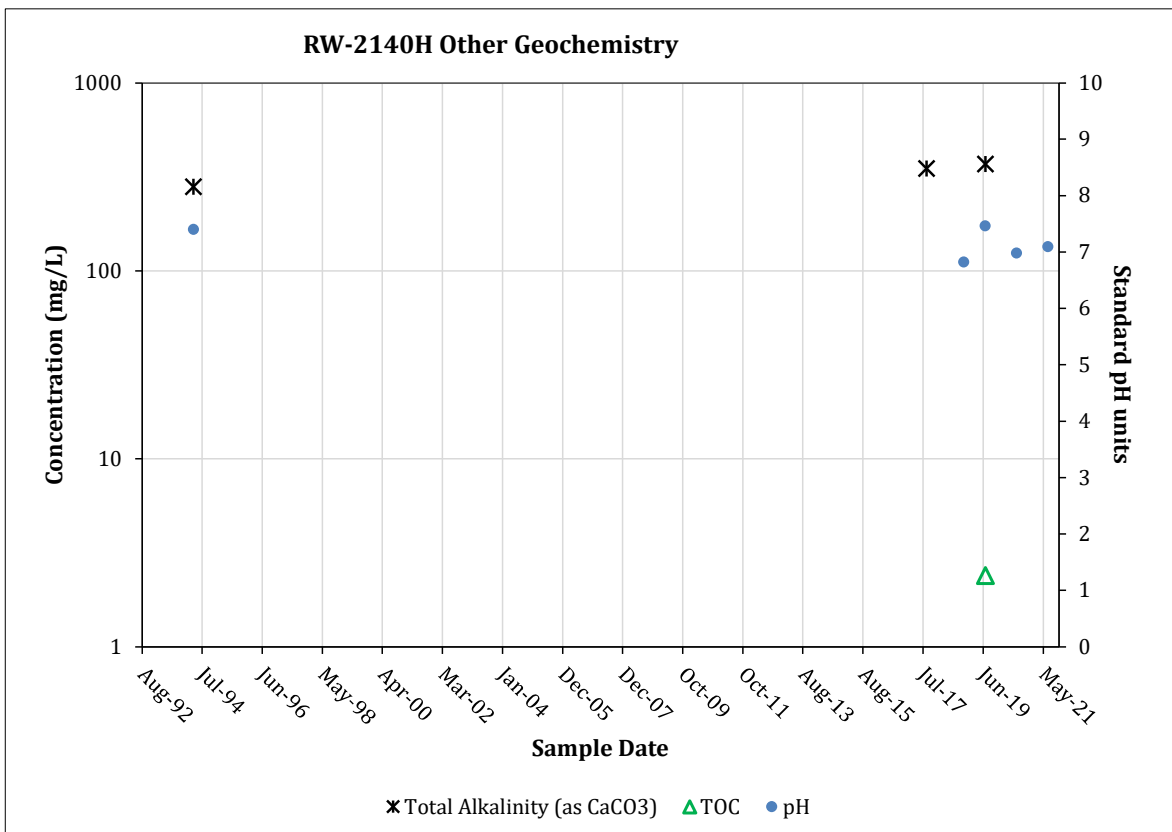
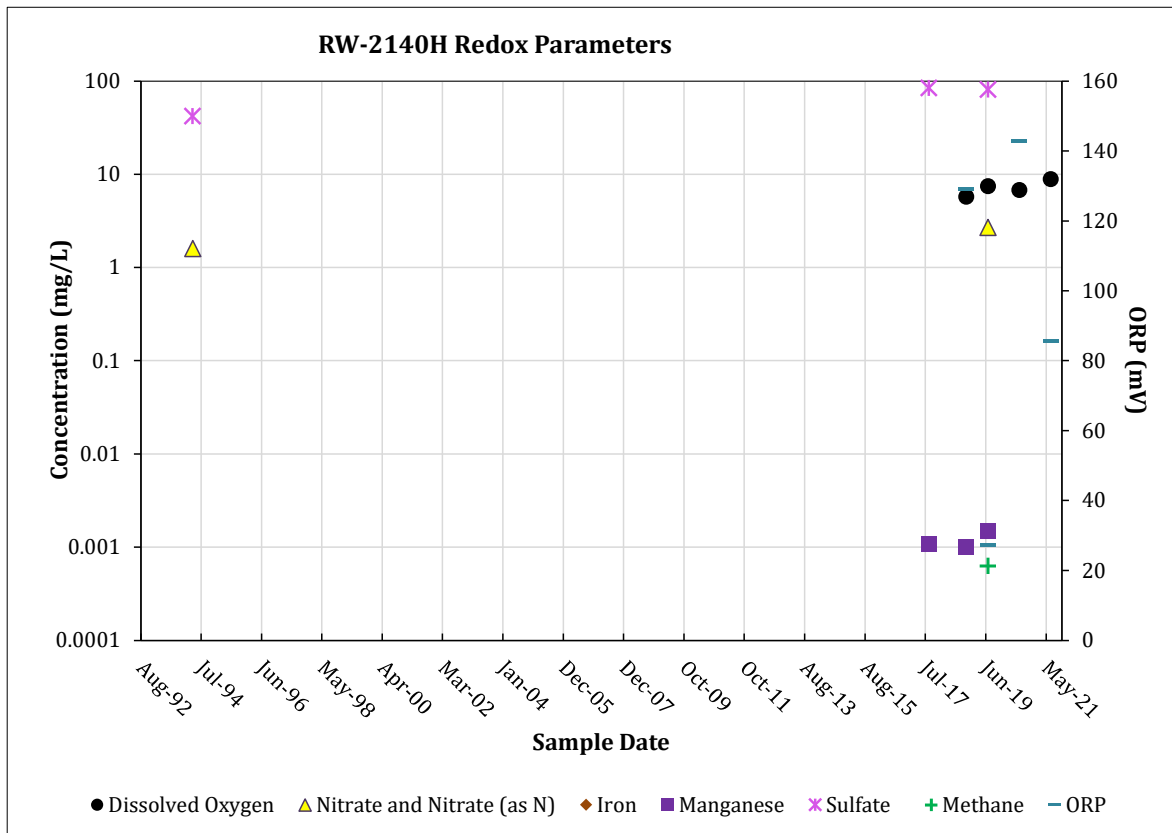


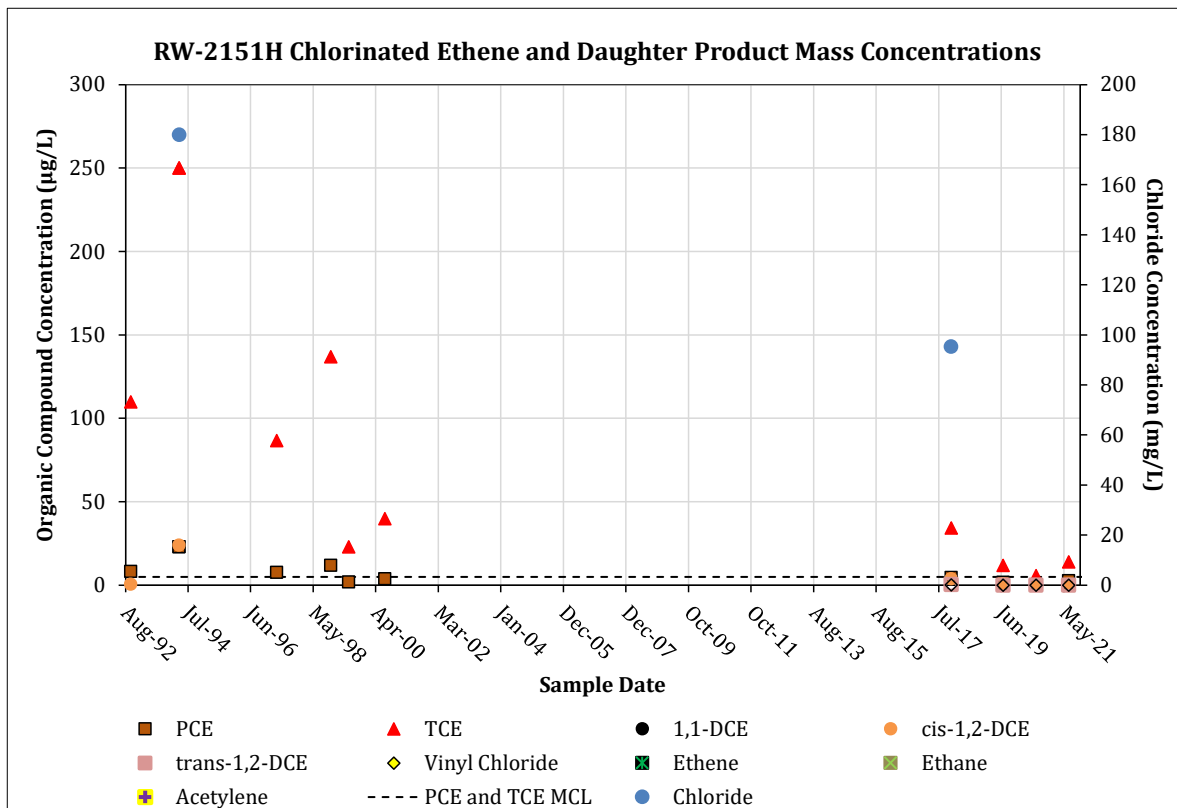
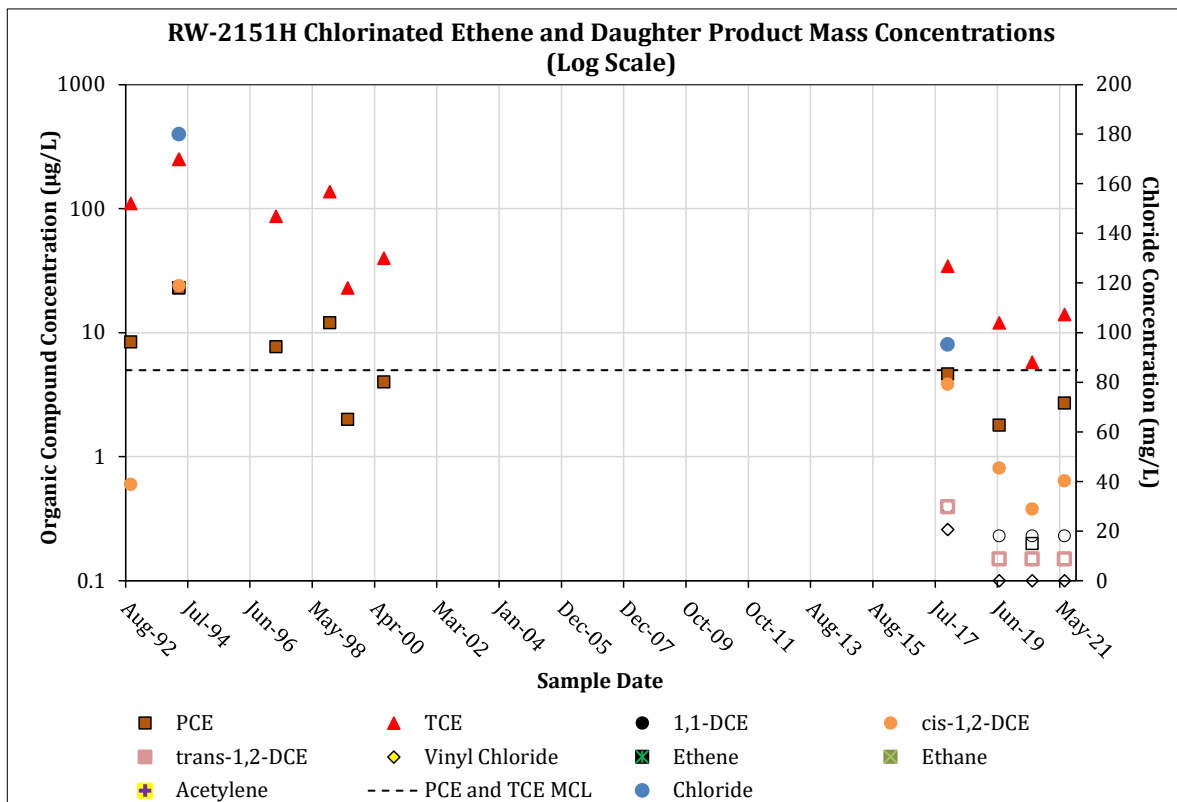




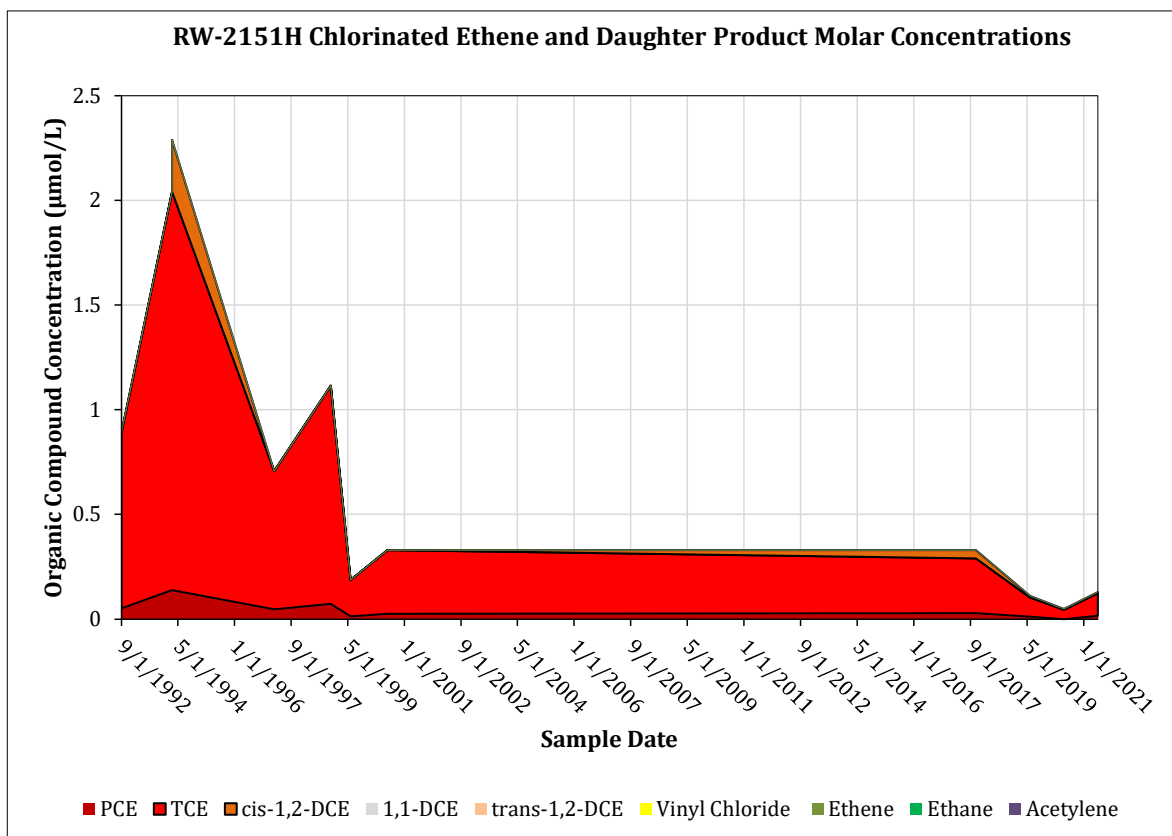
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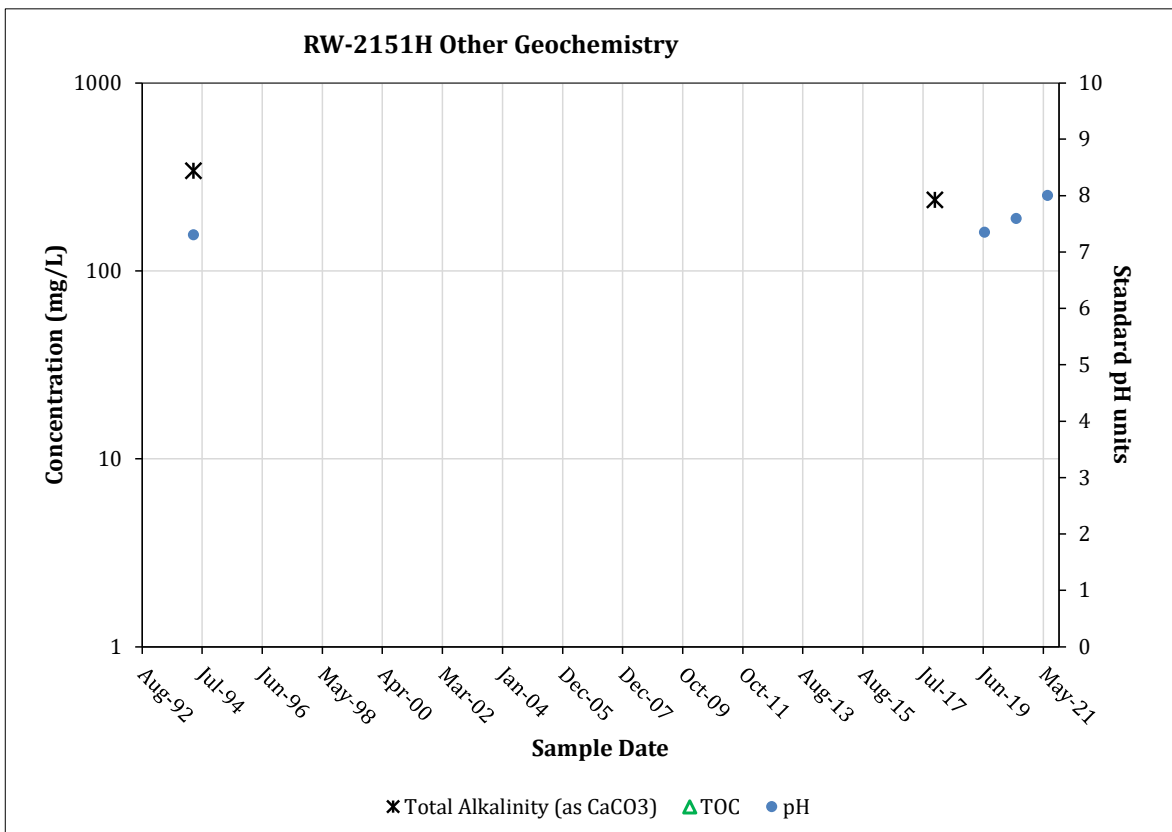
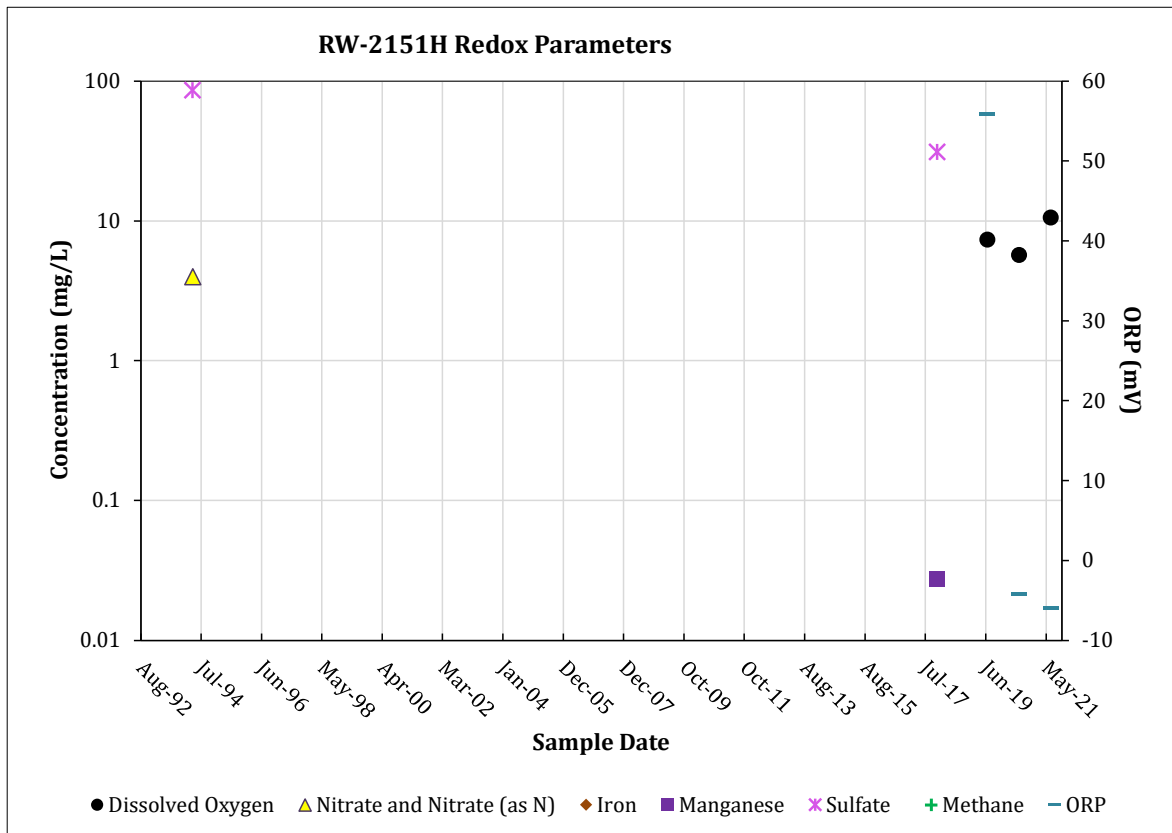


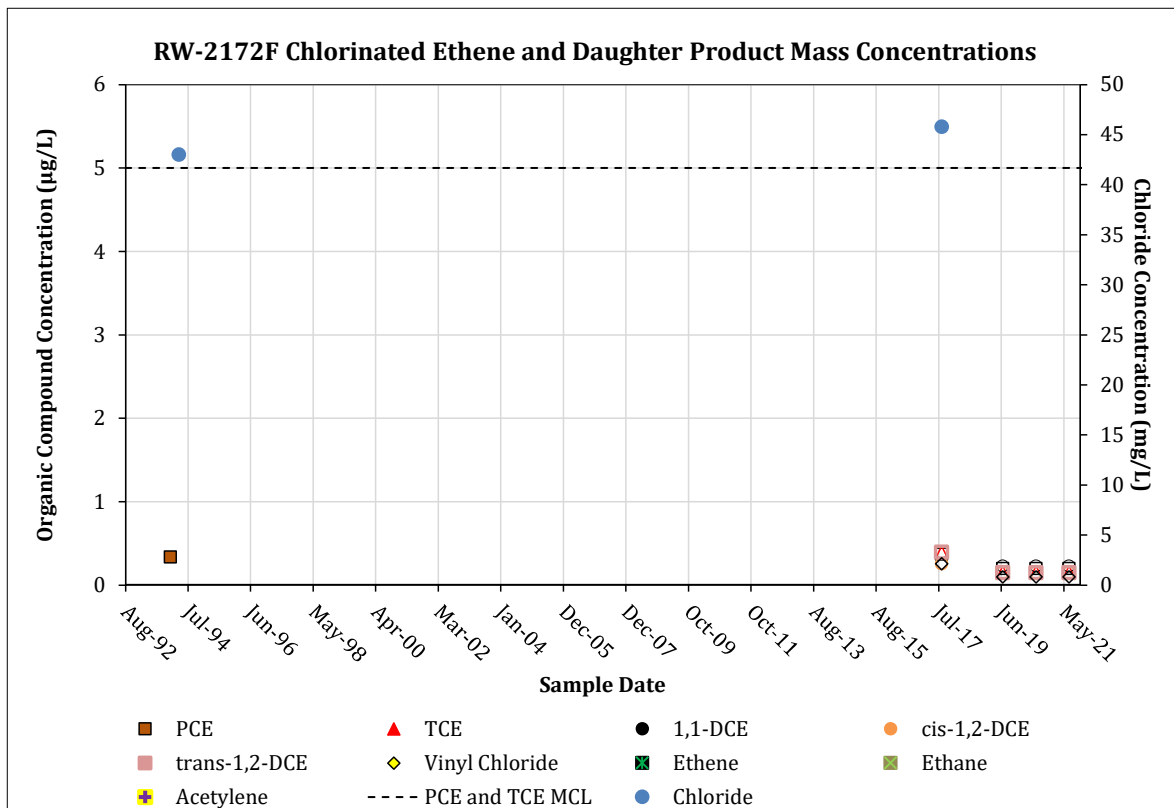
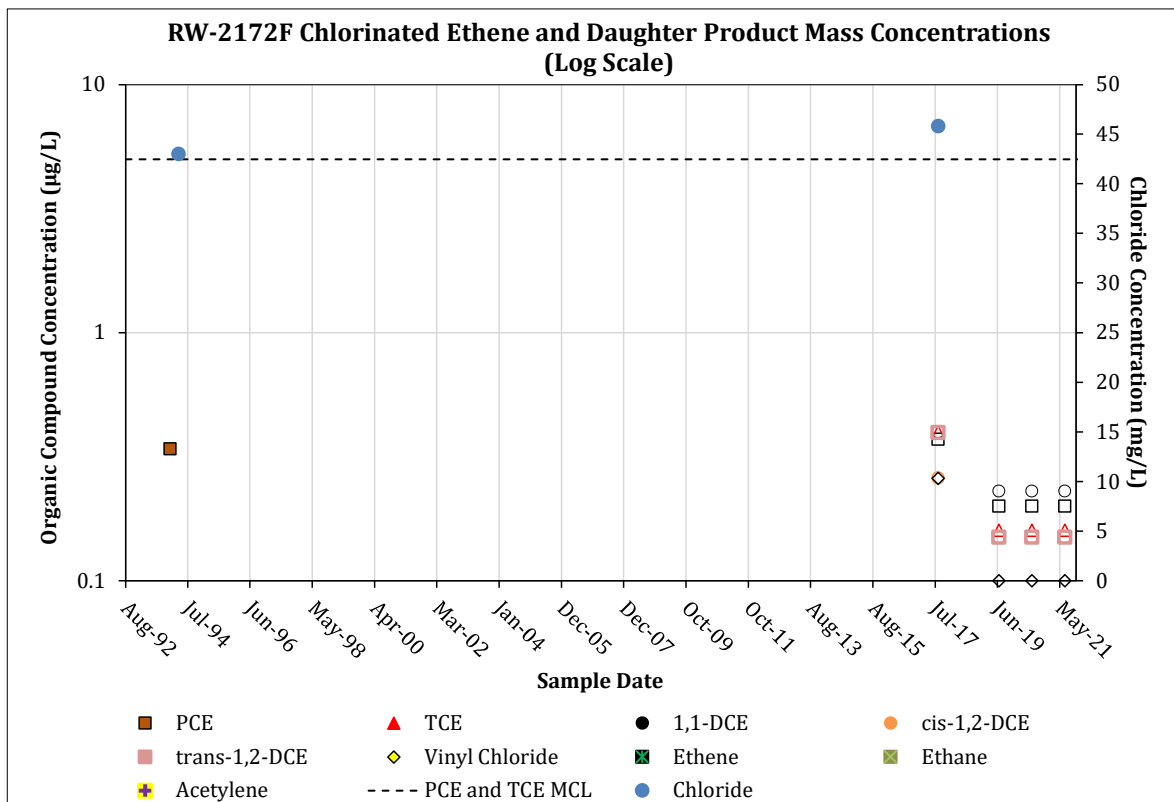




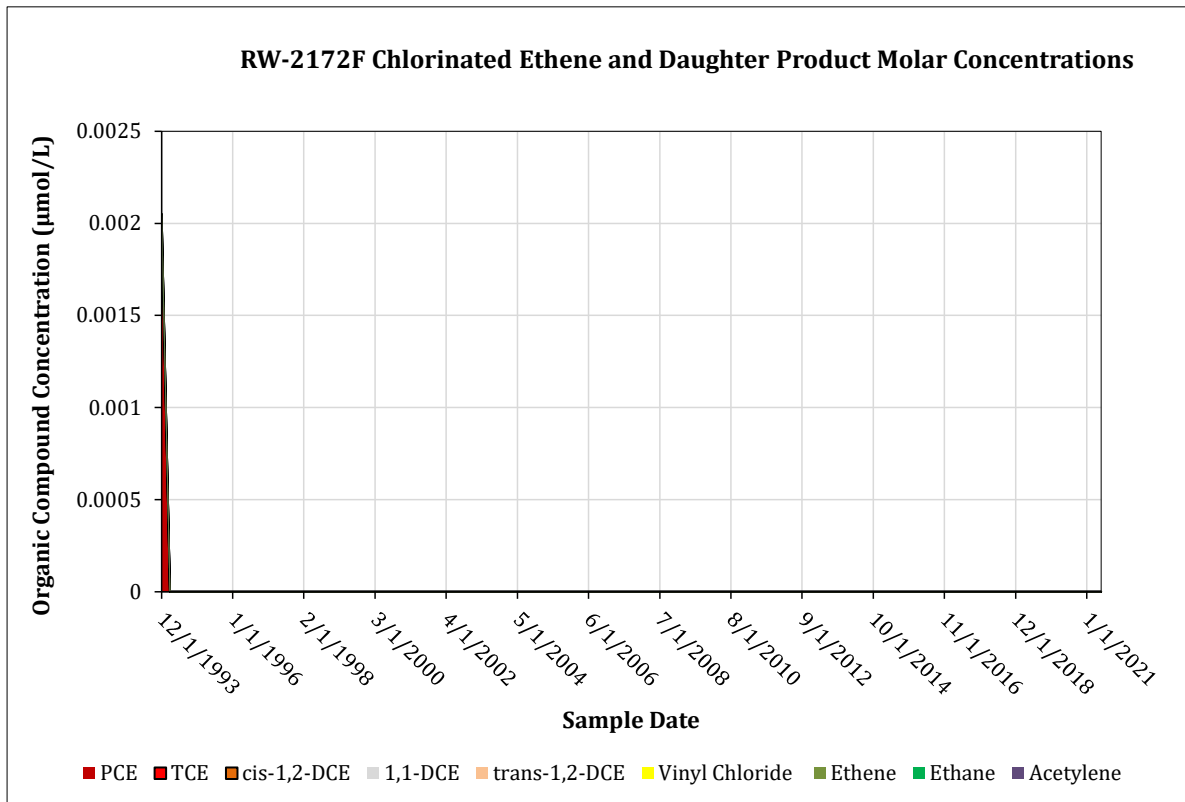
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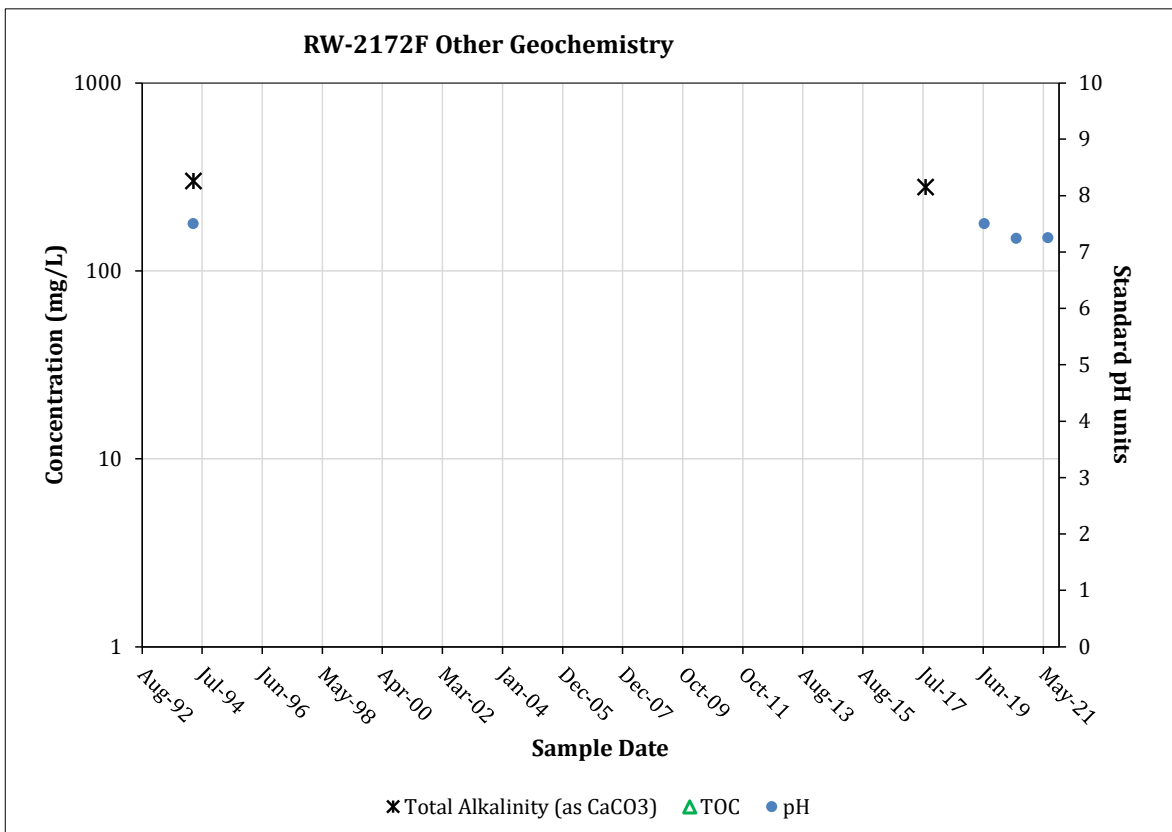
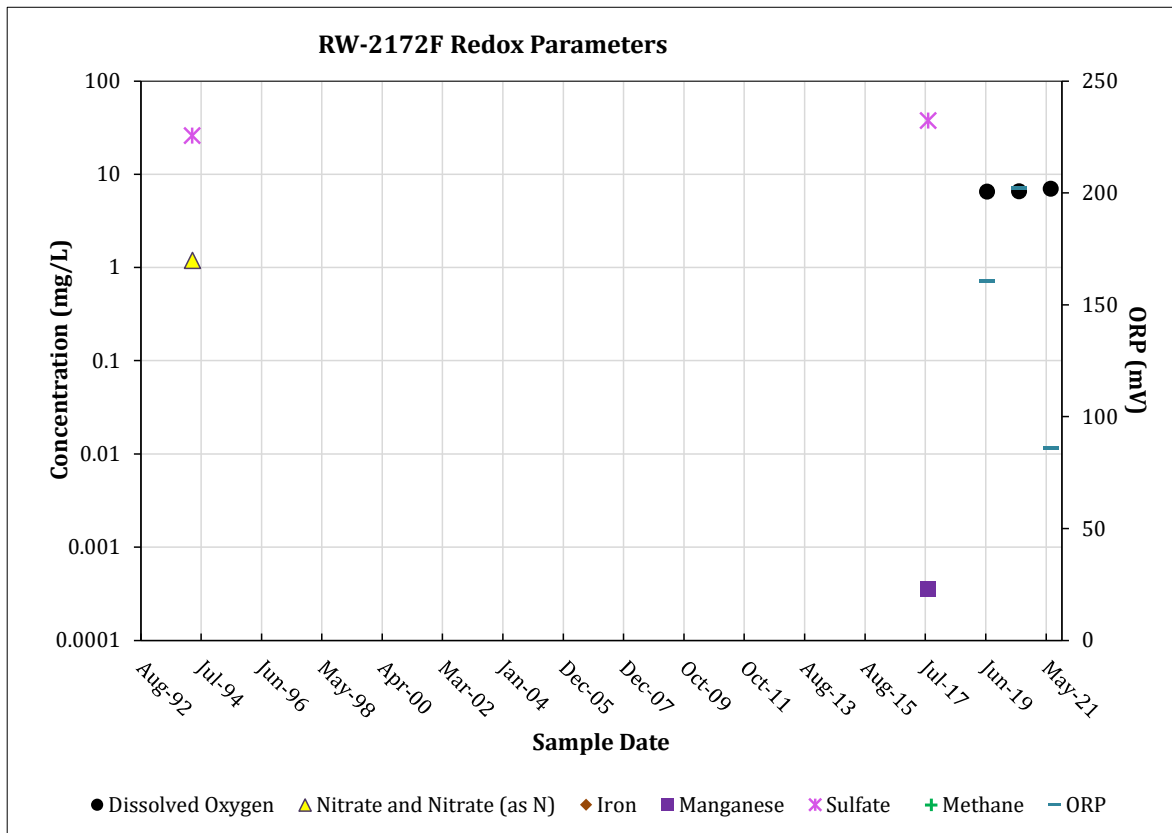


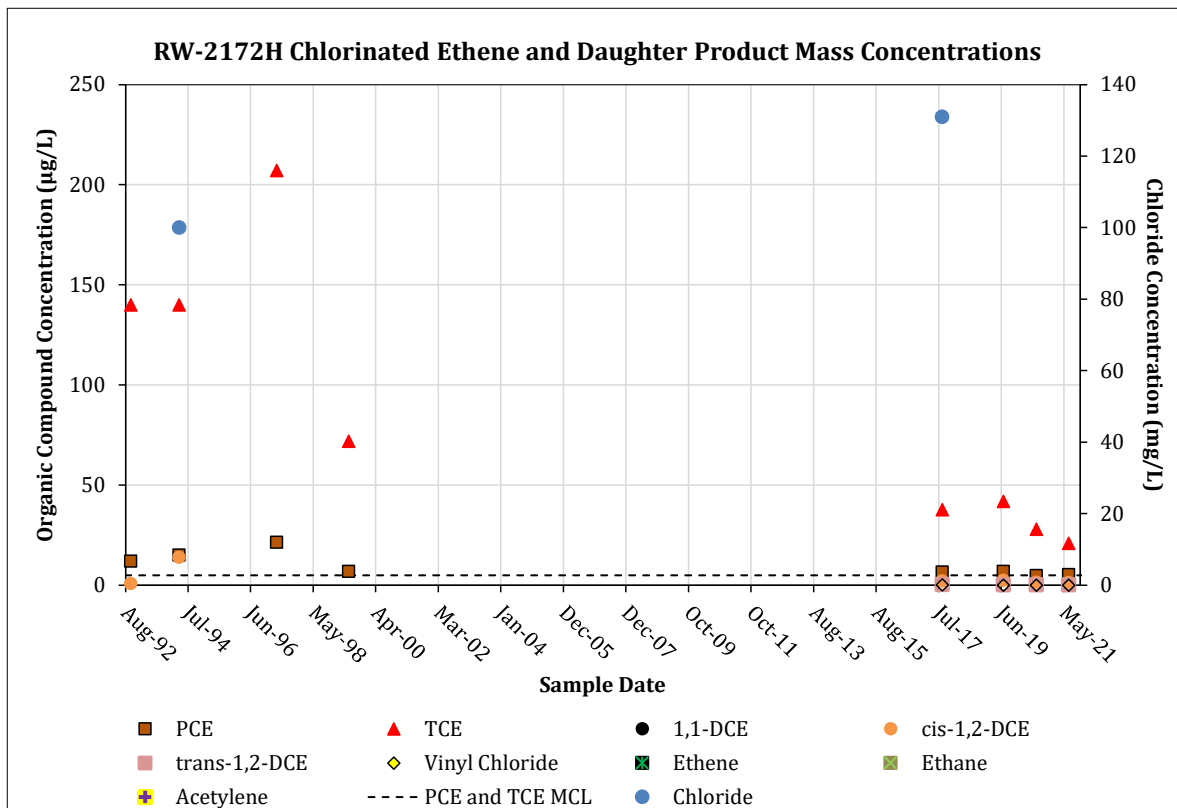
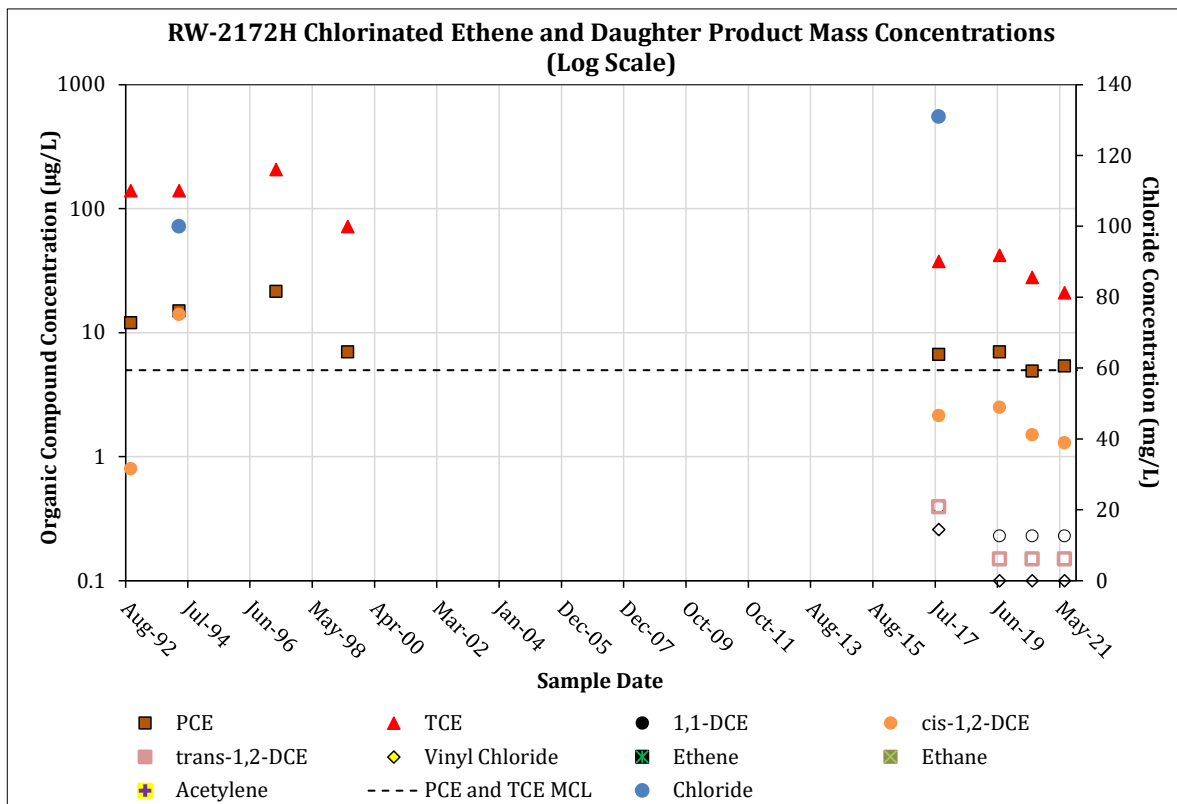




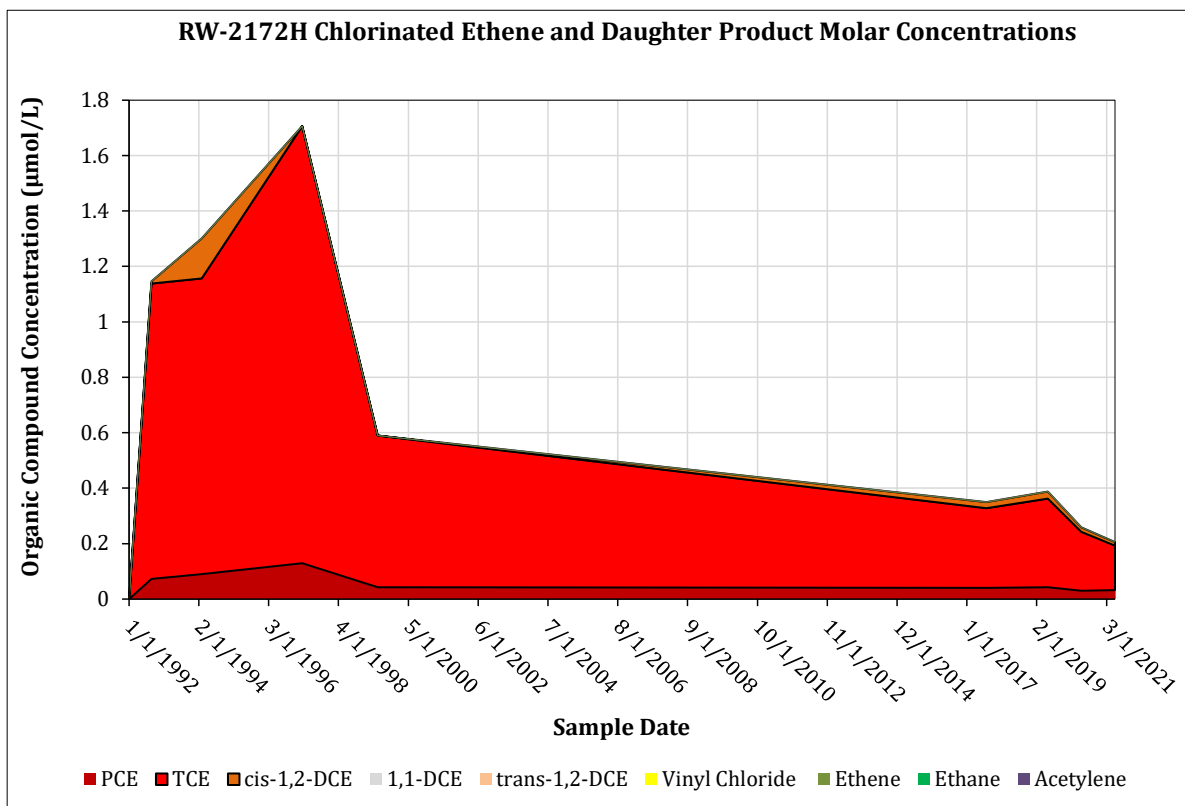
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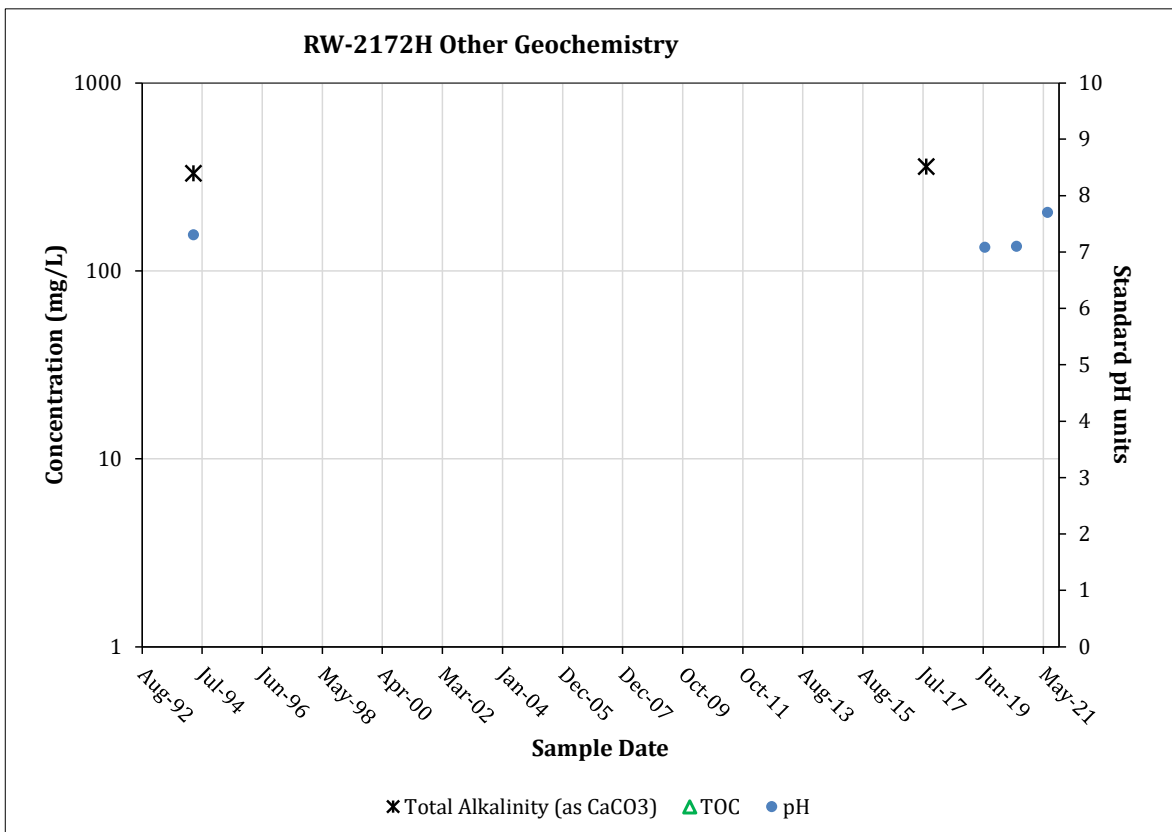
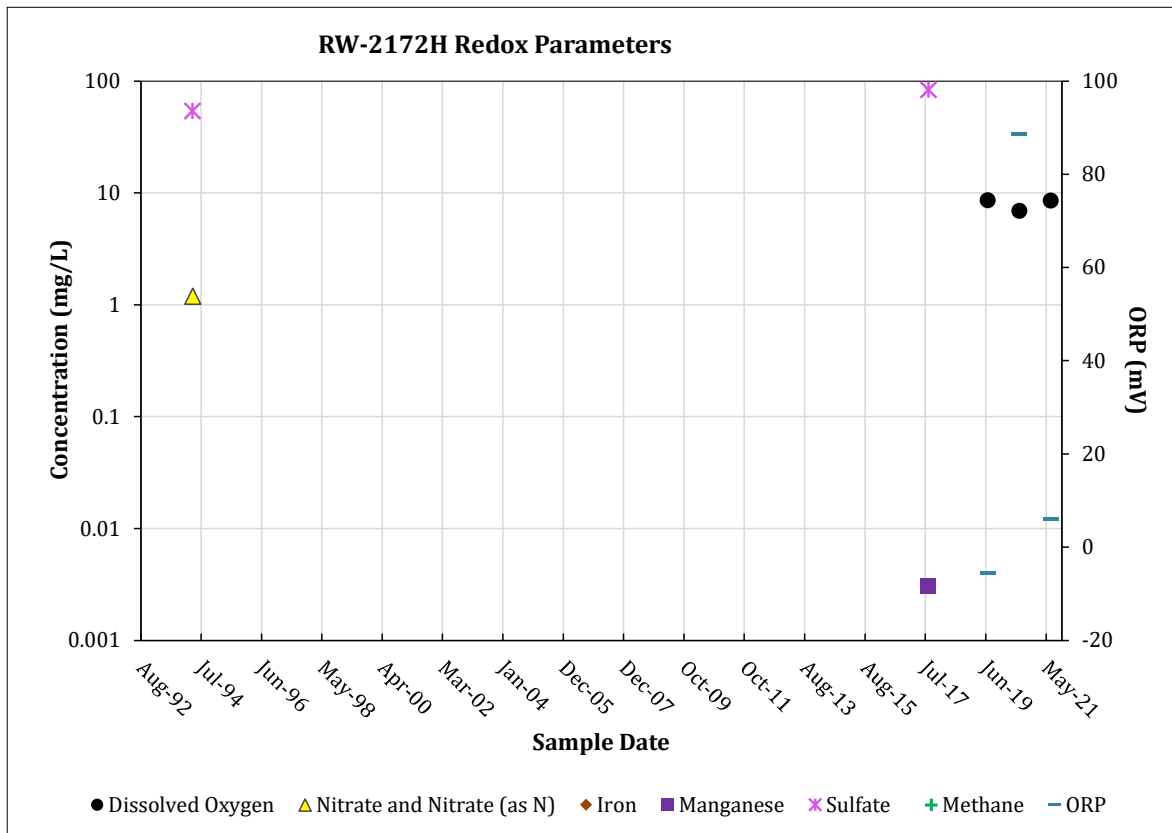


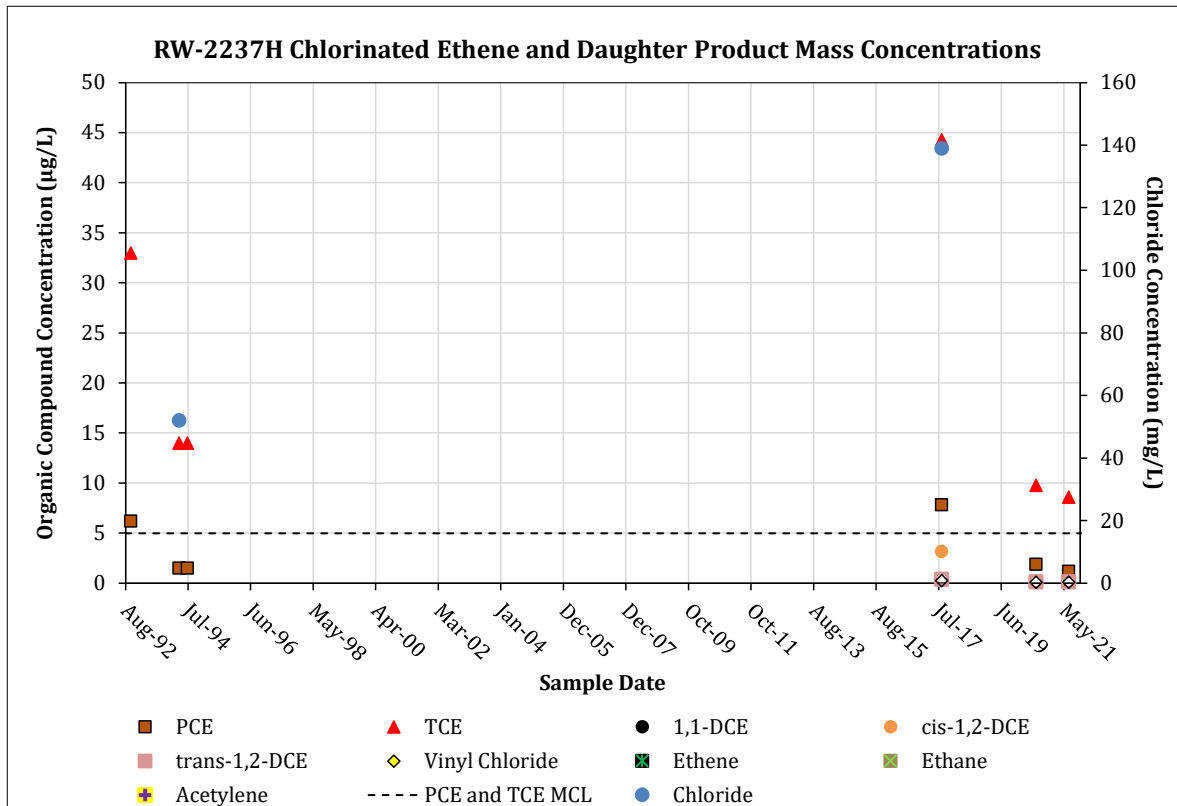
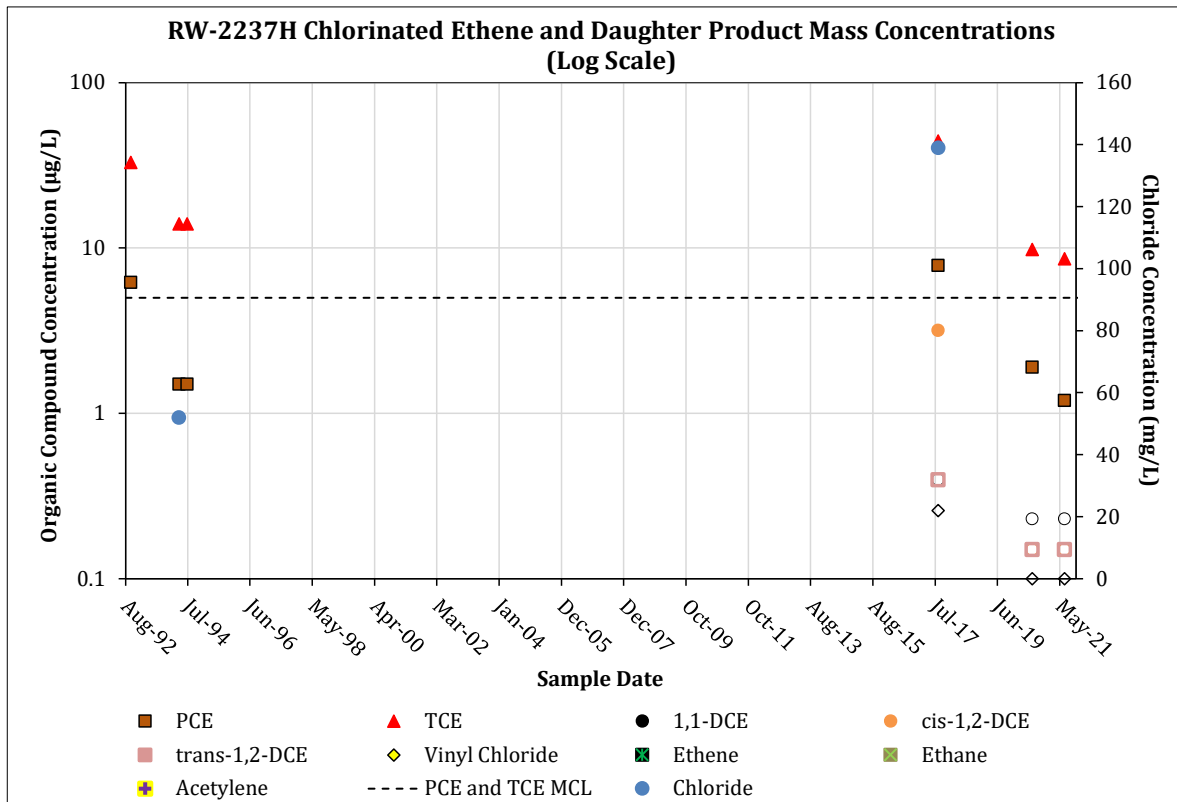




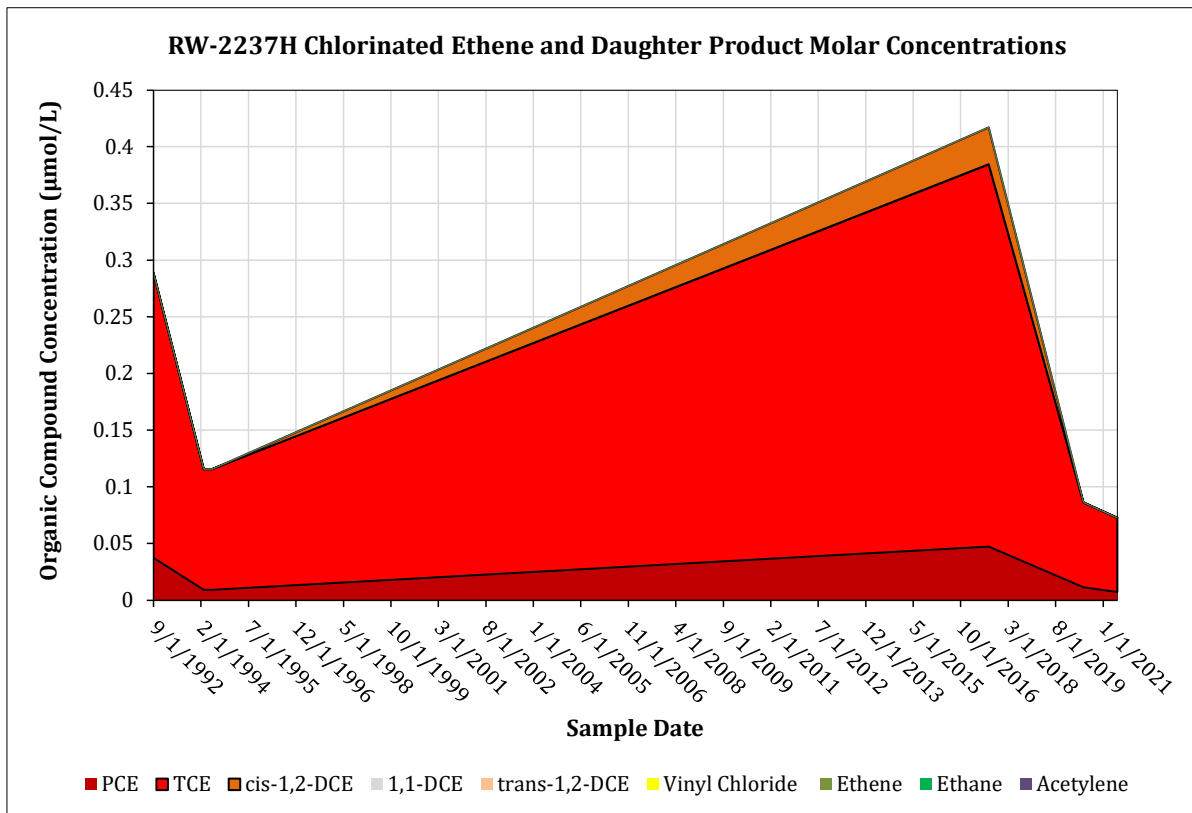
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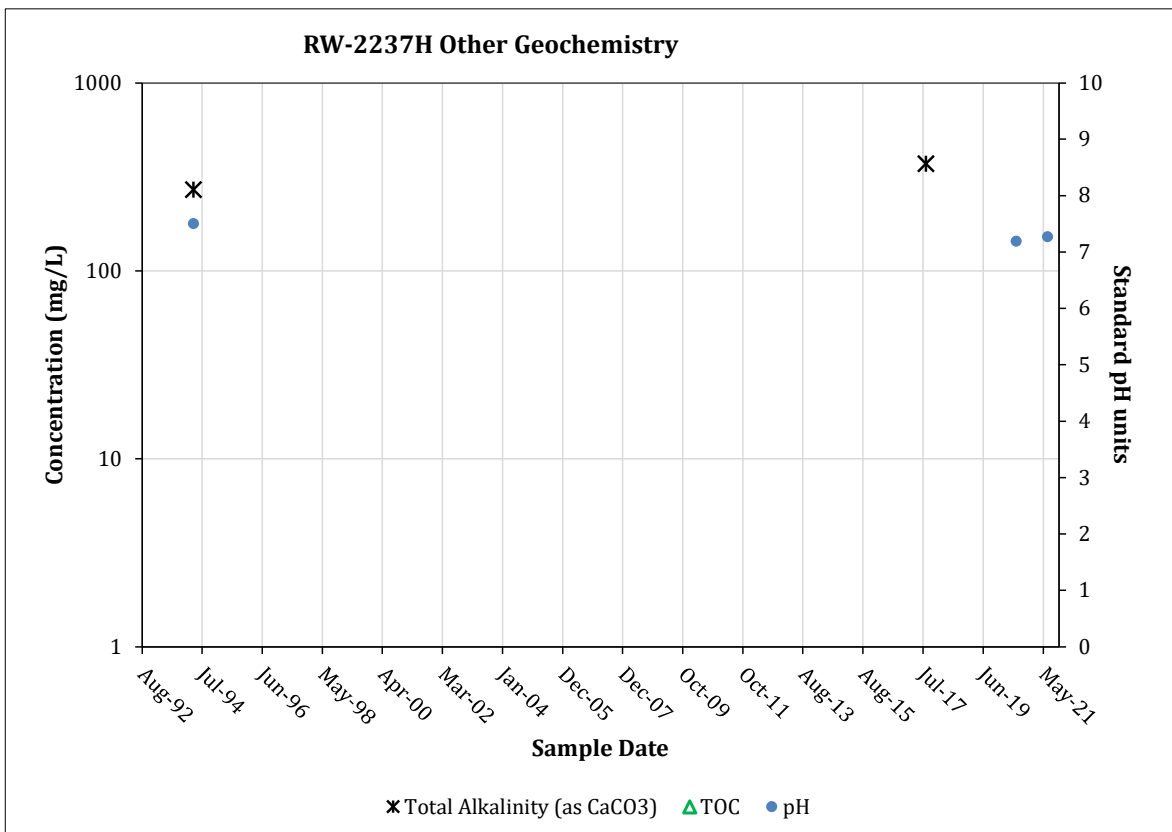
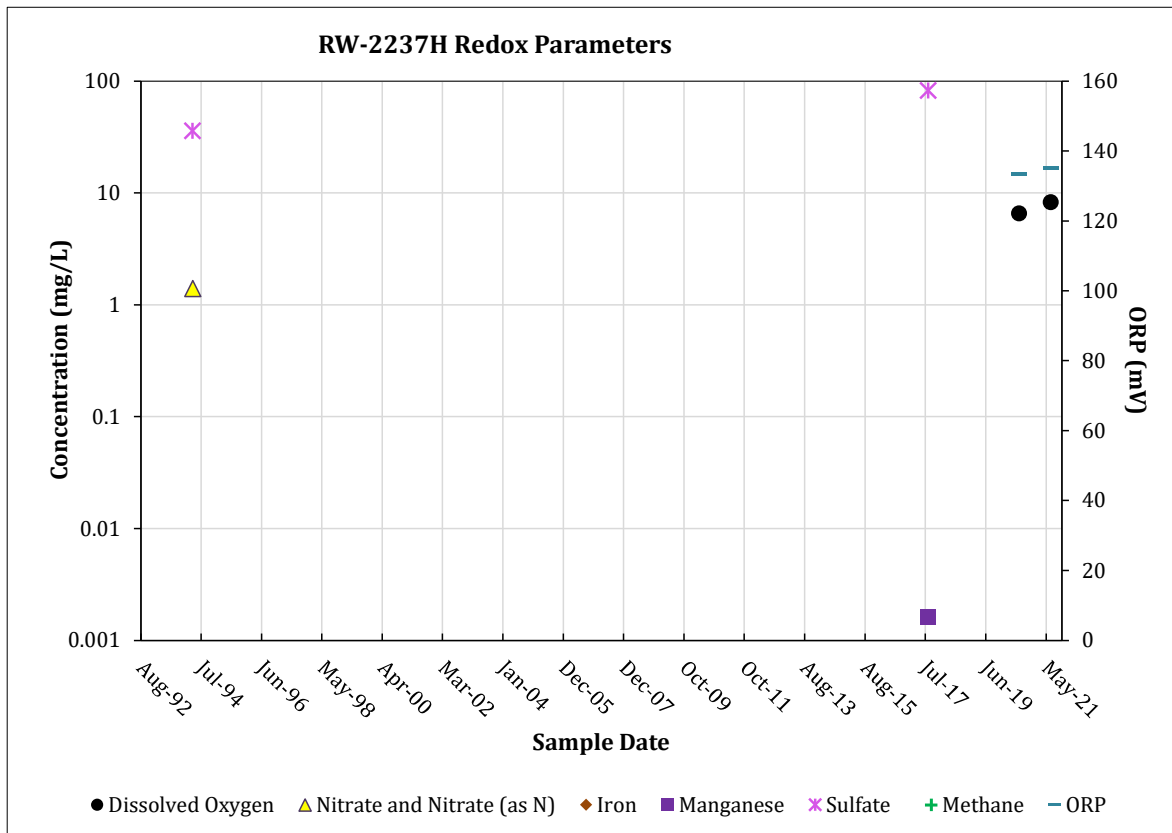


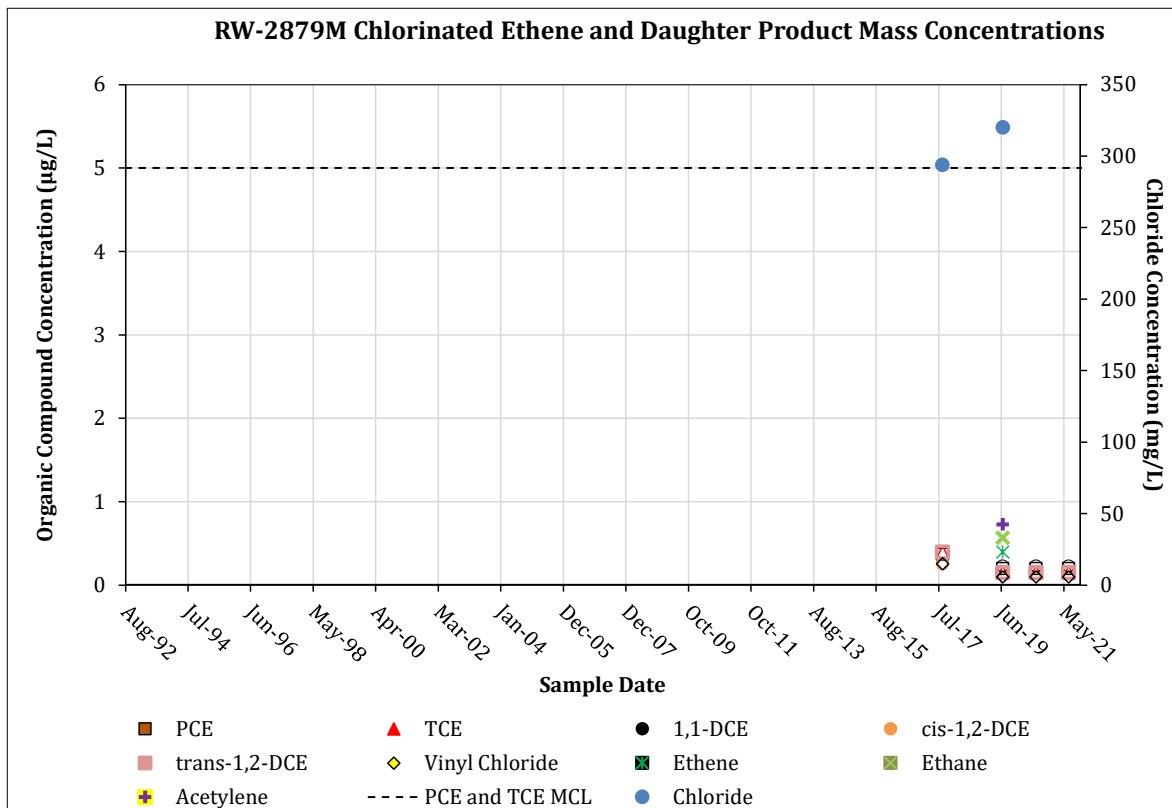
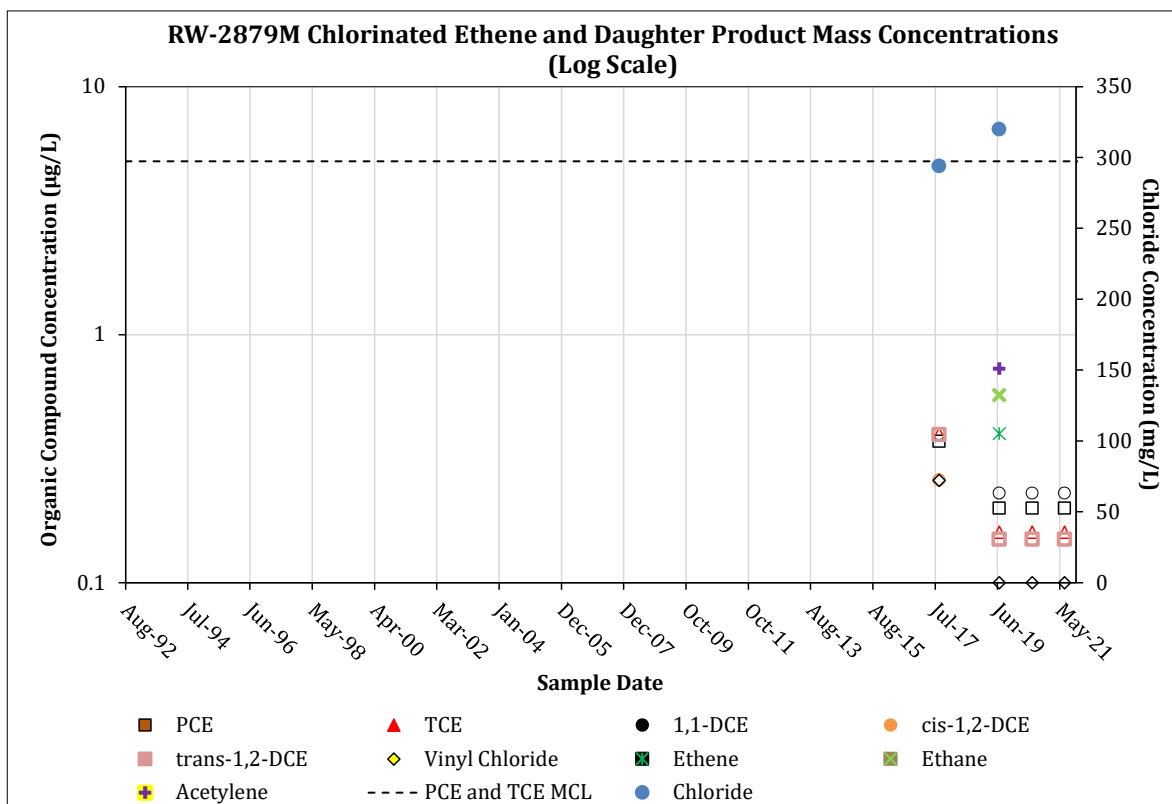




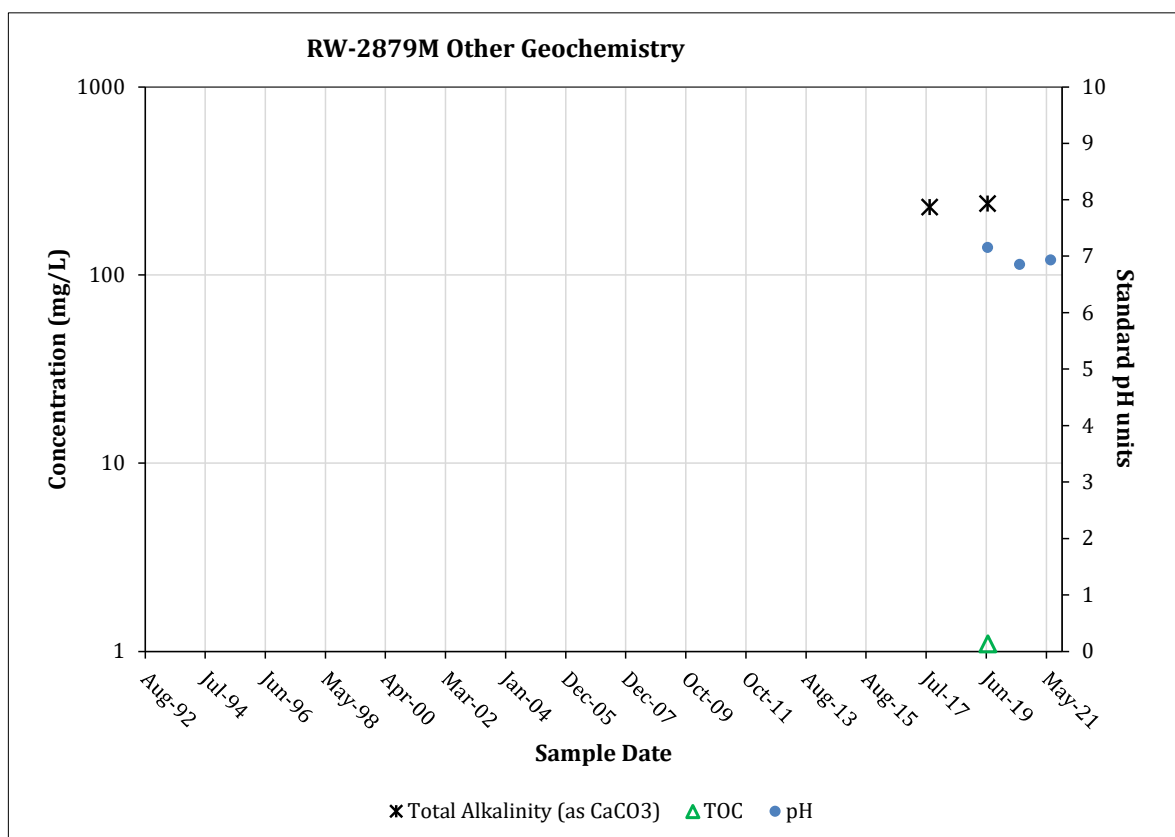
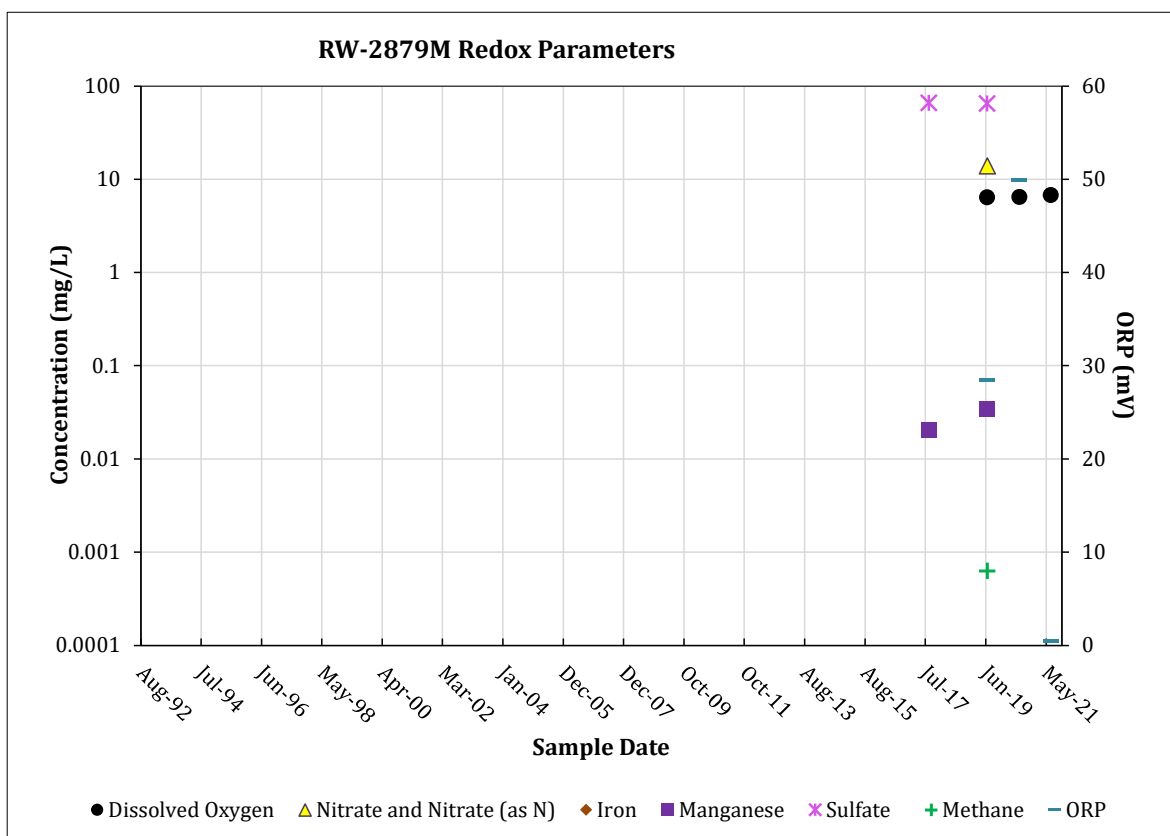
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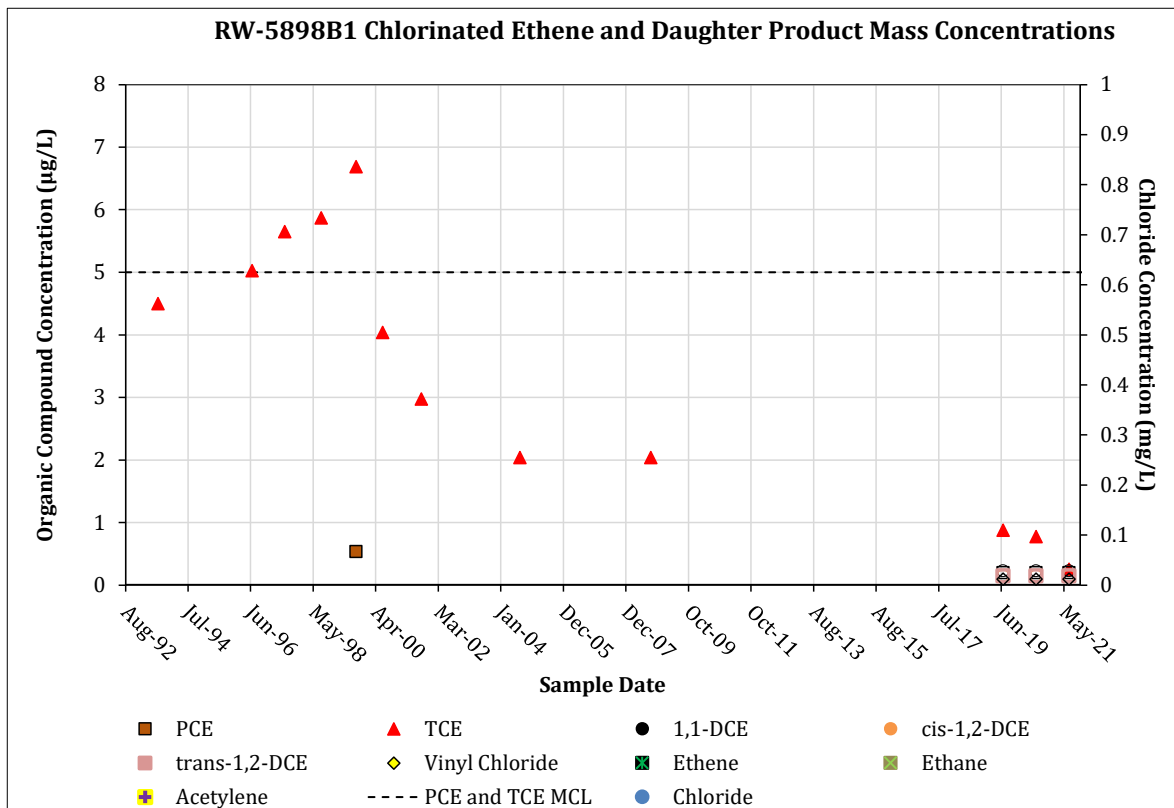
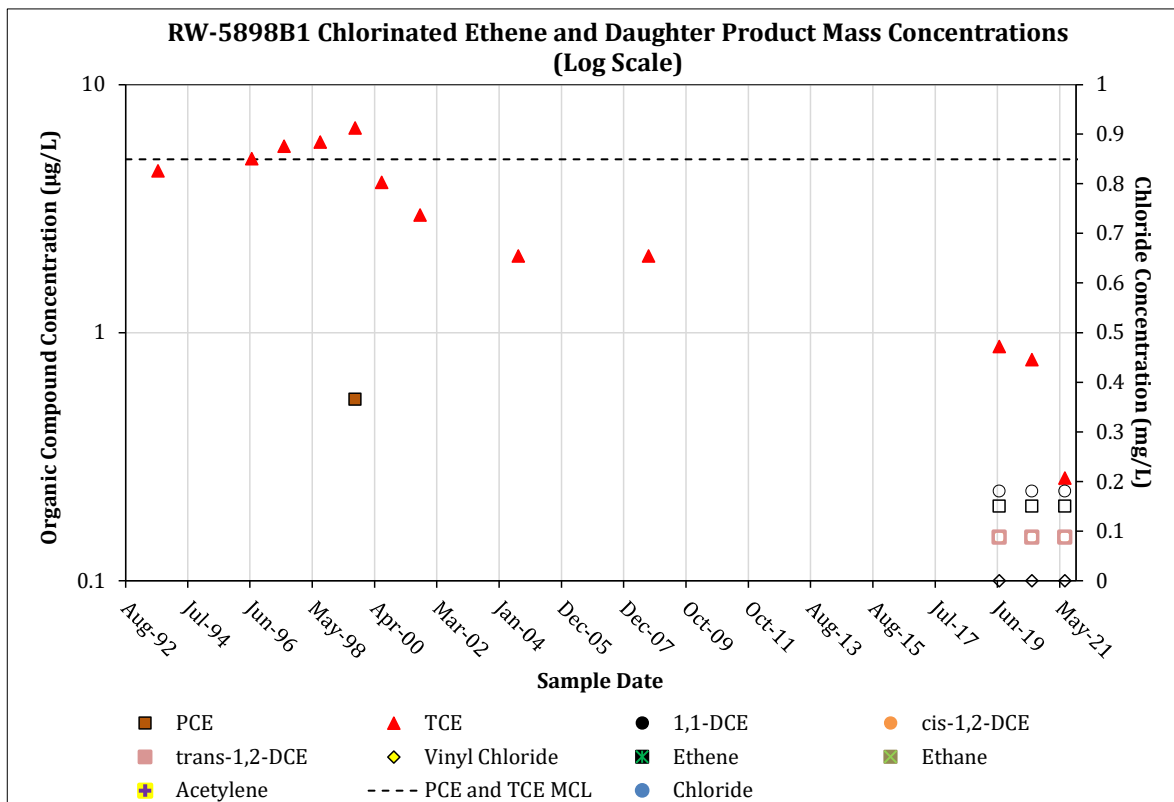




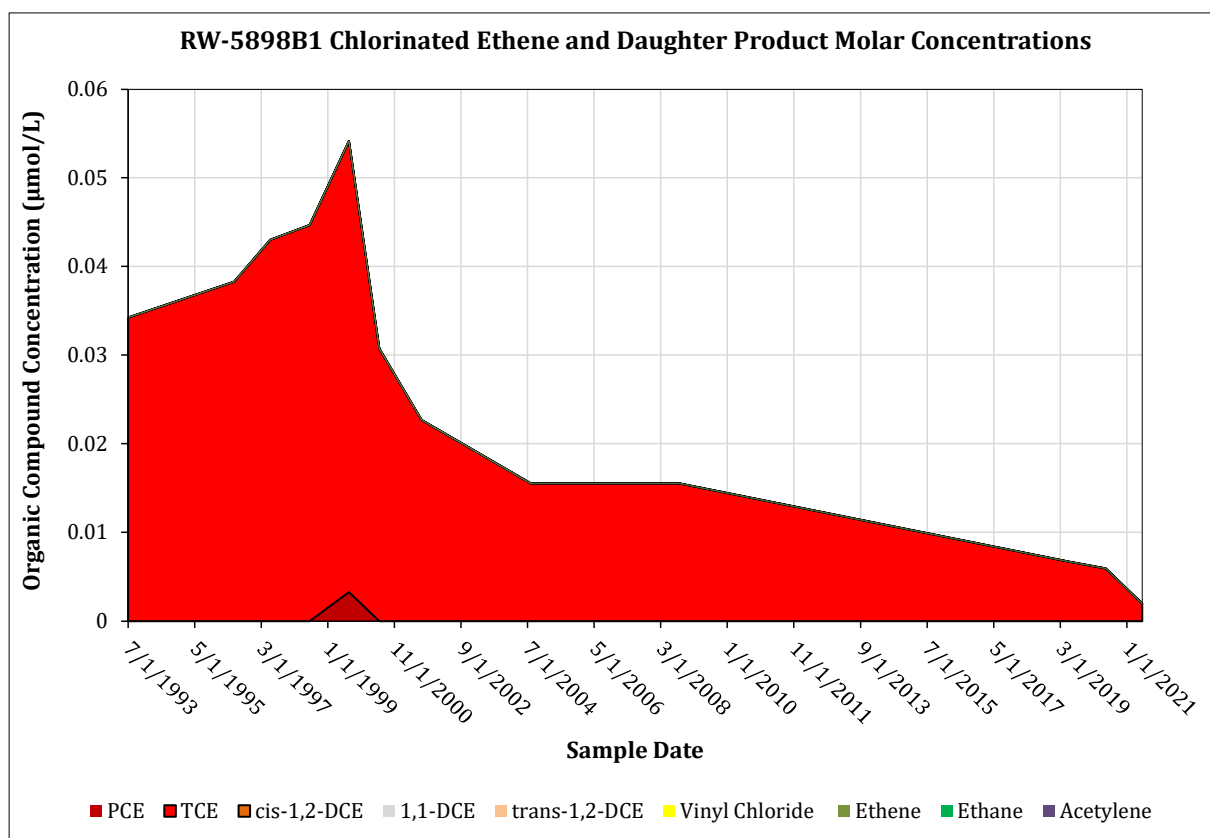


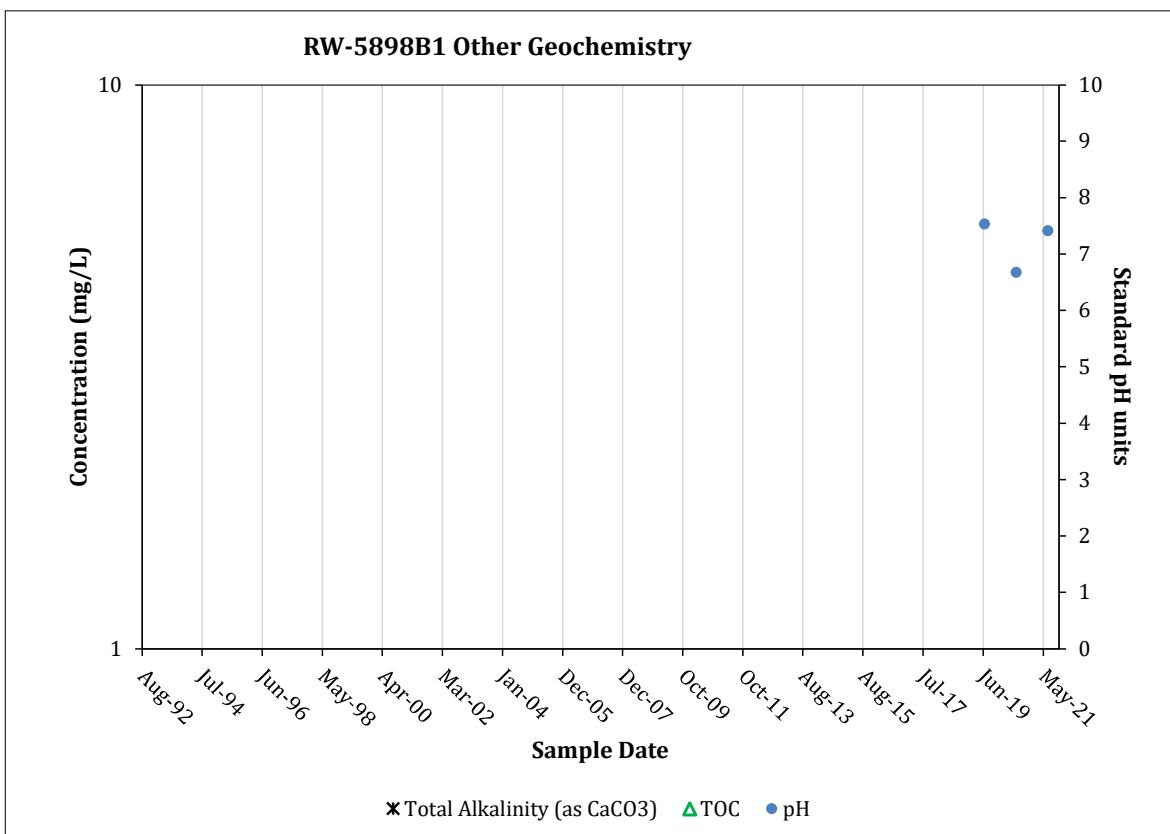
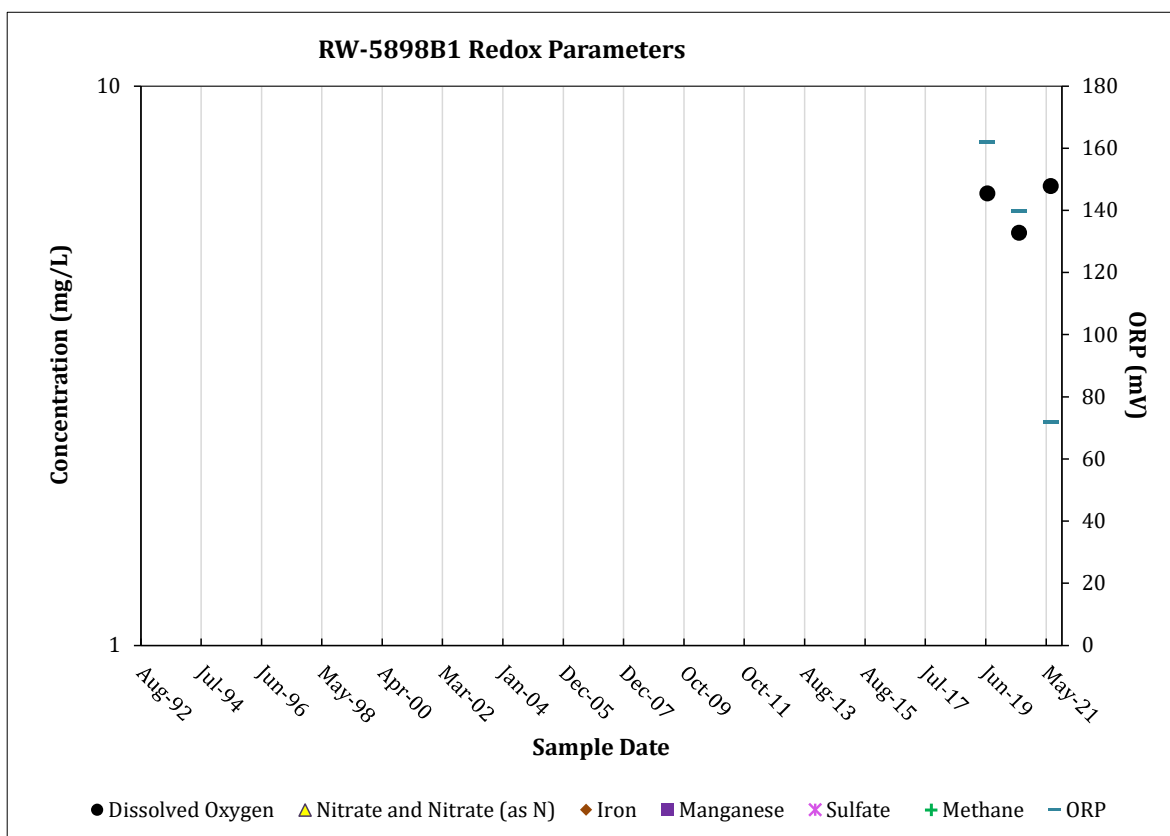
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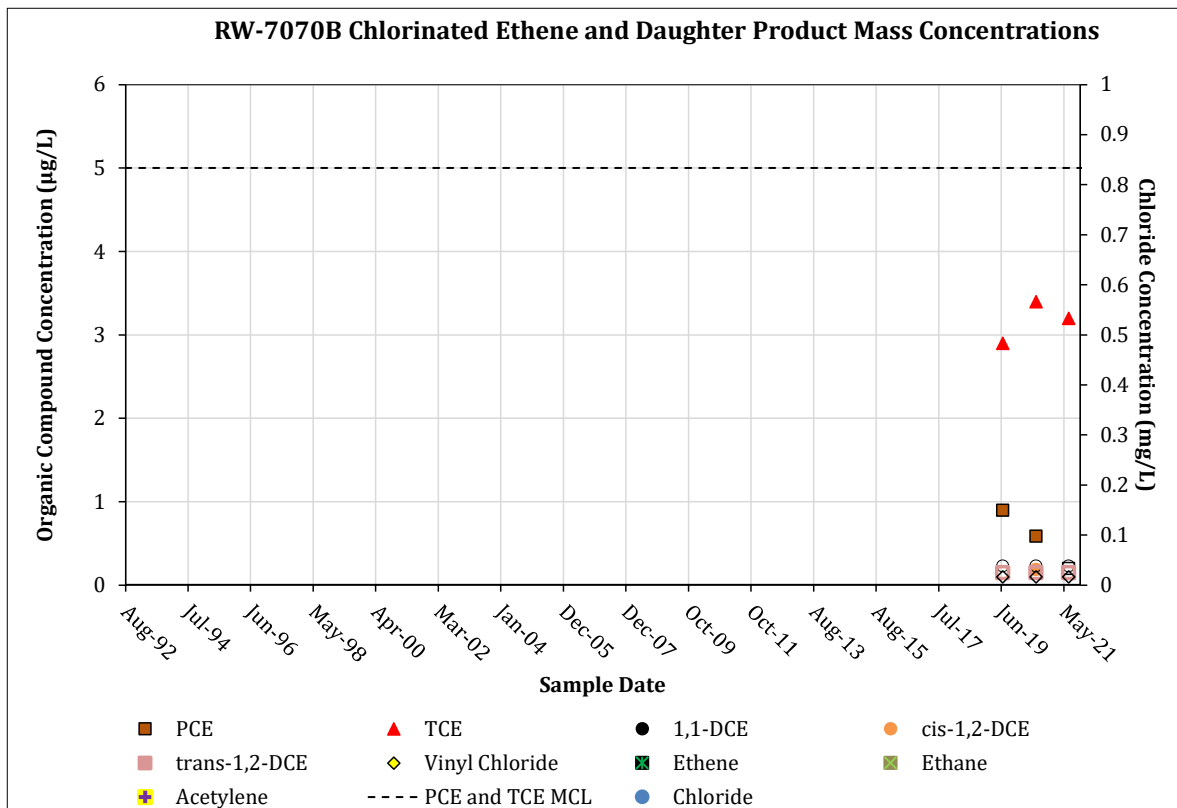
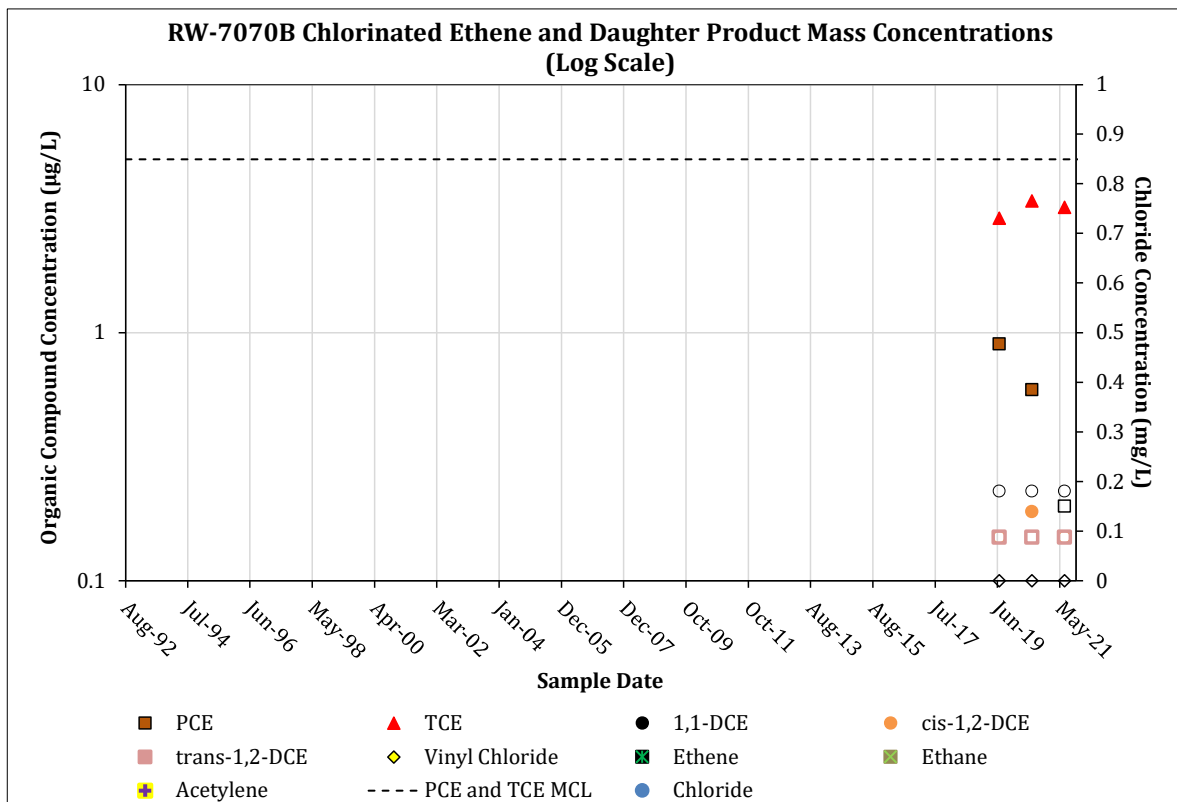




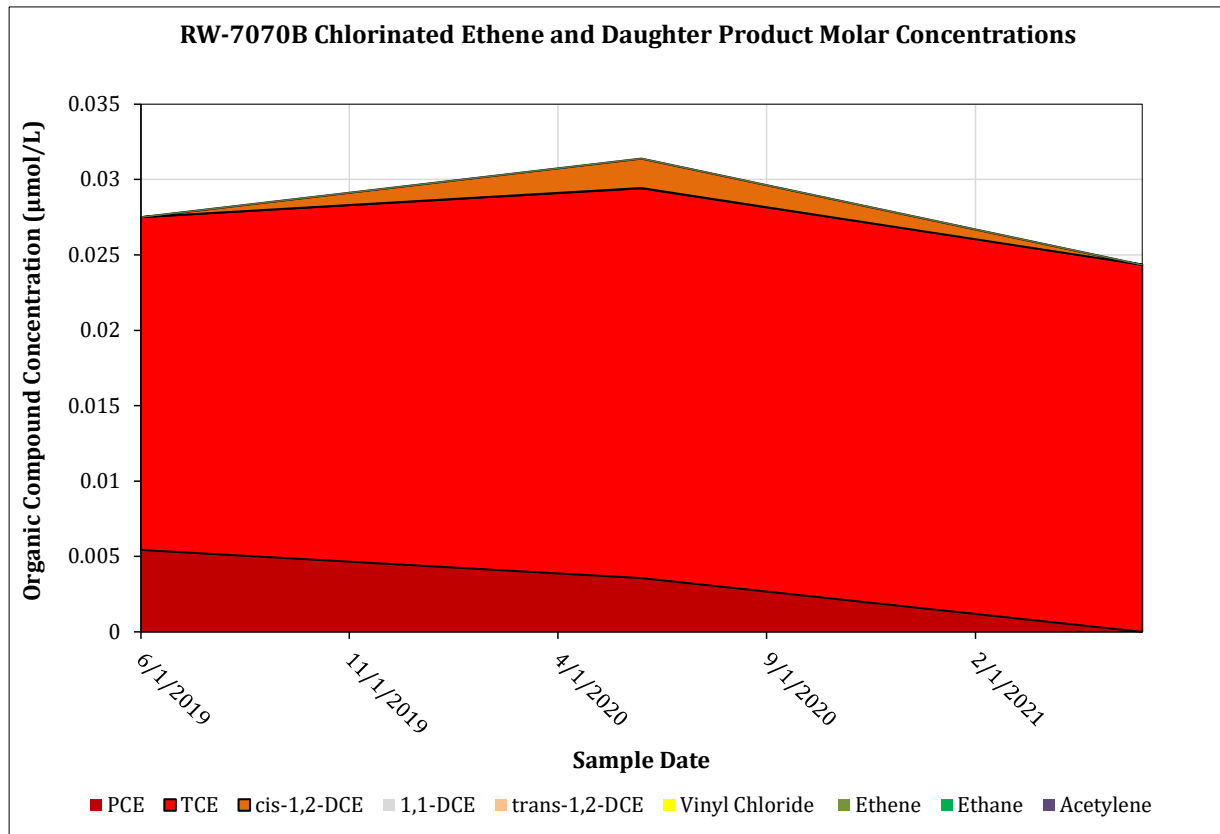
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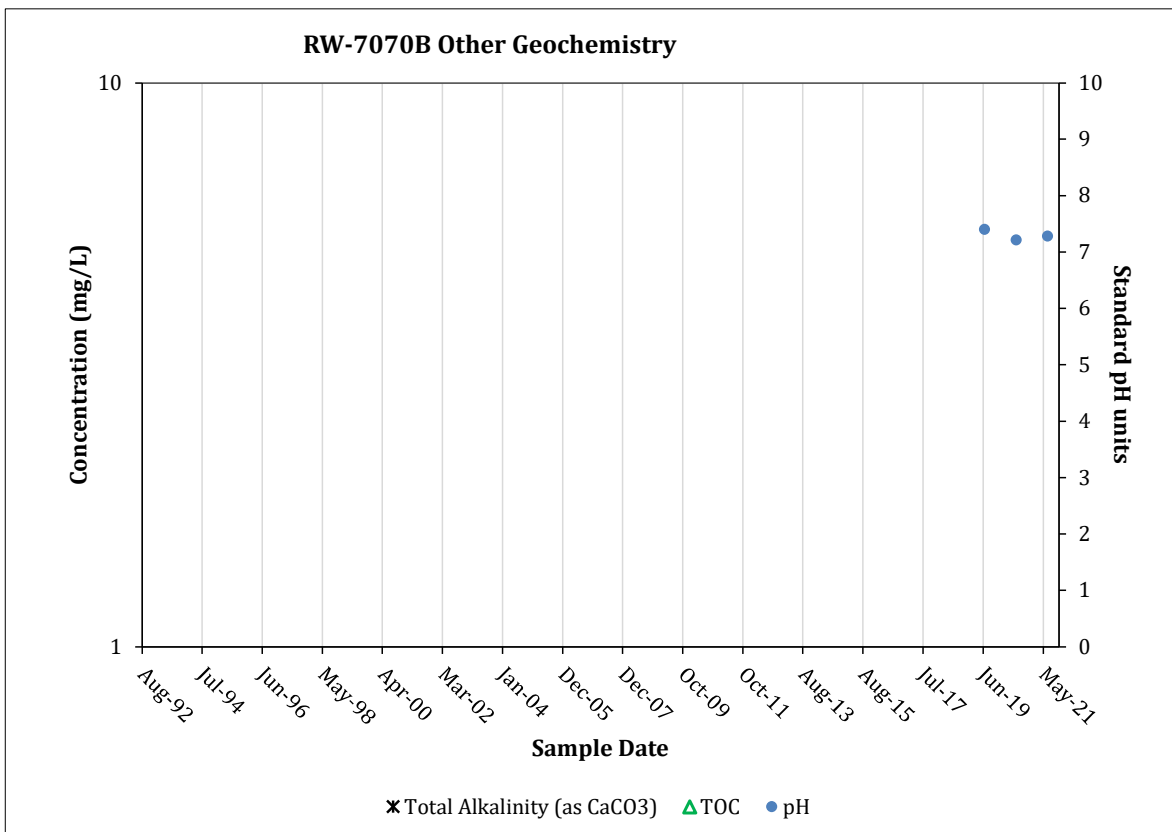
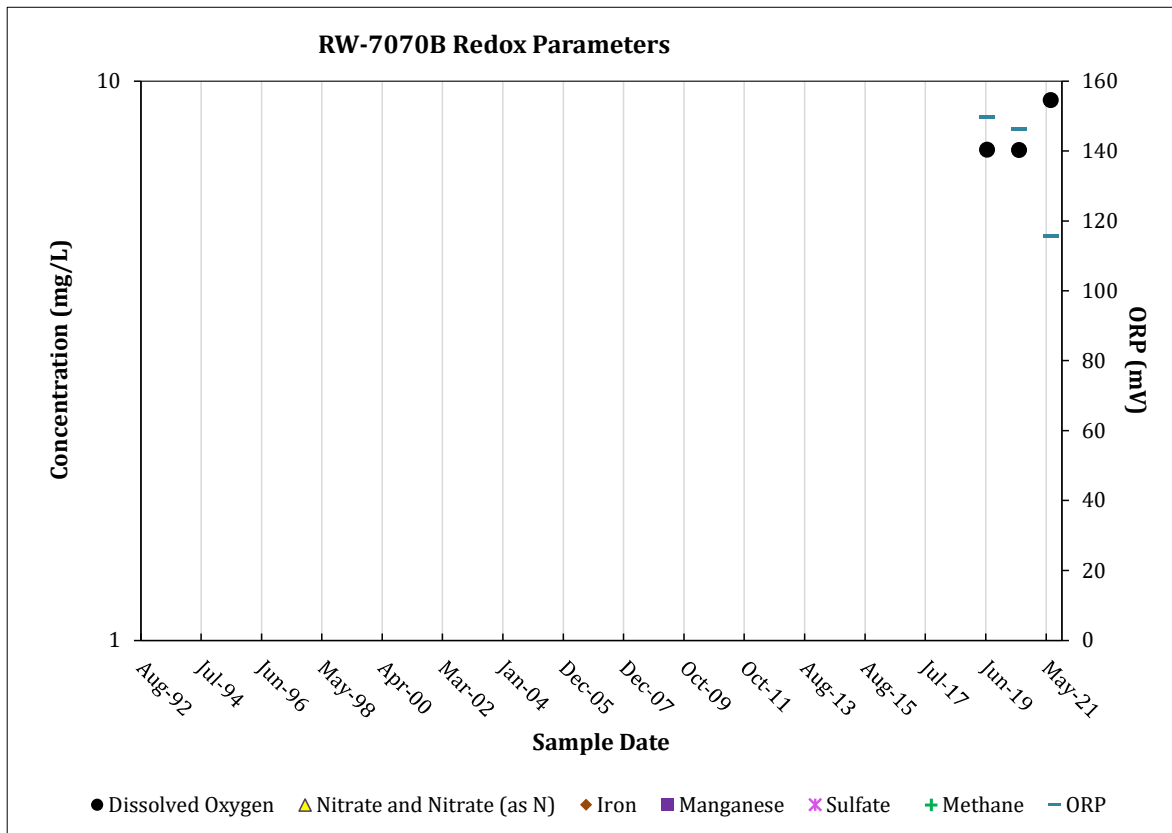


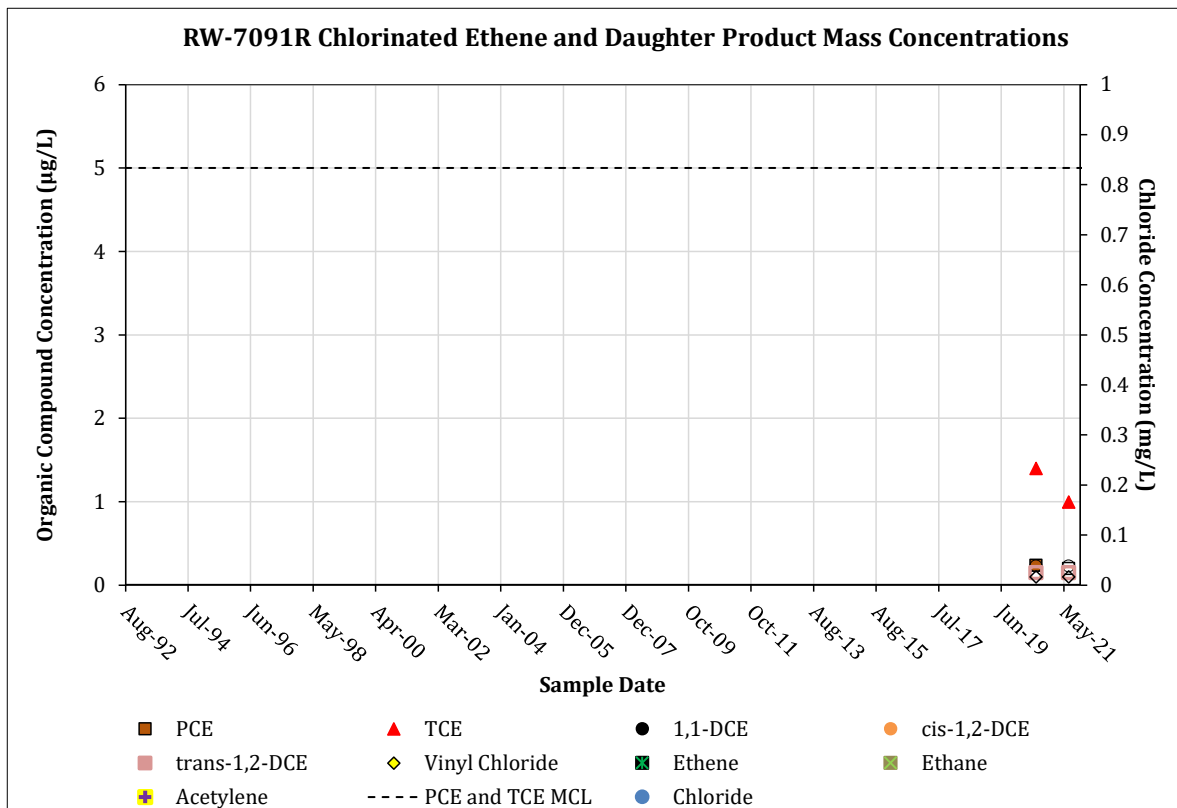
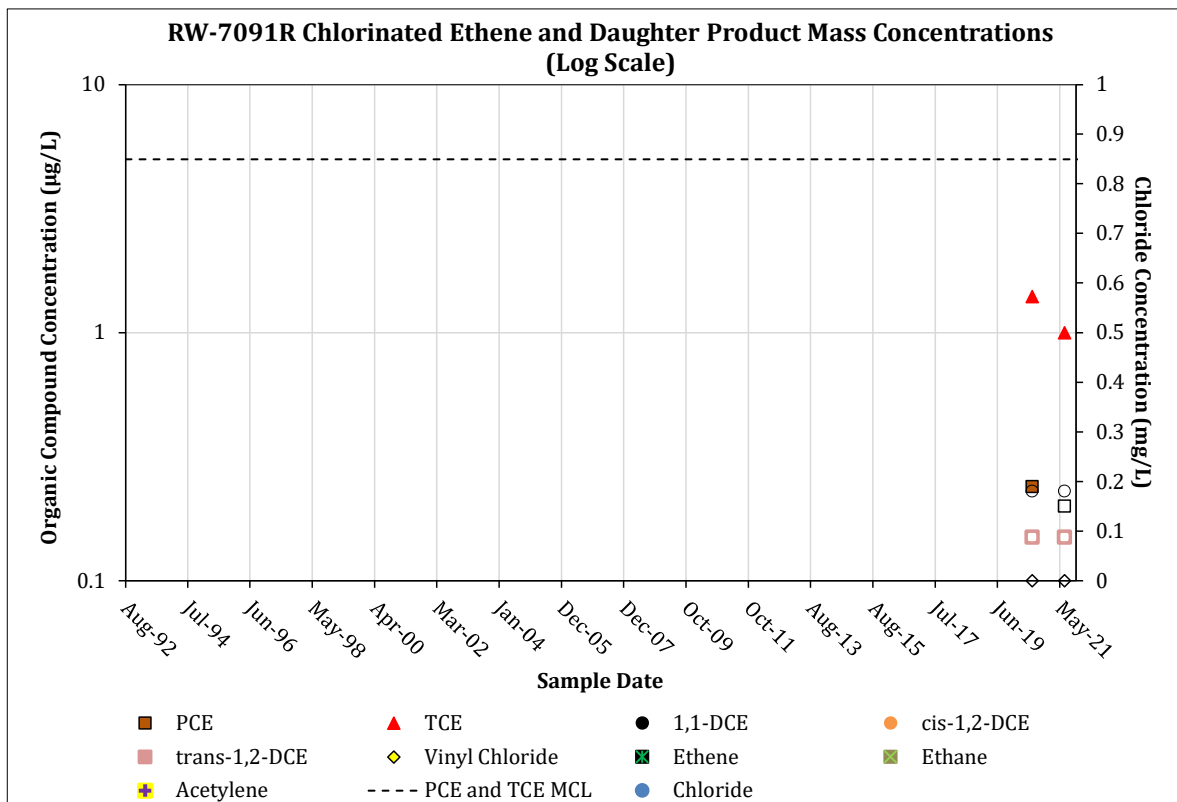




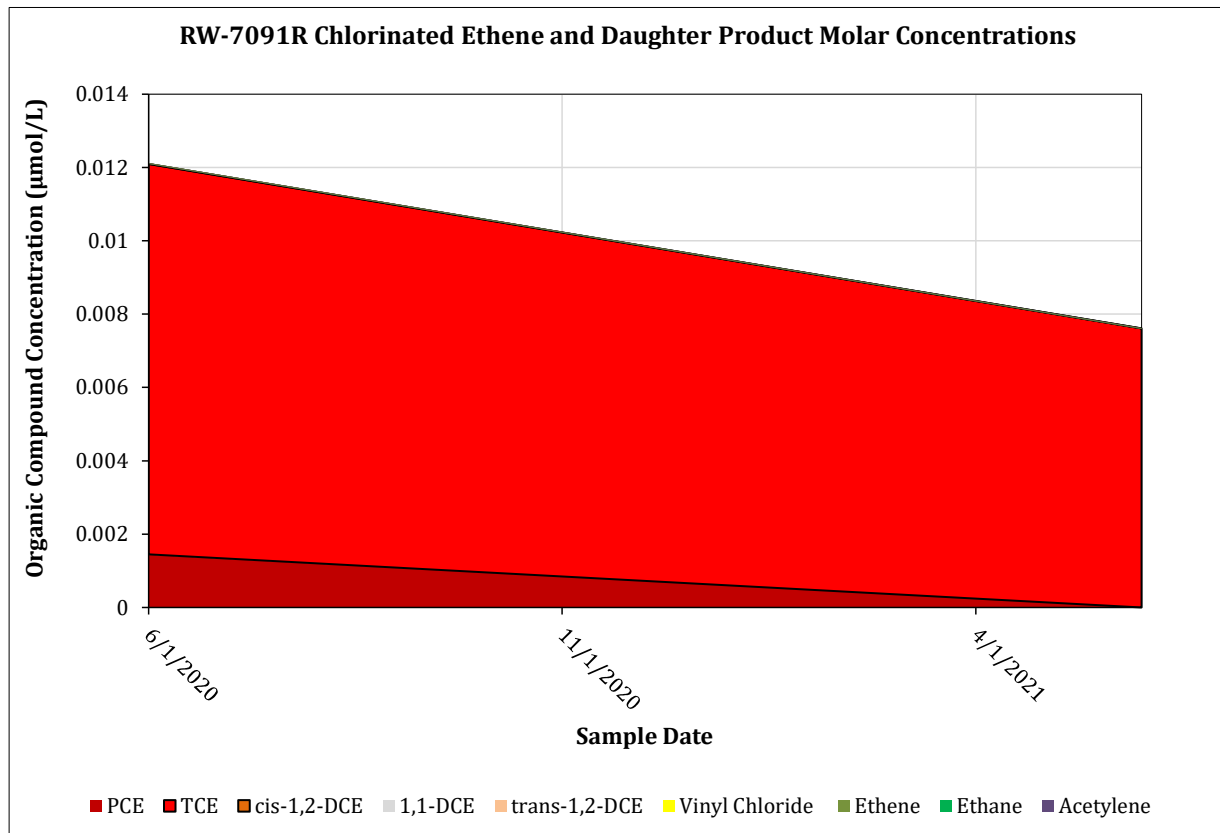
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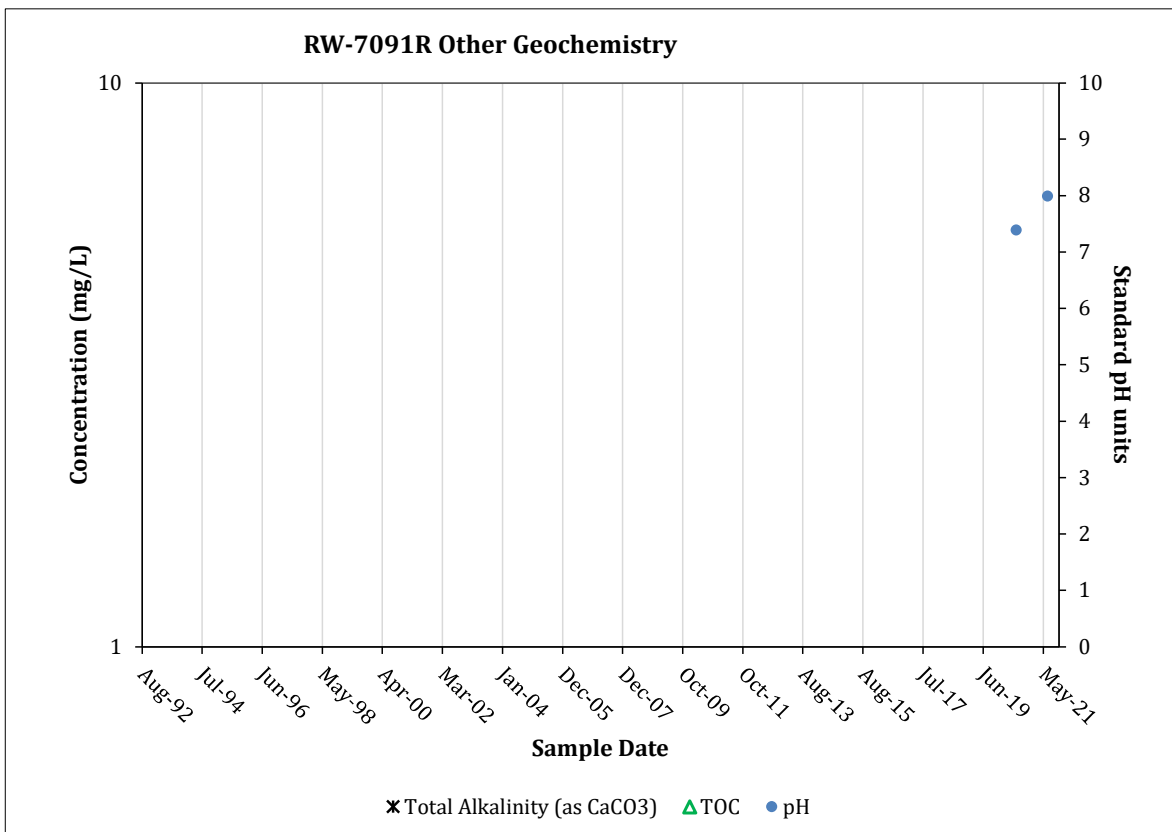
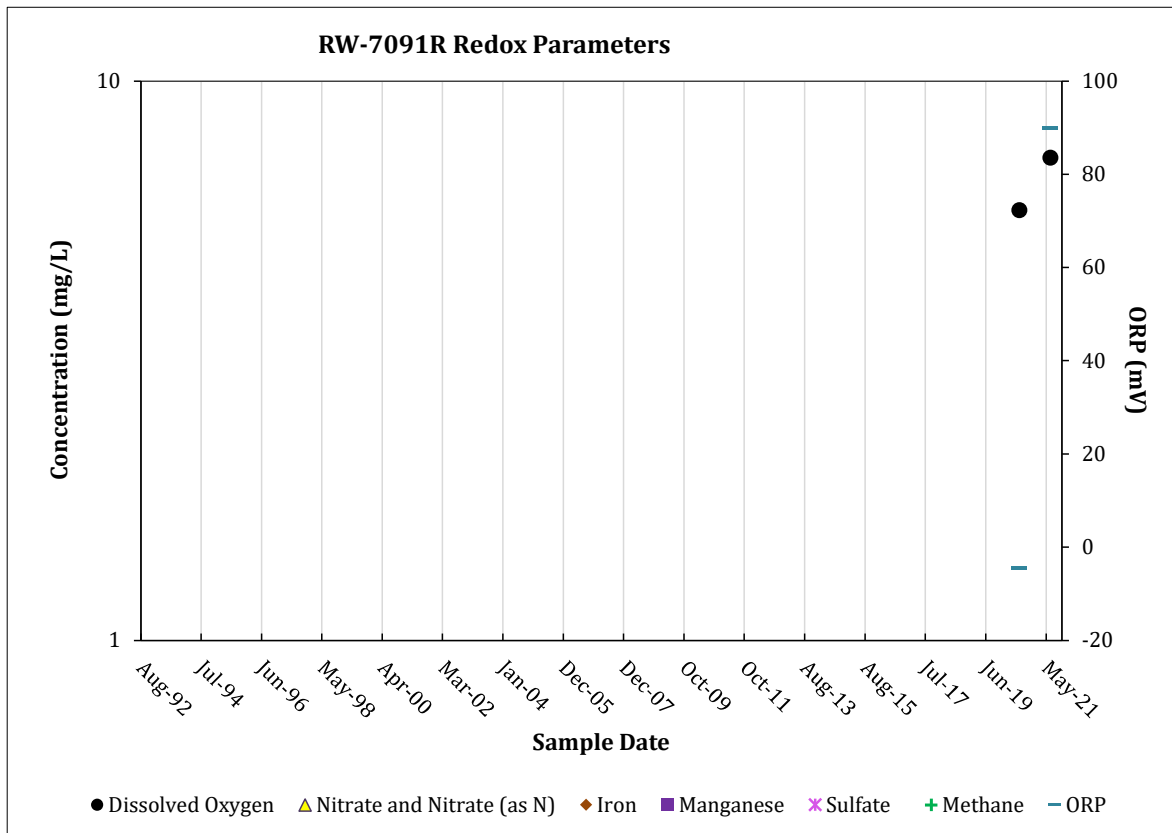


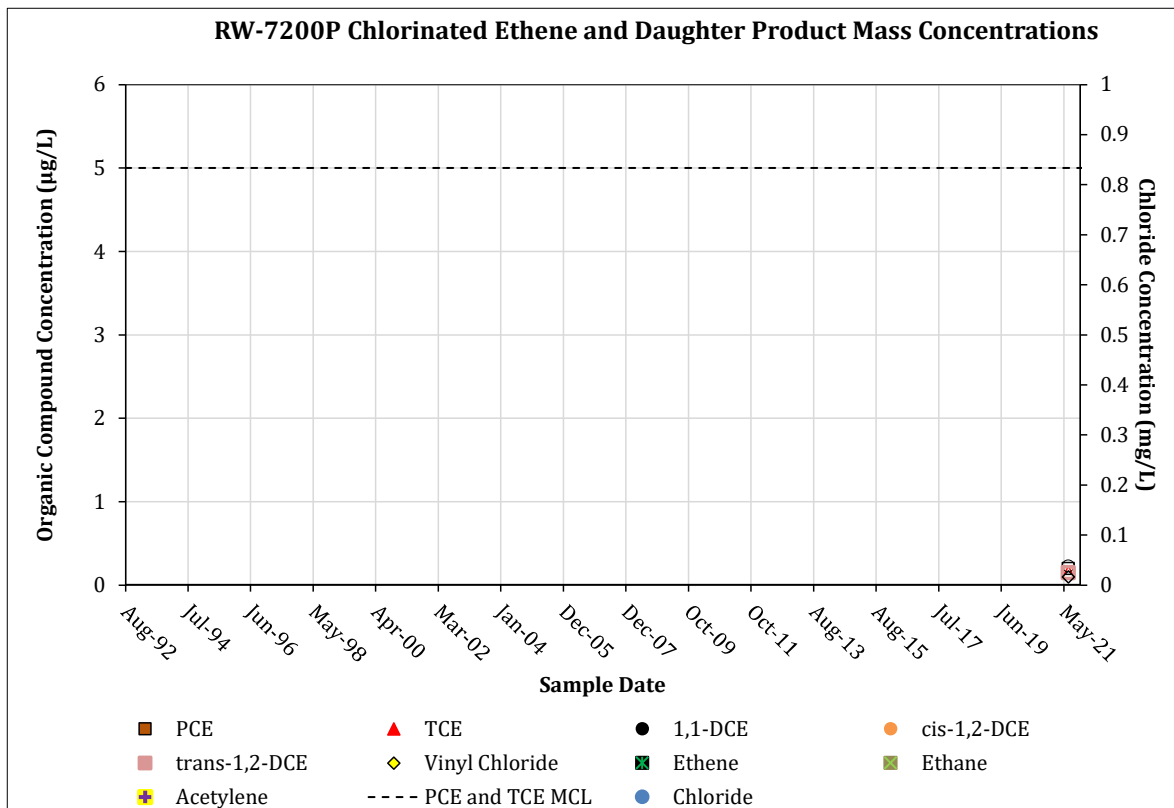
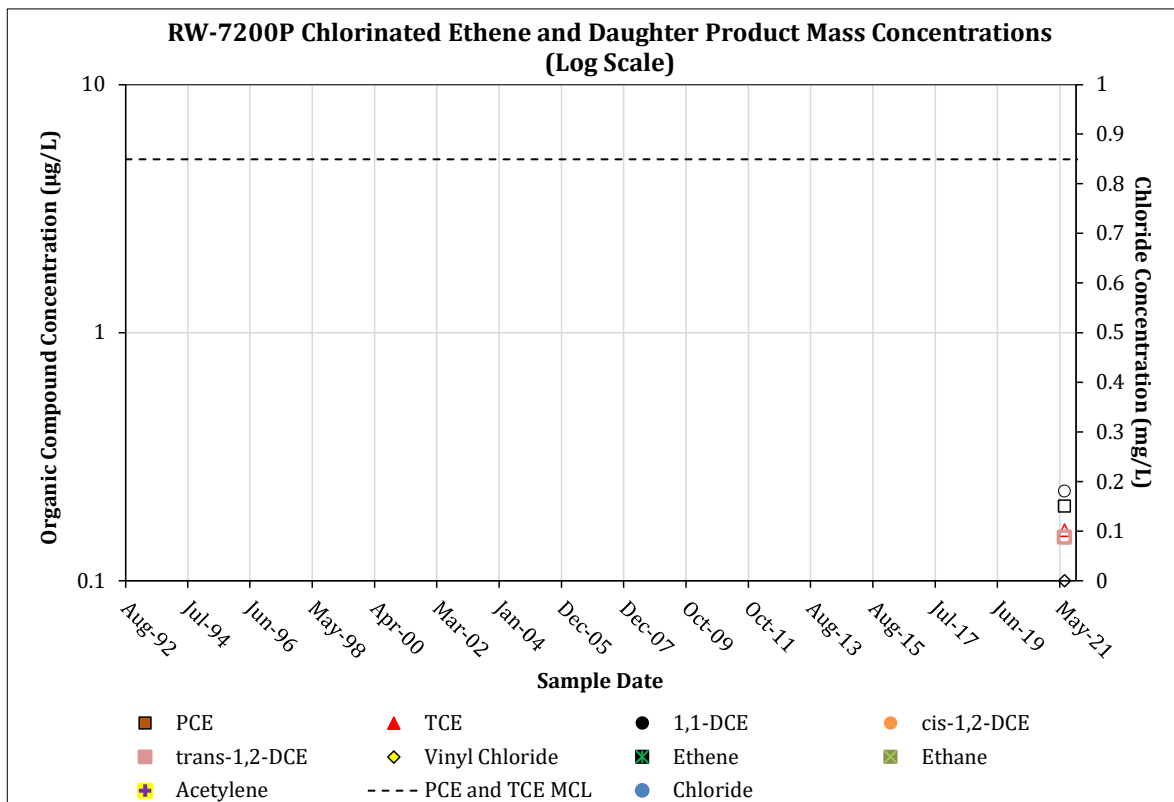




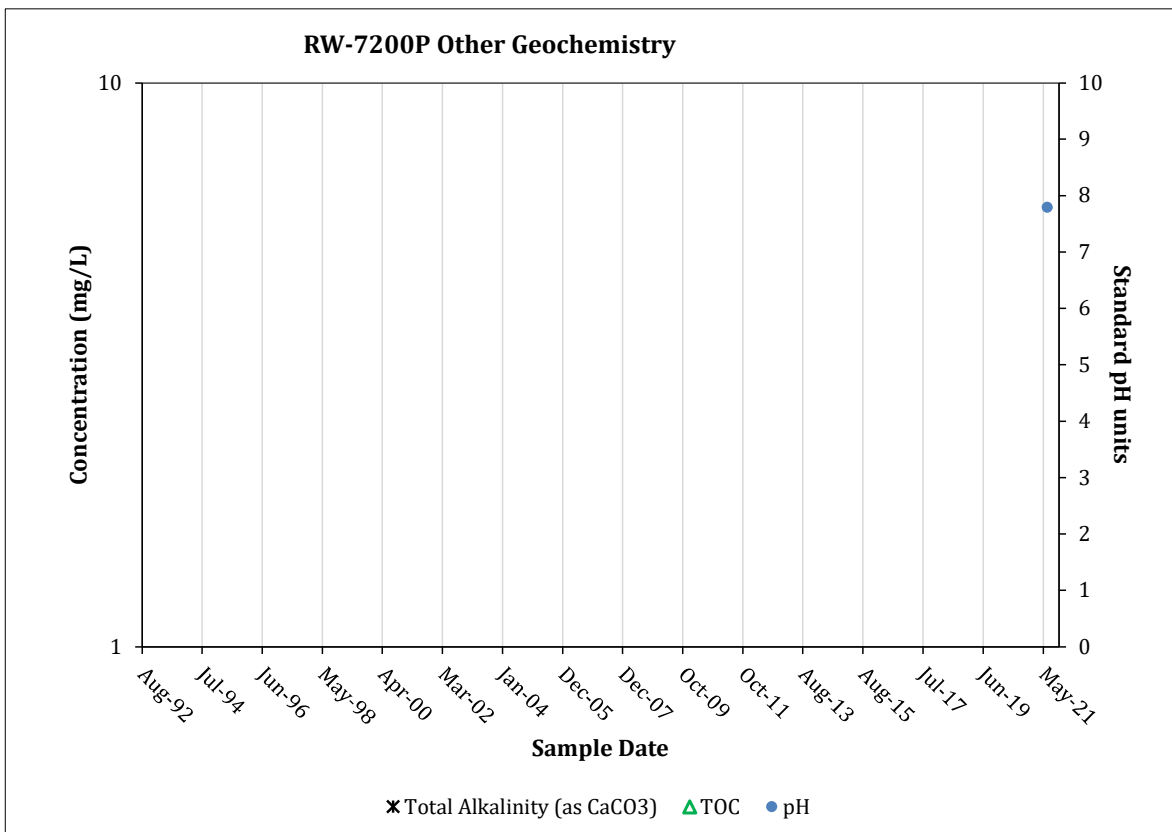
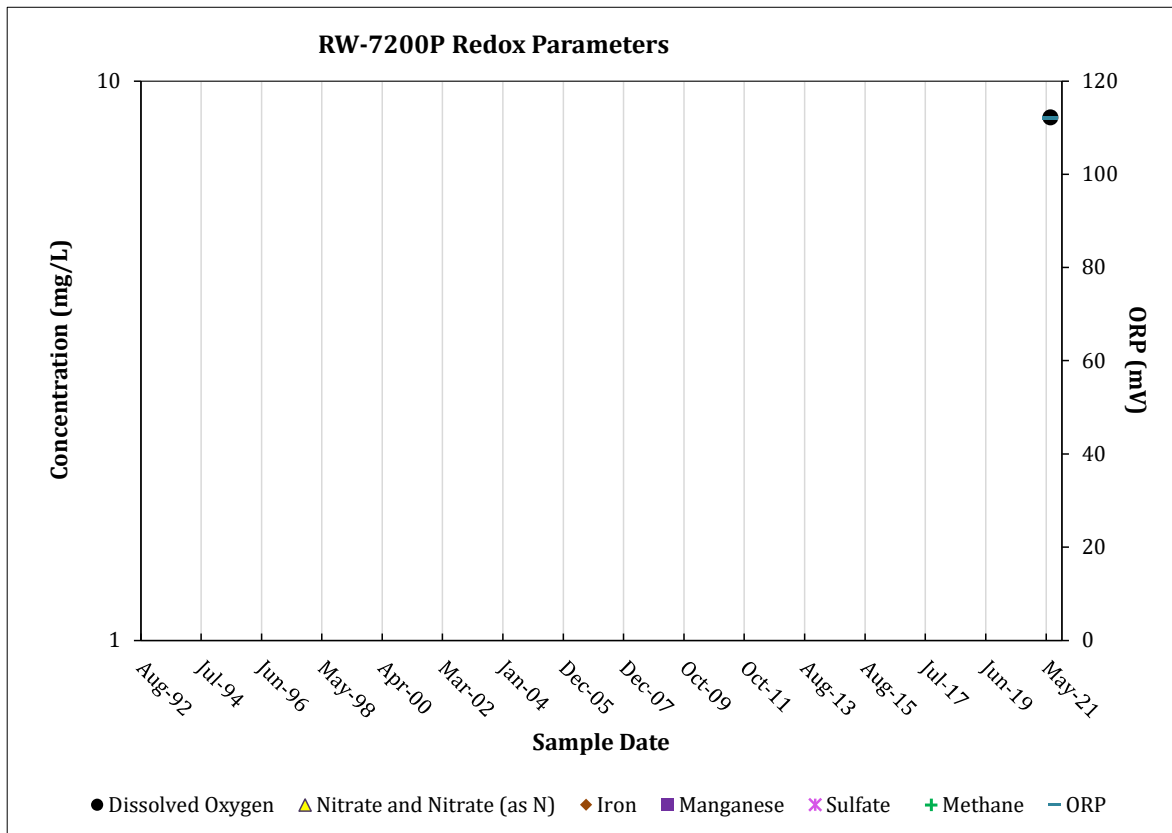
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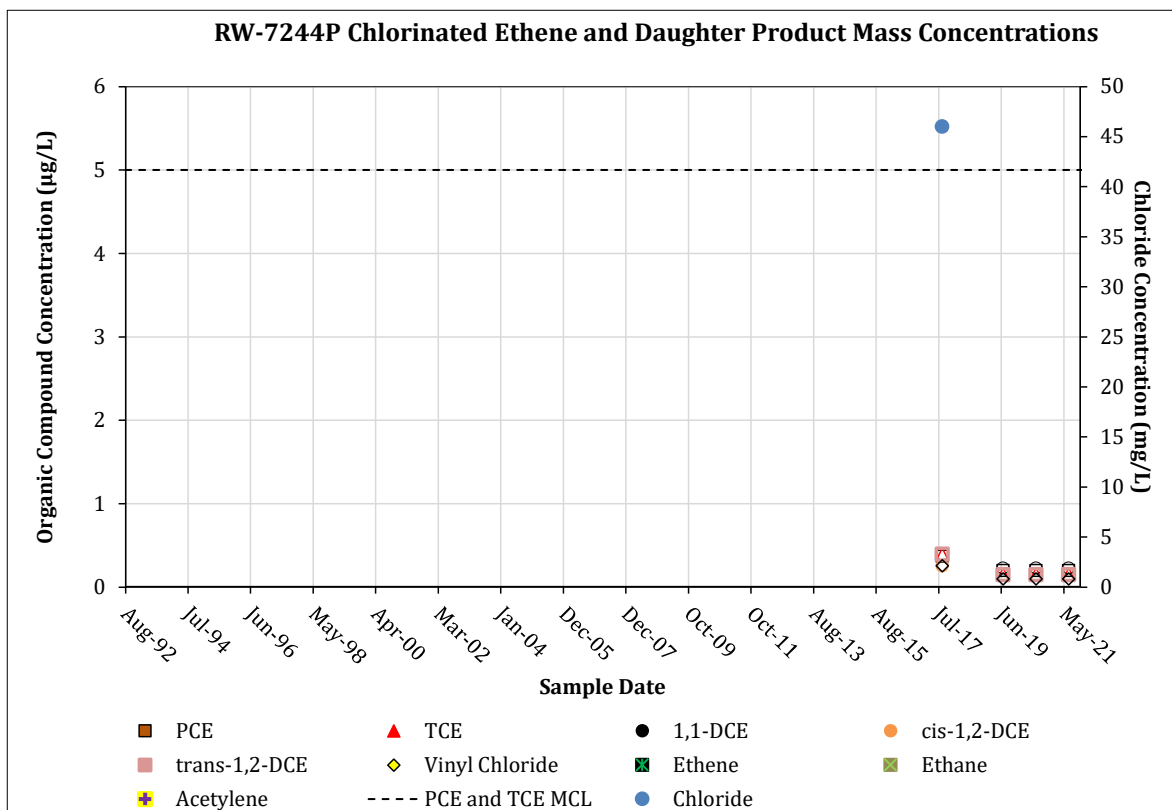
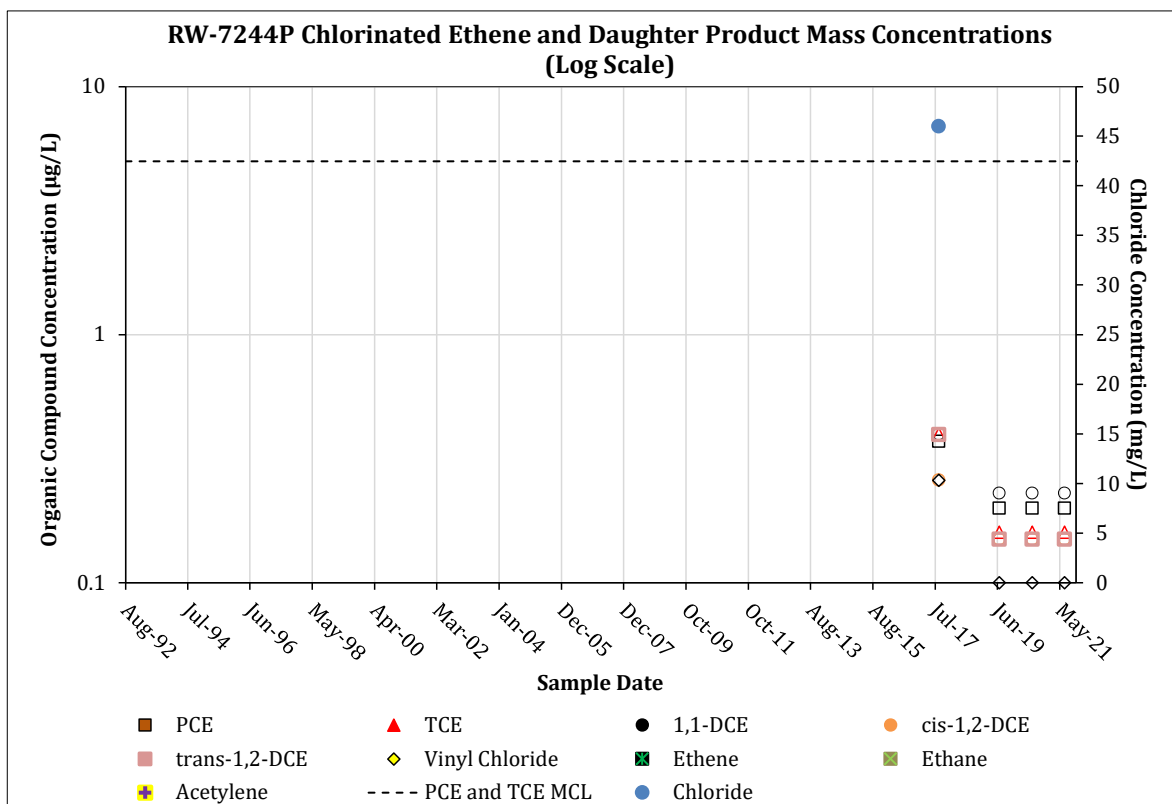




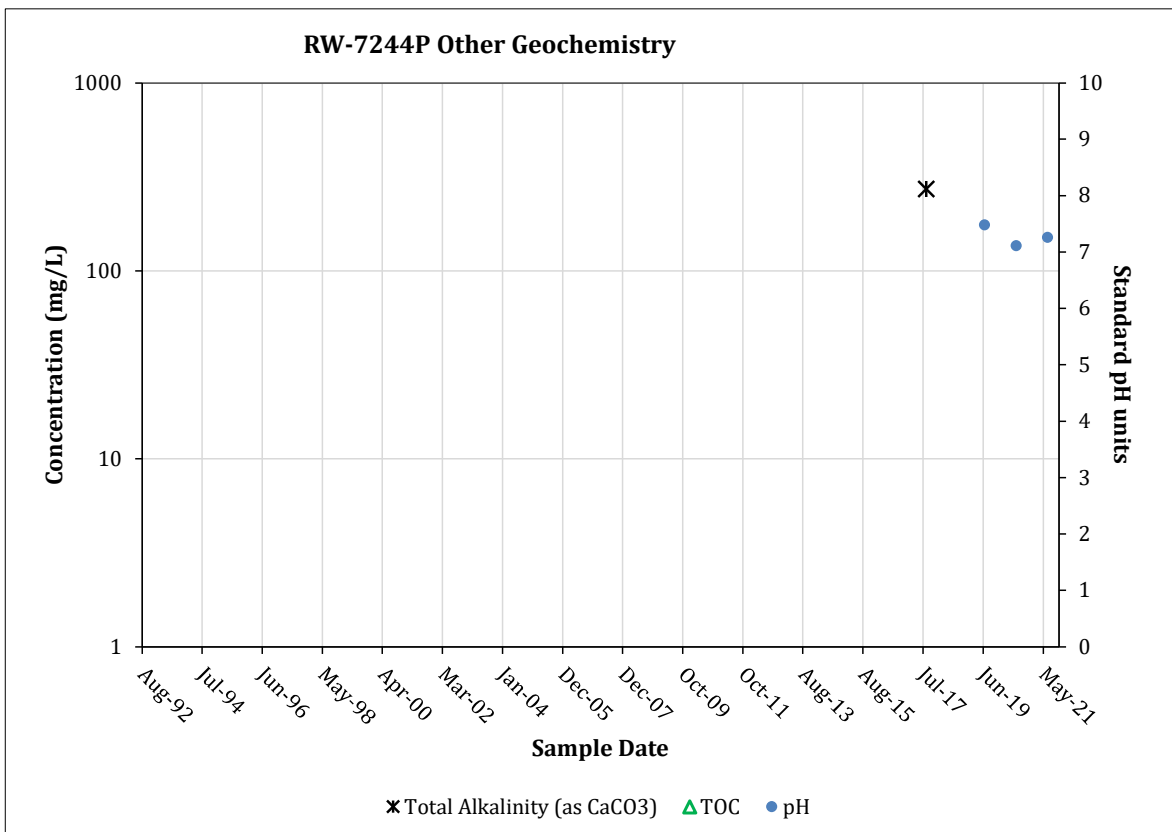
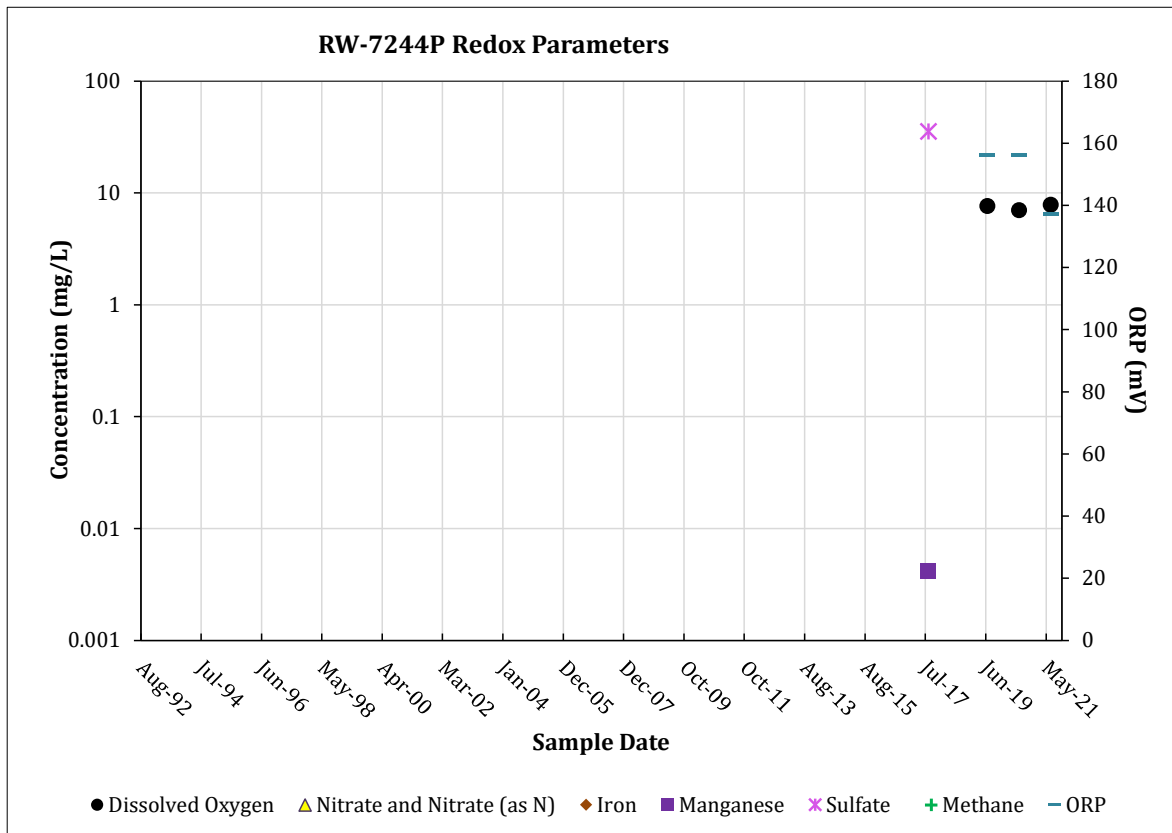


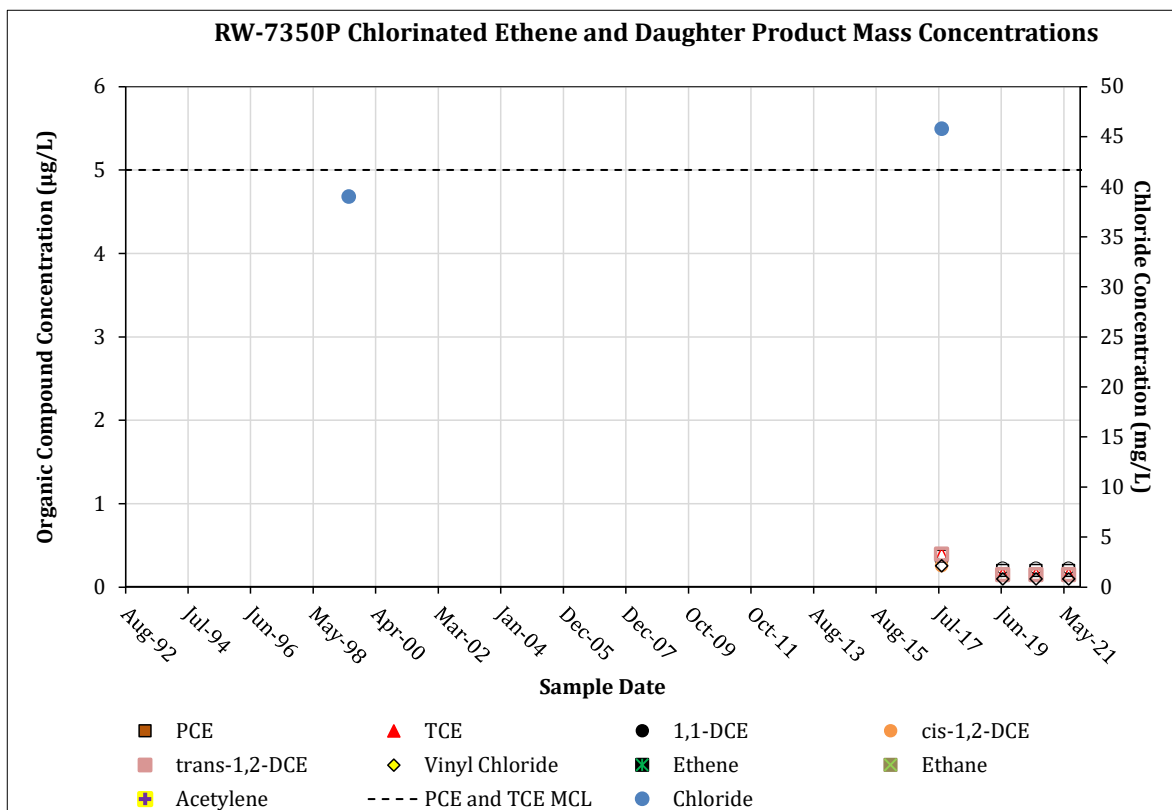
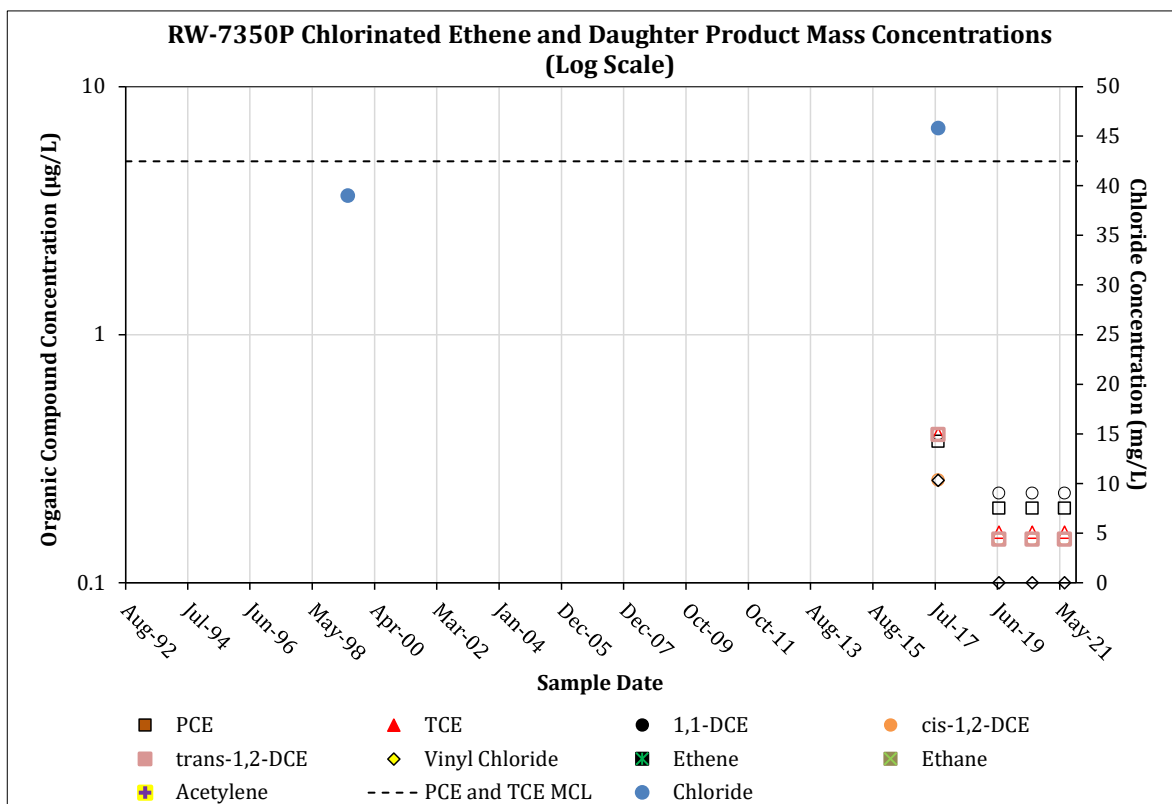
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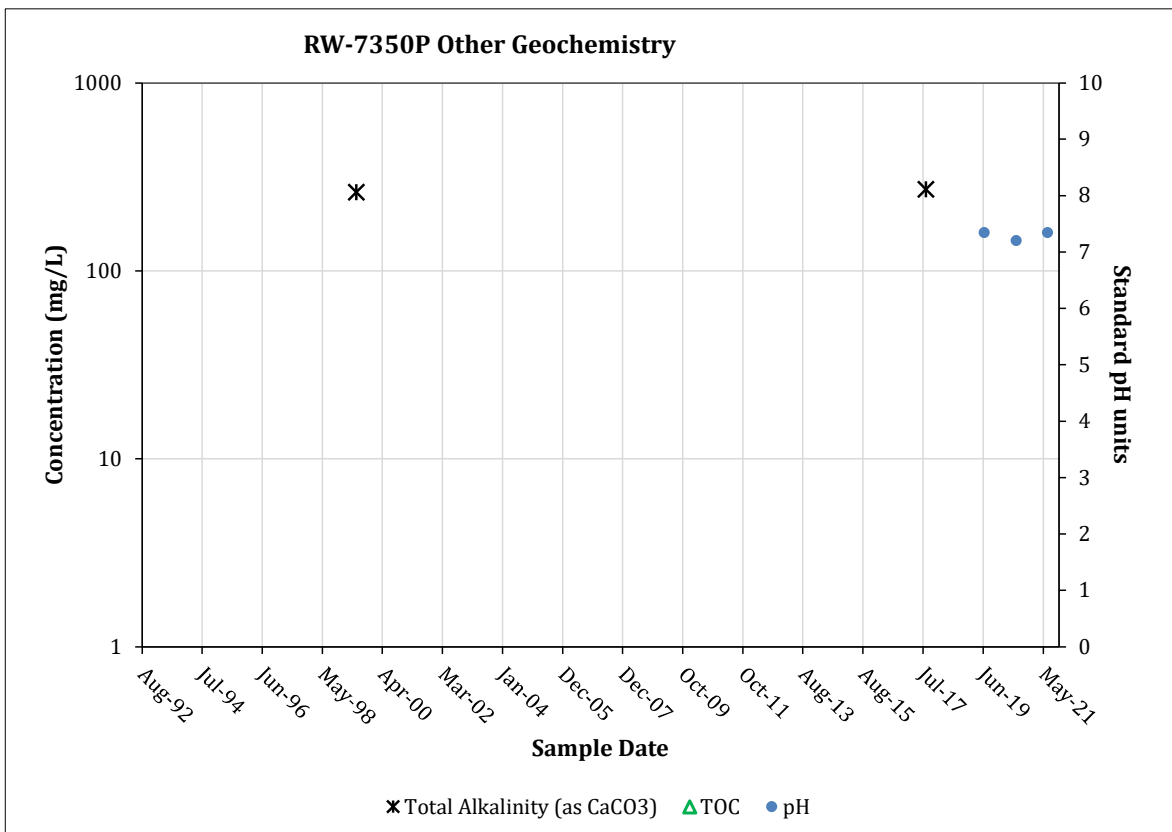
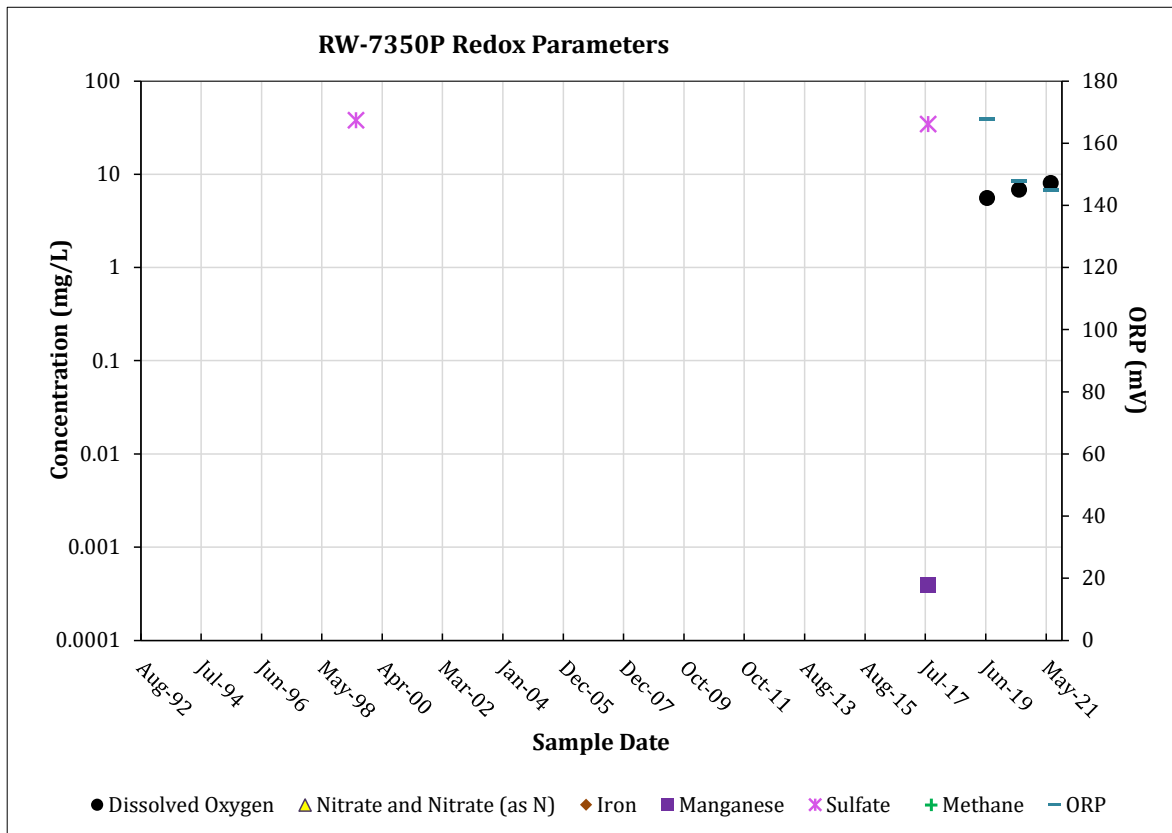


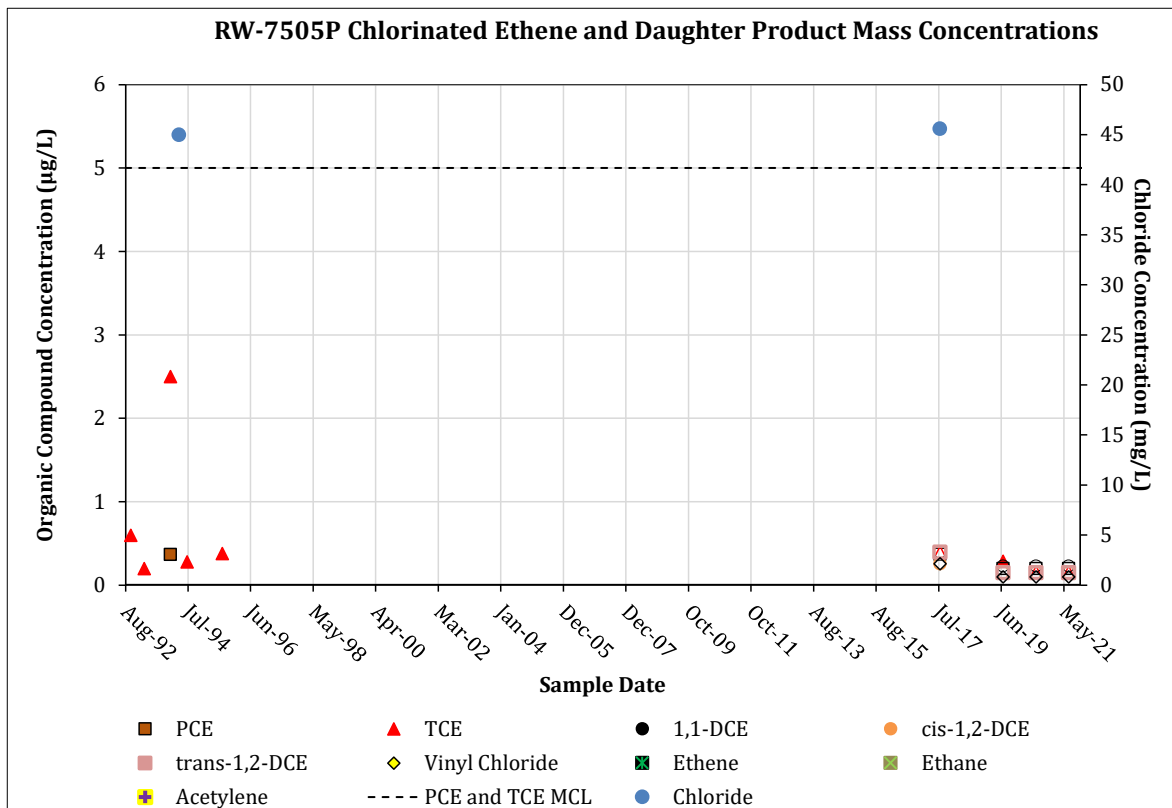
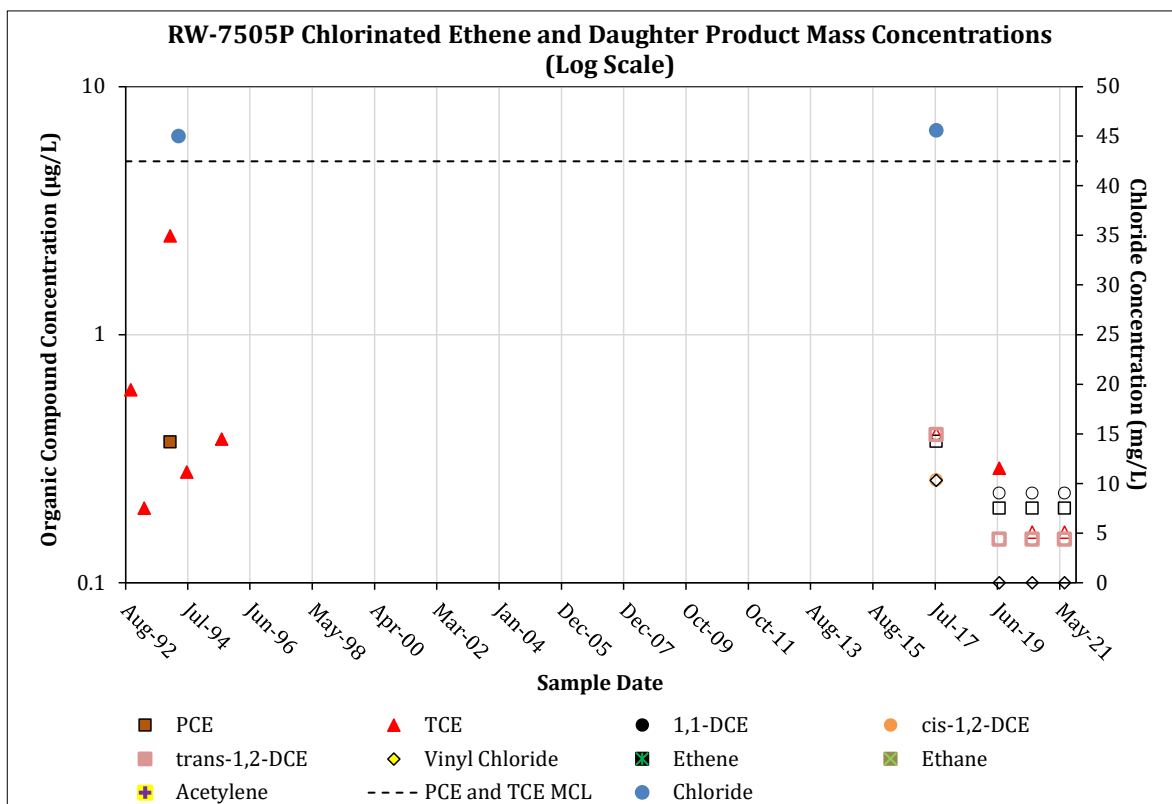
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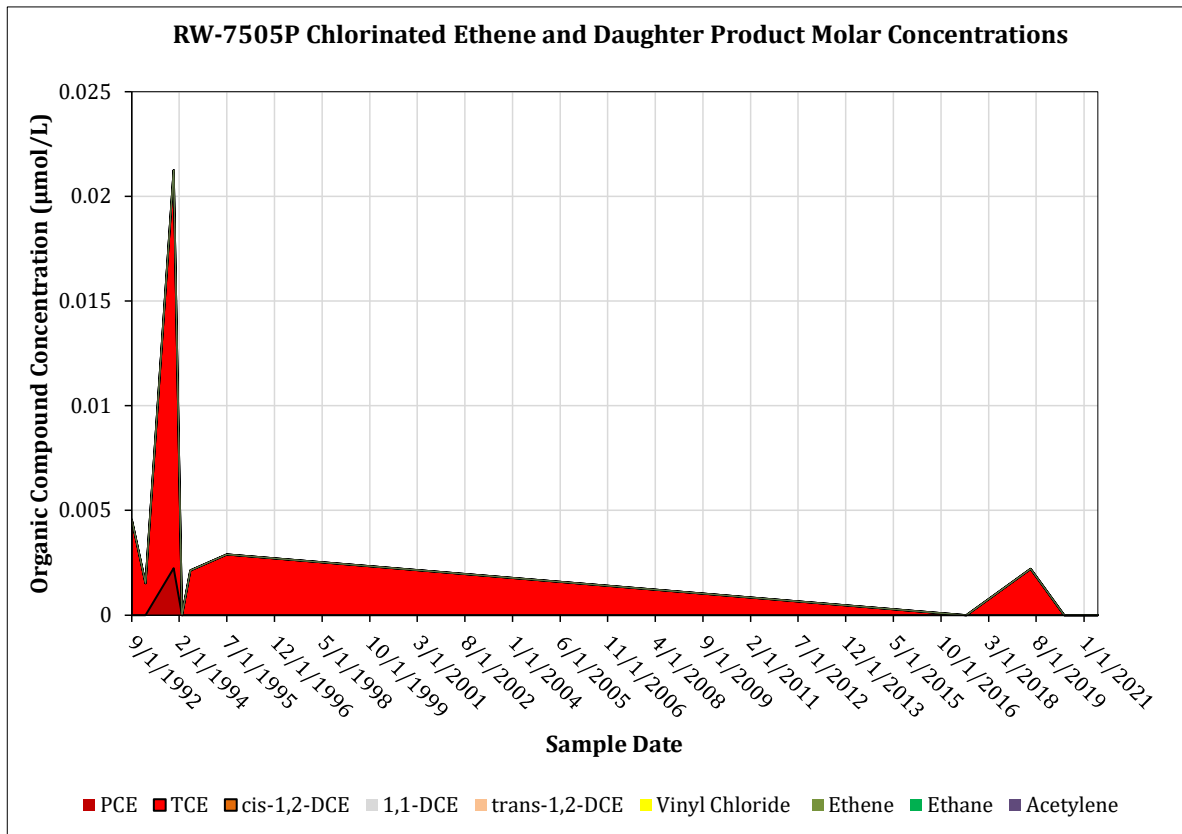


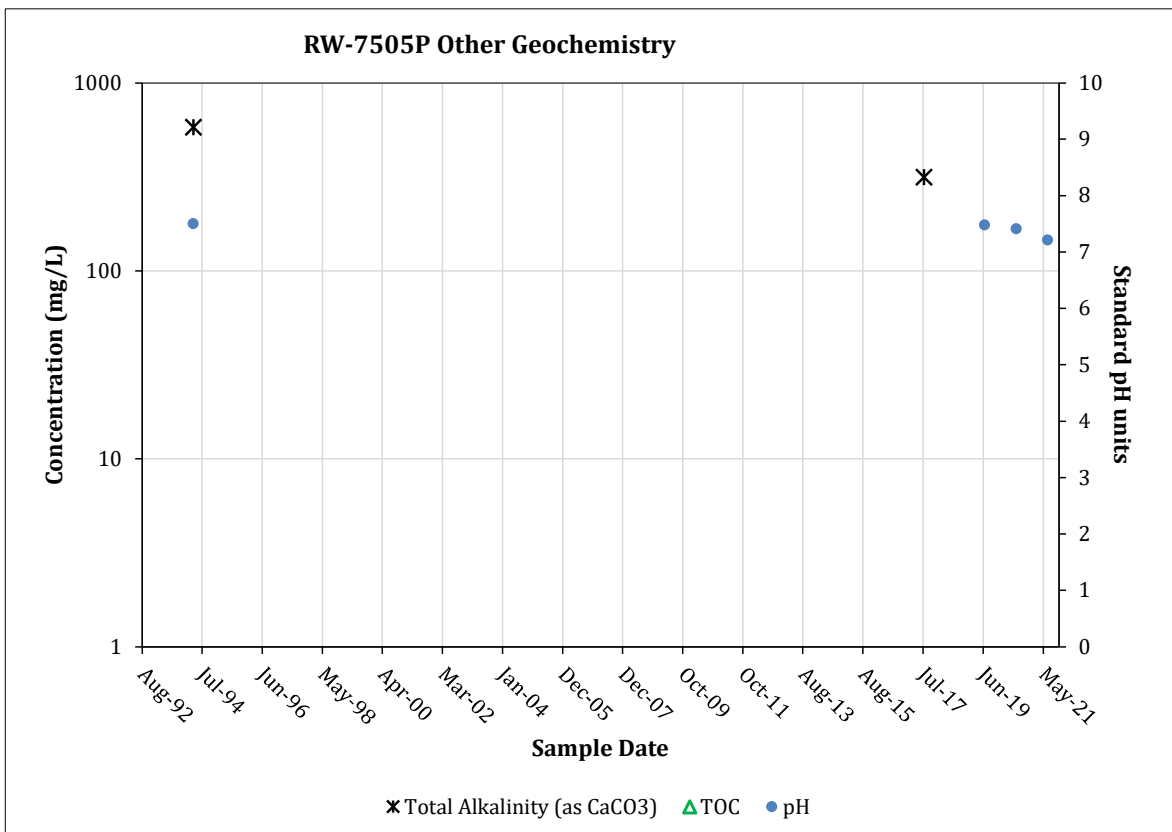
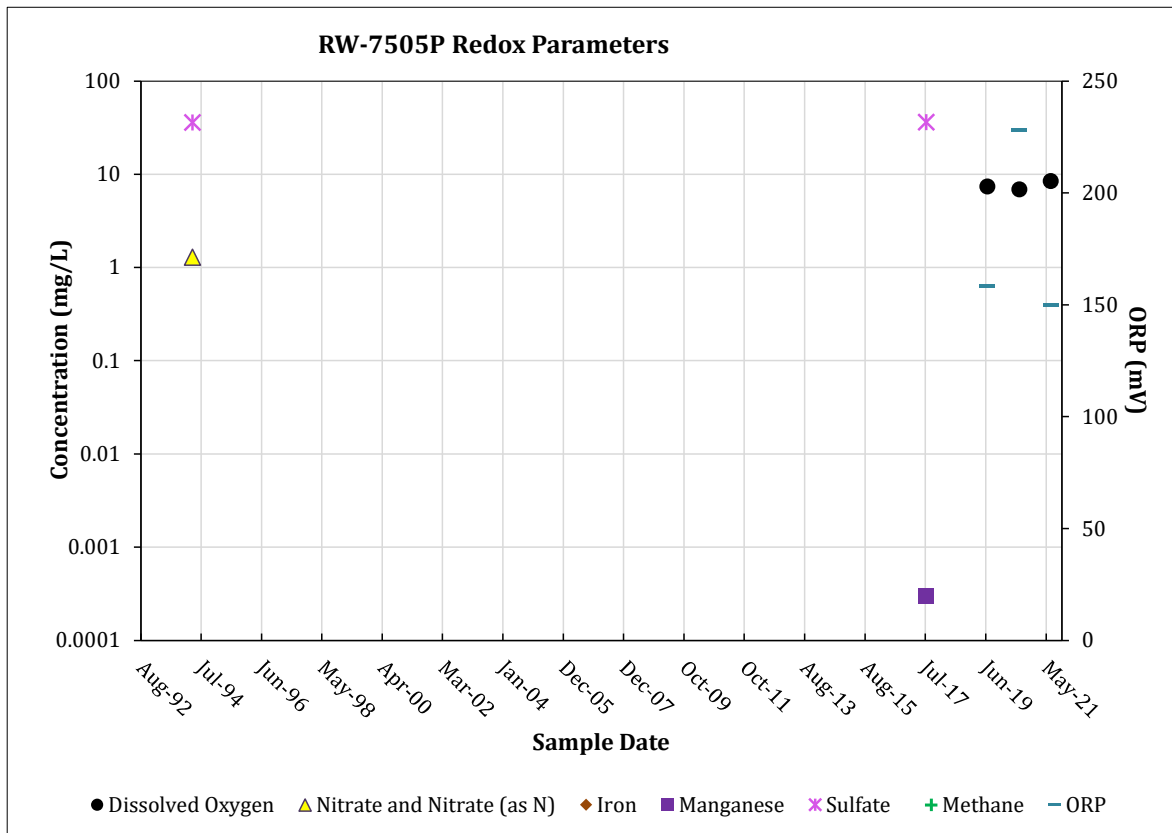
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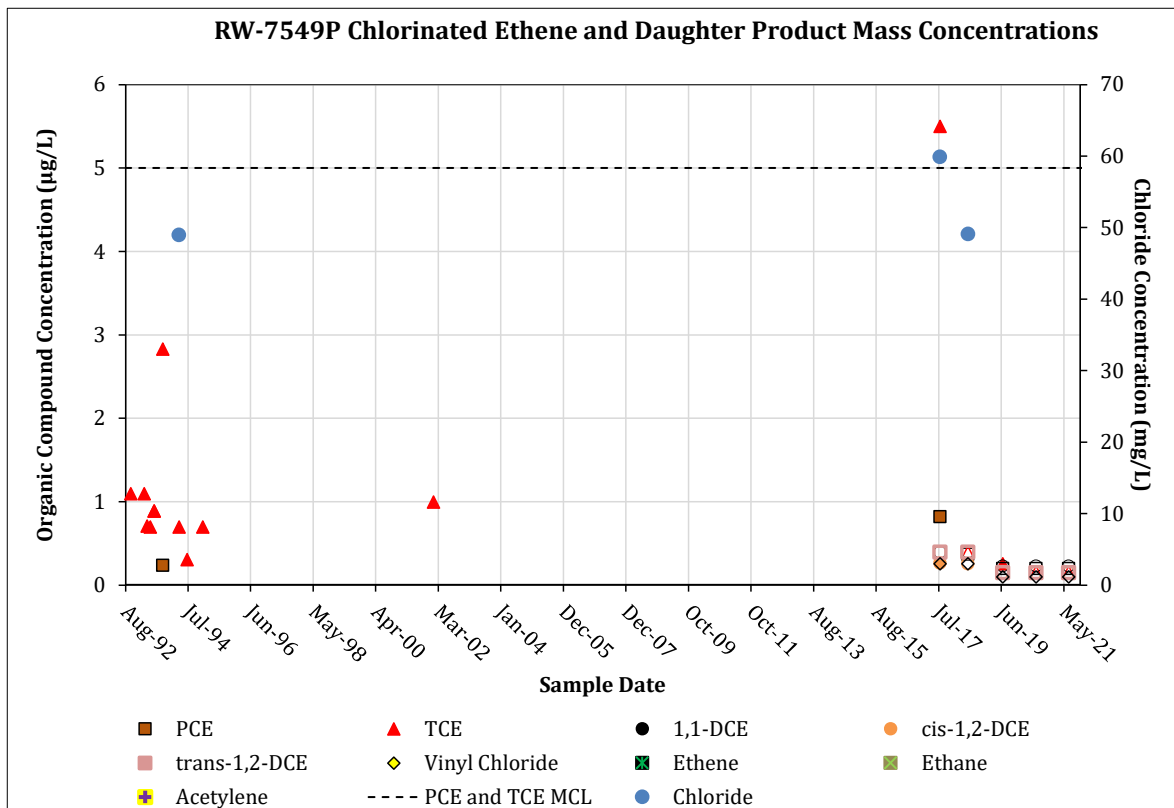
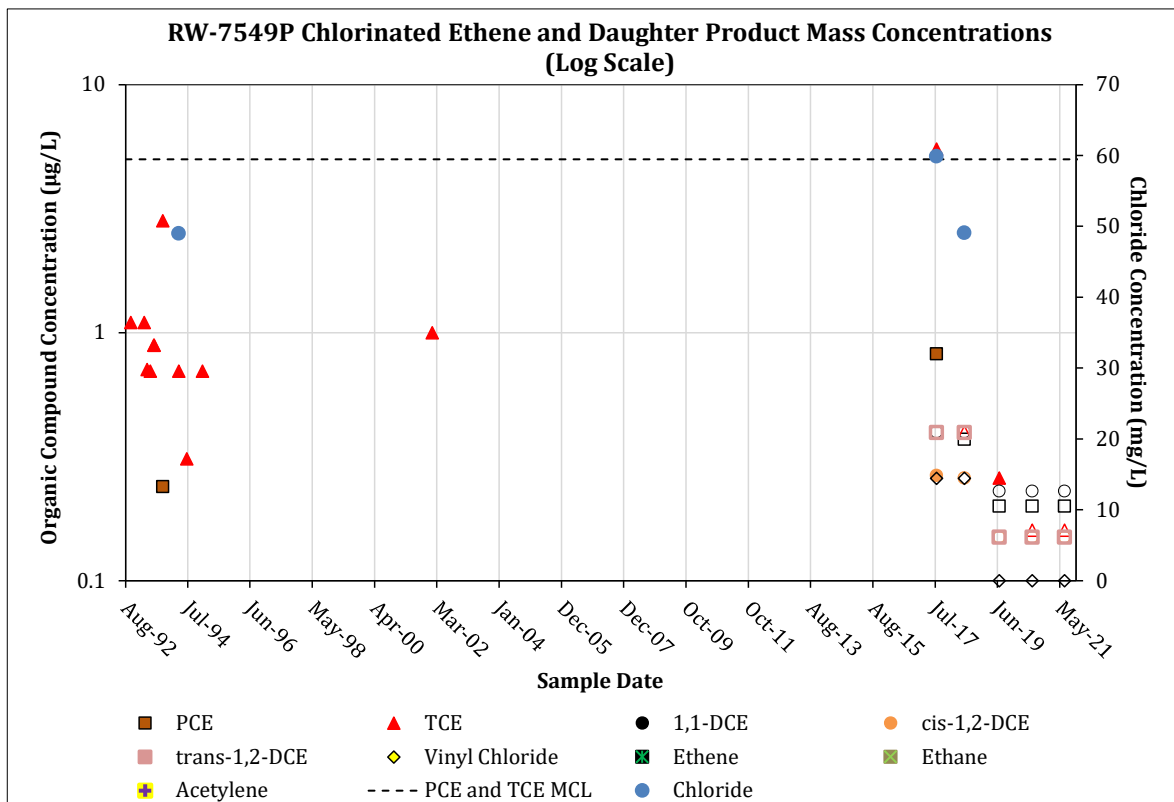




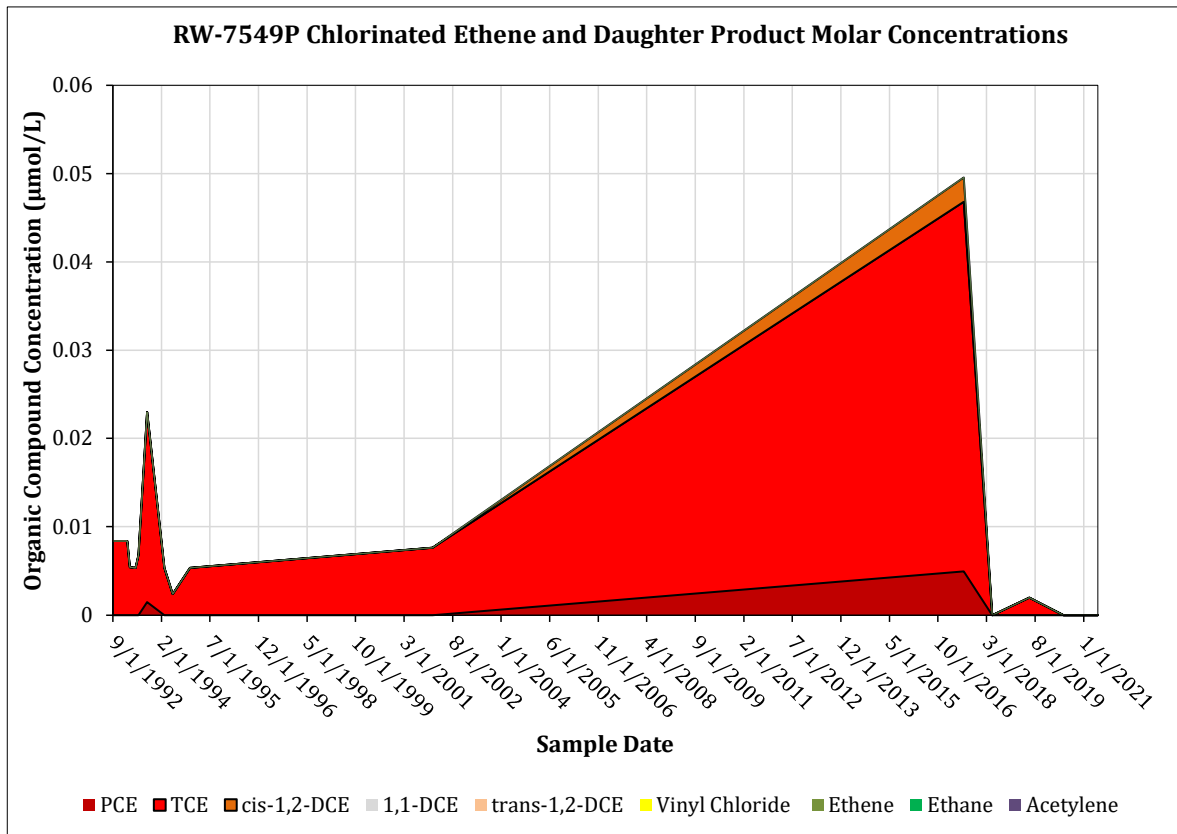
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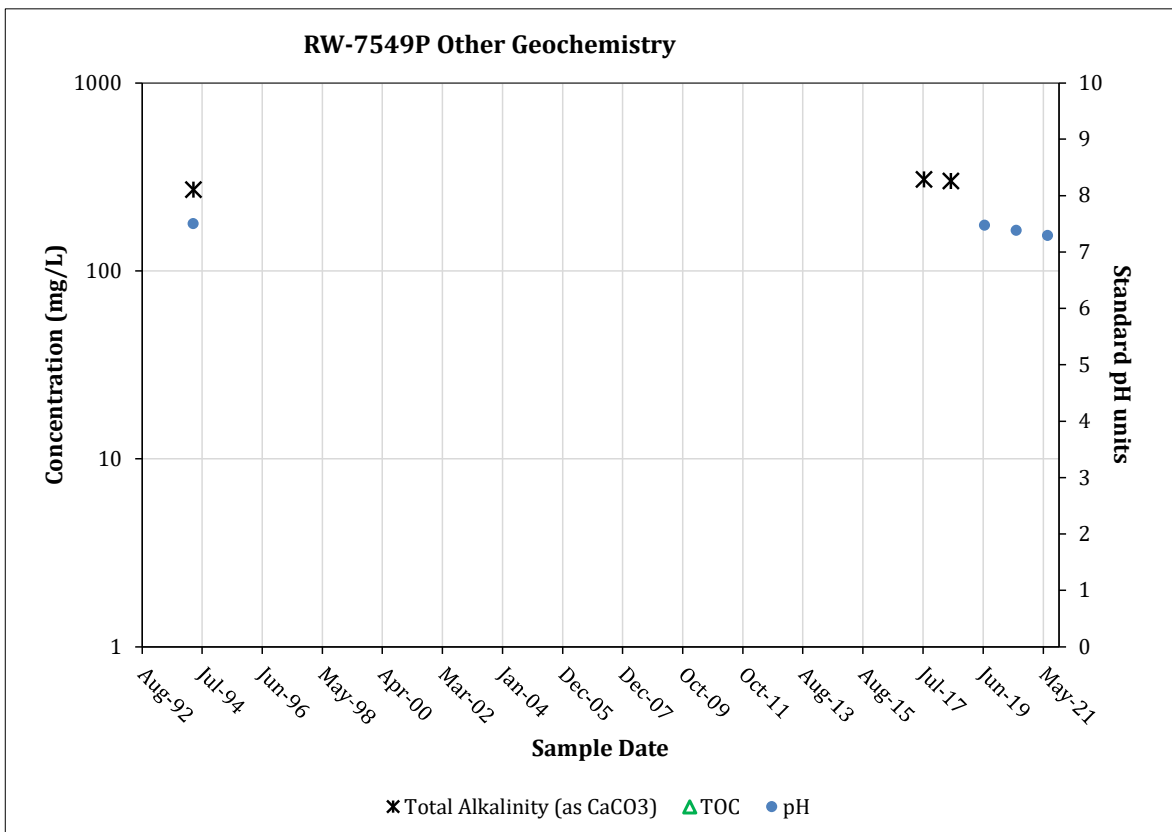
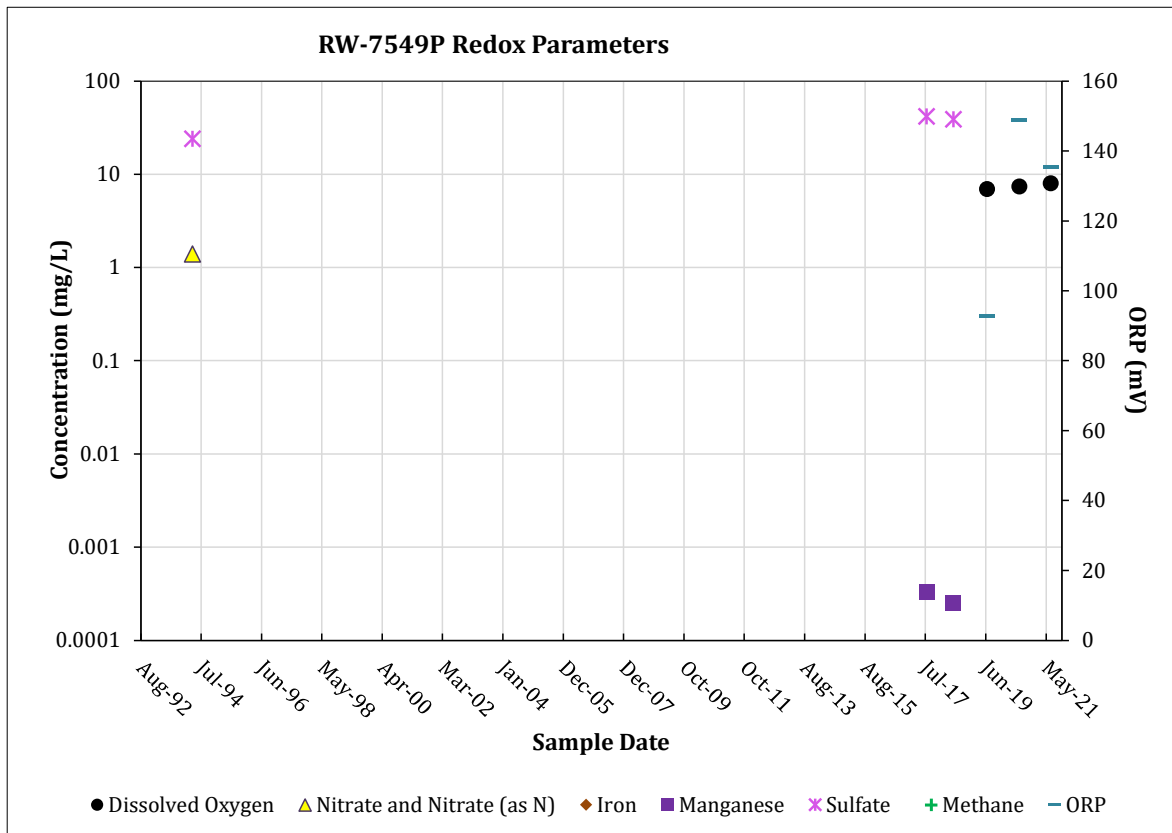


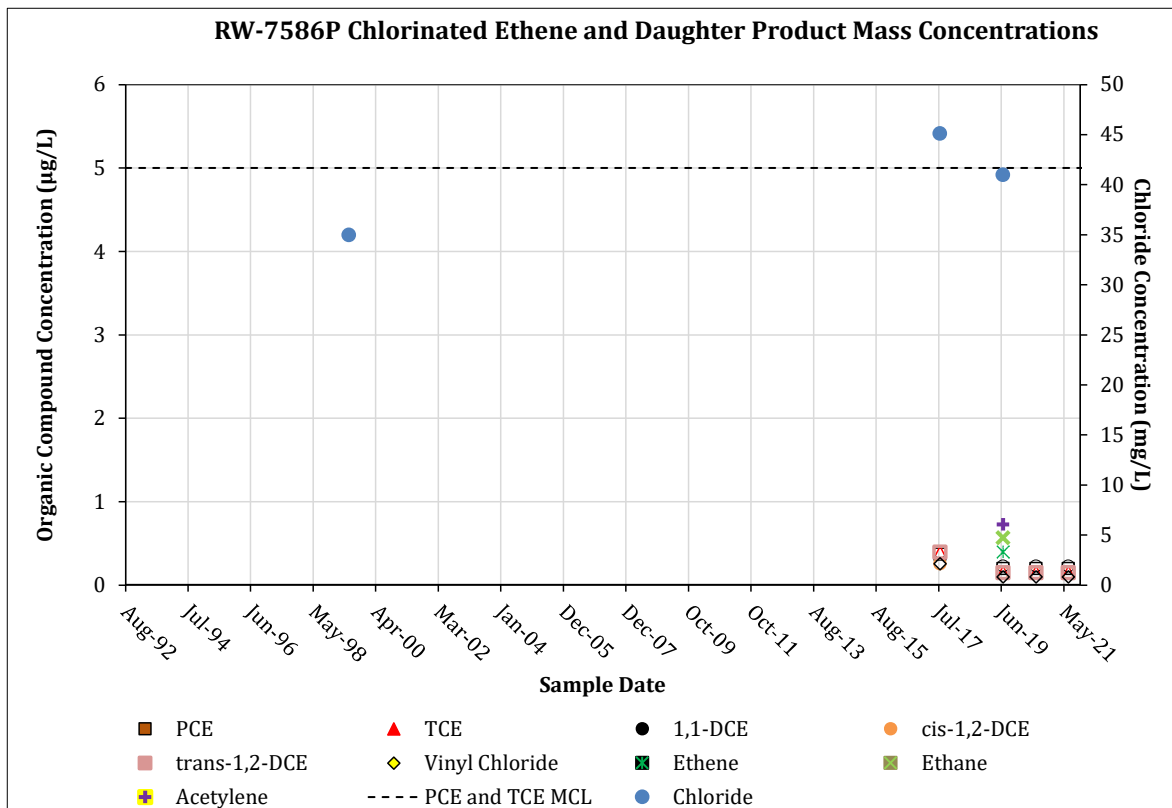
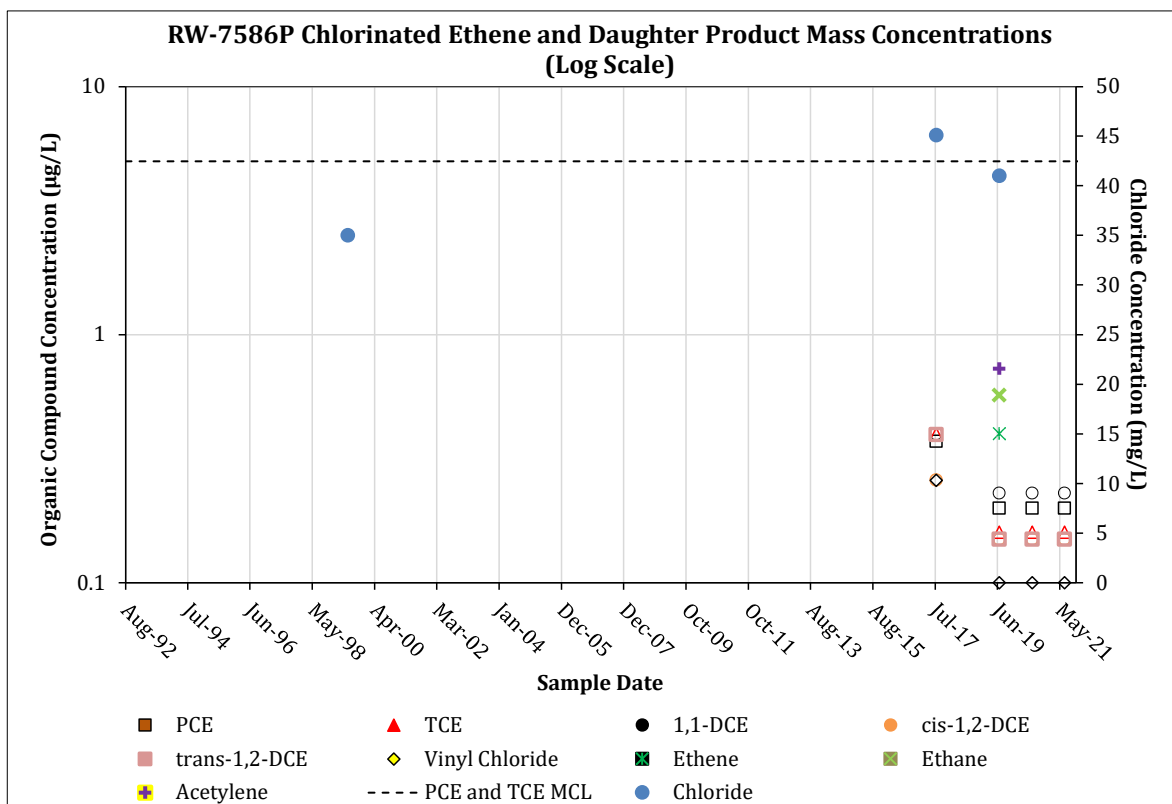




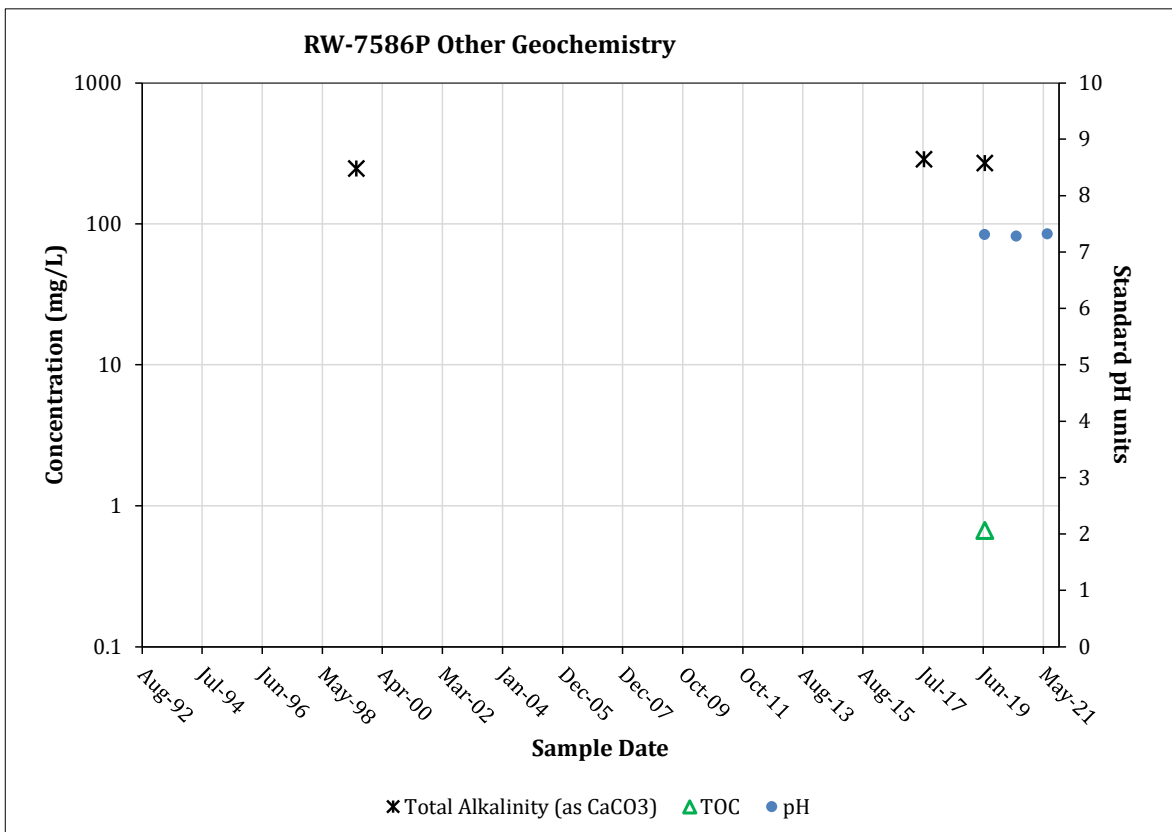
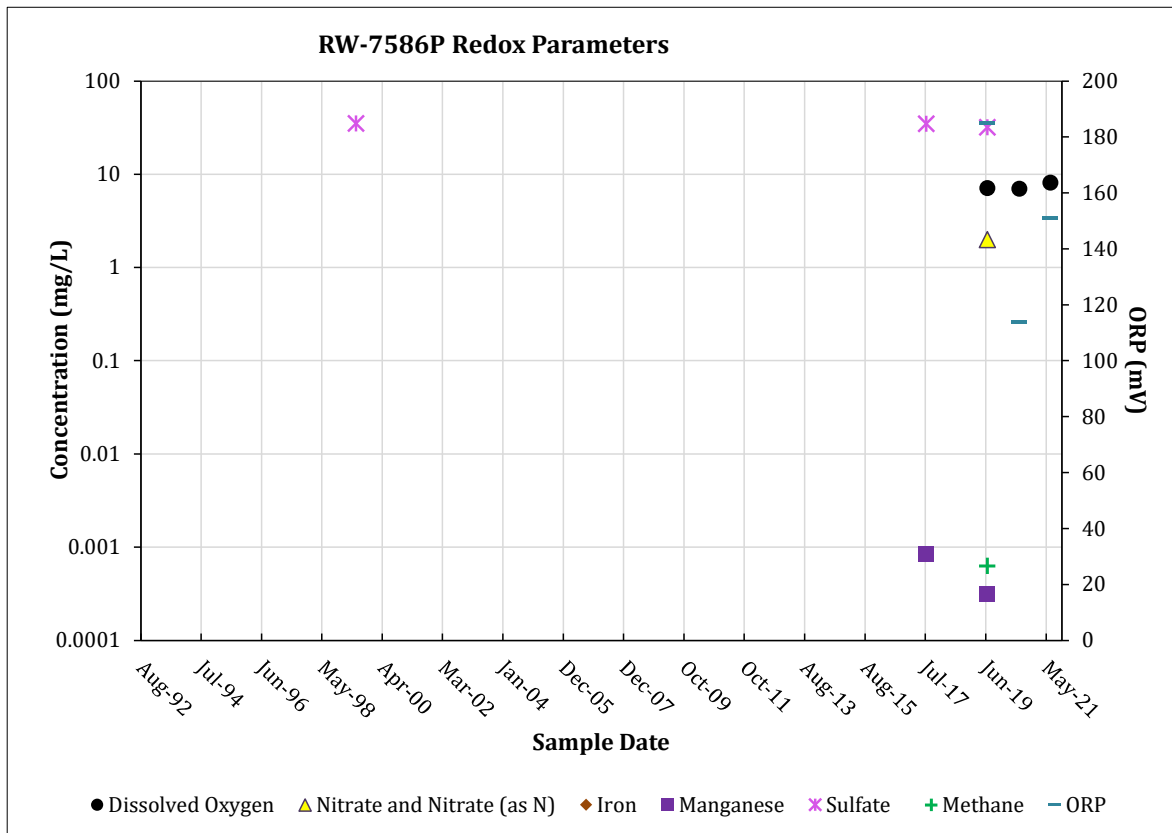
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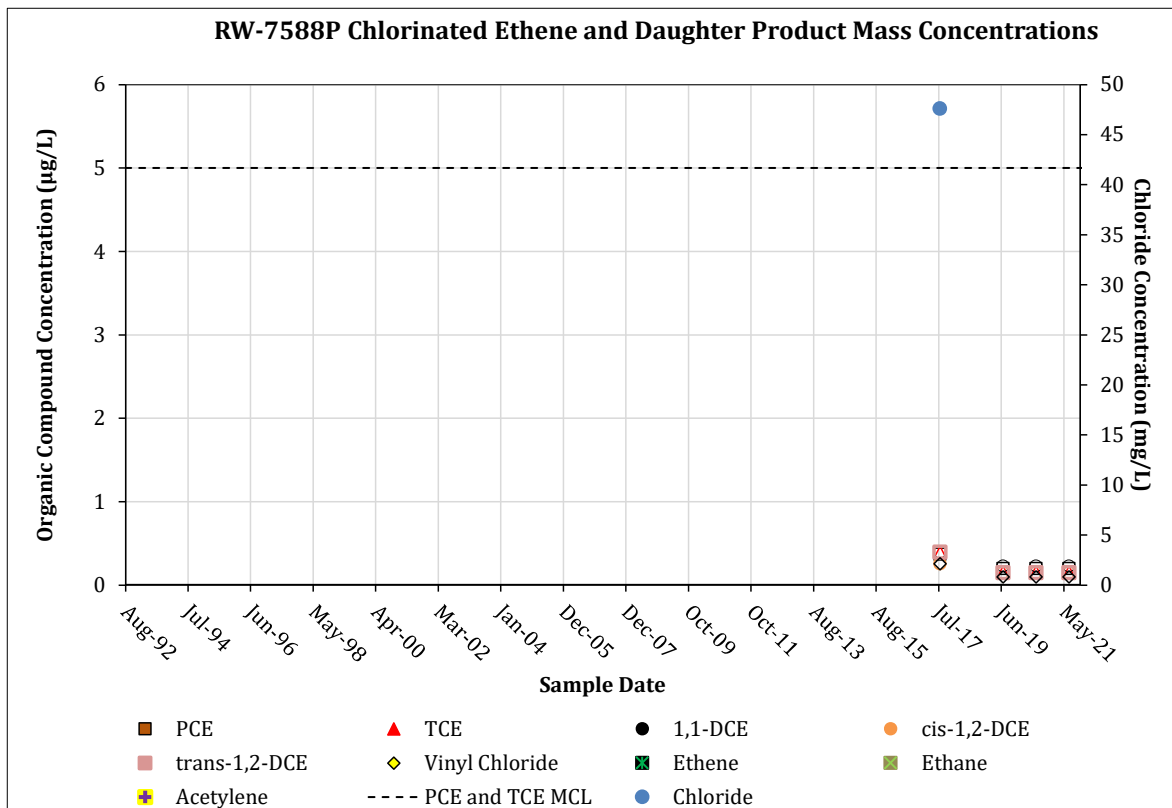
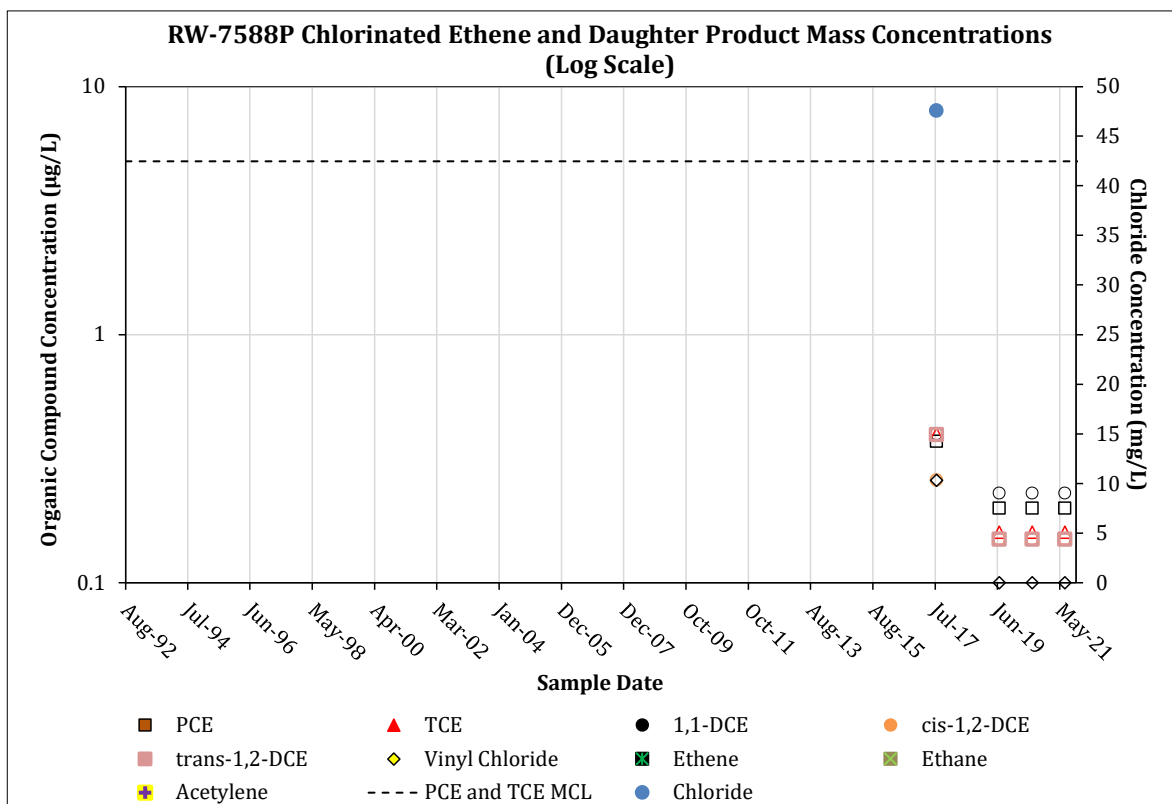




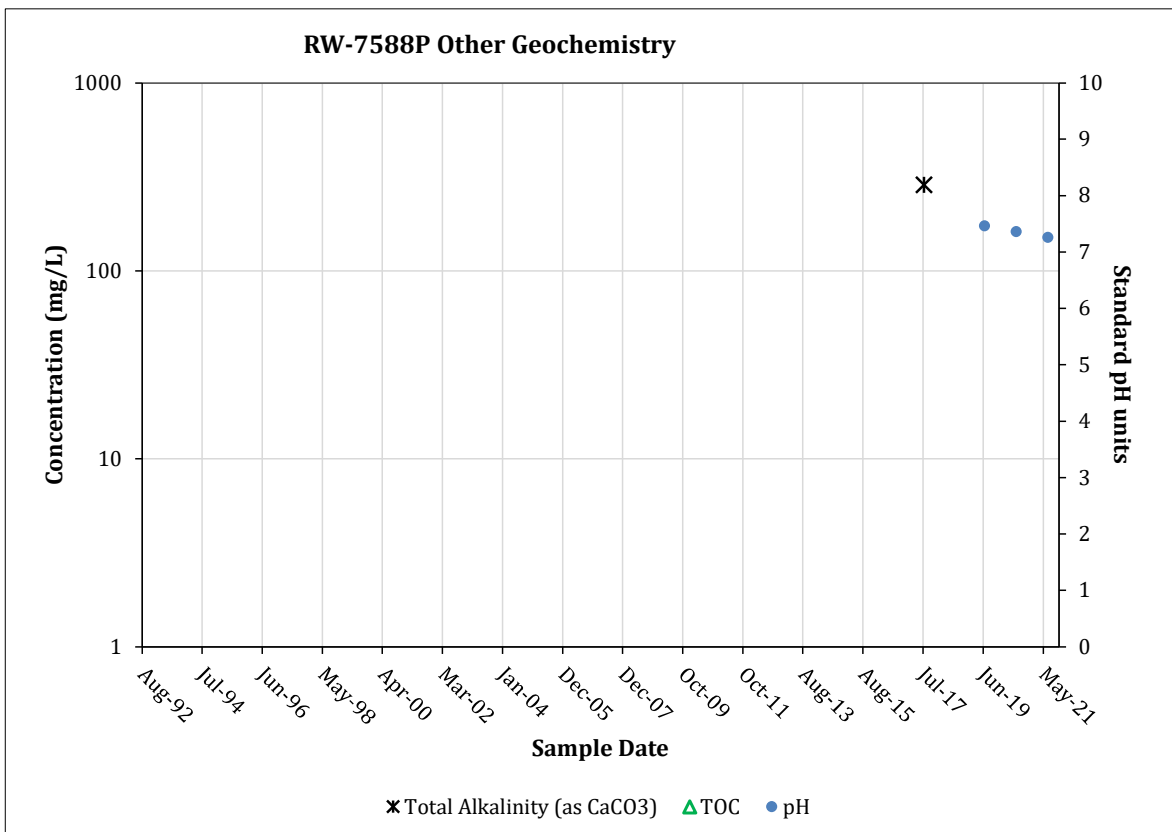
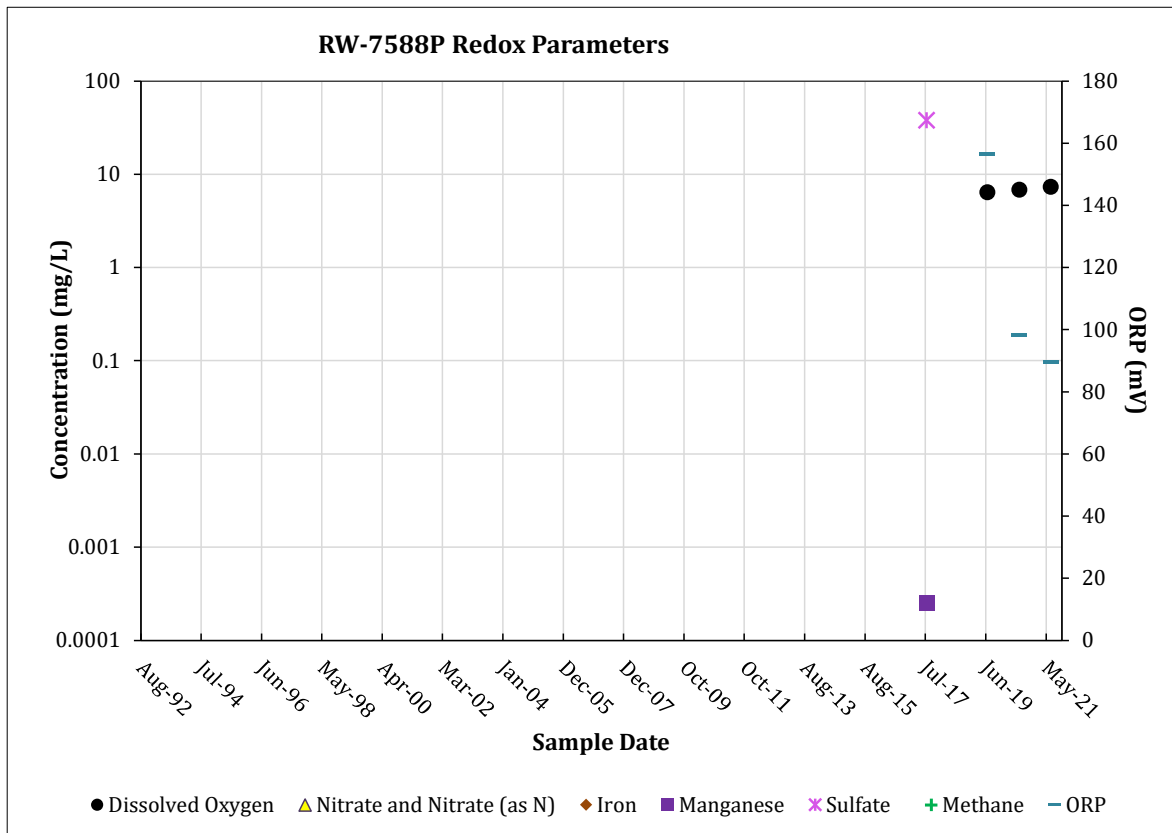


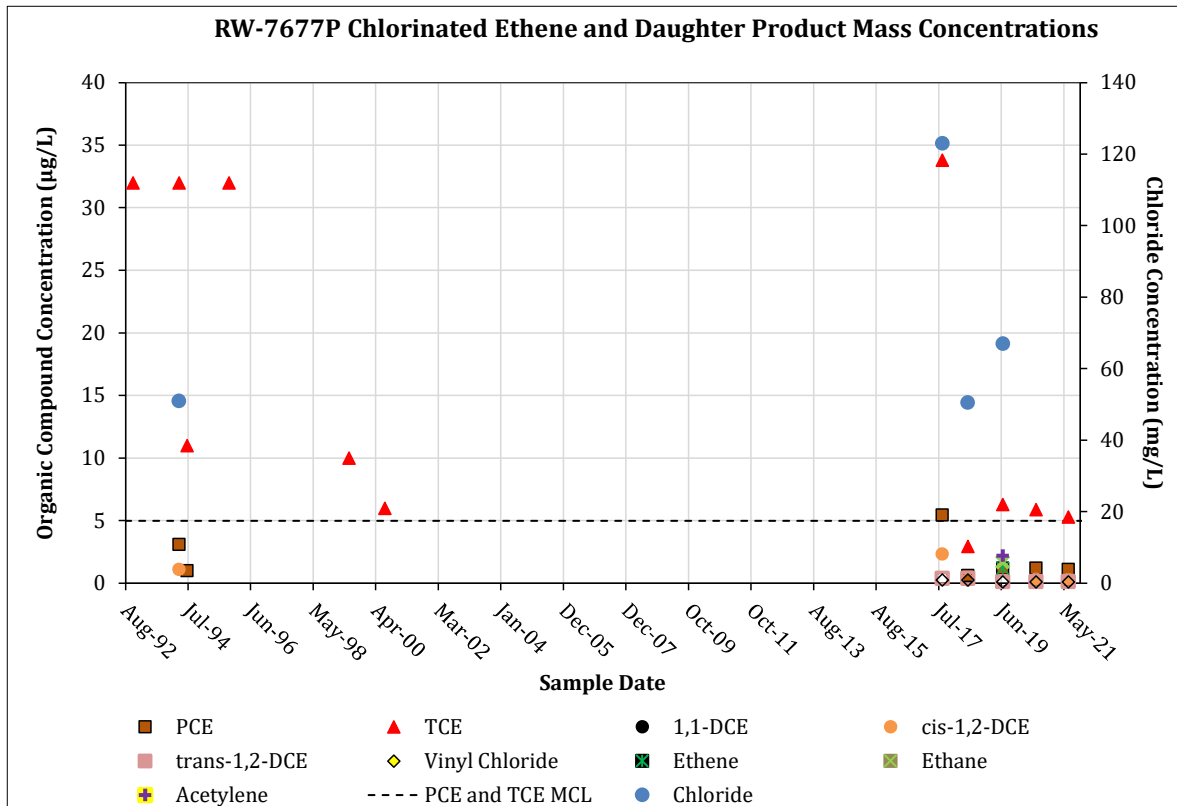
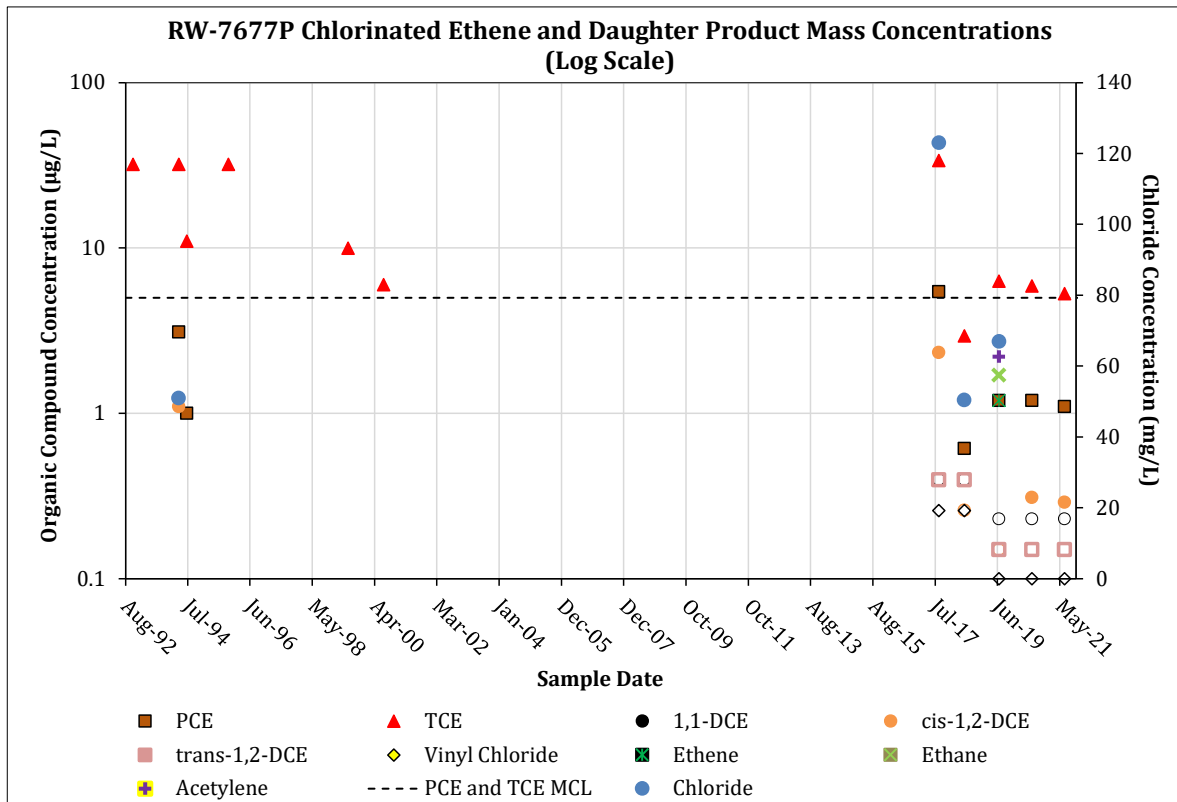
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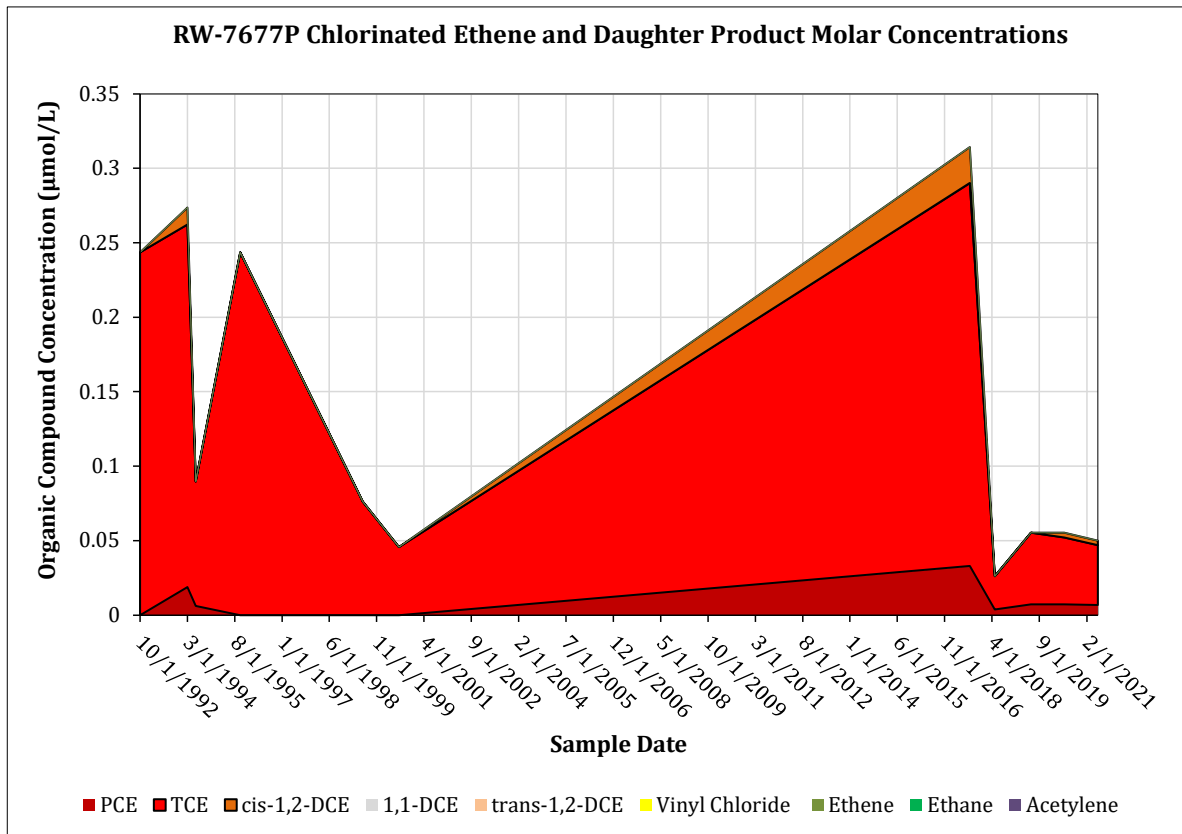


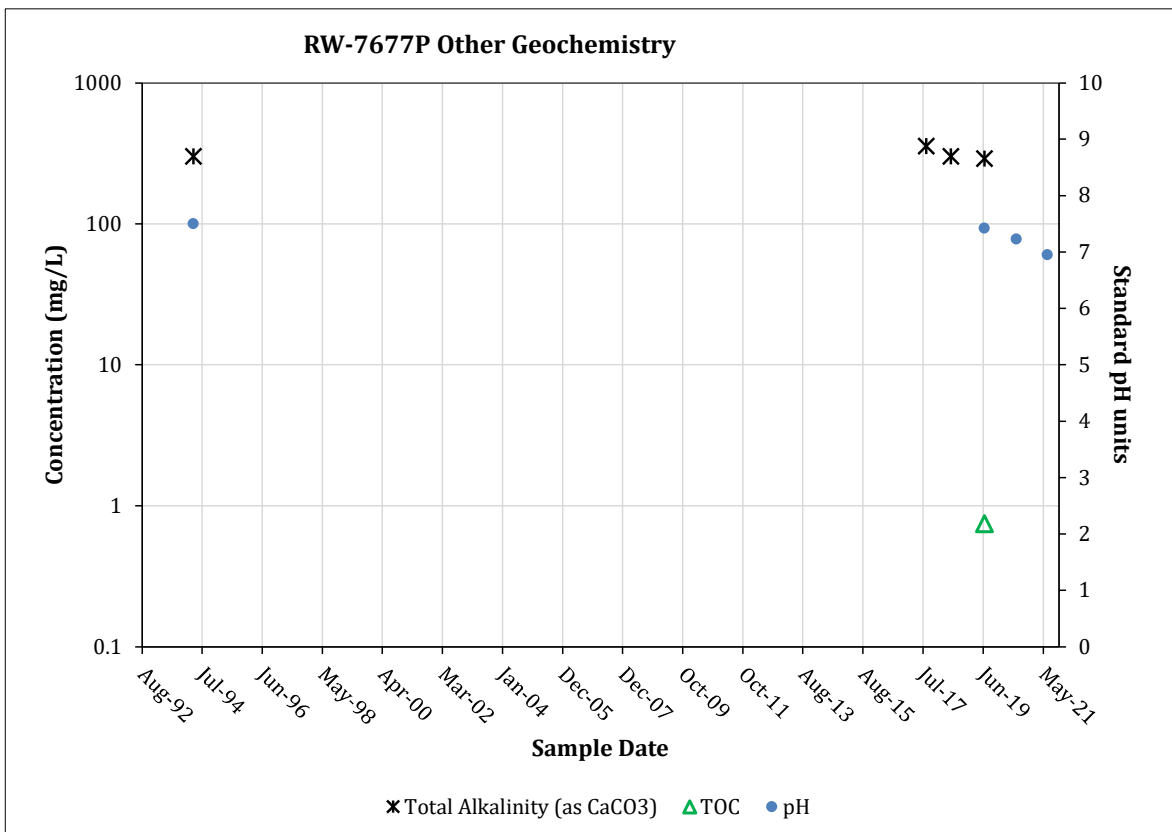
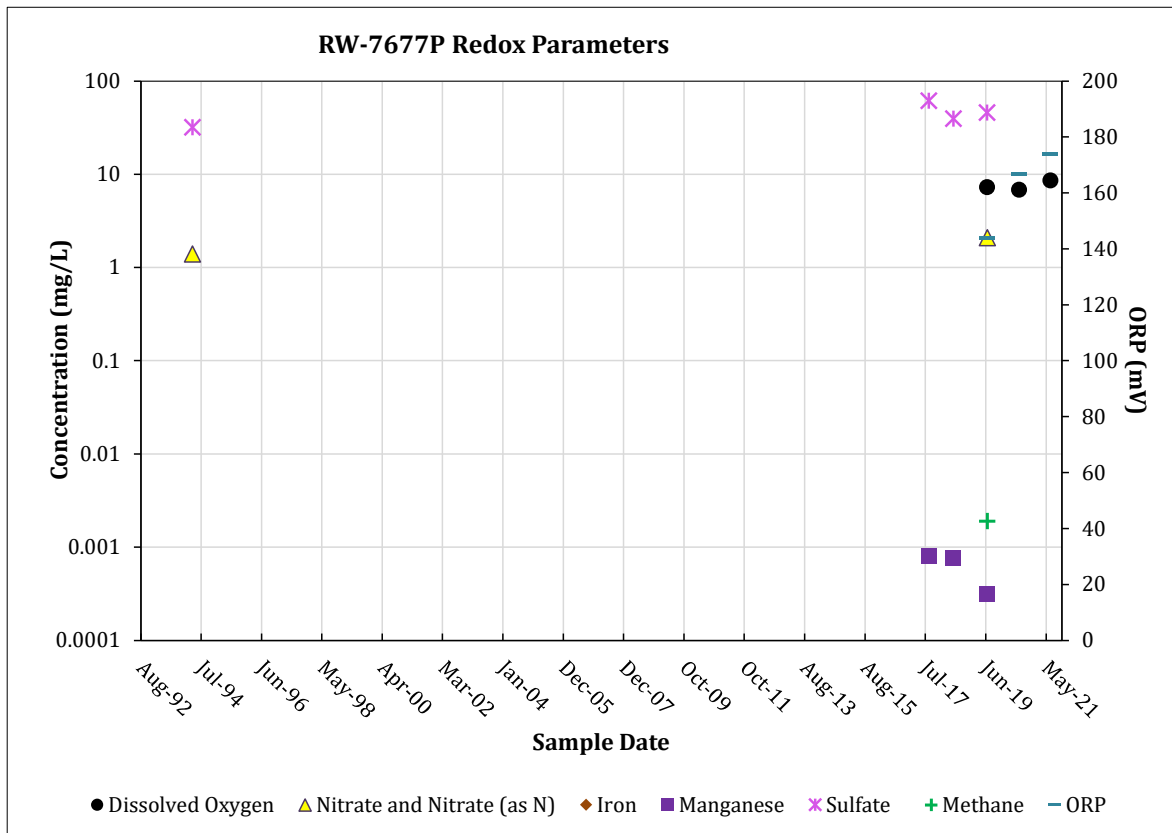
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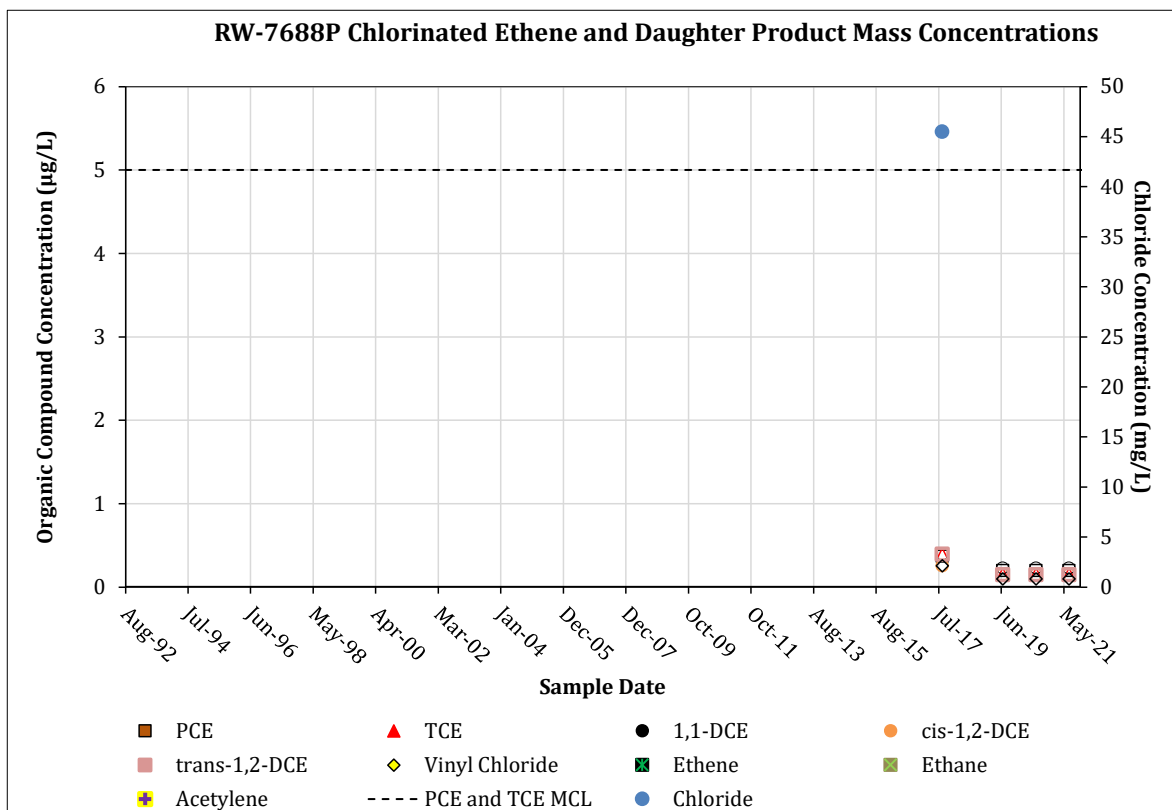
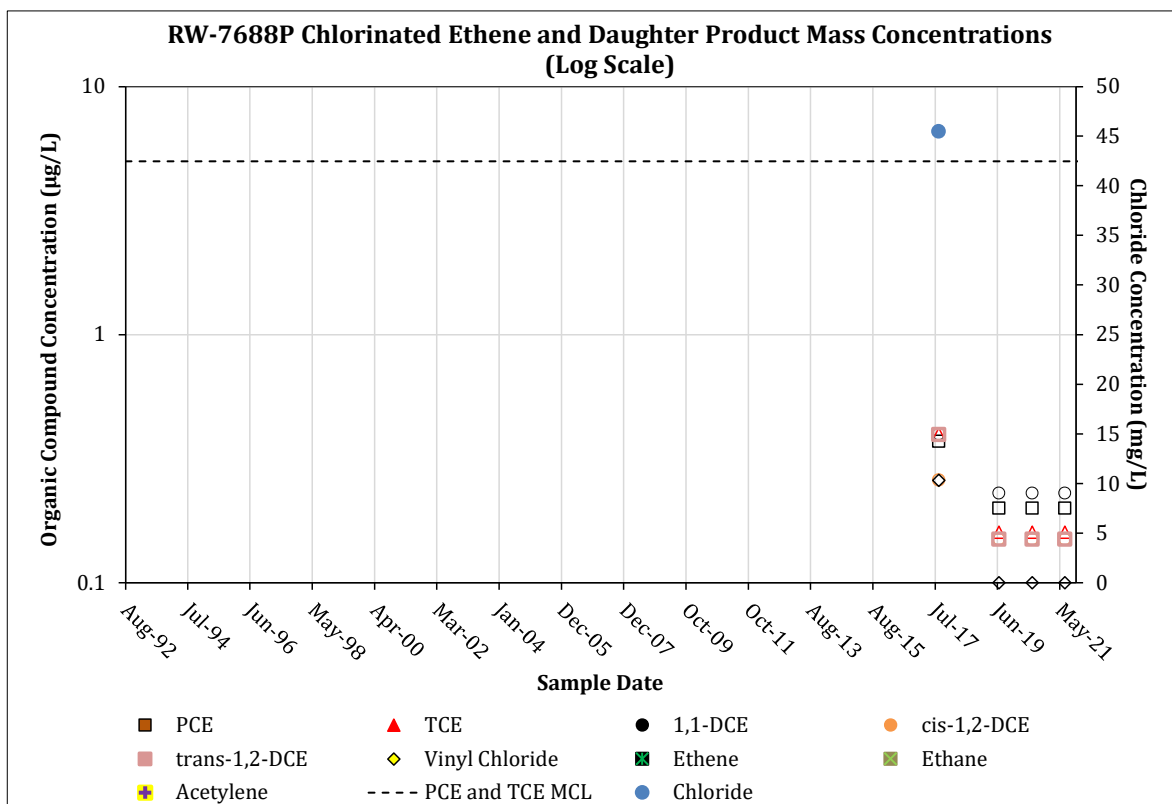




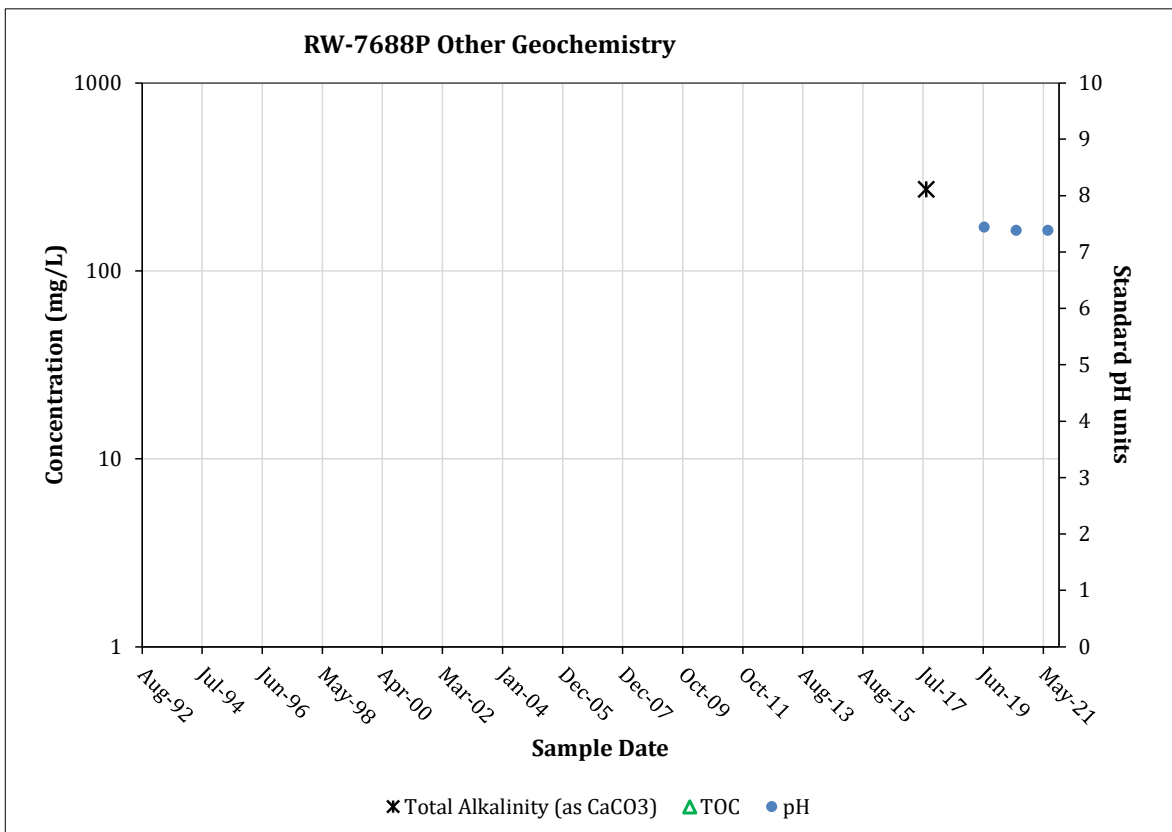
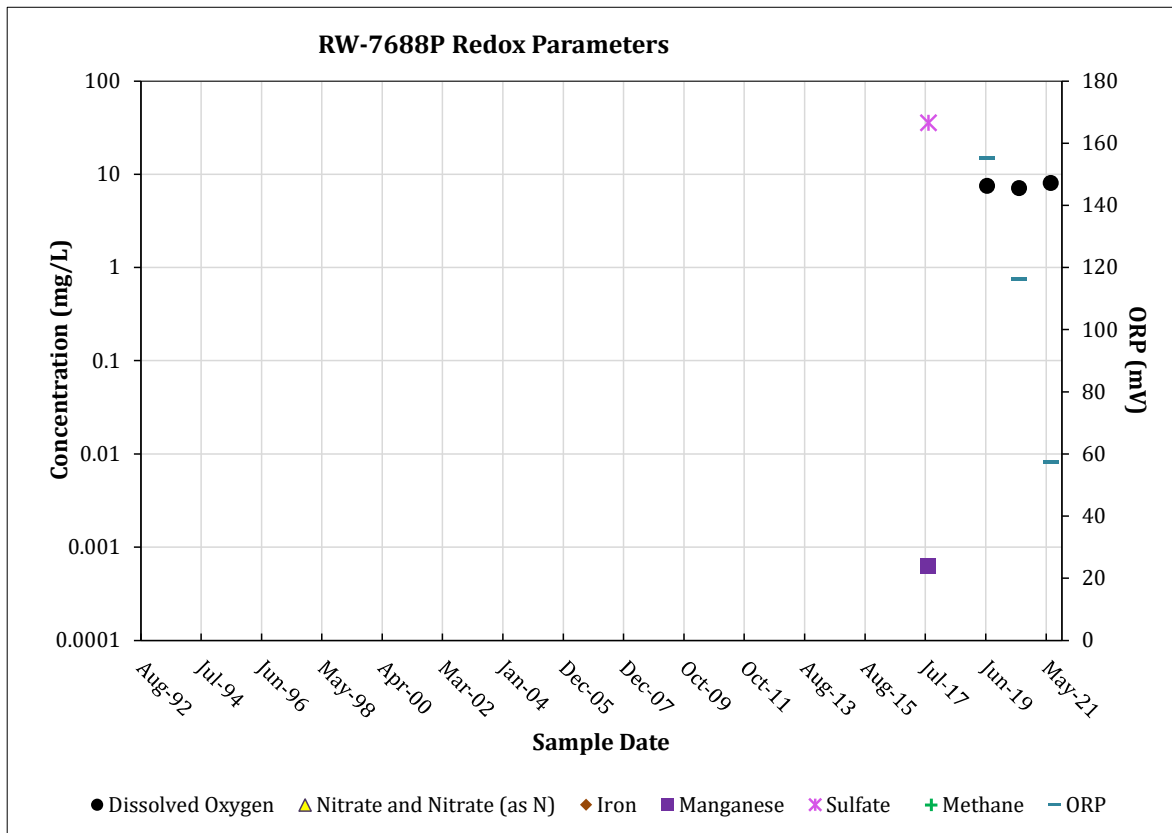
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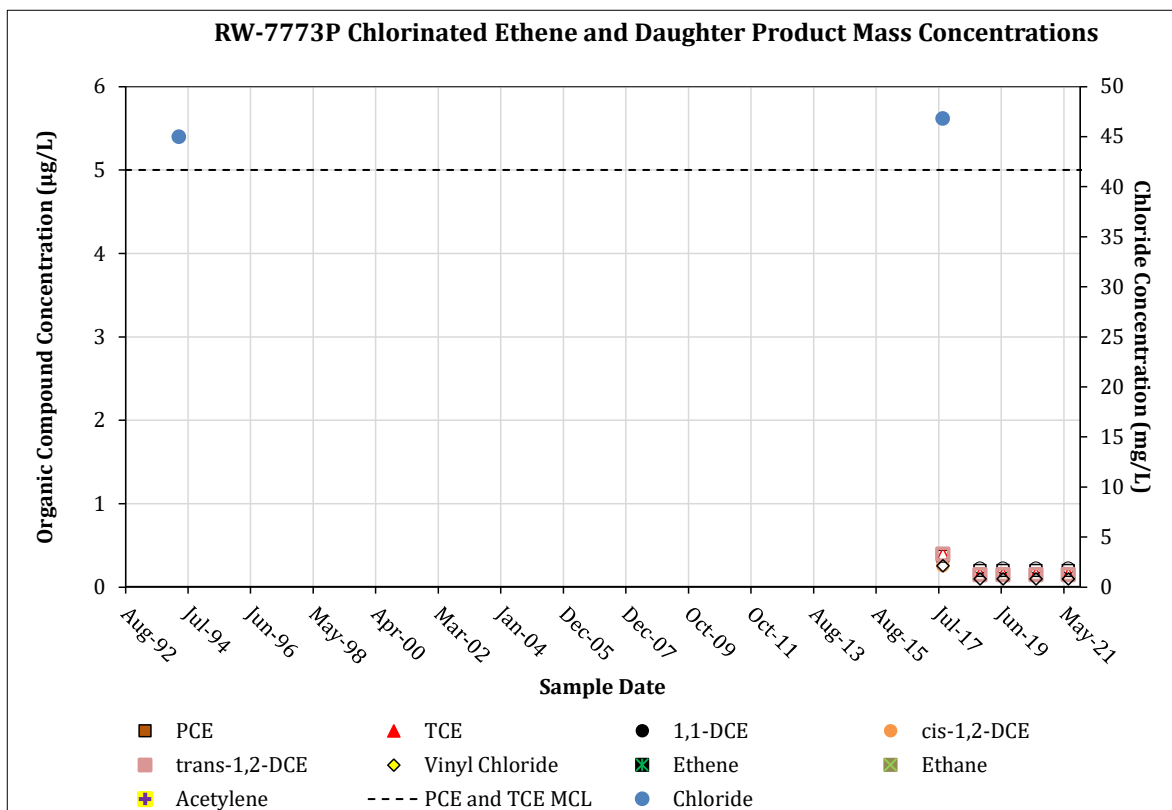
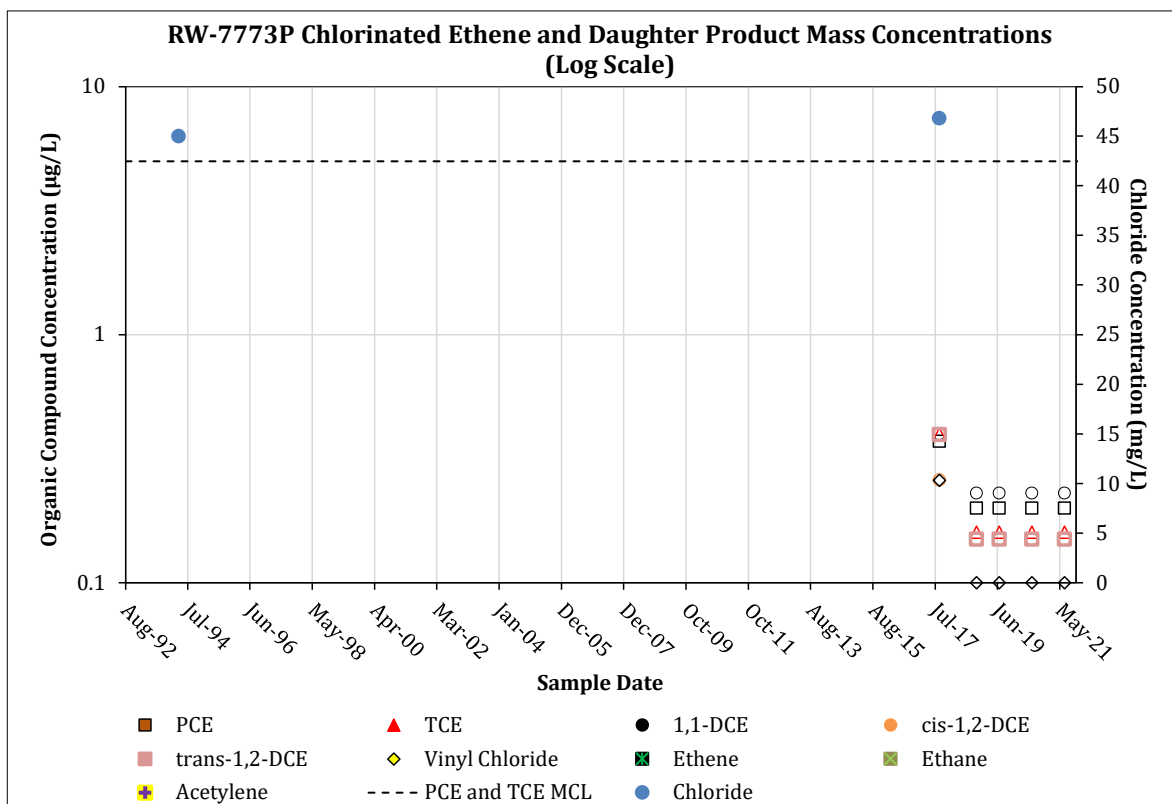




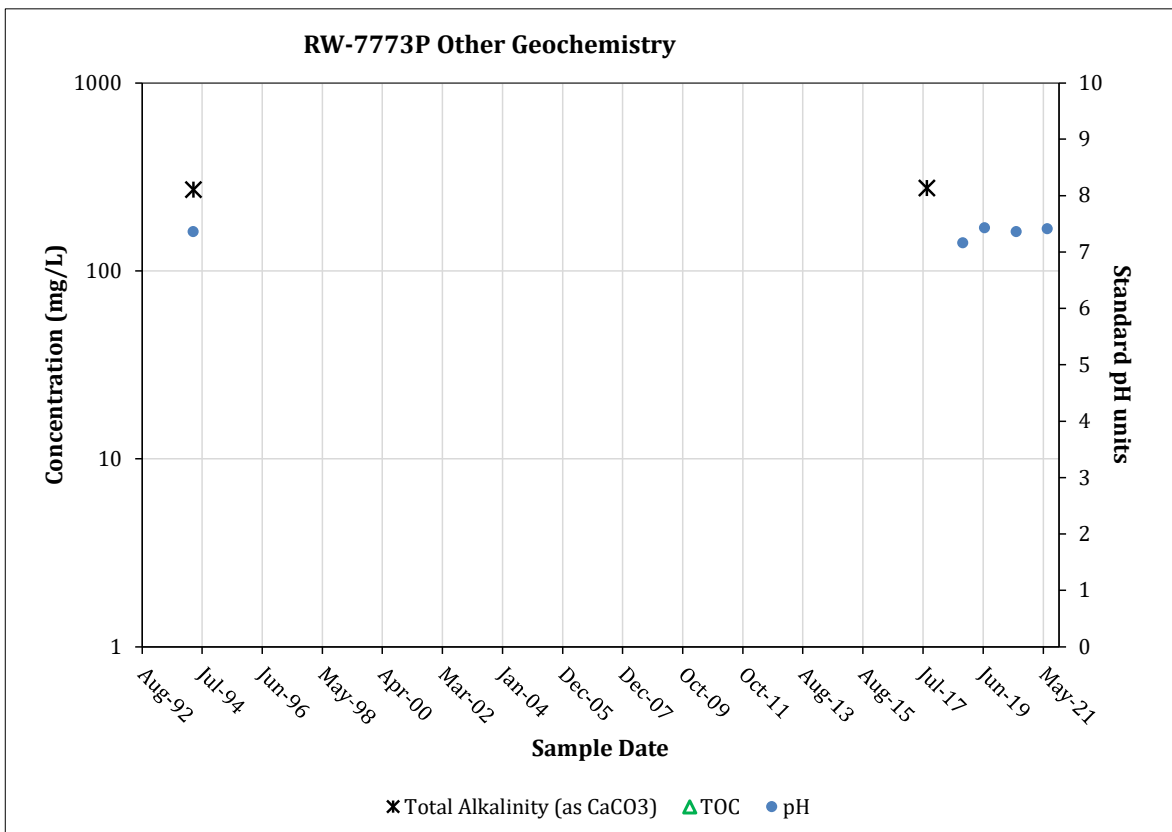
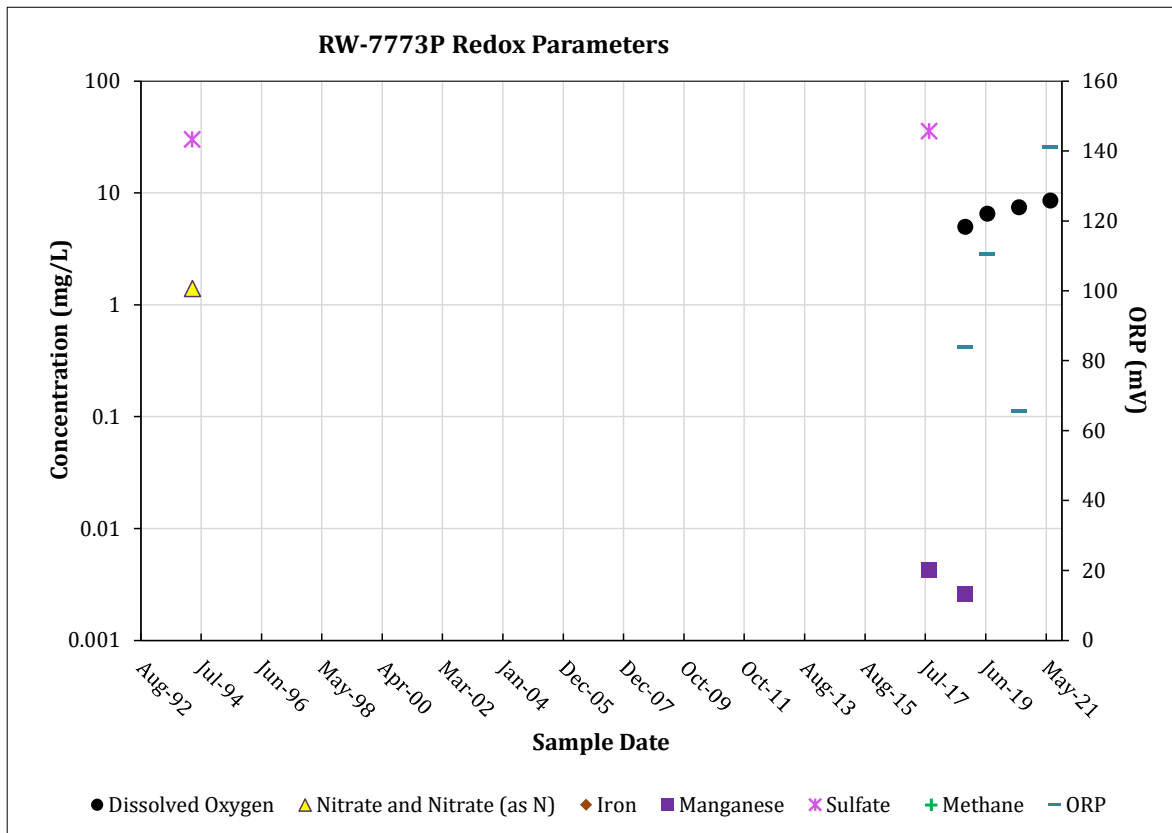


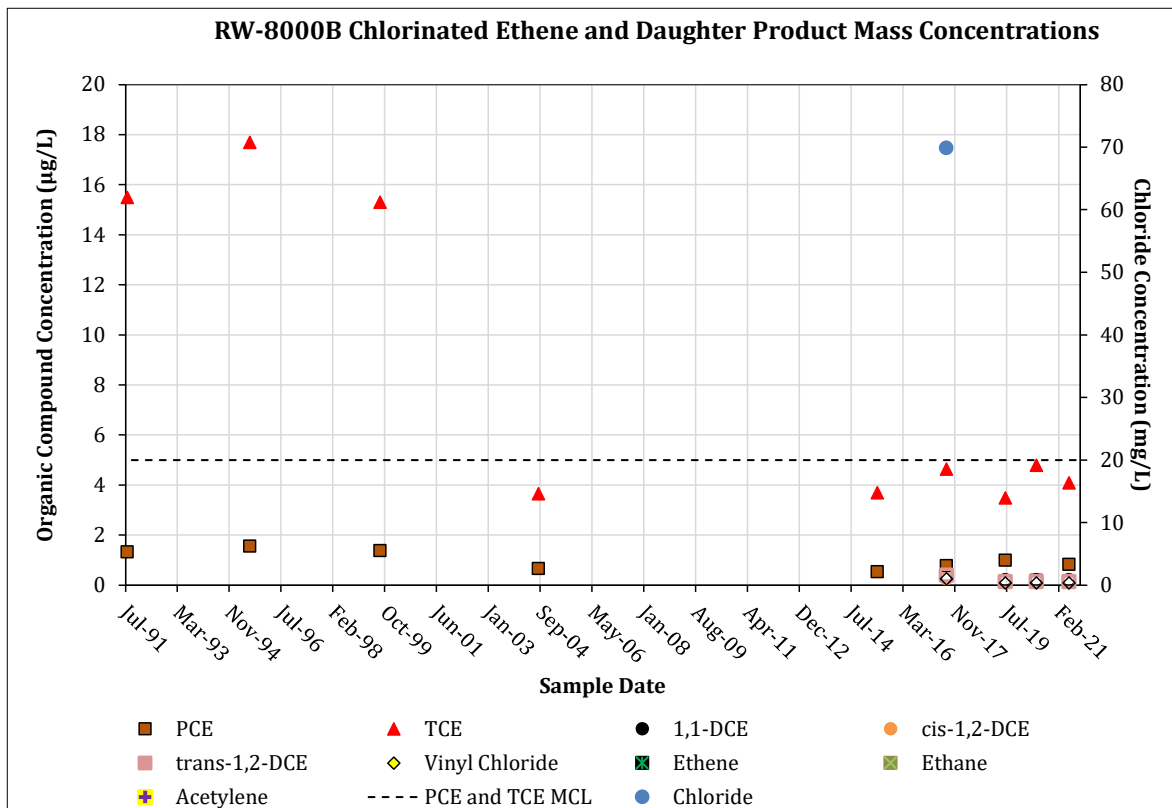
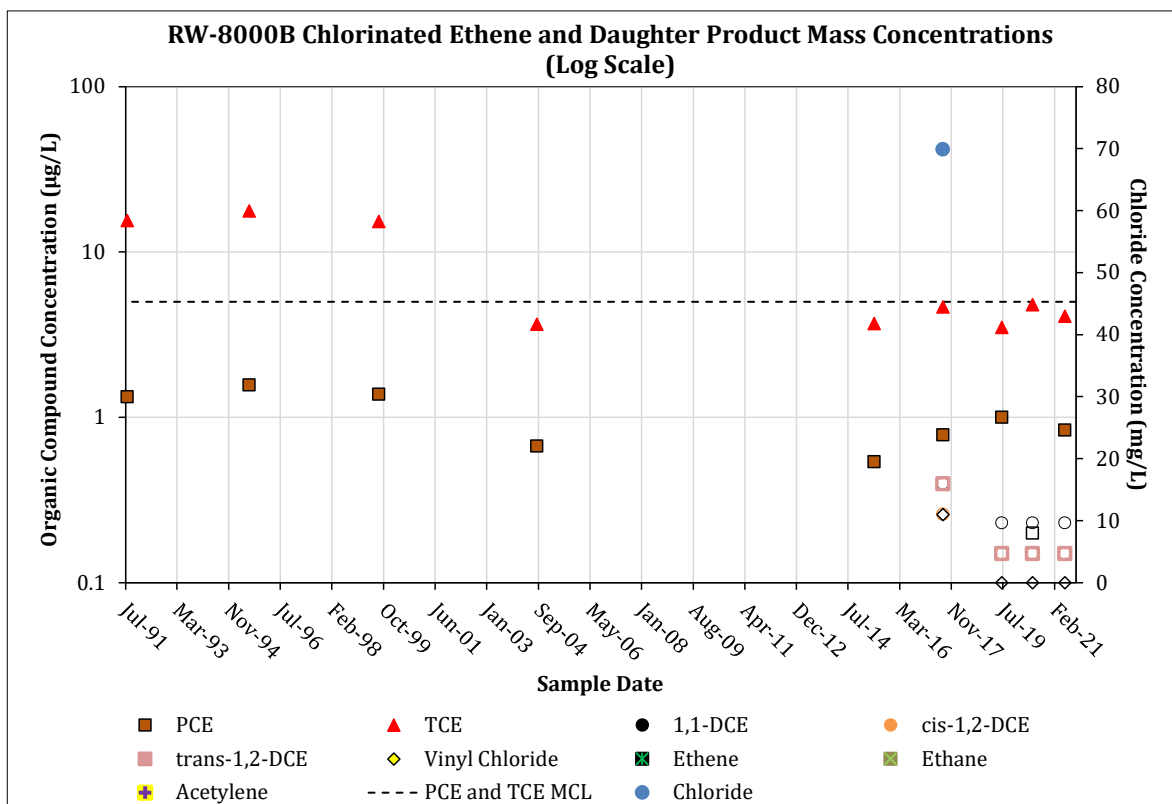
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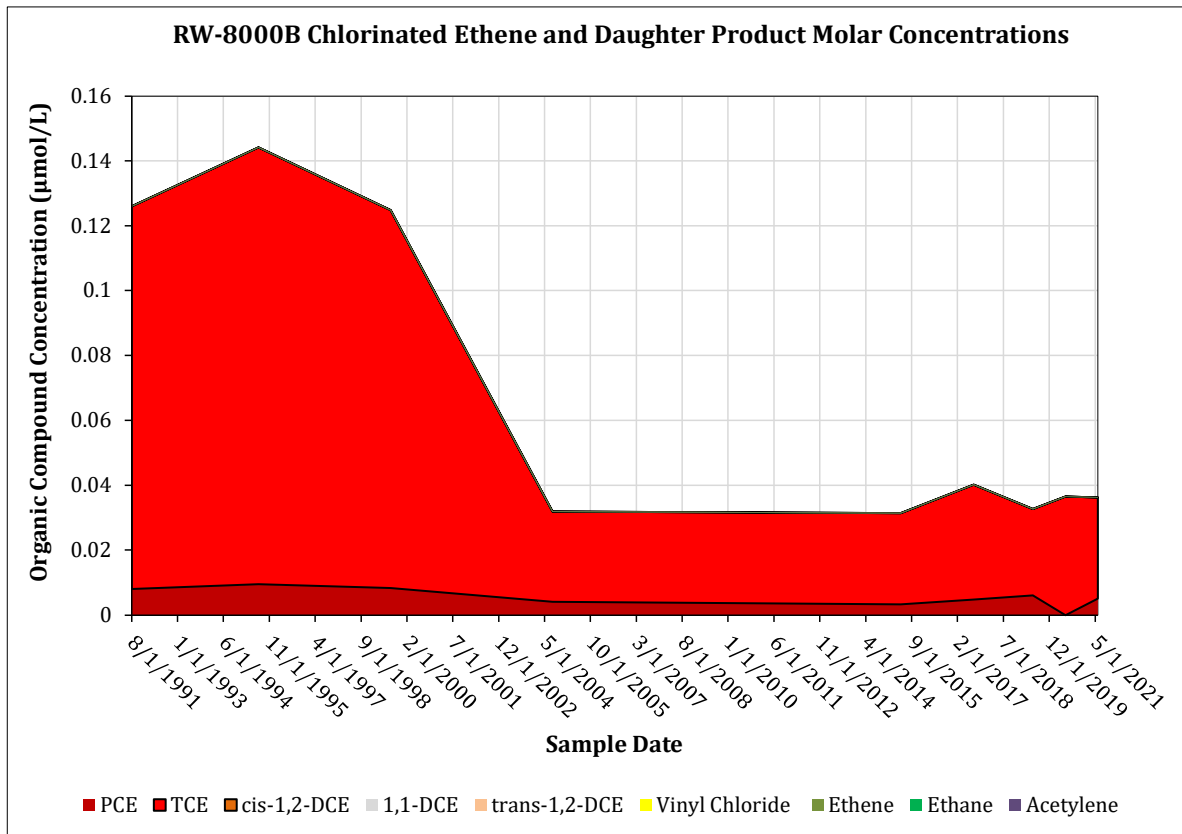


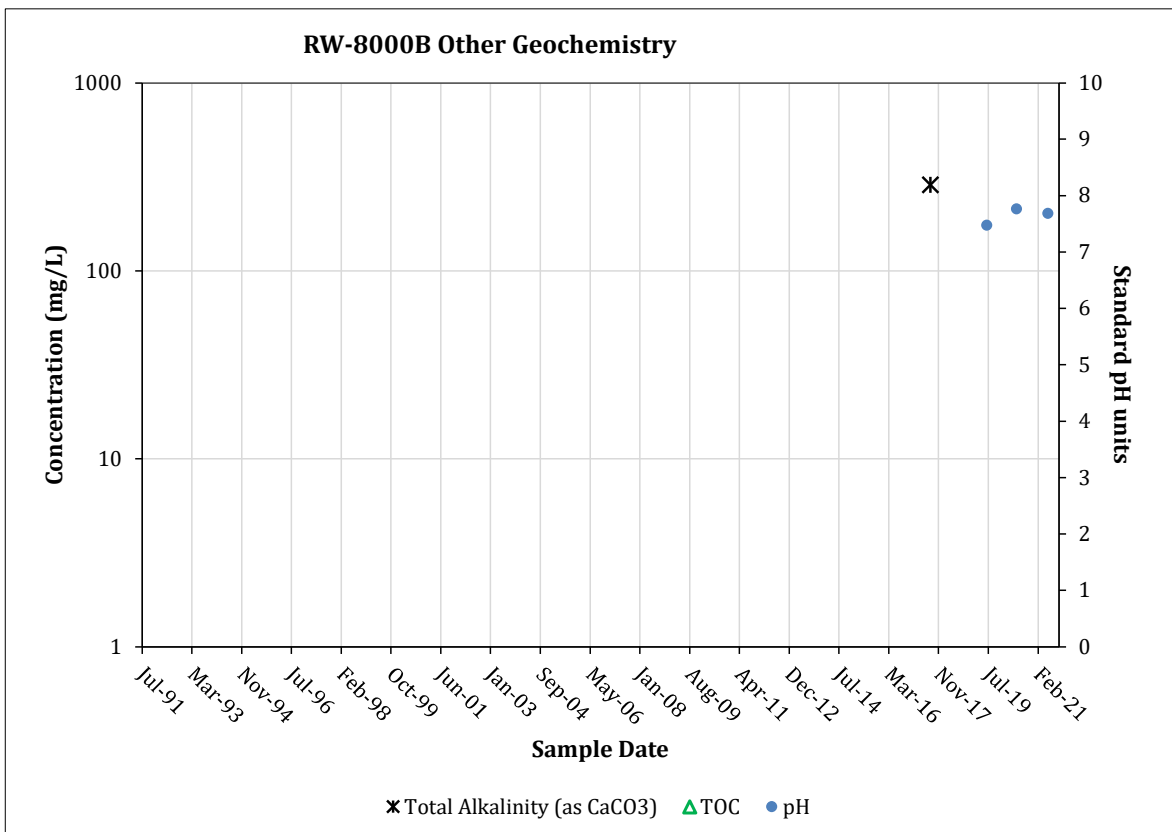
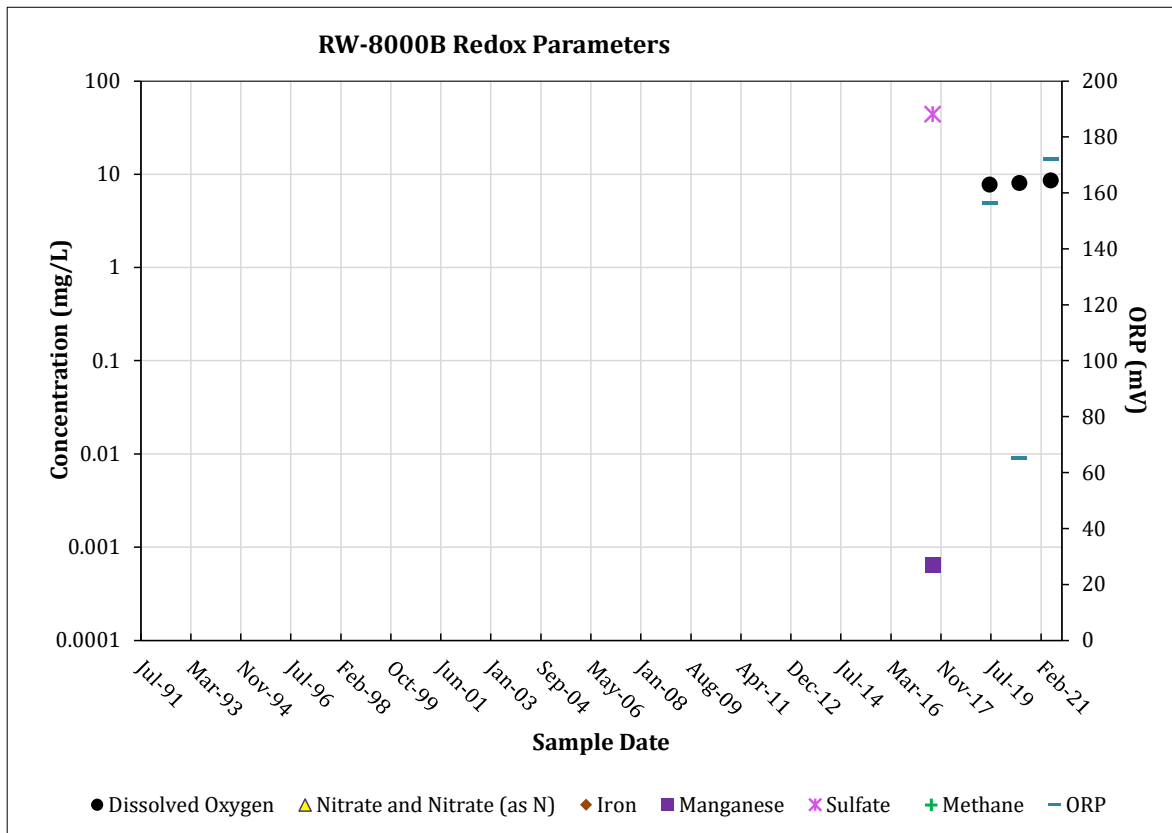
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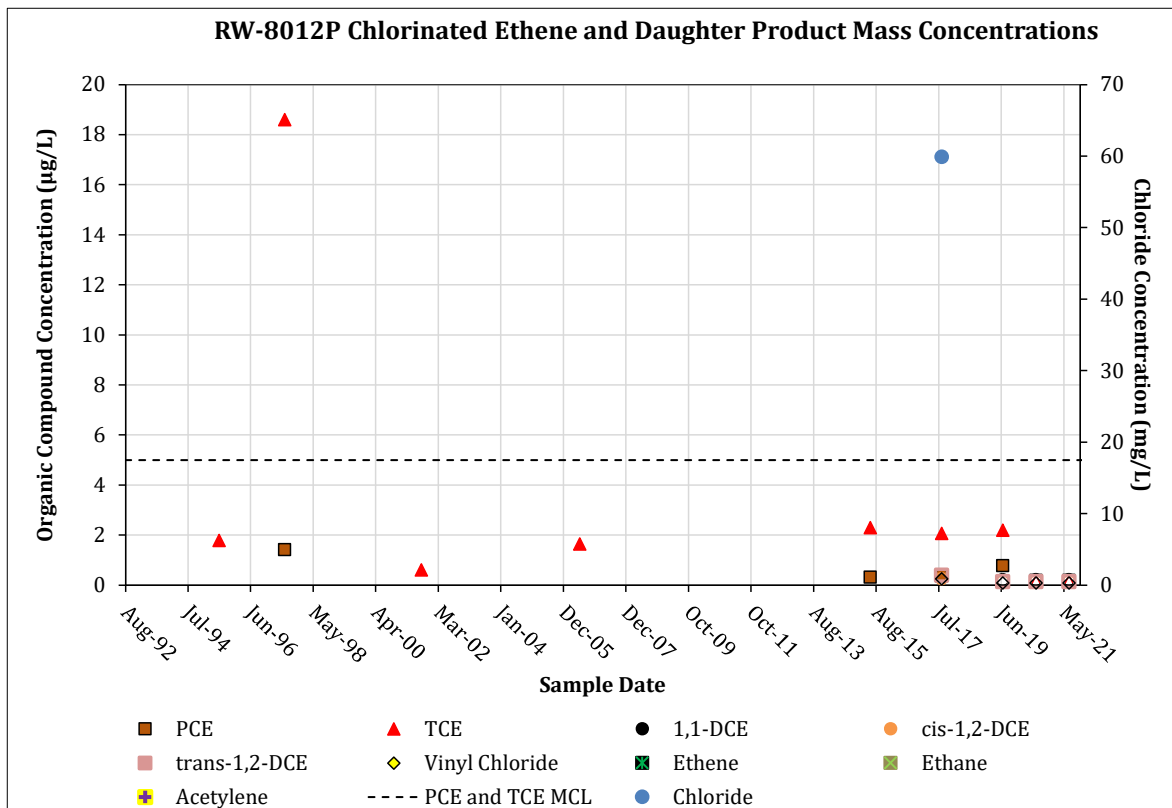
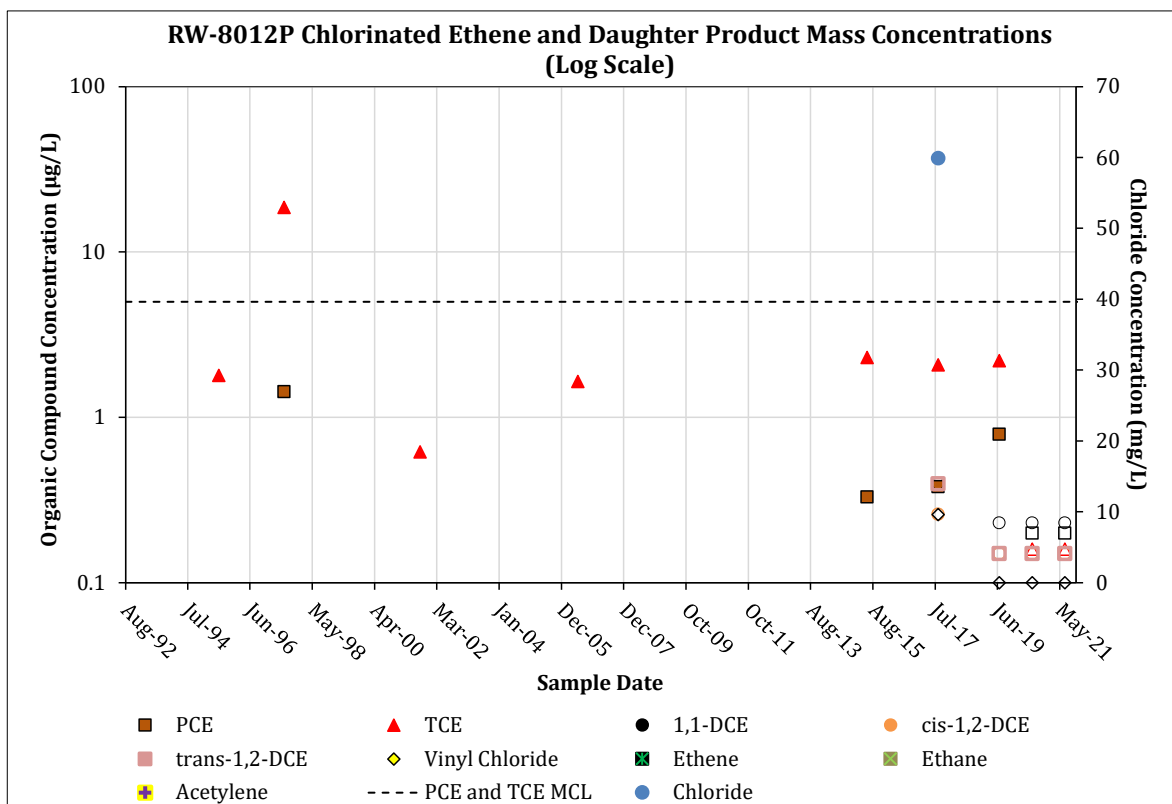




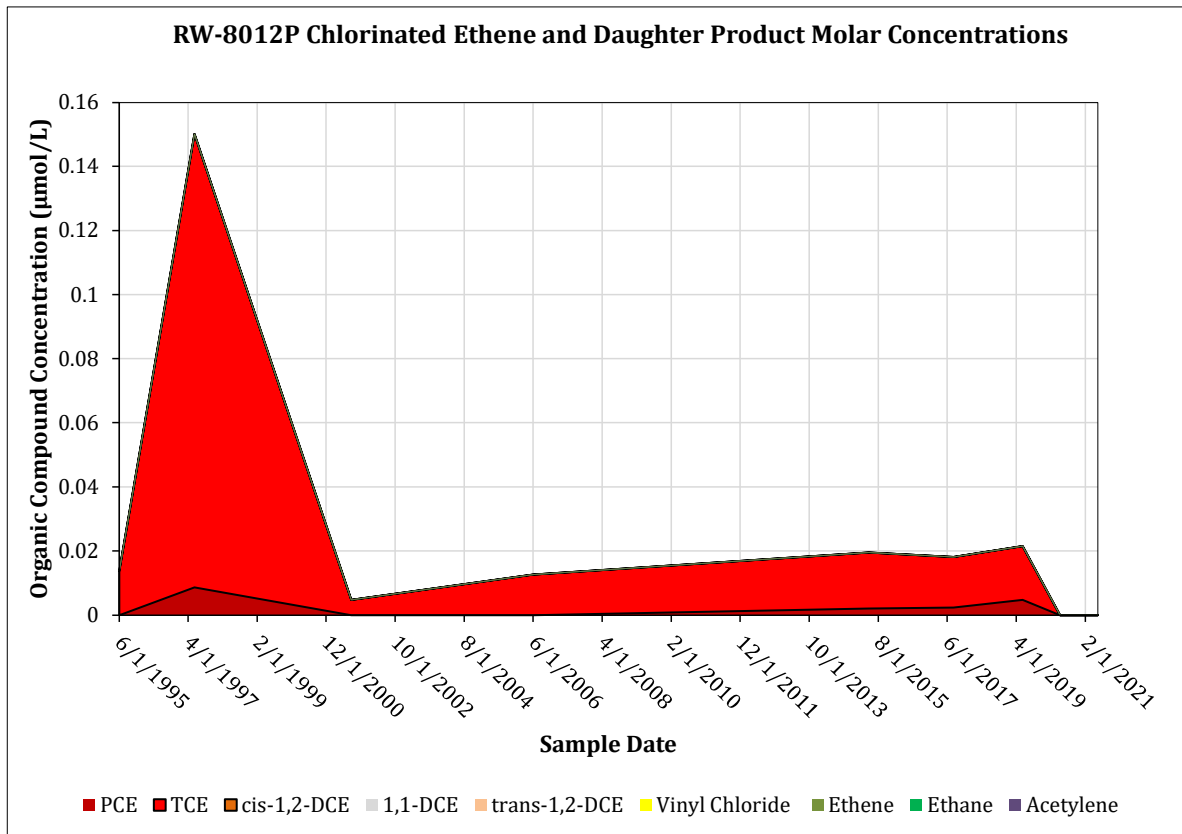
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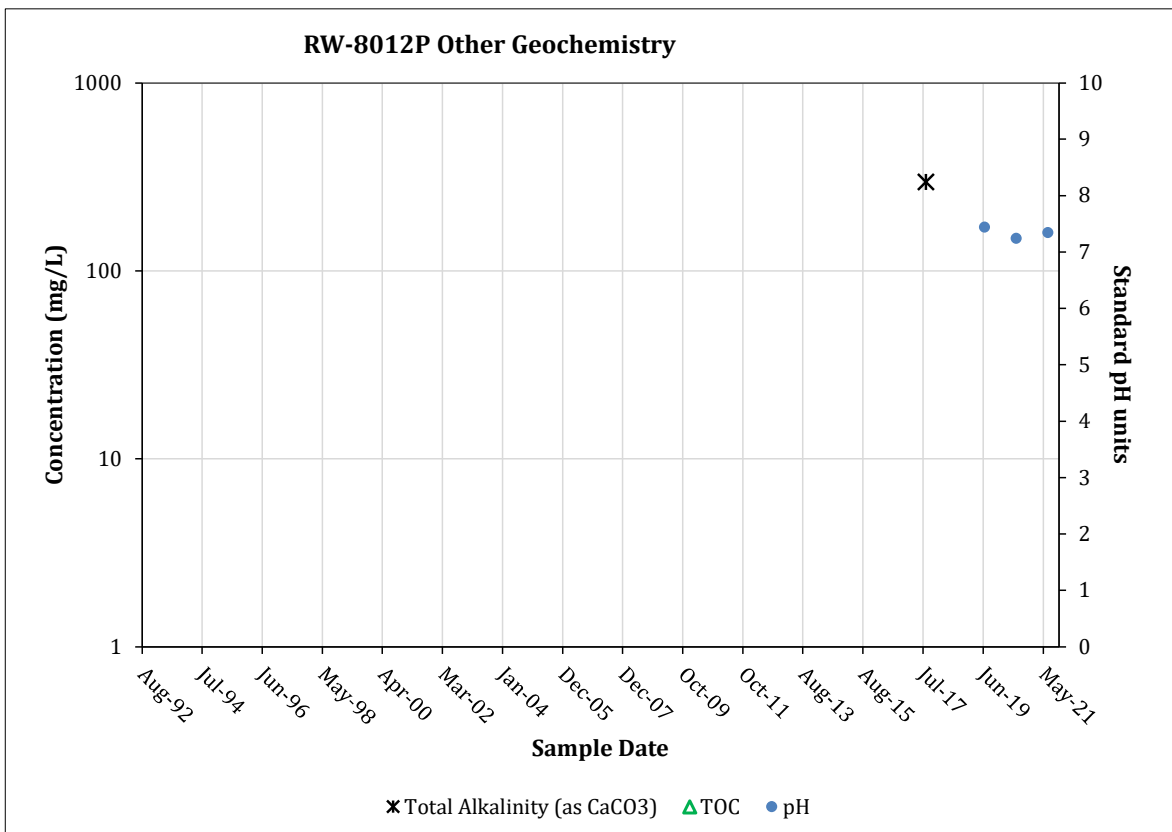
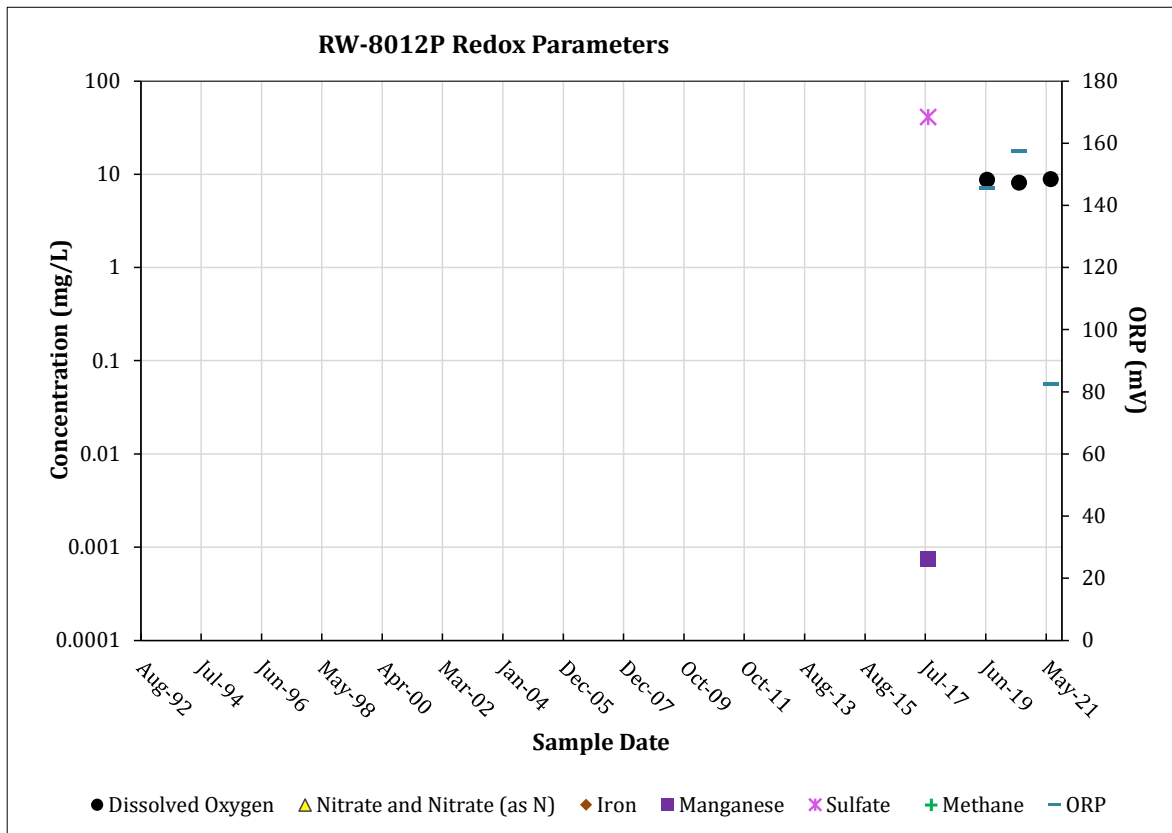


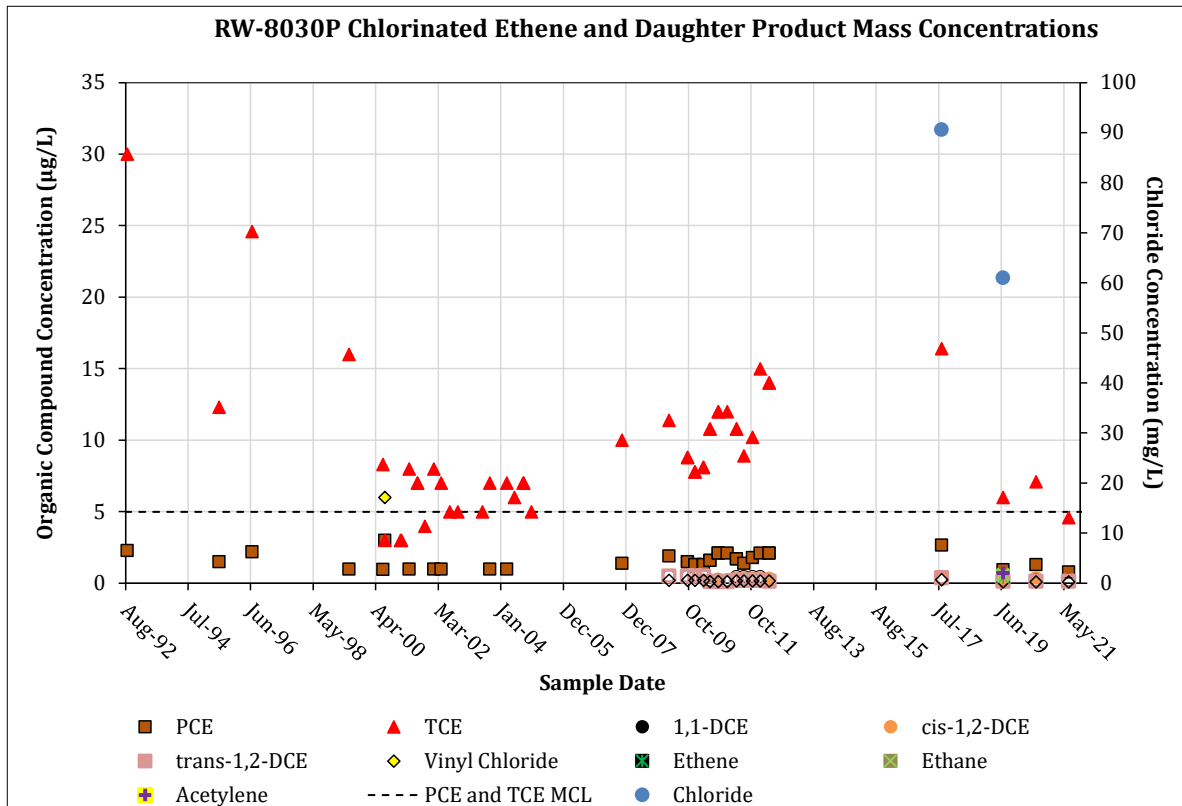
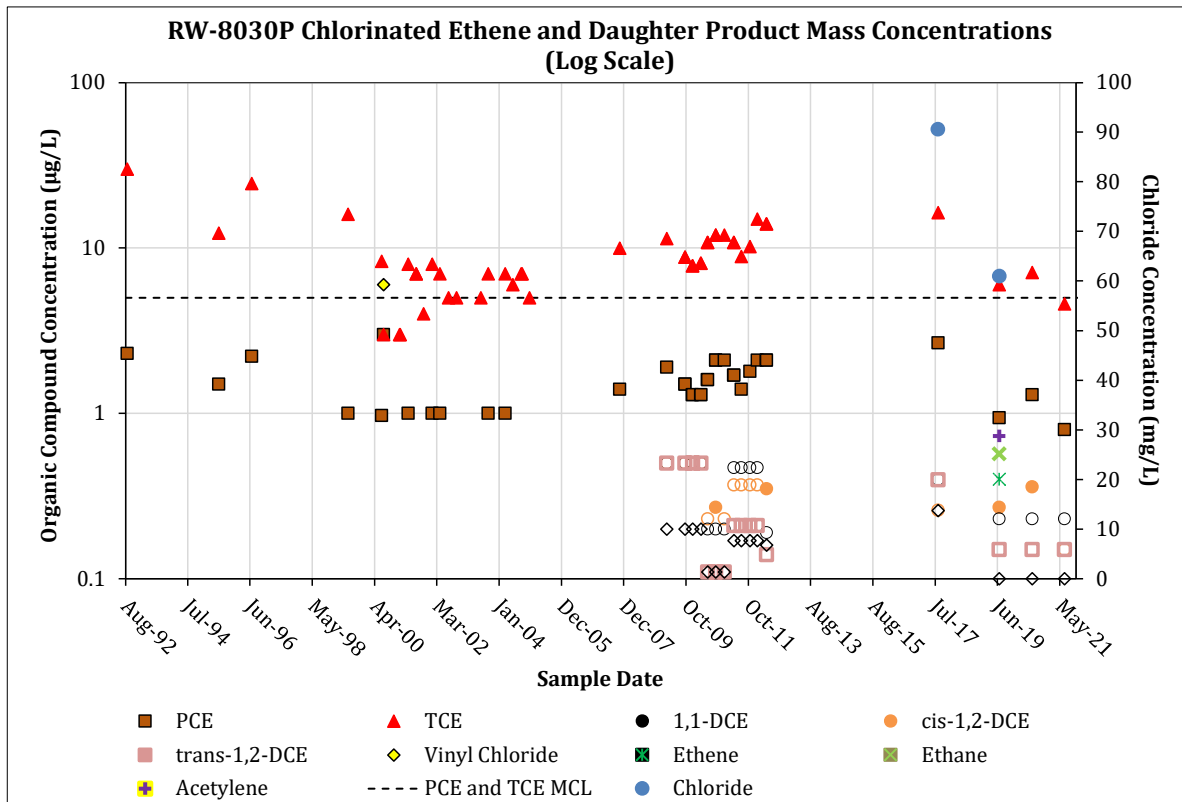




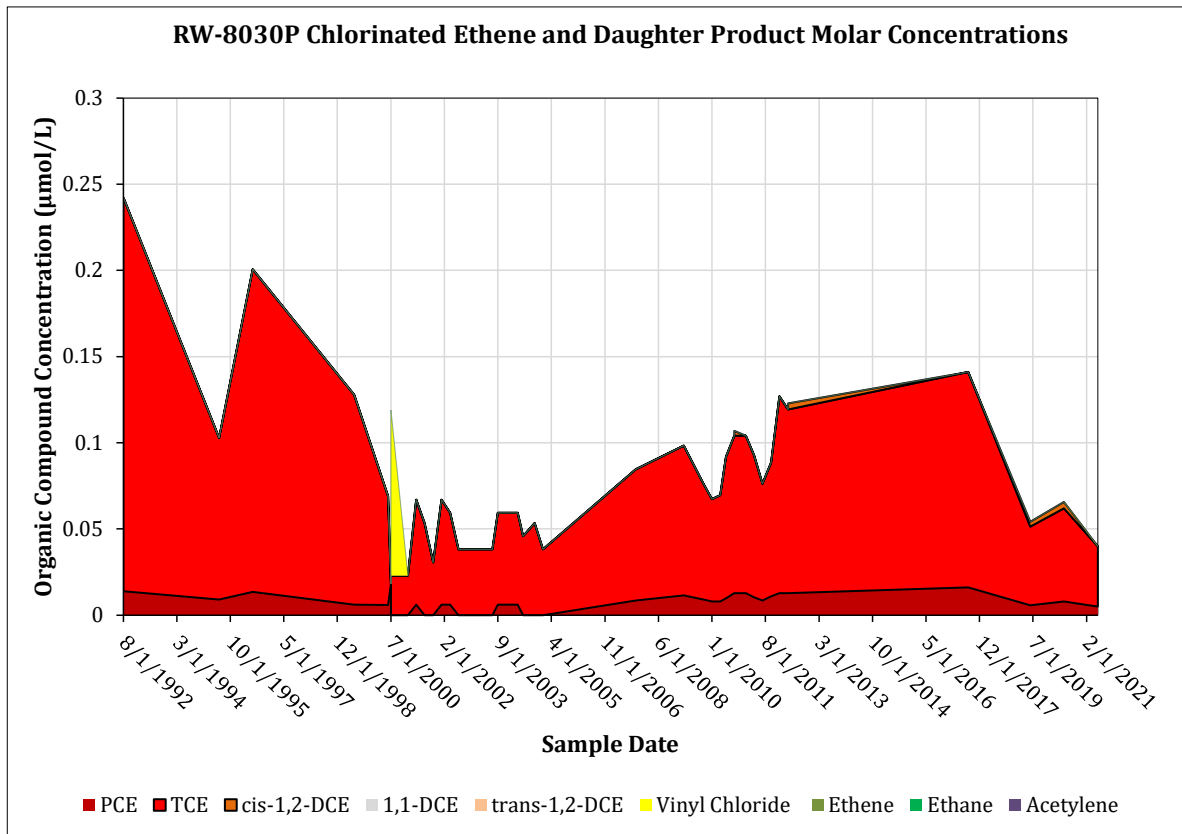
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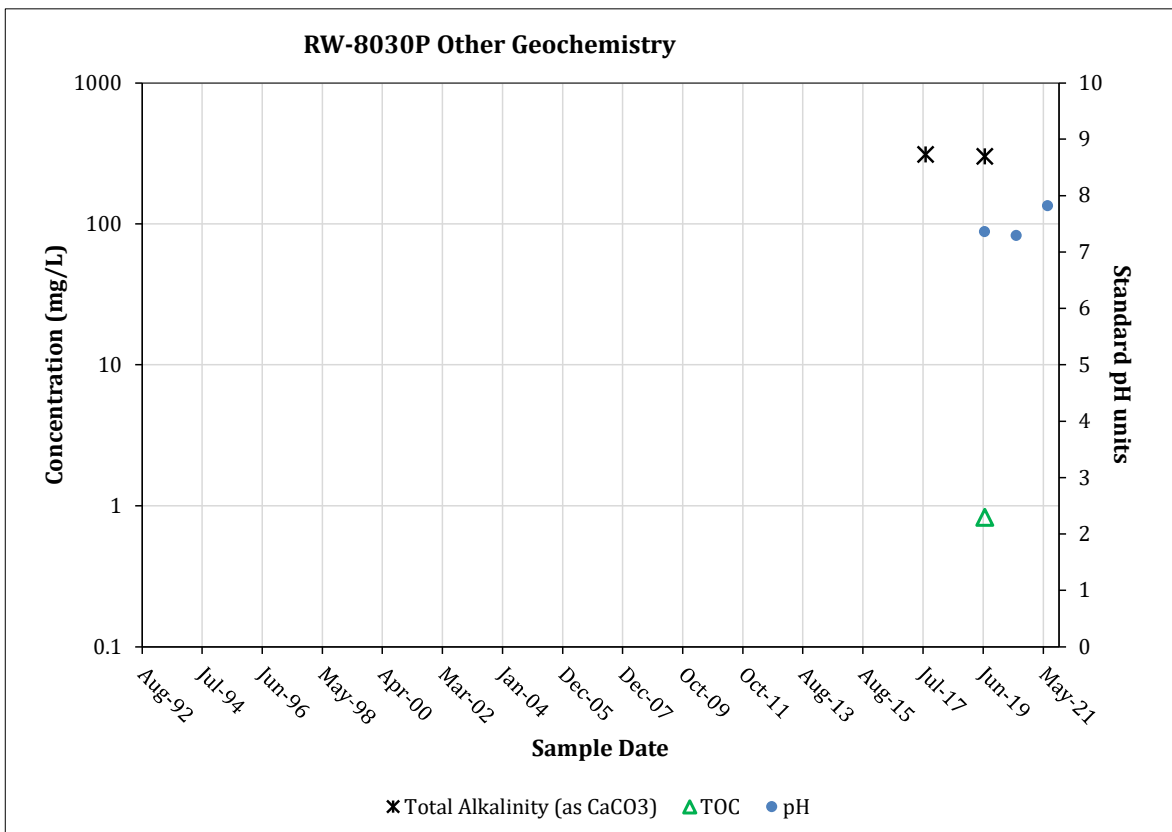
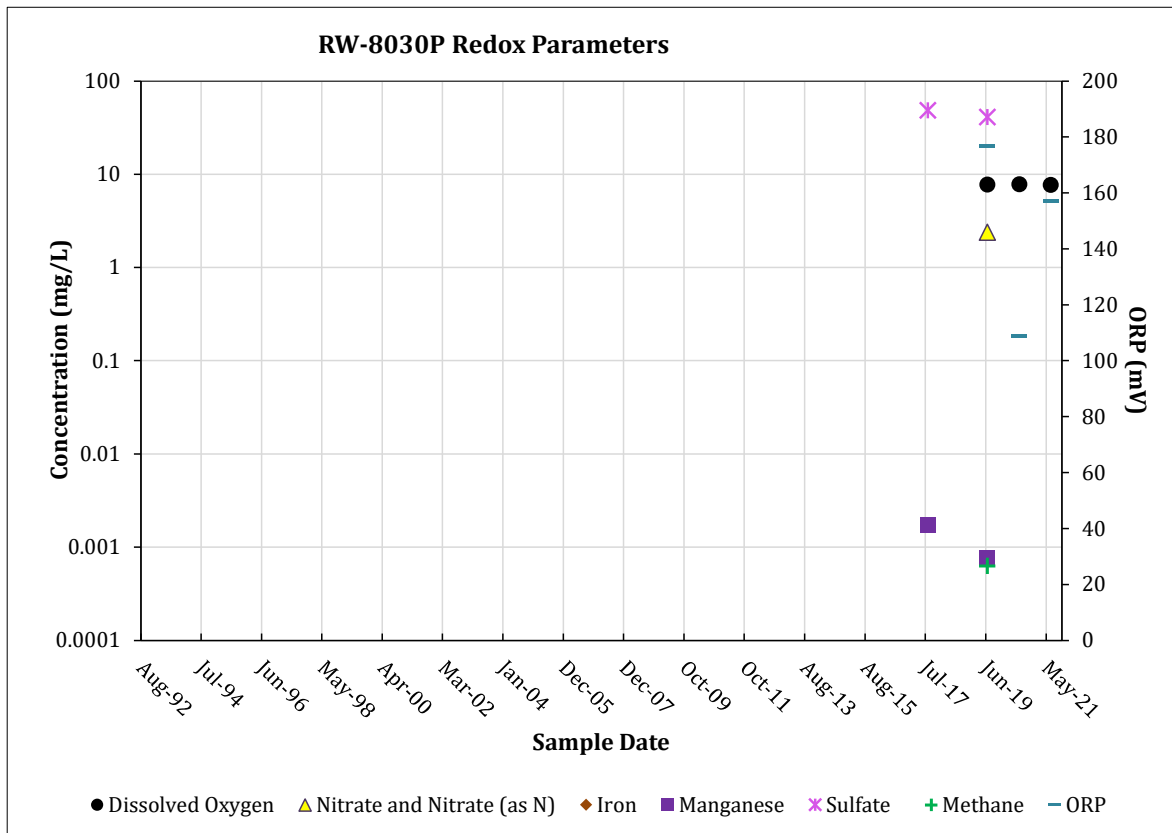


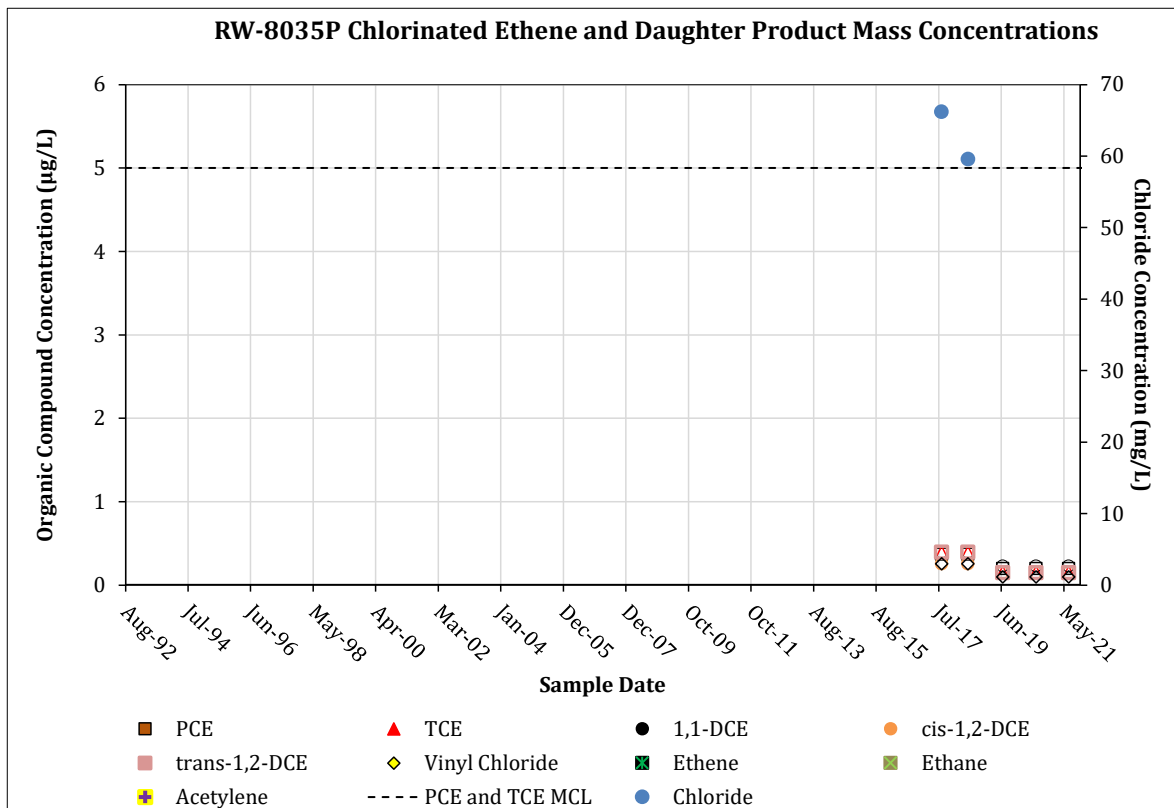
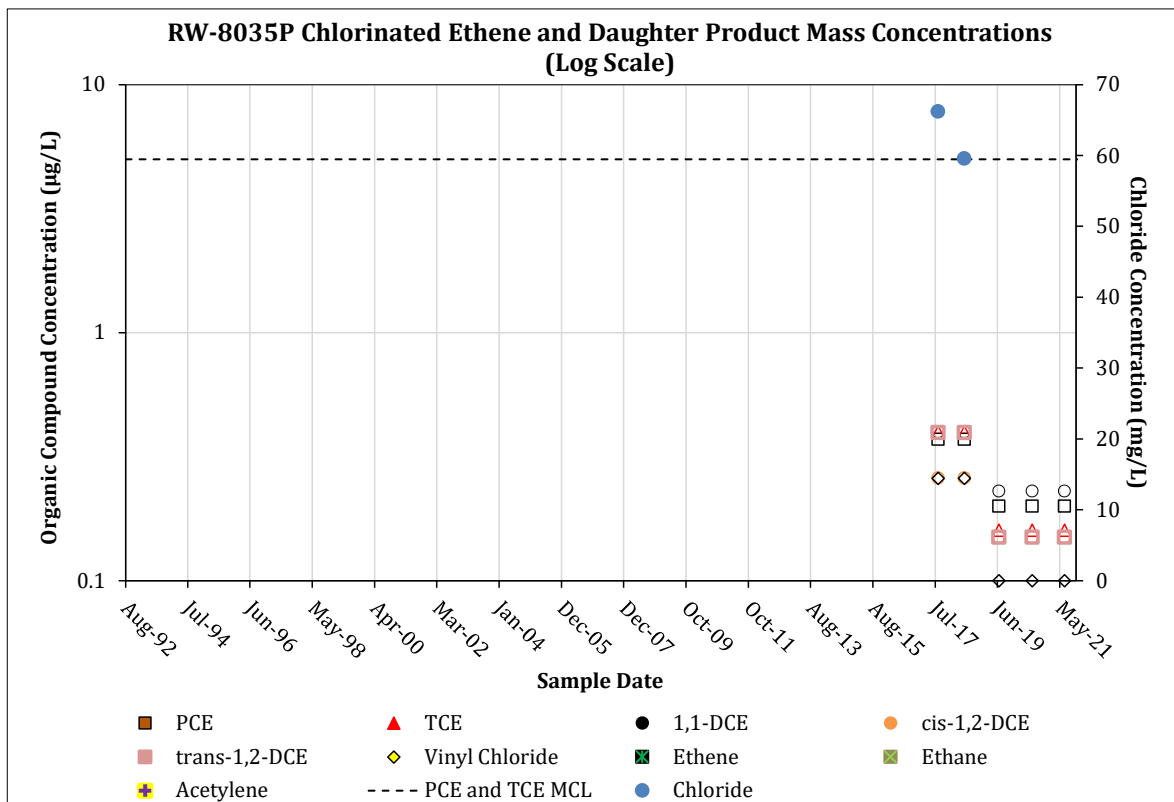




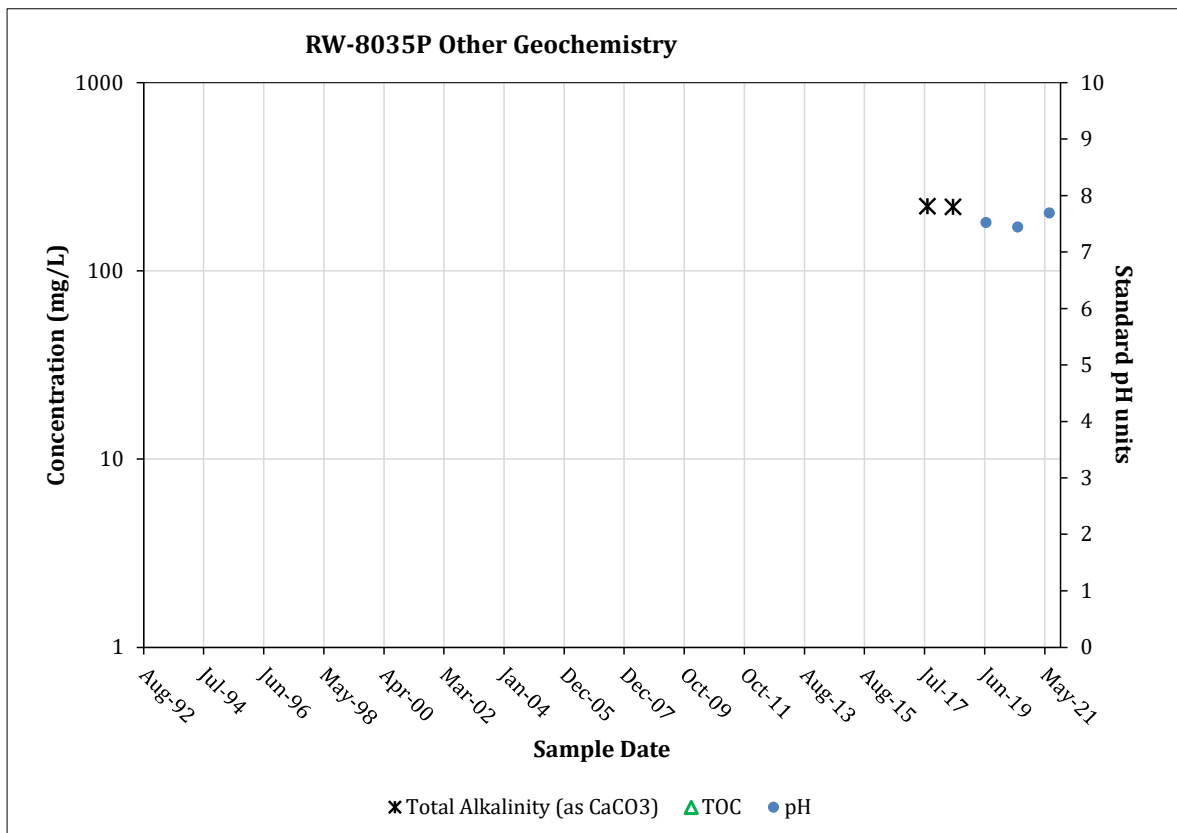
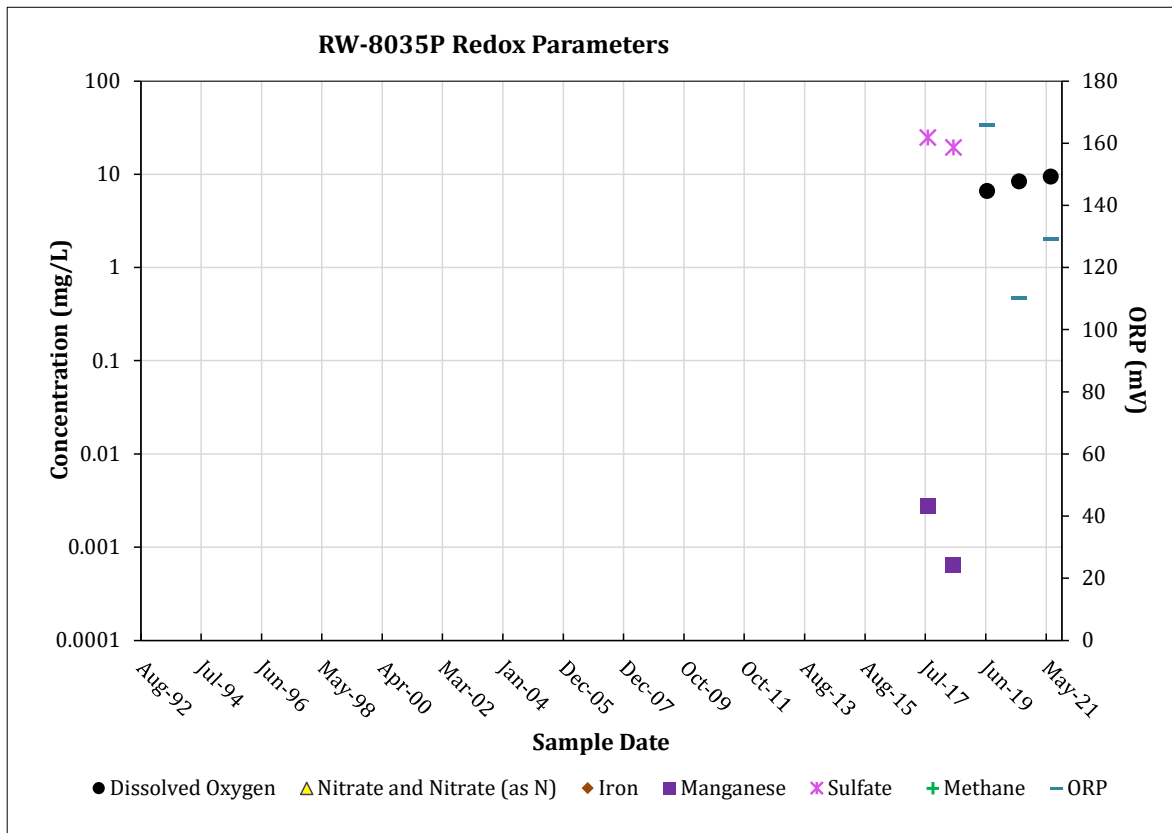
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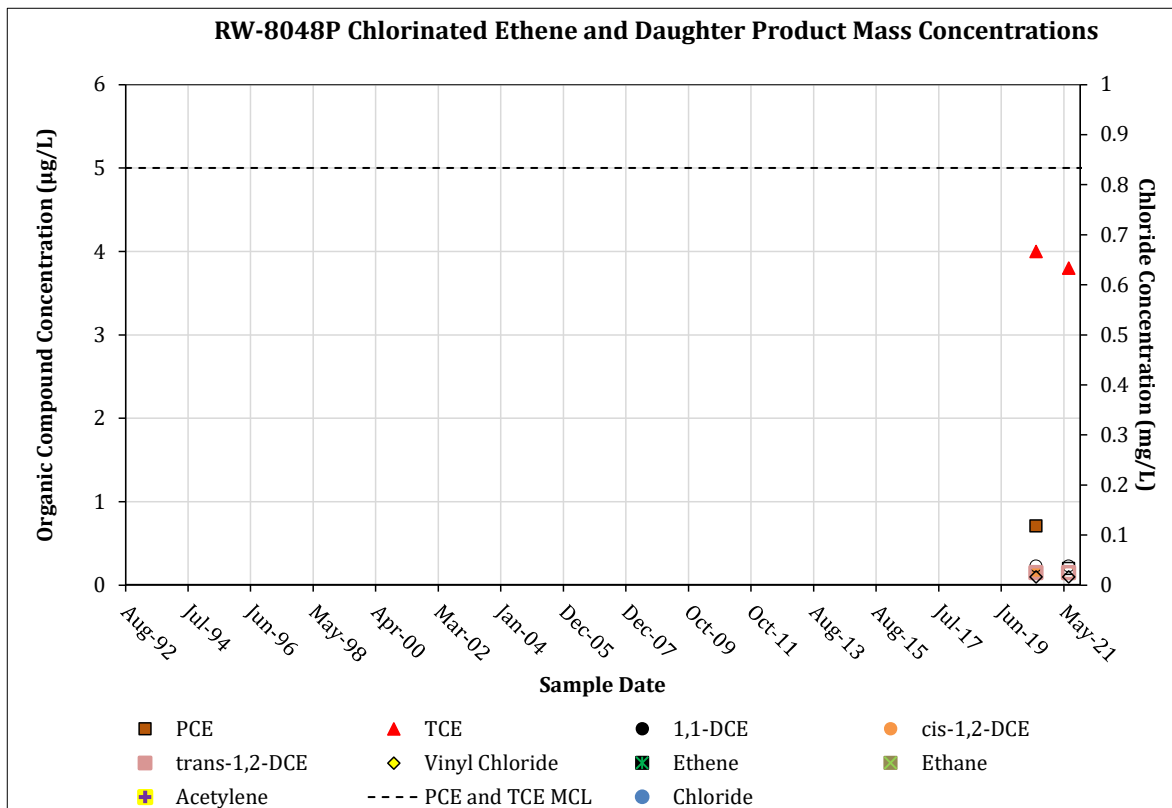
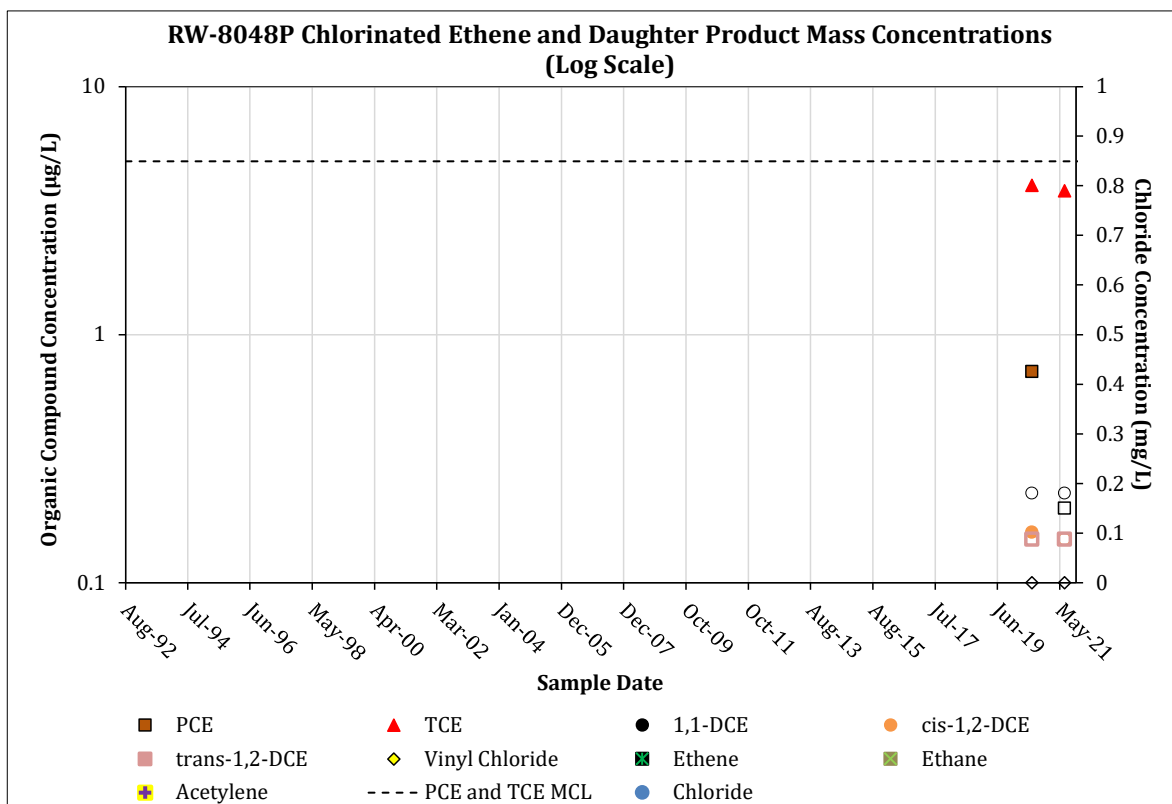




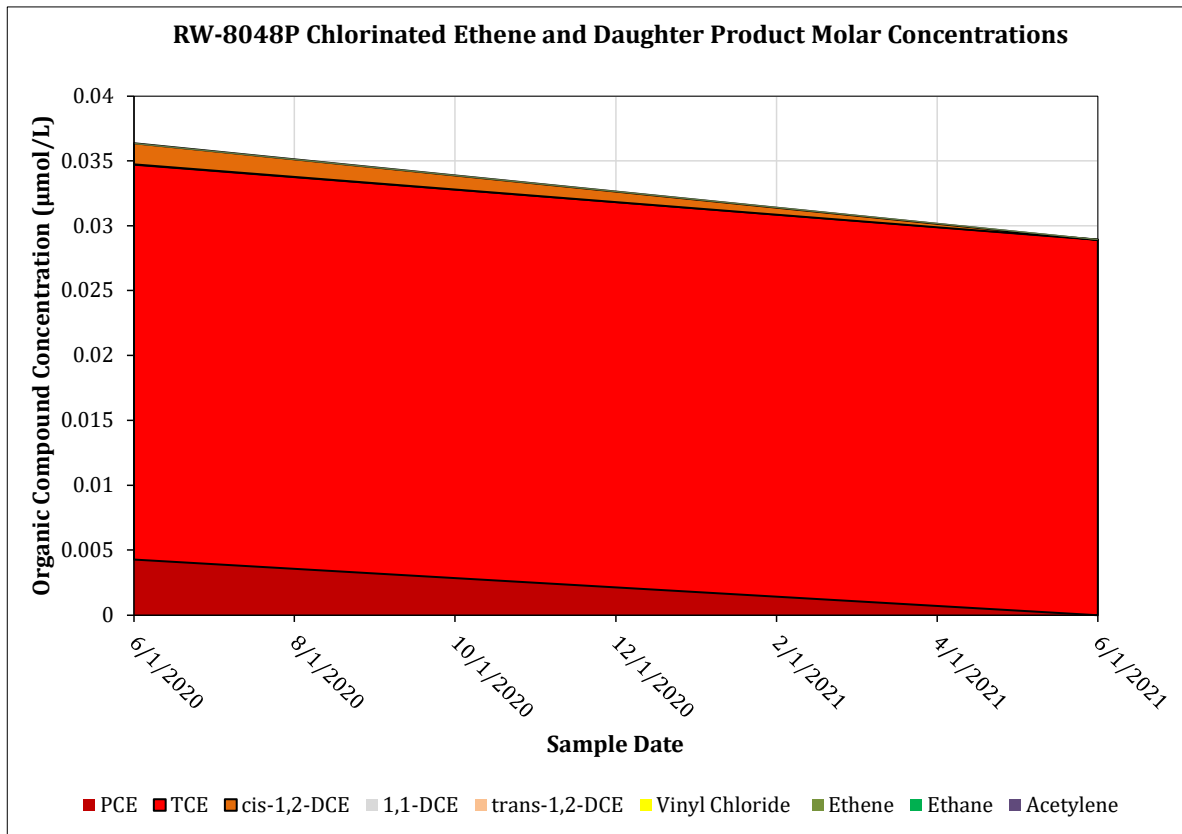


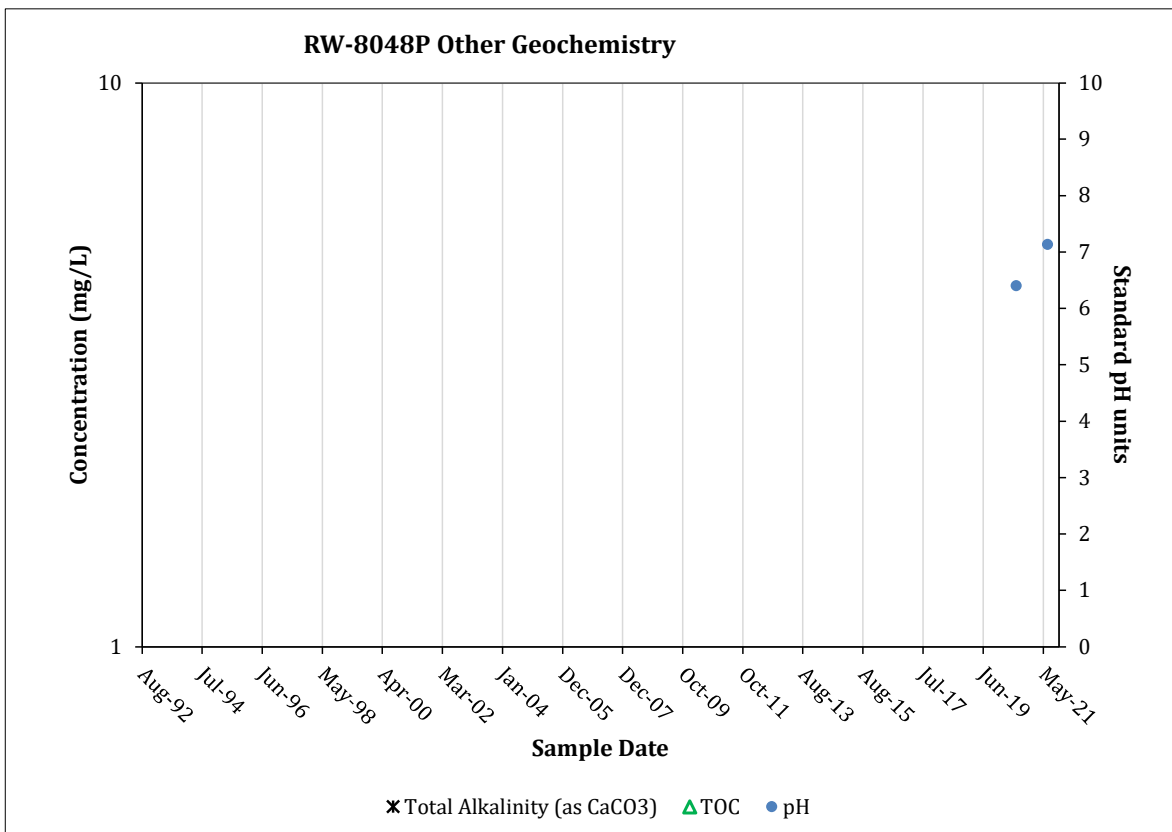
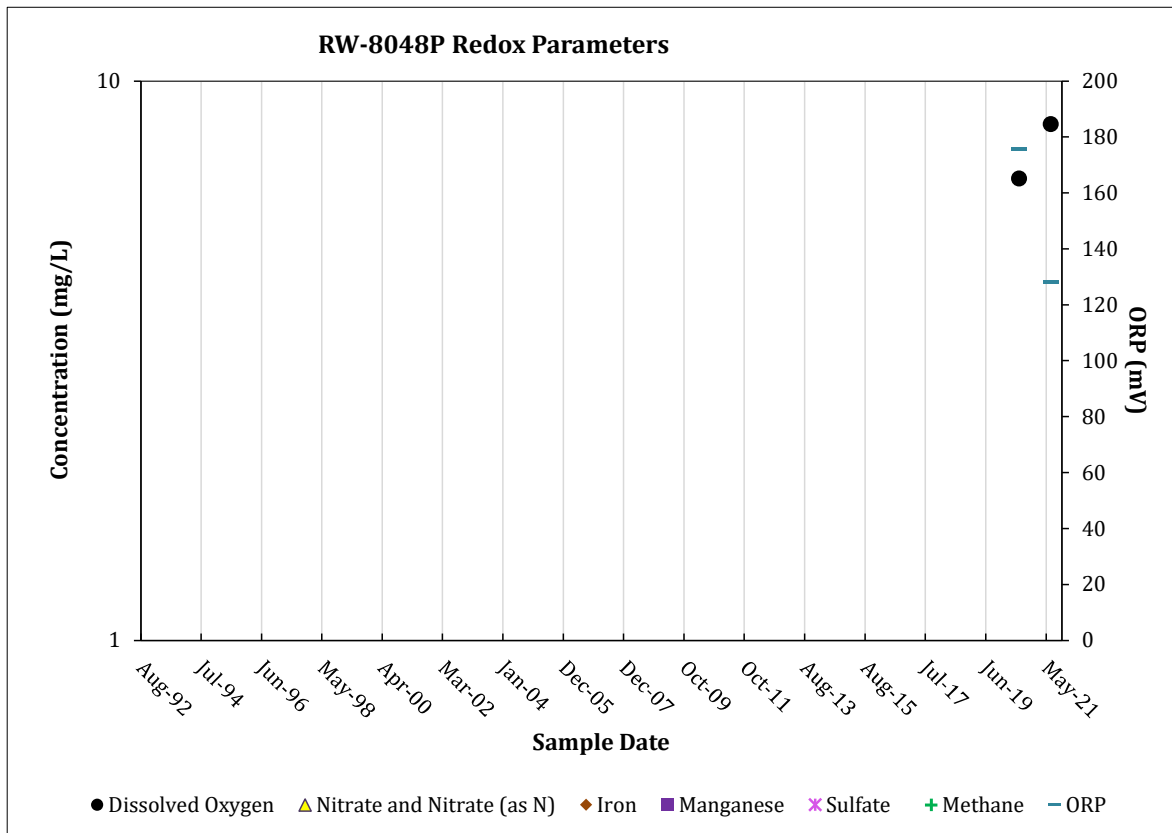
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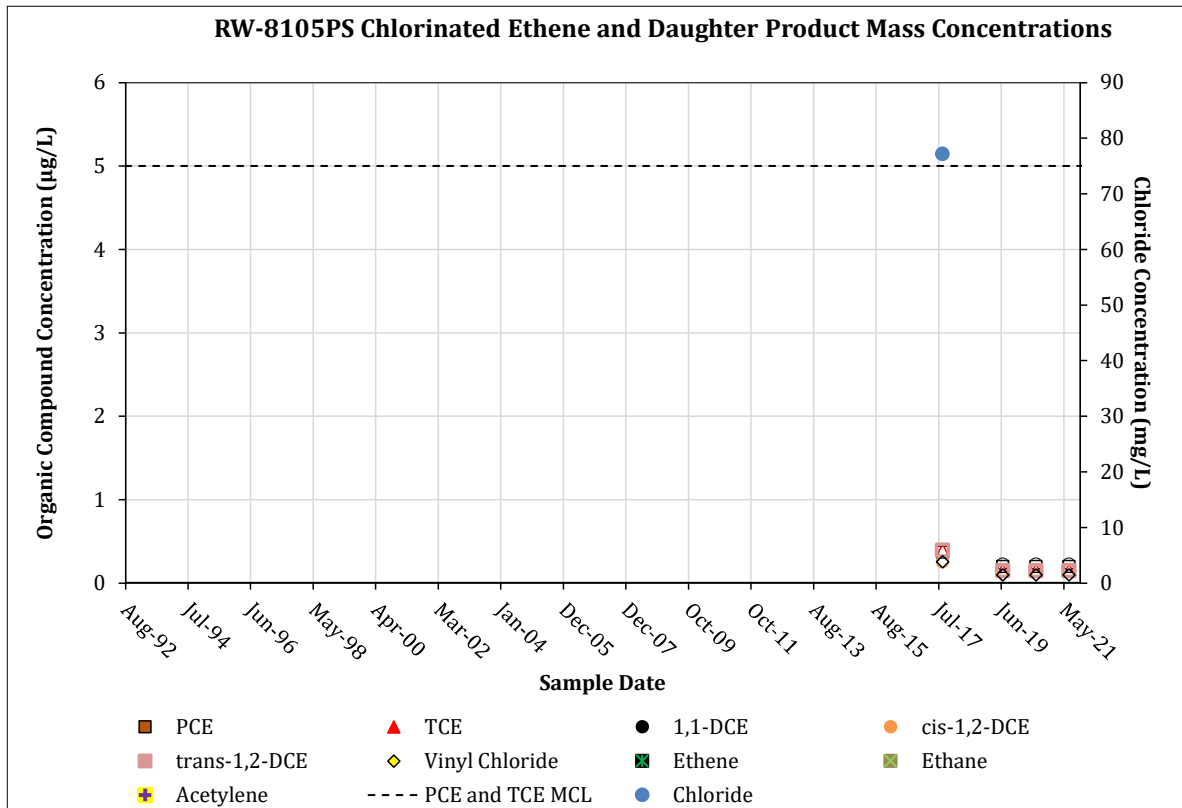
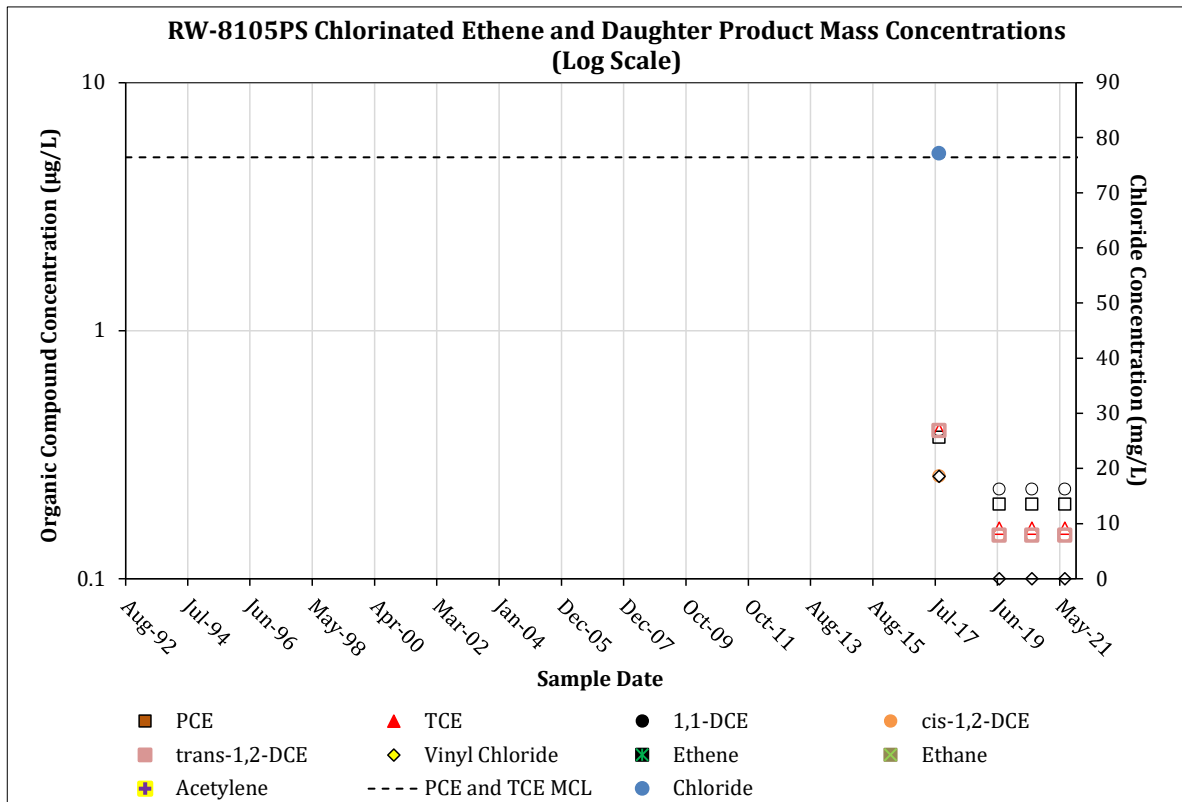




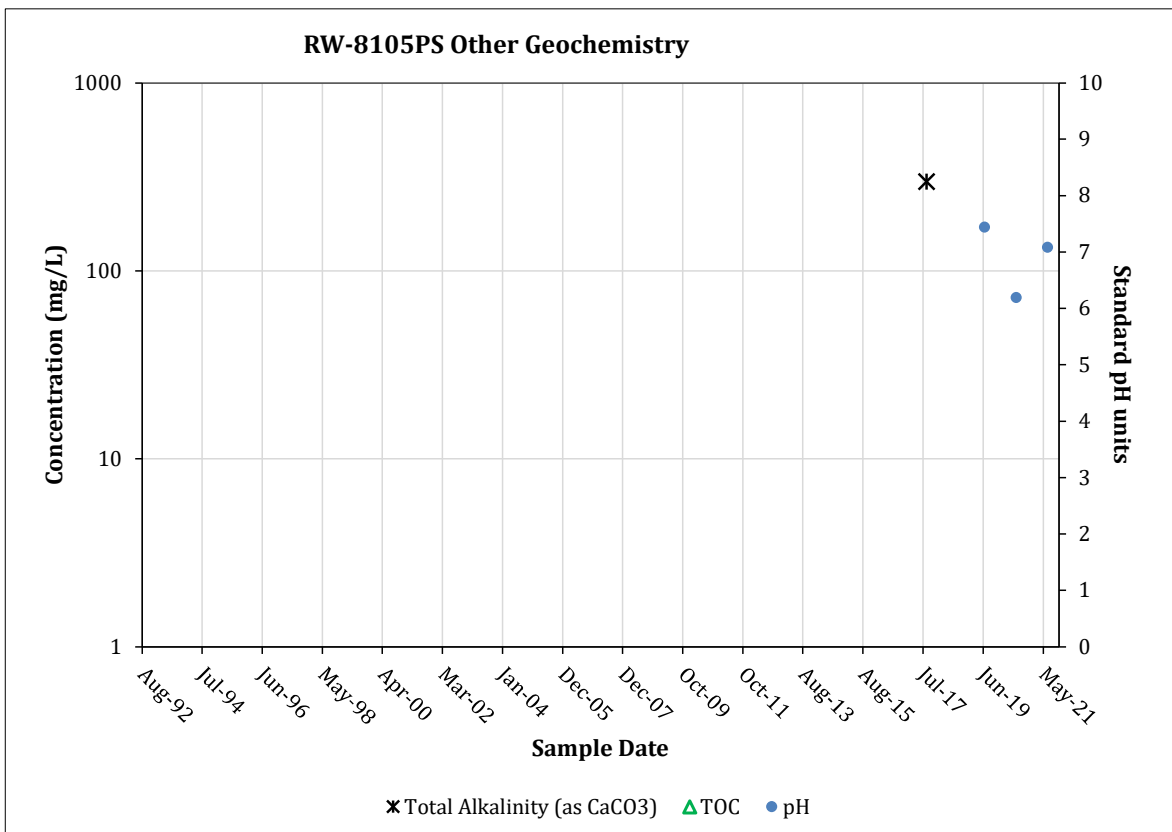
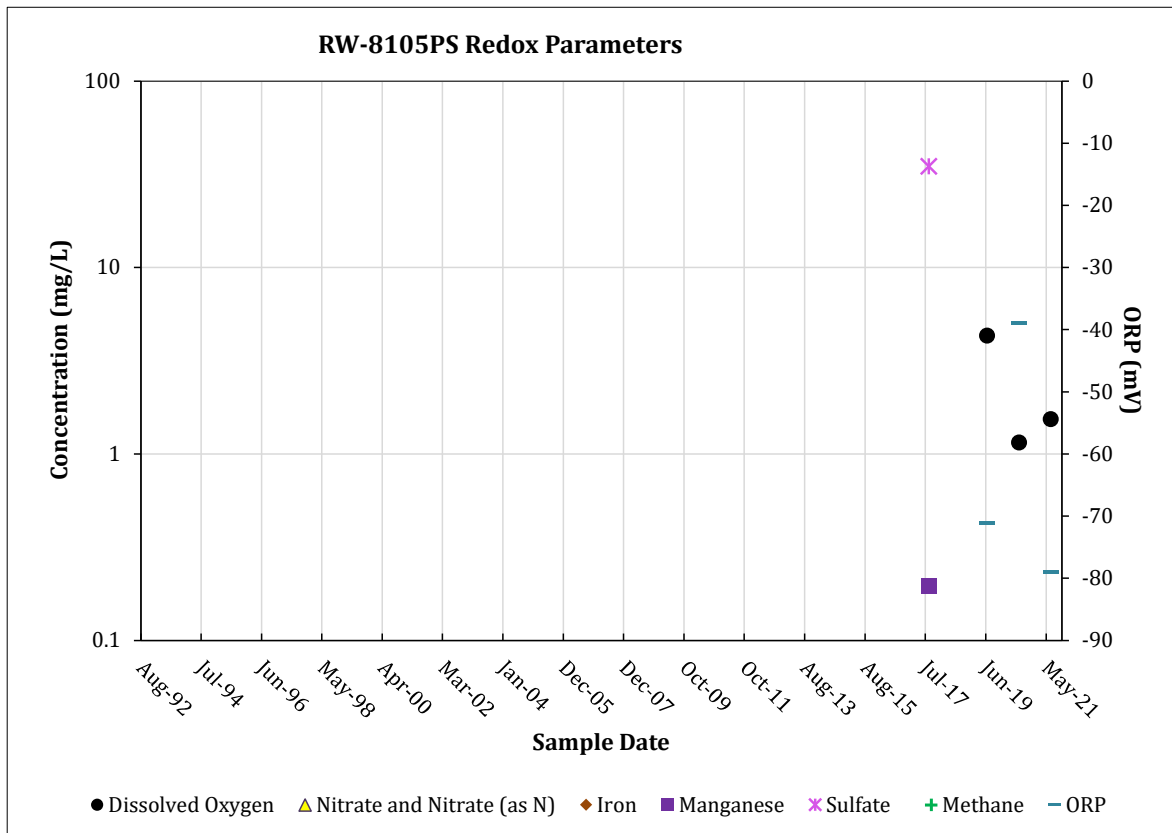
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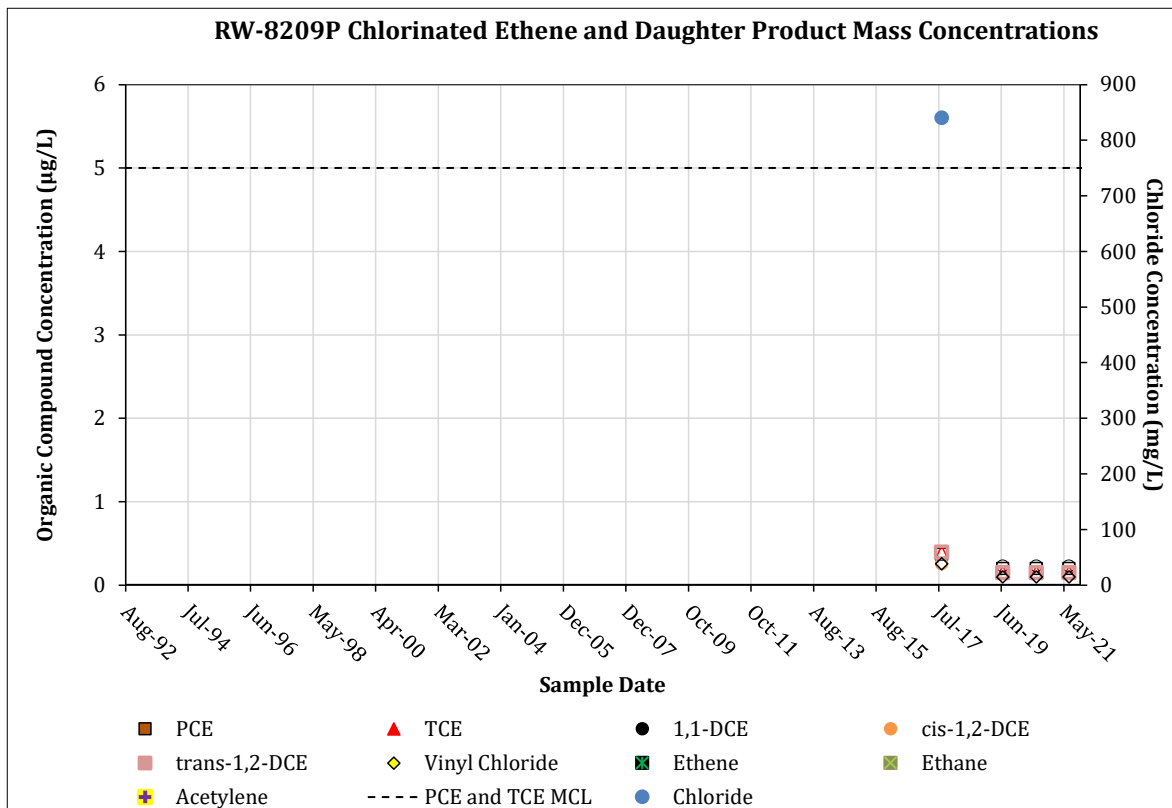
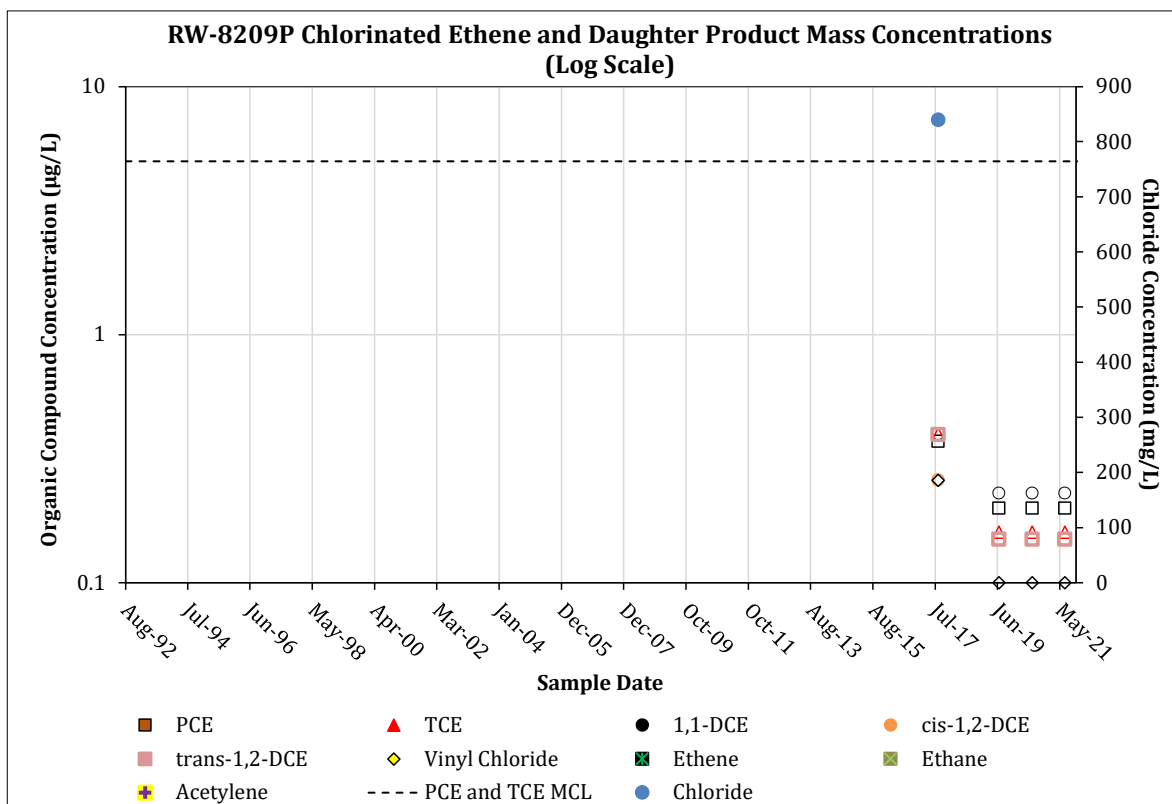




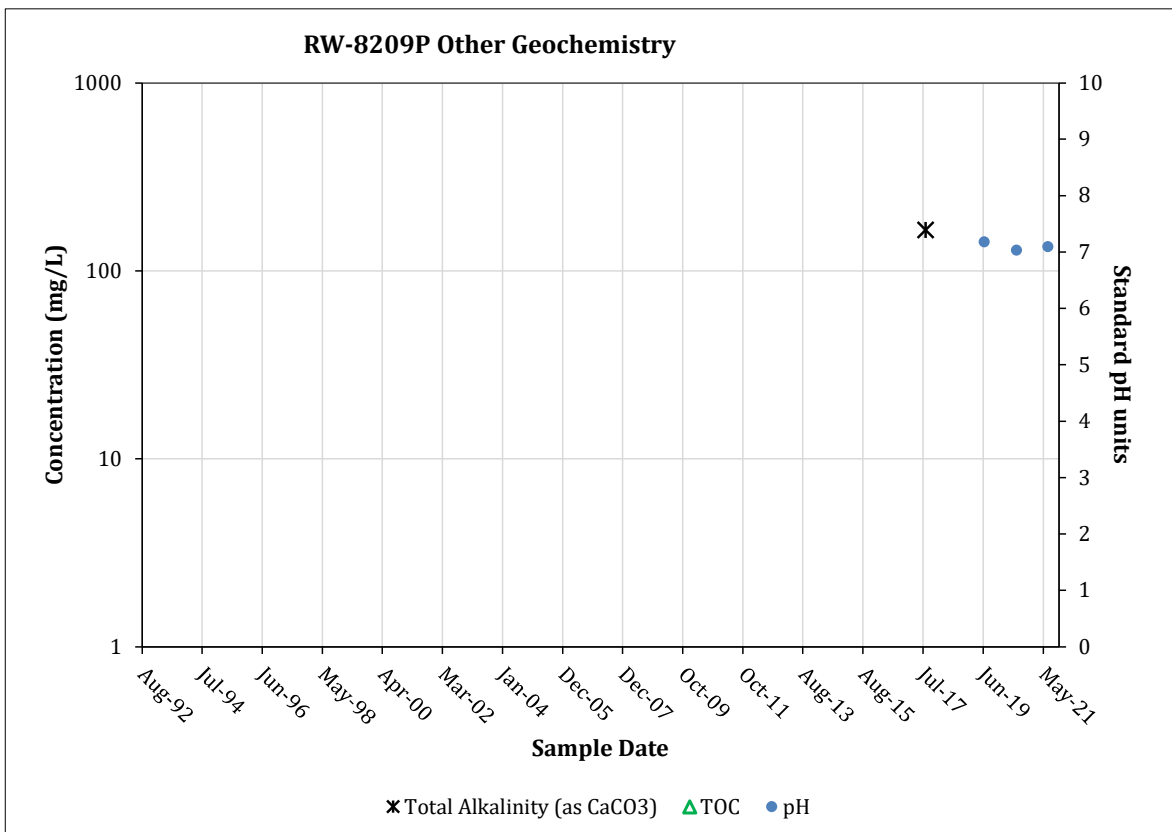
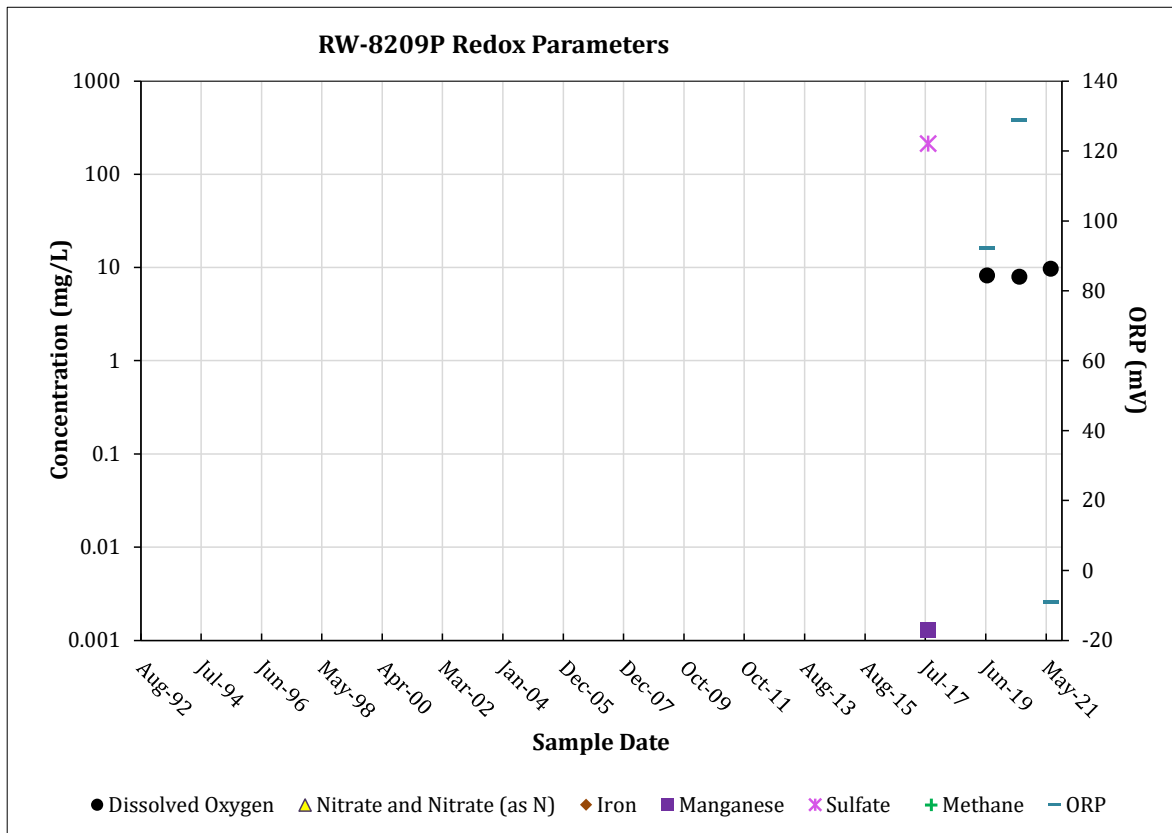


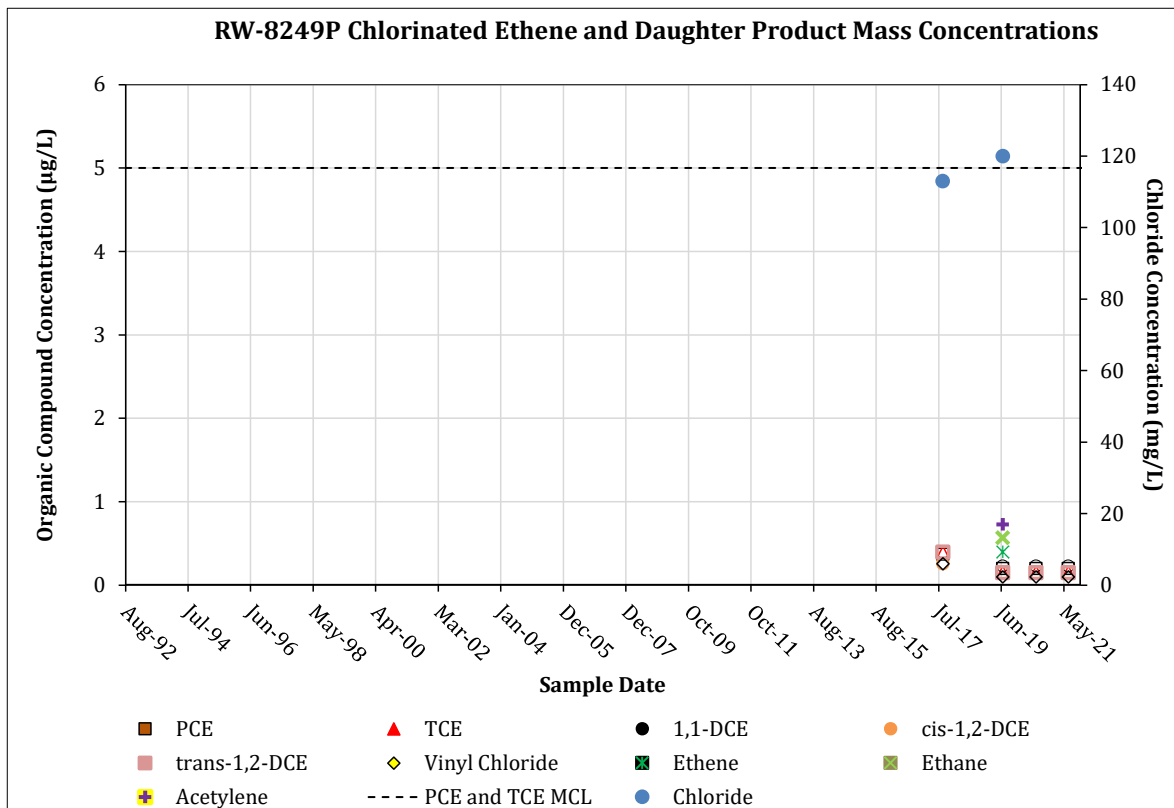
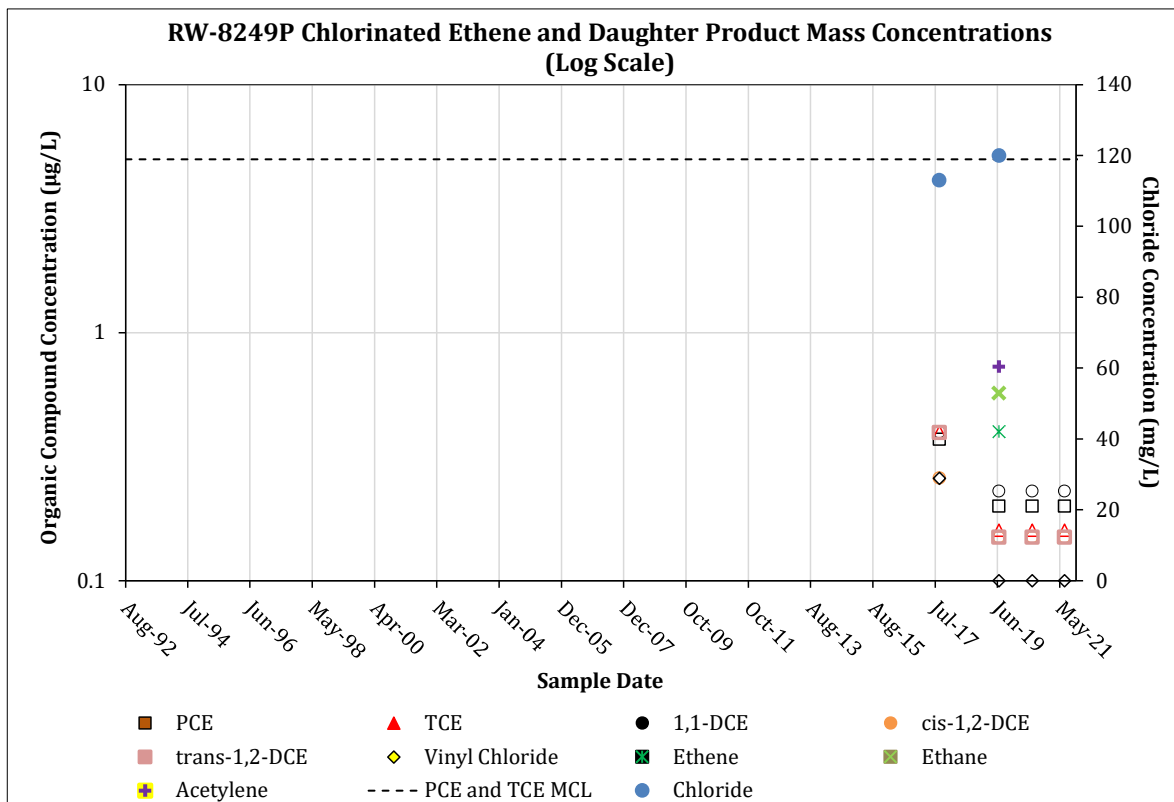
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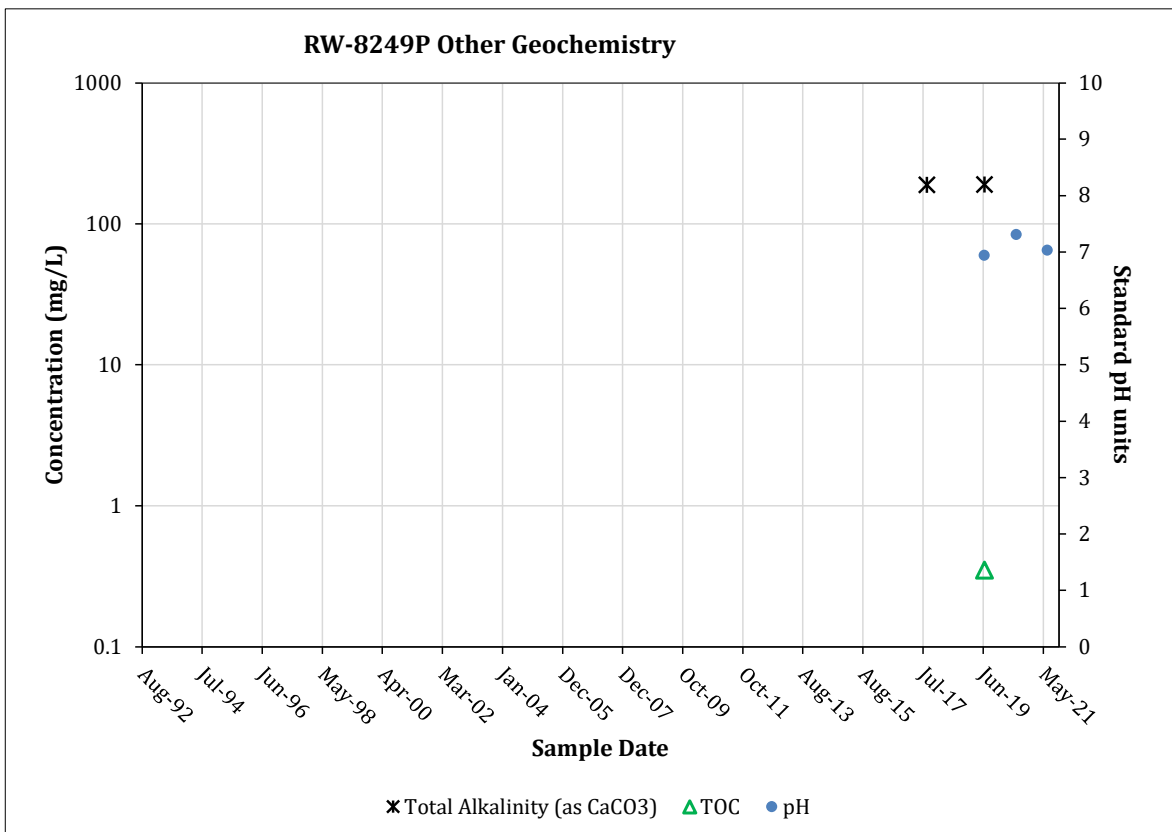
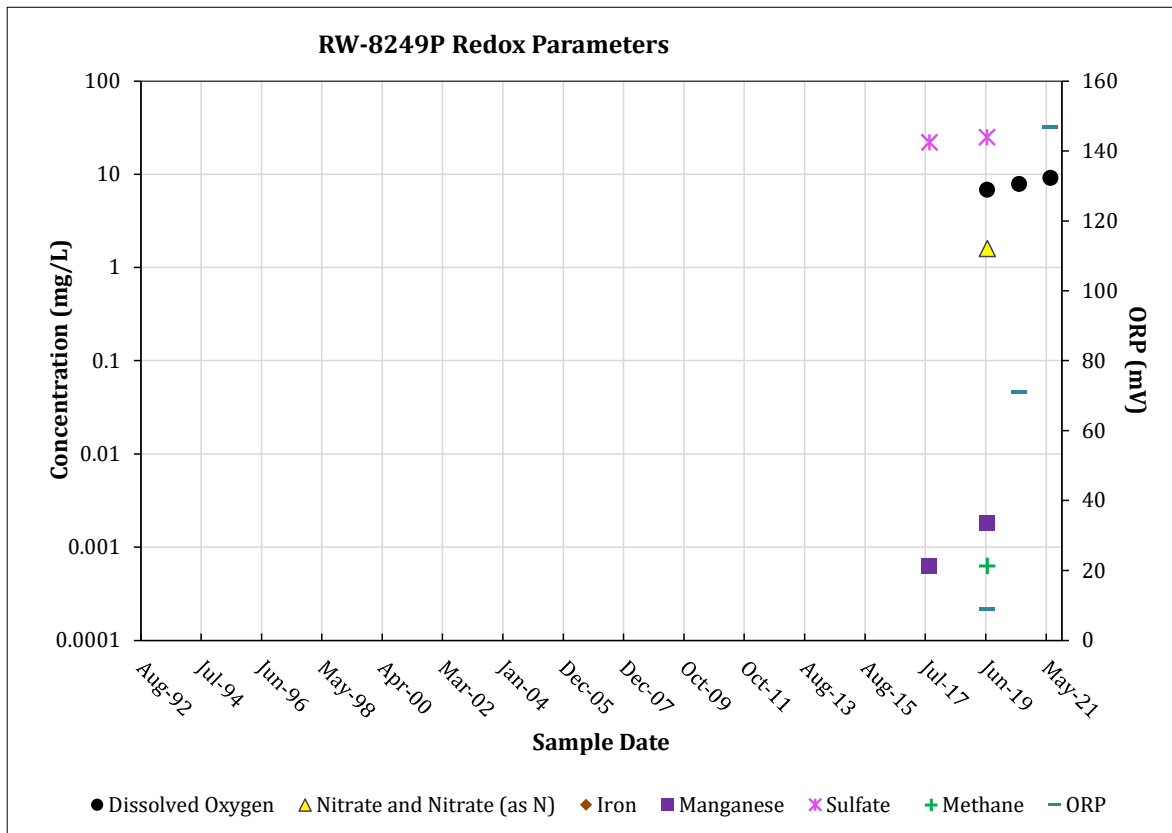


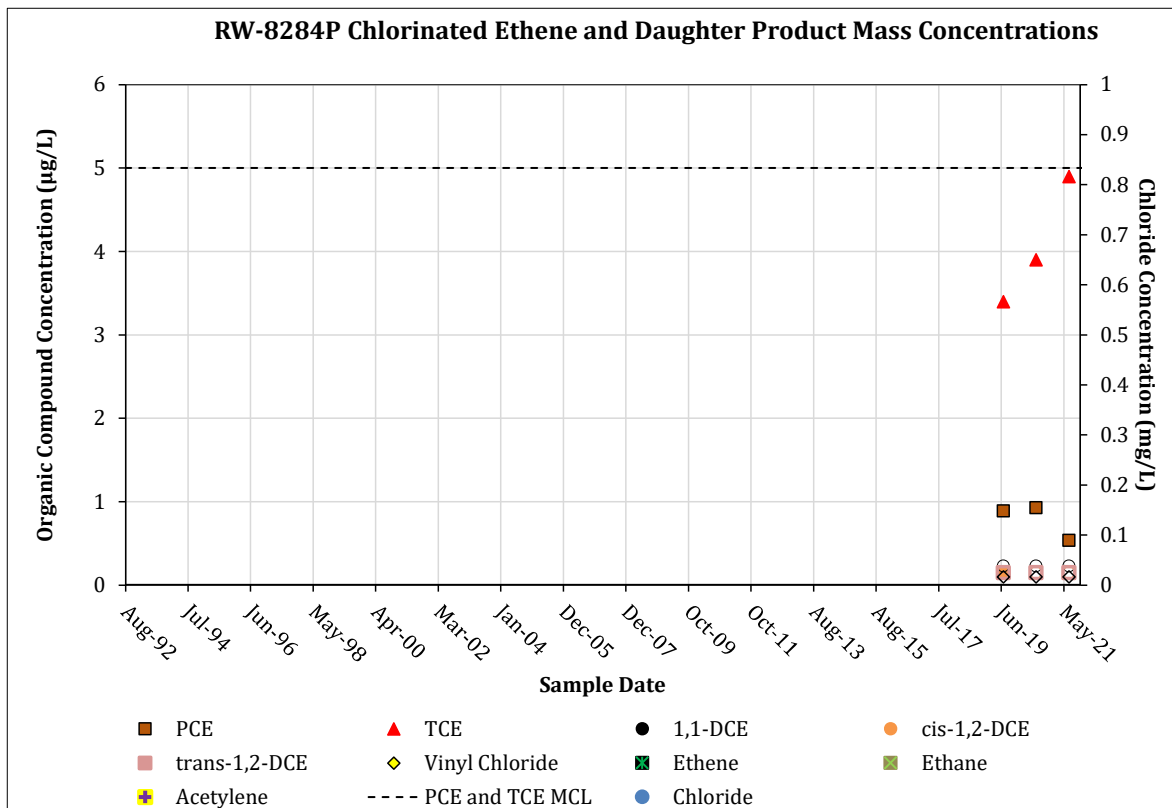
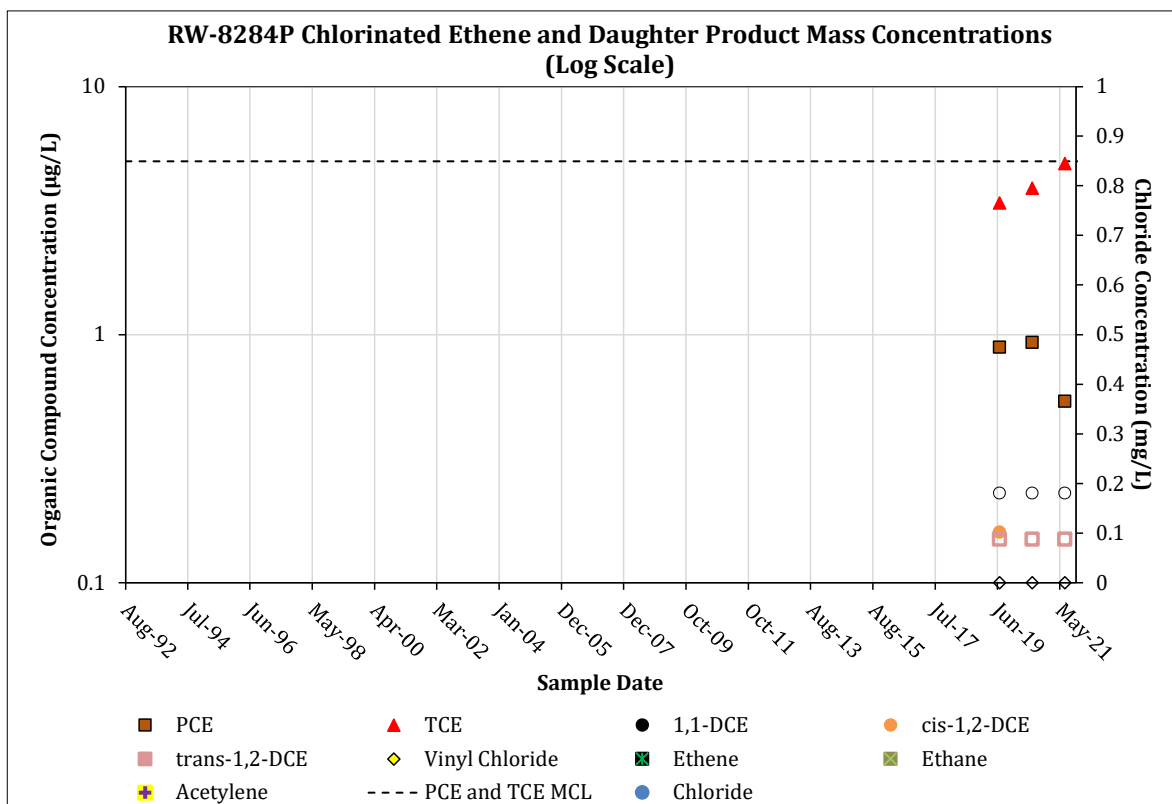
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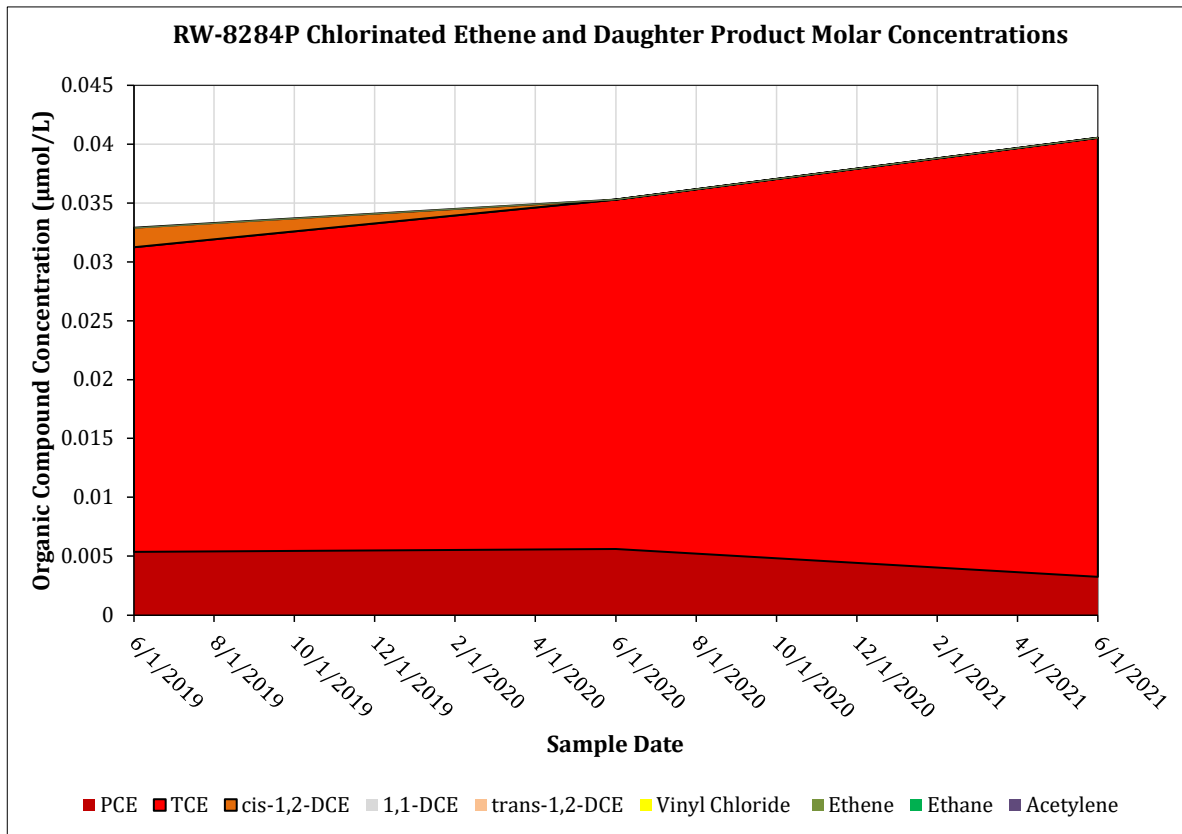


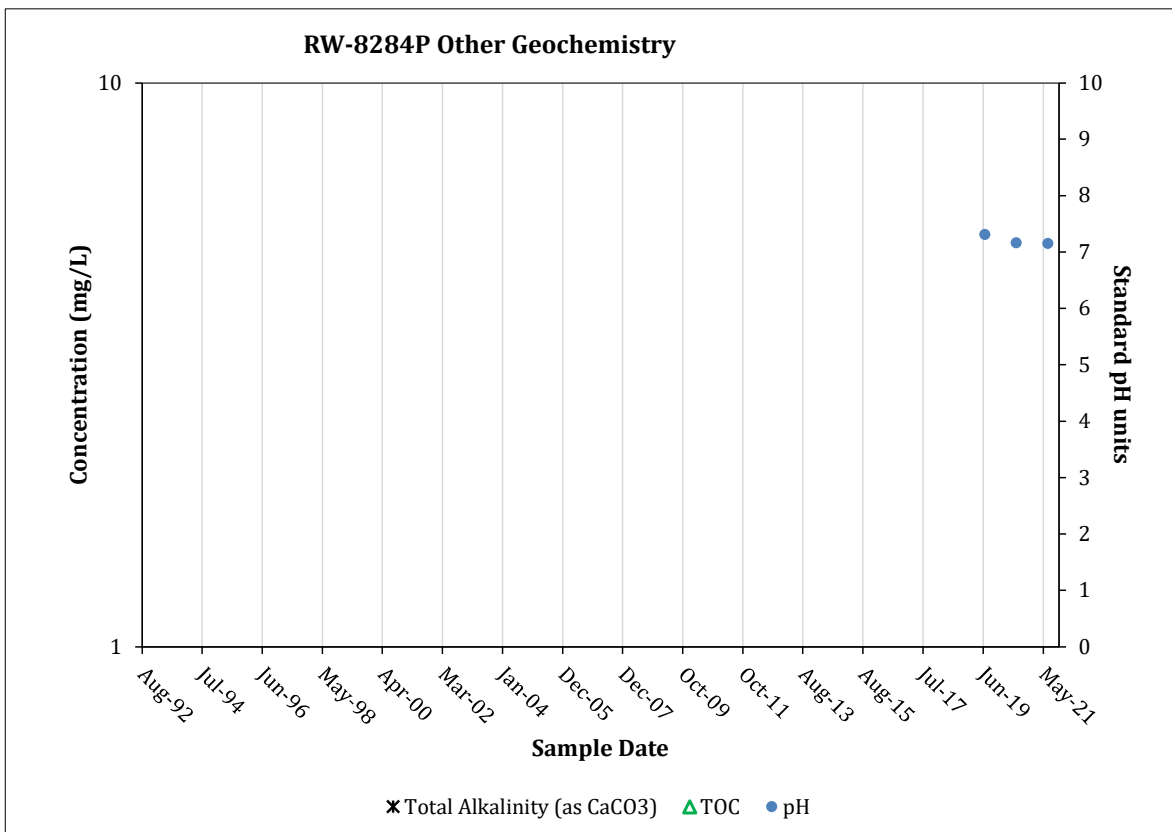
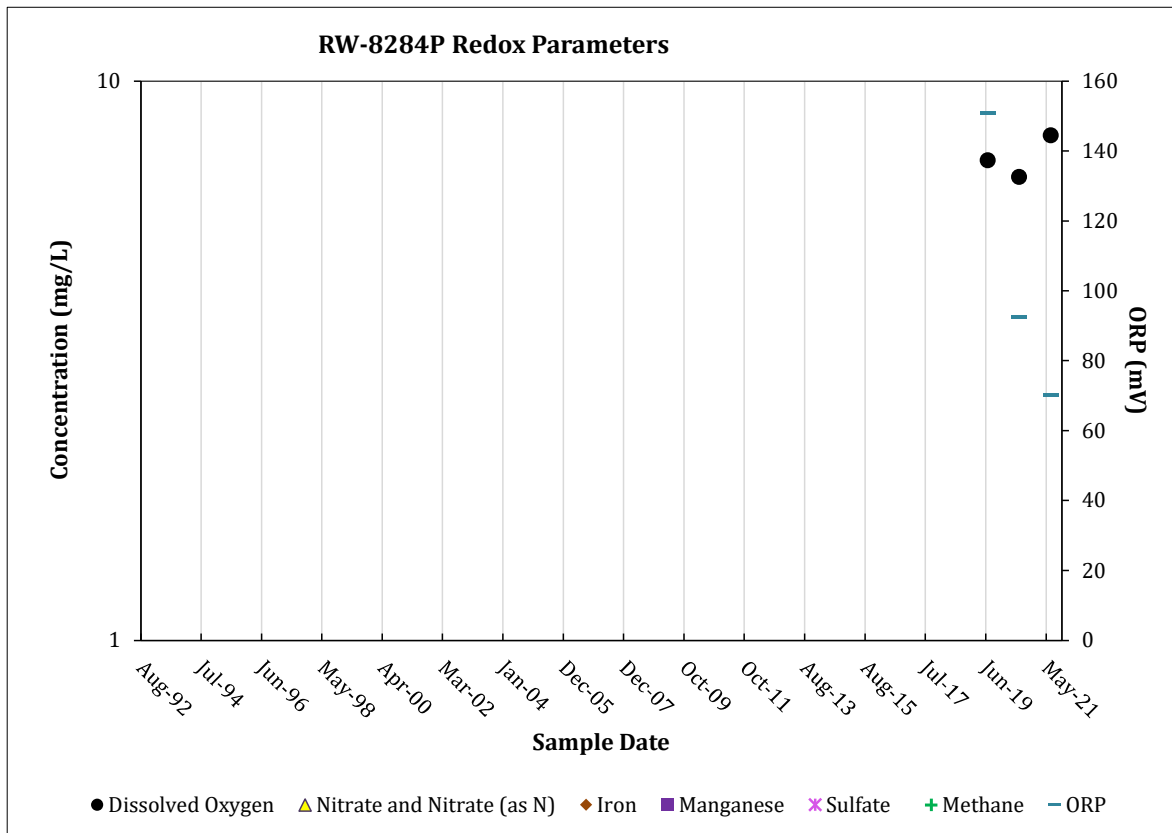
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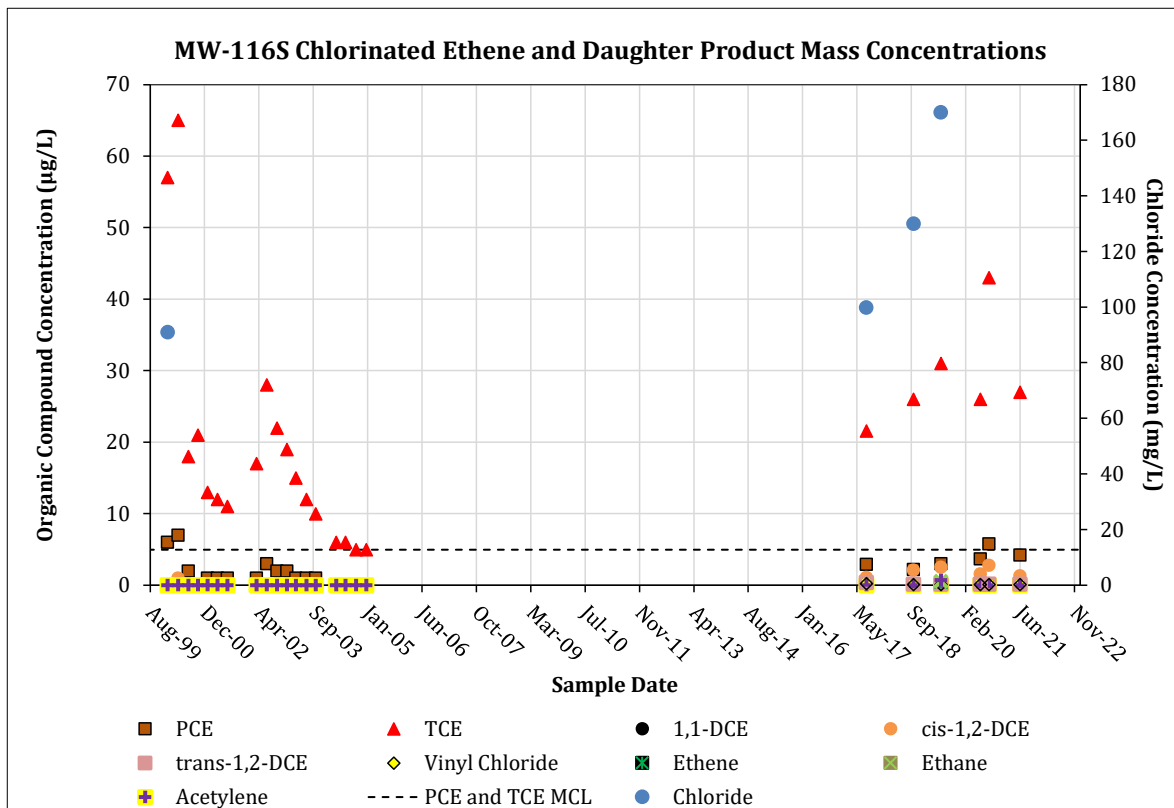
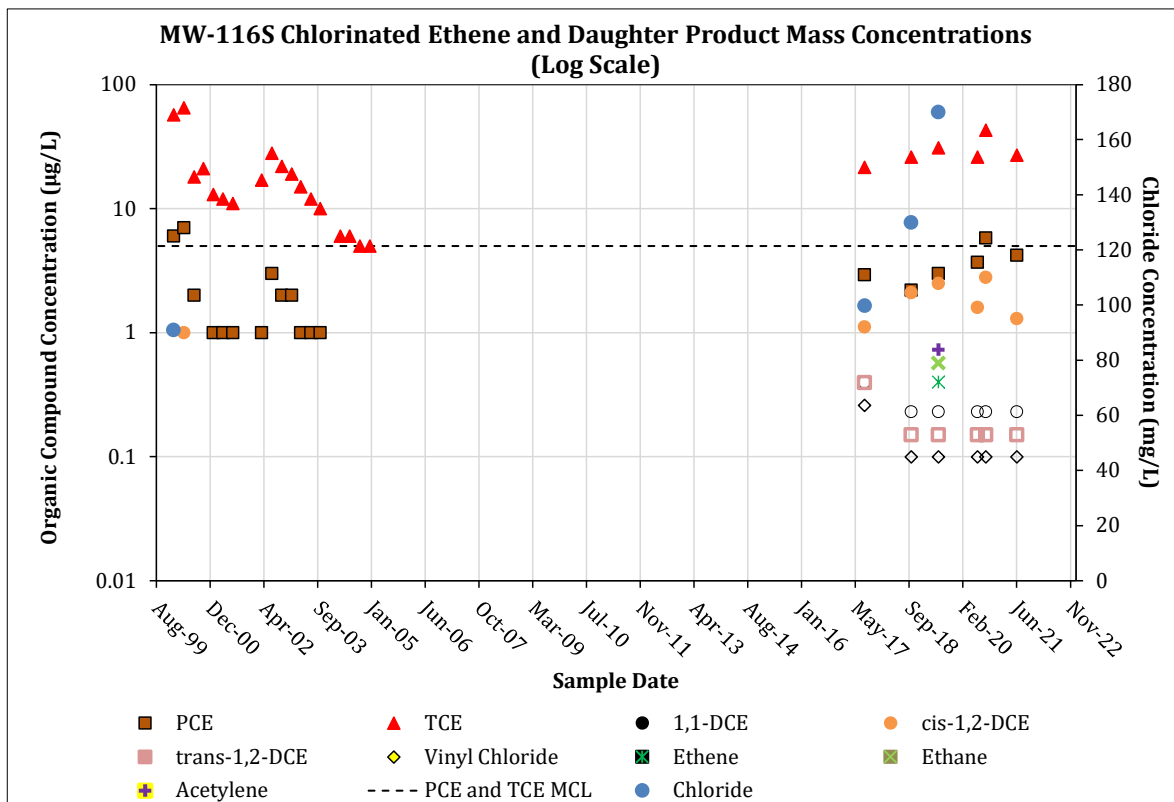




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